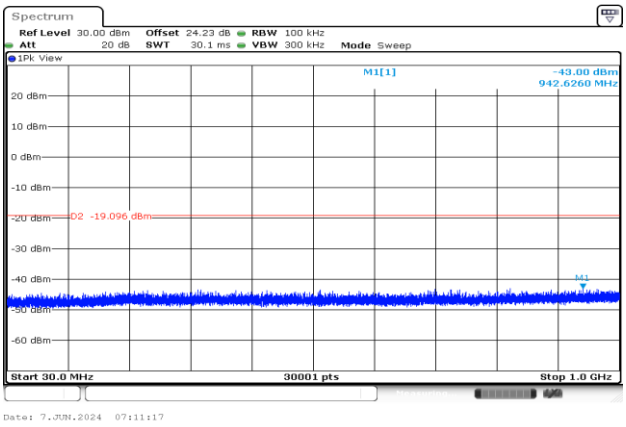
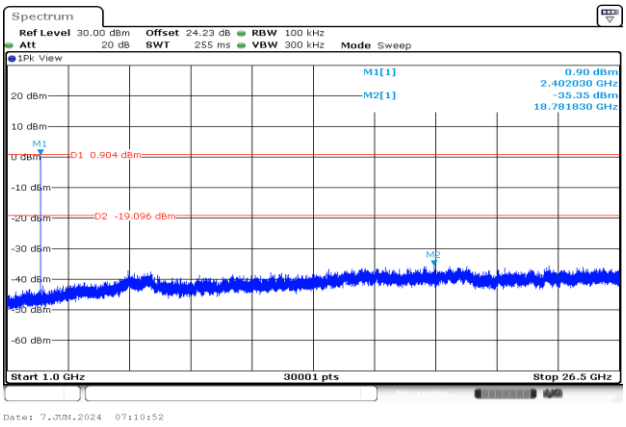
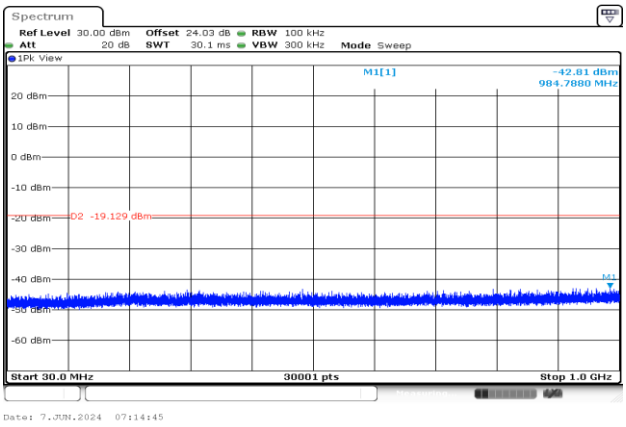
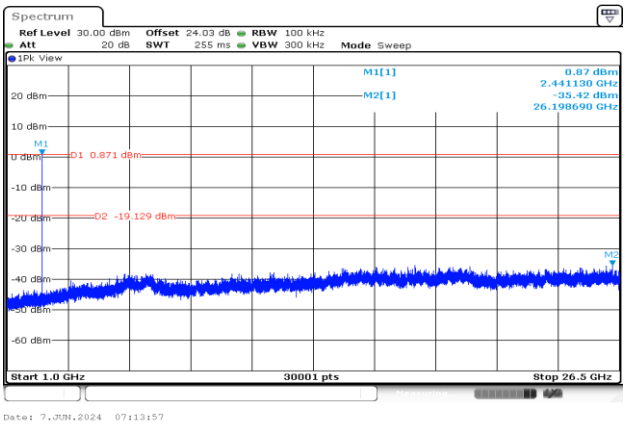
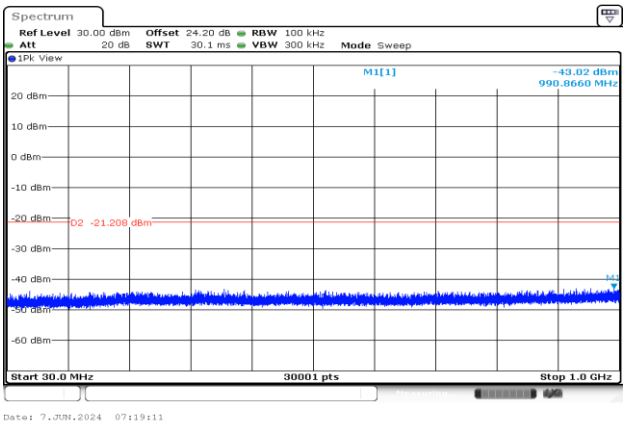
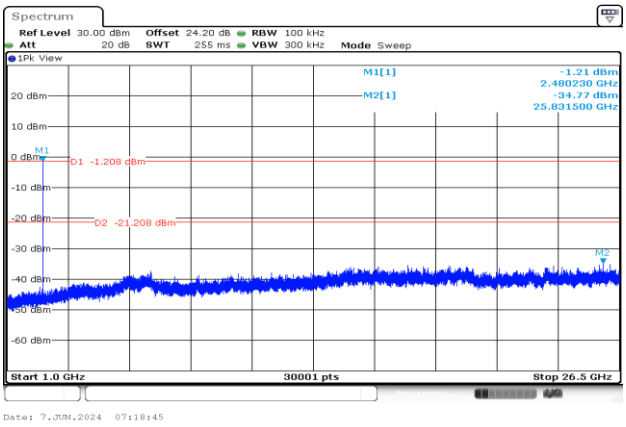
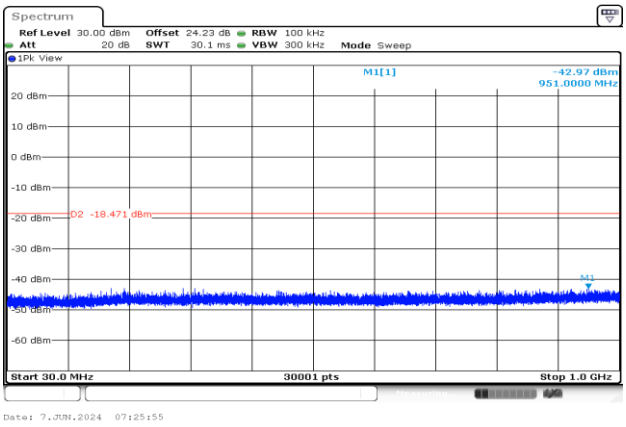
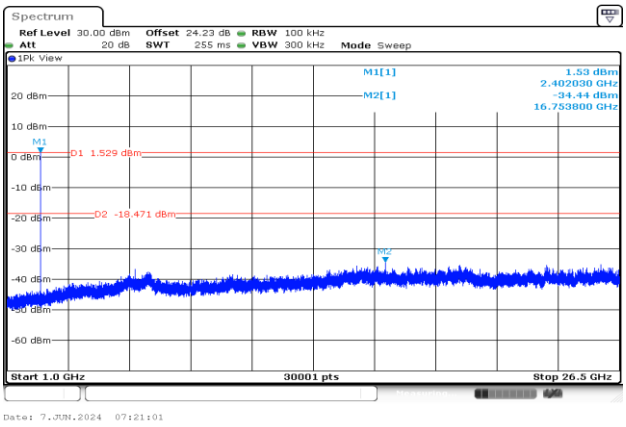
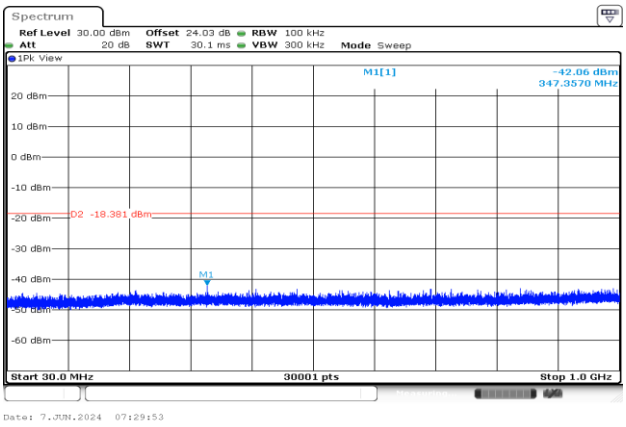
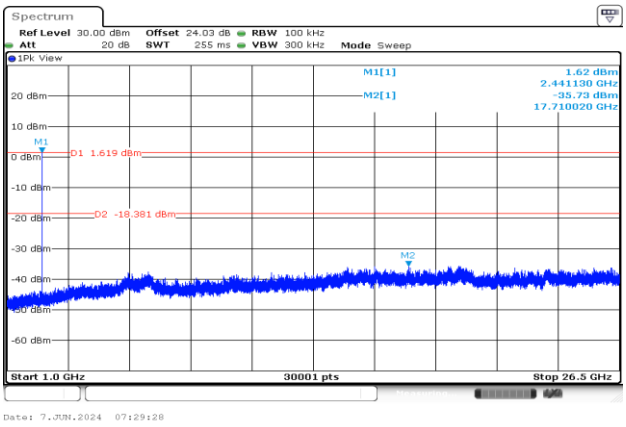
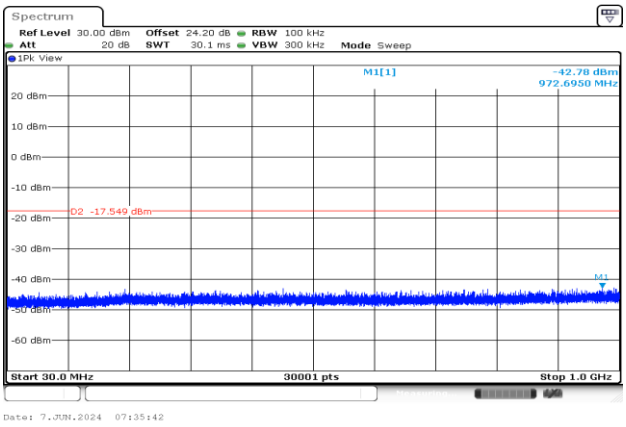
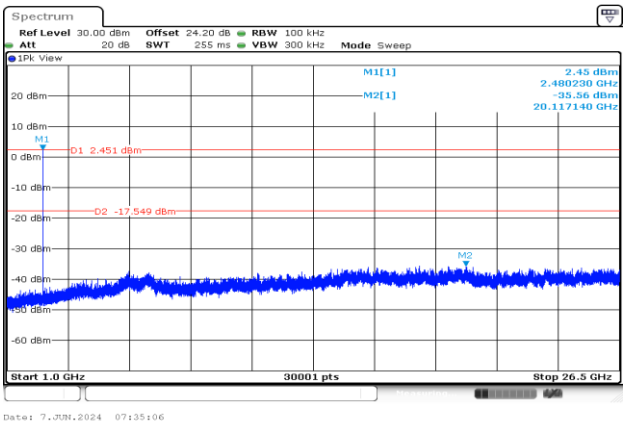
<2Mbps>

