



Appendix B

E-UTRA Band 5



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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	23.44	18.25	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	23.56	18.37	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	23.34	18.15	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	23.48	18.29	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	23.54	18.35	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	23.61	18.42	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	22.56	17.37	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	23.45	18.26	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	23.51	18.32	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.48	18.29	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	23.49	18.3	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	23.56	18.37	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	23.53	18.34	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.58	17.39	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.45	18.26	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	23.58	18.39	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	23.57	18.38	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	23.57	18.38	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	23.78	18.59	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	23.67	18.48	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.80	17.61	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	22.55	17.36	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	22.44	17.25	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	22.66	17.47	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	22.48	17.29	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	22.39	17.2	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	22.51	17.32	38.45	PASS



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Band5	1.4MHz	16QAM	20407	6RB#0	21.72	16.53	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	22.62	17.43	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	22.68	17.49	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	22.66	17.47	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	22.43	17.24	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	22.69	17.5	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	22.44	17.25	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	21.63	16.44	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	22.41	17.22	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	23.05	17.86	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	22.50	17.31	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	22.42	17.23	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	22.71	17.52	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	22.61	17.42	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.71	16.52	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	23.52	18.33	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	23.76	18.57	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.60	18.41	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#4	22.50	17.31	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#0	22.40	17.21	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#7	22.60	17.41	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.42	17.23	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	23.44	18.25	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	23.74	18.55	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.49	18.3	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#7	22.48	17.29	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#0	22.52	17.33	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#4	22.44	17.25	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	22.47	17.28	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	23.52	18.33	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.85	18.66	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	23.63	18.44	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#7	22.53	17.34	38.45	PASS



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Band5	3MHz	QPSK	20635	8RB#0	22.66	17.47	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#4	22.59	17.4	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	22.65	17.46	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	22.57	17.38	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	22.82	17.63	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	22.95	17.76	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#4	21.72	16.53	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#0	21.57	16.38	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#7	21.52	16.33	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	21.48	16.29	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	22.67	17.48	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	22.66	17.47	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	22.51	17.32	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#0	21.68	16.49	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#7	21.64	16.45	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#4	21.78	16.59	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.53	16.34	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	22.96	17.77	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	22.50	17.31	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	22.81	17.62	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#0	21.72	16.53	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#4	21.68	16.49	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#7	21.54	16.35	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	21.58	16.39	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	23.28	18.09	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#12	23.43	18.24	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.41	18.22	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#13	22.54	17.35	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#6	22.49	17.3	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#0	22.61	17.42	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	22.55	17.36	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	23.38	18.19	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	23.50	18.31	38.45	PASS



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Band5	5MHz	QPSK	20525	1RB#24	23.39	18.2	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#0	22.51	17.32	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#6	22.57	17.38	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#13	22.46	17.27	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.60	17.41	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	23.54	18.35	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.57	18.38	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	23.48	18.29	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#0	22.52	17.33	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#6	22.56	17.37	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#13	22.57	17.38	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	22.58	17.39	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.40	17.21	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	22.82	17.63	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	22.97	17.78	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#0	21.53	16.34	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#13	21.51	16.32	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#6	21.63	16.44	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	21.50	16.31	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	22.66	17.47	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	22.72	17.53	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	22.46	17.27	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#0	21.43	16.24	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#6	21.64	16.45	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#13	21.53	16.34	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.50	16.31	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	22.99	17.8	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.64	17.45	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	22.67	17.48	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#0	21.60	16.41	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#6	21.77	16.58	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#13	21.56	16.37	38.45	PASS
Band5	5MHz	16QAM	20625	25RB#0	21.66	16.47	38.45	PASS



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Band5	10MHz	QPSK	20450	1RB#0	23.33	18.14	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.71	18.52	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.57	18.38	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#12	22.51	17.32	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#0	22.65	17.46	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#25	22.61	17.42	38.45	PASS
Band5	10MHz	QPSK	20450	50RB#0	22.64	17.45	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	23.44	18.25	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	23.67	18.48	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.58	18.39	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#0	22.55	17.36	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#12	22.59	17.4	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#25	22.66	17.47	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.60	17.41	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	23.45	18.26	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	23.60	18.41	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	23.53	18.34	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#12	22.62	17.43	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#0	22.59	17.4	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#25	22.70	17.51	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	22.67	17.48	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	22.89	17.7	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	22.86	17.67	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	23.01	17.82	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#0	21.63	16.44	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#12	21.62	16.43	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#25	21.60	16.41	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.71	16.52	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	22.68	17.49	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	23.07	17.88	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	22.69	17.5	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#0	21.66	16.47	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#12	21.68	16.49	38.45	PASS



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Band5	10MHz	16QAM	20525	25RB#25	21.57	16.38	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	21.67	16.48	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	22.97	17.78	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	23.16	17.97	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	22.85	17.66	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#25	21.70	16.51	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#12	21.70	16.51	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#0	21.61	16.42	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	21.62	16.43	38.45	PASS

Remark:

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

$$ERP [dBm] = \text{Conducted Power [dBm]} + \text{Gain [dBd]}$$

$$EIRP [dBm] = \text{Conducted Power [dBm]} + \text{Gain [dBi]}$$



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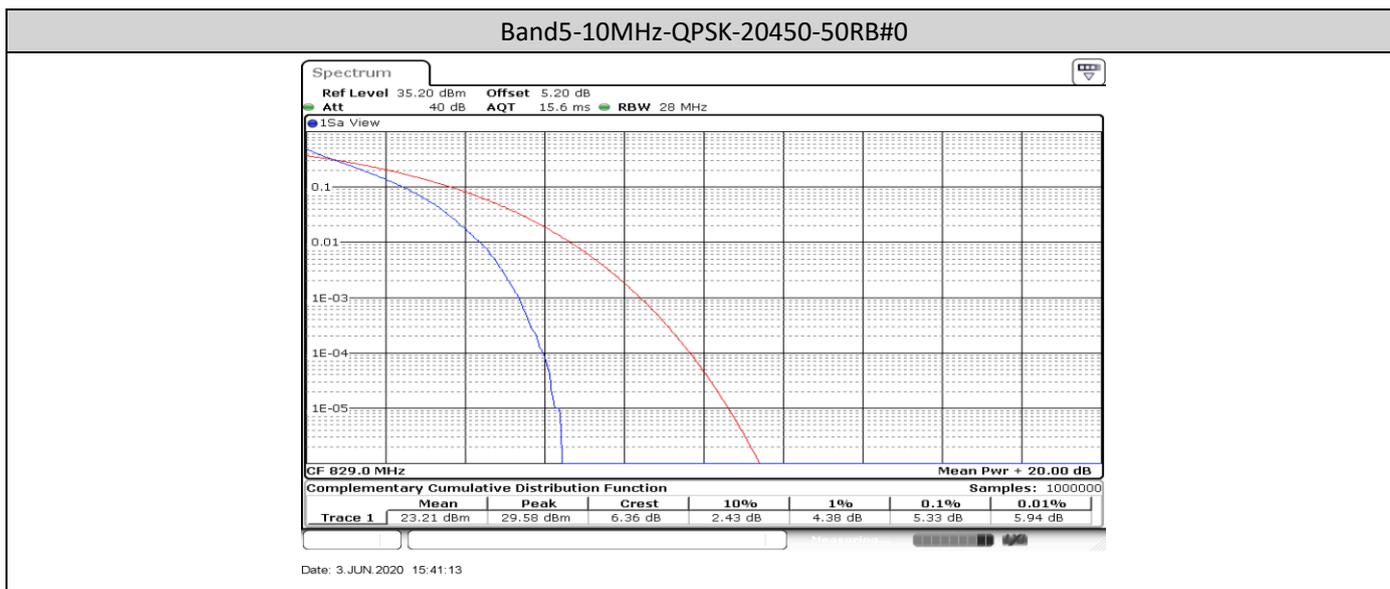


2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	5.33	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	5.33	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.30	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	6.09	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	6.00	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	6.00	13	PASS

2.2. Test Plots

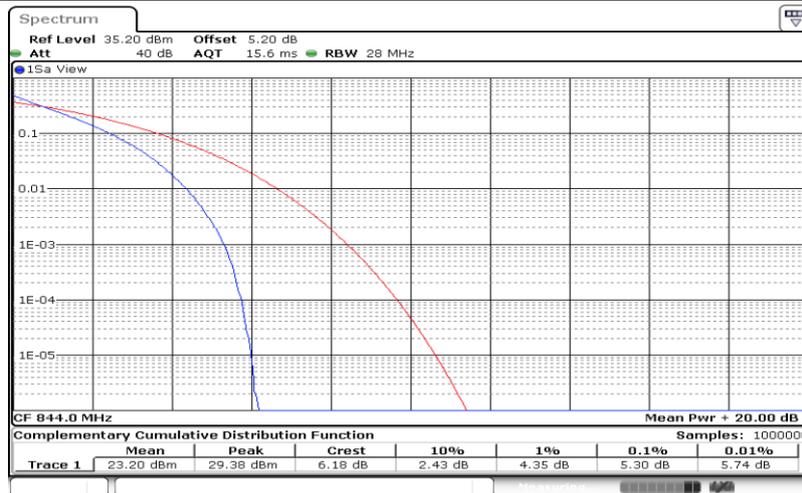


Band5-10MHz-QPSK-20525-50RB#0



Date: 3 JUN 2020 15:41:36

Band5-10MHz-QPSK-20600-50RB#0



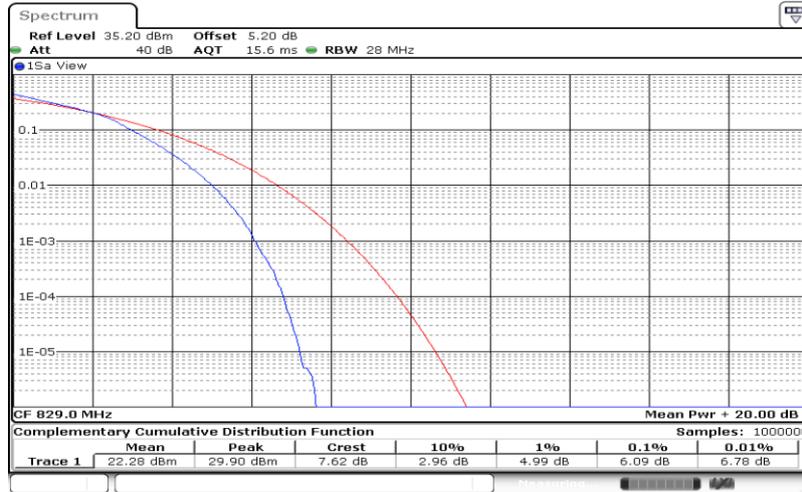
Date: 3 JUN 2020 15:41:59



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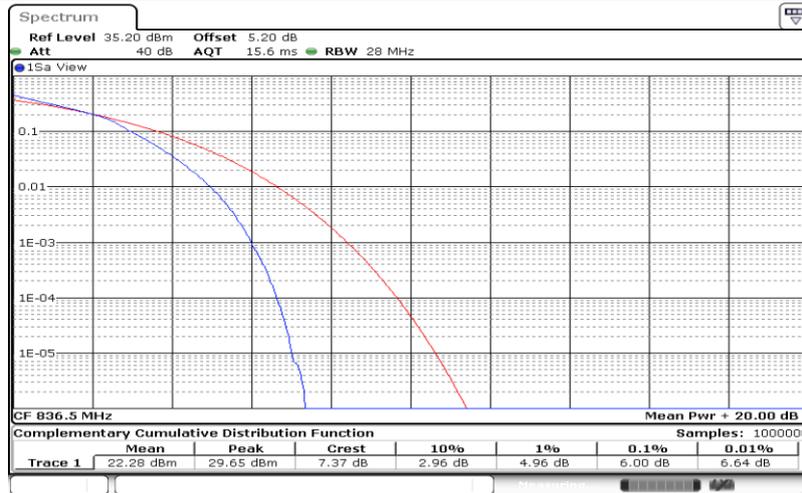


