

Appendix B

E-UTRA Band 4

TABLE OF CONTENTS

1.	MAIN TEST INSTRUMENTS	3
2.	MEASUREMENT UNCERTAINTY	3
3.	EFFECTIVE (ISOTROPIC) RADIATED POWER	4
3.1.	TEST RESULT	4
4.	PEAK-TO-AVERAGE RATIO (CCDF)	10
4.1.	TEST RESULT	10
4.2.	TEST PLOTS	10
5.	MODULATION CHARACTERISTICS	13
5.1.	TEST BAND = LTE BAND 4	13
5.2.	TEST MODE = LTE /TM1 20MHZ	13
5.2.1.	TEST CHANNEL = MCH	13
5.3.	TEST MODE = LTE /TM2 20MHZ	14
5.3.1.	TEST CHANNEL = MCH	14
6.	26DB BANDWIDTH AND OCCUPIED BANDWIDTH	15
6.1.	TEST RESULT	15
6.2.	TEST PLOTS	16
7.	BAND EDGE COMPLIANCE	28
7.1.	TEST PLOTS	28
8.	SPURIOUS EMISSION AT ANTENNA TERMINAL	45
8.1.	TEST PLOTS	45
9.	FREQUENCY STABILITY	50
9.1.	FREQUENCY VS VOLTAGE	50
9.2.	FREQUENCY VS TEMPERATURE	51

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]	$U = \pm 0.37 \text{ dB}$
Bandwidth	Magnitude [%]	$U = \pm 0.2\%$
Band Edge Compliance	Disturbance Power [dBm]	$U = \pm 2.0 \text{ dB}$
Spurious Emissions, Conducted	Disturbance Power [dBm]	$U = \pm 2.0 \text{ dB}$
Frequency Stability	Frequency Accuracy [ppm]	$U = \pm 0.24 \text{ ppm}$

3. Effective (Isotropic) Radiated Power

3.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	23.14	22.36	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#2	23.27	22.49	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	23.12	22.34	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#0	23.21	22.43	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#1	23.27	22.49	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#3	23.24	22.46	30.00	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	22.33	21.55	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	23.22	22.44	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#2	23.34	22.56	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#5	23.21	22.43	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#0	23.32	22.54	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#1	23.37	22.59	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#3	23.33	22.55	30.00	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	22.36	21.58	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	23.20	22.42	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#2	23.32	22.54	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	23.20	22.42	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#0	23.27	22.49	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#1	23.34	22.56	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#3	23.28	22.50	30.00	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	22.29	21.51	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	22.38	21.60	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#2	22.58	21.80	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	22.45	21.67	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#0	22.38	21.60	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#1	22.46	21.68	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#3	22.35	21.57	30.00	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	21.37	20.59	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	22.51	21.73	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#2	22.53	21.75	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#5	22.48	21.70	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#0	22.43	21.65	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#1	22.47	21.69	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#3	22.42	21.64	30.00	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	21.45	20.67	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	22.36	21.58	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#2	22.58	21.80	30.00	PASS

JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZ-R12-2200350

Band4	1.4MHz	16QAM	20393	1RB#5	22.37	21.59	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#0	22.36	21.58	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#1	22.34	21.56	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#3	22.44	21.66	30.00	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	21.46	20.68	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#0	23.16	22.38	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#8	23.19	22.41	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#14	23.17	22.39	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#0	22.26	21.48	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#4	22.30	21.52	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#7	22.27	21.49	30.00	PASS
Band4	3MHz	QPSK	19965	15RB#0	22.29	21.51	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#0	23.27	22.49	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#8	23.27	22.49	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#14	23.25	22.47	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#0	22.30	21.52	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#4	22.32	21.54	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#7	22.28	21.50	30.00	PASS
Band4	3MHz	QPSK	20175	15RB#0	22.30	21.52	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#0	23.23	22.45	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#8	23.23	22.45	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#14	23.21	22.43	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#0	22.27	21.49	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#4	22.30	21.52	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#7	22.26	21.48	30.00	PASS
Band4	3MHz	QPSK	20385	15RB#0	22.25	21.47	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#0	22.44	21.66	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#8	22.38	21.60	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#14	22.33	21.55	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#0	21.31	20.53	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#4	21.33	20.55	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#7	21.31	20.53	30.00	PASS
Band4	3MHz	16QAM	19965	15RB#0	21.23	20.45	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#0	22.47	21.69	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#8	22.53	21.75	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#14	22.48	21.70	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#0	21.41	20.63	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#4	21.42	20.64	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#7	21.36	20.58	30.00	PASS
Band4	3MHz	16QAM	20175	15RB#0	21.35	20.57	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#0	22.50	21.72	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#8	22.46	21.68	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#14	22.42	21.64	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#0	21.34	20.56	30.00	PASS

JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZ-R12-2200350

Band4	3MHz	16QAM	20385	8RB#4	21.39	20.61	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#7	21.39	20.61	30.00	PASS
Band4	3MHz	16QAM	20385	15RB#0	21.30	20.52	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#0	23.05	22.27	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#12	23.34	22.56	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#24	23.05	22.27	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#0	22.23	21.45	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#6	22.29	21.51	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#13	22.20	21.42	30.00	PASS
Band4	5MHz	QPSK	19975	25RB#0	22.28	21.50	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#0	23.15	22.37	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#12	23.43	22.65	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#24	23.16	22.38	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#0	22.30	21.52	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#6	22.34	21.56	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#13	22.27	21.49	30.00	PASS
Band4	5MHz	QPSK	20175	25RB#0	22.32	21.54	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#0	23.15	22.37	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#12	23.43	22.65	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#24	23.10	22.32	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#0	22.26	21.48	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#6	22.32	21.54	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#13	22.24	21.46	30.00	PASS
Band4	5MHz	QPSK	20375	25RB#0	22.28	21.50	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#0	22.26	21.48	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#12	22.53	21.75	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#24	22.29	21.51	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#0	21.26	20.48	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#6	21.34	20.56	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#13	21.31	20.53	30.00	PASS
Band4	5MHz	16QAM	19975	25RB#0	21.26	20.48	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#0	22.44	21.66	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#12	22.64	21.86	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#24	22.33	21.55	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#0	21.44	20.66	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#6	21.43	20.65	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#13	21.37	20.59	30.00	PASS
Band4	5MHz	16QAM	20175	25RB#0	21.35	20.57	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#0	22.37	21.59	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#12	22.61	21.83	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#24	22.32	21.54	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#0	21.39	20.61	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#6	21.45	20.67	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#13	21.37	20.59	30.00	PASS

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Report No: JYTSZ-R12-2200350

Band4	5MHz	16QAM	20375	25RB#0	21.33	20.55	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#0	23.15	22.37	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#24	23.30	22.52	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#49	23.20	22.42	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#0	22.32	21.54	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#12	22.28	21.50	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#25	22.36	21.58	30.00	PASS
Band4	10MHz	QPSK	20000	50RB#0	22.31	21.53	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#0	23.23	22.45	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#24	23.36	22.58	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#49	23.25	22.47	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#0	22.40	21.62	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#12	22.36	21.58	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#25	22.32	21.54	30.00	PASS
Band4	10MHz	QPSK	20175	50RB#0	22.37	21.59	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#0	23.23	22.45	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#24	23.37	22.59	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#49	23.19	22.41	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#0	22.37	21.59	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#12	22.35	21.57	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#25	22.32	21.54	30.00	PASS
Band4	10MHz	QPSK	20350	50RB#0	22.36	21.58	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#0	22.40	21.62	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#24	22.45	21.67	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#49	22.31	21.53	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#0	21.27	20.49	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#12	21.30	20.52	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#25	21.36	20.58	30.00	PASS
Band4	10MHz	16QAM	20000	50RB#0	21.34	20.56	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#0	22.37	21.59	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#24	22.52	21.74	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#49	22.40	21.62	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#0	21.44	20.66	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#12	21.41	20.63	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#25	21.38	20.60	30.00	PASS
Band4	10MHz	16QAM	20175	50RB#0	21.42	20.64	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#0	22.43	21.65	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#24	22.64	21.86	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#49	22.45	21.67	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#0	21.43	20.65	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#12	21.40	20.62	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#25	21.36	20.58	30.00	PASS
Band4	10MHz	16QAM	20350	50RB#0	21.40	20.62	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#0	23.10	22.32	30.00	PASS

JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZ-R12-2200350

Band4	15MHz	QPSK	20025	1RB#38	23.24	22.46	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#74	23.17	22.39	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#0	22.23	21.45	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#18	22.29	21.51	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#39	22.30	21.52	30.00	PASS
Band4	15MHz	QPSK	20025	75RB#0	22.29	21.51	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#0	23.22	22.44	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#38	23.30	22.52	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#74	23.20	22.42	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#0	22.39	21.61	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#18	22.37	21.59	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#39	22.39	21.61	30.00	PASS
Band4	15MHz	QPSK	20175	75RB#0	22.40	21.62	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#0	23.23	22.45	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#38	23.33	22.55	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#74	23.18	22.40	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#0	22.36	21.58	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#18	22.37	21.59	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#39	22.33	21.55	30.00	PASS
Band4	15MHz	QPSK	20325	75RB#0	22.37	21.59	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#0	22.43	21.65	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#38	22.35	21.57	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#74	22.41	21.63	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#0	21.30	20.52	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#18	21.36	20.58	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#39	21.35	20.57	30.00	PASS
Band4	15MHz	16QAM	20025	75RB#0	21.29	20.51	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#0	22.36	21.58	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#38	22.46	21.68	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#74	22.41	21.63	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#0	21.47	20.69	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#18	21.44	20.66	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#39	21.44	20.66	30.00	PASS
Band4	15MHz	16QAM	20175	75RB#0	21.44	20.66	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#0	22.37	21.59	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#38	22.50	21.72	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#74	22.47	21.69	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#0	21.43	20.65	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#18	21.46	20.68	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#39	21.41	20.63	30.00	PASS
Band4	15MHz	16QAM	20325	75RB#0	21.43	20.65	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#0	23.08	22.30	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#49	23.35	22.57	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#99	23.12	22.34	30.00	PASS

JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZ-R12-2200350

Band4	20MHz	QPSK	20050	50RB#0	22.28	21.50	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#25	22.34	21.56	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#50	22.30	21.52	30.00	PASS
Band4	20MHz	QPSK	20050	100RB#0	22.26	21.48	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#0	23.09	22.31	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#49	23.36	22.58	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#99	23.14	22.36	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#0	22.47	21.69	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#25	22.38	21.60	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#50	22.32	21.54	30.00	PASS
Band4	20MHz	QPSK	20175	100RB#0	22.39	21.61	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#0	23.14	22.36	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#49	23.40	22.62	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#99	23.09	22.31	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#0	22.36	21.58	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#25	22.38	21.60	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#50	22.35	21.57	30.00	PASS
Band4	20MHz	QPSK	20300	100RB#0	22.35	21.57	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#0	22.26	21.48	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#49	22.46	21.68	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#99	22.25	21.47	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#0	21.28	20.50	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#25	21.37	20.59	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#50	21.31	20.53	30.00	PASS
Band4	20MHz	16QAM	20050	100RB#0	21.25	20.47	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#0	22.22	21.44	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#49	22.64	21.86	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#99	22.33	21.55	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#0	21.49	20.71	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#25	21.41	20.63	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#50	21.38	20.60	30.00	PASS
Band4	20MHz	16QAM	20175	100RB#0	21.42	20.64	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#0	22.43	21.65	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#49	22.69	21.91	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#99	22.42	21.64	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#0	21.40	20.62	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#25	21.40	20.62	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#50	21.41	20.63	30.00	PASS
Band4	20MHz	16QAM	20300	100RB#0	21.40	20.62	30.00	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]

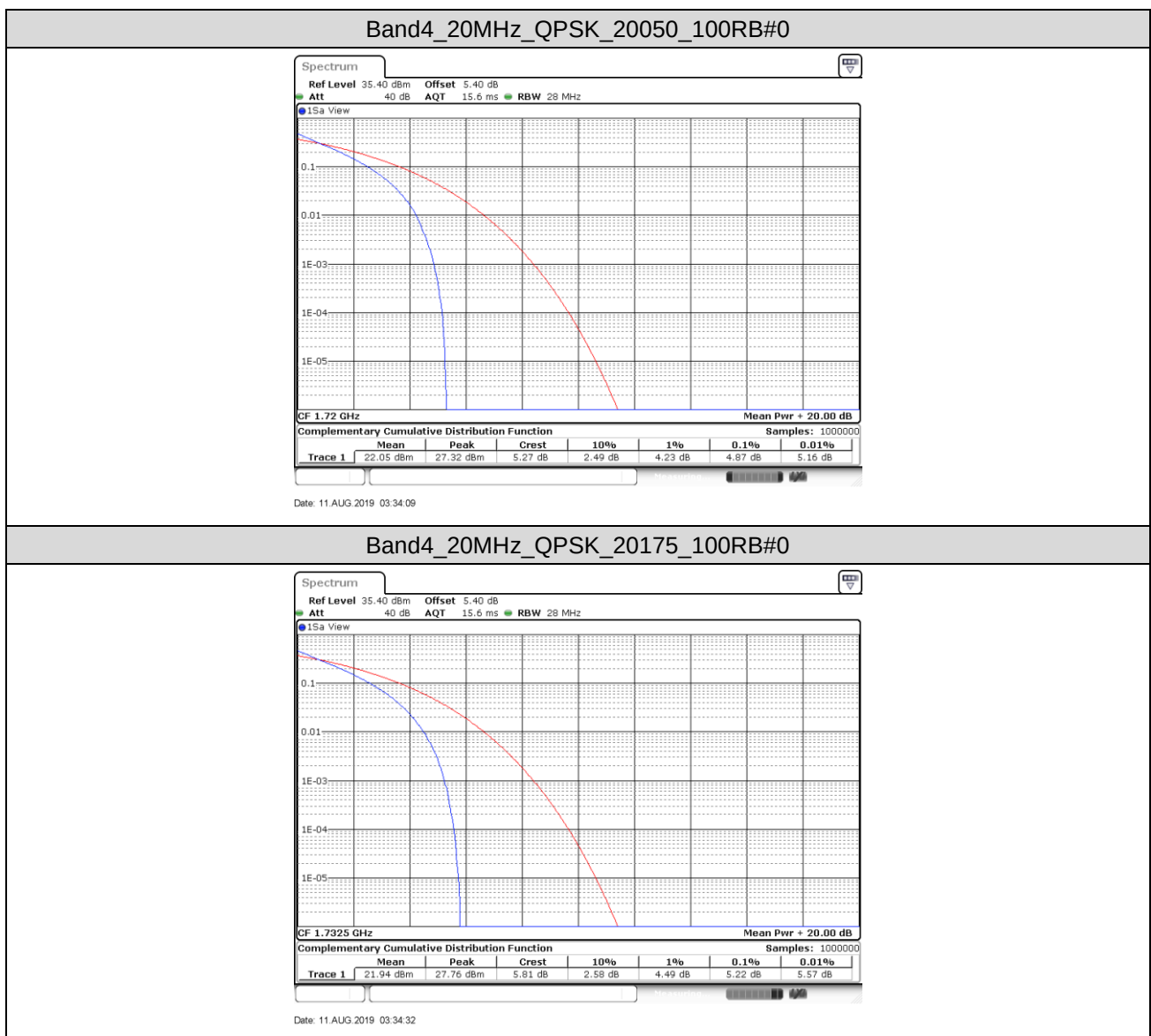
EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]

4. Peak-to-Average Ratio (CCDF)

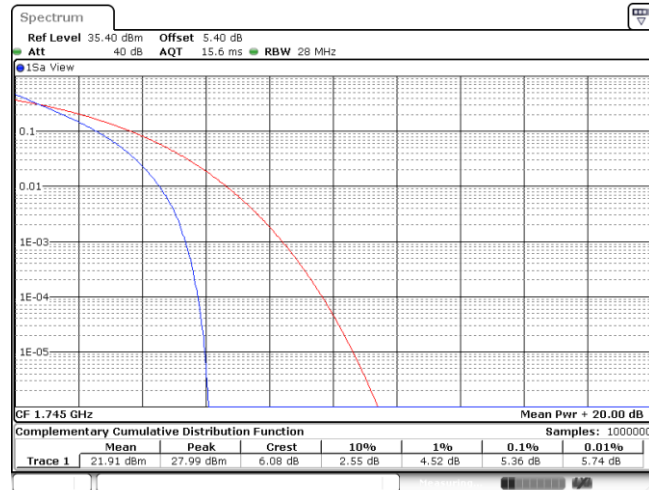
4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	20MHz	QPSK	20050	100RB#0	4.87	13	PASS
Band4	20MHz	QPSK	20175	100RB#0	5.22	13	PASS
Band4	20MHz	QPSK	20300	100RB#0	5.36	13	PASS
Band4	20MHz	16QAM	20050	100RB#0	5.74	13	PASS
Band4	20MHz	16QAM	20175	100RB#0	6.09	13	PASS
Band4	20MHz	16QAM	20300	100RB#0	6.20	13	PASS

