

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.688	2401.704	2402.392	0.5	PASS
		2440	0.704	2439.696	2440.400	0.5	PASS
		2480	0.740	2479.648	2480.388	0.5	PASS

Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



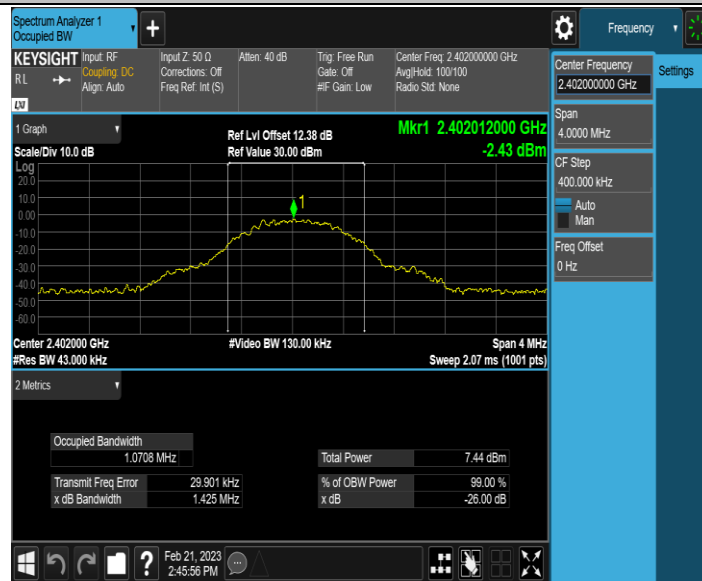
Appendix B: Occupied Channel Bandwidth

Test Result

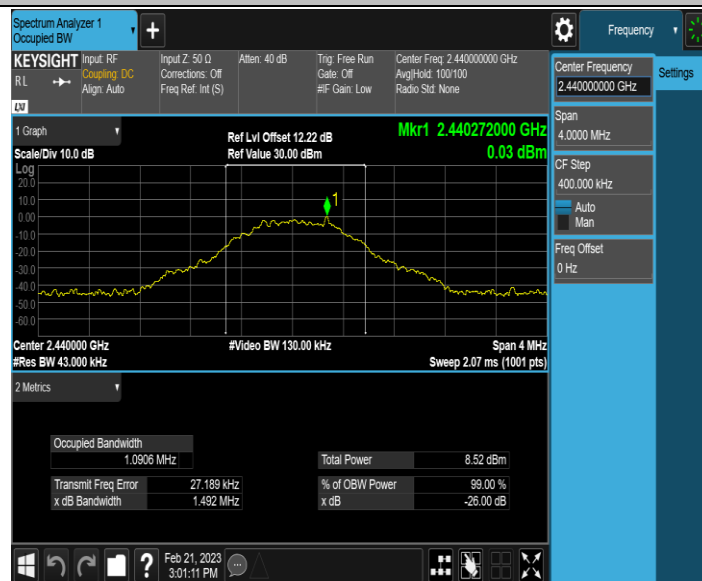
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0708	2401.4945	2402.5653	---	---
		2440	1.0906	2439.4819	2440.5725	---	---
		2480	1.1107	2479.4744	2480.5851	---	---

Test Graphs

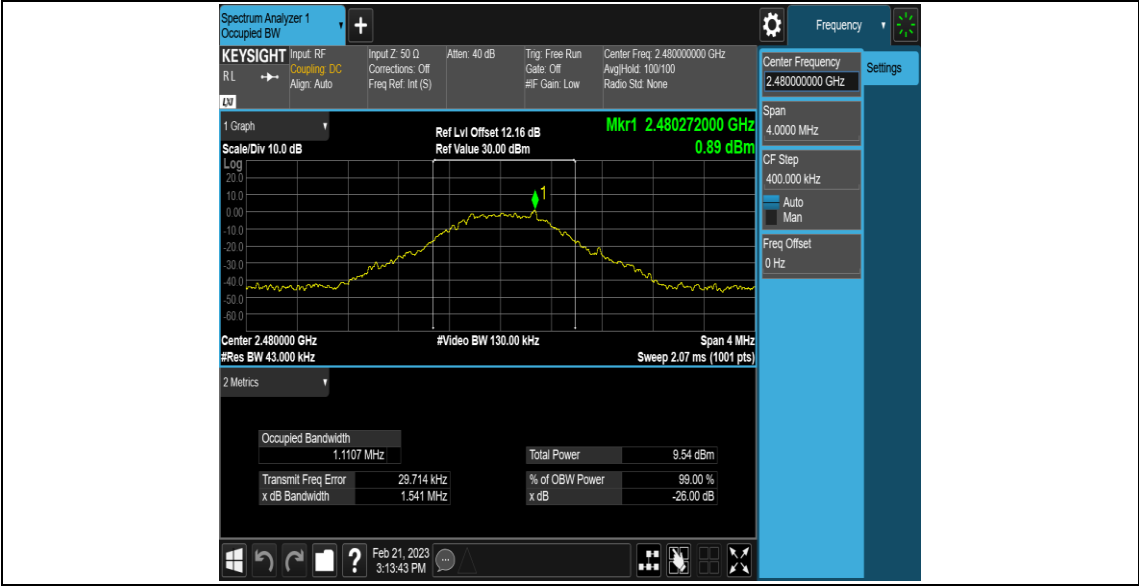
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Frequency[MHz]	Conducted Power[dBm]	Conducted Limit[dBm]	EIRP[dBm]	EIRP Limit[dBm]	Verdict
BLE_1M	Ant1	2402	1.15	≤30	2.15	≤36	PASS
		2440	1.88	≤30	2.88	≤36	PASS
		2480	2.8	≤30	3.8	≤36	PASS

