

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.652	2401.608	2402.260	0.5	PASS
		2440	0.644	2439.612	2440.256	0.5	PASS
		2480	0.676	2479.588	2480.264	0.5	PASS

Test Graphs





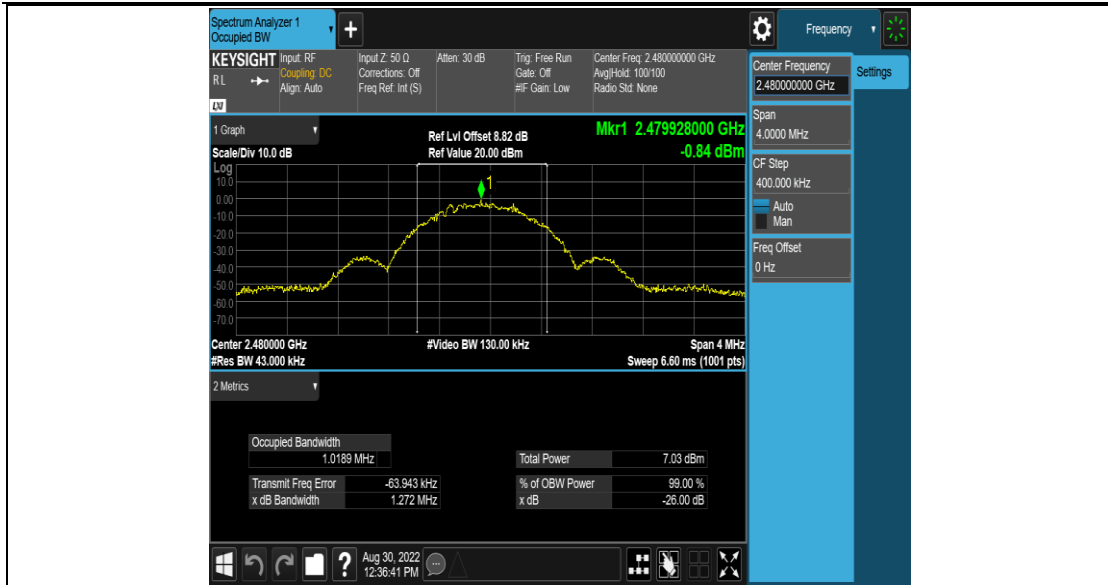
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0086	2401.4342	2402.4428	---	---
		2440	1.0166	2439.4254	2440.4420	---	---
		2480	1.0189	2479.4266	2480.4455	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	1.5	≤30	PASS
		2440	1.84	≤30	PASS
		2480	1.36	≤30	PASS

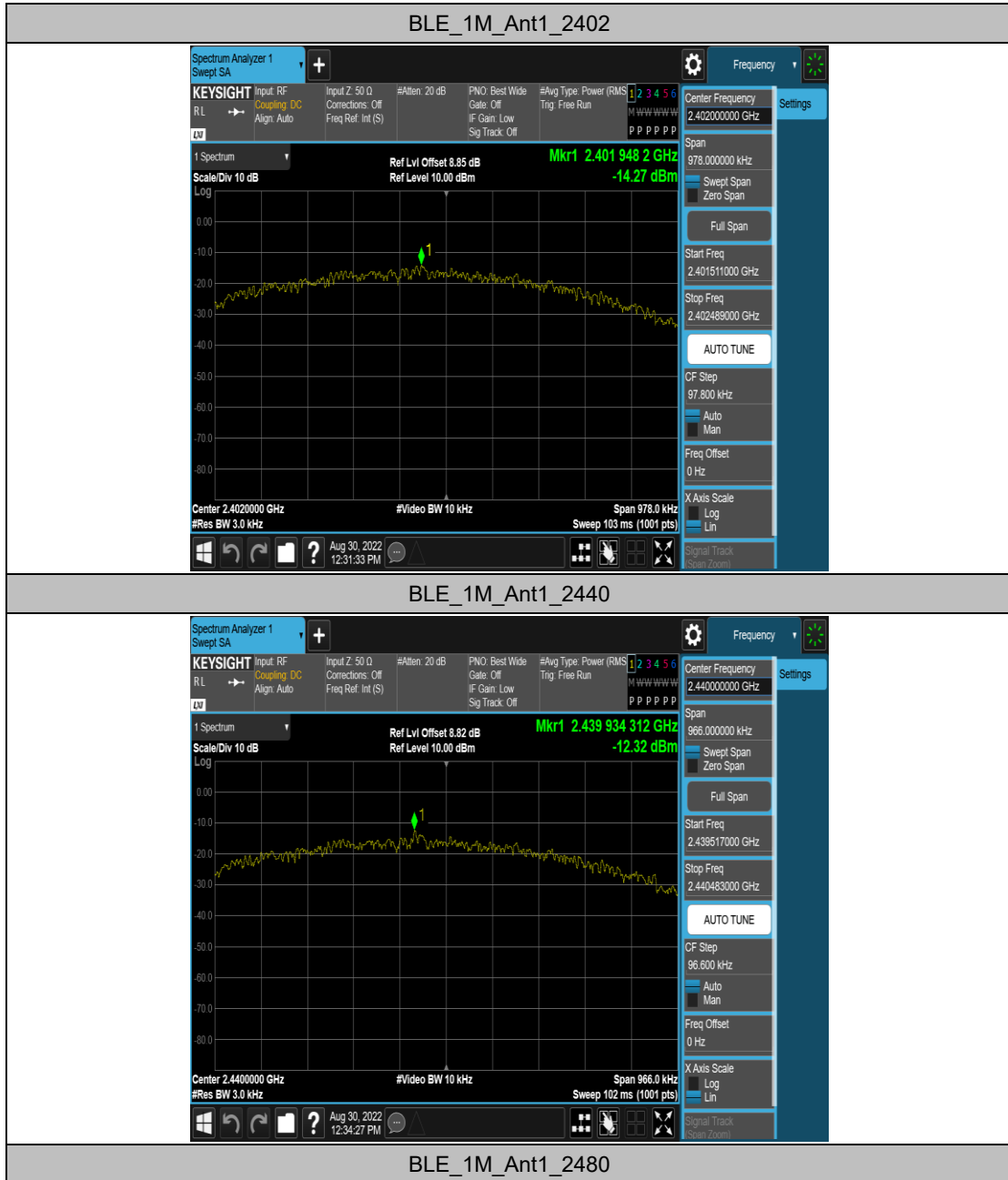
TestMode	Antenna	Channel	E.I.R.P[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	3.2	≤36	PASS
		2440	3.54	≤36	PASS
		2480	3.06	≤36	PASS

