

Appendix B

E-UTRA Band 5

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1. Main Test Instruments

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal.Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018/3/13	2021/3/12
Spectrum Analyzer (20Hz-43GHz)	Rohde & Schwarz	FSU43	SEM004-08	2019/3/2	2020/3/1
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017/6/27	2020/6/26
Horn Antenna (800MHz-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018/4/13	2021/4/12
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017/10/17	2020/10/16
Amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2018/9/2	2019/9/2
Low Noise Amplifier (100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2018/9/2	2019/9/2
Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	EMC2063	2018/10/20	2019/10/19
Pre-amplifier (26-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2019/3/2	2020/3/1
Band filter	N/A	N/A	N/A	N/A	N/A
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2019/6/12	2020/6/11
Wideband Radio CommunicationTeste	Anristu	MT8821C	6201462742	2019/4/3	2020/4/3
Wideband Radio CommunicationTester	Rohde & Schwarz	CMW500	W005-02	2019/1/13	2020/1/12
RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date	Cal.Due date
				(yyyy-mm-dd)	(yyyy-mm-dd)
Dual Output Mobile Communication DC Source	Agilent Technologies Inc	66311B	W009-09	2018/11/2	2019/11/1
Signal Analyzer	Rohde & Schwarz	FSV	W005-02	2019/3/2	2020/3/1
Coaxial Cable	SGS	N/A	SEM031-01	2019/6/12	2020/6/11
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2018/11/2	2019/11/1
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	HTC-1	W006-17	2018/11/2	2019/11/1
Temperature Chamber	GIANT FORCE	ICT-150-40-CP-AR	W027-03	2018/11/2	2019/11/1
Wideband Radio CommunicationTeste	Anristu	MT8821C	6201462742	2019/3/2	2020/3/1
Wideband Radio CommunicationTester	Rohde & Schwarz	CMW500	W005-02	2018/11/2	2019/11/1

2. Measurement Uncertainty

For a 95% confidence level (k = 2), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

Test Item	Extended Uncertainty	Data
Transmit Output Power Data	Power [dBm]	U =±0.37 dB
Bandwidth	Magnitude [%]	U =± 0.2%
Band Edge Compliance	Disturbance Power [dBm]	U = ±2.0 dB
Spurious Emissions, Conducted	Disturbance Power [dBm]	U = ±2.0 dB
Frequency Stability	Frequency Accuracy [ppm]	U = ±0.24 ppm

3. Effective (Isotropic) Radiated Power

3.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	23.11	17.84	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	23.24	17.97	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	23.07	17.80	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	23.20	17.93	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	23.22	17.95	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	23.17	17.90	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	22.28	17.01	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	23.08	17.81	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.19	17.92	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	23.07	17.80	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	23.17	17.90	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	23.22	17.95	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	23.16	17.89	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.28	17.01	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	23.10	17.83	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.21	17.94	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	23.05	17.78	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	23.14	17.87	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	23.19	17.92	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	23.14	17.87	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.26	16.99	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	22.35	17.08	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	22.43	17.16	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	22.32	17.05	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	22.24	16.97	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	22.35	17.08	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	22.24	16.97	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	21.27	16.00	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	22.31	17.04	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	22.42	17.15	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	22.23	16.96	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	22.32	17.05	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	22.39	17.12	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	22.32	17.05	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	21.31	16.04	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	22.28	17.01	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	22.38	17.11	38.45	PASS

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Band5	1.4MHz	16QAM	20643	1RB#5	22.21	16.94	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	22.21	16.94	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	22.25	16.98	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	22.21	16.94	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.25	15.98	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.19	17.92	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	23.16	17.89	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	23.16	17.89	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#0	22.24	16.97	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#4	22.27	17.00	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#7	22.24	16.97	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.26	16.99	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.19	17.92	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	23.14	17.87	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	23.14	17.87	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#0	22.27	17.00	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#4	22.28	17.01	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#7	22.24	16.97	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	22.28	17.01	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	23.17	17.90	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.14	17.87	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	23.13	17.86	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#0	22.23	16.96	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#4	22.26	16.99	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#7	22.23	16.96	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	22.27	17.00	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	22.44	17.17	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	22.39	17.12	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	22.40	17.13	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#0	21.26	15.99	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#4	21.26	15.99	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#7	21.23	15.96	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	21.19	15.92	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	22.37	17.10	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	22.48	17.21	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	22.46	17.19	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#0	21.30	16.03	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#4	21.30	16.03	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#7	21.26	15.99	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.23	15.96	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	22.33	17.06	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	22.33	17.06	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	22.35	17.08	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#0	21.25	15.98	38.45	PASS

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Band5	3MHz	16QAM	20635	8RB#4	21.25	15.98	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#7	21.23	15.96	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	21.17	15.90	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.12	17.85	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#12	23.35	18.08	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	23.06	17.79	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#0	22.19	16.92	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#6	22.30	17.03	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#13	22.25	16.98	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	22.29	17.02	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	23.08	17.81	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	23.29	18.02	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	23.04	17.77	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#0	22.27	17.00	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#6	22.30	17.03	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#13	22.21	16.94	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.27	17.00	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	23.06	17.79	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.33	18.06	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	23.01	17.74	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#0	22.23	16.96	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#6	22.28	17.01	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#13	22.25	16.98	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	22.29	17.02	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	22.38	17.11	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.43	17.16	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	22.30	17.03	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#0	21.19	15.92	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#6	21.29	16.02	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#13	21.28	16.01	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	21.24	15.97	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	22.29	17.02	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	22.59	17.32	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	22.36	17.09	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#0	21.28	16.01	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#6	21.30	16.03	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#13	21.25	15.98	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.23	15.96	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	22.24	16.97	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.46	17.19	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	22.20	16.93	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#0	21.23	15.96	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#6	21.31	16.04	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#13	21.28	16.01	38.45	PASS

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Band5	5MHz	16QAM	20625	25RB#0	21.23	15.96	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	23.20	17.93	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.30	18.03	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.13	17.86	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#0	22.30	17.03	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#12	22.35	17.08	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#25	22.34	17.07	38.45	PASS
Band5	10MHz	QPSK	20450	50RB#0	22.33	17.06	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	23.16	17.89	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.26	17.99	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	23.09	17.82	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#0	22.38	17.11	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#12	22.33	17.06	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#25	22.24	16.97	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.33	17.06	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	23.11	17.84	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	23.25	17.98	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	23.09	17.82	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#0	22.32	17.05	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#12	22.30	17.03	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#25	22.36	17.09	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	22.36	17.09	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	22.32	17.05	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	22.56	17.29	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	22.33	17.06	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#0	21.26	15.99	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#12	21.30	16.03	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#25	21.29	16.02	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.27	16.00	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	22.36	17.09	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	22.47	17.20	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	22.26	16.99	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#0	21.36	16.09	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#12	21.28	16.01	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#25	21.21	15.94	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	21.26	15.99	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	22.34	17.07	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	22.45	17.18	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	22.23	16.96	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#0	21.32	16.05	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#12	21.26	15.99	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#25	21.31	16.04	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	21.30	16.03	38.45	PASS

Remark:

a: For getting the EIRP (Efficient Isotropic Radiated Power), the following formula should be taken to calculate it,

ERP [dBm] = Conducted Power [dBm] + Gain [dBd]

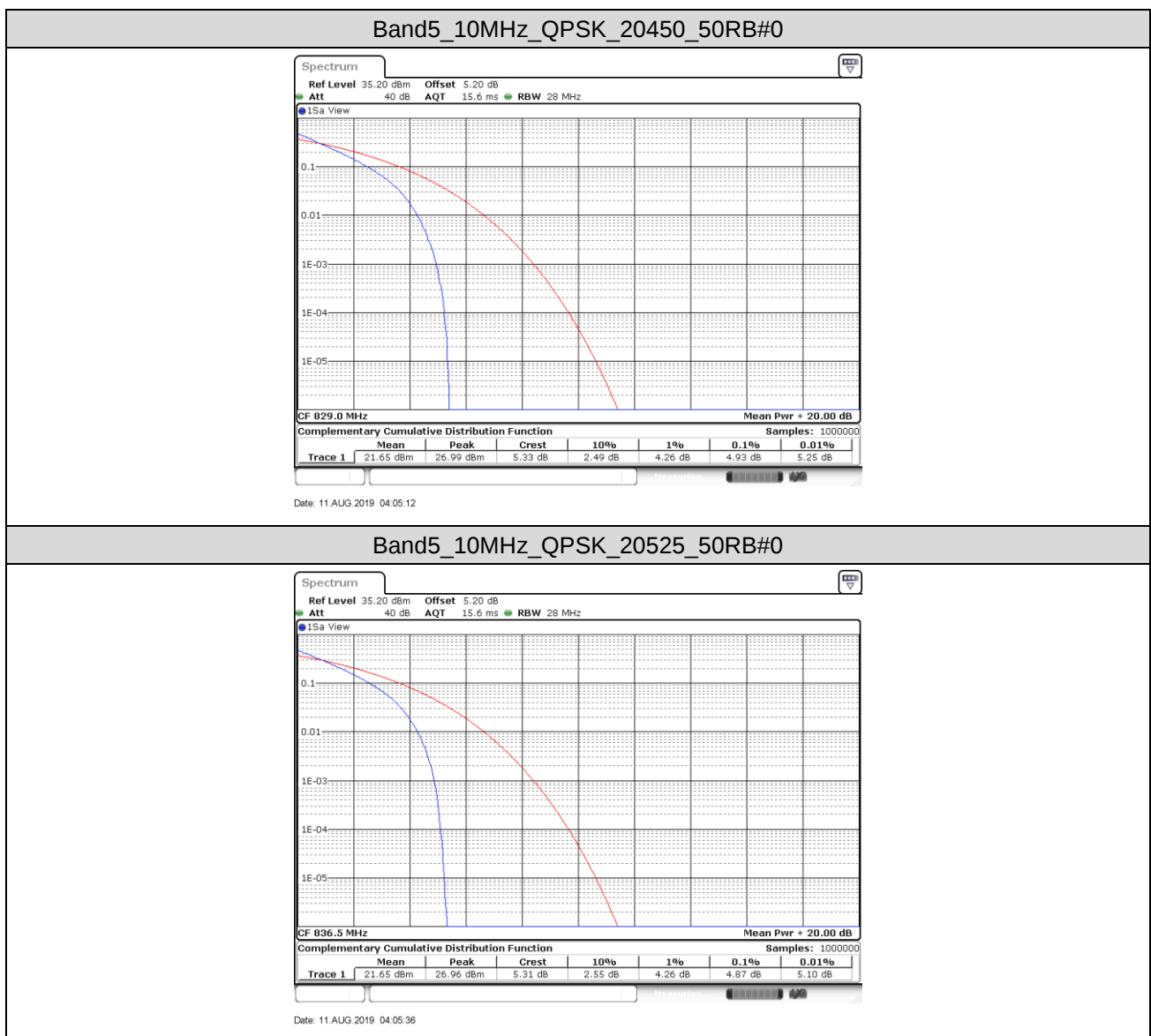
EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]

4. Peak-to-Average Ratio (CCDF)

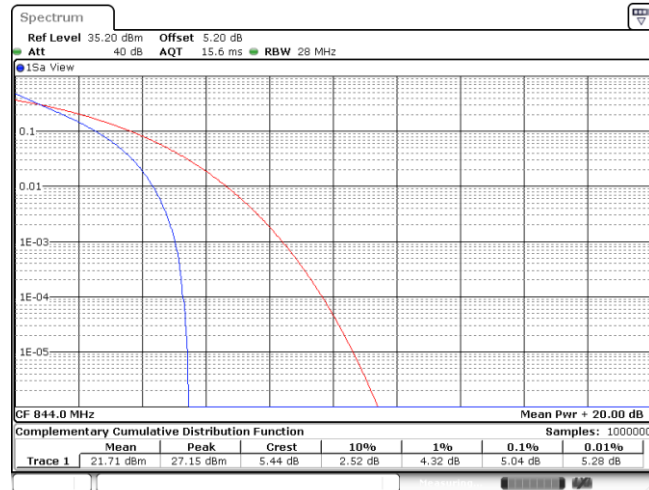
4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	4.93	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	4.87	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.04	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	5.80	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	5.74	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.83	13	PASS

