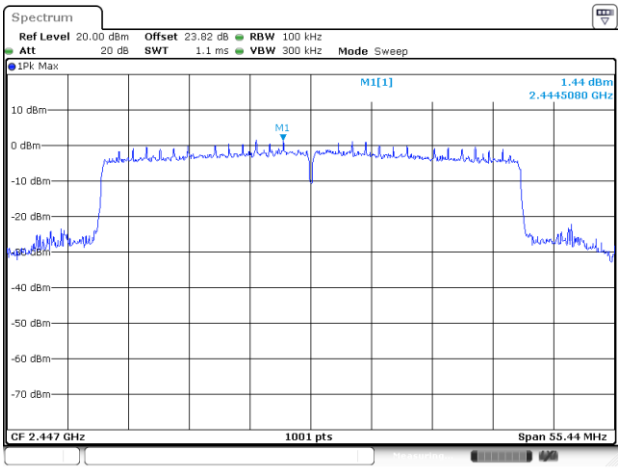
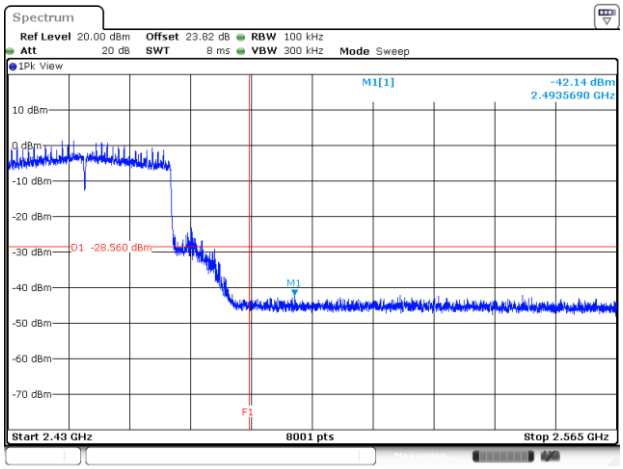
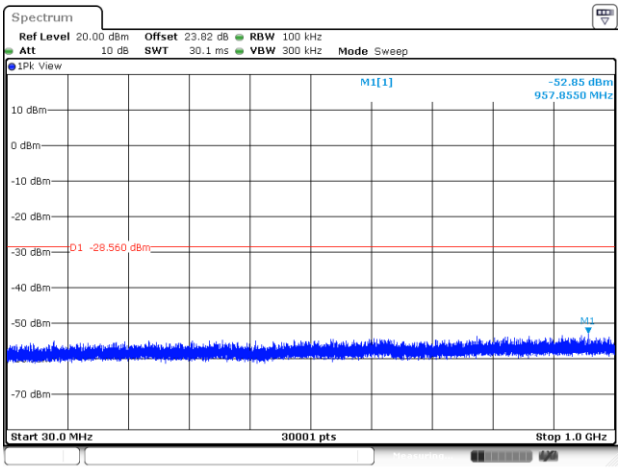
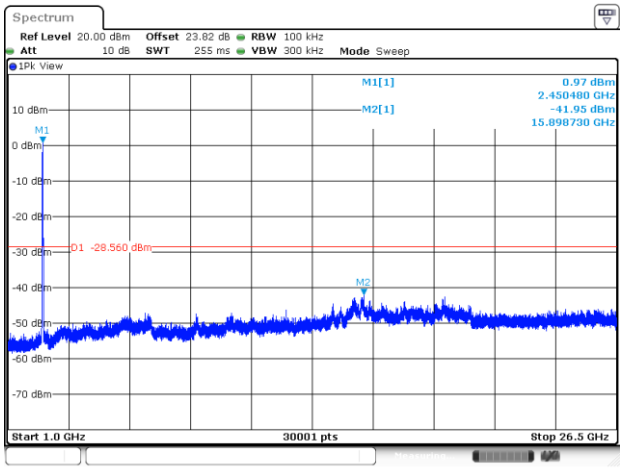
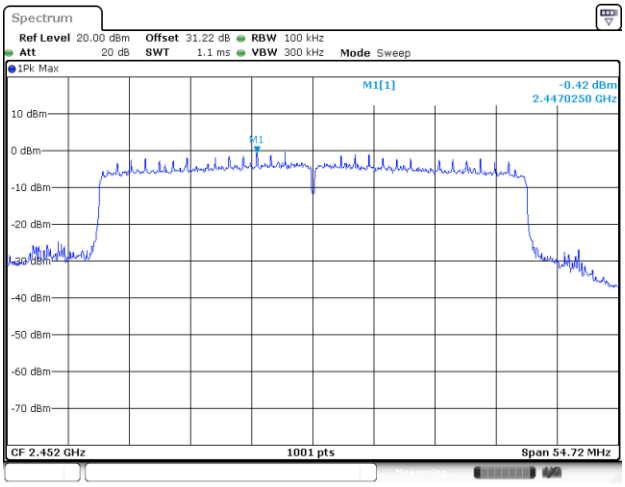
