

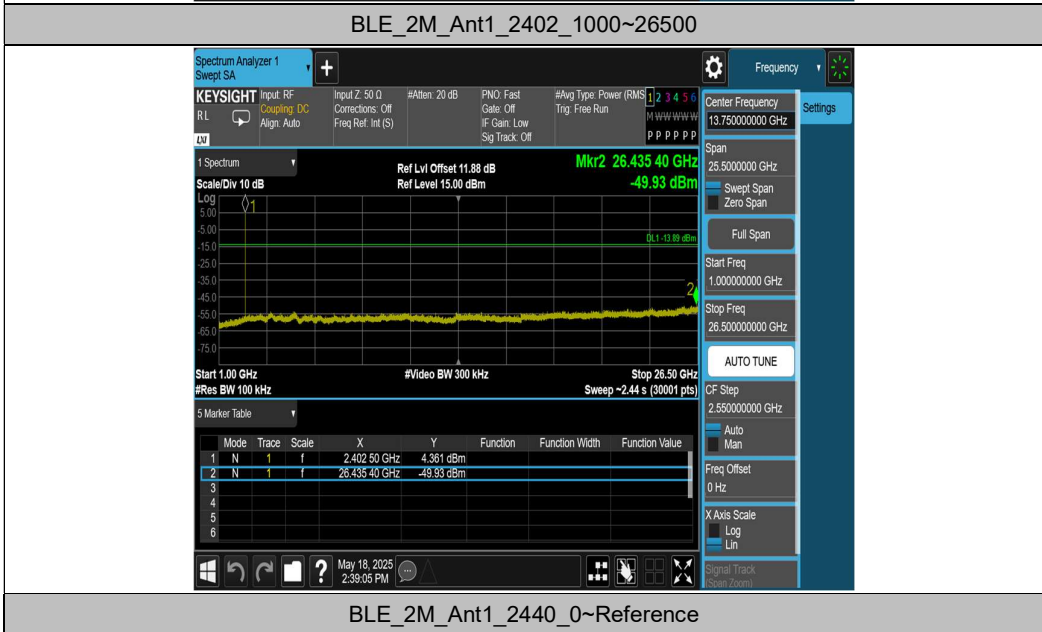
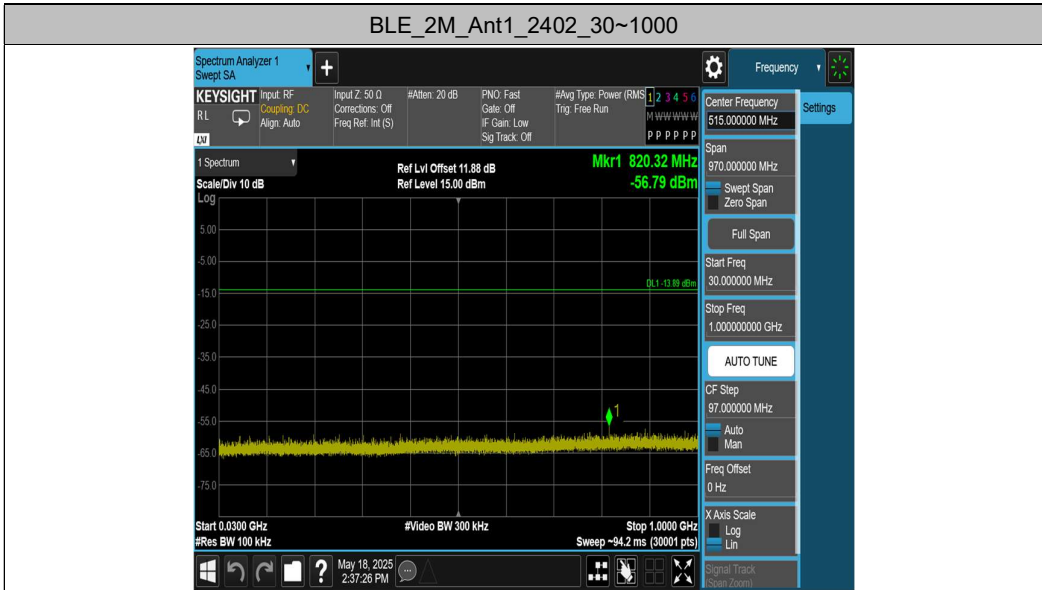


