

**QPSK EIRP POWER FOR LTE BAND 12 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
Company: Project #: 16U23366 Date: 6/15/2016 Test Engineer: 52279 Configuration: EUT Only Mode: LTE Band 12 QPSK 10MHz BW										
Test Equipment: Receiving: Sunol T408, and Chamber D Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
704.00	8.30	V	0.55	0.0	7.75	9.90	34.77	36.99	27.1	
704.00	17.61	H	0.55	0.0	17.06	19.21	34.77	36.99	-17.8	
Mid Ch										
707.50	9.26	V	0.55	0.0	8.71	10.86	34.77	36.99	-26.1	
707.50	18.13	H	0.55	0.0	17.58	19.73	34.77	36.99	-17.3	
High Ch										
711.00	9.63	V	0.55	0.0	9.08	11.23	34.77	36.99	-25.8	
711.00	18.33	H	0.55	0.0	17.78	19.93	34.77	36.99	-17.1	
Rev. 10.24.13										

**16QAM EIRP POWER FOR LTE BAND 12 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
Company: Project #: 16U23366 Date: 6/15/2016 Test Engineer: 52279 Configuration: EUT Only Mode: LTE Band 12 16QAM 10MHz BW										
Test Equipment: Receiving: Sunol T408, and Chamber D Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
704.00	7.58	V	0.55	0.0	7.03	9.18	34.77	36.99	27.8	
704.00	16.97	H	0.55	0.0	16.42	18.57	34.77	36.99	-18.4	
Mid Ch										
707.50	8.37	V	0.55	0.0	7.82	9.97	34.77	36.99	-27.0	
707.50	17.38	H	0.55	0.0	16.83	18.98	34.77	36.99	-18.0	
High Ch										
711.00	8.80	V	0.55	0.0	8.25	10.40	34.77	36.99	-26.6	
711.00	17.63	H	0.55	0.0	17.08	19.23	34.77	36.99	-17.8	
Rev. 10.24.13										

## 10.1.6. LTE BAND 13

### QPSK EIRP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber D																				
Company:																				
Project #:	16U23366																			
Date:	6/15/2016																			
Test Engineer:	52279																			
Configuration:	EUT Only																			
Mode:	LTE Band 13 QPSK 5MHz BW																			
<u>Test Equipment:</u>																				
Receiving: Sunol T408, and Chamber D Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
779.50	13.81	V	0.55	0.0	13.26	15.41	34.77	36.99	-21.6											
779.50	20.70	H	0.55	0.0	20.15	22.30	34.77	36.99	-14.7											
Mid Ch																				
782.00	14.13	V	0.55	0.0	13.58	15.73	34.77	36.99	-21.3											
782.00	20.89	H	0.55	0.0	20.34	22.49	34.77	36.99	-14.5											
High Ch																				
784.50	14.23	V	0.55	0.0	13.68	15.83	34.77	36.99	-21.2											
784.50	21.11	H	0.55	0.0	20.56	22.71	34.77	36.99	-14.3											
Rev. 10.24.13																				

**16QAM EIRP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D																				
Company:																				
Project #:	16U23366																			
Date:	6/15/2016																			
Test Engineer:	52279																			
Configuration:	EUT Only																			
Mode:	LTE Band 13 16QAM5MHz BW																			
<b>Test Equipment:</b>																				
Receiving: Sunol T408, and Chamber D Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
7.00	12.91	V	0.55	0.0	12.36	14.51	34.77	36.99	-22.5											
779.50	19.85	H	0.55	0.0	19.30	21.45	34.77	36.99	-15.5											
Mid Ch																				
782.00	13.41	V	0.55	0.0	12.86	15.01	34.77	36.99	-22.0											
782.00	20.16	H	0.55	0.0	19.61	21.76	34.77	36.99	-15.2											
High Ch																				
784.50	13.67	V	0.55	0.0	13.12	15.27	34.77	36.99	-21.7											
784.50	20.35	H	0.55	0.0	19.80	21.95	34.77	36.99	-15.0											
Rev. 10.24.13																				

**QPSK EIRP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
<b>Company:</b>										
Project #:	16U23366									
Date:	6/15/2016									
Test Engineer:	52279									
Configuration:	EUT Only									
Mode:	LTE Band 13 QPSK 10MHz BW									
<b>Test Equipment:</b>										
Receiving: Sunol T408, and Chamber D Cable										
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
782.00	13.91	V	0.55	0.0	13.36	15.51	34.77	36.99	-21.5	
782.00	20.62	H	0.55	0.0	20.07	22.22	34.77	36.99	-14.8	
Rev. 10.24.13										

**16QAM EIRP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
<b>Company:</b> Project #: 16U23366 Date: 6/15/2016 <b>Test Engineer:</b> 52279 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 13 16QAM 10MHz BW										
<b>Test Equipment:</b> Receiving: Sunol T408, and Chamber D Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
782.00	13.36	V	0.55	0.0	12.81	14.96	34.77	36.99	-22.0	
782.00	19.77	H	0.55	0.0	19.22	21.37	34.77	36.99	-15.6	

Rev. 10.24.13

### 10.1.7. LTE BAND 17

#### QPSK EIRP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber D																				
Company:																				
Project #:	16U23366																			
Date:	6/15/2016																			
Test Engineer:	52279																			
Configuration:	EUT Only																			
Mode:	LTE Band 17 QPSK 5MHz BW																			
<u>Test Equipment:</u>																				
Receiving: Sunol T408, and Chamber D Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
706.50	9.88	V	0.55	0.0	9.33	11.48	34.77	36.99	-25.5											
706.50	18.81	H	0.55	0.0	18.26	20.41	34.77	36.99	-16.6											
Mid Ch																				
710.00	9.89	V	0.55	0.0	9.34	11.49	34.77	36.99	-25.5											
710.00	18.91	H	0.55	0.0	18.36	20.51	34.77	36.99	-16.5											
High Ch																				
713.50	9.89	V	0.55	0.0	9.34	11.49	34.77	36.99	-25.5											
713.50	19.27	H	0.55	0.0	18.72	20.87	34.77	36.99	-16.1											
Rev. 10.24.13																				

**16QAM EIRP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
<b>Test Equipment:</b> Receiving: Sunol T408, and Chamber D Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
706.50	9.09	V	0.55	0.0	8.54	10.69	34.77	36.99	-26.3	
706.50	18.23	H	0.55	0.0	17.68	19.83	34.77	36.99	-17.2	
Mid Ch										
710.00	8.85	V	0.55	0.0	8.30	10.45	34.77	36.99	-26.5	
710.00	18.05	H	0.55	0.0	17.50	19.65	34.77	36.99	-17.3	
High Ch										
713.50	9.05	V	0.55	0.0	8.50	10.65	34.77	36.99	-26.3	
713.50	18.19	H	0.55	0.0	17.64	19.79	34.77	36.99	-17.2	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
<b>Test Equipment:</b> Receiving: Sunol T408, and Chamber D Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
710.00	9.92	V	0.55	0.0	9.37	11.52	34.77	36.99	-25.5	
710.00	18.93	H	0.55	0.0	18.38	20.53	34.77	36.99	-16.5	

Rev. 10.24.13

**16QAM EIRP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D																				
Company:																				
Project #:	16U23366																			
Date:	6/15/2016																			
Test Engineer:	52279																			
Configuration:	EUT Only																			
Mode:	LTE Band 17 16QAM 10MHz BW																			
<b>Test Equipment:</b>																				
Receiving: Sunol T408, and Chamber D Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
710.00	9.27	V	0.55	0.0	8.72	10.87	34.77	36.99	-26.1											
710.00	18.25	H	0.55	0.0	17.70	19.85	34.77	36.99	-17.1											
Rev. 10.24.13																				

### 10.1.8. LTE BAND 25

#### QPSK EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<u>Company:</u>								
Project #:	16U23366							
Date:	6/16/2016							
Test Engineer:	52291							
Configuration:	EUT Only							
Mode:	LTE Band 25 QPSK 1.4MHz BW							
<u>Test Equipment:</u>								
Receiving: Horn T712, and Chamber D SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.851	14.7	V	0.98	8.05	21.72	33.0	-11.3	
1.851	17.8	H	0.98	8.05	24.82	33.0	-8.2	
Mid Ch								
1.883	16.9	V	0.98	8.03	23.97	33.0	-9.0	
1.883	18.7	H	0.98	8.03	25.76	33.0	-7.2	
High Ch								
1.914	16.3	V	0.98	8.07	23.35	33.0	-9.7	
1.914	18.0	H	0.98	8.07	25.05	33.0	-8.0	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<u>Company:</u> Project #: 16U23366 Date: 6/16/2016 <u>Test Engineer:</u> 52291 <u>Configuration:</u> EUT Only <u>Mode:</u> LTE Band 25 16QAM 1.4MHz BW								
<u>Test Equipment:</u> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.851	15.0	V	0.98	8.05	22.11	33.0	-10.9	
1.851	17.2	H	0.98	8.05	24.26	33.0	-8.7	
Mid Ch								
1.883	16.0	V	0.98	8.03	23.06	33.0	-9.9	
1.883	18.2	H	0.98	8.03	25.21	33.0	-7.8	
High Ch								
1.914	15.5	V	0.98	8.07	22.54	33.0	-10.5	
1.914	17.5	H	0.98	8.07	24.56	33.0	-8.4	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/16/2016							
<b>Test Engineer:</b>	52291							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 QPSK 3MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T712, and Chamber D SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.852	15.4	V	0.98	8.05	22.47	33.0	-10.5	
1.852	17.5	H	0.98	8.05	24.61	33.0	-8.4	
Mid Ch								
1.883	16.9	V	0.98	8.03	23.94	33.0	-9.1	
1.883	18.8	H	0.98	8.03	25.83	33.0	-7.2	
High Ch								
1.914	16.6	V	0.98	8.07	23.66	33.0	-9.3	
1.914	18.3	H	0.98	8.07	25.41	33.0	-7.6	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/16/2016							
<b>Test Engineer:</b>	52291							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 16QAM 3MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T712, and Chamber D SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.852	15.2	V	0.98	8.05	22.29	33.0	-10.7	
1.852	17.0	H	0.98	8.05	24.11	33.0	-8.9	
Mid Ch								
1.883	16.2	V	0.98	8.03	23.25	33.0	-9.8	
1.883	18.0	H	0.98	8.03	25.00	33.0	-8.0	
High Ch								
1.914	16.2	V	0.98	8.07	23.30	33.0	-9.7	
1.914	17.7	H	0.98	8.07	24.75	33.0	-8.3	
Rev. 10.24.13								

**QPSK EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/16/2016							
<b>Test Engineer:</b>	52291							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 QPSK 5MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T712, and Chamber D SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.853	15.1	V	0.98	8.05	22.18	33.0	-10.8	
1.853	17.9	H	0.98	8.05	24.92	33.0	-8.1	
Mid Ch								
1.883	16.8	V	0.98	8.03	23.80	33.0	-9.2	
1.883	19.1	H	0.98	8.03	26.16	33.0	-6.8	
High Ch								
1.913	16.0	V	0.98	8.06	23.07	33.0	-9.9	
1.913	17.7	H	0.98	8.06	24.79	33.0	-8.2	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<u>Company:</u> Project #: 16U23366 Date: 6/16/2016 <u>Test Engineer:</u> 52291 <u>Configuration:</u> EUT Only <u>Mode:</u> LTE Band 25 16QAM 5MHz BW								
<u>Test Equipment:</u> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.853	15.1	V	0.98	8.05	22.20	33.0	-10.8	
1.853	17.3	H	0.98	8.05	24.40	33.0	-8.6	
Mid Ch								
1.883	16.4	V	0.98	8.03	23.40	33.0	-9.6	
1.883	18.2	H	0.98	8.03	25.20	33.0	-7.8	
High Ch								
1.913	15.0	V	0.98	8.06	22.04	33.0	-11.0	
1.913	17.0	H	0.98	8.06	24.10	33.0	-8.9	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D																
<b>Company:</b>																
<b>Project #:</b>	16U23366															
<b>Date:</b>	6/16/2016															
<b>Test Engineer:</b>	52291															
<b>Configuration:</b>	EUT Only															
<b>Mode:</b>	LTE Band 25 QPSK 10MHz BW															
<b>Test Equipment:</b>																
Receiving: Horn T712, and Chamber D SMA Cables																
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes								
Low Ch																
1.855	15.9	V	0.98	8.05	22.93	33.0	-10.1									
1.855	17.6	H	0.98	8.05	24.68	33.0	-8.3									
Mid Ch																
1.883	16.8	V	0.98	8.03	23.85	33.0	-9.2									
1.883	19.0	H	0.98	8.03	26.04	33.0	-7.0									
High Ch																
1.910	15.5	V	0.98	8.05	22.59	33.0	-10.4									
1.910	18.0	H	0.98	8.05	25.04	33.0	-8.0									
Rev. 10.24.13																

**16QAM EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 6/16/2016 <b>Test Engineer:</b> 52291 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 25 16QAM 10MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.855	15.6	V	0.98	8.05	22.66	33.0	-10.3	
1.855	17.0	H	0.98	8.05	24.09	33.0	-8.9	
Mid Ch								
1.883	16.2	V	0.98	8.03	23.28	33.0	-9.7	
1.883	18.2	H	0.98	8.03	25.25	33.0	-7.8	
High Ch								
1.910	15.9	V	0.98	8.05	22.97	33.0	-10.0	
1.910	17.1	H	0.98	8.05	24.15	33.0	-8.9	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 Date: 6/16/2016 <b>Test Engineer:</b> 52291 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 25 QPSK 15MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.858	16.6	V	0.98	8.04	23.63	33.0	-9.4	
1.858	17.7	H	0.98	8.04	24.75	33.0	-8.2	
Mid Ch								
1.883	16.9	V	0.98	8.03	23.90	33.0	-9.1	
1.883	19.0	H	0.98	8.03	26.07	33.0	-6.9	
High Ch								
1.908	15.4	V	0.98	8.04	22.50	33.0	-10.5	
1.908	17.9	H	0.98	8.04	24.98	33.0	-8.0	

Rev. 10.24.13

**16QAM EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/16/2016							
<b>Test Engineer:</b>	52291							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 16QAM 15MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T712, and Chamber D SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.858	15.3	V	0.98	8.04	22.39	33.0	-10.6	
1.858	16.9	H	0.98	8.04	23.99	33.0	-9.0	
Mid Ch								
1.883	16.2	V	0.98	8.03	23.28	33.0	-9.7	
1.883	18.5	H	0.98	8.03	25.51	33.0	-7.5	
High Ch								
1.908	14.9	V	0.98	8.04	21.96	33.0	-11.0	
1.908	17.4	H	0.98	8.04	24.46	33.0	-8.5	
Rev. 10.24.13								

**QPSK EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/16/2016							
<b>Test Engineer:</b>	52291							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 QPSK 20MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T712, and Chamber D SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.860	14.9	V	0.98	8.04	21.94	33.0	-11.1	
1.860	17.7	H	0.98	8.04	24.75	33.0	-8.2	
Mid Ch								
1.883	16.2	V	0.98	8.03	23.23	33.0	-9.8	
1.883	19.1	H	0.98	8.03	26.19	33.0	-6.8	
High Ch								
1.905	16.3	V	0.98	8.04	23.34	33.0	-9.7	
1.905	18.5	H	0.98	8.04	25.59	33.0	-7.4	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/16/2016							
<b>Test Engineer:</b>	52291							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 16QAM 20MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T712, and Chamber D SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.860	13.9	V	0.98	8.04	20.92	33.0	-12.1	
1.860	17.0	H	0.98	8.04	24.05	33.0	-8.9	
Mid Ch								
1.883	15.6	V	0.98	8.03	22.63	33.0	-10.4	
1.883	18.8	H	0.98	8.03	25.84	33.0	-7.2	
High Ch								
1.905	15.1	V	0.98	8.04	22.16	33.0	-10.8	
1.905	18.1	H	0.98	8.04	25.15	33.0	-7.9	
Rev. 10.24.13								

## 10.1.9. LTE BAND 26

### QPSK EIRP POWER FOR LTE BAND 26 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
<u>Company:</u> Project #: 16U23366 Date: 6/16/2016 <u>Test Engineer:</u> 52291 <u>Configuration:</u> EUT Only <u>Mode:</u> LTE Band 26 QPSK 1.4MHz BW										
<u>Test Equipment:</u> Receiving: Sunol T408, and Chamber D Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
814.70	9.13	V	0.62	0.0	8.51	10.66	38.45	40.60	-29.9	
814.70	18.89	H	0.62	0.0	18.27	20.42	38.45	40.60	-20.2	
Mid Ch										
819.00	9.22	V	0.62	0.0	8.60	10.75	38.45	40.60	-29.9	
819.00	19.06	H	0.62	0.0	18.44	20.59	38.45	40.60	-20.0	
High Ch										
823.30	10.27	V	0.62	0.0	9.65	11.80	38.45	40.60	-28.8	
823.30	19.82	H	0.62	0.0	19.20	21.35	38.45	40.60	-19.3	

Rev. 10.24.13

**16QAM EIRP POWER FOR LTE BAND 26 (1.4MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
<b>Test Equipment:</b> Receiving: Sunol T408, and Chamber D Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
814.70	8.33	V	0.62	0.0	7.71	9.86	38.45	40.60	-30.7	
814.70	18.09	H	0.62	0.0	17.47	19.62	38.45	40.60	-21.0	
Mid Ch										
819.00	8.42	V	0.62	0.0	7.80	9.95	38.45	40.60	-30.7	
819.00	18.26	H	0.62	0.0	17.64	19.79	38.45	40.60	-20.8	
High Ch										
823.30	9.47	V	0.62	0.0	8.85	11.00	38.45	40.60	-29.6	
823.30	19.02	H	0.62	0.0	18.40	20.55	38.45	40.60	-20.1	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D																				
Company:																				
Project #:	16U23366																			
Date:	6/16/2016																			
Test Engineer:	52291																			
Configuration:	EUT Only																			
Mode:	LTE Band 26 QPSK 3MHz BW																			
<b>Test Equipment:</b>																				
Receiving: Sunol T408, and Chamber D Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
815.50	9.30	V	0.62	0.0	8.68	10.83	38.45	40.60	-29.8											
815.50	18.91	H	0.62	0.0	18.29	20.44	38.45	40.60	-20.2											
Mid Ch																				
819.00	8.74	V	0.62	0.0	8.12	10.27	38.45	40.60	-30.3											
819.00	19.14	H	0.62	0.0	18.52	20.67	38.45	40.60	-19.9											
High Ch																				
822.50	10.34	V	0.62	0.0	9.72	11.87	38.45	40.60	-28.7											
822.50	19.88	H	0.62	0.0	19.26	21.41	38.45	40.60	-19.2											
Rev. 10.24.13																				

**16QAM EIRP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
<b>Company:</b> Project #: 16U23366 Date: 6/16/2016 Test Engineer: 52291 Configuration: EUT Only Mode: LTE Band 26 16QAM 3MHz BW										
<b>Test Equipment:</b> Receiving: Sunol T408, and Chamber D Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
815.50	8.40	V	0.62	0.0	7.78	9.93	38.45	40.60	-30.7	
815.50	18.01	H	0.62	0.0	17.39	19.54	38.45	40.60	-21.1	
Mid Ch										
819.00	7.84	V	0.62	0.0	7.22	9.37	38.45	40.60	-31.2	
819.00	18.24	H	0.62	0.0	17.62	19.77	38.45	40.60	-20.8	
High Ch										
822.50	9.44	V	0.62	0.0	8.82	10.97	38.45	40.60	-29.6	
822.50	18.98	H	0.62	0.0	18.36	20.51	38.45	40.60	-20.1	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D																		
Company:																		
Project #:	16U23366																	
Date:	6/16/2016																	
Test Engineer:	52291																	
Configuration:	EUT Only																	
Mode:	LTE Band 26 QPSK 5MHz BW																	
<u>Test Equipment:</u>																		
Receiving: Sunol T408, and Chamber D Cable																		
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes								
Low Ch																		
816.50	9.07	V	0.62	0.0	8.45	10.60	38.45	40.60	-30.0									
816.50	18.81	H	0.62	0.0	18.19	20.34	38.45	40.60	-20.3									
Mid Ch																		
819.00	8.51	V	0.62	0.0	7.89	10.04	38.45	40.60	-30.6									
819.00	18.98	H	0.62	0.0	18.36	20.51	38.45	40.60	-20.1									
High Ch																		
821.50	10.11	V	0.62	0.0	9.49	11.64	38.45	40.60	-29.0									
821.50	19.76	H	0.62	0.0	19.14	21.29	38.45	40.60	-19.3									
Rev. 10.24.13																		

**16QAM EIRP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
<b>Test Equipment:</b> Receiving: Sunol T408, and Chamber D Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
816.50	8.07	V	0.62	0.0	7.45	9.60	38.45	40.60	-31.0	
816.50	17.68	H	0.62	0.0	17.06	19.21	38.45	40.60	-21.4	
Mid Ch										
819.00	7.51	V	0.62	0.0	6.89	9.04	38.45	40.60	-31.6	
819.00	17.91	H	0.62	0.0	17.29	19.44	38.45	40.60	-21.2	
High Ch										
821.50	9.11	V	0.62	0.0	8.49	10.64	38.45	40.60	-30.0	
821.50	18.65	H	0.62	0.0	18.03	20.18	38.45	40.60	-20.4	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
<b>Company:</b>										
<b>Project #:</b> 16U23366										
<b>Date:</b> 6/16/2016										
<b>Test Engineer:</b> 52291										
<b>Configuration:</b> EUT Only										
<b>Mode:</b> LTE Band 26 QPSK 10MHz BW										
<b>Test Equipment:</b>										
Receiving: Sunol T408, and Chamber D Cable										
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit Margin (dBm)	EIRP (dB)	Notes
Mid Ch										
819.00	9.52	V	0.62	0.0	8.90	11.05	38.45	40.60	-29.6	
819.00	19.41	H	0.62	0.0	18.79	20.94	38.45	40.60	-19.7	
Rev. 10.24.13										

**16QAM EIRP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 6/16/2016 <b>Test Engineer:</b> 52291 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 26 16QAM 10MHz BW										
<b>Test Equipment:</b> Receiving: Sunol T408, and Chamber D Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Mid Ch										
819.00	8.62	V	0.62	0.0	8.00	10.15	38.45	40.60	-30.5	
819.00	18.60	H	0.62	0.0	17.98	20.13	38.45	40.60	-20.5	

Rev. 10.24.13

### 10.1.10. LTE BAND 27

#### QPSK EIRP POWER FOR LTE BAND 27 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<u>Company:</u>								
Project #:	16U23366							
Date:	6/16/2016							
Test Engineer:	52279							
Configuration:	EUT Only							
Mode:	LTE Band 27 QPSK 1.4MHz BW							
<u>Test Equipment:</u>								
Receiving:	Sunol T408, and Chamber D Cable							
Substitution:	Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)							
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Low Ch								
814.70	9.65	V	0.62	0.0	9.03	50.00	-41.0	
814.70	19.87	H	0.62	0.0	19.25	50.00	-30.8	
Mid Ch								
819.00	11.15	V	0.62	0.0	10.53	50.00	-39.5	
819.00	19.52	H	0.62	0.0	18.90	50.00	-31.1	
High Ch								
823.30	12.11	V	0.62	0.0	11.49	50.00	-38.5	
823.30	19.79	H	0.62	0.0	19.17	50.00	-30.8	
Rev. 04.28.15								

**16QAM EIRP POWER FOR LTE BAND 27 (1.4MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<u>Company:</u>								
Project #:	16U23366							
Date:	6/16/2016							
Test Engineer:	52279							
Configuration:	EUT Only							
Mode:	LTE Band 27 16QAM 1.4MHz BW							
<u>Test Equipment:</u>								
Receiving: Sunol T408, and Chamber D Cable								
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Low Ch								
814.70	8.85	V	0.62	0.0	8.23	50.00	-41.8	
814.70	18.92	H	0.62	0.0	18.30	50.00	-31.7	
Mid Ch								
819.00	10.35	V	0.62	0.0	9.73	50.00	-40.3	
819.00	18.82	H	0.62	0.0	18.20	50.00	-31.8	
High Ch								
823.30	11.31	V	0.62	0.0	10.69	50.00	-39.3	
823.30	18.84	H	0.62	0.0	18.22	50.00	-31.8	
Rev. 04.28.15								

**QPSK EIRP POWER FOR LTE BAND 27 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<u>Company:</u>								
Project #:	16U23366							
Date:	6/16/2016							
Test Engineer:	52279							
Configuration:	EUT Only							
Mode:	LTE Band 27 QPSK 3MHz BW							
<u>Test Equipment:</u>								
Receiving: Sunol T408, and Chamber D Cable								
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Low Ch								
815.50	9.86	V	0.62	0.0	9.24	50.00	-40.8	
815.50	19.83	H	0.62	0.0	19.21	50.00	-30.8	
Mid Ch								
819.00	10.99	V	0.62	0.0	10.37	50.00	-39.6	
819.00	19.58	H	0.62	0.0	18.96	50.00	-31.0	
High Ch								
822.50	12.04	V	0.62	0.0	11.42	50.00	-38.6	
822.50	19.92	H	0.62	0.0	19.30	50.00	-30.7	
Rev. 04.28.15								

**16QAM EIRP POWER FOR LTE BAND 27 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<u>Company:</u>								
Project #:	16U23366							
Date:	6/16/2016							
Test Engineer:	52279							
Configuration:	EUT Only							
Mode:	LTE Band 27 16QAM 3MHz BW							
<u>Test Equipment:</u>								
Receiving: Sunol T408, and Chamber D Cable								
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Low Ch								
815.50	8.96	V	0.62	0.0	8.34	50.00	-41.7	
815.50	19.04	H	0.62	0.0	18.42	50.00	-31.6	
Mid Ch								
819.00	10.09	V	0.62	0.0	9.47	50.00	-40.5	
819.00	18.80	H	0.62	0.0	18.18	50.00	-31.8	
High Ch								
822.50	11.14	V	0.62	0.0	10.52	50.00	-39.5	
822.50	19.02	H	0.62	0.0	18.40	50.00	-31.6	
Rev. 04.28.15								

**QPSK EIRP POWER FOR LTE BAND 27 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<u>Company:</u>								
Project #:	16U23366							
Date:	6/16/2016							
Test Engineer:	52279							
Configuration:	EUT Only							
Mode:	LTE Band 27 QPSK 5MHz BW							
<u>Test Equipment:</u>								
Receiving: Sunol T408, and Chamber D Cable								
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Low Ch								
816.50	9.76	V	0.62	0.0	9.14	50.00	-40.9	
816.50	19.80	H	0.62	0.0	19.18	50.00	-30.8	
Mid Ch								
819.00	11.13	V	0.62	0.0	10.51	50.00	-39.5	
819.00	19.50	H	0.62	0.0	18.88	50.00	-31.1	
High Ch								
821.50	11.92	V	0.62	0.0	11.30	50.00	-38.7	
821.50	19.85	H	0.62	0.0	19.23	50.00	-30.8	
Rev. 04.28.15								

**16QAM EIRP POWER FOR LTE BAND 27 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<u>Company:</u>								
Project #:	16U23366							
Date:	6/16/2016							
Test Engineer:	52279							
Configuration:	EUT Only							
Mode:	LTE Band 27 16QAM 5MHz BW							
<u>Test Equipment:</u>								
Receiving: Sunol T408, and Chamber D Cable								
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Low Ch								
816.50	8.96	V	0.62	0.0	8.34	50.00	-41.7	
816.50	18.87	H	0.62	0.0	18.25	50.00	-31.8	
Mid Ch								
819.00	10.33	V	0.62	0.0	9.71	50.00	-40.3	
819.00	18.79	H	0.62	0.0	18.17	50.00	-31.8	
High Ch								
821.50	11.12	V	0.62	0.0	10.50	50.00	-39.5	
821.50	18.91	H	0.62	0.0	18.29	50.00	-31.7	
Rev. 04.28.15								

**QPSK EIRP POWER FOR LTE BAND 27 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>								
Project #:	16U23366							
Date:	6/16/2016							
Test Engineer:	52279							
Configuration:	EUT Only							
Mode:	LTE Band 27 QPSK 10MHz BW							
<b>Test Equipment:</b>								
Receiving: Sunol T408, and Chamber D Cable								
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Mid Ch								
819.00	10.78	V	0.62	0.0	10.16	50.00	-39.8	
819.00	19.45	H	0.62	0.0	18.83	50.00	-31.2	

Rev. 04.28.15

**16QAM EIRP POWER FOR LTE BAND 27 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>								
Project #:	16U23366							
Date:	6/16/2016							
Test Engineer:	52279							
Configuration:	EUT Only							
Mode:	LTE Band 27 16QAM 10MHz BW							
<b>Test Equipment:</b>								
Receiving: Sunol T408, and Chamber D Cable								
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Mid Ch								
819.00	9.98	V	0.62	0.0	9.36	50.00	-40.6	
819.00	18.65	H	0.62	0.0	18.03	50.00	-32.0	
Rev. 04.28.15								

### 10.1.11. LTE BAND 30

#### QPSK EIRP POWER FOR LTE BAND 30 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber D									
Company:									
Project #:	16U23366	Date:	6/20/2016	Test Engineer:	45200	Configuration:	EUT Only	Mode:	LTE Band 30 QPSK 5MHz BW
<u>Test Equipment:</u>									
Receiving: Horn T712, and Chamber D SMA Cables									
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes	
Low Ch									
2.308	10.2	V	1.15	9.37	18.38	24.0	-5.6		
2.308	13.2	H	1.15	9.37	21.45	24.0	-2.5		
Mid Ch									
2.310	10.2	V	1.16	9.37	18.45	24.0	-5.6		
2.310	13.7	H	1.16	9.37	21.86	24.0	-2.1		
High Ch									
2.313	10.5	V	1.17	9.37	18.70	24.0	-5.3		
2.313	14.0	H	1.17	9.37	22.20	24.0	-1.8		
Rev. 04.24.15									

**16QAM EIRP POWER FOR LTE BAND 30 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 Date: 6/20/2016 <b>Test Engineer:</b> 45200 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 30 16QAM 5MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.308	9.5	V	1.15	9.37	17.68	24.0	-6.3	
2.308	12.5	H	1.15	9.37	20.75	24.0	-3.2	
Mid Ch								
2.310	9.5	V	1.16	9.37	17.75	24.0	-6.3	
2.310	13.0	H	1.16	9.37	21.16	24.0	-2.8	
High Ch								
2.313	9.8	V	1.17	9.37	18.00	24.0	-6.0	
2.313	13.3	H	1.17	9.37	21.50	24.0	-2.5	

Rev. 04.24.15

**QPSK EIRP POWER FOR LTE BAND 30 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 6/20/2016 <b>Test Engineer:</b> 45200 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 30 QPSK 10MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
2.310	10.3	V	1.15	9.37	18.51	24.0	-5.5	
2.310	13.6	H	1.15	9.37	21.78	24.0	-2.2	

Rev. 04.24.15

**16QAM EIRP POWER FOR LTE BAND 30 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 6/20/2016 <b>Test Engineer:</b> 45200 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 30 16QAM 10MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
2.310	9.5	V	1.15	9.37	17.71	24.0	-6.3	
2.310	12.8	H	1.15	9.37	20.98	24.0	-3.0	

Rev. 04.24.15

### 10.1.12. LTE BAND 41

#### QPSK EIRP POWER FOR LTE BAND 41 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
Company:								
Project #:	16U23366							
Date:	7/1/2016							
Test Engineer:	30554							
Configuration:	EUT Only							
Mode:	LTE Band 41 QPSK 5MHz BW							
Test Equipment:								
Receiving: Horn T712, and Chamber D SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.499	17.3	V	1.15	9.33	25.48	33.0	-7.5	
2.499	15.2	H	1.15	9.33	23.34	33.0	-9.7	
Mid Ch								
2.593	18.2	V	1.16	9.47	26.47	33.0	-6.5	
2.593	15.6	H	1.16	9.47	23.95	33.0	-9.1	
High Ch								
2.688	17.3	V	1.17	9.78	25.95	33.0	-7.1	
2.688	15.2	H	1.17	9.78	23.82	33.0	-9.2	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 41 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 Date: 7/1/2016 <b>Test Engineer:</b> 30554 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 16QAM 5MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.499	16.5	V	1.15	9.33	24.73	33.0	-8.3	
2.499	14.4	H	1.15	9.33	22.59	33.0	-10.4	
Mid Ch								
2.593	17.4	V	1.16	9.47	25.72	33.0	-7.3	
2.593	14.9	H	1.16	9.47	23.20	33.0	-9.8	
High Ch								
2.688	16.6	V	1.17	9.78	25.20	33.0	-7.8	
2.688	14.5	H	1.17	9.78	23.07	33.0	-9.9	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 41 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 Date: 7/1/2016 <b>Test Engineer:</b> 30554 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 QPSK 10MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.501	17.1	V	1.15	9.33	25.26	33.0	-7.7	
2.501	15.4	H	1.15	9.33	23.61	33.0	-9.4	
Mid Ch								
2.593	18.3	V	1.16	9.47	26.59	33.0	-6.4	
2.593	16.0	H	1.16	9.47	24.31	33.0	-8.7	
High Ch								
2.685	17.4	V	1.17	9.77	26.00	33.0	-7.0	
2.685	15.2	H	1.17	9.77	23.85	33.0	-9.2	

Rev. 10.24.13

**16QAM EIRP POWER FOR LTE BAND 41 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 Date: 7/1/2016 <b>Test Engineer:</b> 30554 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 16QAM 10MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.501	16.3	V	1.15	9.33	24.48	33.0	-8.5	
2.501	14.6	H	1.15	9.33	22.83	33.0	-10.2	
Mid Ch								
2.593	17.5	V	1.16	9.47	25.81	33.0	-7.2	
2.593	15.2	H	1.16	9.47	23.53	33.0	-9.5	
High Ch								
2.685	16.6	V	1.17	9.77	25.22	33.0	-7.8	
2.685	14.5	H	1.17	9.77	23.07	33.0	-9.9	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 41 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 7/1/2016 <b>Test Engineer:</b> 30554 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 QPSK 15MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.504	17.1	V	1.15	9.34	25.31	33.0	-7.7	
2.504	15.7	H	1.15	9.34	23.85	33.0	-9.1	
Mid Ch								
2.593	18.1	V	1.16	9.47	26.39	33.0	-6.6	
2.593	15.4	H	1.16	9.47	23.75	33.0	-9.3	
High Ch								
2.683	17.4	V	1.17	9.76	26.02	33.0	-7.0	
2.683	15.4	H	1.17	9.76	23.98	33.0	-9.0	