CSE Plot on Low Ch between 30MHz ~ 1 GHz	CSE Plot on Low Ch between 1GHz ~ 26.5GHz
	
CSE Plot on Mid. Ch between 30MHz ~ 1 GHz	**CSE Plot on Mid. Ch between 1GHz ~ 26.5GHz**
	
CSE Plot on High Ch between 30MHz ~ 1 GHz	**CSE Plot on High Ch between 1GHz ~ 26.5GHz**
	

<3Mbps>

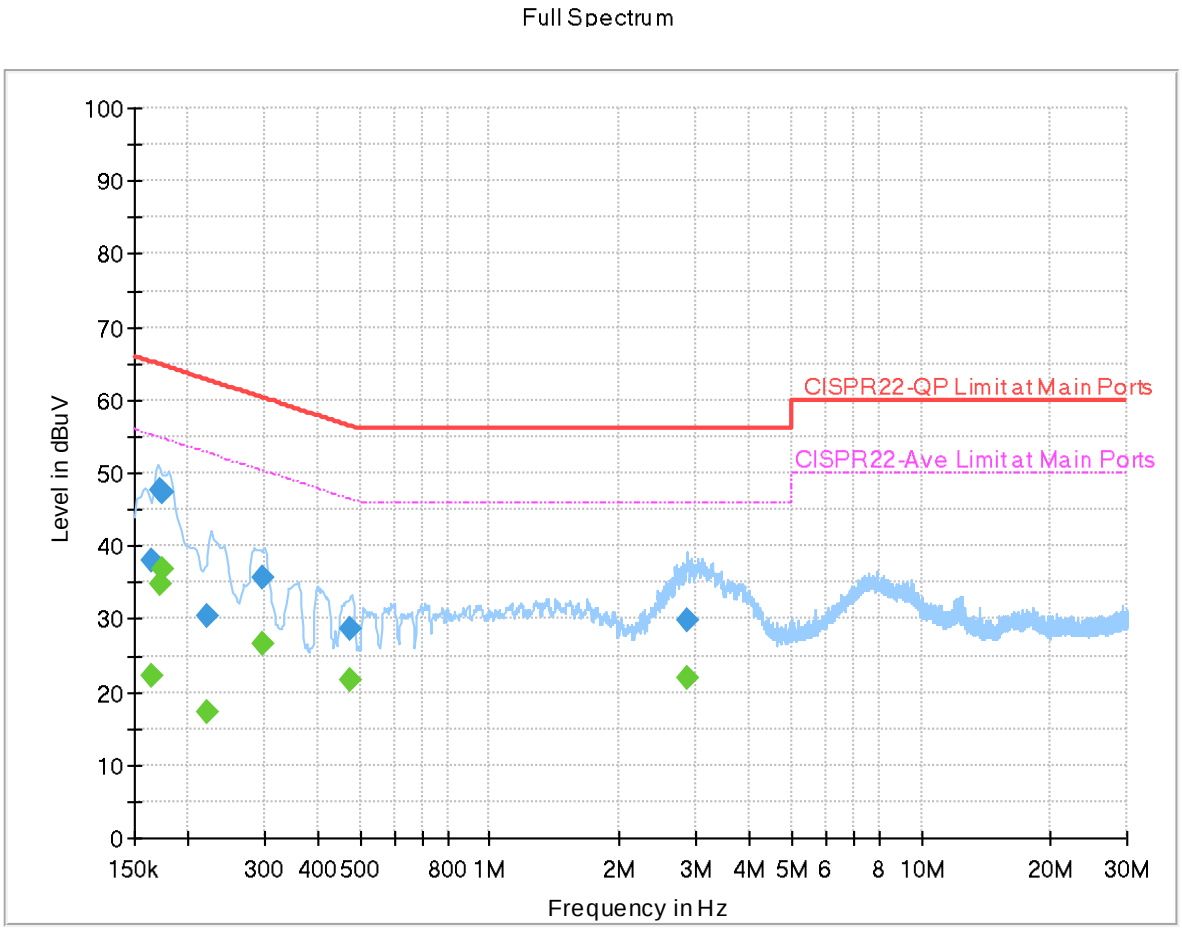
CSE Plot on Low Ch between 30MHz ~ 1 GHz	CSE Plot on Low Ch between 1GHz ~ 26.5GHz
	
