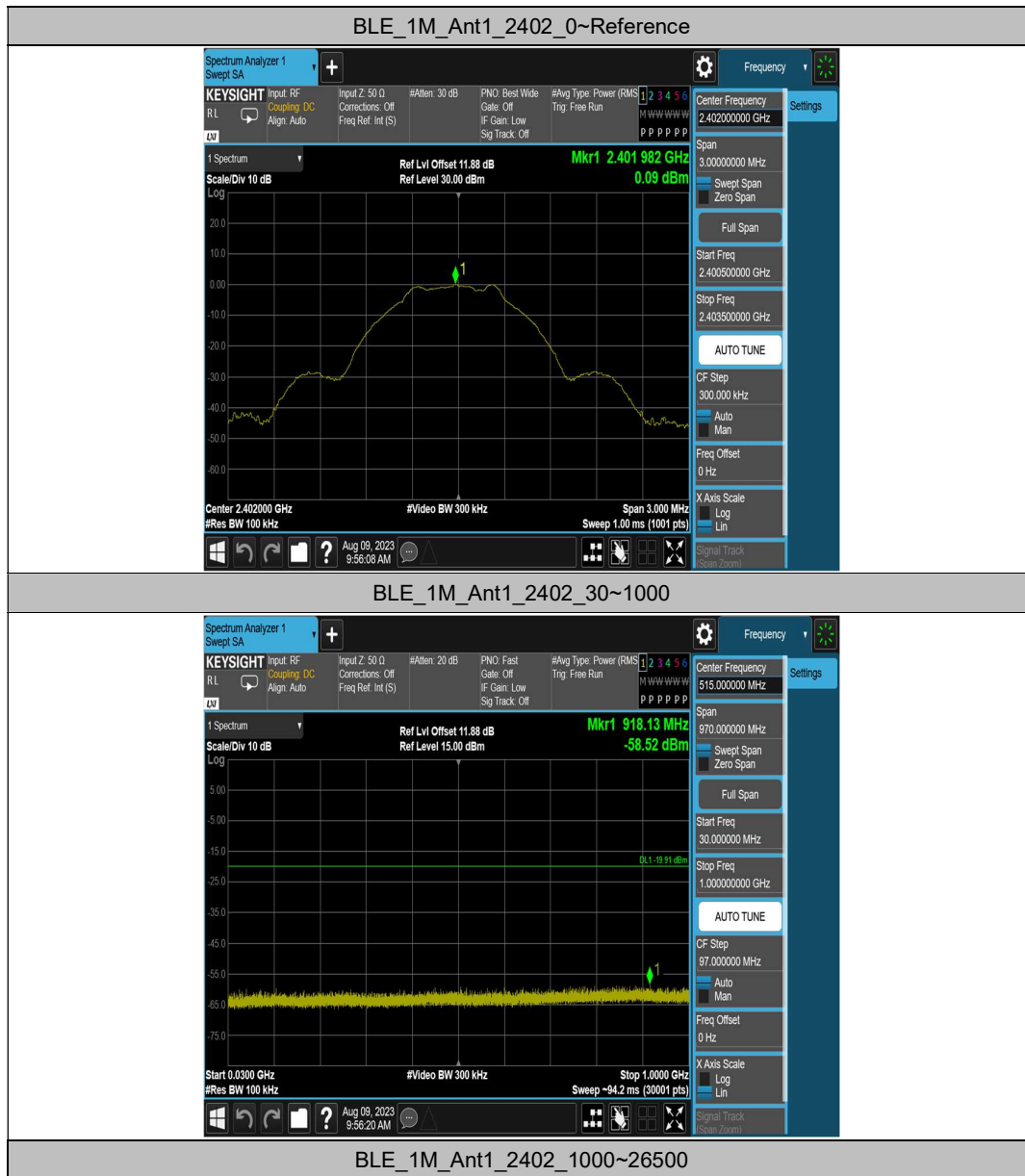
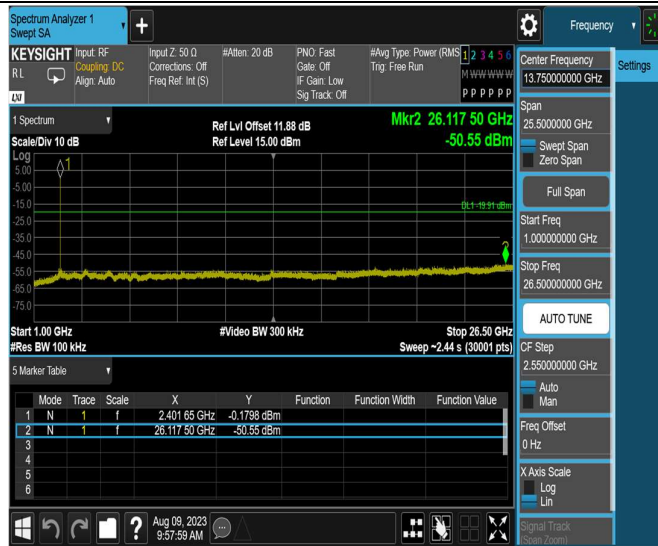