4.2. Test Plots

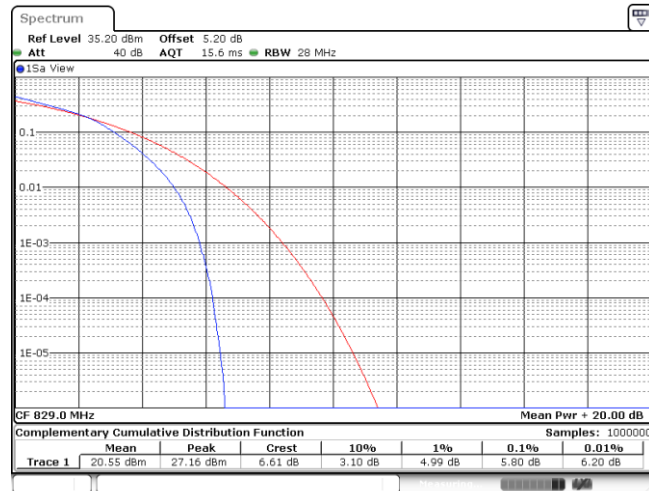


Band5_10MHz_QPSK_20600_50RB#0



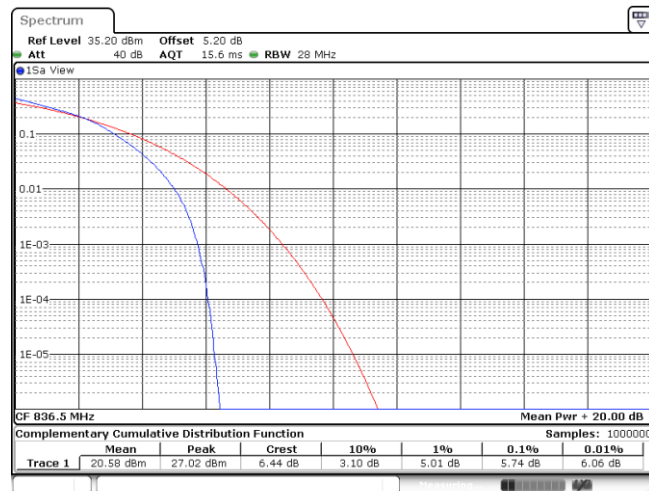
Date: 11 AUG.2019 04:05:58

Band5_10MHz_16QAM_20450_50RB#0



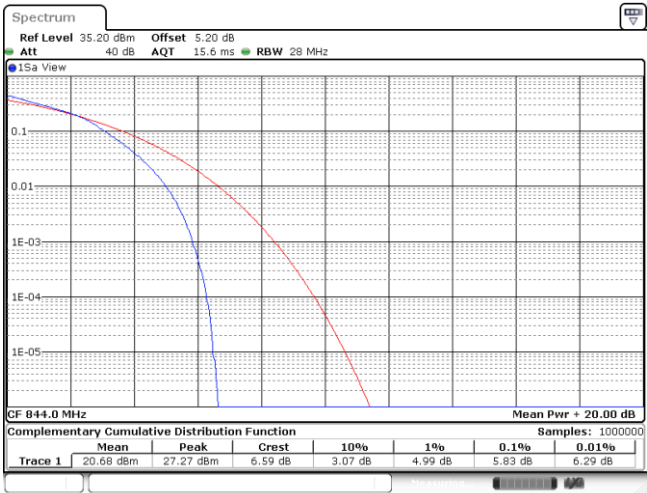
Date: 11 AUG.2019 04:05:24

Band5_10MHz_16QAM_20525_50RB#0



Date: 11 AUG.2019 04:05:47

Band5_10MHz_16QAM_20600_50RB#0



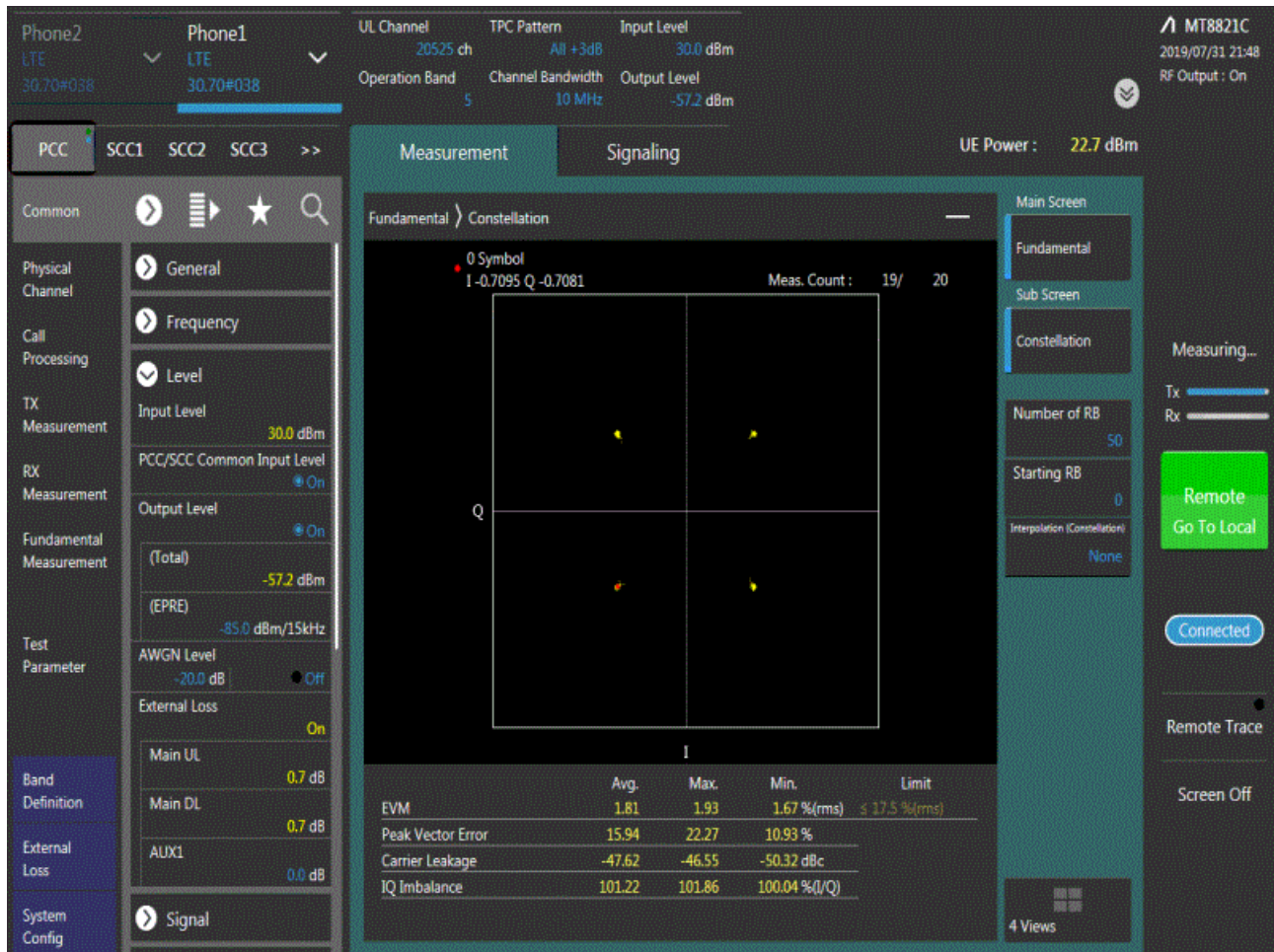
Date: 11.AUG.2019 04:06:10

5. Modulation Characteristics

5.1. Test Band = LTE Band 5

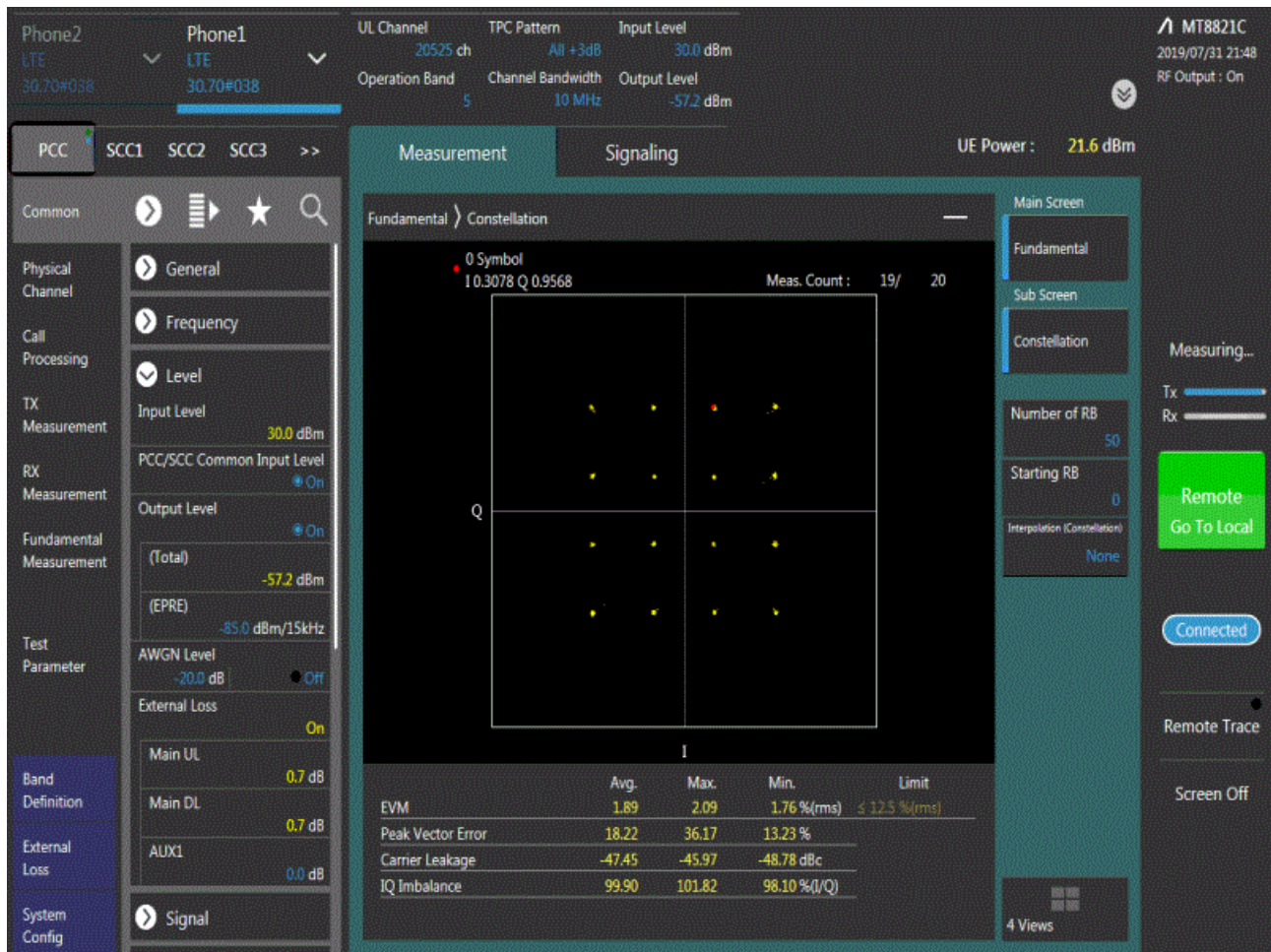
5.2. Test Mode = LTE /TM1 10MHz

5.2.1. Test Channel = MCH



5.3. Test Mode = LTE /TM2 10MHz

5.3.1. Test Channel = MCH



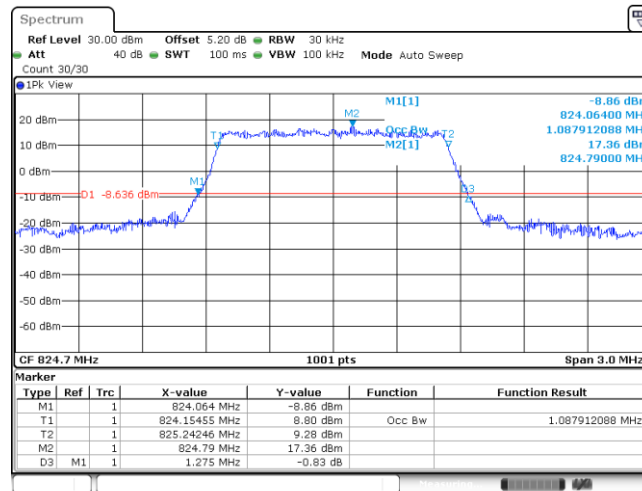
6. 26dB Bandwidth and Occupied Bandwidth

6.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.088	1.275	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.091	1.281	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.088	1.281	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.091	1.290	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.088	1.299	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.088	1.281	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.691	2.916	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.685	2.922	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.685	2.916	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.679	2.904	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.679	2.910	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.679	2.898	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.486	5.060	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.476	5.060	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.486	5.090	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.476	5.050	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.496	5.040	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.496	5.080	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.931	9.840	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.931	9.760	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.971	9.940	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.931	9.880	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.931	9.800	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.951	9.900	PASS