4.2. Test Plots

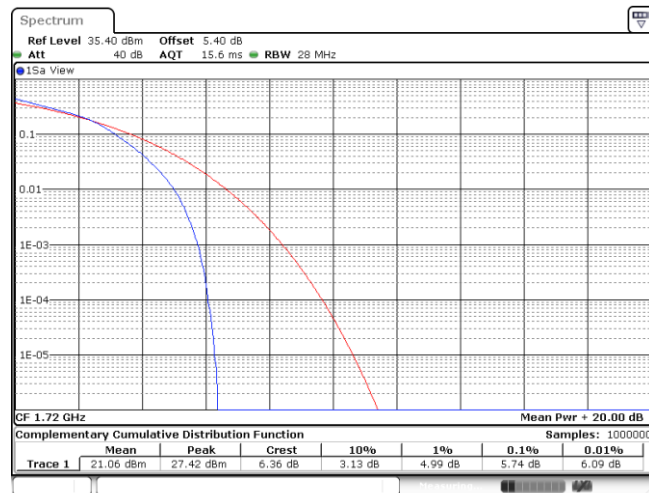


Band4_20MHz_QPSK_20300_100RB#0



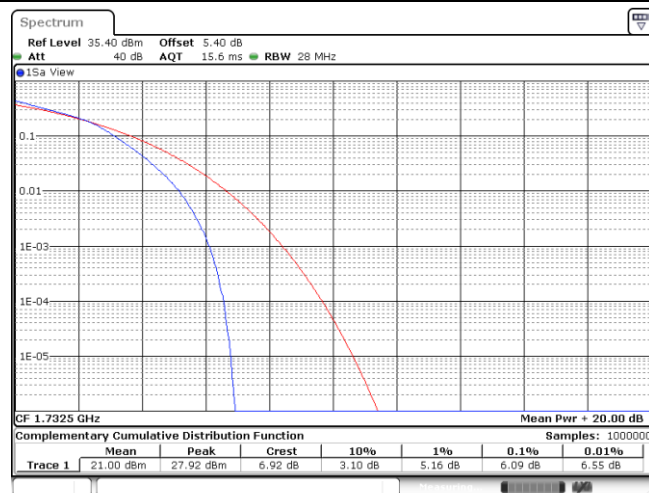
Date: 11 AUG.2019 03:34:55

Band4_20MHz_16QAM_20050_100RB#0



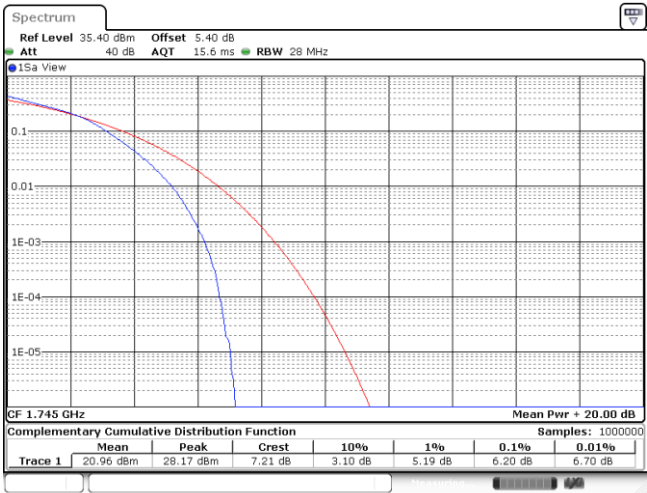
Date: 11 AUG.2019 03:34:20

Band4_20MHz_16QAM_20175_100RB#0



Date: 11 AUG.2019 03:34:44

Band4_20MHz_16QAM_20300_100RB#0



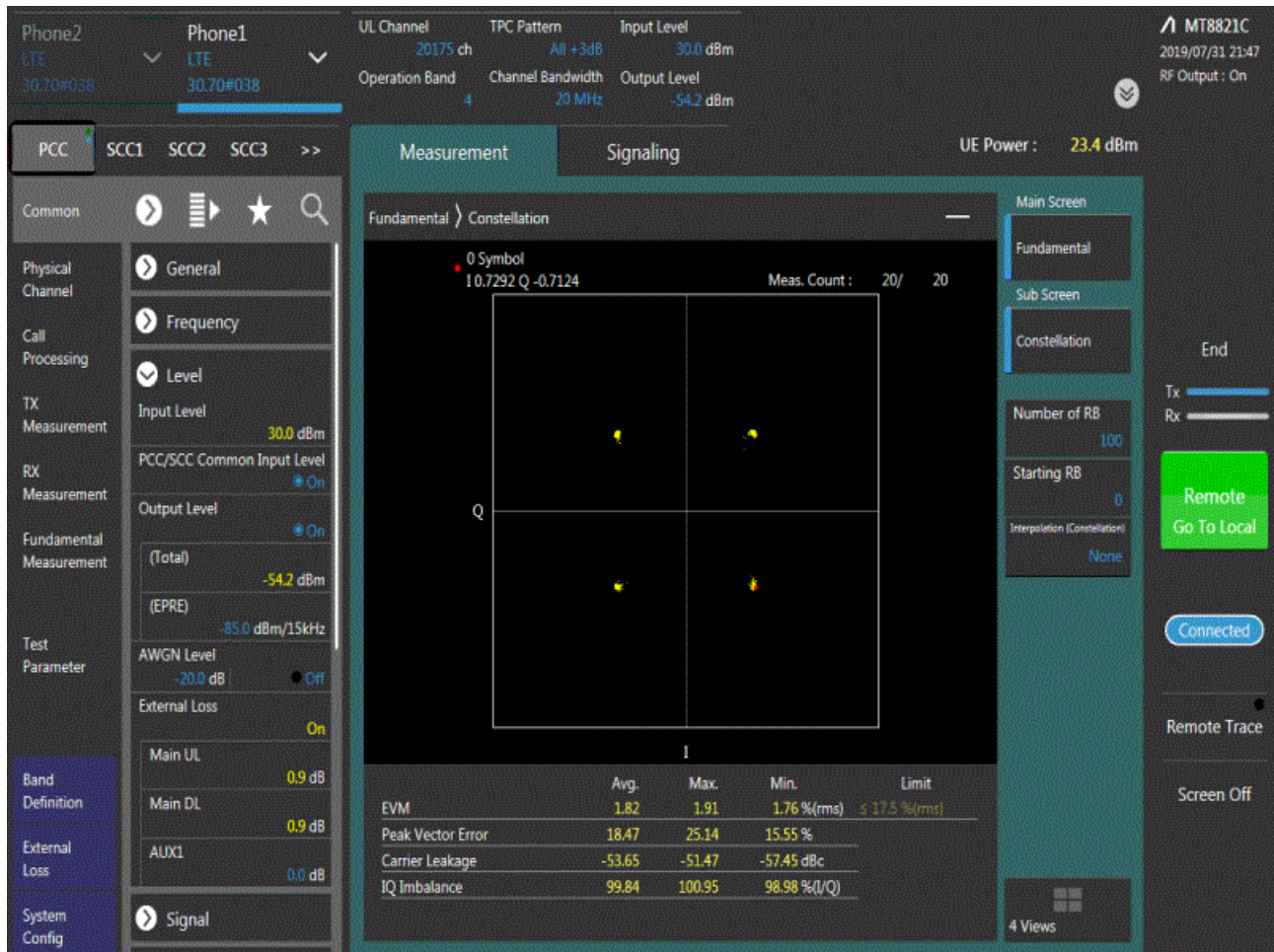
Date: 11.AUG.2019 03:35:07

5. Modulation Characteristics

5.1. Test Band = LTE Band 4

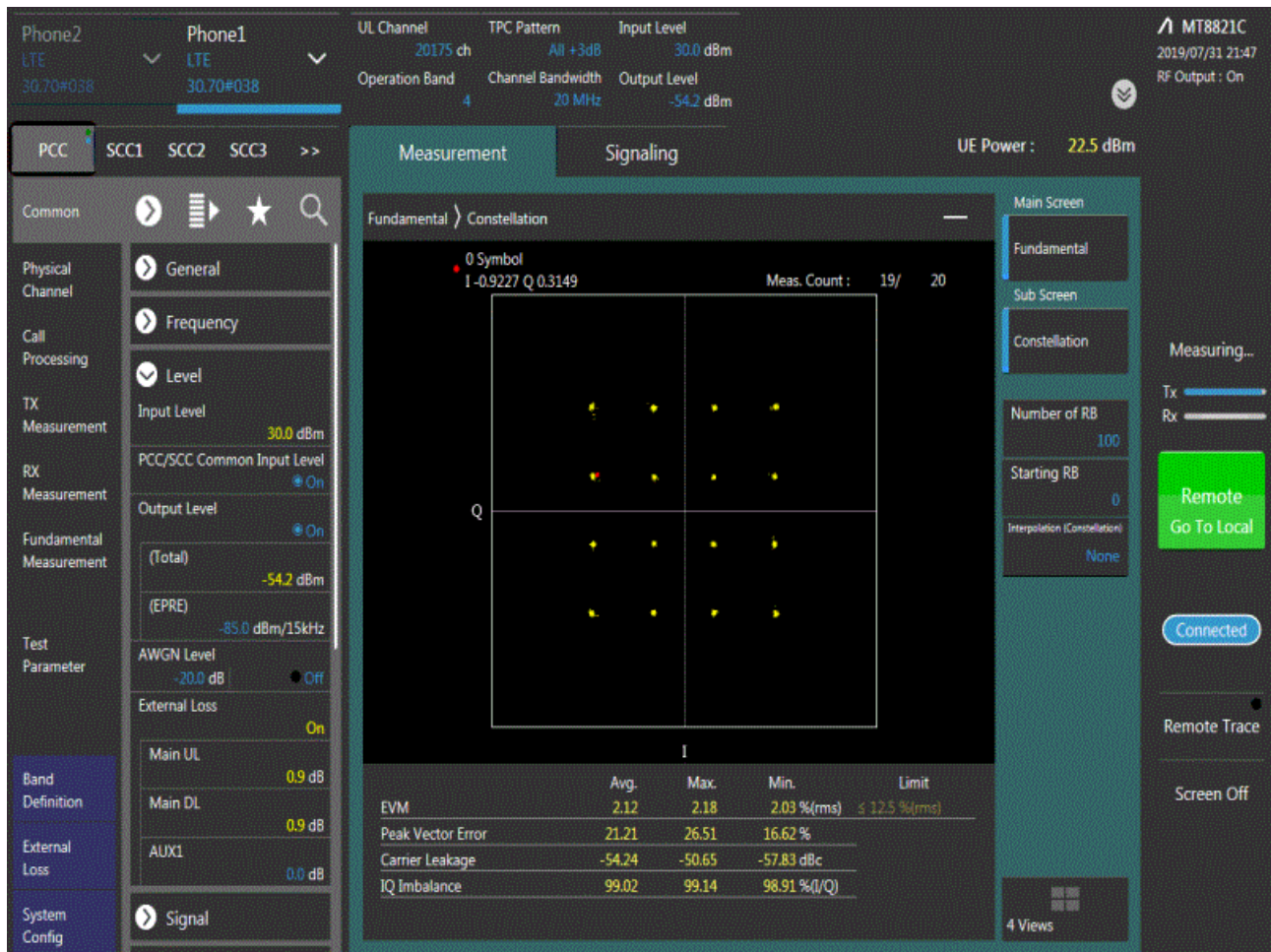
5.2. Test Mode = LTE /TM1 20MHz

5.2.1. Test Channel = MCH



5.3. Test Mode = LTE /TM2 20MHz

5.3.1. Test Channel = MCH



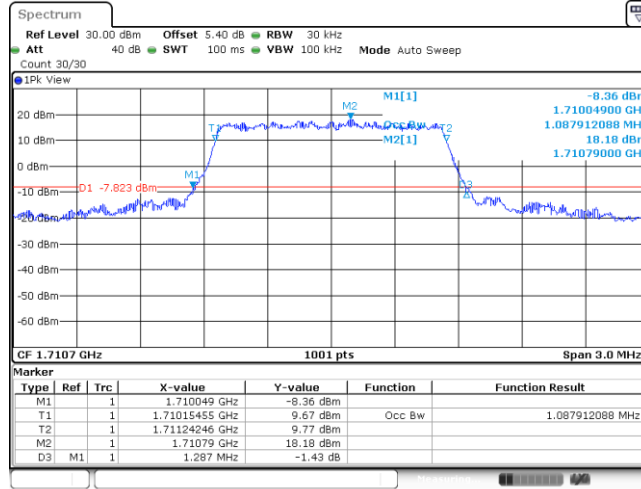
6. 26dB Bandwidth and Occupied Bandwidth

6.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	1.088	1.287	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.091	1.275	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	1.088	1.278	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	1.091	1.317	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.082	1.287	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	1.091	1.290	PASS
Band4	3MHz	QPSK	19965	15RB#0	2.691	2.928	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.691	2.910	PASS
Band4	3MHz	QPSK	20385	15RB#0	2.685	2.916	PASS
Band4	3MHz	16QAM	19965	15RB#0	2.673	2.904	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.679	2.898	PASS