CSE Plot on Mid. Ch between 30MHz ~ 1 GHz	**CSE Plot on Mid. Ch between 1GHz ~ 26.5GHz**
	
CSE Plot on High Ch between 30MHz ~ 1 GHz	**CSE Plot on High Ch between 1GHz ~ 26.5GHz**
	

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Louis Chung	**Temperature :**	24.3~26.8℃
		Relative Humidity :	55.5~67.1%

EUT Information

Report NO :	443061
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

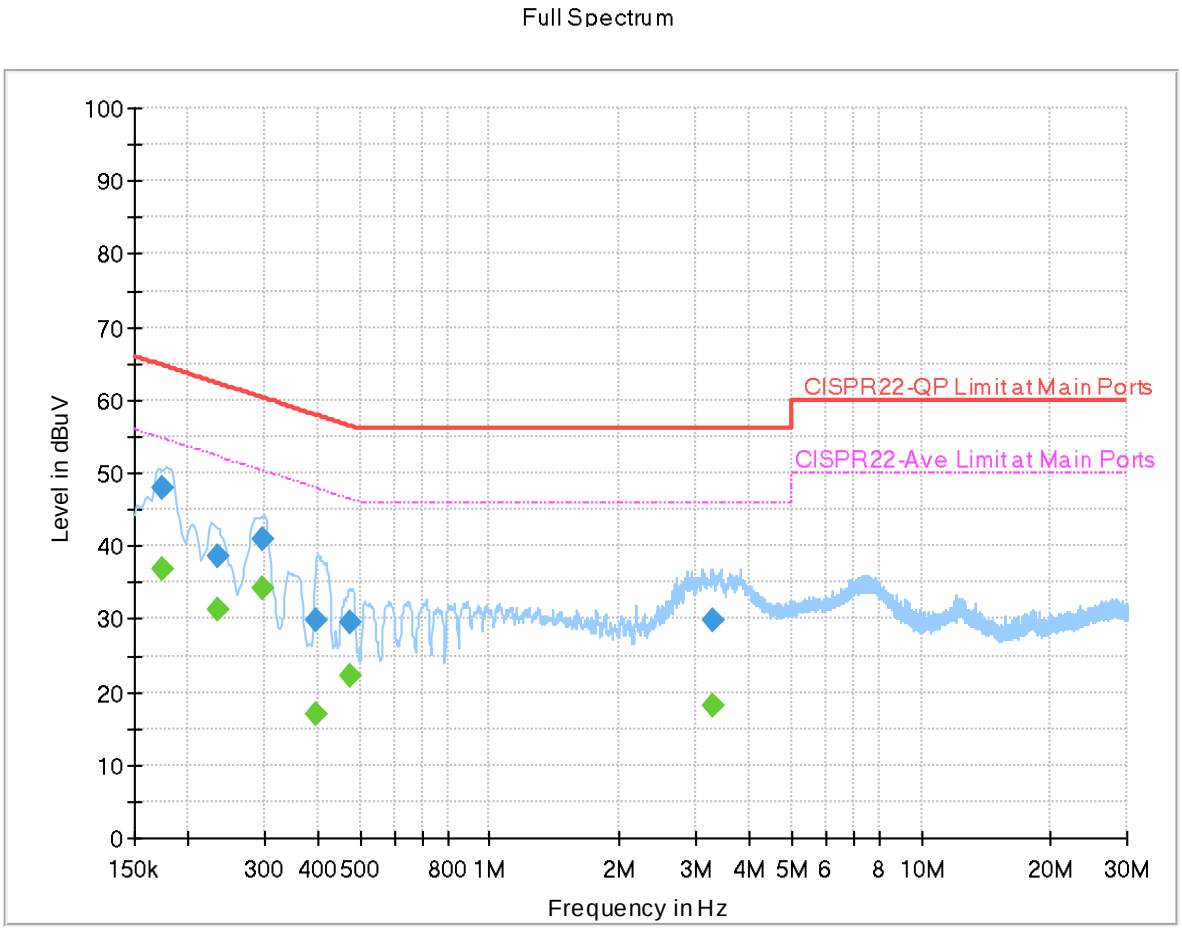


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.163500	---	22.08	55.28	33.20	L1	OFF	19.9
0.163500	38.04	---	65.28	27.24	L1	OFF	19.9
0.171690	---	34.71	54.88	20.17	L1	OFF	19.9
0.171690	47.66	---	64.88	17.22	L1	OFF	19.9
0.174750	---	36.88	54.73	17.85	L1	OFF	19.9
0.174750	47.40	---	64.73	17.33	L1	OFF	19.9
0.222000	---	17.14	52.74	35.60	L1	OFF	19.9
0.222000	30.35	---	62.74	32.39	L1	OFF	19.9
0.296250	---	26.62	50.35	23.73	L1	OFF	19.9
0.296250	35.61	---	60.35	24.74	L1	OFF	19.9
0.474000	---	21.65	46.44	24.79	L1	OFF	19.9
0.474000	28.54	---	56.44	27.90	L1	OFF	19.9
2.877000	---	22.04	46.00	23.96	L1	OFF	20.0
2.877000	29.76	---	56.00	26.24	L1	OFF	20.0

EUT Information

Report NO :	443061
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.173130	---	36.85	54.81	17.96	N	OFF	19.9
0.173130	48.04	---	64.81	16.77	N	OFF	19.9
0.233250	---	31.39	52.33	20.94	N	OFF	19.9
0.233250	38.61	---	62.33	23.72	N	OFF	19.9
0.296250	---	34.22	50.35	16.13	N	OFF	19.9
0.296250	40.87	---	60.35	19.48	N	OFF	19.9
0.393000	---	16.82	48.00	31.18	N	OFF	19.9
0.393000	29.80	---	58.00	28.20	N	OFF	19.9
0.476250	---	22.28	46.40	24.12	N	OFF	19.9
0.476250	29.62	---	56.40	26.78	N	OFF	19.9
3.275250	---	18.25	46.00	27.75	N	OFF	20.0
3.275250	29.79	---	56.00	26.21	N	OFF	20.0

