



Appendix B

E-UTRA Band 5



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CONTENT

1.	EFFECTIVE (ISOTROPIC) RADIATED POWER.....	3
1.1.	TEST RESULT	3
2.	PEAK-TO-AVERAGE RATIO(CCDF).....	8
2.1.	TEST RESULT	8
2.2.	TEST PLOTS.....	8
3.	MODULATION CHARACTERISTICS	12
3.1.	TEST BAND = LTE BAND 5	12
3.2.	TEST MODE = LTE /TM1 10MHZ.....	12
3.2.1.	TEST CHANNEL = MCH.....	12
3.3.	TEST MODE = LTE /TM2 10MHZ.....	13
3.3.1.	TEST CHANNEL = MCH.....	13
4.	26DB BANDWIDTH AND OCCUPIED BANDWIDTH	14
4.1.	TEST RESULT	14
4.2.	TEST PLOTS.....	15
5.	BAND EDGE COMPLIANCE	27
5.1.	TEST PLOTS.....	27
6.	SPURIOUS EMISSION AT ANTENNA TERMINAL	43
6.1.	TEST PLOTS.....	43
7.	FIELD STRENGTH OF SPURIOUS RADIATION.....	49
7.1.	TEST BAND = LTE BAND 5	49
7.1.1.	TEST MODE =LTE/TM1 10MHZ.....	49
7.1.1.1.	TEST CHANNEL = LCH	49
7.1.1.2.	TEST CHANNEL = MCH.....	49
7.1.1.3.	TEST CHANNEL = HCH	50
8.	FREQUENCY STABILITY	51
8.1.	FREQUENCY VS VOLTAGE	51
8.2.	FREQUENCY VS TEMPERATURE	51



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1. Effective (Isotropic) Radiated Power

1.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	ERP (dBm)	limit (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	22.75	19.1	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	22.91	19.26	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	22.70	19.05	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	23.06	19.41	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	23.03	19.38	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	23.07	19.42	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	22.04	18.39	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	22.94	19.29	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.10	19.45	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	22.87	19.22	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	23.11	19.46	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	23.24	19.59	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	22.93	19.28	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.07	18.42	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	22.77	19.12	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.05	19.4	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	22.77	19.12	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	23.16	19.51	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	23.12	19.47	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	23.04	19.39	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.02	18.37	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	21.57	17.92	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	21.75	18.1	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	21.57	17.92	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	22.16	18.51	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	22.15	18.5	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	22.17	18.52	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	20.92	17.27	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	21.60	17.95	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	21.51	17.86	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	21.60	17.95	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	22.18	18.53	38.45	PASS



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Band5	1.4MHz	16QAM	20525	3RB#1	22.12	18.47	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	22.21	18.56	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	21.04	17.39	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	21.66	18.01	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	21.74	18.09	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	21.60	17.95	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	22.28	18.63	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	22.12	18.47	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	22.15	18.5	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.17	17.52	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.06	19.41	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	22.96	19.31	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	22.88	19.23	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#0	22.09	18.44	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#4	21.99	18.34	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#7	21.95	18.3	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.08	18.43	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.21	19.56	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	22.69	19.04	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	22.98	19.33	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#0	22.01	18.36	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#4	22.01	18.36	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#7	22.02	18.37	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	21.97	18.32	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	22.93	19.28	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.04	19.39	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	23.00	19.35	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#0	21.94	18.29	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#4	22.06	18.41	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#7	21.96	18.31	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	21.99	18.34	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	21.72	18.07	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	21.53	17.88	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	21.53	17.88	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#0	21.21	17.56	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#4	20.95	17.3	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#7	20.91	17.26	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	21.06	17.41	38.45	PASS



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Band5	3MHz	16QAM	20525	1RB#0	21.63	17.98	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	21.56	17.91	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	21.51	17.86	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#0	21.16	17.51	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#4	20.87	17.22	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#7	20.98	17.33	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.12	17.47	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	21.66	18.01	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	21.63	17.98	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	21.70	18.05	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#0	20.73	17.08	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#4	20.82	17.17	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#7	20.83	17.18	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	21.13	17.48	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.03	19.38	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#12	22.82	19.17	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	23.19	19.54	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#0	22.03	18.38	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#6	21.91	18.26	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#13	22.08	18.43	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	22.04	18.39	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	22.90	19.25	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	22.86	19.21	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	22.65	19	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#0	22.01	18.36	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#6	21.97	18.32	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#13	22.03	18.38	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.06	18.41	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	22.81	19.16	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.25	19.6	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	22.90	19.25	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#0	21.94	18.29	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#6	22.08	18.43	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#13	22.05	18.4	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	21.94	18.29	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	21.66	18.01	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.09	18.44	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	21.68	18.03	38.45	PASS



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Band5	5MHz	16QAM	20425	12RB#0	21.00	17.35	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#6	20.94	17.29	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#13	20.92	17.27	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	21.01	17.36	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	21.48	17.83	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	21.91	18.26	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	21.46	17.81	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#0	20.99	17.34	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#6	20.91	17.26	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#13	20.97	17.32	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.02	17.37	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	21.63	17.98	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	21.90	18.25	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	21.60	17.95	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#0	20.85	17.2	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#6	20.93	17.28	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#13	20.87	17.22	38.45	PASS
Band5	5MHz	16QAM	20625	25RB#0	20.98	17.33	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	22.97	19.32	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.15	19.5	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.16	19.51	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#0	22.02	18.37	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#12	22.10	18.45	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#25	22.17	18.52	38.45	PASS
Band5	10MHz	QPSK	20450	50RB#0	22.13	18.48	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	22.81	19.16	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.15	19.5	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	22.55	18.9	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#0	22.32	18.67	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#12	22.16	18.51	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#25	21.92	18.27	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.07	18.42	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	22.88	19.23	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	22.78	19.13	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	23.22	19.57	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#0	21.97	18.32	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#12	22.03	18.38	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#25	22.17	18.52	38.45	PASS



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Band5	10MHz	QPSK	20600	50RB#0	21.96	18.31	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	21.73	18.08	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	21.69	18.04	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	21.69	18.04	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#0	21.02	17.37	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#12	21.03	17.38	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#25	21.07	17.42	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.13	17.48	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	21.66	18.01	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	21.80	18.15	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	21.80	18.15	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#0	21.05	17.4	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#12	21.06	17.41	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#25	21.07	17.42	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	21.03	17.38	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	21.85	18.2	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	21.73	18.08	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	21.59	17.94	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#0	20.93	17.28	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#12	21.02	17.37	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#25	20.87	17.22	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	20.95	17.3	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 [dBi]

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



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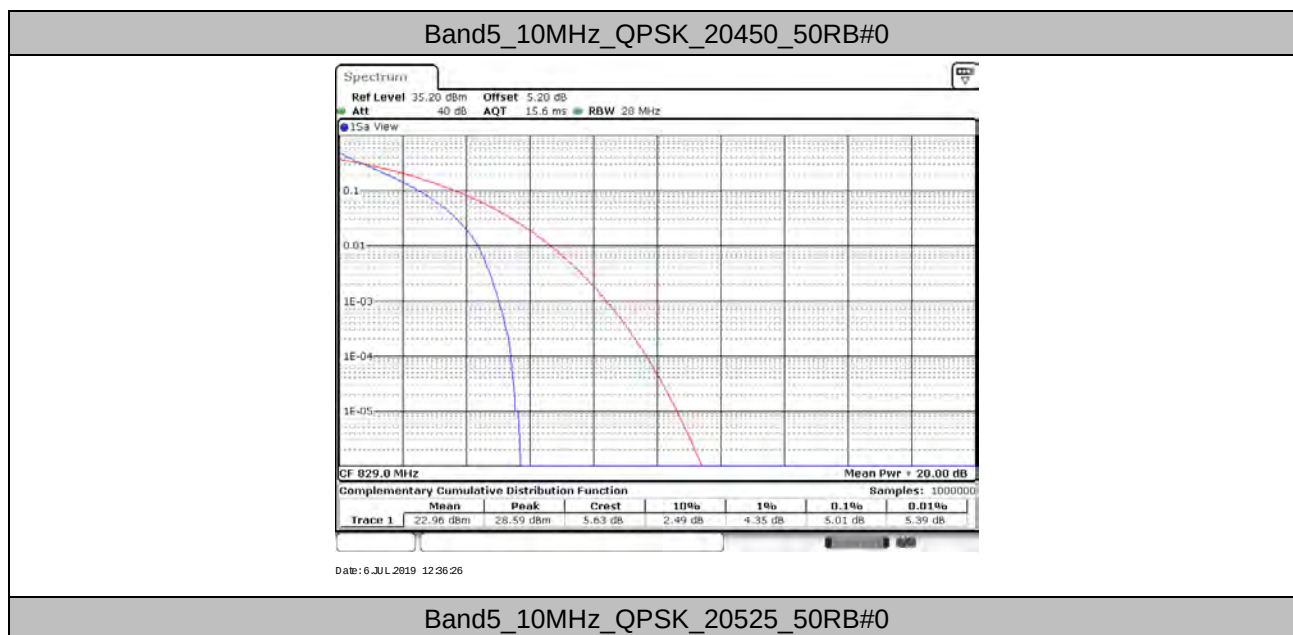


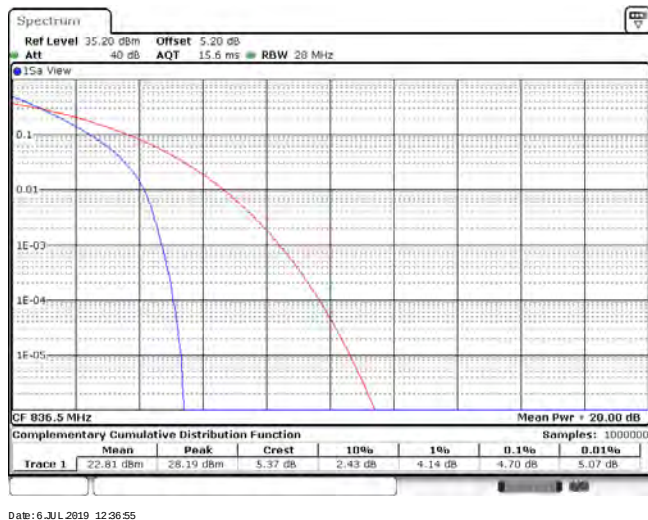
2. Peak-to-Average Ratio(CCDF)

2.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	5.01	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	4.70	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	4.78	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	5.86	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	5.59	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.57	13	PASS