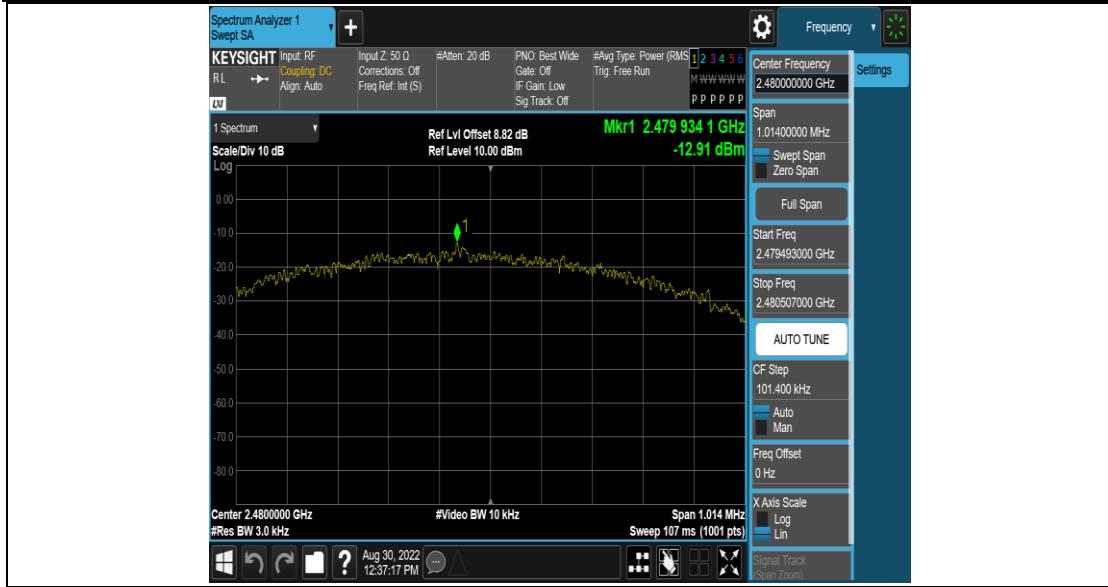
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-14.27	≤8.00	PASS
		2440	-12.32	≤8.00	PASS
		2480	-12.91	≤8.00	PASS

Test Graphs





Appendix E: Band edge measurements

Test Result

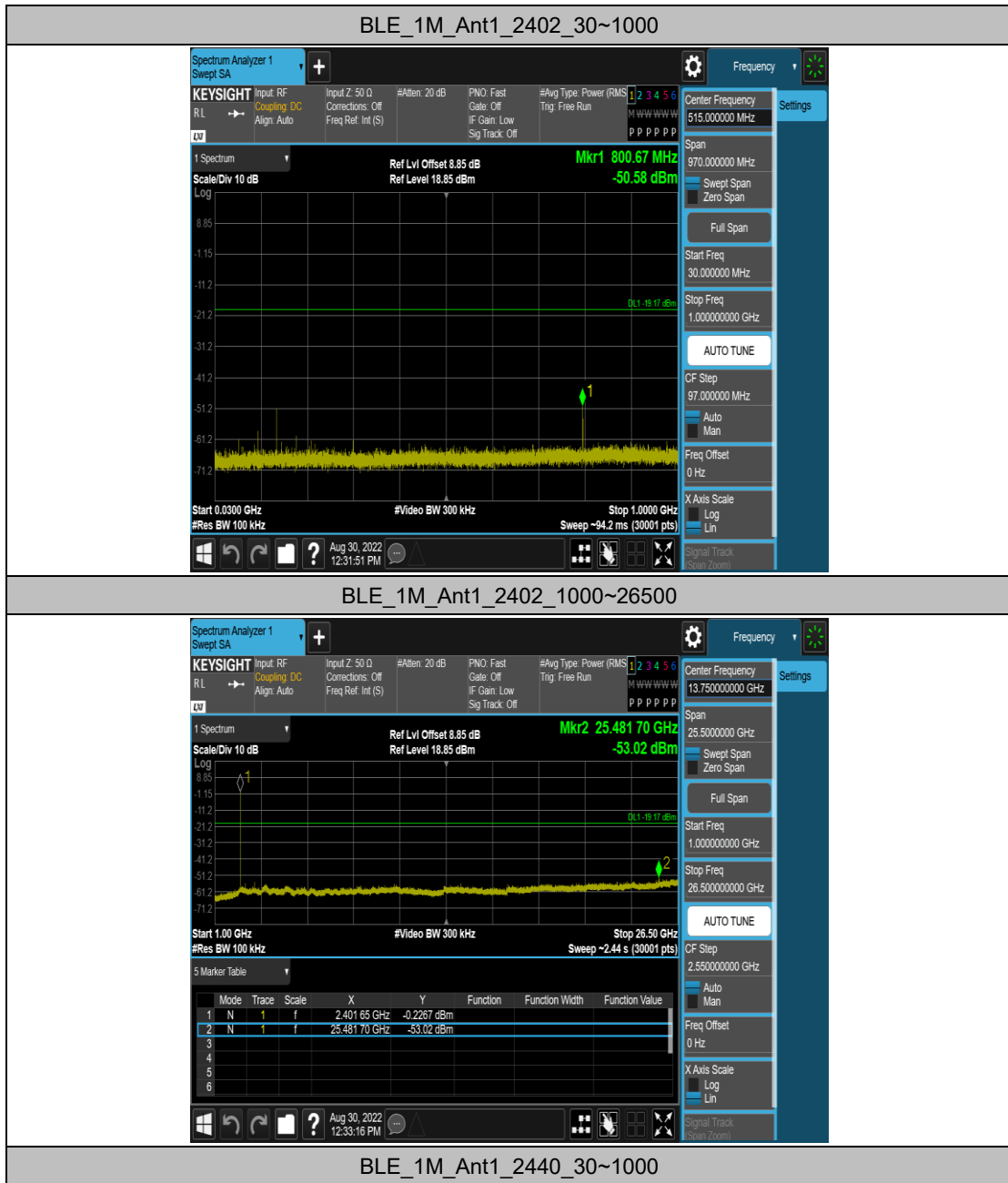
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	0.83	-47.84	≤ -19.17	PASS
		High	2480	0.63	-49.76	≤ -19.37	PASS