Appendix C. Radiated Spurious Emission

Test Engineer :	BANK Lin, Fred Tseng and Karl Hou	**Temperature :**	21.5~24.9°C
		Relative Humidity :	50.1~60.9%

<Ant. 6>

2.4GHz 2400~2483.5MHz

BT (Band Edge @ 3m)

BT	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH00 2402MHz		2354.835	41.05	-32.95	74	37.92	27	8.46	32.33	100	73	P	H
		2354.835	16.26	-37.74	54	-	-	-	-	-	-	A	H
	*	2402	103.76	-	-	100.58	27	8.54	32.36	100	73	P	H
	*	2402	78.97	-	-	-	-	-	-	-	-	A	H
													H
													H
		2362.815	41.11	-32.89	74	37.98	27	8.47	32.34	100	86	P	V
		2362.815	16.32	-37.68	54	-	-	-	-	-	-	A	V
	*	2402	106.95	-	-	103.77	27	8.54	32.36	100	86	P	V
	*	2402	82.16	-	-	-	-	-	-	-	-	A	V
													V
													V
BT CH 39 2441MHz		2367.96	41.61	-32.39	74	38.47	27	8.48	32.34	127	71	P	H
		2367.96	16.82	-37.18	54	-	-	-	-	-	-	A	H
	*	2441	103.1	-	-	100.06	26.81	8.61	32.38	127	71	P	H
	*	2441	78.31	-	-	-	-	-	-	-	-	A	H
		2497.06	42.85	-31.15	74	39.59	26.97	8.71	32.42	127	71	P	H
		2497.06	18.06	-35.94	54	-	-	-	-	-	-	A	H
		2383.08	41.03	-32.97	74	37.9	26.97	8.51	32.35	117	92	P	V
		2383.08	16.24	-37.76	54	-	-	-	-	-	-	A	V
	*	2441	106.92	-	-	103.88	26.81	8.61	32.38	117	92	P	V
	*	2441	82.13	-	-	-	-	-	-	-	-	A	V
		2486.28	41.62	-32.38	74	38.43	26.9	8.7	32.41	117	92	P	V
		2486.28	16.83	-37.17	54	-	-	-	-	-	-	A	V

BT CH 78 2480MHz	*	2480	103.83	-	-	100.66	26.9	8.68	32.41	137	302	P	H
	*	2480	79.04	-	-	-	-	-	-	-	-	A	H
		2483.72	44.1	-29.9	74	40.92	26.9	8.69	32.41	137	302	P	H
		2483.72	19.31	-34.69	54	-	-	-	-	-	-	A	H
													H
													H
	*	2480	106.43	-	-	103.26	26.9	8.68	32.41	100	84	P	V
	*	2480	81.64	-	-	-	-	-	-	-	-	A	V
		2483.64	47.13	-26.87	74	43.95	26.9	8.69	32.41	100	84	P	V
		2483.64	22.34	-31.66	54	-	-	-	-	-	-	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

BT (Harmonic @ 3m)

BT	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH 00 2402MHz		4804	44.75	-29.25	74	32.9	32.32	13.03	33.5	-	-	P	H
		4804	19.96	-34.04	54	-	-	-	-	-	-	A	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		4804	44.3	-29.7	74	32.45	32.32	13.03	33.5			P	V
		4804	19.51	-34.49	54	-	-	-	-	-	-	A	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

BT	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH 39 2441MHz		4882	45.27	-28.73	74	33.13	32.56	13.07	33.49	-	-	P	H
		4882	20.48	-33.52	54	-	-	-	-	-	-	A	H
		7323	49.74	-24.26	74	32.07	37.5	16.02	35.85	-	-	P	H
		7323	24.95	-29.05	54	-	-	-	-	-	-	A	H
													H
													H
													H
													H
													H
													H
													H
													H
		4882	45.64	-28.36	74	33.5	32.56	13.07	33.49	-	-	P	V
		4882	20.85	-33.15	54	-	-	-	-	-	-	A	V
		7323	49.45	-24.55	74	31.78	37.5	16.02	35.85	-	-	P	V
		7323	24.66	-29.34	54	-	-	-	-	-	-	A	V
													V
													V
													V
													V
													V
													V
													V
													V

BT	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH 78 2480MHz		4960	45.19	-28.81	74	32.85	32.7	13.11	33.47	-	-	P	H
		4960	20.4	-33.6	54	-	-	-	-	-	-	A	H
		7440	50.22	-23.78	74	32.68	37.32	16.15	35.93	-	-	P	H
		7440	25.43	-28.57	54	-	-	-	-	-	-	A	H
													H
													H
													H
													H
													H
													H
													H
													H
		4960	45.17	-28.83	74	32.83	32.7	13.11	33.47	-	-	P	V
		4960	20.38	-33.62	54	-	-	-	-	-	-	A	V
		7440	48.94	-25.06	74	31.4	37.32	16.15	35.93	-	-	P	V
		7440	24.15	-29.85	54	-	-	-	-	-	-	A	V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

Emission below 1GHz

2.4GHz BT (LF)

BT	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz BT LF		110.46	30.1	-13.4	43.5	44.04	16.89	1.89	32.72	-	-	P	H
		126.66	27.47	-16.03	43.5	40.52	17.63	2.03	32.71	-	-	P	H
		140.16	27.47	-16.03	43.5	40.65	17.43	2.09	32.7	-	-	P	H
		767.6	30.41	-15.59	46	29.83	28.24	4.95	32.61	-	-	P	H
		845.3	32.77	-13.23	46	30.75	29.03	5.22	32.23	-	-	P	H
		959.4	35.44	-10.56	46	30.12	31.05	5.58	31.31	-	-	P	H
													H
													H
													H
													H
													H
													H
		33.24	32.88	-7.12	40	41.37	23.31	0.95	32.75	100	45	Q	V
		38.37	29.86	-10.14	40	40.71	20.84	1.05	32.74	-	-	P	V
		110.19	29.02	-14.48	43.5	42.98	16.87	1.89	32.72	-	-	P	V
		791.4	31.5	-14.5	46	30.97	28.03	5.02	32.52	-	-	P	V
		890.8	32.48	-13.52	46	30.13	29	5.26	31.91	-	-	P	V
		964.3	35.65	-18.35	54	30.38	30.93	5.59	31.25	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line. 3. The emission position marked as “-” means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.												