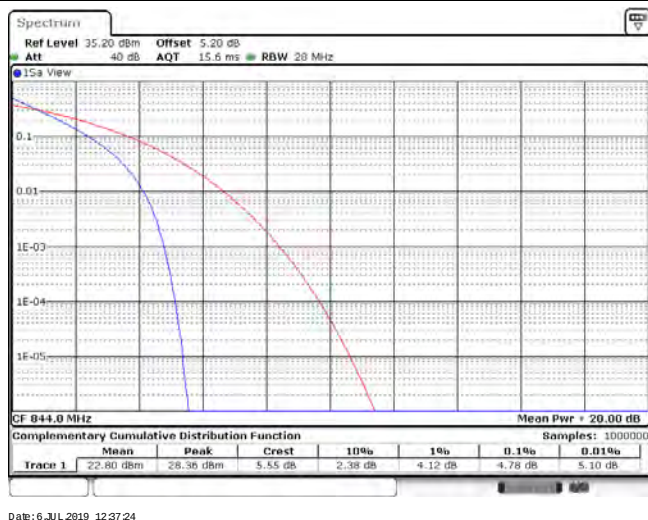
2.2. Test Plots





Date: 6 JUL 2019 12:36:55

Band5_10MHz_QPSK_20600_50RB#0



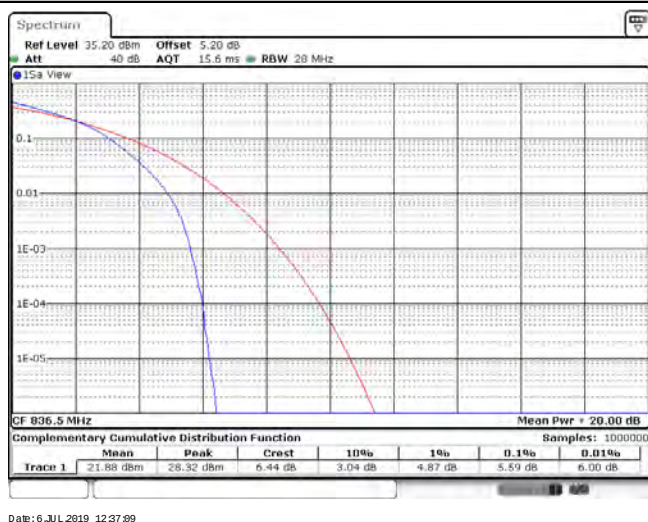
Date: 6 JUL 2019 12:37:24

Band5_10MHz_16QAM_20450_50RB#0





Band5_10MHz_16QAM_20525_50RB#0



Band5_10MHz_16QAM_20600_50RB#0





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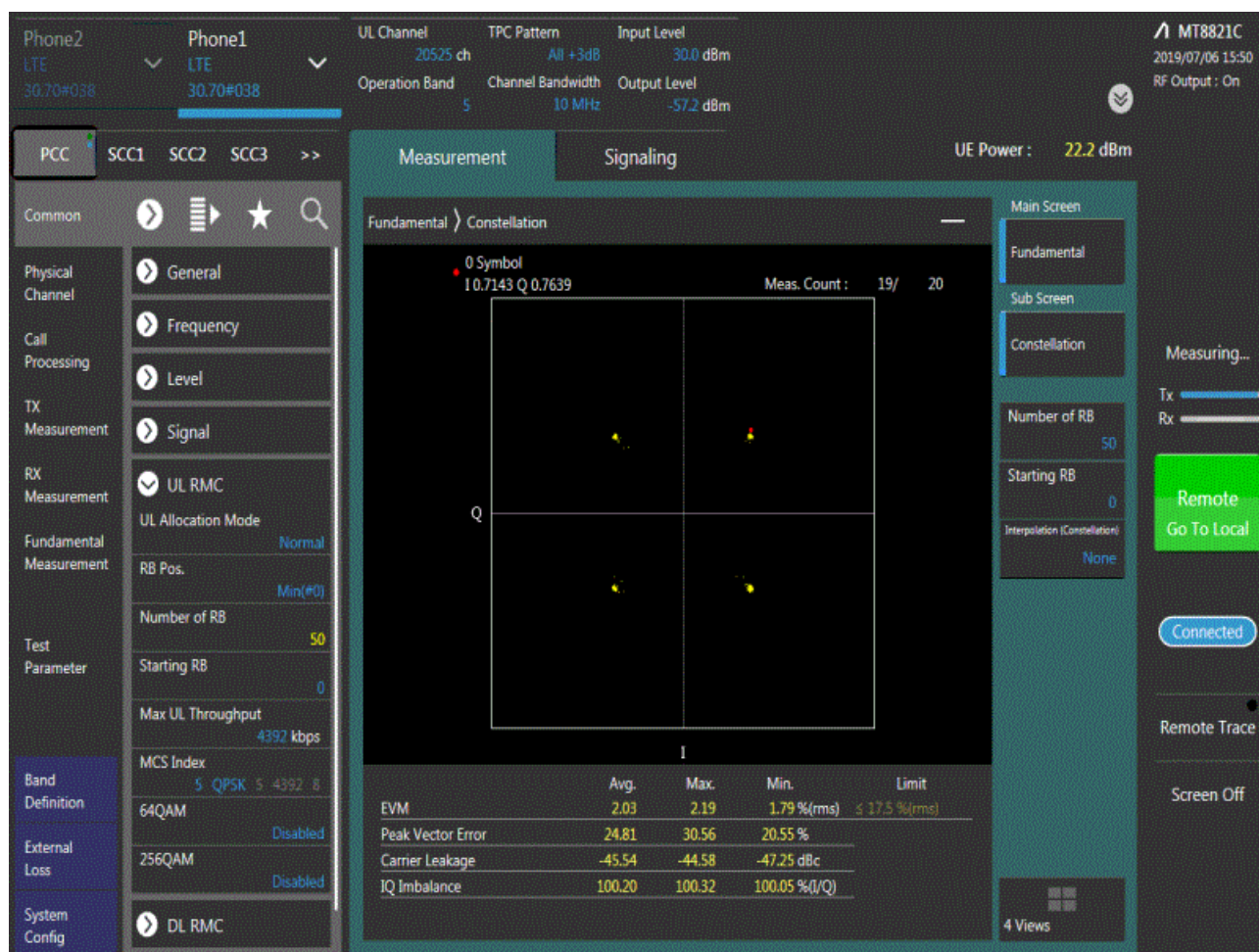


3. Modulation Characteristics

3.1. Test BAND = LTE Band 5

3.2. Test Mode = LTE /TM1 10MHz

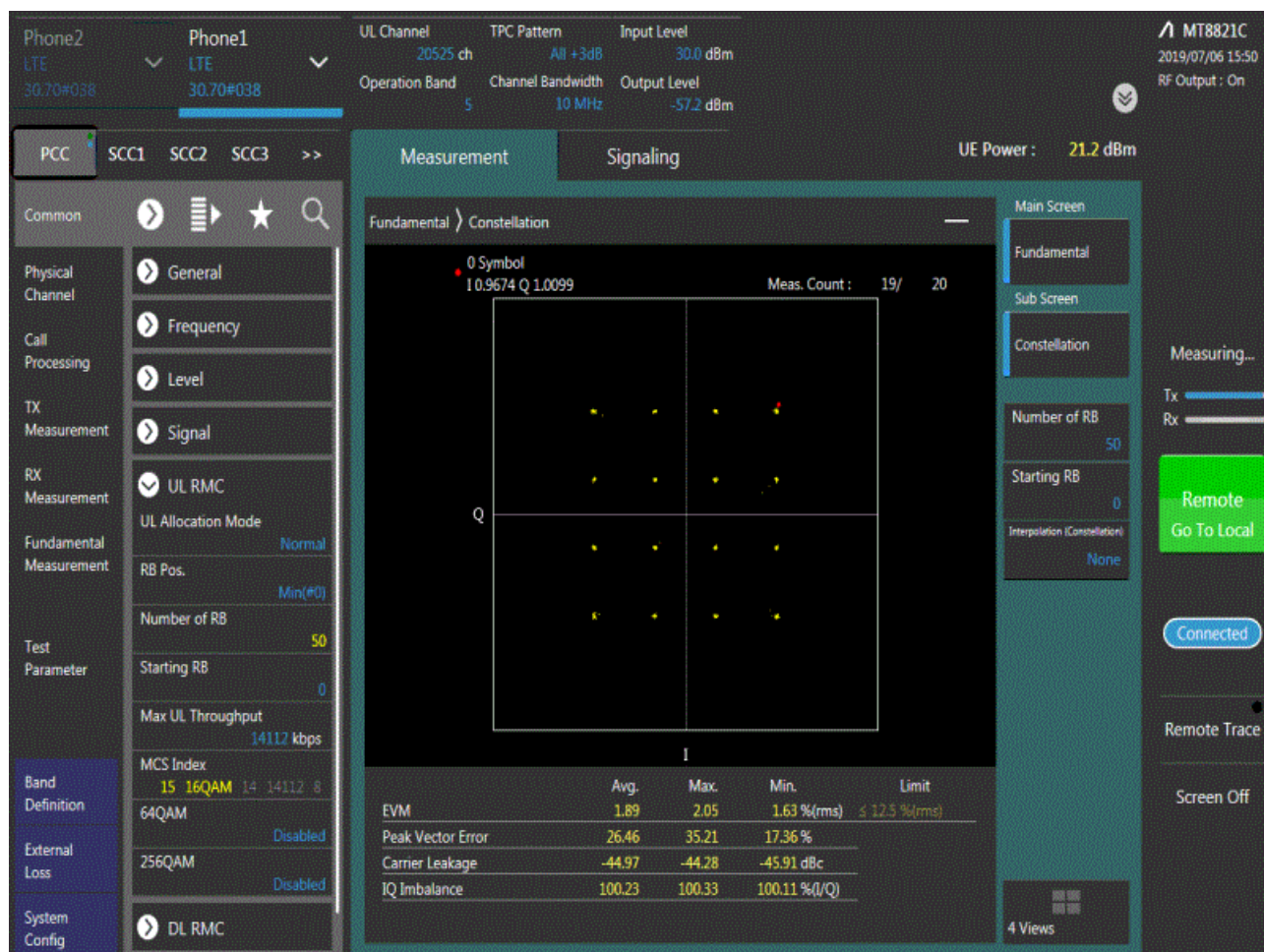
3.2.1. Test Channel = MCH





3.3. Test Mode = LTE /TM2 10MHz

3.3.1. Test Channel = MCH





4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.097	1.323	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.091	1.287	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.094	1.290	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.091	1.302	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.088	1.284	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.091	1.287	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.703	3.006	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.691	2.994	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.697	2.982	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.685	2.976	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.685	2.964	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.685	2.982	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.476	4.940	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.466	4.910	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.466	4.930	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.476	4.970	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.476	4.960	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.486	4.970	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.931	9.800	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.891	9.680	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.931	9.780	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.951	9.800	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.911	9.660	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.951	9.780	PASS



