

Appendix B

E-UTRA Band 41



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1 Effective (Isotropic) Radiated Power

1.1 Test Result

Band	Bandwidth	Modulation	Channel	RB Config.	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band41	5MHz	QPSK	40065	1RB#0	22	17	33.00	PASS
Band41	5MHz	QPSK	40065	1RB#12	22.28	17.28	33.00	PASS
Band41	5MHz	QPSK	40065	1RB#24	22.14	17.14	33.00	PASS
Band41	5MHz	QPSK	40065	12RB#0	21.3	16.3	33.00	PASS
Band41	5MHz	QPSK	40065	12RB#6	21.34	16.34	33.00	PASS
Band41	5MHz	QPSK	40065	12RB#13	21.3	16.3	33.00	PASS
Band41	5MHz	QPSK	40065	25RB#0	21.26	16.26	33.00	PASS
Band41	5MHz	QPSK	40640	1RB#0	22.29	17.29	33.00	PASS
Band41	5MHz	QPSK	40640	1RB#12	22.29	17.29	33.00	PASS
Band41	5MHz	QPSK	40640	1RB#24	22.2	17.2	33.00	PASS
Band41	5MHz	QPSK	40640	12RB#0	21.6	16.6	33.00	PASS
Band41	5MHz	QPSK	40640	12RB#6	21.59	16.59	33.00	PASS
Band41	5MHz	QPSK	40640	12RB#13	21.63	16.63	33.00	PASS
Band41	5MHz	QPSK	40640	25RB#0	21.61	16.61	33.00	PASS
Band41	5MHz	QPSK	41215	1RB#0	21.71	16.71	33.00	PASS
Band41	5MHz	QPSK	41215	1RB#12	21.89	16.89	33.00	PASS
Band41	5MHz	QPSK	41215	1RB#24	21.79	16.79	33.00	PASS
Band41	5MHz	QPSK	41215	12RB#0	21.05	16.05	33.00	PASS
Band41	5MHz	QPSK	41215	12RB#6	21.07	16.07	33.00	PASS
Band41	5MHz	QPSK	41215	12RB#13	21.15	16.15	33.00	PASS
Band41	5MHz	QPSK	41215	25RB#0	21.15	16.15	33.00	PASS
Band41	5MHz	16QAM	40065	1RB#0	21.02	16.02	33.00	PASS
Band41	5MHz	16QAM	40065	1RB#12	21.36	16.36	33.00	PASS
Band41	5MHz	16QAM	40065	1RB#24	20.77	15.77	33.00	PASS
Band41	5MHz	16QAM	40065	12RB#0	20.17	15.17	33.00	PASS
Band41	5MHz	16QAM	40065	12RB#6	20.09	15.09	33.00	PASS
Band41	5MHz	16QAM	40065	12RB#13	20.14	15.14	33.00	PASS
Band41	5MHz	16QAM	40065	25RB#0	20.14	15.14	33.00	PASS
Band41	5MHz	16QAM	40640	1RB#0	21.31	16.31	33.00	PASS
Band41	5MHz	16QAM	40640	1RB#12	21.26	16.26	33.00	PASS
Band41	5MHz	16QAM	40640	1RB#24	21.02	16.02	33.00	PASS
Band41	5MHz	16QAM	40640	12RB#0	20.48	15.48	33.00	PASS



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Band41	5MHz	16QAM	40640	12RB#6	20.42	15.42	33.00	PASS
Band41	5MHz	16QAM	40640	12RB#13	20.5	15.5	33.00	PASS
Band41	5MHz	16QAM	40640	25RB#0	20.63	15.63	33.00	PASS
Band41	5MHz	16QAM	41215	1RB#0	20.84	15.84	33.00	PASS
Band41	5MHz	16QAM	41215	1RB#12	20.59	15.59	33.00	PASS
Band41	5MHz	16QAM	41215	1RB#24	20.86	15.86	33.00	PASS
Band41	5MHz	16QAM	41215	12RB#0	19.96	14.96	33.00	PASS
Band41	5MHz	16QAM	41215	12RB#6	19.94	14.94	33.00	PASS
Band41	5MHz	16QAM	41215	12RB#13	19.96	14.96	33.00	PASS
Band41	5MHz	16QAM	41215	25RB#0	20.07	15.07	33.00	PASS
Band41	10MHz	QPSK	40090	1RB#0	22.31	17.31	33.00	PASS
Band41	10MHz	QPSK	40090	1RB#24	22.36	17.36	33.00	PASS
Band41	10MHz	QPSK	40090	1RB#49	22.29	17.29	33.00	PASS
Band41	10MHz	QPSK	40090	25RB#0	21.4	16.4	33.00	PASS
Band41	10MHz	QPSK	40090	25RB#12	21.41	16.41	33.00	PASS
Band41	10MHz	QPSK	40090	25RB#25	21.44	16.44	33.00	PASS
Band41	10MHz	QPSK	40090	50RB#0	21.49	16.49	33.00	PASS
Band41	10MHz	QPSK	40640	1RB#0	22.43	17.43	33.00	PASS
Band41	10MHz	QPSK	40640	1RB#24	22.57	17.57	33.00	PASS
Band41	10MHz	QPSK	40640	1RB#49	22.39	17.39	33.00	PASS
Band41	10MHz	QPSK	40640	25RB#0	21.65	16.65	33.00	PASS
Band41	10MHz	QPSK	40640	25RB#12	21.61	16.61	33.00	PASS
Band41	10MHz	QPSK	40640	25RB#25	21.61	16.61	33.00	PASS
Band41	10MHz	QPSK	40640	50RB#0	21.63	16.63	33.00	PASS
Band41	10MHz	QPSK	41190	1RB#0	21.96	16.96	33.00	PASS
Band41	10MHz	QPSK	41190	1RB#24	21.96	16.96	33.00	PASS
Band41	10MHz	QPSK	41190	1RB#49	22.06	17.06	33.00	PASS
Band41	10MHz	QPSK	41190	25RB#0	21.13	16.13	33.00	PASS
Band41	10MHz	QPSK	41190	25RB#12	21.20	16.2	33.00	PASS
Band41	10MHz	QPSK	41190	25RB#25	21.08	16.08	33.00	PASS
Band41	10MHz	QPSK	41190	50RB#0	21.10	16.1	33.00	PASS
Band41	10MHz	16QAM	40090	1RB#0	21.39	16.39	33.00	PASS
Band41	10MHz	16QAM	40090	1RB#24	21.45	16.45	33.00	PASS
Band41	10MHz	16QAM	40090	1RB#49	20.86	15.86	33.00	PASS
Band41	10MHz	16QAM	40090	25RB#0	20.26	15.26	33.00	PASS
Band41	10MHz	16QAM	40090	25RB#12	20.23	15.23	33.00	PASS
Band41	10MHz	16QAM	40090	25RB#25	20.25	15.25	33.00	PASS
Band41	10MHz	16QAM	40090	50RB#0	20.32	15.32	33.00	PASS



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Band41	10MHz	16QAM	40640	1RB#0	21.15	16.15	33.00	PASS
Band41	10MHz	16QAM	40640	1RB#24	21.22	16.22	33.00	PASS
Band41	10MHz	16QAM	40640	1RB#49	21.14	16.14	33.00	PASS
Band41	10MHz	16QAM	40640	25RB#0	20.42	15.42	33.00	PASS
Band41	10MHz	16QAM	40640	25RB#12	20.35	15.35	33.00	PASS
Band41	10MHz	16QAM	40640	25RB#25	20.65	15.65	33.00	PASS
Band41	10MHz	16QAM	40640	50RB#0	20.61	15.61	33.00	PASS
Band41	10MHz	16QAM	41190	1RB#0	21.23	16.23	33.00	PASS
Band41	10MHz	16QAM	41190	1RB#24	20.74	15.74	33.00	PASS
Band41	10MHz	16QAM	41190	1RB#49	20.83	15.83	33.00	PASS
Band41	10MHz	16QAM	41190	25RB#0	20.32	15.32	33.00	PASS
Band41	10MHz	16QAM	41190	25RB#12	20.31	15.31	33.00	PASS
Band41	10MHz	16QAM	41190	25RB#25	20.28	15.28	33.00	PASS
Band41	10MHz	16QAM	41190	50RB#0	19.98	14.98	33.00	PASS
Band41	15MHz	QPSK	40115	1RB#0	22.19	17.19	33.00	PASS
Band41	15MHz	QPSK	40115	1RB#38	22.2	17.2	33.00	PASS
Band41	15MHz	QPSK	40115	1RB#74	22.31	17.31	33.00	PASS
Band41	15MHz	QPSK	40115	38RB#0	21.3	16.3	33.00	PASS
Band41	15MHz	QPSK	40115	38RB#18	21.35	16.35	33.00	PASS
Band41	15MHz	QPSK	40115	38RB#37	21.35	16.35	33.00	PASS
Band41	15MHz	QPSK	40115	75RB#0	21.32	16.32	33.00	PASS
Band41	15MHz	QPSK	40640	1RB#0	22.34	17.34	33.00	PASS
Band41	15MHz	QPSK	40640	1RB#38	22.41	17.41	33.00	PASS
Band41	15MHz	QPSK	40640	1RB#74	22.32	17.32	33.00	PASS
Band41	15MHz	QPSK	40640	38RB#0	21.53	16.53	33.00	PASS
Band41	15MHz	QPSK	40640	38RB#18	21.53	16.53	33.00	PASS
Band41	15MHz	QPSK	40640	38RB#37	21.54	16.54	33.00	PASS
Band41	15MHz	QPSK	40640	75RB#0	21.45	16.45	33.00	PASS
Band41	15MHz	QPSK	41165	1RB#0	22.26	17.26	33.00	PASS
Band41	15MHz	QPSK	41165	1RB#38	22.00	17	33.00	PASS
Band41	15MHz	QPSK	41165	1RB#74	21.94	16.94	33.00	PASS
Band41	15MHz	QPSK	41165	38RB#0	21.19	16.19	33.00	PASS
Band41	15MHz	QPSK	41165	38RB#18	21.22	16.22	33.00	PASS
Band41	15MHz	QPSK	41165	38RB#37	21.00	16	33.00	PASS
Band41	15MHz	QPSK	41165	75RB#0	21.17	16.17	33.00	PASS
Band41	15MHz	16QAM	40115	1RB#0	20.79	15.79	33.00	PASS
Band41	15MHz	16QAM	40115	1RB#38	21.49	16.49	33.00	PASS
Band41	15MHz	16QAM	40115	1RB#74	21.02	16.02	33.00	PASS



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Band41	15MHz	16QAM	40115	38RB#0	20.28	15.28	33.00	PASS
Band41	15MHz	16QAM	40115	38RB#18	20.39	15.39	33.00	PASS
Band41	15MHz	16QAM	40115	38RB#37	20.29	15.29	33.00	PASS
Band41	15MHz	16QAM	40115	75RB#0	20.46	15.46	33.00	PASS
Band41	15MHz	16QAM	40640	1RB#0	21.6	16.6	33.00	PASS
Band41	15MHz	16QAM	40640	1RB#38	21.12	16.12	33.00	PASS
Band41	15MHz	16QAM	40640	1RB#74	21.22	16.22	33.00	PASS
Band41	15MHz	16QAM	40640	38RB#0	20.56	15.56	33.00	PASS
Band41	15MHz	16QAM	40640	38RB#18	20.63	15.63	33.00	PASS
Band41	15MHz	16QAM	40640	38RB#37	20.56	15.56	33.00	PASS
Band41	15MHz	16QAM	40640	75RB#0	20.57	15.57	33.00	PASS
Band41	15MHz	16QAM	41165	1RB#0	21.01	16.01	33.00	PASS
Band41	15MHz	16QAM	41165	1RB#38	20.65	15.65	33.00	PASS
Band41	15MHz	16QAM	41165	1RB#74	20.77	15.77	33.00	PASS
Band41	15MHz	16QAM	41165	38RB#0	20.09	15.09	33.00	PASS
Band41	15MHz	16QAM	41165	38RB#18	20.09	15.09	33.00	PASS
Band41	15MHz	16QAM	41165	38RB#37	19.92	14.92	33.00	PASS
Band41	15MHz	16QAM	41165	75RB#0	20.05	15.05	33.00	PASS
Band41	20MHz	QPSK	40140	1RB#0	22.12	17.12	33.00	PASS
Band41	20MHz	QPSK	40140	1RB#49	22.39	17.39	33.00	PASS
Band41	20MHz	QPSK	40140	1RB#99	22.51	17.51	33.00	PASS
Band41	20MHz	QPSK	40140	50RB#0	21.23	16.23	33.00	PASS
Band41	20MHz	QPSK	40140	50RB#25	21.32	16.32	33.00	PASS
Band41	20MHz	QPSK	40140	50RB#50	21.48	16.48	33.00	PASS
Band41	20MHz	QPSK	40140	100RB#0	21.34	16.34	33.00	PASS
Band41	20MHz	QPSK	40640	1RB#0	22.34	17.34	33.00	PASS
Band41	20MHz	QPSK	40640	1RB#49	22.37	17.37	33.00	PASS
Band41	20MHz	QPSK	40640	1RB#99	22.48	17.48	33.00	PASS
Band41	20MHz	QPSK	40640	50RB#0	21.36	16.36	33.00	PASS
Band41	20MHz	QPSK	40640	50RB#25	21.52	16.52	33.00	PASS
Band41	20MHz	QPSK	40640	50RB#50	21.47	16.47	33.00	PASS
Band41	20MHz	QPSK	40640	100RB#0	21.42	16.42	33.00	PASS
Band41	20MHz	QPSK	41140	1RB#0	22.06	17.06	33.00	PASS
Band41	20MHz	QPSK	41140	1RB#49	22.05	17.05	33.00	PASS
Band41	20MHz	QPSK	41140	1RB#99	22.21	17.21	33.00	PASS
Band41	20MHz	QPSK	41140	50RB#0	21.25	16.25	33.00	PASS
Band41	20MHz	QPSK	41140	50RB#25	21.15	16.15	33.00	PASS
Band41	20MHz	QPSK	41140	50RB#50	21.27	16.27	33.00	PASS



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Band41	20MHz	QPSK	41140	100RB#0	21.17	16.17	33.00	PASS
Band41	20MHz	16QAM	40140	1RB#0	21.05	16.05	33.00	PASS
Band41	20MHz	16QAM	40140	1RB#49	21.38	16.38	33.00	PASS
Band41	20MHz	16QAM	40140	1RB#99	21.36	16.36	33.00	PASS
Band41	20MHz	16QAM	40140	50RB#0	20.35	15.35	33.00	PASS
Band41	20MHz	16QAM	40140	50RB#25	20.52	15.52	33.00	PASS
Band41	20MHz	16QAM	40140	50RB#50	20.31	15.31	33.00	PASS
Band41	20MHz	16QAM	40140	100RB#0	20.4	15.4	33.00	PASS
Band41	20MHz	16QAM	40640	1RB#0	21.22	16.22	33.00	PASS
Band41	20MHz	16QAM	40640	1RB#49	21.57	16.57	33.00	PASS
Band41	20MHz	16QAM	40640	1RB#99	20.87	15.87	33.00	PASS
Band41	20MHz	16QAM	40640	50RB#0	20.3	15.3	33.00	PASS
Band41	20MHz	16QAM	40640	50RB#25	20.46	15.46	33.00	PASS
Band41	20MHz	16QAM	40640	50RB#50	20.51	15.51	33.00	PASS
Band41	20MHz	16QAM	40640	100RB#0	20.43	15.43	33.00	PASS
Band41	20MHz	16QAM	41140	1RB#0	21.02	16.02	33.00	PASS
Band41	20MHz	16QAM	41140	1RB#49	20.75	15.75	33.00	PASS
Band41	20MHz	16QAM	41140	1RB#99	20.76	15.76	33.00	PASS
Band41	20MHz	16QAM	41140	50RB#0	20.15	15.15	33.00	PASS
Band41	20MHz	16QAM	41140	50RB#25	20.17	15.17	33.00	PASS
Band41	20MHz	16QAM	41140	50RB#50	20.01	15.01	33.00	PASS
Band41	20MHz	16QAM	41140	100RB#0	20.09	15.09	33.00	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]



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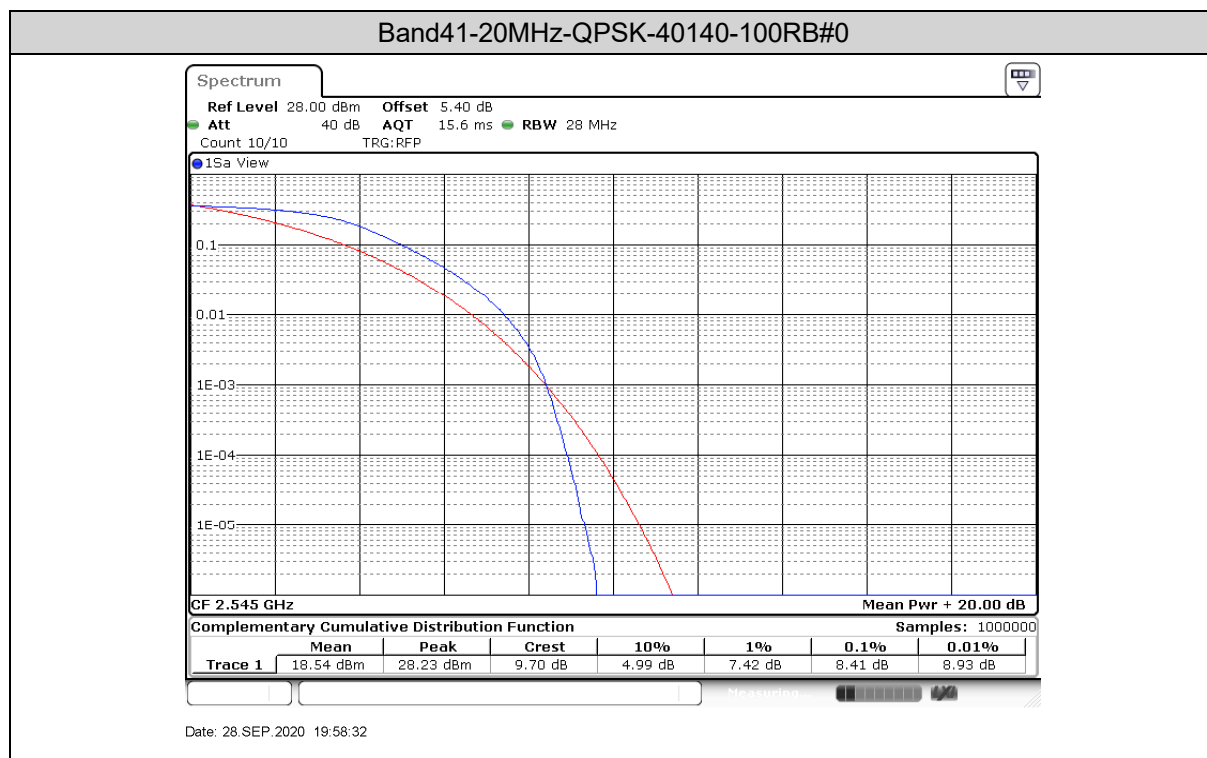
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2 Peak-to-Average Ratio (CCDF)

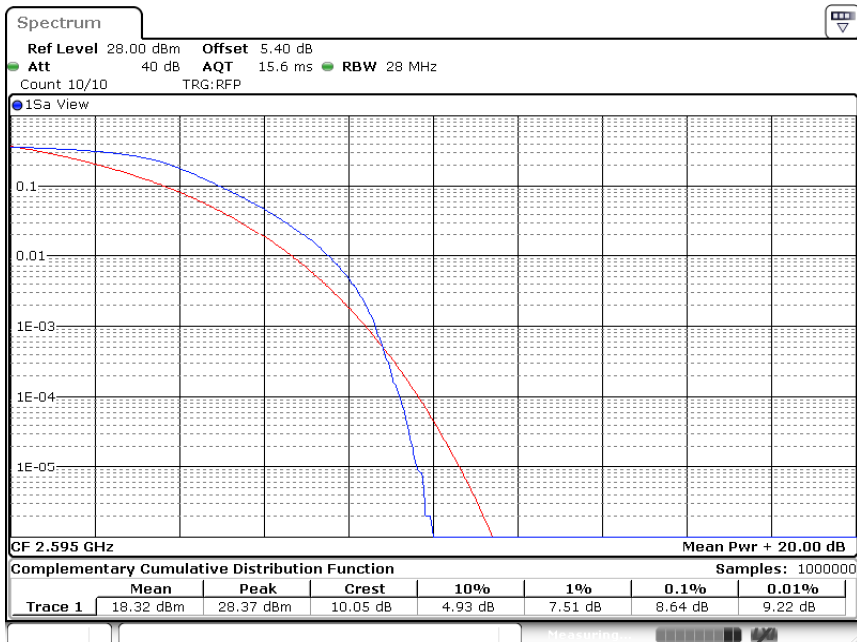
2.1 Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band41	20MHz	QPSK	40140	100RB#0	8.41	13	PASS
Band41	20MHz	QPSK	40640	100RB#0	8.64	13	PASS
Band41	20MHz	QPSK	41140	100RB#0	8.55	13	PASS
Band41	20MHz	16QAM	40140	100RB#0	9.57	13	PASS
Band41	20MHz	16QAM	40640	100RB#0	9.65	13	PASS
Band41	20MHz	16QAM	41140	100RB#0	9.36	13	PASS