<Ant 7>

2.4GHz 2400~2483.5MHz

BT (Band Edge @ 3m)

BT	Note	Frequency	Level	Margin	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BT CH00 2402MHz		2366.595	41.12	-32.88	74	37.98	27	8.48	32.34	128	71	P	H
		2366.595	16.33	-37.67	54	-	-	-	-	-	-	A	H
	*	2402	103.96	-	-	100.78	27	8.54	32.36	128	71	P	H
	*	2402	79.17	-	-	-	-	-	-	-	-	A	H
													H
													H
		2380.35	41.08	-32.92	74	37.93	27	8.5	32.35	114	95	P	V
		2380.35	16.29	-37.71	54	-	-	-	-	-	-	A	V
	*	2402	107.26	-	-	104.08	27	8.54	32.36	114	95	P	V
	*	2402	82.47	-	-	-	-	-	-	-	-	A	V
													V
													V
BT CH 39 2441MHz		2353.68	41.21	-32.79	74	38.09	27	8.45	32.33	125	71	P	H
		2353.68	16.42	-37.58	54	-	-	-	-	-	-	A	H
	*	2441	103.13	-	-	100.09	26.81	8.61	32.38	125	71	P	H
	*	2441	78.34	-	-	-	-	-	-	-	-	A	H
		2487.61	41.22	-32.78	74	38.03	26.9	8.7	32.41	125	71	P	H
		2487.61	16.43	-37.57	54	-	-	-	-	-	-	A	H
		2359.28	41.27	-32.73	74	38.15	27	8.46	32.34	111	96	P	V
		2359.28	16.48	-37.52	54	-	-	-	-	-	-	A	V
	*	2441	106.46	-	-	103.42	26.81	8.61	32.38	111	96	P	V
	*	2441	81.67	-	-	-	-	-	-	-	-	A	V
		2484.74	41.15	-32.85	74	37.97	26.9	8.69	32.41	111	96	P	V
		2484.74	16.36	-37.64	54	-	-	-	-	-	-	A	V

BT CH 78 2480MHz	*	2480	102.84	-	-	99.67	26.9	8.68	32.41	178	79	P	H
	*	2480	78.05	-	-	-	-	-	-	-	-	A	H
		2483.56	44.49	-29.51	74	41.31	26.9	8.69	32.41	178	79	P	H
		2483.56	19.7	-34.3	54	-	-	-	-	-	-	A	H
													H
													H
	*	2480	106.41	-	-	103.24	26.9	8.68	32.41	100	94	P	V
	*	2480	81.62	-	-	-	-	-	-	-	-	A	V
		2483.56	47.22	-26.78	74	44.04	26.9	8.69	32.41	100	94	P	V
		2483.56	22.43	-31.57	54	-	-	-	-	-	-	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

BT (Harmonic @ 3m)

BT	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH 00 2402MHz		4804	45.23	-28.77	74	33.38	32.32	13.03	33.5	-	-	P	H
		4804	20.44	-33.56	54	-	-	-	-	-	-	A	H
													H
													H
													H
													H
													H
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													H
													H
													H
													H
		4804	44.96	-29.04	74	33.11	32.32	13.03	33.5	-	-	P	V
		4804	20.17	-33.83	54	-	-	-	-	-	-	A	V
													V
													V
													V
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													V

BT	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH 39 2441MHz		4882	45.45	-28.55	74	33.31	32.56	13.07	33.49	-	-	P	H
		4882	20.66	-33.34	54	-	-	-	-	-	-	A	H
		7323	49.76	-24.24	74	32.09	37.5	16.02	35.85	-	-	P	H
		7323	24.97	-29.03	54	-	-	-	-	-	-	A	H
													H
													H
													H
													H
													H
													H
													H
													H
		4882	45.69	-28.31	74	33.55	32.56	13.07	33.49	-	-	P	V
		4882	20.9	-33.1	54	-	-	-	-	-	-	A	V
		7323	49.45	-24.55	74	31.78	37.5	16.02	35.85	-	-	P	V
		7323	24.66	-29.34	54	-	-	-	-	-	-	A	V
													V
													V
													V
													V
													V
													V
													V
													V

BT	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
BT CH 78 2480MHz		4960	45.69	-28.31	74	33.35	32.7	13.11	33.47	-	-	P	H
		4960	20.9	-33.1	54	-	-	-	-	-	-	A	
													H
													H
													H
													H
													H
													H
													H
													H
													H
		7440	49.15	-24.85	74	31.61	37.32	16.15	35.93	-	-	P	H
		7440	24.36	-29.64	54	-	-	-	-	-	-	A	
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

Emission below 1GHz

2.4GHz BT (LF)

BT	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz BT LF		31.89	23.6	-16.4	40	31.28	24.14	0.93	32.75	-	-	P	H
		112.08	30.78	-12.72	43.5	44.61	16.98	1.91	32.72	-	-	P	H
		126.12	27.56	-15.94	43.5	40.62	17.62	2.03	32.71	-	-	P	H
		738.9	30.1	-15.9	46	29.86	28.09	4.85	32.7	-	-	P	H
		858.6	32.49	-13.51	46	30.12	29.27	5.24	32.14	-	-	P	H
		974.1	35.2	-18.8	54	29.87	30.84	5.63	31.14	-	-	P	H
													H
													H
													H
													H
													H
													H
		33.24	32.96	-7.04	40	41.45	23.31	0.95	32.75	-	-	P	V
		111.54	28.53	-14.97	43.5	42.39	16.96	1.9	32.72	-	-	P	V
		140.97	28.53	-14.97	43.5	41.72	17.41	2.1	32.7	-	-	P	V
		564.6	27.29	-18.71	46	29.49	26.36	4.31	32.87	-	-	P	V
		789.3	30.89	-15.11	46	30.37	28.04	5.01	32.53	-	-	P	V
		961.5	34.71	-19.29	54	29.41	31	5.58	31.28	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line. 3. The emission position marked as “-” means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **Margin** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

BT	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BT CH 00 2402MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =

Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

3. Margin (dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Margin (dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Margin (dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.

Appendix D. Radiated Spurious Emission Plots

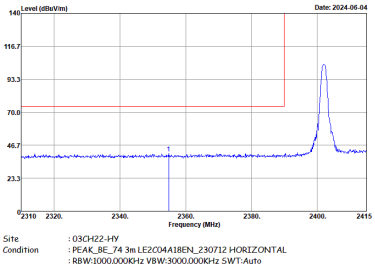
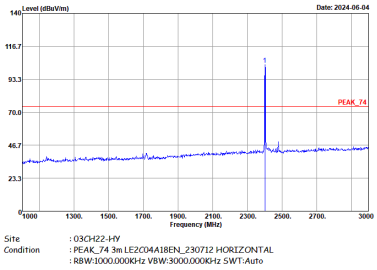
Test Engineer :	BANK Lin, Fred Tseng and Karl Hou	Temperature :	21.5~24.9°C
		Relative Humidity :	50.1~60.9%

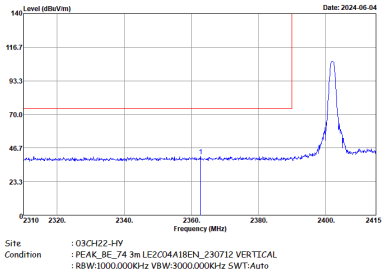
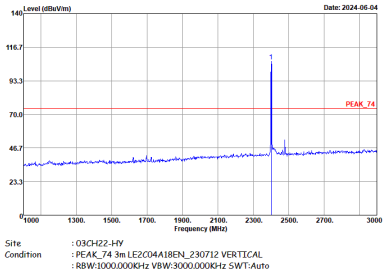
Note symbol