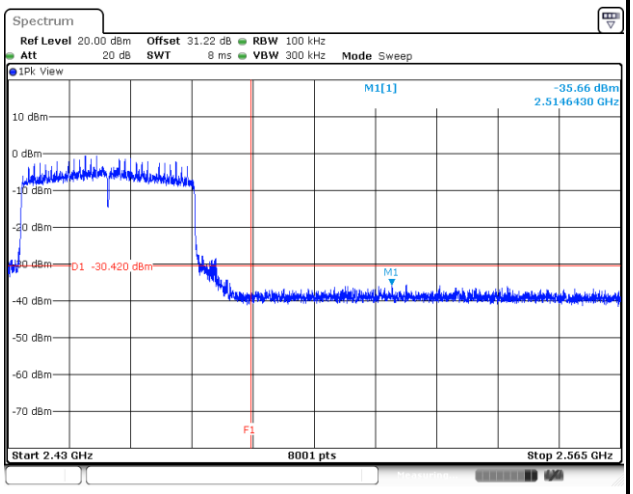
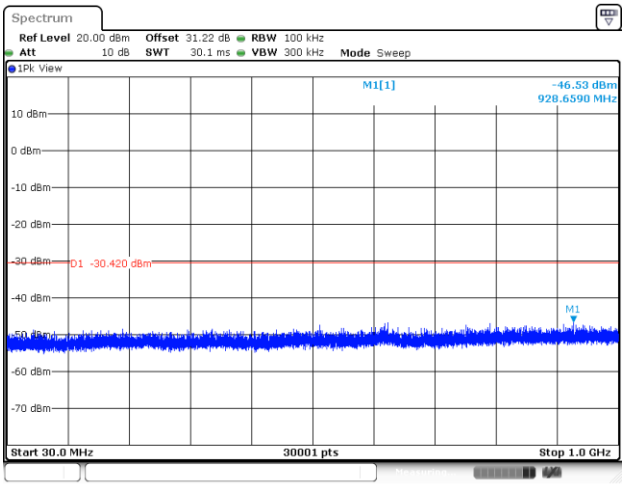
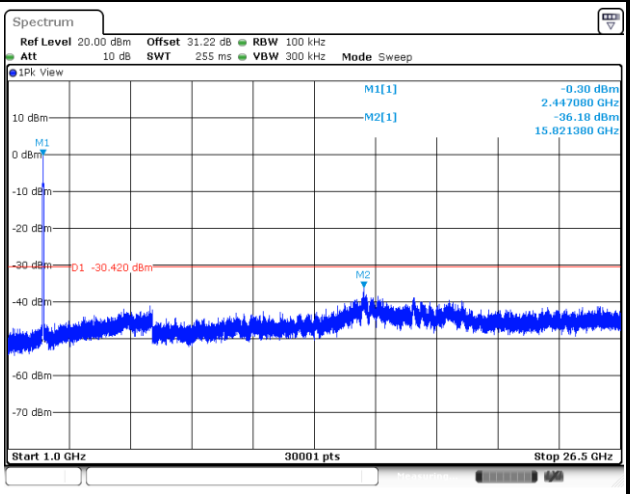
Test Mode :	802.11ax HE40	Test Channel :	08