2.2 Test Plots



Band41-20MHz-QPSK-40640-100RB#0



Date: 28.SEP.2020 19:59:01

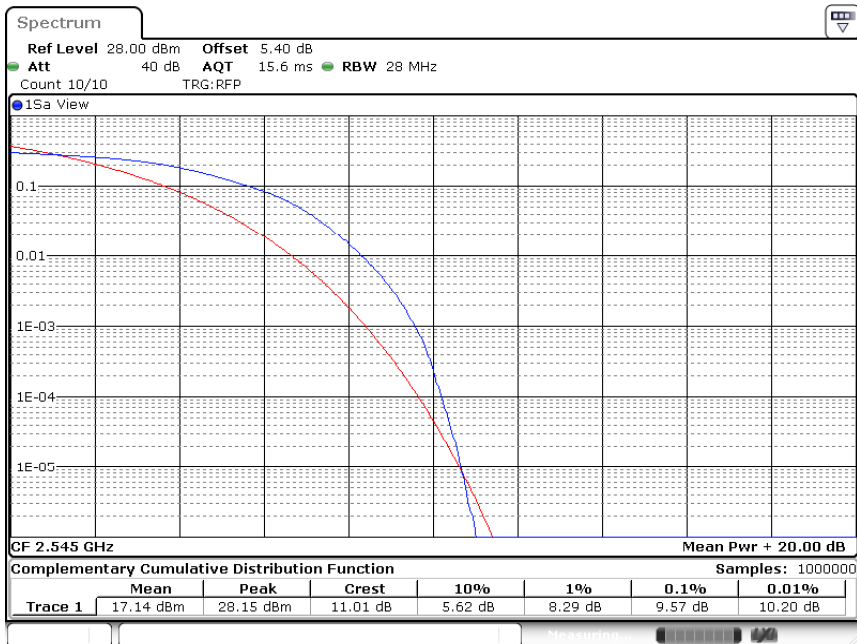
Band41-20MHz-QPSK-41140-100RB#0



Date: 28.SEP.2020 19:59:29

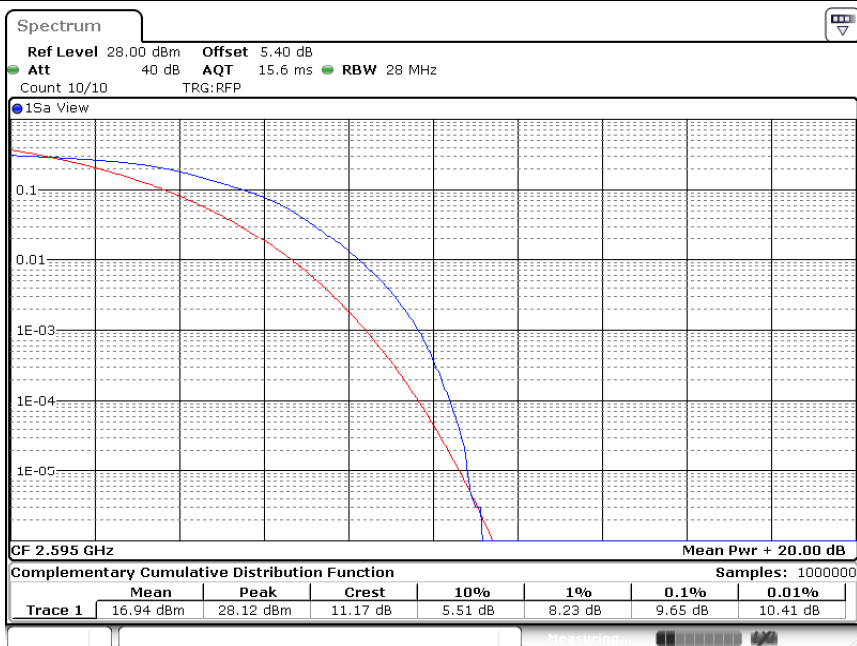


Band41-20MHz-16QAM-40140-100RB#0



Date: 28.SEP.2020 19:58:46

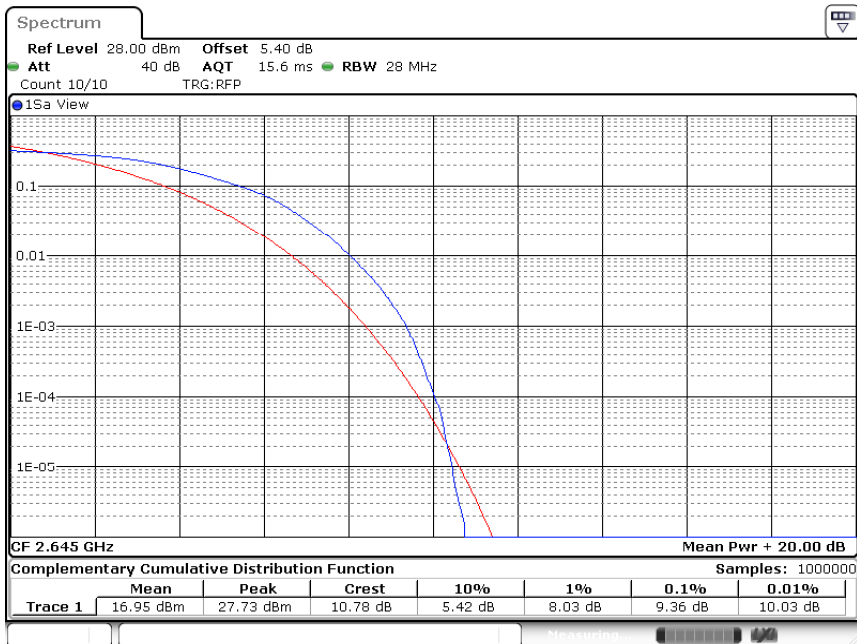
Band41-20MHz-16QAM-40640-100RB#0



Date: 28.SEP.2020 19:59:15



Band41-20MHz-16QAM-41140-100RB#0



Date: 28.SEP.2020 19:59:43



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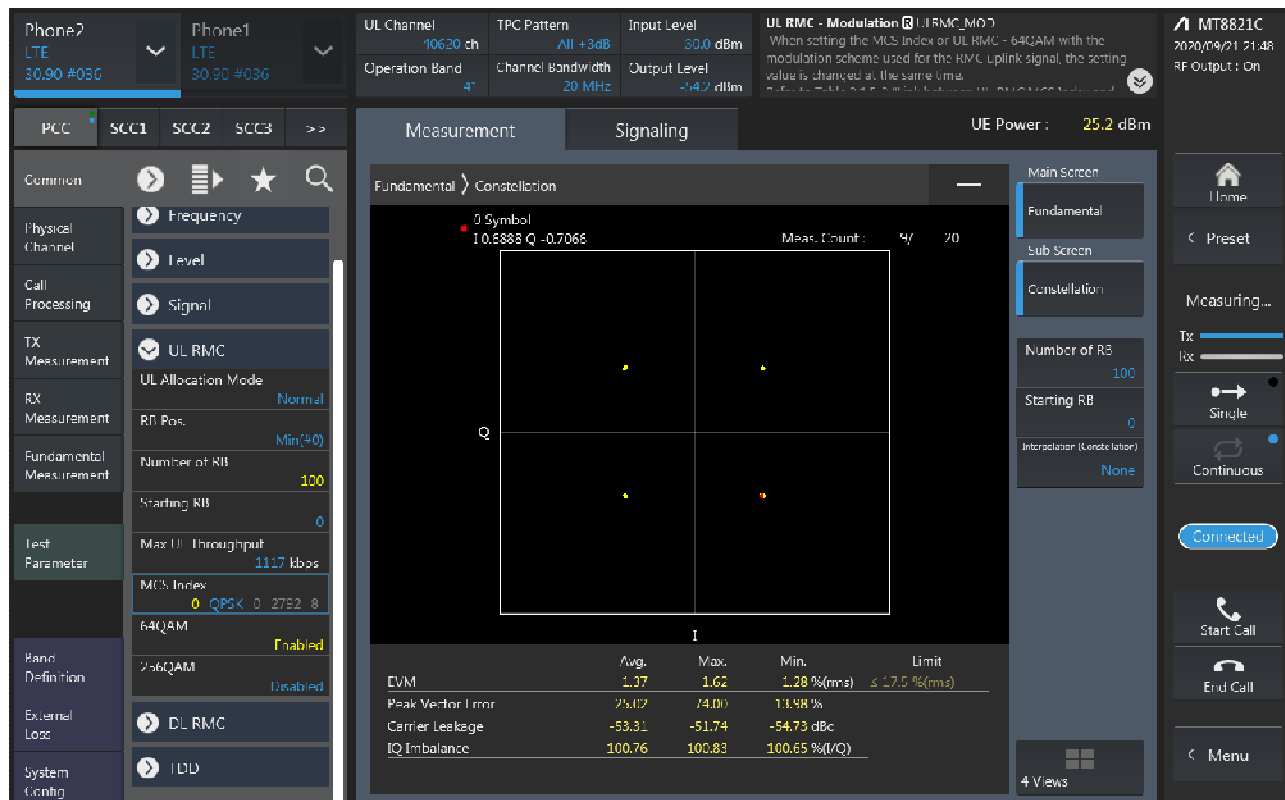
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3 Modulation Characteristics

3.1 Test Mode = LTE /TM1 20MHz

3.1.1 Test Channel = MCH



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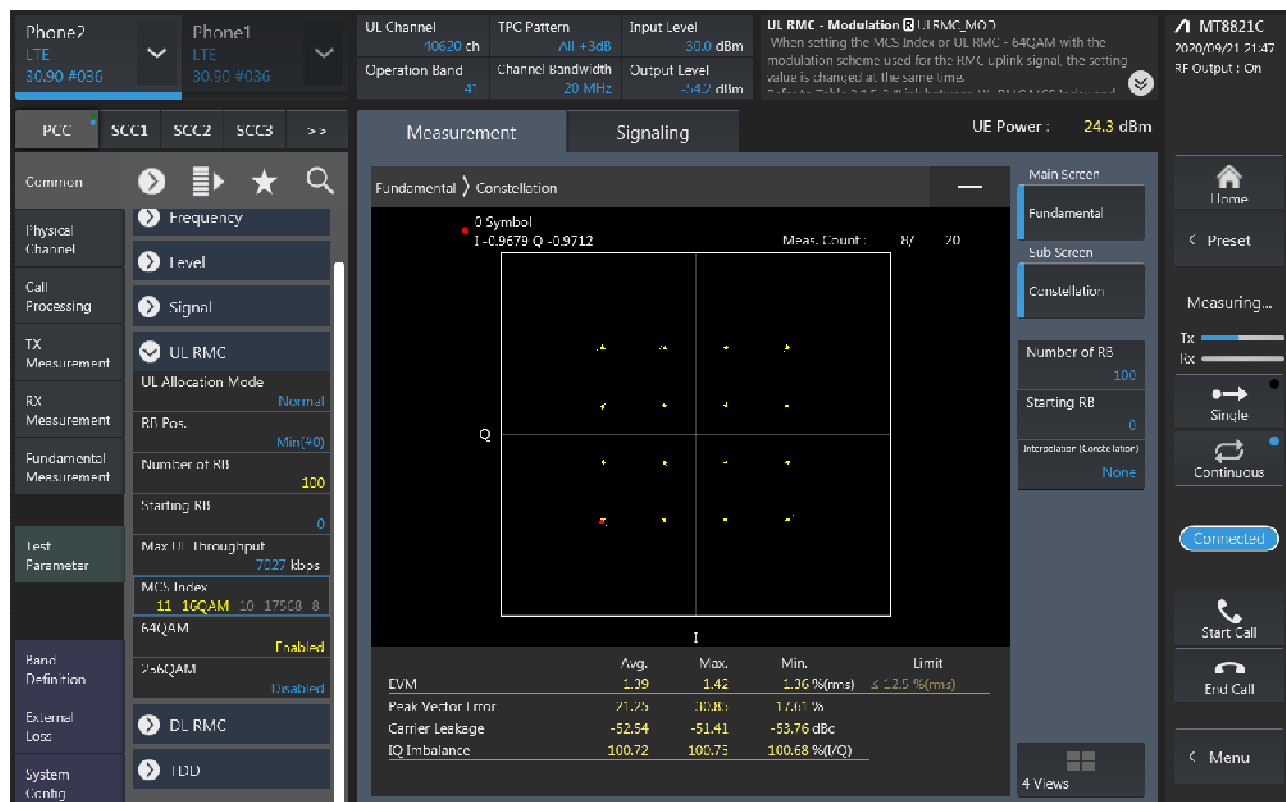
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3.2 Test Mode = LTE /TM2 20MHz

3.2.1 Test Channel = MCH



4 26dB Bandwidth and Occupied Bandwidth

4.1 Test Result

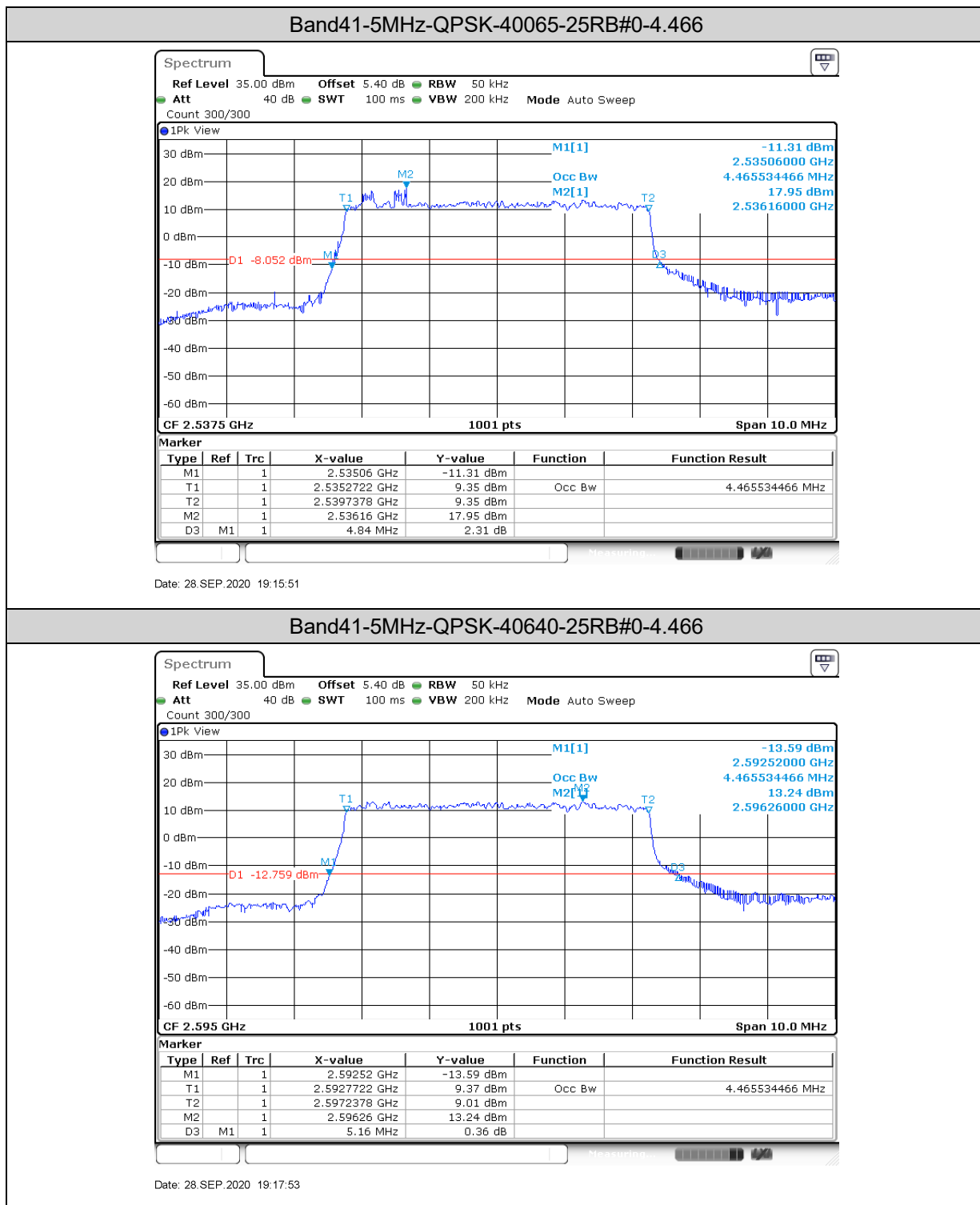
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band41	5MHz	QPSK	40065	25RB#0	4.466	4.840	PASS
Band41	5MHz	QPSK	40640	25RB#0	4.466	5.160	PASS
Band41	5MHz	QPSK	41215	25RB#0	4.466	5.020	PASS
Band41	5MHz	16QAM	40065	25RB#0	4.496	4.940	PASS
Band41	5MHz	16QAM	40640	25RB#0	4.496	4.940	PASS
Band41	5MHz	16QAM	41215	25RB#0	4.496	4.940	PASS
Band41	10MHz	QPSK	40090	50RB#0	8.891	9.720	PASS
Band41	10MHz	QPSK	40640	50RB#0	8.891	9.720	PASS
Band41	10MHz	QPSK	41190	50RB#0	8.911	9.660	PASS
Band41	10MHz	16QAM	40090	50RB#0	8.891	9.640	PASS
Band41	10MHz	16QAM	40640	50RB#0	8.911	9.620	PASS
Band41	10MHz	16QAM	41190	50RB#0	8.911	9.600	PASS
Band41	15MHz	QPSK	40115	75RB#0	13.457	16.080	PASS
Band41	15MHz	QPSK	40640	75RB#0	13.487	16.170	PASS
Band41	15MHz	QPSK	41165	75RB#0	13.457	16.170	PASS
Band41	15MHz	16QAM	40115	75RB#0	13.427	14.970	PASS
Band41	15MHz	16QAM	40640	75RB#0	13.427	15.000	PASS
Band41	15MHz	16QAM	41165	75RB#0	13.397	15.060	PASS
Band41	20MHz	QPSK	40140	100RB#0	17.862	19.760	PASS
Band41	20MHz	QPSK	40640	100RB#0	17.862	19.680	PASS
Band41	20MHz	QPSK	41140	100RB#0	17.902	19.640	PASS
Band41	20MHz	16QAM	40140	100RB#0	17.862	19.680	PASS
Band41	20MHz	16QAM	40640	100RB#0	17.862	19.840	PASS
Band41	20MHz	16QAM	41140	100RB#0	17.862	20.000	PASS



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4.2 Test Plots



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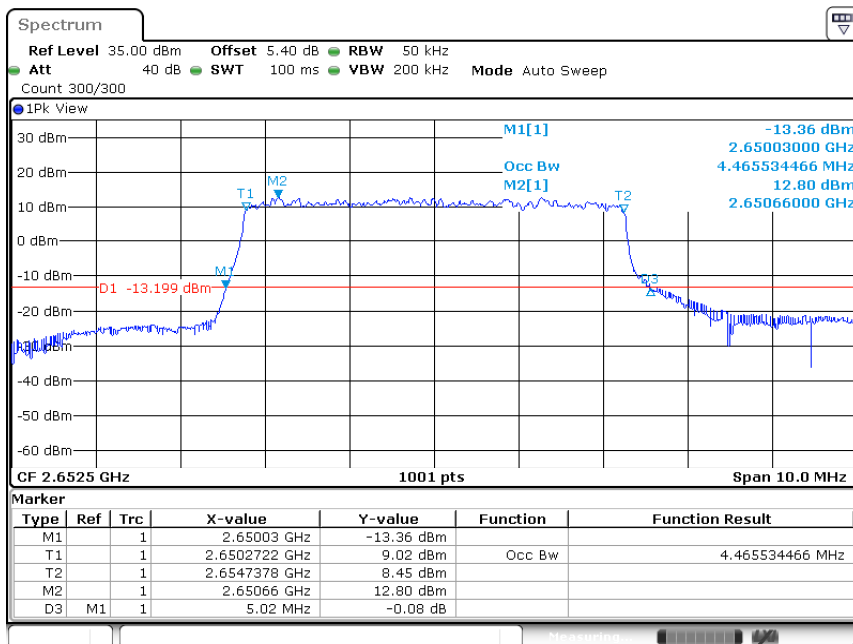
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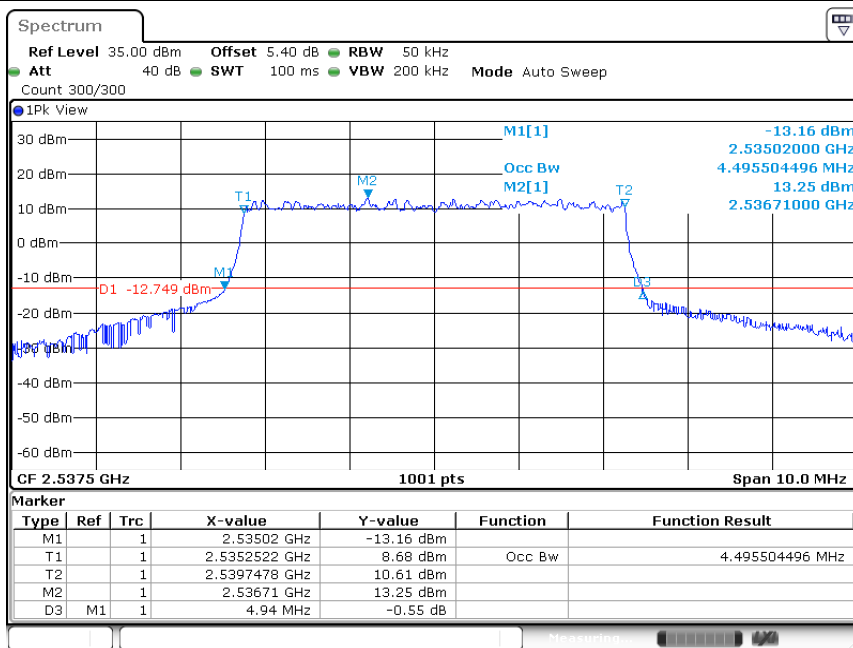
sgs.china@sgs.com