BLE_1M_Ant1_2480_1000~26500



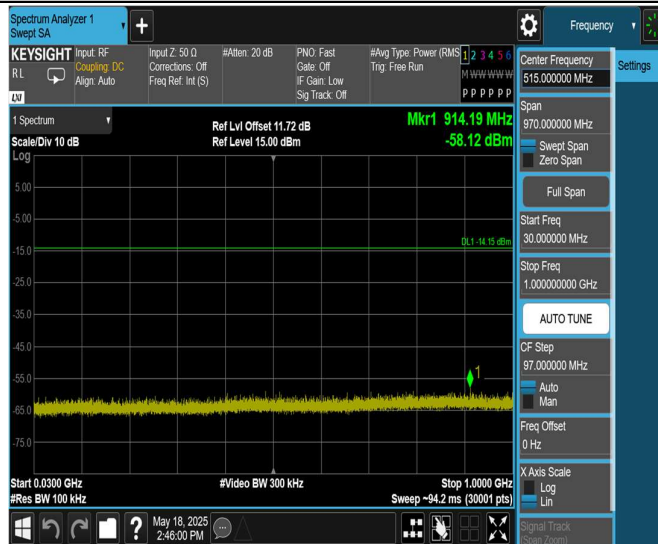
BLE_2M_Ant1_2402_0~Reference







BLE_2M_Ant1_2440_30~1000



BLE_2M_Ant1_2440_1000~26500



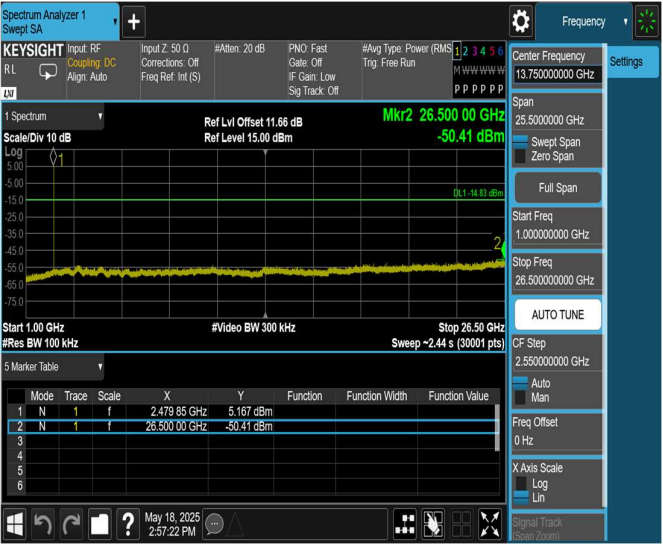
BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000