100kHz PSD reference Level	High Channel Plot
	
Spurious Emission 30MHz~1GHz	**Spurious Emission 1GHz~26.5GHz**
	

Test Mode :	802.11ax HE40	Test Channel :	09

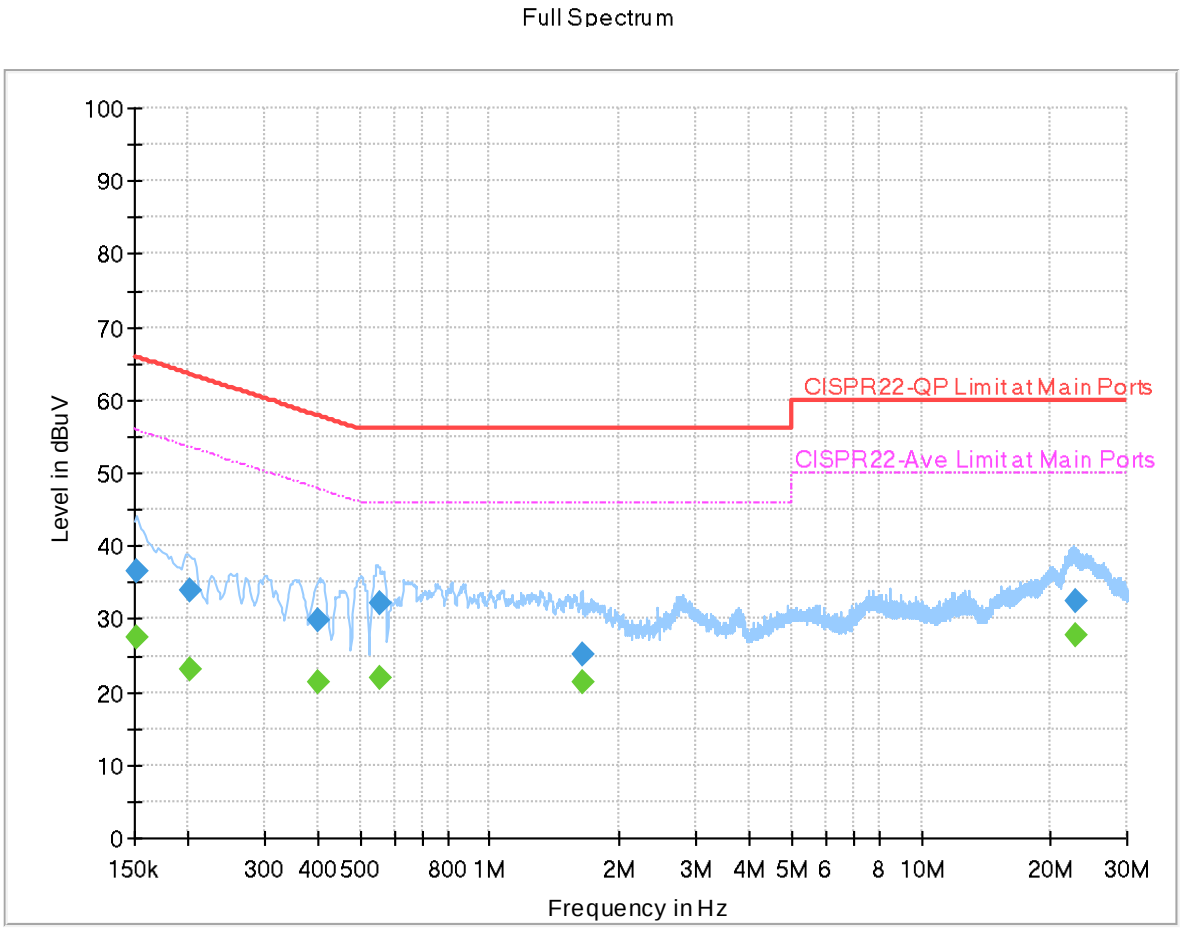
100kHz PSD reference Level	High Channel Plot
	
Date: 6.OCT.2023 10:21:16	Date: 6.OCT.2023 10:22:01
Spurious Emission 30MHz~1GHz	**Spurious Emission 1GHz~26.5GHz**
	
Date: 6.OCT.2023 10:21:34	Date: 6.OCT.2023 10:21:50

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Louis Chung	**Temperature :**	23.3~26.7℃
		Relative Humidity :	54.5~61.2%

