

Appendix for LTE B71 test report

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Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result:

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band71	5MHz	QPSK	133147	1RB#0	22.25	20.83	34.77	PASS
Band71	5MHz	QPSK	133147	1RB#13	24.01	22.59	34.77	PASS
Band71	5MHz	QPSK	133147	1RB#24	23.80	22.38	34.77	PASS
Band71	5MHz	QPSK	133147	12RB#0	23.16	21.74	34.77	PASS
Band71	5MHz	QPSK	133147	12RB#6	23.19	21.77	34.77	PASS
Band71	5MHz	QPSK	133147	12RB#11	23.13	21.71	34.77	PASS
Band71	5MHz	QPSK	133147	25RB#0	23.16	21.74	34.77	PASS
Band71	5MHz	QPSK	133297	1RB#0	22.25	22.29	34.77	PASS
Band71	5MHz	QPSK	133297	1RB#13	24.01	22.78	34.77	PASS
Band71	5MHz	QPSK	133297	1RB#24	23.80	22.59	34.77	PASS
Band71	5MHz	QPSK	133297	12RB#0	23.16	21.84	34.77	PASS
Band71	5MHz	QPSK	133297	12RB#6	23.19	21.86	34.77	PASS
Band71	5MHz	QPSK	133297	12RB#11	23.13	21.94	34.77	PASS
Band71	5MHz	QPSK	133297	25RB#0	23.16	21.74	34.77	PASS
Band71	5MHz	QPSK	133447	1RB#0	22.25	22.54	34.77	PASS
Band71	5MHz	QPSK	133447	1RB#13	24.01	22.62	34.77	PASS
Band71	5MHz	QPSK	133447	1RB#24	23.80	22.47	34.77	PASS
Band71	5MHz	QPSK	133447	12RB#0	23.16	21.74	34.77	PASS
Band71	5MHz	QPSK	133447	12RB#6	23.19	21.8	34.77	PASS
Band71	5MHz	QPSK	133447	12RB#11	23.13	21.68	34.77	PASS
Band71	5MHz	QPSK	133447	25RB#0	23.16	21.73	34.77	PASS
Band71	5MHz	16QAM	133147	1RB#0	21.64	20.22	34.77	PASS
Band71	5MHz	16QAM	133147	1RB#13	22.97	21.55	34.77	PASS
Band71	5MHz	16QAM	133147	1RB#24	22.74	21.32	34.77	PASS
Band71	5MHz	16QAM	133147	12RB#0	21.84	20.42	34.77	PASS
Band71	5MHz	16QAM	133147	12RB#6	22.15	20.73	34.77	PASS
Band71	5MHz	16QAM	133147	12RB#11	22.10	20.68	34.77	PASS
Band71	5MHz	16QAM	133147	25RB#0	22.23	20.81	34.77	PASS
Band71	5MHz	16QAM	133297	1RB#0	23.02	21.6	34.77	PASS



Band71	5MHz	16QAM	133297	1RB#13	22.96	21.54	34.77	PASS
Band71	5MHz	16QAM	133297	1RB#24	23.04	21.62	34.77	PASS
Band71	5MHz	16QAM	133297	12RB#0	21.86	20.44	34.77	PASS
Band71	5MHz	16QAM	133297	12RB#6	22.05	20.63	34.77	PASS
Band71	5MHz	16QAM	133297	12RB#11	22.13	20.71	34.77	PASS
Band71	5MHz	16QAM	133297	25RB#0	22.24	20.82	34.77	PASS
Band71	5MHz	16QAM	133447	1RB#0	22.84	21.42	34.77	PASS
Band71	5MHz	16QAM	133447	1RB#13	22.82	21.4	34.77	PASS
Band71	5MHz	16QAM	133447	1RB#24	22.67	21.25	34.77	PASS
Band71	5MHz	16QAM	133447	12RB#0	21.96	20.54	34.77	PASS
Band71	5MHz	16QAM	133447	12RB#6	22.12	20.7	34.77	PASS
Band71	5MHz	16QAM	133447	12RB#11	22.02	20.6	34.77	PASS
Band71	5MHz	16QAM	133447	25RB#0	22.16	20.74	34.77	PASS
Band71	10MHz	QPSK	133172	1RB#0	22.09	20.67	34.77	PASS
Band71	10MHz	QPSK	133172	1RB#25	24.38	22.96	34.77	PASS
Band71	10MHz	QPSK	133172	1RB#49	23.32	21.9	34.77	PASS
Band71	10MHz	QPSK	133172	25RB#0	23.06	21.64	34.77	PASS
Band71	10MHz	QPSK	133172	25RB#13	23.14	21.72	34.77	PASS
Band71	10MHz	QPSK	133172	25RB#25	23.16	21.74	34.77	PASS
Band71	10MHz	QPSK	133172	50RB#0	23.22	21.8	34.77	PASS
Band71	10MHz	QPSK	133272	1RB#0	23.30	21.88	34.77	PASS
Band71	10MHz	QPSK	133272	1RB#25	24.39	22.97	34.77	PASS
Band71	10MHz	QPSK	133272	1RB#49	24.08	22.66	34.77	PASS
Band71	10MHz	QPSK	133272	25RB#0	23.25	21.83	34.77	PASS
Band71	10MHz	QPSK	133272	25RB#13	23.37	21.95	34.77	PASS
Band71	10MHz	QPSK	133272	25RB#25	23.27	21.85	34.77	PASS
Band71	10MHz	QPSK	133272	50RB#0	23.25	21.83	34.77	PASS
Band71	10MHz	QPSK	133422	1RB#0	23.96	22.54	34.77	PASS
Band71	10MHz	QPSK	133422	1RB#25	24.25	22.83	34.77	PASS
Band71	10MHz	QPSK	133422	1RB#49	23.97	22.55	34.77	PASS
Band71	10MHz	QPSK	133422	25RB#0	23.13	21.71	34.77	PASS
Band71	10MHz	QPSK	133422	25RB#13	23.23	21.81	34.77	PASS
Band71	10MHz	QPSK	133422	25RB#25	23.19	21.77	34.77	PASS



Band71	10MHz	QPSK	133422	50RB#0	23.14	21.72	34.77	PASS
Band71	10MHz	16QAM	133172	1RB#0	21.28	19.86	34.77	PASS
Band71	10MHz	16QAM	133172	1RB#25	23.77	22.35	34.77	PASS
Band71	10MHz	16QAM	133172	1RB#49	22.62	21.2	34.77	PASS
Band71	10MHz	16QAM	133172	25RB#0	22.29	20.87	34.77	PASS
Band71	10MHz	16QAM	133172	25RB#13	22.33	20.91	34.77	PASS
Band71	10MHz	16QAM	133172	25RB#25	22.20	20.78	34.77	PASS
Band71	10MHz	16QAM	133172	50RB#0	22.29	20.87	34.77	PASS
Band71	10MHz	16QAM	133272	1RB#0	22.62	21.2	34.77	PASS
Band71	10MHz	16QAM	133272	1RB#25	23.15	21.73	34.77	PASS
Band71	10MHz	16QAM	133272	1RB#49	22.63	21.21	34.77	PASS
Band71	10MHz	16QAM	133272	25RB#0	22.09	20.67	34.77	PASS
Band71	10MHz	16QAM	133272	25RB#13	22.37	20.95	34.77	PASS
Band71	10MHz	16QAM	133272	25RB#25	22.30	20.88	34.77	PASS
Band71	10MHz	16QAM	133272	50RB#0	22.38	20.96	34.77	PASS
Band71	10MHz	16QAM	133422	1RB#0	23.50	22.08	34.77	PASS
Band71	10MHz	16QAM	133422	1RB#25	23.65	22.23	34.77	PASS
Band71	10MHz	16QAM	133422	1RB#49	23.66	22.24	34.77	PASS
Band71	10MHz	16QAM	133422	25RB#0	22.28	20.86	34.77	PASS
Band71	10MHz	16QAM	133422	25RB#13	22.11	20.69	34.77	PASS
Band71	10MHz	16QAM	133422	25RB#25	22.08	20.66	34.77	PASS
Band71	10MHz	16QAM	133422	50RB#0	22.10	20.68	34.77	PASS
Band71	15MHz	QPSK	133197	1RB#0	22.10	20.68	34.77	PASS
Band71	15MHz	QPSK	133197	1RB#38	23.87	22.45	34.77	PASS
Band71	15MHz	QPSK	133197	1RB#74	24.39	22.97	34.77	PASS
Band71	15MHz	QPSK	133197	36RB#0	23.15	21.73	34.77	PASS
Band71	15MHz	QPSK	133197	36RB#18	23.11	21.69	34.77	PASS
Band71	15MHz	QPSK	133197	36RB#39	23.12	21.7	34.77	PASS
Band71	15MHz	QPSK	133197	75RB#0	23.12	21.7	34.77	PASS
Band71	15MHz	QPSK	133297	1RB#0	23.18	21.76	34.77	PASS
Band71	15MHz	QPSK	133197	1RB#38	24.09	22.67	34.77	PASS
Band71	15MHz	QPSK	133197	1RB#74	24.09	22.67	34.77	PASS
Band71	15MHz	QPSK	133197	36RB#0	23.26	21.84	34.77	PASS