Band41-5MHz-QPSK-41215-25RB#0-4.466



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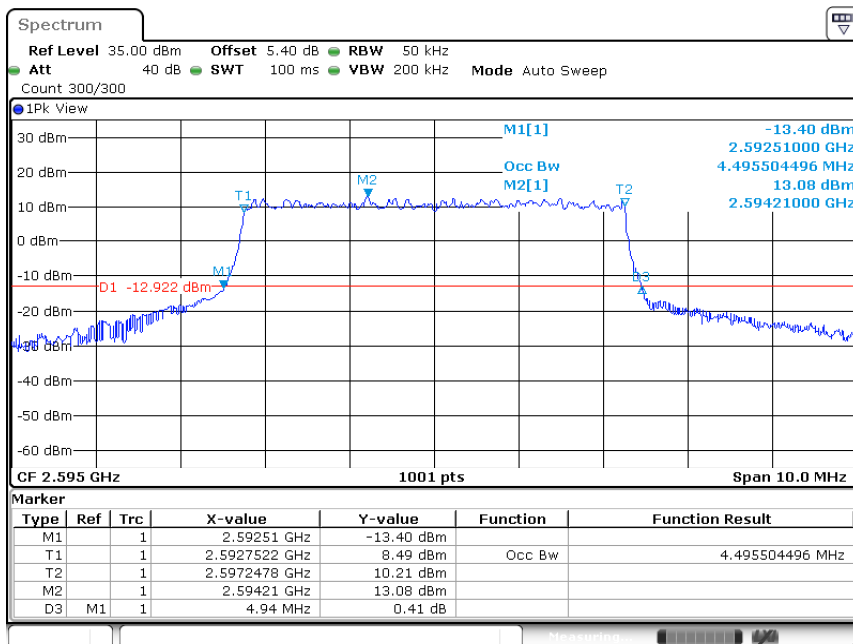
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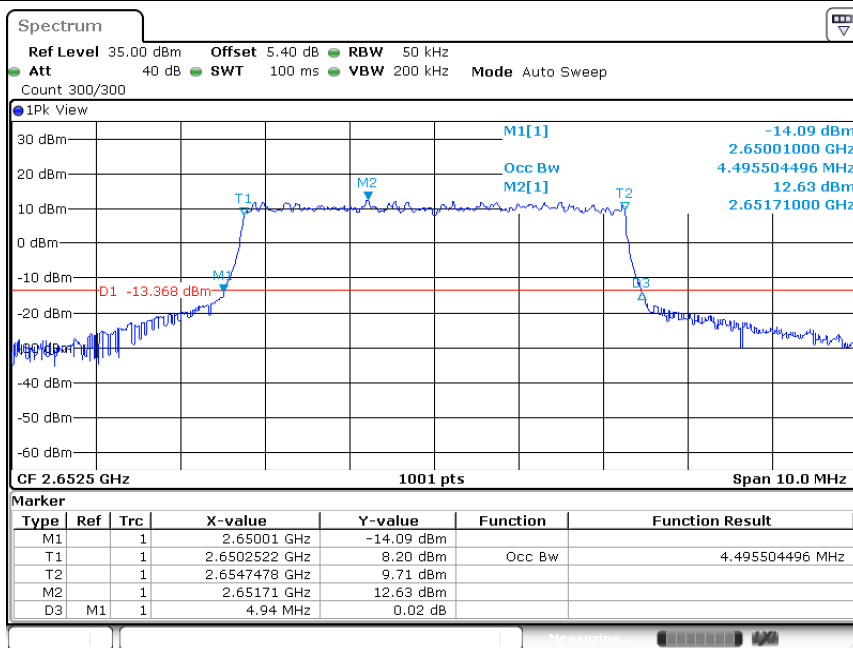


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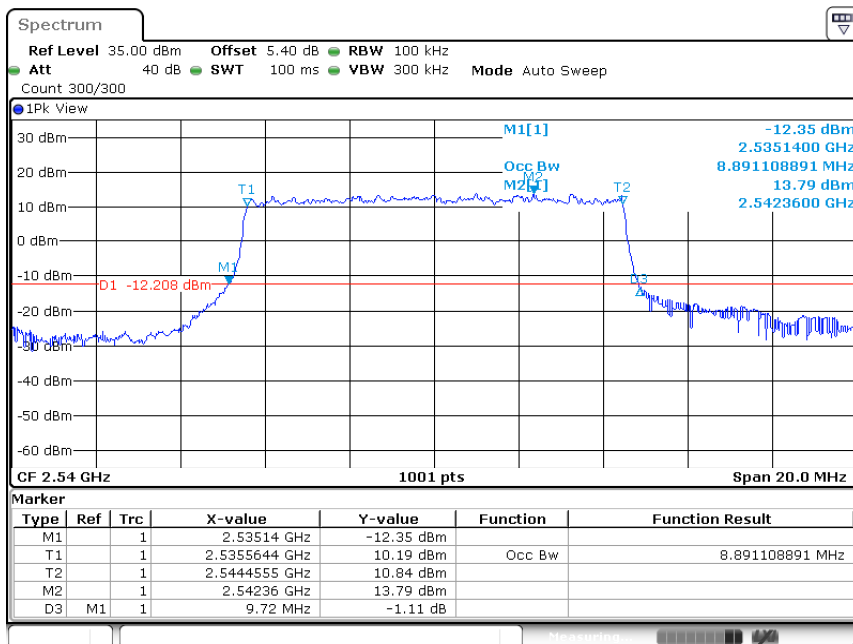
Band41-5MHz-16QAM-41215-25RB#0-4.496



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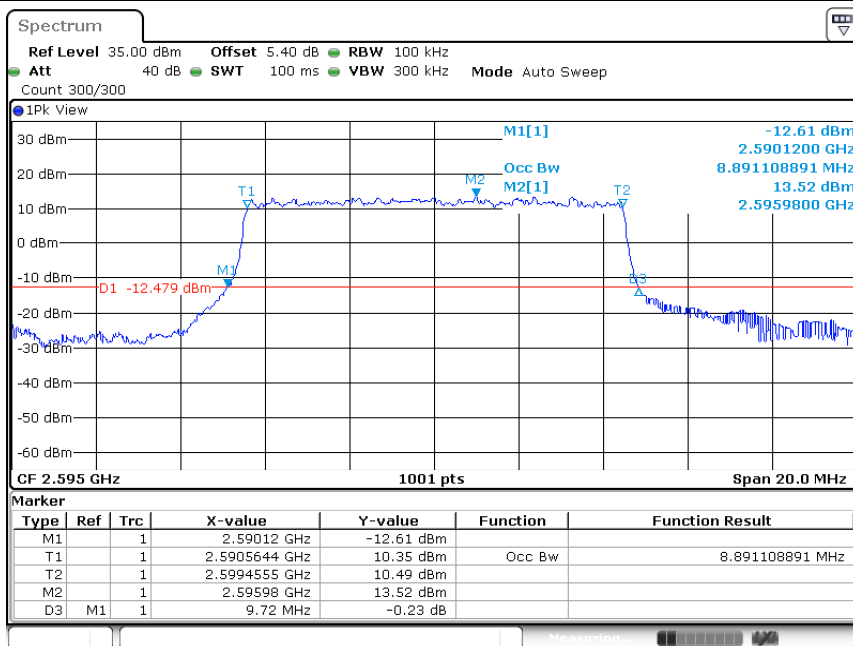


Band41-10MHz-QPSK-40090-50RB#0-8.891



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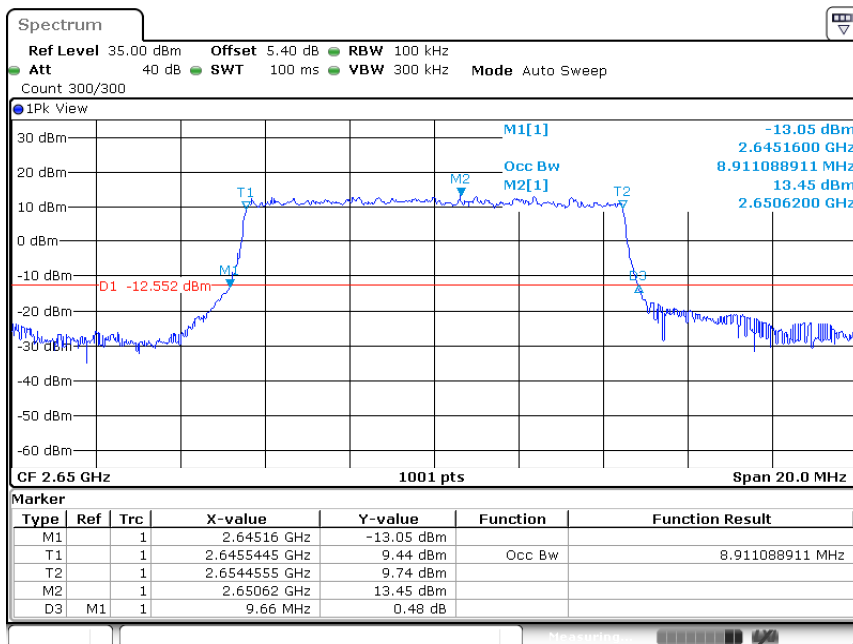
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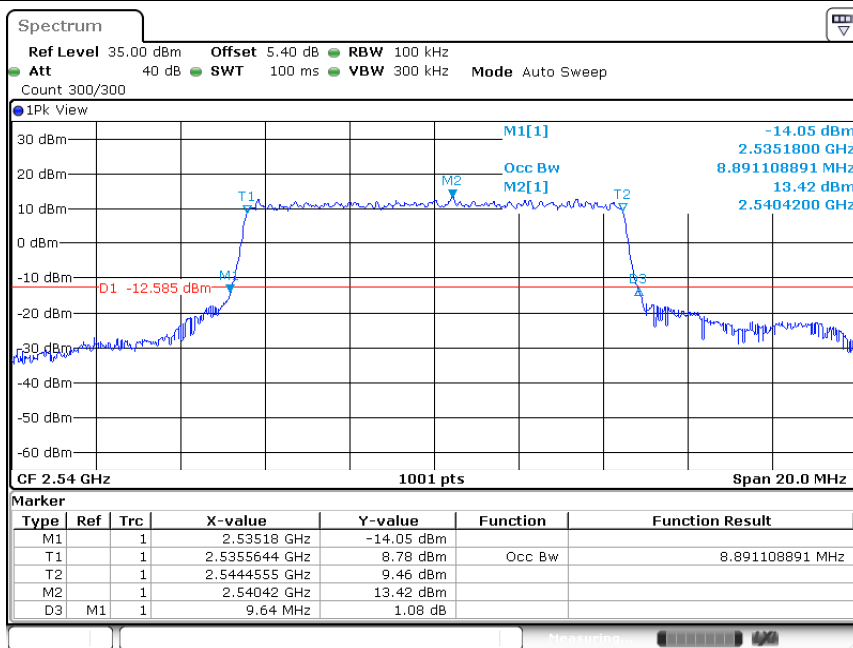


Band41-10MHz-QPSK-41190-50RB#0-8.911



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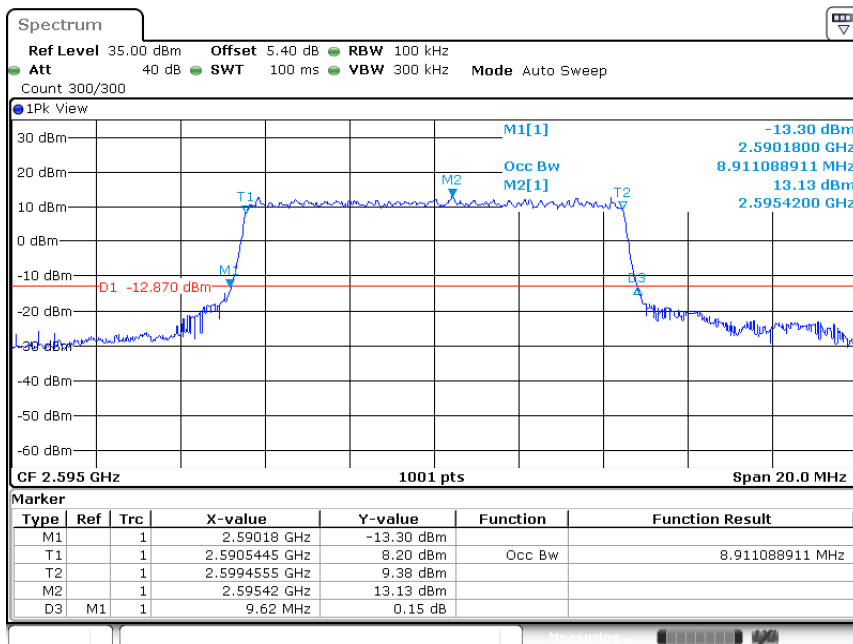
Band41-10MHz-16QAM-40090-50RB#0-8.891



Date: 28.SEP.2020 19:22:03

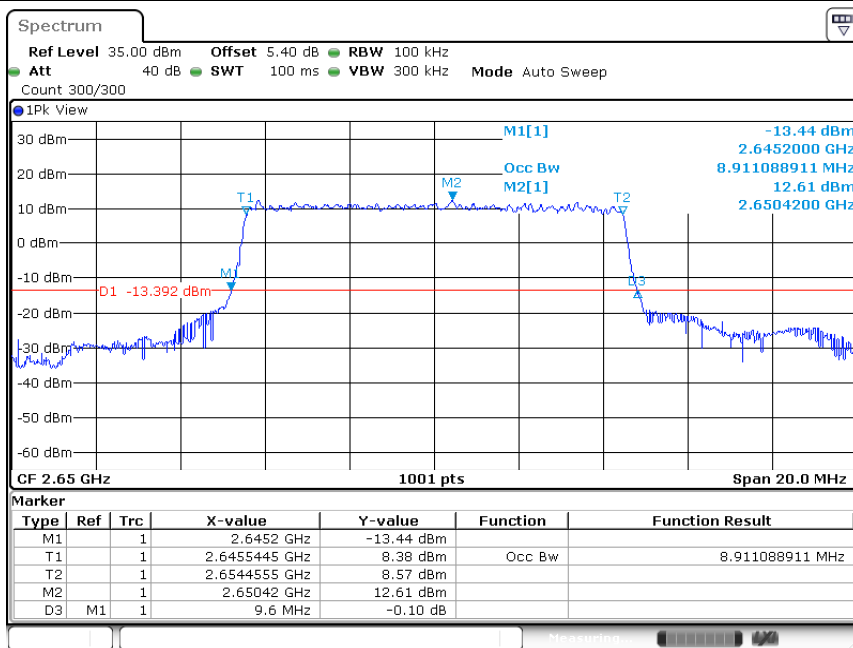


Band41-10MHz-16QAM-40640-50RB#0-8.911



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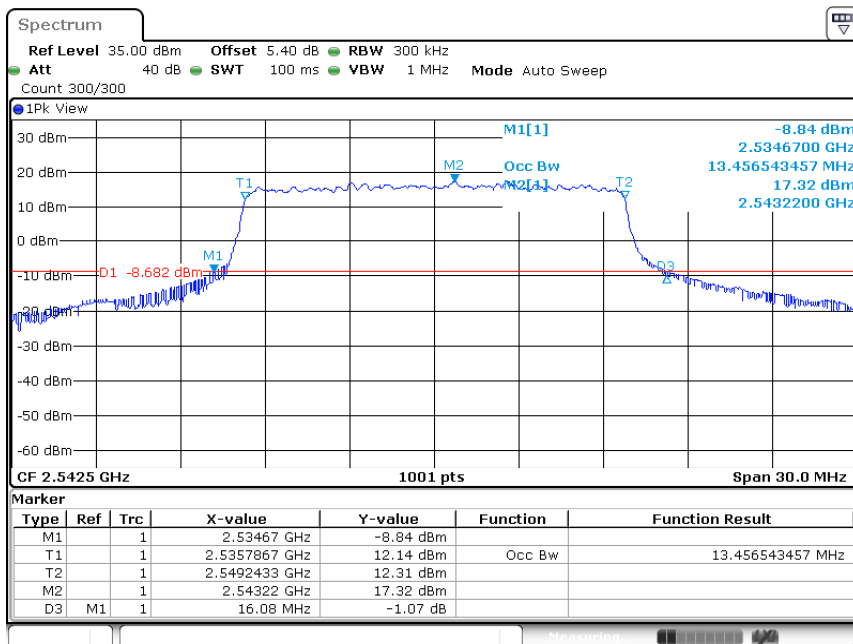
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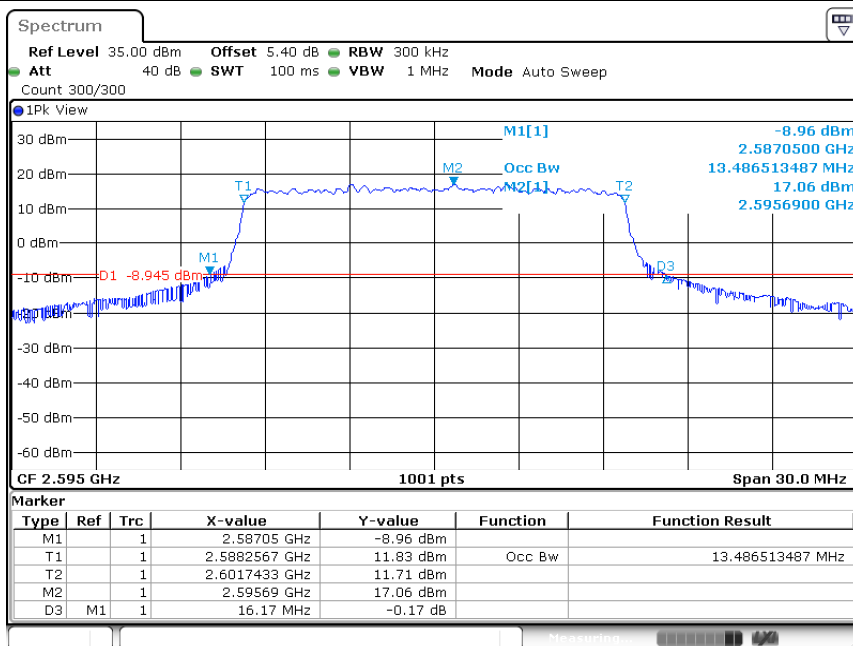


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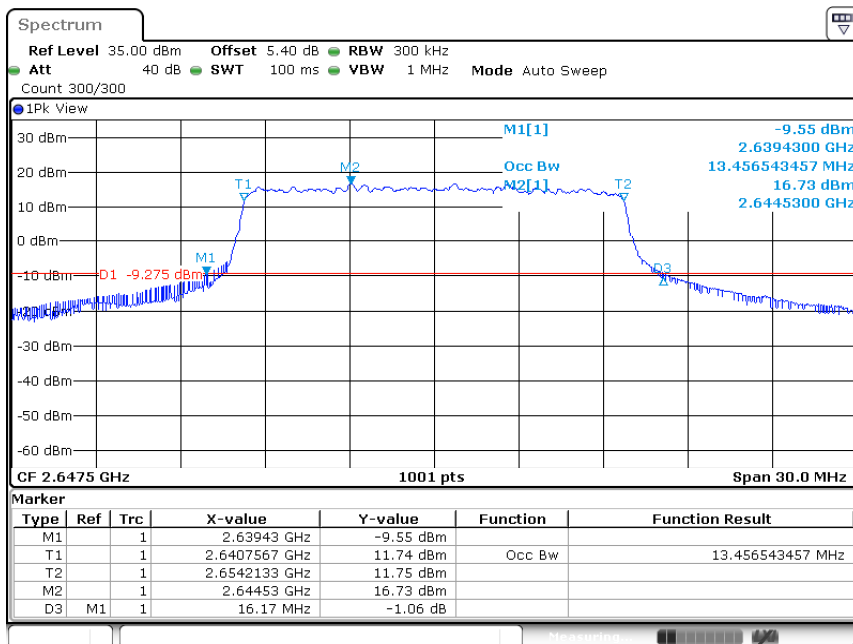
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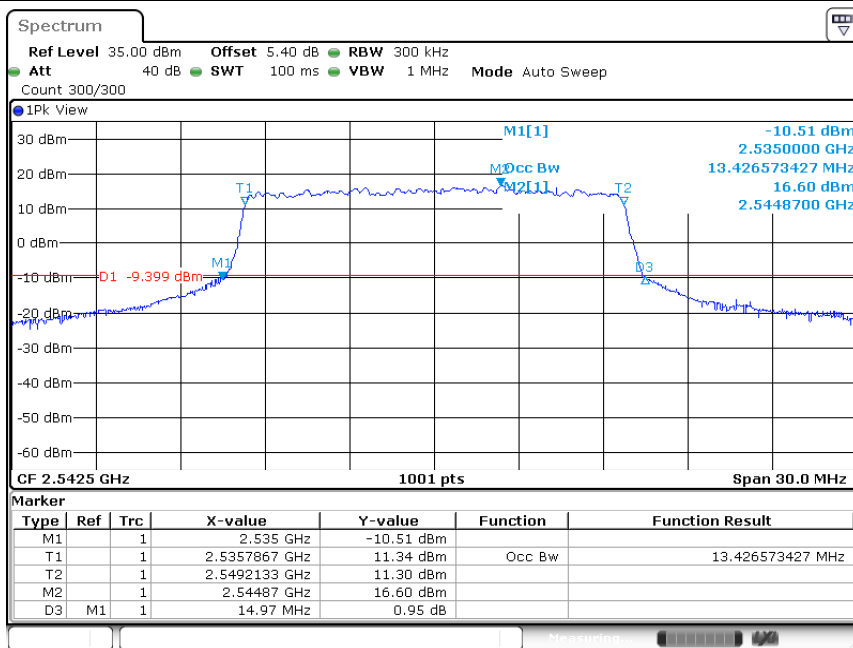