Band5-10MHz-16QAM-20450-50RB#0



Date: 3 JUN 2020 15:41:25

Band5-10MHz-16QAM-20525-50RB#0



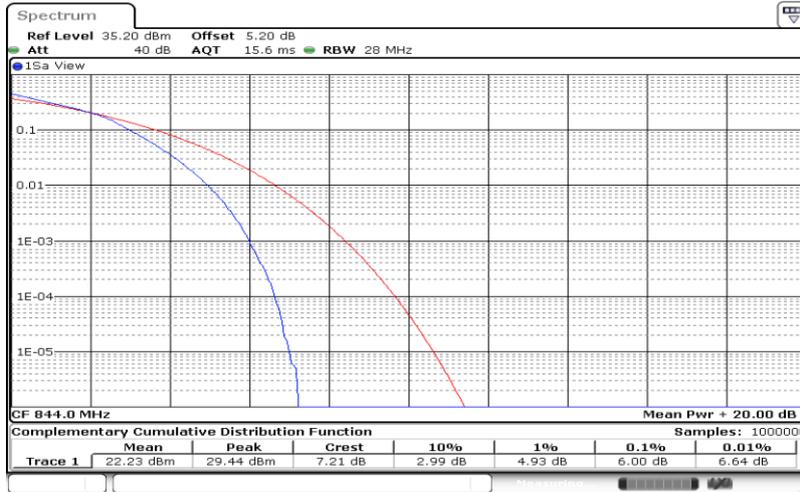
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Band5-10MHz-16QAM-20600-50RB#0



Date: 3 JUN 2020 15:42:11

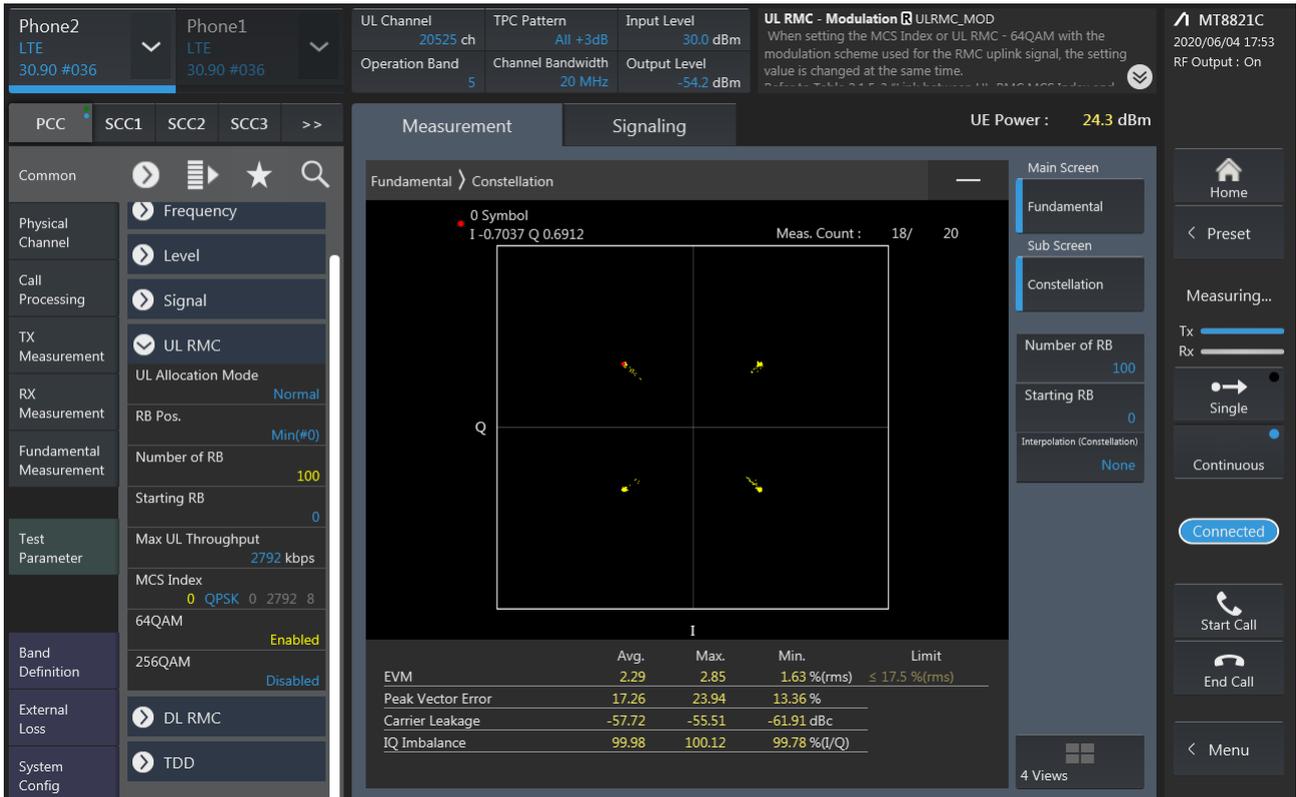


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3. Modulation Characteristics

3.1. Test Mode = LTE /TM1 10MHz

3.1.1. Test Channel = MCH



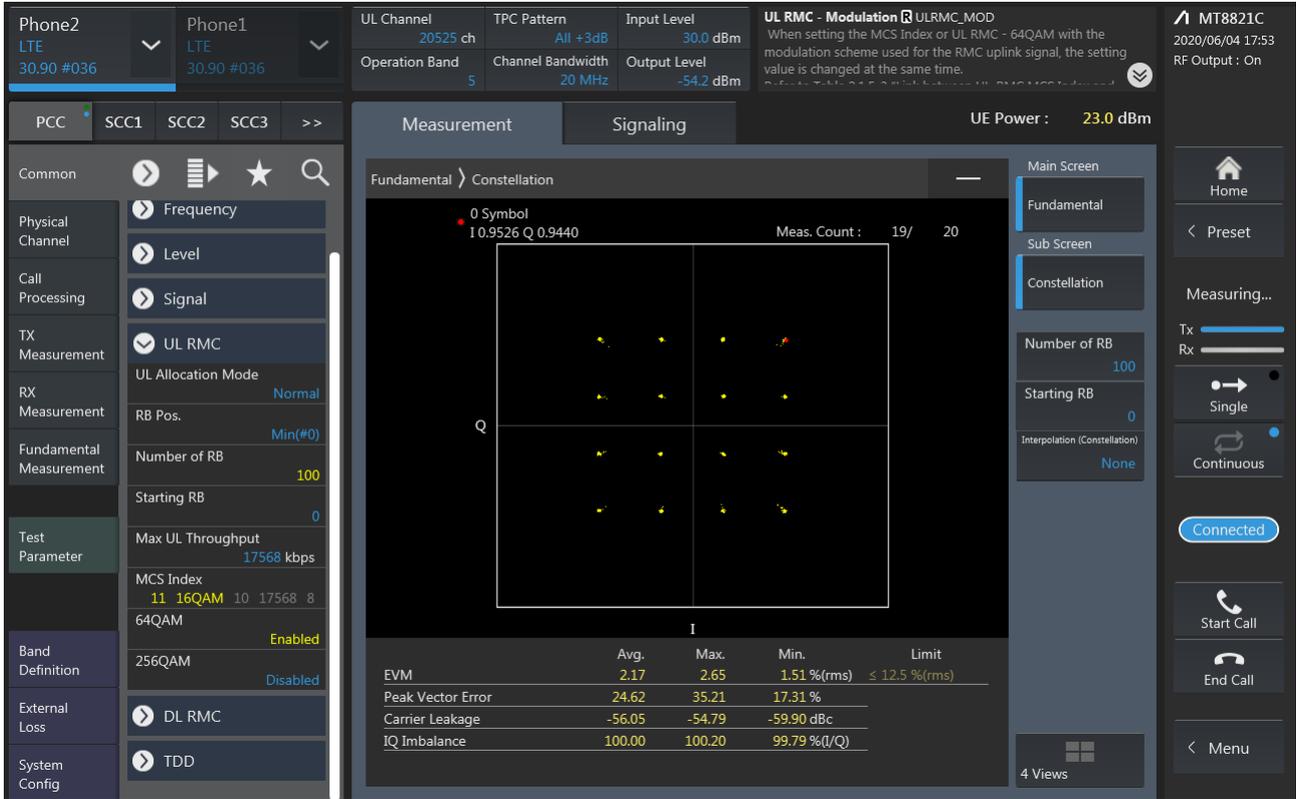
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3.2. Test Mode = LTE /TM2 10MHz

3.2.1. Test Channel = MCH



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4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

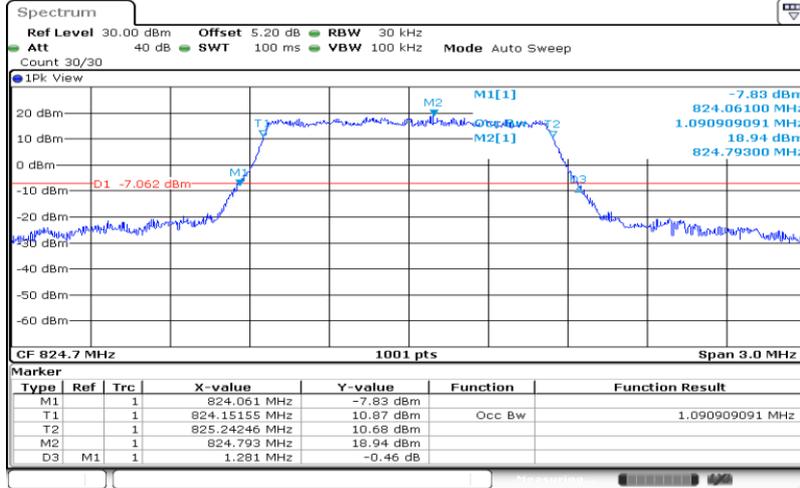
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.091	1.281	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.088	1.284	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.088	1.281	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.085	1.284	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.085	1.290	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.088	1.293	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.691	2.922	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.691	2.916	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.685	2.910	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.673	2.898	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.685	2.856	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.685	2.892	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.476	4.730	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.466	4.810	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.466	4.740	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.466	4.770	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.496	4.760	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.486	4.760	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.971	9.440	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.951	9.460	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.971	9.420	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.931	9.620	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.911	9.640	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.931	9.580	PASS



