

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.700	2401.652	2402.352	0.5	PASS
		2440	0.692	2439.660	2440.352	0.5	PASS
		2480	0.704	2479.648	2480.352	0.5	PASS

Test Graphs





Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0226	2401.4972	2402.5198	---	---
		2440	1.0326	2439.4939	2440.5265	---	---
		2480	1.0361	2479.4921	2480.5282	---	---

Test Graphs



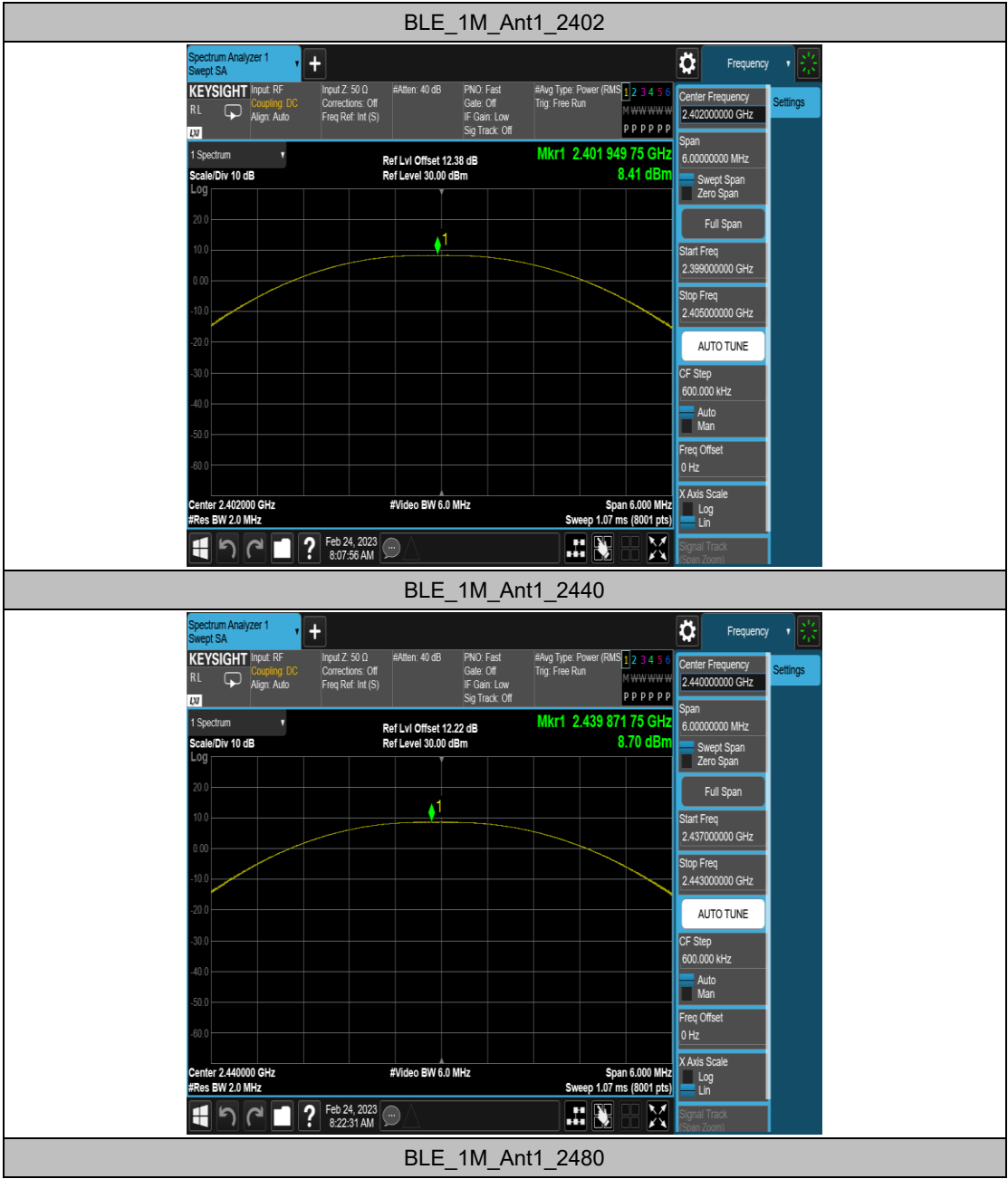


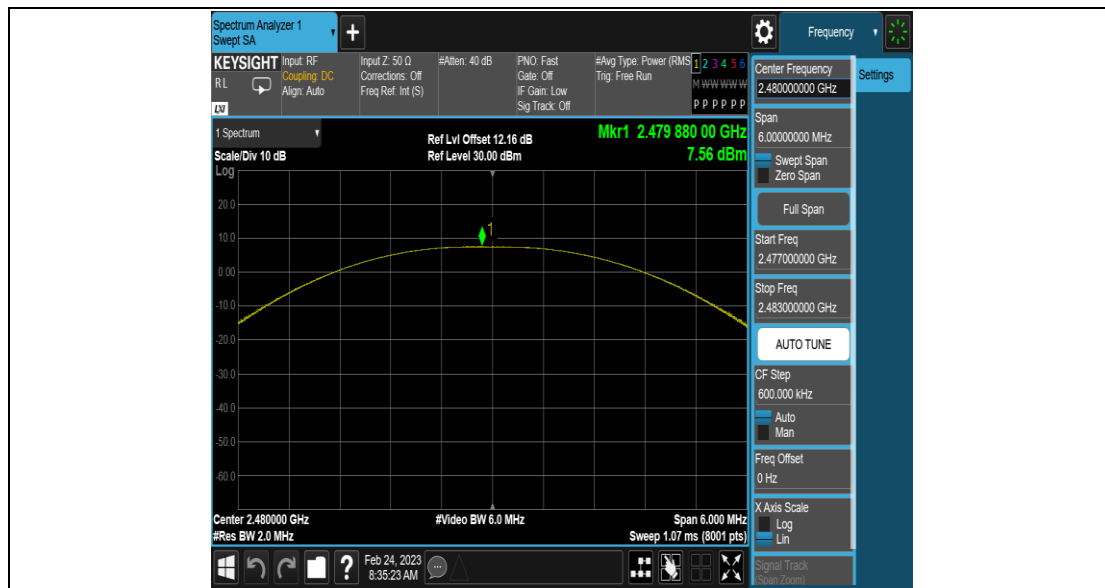
Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	EIRP[dBm]	EIRP Limit[dBm]	Verdict
BLE_1M	Ant1	2402	8.41	≤30	10.31	≤36	PASS
		2440	8.7	≤30	10.60	≤36	PASS
		2480	7.56	≤30	9.46	≤36	PASS