Rev. 10.24.13

**16QAM EIRP POWER FOR LTE BAND 41 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 Date: 7/1/2016 <b>Test Engineer:</b> 30554 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 16QAM 15MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.504	16.3	V	1.15	9.34	24.48	33.0	-8.5	
2.504	14.8	H	1.15	9.34	23.02	33.0	-10.0	
Mid Ch								
2.593	17.3	V	1.16	9.47	25.56	33.0	-7.4	
2.593	14.6	H	1.16	9.47	22.92	33.0	-10.1	
High Ch								
2.683	16.6	V	1.17	9.76	25.19	33.0	-7.8	
2.683	14.6	H	1.17	9.76	23.15	33.0	-9.8	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 41 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 7/1/2016 <b>Test Engineer:</b> 30554 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 QPSK 20MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.506	17.5	V	1.15	9.34	25.72	33.0	-7.3	
2.506	15.9	H	1.15	9.34	24.06	33.0	-8.9	
Mid Ch								
2.593	18.3	V	1.16	9.47	26.59	33.0	-6.4	
2.593	15.8	H	1.16	9.47	24.14	33.0	-8.9	
High Ch								
2.680	17.6	V	1.17	9.76	26.21	33.0	-6.8	
2.680	15.5	H	1.17	9.76	24.11	33.0	-8.9	

Rev. 10.24.13

**16QAM EIRP POWER FOR LTE BAND 41 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 Date: 7/1/2016 <b>Test Engineer:</b> 30554 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 16QAM 20MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.506	16.6	V	1.15	9.34	24.82	33.0	-8.2	
2.506	15.0	H	1.15	9.34	23.16	33.0	-9.8	
Mid Ch								
2.593	17.4	V	1.16	9.47	25.69	33.0	-7.3	
2.593	14.9	H	1.16	9.47	23.24	33.0	-9.8	
High Ch								
2.680	16.7	V	1.17	9.76	25.31	33.0	-7.7	
2.680	14.6	H	1.17	9.76	23.21	33.0	-9.8	

Rev. 10.24.13

## 10.2. RADIATED POWER (ERP & EIRP), UAT

### EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
1.4MHz Band QPSK	1/0	1850.7	20.17	103.99
		1880.0	20.44	110.66
		1909.3	20.42	110.15
1.4MHz Band 16QAM	1/0	1850.7	19.46	88.31
		1880.0	19.65	92.26
		1909.3	19.60	91.20

### EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
3.0MHz Band QPSK	1/0	1851.5	19.93	98.40
		1880.0	20.76	119.12
		1908.5	20.50	112.20
3.0MHz Band 16QAM	1/0	1851.5	19.33	85.70
		1880.0	19.70	93.33
		1908.5	19.61	91.41

### EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
5.0MHz Band QPSK	1/0	1852.5	19.75	94.41
		1880.0	21.43	139.00
		1907.5	20.83	121.06
5.0MHz Band 16QAM	1/0	1852.5	19.86	96.83
		1880.0	20.74	118.58
		1907.5	20.09	102.09

### EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
10.0MHz Band QPSK	1/0	1855.0	19.85	96.61
		1880.0	21.42	138.68
		1905.0	20.71	117.76
10.0MHz Band 16QAM	1/0	1855.0	19.68	92.90
		1880.0	20.73	118.30
		1905.0	20.06	101.39

**EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
15MHz Band QPSK	1/0	1857.5	19.74	94.19
		1880.0	21.19	131.52
		1902.5	20.17	103.99
15MHz Band 16QAM	1/0	1857.5	19.43	87.70
		1880.0	20.65	116.14
		1902.5	19.88	97.27

**EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
20.0MHz Band QPSK	1/0	1860.0	20.20	104.71
		1880.0	21.00	125.89
		1900.0	20.77	119.40
20MHz Band 16QAM	1/0	1860.0	19.49	88.92
		1880.0	20.46	111.17
		1900.0	19.93	98.40

**EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
1.4 MHZ BAND QPSK	1/0	1710.7	19.30	85.11
		1732.5	19.88	97.27
		1754.3	19.22	83.56
1.4 MHZ BAND 16QAM	1/0	1710.7	18.71	74.30
		1732.5	18.97	78.89
		1754.3	18.51	70.96

**EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	1711.5	19.32	85.51
		1732.5	19.73	93.97
		1753.5	19.07	80.72
3.0 MHZ BAND 16QAM	1/0	1711.5	18.56	71.78
		1732.5	19.04	80.17
		1753.5	18.32	67.92

**EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	1712.5	19.33	85.70
		1732.5	19.87	97.05
		1752.5	19.11	81.47
5.0 MHZ BAND 16QAM	1/0	1712.5	18.71	74.30
		1732.5	18.96	78.70
		1752.5	18.53	71.29

**EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	1715.0	19.40	87.10
		1732.5	<b>19.88</b>	97.27
		1750.0	19.02	79.80
10.0 MHZ BAND 16QAM	1/0	1715.0	18.76	75.16
		1732.5	<b>19.38</b>	86.70
		1750.0	18.52	71.12

**EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
15.0 MHZ BAND QPSK	1/0	1717.5	19.53	89.74
		1732.5	<b>19.93</b>	98.40
		1747.5	19.23	83.75
15.0 MHZ BAND 16QAM	1/0	1717.5	18.86	76.91
		1732.5	<b>19.22</b>	83.56
		1747.5	18.78	75.51

**EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
20.0 MHZ BAND QPSK	1/0	1720.0	19.79	95.28
		1732.5	<b>20.37</b>	108.89
		1745.0	19.94	98.63
20.0 MHZ BAND 16QAM	1/0	1720.0	19.04	80.17
		1732.5	<b>19.53</b>	89.74
		1745.0	19.13	81.85

**ERP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
1.4MHz Band QPSK	1/0	824.7	17.73	59.29
		836.5	<b>18.72</b>	74.47
		848.3	18.65	73.28
1.4MHz Band 16QAM	1/0	824.7	17.16	52.00
		836.5	<b>18.36</b>	68.55
		848.3	18.30	67.61

**ERP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	825.5	17.60	57.54
		836.5	<b>18.68</b>	73.79
		847.5	18.65	73.28
3.0 MHZ BAND 16QAM	1/0	825.5	17.12	51.52
		836.5	<b>18.35</b>	68.39
		847.5	18.18	65.77

**ERP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
5MHz Band QPSK	1/0	826.5	17.95	62.37
		836.5	18.53	71.29
		846.5	18.66	73.45
5MHz Band 16QAM	1/0	826.5	17.24	52.97
		836.5	18.45	69.98
		846.5	18.47	70.31

**ERP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	829.0	17.78	59.98
		836.5	18.62	72.78
		844.0	18.82	76.21
10.0 MHZ BAND 16QAM	1/0	829.0	17.07	50.93
		836.5	17.72	59.16
		844.0	17.97	62.66

**EIRP POWER FOR LTE BAND 7 (5.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	25/0	2502.5	16.91	49.09
		2535.0	20.54	113.24
		2567.5	21.50	141.25
5.0 MHZ BAND 16QAM	25/0	2502.5	15.95	39.36
		2535.0	19.75	94.41
		2567.5	20.81	120.50

**EIRP POWER FOR LTE BAND 7 (10.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	50/0	2505.0	17.64	58.08
		2535.0	20.93	123.88
		2565.0	21.98	157.76
10.0 MHZ BAND 16QAM	50/0	2505.0	16.79	47.75
		2535.0	20.28	106.66
		2565.0	21.35	136.46

**EIRP POWER FOR LTE BAND 7 (15.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
15.0 MHZ BAND QPSK	75/0	2507.5	18.49	70.63
		2535.0	21.60	144.54
		2562.5	21.94	156.31
15.0 MHZ BAND 16QAM	75/0	2507.5	17.53	56.62
		2535.0	20.89	122.74
		2562.5	21.61	144.88

**EIRP POWER FOR LTE BAND 7 (20.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
20.0 MHZ BAND QPSK	100/0	2510.0	17.80	60.26
		2535.0	21.96	157.04
		2560.0	20.25	105.93
20.0 MHZ BAND 16QAM	100/0	2510.0	17.59	57.41
		2535.0	21.42	138.68
		2560.0	20.17	103.99

**ERP POWER FOR LTE BAND 12 (1.4MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
1.4MHz Band QPSK	1/0	699.7	16.01	39.90
		707.5	15.61	36.39
		715.3	16.06	40.36
1.4MHz Band 16QAM	1/0	699.7	15.62	36.48
		707.5	15.53	35.73
		715.3	15.76	37.67

**ERP POWER FOR LTE BAND 12 (3.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	700.5	15.83	38.28
		707.5	15.69	37.07
		714.5	16.09	40.64
3.0 MHZ BAND 16QAM	1/0	700.5	15.64	36.64
		707.5	15.41	34.75
		714.5	15.67	36.90

**ERP POWER FOR LTE BAND 12 (5.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
5MHz Band QPSK	1/0	701.5	16.01	39.90
		707.5	15.85	38.46
		713.5	16.18	41.50
5MHz Band 16QAM	1/0	701.5	15.75	37.58
		707.5	15.56	35.97
		713.5	15.87	38.64

**ERP POWER FOR LTE BAND 12 (10.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP (Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	704.0	15.84	38.37
		707.5	16.10	40.74
		711.0	16.07	40.46
10.0 MHZ BAND 16QAM	1/0	704.0	15.67	36.90
		707.5	15.78	37.84
		711.0	15.95	39.36

**ERP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	779.5	<b>18.48</b>	70.47
		782.0	18.08	64.27
		784.5	18.32	67.92
5.0 MHZ BAND 16QAM	1/0	779.5	<b>17.82</b>	60.53
		782.0	17.44	55.46
		784.5	17.71	59.02

**ERP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
10 MHZ BAND QPSK	1/0	782.0	<b>18.04</b>	63.68
			<b>17.44</b>	55.46

**ERP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
5MHz Band QPSK	1/0	706.5	16.32	42.85
		710.0	<b>16.47</b>	44.36
		713.5	16.45	44.16
5MHz Band 16QAM	1/0	706.5	16.11	40.83
		710.0	<b>16.35</b>	43.15
		713.5	16.08	40.55

**EIRP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	710.0	<b>16.53</b>	44.98
		710.0	<b>16.34</b>	43.05

**EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
1.4 MHZ BAND QPSK	1/0	1850.7	19.12	81.66
		1882.5	<b>21.43</b>	139.00
		1914.3	20.39	109.40
1.4 MHZ BAND 16QAM	1/0	1850.7	18.81	76.03
		1882.5	<b>21.34</b>	136.14
		1914.3	20.23	105.44

**EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	1851.5	19.02	79.80
		1882.5	<b>21.49</b>	140.93
		1913.5	20.49	111.94
3.0 MHZ BAND 16QAM	1/0	1851.5	18.72	74.47
		1882.5	<b>21.31</b>	135.21
		1913.5	20.09	102.09

**EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	1852.5	19.11	81.47
		1882.5	<b>21.73</b>	148.94
		1912.5	20.71	117.76
5.0 MHZ BAND 16QAM	1/0	1852.5	18.91	77.80
		1882.5	<b>21.50</b>	141.25
		1912.5	20.40	109.65

**EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	1855.0	19.26	84.33
		1882.5	<b>21.70</b>	147.91
		1910.0	20.26	106.17
10.0 MHZ BAND 16QAM	1/0	1855.0	18.98	79.07
		1882.5	<b>21.55</b>	142.89
		1910.0	19.99	99.77

**EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
15.0 MHZ BAND QPSK	1/0	1857.5	19.19	82.99
		1882.5	<b>21.76</b>	149.97
		1907.5	20.35	108.39
15.0 MHZ BAND 16QAM	1/0	1857.5	18.91	77.80
		1882.5	<b>21.51</b>	141.58
		1907.5	20.15	103.51

**EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
20.0 MHZ BAND QPSK	1/0	1860.0	19.36	86.30
		1882.5	22.00	158.49
		1905.0	21.08	128.23
20.0 MHZ BAND 16QAM	1/0	1860.0	19.02	79.80
		1882.5	21.62	145.21
		1905.0	20.51	112.46

**ERP POWER FOR LTE BAND 26 (1.4MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
1.4 MHZ BAND QPSK	1/0	814.7	18.07	64.12
		819.0	18.61	72.61
		823.3	17.77	59.84
1.4 MHZ BAND 16QAM	1/0	814.7	18.05	63.83
		819.0	18.37	68.71
		823.3	17.67	58.48

**ERP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	815.5	18.29	67.45
		819.0	18.48	70.47
		822.5	17.52	56.49
3.0 MHZ BAND 16QAM	1/0	815.5	18.06	63.97
		819.0	18.35	68.39
		822.5	17.47	55.85

**ERP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	816.5	18.34	68.23
		819.0	18.64	73.11
		821.5	17.97	62.66
5.0 MHZ BAND 16QAM	1/0	816.5	18.15	65.31
		819.0	18.43	69.66
		821.5	17.94	62.23

**ERP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	819.0	18.42	69.50
10.0 MHZ BAND 16QAM	1/0	819.0	18.23	66.53

**ERP POWER FOR LTE BAND 27 (1.4MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
1.4 MHZ BAND QPSK	1/0	814.7	17.29	53.58
		819.0	17.65	58.21
		823.3	18.07	64.12
1.4 MHZ BAND 16QAM	1/0	814.7	17.25	53.09
		819.0	17.38	54.70
		823.3	17.74	59.43

**ERP POWER FOR LTE BAND 27 (3.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
3.0 MHZ BAND QPSK	1/0	815.5	17.32	53.95
		819.0	17.40	54.95
		822.5	18.16	65.46
3.0 MHZ BAND 16QAM	1/0	815.5	17.21	52.60
		819.0	17.30	53.70
		822.5	17.70	58.88

**ERP POWER FOR LTE BAND 27 (5.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
5.0 MHZ BAND QPSK	1/0	816.5	17.45	55.59
		819.0	17.65	58.21
		821.5	18.36	68.55
5.0 MHZ BAND 16QAM	1/0	816.5	17.42	55.21
		819.0	17.38	54.70
		821.5	17.93	62.09

**ERP POWER FOR LTE BAND 27 (10.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	ERP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	819.0	17.39	54.83
10.0 MHZ BAND 16QAM	1/0	819.0	17.33	54.08

**EIRP POWER FOR LTE BAND 30 (5.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
5MHz Band QPSK	1/0	2307.5	<b>20.68</b>	116.95
		2310.0	20.65	116.14
		2312.5	20.60	114.82
5MHz Band 16QAM	1/0	2307.5	20.42	110.15
		2310.0	20.37	108.89
		2312.5	<b>20.54</b>	113.24

**EIRP POWER FOR LTE BAND 30 (10.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Average)	
			dBm	mW
10.0 MHZ BAND QPSK	1/0	2310.0	<b>20.64</b>	115.88
		2310.0	<b>20.24</b>	105.68

**EIRP POWER FOR LTE BAND 41 (5.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
5.0 MHZ BAND QPSK	25/0	2498.5	19.46	88.31
		2593.0	20.02	100.46
		2687.5	<b>20.67</b>	116.68
5.0 MHZ BAND 16QAM	25/0	2498.5	18.76	75.16
		2593.0	19.29	84.92
		2687.5	<b>19.97</b>	99.31

**EIRP POWER FOR LTE BAND 41 (10.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
10.0 MHZ BAND QPSK	50/0	2501.0	19.53	89.74
		2593.0	19.99	99.77
		2685.0	<b>20.45</b>	110.92
10.0 MHZ BAND 16QAM	50/0	2501.0	18.83	76.38
		2593.0	19.07	80.72
		2685.0	<b>19.75</b>	94.41

**EIRP POWER FOR LTE BAND 41 (15.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
15.0 MHZ BAND QPSK	75/0	2503.5	19.47	88.51
		2593.0	20.09	102.09
		2682.5	20.75	118.85
15.0 MHZ BAND 16QAM	75/0	2503.5	18.77	75.34
		2593.0	19.39	86.90
		2682.5	20.05	101.16

**EIRP POWER FOR LTE BAND 41 (20.0MHZ BANDWIDTH)**

Mode	RB/RB SIZE	f (MHz)	EIRP(Peak)	
			dBm	mW
20.0 MHZ BAND QPSK	100/0	2506.0	19.55	90.16
		2593.0	20.00	100.00
		2680.0	20.54	113.24
20.0 MHZ BAND 16QAM	100/0	2506.0	18.81	76.03
		2593.0	19.26	84.33
		2680.0	19.80	95.50

## 10.2.1. LTE BAND 2

### QPSK EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

High Frequency Fundamental Measurement UL Fremont Radiated Chamber F								
<b>Company:</b> Project #: 16U23366 Date: 7/2/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 2 QPSK 1.4MHz BW								
<b>Test Equipment:</b> Receiving: Horn T344 and Chamber F SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.851	12.4	V	0.98	8.05	19.49	33.0	-13.5	
1.851	13.1	H	0.98	8.05	20.17	33.0	-12.8	
Mid Ch								
1.880	12.9	V	0.98	8.03	19.90	33.0	-13.1	
1.880	13.4	H	0.98	8.03	20.44	33.0	-12.6	
High Ch								
1.909	12.9	V	0.98	8.05	19.94	33.0	-13.1	
1.909	13.3	H	0.98	8.05	20.42	33.0	-12.6	
Rev. 06.19.16								

**16QAM EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F																
Company:																
Project #:	16U23366															
Date:	7/2/2016															
Test Engineer:	52268															
Configuration:	EUT Only															
Mode:	LTE Band 2 16QAM 1.4MHz BW															
<b>Test Equipment:</b>																
Receiving: Horn T344 and Chamber F SMA Cables																
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes								
Low Ch																
1.851	11.7	V	0.98	8.05	18.79	33.0	-14.2									
1.851	12.4	H	0.98	8.05	19.46	33.0	-13.5									
Mid Ch																
1.880	12.1	V	0.98	8.03	19.16	33.0	-13.8									
1.880	12.6	H	0.98	8.03	19.65	33.0	-13.4									
High Ch																
1.909	11.8	V	0.98	8.05	18.87	33.0	-14.1									
1.909	12.5	H	0.98	8.05	19.60	33.0	-13.4									
Rev. 06.19.16																

**QPSK EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F																
Company:																
Project #:	16U23366															
Date:	7/2/2016															
Test Engineer:	52268															
Configuration:	EUT Only															
Mode:	LTE Band 2 QPSK 3MHz BW															
<b>Test Equipment:</b>																
Receiving: Horn T344 and Chamber F SMA Cables																
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes								
Low Ch																
1.852	12.3	V	0.98	8.05	19.38	33.0	-13.6									
1.852	12.9	H	0.98	8.05	19.93	33.0	-13.1									
Mid Ch																
1.880	12.8	V	0.98	8.03	19.85	33.0	-13.1									
1.880	13.7	H	0.98	8.03	20.76	33.0	-12.2									
High Ch																
1.909	12.4	V	0.98	8.05	19.42	33.0	-13.6									
1.909	13.4	H	0.98	8.05	20.50	33.0	-12.5									
Rev. 06.19.16																

**16QAM EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F									
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 7/2/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 2 16QAM 3MHz BW									
<b>Test Equipment:</b> Receiving: Horn T344 and Chamber F SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes	
<b>Low Ch</b>									
1.852	11.7	V	0.98	8.05	18.73	33.0	-14.3		
1.852	12.3	H	0.98	8.05	19.33	33.0	-13.7		
<b>Mid Ch</b>									
1.880	12.1	V	0.98	8.03	19.15	33.0	-13.8		
1.880	12.6	H	0.98	8.03	19.70	33.0	-13.3		
<b>High Ch</b>									
1.909	11.5	V	0.98	8.05	18.55	33.0	-14.5		
1.909	12.5	H	0.98	8.05	19.61	33.0	-13.4		
Rev. 06.19.16									

**QPSK EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b> Project #: 16U23366 Date: 7/2/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 2 QPSK 5MHz BW								
<b>Test Equipment:</b> Receiving: Horn T344 and Chamber F SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.853	12.7	V	0.98	8.05	19.80	33.0	-13.2	
1.853	12.7	H	0.98	8.05	19.75	33.0	-13.3	
Mid Ch								
1.880	13.0	V	0.98	8.03	20.09	33.0	-12.9	
1.880	14.4	H	0.98	8.03	21.43	33.0	-11.6	
High Ch								
1.908	12.5	V	0.98	8.04	19.56	33.0	-13.4	
1.908	13.8	H	0.98	8.04	20.83	33.0	-12.2	

Rev. 06.19.16

**16QAM EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F									
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 7/2/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 2 16QAM 5MHz BW									
<b>Test Equipment:</b> Receiving: Horn T344 and Chamber F SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes	
Low Ch									
1.853	12.2	V	0.98	8.05	19.25	33.0	-13.7		
1.853	12.8	H	0.98	8.05	19.86	33.0	-13.1		
Mid Ch									
1.880	13.0	V	0.98	8.03	20.05	33.0	-12.9		
1.880	13.7	H	0.98	8.03	20.74	33.0	-12.3		
High Ch									
1.908	11.9	V	0.98	8.04	18.99	33.0	-14.0		
1.908	13.0	H	0.98	8.04	20.09	33.0	-12.9		

Rev. 06.19.16

**QPSK EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F									
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 7/2/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 2 QPSK 10MHz BW									
<b>Test Equipment:</b> Receiving: Horn T344 and Chamber F SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes	
Low Ch									
1.855	12.1	V	0.98	8.05	19.20	33.0	-13.8		
1.855	12.8	H	0.98	8.05	19.85	33.0	-13.2		
Mid Ch									
1.880	12.9	V	0.98	8.03	19.96	33.0	-13.0		
1.880	14.4	H	0.98	8.03	21.42	33.0	-11.6		
High Ch									
1.905	12.6	V	0.98	8.04	19.69	33.0	-13.3		
1.905	13.7	H	0.98	8.04	20.71	33.0	-12.3		

Rev. 06.19.16

**16QAM EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F									
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 7/2/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 2 16QAM 10MHz BW									
<b>Test Equipment:</b> Receiving: Horn T344 and Chamber F SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)		Notes
<b>Low Ch</b>									
1.855	11.5	V	0.98	8.05	18.52	33.0	-14.5		
1.855	12.6	H	0.98	8.05	19.68	33.0	-13.3		
<b>Mid Ch</b>									
1.880	12.3	V	0.98	8.03	19.31	33.0	-13.7		
1.880	13.7	H	0.98	8.03	20.73	33.0	-12.3		
<b>High Ch</b>									
1.905	11.9	V	0.98	8.04	18.94	33.0	-14.1		
1.905	13.0	H	0.98	8.04	20.06	33.0	-12.9		
Rev. 06.19.16									

**QPSK EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b> Project #: 16U23366 Date: 7/2/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 2 QPSK 15MHz BW								
<b>Test Equipment:</b> Receiving: Horn T344 and Chamber F SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.858	12.3	V	0.98	8.04	19.33	33.0	-13.7	
1.858	12.7	H	0.98	8.04	19.74	33.0	-13.3	
Mid Ch								
1.880	12.8	V	0.98	8.03	19.80	33.0	-13.2	
1.880	14.1	H	0.98	8.03	21.19	33.0	-11.8	
High Ch								
1.903	12.0	V	0.98	8.03	19.01	33.0	-14.0	
1.903	13.1	H	0.98	8.03	20.17	33.0	-12.8	

Rev. 06.19.16

**16QAM EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F									
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 7/2/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 2 16QAM 15MHz BW									
<b>Test Equipment:</b> Receiving: Horn T344 and Chamber F SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes	
<b>Low Ch</b>									
1.858	11.6	V	0.98	8.04	18.64	33.0	-14.4		
1.858	12.4	H	0.98	8.04	19.43	33.0	-13.6		
<b>Mid Ch</b>									
1.880	12.1	V	0.98	8.03	19.15	33.0	-13.8		
1.880	13.6	H	0.98	8.03	20.65	33.0	-12.4		
<b>High Ch</b>									
1.903	11.4	V	0.98	8.03	18.46	33.0	-14.5		
1.903	12.8	H	0.98	8.03	19.88	33.0	-13.1		
Rev. 06.19.16									

**QPSK EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 7/2/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 2 QPSK 20MHz BW								
<b>Test Equipment:</b> Receiving: Horn T344 and Chamber F SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.860	10.7	V	0.98	8.04	17.76	33.0	-15.2	
1.860	13.1	H	0.98	8.04	20.20	33.0	-12.8	
Mid Ch								
1.880	11.5	V	0.98	8.03	18.58	33.0	-14.4	
1.880	13.9	H	0.98	8.03	21.00	33.0	-12.0	
High Ch								
1.900	12.1	V	0.98	8.02	19.14	33.0	-13.9	
1.900	13.7	H	0.98	8.02	20.77	33.0	-12.2	
Rev. 06.19.16								

**16QAM EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b> 16U23366								
<b>Project #:</b> 16U23366								
<b>Date:</b> 7/2/2016								
<b>Test Engineer:</b> 52268								
<b>Configuration:</b> EUT Only								
<b>Mode:</b> LTE Band 2 16QAM 20MHz BW								
<b>Test Equipment:</b>								
Receiving: Horn T344 and Chamber F SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.860	10.6	V	0.98	8.04	17.71	33.0	-15.3	
1.860	12.4	H	0.98	8.04	19.49	33.0	-13.5	
Mid Ch								
1.880	11.7	V	0.98	8.03	18.72	33.0	-14.3	
1.880	13.4	H	0.98	8.03	20.46	33.0	-12.5	
High Ch								
1.900	11.4	V	0.98	8.02	18.45	33.0	-14.6	
1.900	12.9	H	0.98	8.02	19.93	33.0	-13.1	
Rev. 06.19.16								

## 10.2.2. LTE BAND 4

### QPSK EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/17/2016							
<b>Test Engineer:</b>	52279							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 4 QPSK 1.4MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T712, and Chamber D SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.711	5.9	V	0.95	8.27	13.24	30.0	-16.8	
1.711	12.0	H	0.95	8.27	19.30	30.0	-10.7	
Mid Ch								
1.733	8.0	V	0.95	8.23	15.29	30.0	-14.7	
1.733	12.6	H	0.95	8.23	19.88	30.0	-10.1	
High Ch								
1.754	10.6	V	0.95	8.18	17.86	30.0	-12.1	
1.754	12.0	H	0.95	8.18	19.22	30.0	-10.8	
Rev. 06.16.16								

**16QAM EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D								
<b>Company:</b> Project #: 16U23366 Date: 6/17/2016 <b>Test Engineer:</b> 52279 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 4 16QAM 1.4MHz BW								
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.711	5.5	V	0.95	8.27	12.78	30.0	-17.2	
1.711	11.4	H	0.95	8.27	18.71	30.0	-11.3	
Mid Ch								
1.733	7.5	V	0.95	8.23	14.73	30.0	-15.3	
1.733	11.7	H	0.95	8.23	18.97	30.0	-11.0	
High Ch								
1.754	10.1	V	0.95	8.18	17.35	30.0	-12.7	
1.754	11.3	H	0.95	8.18	18.51	30.0	-11.5	

Rev. 06.16.16

**QPSK EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D																
Company:																
Project #:	16U23366															
Date:	6/17/2016															
Test Engineer:	52279															
Configuration:	EUT Only															
Mode:	LTE Band 4 QPSK 3MHz BW															
<b>Test Equipment:</b>																
Receiving: Horn T712, and Chamber D SMA Cables																
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes								
Low Ch																
1.712	6.0	V	0.95	8.27	13.27	30.0	-16.7									
1.712	12.0	H	0.95	8.27	19.32	30.0	-10.7									
Mid Ch																
1.733	7.9	V	0.95	8.23	15.20	30.0	-14.8									
1.733	12.5	H	0.95	8.23	19.73	30.0	-10.3									
High Ch																
1.754	10.6	V	0.95	8.18	17.85	30.0	-12.1									
1.754	11.8	H	0.95	8.18	19.07	30.0	-10.9									
Rev. 06.16.16																

**16QAM EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D									
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 6/17/2016 <b>Test Engineer:</b> 52279 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 4 16QAM 3MHz BW									
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes	
Low Ch									
1.712	5.4	V	0.95	8.27	12.76	30.0	-17.2		
1.712	11.2	H	0.95	8.27	18.56	30.0	-11.4		
Mid Ch									
1.733	7.1	V	0.95	8.23	14.38	30.0	-15.6		
1.733	11.8	H	0.95	8.23	19.04	30.0	-11.0		
High Ch									
1.754	9.9	V	0.95	8.18	17.15	30.0	-12.8		
1.754	11.1	H	0.95	8.18	18.32	30.0	-11.7		

Rev. 06.16.16

**QPSK EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D																
Company:																
Project #:	16U23366															
Date:	6/17/2016															
Test Engineer:	52279															
Configuration:	EUT Only															
Mode:	LTE Band 4 QPSK 5MHz BW															
<b>Test Equipment:</b>																
Receiving: Horn T712, and Chamber D SMA Cables																
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes								
Low Ch																
1.713	5.9	V	0.95	8.27	13.23	30.0	-16.8									
1.713	12.0	H	0.95	8.27	19.33	30.0	-10.7									
Mid Ch																
1.733	7.7	V	0.95	8.23	14.99	30.0	-15.0									
1.733	12.6	H	0.95	8.23	19.87	30.0	-10.1									
High Ch																
1.753	10.5	V	0.95	8.18	17.75	30.0	-12.2									
1.753	11.9	H	0.95	8.18	19.11	30.0	-10.9									
Rev. 06.16.16																

**16QAM EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D									
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 6/17/2016 <b>Test Engineer:</b> 52279 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 4 16QAM 5MHz BW									
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)		Notes
Low Ch									
1.713	5.2	V	0.95	8.27	12.54	30.0	-17.5		
1.713	11.4	H	0.95	8.27	18.71	30.0	-11.3		
Mid Ch									
1.733	7.0	V	0.95	8.23	14.23	30.0	-15.8		
1.733	11.7	H	0.95	8.23	18.96	30.0	-11.0		
High Ch									
1.753	9.9	V	0.95	8.18	17.15	30.0	-12.8		
1.753	11.3	H	0.95	8.18	18.53	30.0	-11.5		
Rev. 06.16.16									

**QPSK EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D									
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 6/17/2016 <b>Test Engineer:</b> 52279 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 4 QPSK 10MHz BW									
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes	
Low Ch									
1.715	5.9	V	0.95	8.26	13.16	30.0	-16.8		
1.715	12.1	H	0.95	8.26	19.40	30.0	-10.6		
Mid Ch									
1.733	7.2	V	0.95	8.23	14.48	30.0	-15.5		
1.733	12.6	H	0.95	8.23	19.88	30.0	-10.1		
High Ch									
1.750	9.7	V	0.95	8.19	16.98	30.0	-13.0		
1.750	11.8	H	0.95	8.19	19.02	30.0	-11.0		

Rev. 06.16.16

**16QAM EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D									
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 6/17/2016 <b>Test Engineer:</b> 52279 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 4 16QAM 10MHz BW									
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)		Notes
<b>Low Ch</b>									
1.715	4.4	V	0.95	8.26	11.74	30.0	-18.3		
1.715	11.5	H	0.95	8.26	18.76	30.0	-11.2		
<b>Mid Ch</b>									
1.733	6.5	V	0.95	8.23	13.73	30.0	-16.3		
1.733	12.1	H	0.95	8.23	19.38	30.0	-10.6		
<b>High Ch</b>									
1.750	9.4	V	0.95	8.19	16.68	30.0	-13.3		
1.750	11.3	H	0.95	8.19	18.52	30.0	-11.5		
Rev. 06.16.16									

**QPSK EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D																
Company:																
Project #:	16U23366															
Date:	6/17/2016															
Test Engineer:	52279															
Configuration:	EUT Only															
Mode:	LTE Band 4 QPSK 15MHz BW															
<u>Test Equipment:</u>																
Receiving: Horn T712, and Chamber D SMA Cables																
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes								
Low Ch																
1.718	5.6	V	0.95	8.26	12.92	30.0	-17.1									
1.718	12.2	H	0.95	8.26	19.53	30.0	-10.5									
Mid Ch																
1.733	6.7	V	0.95	8.23	14.02	30.0	-16.0									
1.733	12.7	H	0.95	8.23	19.93	30.0	-10.1									
High Ch																
1.748	9.3	V	0.95	8.19	16.56	30.0	-13.4									
1.748	12.0	H	0.95	8.19	19.23	30.0	-10.8									
Rev. 06.16.16																

**16QAM EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D									
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 6/17/2016 <b>Test Engineer:</b> 52279 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 4 16QAM 15MHz BW									
<b>Test Equipment:</b> Receiving: Horn T712, and Chamber D SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes	
Low Ch									
1.718	4.9	V	0.95	8.26	12.24	30.0	-17.8		
1.718	11.6	H	0.95	8.26	18.86	30.0	-11.1		
Mid Ch									
1.733	6.1	V	0.95	8.23	13.34	30.0	-16.7		
1.733	11.9	H	0.95	8.23	19.22	30.0	-10.8		
High Ch									
1.748	8.8	V	0.95	8.19	16.02	30.0	-14.0		
1.748	11.5	H	0.95	8.19	18.78	30.0	-11.2		

Rev. 06.16.16

**QPSK EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D																
Company:																
Project #:	16U23366															
Date:	6/17/2016															
Test Engineer:	52279															
Configuration:	EUT Only															
Mode:	LTE Band 4 QPSK 20MHz BW															
<b>Test Equipment:</b>																
Receiving: Horn T712, and Chamber D SMA Cables																
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes								
Low Ch																
1.720	6.5	V	0.95	8.25	13.76	30.0	-16.2									
1.720	12.5	H	0.95	8.25	19.79	30.0	-10.2									
Mid Ch																
1.733	7.7	V	0.95	8.23	15.02	30.0	-15.0									
1.733	13.1	H	0.95	8.23	20.37	30.0	-9.6									
High Ch																
1.745	6.1	V	0.95	8.20	13.37	30.0	-16.6									
1.745	12.7	H	0.95	8.20	19.94	30.0	-10.1									
Rev. 06.16.16																

**16QAM EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber D																
Company:																
Project #:	16U23366															
Date:	6/17/2016															
Test Engineer:	52279															
Configuration:	EUT Only															
Mode:	LTE Band 4 16QAM 20MHz BW															
<b>Test Equipment:</b>																
Receiving: Horn T712, and Chamber D SMA Cables																
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes								
Low Ch																
1.720	6.0	V	0.95	8.25	13.31	30.0	-16.7									
1.720	11.7	H	0.95	8.25	19.04	30.0	-11.0									
Mid Ch																
1.733	6.9	V	0.95	8.23	14.13	30.0	-15.9									
1.733	12.3	H	0.95	8.23	19.53	30.0	-10.5									
High Ch																
1.745	5.1	V	0.95	8.20	12.34	30.0	-17.7									
1.745	11.9	H	0.95	8.20	19.13	30.0	-10.9									
Rev. 06.16.16																

### 10.2.3. LTE BAND 5

#### QPSK EIRP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
Company: Project #: 16U23366 Date: 7/2/2016 Test Engineer: 52268 Configuration: EUT Only Mode: LTE Band 5 QPSK 1.4MHz BW										
Test Equipment: Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
824.70	13.00	V	0.6	0.0	12.38	14.53	38.45	40.60	-26.1	
824.70	18.35	H	0.6	0.0	17.73	19.88	38.45	40.60	-20.7	
Mid Ch										
836.50	13.14	V	0.6	0.0	12.52	14.67	38.45	40.60	-25.9	
836.50	19.34	H	0.6	0.0	18.72	20.87	38.45	40.60	-19.7	
High Ch										
848.30	13.71	V	0.6	0.0	13.09	15.24	38.45	40.60	-25.4	
848.30	19.27	H	0.6	0.0	18.65	20.80	38.45	40.60	-19.8	
Rev. 06.19.16										