Band71	15MHz	QPSK	133197	36RB#18	23.28	21.86	34.77	PASS
Band71	15MHz	QPSK	133197	36RB#39	23.17	21.75	34.77	PASS
Band71	15MHz	QPSK	133197	75RB#0	23.09	21.67	34.77	PASS
Band71	15MHz	QPSK	133397	1RB#0	24.08	22.66	34.77	PASS
Band71	15MHz	QPSK	133397	1RB#38	24.01	22.59	34.77	PASS
Band71	15MHz	QPSK	133397	1RB#74	24.06	22.64	34.77	PASS
Band71	15MHz	QPSK	133397	36RB#0	23.02	21.6	34.77	PASS
Band71	15MHz	QPSK	133397	36RB#18	23.21	21.79	34.77	PASS
Band71	15MHz	QPSK	133397	36RB#39	23.23	21.81	34.77	PASS
Band71	15MHz	QPSK	133397	75RB#0	23.13	21.71	34.77	PASS
Band71	15MHz	16QAM	133197	1RB#0	21.35	19.93	34.77	PASS
Band71	15MHz	16QAM	133197	1RB#38	23.14	21.72	34.77	PASS
Band71	15MHz	16QAM	133197	1RB#74	23.69	22.27	34.77	PASS
Band71	15MHz	16QAM	133197	36RB#0	21.99	20.57	34.77	PASS
Band71	15MHz	16QAM	133197	36RB#18	22.12	20.7	34.77	PASS
Band71	15MHz	16QAM	133197	36RB#39	22.05	20.63	34.77	PASS
Band71	15MHz	16QAM	133197	75RB#0	22.24	20.82	34.77	PASS
Band71	15MHz	16QAM	133297	1RB#0	22.52	21.1	34.77	PASS
Band71	15MHz	16QAM	133197	1RB#38	23.15	21.73	34.77	PASS
Band71	15MHz	16QAM	133197	1RB#74	22.74	21.32	34.77	PASS
Band71	15MHz	16QAM	133197	36RB#0	22.18	20.76	34.77	PASS
Band71	15MHz	16QAM	133197	36RB#18	22.21	20.79	34.77	PASS
Band71	15MHz	16QAM	133197	36RB#39	22.04	20.62	34.77	PASS
Band71	15MHz	16QAM	133197	75RB#0	22.14	20.72	34.77	PASS
Band71	15MHz	16QAM	133397	1RB#0	23.63	22.21	34.77	PASS
Band71	15MHz	16QAM	133397	1RB#38	23.88	22.46	34.77	PASS
Band71	15MHz	16QAM	133397	1RB#74	23.61	22.19	34.77	PASS
Band71	15MHz	16QAM	133397	36RB#0	22.01	20.59	34.77	PASS
Band71	15MHz	16QAM	133397	36RB#18	22.08	20.66	34.77	PASS
Band71	15MHz	16QAM	133397	36RB#39	22.22	20.8	34.77	PASS
Band71	15MHz	16QAM	133397	75RB#0	22.11	20.69	34.77	PASS
Band71	20MHz	QPSK	133222	1RB#0	21.84	20.42	34.77	PASS
Band71	20MHz	QPSK	133222	1RB#50	23.98	22.56	34.77	PASS



Band71	20MHz	QPSK	133222	1RB#99	23.71	22.29	34.77	PASS
Band71	20MHz	QPSK	133222	50RB#0	23.22	21.8	34.77	PASS
Band71	20MHz	QPSK	133222	50RB#25	23.12	21.7	34.77	PASS
Band71	20MHz	QPSK	133222	50RB#50	23.18	21.76	34.77	PASS
Band71	20MHz	QPSK	133222	100RB#0	23.23	21.81	34.77	PASS
Band71	20MHz	QPSK	133322	1RB#0	22.72	21.3	34.77	PASS
Band71	20MHz	QPSK	133222	1RB#50	24.38	22.96	34.77	PASS
Band71	20MHz	QPSK	133322	1RB#99	24.17	22.75	34.77	PASS
Band71	20MHz	QPSK	133222	50RB#0	23.18	21.76	34.77	PASS
Band71	20MHz	QPSK	133322	50RB#25	23.16	21.74	34.77	PASS
Band71	20MHz	QPSK	133222	50RB#50	23.08	21.66	34.77	PASS
Band71	20MHz	QPSK	133322	100RB#0	23.14	21.72	34.77	PASS
Band71	20MHz	QPSK	133372	1RB#0	23.78	22.36	34.77	PASS
Band71	20MHz	QPSK	133372	1RB#50	24.31	22.89	34.77	PASS
Band71	20MHz	QPSK	133372	1RB#99	23.80	22.38	34.77	PASS
Band71	20MHz	QPSK	133372	50RB#0	23.21	21.79	34.77	PASS
Band71	20MHz	QPSK	133372	50RB#25	23.03	21.61	34.77	PASS
Band71	20MHz	QPSK	133372	50RB#50	23.10	21.68	34.77	PASS
Band71	20MHz	QPSK	133372	100RB#0	23.03	21.61	34.77	PASS
Band71	20MHz	16QAM	133222	1RB#0	21.10	19.68	34.77	PASS
Band71	20MHz	16QAM	133222	1RB#50	23.23	21.81	34.77	PASS
Band71	20MHz	16QAM	133222	1RB#99	23.09	21.67	34.77	PASS
Band71	20MHz	16QAM	133222	50RB#0	22.11	20.69	34.77	PASS
Band71	20MHz	16QAM	133222	50RB#25	22.20	20.78	34.77	PASS
Band71	20MHz	16QAM	133222	50RB#50	22.07	20.65	34.77	PASS
Band71	20MHz	16QAM	133222	100RB#0	22.24	20.82	34.77	PASS
Band71	20MHz	16QAM	133322	1RB#0	22.06	20.64	34.77	PASS
Band71	20MHz	16QAM	133222	1RB#50	23.07	21.65	34.77	PASS
Band71	20MHz	16QAM	133322	1RB#99	22.49	21.07	34.77	PASS
Band71	20MHz	16QAM	133222	50RB#0	22.06	20.64	34.77	PASS
Band71	20MHz	16QAM	133322	50RB#25	22.13	20.71	34.77	PASS
Band71	20MHz	16QAM	133222	50RB#50	22.22	20.8	34.77	PASS
Band71	20MHz	16QAM	133322	100RB#0	22.02	20.6	34.77	PASS

Band71	20MHz	16QAM	133372	1RB#0	22.81	21.39	34.77	PASS
Band71	20MHz	16QAM	133372	1RB#50	23.02	21.6	34.77	PASS
Band71	20MHz	16QAM	133372	1RB#99	22.85	21.43	34.77	PASS
Band71	20MHz	16QAM	133372	50RB#0	22.21	20.79	34.77	PASS
Band71	20MHz	16QAM	133372	50RB#25	22.09	20.67	34.77	PASS
Band71	20MHz	16QAM	133372	50RB#50	22.17	20.75	34.77	PASS
Band71	20MHz	16QAM	133372	100RB#0	22.00	20.58	34.77	PASS

Note1:

a, For getting the ERP (Efficient Radiated Power) or EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b, SGP=Signal Generator Level

c, Antenna gain of LTE Band 71 is 0.73dBi.

Note2: SET Span=1.5*OBW

SET RBW=1%of the OBW,not to exceed 1MHz

SET VBW>= 3*RBW

SET Sweep time=auto-couple.

Detector:RMS

Appendix B: Peak-to-Average Ratio

Test Result:

Worst Case data as follows:

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band71	5MHz	QPSK	133147	25RB#0	3.99	13	PASS
Band71	5MHz	QPSK	133297	25RB#0	4.35	13	PASS
Band71	5MHz	QPSK	133447	25RB#0	4.41	13	PASS
Band71	5MHz	16QAM	133147	25RB#0	4.72	13	PASS
Band71	5MHz	16QAM	133297	25RB#0	5.11	13	PASS
Band71	5MHz	16QAM	133447	25RB#0	5.10	13	PASS
Band71	10MHz	QPSK	133172	50RB#0	4.05	13	PASS
Band71	10MHz	QPSK	133297	50RB#0	4.32	13	PASS
Band71	10MHz	QPSK	133422	50RB#0	4.30	13	PASS
Band71	10MHz	16QAM	133172	50RB#0	4.79	13	PASS
Band71	10MHz	16QAM	133297	50RB#0	5.11	13	PASS
Band71	10MHz	16QAM	133422	50RB#0	5.10	13	PASS
Band71	15MHz	QPSK	133197	75RB#0	4.04	13	PASS
Band71	15MHz	QPSK	133297	75RB#0	4.19	13	PASS
Band71	15MHz	QPSK	133397	75RB#0	4.2	13	PASS
Band71	15MHz	16QAM	133197	75RB#0	4.82	13	PASS
Band71	15MHz	16QAM	133297	75RB#0	4.99	13	PASS
Band71	15MHz	16QAM	133397	75RB#0	4.95	13	PASS
Band71	20MHz	QPSK	133222	100RB#0	4.07	13	PASS
Band71	20MHz	QPSK	133322	100RB#0	4.16	13	PASS
Band71	20MHz	QPSK	133372	100RB#0	4.28	13	PASS
Band71	20MHz	16QAM	133222	100RB#0	4.65	13	PASS
Band71	20MHz	16QAM	133322	100RB#0	4.97	13	PASS
Band71	20MHz	16QAM	133372	100RB#0	5.07	13	PASS

Appendix C: Modulation Characteristics

Test Result:

Worst Case data as follows:

Band	Bandwidth	Modulation	Channel	RB Configuration	Result	Verdict
Band71	5MHz	QPSK	133147	25RB#0	PASS	PASS
Band71	5MHz	QPSK	133297	25RB#0	PASS	PASS
Band71	5MHz	QPSK	133447	25RB#0	PASS	PASS
Band71	5MHz	16QAM	133147	25RB#0	PASS	PASS
Band71	5MHz	16QAM	133297	25RB#0	PASS	PASS
Band71	5MHz	16QAM	133447	25RB#0	PASS	PASS
Band71	10MHz	QPSK	133172	50RB#0	PASS	PASS
Band71	10MHz	QPSK	133297	50RB#0	PASS	PASS
Band71	10MHz	QPSK	133422	50RB#0	PASS	PASS
Band71	10MHz	16QAM	133172	50RB#0	PASS	PASS
Band71	10MHz	16QAM	133297	50RB#0	PASS	PASS
Band71	10MHz	16QAM	133422	50RB#0	PASS	PASS
Band71	15MHz	QPSK	133197	75RB#0	PASS	PASS
Band71	15MHz	QPSK	133297	75RB#0	PASS	PASS
Band71	15MHz	QPSK	133397	75RB#0	PASS	PASS
Band71	15MHz	16QAM	133197	75RB#0	PASS	PASS
Band71	15MHz	16QAM	133297	75RB#0	PASS	PASS
Band71	15MHz	16QAM	133397	75RB#0	PASS	PASS
Band71	20MHz	QPSK	133222	100RB#0	PASS	PASS
Band71	20MHz	QPSK	133322	100RB#0	PASS	PASS
Band71	20MHz	QPSK	133372	100RB#0	PASS	PASS
Band71	20MHz	16QAM	133222	100RB#0	PASS	PASS
Band71	20MHz	16QAM	133322	100RB#0	PASS	PASS
Band71	20MHz	16QAM	133372	100RB#0	PASS	PASS

Appendix D: Bandwidth

Test Result:

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band71	5MHz	QPSK	133147	25RB#0	4.5199	4.980	PASS
Band71	5MHz	QPSK	133297	25RB#0	4.4990	4.984	PASS
Band71	5MHz	QPSK	133447	25RB#0	4.5015	4.973	PASS
Band71	5MHz	16QAM	133147	25RB#0	4.4912	4.931	PASS
Band71	5MHz	16QAM	133297	25RB#0	4.985	5.013	PASS
Band71	5MHz	16QAM	133447	25RB#0	4.4924	4.986	PASS
Band71	10MHz	QPSK	133172	50RB#0	8.9314	9.897	PASS
Band71	10MHz	QPSK	133297	50RB#0	8.9312	9.845	PASS
Band71	10MHz	QPSK	133422	50RB#0	8.9880	9.856	PASS
Band71	10MHz	16QAM	133172	50RB#0	8.9543	9.889	PASS
Band71	10MHz	16QAM	133297	50RB#0	8.9336	9.809	PASS
Band71	10MHz	16QAM	133422	50RB#0	8.948	9.824	PASS
Band71	15MHz	QPSK	133197	75RB#0	13.434	14.69	PASS
Band71	15MHz	QPSK	133297	75RB#0	13.392	14.64	PASS
Band71	15MHz	QPSK	133397	75RB#0	13.442	14.70	PASS
Band71	15MHz	16QAM	133197	75RB#0	13.416	14.63	PASS
Band71	15MHz	16QAM	133297	75RB#0	13.369	14.61	PASS
Band71	15MHz	16QAM	133397	75RB#0	13.437	14.72	PASS
Band71	20MHz	QPSK	133222	100RB#0	17.923	19.50	PASS
Band71	20MHz	QPSK	133322	100RB#0	17.788	19.24	PASS
Band71	20MHz	QPSK	133372	100RB#0	17.866	19.36	PASS
Band71	20MHz	16QAM	133222	100RB#0	17.836	19.42	PASS
Band71	20MHz	16QAM	133322	100RB#0	17.805	19.29	PASS
Band71	20MHz	16QAM	133372	100RB#0	17.885	19.46	PASS



Band71-5MHz-16QAM--133147-25RB#0



Band71-5MHz-16QAM--133297-25RB#0



Band71-5MHz-16QAM--13344725RB#0



Band71-10MHz-QPSK-133172-50RB#0



Band71-10MHz-QPSK-133297-50RB#0



Band71-10MHz-QPSK-133422-50RB#0



Band71-10MHz-16QAM-133172-50RB#0



Band71-10MHz-16QAM-133297-50RB#0



Band71-10MHz-16QAM-133422-50RB#0



Band71-15MHz-QPSK-133197-75RB#0



Band71-15MHz-QPSK-133297-75RB#0



Band71-15MHz-QPSK-133397-75RB#0



Band71-15MHz-16QAM-133197-75RB#0



Band71-15MHz-16QAM-133297-75RB#0



Band71-15MHz-16QAM-133397-75RB#0



Band71-20MHz-QPSK-133222-100RB#0



Band71-20MHz-QPSK-133322-100RB#0



Band71-20MHz-QPSK-133372-100RB#0



Band71-20MHz-16QAM-133222-100RB#0



Band71-20MHz-16QAM133322-100RB#0



Band71-20MHz-16QAM-133372-100RB#0



Appendix E: Band Edges Compliance

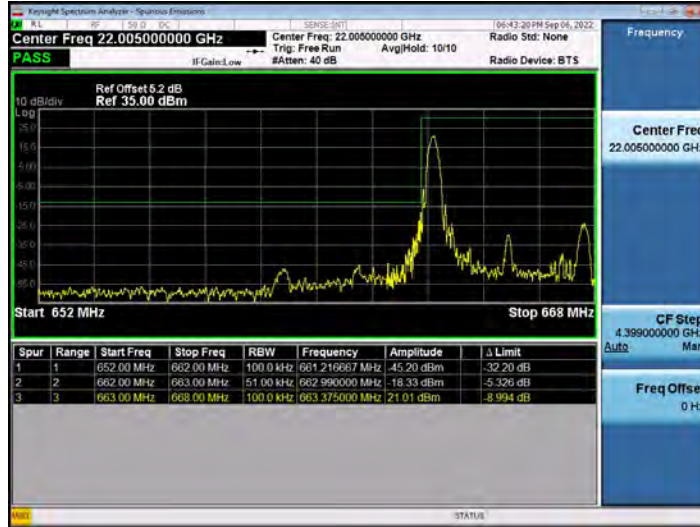
Test Result:

Worst Case data as follows:

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band71	5MHz	QPSK	133147	1RB#0	Reference test Graphs	PASS
Band71	5MHz	QPSK	133147	25RB#0	Reference test Graphs	PASS
Band71	5MHz	QPSK	133447	1RB#24	Reference test Graphs	PASS
Band71	5MHz	QPSK	133447	25RB#0	Reference test Graphs	PASS
Band71	10MHz	QPSK	133172	1RB#0	Reference test Graphs	PASS
Band71	10MHz	QPSK	133172	50RB#0	Reference test Graphs	PASS
Band71	10MHz	QPSK	133422	1RB#49	Reference test Graphs	PASS
Band71	10MHz	QPSK	133422	50RB#0	Reference test Graphs	PASS
Band71	15MHz	QPSK	133197	1RB#0	Reference test Graphs	PASS
Band71	15MHz	QPSK	133197	75RB#0	Reference test Graphs	PASS
Band71	15MHz	QPSK	133197	1RB#74	Reference test Graphs	PASS
Band71	15MHz	QPSK	133197	75RB#0	Reference test Graphs	PASS
Band71	20MHz	QPSK	133222	1RB#0	Reference test Graphs	PASS
Band71	20MHz	QPSK	133222	100RB#0	Reference test Graphs	PASS
Band71	20MHz	QPSK	133372	1RB#99	Reference test Graphs	PASS
Band71	20MHz	QPSK	133372	100RB#0	Reference test Graphs	PASS