Test Graphs

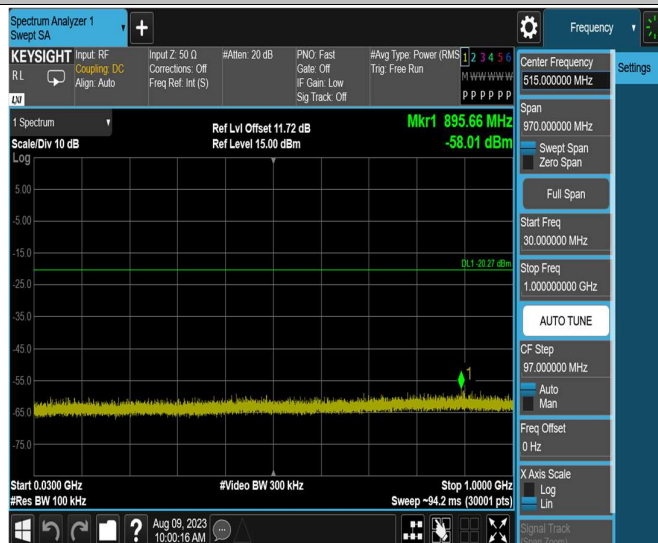




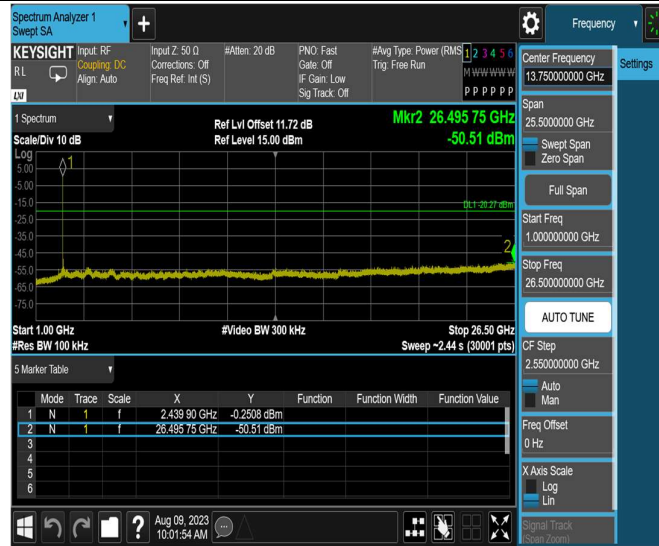
BLE_1M_Ant1_2440_0~Reference



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



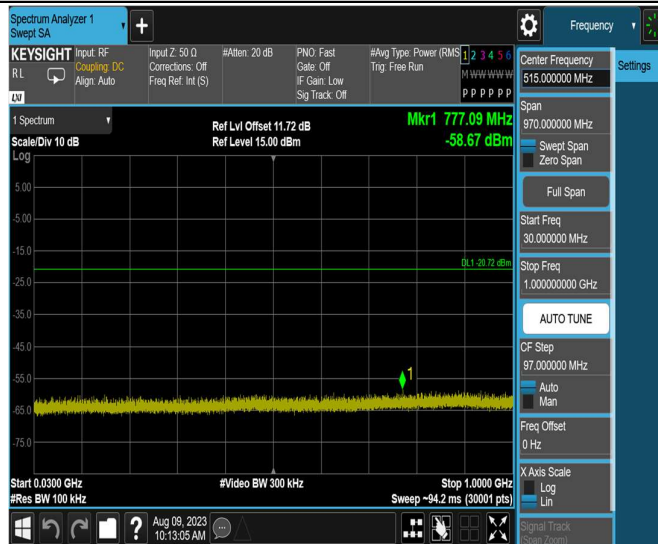
BLE_2M_Ant1_2402_0~Reference







BLE_2M_Ant1_2440_30~1000



BLE_2M_Ant1_2440_1000~26500



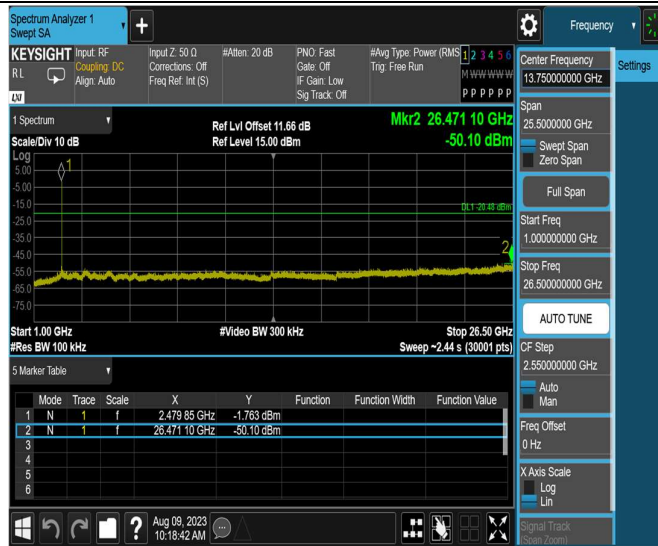
BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000



BLE_2M_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	2.13	2.50	85.20
		2440	2.13	2.50	85.20
		2480	2.12	2.50	84.80
BLE_2M	Ant1	2402	1.08	1.25	86.40