Band41-15MHz-QPSK-41165-75RB#0-13.457



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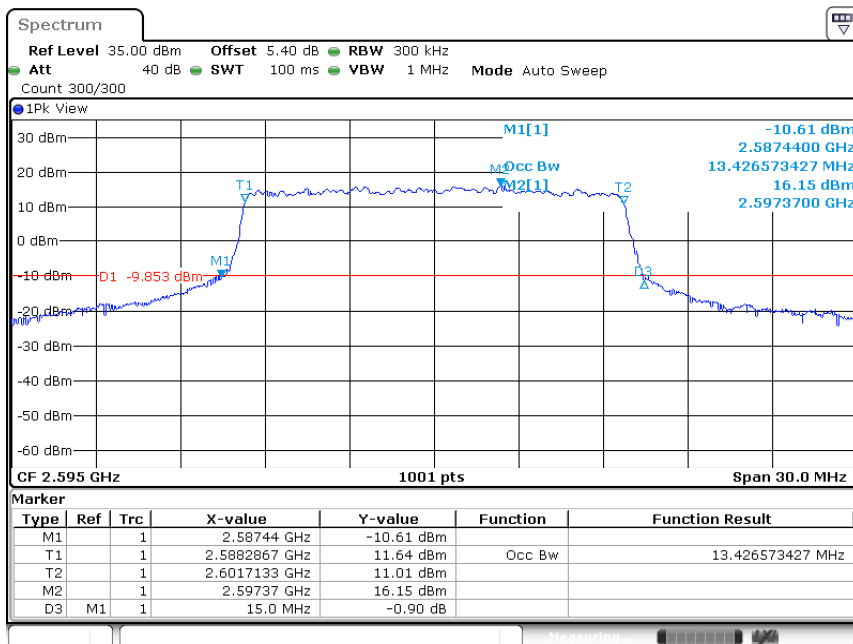
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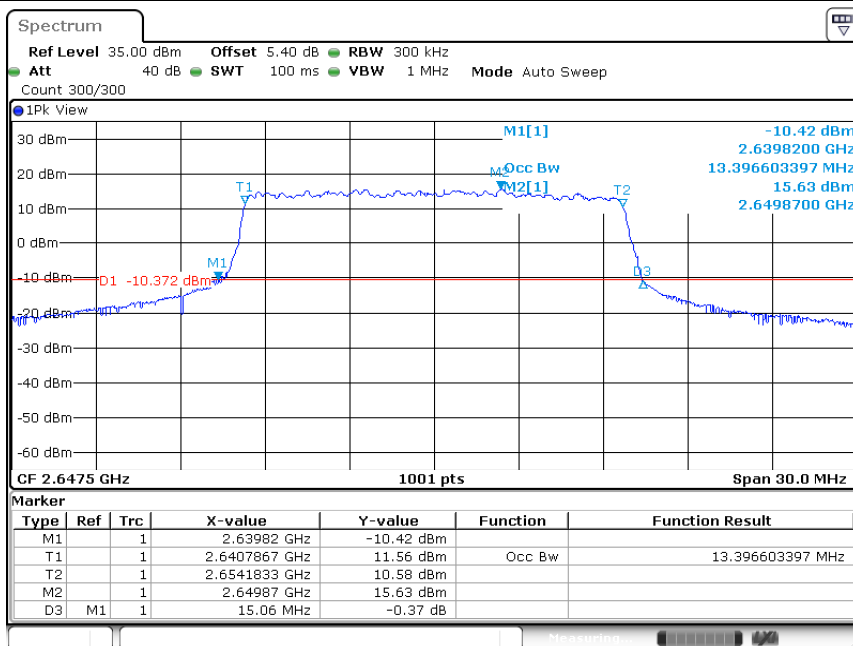


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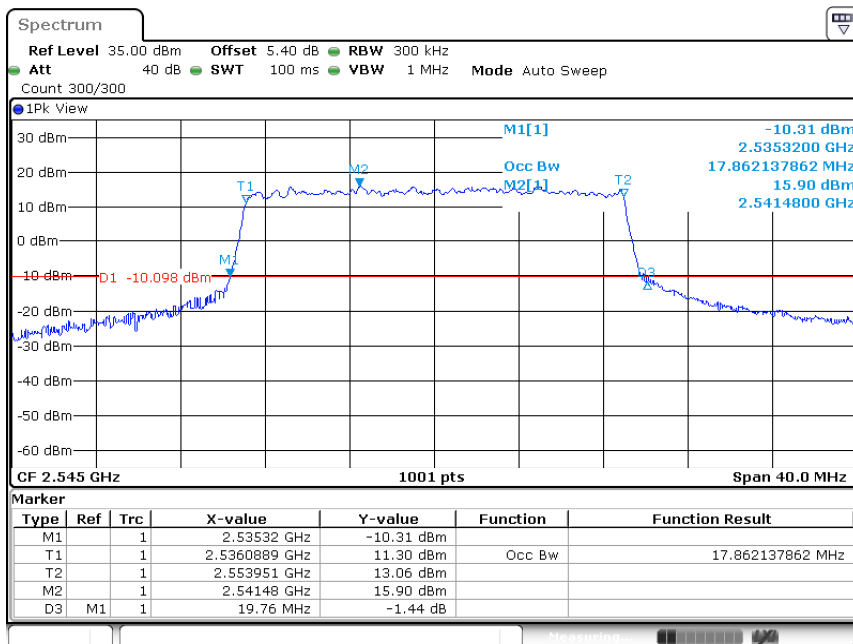
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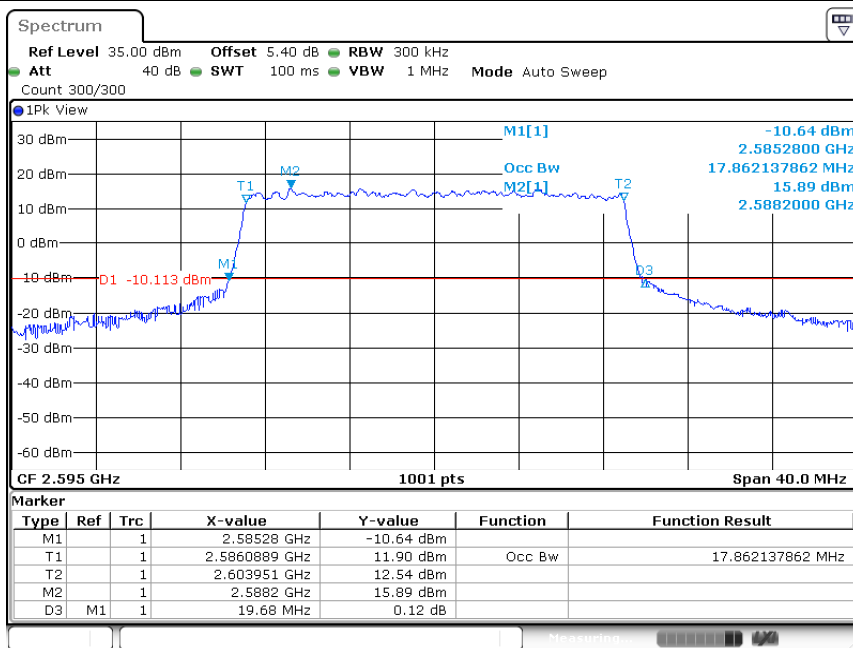


Band41-20MHz-QPSK-40140-100RB#0-17.862



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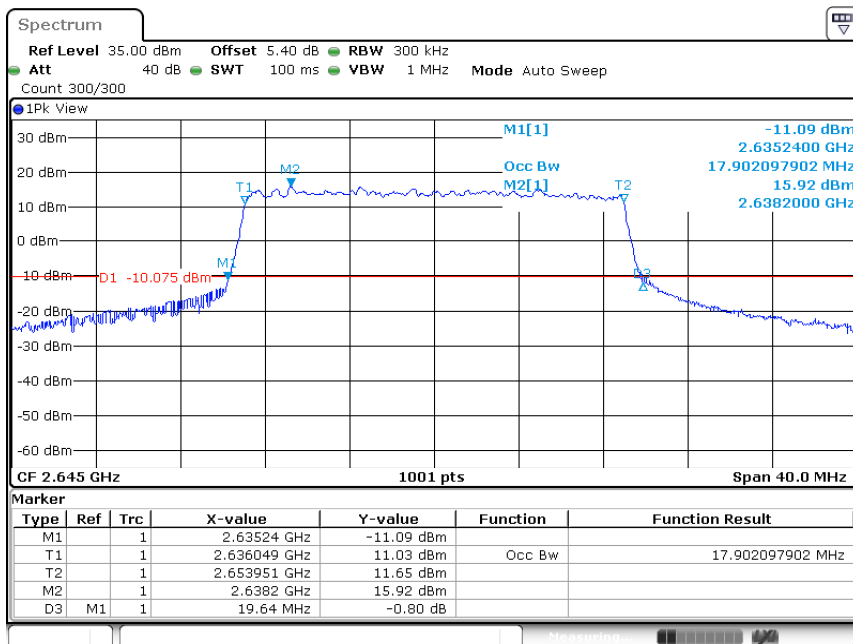
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Date: 28.SEP.2020 19:32:49

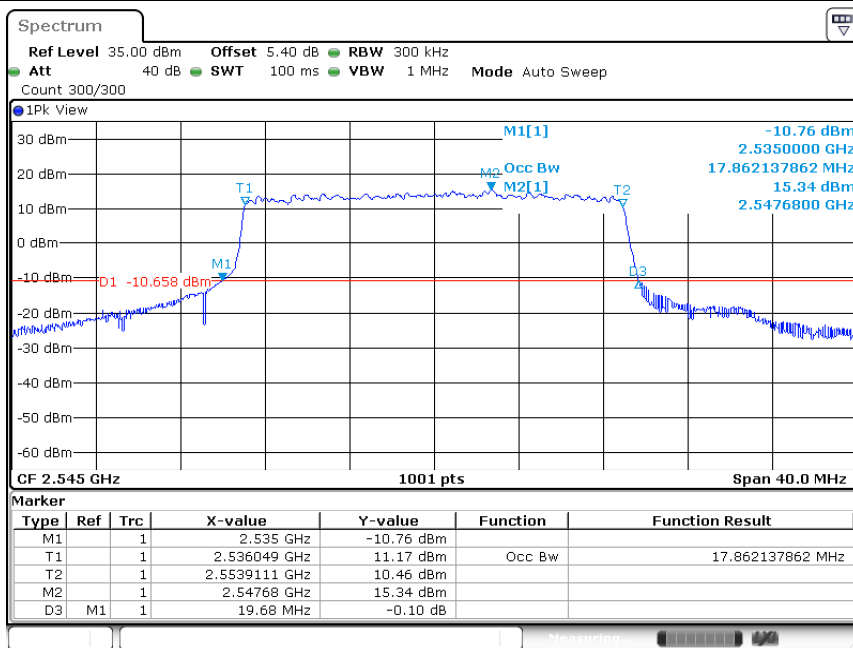


Band41-20MHz-QPSK-41140-100RB#0-17.902



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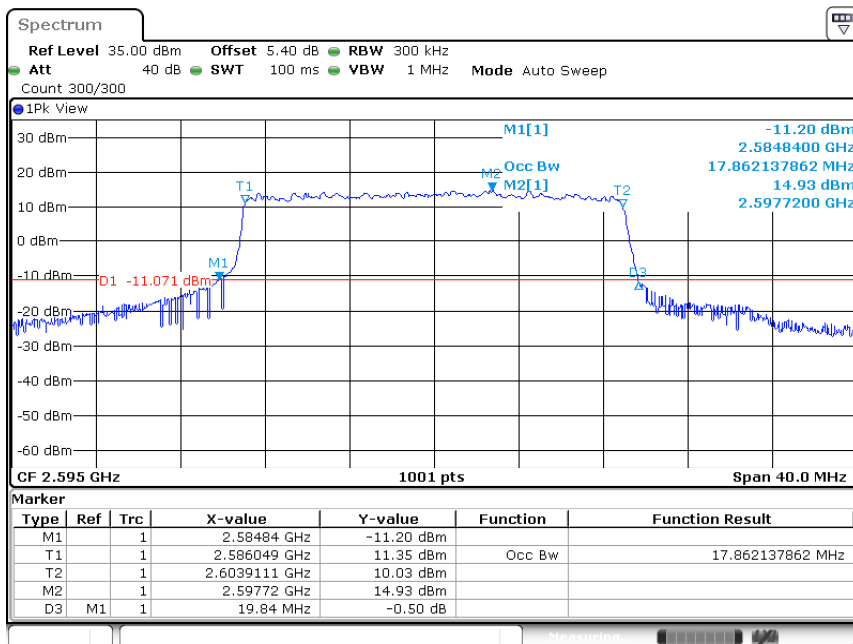
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Date: 28.SEP.2020 19:32:00

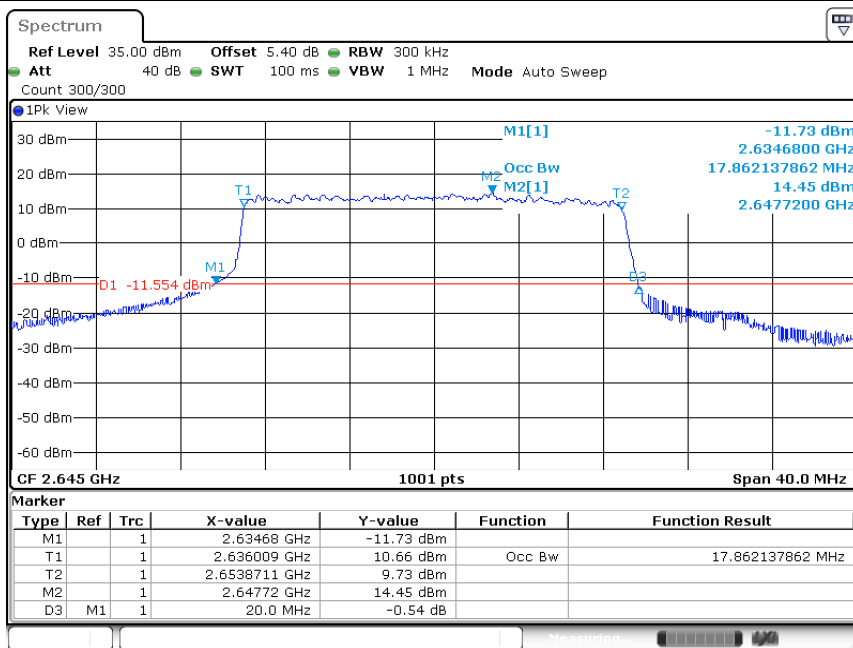


Band41-20MHz-16QAM-40640-100RB#0-17.862



Date: 28.SEP.2020 19:33:38

Band41-20MHz-16QAM-41140-100RB#0-17.862

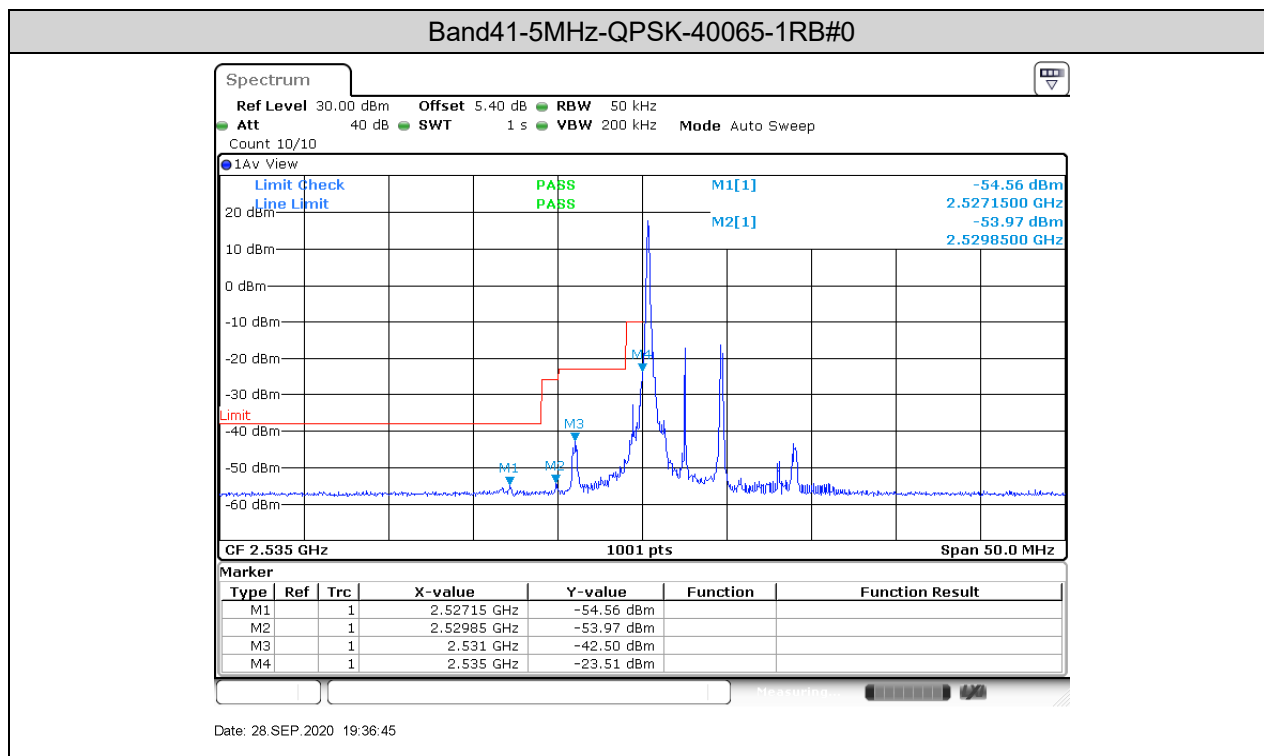


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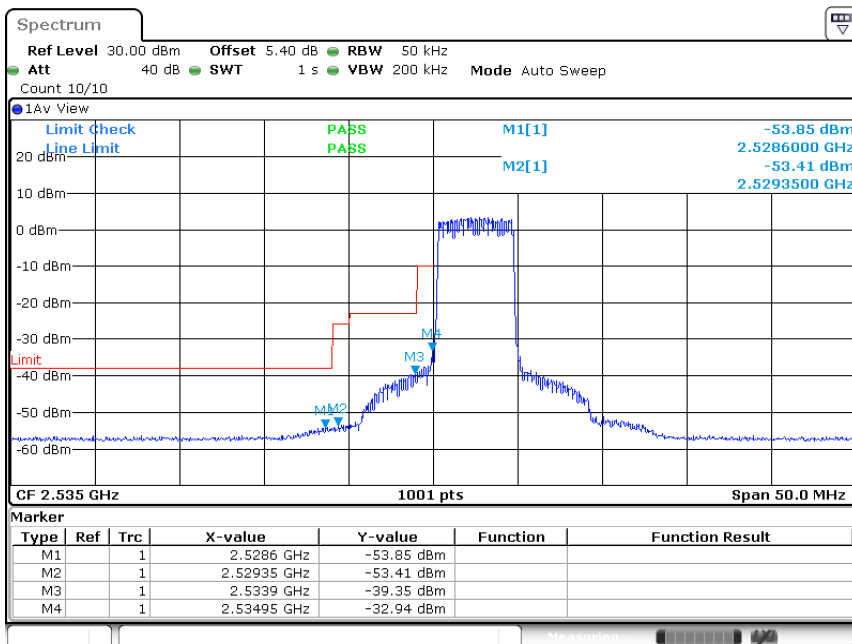


5 Band Edge Compliance

5.1 Test Plots

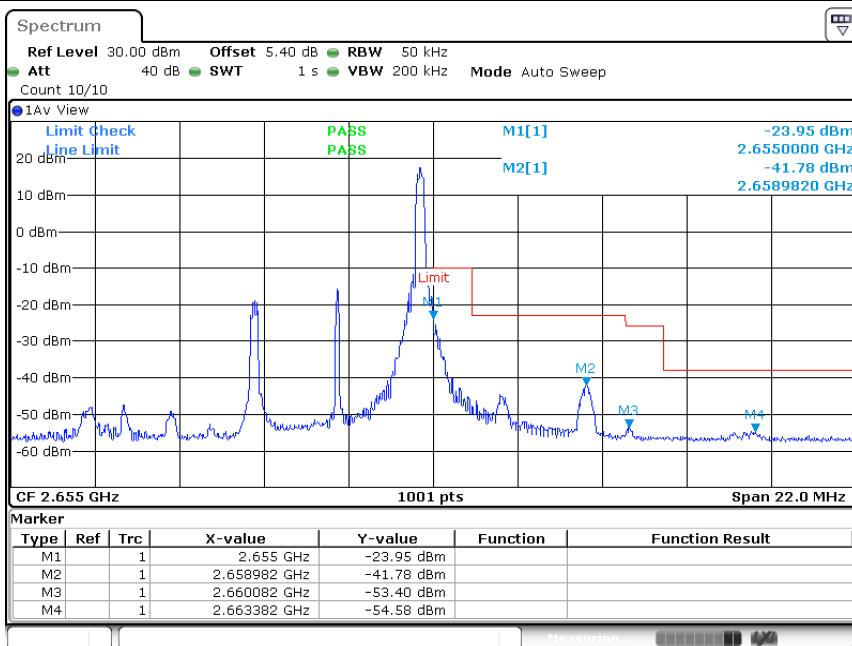


Band41-5MHz-QPSK-40065-25RB#0



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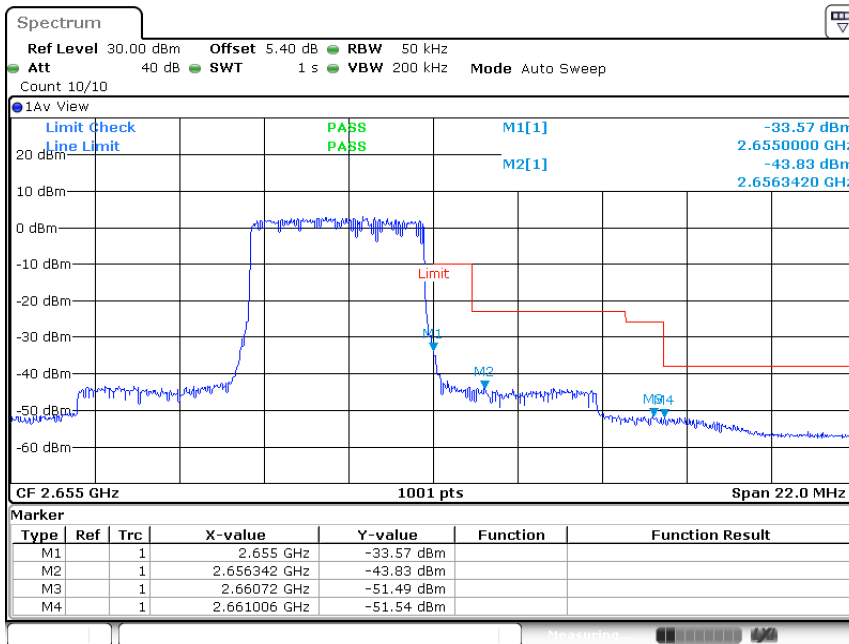
Band41-5MHz-QPSK-41215-1RB#24