Test Graphs

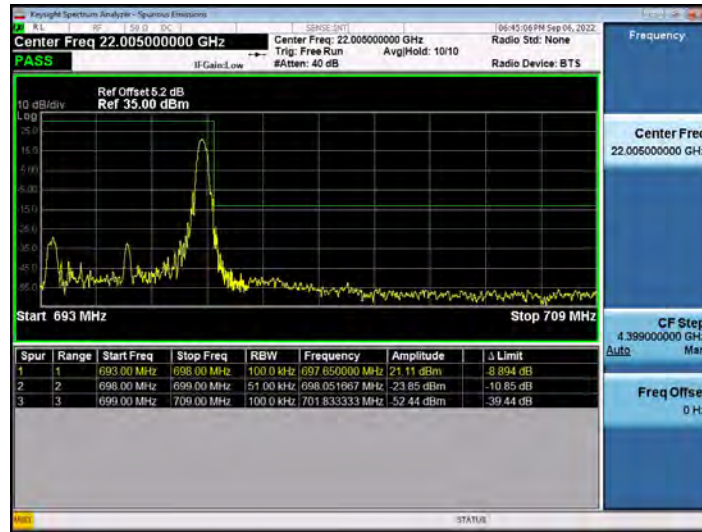
Band71-5MHz-QPSK-1331471RB#0



Band71-5MHz-QPSK-133147-25RB#0



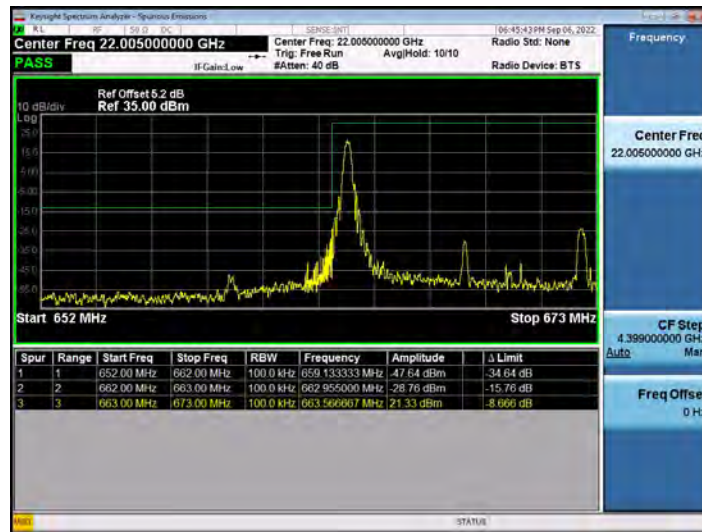
Band71-5MHz-QPSK-133147-1RB#24



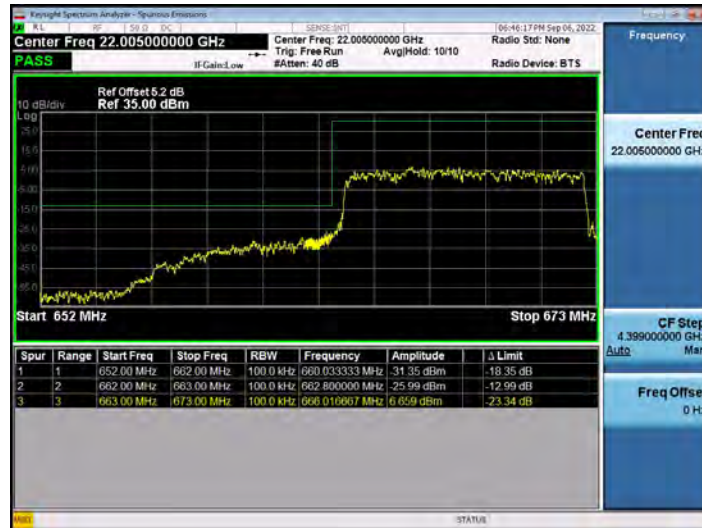
Band71-5MHz-QPSK-133147-25RB#0



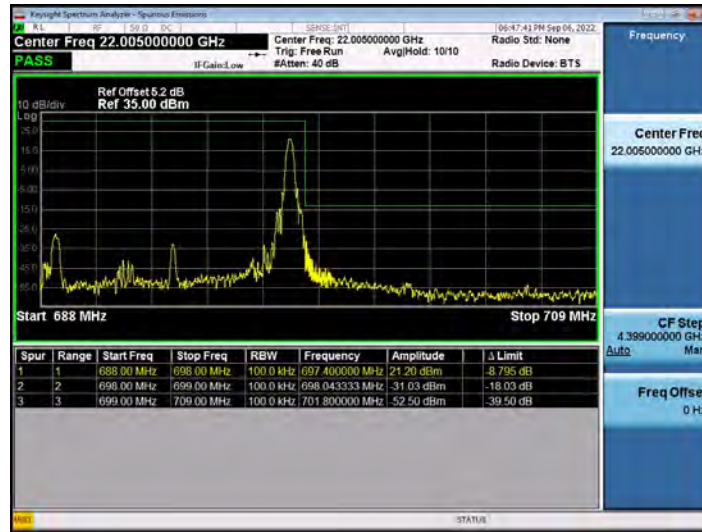
Band71-10MHz-QPSK-133172-1RB#0



Band71-10MHz-QPSK-133172-50RB#0



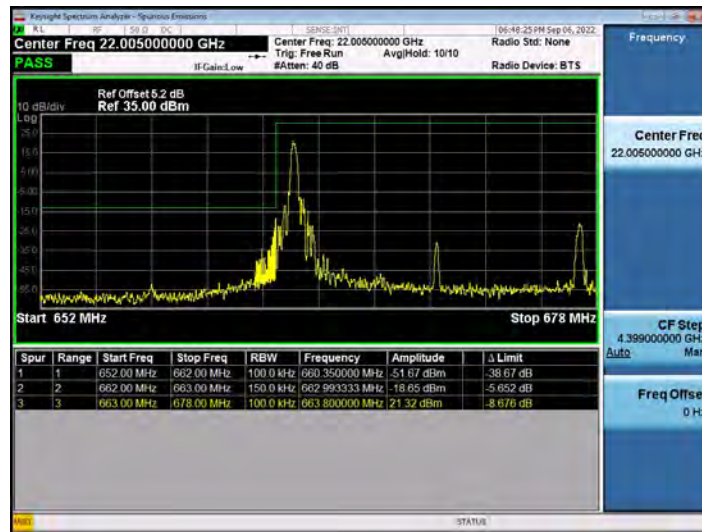
Band71-10MHz-QPSK-133422-1RB#49



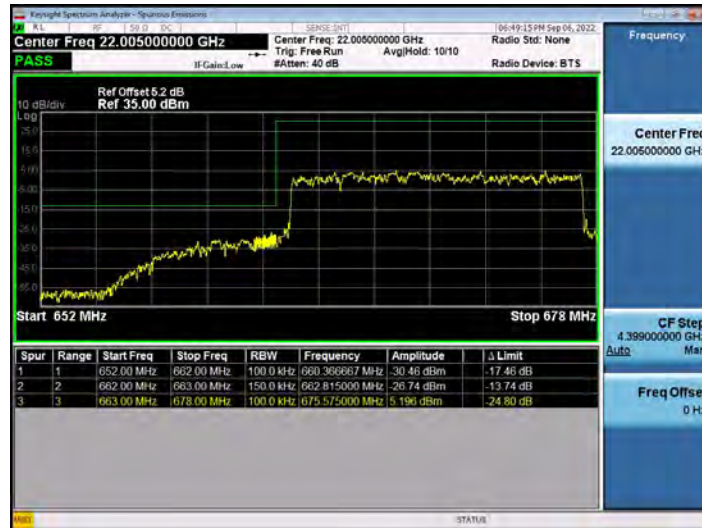
Band71-10MHz-QPSK-133422-50RB#0



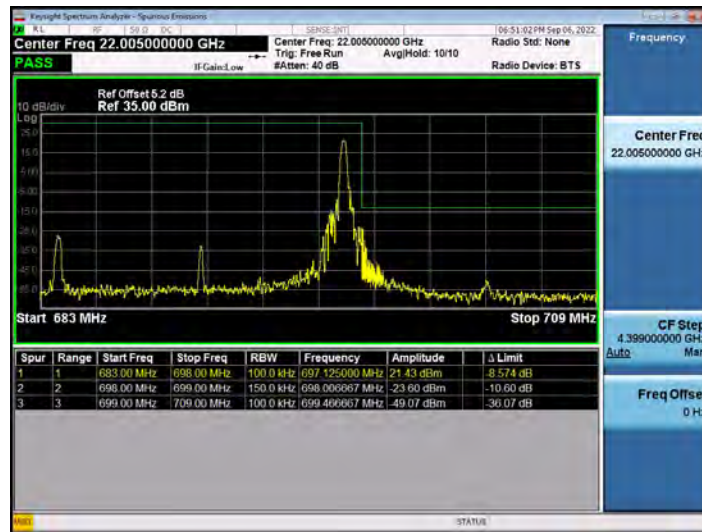
Band_71_15M_-QPSK-CH133197_1RB#0



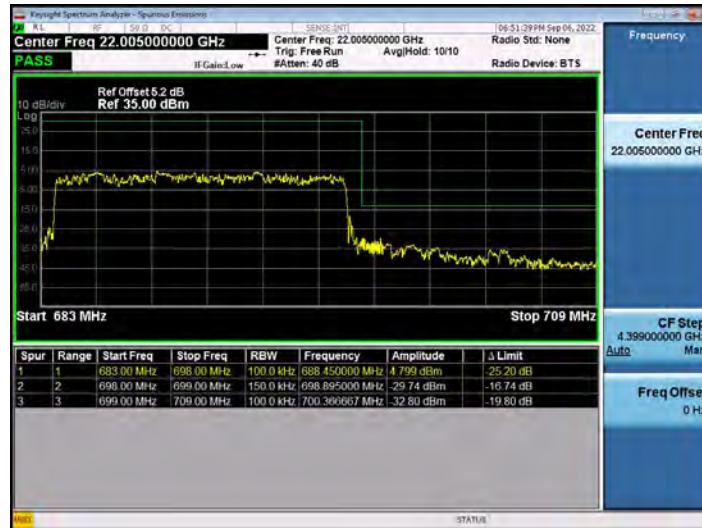
Band71-15MHz-QPSK-133197-75RB#0



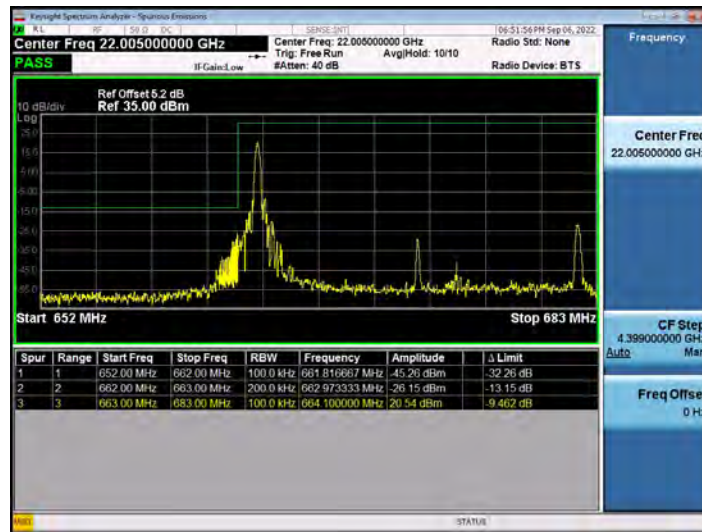
Band71-15MHz-QPSK-133397-1RB#74



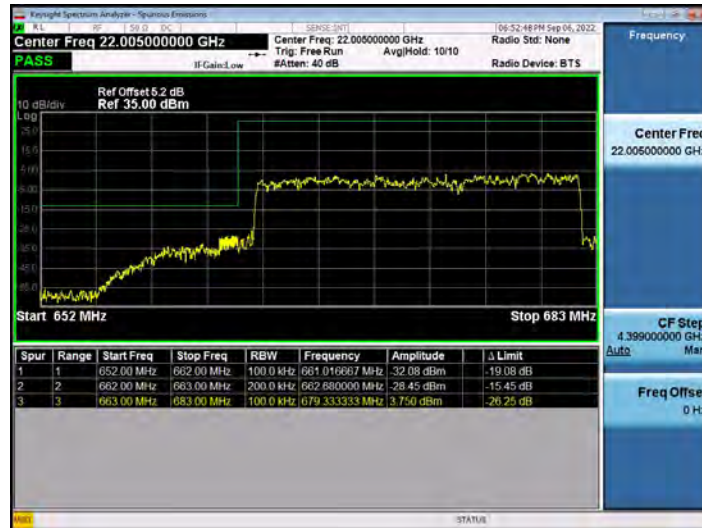
Band71-15MHz-QPSK-133397-75RB#0



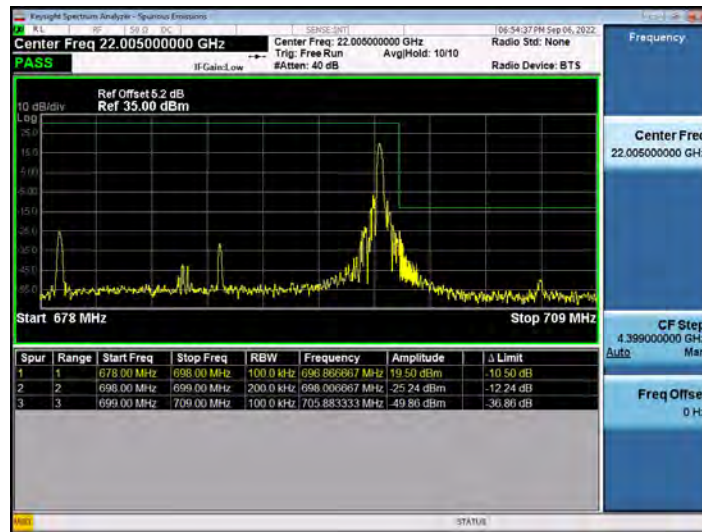
Band71-20MHz-QPSK-133222-1RB#0



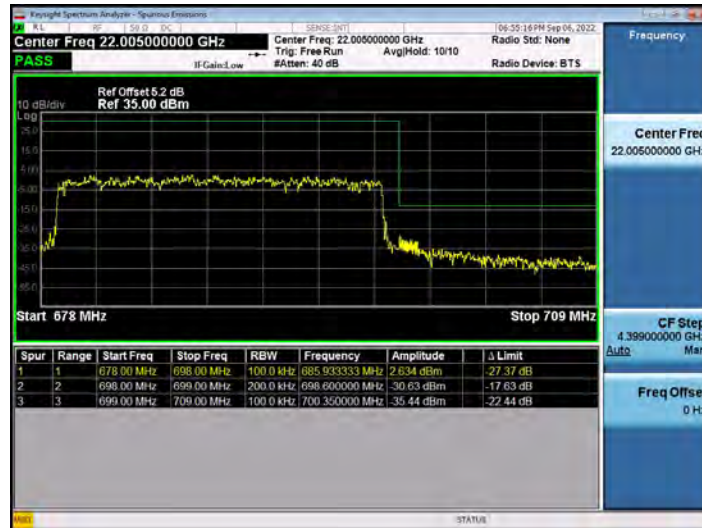
Band71-20MHz-QPSK-133222-100RB#0



Band71-20MHz-QPSK-133372-1RB#99



Band71-20MHz-QPSK-133372-100RB#0



Appendix F: Spurious Emission at Antenna Terminals

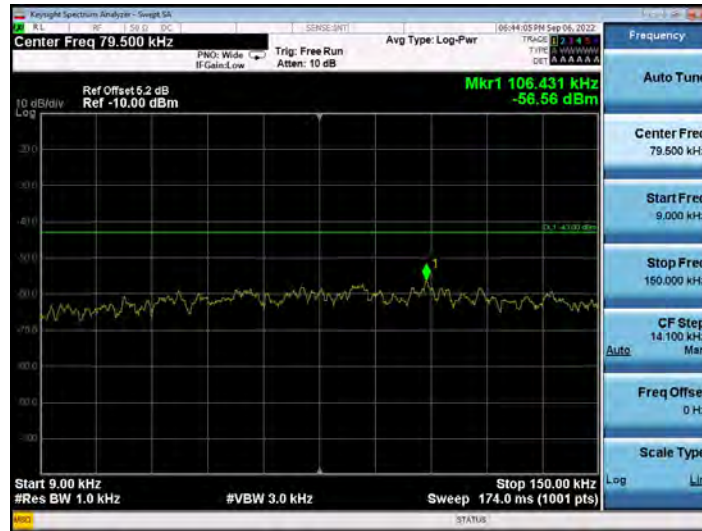
Test Result:

Worst Case data as follows:

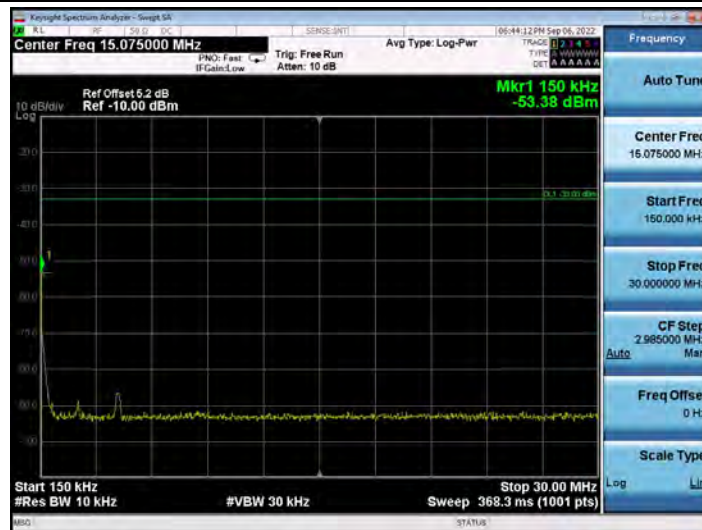
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band71	5MHz	QPSK	133297	1RB#0	Range1: 9KHz~150KHz	-56.56	PASS
Band71	5MHz	QPSK	133297	1RB#0	Range2: 150KHz~30MHz	-53.38	PASS
Band71	5MHz	QPSK	133297	1RB#0	Range3: 30MHz~6.805GHz	-39.30	PASS
Band71	10MHz	QPSK	133297	1RB#0	Range1: 9KHz~150KHz	-55.83	PASS
Band71	10MHz	QPSK	133297	1RB#0	Range2: 150KHz~30MHz	-53.31	PASS
Band71	10MHz	QPSK	133297	1RB#0	Range3: 30MHz~6.805GHz	-39.16	PASS
Band71	15MHz	QPSK	133297	1RB#0	Range1: 9KHz~150KHz	-55.25	PASS
Band71	15MHz	QPSK	133297	1RB#0	Range2: 150KHz~30MHz	-53.60	PASS
Band71	15MHz	QPSK	133297	1RB#0	Range3: 30MHz~6.805GHz	-39.66	PASS
Band71	20MHz	QPSK	133322	1RB#0	Range1: 9KHz~150KHz	-56.13	PASS
Band71	20MHz	QPSK	133322	1RB#0	Range2: 150KHz~30MHz	-53.64	PASS
Band71	20MHz	QPSK	133322	1RB#0	Range3: 30MHz~6.805GHz	-38.72	PASS

Test Graphs

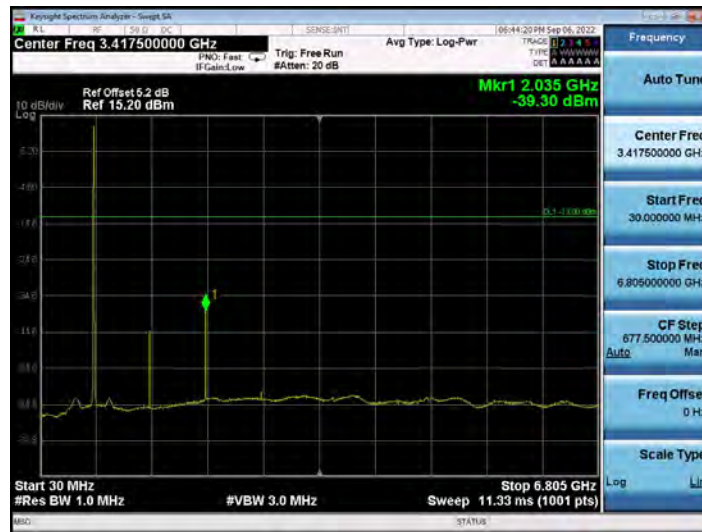
Band71-5MHz-QPSK-133297-1RB#0-Range1: 9KHz~150KHz



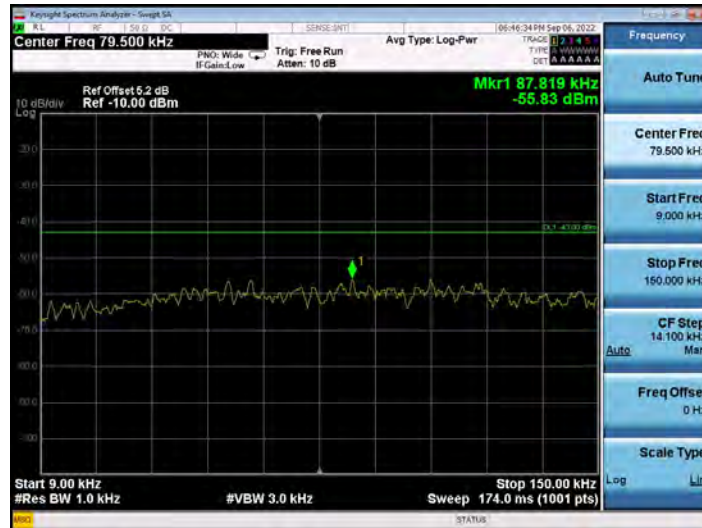
Band71-5MHz-QPSK-133297-1RB#0-Range2: 150KHz~30MHz



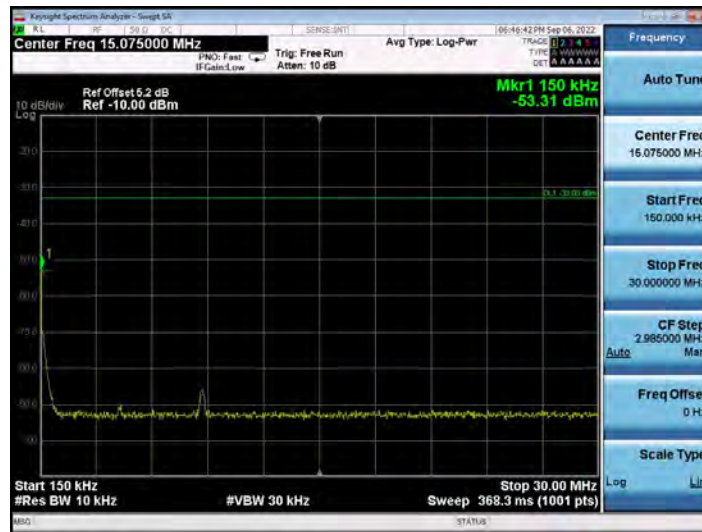
Band71-5MHz-QPSK-133297-1RB#0-Range3:30MHz~6.805GHz



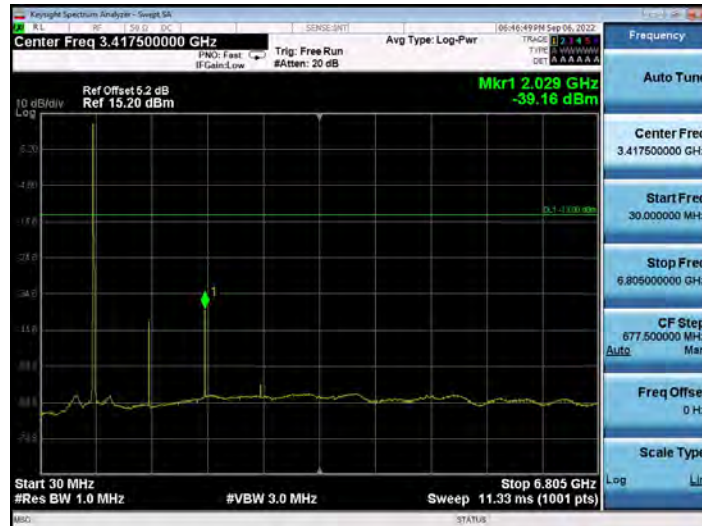
Band71-10MHz-QPSK-133297-1RB#0-Range1: 9KHz~150KHz



Band71-10MHz-QPSK-133297-1RB#0-Range2: 150KHz~30MHz



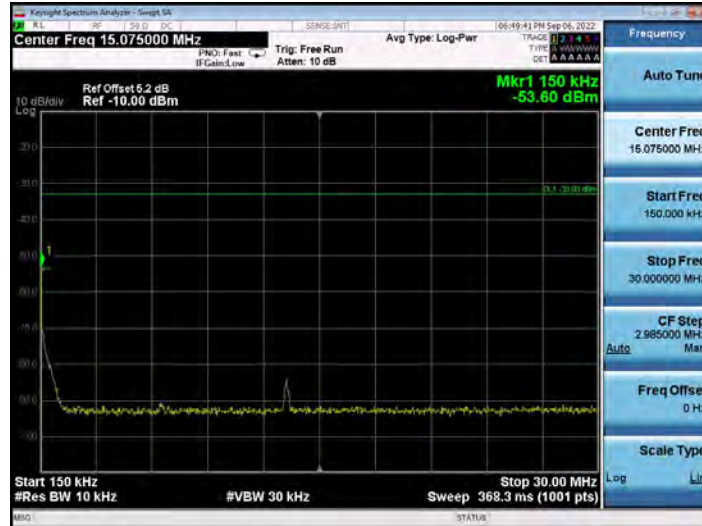
Band71-10MHz-QPSK-133297-1RB#0-Range3:30MHz~6.805GHz



