

WIFI Ant. 0+1	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)
802.11ax HE20 Full CH 11 2462MHz		4924	46.3	-27.7	74	38	32.74	13.16	37.6	100	25	P	H
		4924	36.01	-17.99	54	27.71	32.74	13.16	37.6	100	25	A	H
		7386	56.39	-17.61	74	42.33	36.68	16.05	38.67	101	240	P	H
		7386	41.61	-12.39	54	27.55	36.68	16.05	38.67	101	240	A	H
													H
													H
													H
													H
													H
													H
													H
													H
		4924	50.84	-23.16	74	42.54	32.74	13.16	37.6	100	305	P	V
		4924	37.25	-16.75	54	28.95	32.74	13.16	37.6	100	305	A	V
		7386	54.78	-19.22	74	40.72	36.68	16.05	38.67	100	137	P	V
		7386	41.32	-12.68	54	27.26	36.68	16.05	38.67	100	137	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.												



2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

WIFI Ant. 0+1	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)
802.11ax HE20 Partial 106/53 CH 01 2412MHz		2388.12	67.48	-6.52	74	57.75	27.25	18.72	36.24	114	276	P	H
		2390	44.72	-9.28	54	34.98	27.26	18.72	36.24	114	276	A	H
	*	2412	117.2	-	-	107.34	27.35	18.76	36.25	114	276	P	H
	*	2412	108.41	-	-	98.55	27.35	18.76	36.25	114	276	A	H
													H
													H
		2390	65.74	-8.26	74	56	27.26	18.72	36.24	306	194	P	V
		2390	43.16	-10.84	54	33.42	27.26	18.72	36.24	306	194	A	V
	*	2412	114.47	-	-	104.61	27.35	18.76	36.25	306	194	P	V
	*	2412	103.99	-	-	94.13	27.35	18.76	36.25	306	194	A	V
													V
													V
802.11ax HE20 Partial 106/54 CH 11 2462MHz	*	2462	116.66	-	-	106.53	27.55	18.85	36.27	102	271	P	H
	*	2462	106.01	-	-	95.88	27.55	18.85	36.27	102	271	A	H
		2484.2	71.2	-2.8	74	60.93	27.64	18.9	36.27	102	271	P	H
		2483.8	49.18	-4.82	54	38.91	27.64	18.9	36.27	102	271	A	H
													H
													H
	*	2462	114.94	-	-	104.81	27.55	18.85	36.27	297	195	P	V
	*	2462	104.49	-	-	94.36	27.55	18.85	36.27	297	195	A	V
		2483.52	66.4	-7.6	74	56.15	27.63	18.89	36.27	297	195	P	V
		2483.52	42.64	-11.36	54	32.39	27.63	18.89	36.27	297	195	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission above 18GHz

2.4GHz WIFI 802.11ax HE20 (SHF)

[illegible]

Emission below 1GHz

2.4GHz WIFI 802.11ax HE20 (LF)

[illegible]



<Sample 2>

2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Margin	Limit Line	Read Level	Antenna Factor	Path Loss	Preampl Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Full CH 11 2462MHz	*	2462	111.19	-	-	101.06	27.55	18.85	36.27	100	150	P	H
	*	2462	101.02	-	-	90.89	27.55	18.85	36.27	100	150	A	H
		2484.04	66.84	-7.16	74	56.57	27.64	18.9	36.27	100	150	P	H
		2483.52	52.84	-1.16	54	42.59	27.63	18.89	36.27	100	150	A	H
													H
													H
	*	2462	107.33	-	-	97.2	27.55	18.85	36.27	100	81	P	V
	*	2462	98.3	-	-	88.17	27.55	18.85	36.27	100	81	A	V
		2484.16	62.37	-11.63	74	52.1	27.64	18.9	36.27	100	81	P	V
		2483.52	48.02	-5.98	54	37.77	27.63	18.89	36.27	100	81	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

WIFI 802.11 ax HE20 Full (Harmonic @ 3m)

[illegible]

Emission above 18GHz

2.4GHz WIFI 802.11ax HE20 (SHF)

[illegible]

Emission below 1GHz

2.4GHz WIFI 802.11ax HE20 (LF)

[illegible]



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	Peak or Average
H/V	Horizontal or Vertical



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

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

$$1. \text{ Path Loss(dB)} = \text{Cable loss(dB)} + \text{Filter loss(dB)} + \text{Attenuator loss(dB)}$$

$$2. \text{ Level(dB}\mu\text{V/m)} =$$

$$\text{Antenna Factor(dB/m)} + \text{Path Loss(dB)} + \text{Read Level(dB}\mu\text{V)} - \text{Preamp Factor(dB)}$$

$$3. \text{ Margin (dB)} = \text{Level(dB}\mu\text{V/m)} - \text{Limit Line(dB}\mu\text{V/m)}$$