		2440	1.08	1.25	86.40
		2480	1.08	1.25	86.40

The figure displays two screenshots of a Spectrum Analyzer interface, showing signal analysis results for two different antennas (Ant1_2402 and Ant1_2440).

Top Screenshot (Ant1_2402):

- Center Frequency:** 2.402000000 GHz
- Span:** 0.00000000 Hz
- Start Freq:** 2.402000000 GHz
- Stop Freq:** 2.402000000 GHz
- Ref Lvl Offset:** 11.88 dB
- Ref Level:** 15.00 dBm
- Marker 1:** 2.500 ms, -0.03 dB
- Marker 2:** 2.130 ms (Δ), -44.56 dB
- Marker 3:** 2.500 ms (Δ), -0.0324 dB

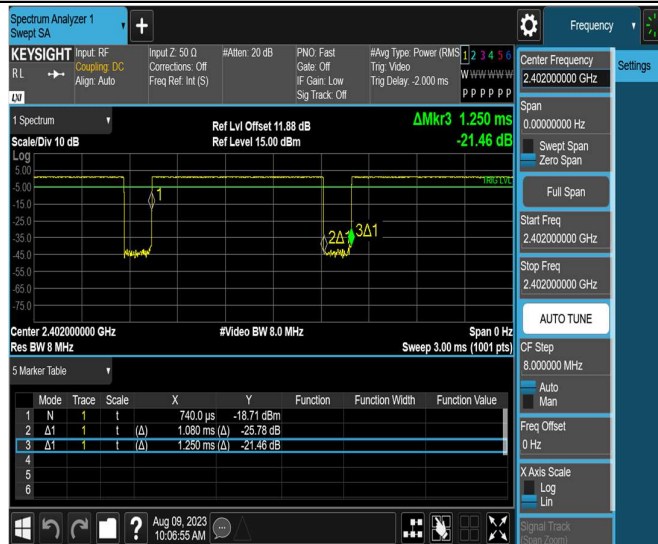
Bottom Screenshot (Ant1_2440):