**16QAM EIRP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
<u>Company:</u> Project #: 16U23366 Date: 7/2/2016 Test Engineer: 52268 Configuration: EUT Only Mode: LTE Band 5 16QAM 1.4MHz BW										
<u>Test Equipment:</u> Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
824.70	12.07	V	0.6	0.0	11.45	13.60	38.45	40.60	-27.0	
824.70	17.78	H	0.6	0.0	17.16	19.31	38.45	40.60	-21.3	
Mid Ch										
836.50	12.44	V	0.6	0.0	11.82	13.97	38.45	40.60	-26.6	
836.50	18.98	H	0.6	0.0	18.36	20.51	38.45	40.60	-20.1	
High Ch										
848.30	12.70	V	0.6	0.0	12.08	14.23	38.45	40.60	-26.4	
848.30	18.92	H	0.6	0.0	18.30	20.45	38.45	40.60	-20.2	

Rev. 06.19.16

**QPSK EIRP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
<b>Company:</b> Project #: 16U23366 Date: 7/2/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 5 QPSK 3MHz BW										
<b>Test Equipment:</b> Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
825.50	12.90	V	0.6	0.0	12.28	14.43	38.45	40.60	-26.2	
825.50	18.22	H	0.6	0.0	17.60	19.75	38.45	40.60	-20.9	
Mid Ch										
836.50	13.16	V	0.6	0.0	12.54	14.69	38.45	40.60	-25.9	
836.50	19.30	H	0.6	0.0	18.68	20.83	38.45	40.60	-19.8	
High Ch										
847.50	13.65	V	0.6	0.0	13.03	15.18	38.45	40.60	-25.4	
847.50	19.27	H	0.6	0.0	18.65	20.80	38.45	40.60	-19.8	
Rev. 06.19.16										

**16QAM EIRP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F																				
Company:																				
Project #:	16U23366																			
Date:	7/2/2016																			
Test Engineer:	52268																			
Configuration:	EUT Only																			
Mode:	LTE Band 5 16QAM 3MHz BW																			
<u>Test Equipment:</u>																				
Receiving: Horn T344, and Chamber F SMA Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
825.50	12.05	V	0.6	0.0	11.43	13.58	38.45	40.60	-27.0											
825.50	17.74	H	0.6	0.0	17.12	19.27	38.45	40.60	-21.3											
Mid Ch																				
836.50	12.19	V	0.6	0.0	11.57	13.72	38.45	40.60	-26.9											
836.50	18.97	H	0.6	0.0	18.35	20.50	38.45	40.60	-20.1											
High Ch																				
847.50	12.46	V	0.6	0.0	11.84	13.99	38.45	40.60	-26.6											
847.50	18.80	H	0.6	0.0	18.18	20.33	38.45	40.60	-20.3											
Rev. 06.19.16																				

**QPSK EIRP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
<u>Company:</u> Project #: 16U23366 Date: 7/2/2016 Test Engineer: 52268 Configuration: EUT Only Mode: LTE Band 5 QPSK 5MHz BW										
<u>Test Equipment:</u> Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
826.50	12.93	V	0.6	0.0	12.31	14.46	38.45	40.60	-26.1	
826.50	18.56	H	0.6	0.0	17.95	20.10	38.45	40.60	-20.5	
Mid Ch										
836.50	13.34	V	0.6	0.0	12.72	14.87	38.45	40.60	-25.7	
836.50	19.15	H	0.6	0.0	18.53	20.68	38.45	40.60	-19.9	
High Ch										
846.50	13.69	V	0.6	0.0	13.08	15.23	38.45	40.60	-25.4	
846.50	19.28	H	0.6	0.0	18.66	20.81	38.45	40.60	-19.8	
Rev. 06.19.16										

**16QAM EIRP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F																				
Company:																				
Project #:	16U23366																			
Date:	7/2/2016																			
Test Engineer:	52268																			
Configuration:	EUT Only																			
Mode:	LTE Band 5 16QAM 5MHz BW																			
<u>Test Equipment:</u>																				
Receiving: Horn T344, and Chamber F SMA Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
826.50	12.03	V	0.6	0.0	11.41	13.56	38.45	40.60	-27.0											
826.50	17.86	H	0.6	0.0	17.24	19.39	38.45	40.60	-21.2											
Mid Ch																				
836.50	12.70	V	0.6	0.0	12.08	14.23	38.45	40.60	-26.4											
836.50	19.07	H	0.6	0.0	18.45	20.60	38.45	40.60	-20.0											
High Ch																				
846.50	12.88	V	0.6	0.0	12.26	14.41	38.45	40.60	-26.2											
846.50	19.09	H	0.6	0.0	18.47	20.62	38.45	40.60	-20.0											
Rev. 06.19.16																				

**QPSK EIRP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
<b>Company:</b> Project #: 16U23366 Date: 7/2/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 5 QPSK 10MHz BW										
<b>Test Equipment:</b> Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
829.00	12.97	V	0.6	0.0	12.35	14.50	38.45	40.60	-26.1	
829.00	18.40	H	0.6	0.0	17.78	19.93	38.45	40.60	-20.7	
Mid Ch										
836.50	13.36	V	0.6	0.0	12.74	14.89	38.45	40.60	-25.7	
836.50	19.24	H	0.6	0.0	18.62	20.77	38.45	40.60	-19.8	
High Ch										
844.00	13.40	V	0.6	0.0	12.78	14.93	38.45	40.60	-25.7	
844.00	19.43	H	0.6	0.0	18.82	20.97	38.45	40.60	-19.6	

Rev. 06.19.16

**16QAM EIRP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F																				
Company:																				
Project #:	16U23366																			
Date:	7/2/2016																			
Test Engineer:	52268																			
Configuration:	EUT Only																			
Mode:	LTE Band 5 16QAM 10MHz BW																			
<b>Test Equipment:</b>																				
Receiving: Horn T344, and Chamber F SMA Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
829.00	11.68	V	0.6	0.0	11.06	13.21	38.45	40.60	-27.4											
829.00	17.68	H	0.6	0.0	17.07	19.22	38.45	40.60	-21.4											
Mid Ch																				
836.50	12.29	V	0.6	0.0	11.67	13.82	38.45	40.60	-26.8											
836.50	18.34	H	0.6	0.0	17.72	19.87	38.45	40.60	-20.7											
High Ch																				
844.00	13.89	V	0.6	0.0	13.27	15.42	38.45	40.60	-25.2											
844.00	18.58	H	0.6	0.0	17.97	20.12	38.45	40.60	-20.5											
Rev. 06.19.16																				

## 10.2.4. LTE BAND 7

### QPSK EIRP POWER FOR LTE BAND 7 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	7/2/2016							
<b>Test Engineer:</b>	52291							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 7 QPSK 5MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T711, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.503	5.8	V	1.15	9.34	14.01	33.0	-19.0	
2.503	8.7	H	1.15	9.34	16.91	33.0	-16.1	
Mid Ch								
2.535	9.1	V	1.16	9.38	17.27	33.0	-15.7	
2.535	12.3	H	1.16	9.38	20.54	33.0	-12.5	
High Ch								
2.568	10.1	V	1.17	9.43	18.36	33.0	-14.6	
2.568	13.2	H	1.17	9.43	21.50	33.0	-11.5	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 7 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	7/2/2016							
<b>Test Engineer:</b>	52291							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 7 16QAM 5MHz BW							
<b>Test Equipment:</b>								
<b>Receiving:</b> Horn T711, and Chamber E SMA Cables								
<b>Substitution:</b> Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.503	4.9	V	1.15	9.34	13.13	33.0	-19.9	
2.503	7.8	H	1.15	9.34	15.95	33.0	-17.1	
Mid Ch								
2.535	8.3	V	1.16	9.38	16.51	33.0	-16.5	
2.535	11.5	H	1.16	9.38	19.75	33.0	-13.3	
High Ch								
2.568	9.3	V	1.17	9.43	17.53	33.0	-15.5	
2.568	12.6	H	1.17	9.43	20.81	33.0	-12.2	
Rev. 10.24.13								

**QPSK EIRP POWER FOR LTE BAND 7 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E																
<b>Company:</b>																
<b>Project #:</b>	16U23366															
<b>Date:</b>	7/2/2016															
<b>Test Engineer:</b>	52291															
<b>Configuration:</b>	EUT Only															
<b>Mode:</b>	LTE Band 7 QPSK 10MHz BW															
<b>Test Equipment:</b>																
Receiving: Horn T711, and Chamber E SMA Cables																
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes								
Low Ch																
2.505	5.9	V	1.15	9.34	14.06	33.0	-18.9									
2.505	9.5	H	1.15	9.34	17.64	33.0	-15.4									
Mid Ch																
2.535	8.8	V	1.16	9.38	17.05	33.0	-15.9									
2.535	12.7	H	1.16	9.38	20.93	33.0	-12.1									
High Ch																
2.565	11.4	V	1.17	9.43	19.64	33.0	-13.4									
2.565	13.7	H	1.17	9.43	21.98	33.0	-11.0									

Rev. 10.24.13

**16QAM EIRP POWER FOR LTE BAND 7 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E																
<b>Company:</b>																
<b>Project #:</b>	16U23366															
<b>Date:</b>	7/2/2016															
<b>Test Engineer:</b>	52291															
<b>Configuration:</b>	EUT Only															
<b>Mode:</b>	LTE Band 7 16QAM 10MHz BW															
<b>Test Equipment:</b>																
<b>Receiving:</b> Horn T711, and Chamber E SMA Cables																
<b>Substitution:</b> Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes								
Low Ch																
2.505	4.7	V	1.15	9.34	12.87	33.0	-20.1									
2.505	8.6	H	1.15	9.34	16.79	33.0	-16.2									
Mid Ch																
2.535	8.7	V	1.16	9.38	16.96	33.0	-16.0									
2.535	12.1	H	1.16	9.38	20.28	33.0	-12.7									
High Ch																
2.565	9.5	V	1.17	9.43	17.76	33.0	-15.2									
2.565	13.1	H	1.17	9.43	21.35	33.0	-11.7									

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 7 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	7/2/2016							
<b>Test Engineer:</b>	52291							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 7 QPSK 15MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T711, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.508	8.1	V	1.15	9.34	16.26	33.0	-16.7	
2.508	10.3	H	1.15	9.34	18.49	33.0	-14.5	
Mid Ch								
2.535	10.2	V	1.16	9.38	18.45	33.0	-14.5	
2.535	13.4	H	1.16	9.38	21.60	33.0	-11.4	
High Ch								
2.563	11.1	V	1.17	9.42	19.38	33.0	-13.6	
2.563	13.7	H	1.17	9.42	21.94	33.0	-11.1	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 7 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	7/2/2016							
<b>Test Engineer:</b>	52291							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 7 16QAM 15MHz BW							
<b>Test Equipment:</b>								
<b>Receiving:</b> Horn T711, and Chamber E SMA Cables								
<b>Substitution:</b> Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.508	6.6	V	1.15	9.34	14.82	33.0	-18.2	
2.508	9.3	H	1.15	9.34	17.53	33.0	-15.5	
Mid Ch								
2.535	9.4	V	1.16	9.38	17.65	33.0	-15.3	
2.535	12.7	H	1.16	9.38	20.89	33.0	-12.1	
High Ch								
2.563	10.0	V	1.17	9.42	18.30	33.0	-14.7	
2.563	13.4	H	1.17	9.42	21.61	33.0	-11.4	
Rev. 10.24.13								

**QPSK EIRP POWER FOR LTE BAND 7 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<u>Company:</u>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	7/2/2016							
<b>Test Engineer:</b>	52291							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 7 QPSK 20MHz BW							
<u>Test Equipment:</u>								
Receiving: Horn T711, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.510	2.8	V	1.15	9.35	11.04	33.0	-22.0	
2.510	9.6	H	1.15	9.35	17.80	33.0	-15.2	
Mid Ch								
2.535	7.8	V	1.16	9.38	16.01	33.0	-17.0	
2.535	13.7	H	1.16	9.38	21.96	33.0	-11.0	
High Ch								
2.560	6.4	V	1.17	9.42	14.65	33.0	-18.4	
2.560	12.0	H	1.17	9.42	20.25	33.0	-12.7	

**16QAM EIRP POWER FOR LTE BAND 7 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	7/2/2016							
<b>Test Engineer:</b>	52291							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 7 16QAM 20MHz BW							
<b>Test Equipment:</b>								
<b>Receiving:</b> Horn T711, and Chamber E SMA Cables								
<b>Substitution:</b> Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.510	6.2	V	1.15	9.35	14.37	33.0		
2.510	9.4	H	1.15	9.35	17.59	33.0	-18.6	
							-15.4	
Mid Ch								
2.535	9.0	V	1.16	9.38	17.24	33.0	-15.8	
2.535	13.2	H	1.16	9.38	21.42	33.0	-11.6	
High Ch								
2.560	10.3	V	1.17	9.42	18.59	33.0	-14.4	
2.560	11.9	H	1.17	9.42	20.17	33.0	-12.8	
Rev. 10.24.13								

## 10.2.5. LTE BAND 12

### QPSK EIRP POWER FOR LTE BAND 12 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
<b>Company:</b>										
<b>Project #:</b> 16U23366										
<b>Date:</b> 7/2/2016										
<b>Test Engineer:</b> 52268										
<b>Configuration:</b> EUT Only										
<b>Mode:</b> LTE Band 12 QPSK 1.4MHz BW										
<b>Test Equipment:</b>										
Receiving: Horn T344, and Chamber F SMA Cable										
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
<b>Low Ch</b>										
699.70	8.42	V	0.55	0.0	7.87	10.02	34.77	36.99	-27.0	
699.70	16.56	H	0.55	0.0	16.01	18.16	34.77	36.99	-18.8	
<b>Mid Ch</b>										
707.50	8.52	V	0.55	0.0	7.97	10.12	34.77	36.99	-26.9	
707.50	16.16	H	0.55	0.0	15.61	17.76	34.77	36.99	-19.2	
<b>High Ch</b>										
715.30	9.27	V	0.55	0.0	8.72	10.87	34.77	36.99	-26.1	
715.30	16.61	H	0.55	0.0	16.06	18.21	34.77	36.99	-18.8	
Rev. 06.19.16										

**16QAM EIRP POWER FOR LTE BAND 12 (1.4MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
Company: Project #: 16U23366 Date: 7/2/2016 Test Engineer: 52268 Configuration: EUT Only Mode: LTE Band 12 16QAM 1.4MHz BW										
Test Equipment: Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
699.70	8.32	V	0.55	0.0	7.77	9.92	34.77	36.99	-27.1	
699.70	16.17	H	0.55	0.0	15.62	17.77	34.77	36.99	-19.2	
Mid Ch										
707.50	8.36	V	0.55	0.0	7.81	9.96	34.77	36.99	-27.0	
707.50	16.08	H	0.55	0.0	15.53	17.68	34.77	36.99	-19.3	
High Ch										
715.30	9.02	V	0.55	0.0	8.47	10.62	34.77	36.99	-26.4	
715.30	16.31	H	0.55	0.0	15.76	17.91	34.77	36.99	-19.1	
Rev. 06.19.16										

**QPSK EIRP POWER FOR LTE BAND 12 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
Company: Project #: 16U23366 Date: 7/2/2016 Test Engineer: 52268 Configuration: EUT Only Mode: LTE Band 12 QPSK 3MHz BW										
Test Equipment: Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
700.50	8.39	V	0.55	0.0	7.84	9.99	34.77	36.99	-27.0	
700.50	16.38	H	0.55	0.0	15.83	17.98	34.77	36.99	-19.0	
Mid Ch										
707.50	8.35	V	0.55	0.0	7.80	9.95	34.77	36.99	-27.0	
707.50	16.24	H	0.55	0.0	15.69	17.84	34.77	36.99	-19.1	
High Ch										
714.50	9.05	V	0.55	0.0	8.50	10.65	34.77	36.99	-26.3	
714.50	16.64	H	0.55	0.0	16.09	18.24	34.77	36.99	-18.8	
Rev. 06.19.16										

**16QAM EIRP POWER FOR LTE BAND 12 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
Company: Project #: 16U23366 Date: 7/2/2016 Test Engineer: 52268 Configuration: EUT Only Mode: LTE Band 12 16QAM 3MHz BW										
Test Equipment: Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
700.50	8.18	V	0.55	0.0	7.63	9.78	34.77	36.99	-27.2	
700.50	16.19	H	0.55	0.0	15.64	17.79	34.77	36.99	-19.2	
Mid Ch										
707.50	8.26	V	0.55	0.0	7.71	9.86	34.77	36.99	-27.1	
707.50	15.96	H	0.55	0.0	15.41	17.56	34.77	36.99	-19.4	
High Ch										
714.50	8.86	V	0.55	0.0	8.31	10.46	34.77	36.99	-26.5	
714.50	16.22	H	0.55	0.0	15.67	17.82	34.77	36.99	-19.2	
Rev. 06.19.16										

**QPSK EIRP POWER FOR LTE BAND 12 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F																				
Company:																				
Project #:	16U23366																			
Date:	7/2/2016																			
Test Engineer:	52268																			
Configuration:	EUT Only																			
Mode:	LTE Band 12 QPSK 5MHz BW																			
<b>Test Equipment:</b>																				
Receiving: Horn T344, and Chamber F SMA Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
701.50	8.66	V	0.55	0.0	8.11	10.26	34.77	36.99	-26.7											
701.50	16.56	H	0.55	0.0	16.01	18.16	34.77	36.99	-18.8											
Mid Ch																				
707.50	8.49	V	0.55	0.0	7.94	10.09	34.77	36.99	-26.9											
707.50	16.40	H	0.55	0.0	15.85	18.00	34.77	36.99	-19.0											
High Ch																				
713.50	9.29	V	0.55	0.0	8.74	10.89	34.77	36.99	-26.1											
713.50	16.73	H	0.55	0.0	16.18	18.33	34.77	36.99	-18.7											
Rev. 06.19.16																				

**16QAM EIRP POWER FOR LTE BAND 12 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F																				
Company:																				
Project #:	16U23366																			
Date:	7/2/2016																			
Test Engineer:	52268																			
Configuration:	EUT Only																			
Mode:	LTE Band 12 16QAM 5MHz BW																			
<u>Test Equipment:</u>																				
Receiving: Horn T344, and Chamber F SMA Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
701.50	8.29	V	0.55	0.0	7.74	9.89	34.77	36.99	-27.1											
701.50	16.30	H	0.55	0.0	15.75	17.90	34.77	36.99	-19.1											
Mid Ch																				
707.50	8.90	V	0.55	0.0	8.35	10.50	34.77	36.99	-26.5											
707.50	16.11	H	0.55	0.0	15.56	17.71	34.77	36.99	-19.3											
High Ch																				
713.50	8.93	V	0.55	0.0	8.38	10.53	34.77	36.99	-26.5											
713.50	16.42	H	0.55	0.0	15.87	18.02	34.77	36.99	-19.0											
Rev. 06.19.16																				

**QPSK EIRP POWER FOR LTE BAND 12 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F																				
Company:																				
Project #:	16U23366																			
Date:	7/2/2016																			
Test Engineer:	52268																			
Configuration:	EUT Only																			
Mode:	LTE Band 12 QPSK 10MHz BW																			
<b>Test Equipment:</b>																				
Receiving: Horn T344, and Chamber F SMA Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
704.00	8.68	V	0.55	0.0	8.13	10.28	34.77	36.99	26.7											
704.00	16.39	H	0.55	0.0	15.84	17.99	34.77	36.99	-19.0											
Mid Ch																				
707.50	8.69	V	0.55	0.0	8.14	10.29	34.77	36.99	26.7											
707.50	16.65	H	0.55	0.0	16.10	18.25	34.77	36.99	-18.7											
High Ch																				
711.00	8.95	V	0.55	0.0	8.40	10.55	34.77	36.99	-26.4											
711.00	16.62	H	0.55	0.0	16.07	18.22	34.77	36.99	-18.8											
Rev. 06.19.16																				

**16QAM EIRP POWER FOR LTE BAND 12 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F																				
Company:																				
Project #:	16U23366																			
Date:	7/2/2016																			
Test Engineer:	52268																			
Configuration:	EUT Only																			
Mode:	LTE Band 12 16QAM 10MHz BW																			
<b>Test Equipment:</b>																				
Receiving: Horn T344, and Chamber F SMA Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
704.00	8.32	V	0.55	0.0	7.77	9.92	34.77	36.99	27.1											
704.00	16.22	H	0.55	0.0	15.67	17.82	34.77	36.99	-19.2											
Mid Ch																				
707.50	8.22	V	0.55	0.0	7.67	9.82	34.77	36.99	-27.2											
707.50	16.33	H	0.55	0.0	15.78	17.93	34.77	36.99	-19.1											
High Ch																				
711.00	8.95	V	0.55	0.0	8.40	10.55	34.77	36.99	-26.4											
711.00	16.50	H	0.55	0.0	15.95	18.10	34.77	36.99	-18.9											
Rev. 06.19.16																				

## 10.2.6. LTE BAND 13

### QPSK EIRP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F																				
Company:																				
Project #:	16U23366																			
Date:	7/2/2016																			
Test Engineer:	52268																			
Configuration:	EUT Only																			
Mode:	LTE Band 13 QPSK 5MHz BW																			
<u>Test Equipment:</u>																				
Receiving: Horn T344, and Chamber F SMA Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
779.50	11.43	V	0.55	0.0	10.88	13.03	34.77	36.99	-24.0											
779.50	19.03	H	0.55	0.0	18.48	20.63	34.77	36.99	-16.4											
Mid Ch																				
782.00	11.08	V	0.55	0.0	10.53	12.68	34.77	36.99	-24.3											
782.00	18.63	H	0.55	0.0	18.08	20.23	34.77	36.99	-16.8											
High Ch																				
784.50	11.84	V	0.55	0.0	11.29	13.44	34.77	36.99	-23.5											
784.50	18.87	H	0.55	0.0	18.32	20.47	34.77	36.99	-16.5											
Rev. 06.19.16																				

**16QAM EIRP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F																				
Company:																				
Project #:	16U23366																			
Date:	7/2/2016																			
Test Engineer:	52268																			
Configuration:	EUT Only																			
Mode:	LTE Band 13 16QAM5MHz BW																			
<u>Test Equipment:</u>																				
Receiving: Horn T344, and Chamber F SMA Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
779.50	10.79	V	0.55	0.0	10.24	12.39	34.77	36.99	-24.6											
779.50	18.37	H	0.55	0.0	17.82	19.97	34.77	36.99	-17.0											
Mid Ch																				
782.00	11.04	V	0.55	0.0	10.49	12.64	34.77	36.99	-24.4											
782.00	17.99	H	0.55	0.0	17.44	19.59	34.77	36.99	-17.4											
High Ch																				
784.50	10.82	V	0.55	0.0	10.27	12.42	34.77	36.99	-24.6											
784.50	18.26	H	0.55	0.0	17.71	19.86	34.77	36.99	-17.1											
Rev. 06.19.16																				

**QPSK EIRP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
<b>Company:</b>										
Project #:	16U23366									
Date:	7/2/2016									
Test Engineer:	52268									
Configuration:	EUT Only									
Mode:	LTE Band 13 QPSK 10MHz BW									
<b>Test Equipment:</b>										
Receiving: Horn T344, and Chamber F SMA Cable										
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
782.00	11.06	V	0.55	0.0	10.51	12.66	34.77	36.99	-24.3	
782.00	18.59	H	0.55	0.0	18.04	20.19	34.77	36.99	-16.8	
Rev. 06.19.16										

**16QAM EIRP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
<b>Company:</b> Project #: 16U23366 Date: 7/2/2016 Test Engineer: 52268 Configuration: EUT Only Mode: LTE Band 13 16QAM 10MHz BW										
<b>Test Equipment:</b> Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
782.00	10.66	V	0.55	0.0	10.11	12.26	34.77	36.99	-24.7	
782.00	17.99	H	0.55	0.0	17.44	19.59	34.77	36.99	-17.4	

Rev. 06.19.16

## 10.2.7. LTE BAND 17

### QPSK EIRP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
Company: Project #: 16U23366 Date: 7/2/2016 Test Engineer: 52268 Configuration: EUT Only Mode: LTE Band 17 QPSK 5MHz BW										
<u>Test Equipment:</u> Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
706.50	8.51	V	0.55	0.0	7.96	10.11	34.77	36.99	-26.9	
706.50	16.87	H	0.55	0.0	16.32	18.47	34.77	36.99	-18.5	
Mid Ch										
710.00	8.96	V	0.55	0.0	8.41	10.56	34.77	36.99	-26.4	
710.00	17.02	H	0.55	0.0	16.47	18.62	34.77	36.99	-18.4	
High Ch										
713.50	9.62	V	0.55	0.0	9.07	11.22	34.77	36.99	-25.8	
713.50	17.00	H	0.55	0.0	16.45	18.60	34.77	36.99	-18.4	
Rev. 06.19.16										

**16QAM EIRP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
<u>Company:</u> Project #: 16U23366 Date: 7/2/2016 Test Engineer: 52268 Configuration: EUT Only Mode: LTE Band 17 16QAM 5MHz BW										
<u>Test Equipment:</u> Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
706.50	8.37	V	0.55	0.0	7.82	9.97	34.77	36.99	-27.0	
706.50	16.66	H	0.55	0.0	16.11	18.26	34.77	36.99	-18.7	
Mid Ch										
710.00	8.68	V	0.55	0.0	8.13	10.28	34.77	36.99	-26.7	
710.00	16.90	H	0.55	0.0	16.35	18.50	34.77	36.99	-18.5	
High Ch										
713.50	8.11	V	0.55	0.0	7.56	9.71	34.77	36.99	-27.3	
713.50	16.63	H	0.55	0.0	16.08	18.23	34.77	36.99	-18.8	
Rev. 06.19.16										

**QPSK EIRP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
<u>Company:</u> Project #: 16U23366 Date: 7/2/2016 Test Engineer: 52268 Configuration: EUT Only Mode: LTE Band 17 QPSK 10MHz BW										
<u>Test Equipment:</u> Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
710.00	8.67	V	0.55	0.0	8.12	10.27	34.77	36.99	-26.7	
710.00	17.08	H	0.55	0.0	16.53	18.68	34.77	36.99	-18.3	

Rev. 06.19.16

**16QAM EIRP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F										
Company:										
Project #:	16U23366									
Date:	7/2/2016									
Test Engineer:	52268									
Configuration:	EUT Only									
Mode:	LTE Band 17 16QAM 10MHz BW									
<b>Test Equipment:</b> Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
710.00	8.42	V	0.55	0.0	7.87	10.02	34.77	36.99	-27.0	
710.00	16.89	H	0.55	0.0	16.34	18.49	34.77	36.99	-18.5	

Rev. 06.19.16

## 10.2.8. LTE BAND 25

### QPSK EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<u>Company:</u>								
Project #:	16U23366							
Date:	6/18/2016							
Test Engineer:	39004							
Configuration:	EUT Only							
Mode:	LTE Band 25 QPSK 1.4MHz BW							
<u>Test Equipment:</u>								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.851	9.8	V	0.98	8.05	16.83	33.0	-16.2	
1.851	12.1	H	0.98	8.05	19.12	33.0	-13.9	
Mid Ch								
1.883	10.4	V	0.98	8.03	17.44	33.0	-15.6	
1.883	14.4	H	0.98	8.03	21.43	33.0	-11.6	
High Ch								
1.914	11.6	V	0.98	8.07	18.66	33.0	-14.3	
1.914	13.3	H	0.98	8.07	20.39	33.0	-12.6	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/18/2016							
<b>Test Engineer:</b>	39004							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 16QAM 1.4MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.851	9.5	V	0.98	8.05	16.53	33.0	-16.5	
1.851	11.7	H	0.98	8.05	18.81	33.0	-14.2	
Mid Ch								
1.883	10.3	V	0.98	8.03	17.32	33.0	-15.7	
1.883	14.3	H	0.98	8.03	21.34	33.0	-11.7	
High Ch								
1.914	11.3	V	0.98	8.07	18.42	33.0	-14.6	
1.914	13.1	H	0.98	8.07	20.23	33.0	-12.8	
Rev. 10.24.13								

**QPSK EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/18/2016							
<b>Test Engineer:</b>	39004							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 QPSK 3MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.852	9.7	V	0.98	8.05	16.75	33.0	-16.3	
1.852	12.0	H	0.98	8.05	19.02	33.0	-14.0	
Mid Ch								
1.883	10.6	V	0.98	8.03	17.60	33.0	-15.4	
1.883	14.4	H	0.98	8.03	21.49	33.0	-11.5	
High Ch								
1.914	11.8	V	0.98	8.07	18.93	33.0	-14.1	
1.914	13.4	H	0.98	8.07	20.49	33.0	-12.5	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/18/2016							
<b>Test Engineer:</b>	39004							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 16QAM 3MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.852	9.4	V	0.98	8.05	16.49	33.0	-16.5	
1.852	11.7	H	0.98	8.05	18.72	33.0	-14.3	
Mid Ch								
1.883	10.3	V	0.98	8.03	17.31	33.0	-15.7	
1.883	14.3	H	0.98	8.03	21.31	33.0	-11.7	
High Ch								
1.914	11.5	V	0.98	8.07	18.60	33.0	-14.4	
1.914	13.0	H	0.98	8.07	20.09	33.0	-12.9	
Rev. 10.24.13								

**QPSK EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/18/2016							
<b>Test Engineer:</b>	39004							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 QPSK 5MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.853	9.9	V	0.98	8.05	16.94	33.0	-16.1	
1.853	12.0	H	0.98	8.05	19.11	33.0	-13.9	
Mid Ch								
1.883	10.6	V	0.98	8.03	17.65	33.0	-15.4	
1.883	14.7	H	0.98	8.03	21.73	33.0	-11.3	
High Ch								
1.913	12.2	V	0.98	8.06	19.29	33.0	-13.7	
1.913	13.6	H	0.98	8.06	20.71	33.0	-12.3	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/18/2016							
<b>Test Engineer:</b>	39004							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 16QAM 5MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.853	9.6	V	0.98	8.05	16.65	33.0	-16.4	
1.853	11.8	H	0.98	8.05	18.91	33.0	-14.1	
Mid Ch								
1.883	10.5	V	0.98	8.03	17.50	33.0	-15.5	
1.883	14.5	H	0.98	8.03	21.50	33.0	-11.5	
High Ch								
1.913	11.8	V	0.98	8.06	18.85	33.0	-14.1	
1.913	13.3	H	0.98	8.06	20.40	33.0	-12.6	
Rev. 10.24.13								

**QPSK EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/18/2016							
<b>Test Engineer:</b>	39004							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 QPSK 10MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.855	10.0	V	0.98	8.05	17.03	33.0	-16.0	
1.855	12.2	H	0.98	8.05	19.26	33.0	-13.7	
Mid Ch								
1.883	10.6	V	0.98	8.03	17.67	33.0	-15.3	
1.883	14.7	H	0.98	8.03	21.70	33.0	-11.3	
High Ch								
1.910	11.3	V	0.98	8.05	18.36	33.0	-14.6	
1.910	13.2	H	0.98	8.05	20.26	33.0	-12.7	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/18/2016							
<b>Test Engineer:</b>	39004							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 16QAM 10MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.855	9.6	V	0.98	8.05	16.71	33.0	-16.3	
1.855	11.9	H	0.98	8.05	18.98	33.0	-14.0	
Mid Ch								
1.883	10.5	V	0.98	8.03	17.56	33.0	-15.4	
1.883	14.5	H	0.98	8.03	21.55	33.0	-11.5	
High Ch								
1.910	11.1	V	0.98	8.05	18.15	33.0	-14.8	
1.910	12.9	H	0.98	8.05	19.99	33.0	-13.0	
Rev. 10.24.13								

**QPSK EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/18/2016							
<b>Test Engineer:</b>	39004							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 QPSK 15MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.858	10.0	V	0.98	8.04	17.05	33.0	-15.9	
1.858	12.1	H	0.98	8.04	19.19	33.0	-13.8	
Mid Ch								
1.883	10.4	V	0.98	8.03	17.46	33.0	-15.5	
1.883	14.7	H	0.98	8.03	21.76	33.0	-11.2	
High Ch								
1.908	10.7	V	0.98	8.04	17.78	33.0	-15.2	
1.908	13.3	H	0.98	8.04	20.35	33.0	-12.6	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/18/2016							
<b>Test Engineer:</b>	39004							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 16QAM 15MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.858	9.7	V	0.98	8.04	16.72	33.0	-16.3	
1.858	11.9	H	0.98	8.04	18.91	33.0	-14.1	
Mid Ch								
1.883	10.4	V	0.98	8.03	17.45	33.0	-15.6	
1.883	14.5	H	0.98	8.03	21.51	33.0	-11.5	
High Ch								
1.908	10.4	V	0.98	8.04	17.46	33.0	-15.5	
1.908	13.1	H	0.98	8.04	20.15	33.0	-12.8	
Rev. 10.24.13								

**QPSK EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/18/2016							
<b>Test Engineer:</b>	39004							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 QPSK 20MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.860	9.9	V	0.98	8.04	16.97	33.0	-16.0	
1.860	12.3	H	0.98	8.04	19.36	33.0	-13.6	
Mid Ch								
1.883	11.2	V	0.98	8.03	18.28	33.0	-14.7	
1.883	15.0	H	0.98	8.03	22.00	33.0	-11.0	
High Ch								
1.905	11.1	V	0.98	8.04	18.17	33.0	-14.8	
1.905	14.0	H	0.98	8.04	21.08	33.0	-11.9	
Rev. 10.24.13								

**16QAM EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/18/2016							
<b>Test Engineer:</b>	39004							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 25 16QAM 20MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
1.860	9.7	V	0.98	8.04	16.71	33.0	-16.3	
1.860	12.0	H	0.98	8.04	19.02	33.0	-14.0	
Mid Ch								
1.883	10.7	V	0.98	8.03	17.72	33.0	-15.3	
1.883	14.6	H	0.98	8.03	21.62	33.0	-11.4	
High Ch								
1.905	10.9	V	0.98	8.04	17.91	33.0	-15.1	
1.905	13.5	H	0.98	8.04	20.51	33.0	-12.5	
Rev. 10.24.13								

## 10.2.9. LTE BAND 26

### QPSK EIRP POWER FOR LTE BAND 26 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber E										
<u>Company:</u> Project #: 16U23366 Date: 6/17/2016 <u>Test Engineer:</u> 39004 <u>Configuration:</u> EUT Only <u>Mode:</u> LTE Band 26 QPSK 1.4MHz BW										
<u>Test Equipment:</u> Receiving: Sunol T408, and Chamber E Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
814.70	12.93	V	0.62	0.0	12.31	14.46	38.45	40.60	-26.1	
814.70	18.69	H	0.62	0.0	18.07	20.22	38.45	40.60	-20.4	
Mid Ch										
819.00	13.12	V	0.62	0.0	12.50	14.65	38.45	40.60	-26.0	
819.00	19.23	H	0.62	0.0	18.61	20.76	38.45	40.60	-19.8	
High Ch										
823.30	12.94	V	0.62	0.0	12.32	14.47	38.45	40.60	-26.1	
823.30	18.39	H	0.62	0.0	17.77	19.92	38.45	40.60	-20.7	