Test Graphs Peak



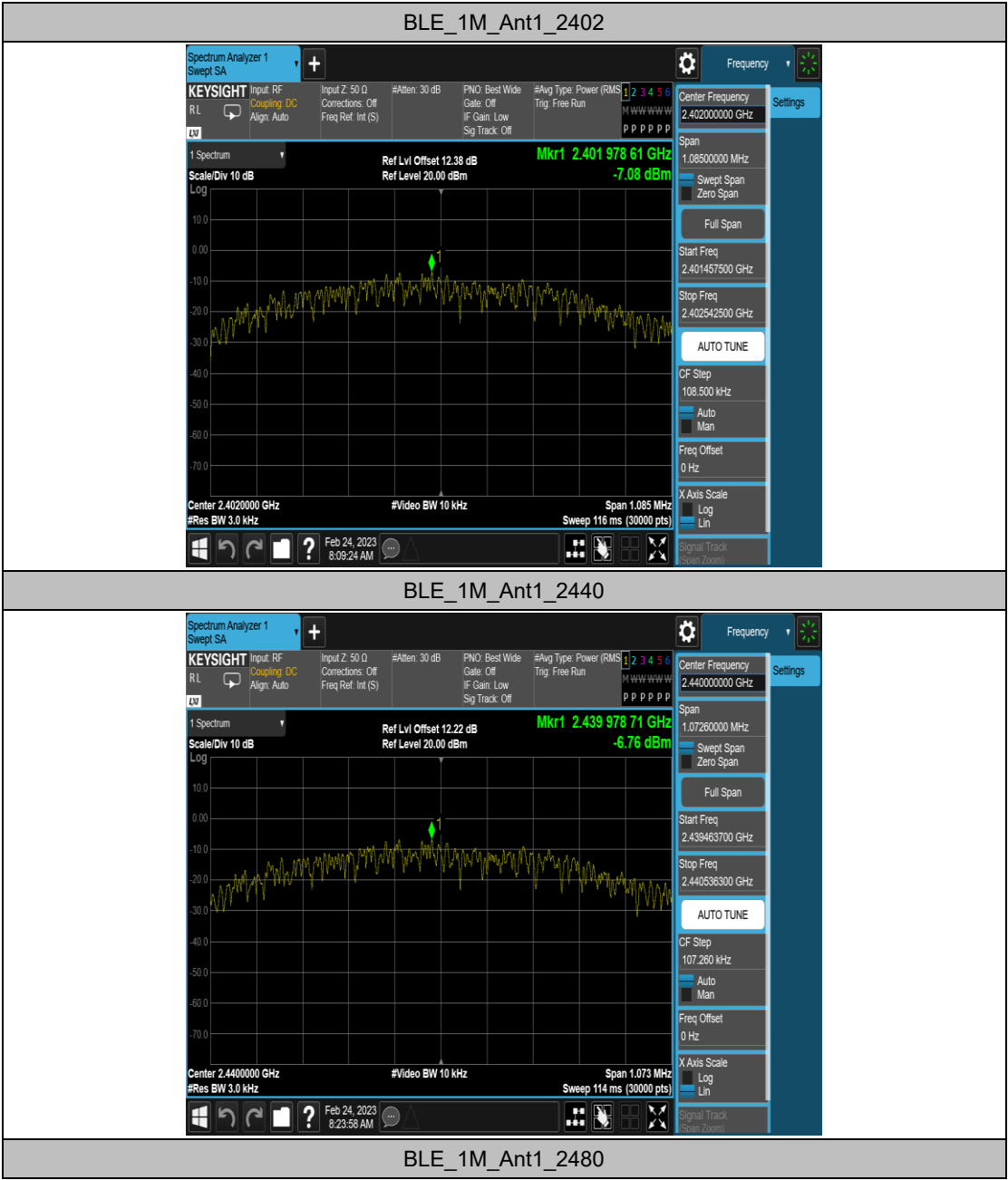


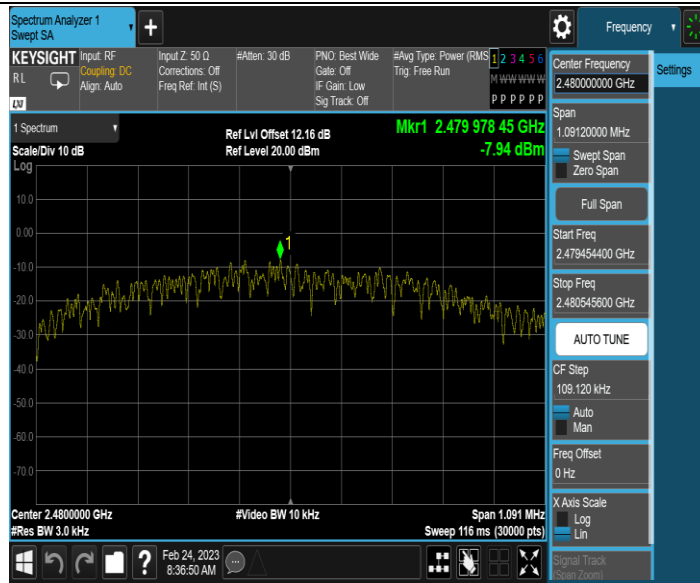
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-7.08	≤8.00	PASS
		2440	-6.76	≤8.00	PASS
		2480	-7.94	≤8.00	PASS