For Peak Limit @ 2390MHz:

$$1. \text{ Level(dB}\mu\text{V/m)}$$

$$= \text{Antenna Factor(dB/m)} + \text{Path Loss(dB)} + \text{Read Level(dB}\mu\text{V)} - \text{Preamp Factor(dB)}$$

$$= 32.22(\text{dB/m}) + 4.58(\text{dB}) + 54.51(\text{dB}\mu\text{V}) - 35.86(\text{dB})$$

$$= 55.45(\text{dB}\mu\text{V/m})$$

$$2. \text{ Margin (dB)}$$

$$= \text{Level(dB}\mu\text{V/m)} - \text{Limit Line(dB}\mu\text{V/m)}$$

$$= 55.45(\text{dB}\mu\text{V/m}) - 74(\text{dB}\mu\text{V/m})$$

$$= -18.55(\text{dB})$$

For Average Limit @ 2390MHz:

$$1. \text{ Level(dB}\mu\text{V/m)}$$

$$= \text{Antenna Factor(dB/m)} + \text{Path Loss(dB)} + \text{Read Level(dB}\mu\text{V)} - \text{Preamp Factor(dB)}$$

$$= 32.22(\text{dB/m}) + 4.58(\text{dB}) + 42.6(\text{dB}\mu\text{V}) - 35.86(\text{dB})$$

$$= 43.54(\text{dB}\mu\text{V/m})$$

$$2. \text{ Margin (dB)}$$

$$= \text{Level(dB}\mu\text{V/m)} - \text{Limit Line(dB}\mu\text{V/m)}$$

$$= 43.54(\text{dB}\mu\text{V/m}) - 54(\text{dB}\mu\text{V/m})$$

$$= -10.46(\text{dB})$$

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



Appendix D. Radiated Spurious Emission Plots

Test Engineer :	John Chuang and David Dai	Temperature :	19.6~23.4°C
		Relative Humidity :	65.8~70.6%

Note symbol

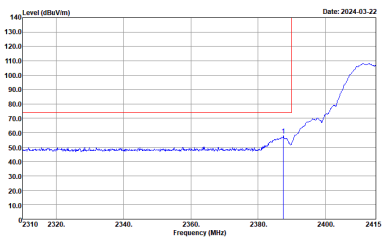
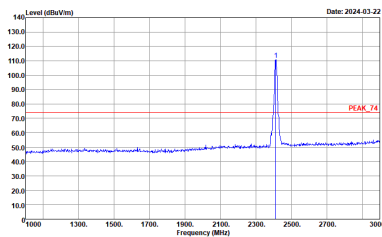
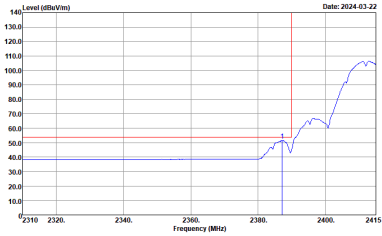
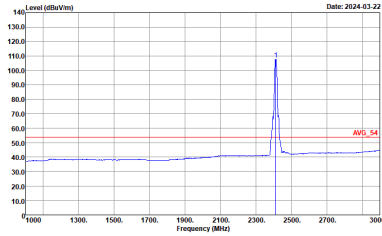
-L	Low channel location
-R	High channel location

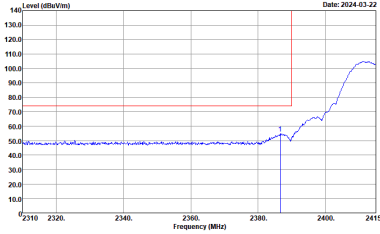
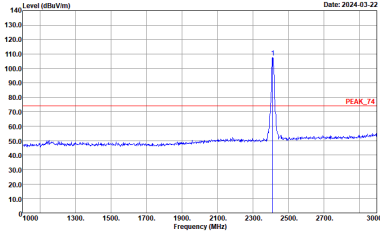
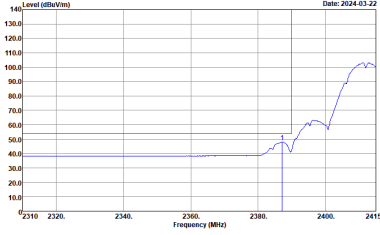
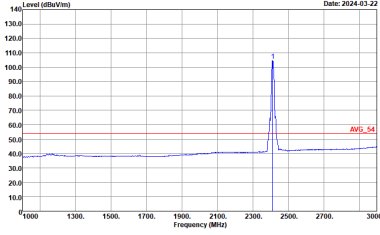


<Sample 1>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

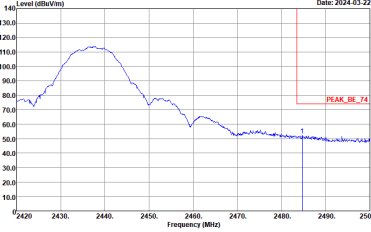
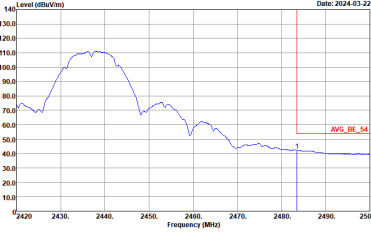
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto
Avg.		