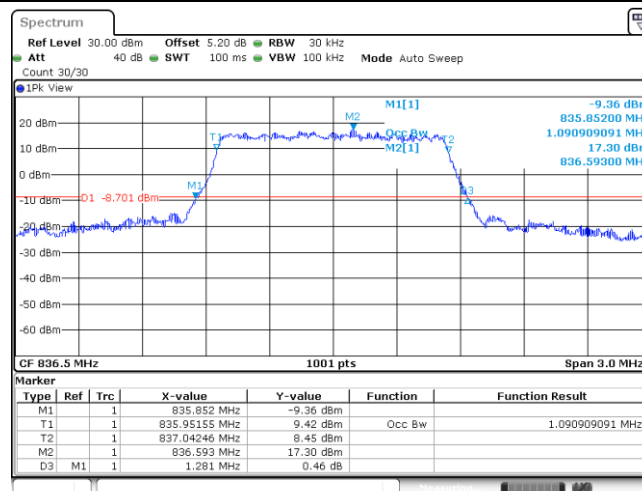
6.2. Test Plots

Band5_1.4MHz_QPSK_20407_6RB#0



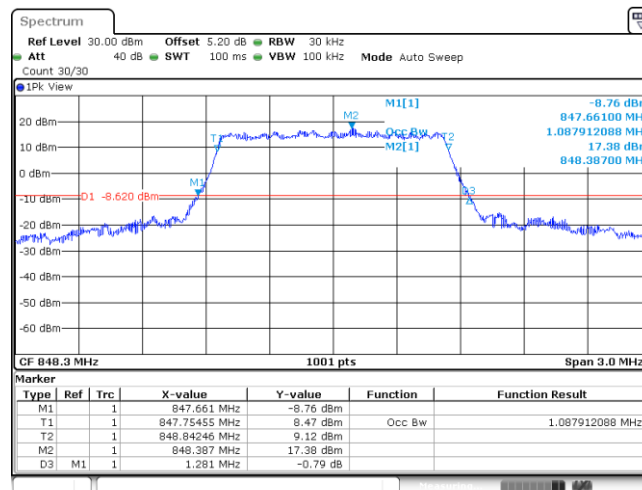
Date: 11 AUG 2019 03:38:38

Band5_1.4MHz_QPSK_20525_6RB#0



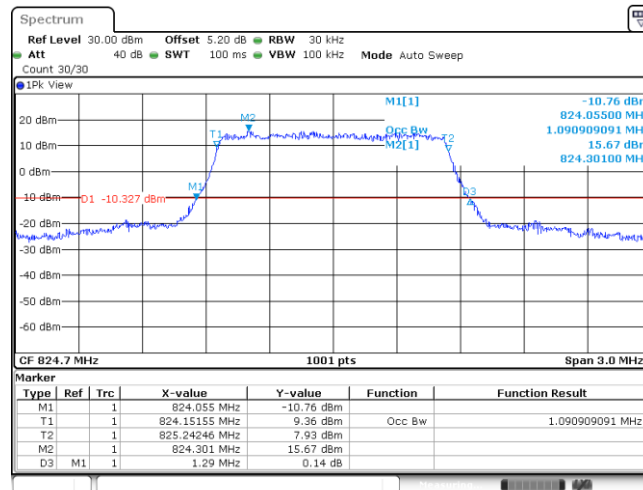
Date: 11 AUG 2019 03:39:05

Band5_1.4MHz_QPSK_20643_6RB#0



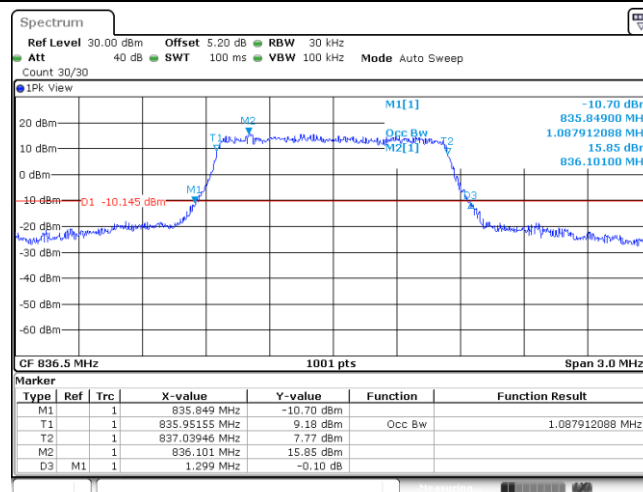
Date: 11 AUG 2019 03:39:31

Band5_1.4MHz_16QAM_20407_6RB#0



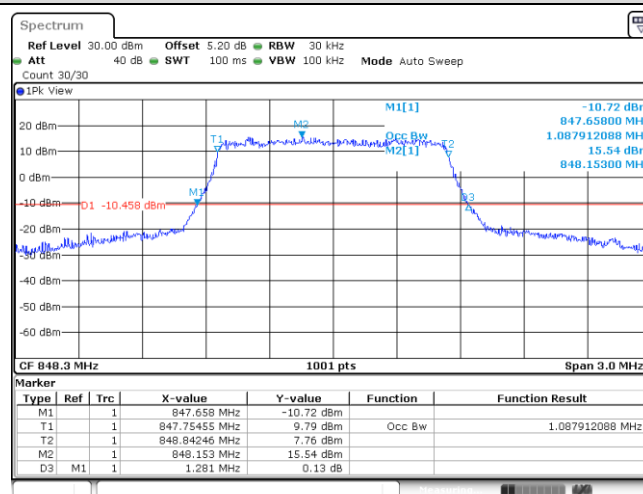
Date: 11 AUG 2019 03:38:51

Band5_1.4MHz_16QAM_20525_6RB#0



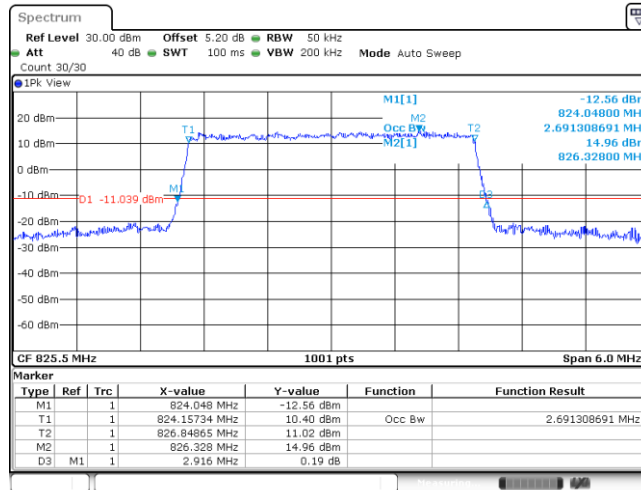
Date: 11 AUG 2019 03:39:18

Band5_1.4MHz_16QAM_20643_6RB#0



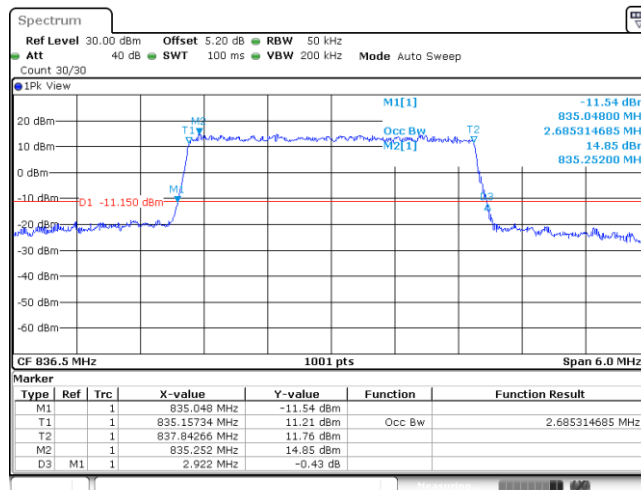
Date: 11 AUG 2019 03:39:44

Band5_3MHz_QPSK_20415_15RB#0



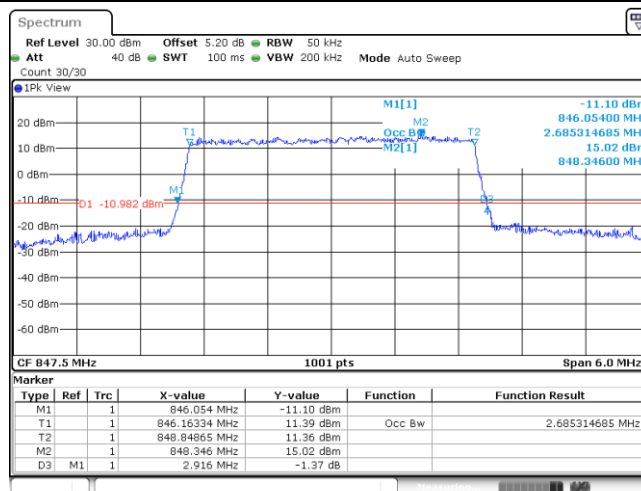
Date: 11 AUG 2019 03:40:02

Band5_3MHz_QPSK_20525_15RB#0



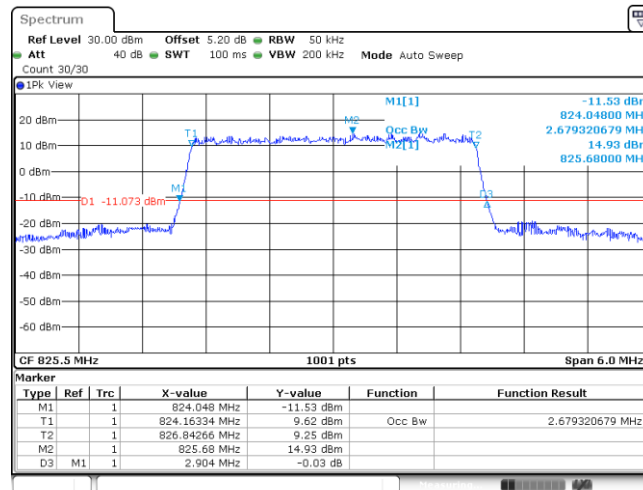
Date: 11 AUG 2019 03:40:28

Band5_3MHz_QPSK_20635_15RB#0



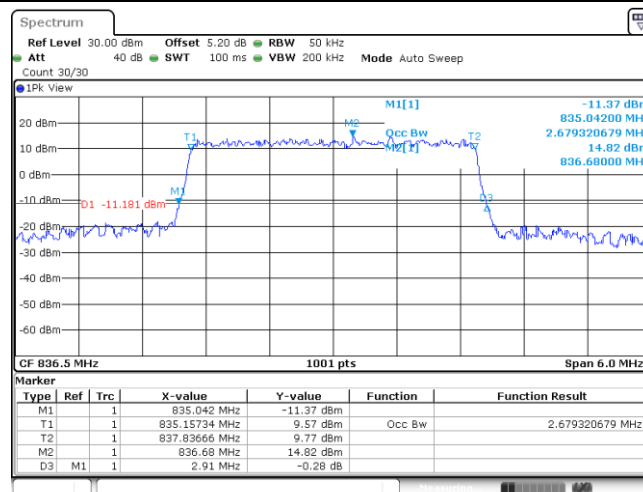
Date: 11 AUG 2019 03:40:54

Band5_3MHz_16QAM_20415_15RB#0



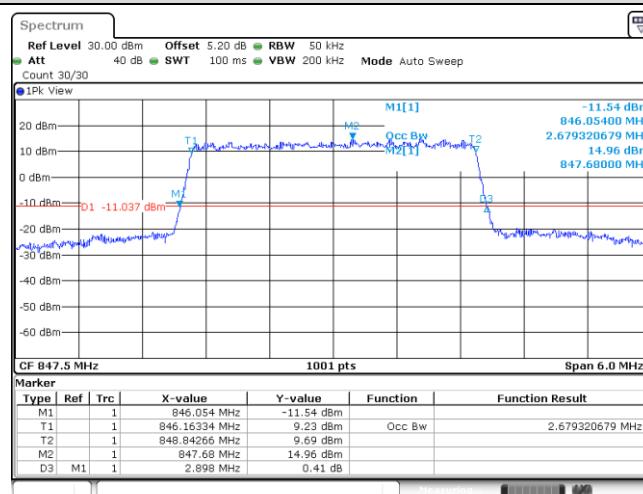
Date: 11 AUG 2019 03:40:14

Band5_3MHz_16QAM_20525_15RB#0



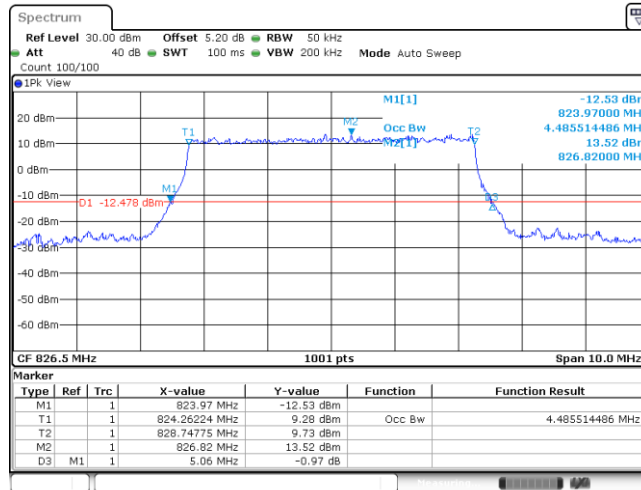