BLE_2M_Ant1_2480_1000~26500



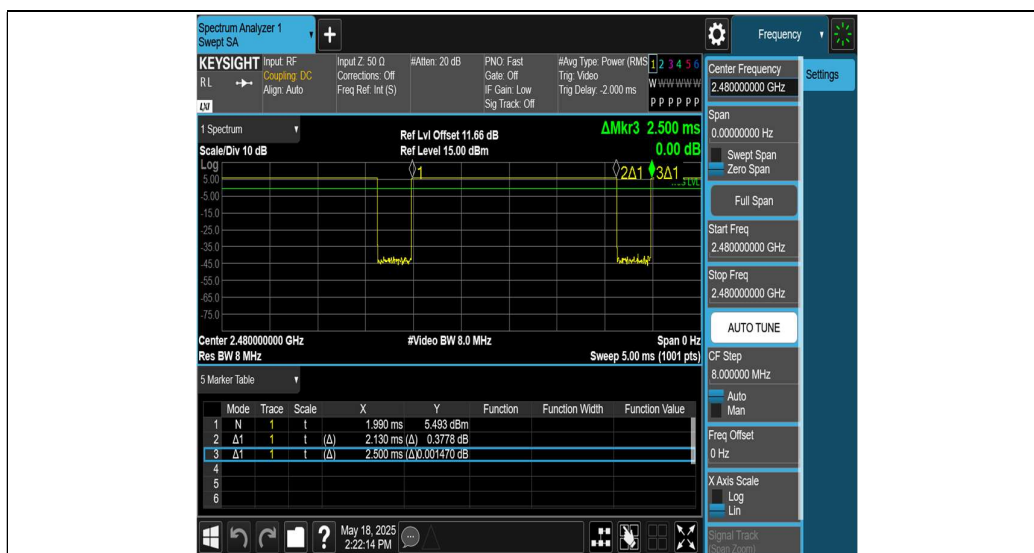
Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]
BLE_1M	Ant1	2402	2.14	2.50	85.60
		2440	2.13	2.50	85.20
		2480	2.13	2.50	85.20
BLE_2M	Ant1	2402	1.08	1.87	57.75
		2440	1.08	1.87	57.75
		2480	1.08	1.87	57.75

Test Graphs





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	6.82	42.94	74.00	31.06	40.75	54.00	13.25	150	68	Horizontal	PASS
2	2331.52	6.87	45.94	74.00	28.06	43.41	54.00	10.59	150	197	Horizontal	PASS
3	2344.56	6.90	45.22	74.00	28.78	42.07	54.00	11.93	150	139	Horizontal	PASS
4	2357.6	7.02	45.14	74.00	28.86	42.16	54.00	11.84	150	253	Horizontal	PASS
5	2375.36	7.26	46.12	74.00	27.88	43.54	54.00	10.46	150	130	Horizontal	PASS
6	2390	7.73	44.50	74.00	29.50	42.71	54.00	11.29	150	150	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	6.82	44.53	74.00	29.47	41.16	54.00	12.84	150	102	Vertical	PASS
2	2321.76	6.84	45.41	74.00	28.59	40.92	54.00	13.08	150	228	Vertical	PASS
3	2331.12	6.87	46.77	74.00	27.23	43.36	54.00	10.64	150	208	Vertical	PASS
4	2361.84	7.08	46.47	74.00	27.53	45.09	54.00	8.91	150	128	Vertical	PASS
5	2367.28	7.15	45.48	74.00	28.52	42.98	54.00	11.02	150	125	Vertical	PASS
6	2390	7.73	44.89	74.00	29.11	42.20	54.00	11.80	150	16	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	6.54	51.51	74.00	22.49	49.50	54.00	4.50	150	65	Horizontal	PASS
2	2489.2255	6.56	52.82	74.00	21.18	50.63	54.00	3.37	150	53	Horizontal	PASS
3	2490.6115	6.56	52.93	74.00	21.07	50.42	54.00	3.58	150	0	Horizontal	PASS
4	2494.4725	6.57	52.85	74.00	21.15	51.07	54.00	2.93	150	154	Horizontal	PASS
5	2495.7595	6.57	52.78	74.00	21.22	51.01	54.00	2.99	150	10	Horizontal	PASS
6	2500	6.58	51.27	74.00	22.73	48.24	54.00	5.76	150	289	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	6.54	50.74	74.00	23.26	48.40	54.00	5.60	150	85	Vertical	PASS
2	2487.8395	6.56	52.54	74.00	21.46	50.34	54.00	3.66	150	208	Vertical	PASS
3	2491.5355	6.57	52.88	74.00	21.12	48.22	54.00	5.78	150	229	Vertical	PASS
4	2495.776	6.57	53.36	74.00	20.64	50.98	54.00	3.02	150	42	Vertical	PASS
5	2497.3435	6.58	54.00	74.00	20.00	51.08	54.00	2.92	150	352	Vertical	PASS
6	2500	6.58	51.70	74.00	22.30	50.13	54.00	3.87	150	360	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	6.82	43.96	74.00	30.04	41.02	54.00	12.98	150	79	Horizontal	PASS
2	2326.8	6.86	45.36	74.00	28.64	42.73	54.00	11.27	150	302	Horizontal	PASS
3	2348.72	6.91	45.31	74.00	28.69	42.65	54.00	11.35	150	155	Horizontal	PASS
4	2353.76	6.97	45.44	74.00	28.56	40.07	54.00	13.93	150	86	Horizontal	PASS
5	2367.76	7.16	44.76	74.00	29.24	41.24	54.00	12.76	150	146	Horizontal	PASS
6	2390	7.73	45.87	74.00	28.13	42.46	54.00	11.54	150	99	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	6.82	43.60	74.00	30.40	40.18	54.00	13.82	150	360	Vertical	PASS
2	2332.56	6.88	45.16	74.00	28.84	42.55	54.00	11.45	150	360	Vertical	PASS
3	2340.48	6.89	45.10	74.00	28.90	43.14	54.00	10.86	150	196	Vertical	PASS
4	2364.08	7.11	46.93	74.00	27.07	45.64	54.00	8.36	150	123	Vertical	PASS
5	2367.76	7.16	47.06	74.00	26.94	45.36	54.00	8.64	150	123	Vertical	PASS
6	2390	7.73	44.71	74.00	29.29	42.48	54.00	11.52	150	30	Vertical	PASS