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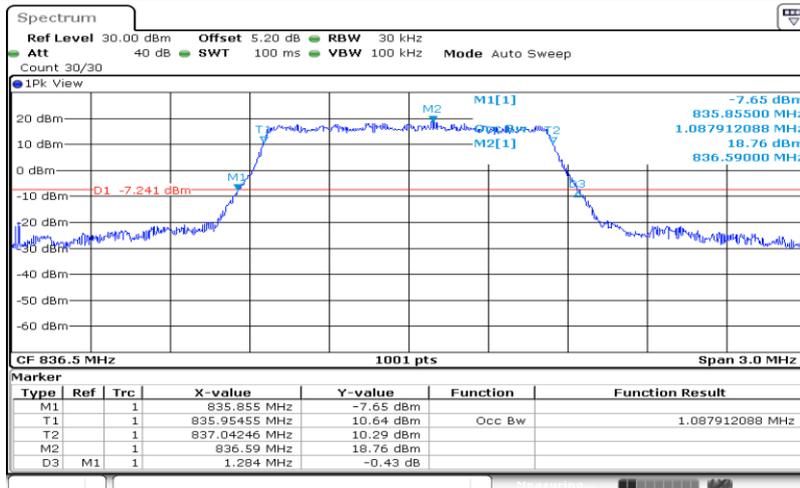
4.2. Test Plots

Band5-1.4MHz-QPSK-20407-6RB#0-1.091



Date: 3 JUN 2020 15:14:28

Band5-1.4MHz-QPSK-20525-6RB#0-1.088

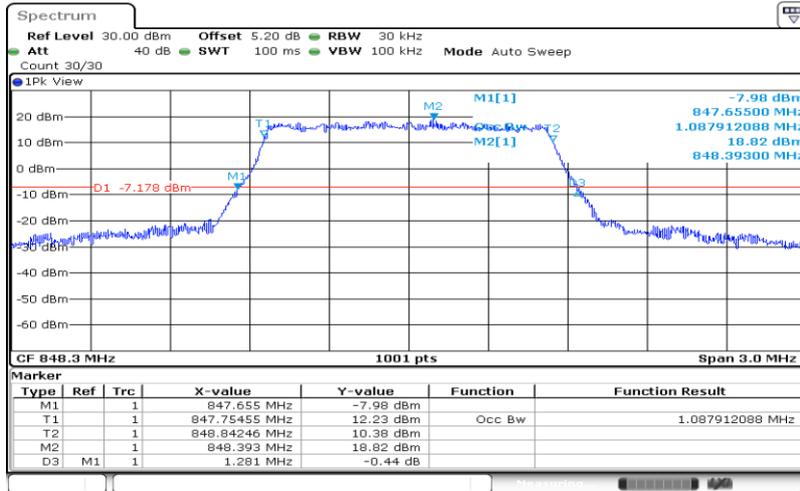


Date: 3 JUN 2020 15:14:54

Band5-1.4MHz-QPSK-20643-6RB#0-1.088

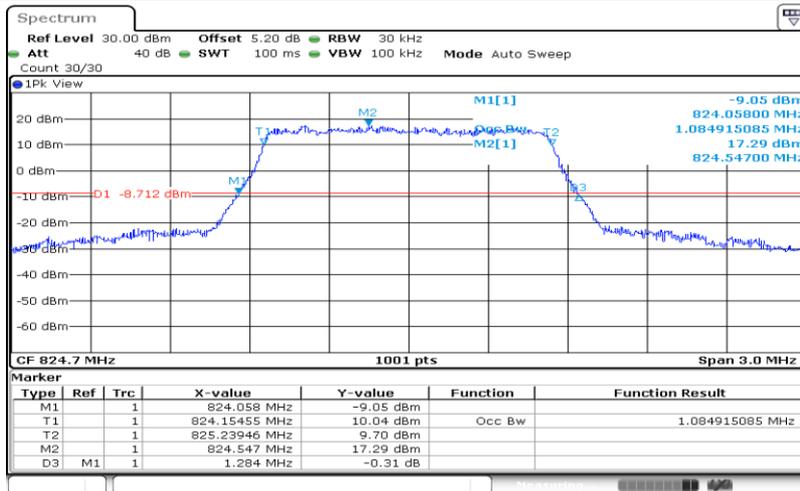


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Date: 3 JUN 2020 15:15:20

Band5-1.4MHz-16QAM-20407-6RB#0-1.085

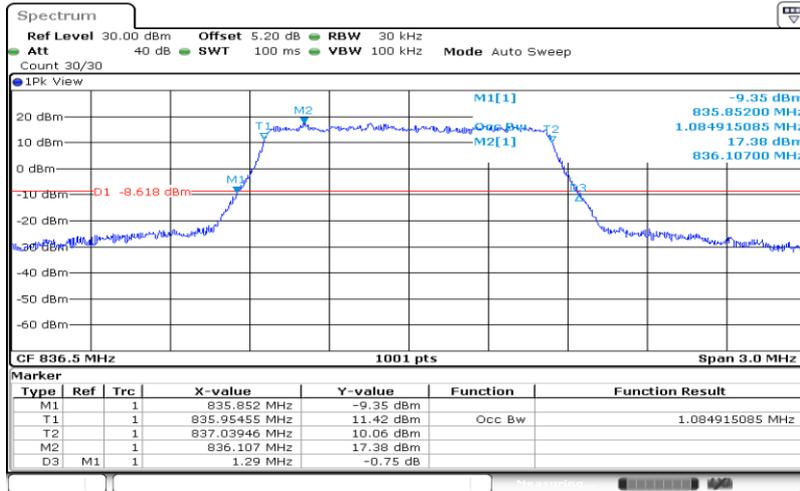


Date: 3 JUN 2020 15:14:41

Band5-1.4MHz-16QAM-20525-6RB#0-1.085

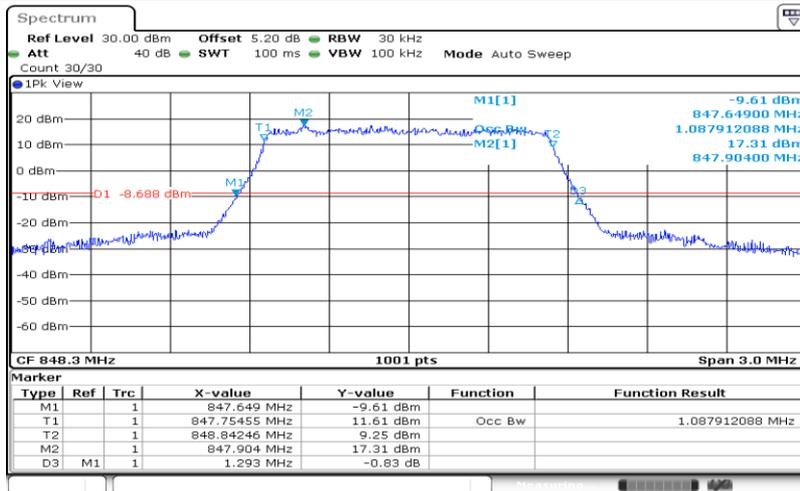


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Date: 3 JUN 2020 15:15:07

Band5-1.4MHz-16QAM-20643-6RB#0-1.088

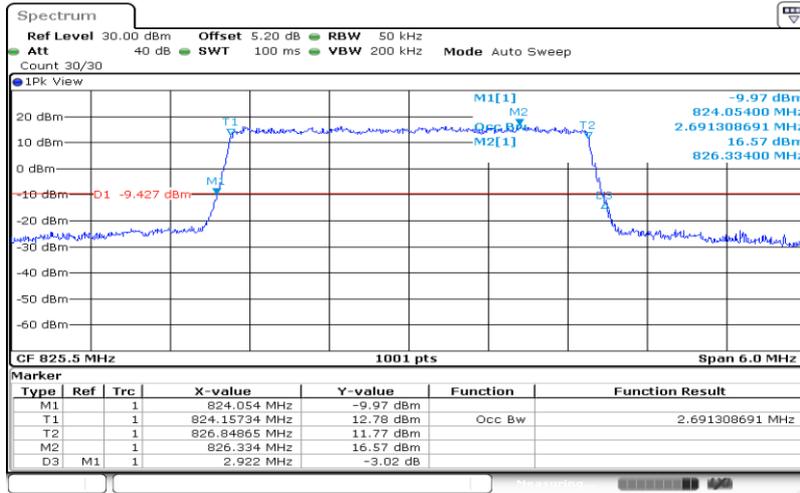


Date: 3 JUN 2020 15:15:33

Band5-3MHz-QPSK-20415-15RB#0-2.691

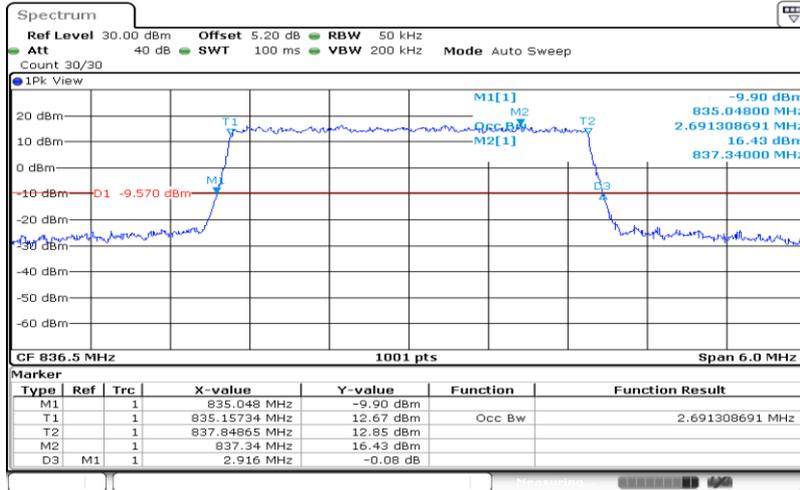


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Band5-3MHz-QPSK-20525-15RB#0-2.691