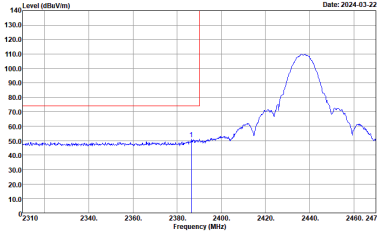
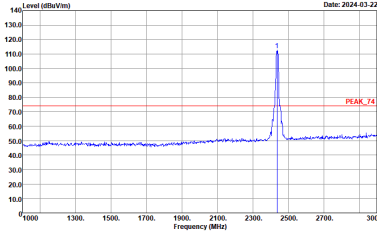
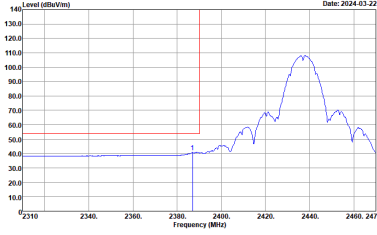
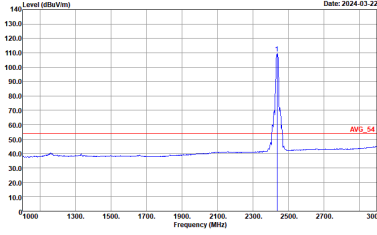


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
0+1	Horizontal	Fundamental
Peak	Site : 03CH20-HY Condition : PEAK_85_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH20-HY Condition : AVG_85_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

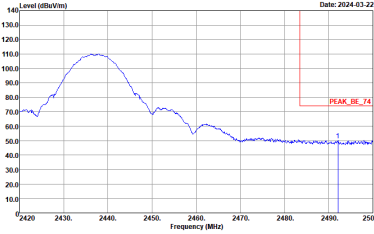
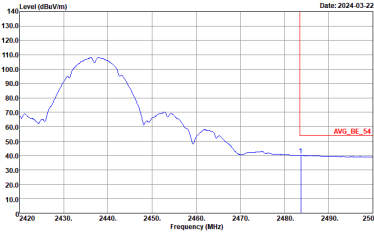


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
0+1	Vertical	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 9120D_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH20-HY Condition : PEAK_74 3m 9120D_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 9120D_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH20-HY Condition : AVG_54 3m 9120D_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

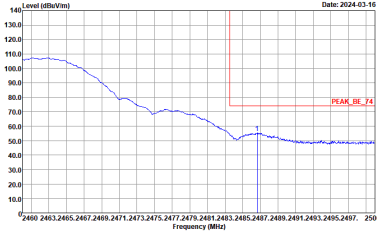
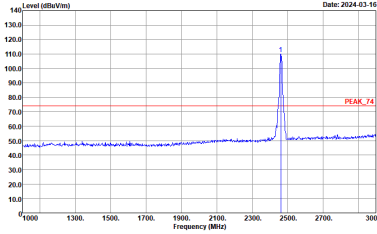
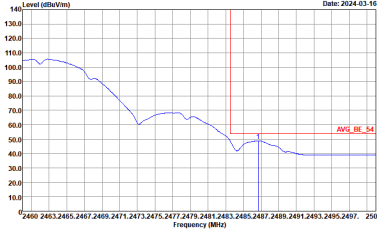
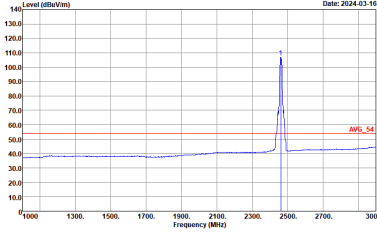


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
0+1	Vertical	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
0+1	Horizontal	Fundamental
Peak	Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

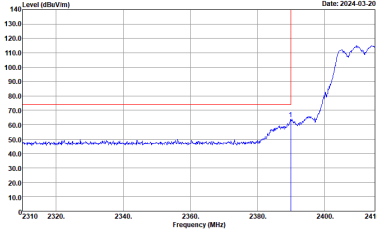
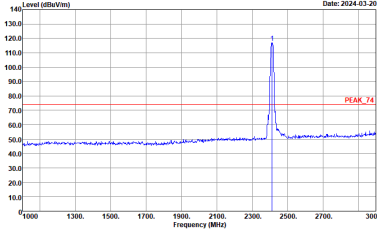
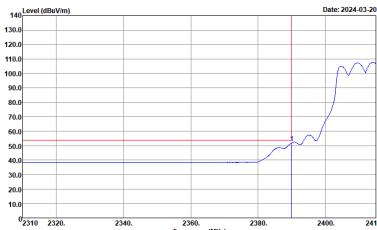
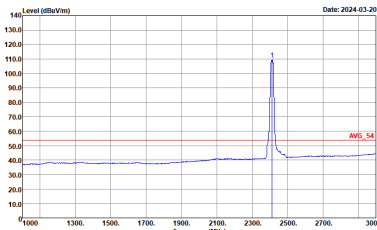


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

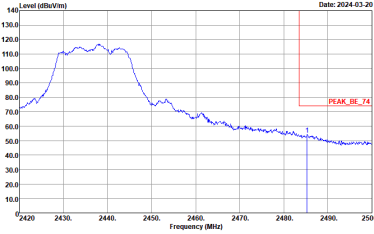
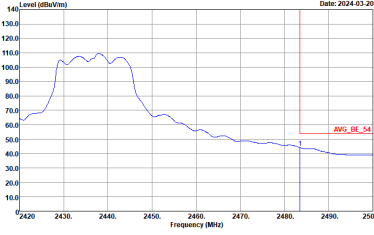


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
0+1	Vertical	Fundamental
Peak	Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
0+1	Horizontal	Fundamental
Peak	Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto

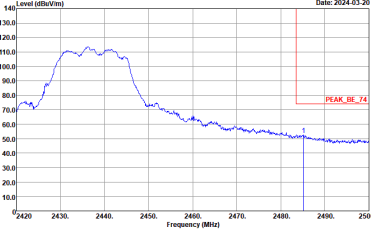
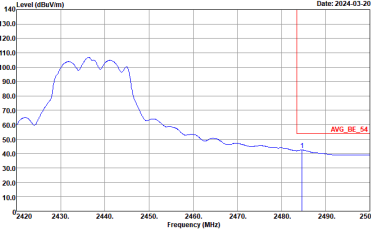


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
0+1	Vertical	Fundamental
Peak	Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
0+1	Vertical	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left Blank
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left Blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
0+1	Horizontal	Fundamental
Peak	Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
0+1	Vertical	Fundamental
Peak	Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH20-HY Condition : PEAK_F4 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Site : 03CH20-HY Condition : AVG_F4 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto



2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH01 2412MHz	
0+1	Horizontal	Fundamental
Peak	Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

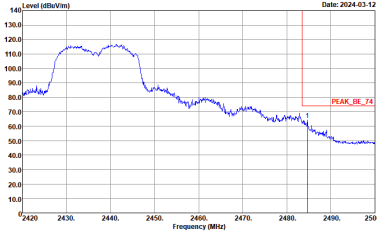
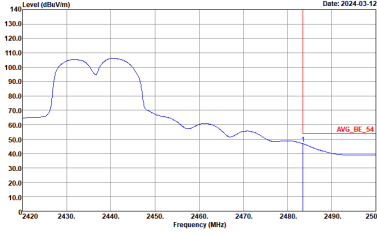


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH01 2412MHz	
0+1	Vertical	Fundamental
Peak	Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - L	
0+1	Horizontal	Fundamental
Peak	Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

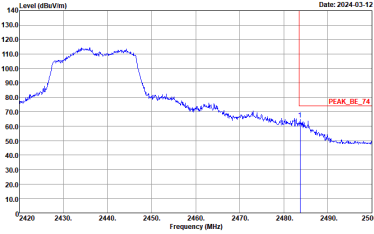
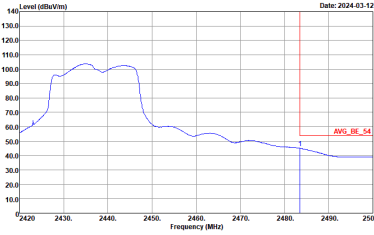


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - R	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

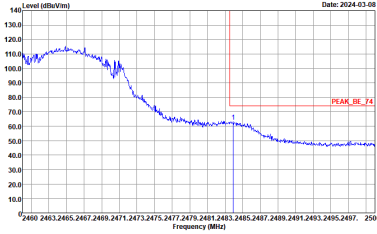
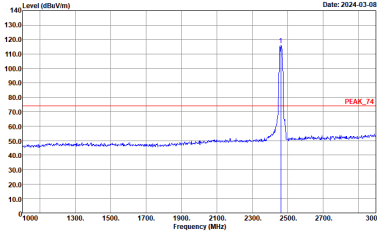
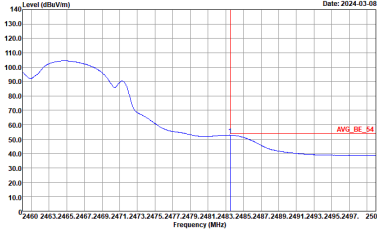
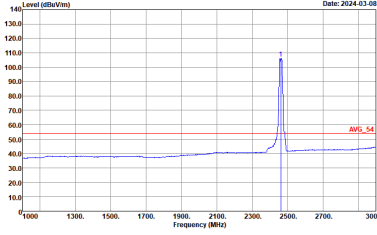


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - L	
0+1	Vertical	Fundamental
Peak	Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - R	
0+1	Vertical	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH11 2462MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

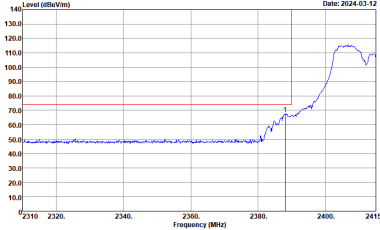
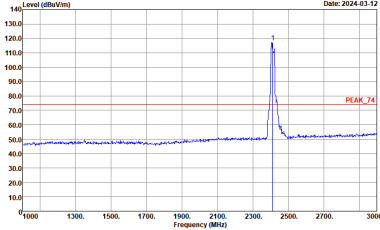
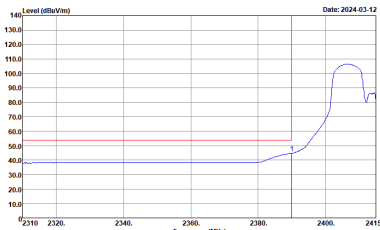
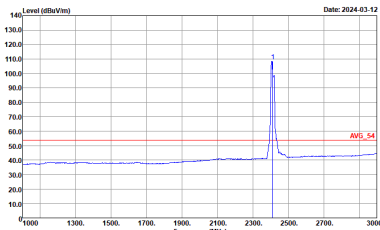


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH11 2462MHz	
0+1	Vertical	Fundamental
Peak	Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