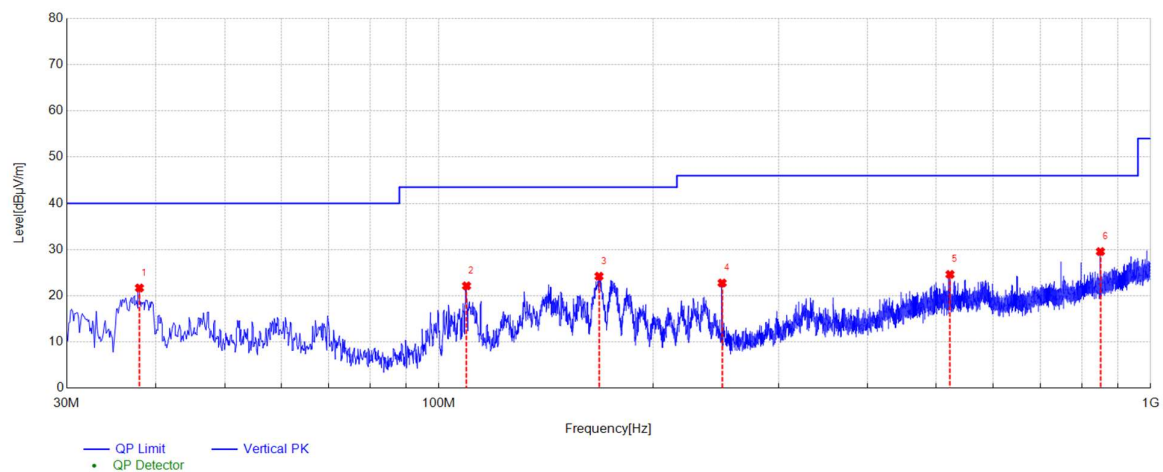
Mode:	BLE 2M-2480
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Final Data List												
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	2483.5	6.54	51.25	74.00	22.75	48.25	54.00	5.75	150	170	Horizontal	PASS
2	2486.041	6.55	54.16	74.00	19.84	50.60	54.00	3.40	150	126	Horizontal	PASS
3	2488.021	6.56	52.97	74.00	21.03	49.77	54.00	4.23	150	129	Horizontal	PASS
4	2490.76	6.56	53.65	74.00	20.35	50.75	54.00	3.25	150	143	Horizontal	PASS
5	2492.047	6.57	52.81	74.00	21.19	50.46	54.00	3.54	150	113	Horizontal	PASS
6	2500	6.58	51.38	74.00	22.62	48.52	54.00	5.48	150	141	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	6.54	52.10	74.00	21.90	48.67	54.00	5.33	150	62	Vertical	PASS
2	2485.6945	6.55	52.70	74.00	21.30	49.67	54.00	4.33	150	186	Vertical	PASS
3	2490.8755	6.56	52.73	74.00	21.27	48.03	54.00	5.97	150	69	Vertical	PASS
4	2491.8985	6.57	53.43	74.00	20.57	49.30	54.00	4.70	150	236	Vertical	PASS
5	2493.268	6.56	52.37	74.00	21.63	48.06	54.00	5.94	150	14	Vertical	PASS
6	2500	6.58	51.00	74.00	23.00	49.05	54.00	4.95	150	85	Vertical	PASS