- Center Frequency:** 2.440000000 GHz
- Span:** 0.00000000 Hz
- Start Freq:** 2.440000000 GHz
- Stop Freq:** 2.440000000 GHz
- Ref Lvl Offset:** 11.72 dB
- Ref Level:** 15.00 dBm
- Marker 1:** 2.500 ms, 0.00 dB
- Marker 2:** 2.130 ms (Δ), -44.28 dB
- Marker 3:** 2.500 ms (Δ), 0.002940 dB

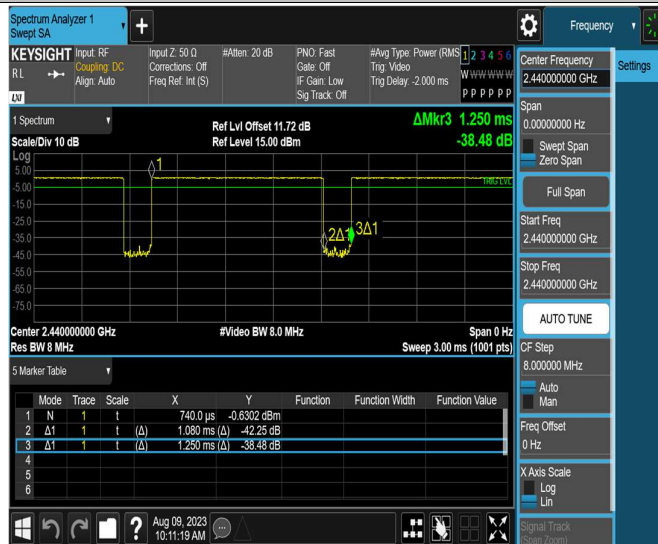
BLE_1M_Ant1_2480



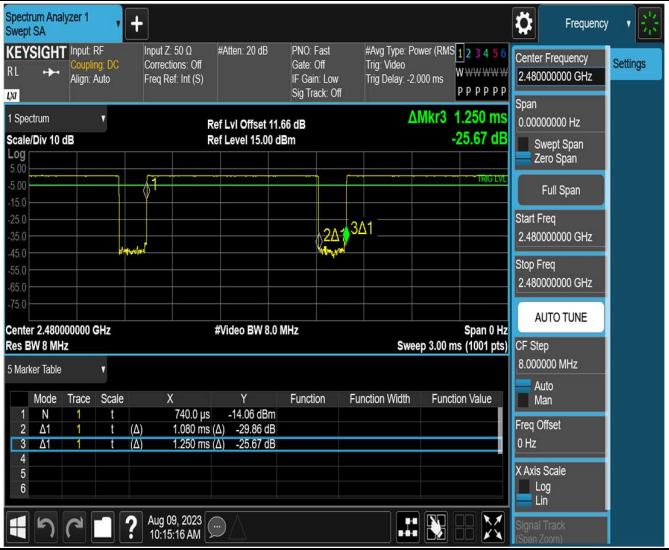
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