Date: 11 AUG 2019 03:40:41

Band5_3MHz_16QAM_20635_15RB#0



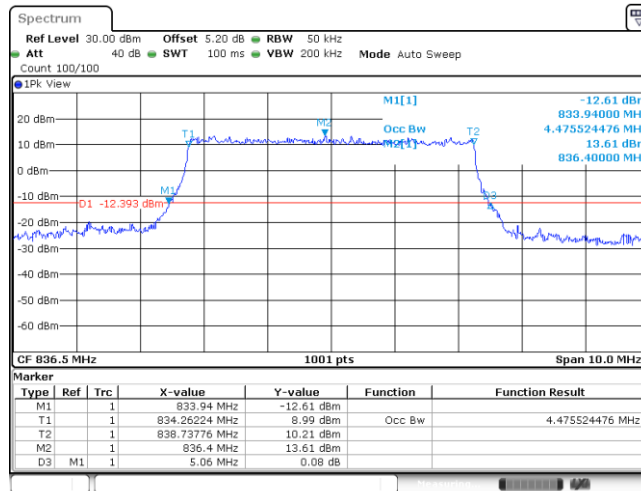
Date: 11 AUG 2019 03:41:07

Band5_5MHz_QPSK_20425_25RB#0



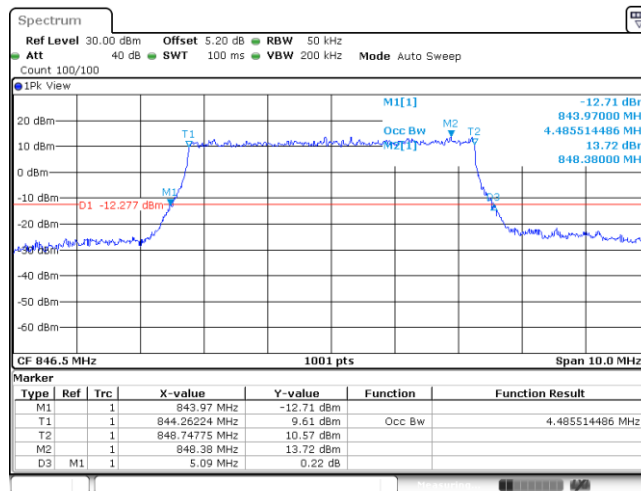
Date: 11 AUG 2019 03:41:31

Band5_5MHz_QPSK_20525_25RB#0



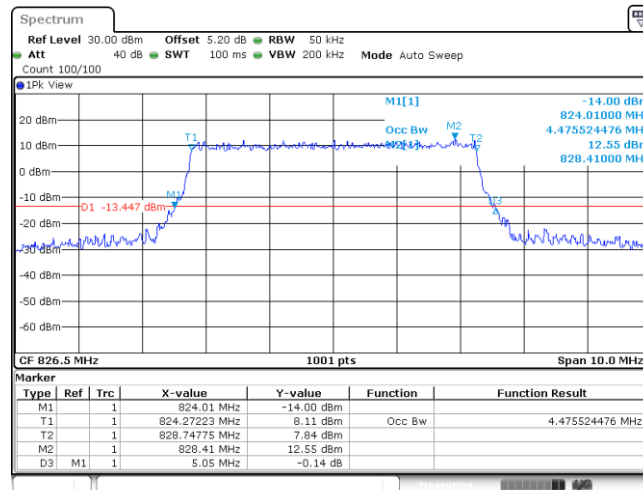
Date: 11 AUG 2019 03:42:12

Band5_5MHz_QPSK_20625_25RB#0



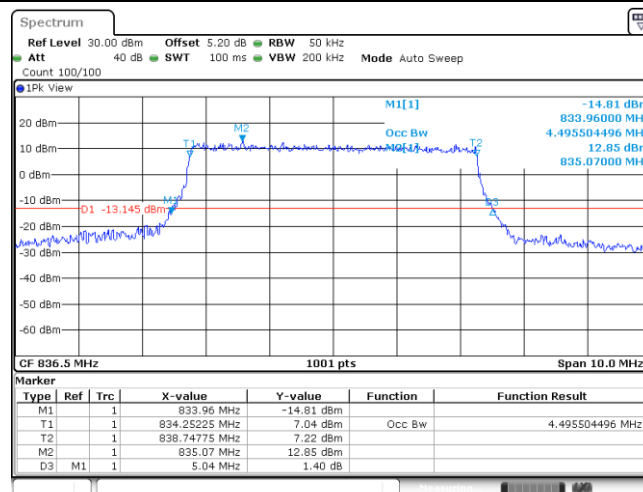
Date: 11 AUG 2019 03:42:52

Band5_5MHz_16QAM_20425_25RB#0



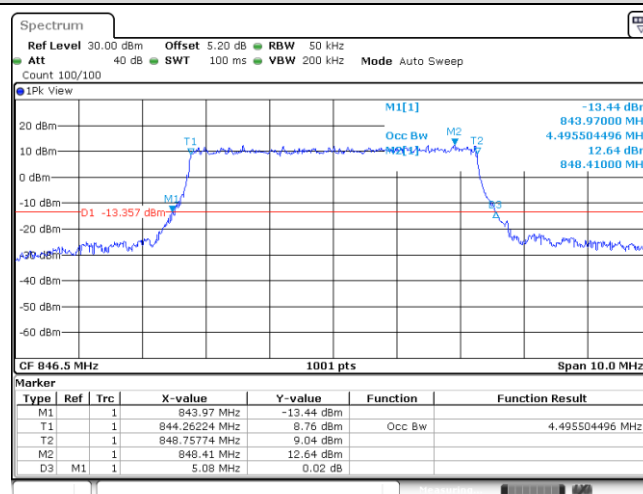
Date: 11 AUG 2019 03:41:52

Band5_5MHz_16QAM_20525_25RB#0



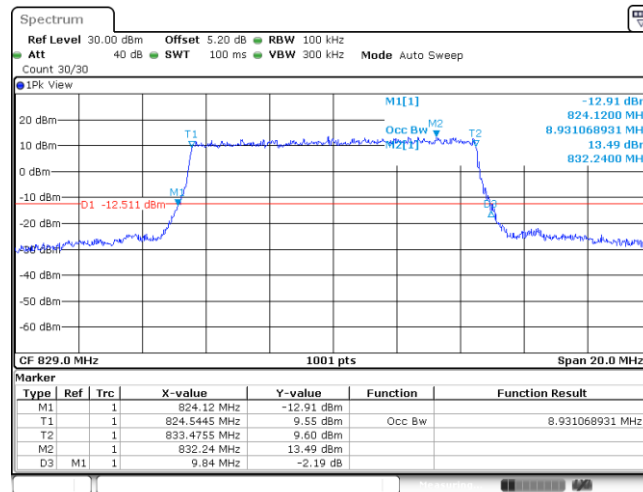
Date: 11 AUG 2019 03:42:31

Band5_5MHz_16QAM_20625_25RB#0



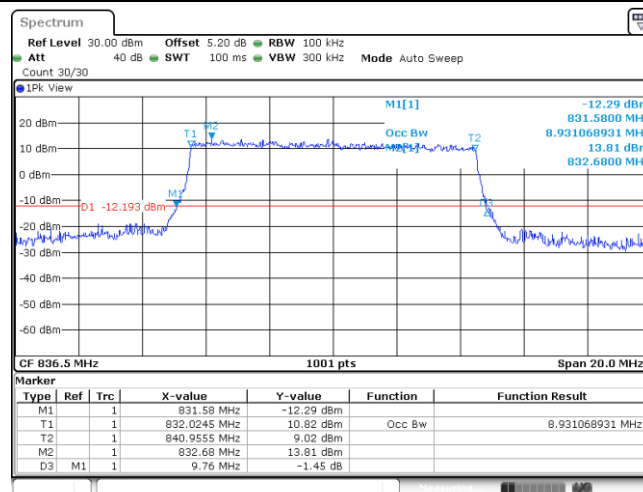
Date: 11 AUG 2019 03:43:12

Band5_10MHz_QPSK_20450_50RB#0



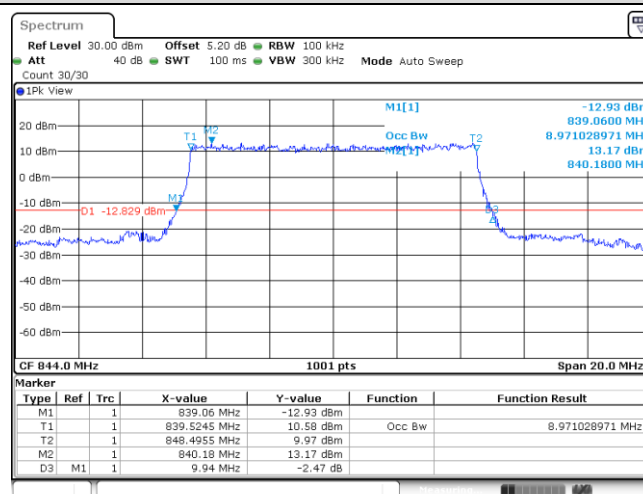
Date: 11 AUG 2019 03:43:29

Band5_10MHz_QPSK_20525_50RB#0



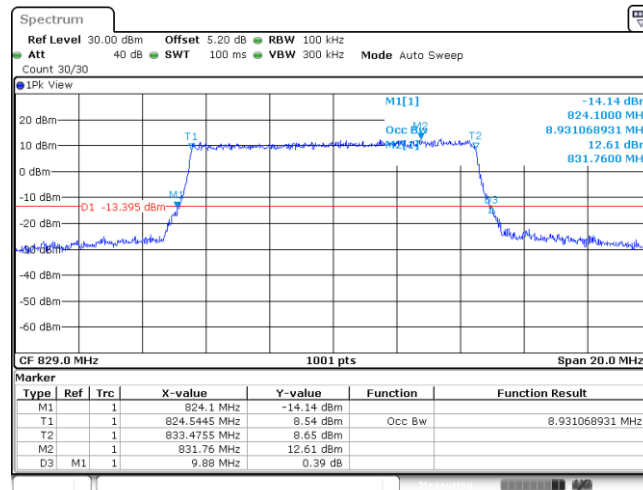
Date: 11 AUG 2019 03:43:56

Band5_10MHz_QPSK_20600_50RB#0



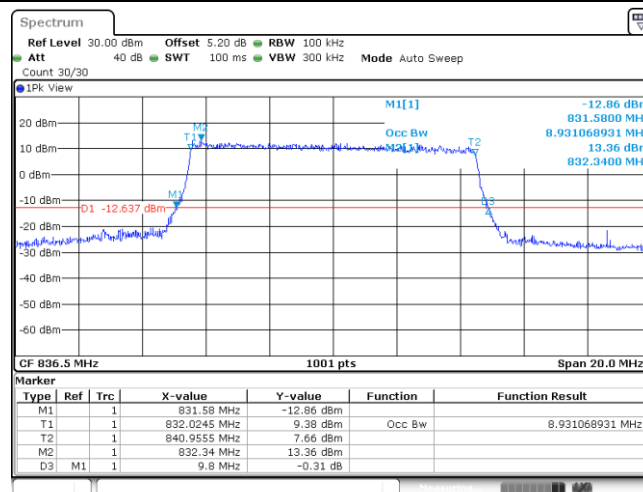
Date: 11 AUG 2019 03:44:22

Band5_10MHz_16QAM_20450_50RB#0



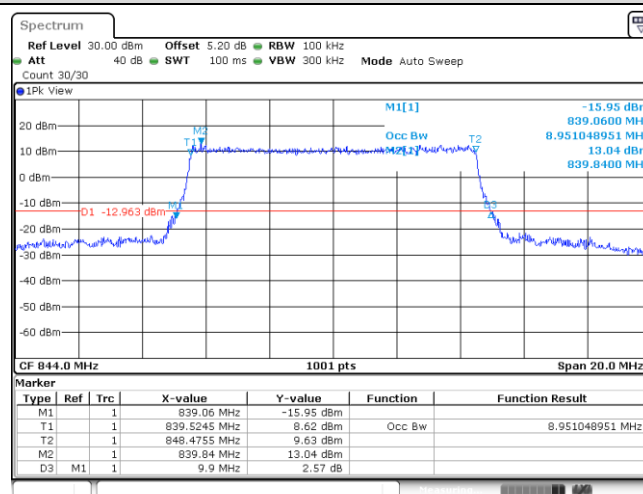
Date: 11 AUG 2019 03:43:43