Band4	3MHz	16QAM	20385	15RB#0	2.673	2.898	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.476	5.070	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.476	5.070	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.476	5.060	PASS
Band4	5MHz	16QAM	19975	25RB#0	4.496	5.100	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.496	5.060	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.496	5.110	PASS
Band4	10MHz	QPSK	20000	50RB#0	8.951	9.900	PASS
Band4	10MHz	QPSK	20175	50RB#0	8.931	9.900	PASS
Band4	10MHz	QPSK	20350	50RB#0	8.951	9.860	PASS
Band4	10MHz	16QAM	20000	50RB#0	8.951	9.880	PASS
Band4	10MHz	16QAM	20175	50RB#0	8.951	9.960	PASS
Band4	10MHz	16QAM	20350	50RB#0	8.951	9.900	PASS
Band4	15MHz	QPSK	20025	75RB#0	13.487	15.480	PASS
Band4	15MHz	QPSK	20175	75RB#0	13.487	14.880	PASS
Band4	15MHz	QPSK	20325	75RB#0	13.457	15.090	PASS
Band4	15MHz	16QAM	20025	75RB#0	13.516	15.030	PASS
Band4	15MHz	16QAM	20175	75RB#0	13.516	14.970	PASS
Band4	15MHz	16QAM	20325	75RB#0	13.487	15.030	PASS
Band4	20MHz	QPSK	20050	100RB#0	17.902	19.920	PASS
Band4	20MHz	QPSK	20175	100RB#0	17.902	19.680	PASS
Band4	20MHz	QPSK	20300	100RB#0	17.902	19.640	PASS
Band4	20MHz	16QAM	20050	100RB#0	17.942	19.600	PASS
Band4	20MHz	16QAM	20175	100RB#0	17.902	19.800	PASS
Band4	20MHz	16QAM	20300	100RB#0	17.942	19.680	PASS