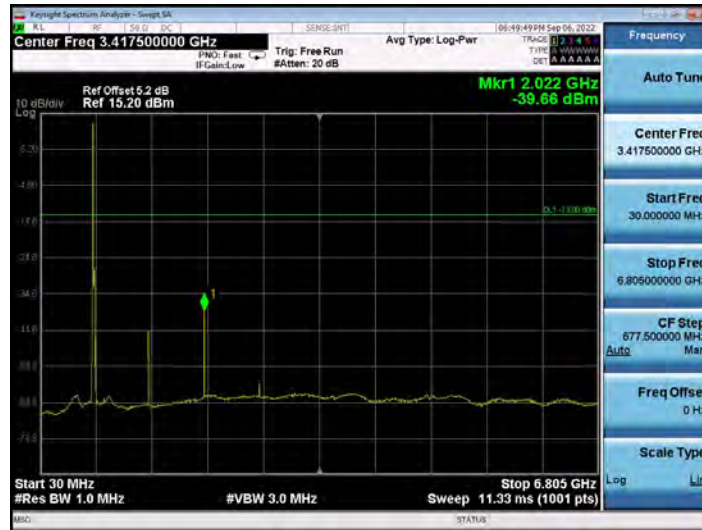
Band71-15MHz-QPSK-133297-1RB#0-Range1: 9KHz~150KHz



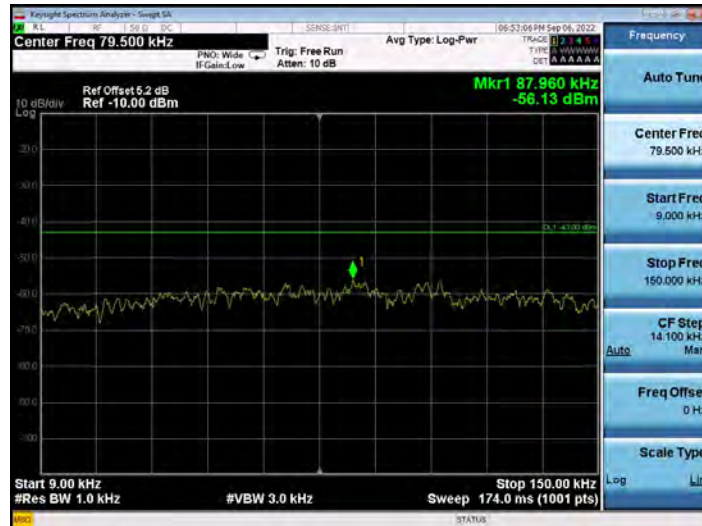
Band71-15MHz-QPSK-133297-1RB#0-Range2: 150KHz~30MHz



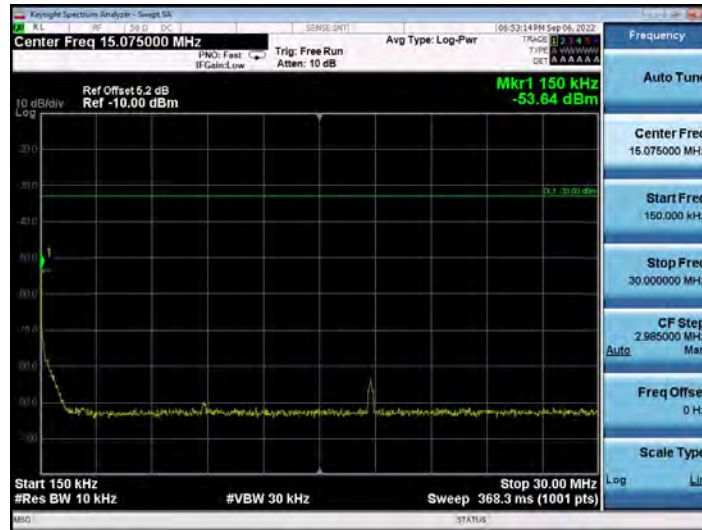
Band71-15MHz-QPSK-133297-1RB#0-Range 3:30MHz~6.805GHz



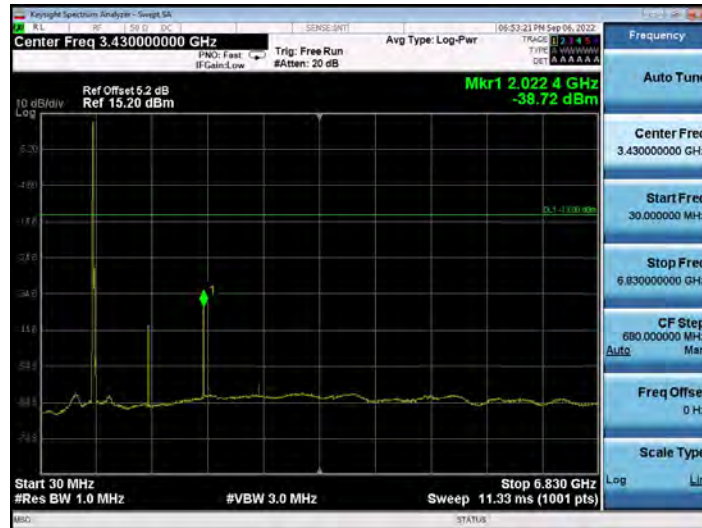
Band71-20MHz-QPSK-133297-1RB#0-Range1: 9KHz~150KHz



Band71-20MHz-QPSK-133297-1RB#0-Range2: 150KHz~30MHz



Band71-20MHz-QPSK-133322-1RB#0-Range 3:30MHz~6.805GHz



Appendix G: Field Strength of Spurious Radiation

The transmitting equipment under test (EUT) is placed on a styrene turntable which is four feet in diameter and approximately 0.8 meter up to 1GHz and 1.5 meter above 1GHz in height above the ground plane. During the radiated emissions test, the turntable is rotated and any cables leaving the EUT are manipulated to find the configuration resulting in maximum emissions. The EUT is adjusted through all three orthogonal axes to obtain maximum emission levels. The antenna height and polarization are varied during the testing to search for maximum signal levels.

The frequency range scanned is from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or 40 GHz, whichever is lower. The emissions were very low against the limit in the frequency range 9kHz to 30MHz and 18 GHz ~ 20 GHz.

Note: We tested all modes, but the data presented below is the worst case.

9kHz~150kHz, VBW = 200Hz, VBW = 600 Hz, Detector: PK

150kHz~30MHz, VBW = 9kHz, VBW = 30k Hz, Detector: PK

30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: RMS

Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Test Plots

Test Band = BAND71

Worst Test Bandwidth = 5MHz(30MHz~1GHz)

Worst Test Bandwidth = 5MHz,20MHz, -Middle channel(1GHz~7GHz)

Note:

1. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.
2. The EUT is tested radiation emission at each test mode in three axes. The worst emissions are reported in all test mode and channels.
3. Measurement = Reading + Correct Factor
Over = Measurement – Limit.

Middle channel Horizontal

Below 1G
BW_5MHz

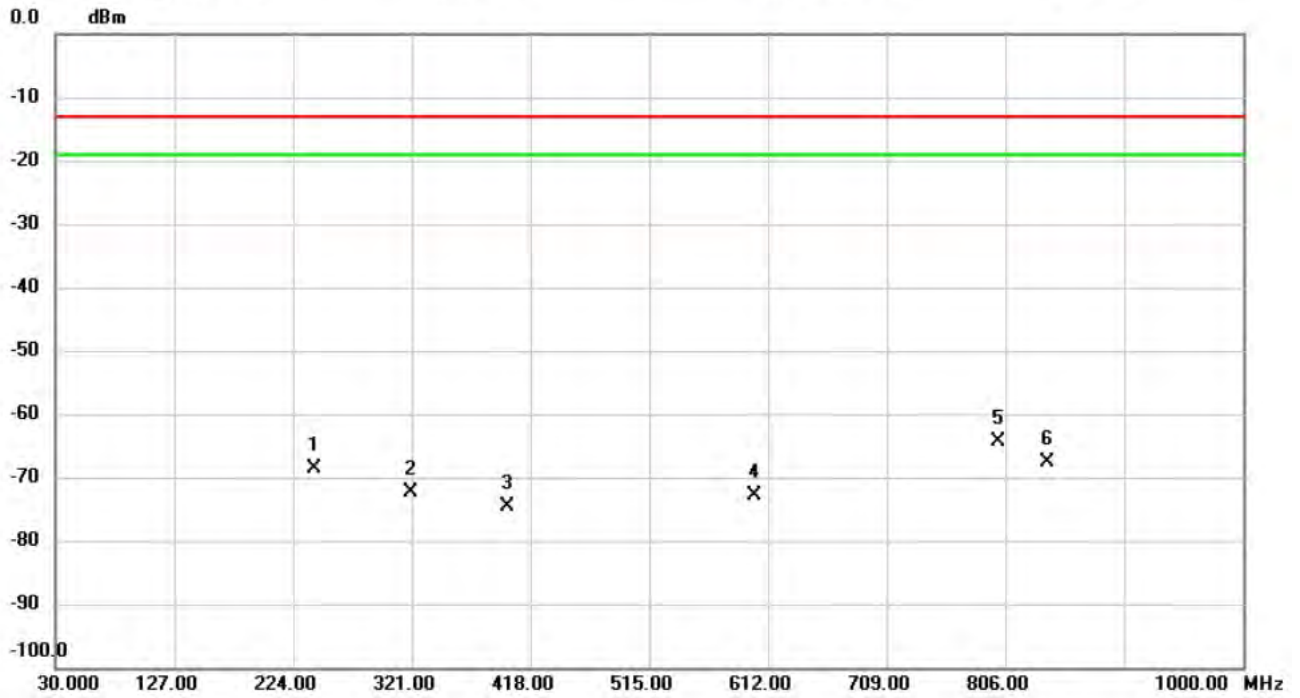
Radiated Emission Measurement

File :FCCP_BELOW1G

Data :#14

Date: 2022/9/13

Time: 11:51:48



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector
1		241.4600	-64.69	-3.91	-68.60	-13.00	-55.60	RMS
2		320.0300	-69.63	-2.81	-72.44	-13.00	-59.44	RMS
3		399.5700	-72.95	-1.76	-74.71	-13.00	-61.71	RMS
4		600.3600	-74.87	1.95	-72.92	-13.00	-59.92	RMS
5	*	800.1800	-68.61	4.28	-64.33	-13.00	-51.33	RMS
6		839.9500	-71.89	4.22	-67.67	-13.00	-54.67	RMS