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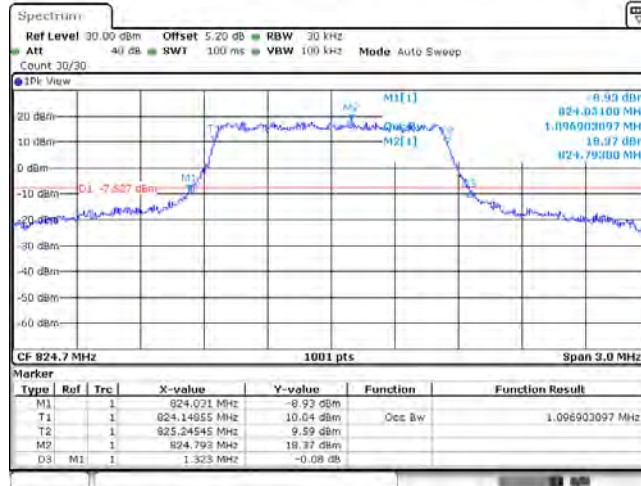
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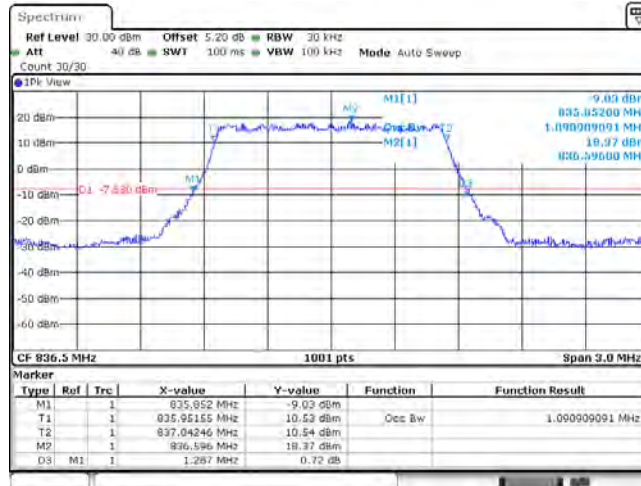
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4.2. Test Plots

Band5_1.4MHz_QPSK_20407_6RB#0



Band5_1.4MHz_QPSK_20525_6RB#0



Band5_1.4MHz_QPSK_20643_6RB#0



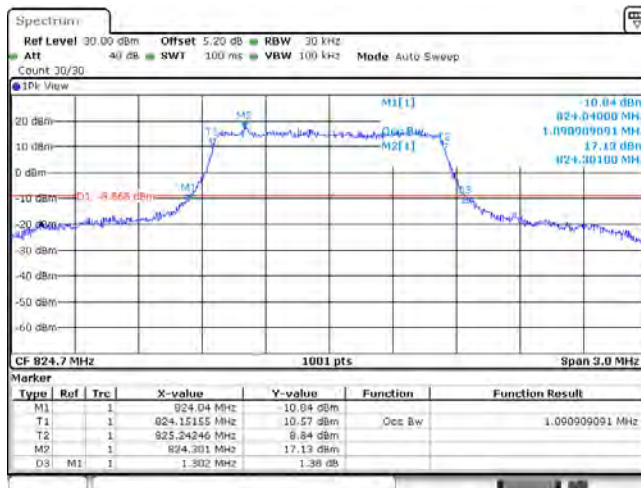
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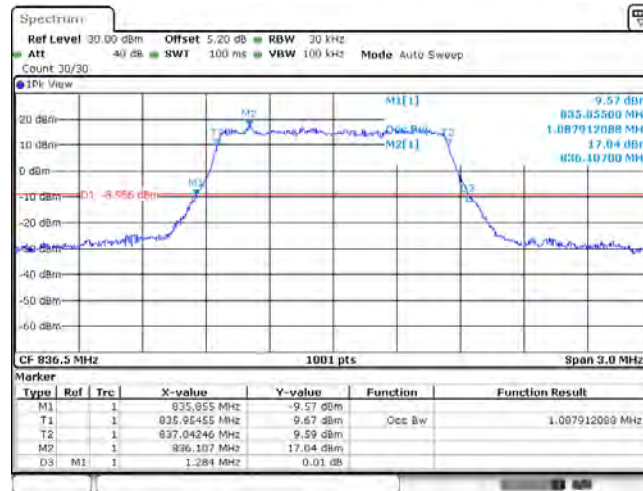
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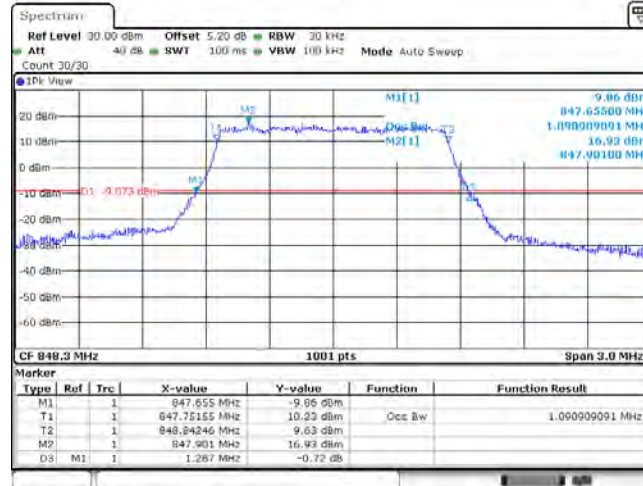
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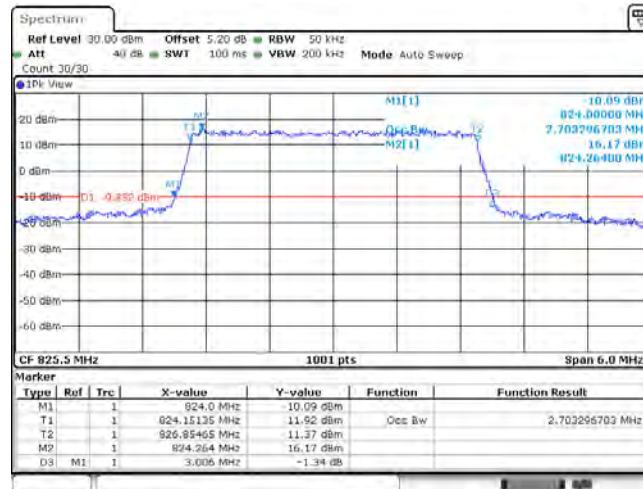
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Band5_3MHz_QPSK_20415_15RB#0



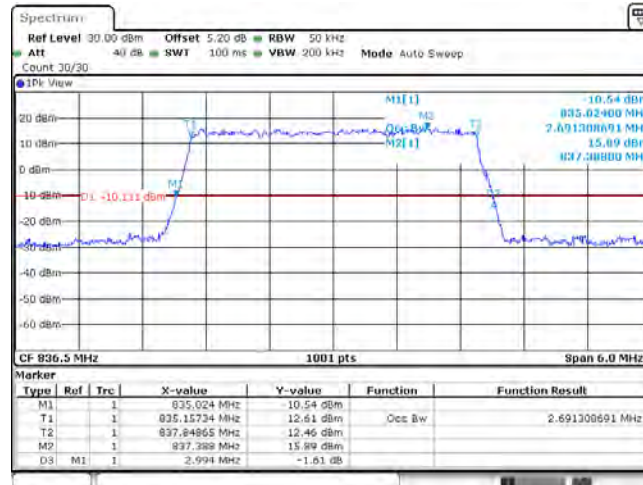
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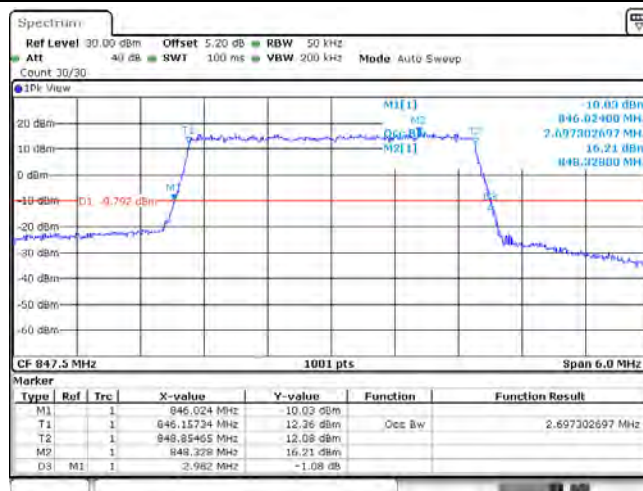
Band5_3MHz_QPSK_20525_15RB#0



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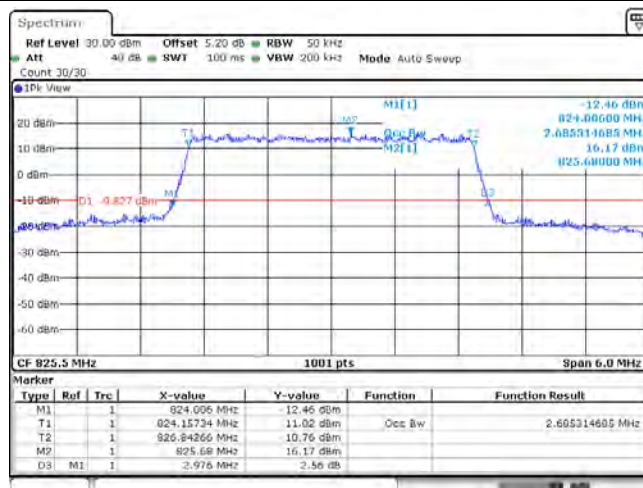
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Date: 6 JUL 2019 12:59:48

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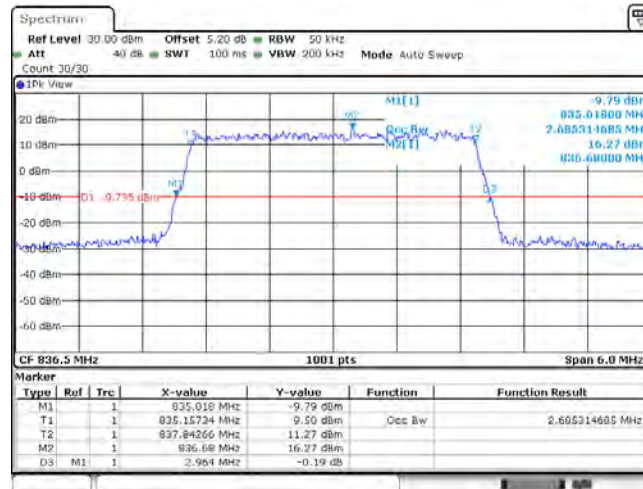
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Band5_3MHz_16QAM_20525_15RB#0



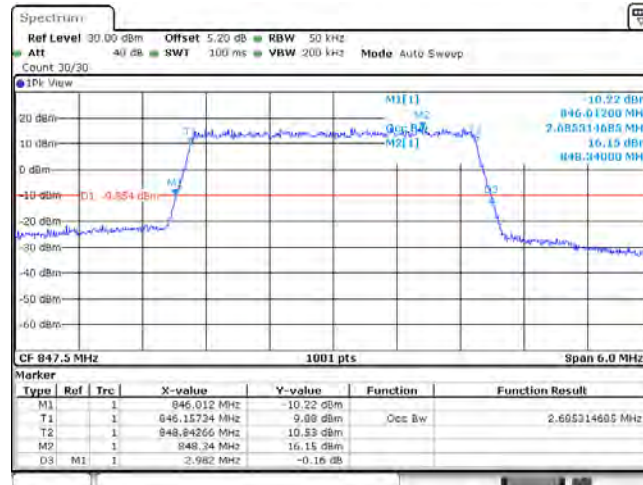
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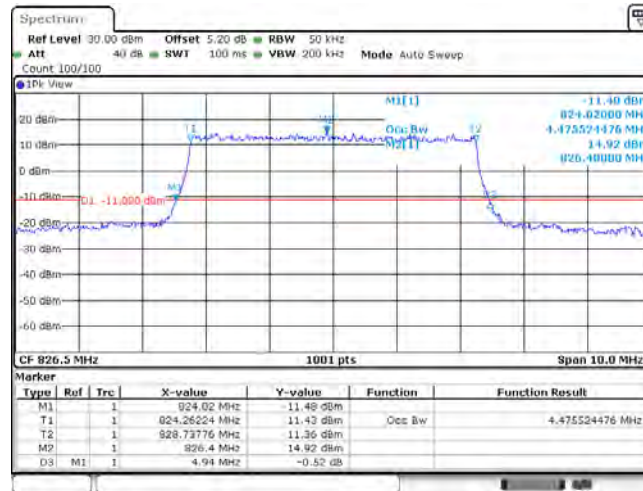
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Band5_5MHz_QPSK_20425_25RB#0