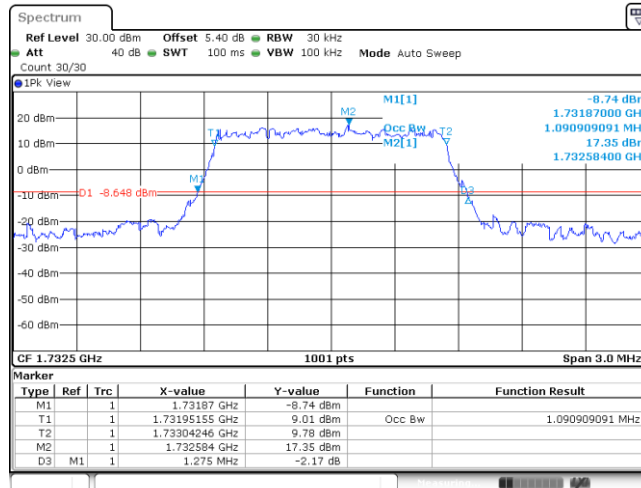
6.2. Test Plots

Band4_1.4MHz_QPSK_19957_6RB#0



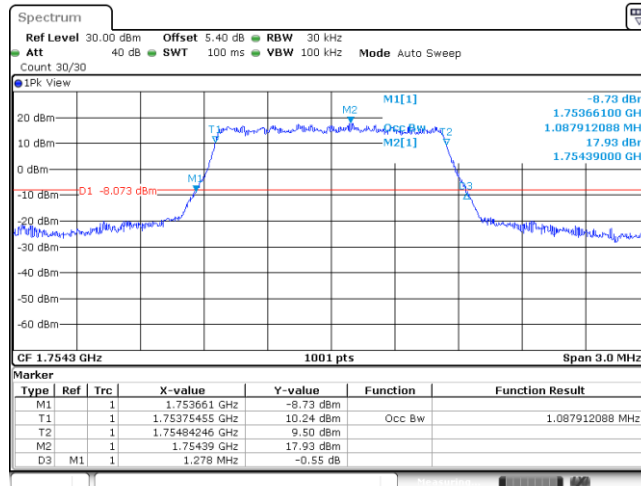
Date: 11 AUG 2019 03:04:16

Band4_1.4MHz_QPSK_20175_6RB#0



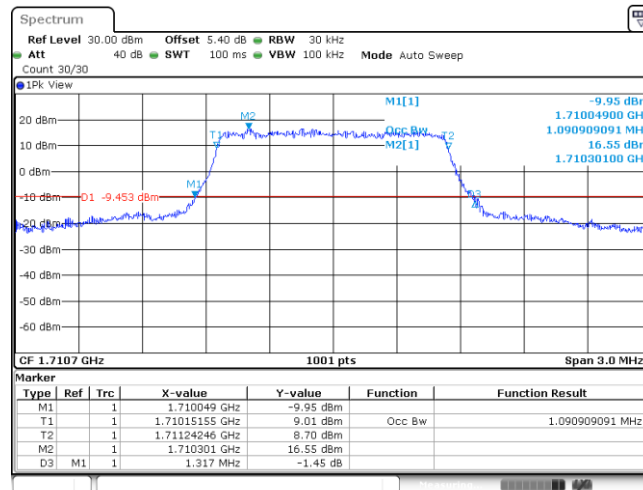
Date: 11 AUG 2019 03:04:42

Band4_1.4MHz_QPSK_20393_6RB#0



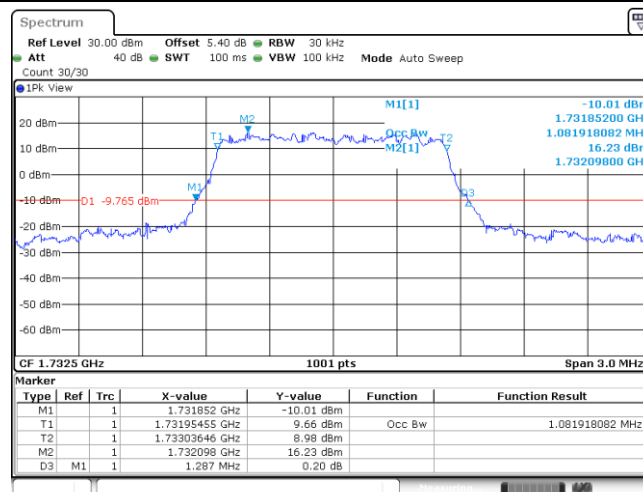
Date: 11 AUG 2019 03:05:08

Band4_1.4MHz_16QAM_19957_6RB#0



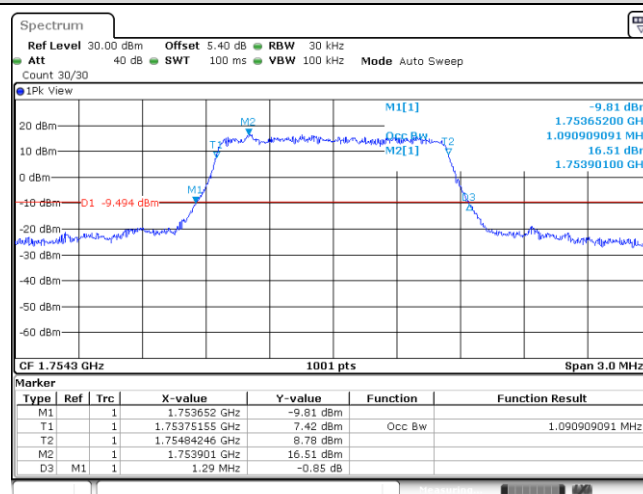
Date: 11 AUG 2019 03:04:29

Band4_1.4MHz_16QAM_20175_6RB#0



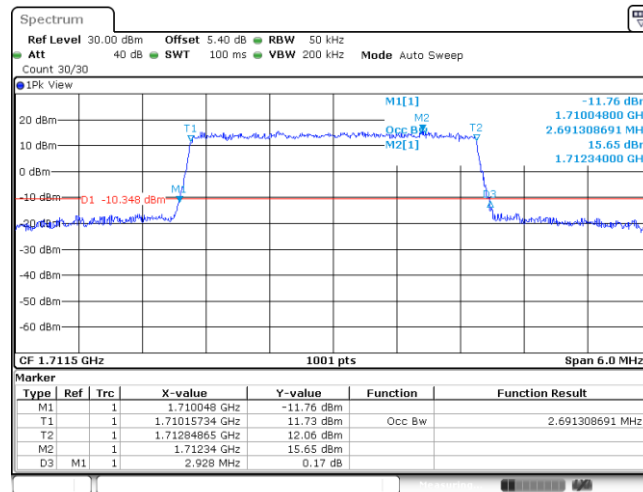
Date: 11 AUG 2019 03:04:55

Band4_1.4MHz_16QAM_20393_6RB#0



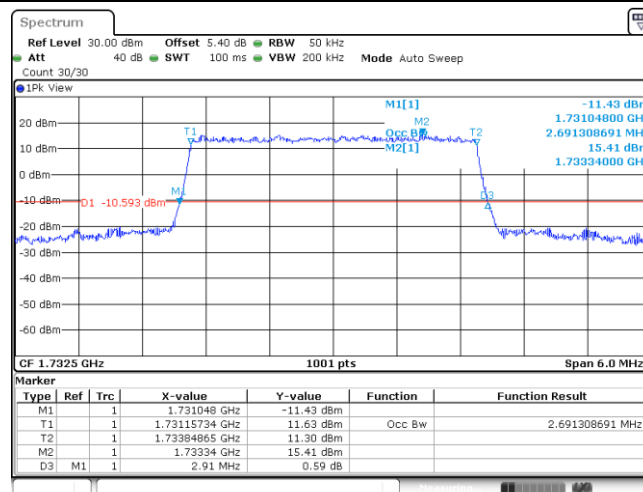
Date: 11 AUG 2019 03:05:21

Band4_3MHz_QPSK_19965_15RB#0



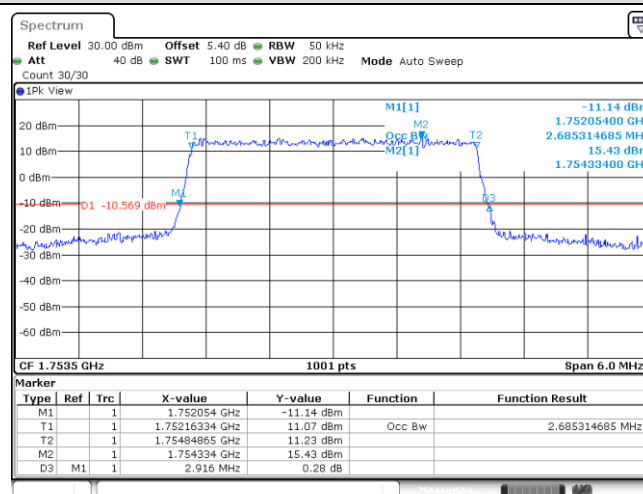
Date: 11 AUG 2019 03:05:39

Band4_3MHz_QPSK_20175_15RB#0



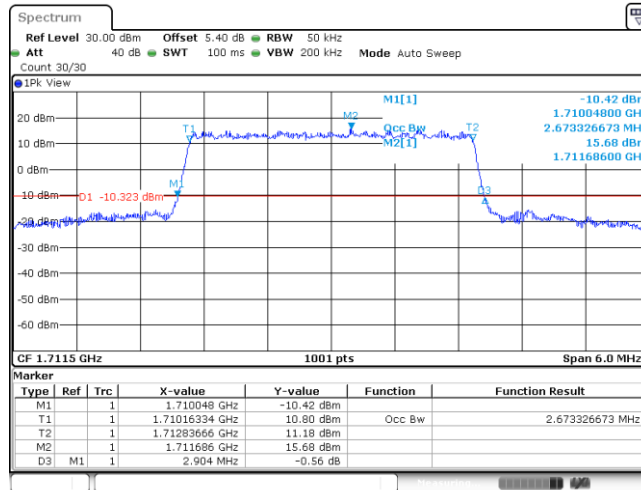
Date: 11 AUG 2019 03:06:05

Band4_3MHz_QPSK_20385_15RB#0