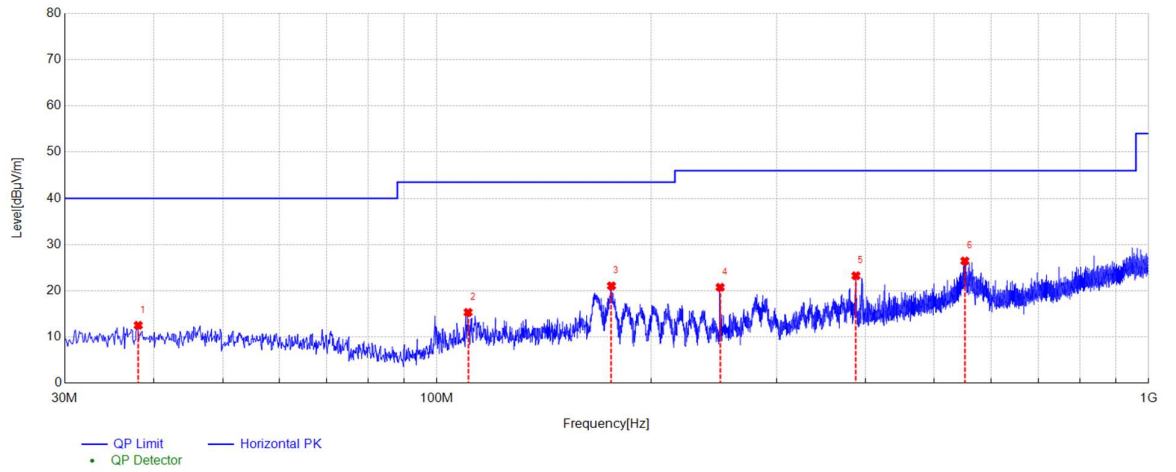
Note:

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



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	37.9548	21.70	-16.29	40.00	18.30	100	330	Vertical	PASS
2	109.353	22.15	-18.95	43.50	21.35	100	240	Vertical	PASS
3	167.850	24.23	-16.52	43.50	19.27	100	350	Vertical	PASS
4	250.018	22.77	-17.97	46.00	23.23	100	220	Vertical	PASS
5	522.518	24.63	-11.08	46.00	21.37	100	150	Vertical	PASS
6	850.120	29.57	-4.56	46.00	16.43	100	30	Vertical	PASS



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	38.0518	12.54	-16.28	40.00	27.46	100	190	Horizontal	PASS
2	110.615	15.34	-18.84	43.50	28.16	100	60	Horizontal	PASS
3	175.902	21.07	-17.43	43.50	22.43	100	120	Horizontal	PASS
4	250.018	20.76	-17.97	46.00	25.24	100	250	Horizontal	PASS
5	387.965	23.26	-13.97	46.00	22.74	100	250	Horizontal	PASS
6	551.815	26.46	-10.31	46.00	19.54	100	350	Horizontal	PASS