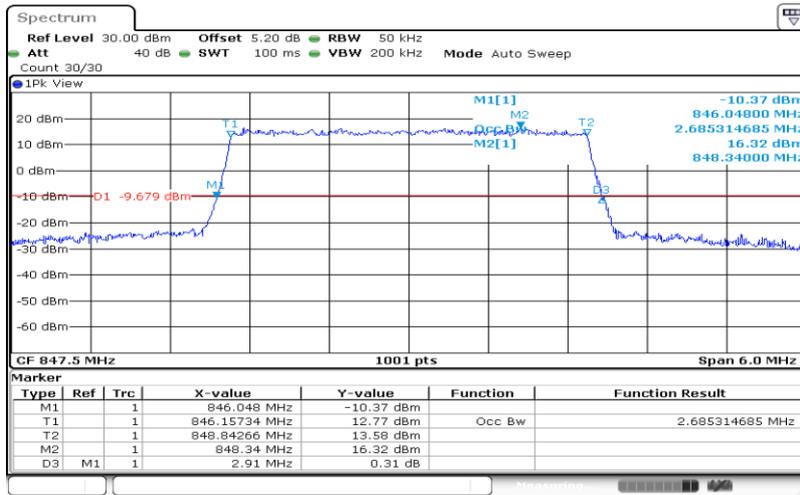


Date: 3 JUN 2020 15:16:18

Band5-3MHz-QPSK-20635-15RB#0-2.685

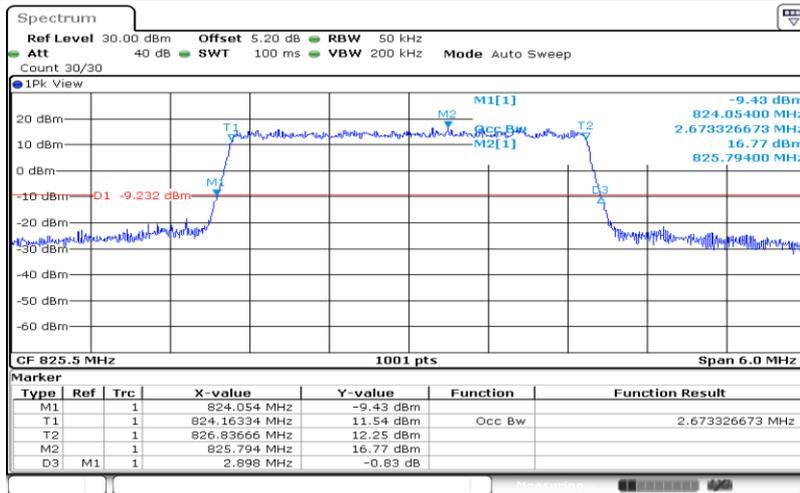


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Date: 3 JUN 2020 15:16:44

Band5-3MHz-16QAM-20415-15RB#0-2.673

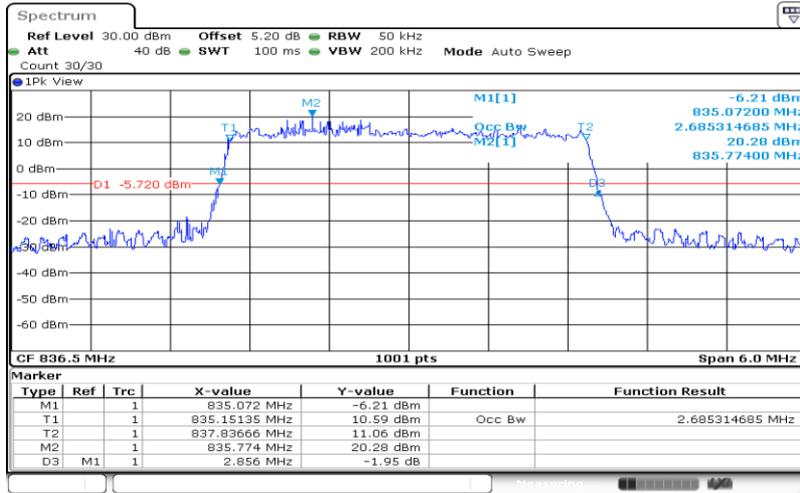


Date: 3 JUN 2020 15:16:05

Band5-3MHz-16QAM-20525-15RB#0-2.685

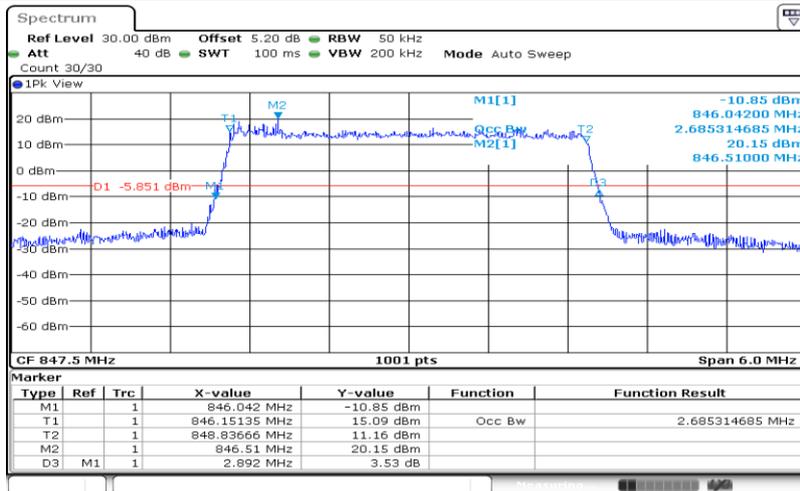


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Band5-3MHz-16QAM-20635-15RB#0-2.685