Appendix H: Emissions in Restricted Bands

Test Result

Mode:	BLE 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	7.07	44.58	74.00	29.42	42.18	54.00	11.82	150	167	Horizontal	PASS
2	2324.32	7.15	47.61	74.00	26.39	42.77	54.00	11.23	150	336	Horizontal	PASS
3	2331.6	7.26	47.52	74.00	26.48	44.60	54.00	9.40	150	297	Horizontal	PASS
4	2353.76	7.26	46.53	74.00	27.47	43.89	54.00	10.11	150	336	Horizontal	PASS
5	2358	7.38	47.46	74.00	26.54	42.99	54.00	11.01	150	297	Horizontal	PASS
6	2390	8.38	50.24	74.00	23.76	48.90	54.00	5.10	150	344	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	7.07	45.14	74.00	28.86	42.56	54.00	11.44	150	197	Vertical	PASS
2	2316.48	7.09	47.49	74.00	26.51	43.80	54.00	10.20	150	112	Vertical	PASS
3	2331.6	7.26	47.18	74.00	26.82	45.21	54.00	8.79	150	112	Vertical	PASS
4	2349.12	7.20	47.34	74.00	26.66	43.45	54.00	10.55	150	112	Vertical	PASS
5	2383.68	8.10	49.11	74.00	24.89	45.25	54.00	8.75	150	112	Vertical	PASS
6	2390	8.38	51.55	74.00	22.45	49.07	54.00	4.93	150	109	Vertical	PASS

Mode:	BLE 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	8.62	47.99	74.00	26.01	46.66	54.00	7.34	150	20	Horizontal	PASS
2	2491.288	8.36	51.53	74.00	22.47	47.89	54.00	6.11	150	20	Horizontal	PASS
3	2491.6015	8.38	51.98	74.00	22.02	49.40	54.00	4.60	150	26	Horizontal	PASS
4	2491.849	8.39	51.89	74.00	22.11	49.08	54.00	4.92	150	20	Horizontal	PASS
5	2492.08	8.40	51.35	74.00	22.65	47.83	54.00	6.17	150	23	Horizontal	PASS
6	2500	8.10	44.75	74.00	29.25	41.51	54.00	12.49	150	257	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	8.62	48.64	74.00	25.36	45.86	54.00	8.14	150	162	Vertical	PASS
2	2491.288	8.36	52.39	74.00	21.61	48.98	54.00	5.02	150	116	Vertical	PASS
3	2491.5355	8.38	51.71	74.00	22.29	48.15	54.00	5.85	150	112	Vertical	PASS
4	2491.882	8.39	50.74	74.00	23.26	49.25	54.00	4.75	150	119	Vertical	PASS
5	2492.0305	8.40	51.22	74.00	22.78	49.31	54.00	4.69	150	119	Vertical	PASS
6	2500	8.10	45.76	74.00	28.24	42.59	54.00	11.41	150	101	Vertical	PASS

Mode:	BLE 2M-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	7.07	43.78	74.00	30.22	42.10	54.00	11.90	150	226	Horizontal	PASS
2	2335.28	7.23	47.23	74.00	26.77	42.40	54.00	11.60	150	136	Horizontal	PASS
3	2344.88	7.29	46.68	74.00	27.32	41.97	54.00	12.03	150	341	Horizontal	PASS
4	2368.24	7.47	47.17	74.00	26.83	44.82	54.00	9.18	150	347	Horizontal	PASS
5	2387.12	8.25	48.55	74.00	25.45	45.99	54.00	8.01	150	296	Horizontal	PASS
6	2390	8.38	49.31	74.00	24.69	47.11	54.00	6.89	150	299	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	7.07	44.28	74.00	29.72	42.57	54.00	11.43	150	184	Vertical	PASS
2	2337.6	7.19	47.32	74.00	26.68	44.70	54.00	9.30	150	42	Vertical	PASS
3	2348.08	7.23	46.77	74.00	27.23	45.56	54.00	8.44	150	104	Vertical	PASS
4	2388.88	8.33	50.83	74.00	23.17	48.50	54.00	5.50	150	104	Vertical	PASS
5	2389.6	8.37	52.07	74.00	21.93	48.70	54.00	5.30	150	107	Vertical	PASS
6	2390	8.38	52.02	74.00	21.98	50.54	54.00	3.46	150	114	Vertical	PASS