EUT Information

Report NO :	392037
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

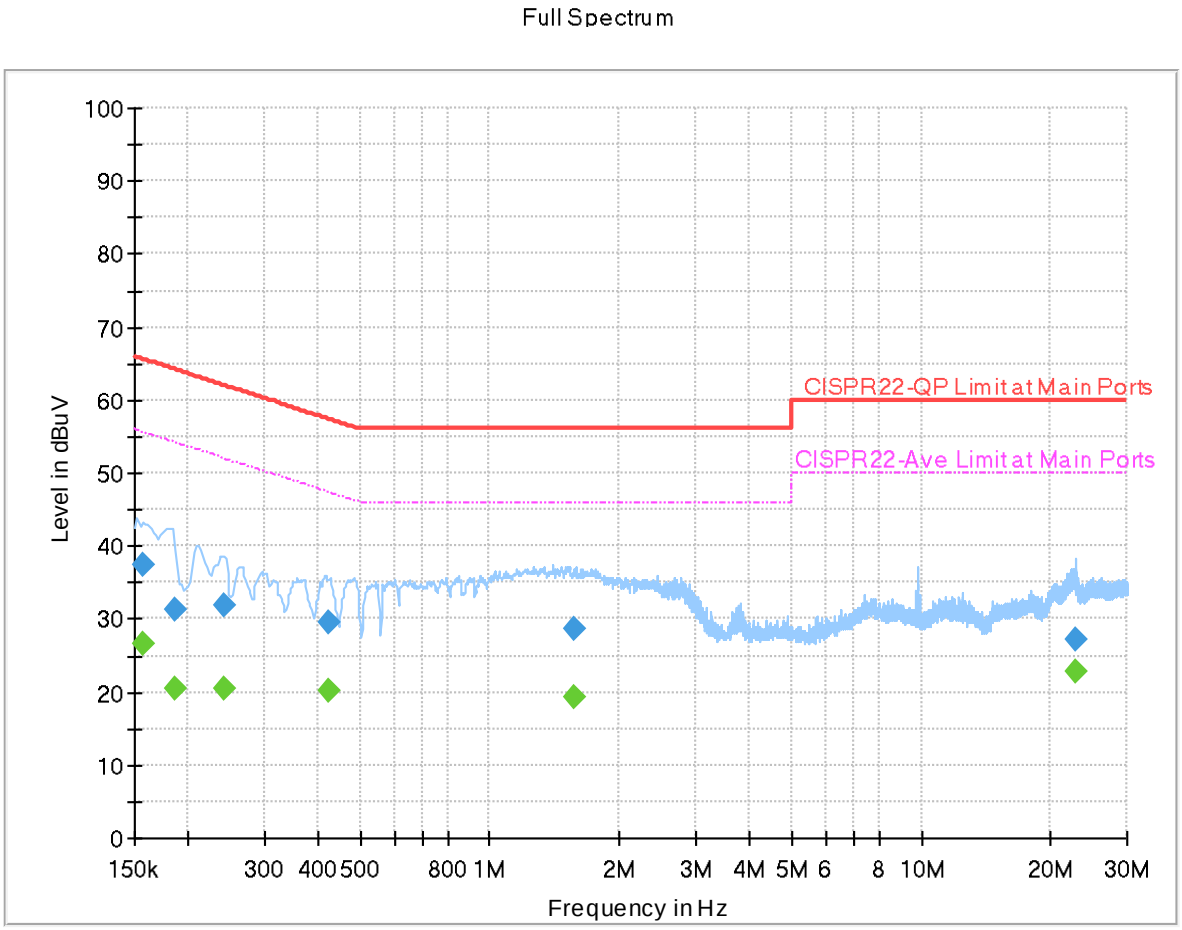


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.151688	---	27.49	55.91	28.42	L1	OFF	19.9
0.151688	36.46	---	65.91	29.45	L1	OFF	19.9
0.201390	---	23.24	53.55	30.31	L1	OFF	19.9
0.201390	34.04	---	63.55	29.51	L1	OFF	19.9
0.401910	---	21.23	47.81	26.58	L1	OFF	20.0
0.401910	29.69	---	57.81	28.12	L1	OFF	20.0
0.553110	---	21.80	46.00	24.20	L1	OFF	20.0
0.553110	32.05	---	56.00	23.95	L1	OFF	20.0
1.633110	---	21.35	46.00	24.65	L1	OFF	20.0
1.633110	25.24	---	56.00	30.76	L1	OFF	20.0
22.929000	---	27.79	50.00	22.21	L1	OFF	20.2
22.929000	32.56	---	60.00	27.44	L1	OFF	20.2

EUT Information

Report NO :	392037
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)
0.156750	---	26.63	55.63	29.00	N	OFF	19.9
0.156750	37.50	---	65.63	28.13	N	OFF	19.9
0.186450	---	20.45	54.19	33.74	N	OFF	19.9
0.186450	31.41	---	64.19	32.78	N	OFF	19.9
0.240990	---	20.41	52.06	31.65	N	OFF	19.9
0.240990	31.96	---	62.06	30.10	N	OFF	19.9
0.423330	---	20.28	47.38	27.10	N	OFF	20.0
0.423330	29.46	---	57.38	27.92	N	OFF	20.0
1.572000	---	19.18	46.00	26.82	N	OFF	20.0
1.572000	28.65	---	56.00	27.35	N	OFF	20.0
22.946100	---	22.89	50.00	27.11	N	OFF	20.2
22.946100	27.31	---	60.00	32.69	N	OFF	20.2

Appendix C. Radiated Spurious Emission

Test Engineer :	Jack Tsai, Gary Guo, and Steven Wu	Temperature :	20~25°C
		Relative Humidity :	50~65%

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Margin	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
17+6		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2313.465	55.52	-18.48	74	41.33	27.2	17.48	30.49	286	136	P	H
		2389.38	44.96	-9.04	54	30.43	27.39	17.61	30.47	286	136	A	H
	*	2412	108.86	-	-	94.26	27.42	17.64	30.46	286	136	P	H
	*	2412	105.83	-	-	91.23	27.42	17.64	30.46	286	136	A	H
													H
													H
		2389.17	56.58	-17.42	74	42.05	27.39	17.61	30.47	121	312	P	V
		2389.17	46.39	-7.61	54	31.86	27.39	17.61	30.47	121	312	A	V
	*	2412	109.46	-	-	94.86	27.42	17.64	30.46	121	312	P	V
	*	2412	106.6	-	-	92	27.42	17.64	30.46	121	312	A	V
													V
802.11b CH 06 2437MHz		2389.52	56.49	-17.51	74	41.95	27.4	17.61	30.47	100	63	P	H
		2389.94	44.84	-9.16	54	30.3	27.4	17.61	30.47	100	63	A	H
	*	2437	109.81	-	-	95.01	27.6	17.65	30.45	100	63	P	H
	*	2437	106.66	-	-	91.86	27.6	17.65	30.45	100	63	A	H
		2497.62	55.46	-18.54	74	40.41	27.8	17.68	30.43	100	63	P	H
		2488.03	45.31	-8.69	54	30.28	27.78	17.68	30.43	100	63	A	H
		2320.36	55.49	-18.51	74	41.29	27.2	17.49	30.49	103	118	P	V
		2389.94	45.46	-8.54	54	30.92	27.4	17.61	30.47	103	118	A	V
	*	2437	113.89	-	-	99.09	27.6	17.65	30.45	103	118	P	V
	*	2437	110.72	-	-	95.92	27.6	17.65	30.45	103	118	A	V
		2497.41	56	-18	74	40.95	27.8	17.68	30.43	103	118	P	V
		2488.24	45.46	-8.54	54	30.43	27.78	17.68	30.43	103	118	A	V