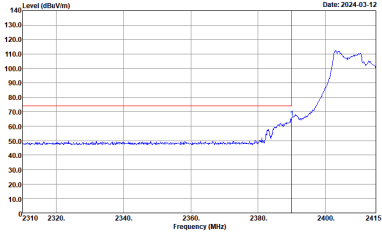
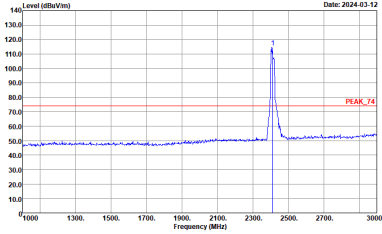
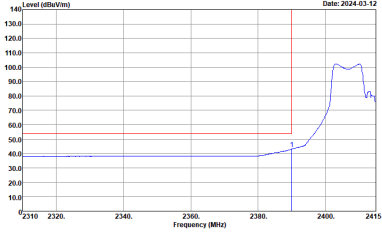
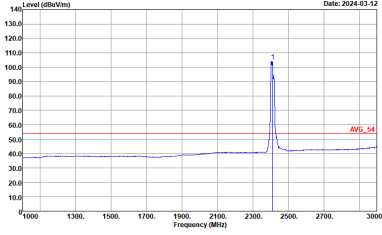


2.4GHz 2400~2483.5MHz

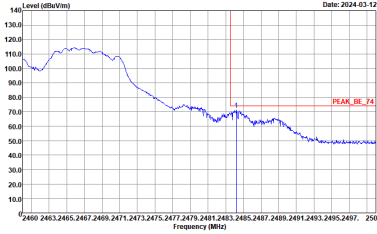
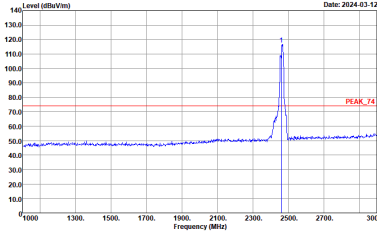
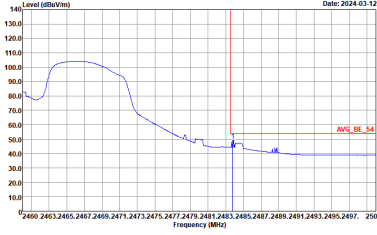
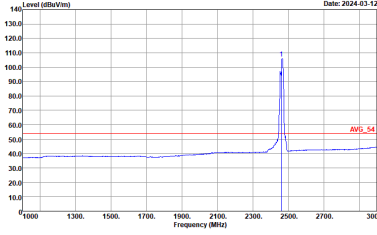
WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

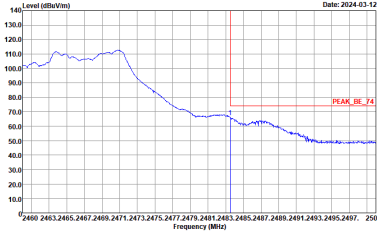
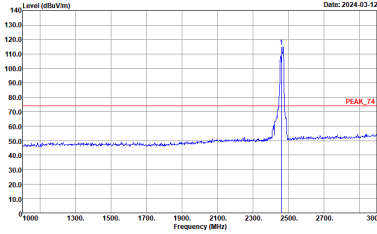
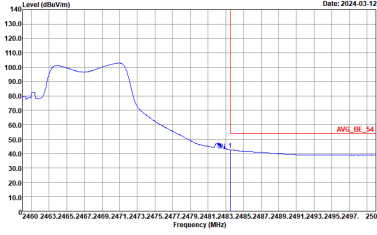
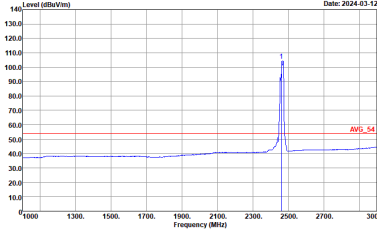
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH01 2412MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH01 2412MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto



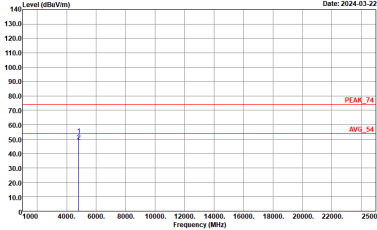
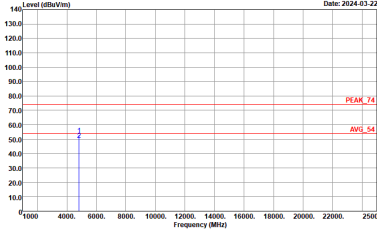
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH11 2462MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH11 2462MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto
Avg.		