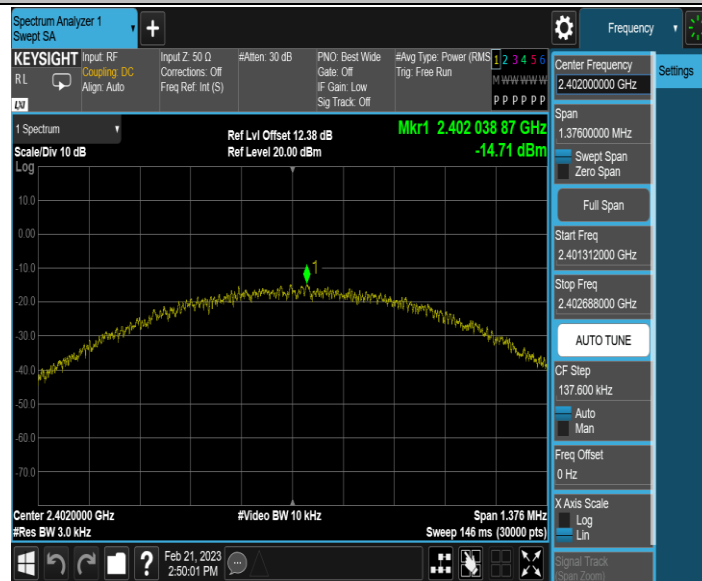
Appendix D: Maximum power spectral density

Test Result

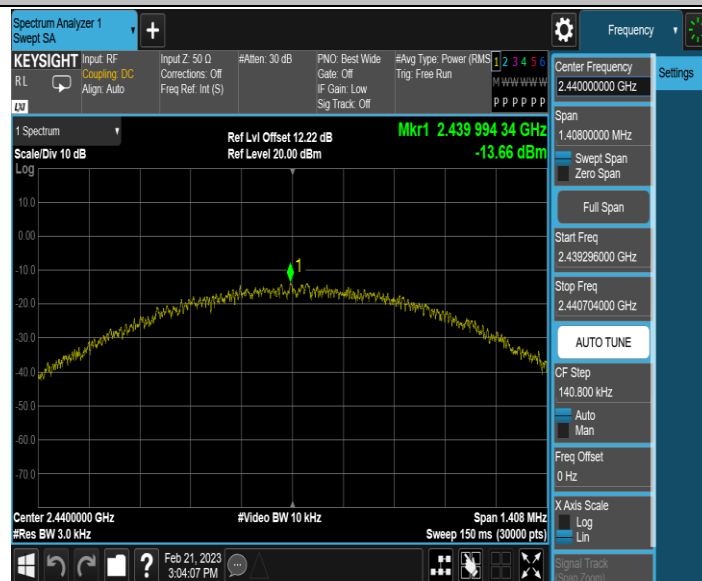
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-14.71	≤8.00	PASS
		2440	-13.66	≤8.00	PASS
		2480	-12.7	≤8.00	PASS

Test Graphs

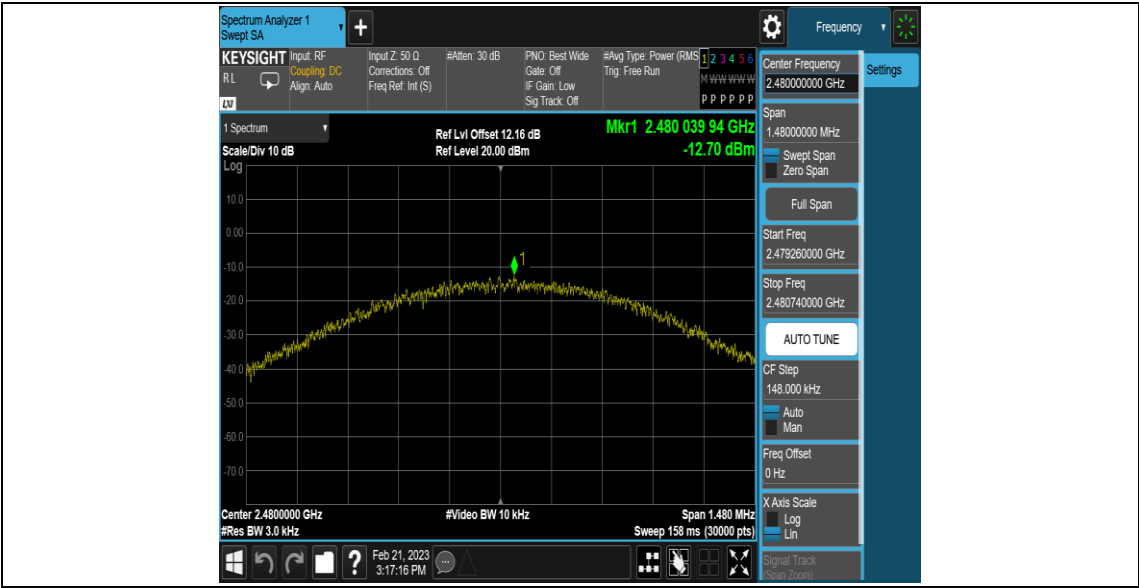
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix E: Band edge measurements