Mode:	BLE 2M-2480
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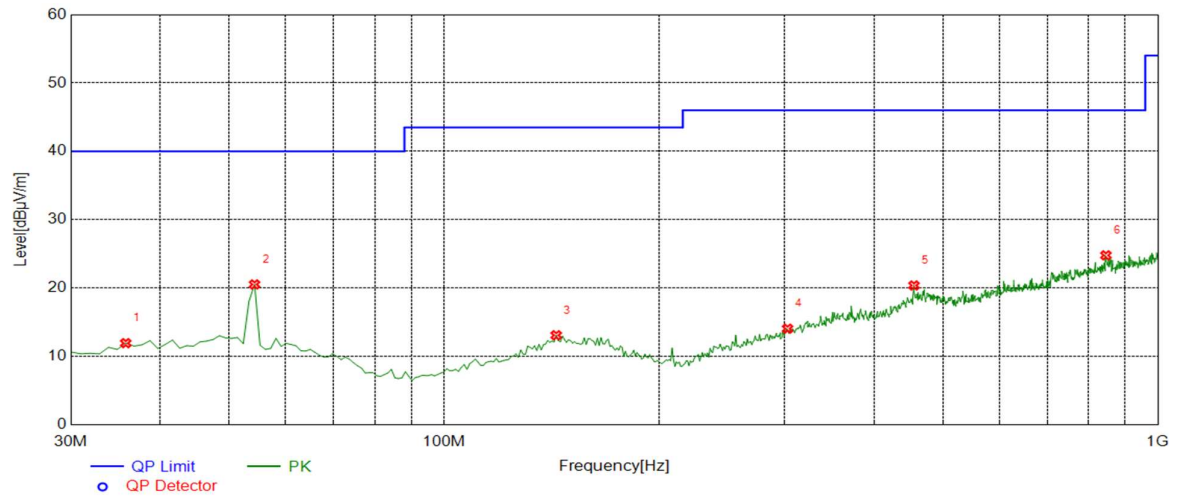
Final Data List												
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	2483.5	8.62	49.74	74.00	24.26	45.70	54.00	8.30	150	17	Horizontal	PASS
2	2483.929	8.56	49.52	74.00	24.48	47.56	54.00	6.44	150	26	Horizontal	PASS
3	2485.9255	8.39	48.66	74.00	25.34	45.83	54.00	8.17	150	33	Horizontal	PASS
4	2490.892	8.34	50.80	74.00	23.20	48.04	54.00	5.96	150	26	Horizontal	PASS
5	2491.453	8.37	51.04	74.00	22.96	47.83	54.00	6.17	150	17	Horizontal	PASS
6	2500	8.10	45.48	74.00	28.52	43.04	54.00	10.96	150	333	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	8.62	50.12	74.00	23.88	46.83	54.00	7.17	150	148	Vertical	PASS
2	2490.793	8.33	51.08	74.00	22.92	48.78	54.00	5.22	150	114	Vertical	PASS
3	2491.1395	8.36	51.22	74.00	22.78	47.94	54.00	6.06	150	124	Vertical	PASS
4	2491.684	8.38	51.43	74.00	22.57	48.47	54.00	5.53	150	117	Vertical	PASS
5	2492.1295	8.40	50.94	74.00	23.06	48.61	54.00	5.39	150	148	Vertical	PASS
6	2500	8.10	45.66	74.00	28.34	42.67	54.00	11.33	150	306	Vertical	PASS