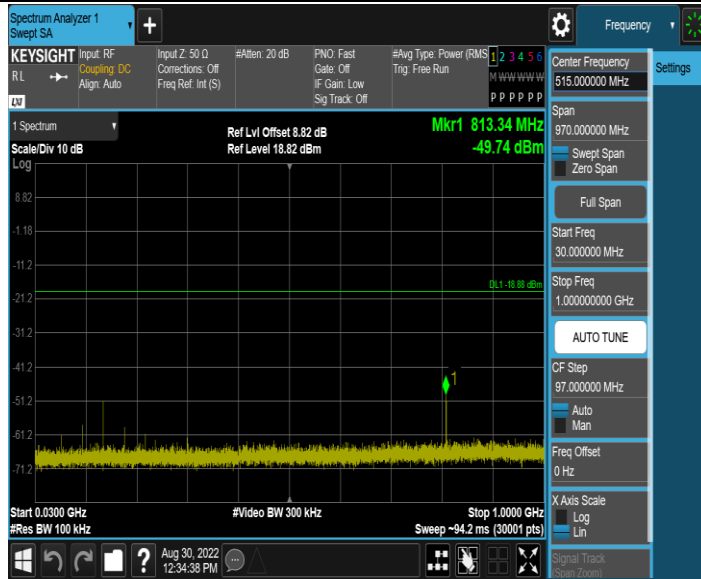
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	30~1000	0.83	-50.58	≤-19.17	PASS
			1000~26500	0.83	-53.02	≤-19.17	PASS
		2440	30~1000	1.12	-49.74	≤-18.88	PASS
			1000~26500	1.12	-53.55	≤-18.88	PASS
		2480	30~1000	0.63	-49.69	≤-19.37	PASS
			1000~26500	0.63	-52.93	≤-19.37	PASS