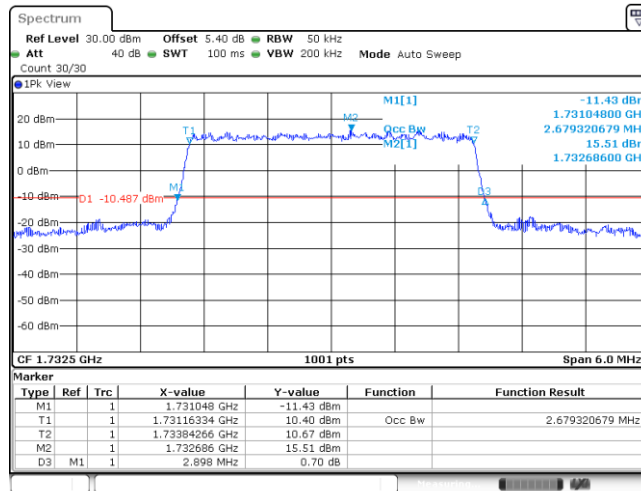
Date: 11 AUG 2019 03:06:31

Band4_3MHz_16QAM_19965_15RB#0



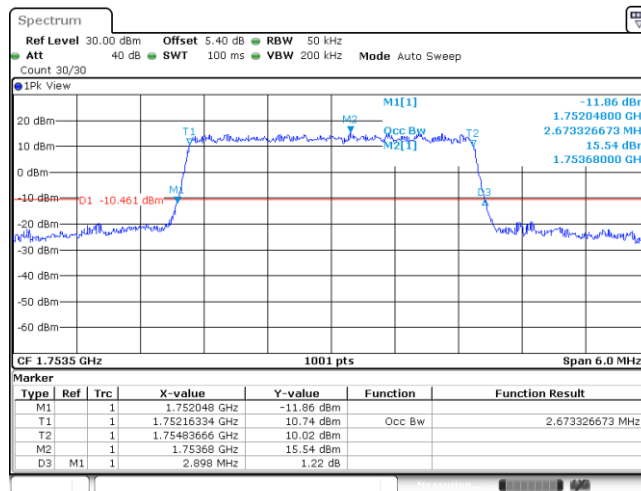
Date: 11 AUG 2019 03:05:52

Band4_3MHz_16QAM_20175_15RB#0



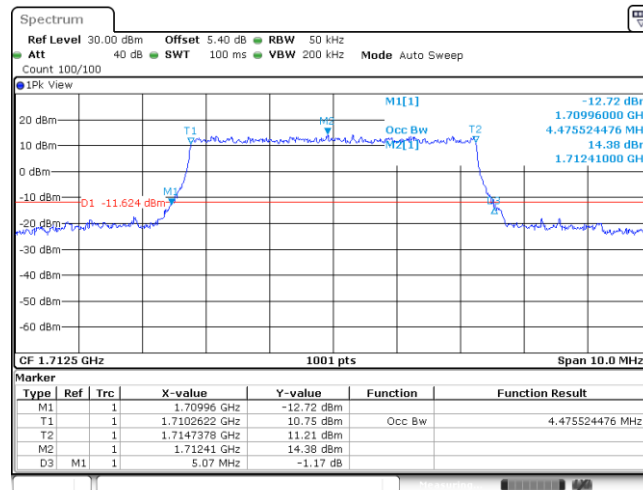
Date: 11 AUG 2019 03:06:18

Band4_3MHz_16QAM_20385_15RB#0



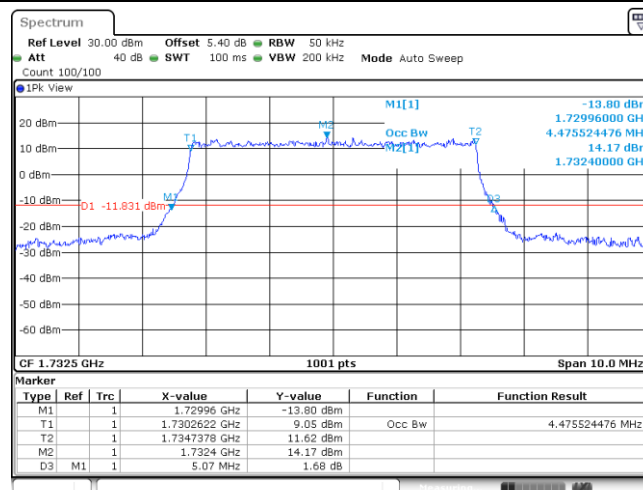
Date: 11 AUG 2019 03:06:44

Band4_5MHz_QPSK_19975_25RB#0



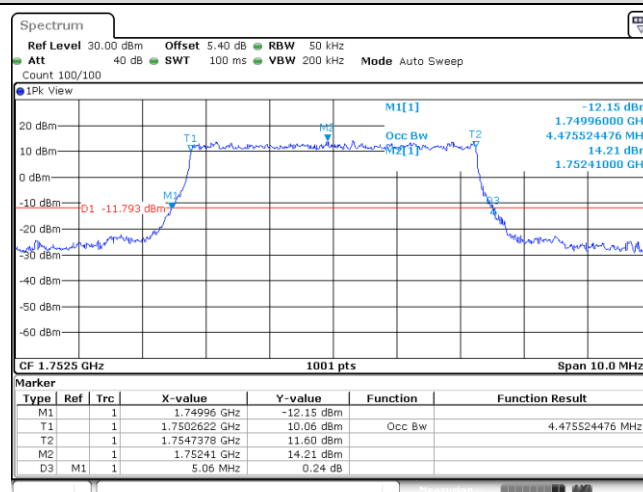
Date: 11 AUG 2019 03:07:08

Band4_5MHz_QPSK_20175_25RB#0



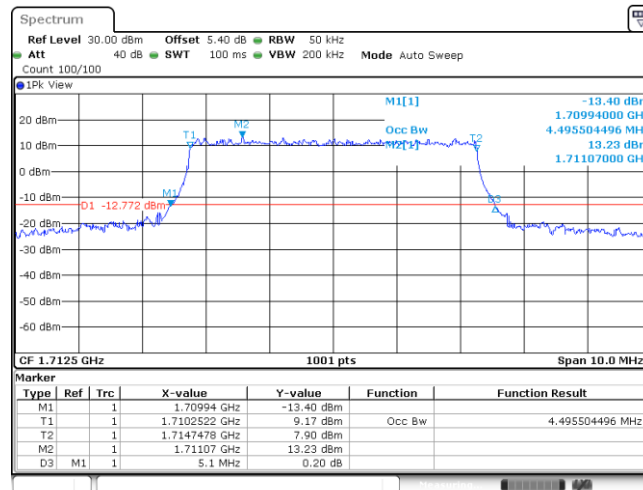
Date: 11 AUG 2019 03:07:48

Band4_5MHz_QPSK_20375_25RB#0



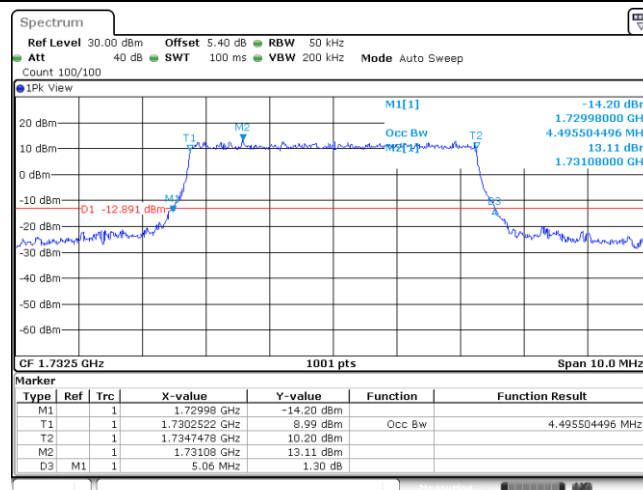
Date: 11 AUG 2019 03:08:29

Band4_5MHz_16QAM_19975_25RB#0



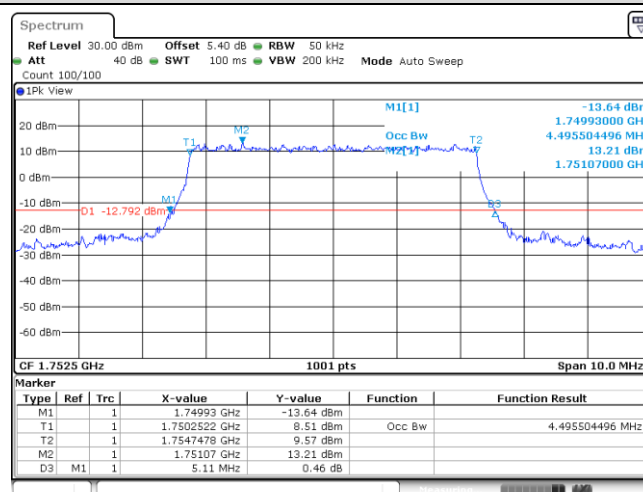
Date: 11 AUG 2019 03:07:28

Band4_5MHz_16QAM_20175_25RB#0



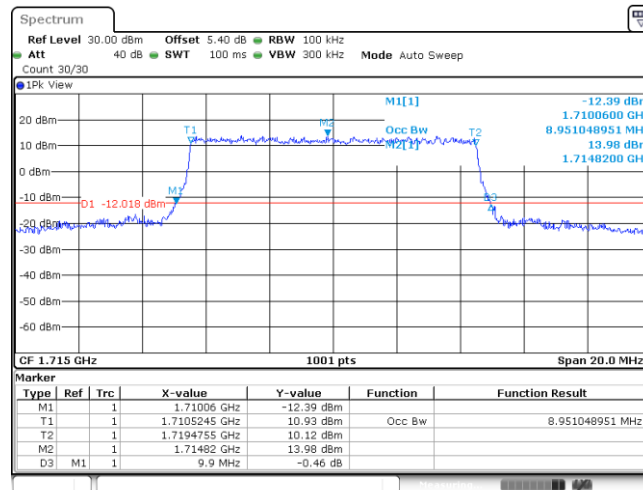
Date: 11 AUG 2019 03:08:09

Band4_5MHz_16QAM_20375_25RB#0