Test Graphs





ppendix E: Reference level measurement

Test Result

TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
BLE_1M	Ant1	2402	2402.00	7.44
		2440	2439.99	7.77
		2480	2480.00	6.59

Test Graphs





Appendix F: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq (MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	7.44	-45.69	≤-12.56	PASS
		High	2480	6.59	-46.13	≤-13.41	PASS

Test Graphs



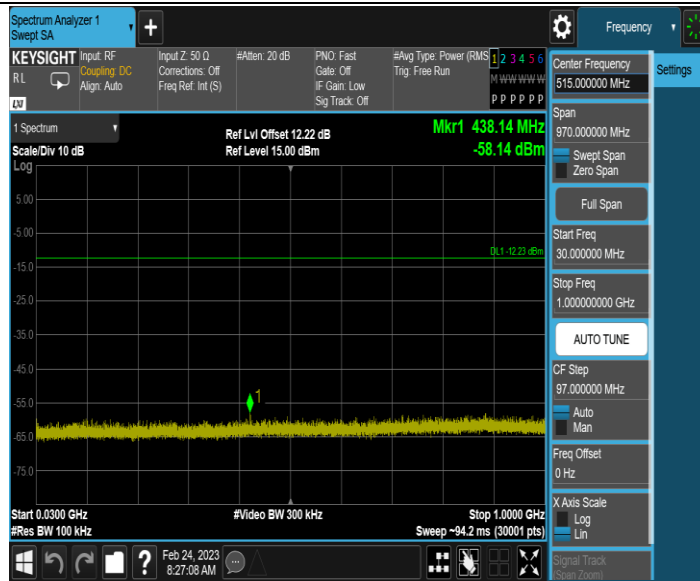
Appendix G: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	30~1000	7.44	-57.78	≤-12.56	PASS
			1000~26500	7.44	-49.87	≤-12.56	PASS
		2440	30~1000	7.77	-58.14	≤-12.23	PASS
			1000~26500	7.77	-49.8	≤-12.23	PASS
		2480	30~1000	6.59	-57.35	≤-13.41	PASS
			1000~26500	6.59	-49.78	≤-13.41	PASS

Test Graphs





BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]
BLE_1M	Ant1	2402	0.38	0.63	60.32
		2440	0.38	0.63	60.32
		2480	0.38	0.63	60.32

Test Graphs





Appendix H: Emissions in Restricted Bands

Test Result

Mode:	1M-2402
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Final Data List												
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	2310	6.96	46.85	74.00	27.15	44.04	54.00	9.96	150	97	Horizontal	PASS
2	2322.56	7.16	48.32	74.00	25.68	44.47	54.00	9.53	150	282	Horizontal	PASS
3	2336.8	7.09	48.85	74.00	25.15	45.53	54.00	8.47	150	275	Horizontal	PASS
4	2353.84	7.35	48.96	74.00	25.04	46.27	54.00	7.73	150	300	Horizontal	PASS
5	2370	7.56	48.69	74.00	25.31	46.18	54.00	7.82	150	168	Horizontal	PASS
6	2390	8.28	48.92	74.00	25.08	46.00	54.00	8.00	150	349	Horizontal	PASS