Test Graphs

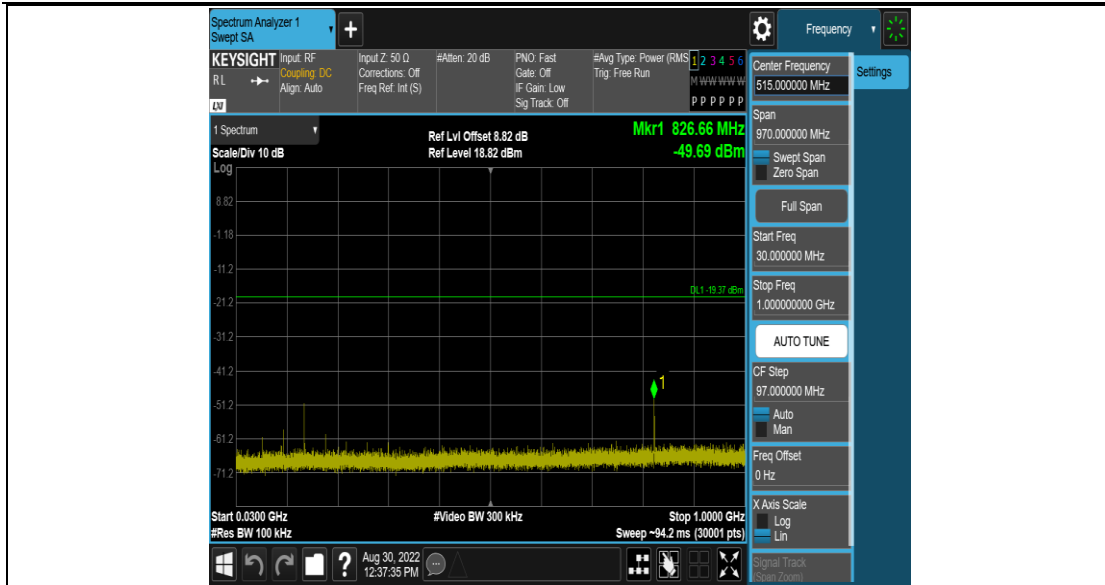




BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



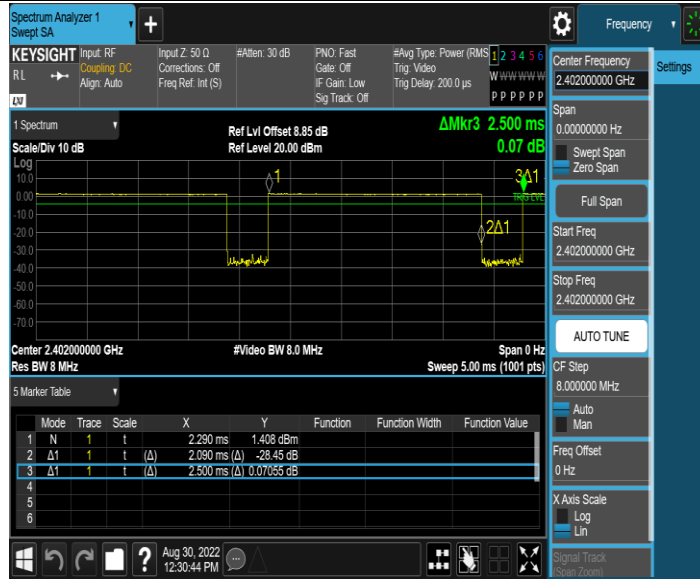
Appendix G: Duty Cycle

Test Result

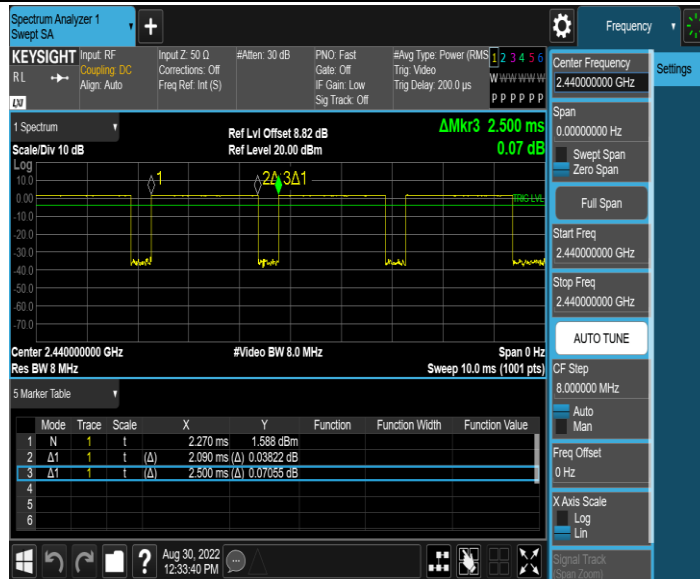
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
BLE_1M	Ant1	2402	2.09	2.50	83.60	---	---
		2440	2.09	2.50	83.60	---	---
		2480	2.09	2.50	83.60	---	---

Test Graphs

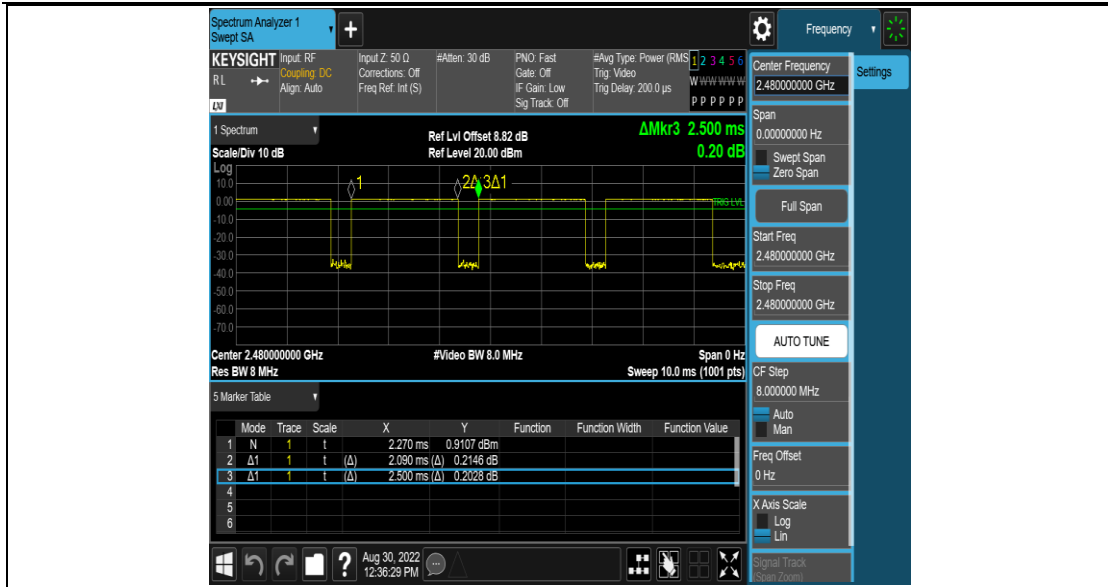
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix H: Emissions in Restricted Bands

Test Result

Mode:	BLE 2402
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PK Final Data List								
NO.	Freq. [MHz]	PK Reading [dB μ V/m]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Polarity	Verdict
1	2310.000	63.37	42.25	-21.12	74.00	31.75	Horizontal	PASS
2	2376.326	67.62	46.62	-21.00	74.00	27.38	Horizontal	PASS
3	2390.000	62.36	41.39	-20.97	74.00	32.61	Horizontal	PASS

PK Final Data List								
NO.	Freq. [MHz]	PK Reading [dB μ V/m]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Polarity	Verdict
1	2310.000	62.01	40.89	-21.12	74.00	33.11	Vertical	PASS
2	2369.349	67.36	46.35	-21.01	74.00	27.65	Vertical	PASS
3	2390.000	62.39	41.42	-20.97	74.00	32.58	Vertical	PASS

Mode:	BLE 2480
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PK Final Data List								
NO.	Freq. [MHz]	PK Reading [dB μ V/m]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Polarity	Verdict
1	2483.500	63.14	42.34	-20.80	74.00	31.66	Horizontal	PASS
2	2485.031	66.00	45.20	-20.80	74.00	28.80	Horizontal	PASS
3	2500.000	63.44	42.67	-20.77	74.00	31.33	Horizontal	PASS