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH20-HV Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL :	 Site : 03CH20-HV Condition : PEAK_74 3m 91200_02360_231030 VERTICAL :



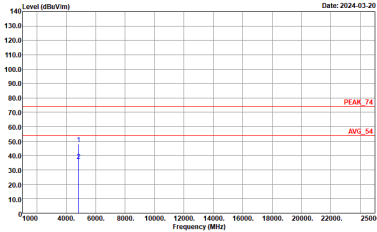
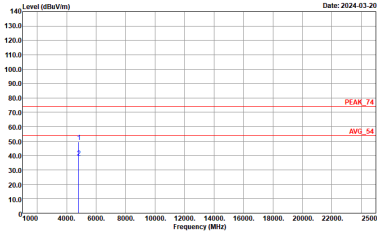
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
0+1	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2024-03-22 Site : 03CH20-14V Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL :	Level (dBuV/m) Date: 2024-03-22 Site : 03CH20-14V Condition : PEAK_74 3m 91200_02360_231030 VERTICAL :



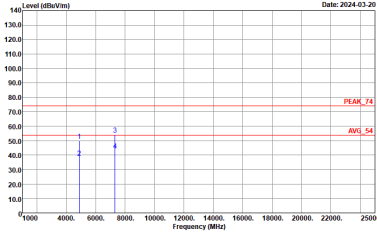
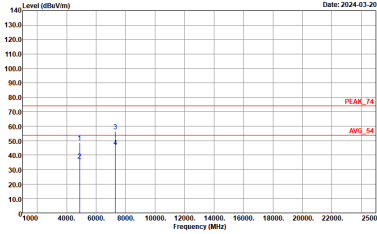
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
0+1	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2024-03-16 Site : 03CH20-11V Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL :	Level (dBuV/m) Date: 2024-03-16 Site : 03CH20-11V Condition : PEAK_74 3m 91200_02360_231030 VERTICAL :



2.4GHz 2400~2483.5MHz
WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL :	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 VERTICAL :



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH20-14Y Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL :	 Site : 03CH20-14Y Condition : PEAK_74 3m 91200_02360_231030 VERTICAL :

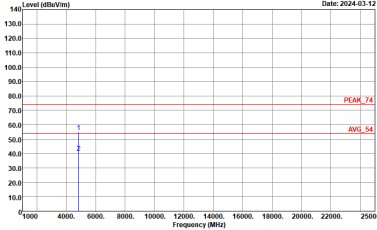
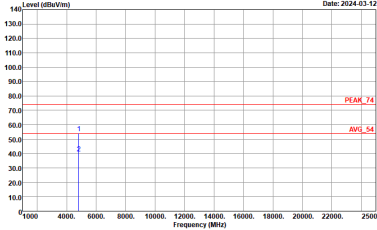


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
0+1	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2024-03-20 Site : 03CH20-14V Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL :	Level (dBuV/m) Date: 2024-03-20 Site : 03CH20-14V Condition : PEAK_74 3m 91200_02360_231030 VERTICAL :

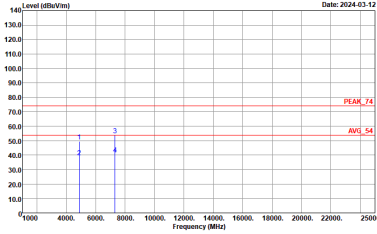
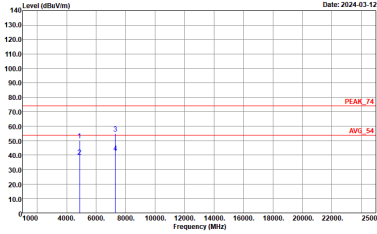


2.4GHz 2400~2483.5MHz

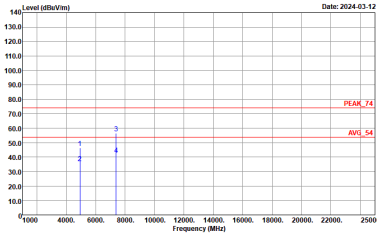
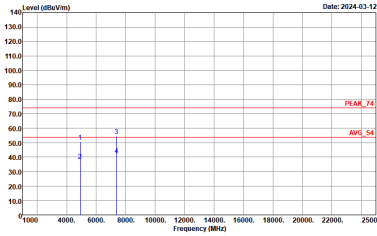
WIFI 802.11 ax HE20 Full (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH01 2412MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL :	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 VERTICAL :



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH06 2437MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH20-14Y Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL :	 Site : 03CH20-14Y Condition : PEAK_74 3m 91200_02360_231030 VERTICAL :

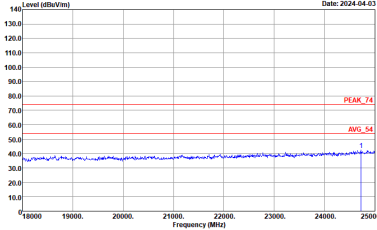
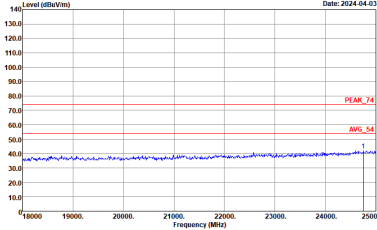


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH11 2462MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH20-14V Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL :	 Site : 03CH20-14V Condition : PEAK_74 3m 91200_02360_231030 VERTICAL :



Emission above 18GHz

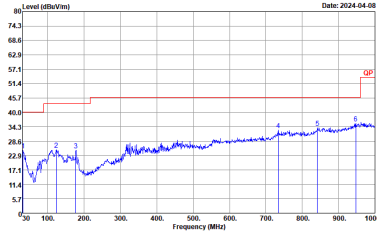
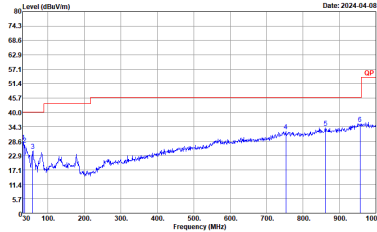
2.4GHz WIFI 802.11ax HE20 Full (SHF @ 1m)