Final Data List												
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	2310	6.96	47.35	74.00	26.65	44.18	54.00	9.82	150	180	Vertical	PASS
2	2329.68	7.13	48.09	74.00	25.91	45.30	54.00	8.70	150	172	Vertical	PASS
3	2344	7.28	49.19	74.00	24.81	44.34	54.00	9.66	150	360	Vertical	PASS
4	2355.68	7.35	49.12	74.00	24.88	45.82	54.00	8.18	150	112	Vertical	PASS
5	2362.64	7.43	48.53	74.00	25.47	46.24	54.00	7.76	150	51	Vertical	PASS
6	2390	8.28	48.21	74.00	25.79	44.81	54.00	9.19	150	165	Vertical	PASS

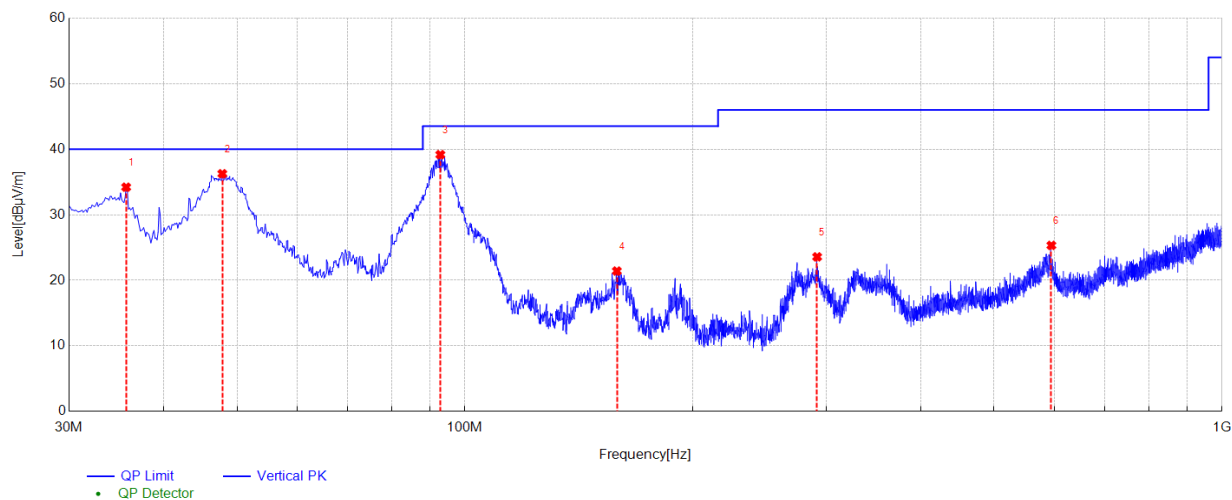
Mode:	1M-2480
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Final Data List												
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	2483.5	7.53	55.11	74.00	18.89	46.52	54.00	7.48	150	152	Horizontal	PASS
2	2486.569	7.59	56.57	74.00	17.43	44.61	54.00	9.39	150	216	Horizontal	PASS
3	2489.0275	7.64	56.51	74.00	17.49	45.93	54.00	8.07	150	109	Horizontal	PASS
4	2492.047	7.65	56.76	74.00	17.24	45.61	54.00	8.39	150	230	Horizontal	PASS
5	2494.786	7.66	57.24	74.00	16.76	41.78	54.00	12.22	150	91	Horizontal	PASS
6	2500	7.60	55.27	74.00	18.73	39.00	54.00	15.00	150	227	Horizontal	PASS