PK Final Data List								
NO.	Freq. [MHz]	PK Reading [dB μ V/m]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Polarity	Verdict
1	2483.500	64.00	43.20	-20.80	74.00	30.80	Vertical	PASS
2	2490.075	65.47	44.68	-20.79	74.00	29.32	Vertical	PASS
3	2500.000	62.57	41.80	-20.77	74.00	32.20	Vertical	PASS

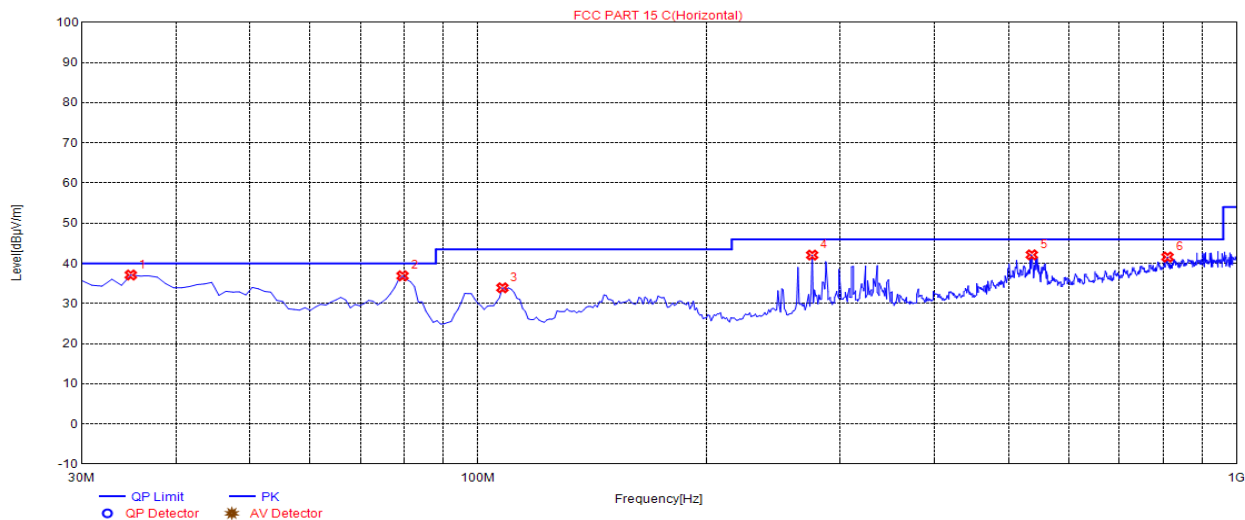
Note:

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

Mode:	BLE 2402
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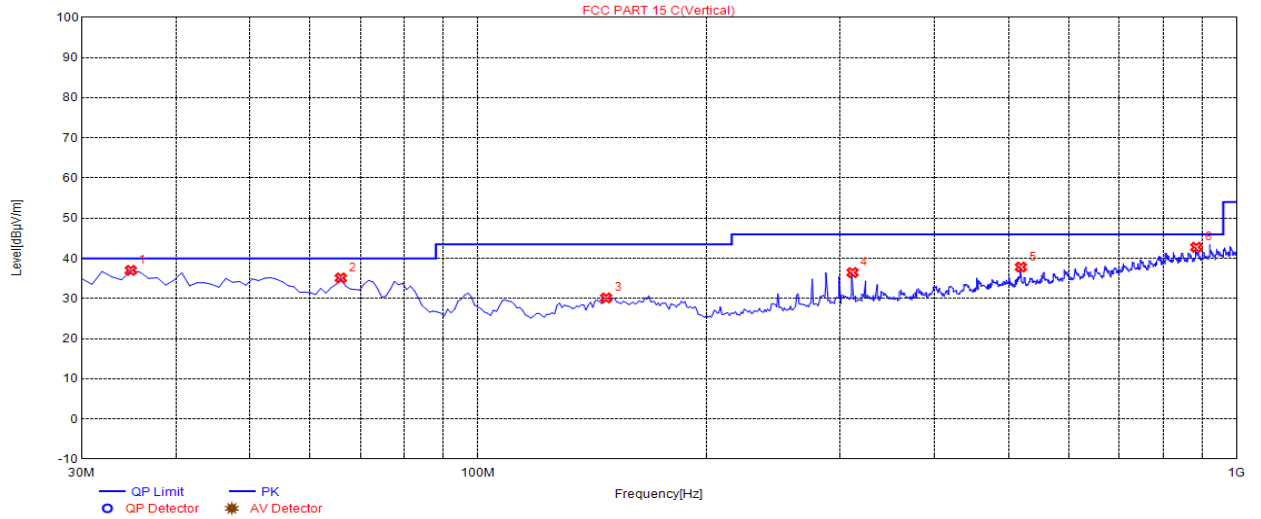
Test Graph



NO.	Freq. [MHz]	Level [dB $\mu\text{V}/\text{m}$]	Factor [dB/m]	Limit [dB $\mu\text{V}/\text{m}$]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	34.8549	37.10	-16.85	40.00	2.90	100	336	Horizontal
2	79.5195	36.89	-20.53	40.00	3.11	100	214	Horizontal
3	107.677	33.91	-19.42	43.50	9.59	100	244	Horizontal
4	275.655	42.06	-15.99	46.00	3.94	100	151	Horizontal
5	536.846	42.13	-10.36	46.00	3.87	100	318	Horizontal
6	810.660	41.58	-5.93	46.00	4.42	100	49	Horizontal