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11ax HE20 Full SHF	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH20-HY Condition : PEAK_74 1m SHF_1224_230710 HORIZONTAL :	 Site : 03CH20-HY Condition : PEAK_74 1m SHF_1224_230710 VERTICAL :



Emission above 18GHz

2.4GHz WIFI 802.11ax HE20 Full (LF)

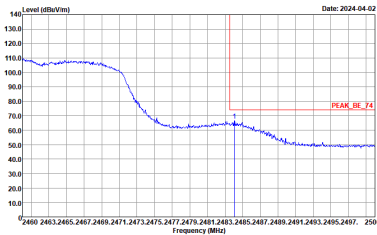
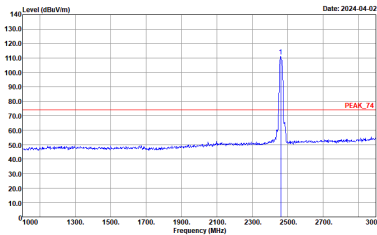
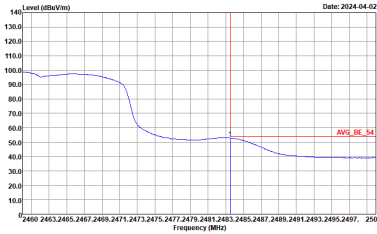
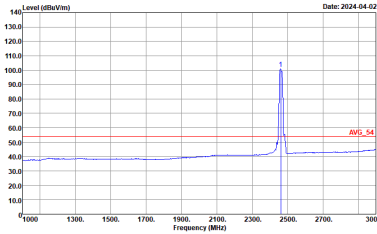
WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11ax HE20 Full LF	
0+1	Horizontal	Vertical
QP / Peak	 Site : 03CH20-HV Condition : QP-3m LF_55606_231020_200 HORIZONTAL :	 Site : 03CH20-HV Condition : QP-3m LF_55606_231020_200 VERTICAL :



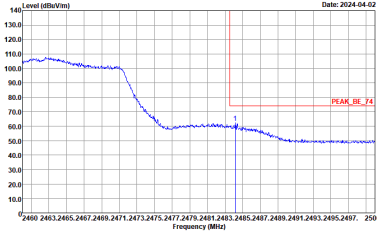
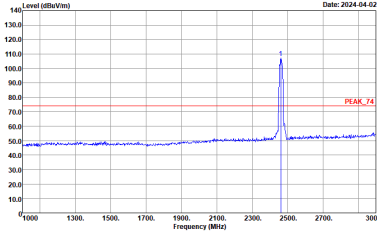
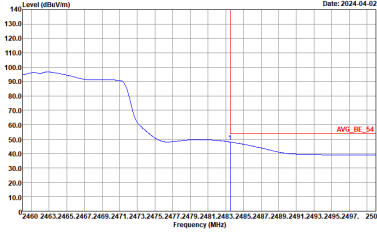
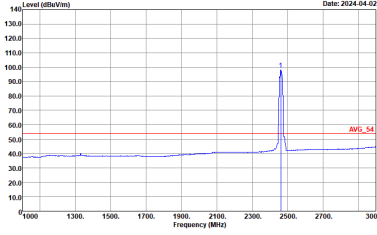
<Sample 2>

2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH11 2462MHz	
0+1	Horizontal	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

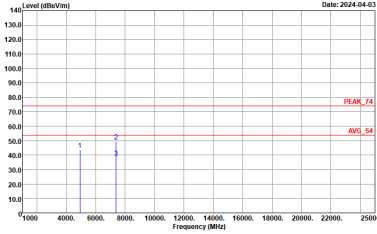
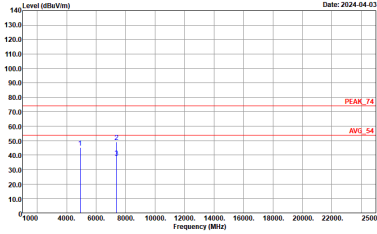


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH11 2462MHz	
0+1	Vertical	Fundamental
Peak	 Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH20-HY Condition : PEAK_74 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH20-HY Condition : AVG_54 3m 91200_02360_231030 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto



2.4GHz 2400~2483.5MHz

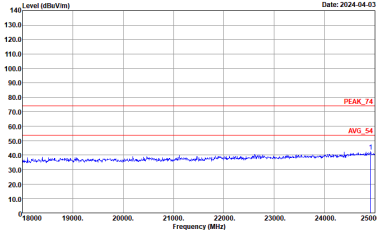
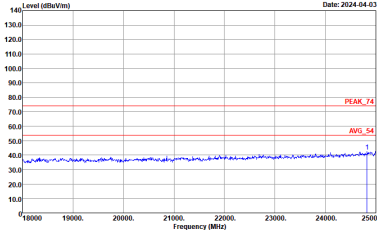
WIFI 802.11 ax HE20 Full (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH11 2462MHz	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH20-HY Condition : PEAK_74 3m 9120D_02360_231030 HORIZONTAL :	 Site : 03CH20-HY Condition : PEAK_74 3m 9120D_02360_231030 VERTICAL :



Emission above 18GHz

2.4GHz WIFI 802.11ax HE20 Full (SHF @ 1m)

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11ax HE20 Full SHF	
0+1	Horizontal	Vertical
Peak Avg.	 Site : 03CH20-HY Condition : PEAK_74 1m SHF_1224_230710 HORIZONTAL ..	 Site : 03CH20-HY Condition : PEAK_74 1m SHF_1224_230710 VERTICAL ..