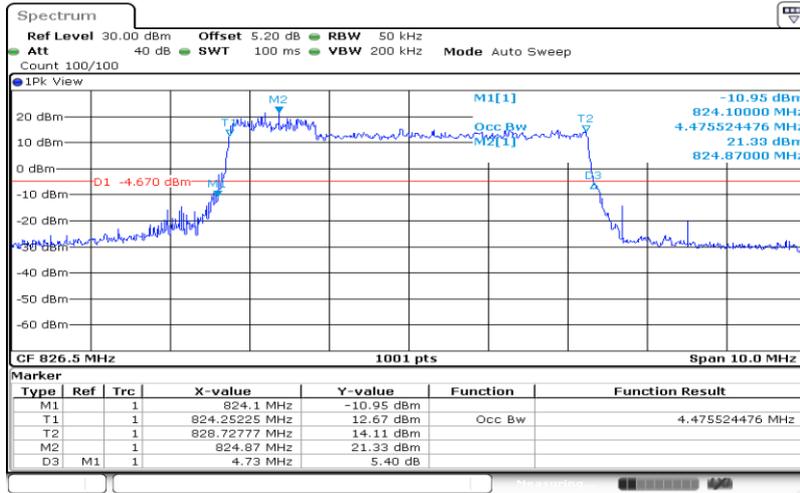


Date: 3 JUN 2020 15:16:57

Band5-5MHz-QPSK-20425-25RB#0-4.476

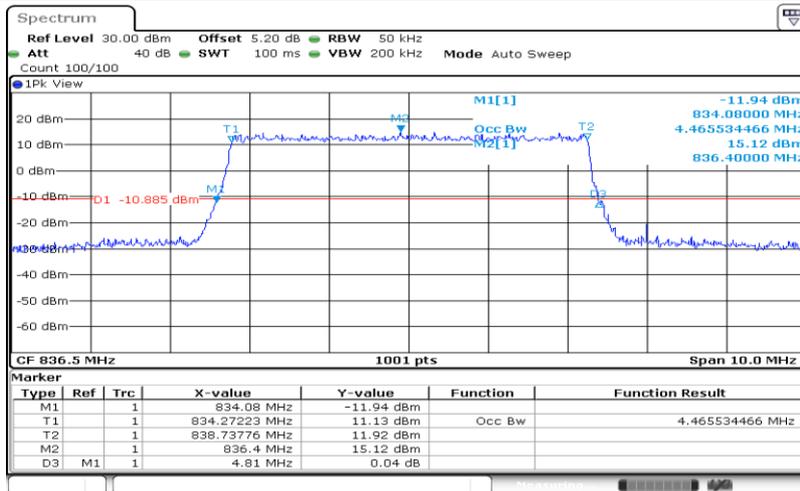


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Date: 3 JUN 2020 15:17:23

Band5-5MHz-QPSK-20525-25RB#0-4.466

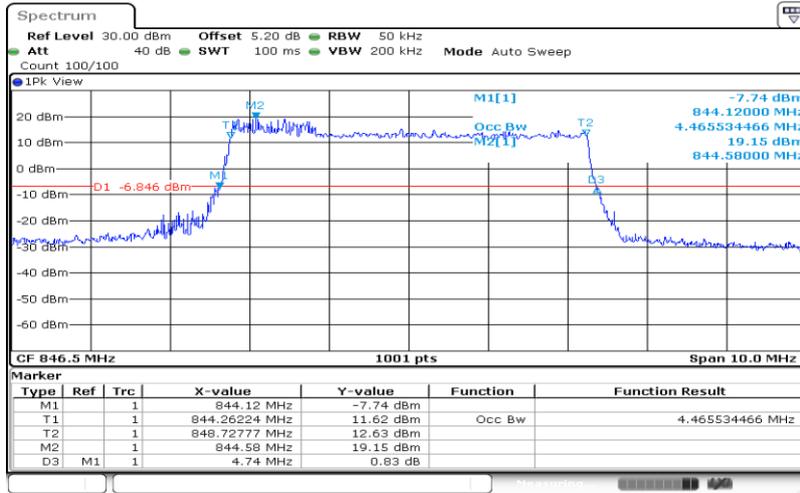


Date: 3 JUN 2020 15:18:03

Band5-5MHz-QPSK-20625-25RB#0-4.466

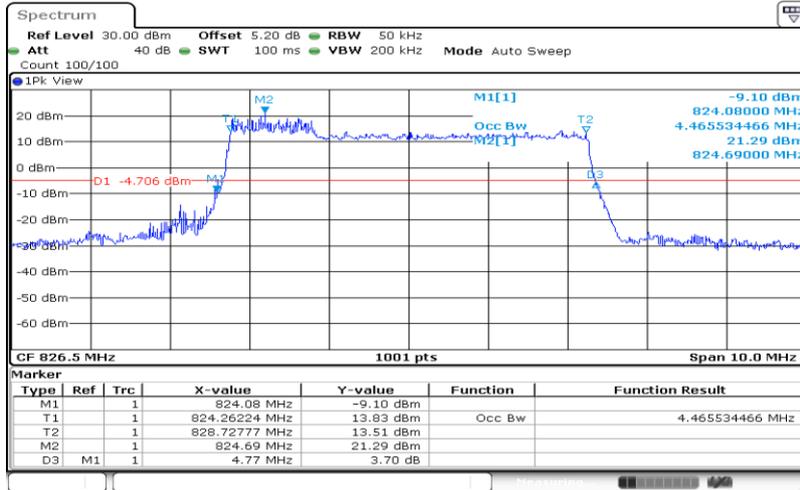


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Date: 3 JUN 2020 15:18:43

Band5-5MHz-16QAM-20425-25RB#0-4.466

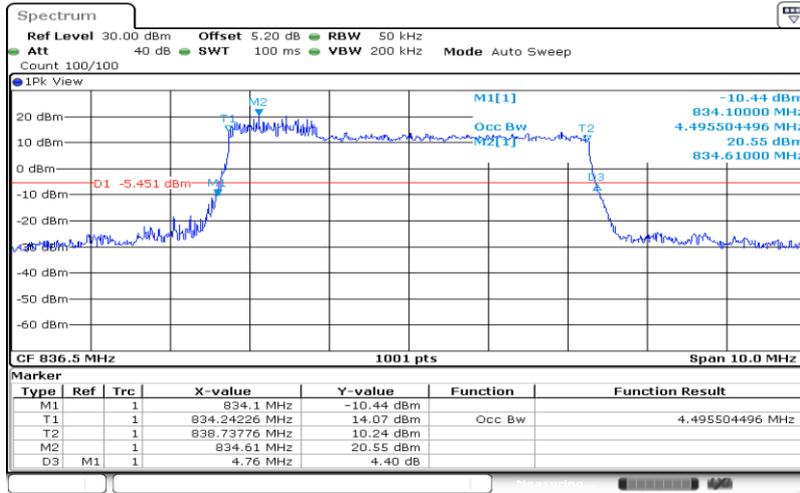


Date: 3 JUN 2020 15:17:43

Band5-5MHz-16QAM-20525-25RB#0-4.496

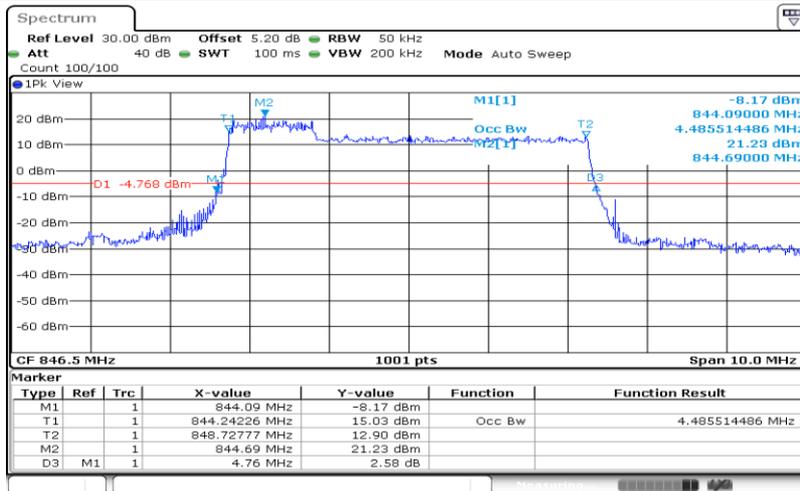


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Date: 3 JUN 2020 15:18:22

Band5-5MHz-16QAM-20625-25RB#0-4.486

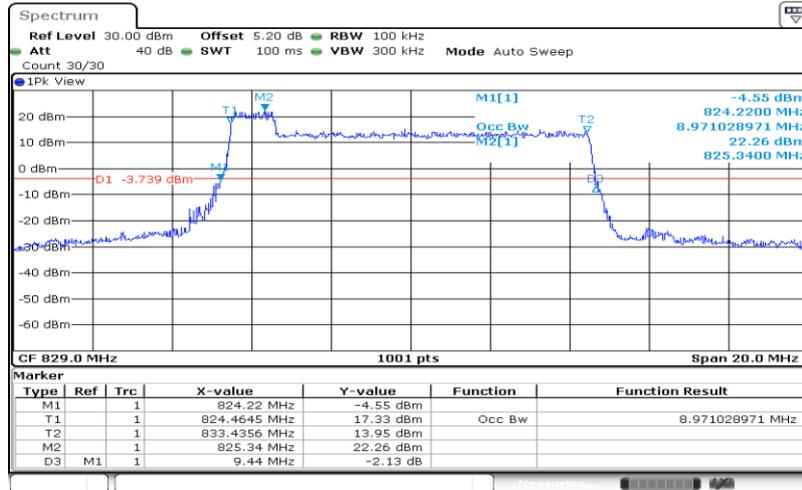


Date: 3 JUN 2020 15:19:02



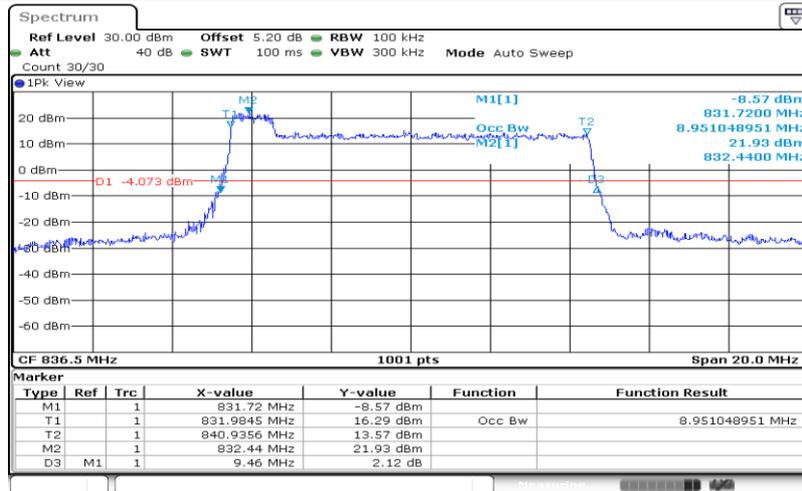
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Band5-10MHz-QPSK-20450-50RB#0-8.971



Date: 3 JUN 2020 15:19:21

Band5-10MHz-QPSK-20525-50RB#0-8.951

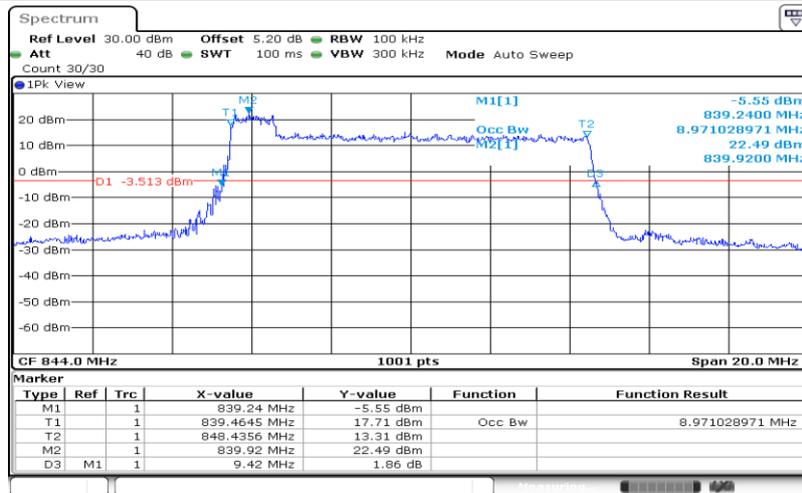


Date: 3 JUN 2020 15:19:47



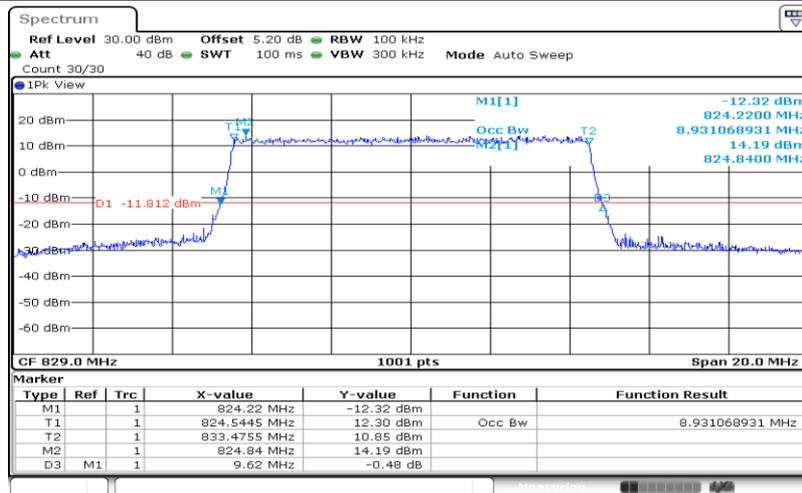
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Band5-10MHz-QPSK-20600-50RB#0-8.971



Date: 3 JUN 2020 15:20:13

Band5-10MHz-16QAM-20450-50RB#0-8.931



Date: 3 JUN 2020 15:19:33

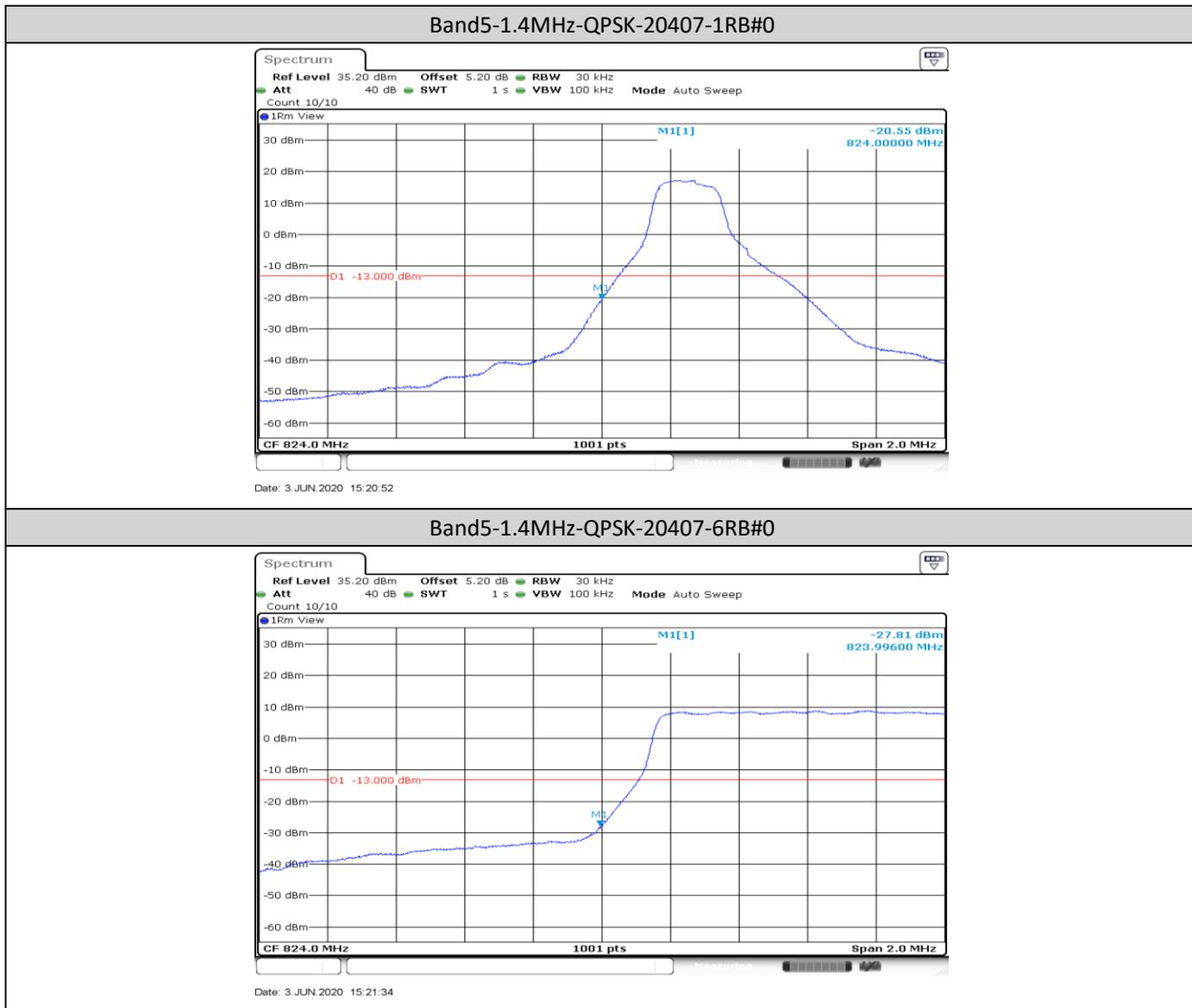


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5. Band Edge Compliance

5.1. Test Plots



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Band5-1.4MHz-QPSK-20643-1RB#5



Date: 3 JUN 2020 15:22:20

Band5-1.4MHz-QPSK-20643-6RB#0



Date: 3 JUN 2020 15:23:01



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Band5-1.4MHz-16QAM-20407-1RB#0