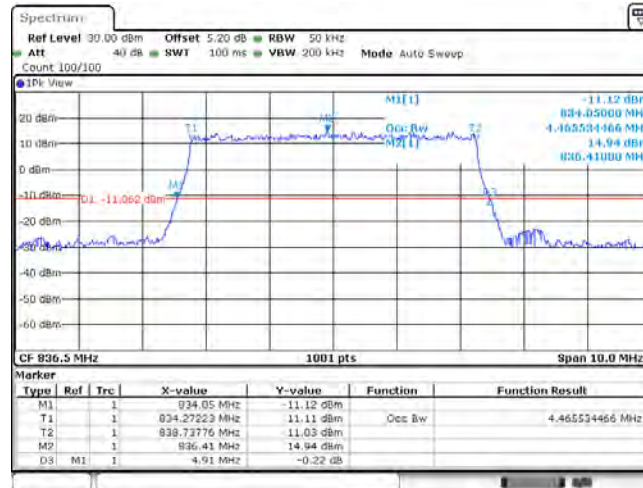
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Band5_5MHz_QPSK_20525_25RB#0



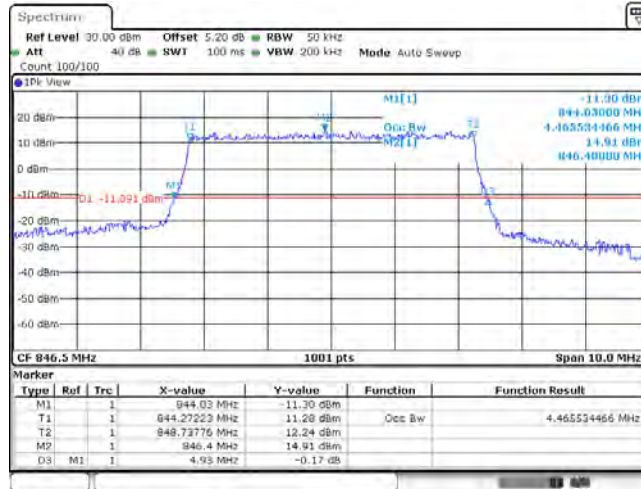
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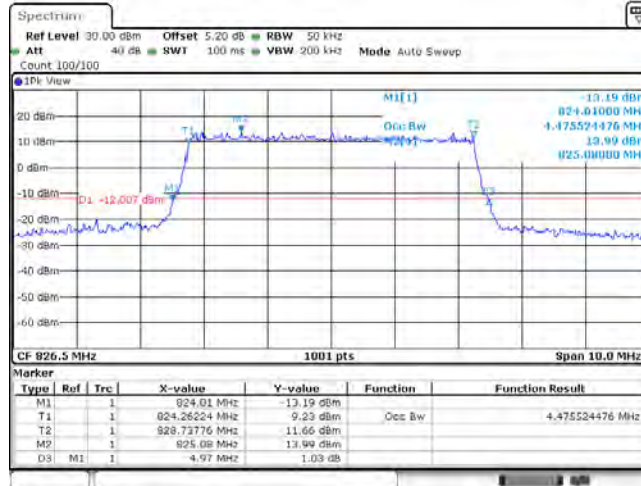
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Band5_5MHz_16QAM_20425_25RB#0



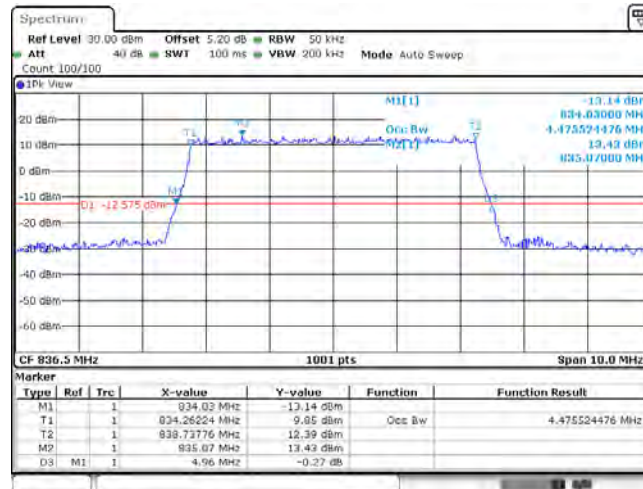
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Band5_5MHz_16QAM_20525_25RB#0



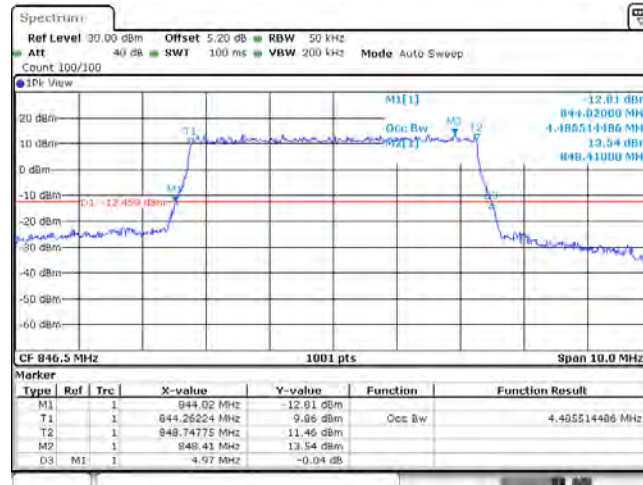
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Band5_5MHz_16QAM_20625_25RB#0



Date: 6 JUL 2019 12:12:26

Band5_10MHz_QPSK_20450_50RB#0



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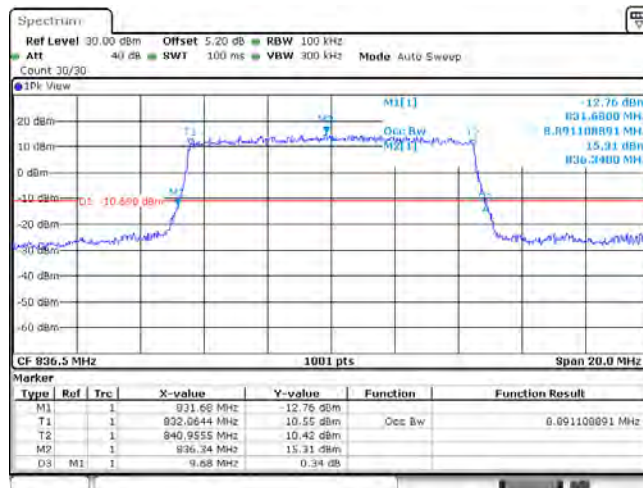
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Band5_10MHz_QPSK_20525_50RB#0



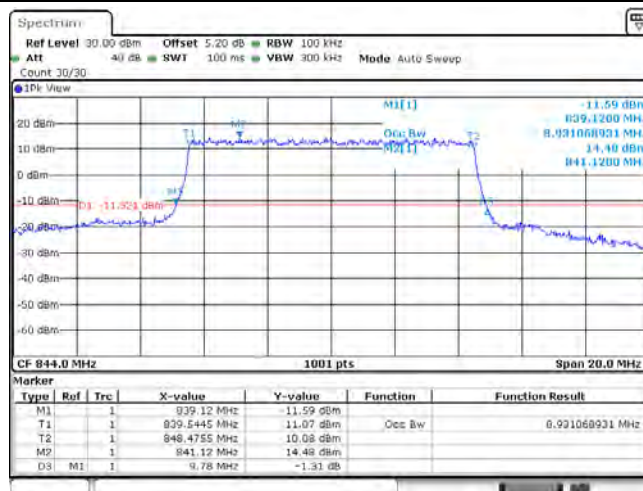
Date: 6 JUL 2019 12:13:18

Band5_10MHz_QPSK_20600_50RB#0



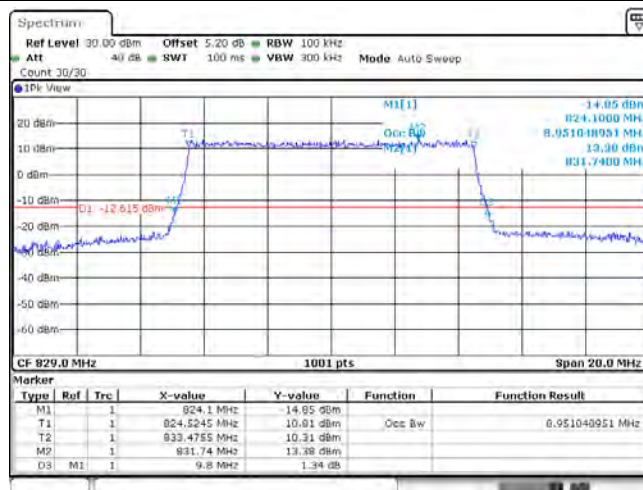
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Date: 6 JUL 2019 12:13:50