Rev. 10.24.13

**16QAM EIRP POWER FOR LTE BAND 26 (1.4MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E																				
Company:																				
Project #:	16U23366																			
Date:	6/17/2016																			
Test Engineer:	39004																			
Configuration:	EUT Only																			
Mode:	LTE Band 26 16QAM 1.4MHz BW																			
<u>Test Equipment:</u>																				
Receiving: Sunol T408, and Chamber E Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
814.70	12.70	V	0.62	0.0	12.08	14.23	38.45	40.60	-26.4											
814.70	18.67	H	0.62	0.0	18.05	20.20	38.45	40.60	-20.4											
Mid Ch																				
819.00	13.96	V	0.62	0.0	13.34	15.49	38.45	40.60	-25.1											
819.00	18.99	H	0.62	0.0	18.37	20.52	38.45	40.60	-20.1											
High Ch																				
823.30	12.77	V	0.62	0.0	12.15	14.30	38.45	40.60	-26.3											
823.30	18.29	H	0.62	0.0	17.67	19.82	38.45	40.60	-20.8											
Rev. 10.24.13																				

**QPSK EIRP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E																				
Company:																				
Project #:	16U23366																			
Date:	6/17/2016																			
Test Engineer:	39004																			
Configuration:	EUT Only																			
Mode:	LTE Band 26 QPSK 3MHz BW																			
<b>Test Equipment:</b>																				
Receiving: Sunol T408, and Chamber E Cable																				
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																				
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes										
Low Ch																				
815.50	12.91	V	0.62	0.0	12.29	14.44	38.45	40.60	-26.2											
815.50	18.91	H	0.62	0.0	18.29	20.44	38.45	40.60	-20.2											
Mid Ch																				
819.00	13.18	V	0.62	0.0	12.56	14.71	38.45	40.60	-25.9											
819.00	19.10	H	0.62	0.0	18.48	20.63	38.45	40.60	-20.0											
High Ch																				
822.50	12.87	V	0.62	0.0	12.25	14.40	38.45	40.60	-26.2											
822.50	18.14	H	0.62	0.0	17.52	19.67	38.45	40.60	-20.9											
Rev. 10.24.13																				

**16QAM EIRP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E										
<b>Company:</b> Project #: 16U23366 Date: 6/17/2016 Test Engineer: 39004 Configuration: EUT Only Mode: LTE Band 26 16QAM 3MHz BW										
<b>Test Equipment:</b> Receiving: Sunol T408, and Chamber E Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
815.50	12.67	V	0.62	0.0	12.05	14.20	38.45	40.60	-26.4	
815.50	18.68	H	0.62	0.0	18.06	20.21	38.45	40.60	-20.4	
Mid Ch										
819.00	13.87	V	0.62	0.0	13.25	15.40	38.45	40.60	-25.2	
819.00	18.97	H	0.62	0.0	18.35	20.50	38.45	40.60	-20.1	
High Ch										
822.50	12.73	V	0.62	0.0	12.11	14.26	38.45	40.60	-26.3	
822.50	18.09	H	0.62	0.0	17.47	19.62	38.45	40.60	-21.0	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E																		
Company:																		
Project #:	16U23366																	
Date:	6/17/2016																	
Test Engineer:	39004																	
Configuration:	EUT Only																	
Mode:	LTE Band 26 QPSK 5MHz BW																	
<u>Test Equipment:</u>																		
Receiving: Sunol T408, and Chamber E Cable																		
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes								
Low Ch																		
816.50	12.94	V	0.62	0.0	12.32	14.47	38.45	40.60	-26.1									
816.50	18.96	H	0.62	0.0	18.34	20.49	38.45	40.60	-20.1									
Mid Ch																		
819.00	13.80	V	0.62	0.0	13.18	15.33	38.45	40.60	-25.3									
819.00	19.26	H	0.62	0.0	18.64	20.79	38.45	40.60	-19.8									
High Ch																		
821.50	12.90	V	0.62	0.0	12.28	14.43	38.45	40.60	-26.2									
821.50	18.59	H	0.62	0.0	17.97	20.12	38.45	40.60	-20.5									
Rev. 10.24.13																		

**16QAM EIRP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E										
<b>Test Equipment:</b> Receiving: Sunol T408, and Chamber E Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
816.50	13.11	V	0.62	0.0	12.49	14.64	38.45	40.60	-26.0	
816.50	18.77	H	0.62	0.0	18.15	20.30	38.45	40.60	-20.3	
Mid Ch										
819.00	13.59	V	0.62	0.0	12.97	15.12	38.45	40.60	-25.5	
819.00	19.05	H	0.62	0.0	18.43	20.58	38.45	40.60	-20.0	
High Ch										
821.50	13.29	V	0.62	0.0	12.67	14.82	38.45	40.60	-25.8	
821.50	18.56	H	0.62	0.0	17.94	20.09	38.45	40.60	-20.5	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E										
<b>Company:</b> Project #: 16U23366 Date: 6/17/2016 Test Engineer: 39004 Configuration: EUT Only Mode: LTE Band 26 QPSK 10MHz BW										
<b>Test Equipment:</b> Receiving: Sunol T408, and Chamber E Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin EIRP (dB)	Notes
Mid Ch										
819.00	13.09	V	0.62	0.0	12.47	14.62	38.45	40.60	-26.0	
819.00	19.04	H	0.62	0.0	18.42	20.57	38.45	40.60	-20.0	

Rev. 10.24.13

**16QAM EIRP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E										
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 6/17/2016 <b>Test Engineer:</b> 39004 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 26 16QAM 10MHz BW										
<b>Test Equipment:</b> Receiving: Sunol T408, and Chamber E Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Mid Ch										
819.00	12.99	V	0.62	0.0	12.37	14.52	38.45	40.60	-26.1	
819.00	18.85	H	0.62	0.0	18.23	20.38	38.45	40.60	-20.2	

Rev. 10.24.13

## 10.2.10. LTE BAND 27

### QPSK EIRP POWER FOR LTE BAND 27 (1.4MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<u>Company:</u>								
Project #:	16U23366							
Date:	6/16/2016							
Test Engineer:	52268							
Configuration:	EUT Only							
Mode:	LTE Band 27 QPSK 1.4MHz BW							
<u>Test Equipment:</u>								
Receiving:	Horn T344, and Chamber F SMA Cable							
Substitution:	Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)							
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Low Ch								
814.70	11.45	V	0.62	0.0	10.83	50.00	-39.2	
814.70	17.91	H	0.62	0.0	17.29	50.00	-32.7	
Mid Ch								
819.00	12.07	V	0.62	0.0	11.45	50.00	-38.5	
819.00	18.27	H	0.62	0.0	17.65	50.00	-32.3	
High Ch								
823.30	12.40	V	0.62	0.0	11.78	50.00	-38.2	
823.30	18.69	H	0.62	0.0	18.07	50.00	-31.9	
Rev. 06.19.16								

**16QAM EIRP POWER FOR LTE BAND 27 (1.4MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/16/2016							
<b>Test Engineer:</b>	52268							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 27 16QAM 1.4MHz BW							
<b>Test Equipment:</b>								
Receiving: Horn T344, and Chamber F SMA Cable								
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Low Ch								
814.70	11.11	V	0.62	0.0	10.49	50.00	-39.5	
814.70	17.87	H	0.62	0.0	17.25	50.00	-32.7	
Mid Ch								
819.00	11.75	V	0.62	0.0	11.13	50.00	-38.9	
819.00	18.00	H	0.62	0.0	17.38	50.00	-32.6	
High Ch								
823.30	12.09	V	0.62	0.0	11.47	50.00	-38.5	
823.30	18.36	H	0.62	0.0	17.74	50.00	-32.3	
Rev. 06.19.16								

**QPSK EIRP POWER FOR LTE BAND 27 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<u>Company:</u>								
Project #:	16U23366							
Date:	6/16/2016							
Test Engineer:	52268							
Configuration:	EUT Only							
Mode:	LTE Band 27 QPSK 3MHz BW							
<u>Test Equipment:</u>								
Receiving: Horn T344, and Chamber F SMA Cable								
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Low Ch								
815.50	11.32	V	0.62	0.0	10.70	50.00	-39.3	
815.50	17.94	H	0.62	0.0	17.32	50.00	-32.7	
Mid Ch								
819.00	11.79	V	0.62	0.0	11.17	50.00	-38.8	
819.00	18.02	H	0.62	0.0	17.40	50.00	-32.6	
High Ch								
822.50	12.23	V	0.62	0.0	11.61	50.00	-38.4	
822.50	18.78	H	0.62	0.0	18.16	50.00	-31.8	
Rev. 06.19.16								

**16QAM EIRP POWER FOR LTE BAND 27 (3.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<u>Company:</u>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/16/2016							
<b>Test Engineer:</b>	52268							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 27 16QAM 3MHz BW							
<u>Test Equipment:</u>								
Receiving: Horn T344, and Chamber F SMA Cable								
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Low Ch								
815.50	11.13	V	0.62	0.0	10.51	50.00	-39.5	
815.50	17.83	H	0.62	0.0	17.21	50.00	-32.8	
Mid Ch								
819.00	11.69	V	0.62	0.0	11.07	50.00	-38.9	
819.00	17.92	H	0.62	0.0	17.30	50.00	-32.7	
High Ch								
822.50	11.86	V	0.62	0.0	11.24	50.00	-38.8	
822.50	18.32	H	0.62	0.0	17.70	50.00	-32.3	
Rev. 06.19.16								

**QPSK EIRP POWER FOR LTE BAND 27 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<u>Company:</u>								
Project #:	16U23366							
Date:	6/16/2016							
Test Engineer:	52268							
Configuration:	EUT Only							
Mode:	LTE Band 27 QPSK 5MHz BW							
<u>Test Equipment:</u>								
Receiving: Horn T344, and Chamber F SMA Cable								
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Low Ch								
816.50	11.43	V	0.62	0.0	10.81	50.00	-39.2	
816.50	18.07	H	0.62	0.0	17.45	50.00	-32.6	
Mid Ch								
819.00	11.89	V	0.62	0.0	11.27	50.00	-38.7	
819.00	18.27	H	0.62	0.0	17.65	50.00	-32.4	
High Ch								
821.50	12.35	V	0.62	0.0	11.73	50.00	-38.3	
821.50	18.98	H	0.62	0.0	18.36	50.00	-31.6	
Rev. 06.19.16								

**16QAM EIRP POWER FOR LTE BAND 27 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<u>Company:</u>								
<b>Project #:</b>	16U23366							
<b>Date:</b>	6/16/2016							
<b>Test Engineer:</b>	52268							
<b>Configuration:</b>	EUT Only							
<b>Mode:</b>	LTE Band 27 16QAM 5MHz BW							
<u>Test Equipment:</u>								
Receiving: Horn T344, and Chamber F SMA Cable								
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Low Ch								
816.50	11.36	V	0.62	0.0	10.74	50.00	-39.3	
816.50	18.04	H	0.62	0.0	17.42	50.00	-32.6	
Mid Ch								
819.00	11.70	V	0.62	0.0	11.08	50.00	-38.9	
819.00	18.00	H	0.62	0.0	17.38	50.00	-32.6	
High Ch								
821.50	12.12	V	0.62	0.0	11.50	50.00	-38.5	
821.50	18.55	H	0.62	0.0	17.93	50.00	-32.1	
Rev. 06.19.16								

**QPSK EIRP POWER FOR LTE BAND 27 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b> Project #: 16U23366 Date: 6/16/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 27 QPSK 10MHz BW								
<b>Test Equipment:</b> Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Mid Ch								
819.00	11.42	V	0.62	0.0	10.80	50.00	-39.2	
819.00	18.01	H	0.62	0.0	17.39	50.00	-32.6	

Rev. 06.19.16

**16QAM EIRP POWER FOR LTE BAND 27 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber F								
<b>Company:</b> Project #: 16U23366 Date: 6/16/2016 <b>Test Engineer:</b> 52268 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 27 16QAM 10MHz BW								
<b>Test Equipment:</b> Receiving: Horn T344, and Chamber F SMA Cable Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	ERP Limit (dBm)	Margin (dB)	Notes
Mid Ch								
819.00	11.41	V	0.62	0.0	10.79	50.00	-39.2	
819.00	17.95	H	0.62	0.0	17.33	50.00	-32.7	

Rev. 06.19.16

## 10.2.11. LTE BAND 30

### QPSK EIRP POWER FOR LTE BAND 30 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber E																
<b>Company:</b>																
<b>Project #:</b>	16U23366															
<b>Date:</b>	6/23/2016															
<b>Test Engineer:</b>	44399															
<b>Configuration:</b>	EUT Only															
<b>Mode:</b>	LTE Band 30 QPSK 5MHz BW															
<b>Test Equipment:</b>																
Receiving: Horn T346, and Chamber E SMA Cables																
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)																
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes								
Low Ch																
2.308	12.5	V	1.15	9.37	20.68	24.0	-3.3									
2.308	10.4	H	1.15	9.37	18.62	24.0	-5.4									
Mid Ch																
2.310	12.4	V	1.16	9.37	20.65	24.0	-3.4									
2.310	10.5	H	1.16	9.37	18.76	24.0	-5.2									
High Ch																
2.313	12.4	V	1.17	9.37	20.60	24.0	-3.4									
2.313	11.1	H	1.17	9.37	19.33	24.0	-4.7									
Rev. 04.24.15																

**16QAM EIRP POWER FOR LTE BAND 30 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b> Project #: 16U23366 Date: 6/23/2016 <b>Test Engineer:</b> 44399 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 30 16QAM 5MHz BW								
<b>Test Equipment:</b> Receiving: Horn T346, and Chamber E SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.308	12.2	V	1.15	9.37	20.42	24.0	-3.6	
2.308	10.2	H	1.15	9.37	18.44	24.0	-5.6	
Mid Ch								
2.310	12.2	V	1.16	9.37	20.37	24.0	-3.6	
2.310	10.3	H	1.16	9.37	18.55	24.0	-5.5	
High Ch								
2.313	12.3	V	1.17	9.37	20.54	24.0	-3.5	
2.313	11.0	H	1.17	9.37	19.19	24.0	-4.8	

Rev. 04.24.15

**QPSK EIRP POWER FOR LTE BAND 30 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 6/23/2016 <b>Test Engineer:</b> 44399 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 30 QPSK 10MHz BW								
<b>Test Equipment:</b> Receiving: Horn T346, and Chamber E SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
2.310	12.4	V	1.15	9.37	20.64	24.0	-3.4	
2.310	10.5	H	1.15	9.37	18.71	24.0	-5.3	

Rev. 04.24.15

**16QAM EIRP POWER FOR LTE BAND 30 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b> Project #: 16U23366 <b>Date:</b> 6/23/2016 <b>Test Engineer:</b> 44399 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 30 16QAM 10MHz BW								
<b>Test Equipment:</b> Receiving: Horn T346, and Chamber E SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
2.310	12.0	V	1.15	9.37	20.24	24.0	-3.8	
2.310	10.4	H	1.15	9.37	18.64	24.0	-5.4	

Rev. 04.24.15

## 10.2.12. LTE BAND 41

### QPSK EIRP POWER FOR LTE BAND 41 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
Company:								
Project #:	16U23366							
Date:	6/22/2016							
Test Engineer:	44399							
Configuration:	EUT Only							
Mode:	LTE Band 41 QPSK 5MHz BW							
Test Equipment:								
Receiving: Horn T346, and Chamber E SMA Cables								
Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.499	7.1	V	1.15	9.33	15.31	33.0	-17.7	
2.499	11.3	H	1.15	9.33	19.46	33.0	-13.5	
Mid Ch								
2.593	6.9	V	1.16	9.47	15.25	33.0	-17.7	
2.593	11.7	H	1.16	9.47	20.02	33.0	-13.0	
High Ch								
2.688	6.9	V	1.17	9.78	15.52	33.0	-17.5	
2.688	12.1	H	1.17	9.78	20.67	33.0	-12.3	

Rev. 10.24.13

**16QAM EIRP POWER FOR LTE BAND 41 (5.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b> Project #: 16U23366 Date: 6/22/2016 <b>Test Engineer:</b> 44399 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 16QAM 5MHz BW								
<b>Test Equipment:</b> Receiving: Horn T346, and Chamber E SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.499	6.4	V	1.15	9.33	14.61	33.0	-18.4	
2.499	10.6	H	1.15	9.33	18.76	33.0	-14.2	
Mid Ch								
2.593	6.2	V	1.16	9.47	14.55	33.0	-18.4	
2.593	11.0	H	1.16	9.47	19.29	33.0	-13.7	
High Ch								
2.688	6.2	V	1.17	9.78	14.82	33.0	-18.2	
2.688	11.4	H	1.17	9.78	19.97	33.0	-13.0	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 41 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b> Project #: 16U23366 Date: 6/22/2016 <b>Test Engineer:</b> 44399 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 QPSK 10MHz BW								
<b>Test Equipment:</b> Receiving: Horn T346, and Chamber E SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.501	7.4	V	1.15	9.33	15.62	33.0	-17.4	
2.501	11.3	H	1.15	9.33	19.53	33.0	-13.5	
Mid Ch								
2.593	6.8	V	1.16	9.47	15.11	33.0	-17.9	
2.593	11.7	H	1.16	9.47	19.99	33.0	-13.0	
High Ch								
2.685	7.1	V	1.17	9.77	15.68	33.0	-17.3	
2.685	11.8	H	1.17	9.77	20.45	33.0	-12.6	

Rev. 10.24.13

**16QAM EIRP POWER FOR LTE BAND 41 (10.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b> Project #: 16U23366 Date: 6/22/2016 <b>Test Engineer:</b> 44399 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 16QAM 10MHz BW								
<b>Test Equipment:</b> Receiving: Horn T346, and Chamber E SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.501	6.7	V	1.15	9.33	14.92	33.0	-18.1	
2.501	10.6	H	1.15	9.33	18.83	33.0	-14.2	
Mid Ch								
2.593	6.1	V	1.16	9.47	14.41	33.0	-18.6	
2.593	10.8	H	1.16	9.47	19.07	33.0	-13.9	
High Ch								
2.685	6.4	V	1.17	9.77	14.98	33.0	-18.0	
2.685	11.1	H	1.17	9.77	19.75	33.0	-13.3	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 41 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E							
SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
7.3	V	1.15	9.34	15.53	33.0	-17.5	
11.3	H	1.15	9.34	19.47	33.0	-13.5	
6.9	V	1.16	9.47	15.24	33.0	-17.8	
11.8	H	1.16	9.47	20.09	33.0	-12.9	
7.0	V	1.17	9.76	15.56	33.0	-17.4	
12.2	H	1.17	9.76	20.75	33.0	-12.3	

**16QAM EIRP POWER FOR LTE BAND 41 (15.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b> Project #: 16U23366 Date: 6/22/2016 <b>Test Engineer:</b> 44399 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 16QAM 15MHz BW								
<b>Test Equipment:</b> Receiving: Horn T346, and Chamber E SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.504	6.6	V	1.15	9.34	14.83	33.0	-18.2	
2.504	10.6	H	1.15	9.34	18.77	33.0	-14.2	
Mid Ch								
2.593	6.2	V	1.16	9.47	14.54	33.0	-18.5	
2.593	11.1	H	1.16	9.47	19.39	33.0	-13.6	
High Ch								
2.683	6.3	V	1.17	9.76	14.86	33.0	-18.1	
2.683	11.5	H	1.17	9.76	20.05	33.0	-13.0	

Rev. 10.24.13

**QPSK EIRP POWER FOR LTE BAND 41 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b> Project #: 16U23366 Date: 6/22/2016 <b>Test Engineer:</b> 44399 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 QPSK 20MHz BW								
<b>Test Equipment:</b> Receiving: Horn T346, and Chamber E SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.506	7.3	V	1.15	9.34	15.47	33.0	-17.5	
2.506	11.4	H	1.15	9.34	19.55	33.0	-13.5	
Mid Ch								
2.593	6.8	V	1.16	9.47	15.14	33.0	-17.9	
2.593	11.7	H	1.16	9.47	20.00	33.0	-13.0	
High Ch								
2.680	6.8	V	1.17	9.76	15.39	33.0	-17.6	
2.680	12.0	H	1.17	9.76	20.54	33.0	-12.5	

Rev. 10.24.13

**16QAM EIRP POWER FOR LTE BAND 41 (20.0MHZ BANDWIDTH)**

High Frequency Substitution Measurement UL Fremont Radiated Chamber E								
<b>Company:</b> Project #: 16U23366 Date: 6/22/2016 <b>Test Engineer:</b> 44399 <b>Configuration:</b> EUT Only <b>Mode:</b> LTE Band 41 16QAM 20MHz BW								
<b>Test Equipment:</b> Receiving: Horn T346, and Chamber E SMA Cables Substitution: Horn T59 Substitution, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin EIRP (dB)	Notes
Low Ch								
2.506	6.5	V	1.15	9.34	14.73	33.0	-18.3	
2.506	10.6	H	1.15	9.34	18.81	33.0	-14.2	
Mid Ch								
2.593	6.1	V	1.16	9.47	14.40	33.0	-18.6	
2.593	11.0	H	1.16	9.47	19.26	33.0	-13.7	
High Ch								
2.680	6.1	V	1.17	9.76	14.65	33.0	-18.3	
2.680	11.2	H	1.17	9.76	19.80	33.0	-13.2	

Rev. 10.24.13

### 10.3. PEAK-TO-AVERAGE RATIO

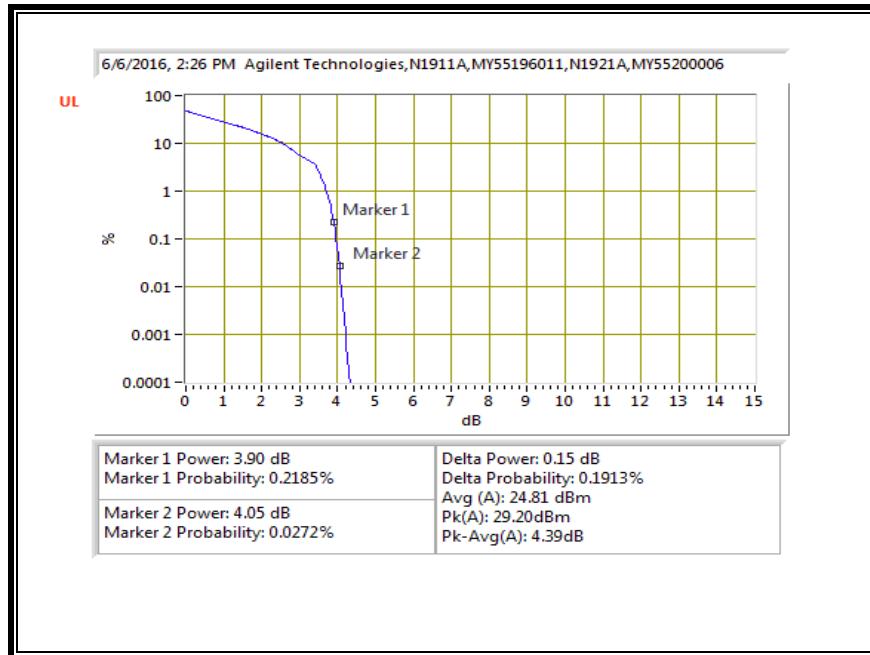
In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13 dB

#### RESULT

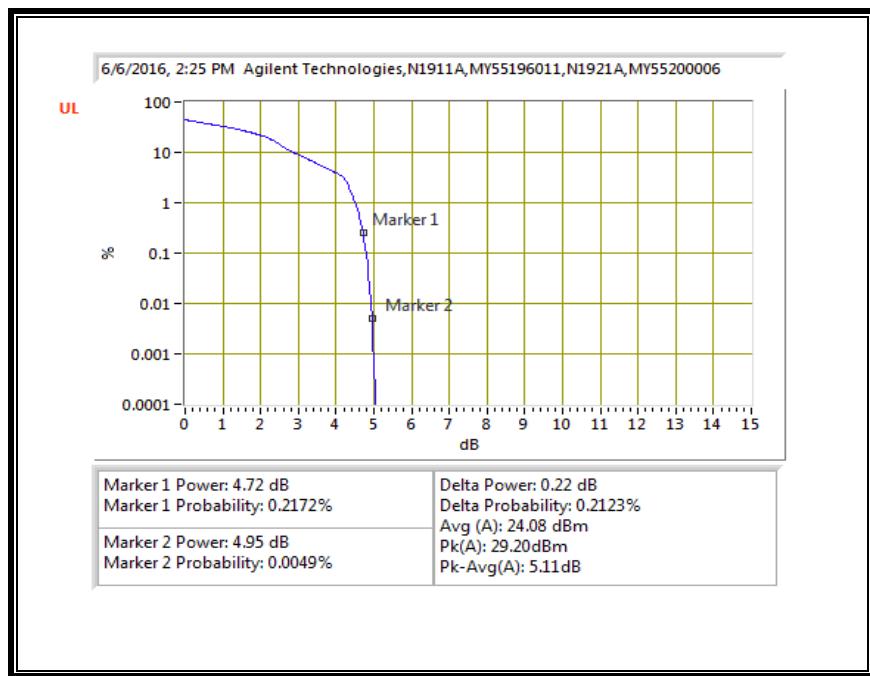
The results from all CCDF plots are passed with 13dB peak-to-average ratio criteria.

### 10.3.1. LTE BAND 2

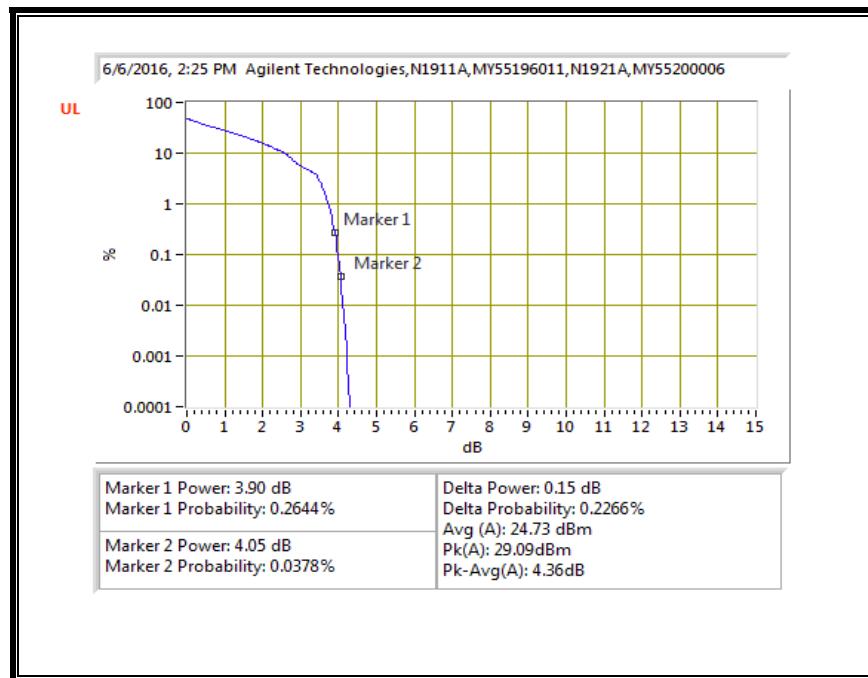
#### QPSK, (1.4 MHz BAND WIDTH)



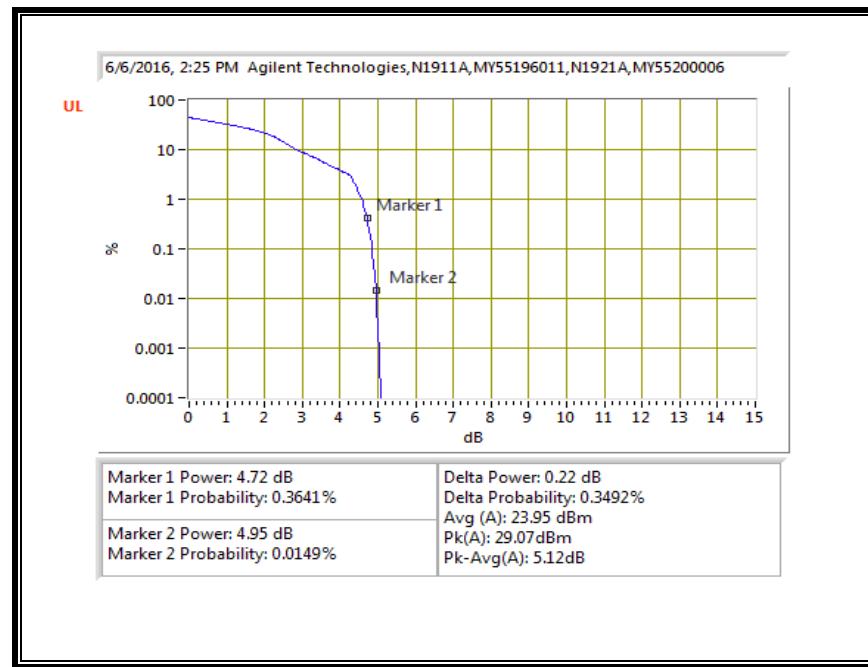
#### 16QAM, (1.4 MHz BAND WIDTH)



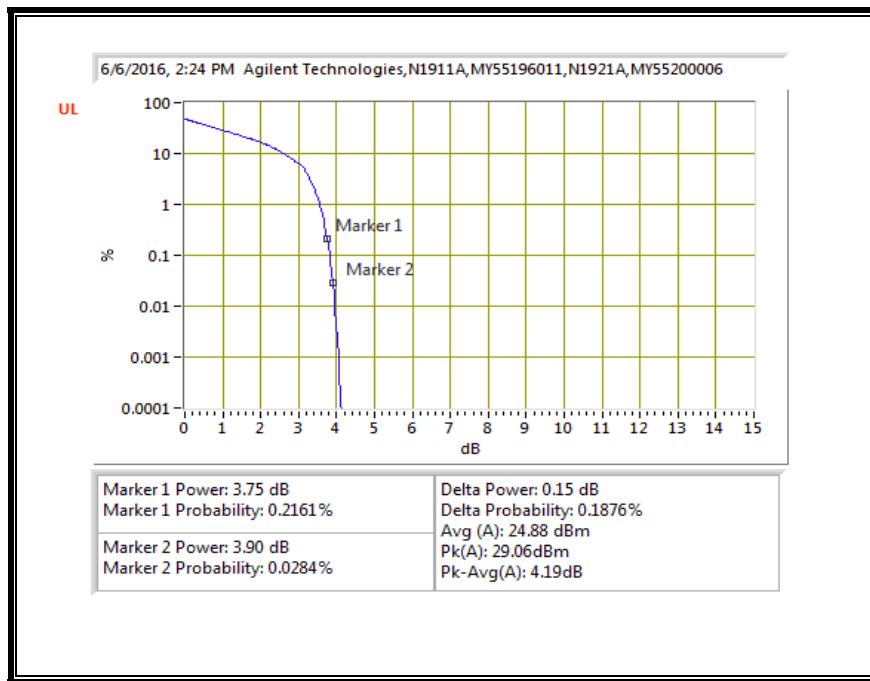
**QPSK, (3.0 MHz BAND WIDTH)**



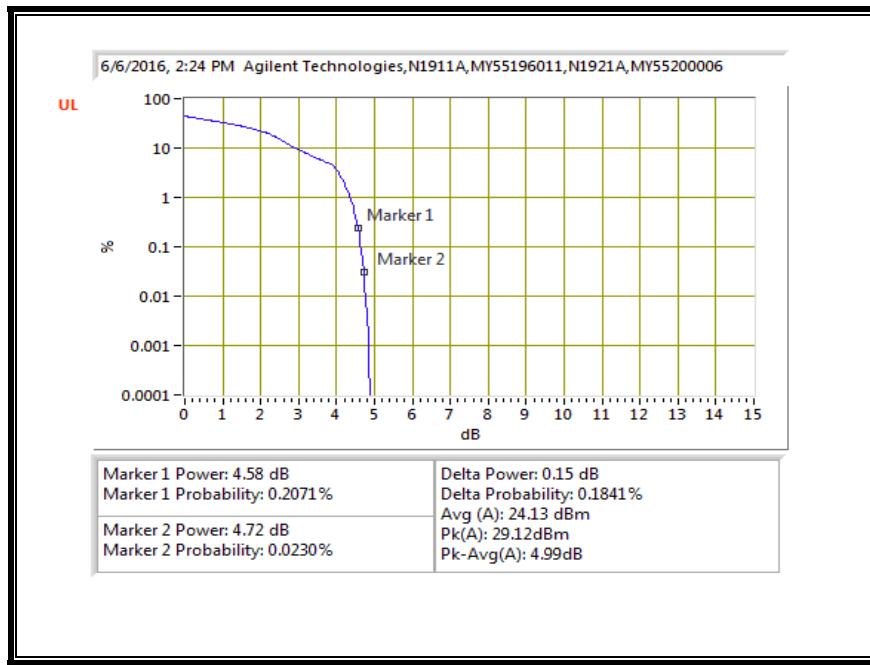
**16QAM, (3.0 MHz BAND WIDTH)**



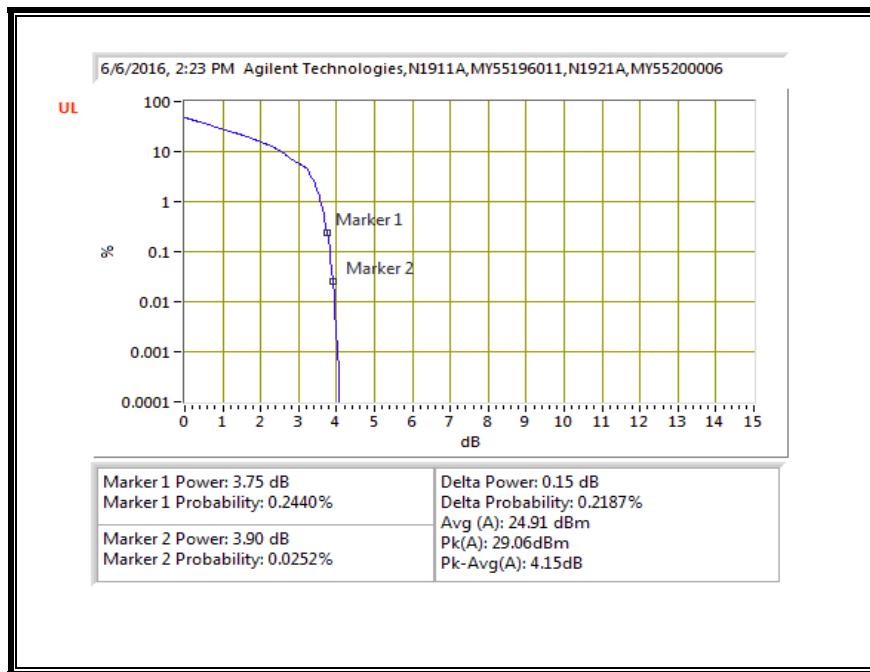
### QPSK, (5.0 MHz BAND WIDTH)