Date: 28.SEP.2020 19:38:35

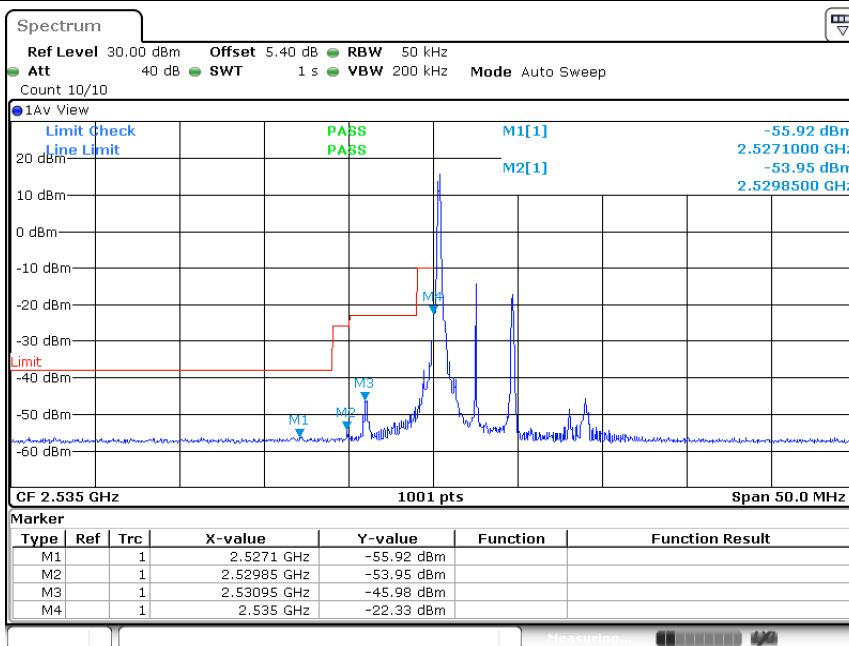


Band41-5MHz-QPSK-41215-25RB#0



Date: 28.SEP.2020 19:39:27

Band41-5MHz-16QAM-40065-1RB#0

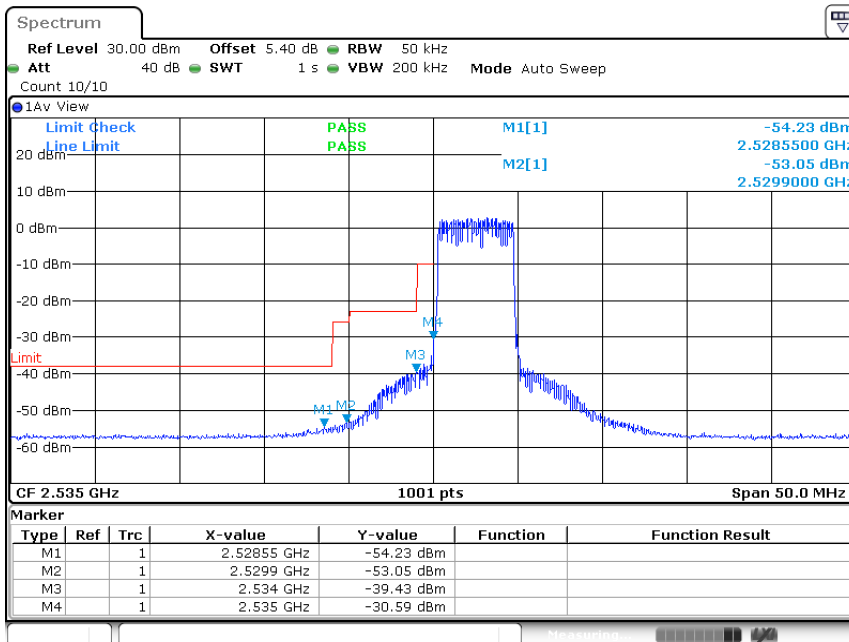


Date: 28.SEP.2020 19:37:11



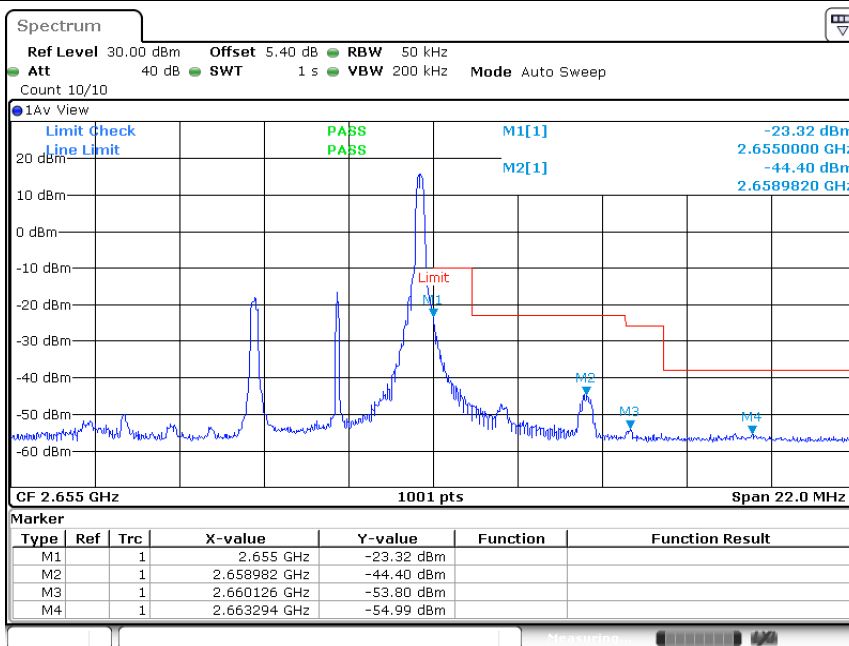
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Band41-5MHz-16QAM-40065-25RB#0



Date: 28.SEP.2020 19:38:02

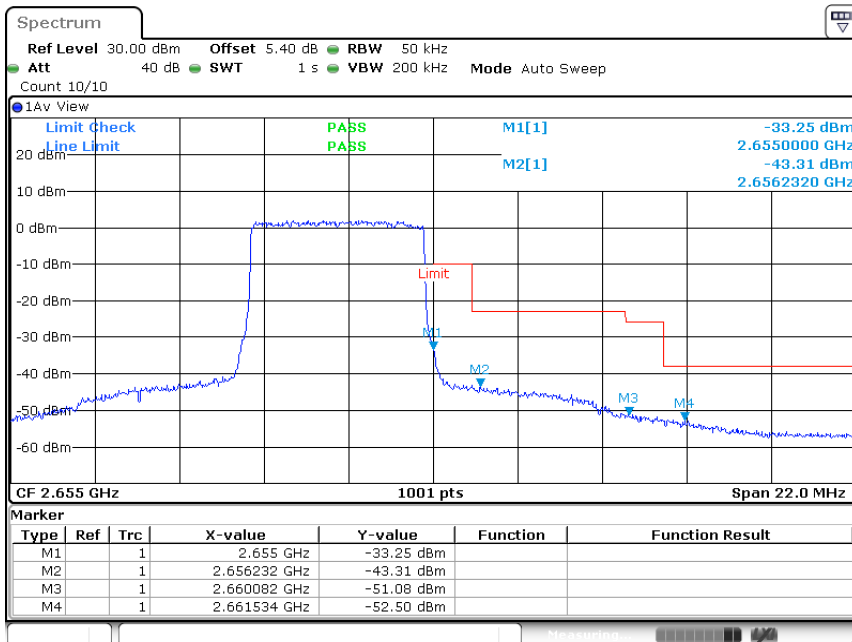
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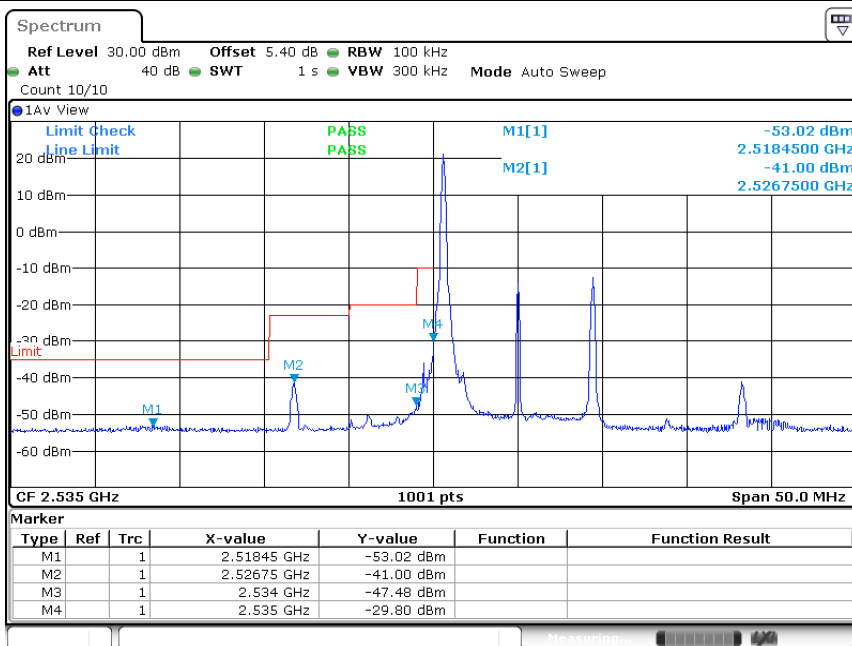


Band41-5MHz-16QAM-41215-25RB#0



Date: 28.SEP.2020 19:39:55

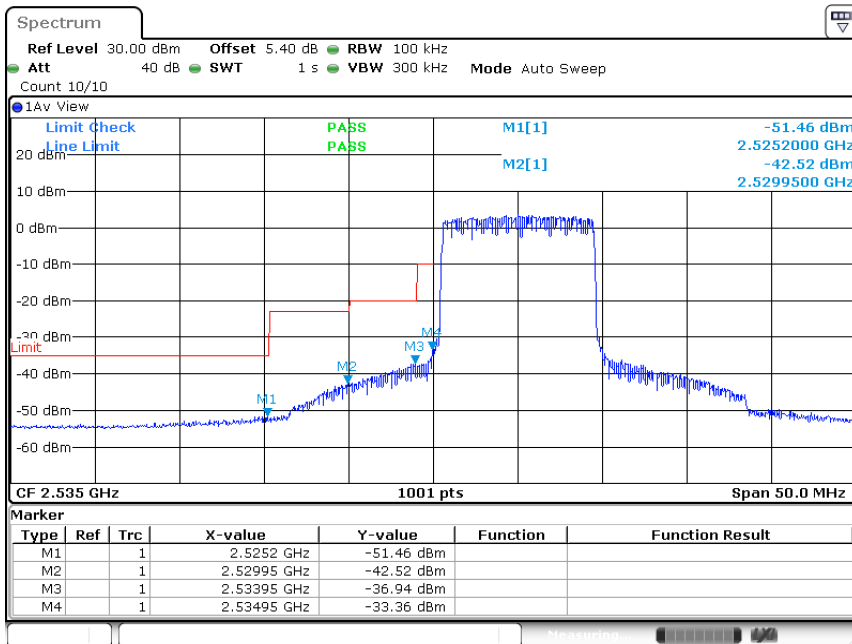
Band41-10MHz-QPSK-40090-1RB#0



Date: 28.SEP.2020 19:40:29

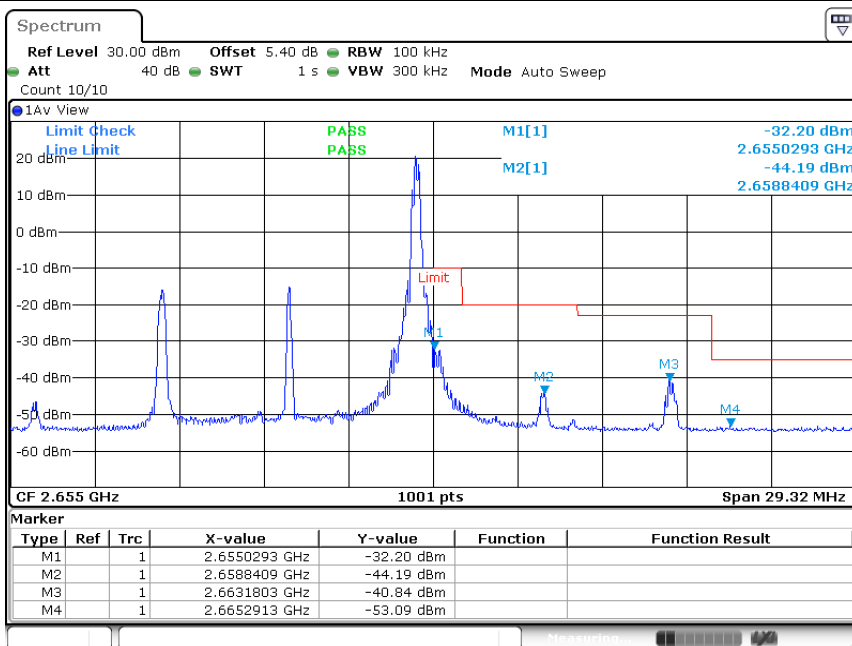


Band41-10MHz-QPSK-40090-50RB#0



Date: 28.SEP.2020 19:41:20

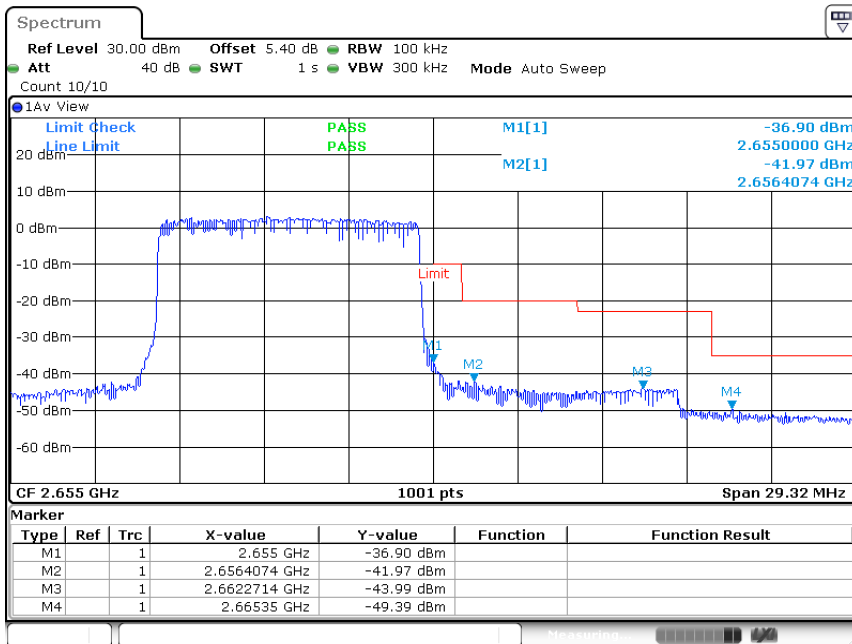
Band41-10MHz-QPSK-41190-1RB#49



Date: 28.SEP.2020 19:42:19

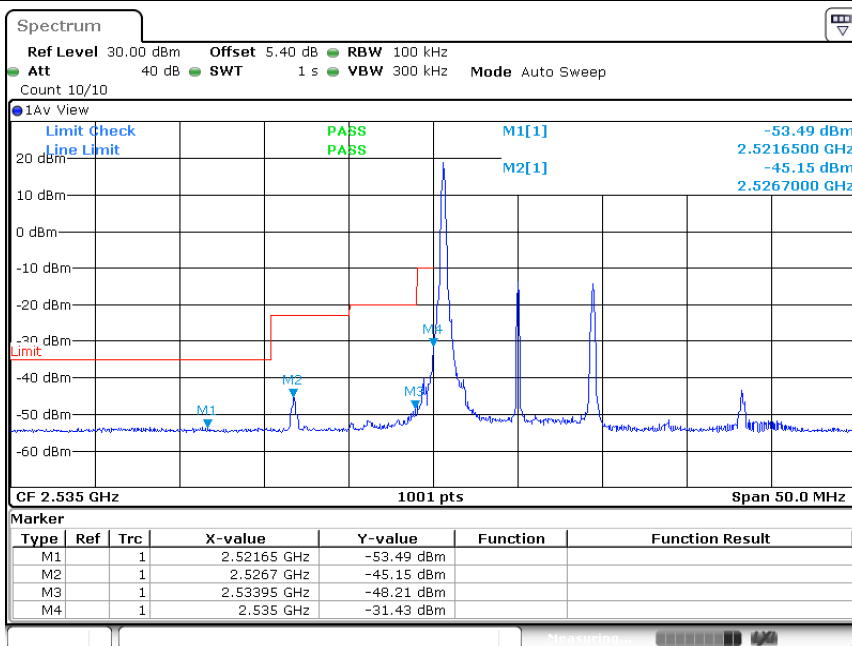


Band41-10MHz-QPSK-41190-50RB#0



Date: 28.SEP.2020 19:43:11

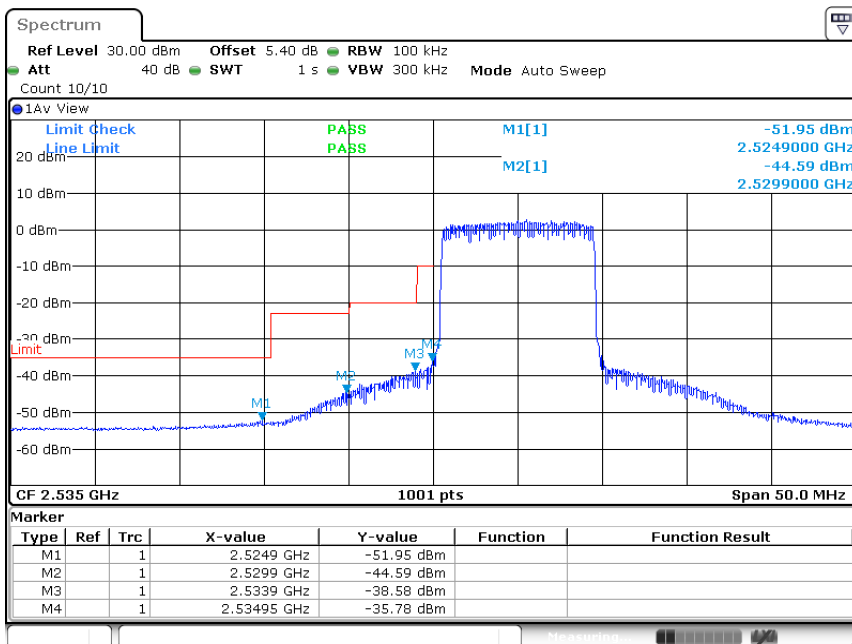
Band41-10MHz-16QAM-40090-1RB#0



Date: 28.SEP.2020 19:40:54

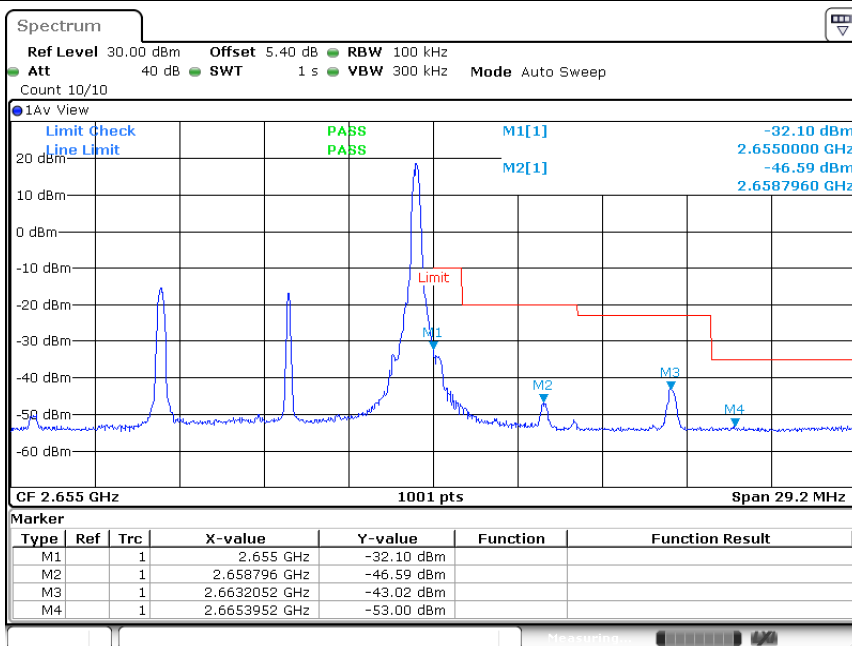


Band41-10MHz-16QAM-40090-50RB#0



Date: 28.SEP.2020 19:41:46

Band41-10MHz-16QAM-41190-1RB#49



Date: 28.SEP.2020 19:42:45



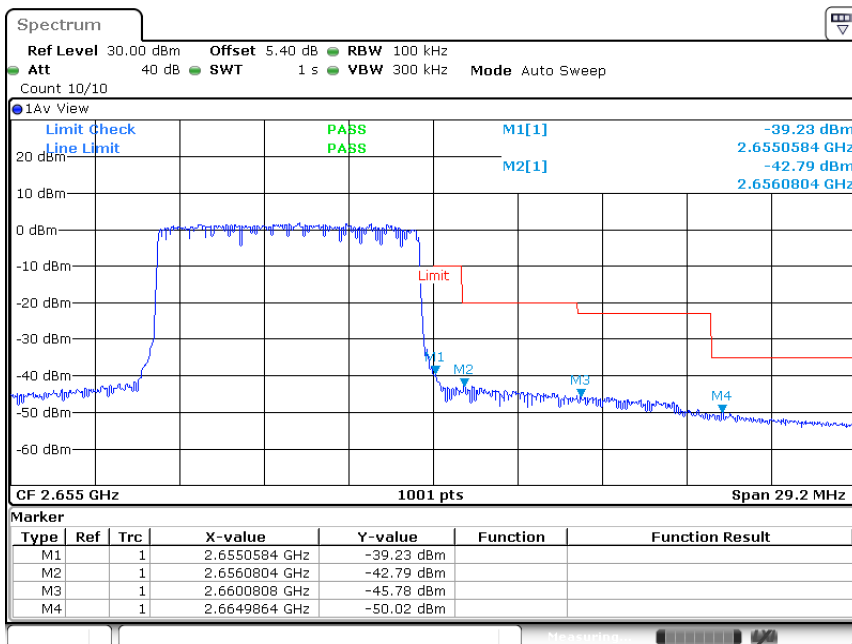
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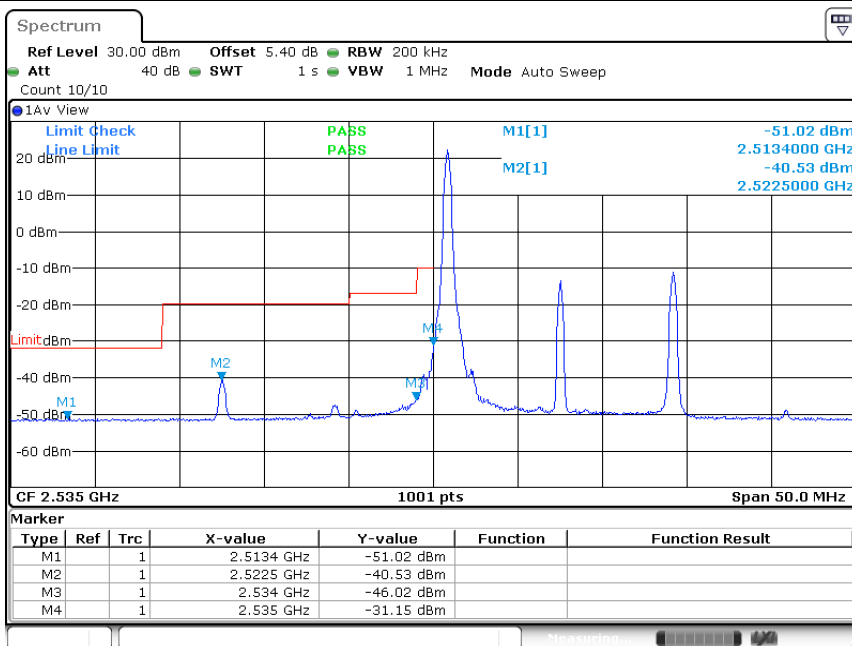
No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Band41-10MHz-16QAM-41190-50RB#0