Band5_10MHz_16QAM_20525_50RB#0



Date: 11 AUG 2019 03:44:09

Band5_10MHz_16QAM_20600_50RB#0

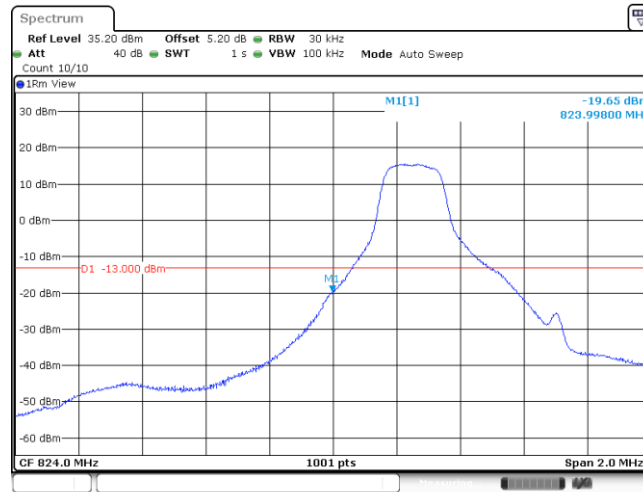


Date: 11 AUG 2019 03:44:35

7. Band Edge Compliance

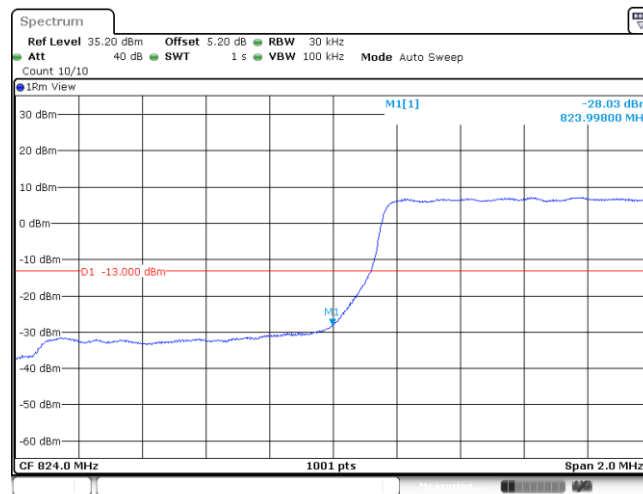
7.1. Test Plots

Band5_1.4MHz_QPSK_20407_1RB#0



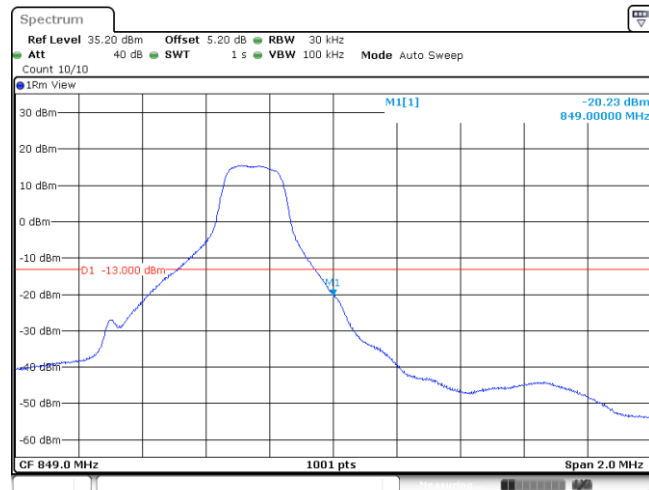
Date: 11 AUG 2019 03:45:00

Band5_1.4MHz_QPSK_20407_6RB#0



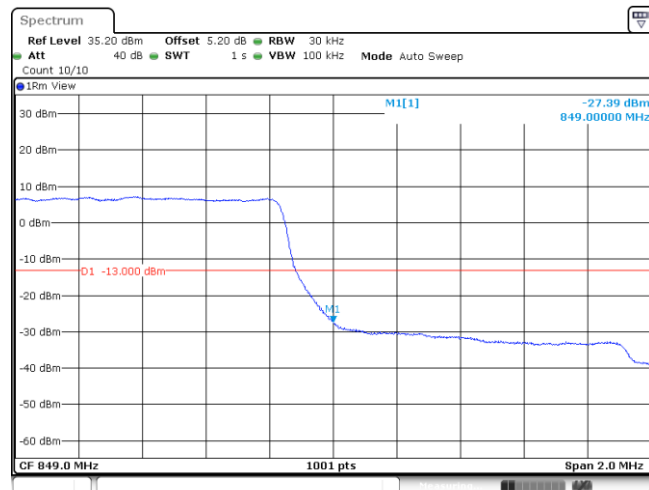
Date: 11 AUG 2019 03:46:28

Band5_1.4MHz_QPSK_20643_1RB#5



Date: 11 AUG.2019 03:45:44

Band5_1.4MHz_QPSK_20643_6RB#0



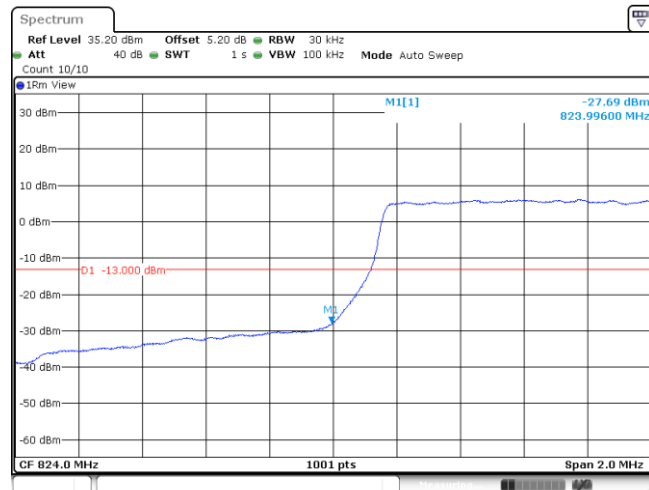
Date: 11 AUG.2019 03:47:08

Band5_1.4MHz_16QAM_20407_1RB#0



Date: 11 AUG.2019 03:45:20

Band5_1.4MHz_16QAM_20407_6RB#0



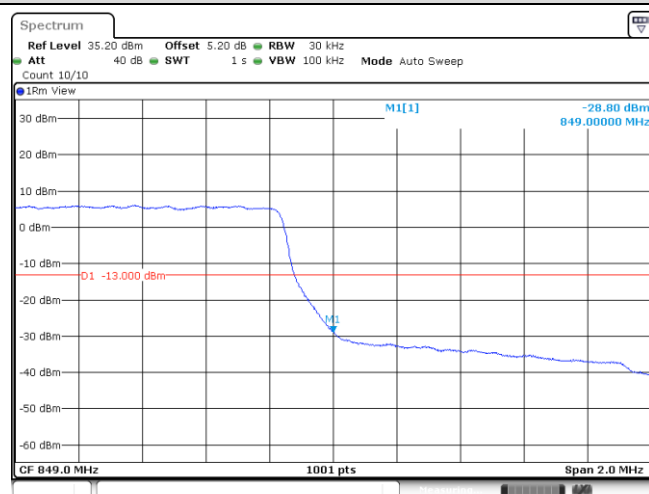
Date: 11 AUG.2019 03:46:48

Band5_1.4MHz_16QAM_20643_1RB#5



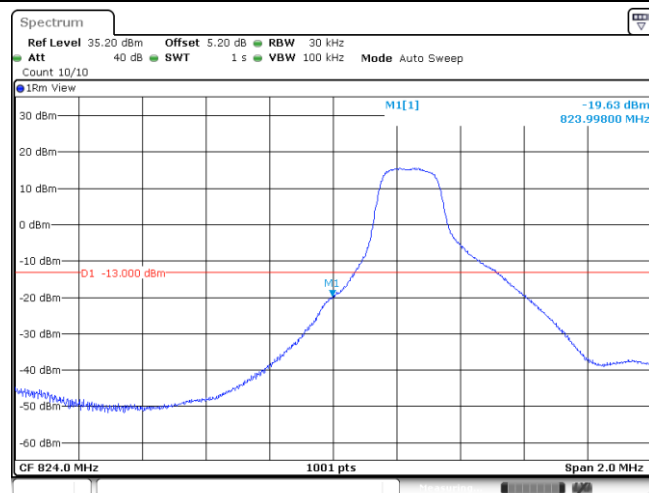
Date: 11 AUG.2019 03:46:04

Band5_1.4MHz_16QAM_20643_6RB#0



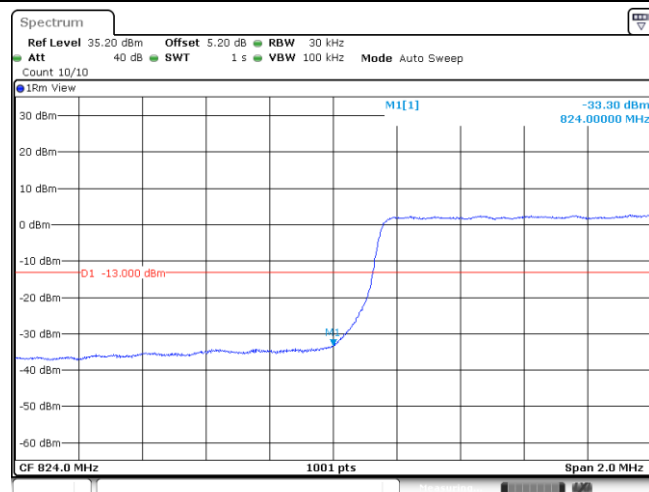
Date: 11 AUG.2019 03:47:28

Band5_3MHz_QPSK_20415_1RB#0



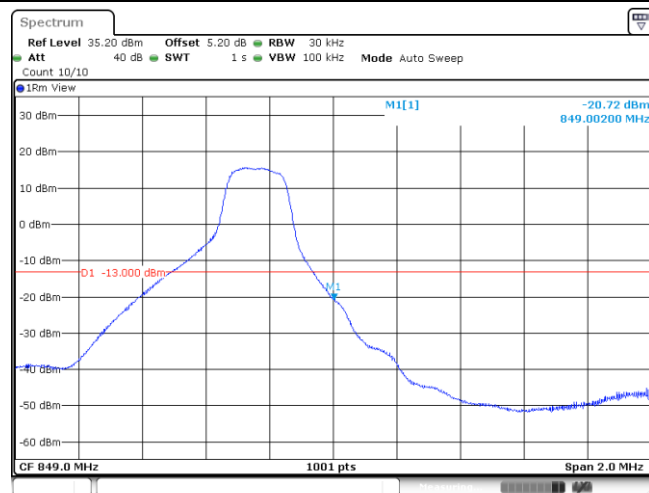
Date: 11 AUG.2019 03:47:53

Band5_3MHz_QPSK_20415_15RB#0



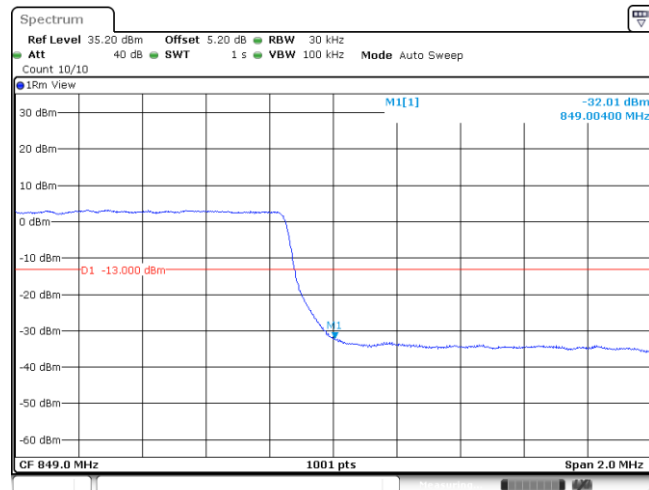