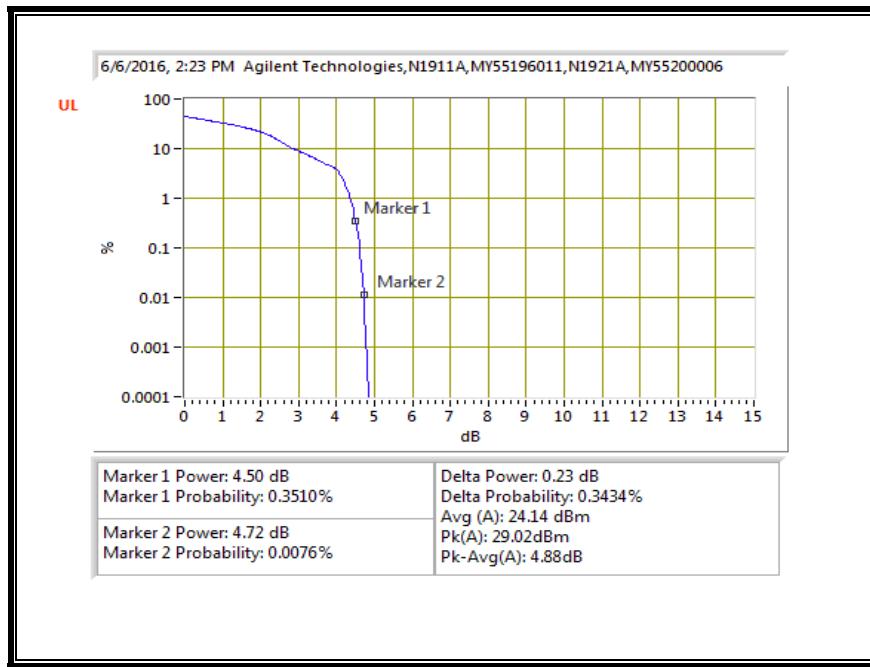
### 16QAM, (5.0 MHz BAND WIDTH)



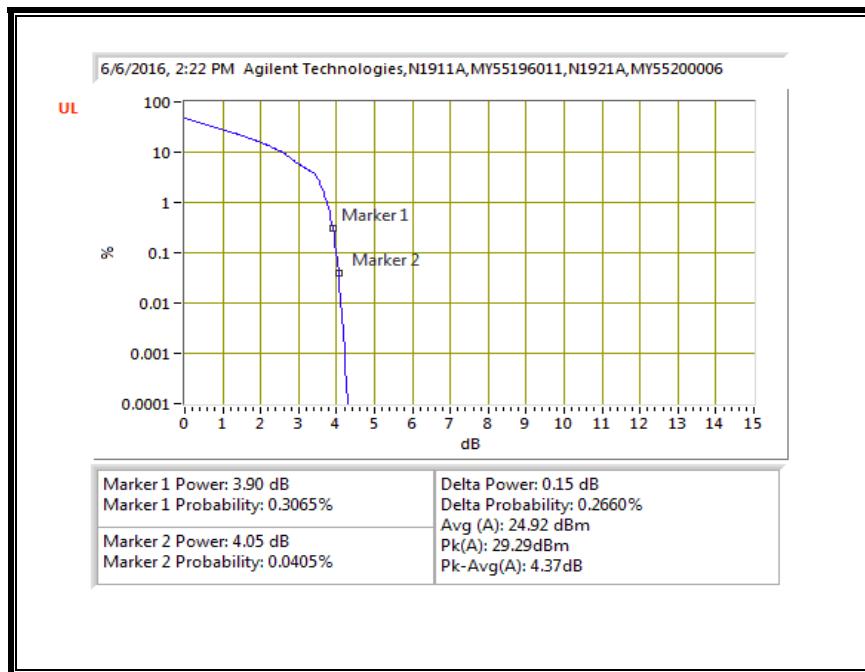
**QPSK, (10.0 MHz BAND WIDTH)**



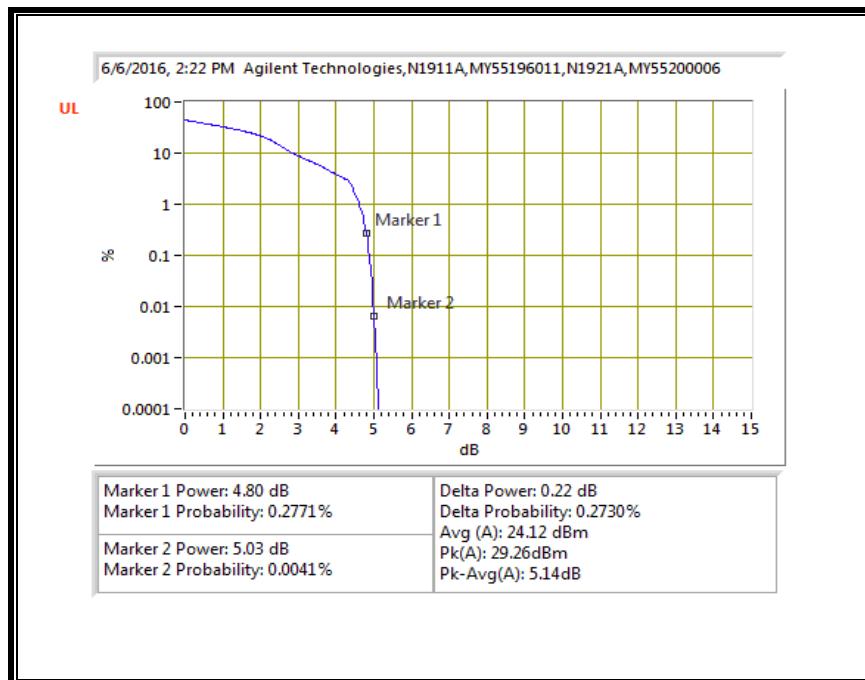
**16QAM, (10.0 MHz BAND WIDTH)**



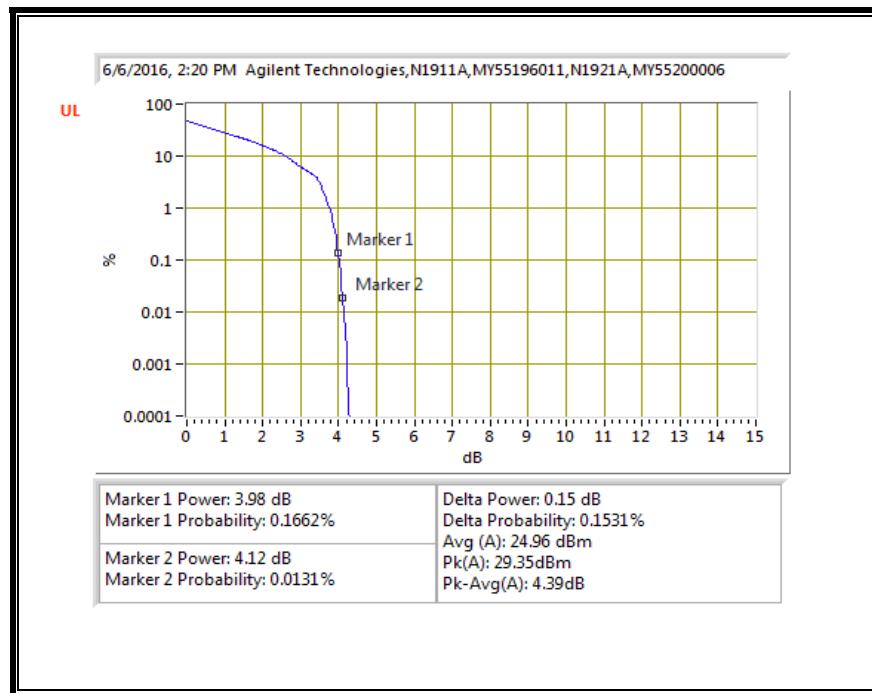
**QPSK, (15.0 MHz BAND WIDTH)**



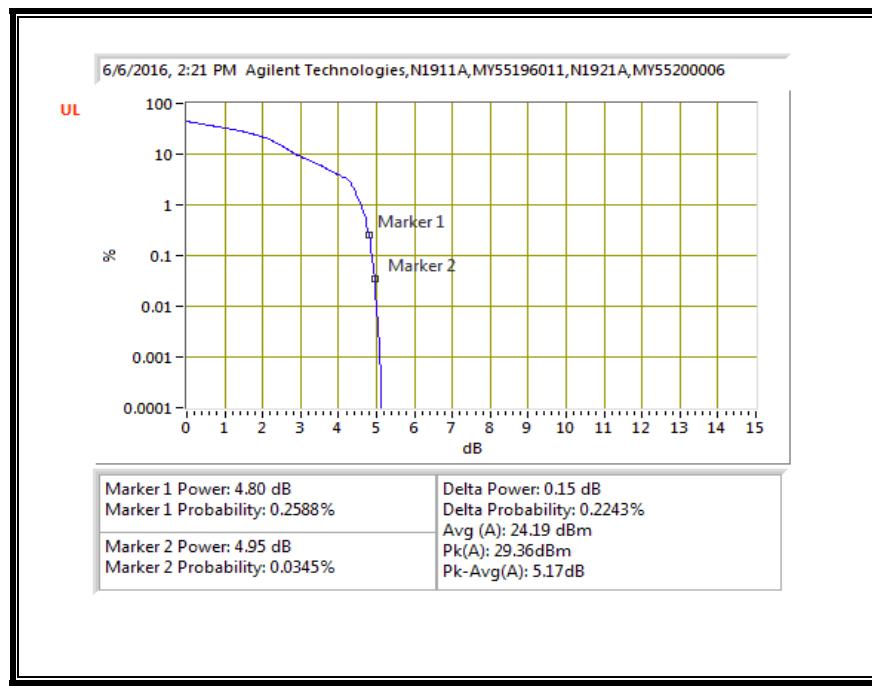
**16QAM, (15.0 MHz BAND WIDTH)**



**QPSK, (20.0 MHz BAND WIDTH)**

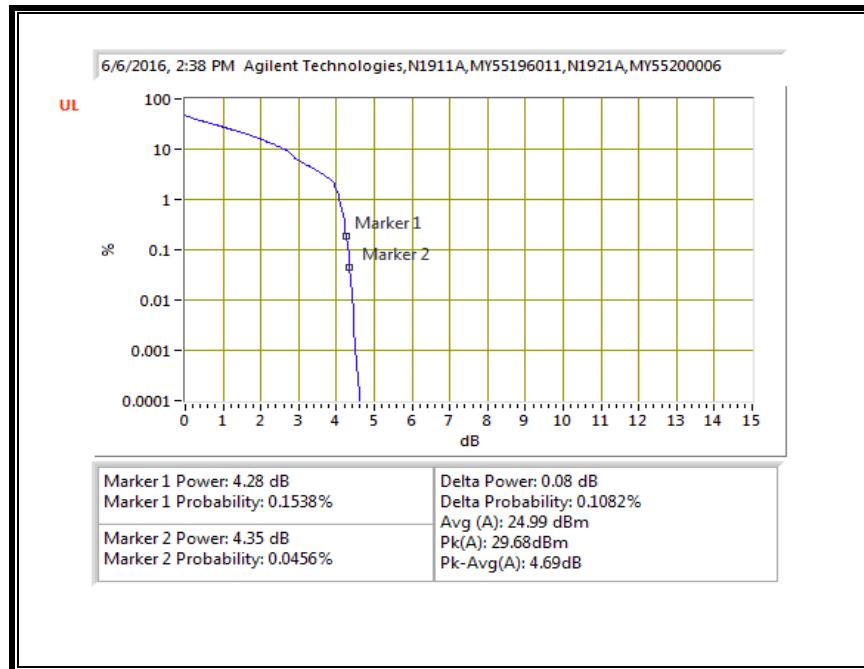


**16QAM, (20.0 MHz BAND WIDTH)**

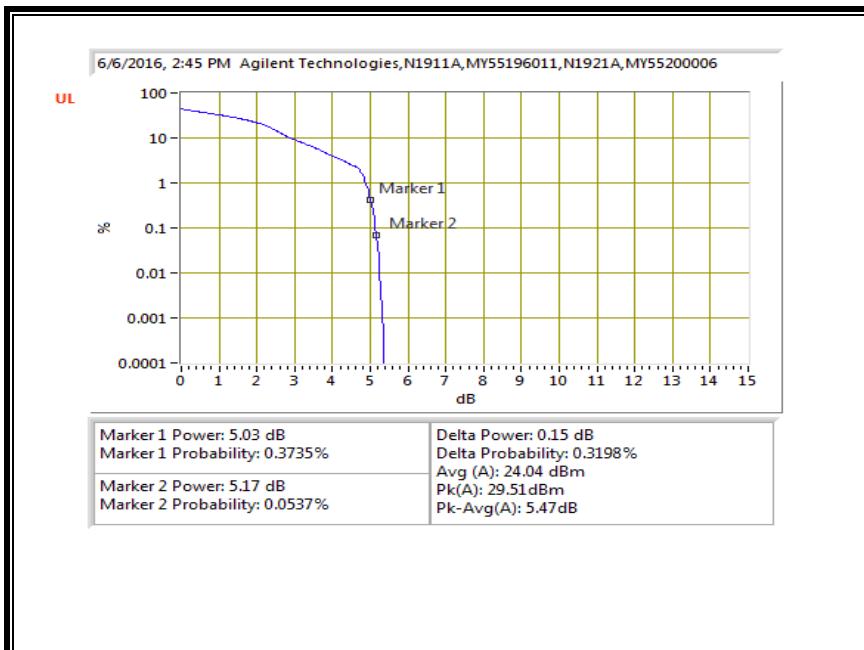


### 10.3.2. LTE BAND 4

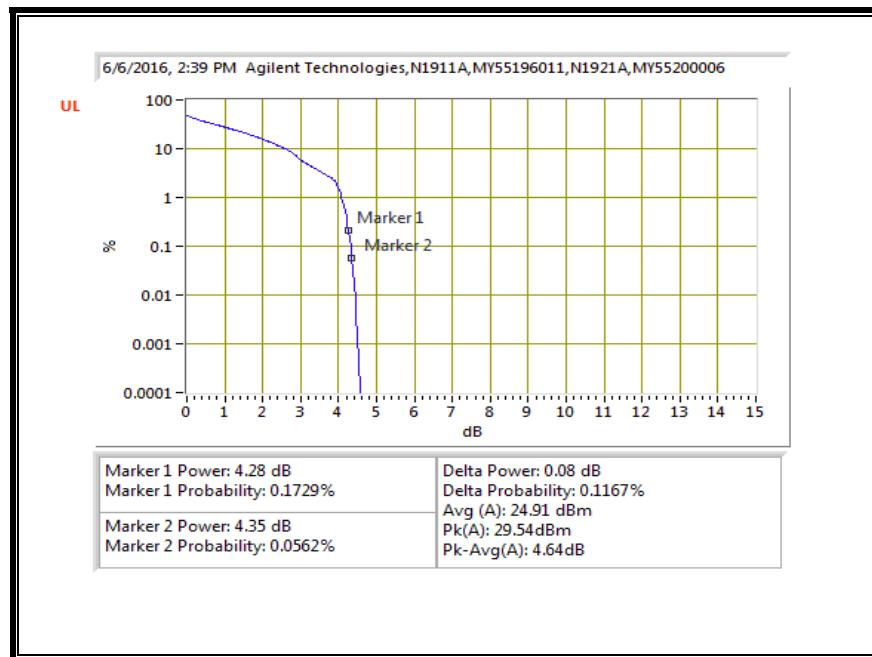
#### QPSK, (1.4 MHz BAND WIDTH)



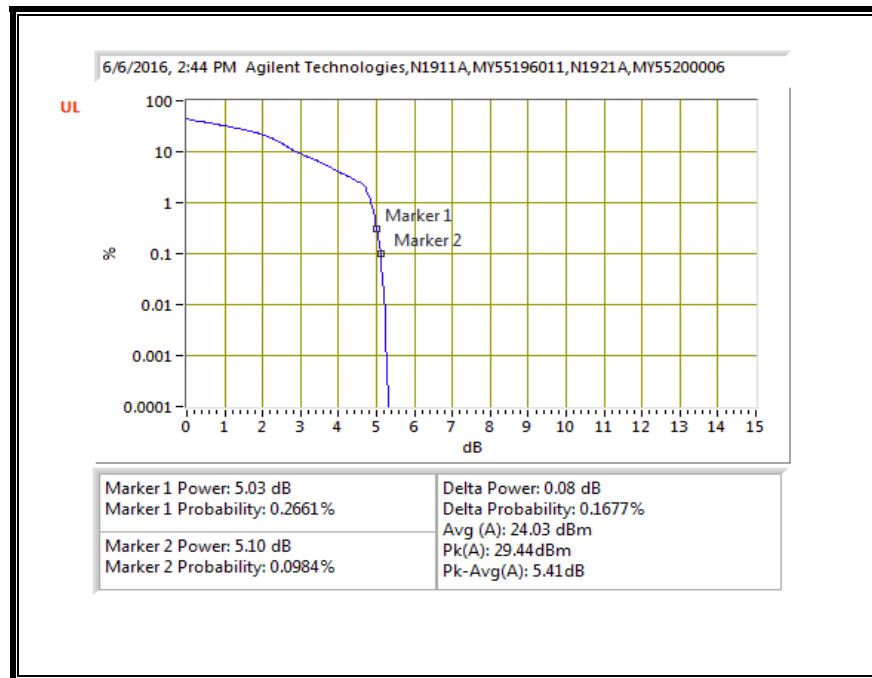
#### 16QAM, (1.4 MHz BAND WIDTH)



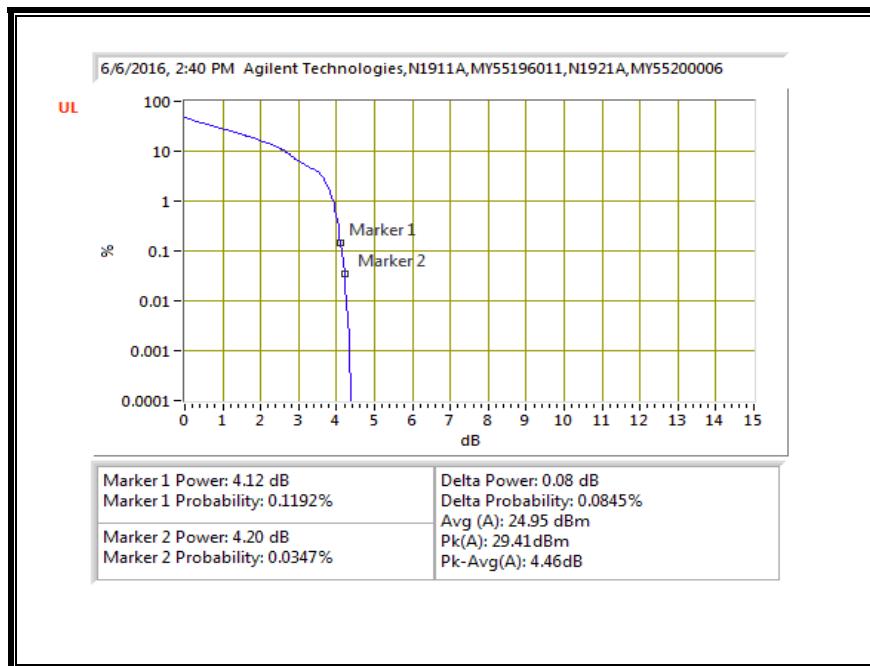
**QPSK, (3.0 MHz BAND WIDTH)**



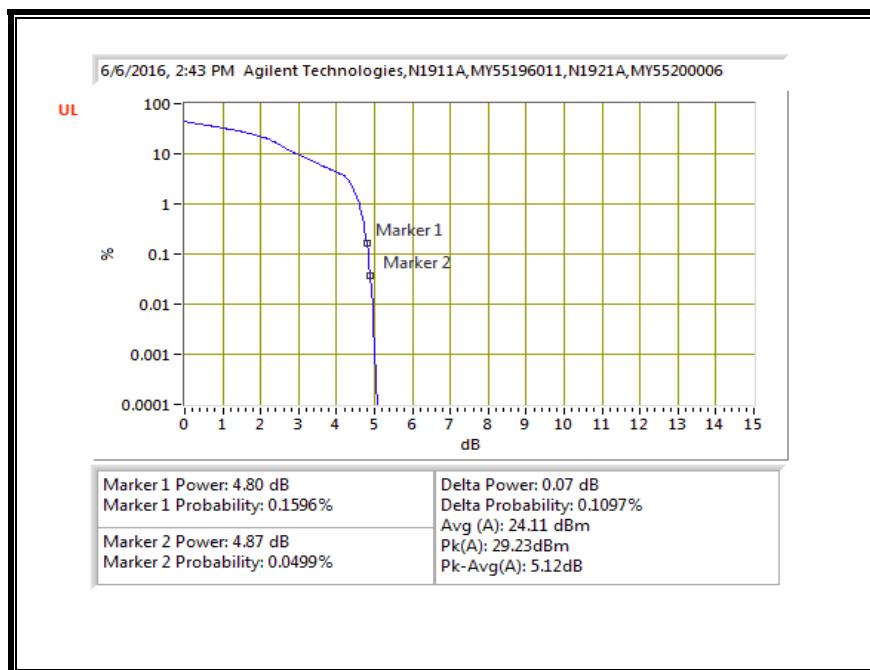
**16QAM, (3.0 MHz BAND WIDTH)**



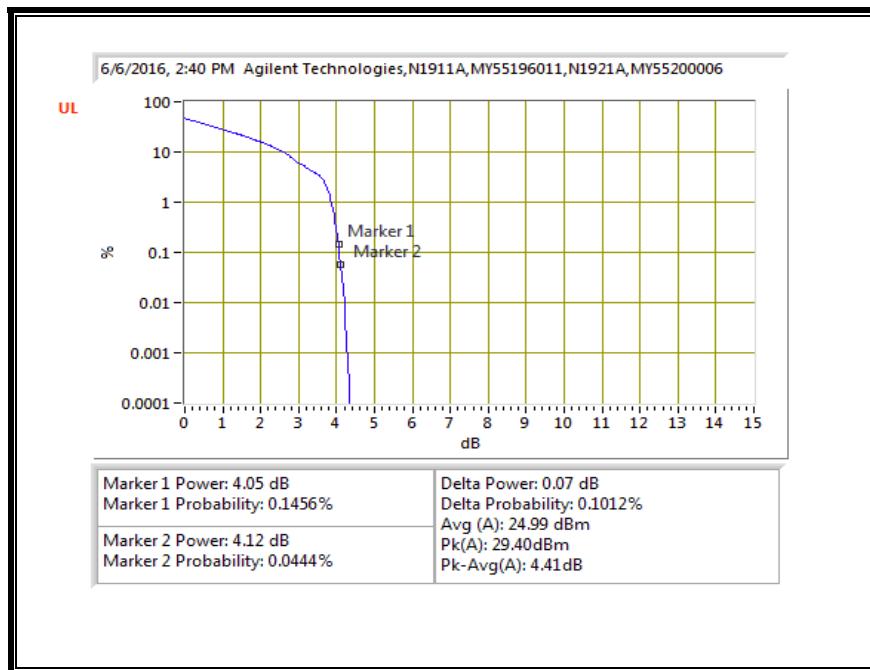
**QPSK, (5.0 MHz BAND WIDTH)**



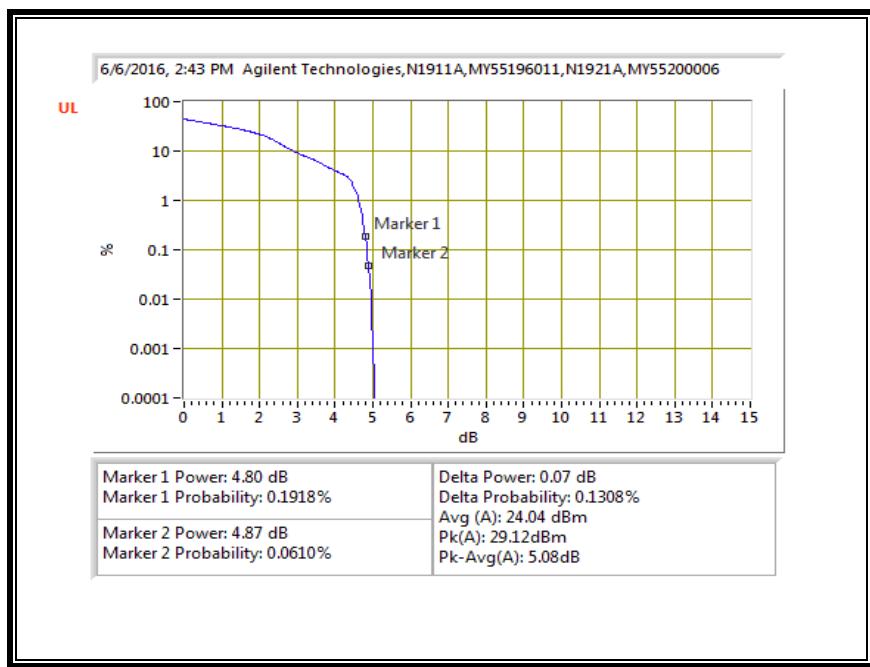
**16QAM, (5.0 MHz BAND WIDTH)**



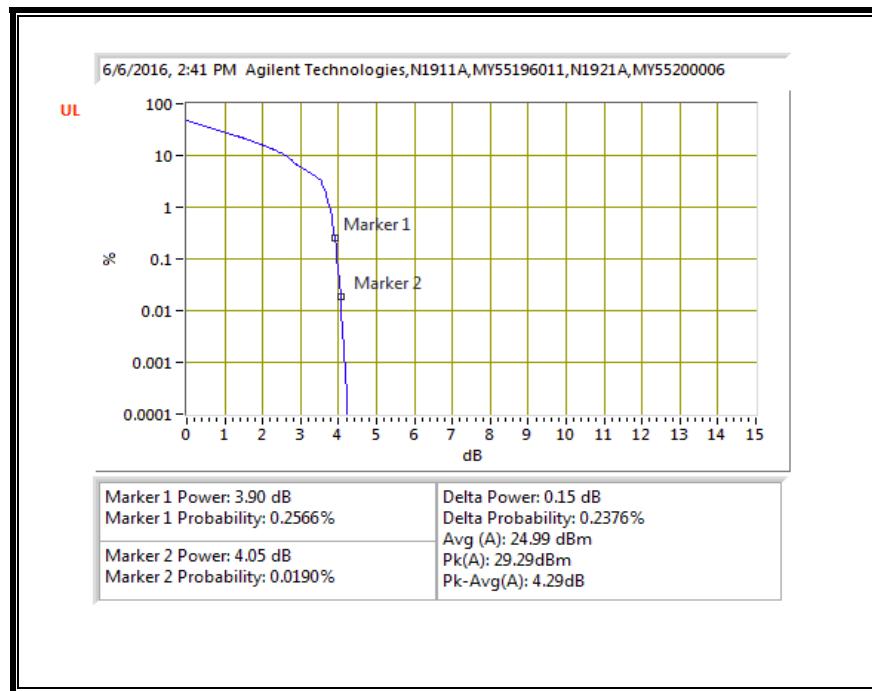
**QPSK, (10.0 MHz BAND WIDTH)**



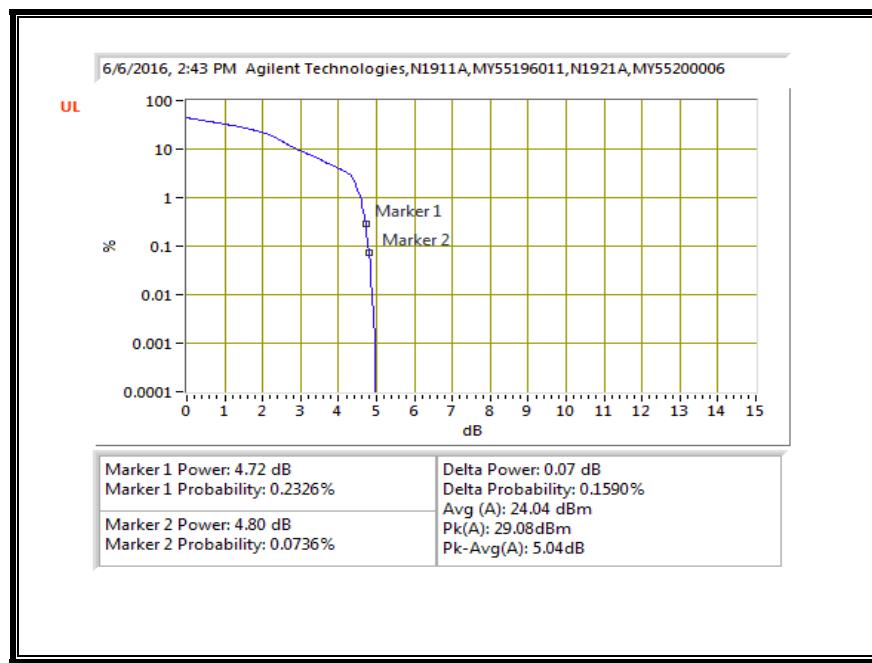
**16QAM, (10.0 MHz BAND WIDTH)**



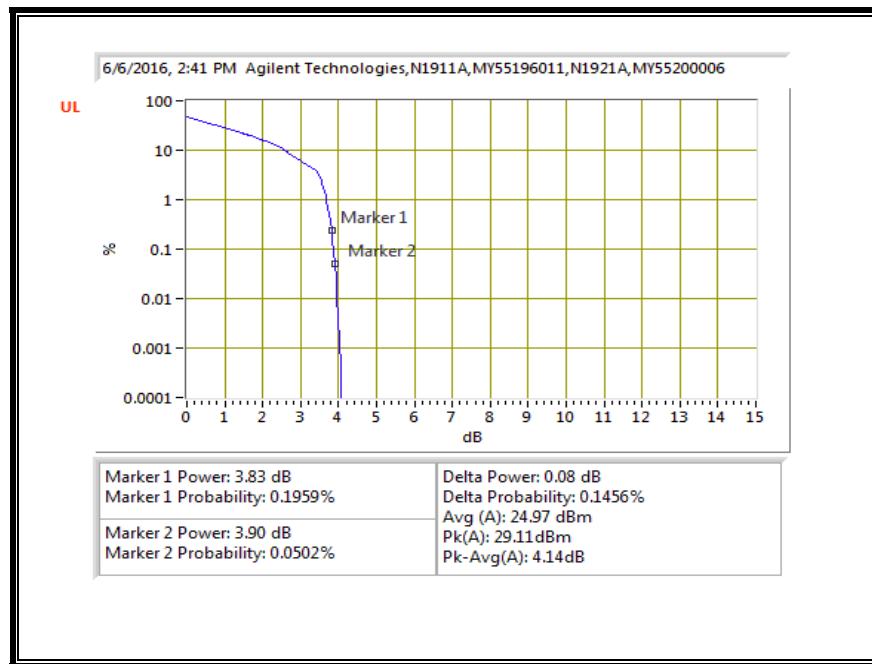
**QPSK, (15.0 MHz BAND WIDTH)**



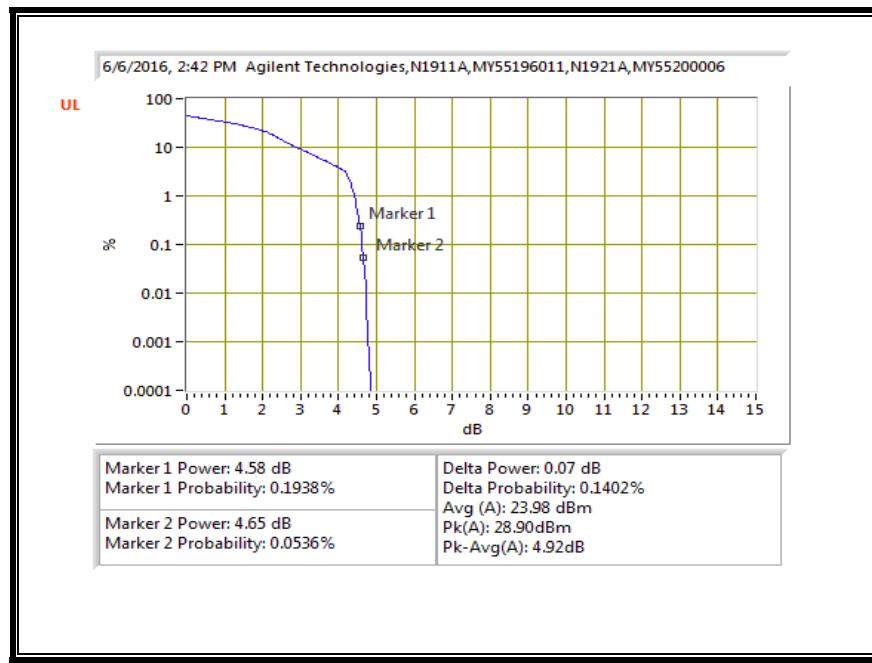
**16QAM, (15.0 MHz BAND WIDTH)**



**QPSK, (20.0 MHz BAND WIDTH)**

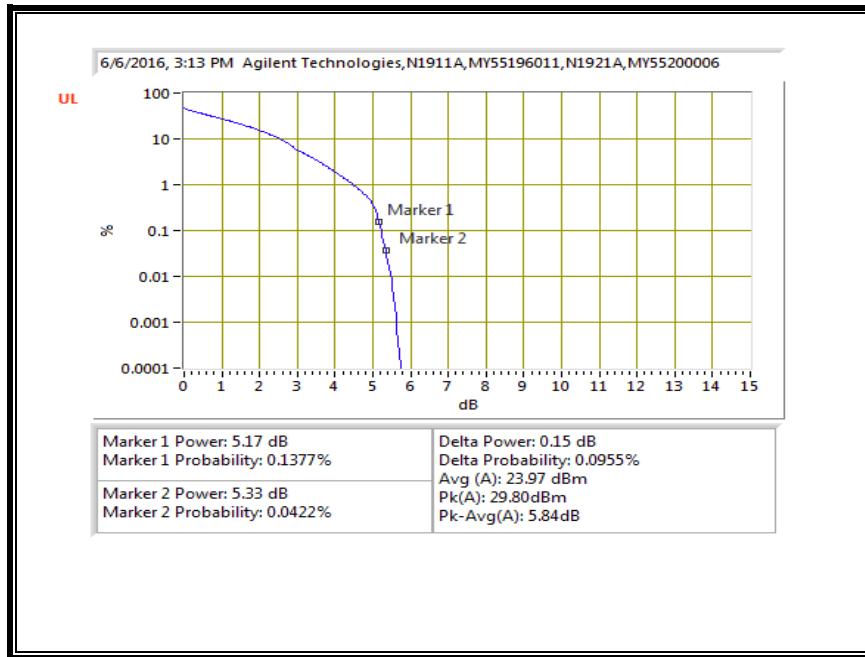


**16QAM, (20.0 MHz BAND WIDTH)**

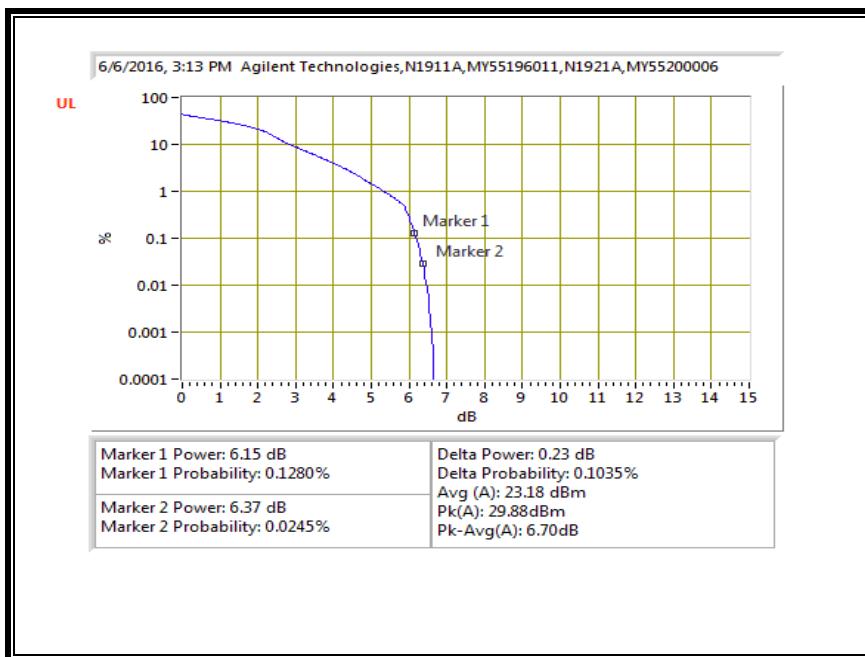


### 10.3.3. LTE BAND 5

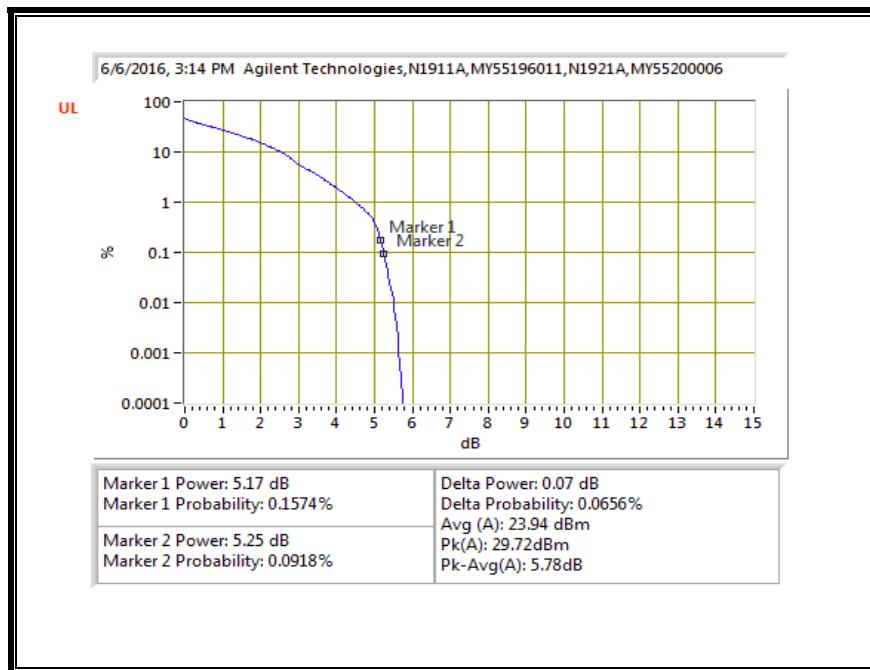
#### QPSK, (1.4 MHz BAND WIDTH)