Test Result

TestMod e	Antenn a	ChNam e	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-0.02	-44.85	≤-20.02	PASS
		High	2480	2.39	-43.46	≤-17.61	PASS

Test Graphs



Appendix F: Conducted Spurious Emission

Test Result

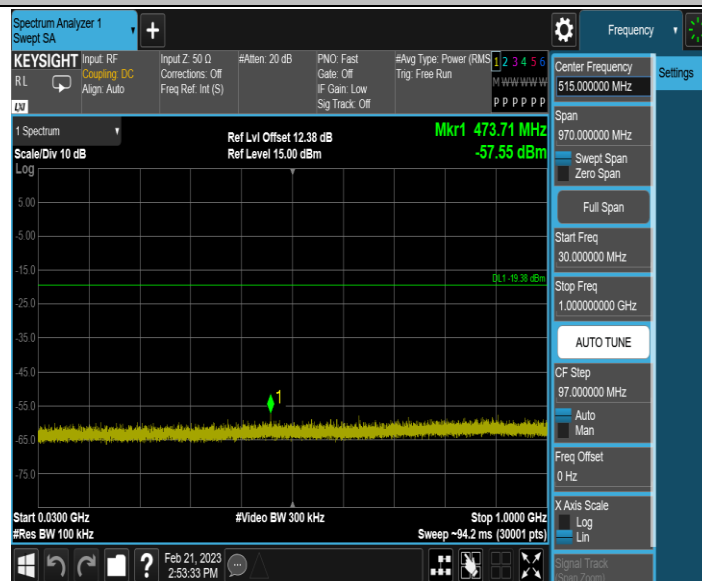
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	0.62	0.62	---	PASS
			30~1000	0.62	-57.55	≤-19.38	PASS
			1000~26500	0.62	-43.19	≤-19.38	PASS
		2440	Reference	1.55	1.55	---	PASS
			30~1000	1.55	-57.83	≤-18.45	PASS
			1000~26500	1.55	-42.33	≤-18.45	PASS
		2480	Reference	2.39	2.39	---	PASS
			30~1000	2.39	-57.57	≤-17.61	PASS
			1000~26500	2.39	-41.35	≤-17.61	PASS

Test Graphs

BLE_1M_Ant1_2402_0~Reference



BLE_1M_Ant1_2402_30~1000



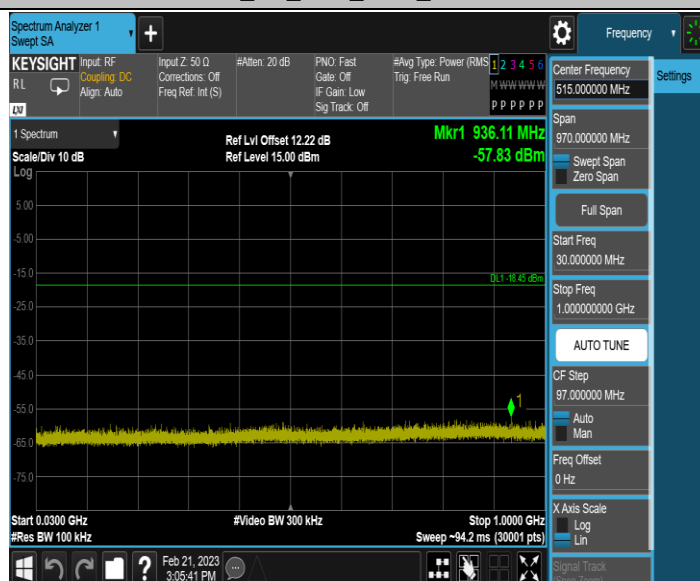
BLE_1M_Ant1_2402_1000~26500



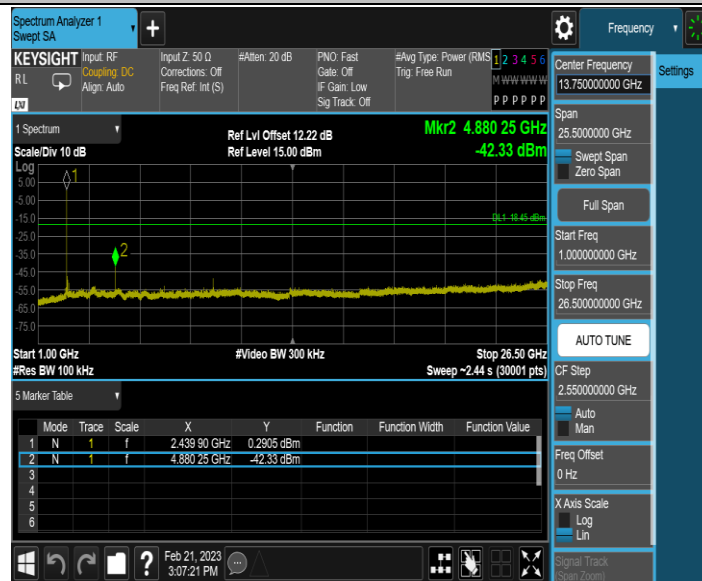
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