Date: 3 JUN 2020 15:21:13

Band5-1.4MHz-16QAM-20407-6RB#0

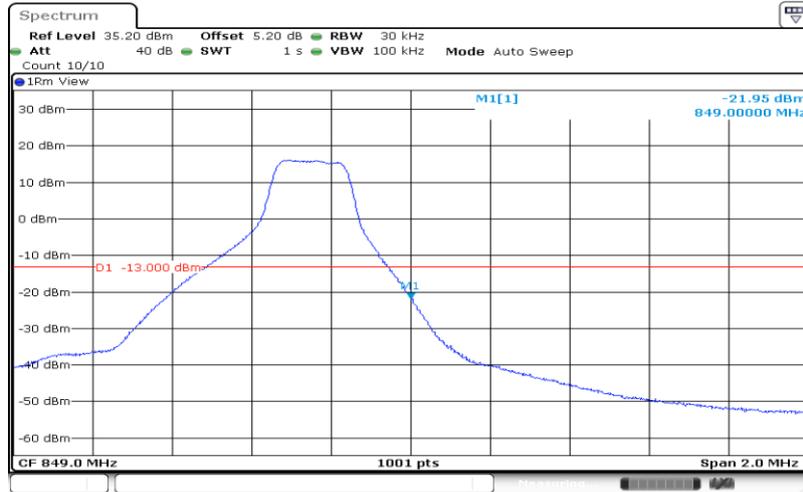


Date: 3 JUN 2020 15:21:55



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Band5-1.4MHz-16QAM-20643-1RB#5



Date: 3 JUN 2020 15:22:41

Band5-1.4MHz-16QAM-20643-6RB#0



Date: 3 JUN 2020 15:23:22



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Band5-3MHz-QPSK-20415-1RB#0



Date: 3 JUN 2020 15:23:48

Band5-3MHz-QPSK-20415-15RB#0



Date: 3 JUN 2020 15:24:30



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Band5-3MHz-QPSK-20635-1RB#14



Date: 3 JUN 2020 15:25:16

Band5-3MHz-QPSK-20635-15RB#0



Date: 3 JUN 2020 15:25:57



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Band5-3MHz-16QAM-20415-1RB#0



Date: 3 JUN 2020 15:24:09

Band5-3MHz-16QAM-20415-15RB#0



Date: 3 JUN 2020 15:24:51



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Band5-3MHz-16QAM-20635-1RB#14



Date: 3 JUN 2020 15:25:37

Band5-3MHz-16QAM-20635-15RB#0

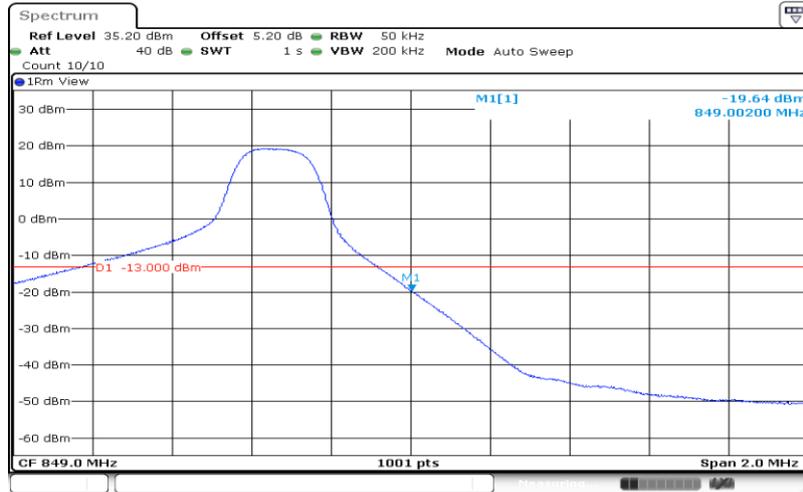


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Band5-5MHz-QPSK-20625-1RB#24



Date: 3 JUN 2020 15:28:12

Band5-5MHz-QPSK-20625-25RB#0



Date: 3 JUN 2020 15:28:54



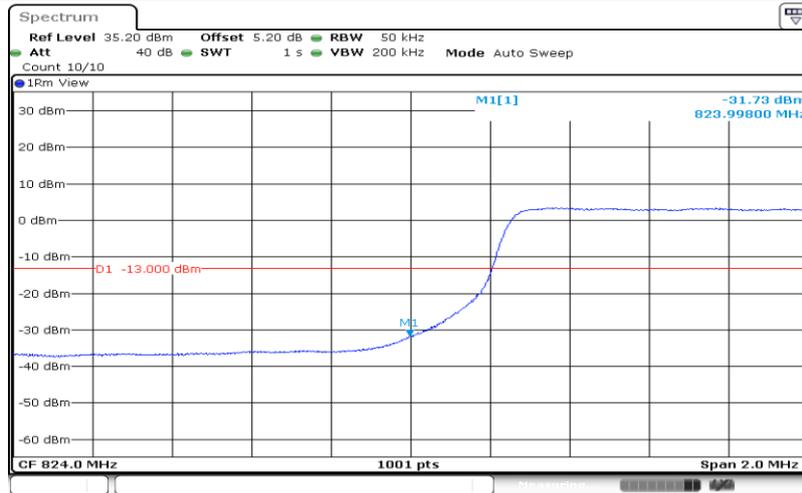
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Band5-5MHz-16QAM-20425-1RB#0



Date: 3 JUN 2020 15:27:05

Band5-5MHz-16QAM-20425-25RB#0

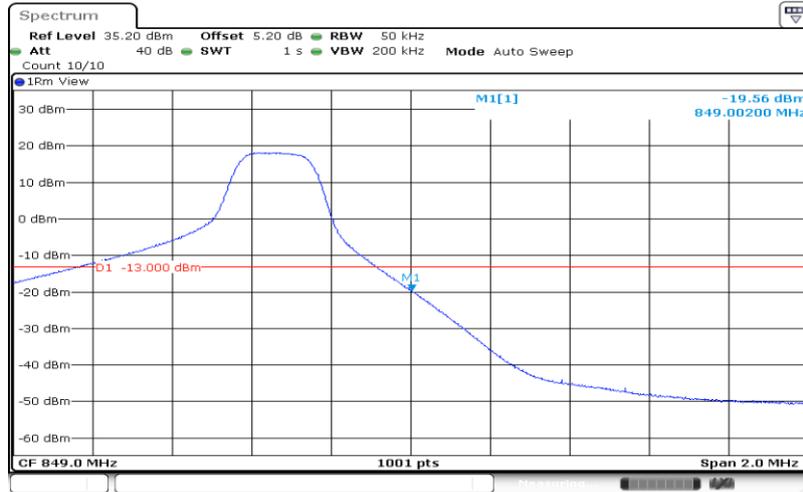


Date: 3 JUN 2020 15:27:47



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Band5-5MHz-16QAM-20625-1RB#24



Date: 3 JUN 2020 15:28:33

Band5-5MHz-16QAM-20625-25RB#0



Date: 3 JUN 2020 15:29:15



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Band5-10MHz-QPSK-20450-1RB#0



Date: 3 JUN 2020 15:29:41

Band5-10MHz-QPSK-20450-50RB#0



Date: 3 JUN 2020 15:30:22



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Band5-10MHz-QPSK-20600-1RB#49



Date: 3 JUN 2020 15:31:08

Band5-10MHz-QPSK-20600-50RB#0

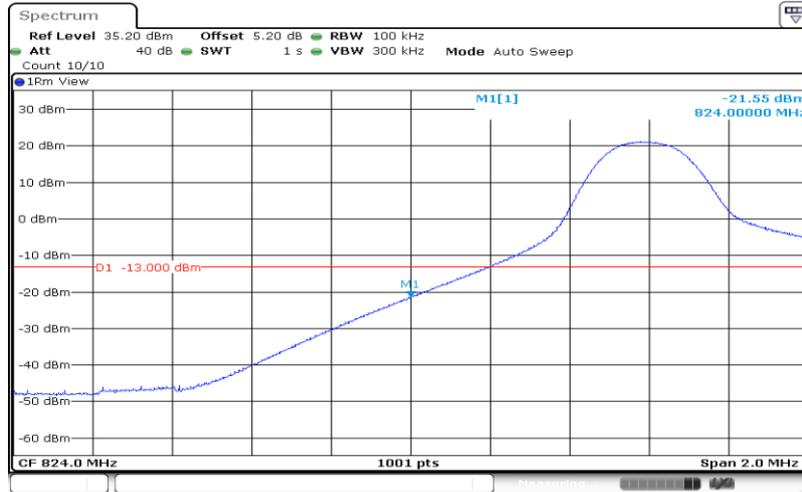


Date: 3 JUN 2020 15:31:49



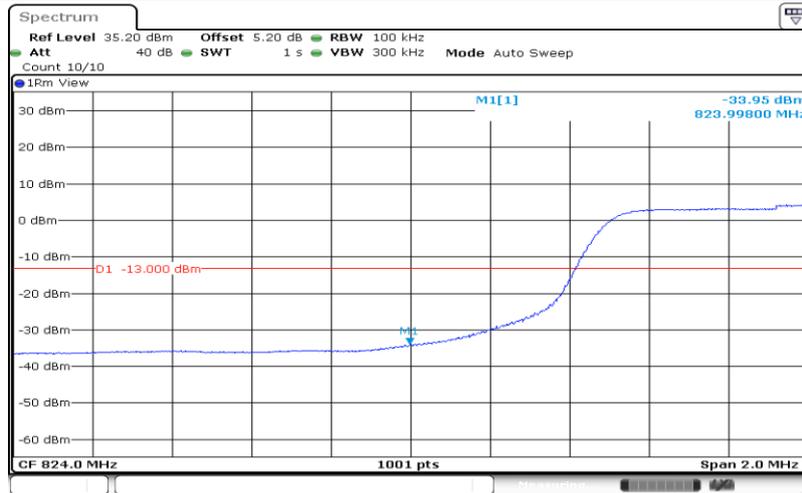
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Band5-10MHz-16QAM-20450-1RB#0



Date: 3 JUN 2020 15:30:02

Band5-10MHz-16QAM-20450-50RB#0



Date: 3 JUN 2020 15:30:43



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Band5-10MHz-16QAM-20600-1RB#49



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Band5-10MHz-16QAM-20600-50RB#0