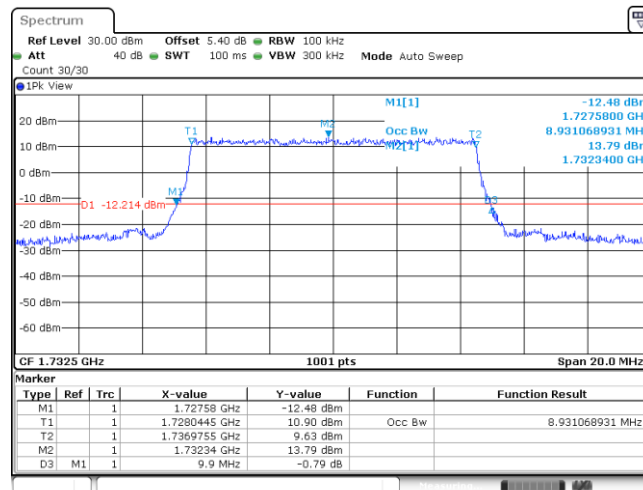
Date: 11 AUG 2019 03:08:49

Band4_10MHz_QPSK_20000_50RB#0



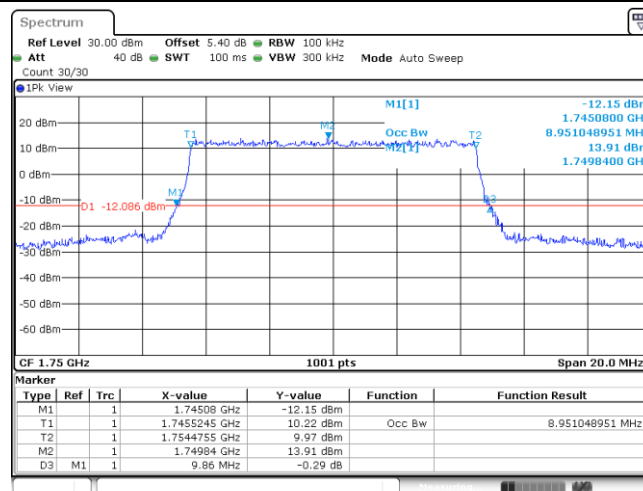
Date: 11 AUG 2019 03:09:06

Band4_10MHz_QPSK_20175_50RB#0



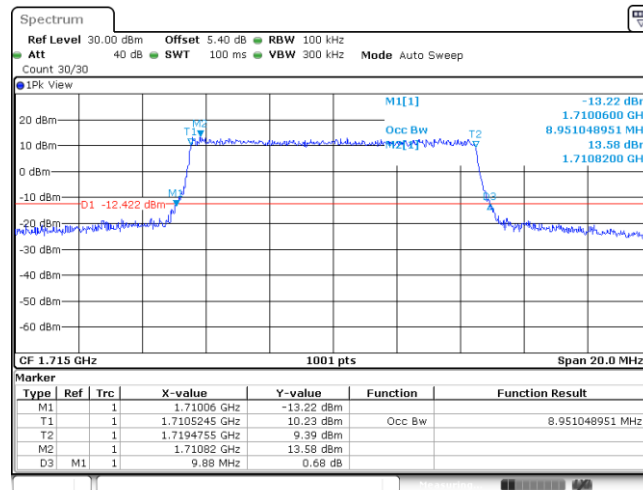
Date: 11 AUG 2019 03:09:33

Band4_10MHz_QPSK_20350_50RB#0



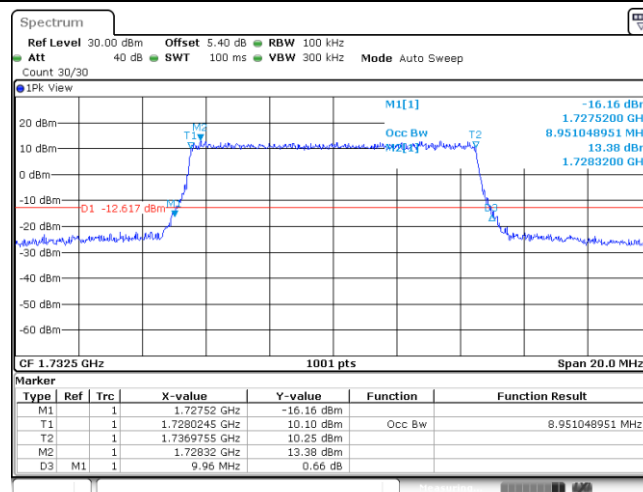
Date: 11 AUG 2019 03:09:59

Band4_10MHz_16QAM_20000_50RB#0



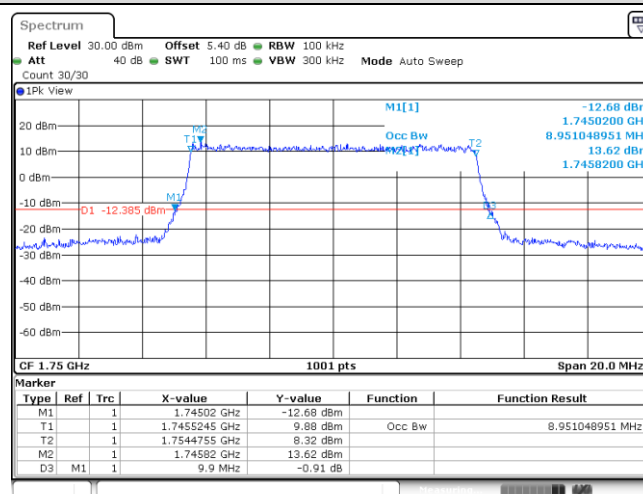
Date: 11 AUG 2019 03:09:20

Band4_10MHz_16QAM_20175_50RB#0



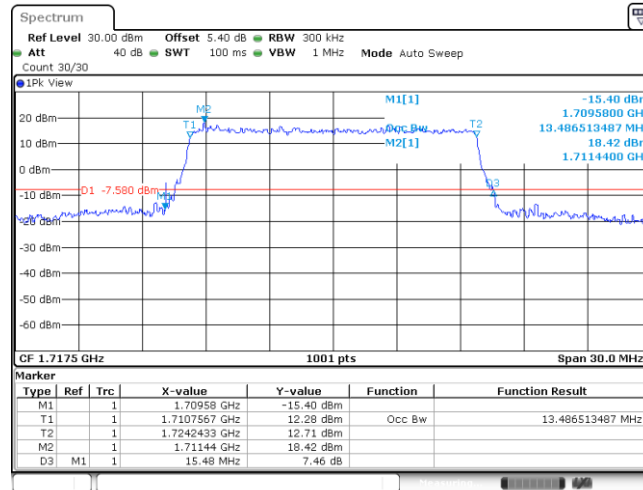
Date: 11 AUG 2019 03:09:46

Band4_10MHz_16QAM_20350_50RB#0



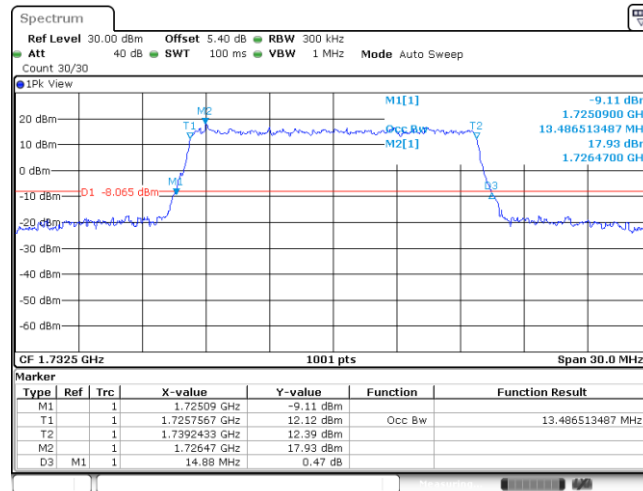
Date: 11 AUG 2019 03:10:12

Band4_15MHz_QPSK_20025_75RB#0



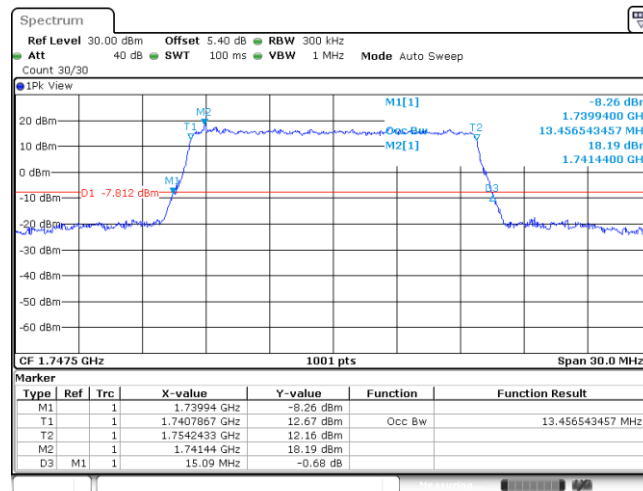
Date: 11 AUG 2019 03:10:29

Band4_15MHz_QPSK_20175_75RB#0



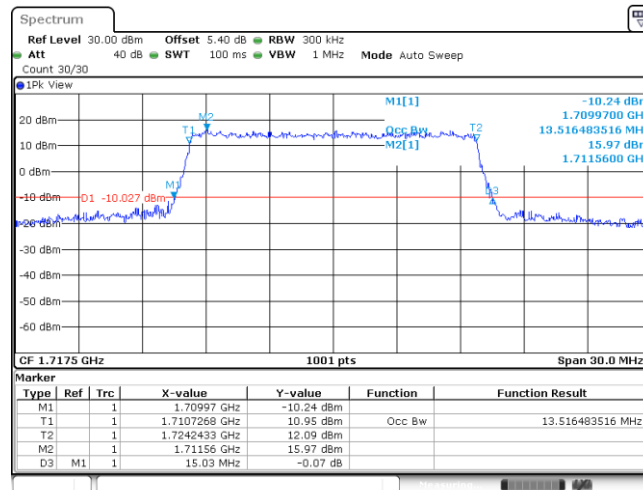
Date: 11 AUG 2019 03:10:56

Band4_15MHz_QPSK_20325_75RB#0