**Above 1G
BW_5MHz**

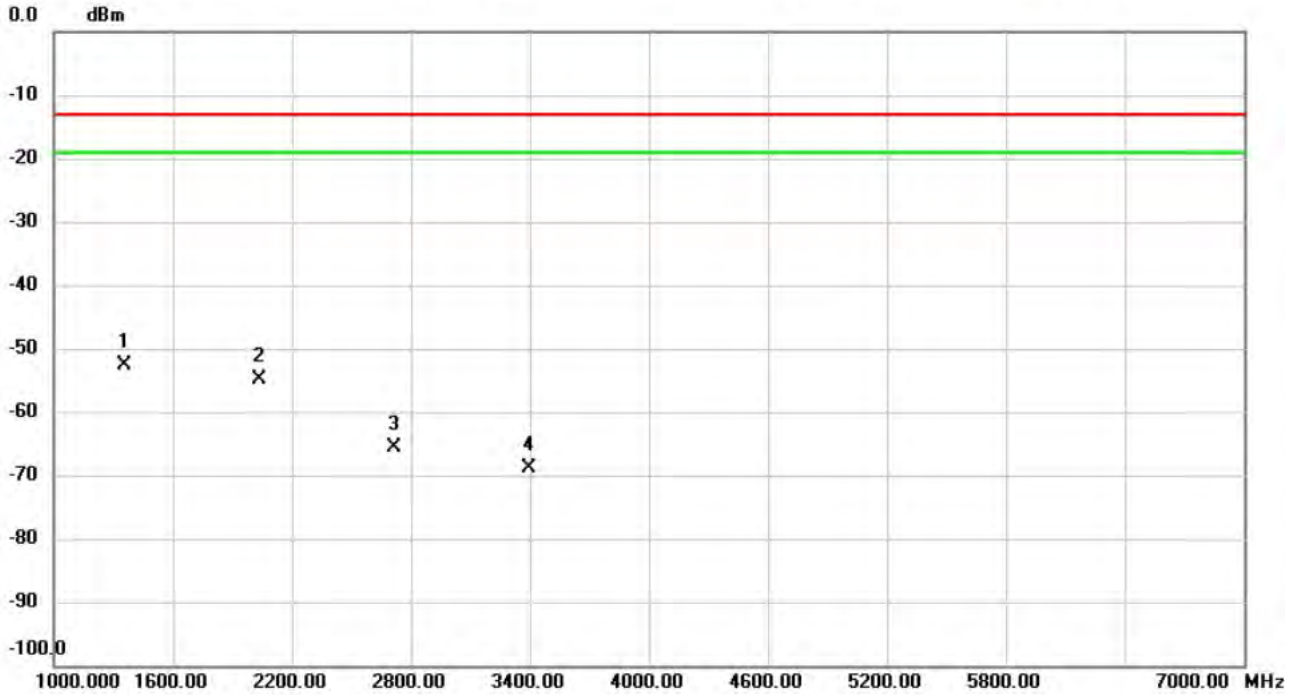
Radiated Emission Measurement

File :FCCP_ABOVE1G

Data :#24

Date: 2022/9/7

Time: 13:42:28



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector
		MHz	dBm	dB	dBm	dBm	dB	
1	*	1354.000	-40.04	-12.56	-52.60	-13.00	-39.60	RMS
2		2038.000	-44.27	-10.72	-54.99	-13.00	-41.99	RMS
3		2716.000	-56.28	-9.36	-65.64	-13.00	-52.64	RMS
4		3394.000	-60.43	-8.52	-68.95	-13.00	-55.95	RMS

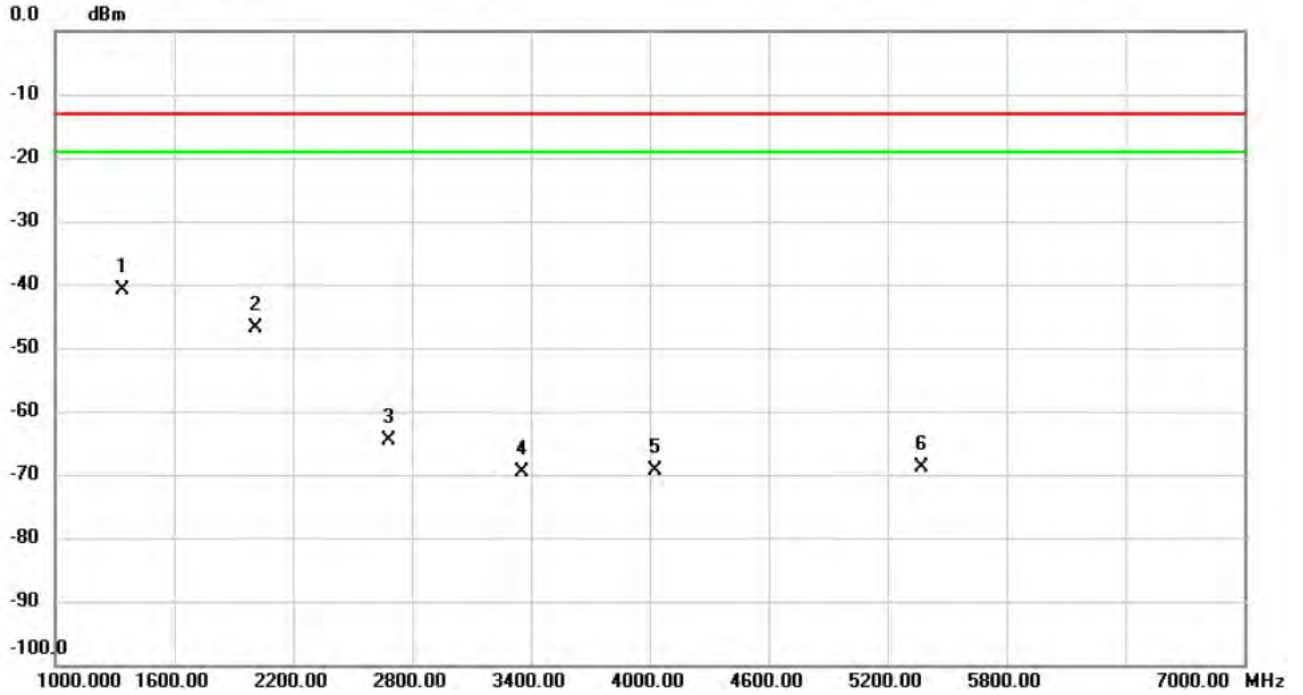
**BW_20MHz
Radiated Emission Measurement**

File :FCCP_ABOVE1G

Data :#26

Date: 2022/9/7

Time: 13:47:46



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector
1	*	1342.000	-28.33	-12.61	-40.94	-13.00	-27.94	RMS
2		2014.000	-35.84	-10.98	-46.82	-13.00	-33.82	RMS
3		2686.000	-55.09	-9.55	-64.64	-13.00	-51.64	RMS
4		3358.000	-61.26	-8.40	-69.66	-13.00	-56.66	RMS
5		4030.000	-63.00	-6.42	-69.42	-13.00	-56.42	RMS
6		5372.000	-64.58	-4.33	-68.91	-13.00	-55.91	RMS

Middle channel Vertical

Below 1G

BW_5MHz

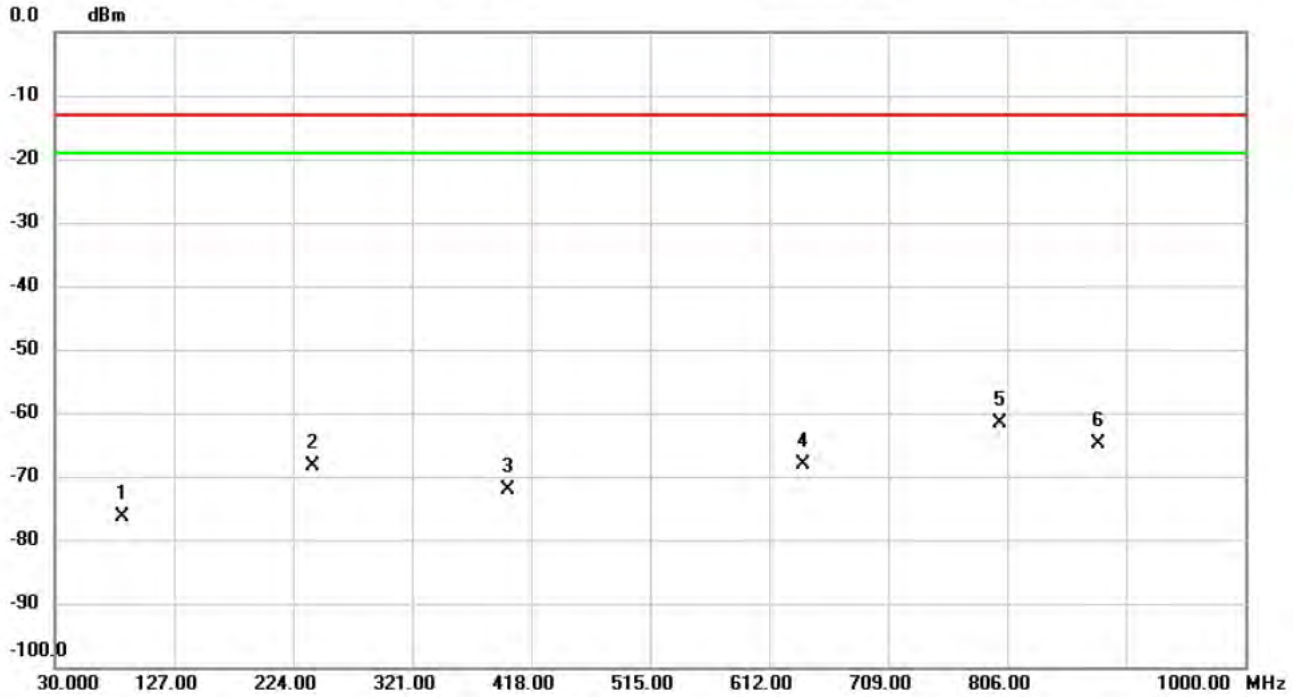
Radiated Emission Measurement

File :FCCP_BELOW1G

Data :#13

Date: 2022/9/13

Time: 11:49:20



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector
1		84.3200	-70.07	-6.25	-76.32	-13.00	-63.32	RMS
2		239.5200	-62.83	-5.49	-68.32	-13.00	-55.32	RMS
3		399.5700	-70.65	-1.55	-72.20	-13.00	-59.20	RMS
4		640.1300	-69.96	1.95	-68.01	-13.00	-55.01	RMS
5	*	800.1800	-65.09	3.44	-61.65	-13.00	-48.65	RMS
6		879.7200	-68.76	3.99	-64.77	-13.00	-51.77	RMS