Mode:	BLE 2402
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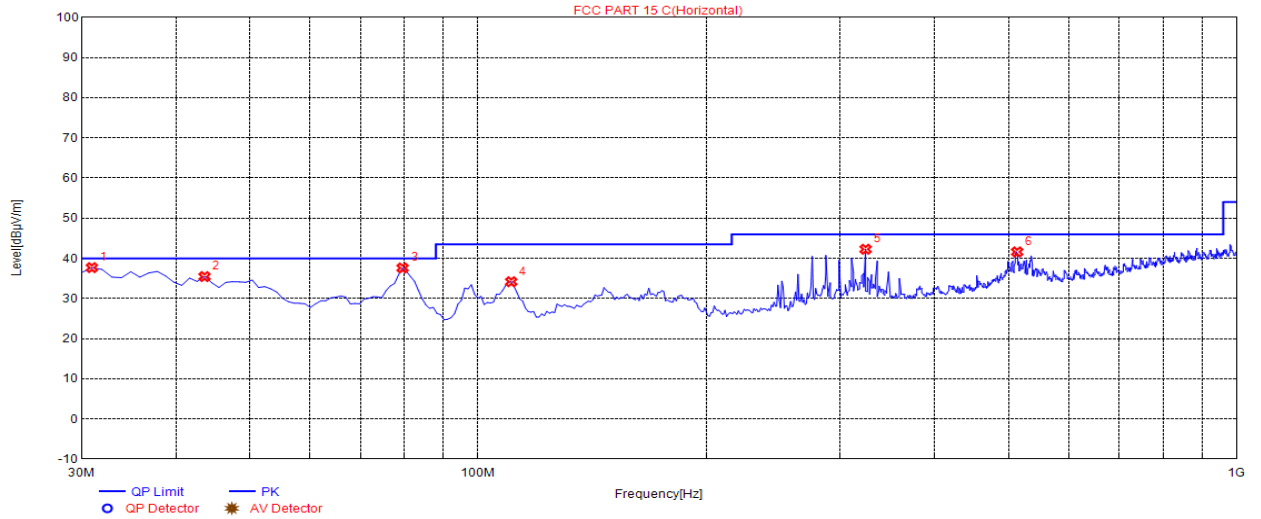
Test Graph



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	34.8549	37.01	-16.85	40.00	2.99	100	262	Vertical
2	65.9259	35.11	-17.14	40.00	4.89	100	325	Vertical
3	147.487	30.14	-15.89	43.50	13.36	100	310	Vertical
4	311.581	36.46	-15.30	46.00	9.54	100	277	Vertical
5	519.369	37.83	-10.73	46.00	8.17	100	71	Vertical
6	884.454	42.77	-5.43	46.00	3.23	100	141	Vertical

Mode:	BLE 2440
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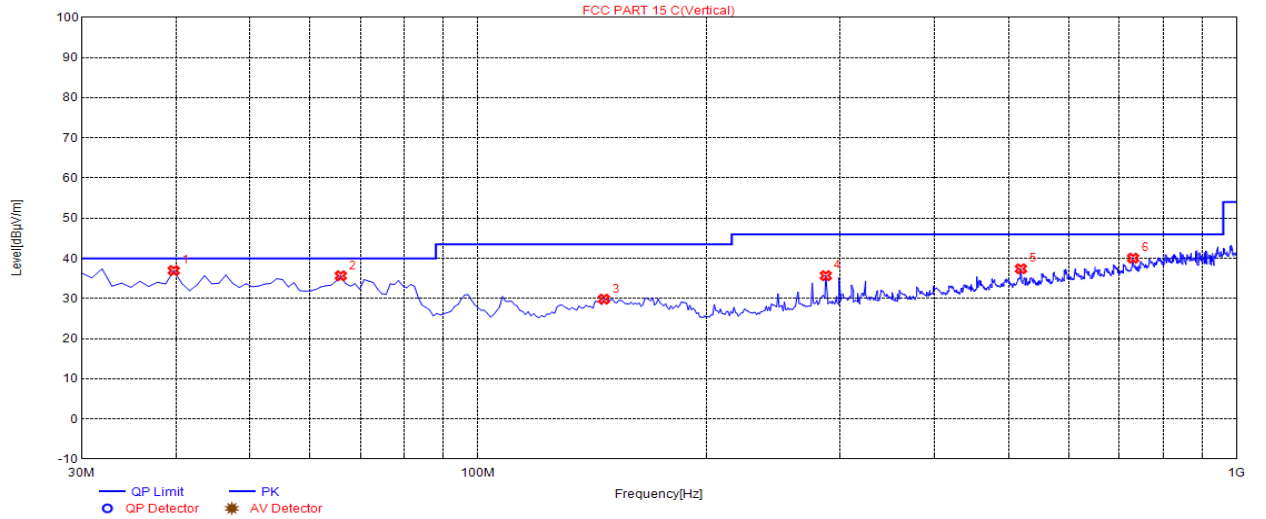
Test Graph



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	30.9710	37.69	-17.27	40.00	2.31	100	336	Horizontal
2	43.5936	35.46	-16.08	40.00	4.54	100	336	Horizontal
3	79.5195	37.61	-20.53	40.00	2.39	100	240	Horizontal
4	110.590	34.18	-19.13	43.50	9.32	100	244	Horizontal
5	324.204	42.28	-15.04	46.00	3.72	100	328	Horizontal
6	513.543	41.61	-10.85	46.00	4.39	100	295	Horizontal