WIFI Ant. 17+6	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)
802.11b CH 11 2462MHz	*	2462	108.71	-	-	93.89	27.6	17.66	30.44	114	360	P	H
	*	2462	105.62	-	-	90.8	27.6	17.66	30.44	114	360	A	H
		2492.12	56.59	-17.41	74	41.54	27.8	17.68	30.43	114	360	P	H
		2487.84	46.05	-7.95	54	31.02	27.78	17.68	30.43	114	360	A	H
													H
													H
	*	2462	113.65	-	-	98.81	27.62	17.66	30.44	100	102	P	V
	*	2462	110.52	-	-	95.68	27.62	17.66	30.44	100	102	A	V
		2486.12	56.74	-17.26	74	41.73	27.76	17.68	30.43	100	102	P	V
		2484.76	46.09	-7.91	54	31.09	27.75	17.68	30.43	100	102	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 802.11b (Harmonic @ 3m)

WIFI Ant. 17+6	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)
802.11b CH 01 2412MHz		4824	37.63	-36.37	74	60.66	32.44	11.17	66.64	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		4824	37.96	-36.04	74	60.99	32.44	11.17	66.64	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 17+6	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)
802.11b CH 06 2437MHz		4874	46.78	-27.22	74	69.42	32.65	11.3	66.59	272	296	P	H
		4874	43.06	-10.94	54	65.7	32.65	11.3	66.59	272	296	A	H
		7311	47.22	-26.78	74	62.87	36.88	13.8	66.33	100	326	P	H
		7311	40.29	-13.71	54	55.94	36.88	13.8	66.33	100	326	A	H
													H
													H
													H
													H
													H
													H
													H
													H
		4874	45.36	-28.64	74	68	32.65	11.3	66.59	330	327	P	V
		4874	42.48	-11.52	54	65.12	32.65	11.3	66.59	330	327	A	V
		7311	44.83	-29.17	74	60.48	36.88	13.8	66.33	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 17+6	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)
802.11b CH 11 2462MHz		4924	48.07	-25.93	74	70.42	32.75	11.44	66.54	100	1	P	H
		4924	45.45	-8.55	54	67.8	32.75	11.44	66.54	100	1	A	H
		7386	44.08	-29.92	74	59.96	36.66	13.82	66.36	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		4924	48.42	-25.58	74	70.77	32.75	11.44	66.54	305	328	P	V
		4924	45.48	-8.52	54	67.83	32.75	11.44	66.54	305	328	A	V
		7386	44.3	-29.7	74	60.18	36.66	13.82	66.36	-	-	P	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.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI Ant. 17+6	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)
802.11g CH 01 2412MHz		2388.855	57.26	-16.74	74	42.73	27.39	17.61	30.47	300	63	P	H
		2389.905	47.53	-6.47	54	32.99	27.4	17.61	30.47	300	63	A	H
	*	2412	108.36	-	-	93.76	27.42	17.64	30.46	300	63	P	H
	*	2412	101.51	-	-	86.91	27.42	17.64	30.46	300	63	A	H
													H
													H
		2390	63.27	-10.73	74	48.73	27.4	17.61	30.47	140	314	P	V
		2390	49.76	-4.24	54	35.22	27.4	17.61	30.47	140	314	A	V
	*	2412	108.12	-	-	93.52	27.42	17.64	30.46	140	314	P	V
	*	2412	100.79	-	-	86.19	27.42	17.64	30.46	140	314	A	V
													V
													V
802.11g CH 06 2437MHz		2387.28	55.44	-18.56	74	40.93	27.37	17.61	30.47	356	56	P	H
		2388.82	45.65	-8.35	54	31.12	27.39	17.61	30.47	356	56	A	H
	*	2437	111.27	-	-	96.47	27.6	17.65	30.45	356	56	P	H
	*	2437	103.13	-	-	88.33	27.6	17.65	30.45	356	56	A	H
		2486.49	56.75	-17.25	74	41.74	27.76	17.68	30.43	356	56	P	H
		2483.5	47.03	-6.97	54	32.05	27.74	17.68	30.44	356	56	A	H
		2389.8	56.51	-17.49	74	41.97	27.4	17.61	30.47	103	116	P	V
		2389.1	46.75	-7.25	54	32.22	27.39	17.61	30.47	103	116	A	V
	*	2437	115.02	-	-	100.22	27.6	17.65	30.45	103	116	P	V
	*	2437	108.01	-	-	93.21	27.6	17.65	30.45	103	116	A	V
		2484.39	56.69	-17.31	74	41.7	27.74	17.68	30.43	103	116	P	V
		2483.76	47.49	-6.51	54	32.51	27.74	17.68	30.44	103	116	A	V