Date: 28.SEP.2020 19:43:37

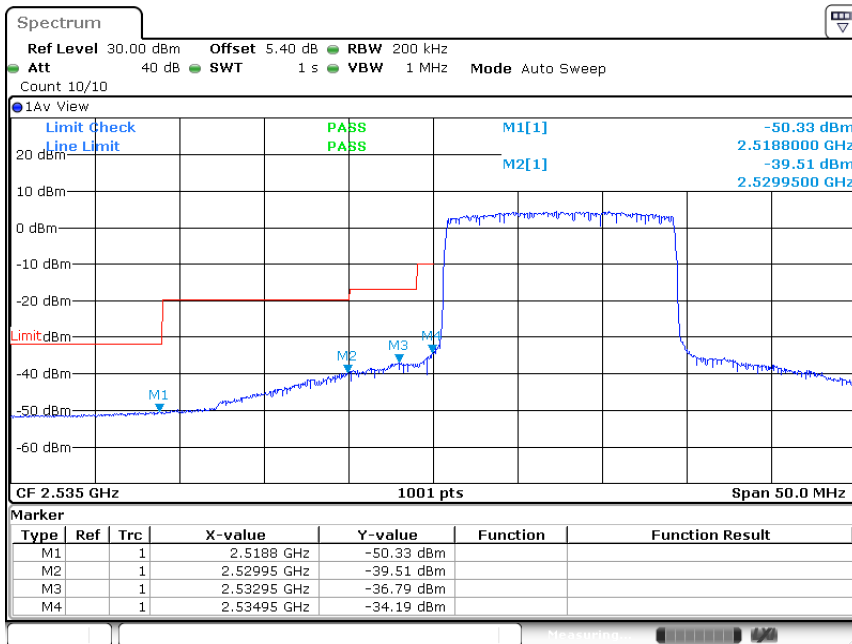
Band41-15MHz-QPSK-40115-1RB#0



Date: 28.SEP.2020 19:47:21

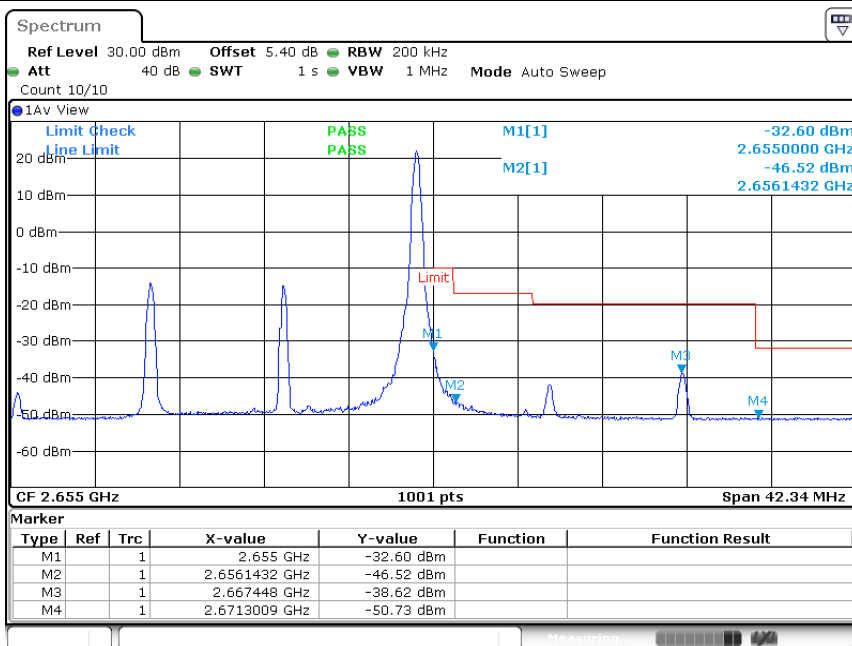


Band41-15MHz-QPSK-40115-75RB#0



Date: 28.SEP.2020 19:48:13

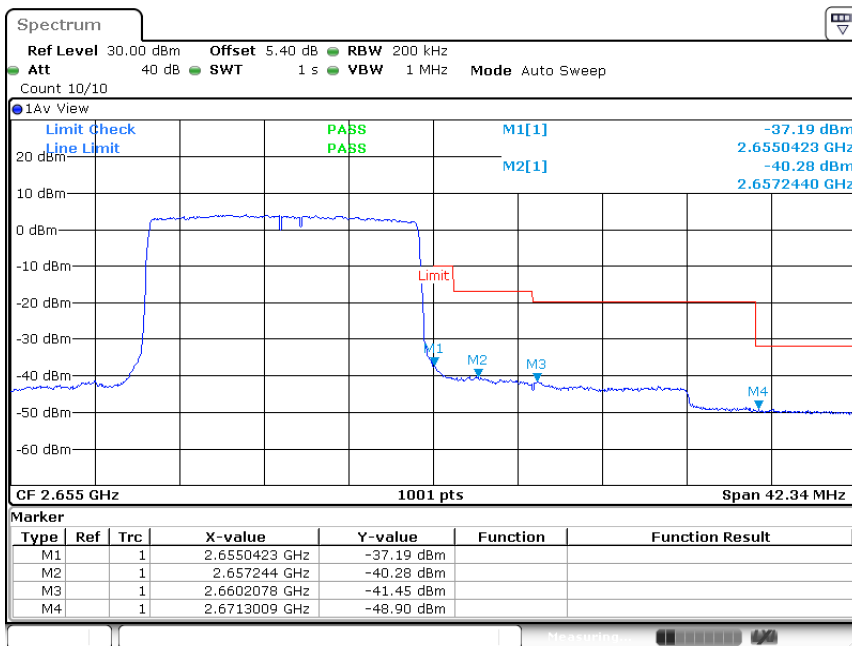
Band41-15MHz-QPSK-41165-1RB#74



Date: 28.SEP.2020 19:49:11

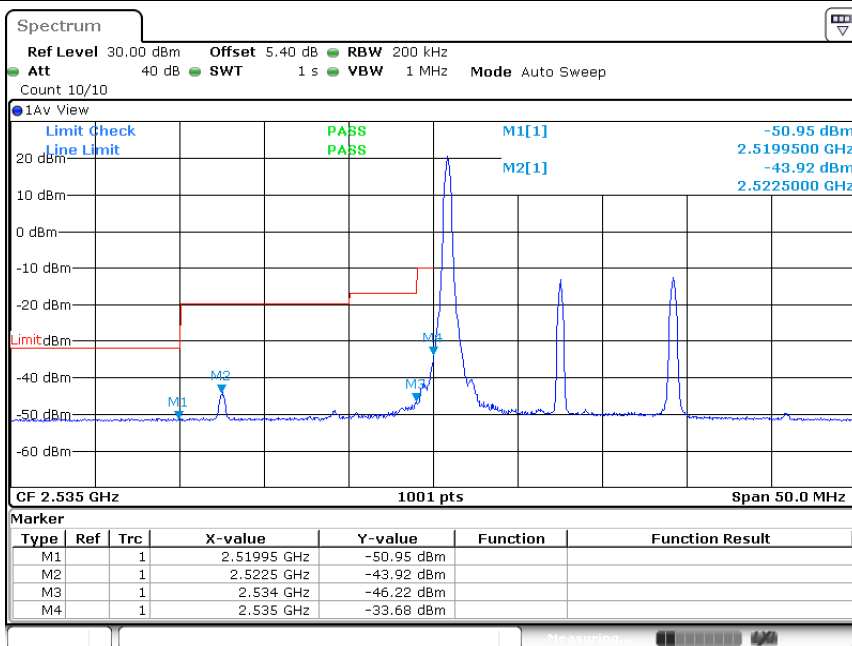


Band41-15MHz-QPSK-41165-75RB#0



Date: 28.SEP.2020 19:50:03

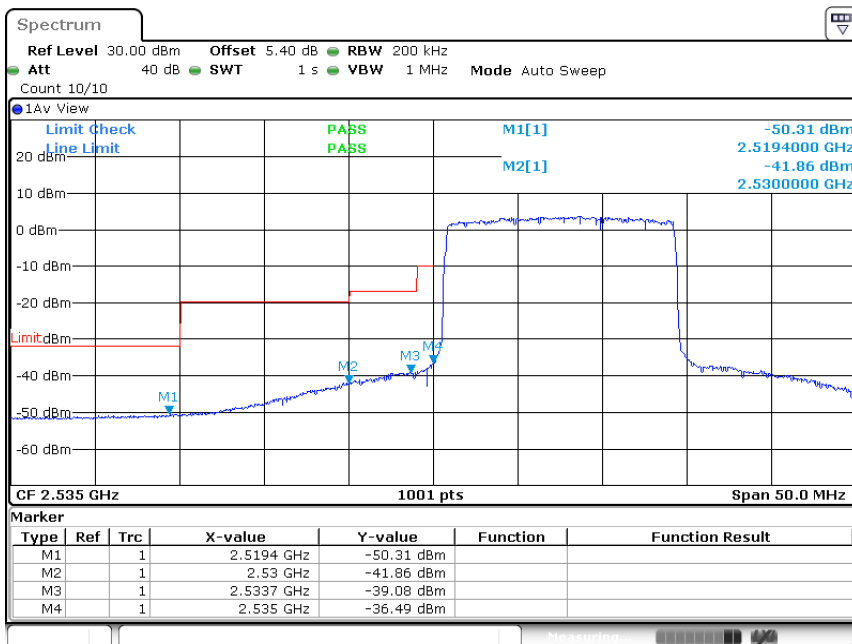
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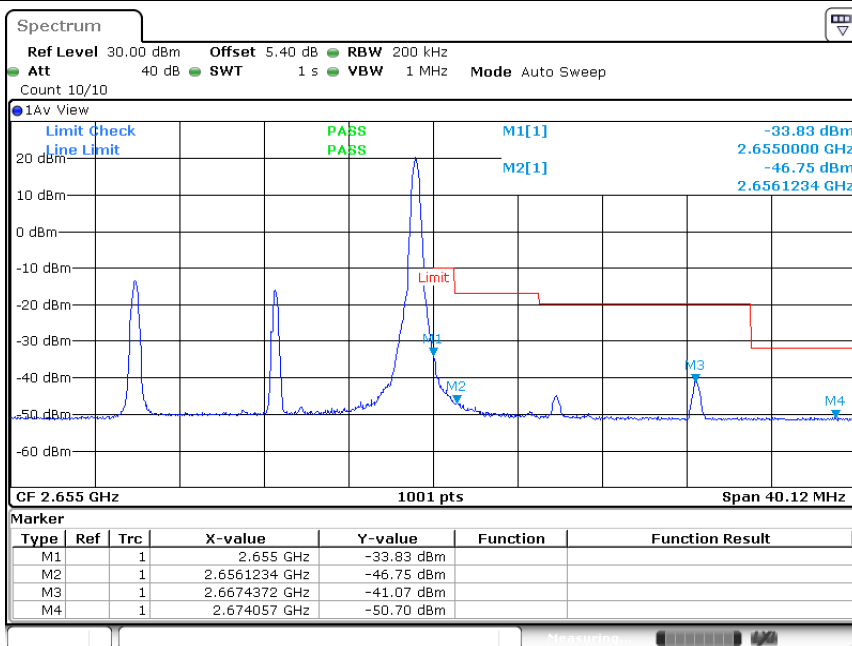