Mode:	BLE 2440
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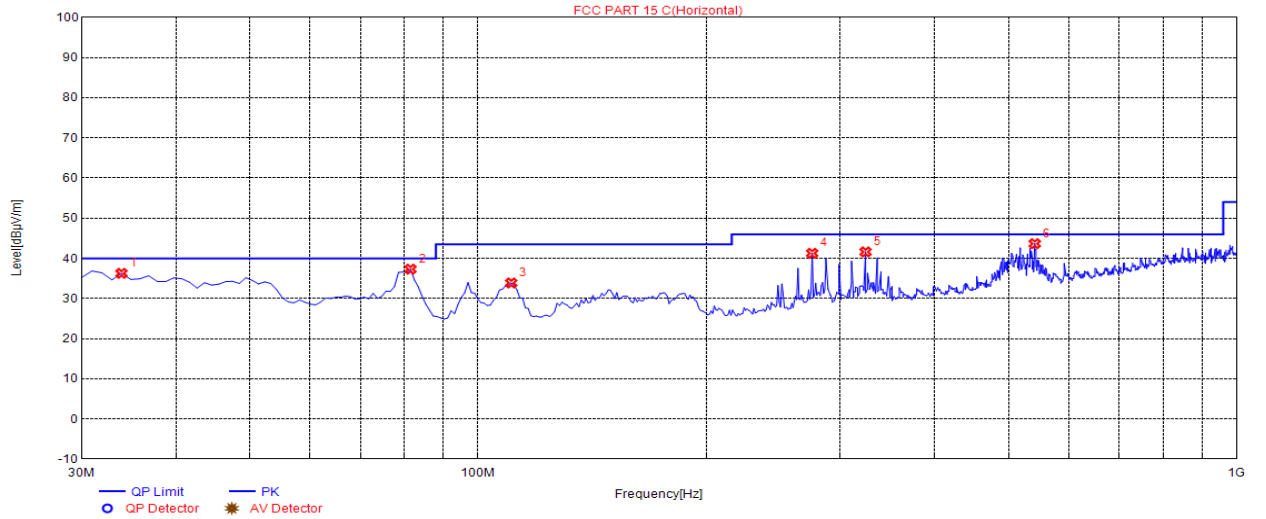
Test Graph



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	39.7097	36.96	-16.32	40.00	3.04	100	265	Vertical
2	65.9259	35.66	-17.14	40.00	4.34	100	302	Vertical
3	146.516	29.85	-15.92	43.50	13.65	100	228	Vertical
4	287.307	35.69	-15.67	46.00	10.31	100	106	Vertical
5	519.369	37.41	-10.73	46.00	8.59	100	243	Vertical
6	730.070	40.05	-7.27	46.00	5.95	100	99	Vertical

Mode:	BLE 2480
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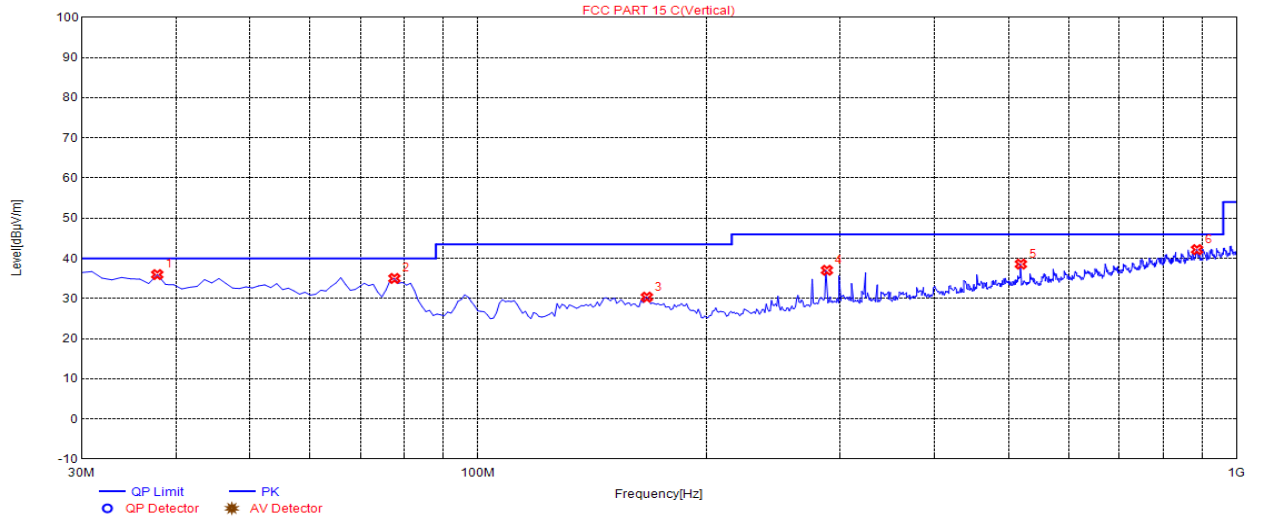
Test Graph



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	33.8839	36.27	-16.95	40.00	3.73	100	336	Horizontal
2	81.4615	37.31	-20.81	40.00	2.69	100	245	Horizontal
3	110.590	33.87	-19.13	43.50	9.63	100	234	Horizontal
4	275.655	41.26	-15.99	46.00	4.74	100	175	Horizontal
5	324.204	41.62	-15.04	46.00	4.38	100	296	Horizontal
6	541.701	43.66	-10.26	46.00	2.34	100	296	Horizontal

Mode:	BLE 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
1	37.7678	35.96	-16.53	40.00	4.04	100	24	Vertical
2	77.5776	35.00	-19.98	40.00	5.00	100	160	Vertical
3	166.906	30.34	-16.15	43.50	13.16	100	86	Vertical
4	288.278	37.03	-15.66	46.00	8.97	100	259	Vertical
5	519.369	38.57	-10.73	46.00	7.43	100	171	Vertical
6	886.396	42.18	-5.42	46.00	3.82	100	348	Vertical

Mode:	BLE 2402
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PK Final Data List								
NO.	Freq. [MHz]	PK Reading [dB μ V/m]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Polarity	Verdict
1	4957.69	63.14	46.77	-16.37	74.00	27.23	Horizontal	PASS
2	7060.90	62.34	49.77	-12.57	74.00	24.23	Horizontal	PASS

PK Final Data List								
NO.	Freq. [MHz]	PK Reading [dB μ V/m]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Polarity	Verdict
1	5004.20	63.47	47.63	-15.84	74.00	26.37	Vertical	PASS
2	6828.38	61.56	49.11	-12.45	74.00	24.89	Vertical	PASS