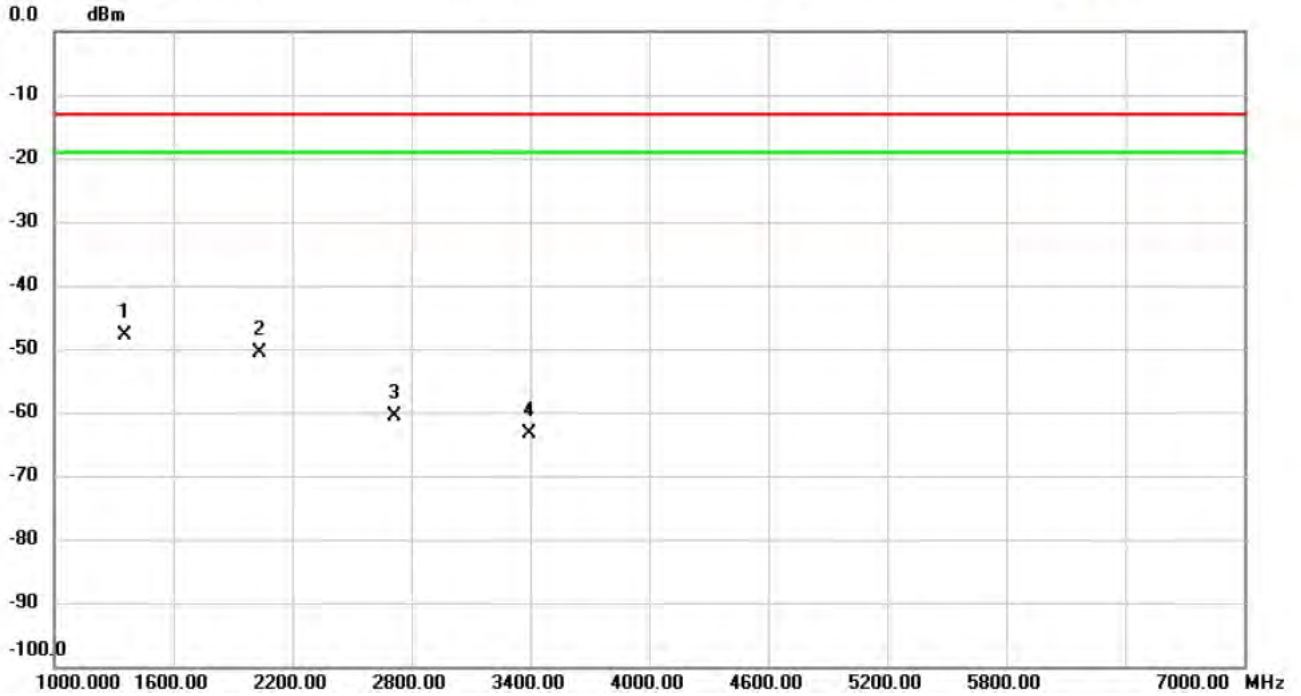
Above 1G
BW_5MHz
Radiated Emission Measurement

File :FCCP_ABOVE1G

Data :#23

Date: 2022/9/7

Time: 13:40:51



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector
1	*	1354.000	-35.50	-12.48	-47.98	-13.00	-34.98	RMS
2		2038.000	-39.87	-10.72	-50.59	-13.00	-37.59	RMS
3		2716.000	-51.53	-9.16	-60.69	-13.00	-47.69	RMS
4		3394.000	-54.89	-8.57	-63.46	-13.00	-50.46	RMS

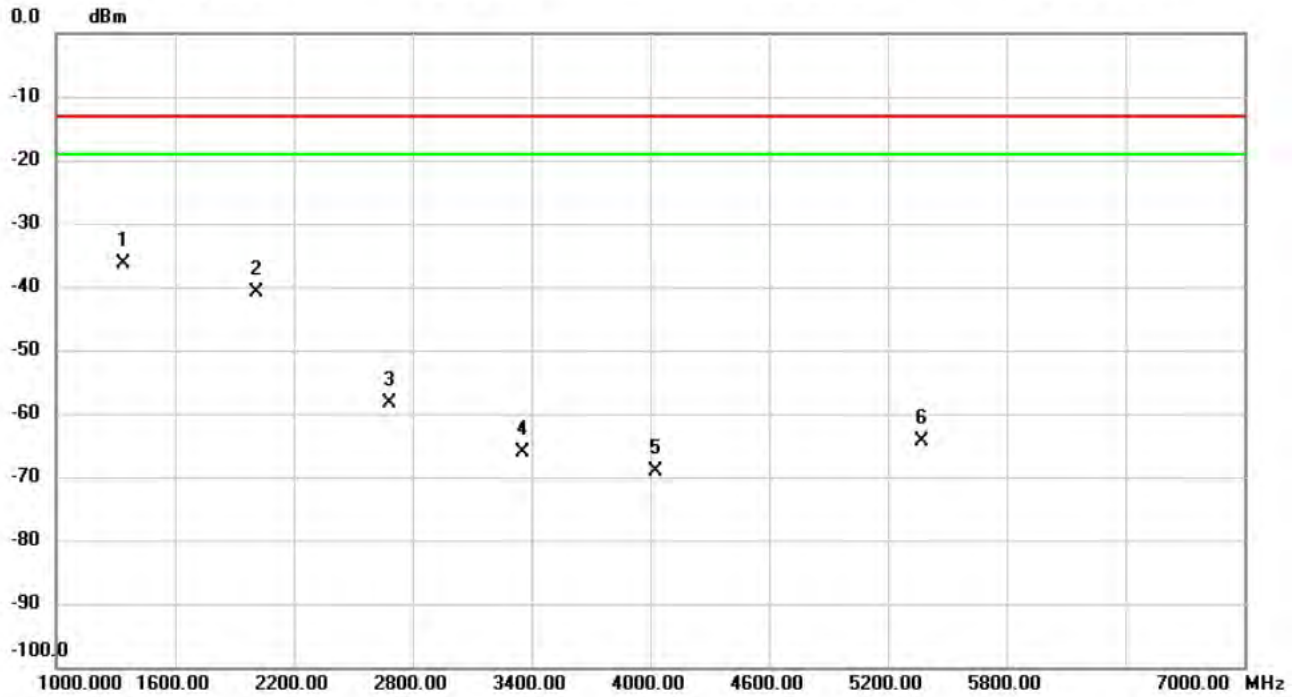
**BW_20MHz
Radiated Emission Measurement**

File :FCCP_ABOVE1G

Data :#25

Date: 2022/9/7

Time: 13:45:39



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector
		MHz	dBm	dB	dBm	dBm	dB	
1	*	1342.000	-23.90	-12.59	-36.49	-13.00	-23.49	RMS
2		2014.000	-30.02	-10.94	-40.96	-13.00	-27.96	RMS
3		2686.000	-49.07	-9.21	-58.28	-13.00	-45.28	RMS
4		3358.000	-57.67	-8.43	-66.10	-13.00	-53.10	RMS
5		4030.000	-62.99	-6.14	-69.13	-13.00	-56.13	RMS
6		5374.000	-60.06	-4.24	-64.30	-13.00	-51.30	RMS

Appendix H: Frequency Stability

Test Result:

Frequency Error vs. Voltage:

Worst Case data as follows:

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configuration	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band71	5MHz	QPSK	133322	1RB#0	VH	NT	7.73	0.01131772	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	VN	NT	6.32	0.00925329	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	VL	NT	7.96	0.01165447	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	VH	NT	6.90	0.01010249	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	VN	NT	8.28	0.01212299	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	VL	NT	8.81	0.01289898	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	VH	NT	4.07	0.00595900	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	VN	NT	7.32	0.01071742	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	VL	NT	7.35	0.01076135	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	VH	NT	5.57	0.00815520	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	VN	NT	5.42	0.00793558	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	VL	NT	8.51	0.01245974	±2.5	PASS

Frequency Error vs. Temperature:
Worst Case data as follows:

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configuration	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band71	5MHz	SQPSK	133322	1RB#0	NV	-40	5.29	0.00774524	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	NV	-30	6.65	0.00973646	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	NV	-20	8.06	0.01180088	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	NV	-10	5.31	0.00777452	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	NV	0	7.31	0.01070278	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	NV	10	7.02	0.01027818	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	NV	20	6.48	0.00948755	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	NV	30	4.31	0.00631040	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	NV	40	7.76	0.01136164	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	NV	50	4.15	0.00607613	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	NV	60	8.70	0.01273792	±2.5	PASS
Band71	5MHz	QPSK	133322	1RB#0	NV	70	4.42	0.00647145	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	80	8.89	0.01301611	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	-40	6.00	0.00878477	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	-30	7.09	0.01038067	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	-20	5.80	0.00849195	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	-10	6.79	0.00994143	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	0	6.19	0.00906296	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	10	8.80	0.01288433	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	20	8.26	0.01209370	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	30	4.89	0.00715959	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	40	8.39	0.01228404	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	50	8.56	0.01253294	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	60	5.80	0.00849195	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	70	6.66	0.00975110	±2.5	PASS
Band71	10MHz	QPSK	133322	1RB#0	NV	80	5.96	0.00872621	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	NV	-40	7.89	0.01155198	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	NV	-30	8.42	0.01232796	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	NV	-20	7.54	0.01103953	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	NV	-10	4.15	0.00607613	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	NV	0	5.40	0.00790630	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	NV	10	6.96	0.01019034	±2.5	PASS



Band71	15MHz	QPSK	133322	1RB#0	NV	20	7.62	0.01115666	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	NV	30	7.10	0.01039531	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	NV	40	7.72	0.01130307	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	NV	50	7.46	0.01092240	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	NV	60	6.78	0.00992679	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	NV	70	5.55	0.00812592	±2.5	PASS
Band71	15MHz	QPSK	133322	1RB#0	NV	80	8.78	0.01285505	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	-40	6.39	0.00935578	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	-30	4.55	0.00666179	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	-20	5.27	0.00771596	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	-10	7.82	0.01144949	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	0	7.77	0.01137628	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	10	5.99	0.00877013	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	20	6.18	0.00904832	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	30	6.13	0.00897511	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	40	5.07	0.00742313	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	50	7.55	0.01105417	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	60	4.02	0.00588580	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	70	4.50	0.00658858	±2.5	PASS
Band71	20MHz	QPSK	133322	1RB#0	NV	80	8.55	0.01251830	±2.5	PASS

END