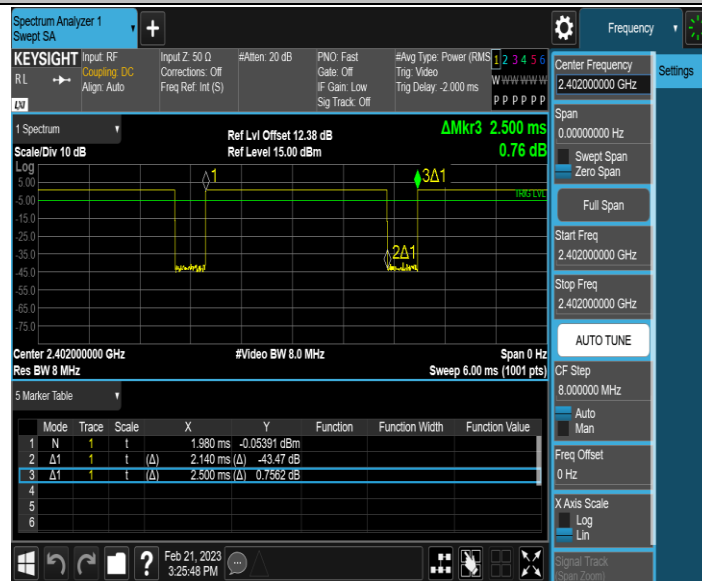
Appendix G: Duty Cycle

Test Result

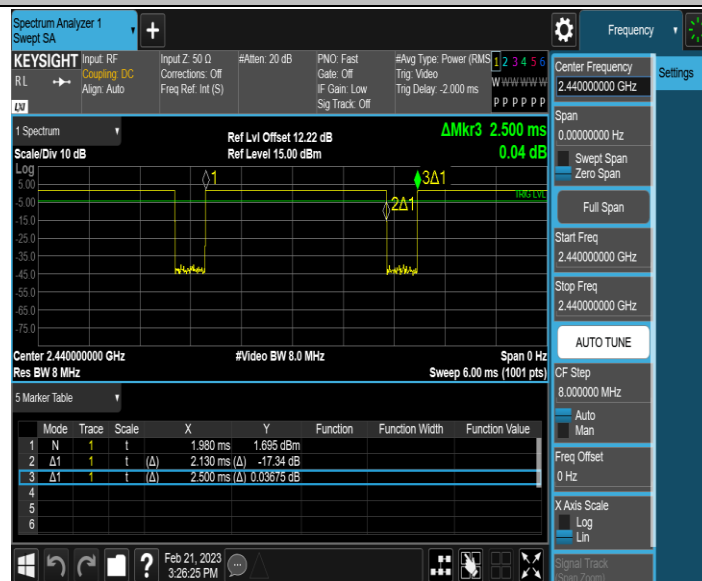
TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]
BLE_1M	Ant1	2402	2.14	2.50	85.60
		2440	2.13	2.50	85.20
		2480	2.14	2.50	85.60

Test Graphs

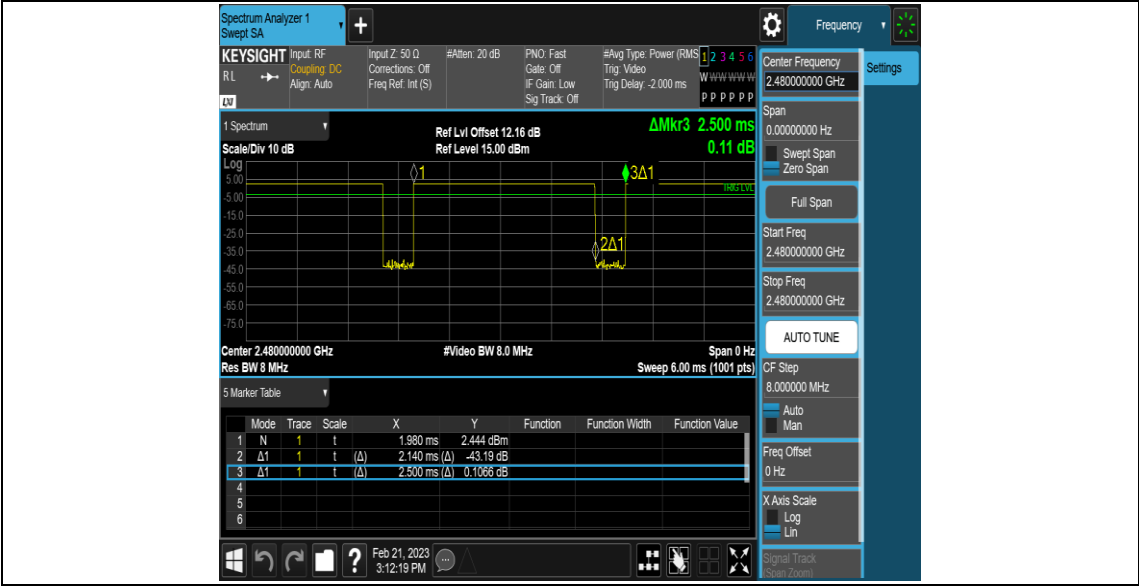
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix H: Emissions in Restricted Bands