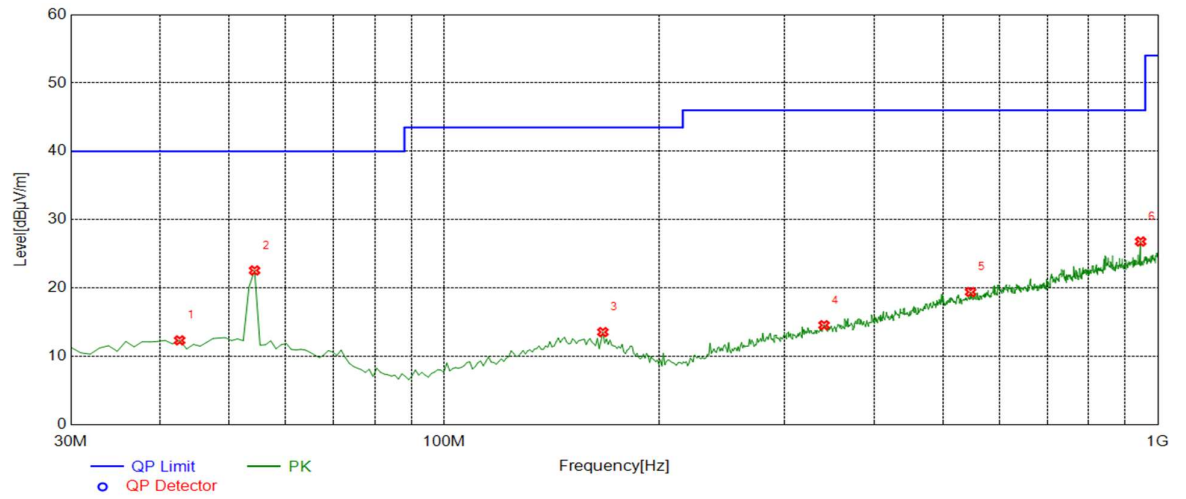
Note:

1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/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



Suspected Data List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	35.825	11.94	-16.51	40.00	28.06	100	73	Horizontal
2	54.274	20.53	-15.80	40.00	19.47	100	356	Horizontal
3	143.60	13.10	-16.05	43.50	30.40	100	195	Horizontal
4	302.84	14.06	-15.60	46.00	31.94	100	197	Horizontal
5	455.28	20.38	-12.39	46.00	25.62	100	358	Horizontal
6	845.61	24.79	-6.10	46.00	21.21	100	327	Horizontal



Suspected Data List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	42.622	12.35	-15.73	40.00	27.65	100	172	Vertical
2	54.274	22.58	-15.80	40.00	17.42	100	264	Vertical
3	166.90	13.56	-16.20	43.50	29.94	100	222	Vertical
4	340.71	14.57	-14.81	46.00	31.43	100	314	Vertical
5	546.55	19.42	-10.49	46.00	26.58	100	154	Vertical
6	945.62	26.81	-5.16	46.00	19.19	100	126	Vertical

Mode:	BLE 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	1284	40.85	1.14	74.00	33.15	150	318	Horizontal
2	2052	46.58	6.34	74.00	27.42	150	286	Horizontal
3	3849	42.81	-17.37	74.00	31.19	150	284	Horizontal
4	5868	44.03	-12.72	74.00	29.97	150	355	Horizontal
5	9609	49.51	-8.59	74.00	24.49	150	284	Horizontal
6	13653	48.42	-2.32	74.00	25.58	150	277	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1212	41.37	1.10	74.00	32.63	150	297	Vertical
2	2010	45.27	6.17	74.00	28.73	150	314	Vertical
3	4947	43.59	-15.20	74.00	30.41	150	346	Vertical
4	7206	43.88	-12.26	74.00	30.12	150	346	Vertical
5	9609	50.58	-8.59	74.00	23.42	150	281	Vertical
6	12897	48.17	-3.21	74.00	25.83	150	360	Vertical

Mode:	BLE 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	1350	41.46	1.07	74.00	32.54	150	353	Horizontal
2	2046	46.16	6.33	74.00	27.84	150	333	Horizontal
3	5016	43.42	-14.55	74.00	30.58	150	352	Horizontal
4	8322	44.88	-10.48	74.00	29.12	150	300	Horizontal
5	9759	51.09	-7.90	74.00	22.91	150	277	Horizontal
6	11787	47.84	-4.99	74.00	26.16	150	313	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1190	41.42	1.10	74.00	32.58	150	288	Vertical
2	2012	44.93	6.18	74.00	29.07	150	335	Vertical
3	4878	46.32	-14.75	74.00	27.68	150	296	Vertical
4	7437	43.44	-11.77	74.00	30.56	150	312	Vertical
5	9759	50.16	-7.90	74.00	23.84	150	274	Vertical
6	15099	49.30	-0.40	74.00	24.70	150	325	Vertical