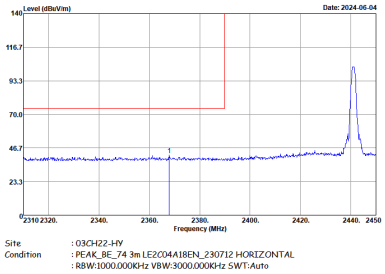
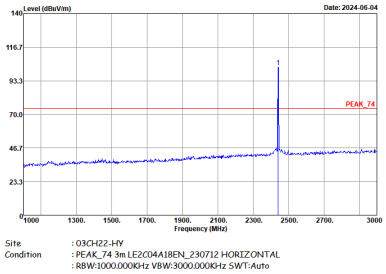
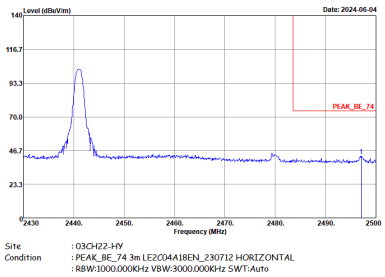
-L	**Low channel location**
-R	**High channel location**

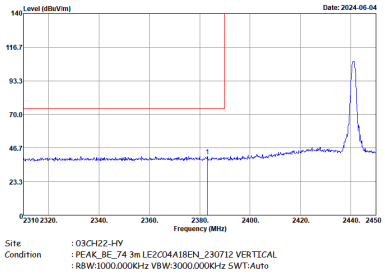
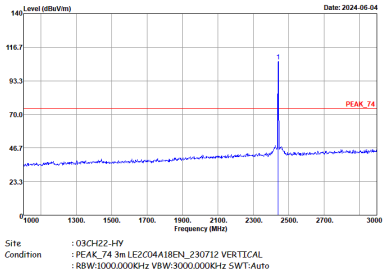
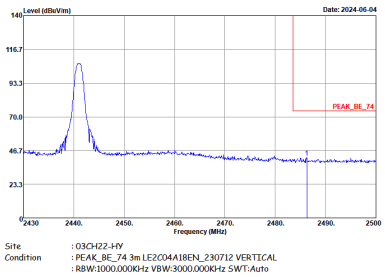
2.4GHz 2400~2483.5MHz

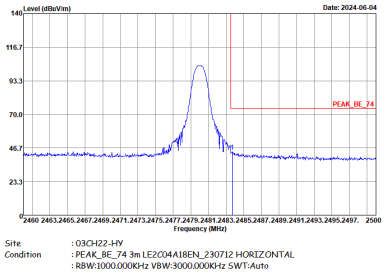
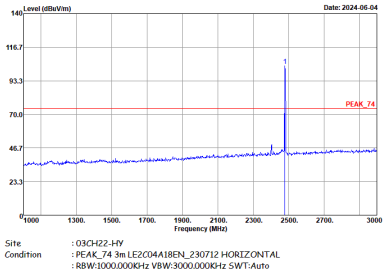
BT (Band Edge @ 3m)

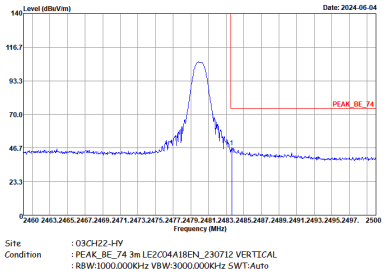
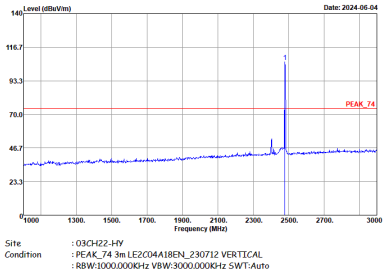
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH00 2402MHz	
6	Horizontal	Fundamental
Peak		

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH00 2402MHz	
6	Vertical	Fundamental
Peak		

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH39 2441MHz	
6	Horizontal	Fundamental
Peak		
Peak		Left blank

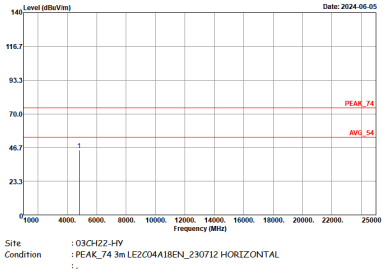
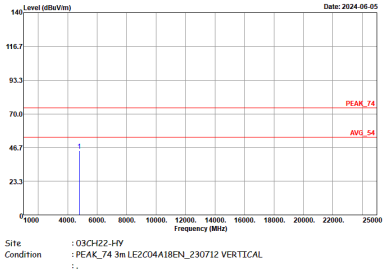
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH39 2441MHz	
6	Vertical	Fundamental
Peak		
Peak		Left blank

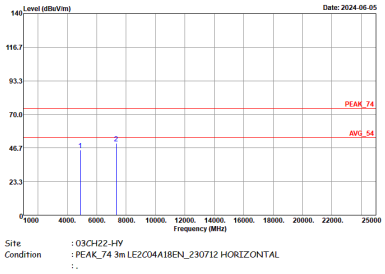
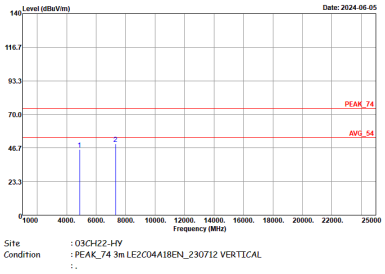
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH78 2480MHz	
6	Horizontal	Fundamental
Peak		

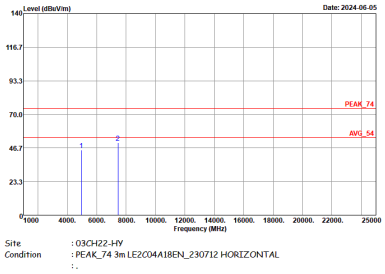
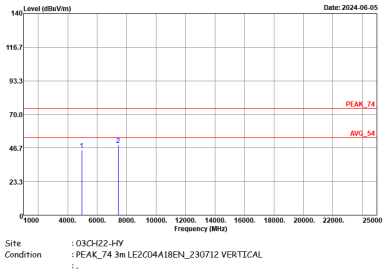
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH78 2480MHz	
6	Vertical	Fundamental
Peak		

2.4GHz 2400~2483.5MHz

BT (Harmonic @ 3m)

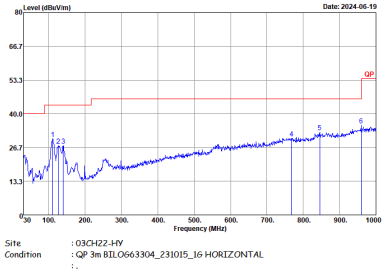
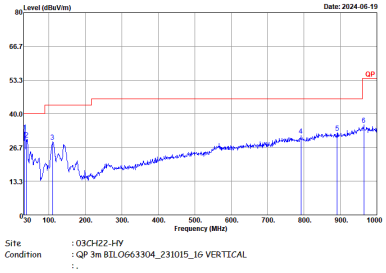
BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH00 2402MHz	
6	Horizontal	Vertical
Peak Avg.		

BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH39 2441MHz	
6	Horizontal	Vertical
Peak Avg.		

BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH78 2480MHz	
6	Horizontal	Vertical
Peak Avg.		