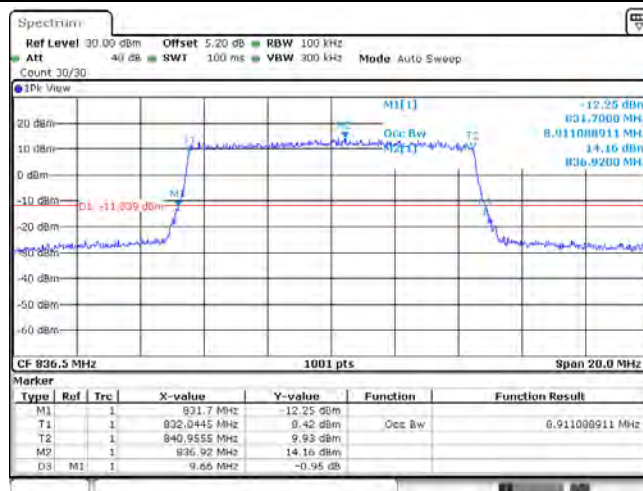
Band5_10MHz_16QAM_20450_50RB#0



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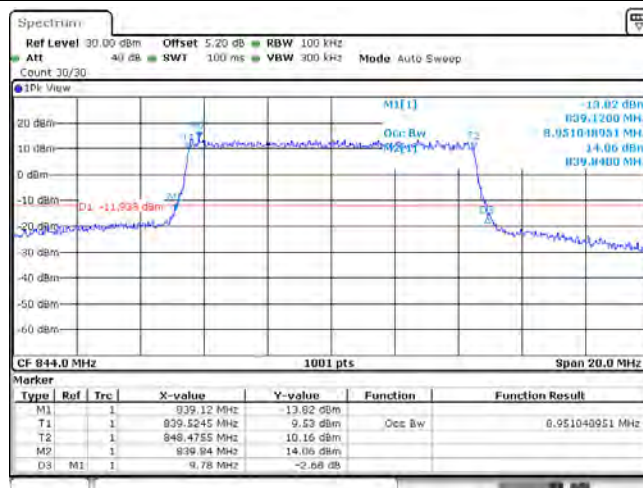
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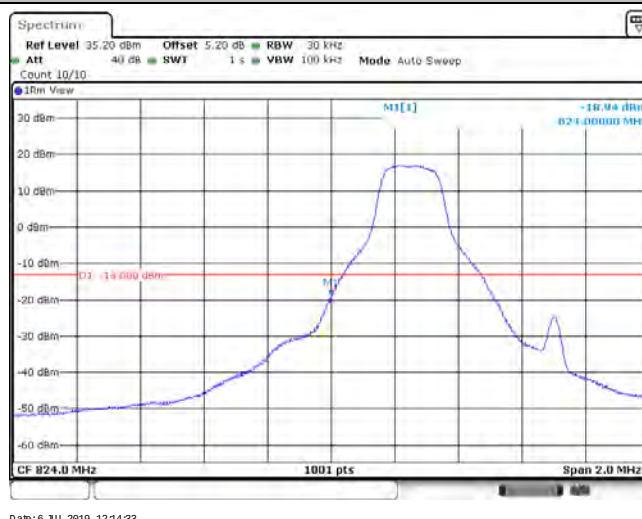
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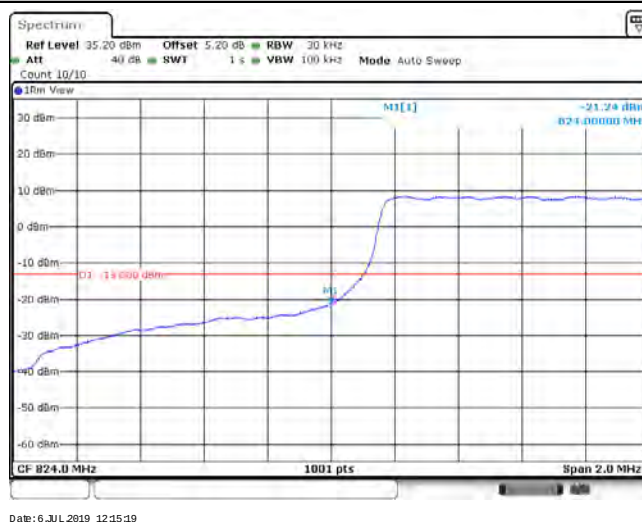
5. Band Edge Compliance

5.1. Test Plots

Band5_1.4MHz_QPSK_20407_1RB#0



Band5_1.4MHz_QPSK_20407_6RB#0



Band5_1.4MHz_QPSK_20643_1RB#5

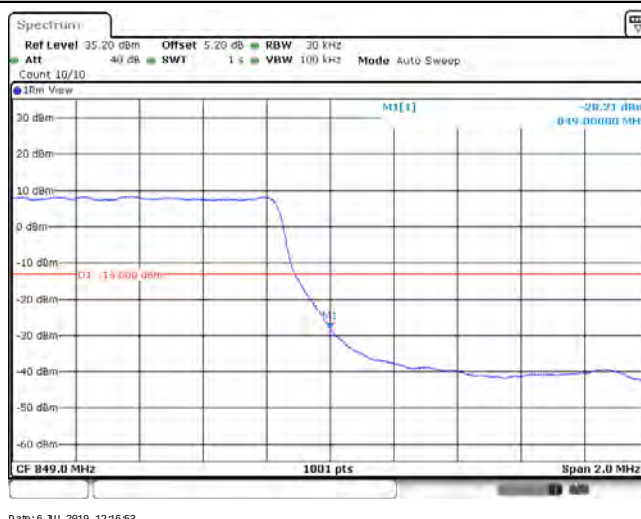


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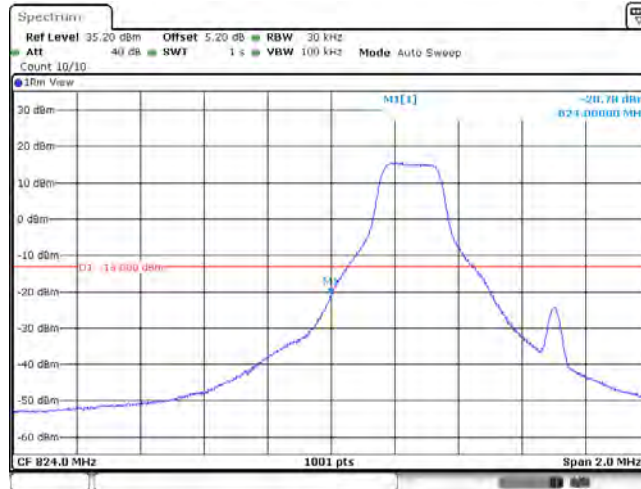


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Date: 6 JUL 2019 12:14:56

Band5_1.4MHz_16QAM_20407_6RB#0



Date: 6 JUL 2019 12:15:41

Band5_1.4MHz_16QAM_20643_1RB#5



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Band5_1.4MHz_16QAM_20643_6RB#0

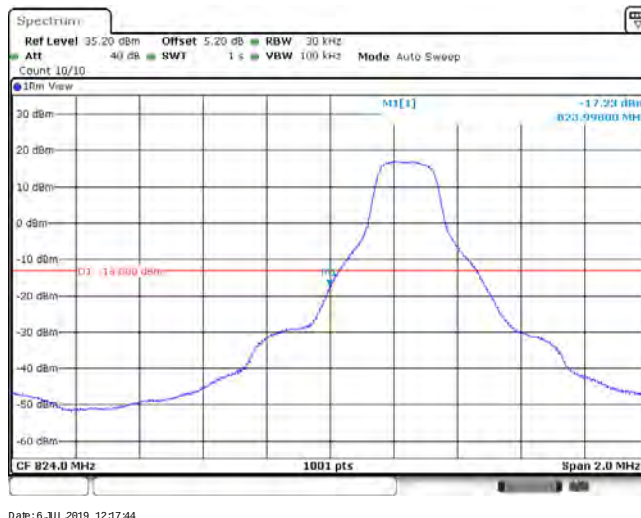


Band5_3MHz_QPSK_20415_1RB#0

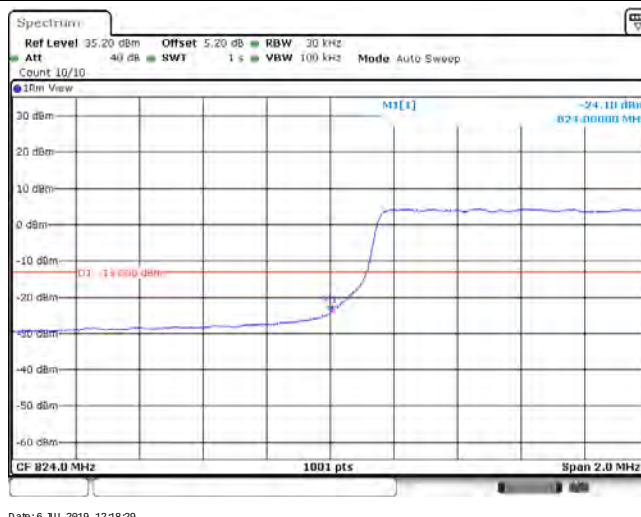


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Band5_3MHz_QPSK_20415_15RB#0

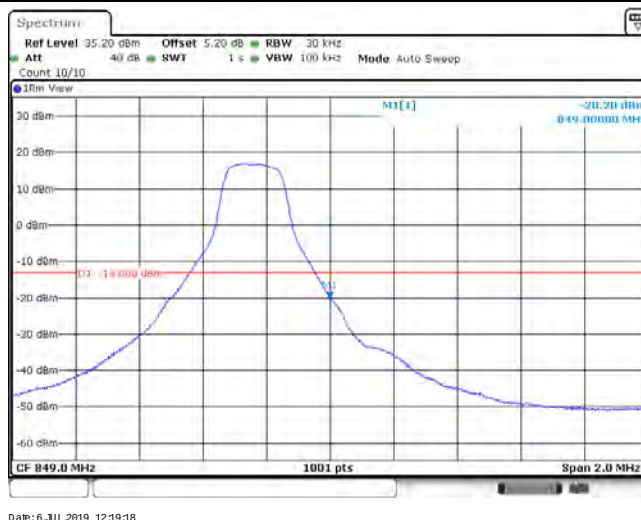


Band5_3MHz_QPSK_20635_1RB#14



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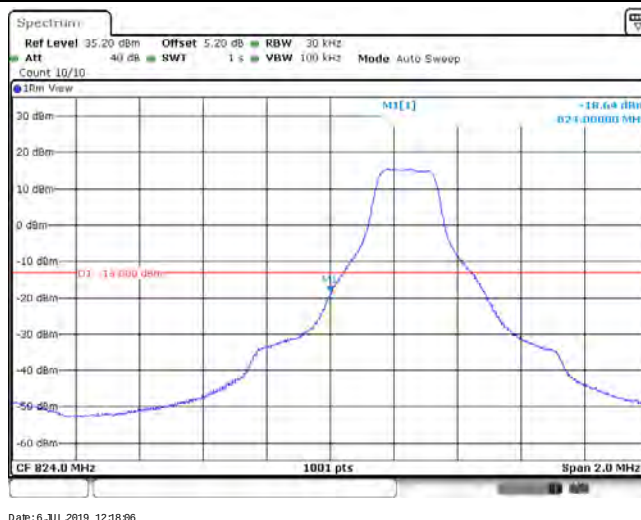


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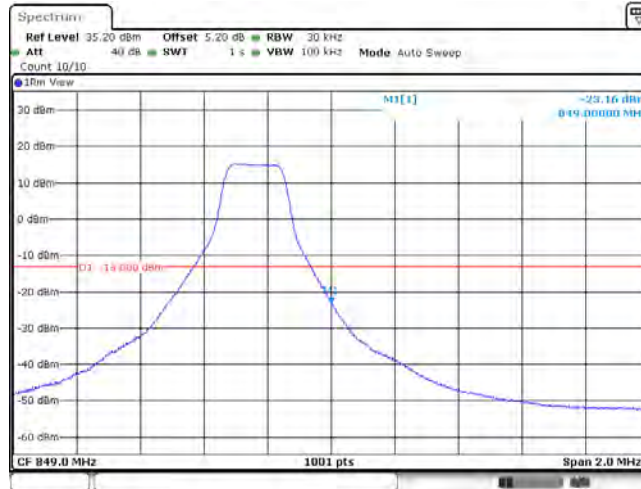


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Band5_3MHz_16QAM_20635_1RB#14