WIFI Ant. 17+6	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)
802.11g CH 11 2462MHz	*	2462	109.05	-	-	94.18	27.64	17.67	30.44	110	360	P	H
	*	2462	101.9	-	-	87.03	27.64	17.67	30.44	110	360	A	H
		2483.72	61.59	-12.41	74	46.61	27.74	17.68	30.44	110	360	P	H
		2483.68	48.21	-5.79	54	33.23	27.74	17.68	30.44	110	360	A	H
													H
													H
	*	2462	113.6	-	-	98.76	27.62	17.66	30.44	100	81	P	V
	*	2462	105.64	-	-	90.8	27.62	17.66	30.44	100	81	A	V
		2483.56	62.14	-11.86	74	47.16	27.74	17.68	30.44	100	81	P	V
		2483.52	49.6	-4.4	54	34.62	27.74	17.68	30.44	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 802.11g (Harmonic @ 3m)

WIFI Ant. 17+6	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)
802.11g CH 01 2412MHz		4824	39.58	-34.42	74	62.61	32.44	11.17	66.64	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		4824	39	-35	74	62.03	32.44	11.17	66.64	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 17+6	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)
802.11g CH 06 2437MHz		4874	47.38	-26.62	74	70.02	32.65	11.3	66.59	100	66	P	H
		4874	37.28	-16.72	54	59.92	32.65	11.3	66.59	100	66	A	H
		7311	47.05	-26.95	74	62.7	36.88	13.8	66.33	100	360	P	H
		7311	35.19	-18.81	54	50.84	36.88	13.8	66.33	100	360	A	H
													H
													H
													H
													H
													H
													H
													H
													H
		4874	44.59	-29.41	74	67.23	32.65	11.3	66.59	345	397	P	V
		4874	34.34	-19.66	54	56.98	32.65	11.3	66.59	345	397	A	V
		7311	45.77	-28.23	74	61.42	36.88	13.8	66.33	216	4	P	V
		7311	35.11	-18.89	54	50.76	36.88	13.8	66.33	216	4	A	V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 17+6	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)
802.11g CH 11 2462MHz		4924	46.14	-27.86	74	68.49	32.75	11.44	66.54	100	72	P	H
		4924	37.49	-16.51	54	59.84	32.75	11.44	66.54	100	72	A	H
		7386	45.27	-28.73	74	61.15	36.66	13.82	66.36	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		4924	43.93	-30.07	74	66.28	32.75	11.44	66.54	100	352	P	V
		4924	34.89	-19.11	54	57.24	32.75	11.44	66.54	100	352	A	V
		7386	43.88	-30.12	74	59.76	36.66	13.82	66.36	-	-	P	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.

2.4GHz 2400~2483.5MHz

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

WIFI Ant. 17+6	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)
		2388.96	58.02	-15.98	74	43.49	27.39	17.61	30.47	300	135	P	H
		2390	47.69	-6.31	54	33.15	27.4	17.61	30.47	300	135	A	H
	*	2412	104.28	-	-	89.68	27.42	17.64	30.46	300	135	P	H
	*	2412	97.3	-	-	82.7	27.42	17.64	30.46	300	135	A	H
802.11ax													H
HE20 Full													H
CH 01		2390.01	64.29	-85.71	150	49.75	27.4	17.61	30.47	111	314	P	V
2412MHz		2389.905	50.5	-3.5	54	35.96	27.4	17.61	30.47	111	314	A	V
	*	2412	106.61	-	-	92.01	27.42	17.64	30.46	111	314	P	V
	*	2412	98.43	-	-	83.83	27.42	17.64	30.46	111	314	A	V
													V
													V
		2389.66	55.6	-18.4	74	41.06	27.4	17.61	30.47	400	56	P	H
		2389.24	45.79	-8.21	54	31.26	27.39	17.61	30.47	400	56	A	H
	*	2437	107	-	-	92.2	27.6	17.65	30.45	400	56	P	H
	*	2437	98.45	-	-	83.65	27.6	17.65	30.45	400	56	A	H
802.11ax		2494.26	55.59	-18.41	74	40.54	27.8	17.68	30.43	400	56	P	H
HE20 Full		2485.02	46.76	-7.24	54	31.76	27.75	17.68	30.43	400	56	A	H
CH 06		2389.8	56.12	-17.88	74	41.58	27.4	17.61	30.47	103	116	P	V
2437MHz		2389.8	46.66	-7.34	54	32.12	27.4	17.61	30.47	103	116	A	V
	*	2437	114.72	-	-	99.92	27.6	17.65	30.45	103	116	P	V
	*	2437	105.16	-	-	90.36	27.6	17.65	30.45	103	116	A	V
		2490.34	56.81	-17.19	74	41.76	27.8	17.68	30.43	103	116	P	V
		2484.88	46.85	-7.15	54	31.85	27.75	17.68	30.43	103	116	A	V

WIFI Ant. 17+6	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)
	*	2462	107.02	-	-	92.18	27.62	17.66	30.44	357	54	P	H
	*	2462	99.21	-	-	84.37	27.62	17.66	30.44	357	54	A	H
		2486.28	59.83	-14.17	74	44.82	27.76	17.68	30.43	357	54	P	H
		2483.88	49.1	-4.9	54	34.12	27.74	17.68	30.44	357	54	A	H
802.11ax													H
HE20 Full													H
CH 11	*	2462	111.27	-	-	96.43	27.62	17.66	30.44	102	117	P	V
2462MHz	*	2462	103.17	-	-	88.33	27.62	17.66	30.44	102	117	A	V
		2485.88	60.34	-13.66	74	45.33	27.76	17.68	30.43	102	117	P	V
		2483.96	50.11	-3.89	54	35.13	27.74	17.68	30.44	102	117	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)