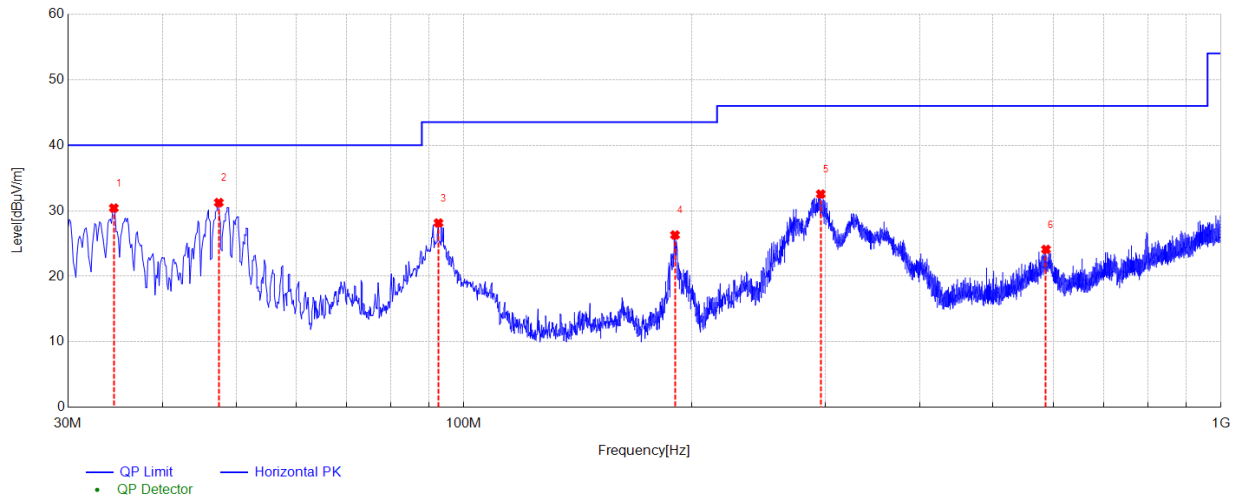
Final Data List												
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	2483.5	7.53	55.14	74.00	18.86	47.74	54.00	6.26	150	360	Vertical	PASS
2	2486.107	7.55	56.84	74.00	17.16	48.71	54.00	5.29	150	103	Vertical	PASS
3	2486.833	7.61	56.22	74.00	17.78	46.97	54.00	7.03	150	259	Vertical	PASS
4	2490.2155	7.65	57.18	74.00	16.82	44.73	54.00	9.27	150	64	Vertical	PASS
5	2494.423	7.67	56.19	74.00	17.81	44.36	54.00	9.64	150	262	Vertical	PASS
6	2500	7.60	54.87	74.00	19.13	41.96	54.00	12.04	150	64	Vertical	PASS

Appendix I: Spurious emissions

Test Result



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	35.6987	34.21	-16.39	40.00	5.79	100	117	Vertical	PASS
2	47.8237	36.26	-16.33	40.00	3.74	100	293	Vertical	PASS
3	92.8075	39.17	-20.32	43.50	4.33	100	214	Vertical	PASS
4	158.767	21.42	-16.08	43.50	22.08	100	57	Vertical	PASS
5	291.900	23.58	-16.54	46.00	22.42	100	350	Vertical	PASS
6	595.146	25.33	-9.22	46.00	20.67	100	144	Vertical	PASS



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	34.4862	30.42	-16.46	40.00	9.58	100	10	Horizontal	PASS
2	47.4600	31.25	-16.29	40.00	8.75	100	10	Horizontal	PASS
3	92.5650	28.14	-20.32	43.50	15.36	100	10	Horizontal	PASS
4	190.050	26.31	-18.80	43.50	17.19	100	124	Horizontal	PASS
5	296.022	32.55	-16.31	46.00	13.45	100	220	Horizontal	PASS
6	587.265	24.11	-9.09	46.00	21.89	100	319	Horizontal	PASS

Mode:	1M-2402
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Final Data List												
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1340.4	2.44	42.54	74.00	31.46	41.69	54.00	12.31	150	174	Horizontal	PASS
2	1891.6	6.12	44.56	74.00	29.44	44.19	54.00	9.81	150	334	Horizontal	PASS
3	5018.25	-13.64	41.75	74.00	32.25	36.81	54.00	17.19	150	230	Horizontal	PASS
4	7043.25	-10.69	43.79	74.00	30.21	36.56	54.00	17.44	150	299	Horizontal	PASS
5	9756	-6.67	45.64	74.00	28.36	39.54	54.00	14.46	150	195	Horizontal	PASS
6	14283	0.74	49.61	74.00	24.39	44.48	54.00	9.52	150	230	Horizontal	PASS