Band41-15MHz-16QAM-40115-75RB#0



Date: 28.SEP.2020 19:48:38

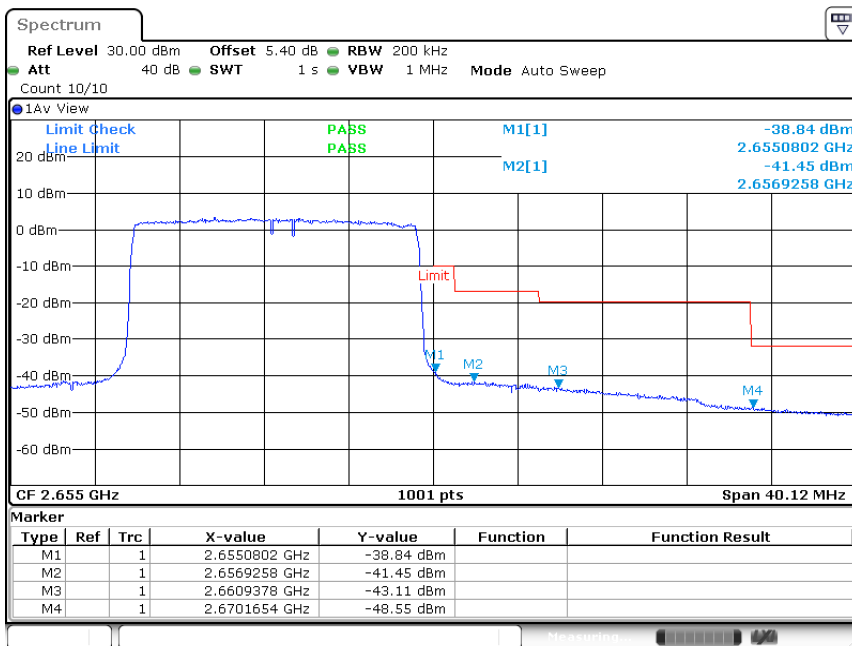
Band41-15MHz-16QAM-41165-1RB#74



Date: 28.SEP.2020 19:49:37

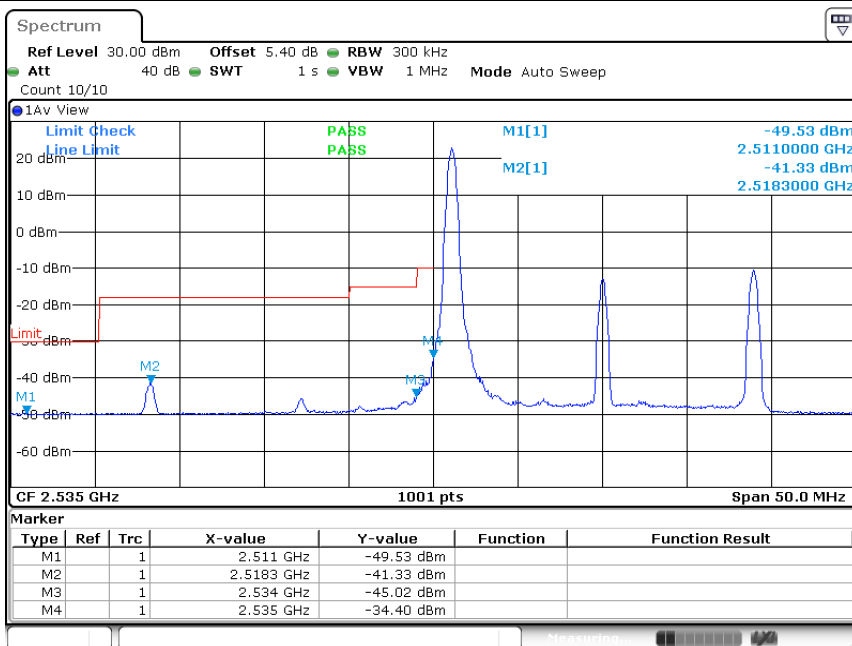


Band41-15MHz-16QAM-41165-75RB#0



Date: 28.SEP.2020 19:50:29

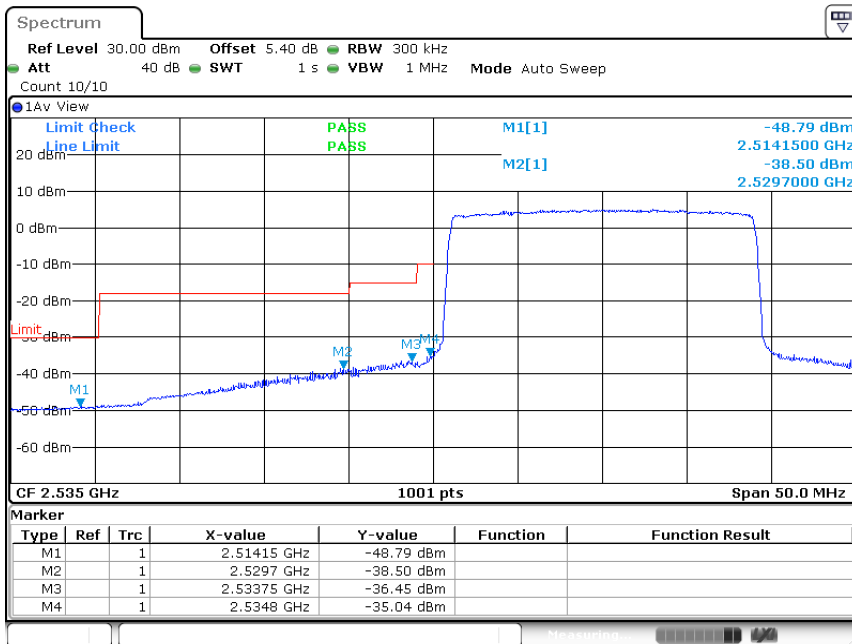
Band41-20MHz-QPSK-40140-1RB#0



Date: 28.SEP.2020 19:51:02

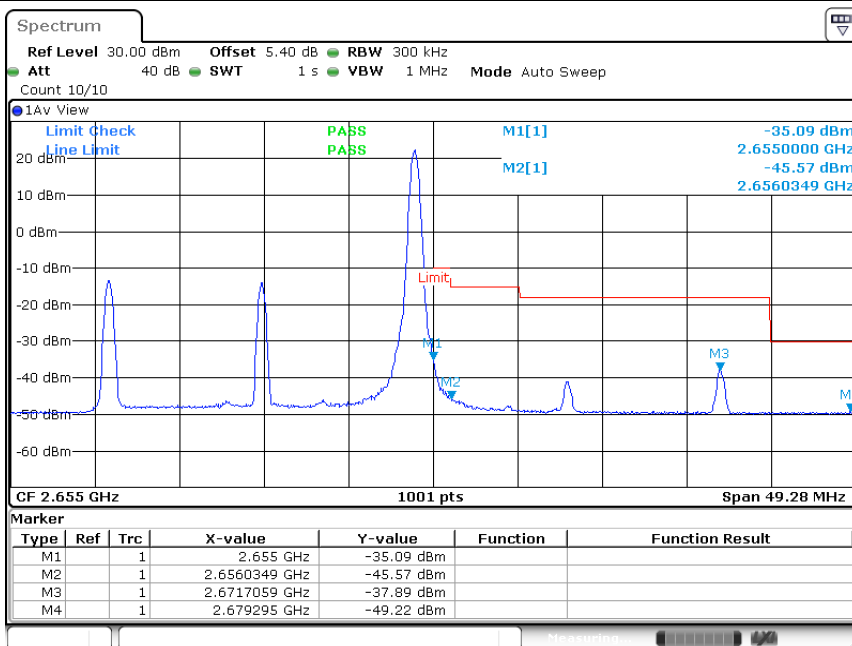


Band41-20MHz-QPSK-40140-100RB#0



Date: 28.SEP.2020 19:51:54

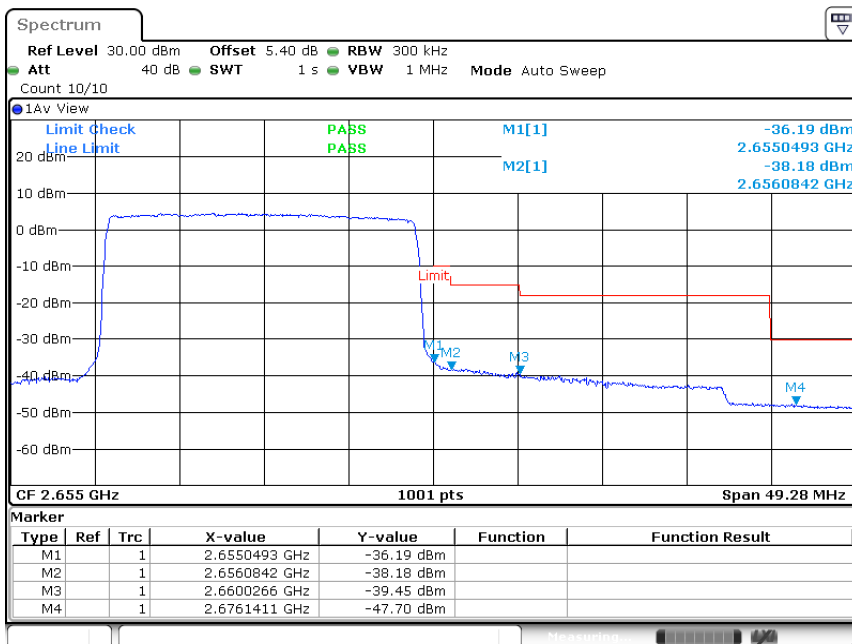
Band41-20MHz-QPSK-41140-1RB#99



Date: 28.SEP.2020 19:52:53

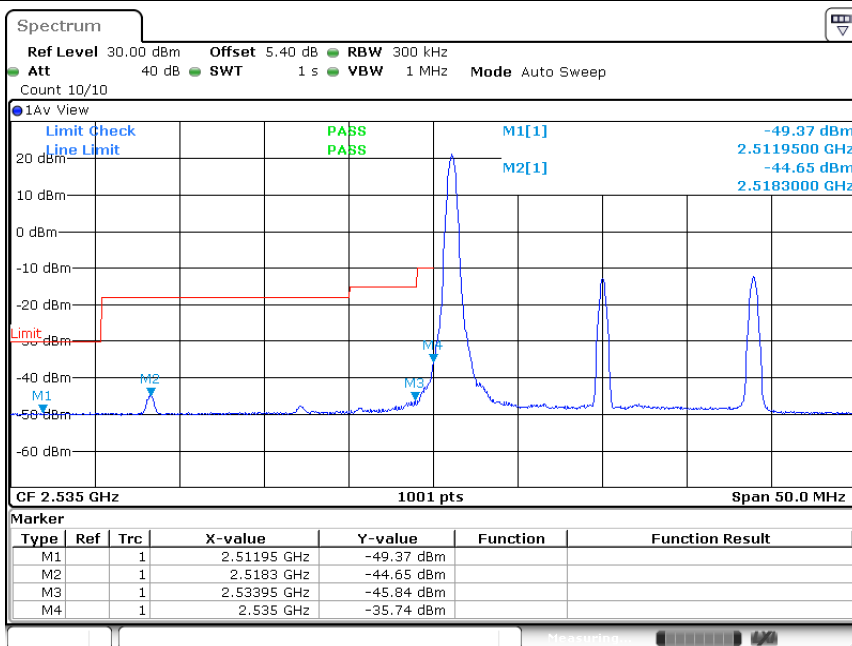


Band41-20MHz-QPSK-41140-100RB#0



Date: 28.SEP.2020 19:53:45

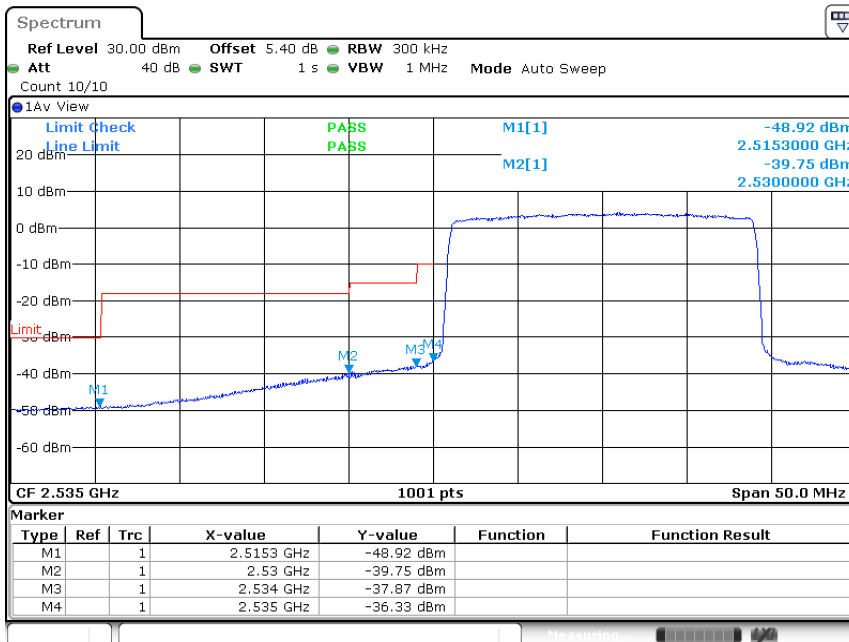
Band41-20MHz-16QAM-40140-1RB#0



Date: 28.SEP.2020 19:51:28

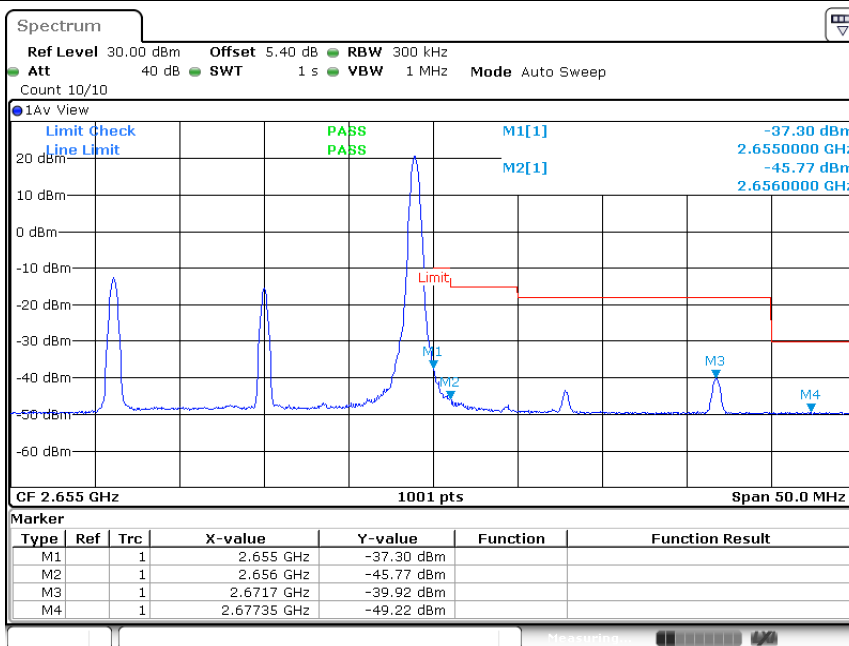


Band41-20MHz-16QAM-40140-100RB#0



Date: 28.SEP.2020 19:52:20

Band41-20MHz-16QAM-41140-1RB#99

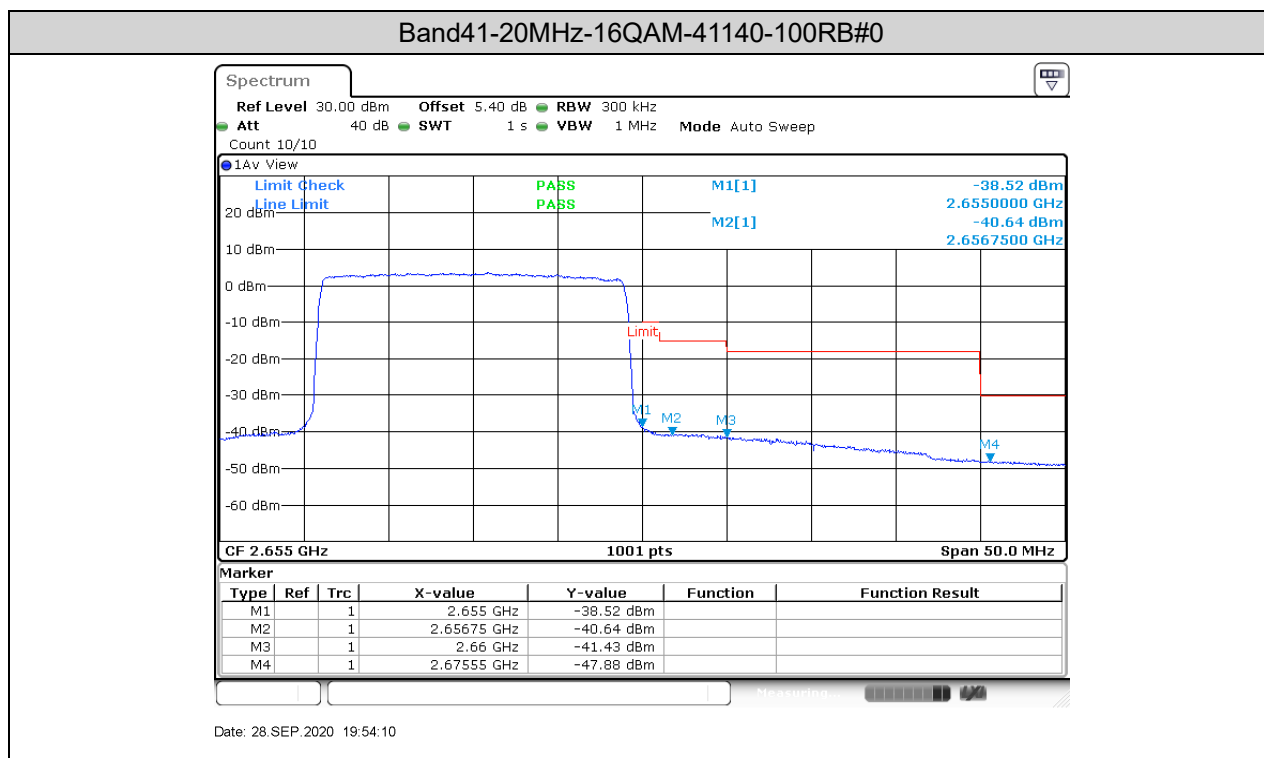


Date: 28.SEP.2020 19:53:19



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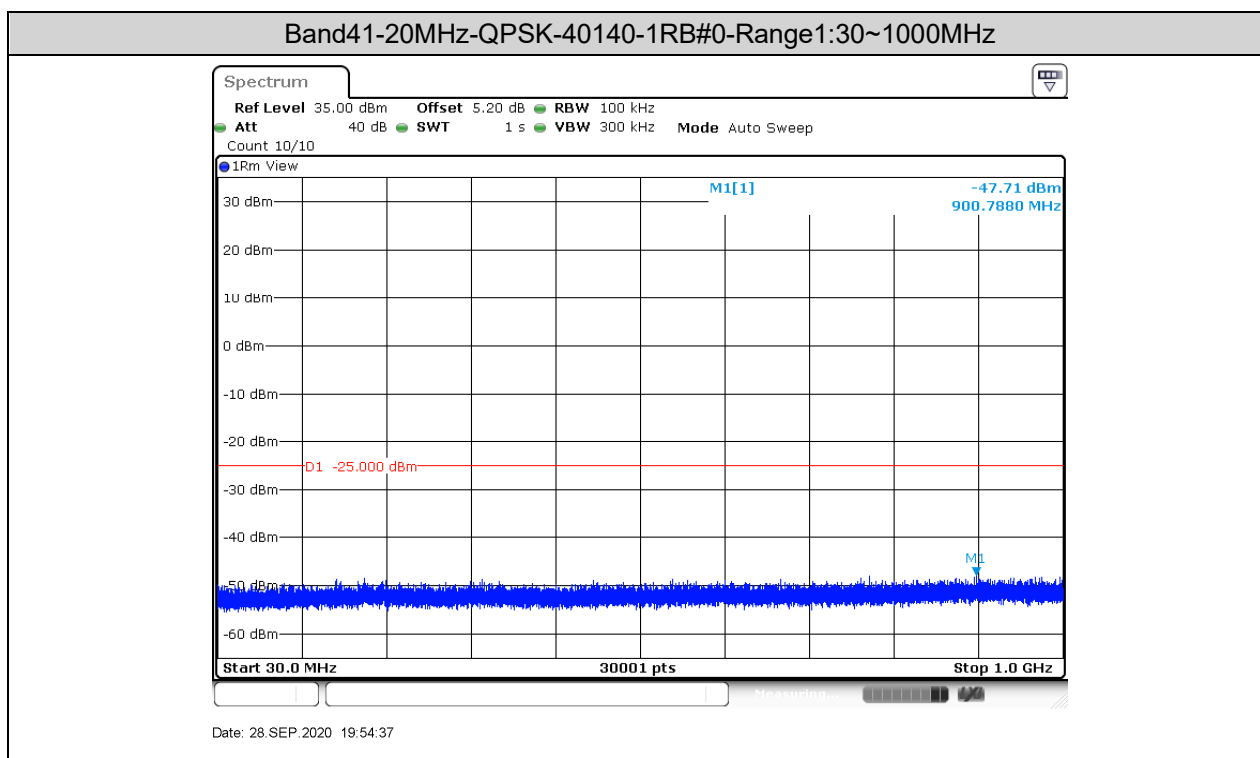


6 Spurious Emission at Antenna Terminal

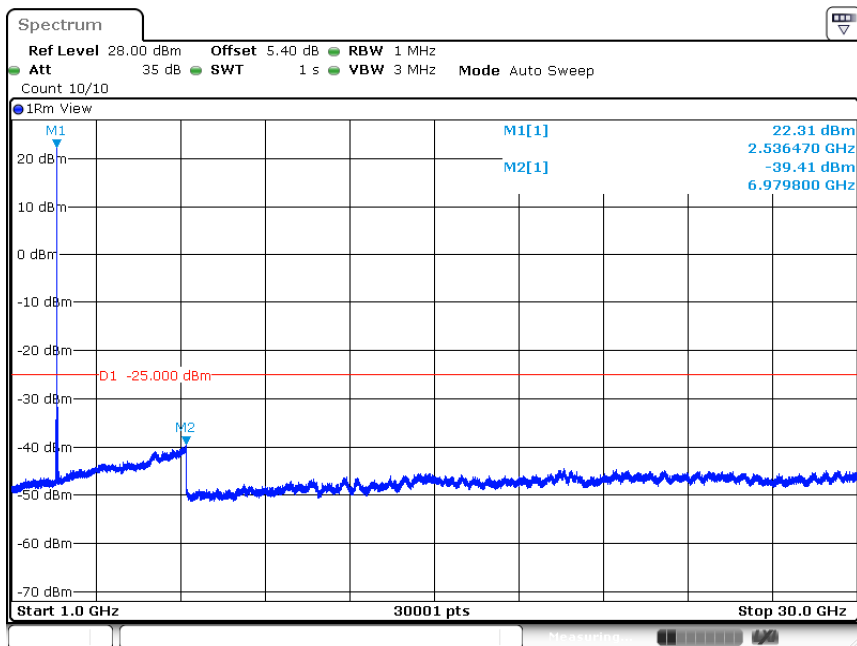
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =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

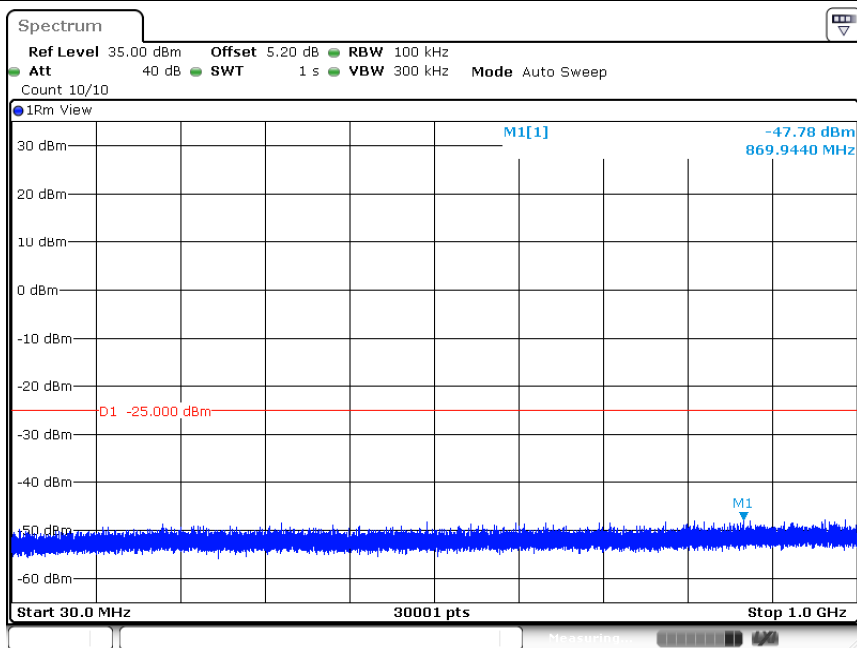


Band41-20MHz-QPSK-40140-1RB#0-Range2:1000~30000MHz



Date: 28.SEP.2020 19:54:54

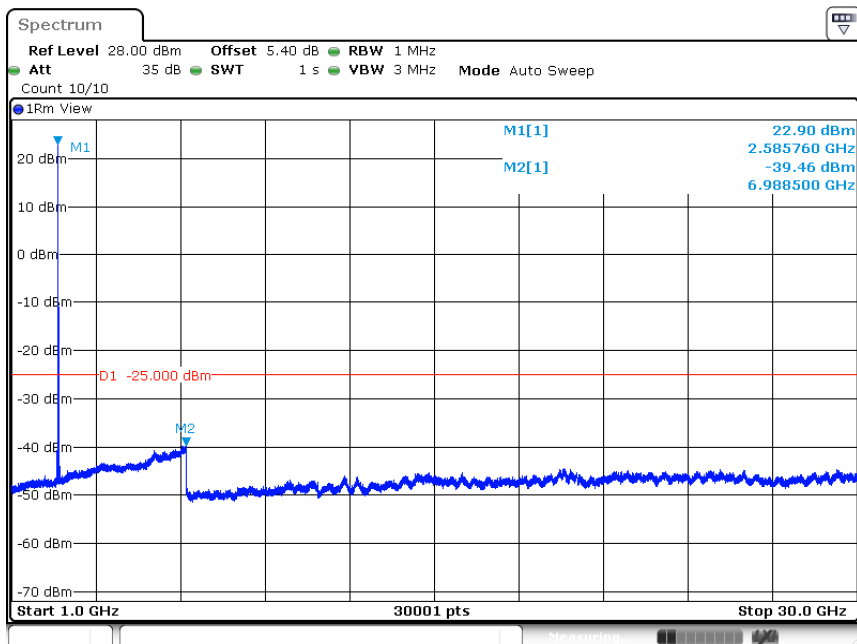
Band41-20MHz-QPSK-40640-1RB#0-Range1:30~1000MHz



Date: 28.SEP.2020 19:55:55

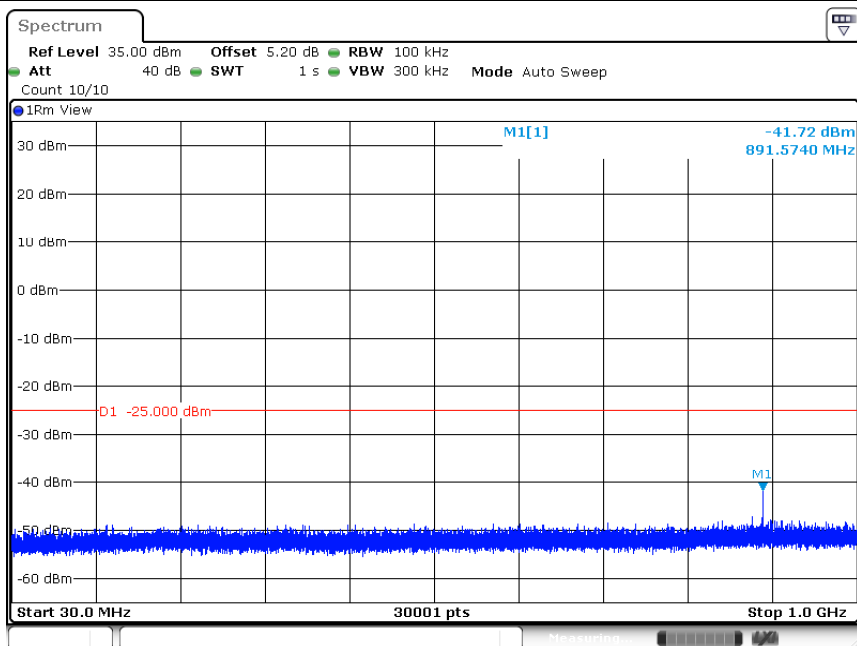


Band41-20MHz-QPSK-40640-1RB#0-Range2:1000~30000MHz



Date: 28.SEP.2020 19:56:12

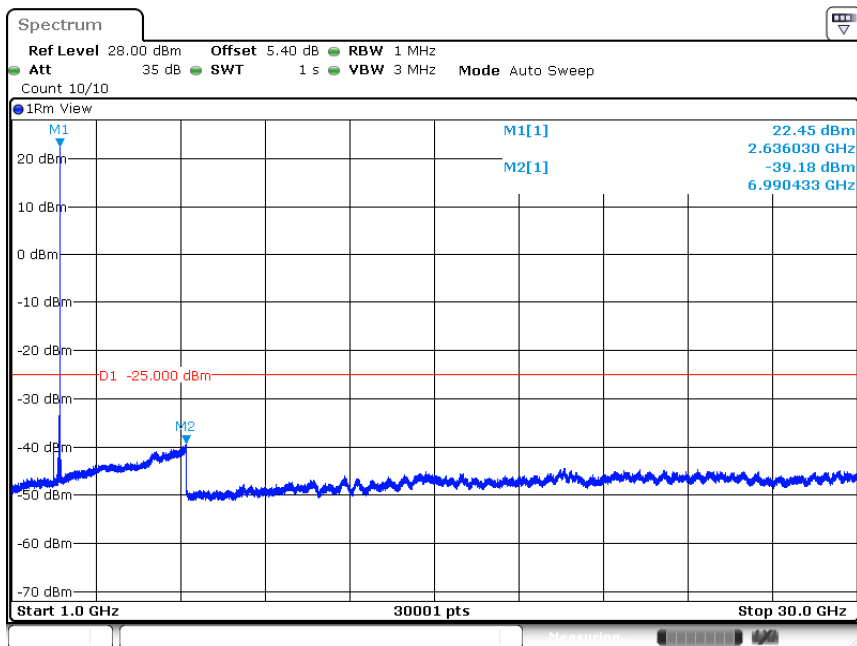
Band41-20MHz-QPSK-41140-1RB#0-Range1:30~1000MHz