Emission below 1GHz

2.4GHz WIFI 802.11ax HE20 Full (LF)

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11ax HE20 Full LF	
0+1	Horizontal	Vertical
QP / Peak	Level (dBuV/m) Date: 2024-04-09 Site : 03CH20-HY Condition : QP 3m LF_55606_231020_200 HORIZONTAL :	Level (dBuV/m) Date: 2024-04-09 Site : 03CH20-HY Condition : QP 3m LF_55606_231020_200 VERTICAL :

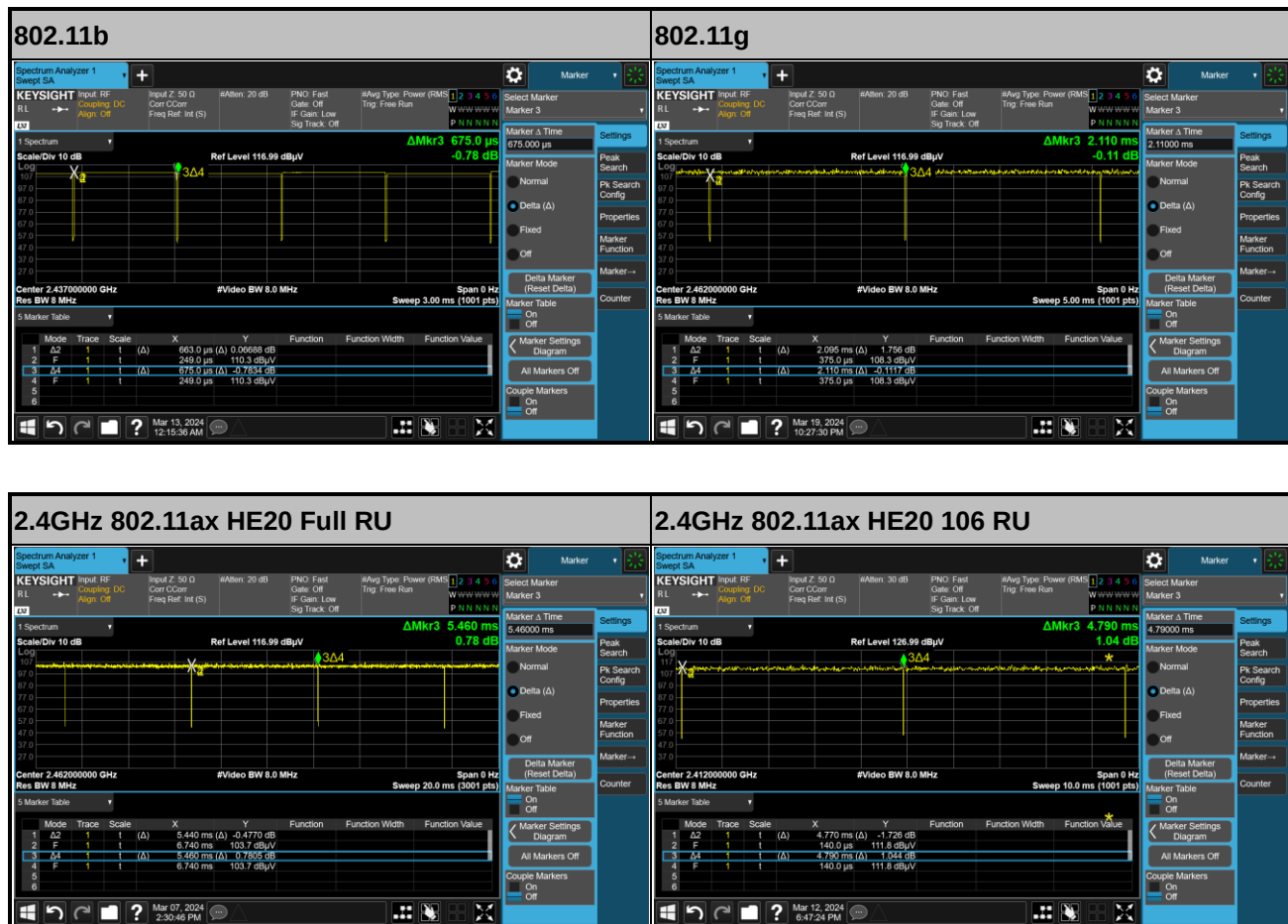


Appendix E. Duty Cycle Plots

<Sample 1>

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
0+1	802.11b	98.22	-	-	10Hz
0+1	802.11g	99.29	-	-	10Hz
0+1	2.4GHz 802.11ax HE20 Full RU	99.63	-	-	10Hz
0+1	2.4GHz 802.11ax HE20 106 RU	99.58	-	-	10Hz

MIMO <Ant. 0+1>





<Sample 2>

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
0+1	2.4GHz 802.11ax HE20 Full RU	99.72	-	-	10Hz

MIMO <Ant. 0+1>