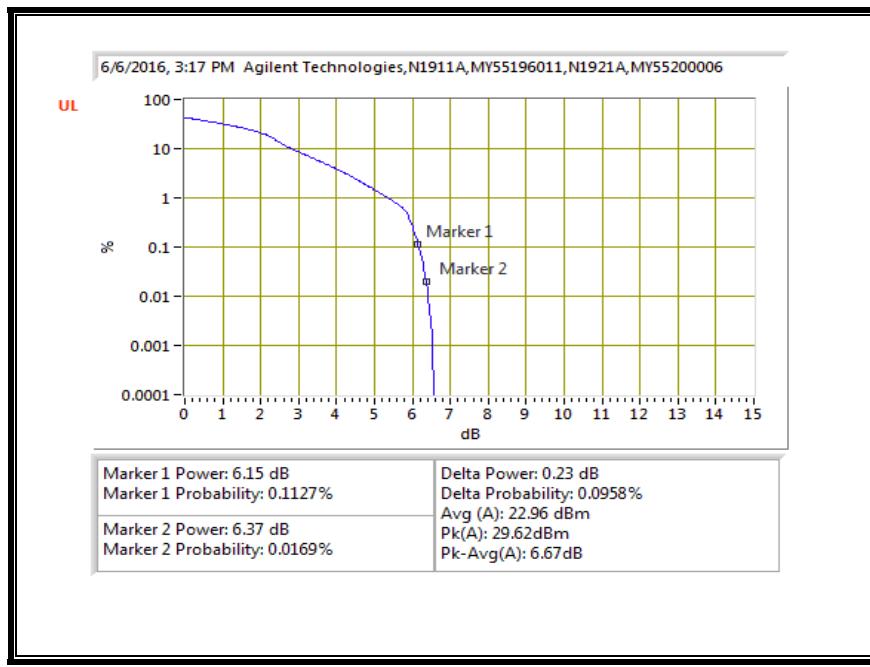
#### 16QAM, (1.4 MHz BAND WIDTH)



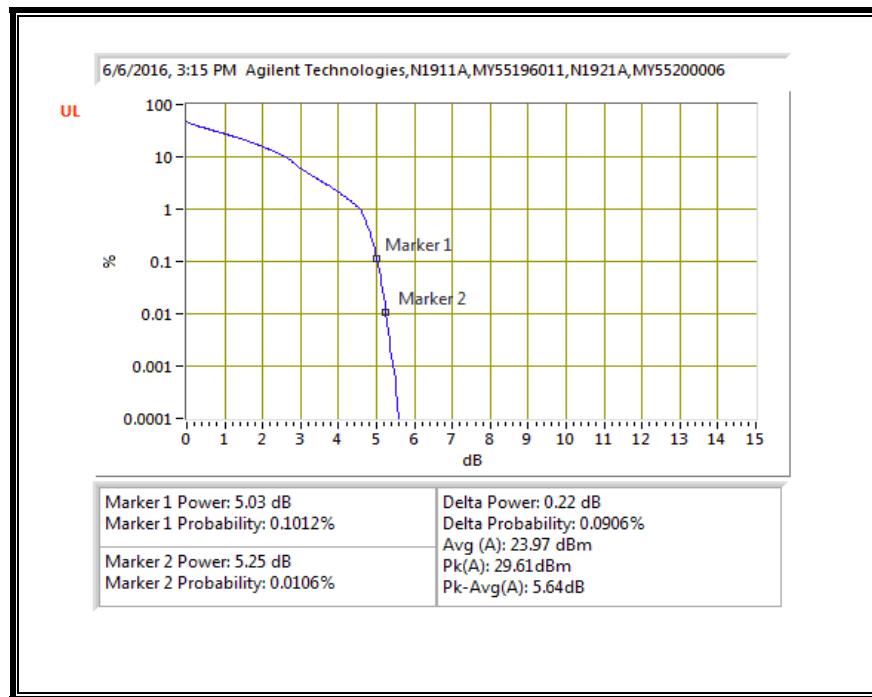
**QPSK, (3.0 MHz BAND WIDTH)**



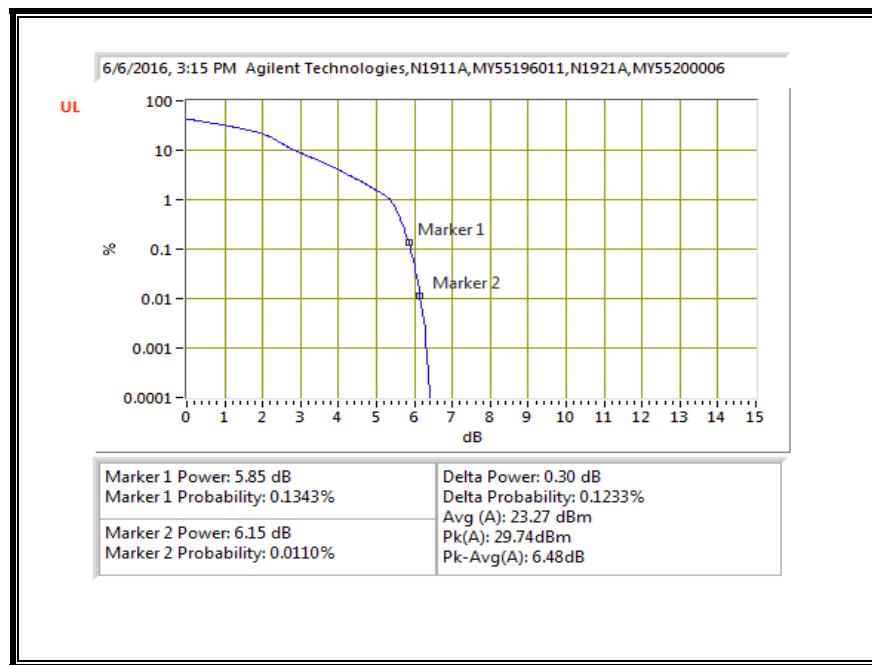
**16QAM, (3.0 MHz BAND WIDTH)**



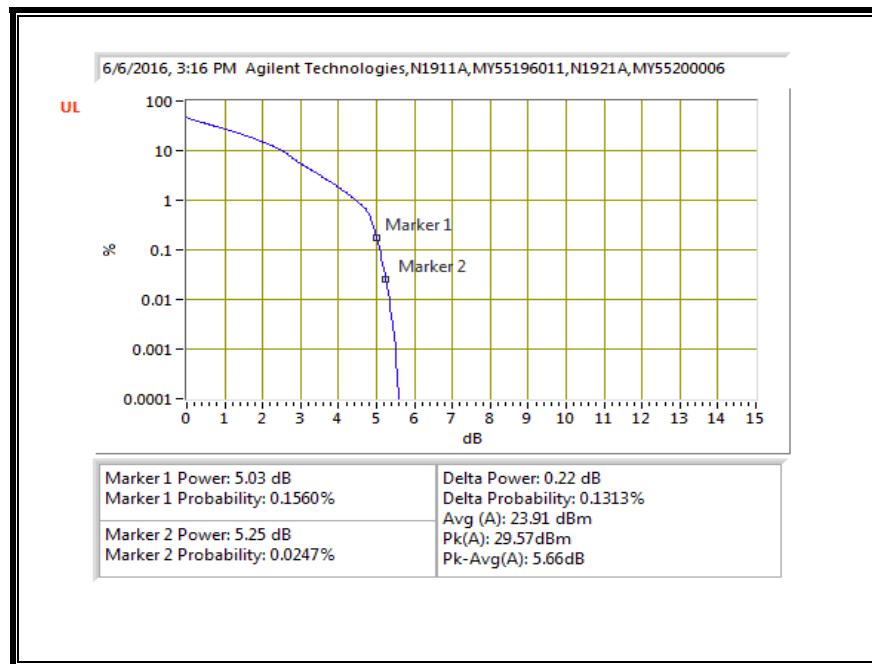
**QPSK, (5.0 MHz BAND WIDTH)**



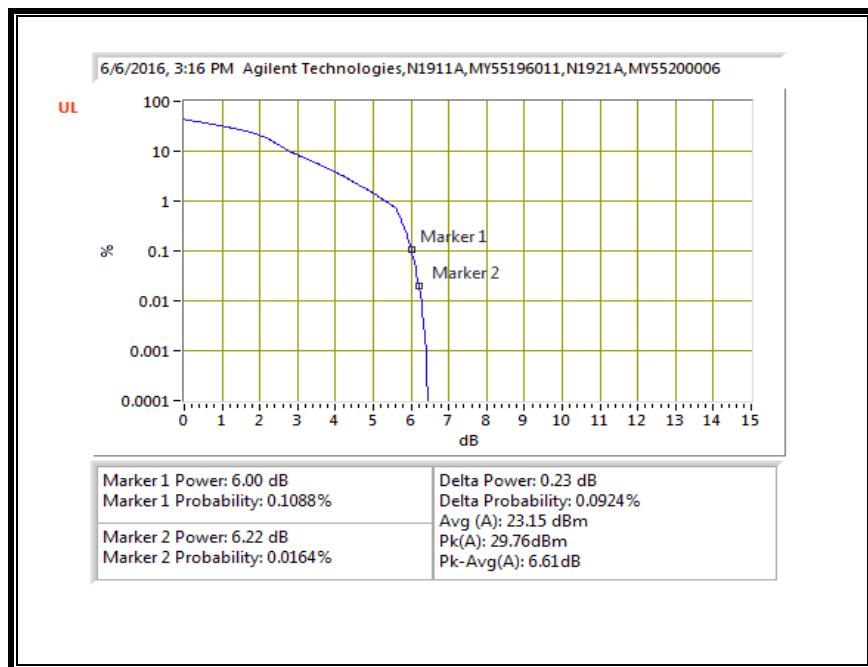
**16QAM, (5.0 MHz BAND WIDTH)**



**QPSK, (10.0 MHz BAND WIDTH)**

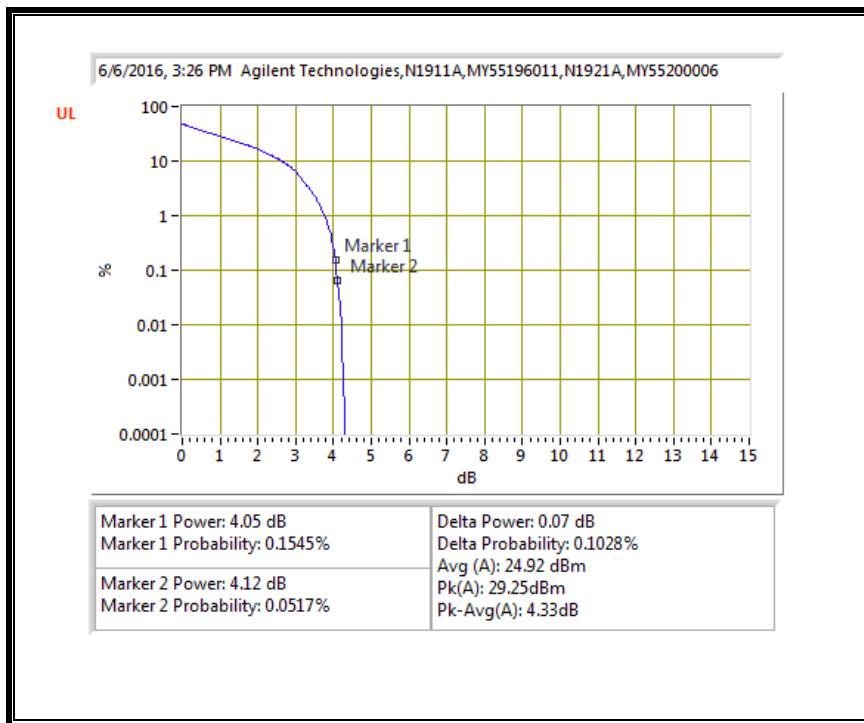


**16QAM, (10.0 MHz BAND WIDTH)**

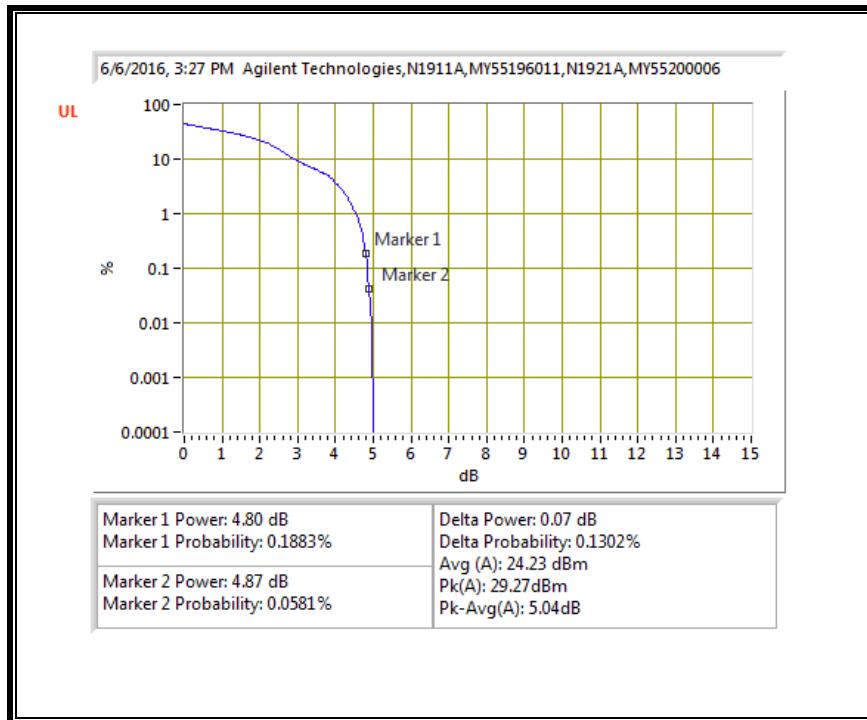


#### 10.3.4. LTE BAND 7

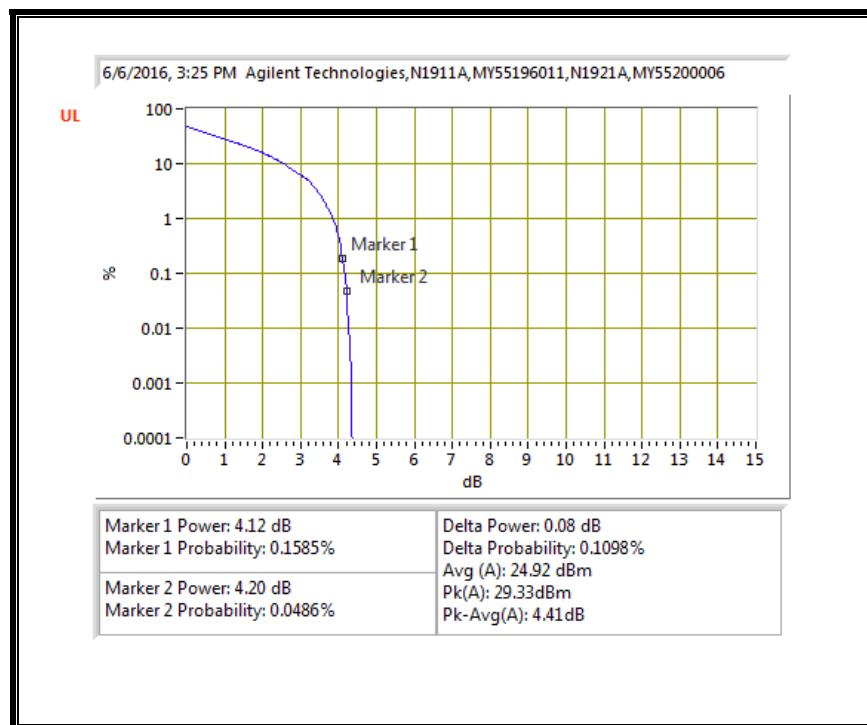
##### QPSK, (5.0 MHz BAND WIDTH)



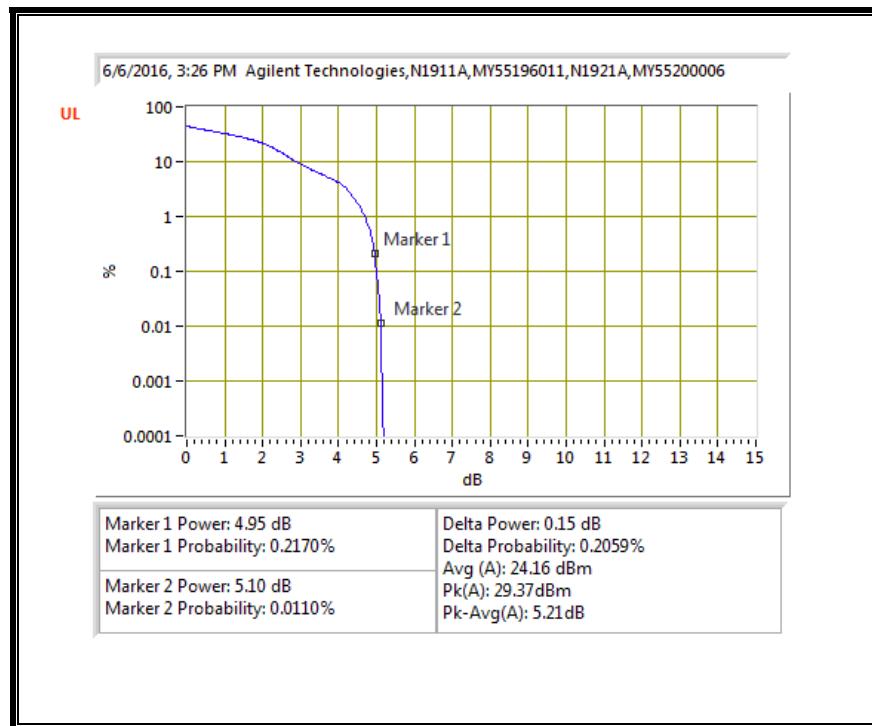
**16QAM, (5.0 MHz BAND WIDTH)**



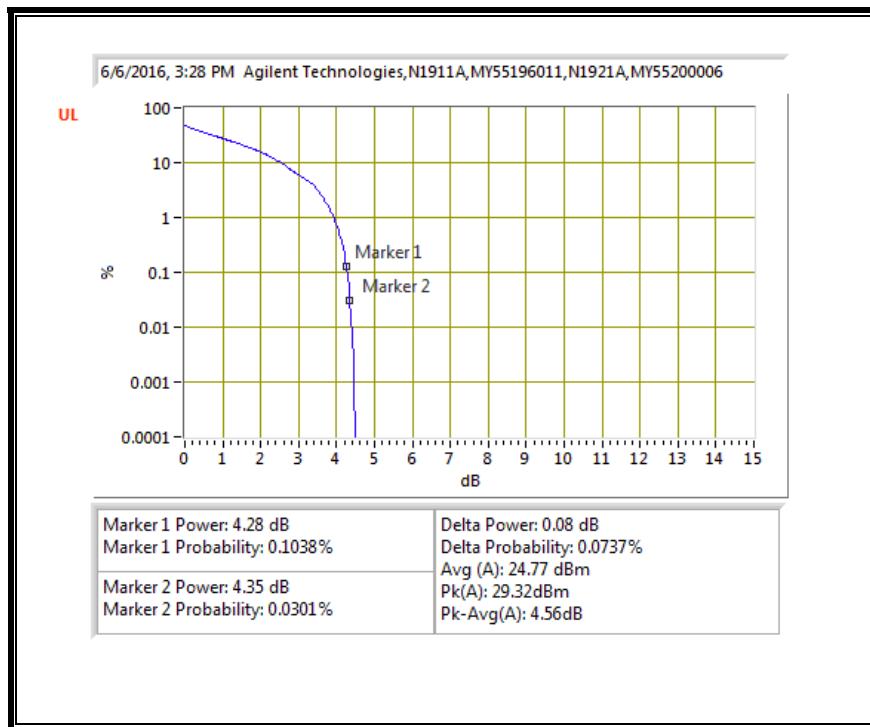
**QPSK, (10.0 MHz BAND WIDTH)**



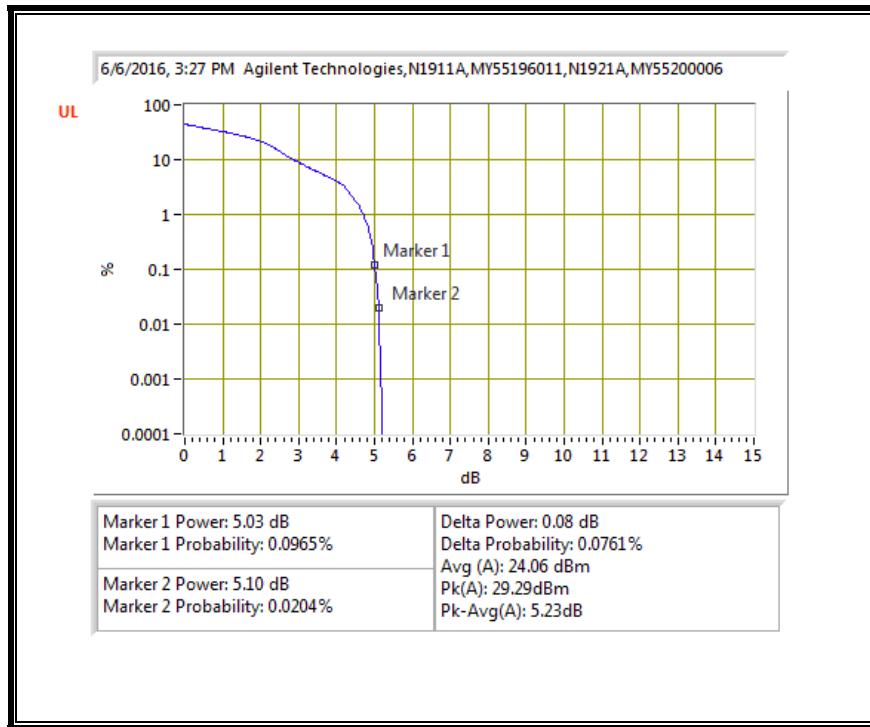
**16QAM, (10.0 MHz BAND WIDTH)**



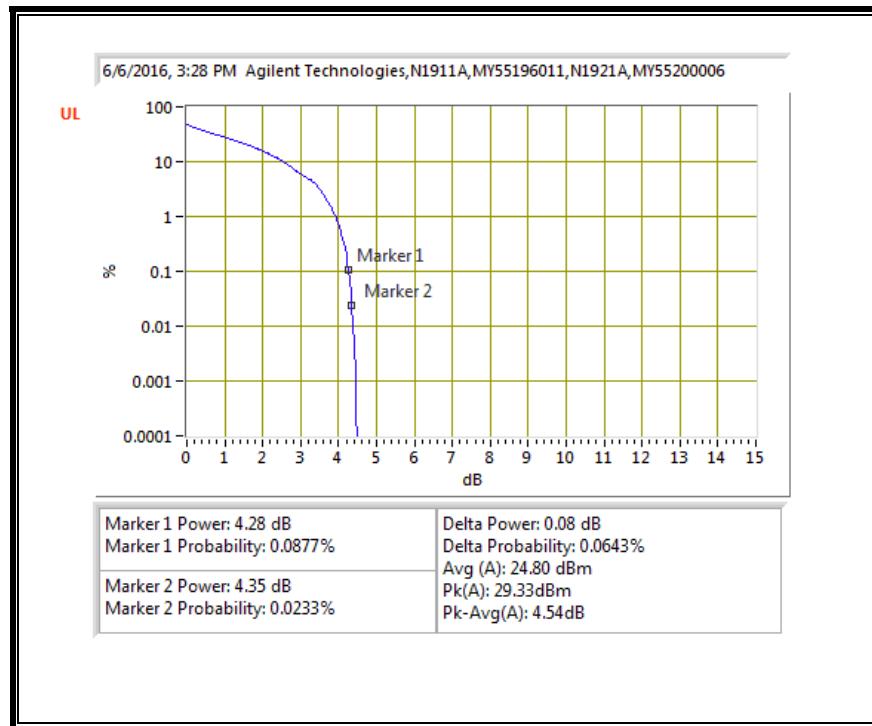
**QPSK, (15.0 MHz BAND WIDTH)**



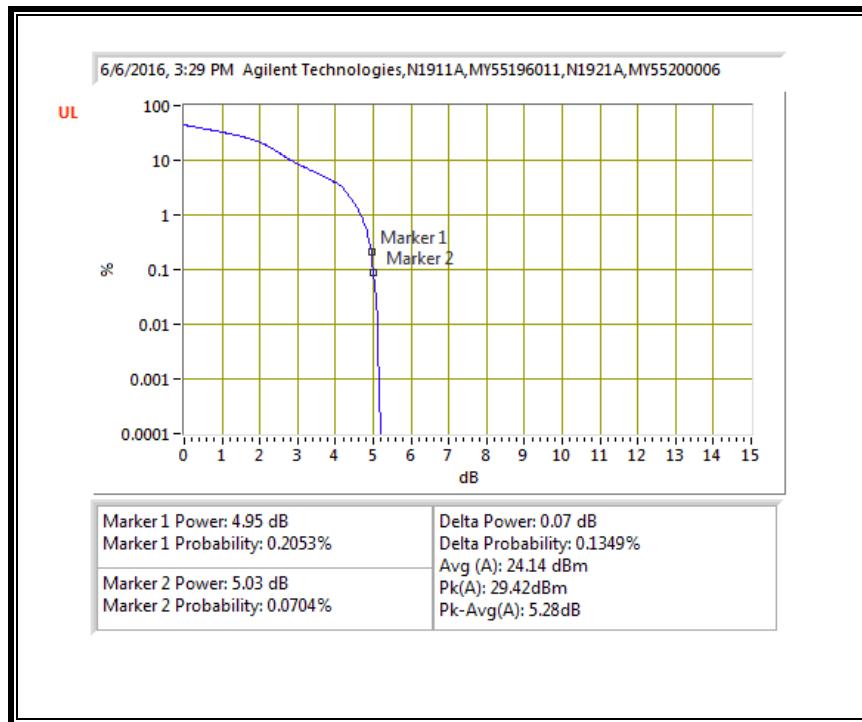
**16QAM, (15.0 MHz BAND WIDTH)**



**QPSK, (20.0 MHz BAND WIDTH)**

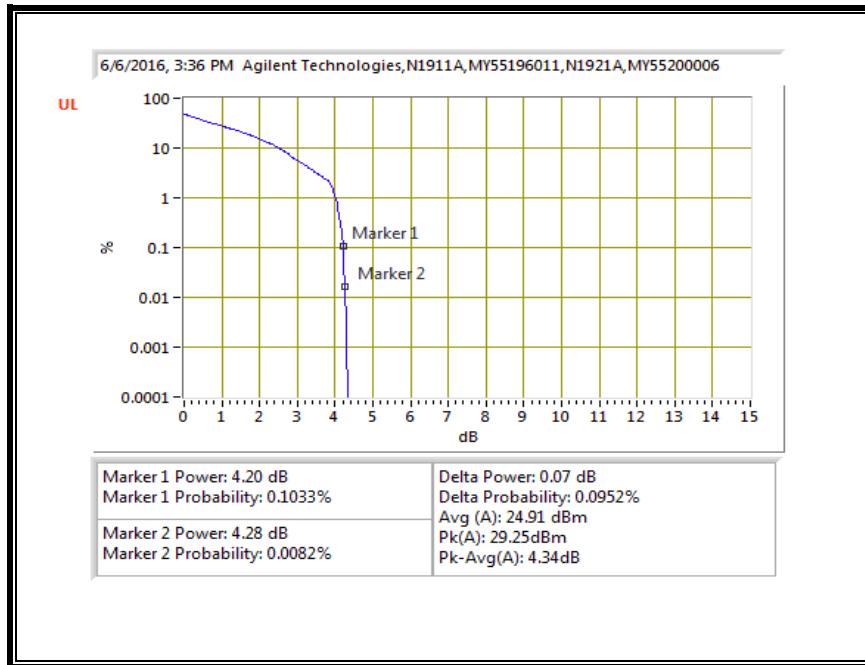


**16QAM, (20.0 MHz BAND WIDTH)**

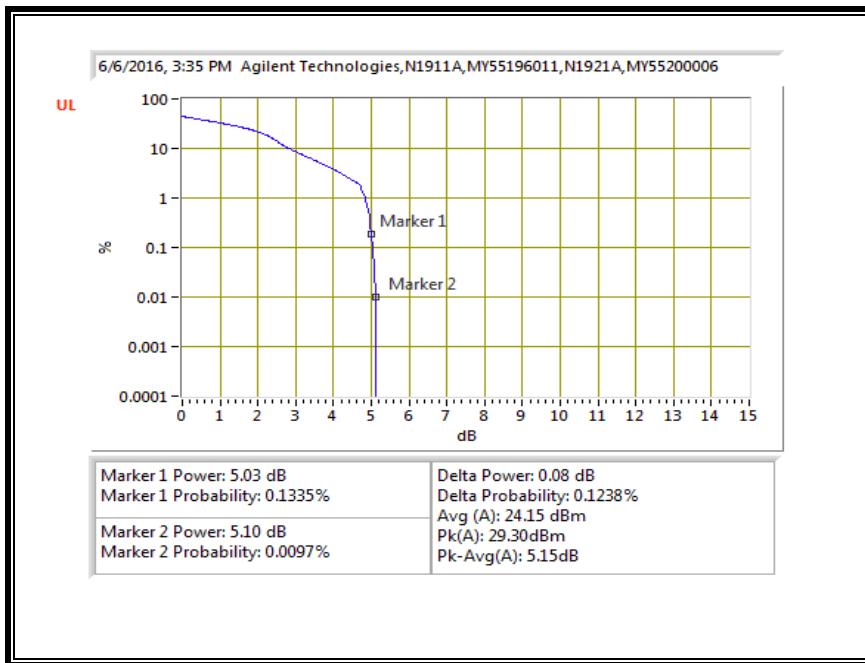


### 10.3.5. LTE BAND 12

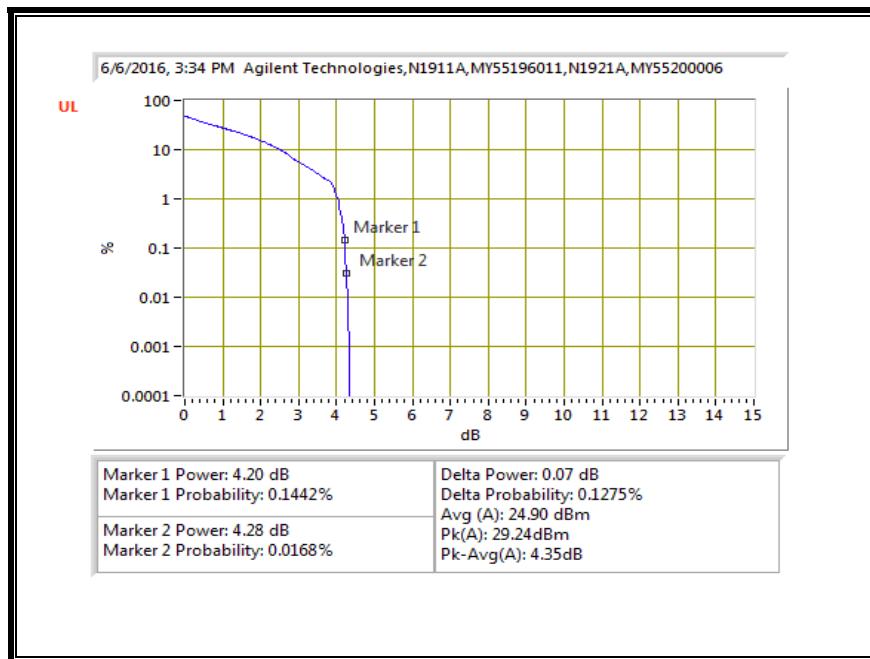
#### QPSK, (1.4 MHz BAND WIDTH)