Date: 11 AUG.2019 03:49:22

Band5_3MHz_QPSK_20635_1RB#14



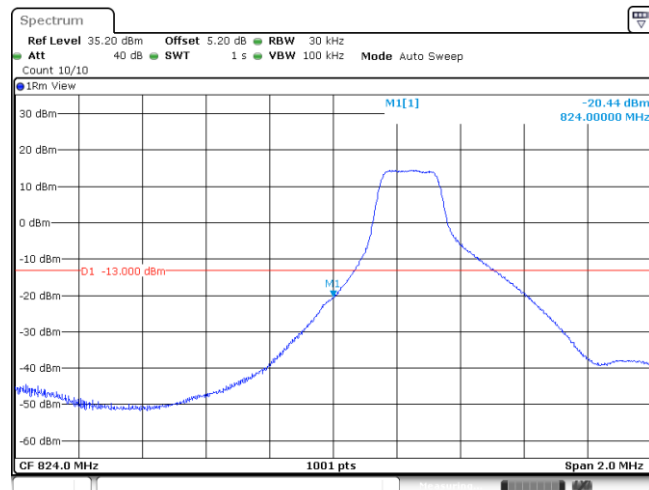
Date: 11 AUG.2019 03:48:37

Band5_3MHz_QPSK_20635_15RB#0



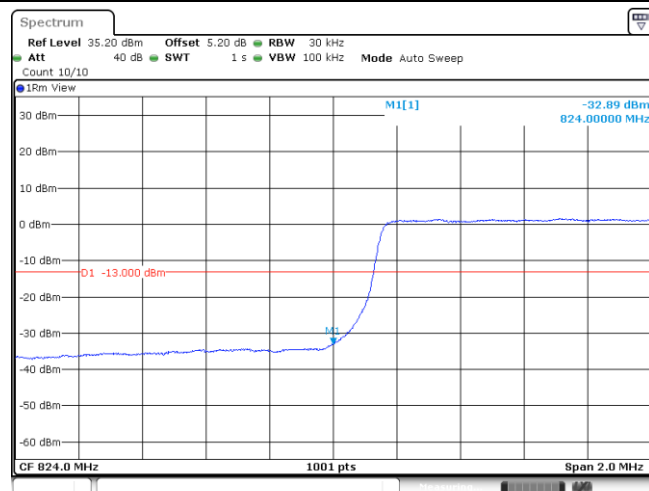
Date: 11 AUG.2019 03:50:02

Band5_3MHz_16QAM_20415_1RB#0



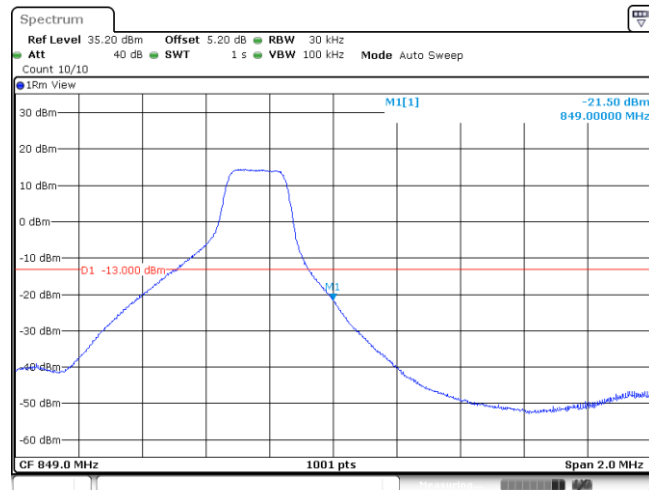
Date: 11 AUG.2019 03:48:13

Band5_3MHz_16QAM_20415_15RB#0



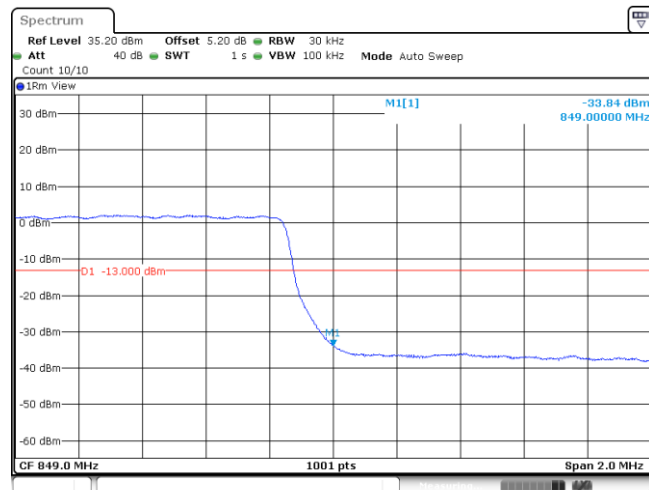
Date: 11 AUG.2019 03:49:42

Band5_3MHz_16QAM_20635_1RB#14



Date: 11 AUG.2019 03:48:57

Band5_3MHz_16QAM_20635_15RB#0



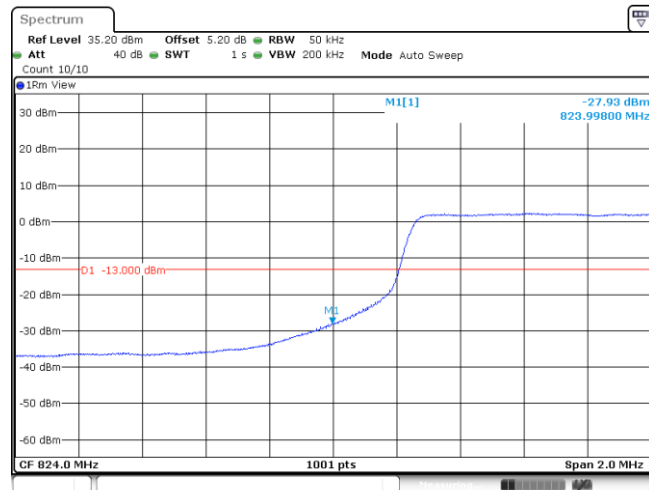
Date: 11 AUG.2019 03:50:21

Band5_5MHz_QPSK_20425_1RB#0



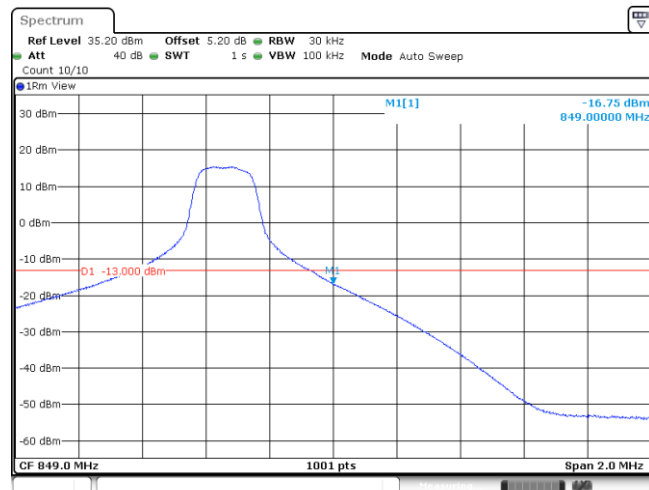
Date: 11 AUG.2019 03:50:46

Band5_5MHz_QPSK_20425_25RB#0



Date: 11 AUG.2019 03:52:14

Band5_5MHz_QPSK_20625_1RB#24



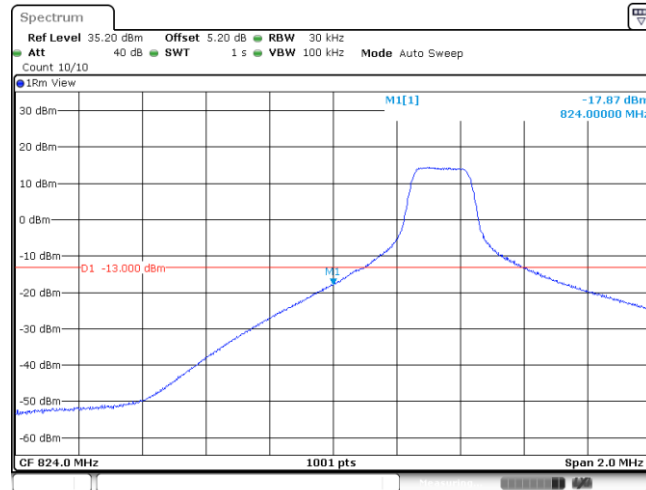
Date: 11 AUG.2019 03:51:30

Band5_5MHz_QPSK_20625_25RB#0



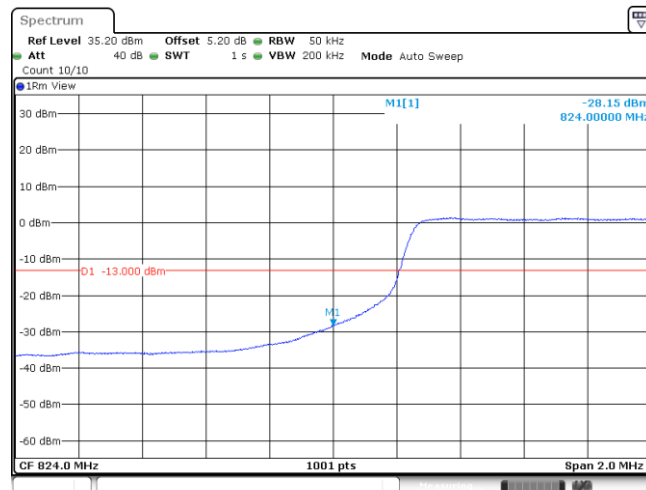
Date: 11 AUG.2019 03:52:53

Band5_5MHz_16QAM_20425_1RB#0



Date: 11.AUG.2019 03:51:06

Band5_5MHz_16QAM_20425_25RB#0



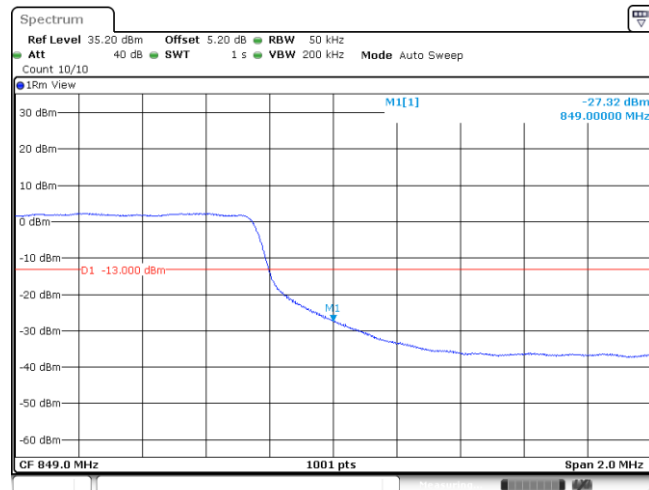
Date: 11.AUG.2019 03:52:33

Band5_5MHz_16QAM_20625_1RB#24