WIFI Ant. 17+6	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)
		4824	38.96	-35.04	74	61.99	32.44	11.17	66.64	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 01		4824	38.86	-35.14	74	61.89	32.44	11.17	66.64	-	-	P	V
2412MHz													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 17+6	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)
		4874	40.83	-33.17	74	63.47	32.65	11.3	66.59	-	-	P	H
		7311	48.75	-25.25	74	64.4	36.88	13.8	66.33	100	347	P	H
		7311	35.85	-18.15	54	51.5	36.88	13.8	66.33	100	347	A	H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 06		4874	44.31	-29.69	74	66.95	32.65	11.3	66.59	330	326	P	V
2437MHz		4874	34.39	-19.61	54	57.03	32.65	11.3	66.59	330	326	A	V
		7311	45.36	-28.64	74	61.01	36.88	13.8	66.33	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 17+6	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)
		4924	44.26	-29.74	74	66.61	32.75	11.44	66.54	114	73	P	H
		4924	34.65	-19.35	54	57	32.75	11.44	66.54	114	73	A	H
		7386	43.15	-30.85	74	59.03	36.66	13.82	66.36	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 11		4924	40.65	-33.35	74	63	32.75	11.44	66.54	-	-	P	V
2462MHz		7386	43.45	-30.55	74	59.33	36.66	13.82	66.36	-	-	P	V
													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.												

2.4GHz 2400~2483.5MHz

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

WIFI Ant. 17+6	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		2358.195	56.28	-17.72	74	42	27.2	17.56	30.48	302	61	P	H
		2390	45.32	-8.68	54	30.78	27.4	17.61	30.47	302	61	A	H
	*	2412	109.49	-	-	94.89	27.42	17.64	30.46	302	61	P	H
	*	2412	100.73	-	-	86.13	27.42	17.64	30.46	302	61	A	H
													H
													H
		2386.44	56.77	-17.23	74	42.27	27.36	17.61	30.47	115	305	P	V
		2390	45.74	-8.26	54	31.2	27.4	17.61	30.47	115	305	A	V
	*	2412	107.27	-	-	92.67	27.42	17.64	30.46	115	305	P	V
	*	2412	99.84	-	-	85.24	27.42	17.64	30.46	115	305	A	V
													V
													V
802.11ax HE20 Partial 106/54 CH 11 2462MHz	*	2462	107.95	-	-	93.11	27.62	17.66	30.44	400	45	P	H
	*	2462	100.04	-	-	85.2	27.62	17.66	30.44	400	45	A	H
		2484.8	56.98	-17.02	74	41.98	27.75	17.68	30.43	400	45	P	H
		2485.2	46.01	-7.99	54	31.01	27.75	17.68	30.43	400	45	A	H
													H
													H
	*	2462	112.83	-	-	97.99	27.62	17.66	30.44	100	76	P	V
	*	2462	102.68	-	-	87.84	27.62	17.66	30.44	100	76	A	V
		2487.44	57.97	-16.03	74	42.95	27.77	17.68	30.43	100	76	P	V
		2484.88	46.94	-7.06	54	31.94	27.75	17.68	30.43	100	76	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 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 17+6	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 HE40 Full CH 03 2422MHz		2389.38	56.72	-17.28	74	42.19	27.39	17.61	30.47	300	64	P	H
		2389.8	49.13	-4.87	54	34.59	27.4	17.61	30.47	300	64	A	H
	*	2422	103.25	-	-	88.54	27.52	17.64	30.45	300	64	P	H
	*	2422	94.91	-	-	80.2	27.52	17.64	30.45	300	64	A	H
		2485.93	55.34	-18.66	74	40.33	27.76	17.68	30.43	300	64	P	H
		2485.58	46.33	-7.67	54	31.32	27.76	17.68	30.43	300	64	A	H
		2389.94	60.47	-13.53	74	45.93	27.4	17.61	30.47	100	107	P	V
		2389.94	50.36	-3.64	54	35.82	27.4	17.61	30.47	100	107	A	V
	*	2422	106.23	-	-	91.52	27.52	17.64	30.45	100	107	P	V
	*	2422	96.85	-	-	82.14	27.52	17.64	30.45	100	107	A	V
		2484.18	55.12	-18.88	74	40.14	27.74	17.68	30.44	100	107	P	V
		2484.25	46.53	-7.47	54	31.55	27.74	17.68	30.44	100	107	A	V
802.11ax HE40 Full CH 04 2427MHz		2389.05	57.7	-16.3	74	43.17	27.39	17.61	30.47	100	342	P	H
		2389.5	49.58	-4.42	54	35.04	27.4	17.61	30.47	100	342	A	H
	*	2427	104.44	-	-	89.68	27.57	17.64	30.45	100	342	P	H
	*	2427	95.73	-	-	80.97	27.57	17.64	30.45	100	342	A	H
		2490.55	55.44	-18.56	74	40.39	27.8	17.68	30.43	100	342	P	H
		2491.09	46.42	-7.58	54	31.37	27.8	17.68	30.43	100	342	A	H
		2389.8	60.39	-13.61	74	45.85	27.4	17.61	30.47	100	302	P	V
		2389.95	50.22	-3.78	54	35.68	27.4	17.61	30.47	100	302	A	V
	*	2427	104.53	-	-	89.77	27.57	17.64	30.45	100	302	P	V
	*	2427	95.88	-	-	81.12	27.57	17.64	30.45	100	302	A	V
		2490.73	55	-19	74	39.95	27.8	17.68	30.43	100	302	P	V
		2486.95	46.62	-7.38	54	31.6	27.77	17.68	30.43	100	302	A	V