Test Result

Mode:	1M-2402
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NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2310	46.57	6.48	74.00	27.43	150	330	Horizontal
2	2327.84	47.50	6.52	74.00	26.50	150	30	Horizontal
3	2331.36	47.71	6.52	74.00	26.29	150	20	Horizontal
4	2351.28	47.37	6.56	74.00	26.63	150	320	Horizontal
5	2365.12	47.33	6.60	74.00	26.67	150	270	Horizontal
6	2390	45.73	6.64	74.00	28.27	150	30	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2310	46.39	6.48	74.00	27.61	150	170	Vertical
2	2311.6	47.62	6.48	74.00	26.38	150	20	Vertical
3	2337.44	47.56	6.54	74.00	26.44	150	310	Vertical
4	2356.88	47.42	6.58	74.00	26.58	150	170	Vertical
5	2364.64	47.79	6.58	74.00	26.21	150	280	Vertical
6	2390	46.25	6.64	74.00	27.75	150	230	Vertical

Mode:	1M-2480
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NO.	Freq. [MHz]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2483.5	46.91	7.20	74.00	27.09	150	250	Horizontal
2	2488.58	48.99	7.24	74.00	25.01	150	220	Horizontal
3	2493.82	47.53	7.27	74.00	26.47	150	300	Horizontal
4	2494.86	47.78	7.27	74.00	26.22	150	330	Horizontal
5	2495.85	47.74	7.29	74.00	26.26	150	210	Horizontal
6	2500	47.38	7.31	74.00	26.62	150	170	Horizontal

NO.	Freq. [MHz]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2483.5	46.79	7.20	74.00	27.21	150	110	Vertical
2	2488.43	48.29	7.24	74.00	25.71	150	50	Vertical
3	2494.01	48.83	7.27	74.00	25.17	150	20	Vertical
4	2494.01	48.83	7.27	74.00	25.17	150	20	Vertical
5	2499.27	48.76	7.31	74.00	25.24	150	190	Vertical
6	2500	46.60	7.31	74.00	27.40	150	300	Vertical

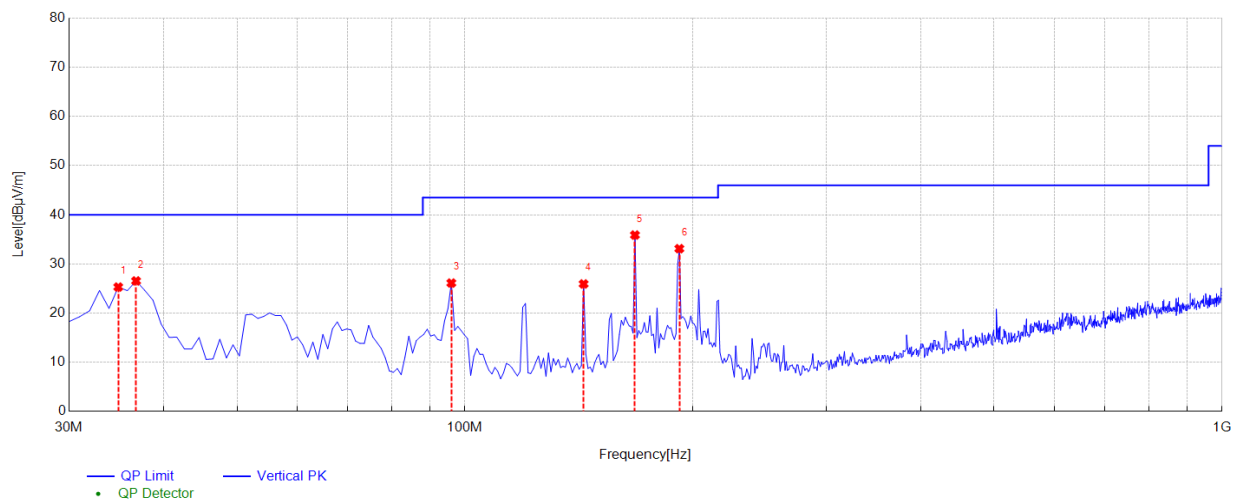
Note:

1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dB μ V/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Appendix I: Spurious emissions