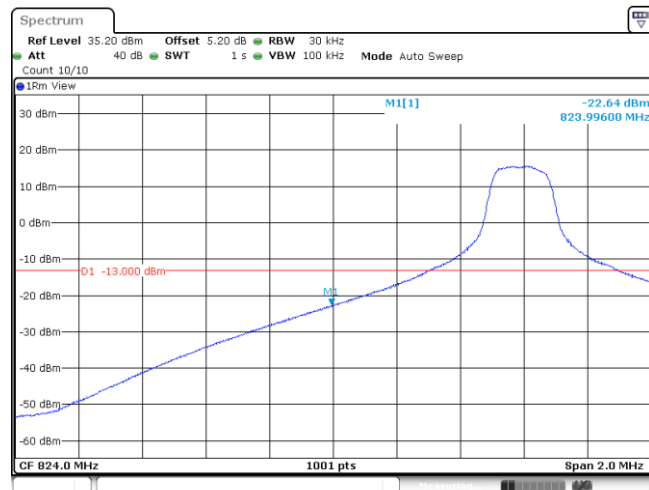
Date: 11.AUG.2019 03:51:49

Band5_5MHz_16QAM_20625_25RB#0



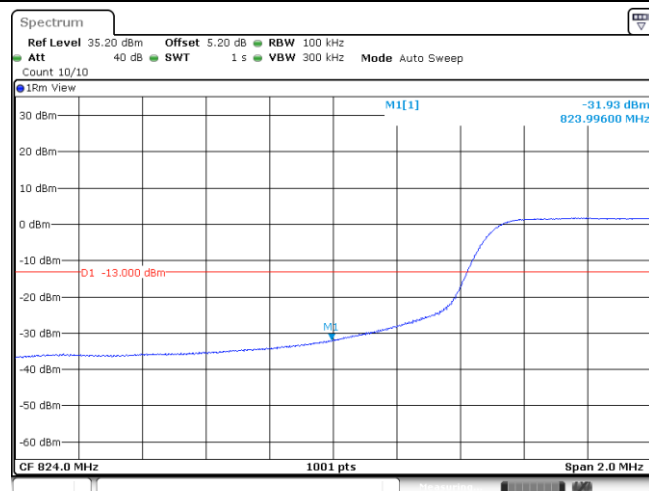
Date: 11 AUG.2019 03:53:13

Band5_10MHz_QPSK_20450_1RB#0



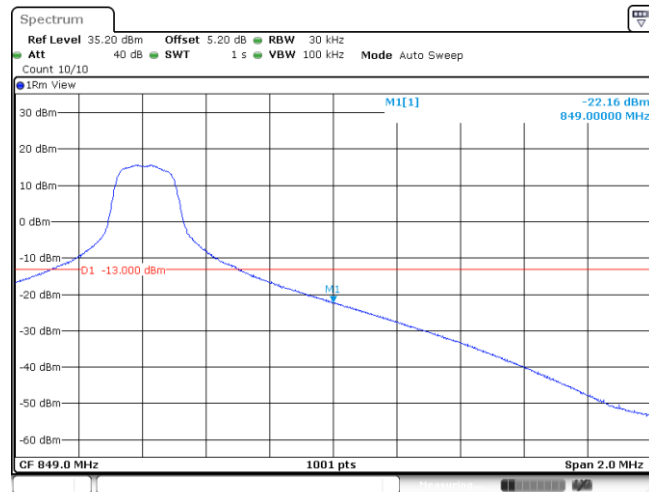
Date: 11 AUG.2019 03:53:37

Band5_10MHz_QPSK_20450_50RB#0



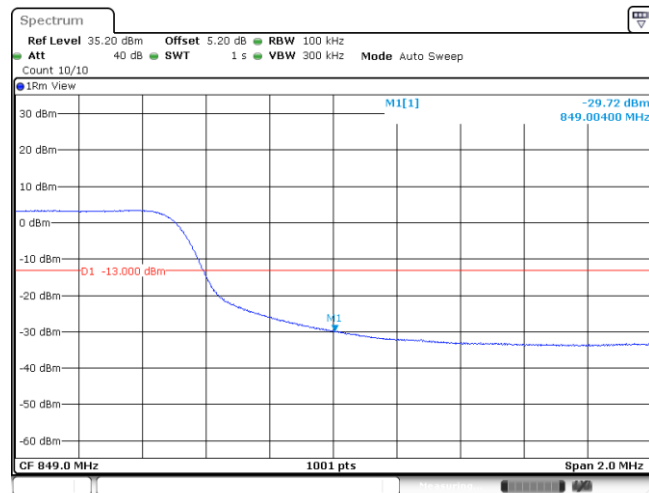
Date: 11 AUG.2019 03:55:05

Band5_10MHz_QPSK_20600_1RB#49



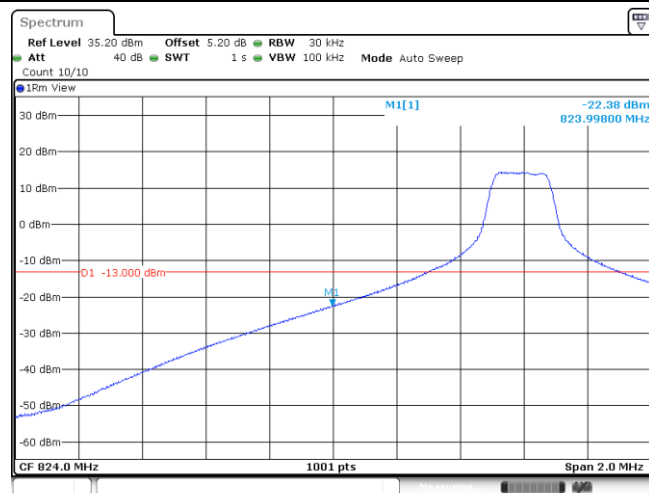
Date: 11 AUG.2019 03:54:22

Band5_10MHz_QPSK_20600_50RB#0



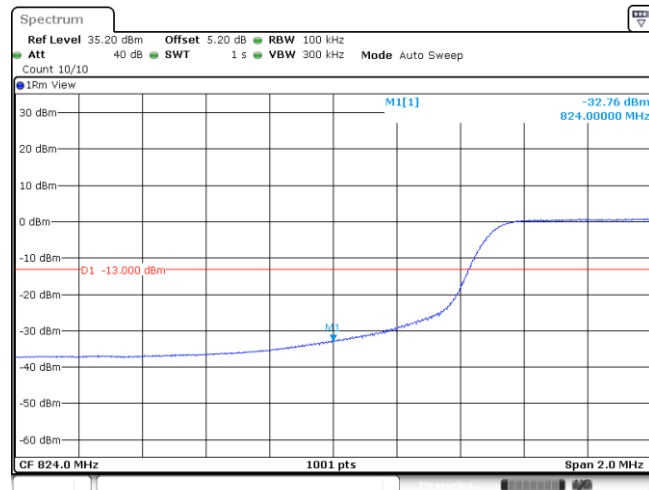
Date: 11 AUG.2019 03:55:45

Band5_10MHz_16QAM_20450_1RB#0



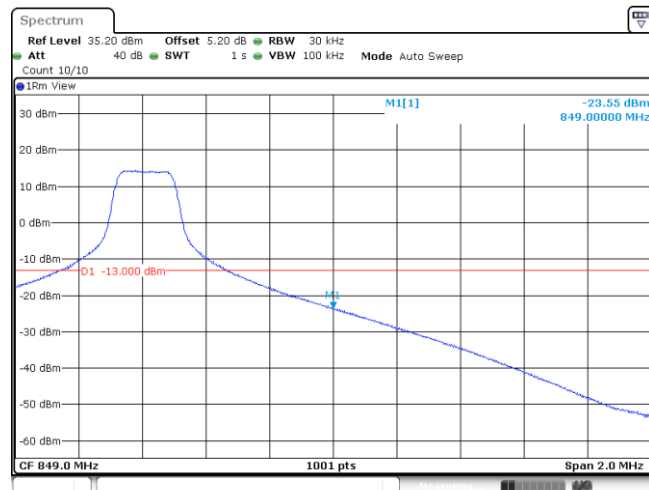
Date: 11 AUG.2019 03:53:57

Band5_10MHz_16QAM_20450_50RB#0



Date: 11 AUG.2019 03:55:25

Band5_10MHz_16QAM_20600_1RB#49



Date: 11 AUG.2019 03:54:41

Band5_10MHz_16QAM_20600_50RB#0



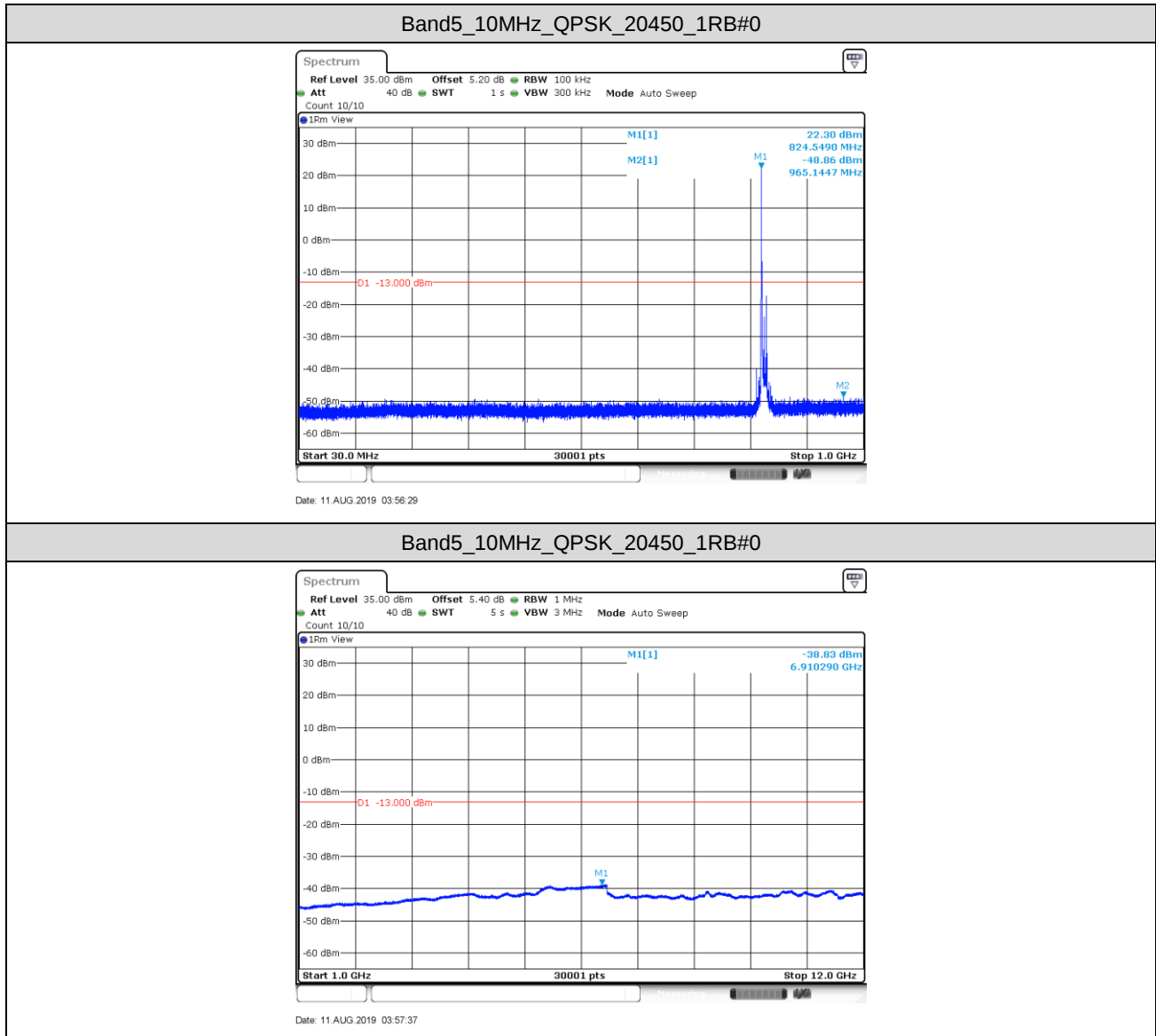
Date: 11 AUG.2019 03:56:05

8. Spurious Emission at Antenna Terminal

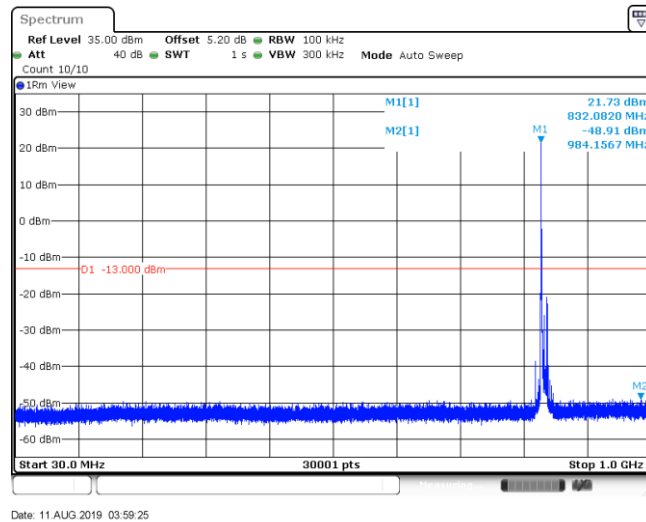
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (\text{Span} / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Remark2: only the worst case data displayed in this report.