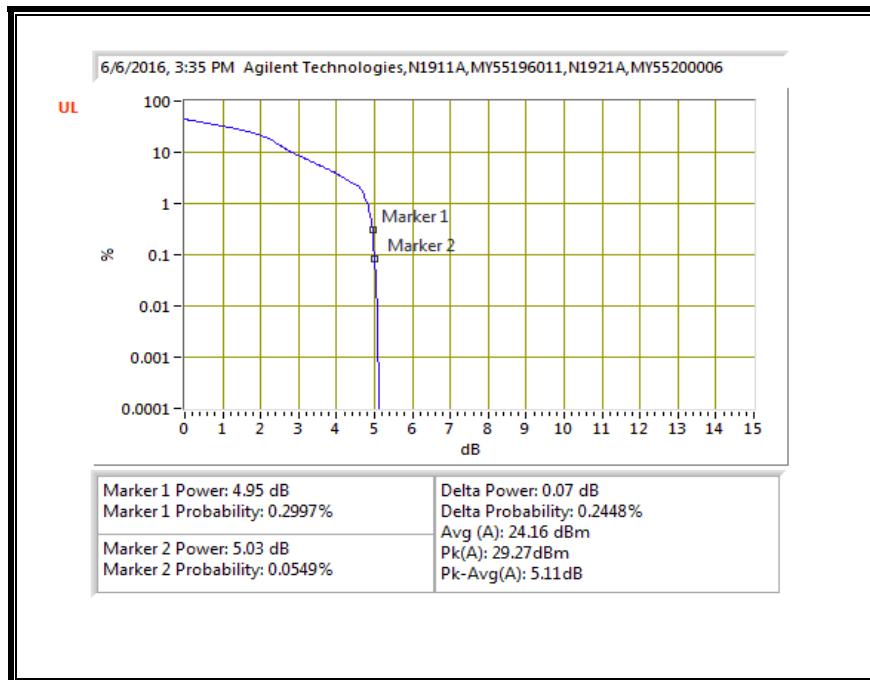
#### 16QAM, (1.4 MHz BAND WIDTH)



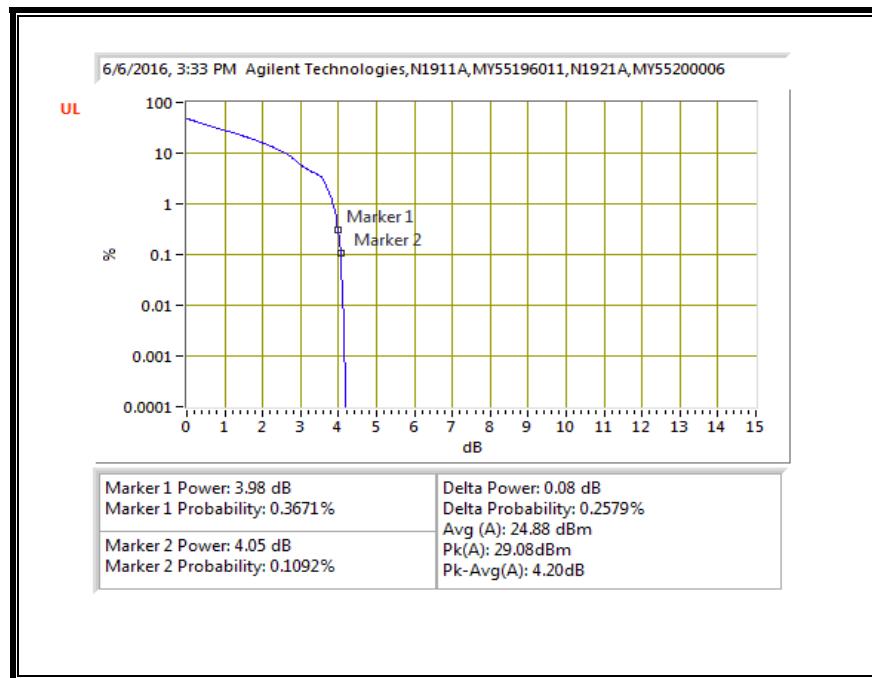
**QPSK, (3.0 MHz BAND WIDTH)**



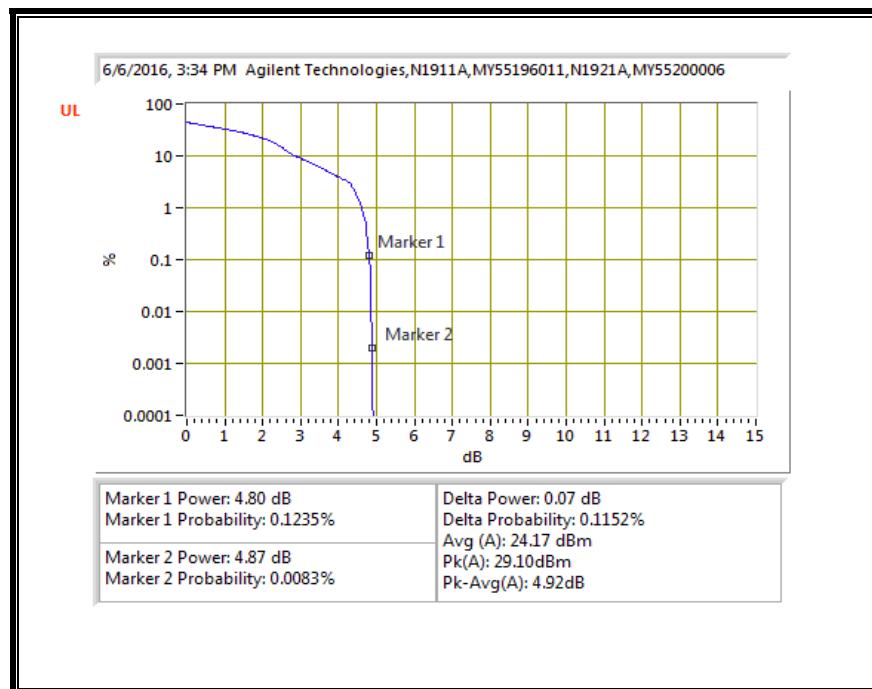
**16QAM, (3.0 MHz BAND WIDTH)**



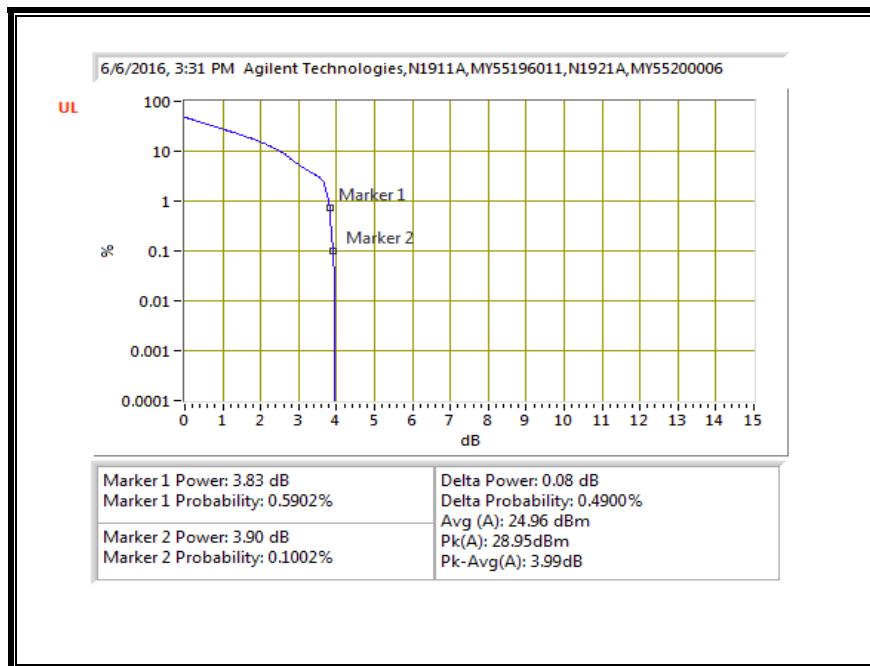
### QPSK, (5.0 MHz BAND WIDTH)



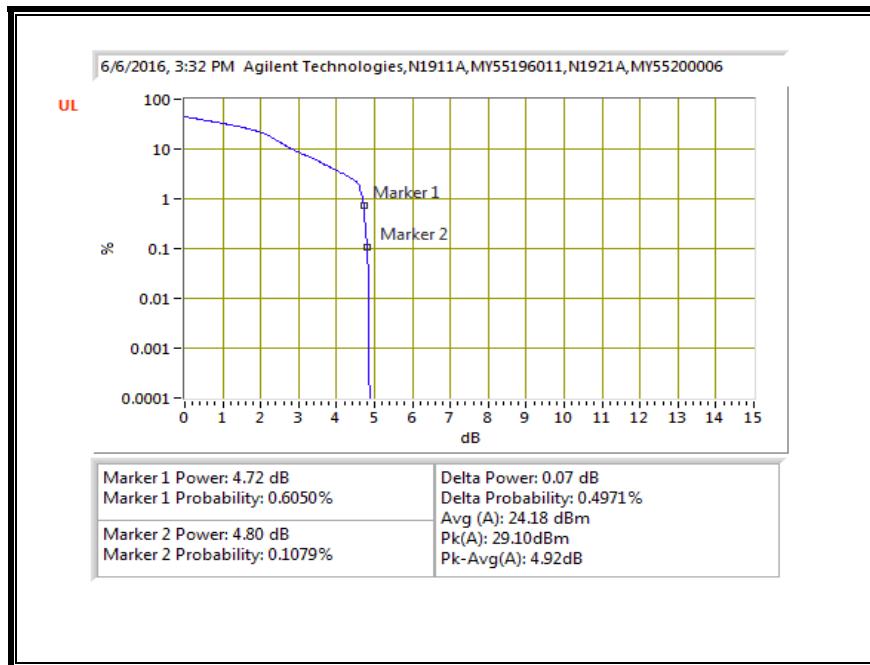
### 16QAM, (5.0 MHz BAND WIDTH)



**QPSK, (10.0 MHz BAND WIDTH)**

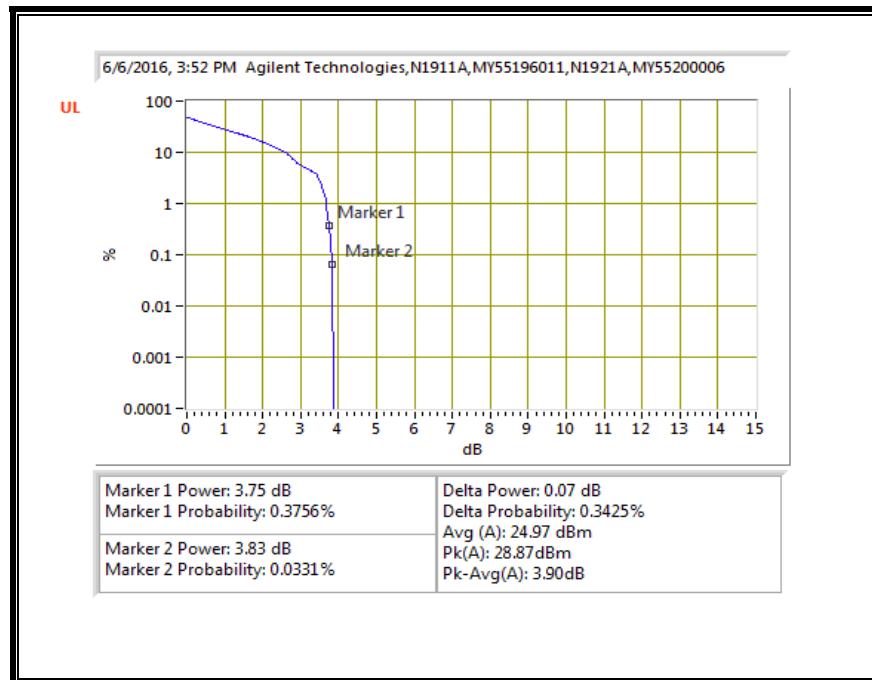


**16QAM, (10.0 MHz BAND WIDTH)**

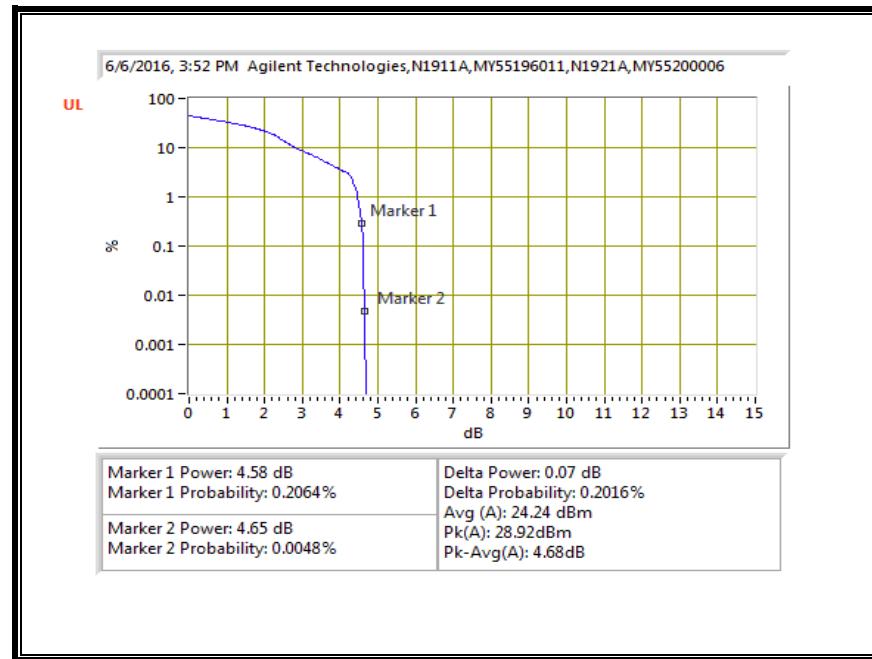


### 10.3.6. LTE BAND 13

#### QPSK, (5.0 MHz BAND WIDTH)

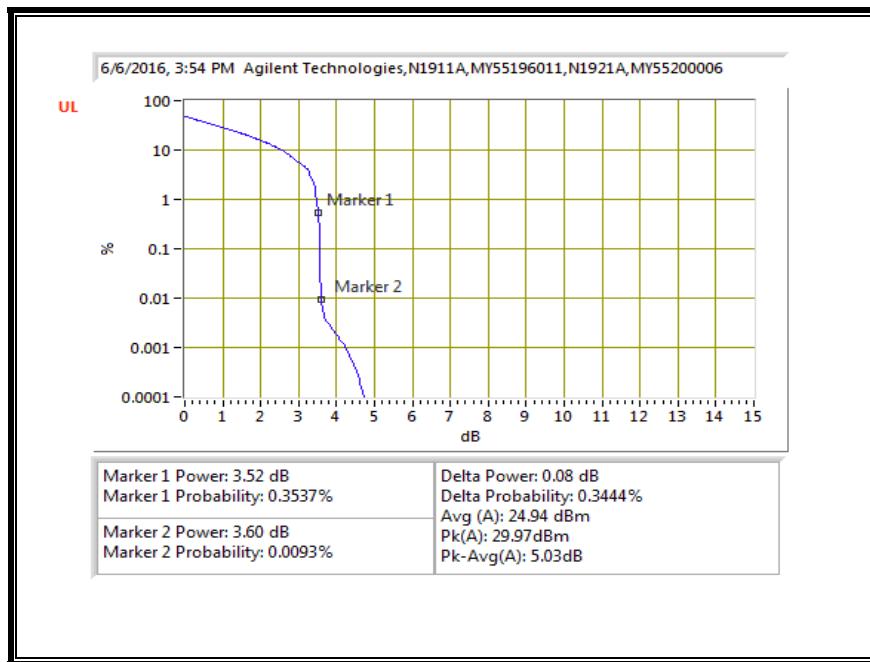


#### 16QAM, (5.0 MHz BAND WIDTH)

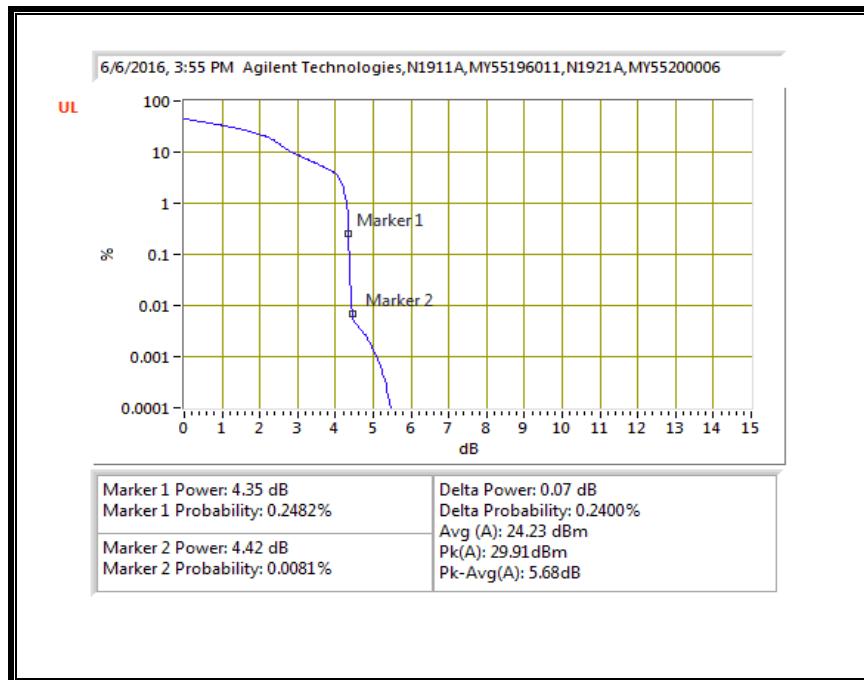




**QPSK, (10.0 MHz BAND WIDTH)**

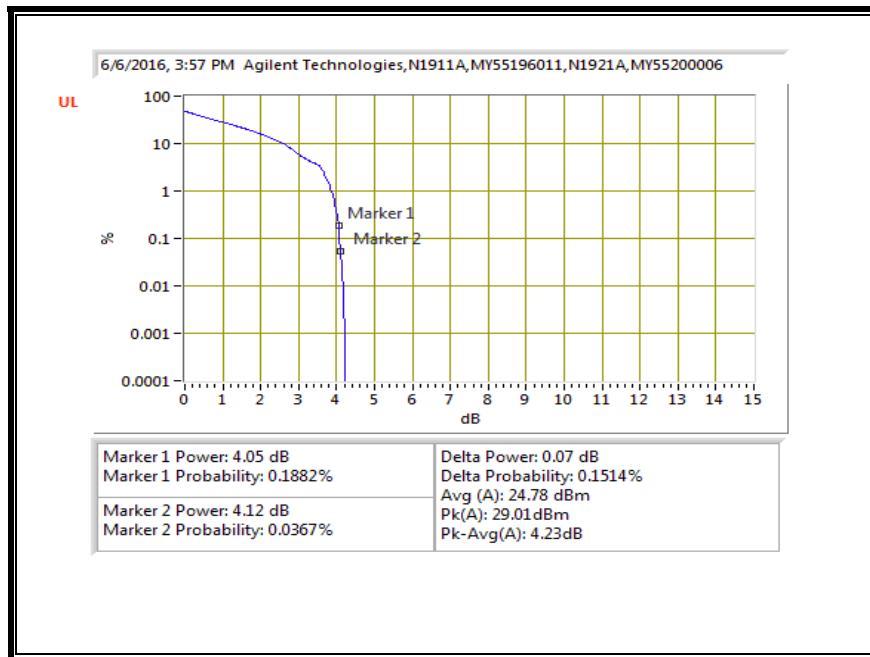


**16QAM, (10.0 MHz BAND WIDTH)**

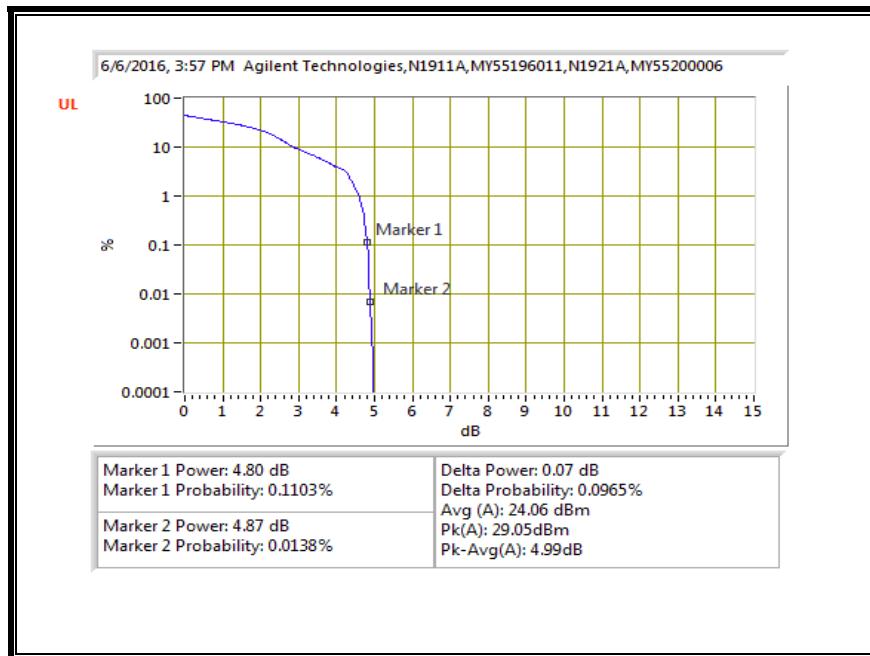


### 10.3.7. LTE BAND 17

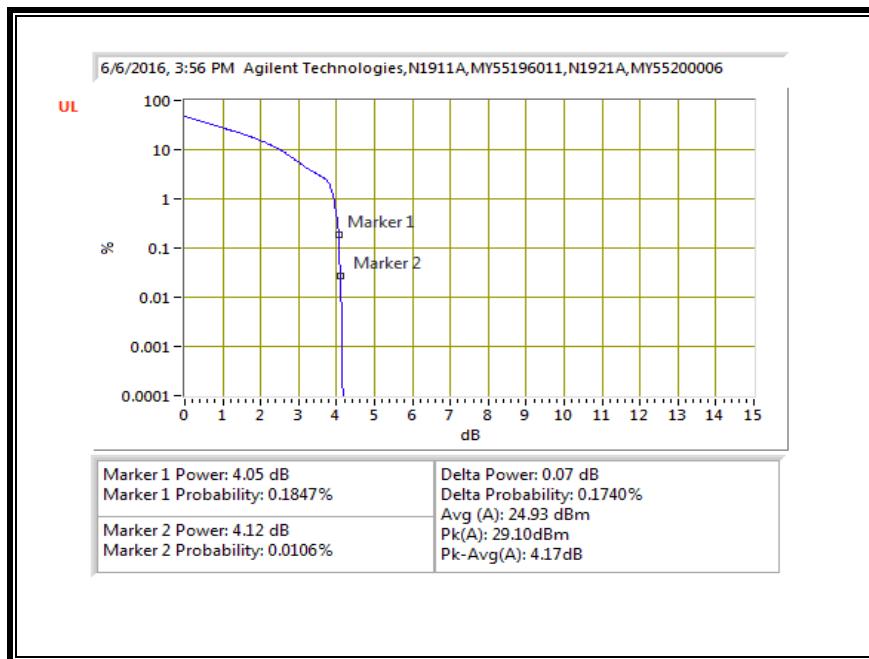
#### QPSK, (5.0 MHz BAND WIDTH)



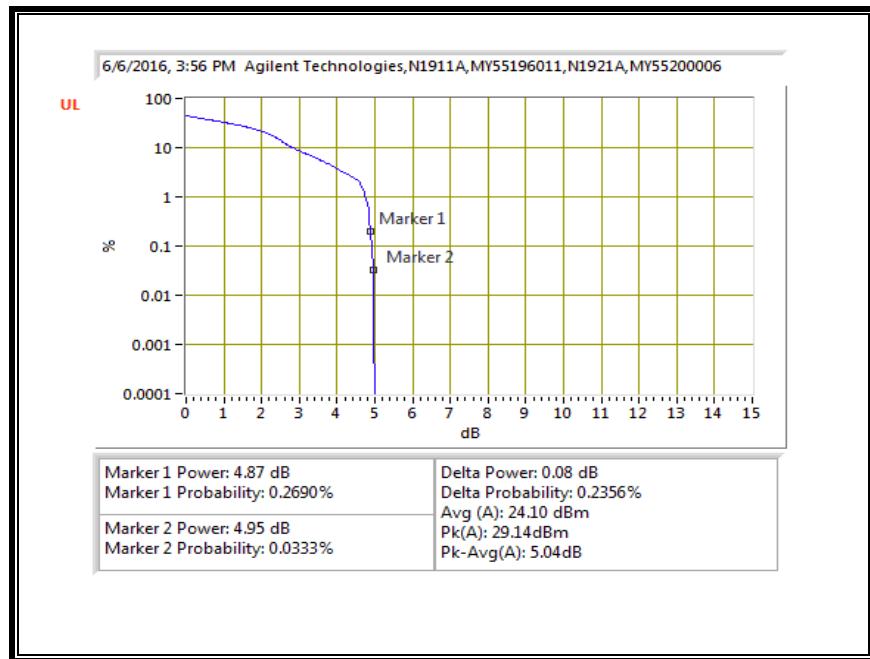
#### 16QAM, (5.0 MHz BAND WIDTH)



**QPSK, (10.0 MHz BAND WIDTH)**

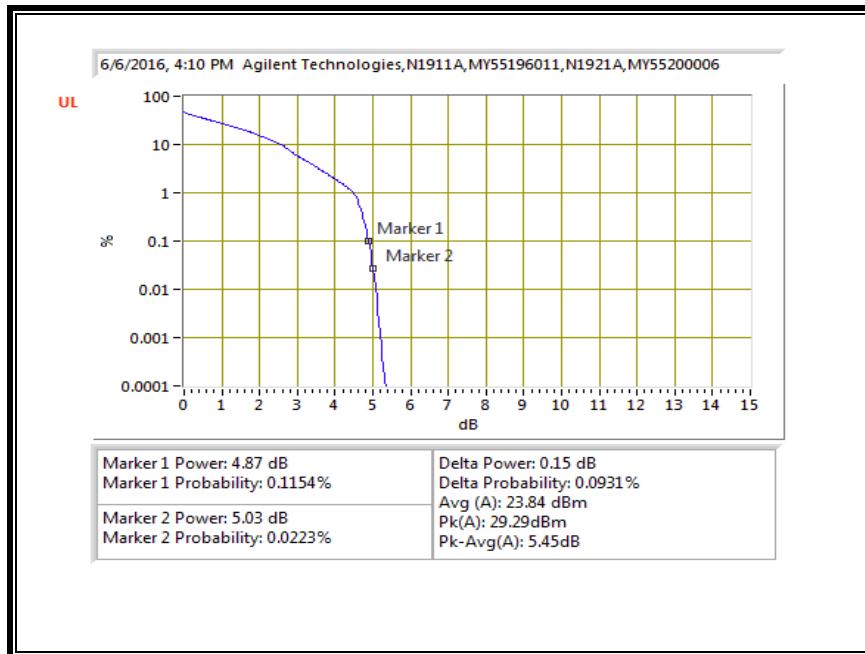


**16QAM, (10.0 MHz BAND WIDTH)**

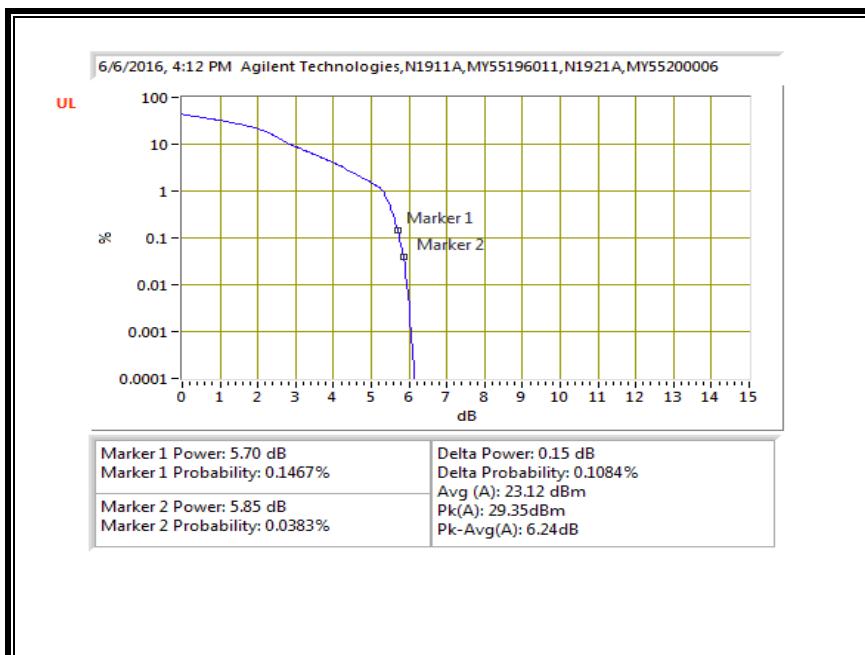


### 10.3.8. LTE BAND 25

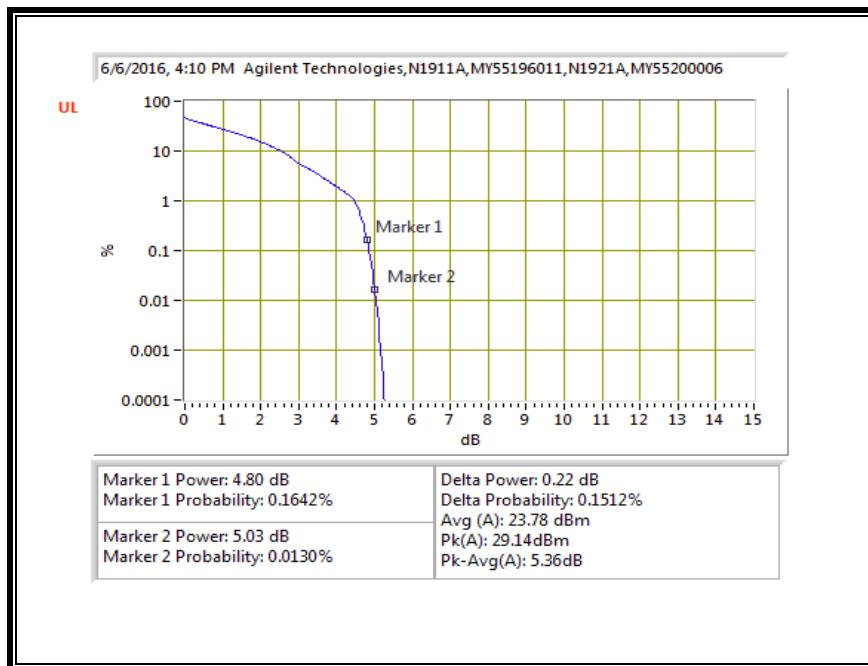
#### QPSK, (1.4 MHz BAND WIDTH)



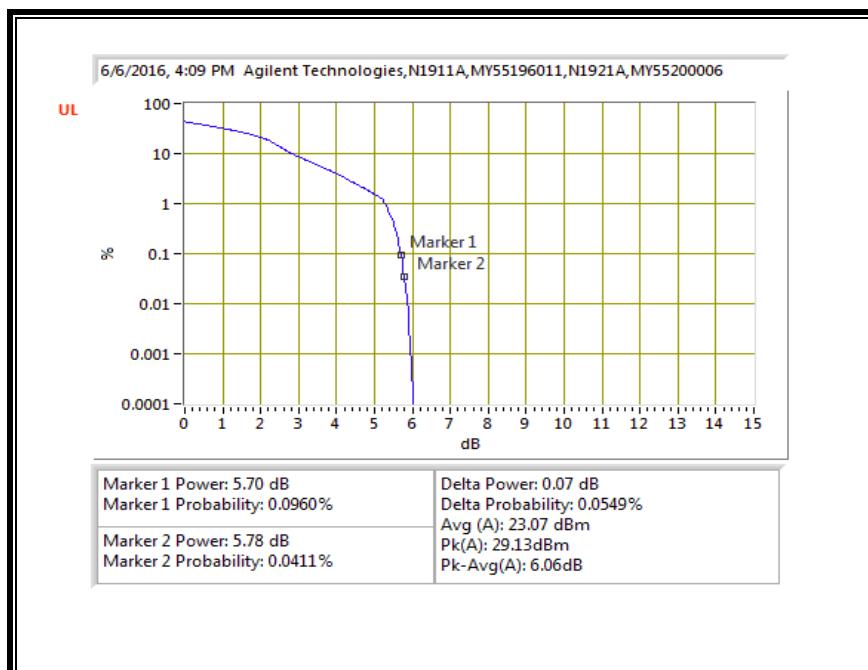
#### 16QAM, (1.4 MHz BAND WIDTH)