Mode:	1M-2402
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Test Graph

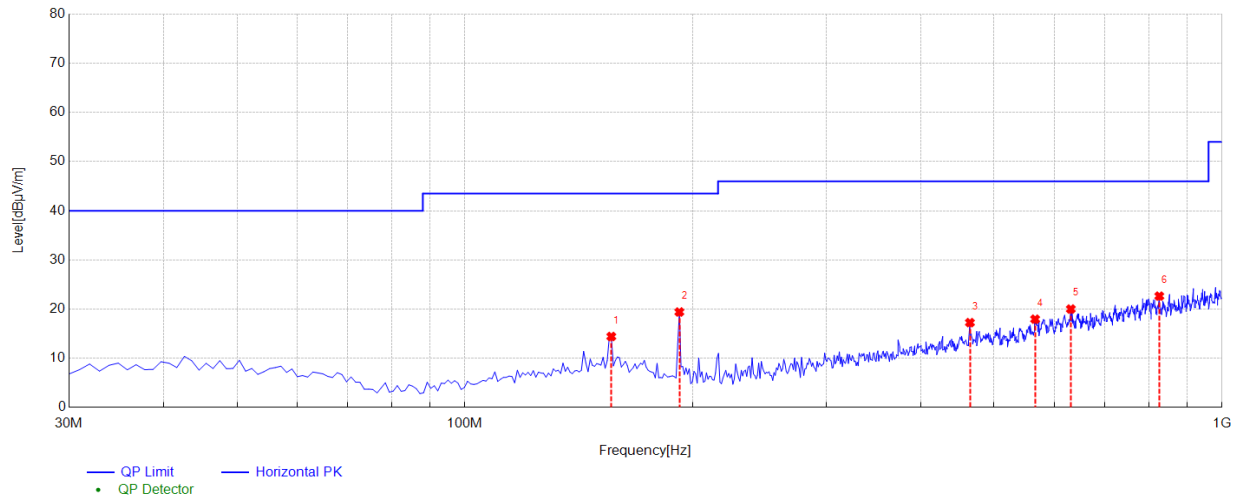


NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	34.85	25.31	-16.53	40.00	14.69	100	70	Vertical	PASS
2	36.79	26.55	-16.19	40.00	13.45	100	170	Vertical	PASS
3	95.96	26.12	-20.30	43.50	17.38	100	130	Vertical	PASS
4	143.49	25.94	-16.69	43.50	17.56	100	290	Vertical	PASS
5	167.74	35.88	-16.56	43.50	7.62	100	180	Vertical	PASS
6	191.99	33.11	-19.09	43.50	10.39	100	320	Vertical	PASS

Mode:

1M-2402

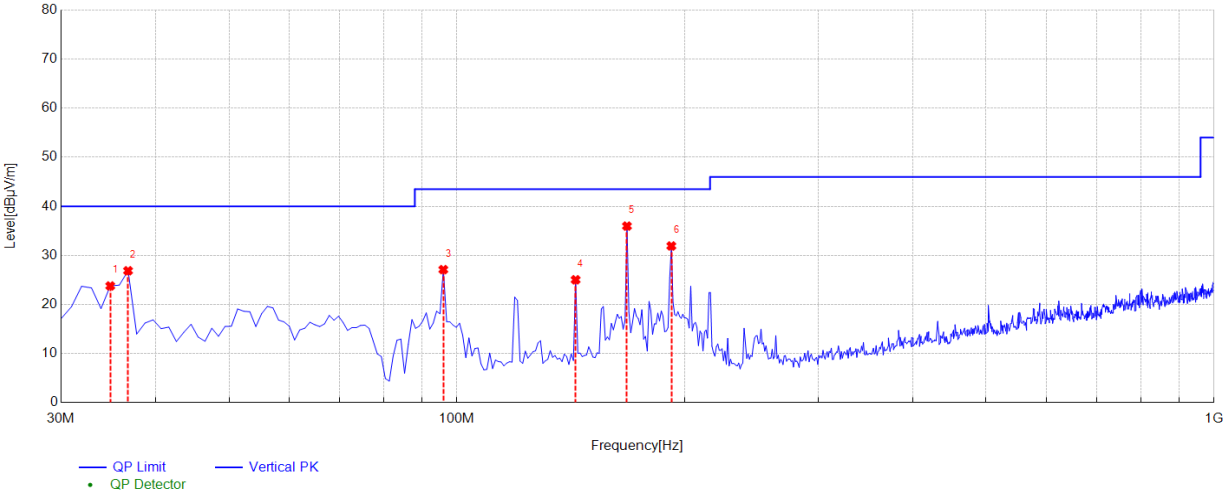
Test Graph



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	156.1	14.44	-16.12	43.50	29.06	100	60	Horizontal	PASS
2	191.99	19.42	-19.09	43.50	24.08	100	30	Horizontal	PASS
3	464.56	17.26	-12.35	46.00	28.74	100	150	Horizontal	PASS
4	566.41	17.96	-10.32	46.00	28.04	100	100	Horizontal	PASS
5	631.4	20.02	-8.75	46.00	25.98	100	100	Horizontal	PASS
6	826.37	22.65	-6.37	46.00	23.35	100	260	Horizontal	PASS