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	1360	40.25	0.20	74.00	33.75	150	212	Horizontal
2	2108	46.33	7.56	74.00	27.67	150	202	Horizontal
3	5241	44.59	-12.49	74.00	29.41	150	77	Horizontal
4	6078	44.93	-11.00	74.00	29.07	150	82	Horizontal
5	11124	48.58	-3.62	74.00	25.42	150	258	Horizontal
6	15123	50.31	1.74	74.00	23.69	150	144	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1338	40.12	0.12	74.00	33.88	150	81	Vertical
2	1938	45.39	6.27	74.00	28.61	150	132	Vertical
3	5247	47.75	-12.49	74.00	26.25	150	360	Vertical
4	7101	47.22	-10.32	74.00	26.78	150	64	Vertical
5	11025	48.87	-3.70	74.00	25.13	150	198	Vertical
6	14850	50.26	0.67	74.00	23.74	150	64	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	1210	39.97	0.36	74.00	34.03	150	52	Horizontal
2	1958	45.67	6.21	74.00	28.33	150	132	Horizontal
3	4731	45.23	-13.48	74.00	28.77	150	28	Horizontal
4	7323	44.75	-9.78	74.00	29.25	150	196	Horizontal
5	8472	46.07	-9.11	74.00	27.93	150	150	Horizontal
6	11631	49.99	-3.08	74.00	24.01	150	20	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1314	40.51	0.06	74.00	33.49	150	159	Vertical
2	1878	45.73	5.91	74.00	28.27	150	49	Vertical
3	4737	51.22	-13.46	74.00	22.78	150	323	Vertical
4	5247	51.27	-12.49	74.00	22.73	150	134	Vertical
5	9729	47.17	-6.30	74.00	26.83	150	334	Vertical
6	11958	49.49	-2.50	74.00	24.51	150	196	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	1246	40.15	0.20	74.00	33.85	150	282	Horizontal
2	2128	46.92	7.26	74.00	27.08	150	13	Horizontal
3	3147	43.34	-17.58	74.00	30.66	150	359	Horizontal
4	5202	44.97	-12.49	74.00	29.03	150	84	Horizontal
5	6330	45.15	-10.86	74.00	28.85	150	273	Horizontal
6	11004	48.64	-3.71	74.00	25.36	150	100	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1258	41.10	0.16	74.00	32.90	150	225	Vertical
2	1738	42.59	3.11	74.00	31.41	150	136	Vertical
3	3939	47.15	-16.04	74.00	26.85	150	129	Vertical
4	5247	53.32	-12.49	74.00	20.68	150	258	Vertical
5	7986	45.72	-9.17	74.00	28.28	150	73	Vertical
6	11715	48.59	-2.73	74.00	25.41	150	37	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	1222	40.20	0.30	74.00	33.80	150	35	Horizontal
2	1958	46.26	6.21	74.00	27.74	150	243	Horizontal
3	4938	44.47	-13.62	74.00	29.53	150	356	Horizontal
4	7320	45.57	-9.77	74.00	28.43	150	234	Horizontal
5	10626	48.24	-4.65	74.00	25.76	150	338	Horizontal
6	13647	49.59	-0.65	74.00	24.41	150	335	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1224	41.93	0.30	74.00	32.07	150	279	Vertical
2	1912	45.57	6.36	74.00	28.43	150	206	Vertical
3	3951	46.65	-16.05	74.00	27.35	150	53	Vertical
4	5262	44.91	-12.51	74.00	29.09	150	184	Vertical
5	7194	46.64	-10.00	74.00	27.36	150	10	Vertical
6	9624	47.23	-6.49	74.00	26.77	150	268	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	1280	40.85	0.09	74.00	33.15	150	196	Horizontal
2	2070	47.61	7.21	74.00	26.39	150	16	Horizontal
3	3765	41.99	-16.58	74.00	32.01	150	288	Horizontal
4	6561	45.35	-10.66	74.00	28.65	150	220	Horizontal
5	8142	45.57	-9.15	74.00	28.43	150	303	Horizontal
6	11241	48.84	-3.25	74.00	25.16	150	228	Horizontal