Date: 28.SEP.2020 19:57:14

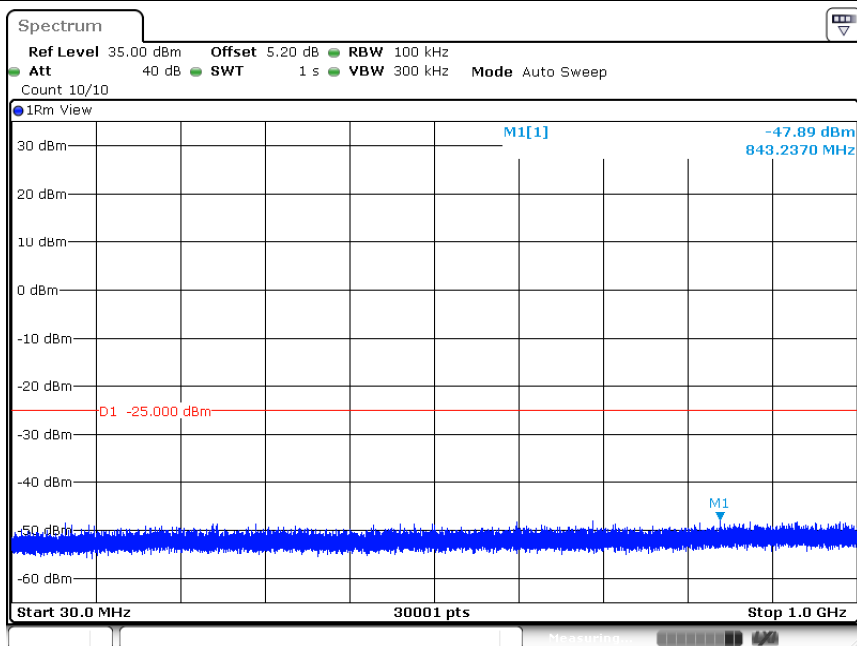


Band41-20MHz-QPSK-41140-1RB#0-Range2:1000~30000MHz



Date: 28.SEP.2020 19:57:34

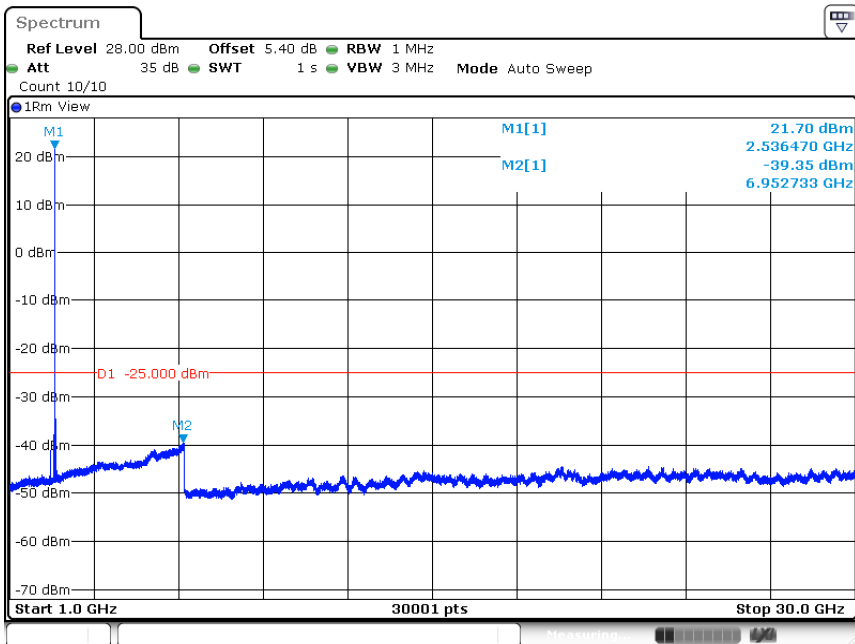
Band41-20MHz-16QAM-40140-1RB#0-Range1:30~1000MHz



Date: 28.SEP.2020 19:55:16

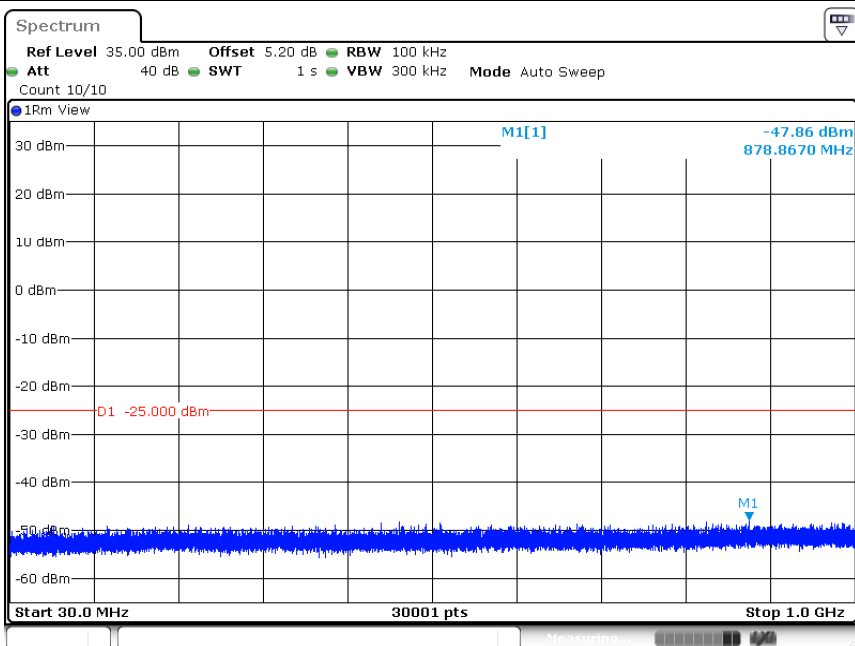


Band41-20MHz-16QAM-40140-1RB#0-Range2:1000~30000MHz



Date: 28.SEP.2020 19:55:33

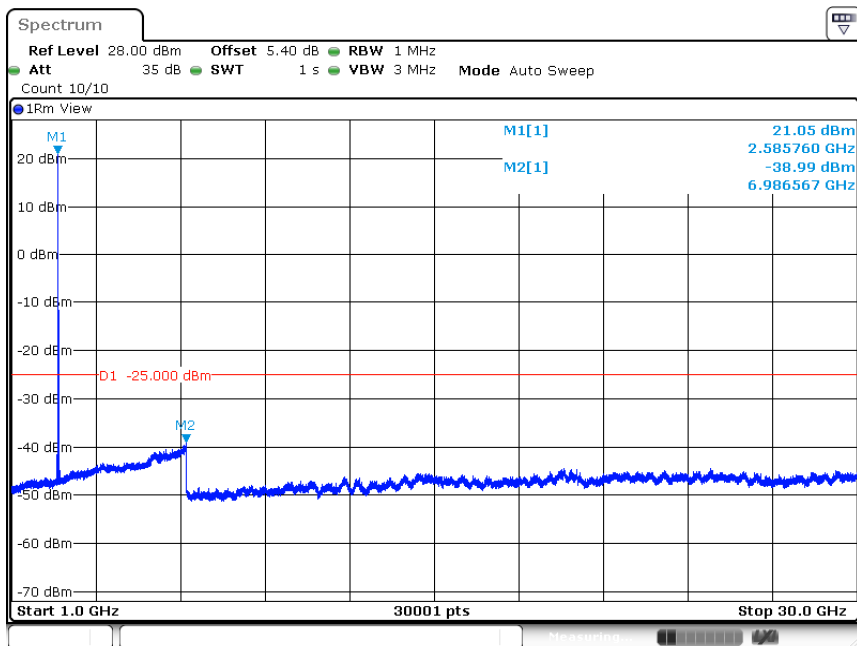
Band41-20MHz-16QAM-40640-1RB#0-Range1:30~1000MHz



Date: 28.SEP.2020 19:56:34

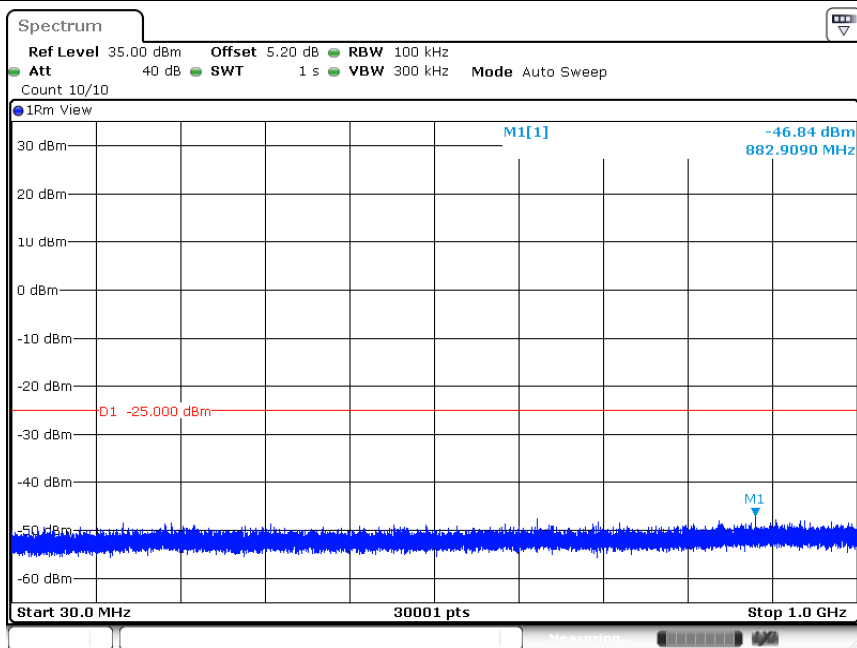


Band41-20MHz-16QAM-40640-1RB#0-Range2:1000~30000MHz



Date: 28.SEP.2020 19:56:51

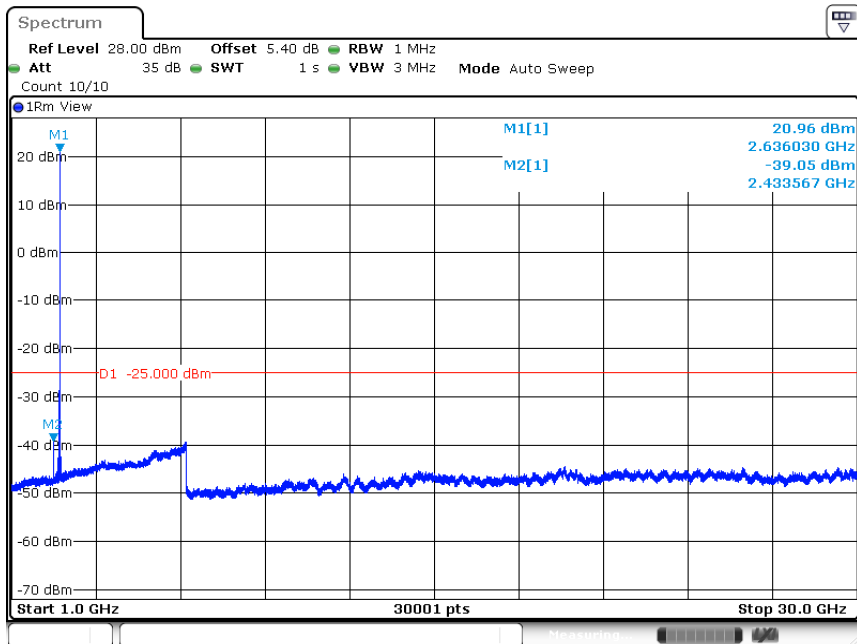
Band41-20MHz-16QAM-41140-1RB#0-Range1:30~1000MHz



Date: 28.SEP.2020 19:57:55



Band41-20MHz-16QAM-41140-1RB#0-Range2:1000~30000MHz



Date: 28.SEP.2020 19:58:12



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7 Field Strength of Spurious Radiation

7.1 Test Mode =LTE/TM1 20MHz

7.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
31.9886	-74.34	-25.00	49.34	Vertical
118.8079	-65.27	-25.00	40.27	Vertical
449.5460	-66.44	-25.00	41.44	Vertical
5011.5671	-62.03	-25.00	37.03	Vertical
7351.1450	-56.13	-25.00	31.13	Vertical
17995.9999	-40.27	-25.00	15.27	Vertical
46.5393	-63.87	-25.00	38.87	Horizontal
102.0746	-75.98	-25.00	50.98	Horizontal
246.2238	-68.57	-25.00	43.57	Horizontal
3769.5257	-61.17	-25.00	36.17	Horizontal
7461.6487	-56.27	-25.00	31.27	Horizontal
16390.4463	-43.98	-25.00	18.98	Horizontal

7.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
31.6006	-73.09	-25.00	48.09	Vertical
111.9691	-65.35	-25.00	40.35	Vertical
432.9581	-67.43	-25.00	42.43	Vertical
5060.5687	-61.90	-25.00	36.90	Vertical
7462.6488	-56.18	-25.00	31.18	Vertical
17999.5000	-39.65	-25.00	14.65	Vertical
46.2483	-64.52	-25.00	39.52	Horizontal
82.8676	-75.38	-25.00	50.38	Horizontal
238.4634	-68.68	-25.00	43.68	Horizontal
3639.5213	-60.87	-25.00	35.87	Horizontal
7419.6473	-56.31	-25.00	31.31	Horizontal
16405.9469	-43.77	-25.00	18.77	Horizontal



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7.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
30.8245	-73.38	-25.00	48.38	Vertical
109.9805	-64.28	-25.00	39.28	Vertical
592.7251	-64.40	-25.00	39.40	Vertical
3845.5282	-62.15	-25.00	37.15	Vertical
7401.1467	-56.18	-25.00	31.18	Vertical
17998.5000	-40.19	-25.00	15.19	Vertical
43.2897	-63.90	-25.00	38.90	Horizontal
101.5411	-76.43	-25.00	51.43	Horizontal
231.2851	-68.89	-25.00	43.89	Horizontal
3718.0239	-61.12	-25.00	36.12	Horizontal
7497.6499	-56.70	-25.00	31.70	Horizontal
16389.9463	-43.64	-25.00	18.64	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.





8 Frequency Stability

8.1 Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage		Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
					Voltage [Vdc]	Temperature (°C)				
Band41	20MHz	QPSK	40140	100RB#0	VL	NT	0.50	0.000196	±2.5	PASS
Band41	20MHz	QPSK	40140	100RB#0	VN	NT	0.30	0.000118	±2.5	PASS
Band41	20MHz	QPSK	40140	100RB#0	VH	NT	4.00	0.001572	±2.5	PASS
Band41	20MHz	QPSK	40640	100RB#0	VL	NT	-38.20	-0.014721	±2.5	PASS
Band41	20MHz	QPSK	40640	100RB#0	VN	NT	84.40	0.032524	±2.5	PASS
Band41	20MHz	QPSK	40640	100RB#0	VH	NT	17.80	0.006859	±2.5	PASS
Band41	20MHz	QPSK	41140	100RB#0	VL	NT	2.60	0.000983	±2.5	PASS
Band41	20MHz	QPSK	41140	100RB#0	VN	NT	3.00	0.001134	±2.5	PASS
Band41	20MHz	QPSK	41140	100RB#0	VH	NT	5.10	0.001928	±2.5	PASS
Band41	20MHz	16QAM	40140	100RB#0	VL	NT	-0.90	-0.000354	±2.5	PASS
Band41	20MHz	16QAM	40140	100RB#0	VN	NT	-1.00	-0.000393	±2.5	PASS
Band41	20MHz	16QAM	40140	100RB#0	VH	NT	-1.40	-0.000550	±2.5	PASS
Band41	20MHz	16QAM	40640	100RB#0	VL	NT	-9.10	-0.003507	±2.5	PASS
Band41	20MHz	16QAM	40640	100RB#0	VN	NT	-11.90	-0.004586	±2.5	PASS
Band41	20MHz	16QAM	40640	100RB#0	VH	NT	-4.20	-0.001618	±2.5	PASS
Band41	20MHz	16QAM	41140	100RB#0	VL	NT	4.00	0.001512	±2.5	PASS
Band41	20MHz	16QAM	41140	100RB#0	VN	NT	1.40	0.000529	±2.5	PASS
Band41	20MHz	16QAM	41140	100RB#0	VH	NT	-1.00	-0.000378	±2.5	PASS



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8.2 Frequency Vs Temperature

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band41	20MHz	QPSK	40140	100RB#0	NV	-30	1.40	0.000550	±2.5	PASS
Band41	20MHz	QPSK	40140	100RB#0	NV	-20	2.50	0.000982	±2.5	PASS
Band41	20MHz	QPSK	40140	100RB#0	NV	-10	5.20	0.002043	±2.5	PASS
Band41	20MHz	QPSK	40140	100RB#0	NV	0	1.00	0.000393	±2.5	PASS
Band41	20MHz	QPSK	40140	100RB#0	NV	10	1.90	0.000747	±2.5	PASS
Band41	20MHz	QPSK	40140	100RB#0	NV	20	1.40	0.000550	±2.5	PASS
Band41	20MHz	QPSK	40140	100RB#0	NV	30	0.50	0.000196	±2.5	PASS
Band41	20MHz	QPSK	40140	100RB#0	NV	40	1.70	0.000668	±2.5	PASS
Band41	20MHz	QPSK	40140	100RB#0	NV	50	-2.70	-0.001061	±2.5	PASS
Band41	20MHz	QPSK	40640	100RB#0	NV	-30	24.70	0.009518	±2.5	PASS
Band41	20MHz	QPSK	40640	100RB#0	NV	-20	41.60	0.016031	±2.5	PASS
Band41	20MHz	QPSK	40640	100RB#0	NV	-10	10.10	0.003892	±2.5	PASS
Band41	20MHz	QPSK	40640	100RB#0	NV	0	-7.70	-0.002967	±2.5	PASS
Band41	20MHz	QPSK	40640	100RB#0	NV	10	18.50	0.007129	±2.5	PASS
Band41	20MHz	QPSK	40640	100RB#0	NV	20	12.80	0.004933	±2.5	PASS
Band41	20MHz	QPSK	40640	100RB#0	NV	30	44.70	0.017225	±2.5	PASS
Band41	20MHz	QPSK	40640	100RB#0	NV	40	55.50	0.021387	±2.5	PASS
Band41	20MHz	QPSK	40640	100RB#0	NV	50	8.00	0.003083	±2.5	PASS
Band41	20MHz	QPSK	41140	100RB#0	NV	-30	1.70	0.000643	±2.5	PASS
Band41	20MHz	QPSK	41140	100RB#0	NV	-20	-0.40	-0.000151	±2.5	PASS
Band41	20MHz	QPSK	41140	100RB#0	NV	-10	2.60	0.000983	±2.5	PASS
Band41	20MHz	QPSK	41140	100RB#0	NV	0	1.20	0.000454	±2.5	PASS
Band41	20MHz	QPSK	41140	100RB#0	NV	10	-0.50	-0.000189	±2.5	PASS
Band41	20MHz	QPSK	41140	100RB#0	NV	20	5.40	0.002042	±2.5	PASS
Band41	20MHz	QPSK	41140	100RB#0	NV	30	6.20	0.002344	±2.5	PASS
Band41	20MHz	QPSK	41140	100RB#0	NV	40	0.80	0.000302	±2.5	PASS
Band41	20MHz	QPSK	41140	100RB#0	NV	50	2.30	0.000870	±2.5	PASS
Band41	20MHz	16QAM	40140	100RB#0	NV	-30	-0.40	-0.000157	±2.5	PASS
Band41	20MHz	16QAM	40140	100RB#0	NV	-20	2.80	0.001100	±2.5	PASS
Band41	20MHz	16QAM	40140	100RB#0	NV	-10	-1.30	-0.000511	±2.5	PASS
Band41	20MHz	16QAM	40140	100RB#0	NV	0	-1.80	-0.000707	±2.5	PASS
Band41	20MHz	16QAM	40140	100RB#0	NV	10	-0.70	-0.000275	±2.5	PASS
Band41	20MHz	16QAM	40140	100RB#0	NV	20	1.30	0.000511	±2.5	PASS



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Band41	20MHz	16QAM	40140	100RB#0	NV	30	2.40	0.000943	±2.5	PASS
Band41	20MHz	16QAM	40140	100RB#0	NV	40	-2.90	-0.001139	±2.5	PASS
Band41	20MHz	16QAM	40140	100RB#0	NV	50	1.60	0.000629	±2.5	PASS
Band41	20MHz	16QAM	40640	100RB#0	NV	-30	-29.80	-0.011484	±2.5	PASS
Band41	20MHz	16QAM	40640	100RB#0	NV	-20	-7.30	-0.002813	±2.5	PASS
Band41	20MHz	16QAM	40640	100RB#0	NV	-10	26.60	0.010250	±2.5	PASS
Band41	20MHz	16QAM	40640	100RB#0	NV	0	-9.70	-0.003738	±2.5	PASS
Band41	20MHz	16QAM	40640	100RB#0	NV	10	3.60	0.001387	±2.5	PASS
Band41	20MHz	16QAM	40640	100RB#0	NV	20	14.10	0.005434	±2.5	PASS
Band41	20MHz	16QAM	40640	100RB#0	NV	30	28.60	0.011021	±2.5	PASS
Band41	20MHz	16QAM	40640	100RB#0	NV	40	21.90	0.008439	±2.5	PASS
Band41	20MHz	16QAM	40640	100RB#0	NV	50	-6.00	-0.002312	±2.5	PASS
Band41	20MHz	16QAM	41140	100RB#0	NV	-30	0.50	0.000189	±2.5	PASS
Band41	20MHz	16QAM	41140	100RB#0	NV	-20	3.90	0.001474	±2.5	PASS
Band41	20MHz	16QAM	41140	100RB#0	NV	-10	2.20	0.000832	±2.5	PASS
Band41	20MHz	16QAM	41140	100RB#0	NV	0	-2.60	-0.000983	±2.5	PASS
Band41	20MHz	16QAM	41140	100RB#0	NV	10	-0.50	-0.000189	±2.5	PASS
Band41	20MHz	16QAM	41140	100RB#0	NV	20	-1.80	-0.000681	±2.5	PASS
Band41	20MHz	16QAM	41140	100RB#0	NV	30	3.50	0.001323	±2.5	PASS
Band41	20MHz	16QAM	41140	100RB#0	NV	40	-0.60	-0.000227	±2.5	PASS
Band41	20MHz	16QAM	41140	100RB#0	NV	50	1.90	0.000718	±2.5	PASS

The End



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