Mode:	BLE 2440
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PK Final Data List								
NO.	Freq. [MHz]	PK Reading [dB μ V/m]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Polarity	Verdict
1	6703.87	61.61	48.69	-12.92	74.00	25.31	Horizontal	PASS
2	7549.95	62.47	49.78	-12.69	74.00	24.22	Horizontal	PASS

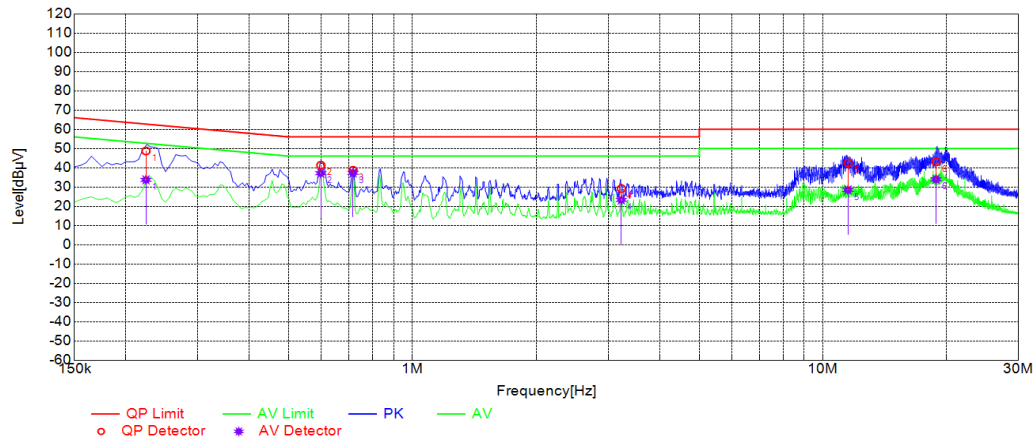
PK Final Data List								
NO.	Freq. [MHz]	PK Reading [dB μ V/m]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Polarity	Verdict
1	5032.70	62.90	47.10	-15.80	74.00	26.90	Vertical	PASS
2	6660.36	62.63	50.09	-12.54	74.00	23.91	Vertical	PASS

Mode:	BLE 2480
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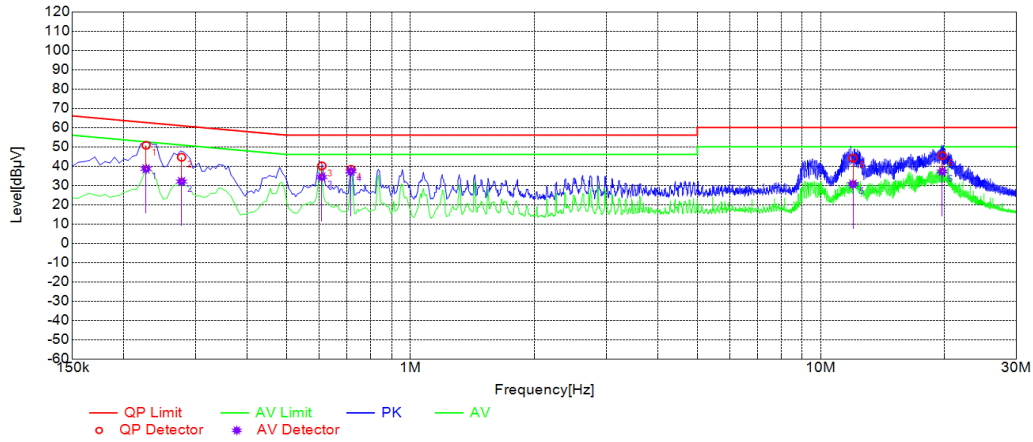
PK Final Data List								
NO.	Freq. [MHz]	PK Reading [dB μ V/m]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Polarity	Verdict
1	5131.71	64.07	48.03	-16.04	74.00	25.97	Horizontal	PASS
2	6930.39	62.73	49.80	-12.93	74.00	24.20	Horizontal	PASS

PK Final Data List								
NO.	Freq. [MHz]	PK Reading [dB μ V/m]	Level [dB μ V/m]	Factor [dB/m]	Limit [dB μ V/m]	Margin [dB]	Polarity	Verdict
1	4960.69	65.36	49.02	-16.34	74.00	24.98	Vertical	PASS
2	7915.99	61.96	50.26	-11.70	74.00	23.74	Vertical	PASS

Appendix J: Conducted emission AC power port



Final Data List										
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Type	Verdict
1	0.2240	10.24	48.69	62.67	13.98	33.69	52.67	18.98	N	PASS
2	0.5976	10.26	41.31	56.00	14.69	37.15	46.00	8.85	N	PASS
3	0.7161	10.27	38.68	56.00	17.32	37.31	46.00	8.69	N	PASS
4	3.2285	10.32	29.15	56.00	26.85	23.24	46.00	22.76	N	PASS
5	11.5210	10.52	42.49	60.00	17.51	28.44	50.00	21.56	N	PASS
6	18.8837	10.69	43.00	60.00	17.00	33.98	50.00	16.02	N	PASS



Final Data List										
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Type	Verdict
1	0.2267	10.24	50.77	62.57	11.80	38.54	52.57	14.03	L	PASS
2	0.2766	10.25	44.58	60.92	16.34	32.01	50.92	18.91	L	PASS
3	0.6079	10.27	40.12	56.00	15.88	34.31	46.00	11.69	L	PASS
4	0.7161	10.28	38.35	56.00	17.65	37.29	46.00	8.71	L	PASS
5	11.9816	10.57	44.11	60.00	15.89	30.64	50.00	19.36	L	PASS
6	19.7797	10.73	45.45	60.00	14.55	37.23	50.00	12.77	L	PASS