Mode:	BLE 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	1214	41.93	1.09	74.00	32.07	150	327	Horizontal
2	1862	43.89	4.85	74.00	30.11	150	335	Horizontal
3	4959	45.69	-15.18	74.00	28.31	150	335	Horizontal
4	7236	43.77	-12.00	74.00	30.23	150	341	Horizontal
5	9921	50.03	-8.55	74.00	23.97	150	280	Horizontal
6	13644	48.32	-2.41	74.00	25.68	150	360	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1348	40.46	1.07	74.00	33.54	150	331	Vertical
2	2032	45.95	6.26	74.00	28.05	150	351	Vertical
3	4962	48.87	-15.15	74.00	25.13	150	301	Vertical
4	7329	44.29	-11.81	74.00	29.71	150	356	Vertical
5	9921	49.35	-8.55	74.00	24.65	150	301	Vertical
6	12975	48.64	-3.76	74.00	25.36	150	320	Vertical

Mode:	BLE 2M-2402
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NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1524	42.13	1.57	74.00	31.87	150	356	Horizontal
2	2128	45.24	6.58	74.00	28.76	150	347	Horizontal
3	4941	43.89	-15.08	74.00	30.11	150	280	Horizontal
4	9609	49.61	-8.59	74.00	24.39	150	274	Horizontal
5	12090	46.87	-3.95	74.00	27.13	150	280	Horizontal
6	15651	50.14	-0.48	74.00	23.86	150	322	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1286	40.98	1.15	74.00	33.02	150	353	Vertical
2	2024	45.34	6.23	74.00	28.66	150	297	Vertical
3	4287	42.00	-16.36	74.00	32.00	150	309	Vertical
4	5514	43.49	-13.91	74.00	30.51	150	348	Vertical
5	6255	43.88	-12.42	74.00	30.12	150	344	Vertical
6	9609	50.13	-8.59	74.00	23.87	150	274	Vertical

Mode:	BLE 2M-2440
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NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1578	42.58	2.05	74.00	31.42	150	353	Horizontal
2	2170	45.72	6.72	74.00	28.28	150	348	Horizontal
3	4296	42.17	-16.27	74.00	31.83	150	274	Horizontal
4	6018	43.77	-12.41	74.00	30.23	150	293	Horizontal
5	9759	49.91	-7.90	74.00	24.09	150	284	Horizontal
6	13743	47.81	-2.45	74.00	26.19	150	293	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1396	41.56	1.22	74.00	32.44	150	277	Vertical
2	2058	45.59	6.36	74.00	28.41	150	356	Vertical
3	4308	41.98	-16.24	74.00	32.02	150	355	Vertical
4	4881	46.91	-14.67	74.00	27.09	150	297	Vertical
5	7320	43.95	-11.84	74.00	30.05	150	316	Vertical
6	9759	48.21	-7.90	74.00	25.79	150	287	Vertical

Mode:	BLE 2M-2480
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NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1348	40.76	1.07	74.00	33.24	150	331	Horizontal
2	1900	44.76	5.27	74.00	29.24	150	356	Horizontal
3	4959	44.28	-15.18	74.00	29.72	150	342	Horizontal
4	7935	44.47	-10.92	74.00	29.53	150	325	Horizontal
5	9921	48.56	-8.55	74.00	25.44	150	284	Horizontal
6	14043	49.40	-2.31	74.00	24.60	150	338	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1270	41.03	1.10	74.00	32.97	150	346	Vertical
2	2022	45.17	6.22	74.00	28.83	150	336	Vertical
3	4959	46.92	-15.18	74.00	27.08	150	304	Vertical
4	8217	44.39	-10.23	74.00	29.61	150	287	Vertical
5	9921	47.95	-8.55	74.00	26.05	150	352	Vertical
6	12525	47.14	-4.05	74.00	26.86	150	287	Vertical