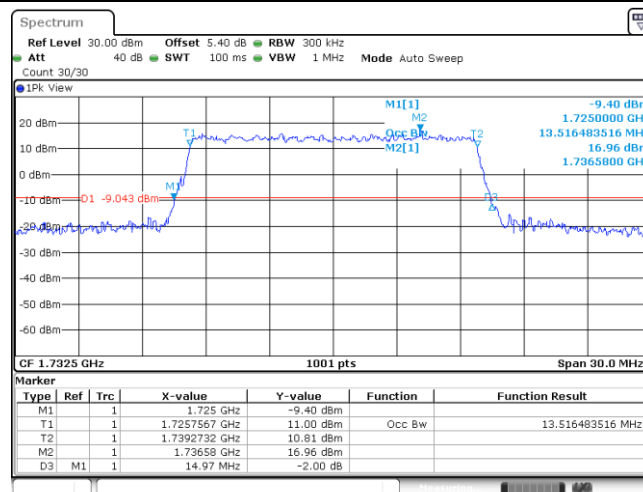
Date: 11 AUG 2019 03:11:22

Band4_15MHz_16QAM_20025_75RB#0



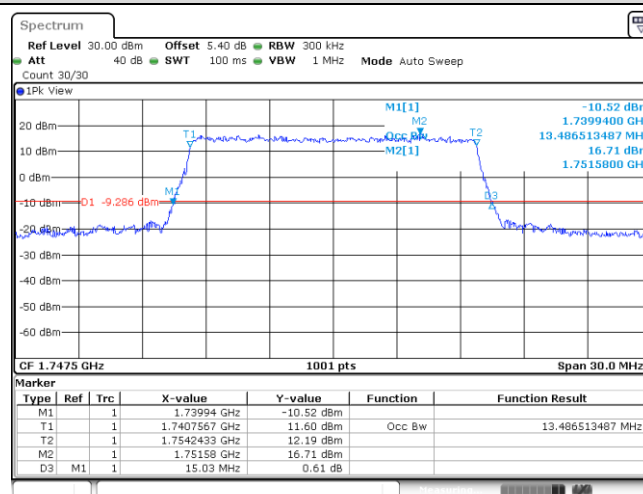
Date: 11 AUG 2019 03:10:42

Band4_15MHz_16QAM_20175_75RB#0



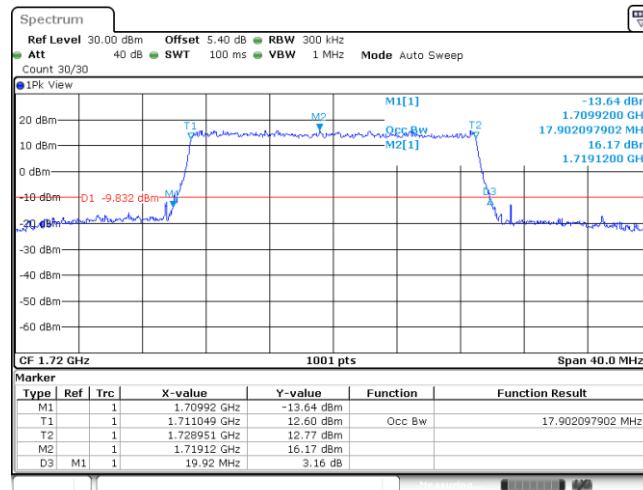
Date: 11 AUG 2019 03:11:09

Band4_15MHz_16QAM_20325_75RB#0



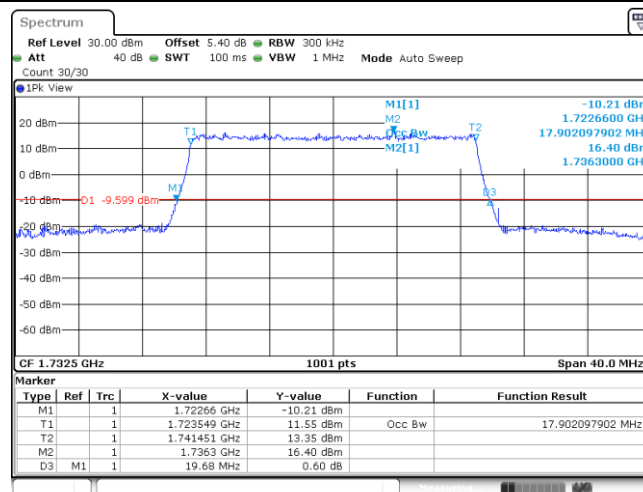
Date: 11 AUG 2019 03:11:35

Band4_20MHz_QPSK_20050_100RB#0



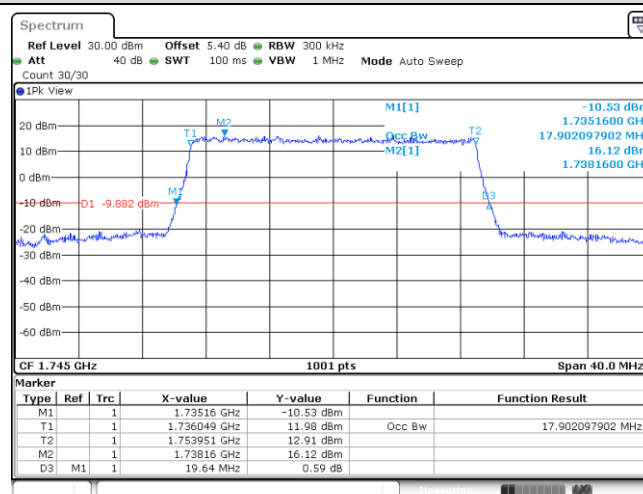
Date: 11 AUG 2019 03:11:52

Band4_20MHz_QPSK_20175_100RB#0



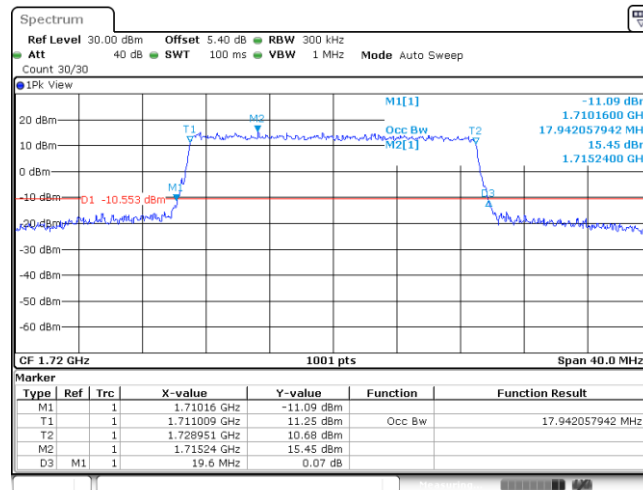
Date: 11 AUG 2019 03:12:18

Band4_20MHz_QPSK_20300_100RB#0



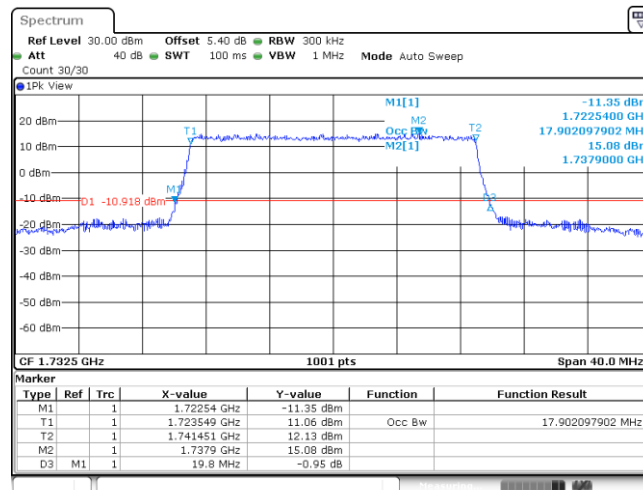
Date: 11 AUG 2019 03:12:44

Band4_20MHz_16QAM_20050_100RB#0



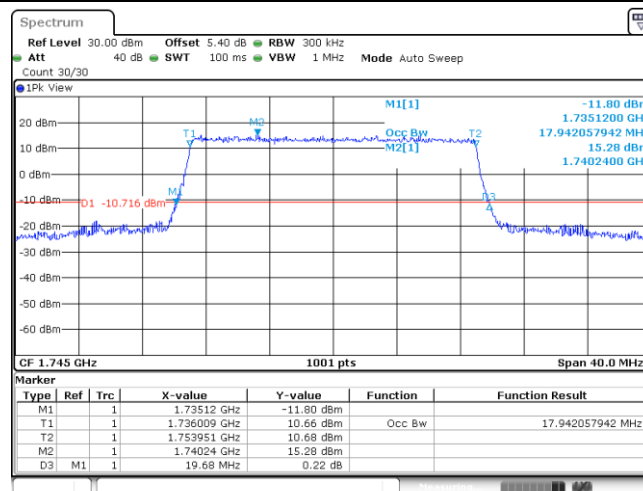
Date: 11 AUG 2019 03:12:05

Band4_20MHz_16QAM_20175_100RB#0



Date: 11 AUG 2019 03:12:31

Band4_20MHz_16QAM_20300_100RB#0



Date: 11 AUG 2019 03:12:58