Date: 6 JUL 2019 12:19:41

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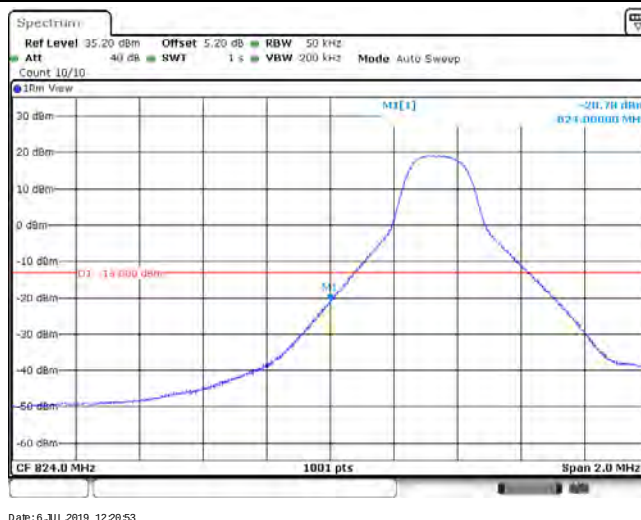
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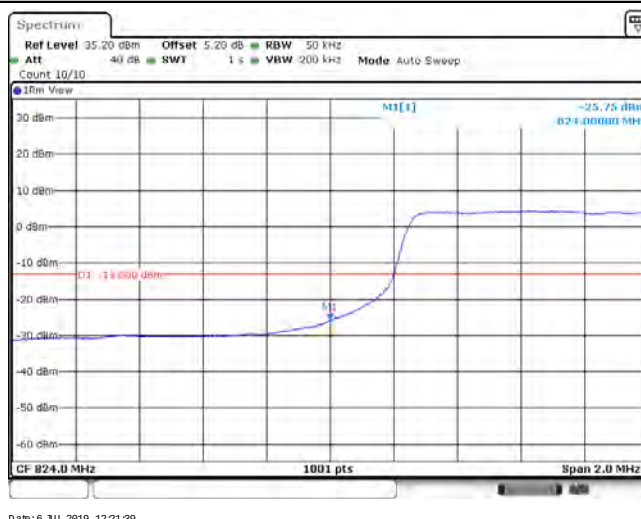


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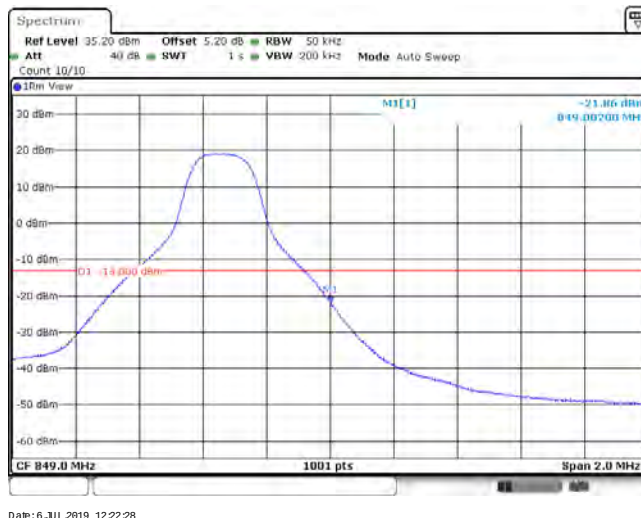


Band5_5MHz_QPSK_20425_25RB#0



Band5_5MHz_QPSK_20625_1RB#24





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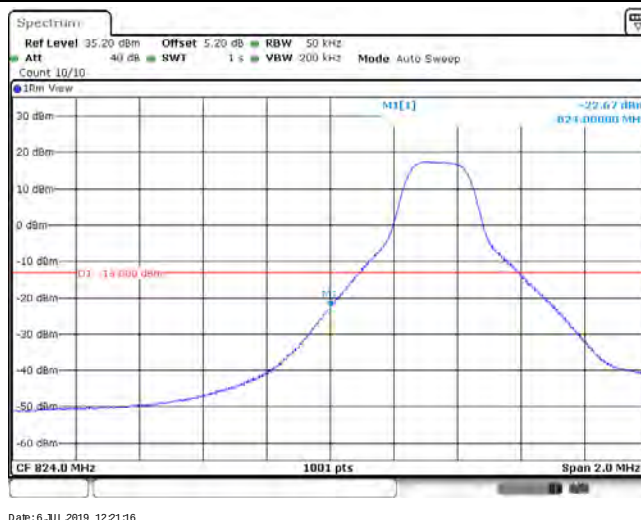


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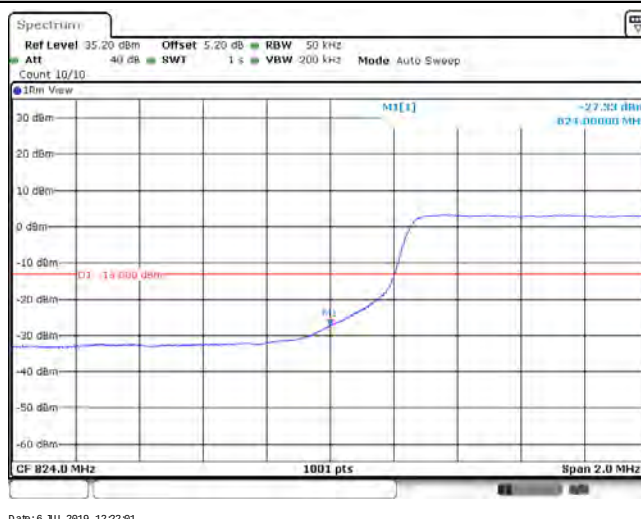


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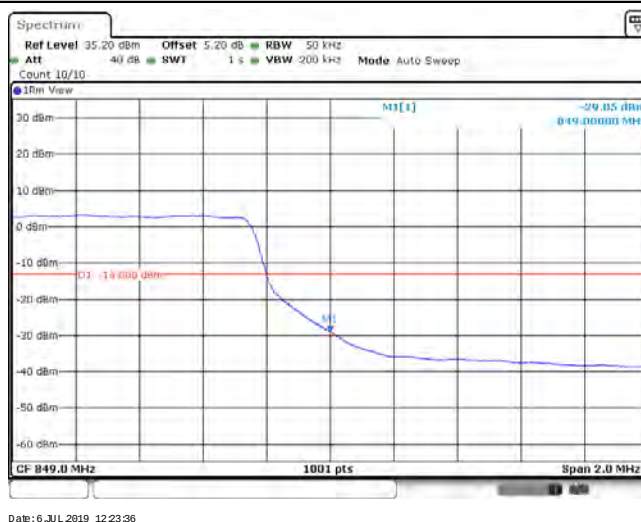


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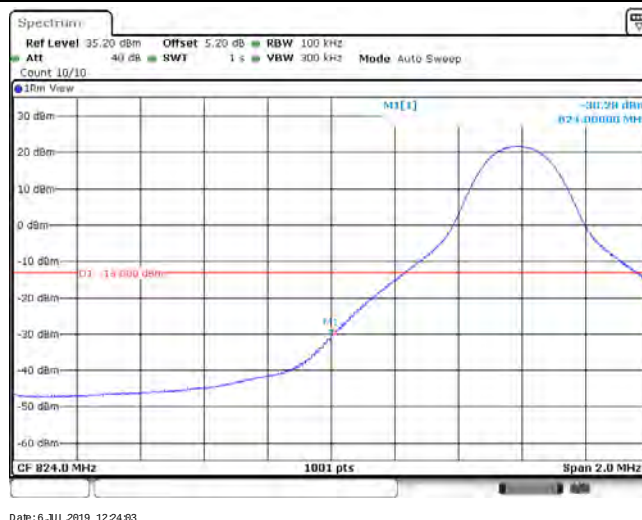


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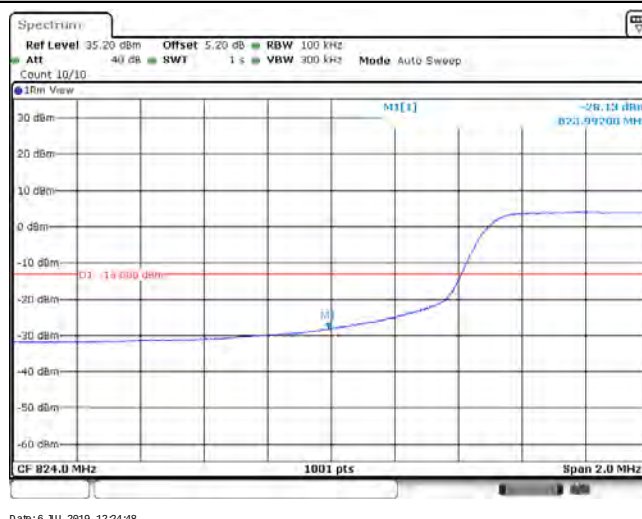


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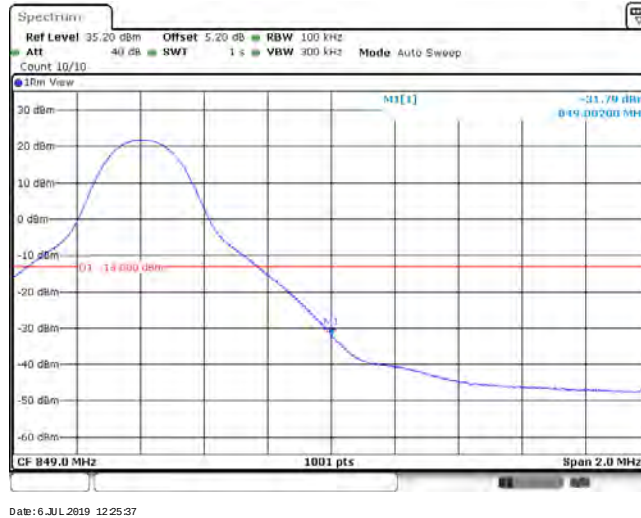


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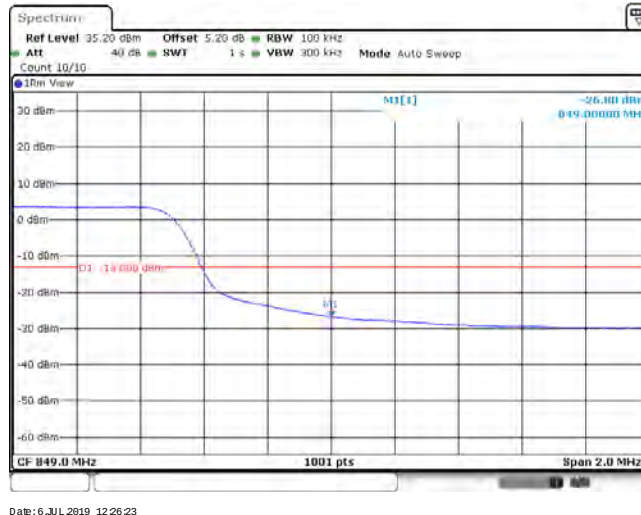
Band5_10MHz_QPSK_20600_1RB#49