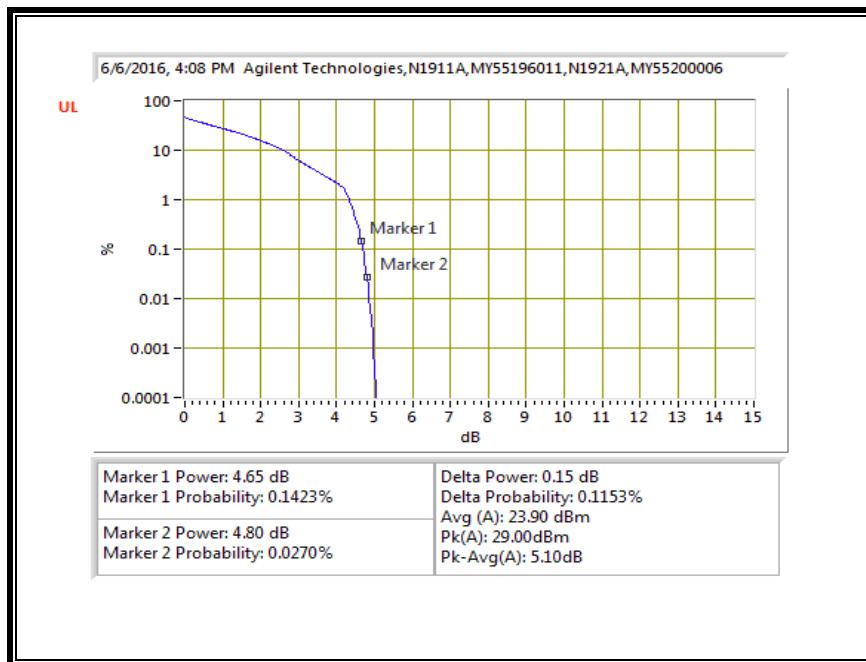
**QPSK, (3.0 MHz BAND WIDTH)**



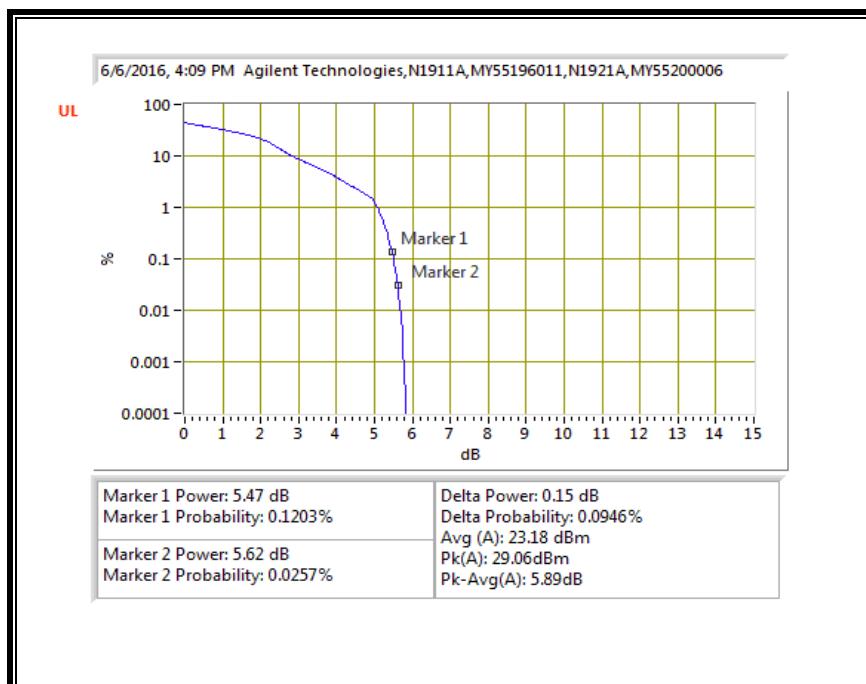
**16QAM, (3.0 MHz BAND WIDTH)**



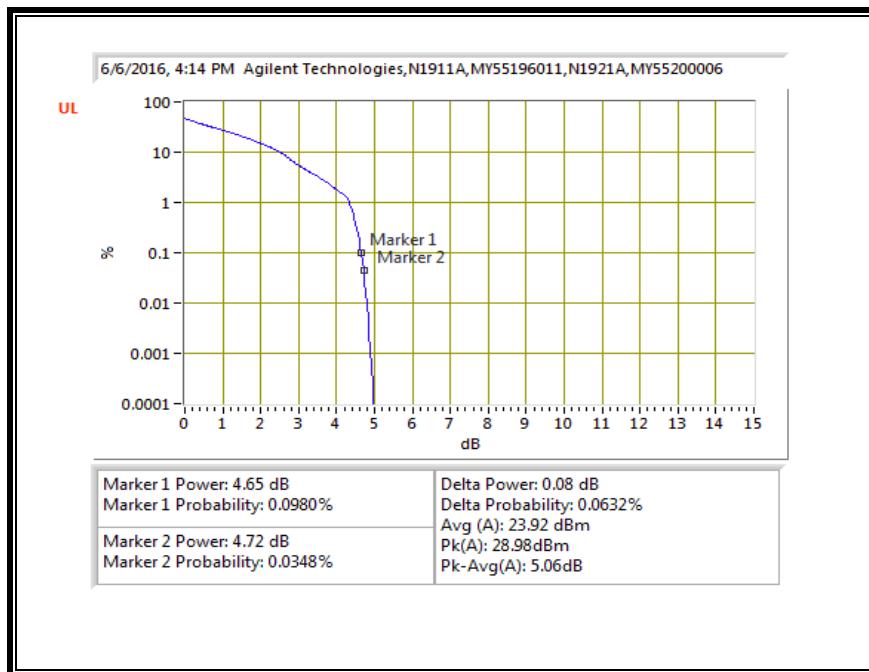
**QPSK, (5.0 MHz BAND WIDTH)**



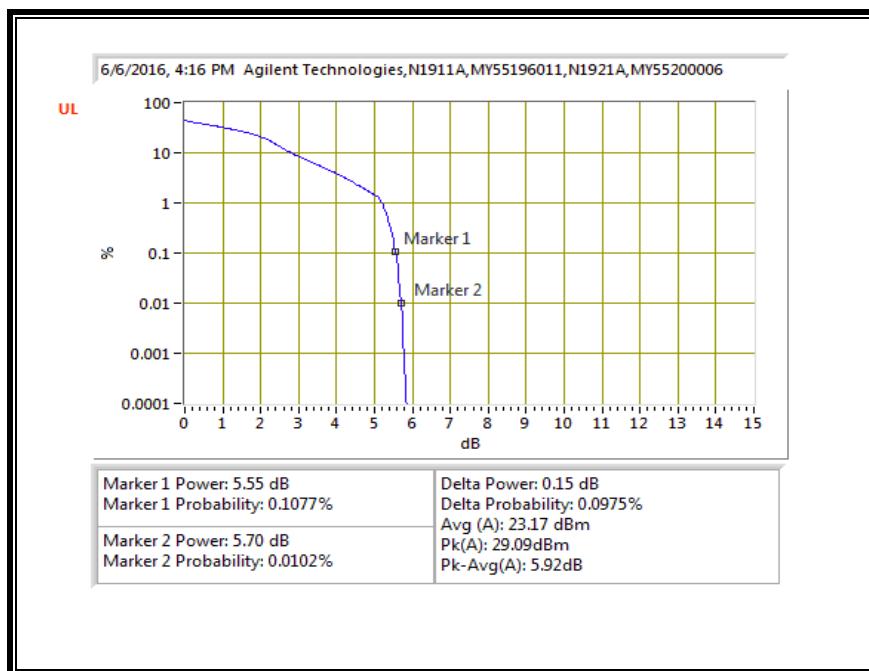
**16QAM, (5.0 MHz BAND WIDTH)**



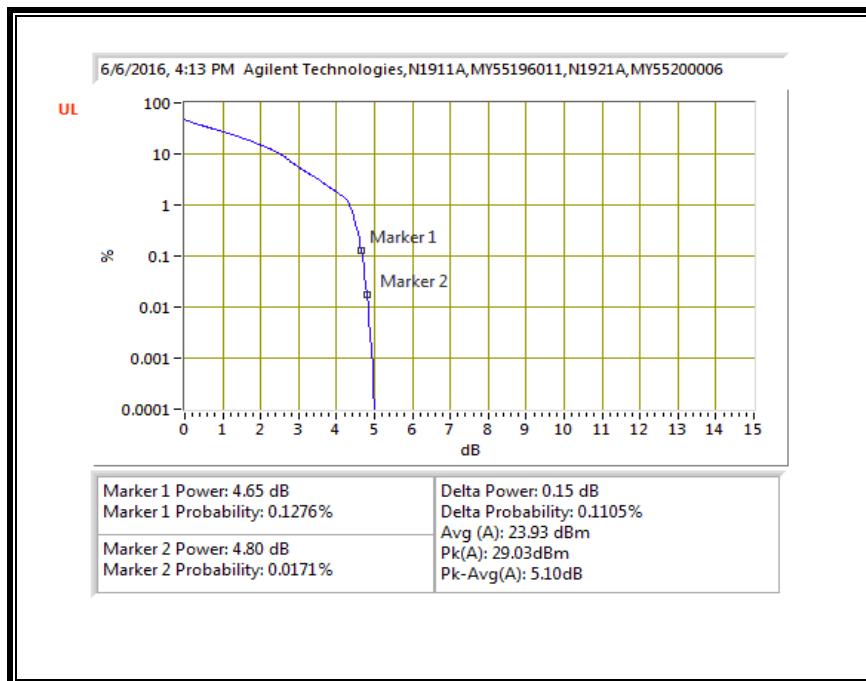
**QPSK, (10.0 MHz BAND WIDTH)**



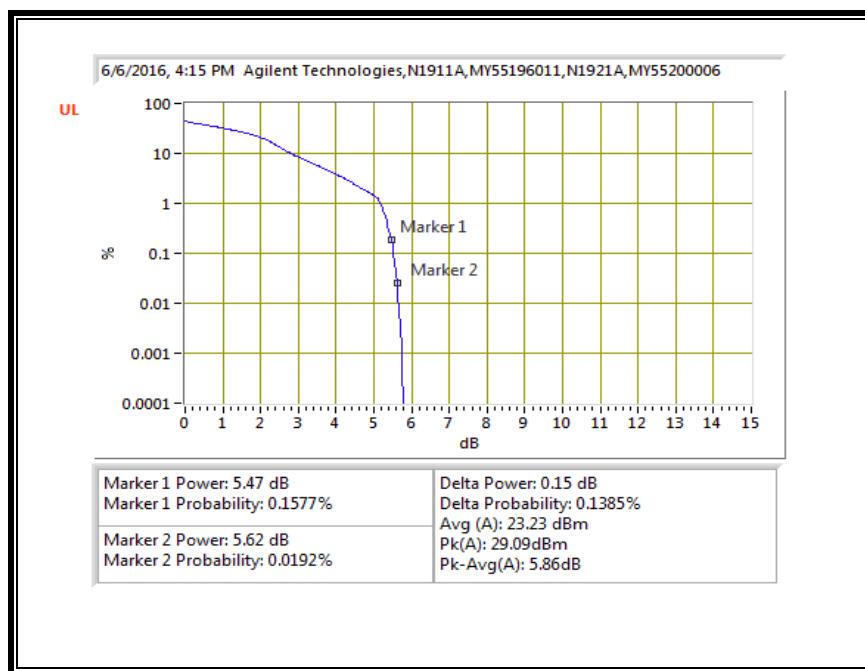
**16QAM, (10.0 MHz BAND WIDTH)**



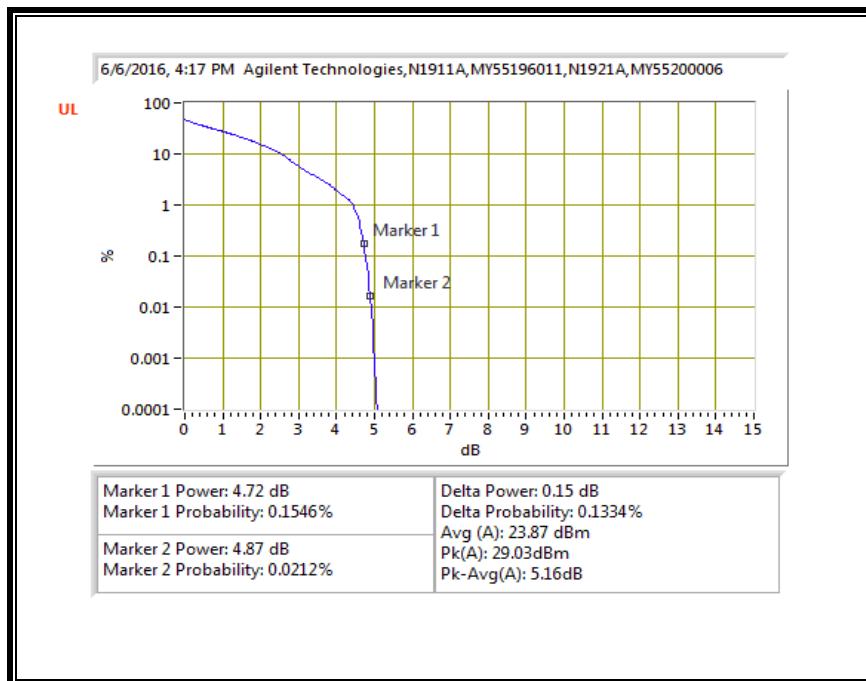
**QPSK, (15.0 MHz BAND WIDTH)**



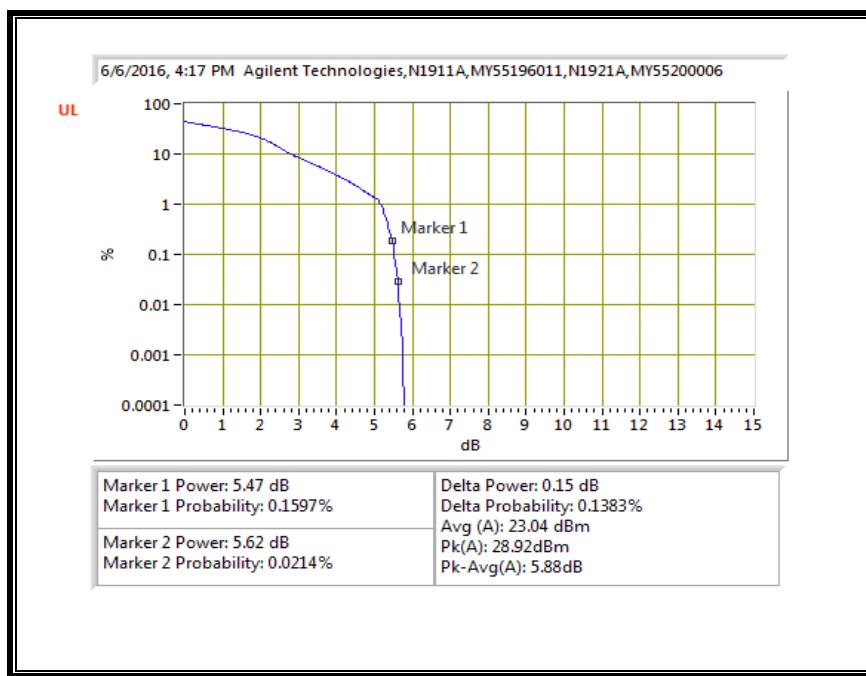
**16QAM, (15.0 MHz BAND WIDTH)**



**QPSK, (20.0 MHz BAND WIDTH)**

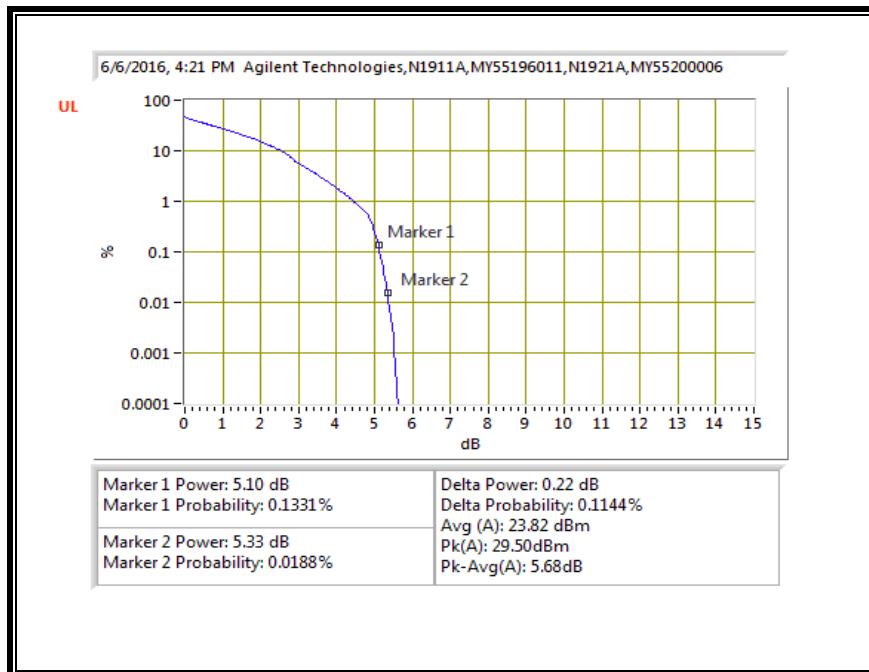


**16QAM, (20.0 MHz BAND WIDTH)**

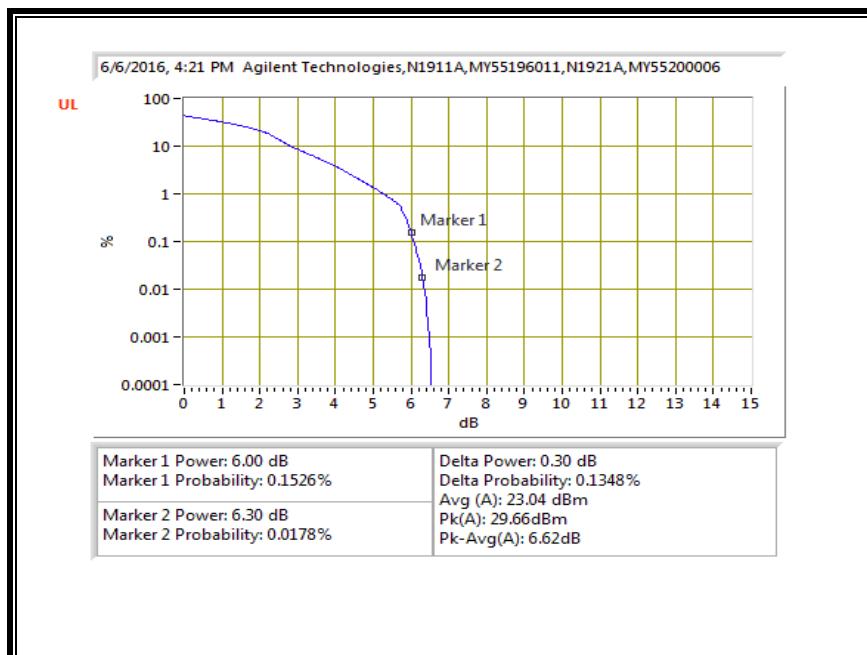


### 10.3.9. LTE BAND 26

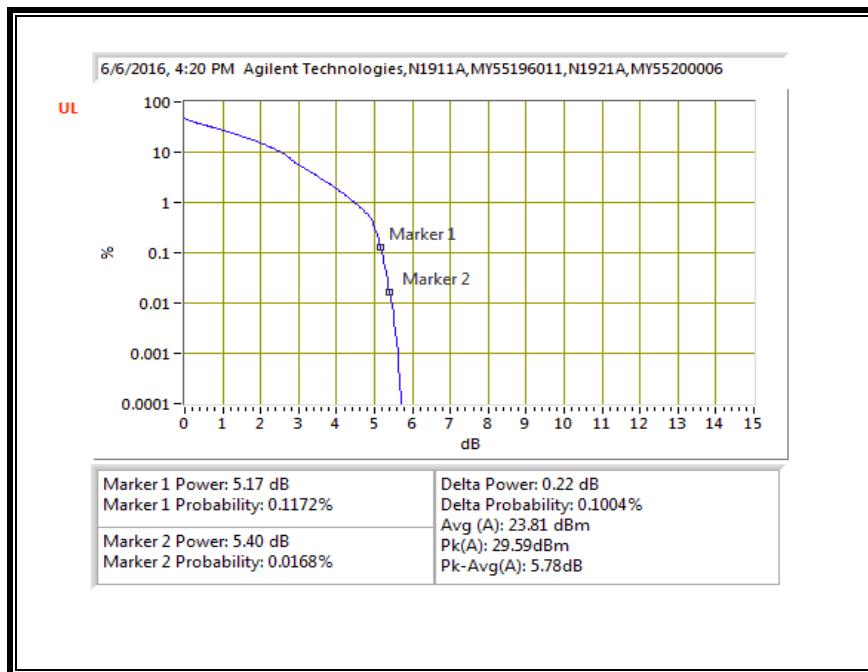
#### QPSK, (1.4 MHz BAND WIDTH)



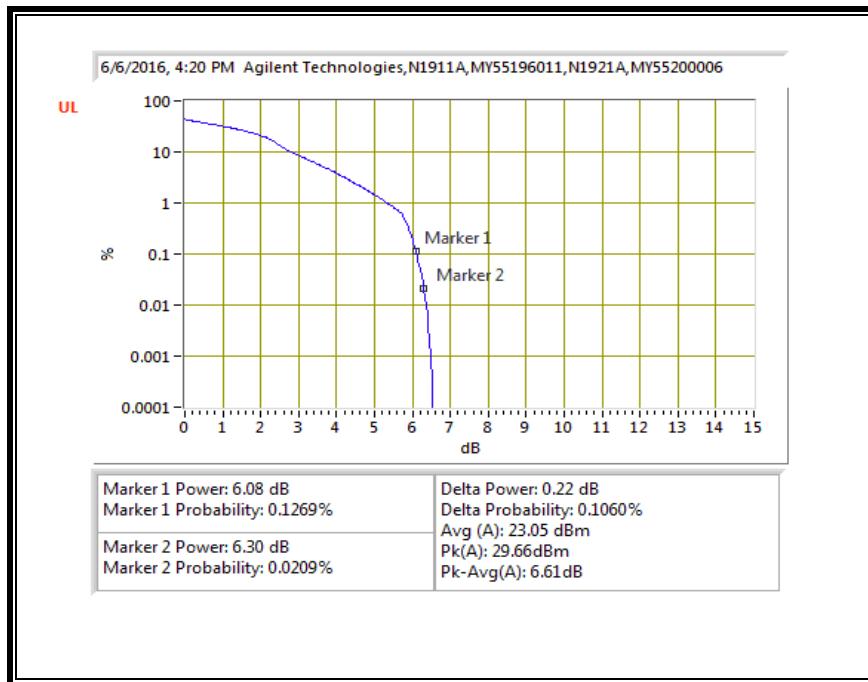
#### 16QAM, (1.4 MHz BAND WIDTH)



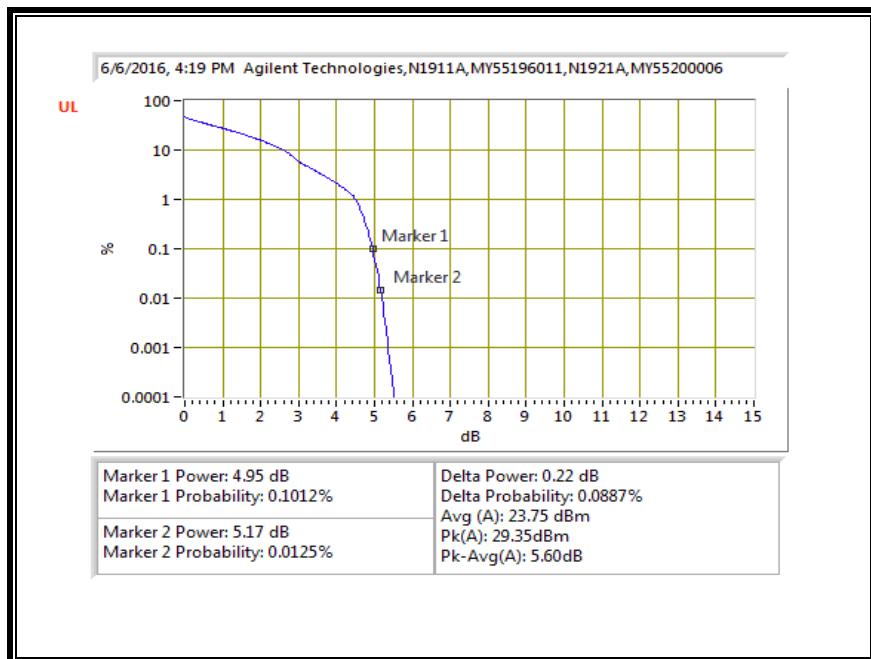
**QPSK, (3.0 MHz BAND WIDTH)**



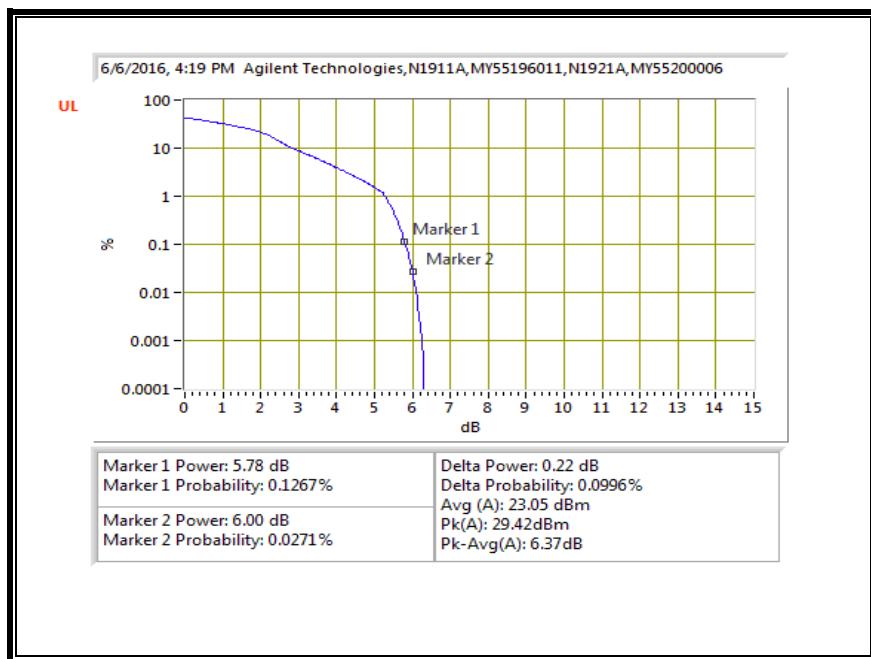
**16QAM, (3.0 MHz BAND WIDTH)**



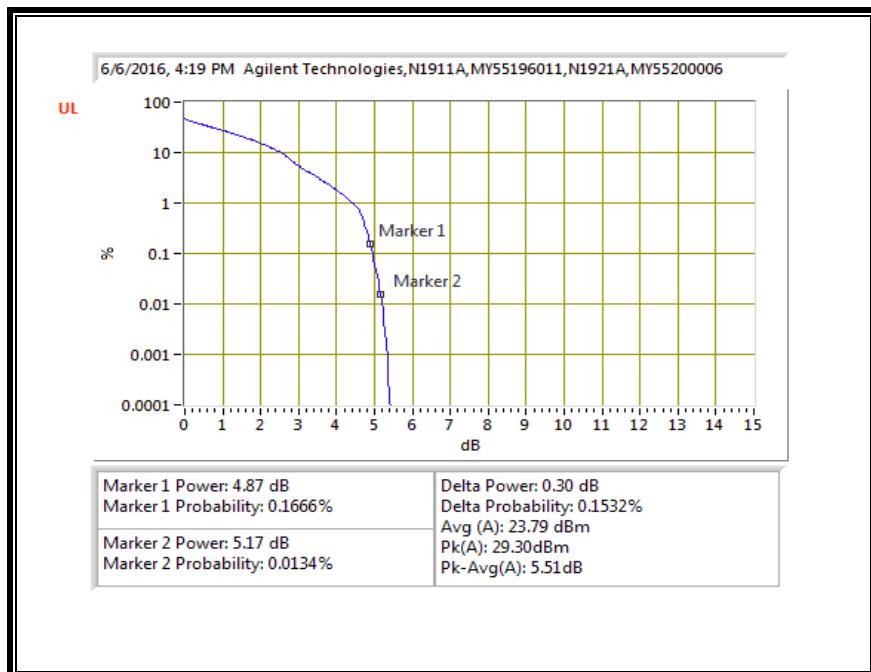
**QPSK, (5.0 MHz BAND WIDTH)**



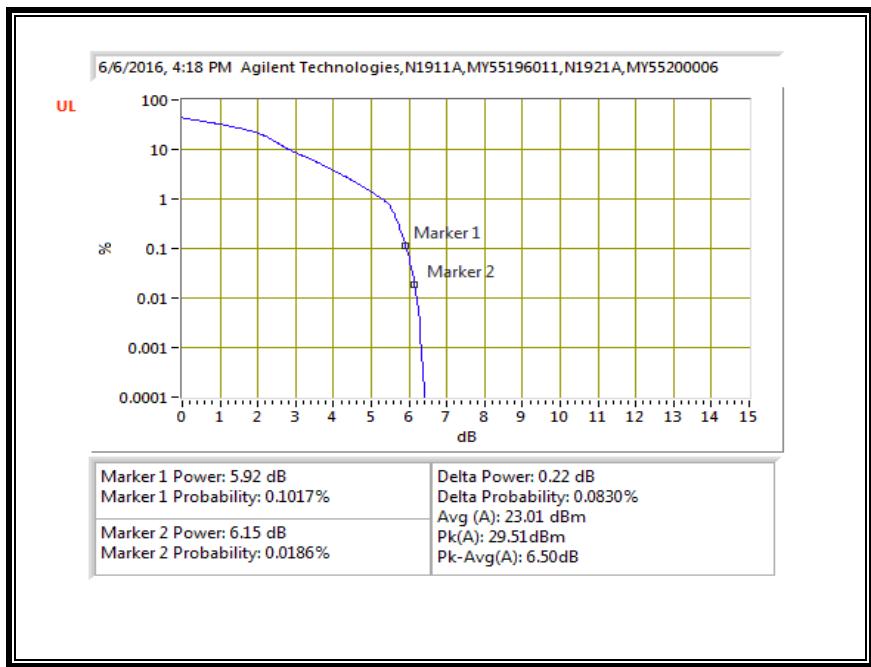
**16QAM, (5.0 MHz BAND WIDTH)**



**QPSK, (10.0 MHz BAND WIDTH)**

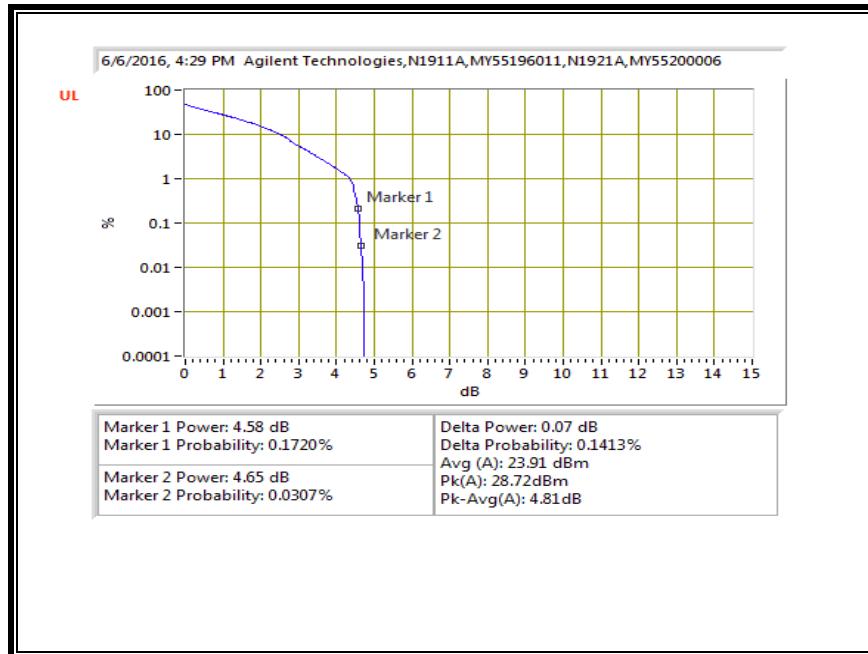


**16QAM, (10.0 MHz BAND WIDTH)**

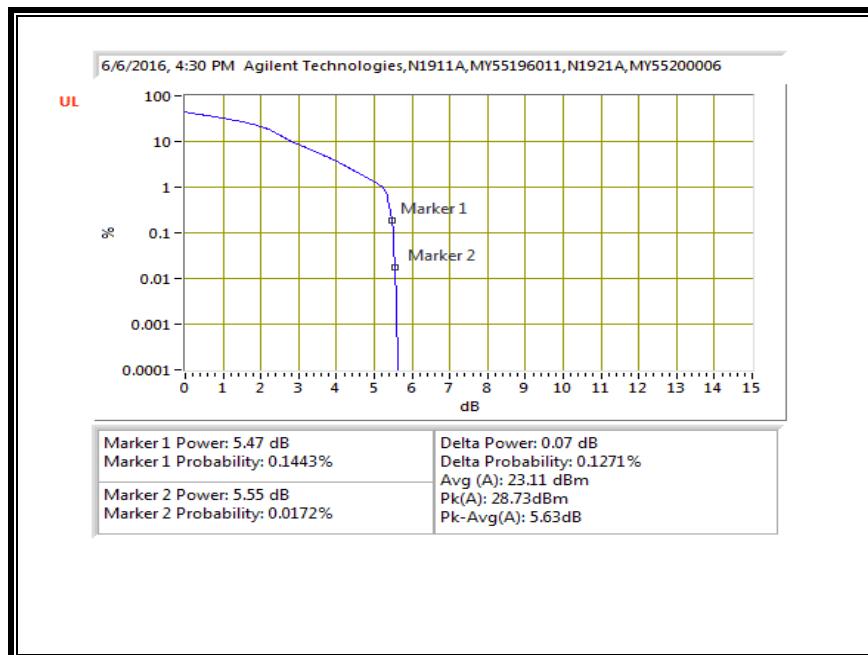


### 10.3.10. LTE BAND 27

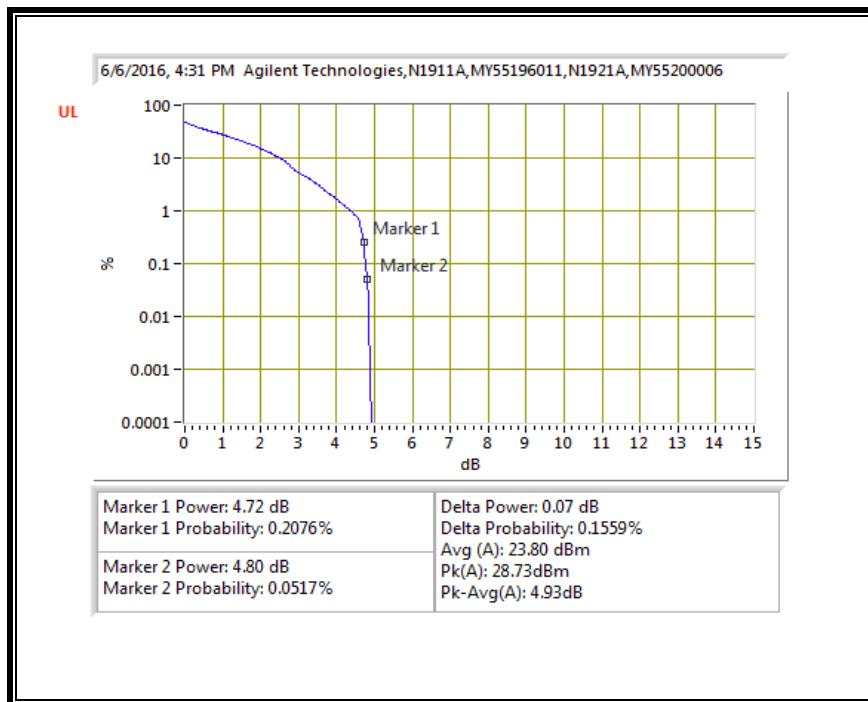
#### QPSK, (1.4 MHz BAND WIDTH)



#### 16QAM, (1.4 MHz BAND WIDTH)



**QPSK, (3.0 MHz BAND WIDTH)**



**16QAM, (3.0 MHz BAND WIDTH)**