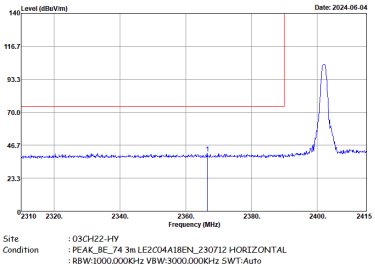
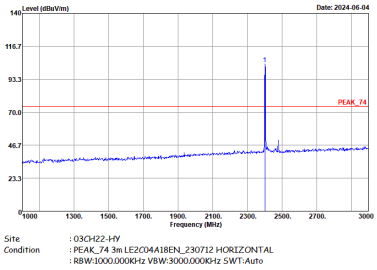
Emission below 1GHz

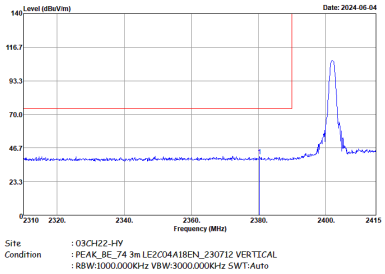
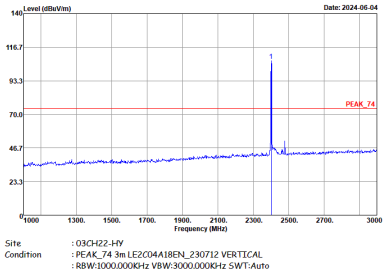
2.4GHz BT (LF)

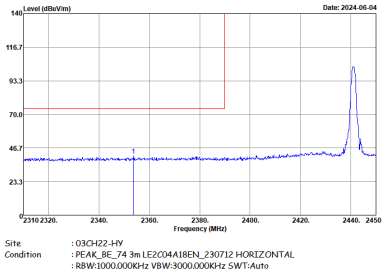
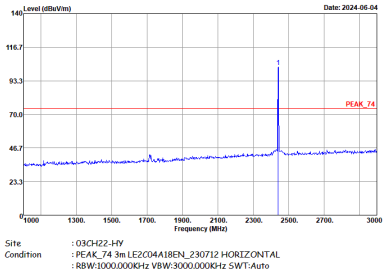
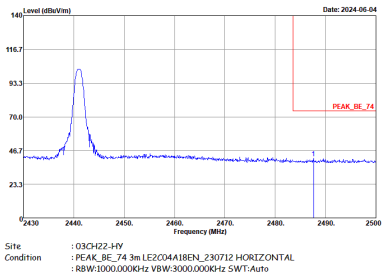
BT	2.4GHz 2400~2483.5MHz	
ANT	BT LF	
6	Horizontal	Vertical
QP / Peak		

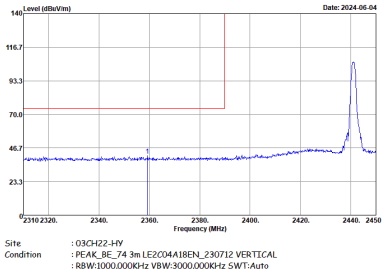
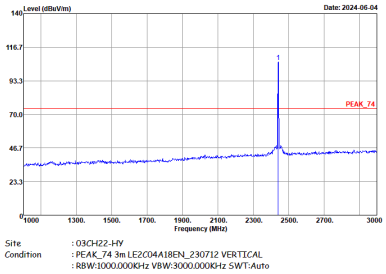
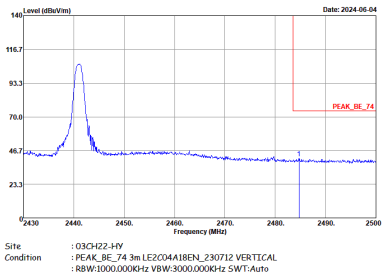
2.4GHz 2400~2483.5MHz

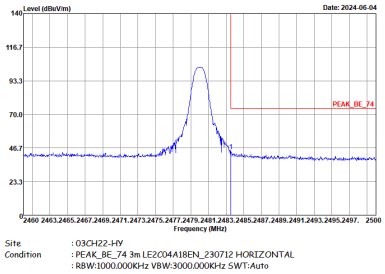
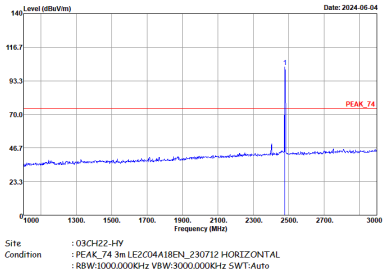
BT (Band Edge @ 3m)

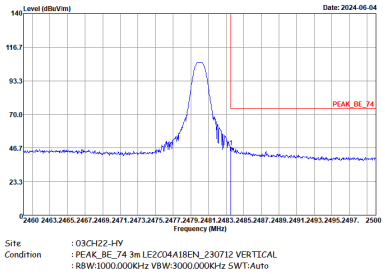
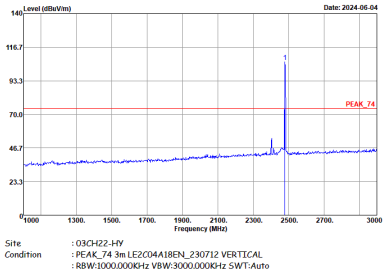
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH00 2402MHz	
7	Horizontal	Fundamental
Peak		

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH00 2402MHz	
7	Vertical	Fundamental
Peak		

BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH39 2441MHz	
7	Horizontal	Fundamental
Peak		
Peak		Left blank

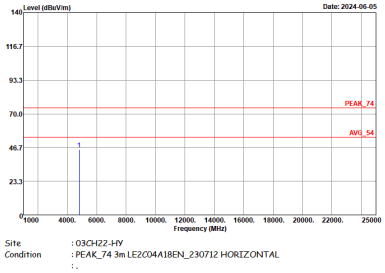
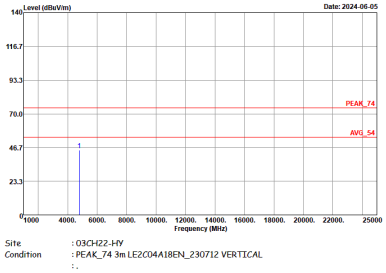
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH39 2441MHz	
7	Vertical	Fundamental
Peak		
Peak		Left blank

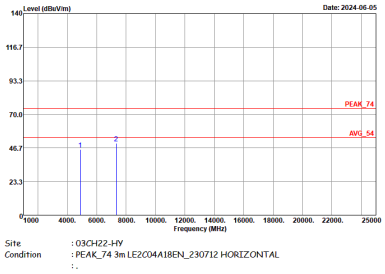
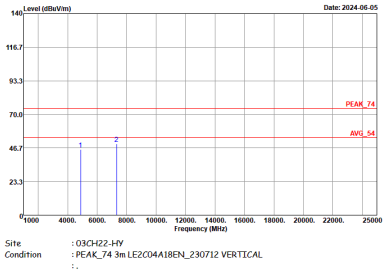
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH78 2480MHz	
7	Horizontal	Fundamental
Peak		