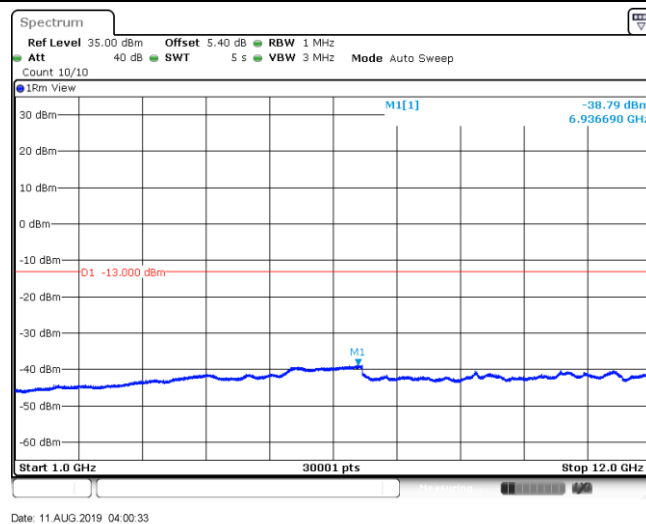
8.1. Test Plots



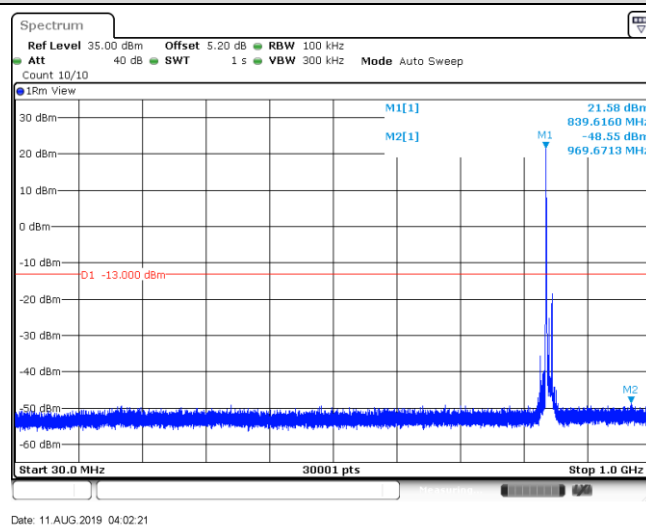
Band5_10MHz_QPSK_20525_1RB#0



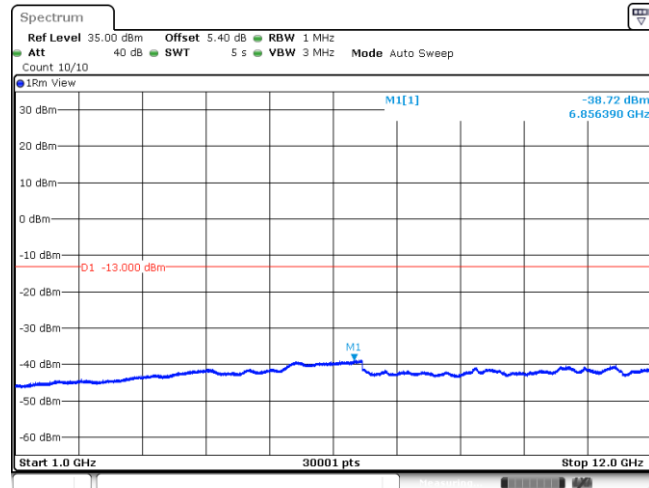
Band5_10MHz_QPSK_20525_1RB#0



Band5_10MHz_QPSK_20600_1RB#0

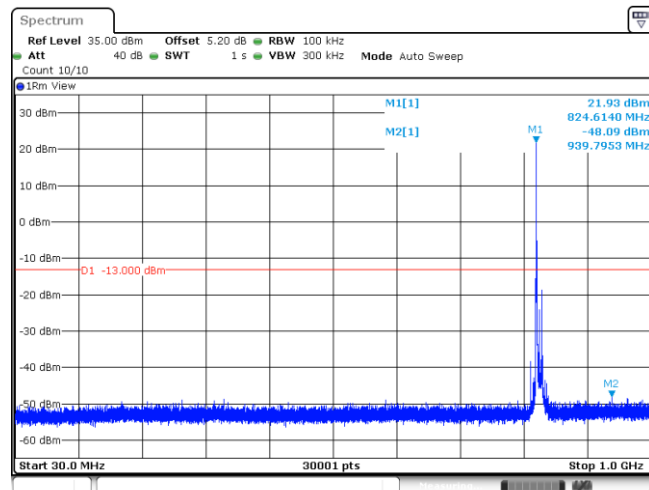


Band5_10MHz_QPSK_20600_1RB#0



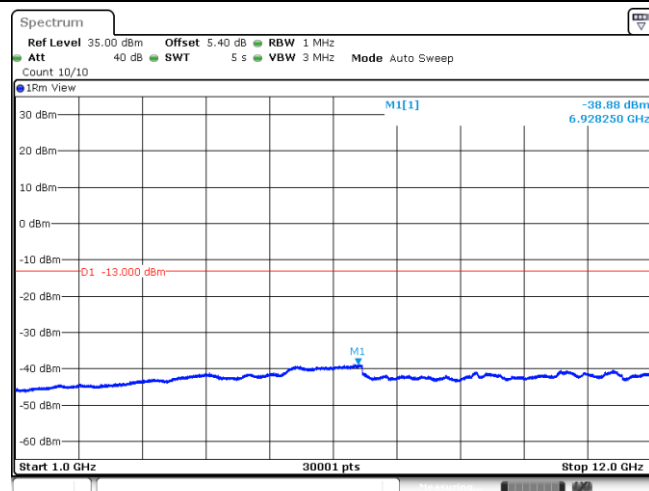
Date: 11 AUG.2019 04:03:28

Band5_10MHz_16QAM_20450_1RB#0



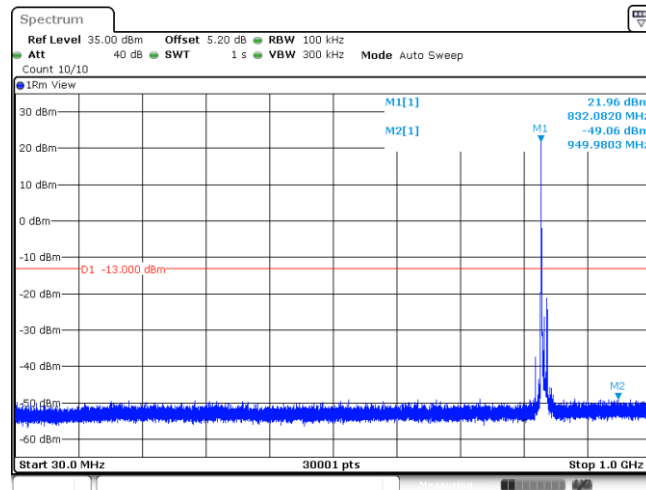
Date: 11 AUG.2019 03:57:57

Band5_10MHz_16QAM_20450_1RB#0



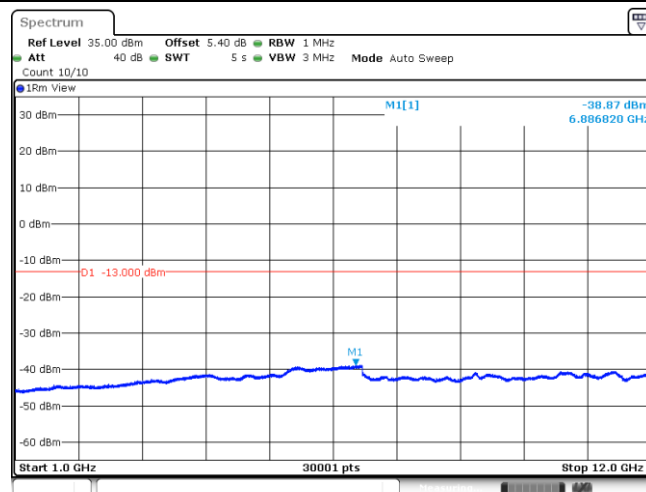
Date: 11 AUG.2019 03:59:04

Band5_10MHz_16QAM_20525_1RB#0



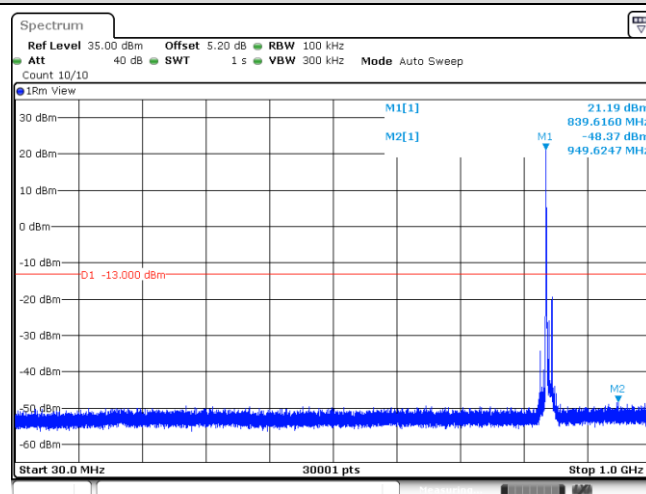
Date: 11 AUG.2019 04:00:53

Band5_10MHz_16QAM_20525_1RB#0



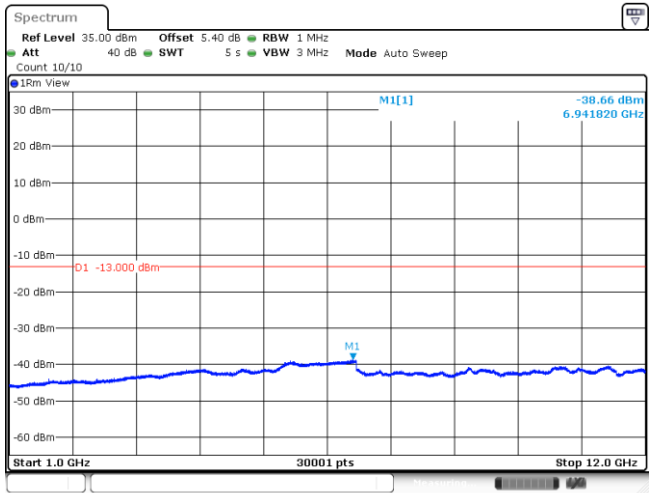
Date: 11 AUG.2019 04:02:00

Band5_10MHz_16QAM_20600_1RB#0



Date: 11 AUG.2019 04:03:49

Band5_10MHz_16QAM_20600_1RB#0



Date: 11.AUG.2019 04:04:56

9. Frequency Stability

9.1. Frequency Vs Voltage

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	VL	NT	-8.40	-0.010133	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	-14.10	-0.017008	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	-11.10	-0.013390	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-10.80	-0.012911	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-7.00	-0.008368	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-11.10	-0.013270	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	-9.30	-0.011019	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	-5.40	-0.006398	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	-8.00	-0.009479	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VL	NT	-1.60	-0.001930	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VN	NT	-5.00	-0.006031	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VH	NT	-8.20	-0.009891	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VL	NT	-3.30	-0.003945	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VN	NT	-4.80	-0.005738	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VH	NT	-1.60	-0.001913	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VL	NT	-8.50	-0.010071	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VN	NT	-8.20	-0.009716	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VH	NT	-3.80	-0.004502	±2.5	PASS

9.2. Frequency Vs Temperature

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	NV	-30	-7.70	-0.009288	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-20	-7.00	-0.008444	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	0	-1.90	-0.002292	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	-4.30	-0.005187	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	-2.90	-0.003498	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-5.50	-0.006634	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	-8.40	-0.010133	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	50	-7.60	-0.009168	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	-7.60	-0.009085	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	-7.30	-0.008727	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-5.30	-0.006336	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-8.00	-0.009564	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	-8.20	-0.009803	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-7.50	-0.008966	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	-8.00	-0.009564	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	-8.40	-0.010042	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-30	-7.70	-0.009123	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	-2.50	-0.002962	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	0	-6.50	-0.007701	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	10	-3.00	-0.003555	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	20	-2.80	-0.003318	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	30	-5.90	-0.006991	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	-9.60	-0.011374	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	50	-9.10	-0.010782	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-30	-11.10	-0.013390	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-20	-8.10	-0.009771	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	0	-10.80	-0.013028	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	10	-7.70	-0.009288	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	20	-4.40	-0.005308	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	30	-8.50	-0.010253	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	40	-8.70	-0.010495	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	50	-8.50	-0.010253	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-30	0.40	0.000478	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-20	-8.30	-0.009922	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	0	-7.30	-0.008727	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	10	-3.70	-0.004423	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	20	-9.70	-0.011596	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	30	-4.10	-0.004901	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	40	-6.70	-0.008010	±2.5	PASS

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Band5	10MHz	16QAM	20525	50RB#0	NV	50	0.00	0.000000	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-30	-5.20	-0.006161	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-20	-3.20	-0.003791	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	0	-3.90	-0.004621	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	10	-10.60	-0.012559	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	20	-7.30	-0.008649	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	30	-7.70	-0.009123	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	40	-7.70	-0.009123	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	50	-5.70	-0.006754	±2.5	PASS

The End