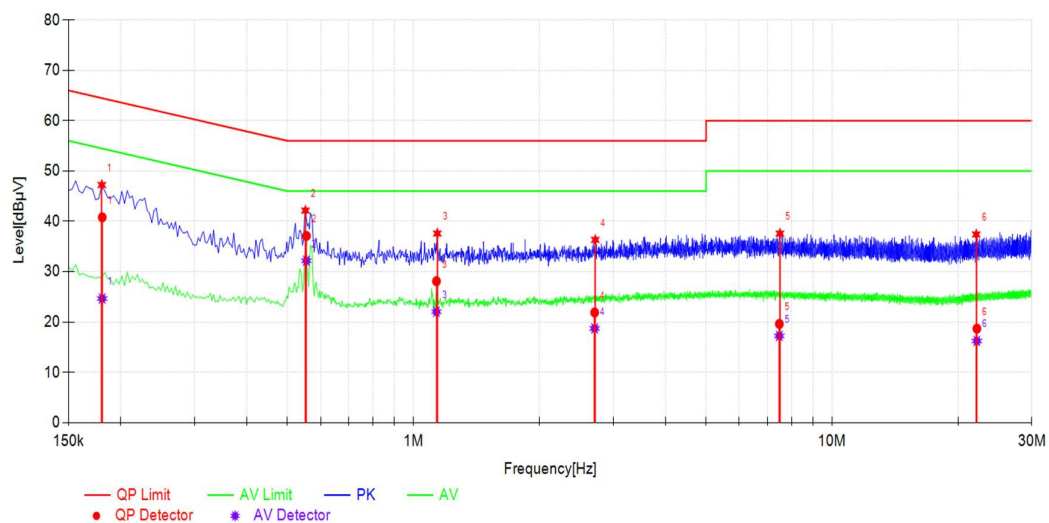
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1438	40.55	0.53	74.00	33.45	150	89	Vertical
2	1900	45.72	6.40	74.00	28.28	150	84	Vertical
3	3936	44.31	-16.04	74.00	29.69	150	133	Vertical
4	4737	47.29	-13.46	74.00	26.71	150	279	Vertical
5	6585	50.47	-10.67	74.00	23.53	150	276	Vertical
6	10536	47.40	-5.04	74.00	26.60	150	219	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	1224	40.34	0.30	74.00	33.66	150	4	Horizontal
2	1932	46.14	6.29	74.00	27.86	150	186	Horizontal
3	4731	45.50	-13.48	74.00	28.50	150	355	Horizontal
4	7194	45.26	-10.00	74.00	28.74	150	352	Horizontal
5	8901	46.61	-7.80	74.00	27.39	150	182	Horizontal
6	11028	48.65	-3.70	74.00	25.35	150	170	Horizontal

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1314	40.33	0.06	74.00	33.67	150	296	Vertical
2	2060	45.56	7.06	74.00	28.44	150	263	Vertical
3	3948	44.47	-16.04	74.00	29.53	150	60	Vertical
4	5256	46.08	-12.50	74.00	27.92	150	76	Vertical
5	6582	49.35	-10.67	74.00	24.65	150	283	Vertical
6	11115	49.01	-3.63	74.00	24.99	150	108	Vertical

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]	Polarity	Verdict
1	0.1804	10.31	40.81	64.47	23.66	24.67	54.47	29.80	L1	PASS
2	0.5547	10.25	37.11	56.00	18.89	32.18	46.00	13.82	L1	PASS
3	1.1344	10.35	28.12	56.00	27.88	22.06	46.00	23.94	L1	PASS
4	2.7086	10.29	21.91	56.00	34.09	18.73	46.00	27.27	L1	PASS
5	7.4817	10.42	19.64	60.00	40.36	17.24	50.00	32.76	L1	PASS
6	22.1793	10.71	18.70	60.00	41.30	16.24	50.00	33.76	L1	PASS