Mode:	1M-2440
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Test Graph

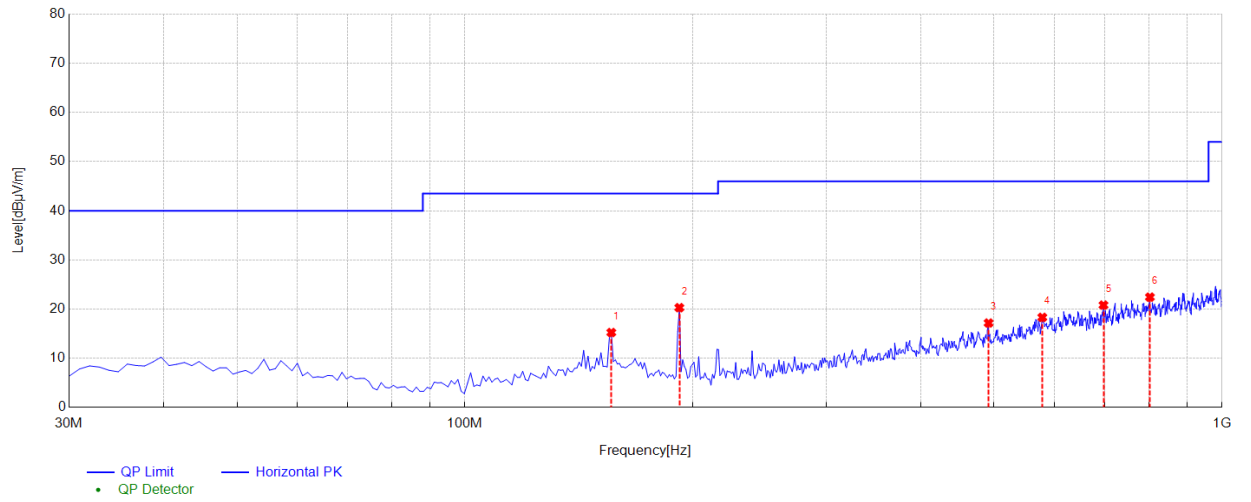


NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	34.85	23.79	-16.53	40.00	16.21	100	330	Vertical	PASS
2	36.79	26.88	-16.19	40.00	13.12	100	130	Vertical	PASS
3	95.96	27.11	-20.30	43.50	16.39	100	200	Vertical	PASS
4	143.49	25.04	-16.69	43.50	18.46	100	250	Vertical	PASS
5	167.74	35.98	-16.56	43.50	7.52	100	90	Vertical	PASS
6	191.99	31.93	-19.09	43.50	11.57	100	240	Vertical	PASS

Mode:

1M-2440

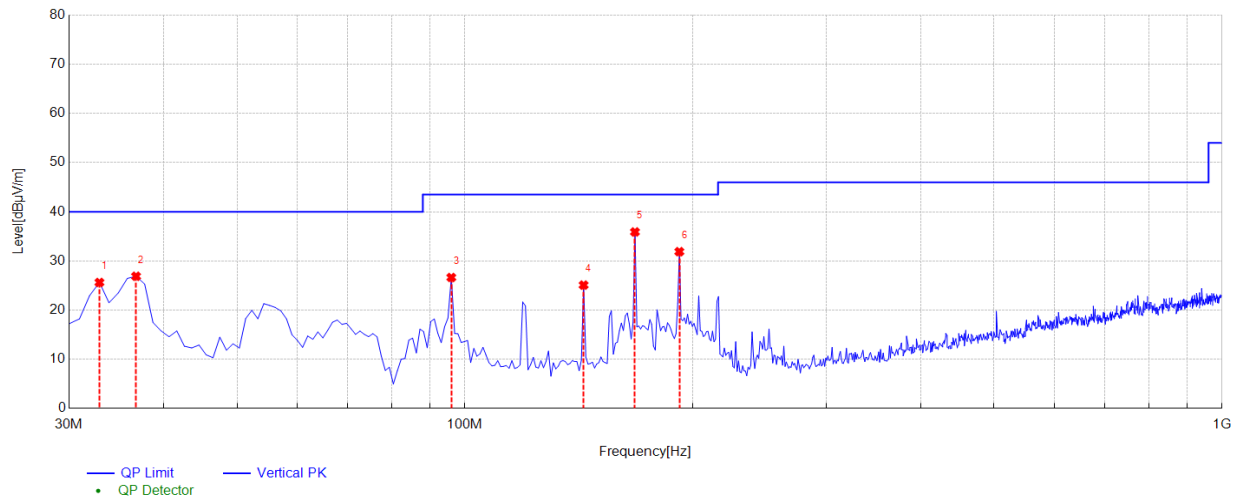
Test Graph



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	156.1	15.25	-16.12	43.50	28.25	100	140	Horizontal	PASS
2	191.99	20.30	-19.09	43.50	23.20	100	240	Horizontal	PASS
3	491.72	17.18	-11.96	46.00	28.82	100	20	Horizontal	PASS
4	579.02	18.33	-9.67	46.00	27.67	100	140	Horizontal	PASS
5	697.36	20.82	-8.47	46.00	25.18	100	350	Horizontal	PASS
6	803.09	22.44	-6.04	46.00	23.56	100	320	Horizontal	PASS

Mode:

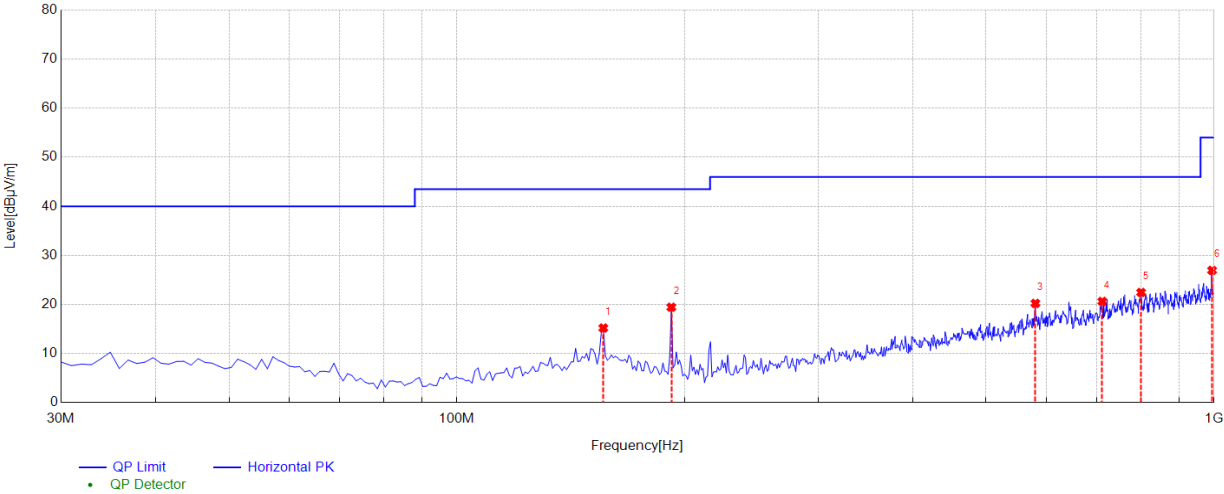
1M-2480



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	32.91	25.63	-16.87	40.00	14.37	100	90	Vertical	PASS
2	36.79	26.89	-16.19	40.00	13.11	100	80	Vertical	PASS
3	95.96	26.64	-20.30	43.50	16.86	100	110	Vertical	PASS
4	143.49	25.09	-16.69	43.50	18.41	100	240	Vertical	PASS
5	167.74	35.90	-16.56	43.50	7.60	100	140	Vertical	PASS
6	191.99	31.89	-19.09	43.50	11.61	100	120	Vertical	PASS

Mode:	1M-2480
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Test Graph



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	156.1	15.21	-16.12	43.50	28.29	100	90	Horizontal	PASS
2	191.99	19.45	-19.09	43.50	24.05	100	150	Horizontal	PASS
3	580.96	20.23	-9.63	46.00	25.77	100	30	Horizontal	PASS
4	711.91	20.63	-8.10	46.00	25.37	100	150	Horizontal	PASS
5	801.15	22.46	-5.99	46.00	23.54	100	260	Horizontal	PASS
6	994.18	26.96	-4.04	54.00	27.04	100	210	Horizontal	PASS

Mode:	1M-2402
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NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	3135	45.74	-14.24	74.00	28.26	150	354	Horizontal
2	5103	43.98	-13.78	74.00	30.02	150	332	Horizontal
3	6126	45.46	-11.50	74.00	28.54	150	360	Horizontal
4	9603	46.59	-8.44	74.00	27.41	150	209	Horizontal
5	12114	49.23	-3.54	74.00	24.77	150	73	Horizontal
6	16224	50.78	0.51	74.00	23.22	150	360	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4941	45.07	-14.81	74.00	28.93	150	170	Vertical
2	6123	44.94	-11.48	74.00	29.06	150	77	Vertical
3	7200	44.92	-11.01	74.00	29.08	150	107	Vertical
4	9441	45.53	-8.40	74.00	28.47	150	115	Vertical
5	10917	47.43	-6.01	74.00	26.57	150	19	Vertical
6	17283	53.08	2.62	74.00	20.92	150	337	Vertical

Mode:	1M-2440
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NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4272	44.96	-15.19	74.00	29.04	100	114	Horizontal
2	6027	45.21	-11.19	74.00	28.79	100	114	Horizontal
3	7440	45.90	-11.25	74.00	28.10	100	50	Horizontal
4	10686	47.09	-6.24	74.00	26.91	100	330	Horizontal
5	13200	50.28	-1.69	74.00	23.72	100	50	Horizontal
6	17010	52.88	2.55	74.00	21.12	100	180	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4209	52.13	-14.80	74.00	21.87	150	253	Vertical
2	5760	45.76	-12.72	74.00	28.24	150	188	Vertical
3	7095	44.55	-11.39	74.00	29.45	150	213	Vertical
4	11304	47.59	-5.63	74.00	26.41	150	326	Vertical
5	13176	49.41	-1.95	74.00	24.59	150	326	Vertical
6	17763	53.35	2.63	74.00	20.65	150	322	Vertical

Mode:	1M-2480
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NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4581	43.09	-14.54	74.00	30.91	150	253	Vertical
2	5760	46.17	-12.72	74.00	27.83	150	95	Vertical
3	7203	45.04	-11.05	74.00	28.96	150	179	Vertical
4	10581	46.83	-6.44	74.00	27.17	150	213	Vertical
5	12027	48.94	-4.25	74.00	25.06	150	334	Vertical
6	17199	53.46	2.13	74.00	20.54	150	179	Vertical

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4269	43.15	-15.17	74.00	30.85	150	240	Horizontal
2	5382	44.28	-13.68	74.00	29.72	150	110	Horizontal
3	6882	44.67	-11.39	74.00	29.33	150	200	Horizontal
4	8604	45.15	-10.35	74.00	28.85	150	150	Horizontal
5	13284	49.27	-2.36	74.00	24.73	150	210	Horizontal
6	17325	52.87	2.44	74.00	21.13	150	70	Horizontal