Final Data List												
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1487.2	2.22	42.17	74.00	31.83	41.75	54.00	12.25	150	193	Vertical	PASS
2	4437	-14.71	41.73	74.00	32.27	33.94	54.00	20.06	150	282	Vertical	PASS
3	5775	-12.21	43.83	74.00	30.17	37.62	54.00	16.38	150	213	Vertical	PASS
4	9368.25	-7.31	44.98	74.00	29.02	39.12	54.00	14.88	150	248	Vertical	PASS
5	11715	-2.92	47.24	74.00	26.76	40.05	54.00	13.95	150	144	Vertical	PASS
6	15142.5	1.31	50.41	74.00	23.59	44.14	54.00	9.86	150	317	Vertical	PASS

Mode:	1M-2440
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Final Data List												
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1258.4	2.61	42.76	74.00	31.24	42.45	54.00	11.55	150	76	Horizontal	PASS
2	1990	6.67	45.53	74.00	28.47	45.03	54.00	8.97	150	152	Horizontal	PASS
3	4609.5	-14.94	41.67	74.00	32.33	34.85	54.00	19.15	150	247	Horizontal	PASS
4	6514.5	-11.00	44.14	74.00	29.86	37.34	54.00	16.66	150	178	Horizontal	PASS
5	8633.25	-9.04	44.95	74.00	29.05	37.46	54.00	16.54	150	39	Horizontal	PASS
6	11217	-3.39	47.93	74.00	26.07	40.59	54.00	13.41	150	178	Horizontal	PASS

Final Data List												
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1314.8	2.63	43.22	74.00	30.78	42.73	54.00	11.27	150	235	Vertical	PASS
2	1927.2	6.14	45.58	74.00	28.42	44.97	54.00	9.03	150	301	Vertical	PASS
3	4508.25	-14.50	42.25	74.00	31.75	35.03	54.00	18.97	150	256	Vertical	PASS
4	6705.75	-10.92	44.33	74.00	29.67	35.91	54.00	18.09	150	39	Vertical	PASS
5	10742.25	-4.98	44.23	74.00	29.77	36.57	54.00	17.43	150	109	Vertical	PASS
6	14305.5	0.65	49.36	74.00	24.64	45.55	54.00	8.45	150	39	Vertical	PASS

Mode:	1M-2480
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Final Data List												
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1340.4	2.44	42.13	74.00	31.87	41.66	54.00	12.34	150	214	Horizontal	PASS
2	1983.2	6.65	45.83	74.00	28.17	45.55	54.00	8.45	150	344	Horizontal	PASS
3	5188.5	-12.94	42.18	74.00	31.82	36.60	54.00	17.40	150	215	Horizontal	PASS
4	6687	-10.97	44.63	74.00	29.37	36.55	54.00	17.45	150	215	Horizontal	PASS
5	9382.5	-7.47	44.63	74.00	29.37	39.12	54.00	14.88	150	40	Horizontal	PASS
6	11627.25	-2.84	47.54	74.00	26.46	40.65	54.00	13.35	150	356	Horizontal	PASS

Final Data List												
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1339.2	2.42	42.84	74.00	31.16	42.13	54.00	11.87	150	215	Vertical	PASS
2	1980.8	6.64	45.27	74.00	28.73	44.56	54.00	9.44	150	204	Vertical	PASS
3	4395.75	-14.99	40.82	74.00	33.18	34.06	54.00	19.94	150	113	Vertical	PASS
4	6110.25	-10.98	43.56	74.00	30.44	36.76	54.00	17.24	150	149	Vertical	PASS
5	8610.75	-9.20	44.14	74.00	29.86	37.09	54.00	16.91	150	185	Vertical	PASS
6	11151	-3.78	46.17	74.00	27.83	41.56	54.00	12.44	150	302	Vertical	PASS