Date: 3 JUN 2020 15:32:10



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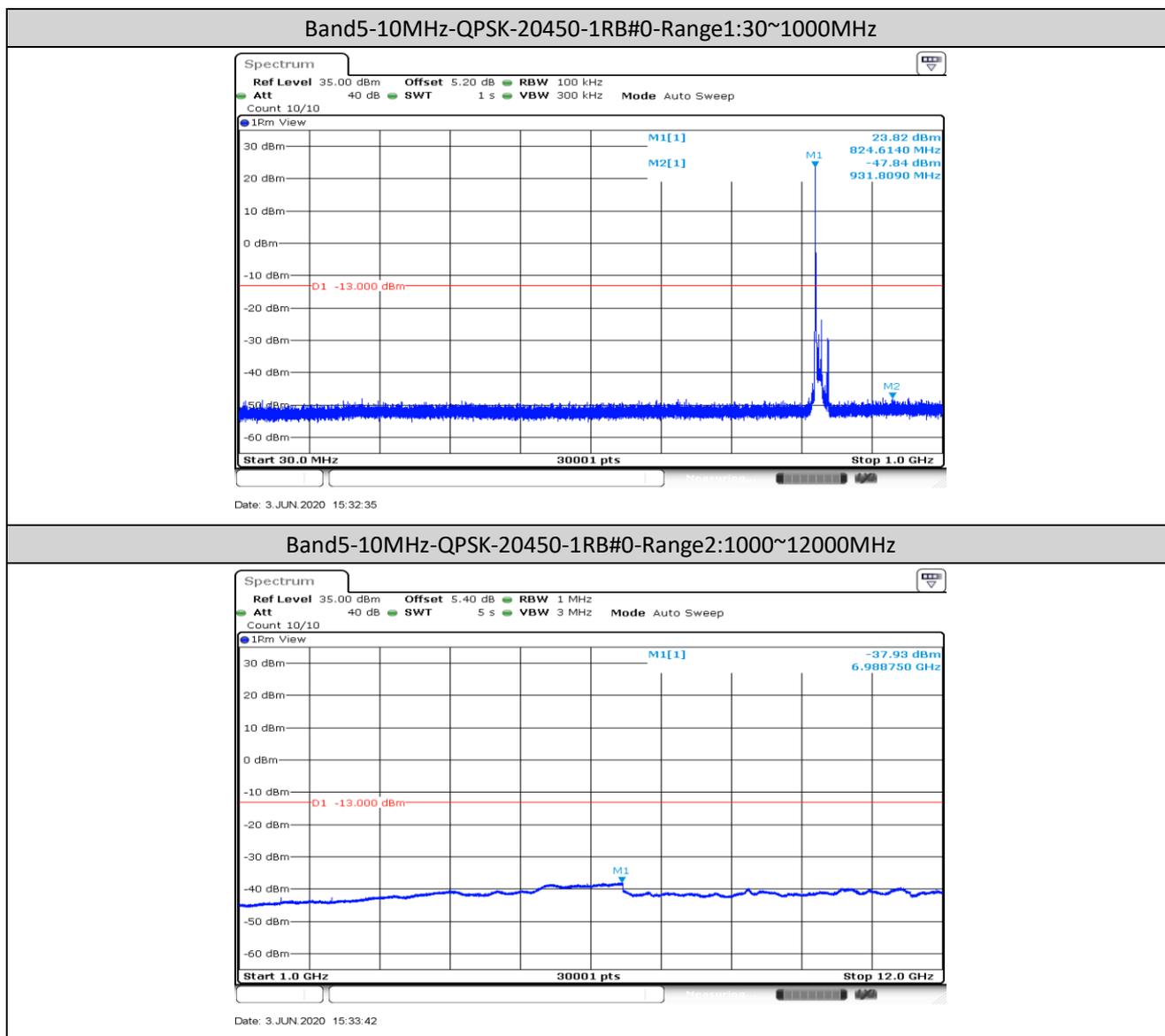
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6. Spurious Emission at Antenna Terminal

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 = $k * (Span / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

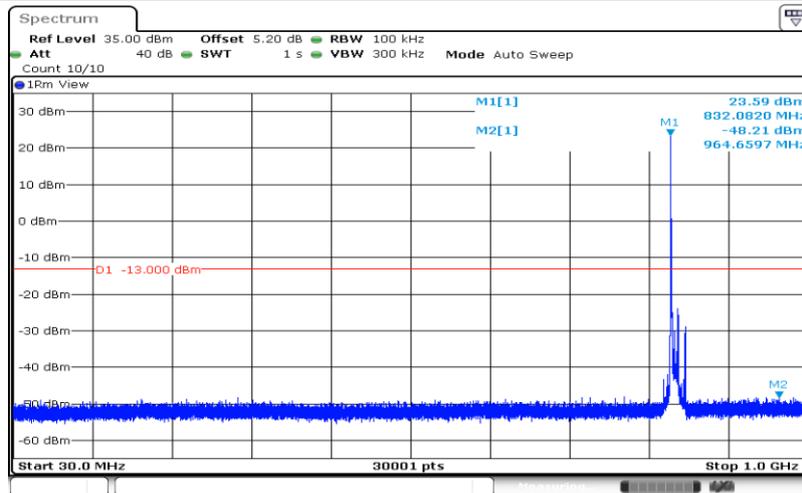
Remark2: only the worst case data displayed in this report.

6.1. Test Plots



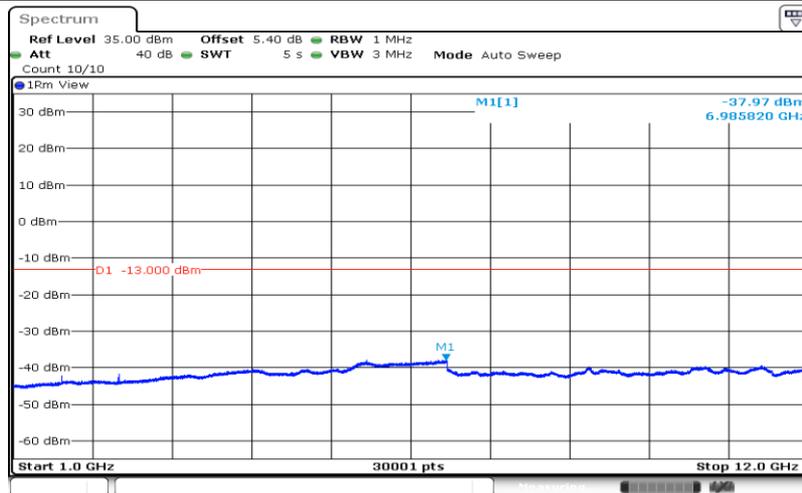
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Band5-10MHz-QPSK-20525-1RB#0-Range1:30~1000MHz



Date: 3 JUN 2020 15:35:29

Band5-10MHz-QPSK-20525-1RB#0-Range2:1000~12000MHz



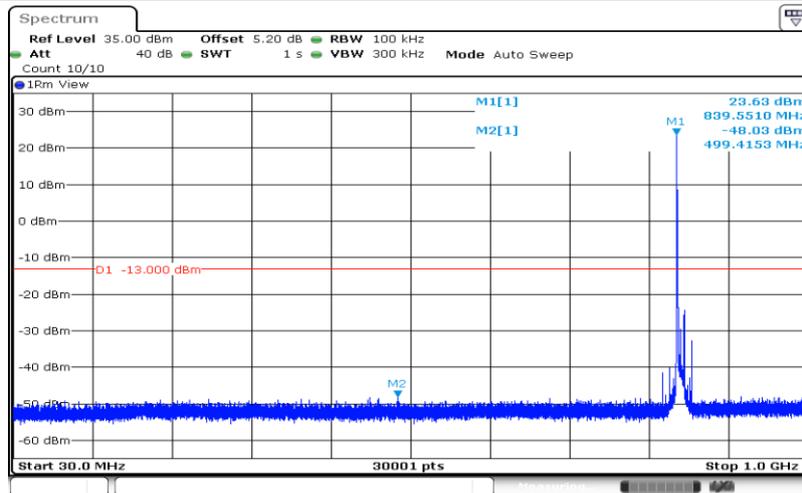
Date: 3 JUN 2020 15:36:36



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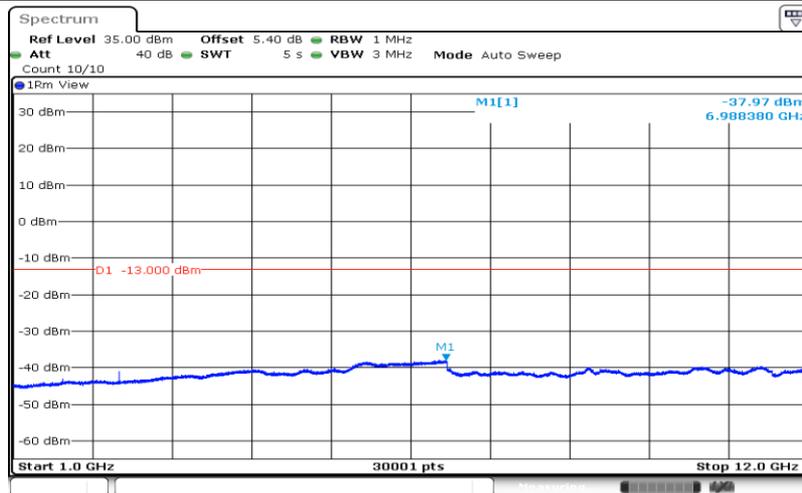


Band5-10MHz-QPSK-20600-1RB#0-Range1:30~1000MHz



Date: 3 JUN 2020 15:38:24

Band5-10MHz-QPSK-20600-1RB#0-Range2:1000~12000MHz

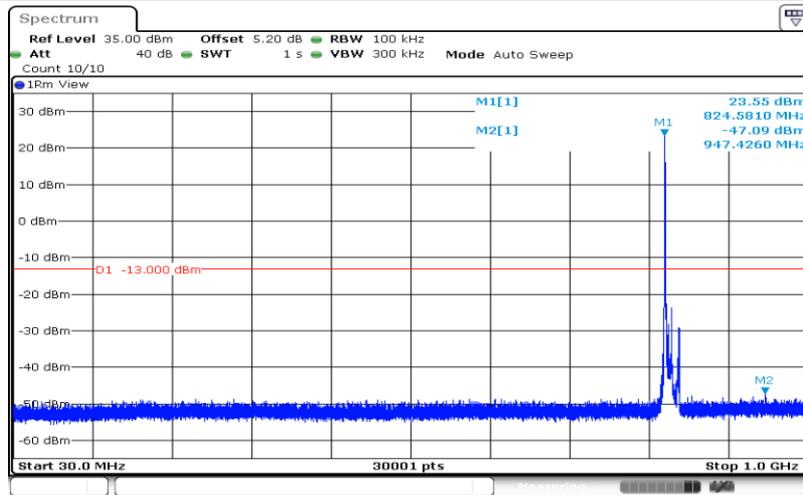


Date: 3 JUN 2020 15:39:31



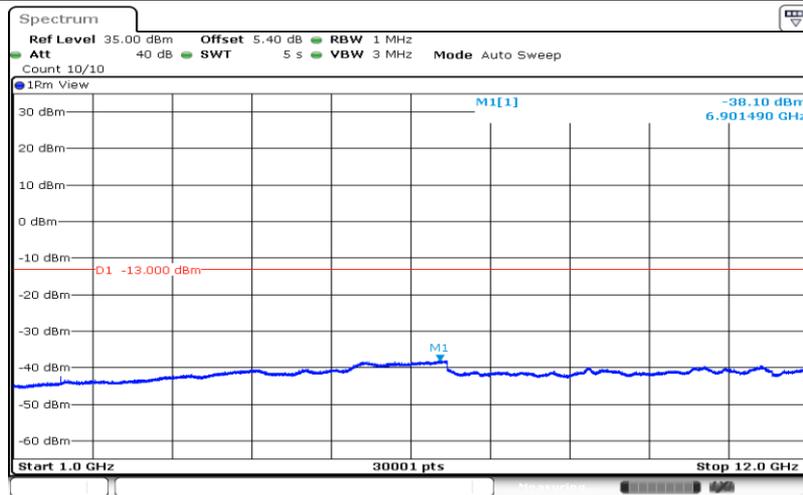
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Band5-10MHz-16QAM-20450-1RB#0-Range1:30~1000MHz