Date: 6 JUL 2019 12:25:37

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Date: 6 JUL 2019 12:26:23

Band5_10MHz_16QAM_20450_1RB#0



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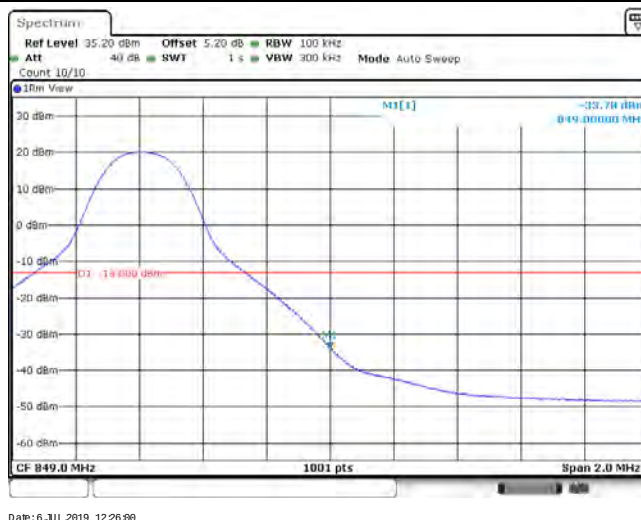


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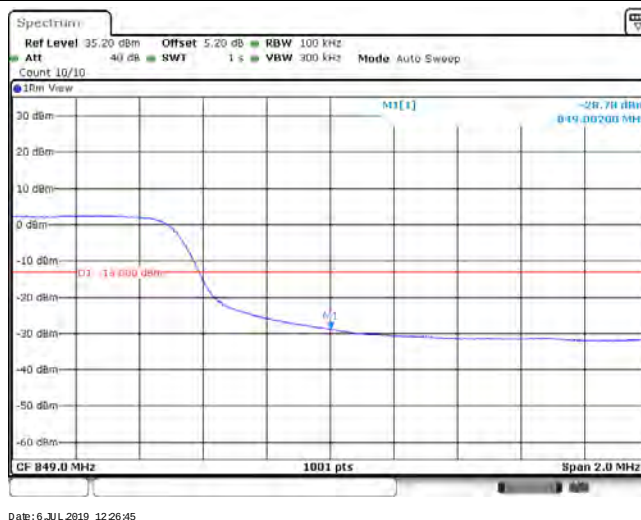


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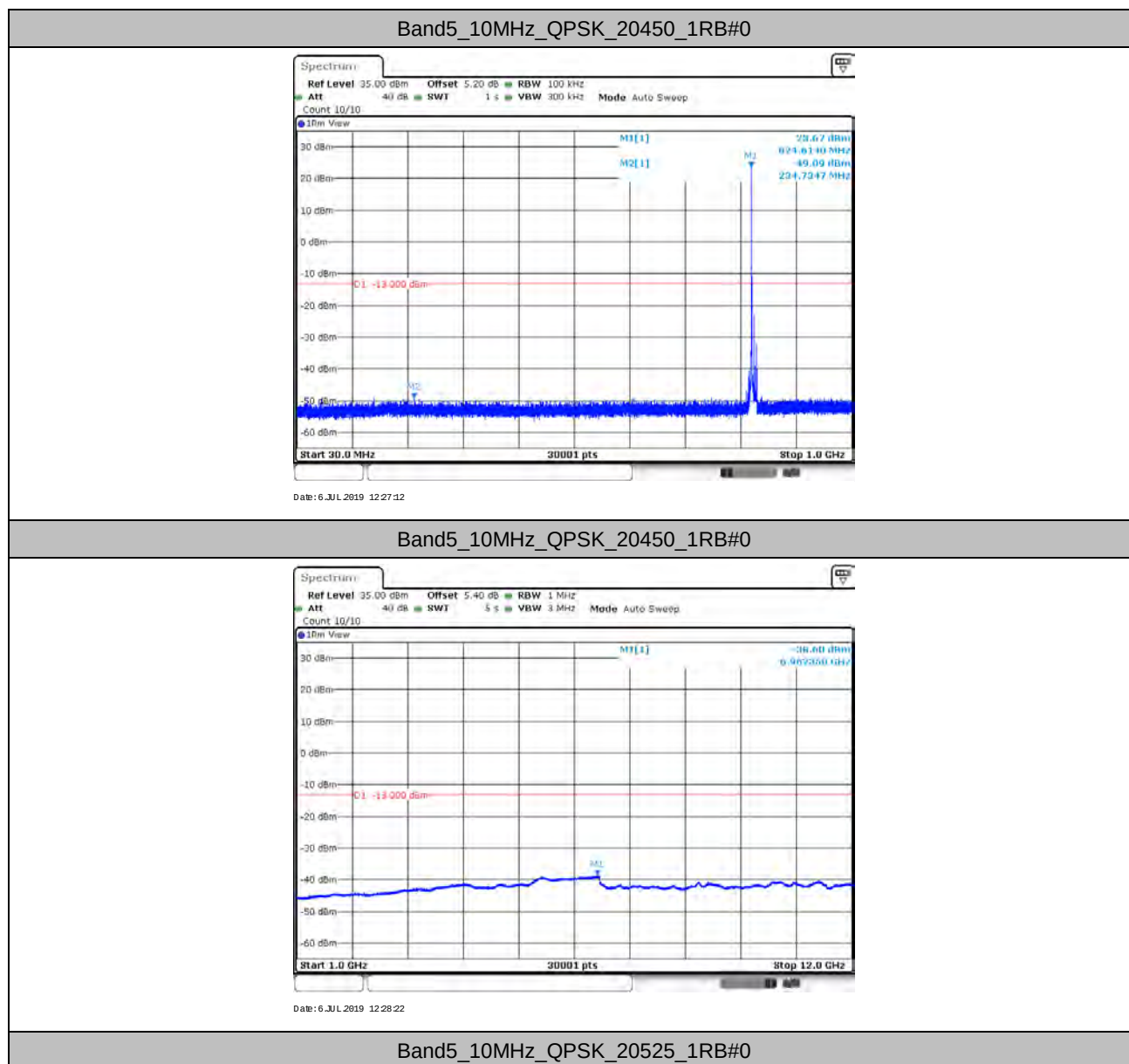
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6. Spurious Emission at Antenna Terminal

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.

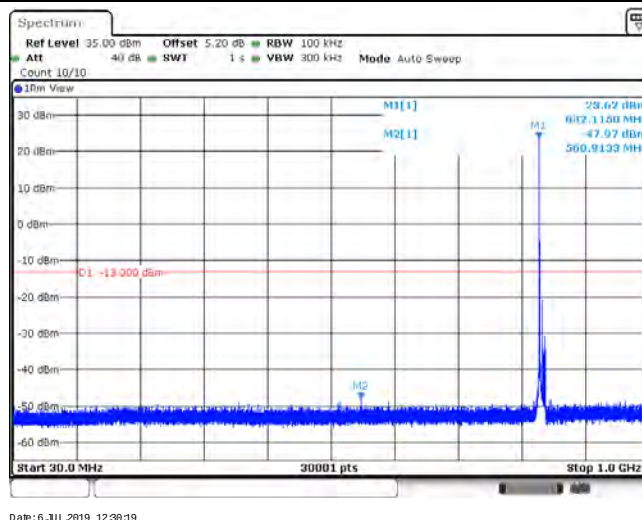
Remark2: only the worst case data displayed in this report.

6.1. Test Plots

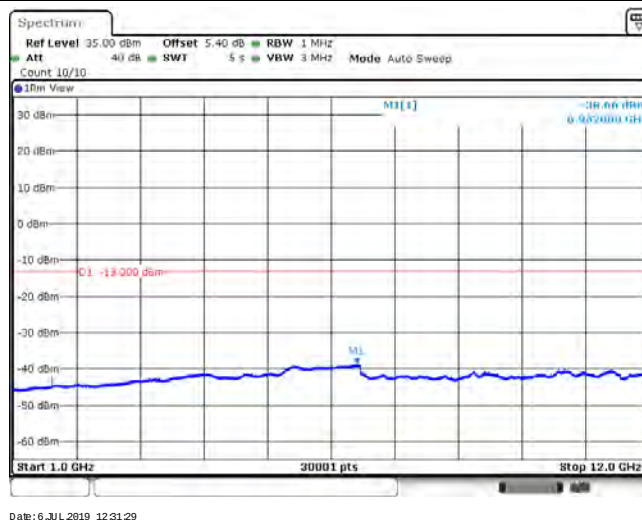


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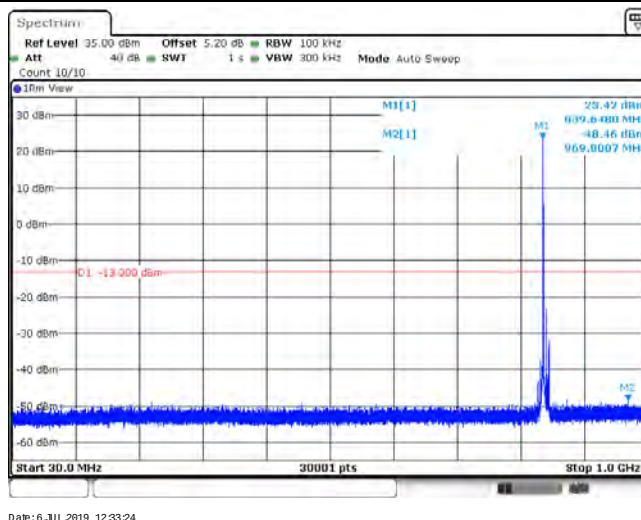