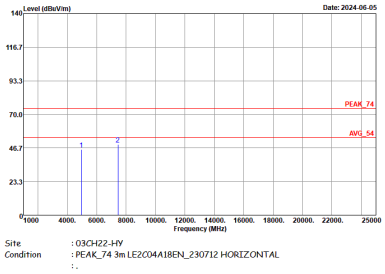
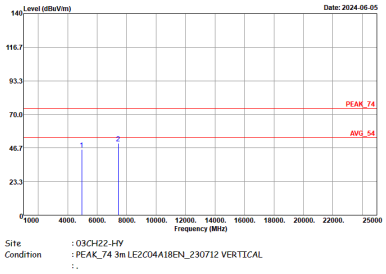
BT	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	BT CH78 2480MHz	
7	Vertical	Fundamental
Peak		

2.4GHz 2400~2483.5MHz

BT (Harmonic @ 3m)

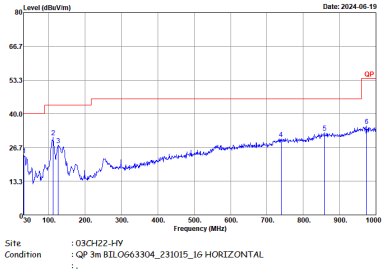
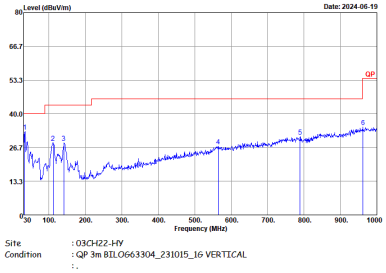
BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH00 2402MHz	
7	Horizontal	Vertical
Peak Avg.		

BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH39 2441MHz	
7	Horizontal	Vertical
Peak Avg.		

BT	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	BT CH78 2480MHz	
7	Horizontal	Vertical
Peak Avg.		

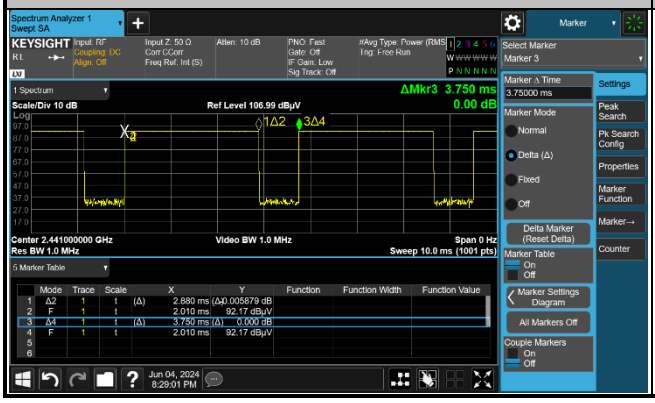
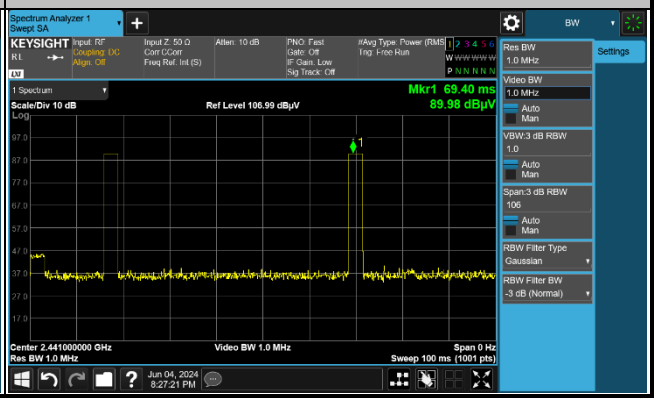
Emission below 1GHz

2.4GHz BT (LF)

BT	2.4GHz 2400~2483.5MHz	
ANT	BT LF	
7	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

<Ant. 6>

DH5 on time (One Pulse) Plot on Channel 39	on time (Count Pulses) Plot on Channel 39
	

Note:

1. Worst case Duty cycle = on time/100 milliseconds = 2 * 2.88 / 100 = 5.76 %
2. Worst case Duty cycle correction factor = 20*log(Duty cycle) = -24.79 dB
3. **DH5** has the highest duty cycle worst case and is reported.

Duty Cycle Correction Factor Consideration for AFH mode:

Bluetooth normal hopping rate is 1600Hz and reduced to 800Hz in AFH mode; due to the reduced number of hopping frequencies, with the same packet configuration the dwell time in each channel frequency within 100msec period is longer in AFH mode than normal mode.

In AFH mode, the minimum hopping frequencies are 20, to get the longest dwell time DH5 packet is observed; the on time period to have DH5 packet completing one hopping sequence is

2.88 ms x 20 channels = 57.6 ms

There cannot be 2 complete hopping sequences within 100ms period, considering the random hopping behavior, maximum 2 hops can be possibly observed within the period. [100 ms / 57.6 ms] = 2 hops

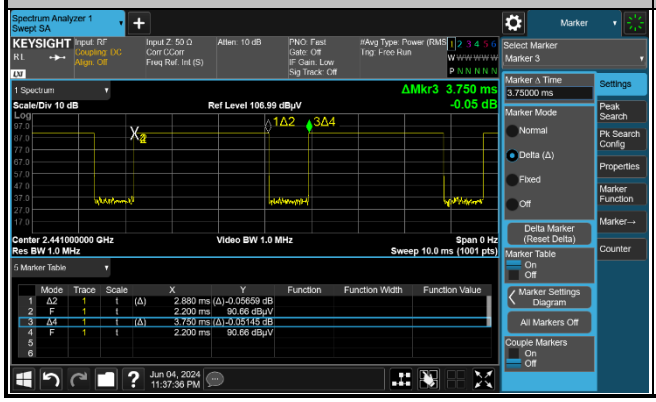
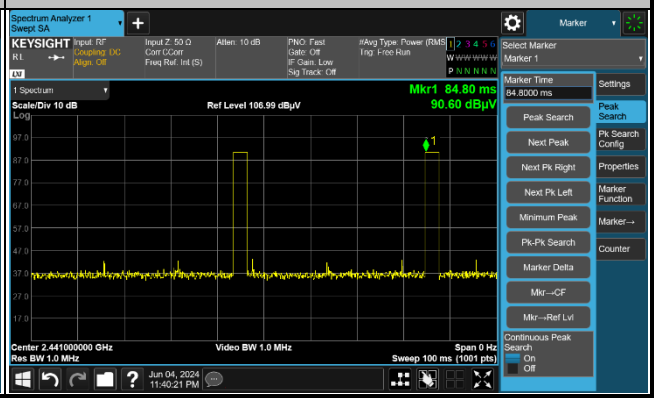
Thus, the maximum possible ON time:

2.88 ms x 2 = 5.76 ms

Worst case Duty Cycle Correction factor, which is derived from the maximum possible ON time,

20 x log(5.76 ms/100 ms) = -24.79 dB

<Ant. 7>

DH5 on time (One Pulse) Plot on Channel 39	on time (Count Pulses) Plot on Channel 39
	

Note:

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Thus, the maximum possible ON time:

2.88 ms x 2 = 5.76 ms

Worst case Duty Cycle Correction factor, which is derived from the maximum possible ON time,

20 x log(5.76 ms/100 ms) = -24.79 dB