Date: 3 JUN 2020 15:34:02

Band5-10MHz-16QAM-20450-1RB#0-Range2:1000~12000MHz

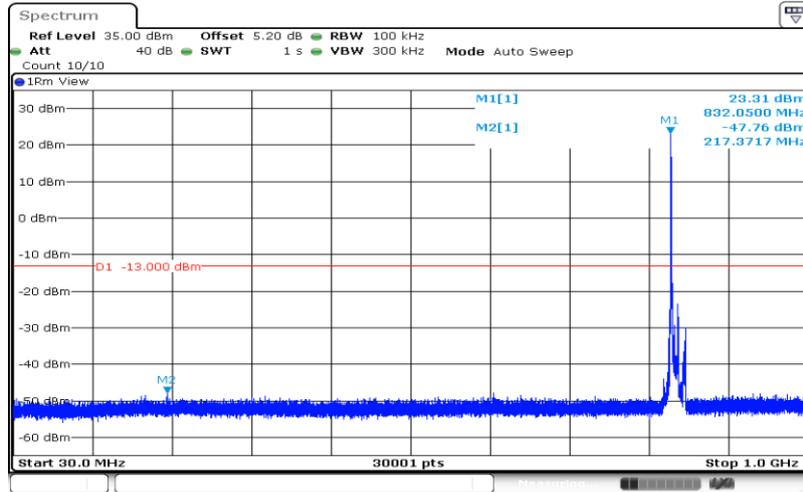


Date: 3 JUN 2020 15:35:09



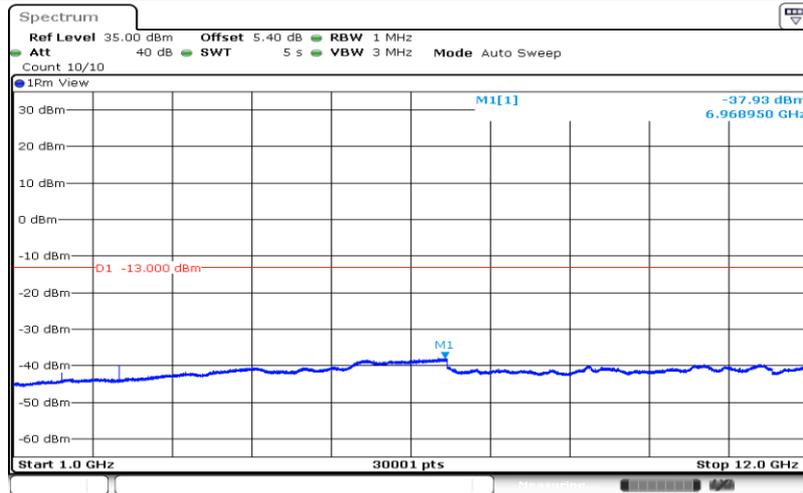
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Band5-10MHz-16QAM-20525-1RB#0-Range1:30~1000MHz



Date: 3 JUN 2020 15:36:56

Band5-10MHz-16QAM-20525-1RB#0-Range2:1000~12000MHz



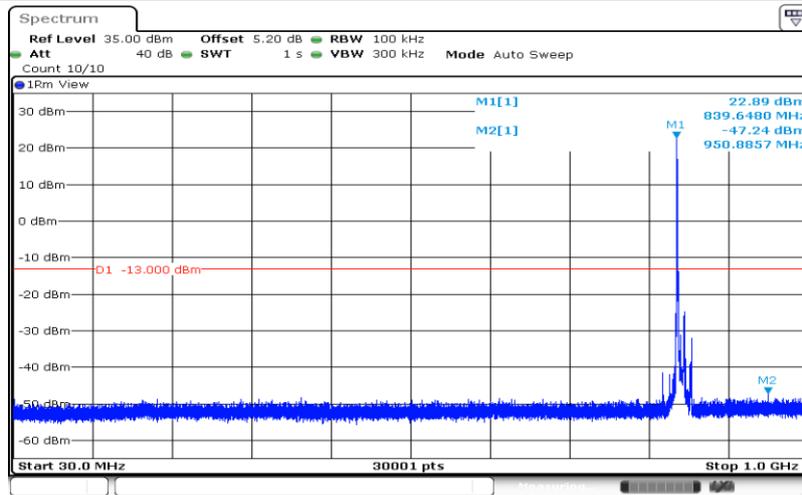
Date: 3 JUN 2020 15:36:03



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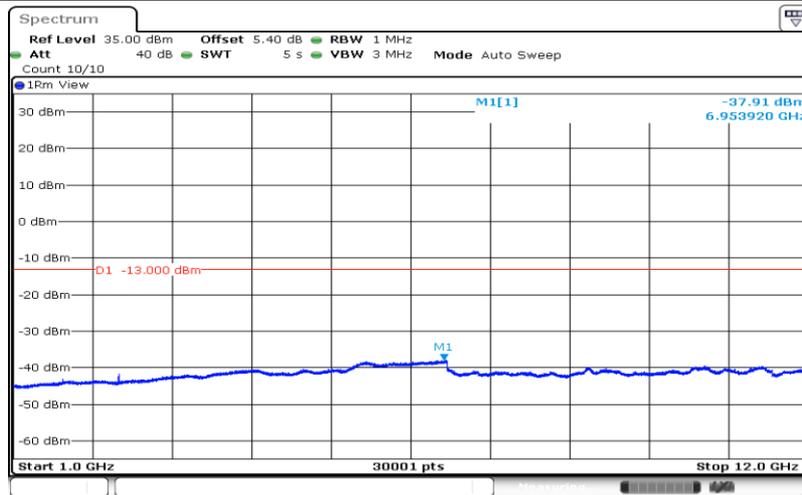


Band5-10MHz-16QAM-20600-1RB#0-Range1:30~1000MHz



Date: 3 JUN 2020 15:39:51

Band5-10MHz-16QAM-20600-1RB#0-Range2:1000~12000MHz



Date: 3 JUN 2020 15:40:58



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7. Field Strength of Spurious Radiation

7.1. Test Mode =LTE/TM1 10MHz

7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
105.4213	-62.69	-13.00	49.69	Vertical
582.7336	-61.56	-13.00	48.56	Vertical
1648.9298	-62.44	-13.00	49.44	Vertical
2697.1394	-57.50	-13.00	44.50	Vertical
7349.1450	-56.01	-13.00	43.01	Vertical
8771.5924	-54.68	-13.00	41.68	Vertical
43.6292	-61.98	-13.00	48.98	Horizontal
231.4306	-65.02	-13.00	52.02	Horizontal
1648.9298	-57.91	-13.00	44.91	Horizontal
2699.5399	-56.57	-13.00	43.57	Horizontal
7480.9494	-56.42	-13.00	43.42	Horizontal
8816.9939	-54.93	-13.00	41.93	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
109.3015	-62.37	-13.00	49.37	Vertical
614.8907	-60.92	-13.00	47.92	Vertical
1500.1000	-65.27	-13.00	52.27	Vertical
2698.3397	-57.70	-13.00	44.70	Vertical
3616.4205	-61.64	-13.00	48.64	Vertical
7363.9455	-56.15	-13.00	43.15	Vertical
43.9687	-61.86	-13.00	48.86	Horizontal
237.5904	-65.63	-13.00	52.63	Horizontal
1664.1328	-62.90	-13.00	49.90	Horizontal
2693.9388	-56.44	-13.00	43.44	Horizontal
7362.3454	-56.82	-13.00	43.82	Horizontal
8843.1948	-55.09	-13.00	42.09	Horizontal



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7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
49.2555	-68.47	-13.00	55.47	Vertical
112.3571	-62.27	-13.00	49.27	Vertical
444.8412	-64.90	-13.00	51.90	Vertical
1678.9358	-62.20	-13.00	49.20	Vertical
2510.3021	-51.62	-13.00	38.62	Vertical
8014.7672	-55.60	-13.00	42.60	Vertical
42.1741	-61.64	-13.00	48.64	Horizontal
234.7287	-65.71	-13.00	52.71	Horizontal
493.5862	-63.53	-13.00	50.53	Horizontal
1678.9358	-58.24	-13.00	45.24	Horizontal
2510.3021	-49.95	-13.00	36.95	Horizontal
5099.6700	-61.26	-13.00	48.26	Horizontal

Remark:

- 1 According to 971168 D01 Power Meas License Digital Systems, The amplitudes of unwanted emissions that are attenuated more than 20 dB below the applicable limit are not required to be reported.
- 2 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 displayed in this report.
- 3 all modulation and all Bandwidth had been tested, but only the worst case data displayed in this report.



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8. Frequency Stability

8.1. Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configuration	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	VL	NT	-7.20	-0.008685	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	-12.20	-0.014717	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	-5.00	-0.006031	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-7.70	-0.009205	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-0.30	-0.000359	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-2.50	-0.002989	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	-4.00	-0.004739	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	-4.70	-0.005569	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	-11.40	-0.013507	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VL	NT	-4.40	-0.005308	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VN	NT	-5.10	-0.006152	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VH	NT	-3.60	-0.004343	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VL	NT	-5.00	-0.005977	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VN	NT	-5.10	-0.006097	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VH	NT	-3.60	-0.004304	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VL	NT	-1.80	-0.002133	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VN	NT	-6.70	-0.007938	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VH	NT	-2.70	-0.003199	±2.5	PASS



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8.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configuration	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	NV	-30	-10.60	-0.012786	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-20	0.30	0.000362	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	0	-9.60	-0.011580	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	-9.70	-0.011701	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	-5.70	-0.006876	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-2.30	-0.002774	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	-3.70	-0.004463	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	50	-4.40	-0.005308	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	-3.40	-0.004065	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	-6.90	-0.008249	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-9.40	-0.011237	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-5.60	-0.006695	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	-4.60	-0.005499	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-11.10	-0.013270	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	-2.80	-0.003347	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	-5.10	-0.006097	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-30	-2.80	-0.003318	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	-8.10	-0.009597	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	0	-6.90	-0.008175	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	10	-4.30	-0.005095	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	20	-6.40	-0.007583	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	30	-4.10	-0.004858	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	-2.80	-0.003318	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	50	-5.70	-0.006754	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-30	-6.10	-0.007358	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-20	-3.90	-0.004704	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	0	-2.30	-0.002774	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	10	-7.80	-0.009409	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	20	-4.60	-0.005549	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	30	-7.60	-0.009168	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	40	-6.40	-0.007720	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	50	-6.70	-0.008082	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-30	-6.20	-0.007412	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-20	-7.20	-0.008607	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	0	-6.70	-0.008010	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	10	-3.10	-0.003706	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	20	-5.40	-0.006455	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	30	-3.20	-0.003825	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	40	-6.40	-0.007651	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	50	5.60	0.006695	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-30	-9.80	-0.011611	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-20	-6.50	-0.007701	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	0	-1.80	-0.002133	±2.5	PASS



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Band5	10MHz	16QAM	20600	50RB#0	NV	10	-5.30	-0.006280	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	20	-8.00	-0.009479	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	30	-7.60	-0.009005	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	40	-8.90	-0.010545	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	50	-1.80	-0.002133	±2.5	PASS



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