Band5_10MHz_QPSK_20525_1RB#0

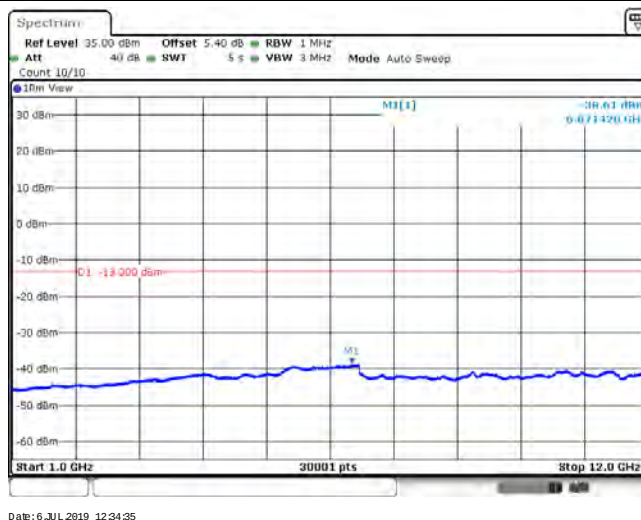


Band5_10MHz_QPSK_20600_1RB#0



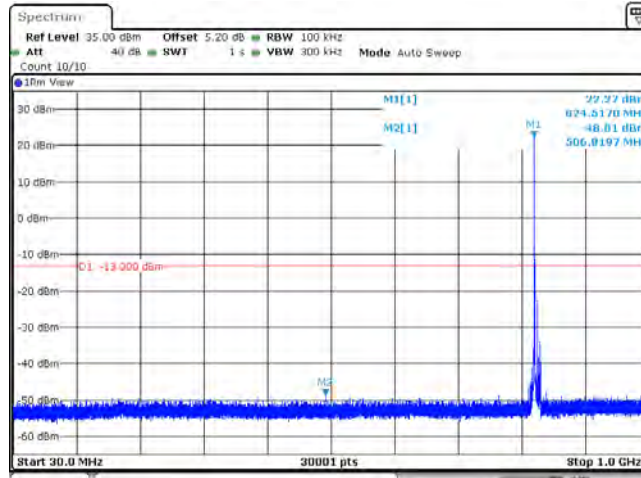


Band5_10MHz_QPSK_20600_1RB#0



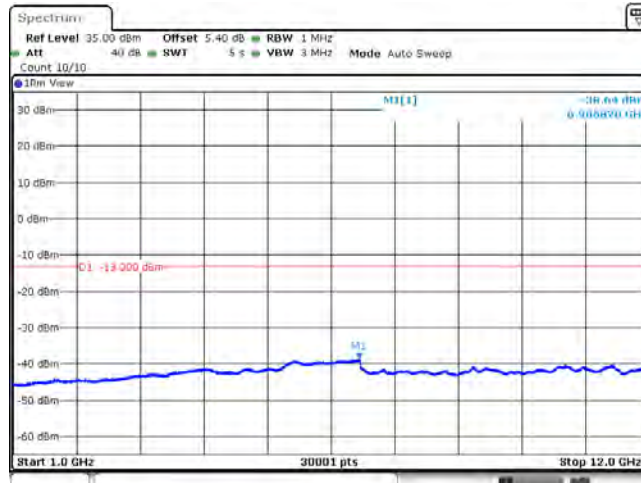
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Date: 6 JUL 2019 12:28:45

Band5_10MHz_16QAM_20450_1RB#0



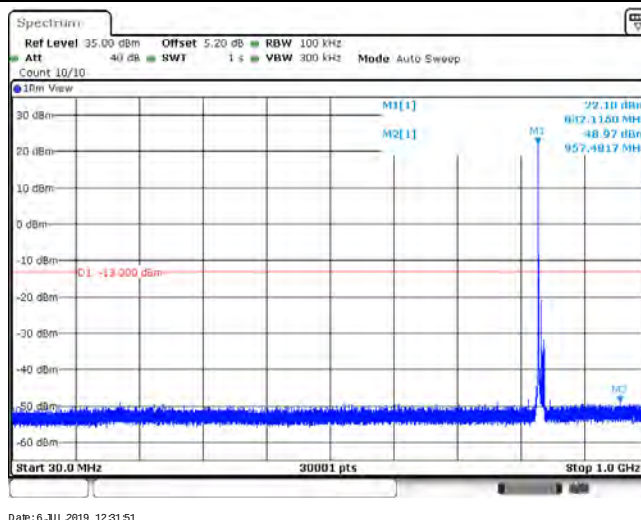
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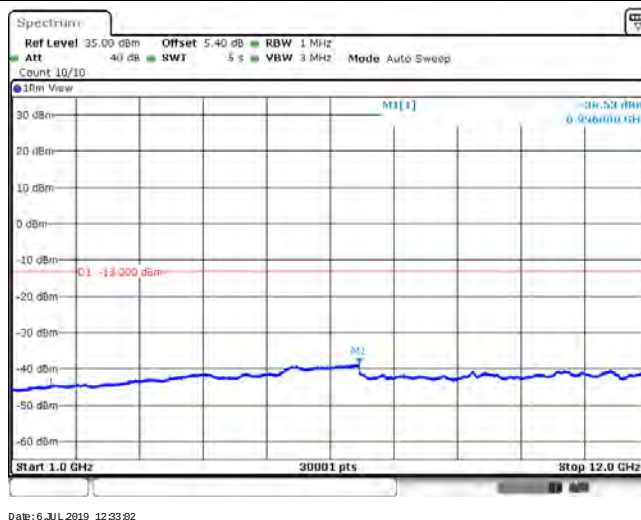


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Band5_10MHz_16QAM_20525_1RB#0

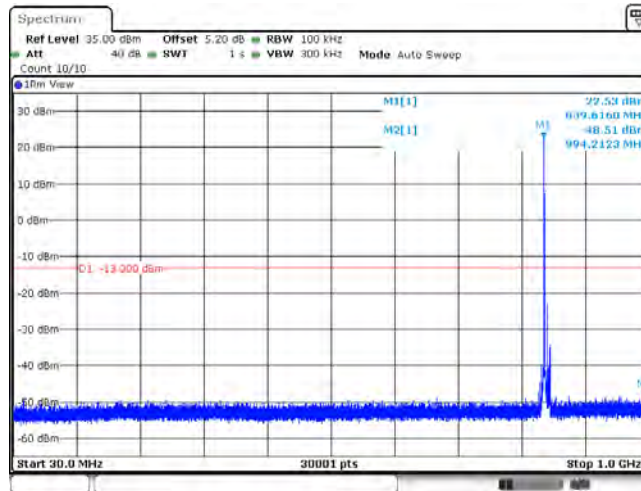


Band5_10MHz_16QAM_20600_1RB#0



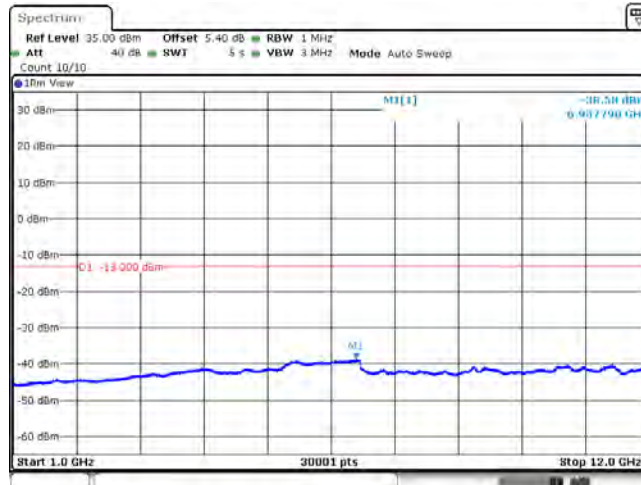
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Band5_10MHz_16QAM_20600_1RB#0



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7. Field Strength of Spurious Radiation

7.1. Test BAND = LTE Band 5

7.1.1. Test Mode = LTE/TM1 10MHz

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
31.6976	-68.59	-13.00	55.59	Vertical
112.4056	-63.39	-13.00	50.39	Vertical
587.2929	-61.09	-13.00	48.09	Vertical
2455.8912	-52.51	-13.00	39.51	Vertical
5672.8891	-55.62	-13.00	42.62	Vertical
8880.3960	-51.16	-13.00	38.16	Vertical
42.7561	-62.51	-13.00	49.51	Horizontal
231.1396	-64.62	-13.00	51.62	Horizontal
644.0407	-60.87	-13.00	47.87	Horizontal
1648.9298	-59.50	-13.00	46.50	Horizontal
2456.2913	-50.12	-13.00	37.12	Horizontal
8775.5925	-51.52	-13.00	38.52	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
31.9886	-68.44	-13.00	55.44	Vertical
108.7194	-62.40	-13.00	49.40	Vertical
601.4556	-60.97	-13.00	47.97	Vertical
1664.1328	-60.49	-13.00	47.49	Vertical
2456.2913	-52.44	-13.00	39.44	Vertical
8589.7863	-50.88	-13.00	37.88	Vertical
39.4095	-62.08	-13.00	49.08	Horizontal
238.3664	-65.71	-13.00	52.71	Horizontal
622.5541	-61.14	-13.00	48.14	Horizontal
1664.1328	-53.82	-13.00	40.82	Horizontal
2457.8916	-51.07	-13.00	38.07	Horizontal
8822.7941	-51.51	-13.00	38.51	Horizontal





7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
32.0371	-67.48	-13.00	54.48	Vertical
106.8278	-63.12	-13.00	50.12	Vertical
589.4270	-61.66	-13.00	48.66	Vertical
2457.8916	-55.08	-13.00	42.08	Vertical
7294.3431	-53.50	-13.00	40.50	Vertical
8847.1949	-51.01	-13.00	38.01	Vertical
44.4537	-62.40	-13.00	49.40	Horizontal
232.6431	-65.41	-13.00	52.41	Horizontal
592.9676	-60.91	-13.00	47.91	Horizontal
1500.1000	-64.36	-13.00	51.36	Horizontal
2456.2913	-53.07	-13.00	40.07	Horizontal
8804.9935	-51.37	-13.00	38.37	Horizontal

Remark:

The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data had been displayed.

We have tested all modulation and all Bandwidth , but only the worst case data presented in this report.



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8. Frequency Stability

8.1. 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	-0.20	-0.000241	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	-0.60	-0.000724	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	-1.10	-0.001327	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-0.60	-0.000717	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-1.70	-0.002032	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-0.60	-0.000717	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	0.10	0.000118	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	-0.10	-0.000118	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	-1.20	-0.001422	±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	-2.20	-0.002654	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VH	NT	-0.70	-0.000844	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VL	NT	-0.30	-0.000359	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VN	NT	-1.30	-0.001554	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VH	NT	-0.30	-0.000359	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VL	NT	-0.60	-0.000711	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VN	NT	0.20	0.000237	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VH	NT	0.70	0.000829	±2.5	PASS

8.2. 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	-0.60	-0.000724	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-20	0.00	0.000000	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	0	-0.10	-0.000121	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	-0.40	-0.000483	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	-0.70	-0.000844	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-1.20	-0.001448	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	-0.60	-0.000724	±2.5	PASS



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Band5	10MHz	QPSK	20450	50RB#0	NV	50	-0.90	-0.001086	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	-0.40	-0.000478	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	-0.80	-0.000956	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-1.30	-0.001554	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-1.90	-0.002271	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	-1.40	-0.001674	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-0.60	-0.000717	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	0.10	0.000120	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	-0.40	-0.000478	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-30	-0.90	-0.001066	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	0.40	0.000474	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	0	-0.30	-0.000355	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	10	-0.90	-0.001066	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	20	-0.10	-0.000118	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	30	-2.30	-0.002725	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	-0.60	-0.000711	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	50	0.10	0.000118	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-30	-0.80	-0.000965	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-20	0.30	0.000362	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	0	-0.20	-0.000241	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	10	-0.80	-0.000965	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	20	-0.30	-0.000362	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	30	-1.20	-0.001448	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	40	-0.30	-0.000362	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	50	0.50	0.000603	±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	-0.70	-0.000837	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	0	-1.40	-0.001674	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	10	-1.80	-0.002152	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	20	0.70	0.000837	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	30	0.70	0.000837	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	40	-1.40	-0.001674	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	50	-0.90	-0.001076	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-30	0.60	0.000711	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-20	-0.40	-0.000474	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	0	-0.30	-0.000355	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	10	0.40	0.000474	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	20	-0.60	-0.000711	±2.5	PASS



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Band5	10MHz	16QAM	20600	50RB#0	NV	30	-2.10	-0.002488	± 2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	40	0.00	0.000000	± 2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	50	-1.00	-0.001185	± 2.5	PASS

The End