WIFI Ant. 17+6	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 HE40 Full CH 06 2437MHz		2389.66	60.37	-13.63	74	45.83	27.4	17.61	30.47	300	64	P	H
		2389.38	50.38	-3.62	54	35.85	27.39	17.61	30.47	300	64	A	H
	*	2437	106.2	-	-	91.4	27.6	17.65	30.45	300	64	P	H
	*	2437	97.82	-	-	83.02	27.6	17.65	30.45	300	64	A	H
		2484.32	59.78	-14.22	74	44.8	27.74	17.68	30.44	300	64	P	H
		2484.74	48.5	-5.5	54	33.5	27.75	17.68	30.43	300	64	A	H
		2389.94	61.44	-12.56	74	46.9	27.4	17.61	30.47	100	116	P	V
		2389.52	50.7	-3.3	54	36.16	27.4	17.61	30.47	100	116	A	V
	*	2437	108.63	-	-	93.83	27.6	17.65	30.45	100	116	P	V
	*	2437	101.18	-	-	86.38	27.6	17.65	30.45	100	116	A	V
		2484.88	61.81	-12.19	74	46.81	27.75	17.68	30.43	100	116	P	V
		2484.74	50.56	-3.44	54	35.56	27.75	17.68	30.43	100	116	A	V
802.11ax HE40 Full CH 08 2447MHz		2381.55	55.04	-18.96	74	40.59	27.32	17.6	30.47	254	53	P	H
		2389.8	45.66	-8.34	54	31.12	27.4	17.61	30.47	254	53	A	H
	*	2447	104.37	-	-	89.56	27.6	17.66	30.45	254	53	P	H
	*	2447	96.52	-	-	81.71	27.6	17.66	30.45	254	53	A	H
		2483.53	58.95	-15.05	74	43.97	27.74	17.68	30.44	254	53	P	H
		2484.52	48.94	-5.06	54	33.94	27.75	17.68	30.43	254	53	A	H
		2389.8	54.93	-19.07	74	40.39	27.4	17.61	30.47	100	60	P	V
		2388.9	46.41	-7.59	54	31.88	27.39	17.61	30.47	100	60	A	V
	*	2447	107.07	-	-	92.26	27.6	17.66	30.45	100	60	P	V
	*	2447	99.63	-	-	84.82	27.6	17.66	30.45	100	60	A	V
		2483.53	62.14	-11.86	74	47.16	27.74	17.68	30.44	100	60	P	V
		2484.61	50.64	-3.36	54	35.64	27.75	17.68	30.43	100	60	A	V

WIFI Ant. 17+6	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 HE40 Full CH 09 2452MHz		2376.64	55.41	-18.59	74	41.02	27.27	17.59	30.47	115	360	P	H
		2388.82	45.69	-8.31	54	31.16	27.39	17.61	30.47	115	360	A	H
	*	2452	103.43	-	-	88.62	27.6	17.66	30.45	115	360	P	H
	*	2452	94.65	-	-	79.84	27.6	17.66	30.45	115	360	A	H
		2484.11	58.47	-15.53	74	43.49	27.74	17.68	30.44	115	360	P	H
		2484.04	49.19	-4.81	54	34.21	27.74	17.68	30.44	115	360	A	H
		2379.72	54.82	-19.18	74	40.4	27.3	17.59	30.47	100	118	P	V
		2389.94	45.79	-8.21	54	31.25	27.4	17.61	30.47	100	118	A	V
	*	2452	106.26	-	-	91.45	27.6	17.66	30.45	100	118	P	V
	*	2452	97.93	-	-	83.12	27.6	17.66	30.45	100	118	A	V
		2483.55	60.88	-13.12	74	45.9	27.74	17.68	30.44	100	118	P	V
		2483.97	50.9	-3.1	54	35.92	27.74	17.68	30.44	100	118	A	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 HE40 Full (Harmonic @ 3m)

WIFI Ant. 17+6	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)
		4844	38.53	-35.47	74	61.37	32.56	11.22	66.62	-	-	P	H
		7266	44.26	-29.74	74	59.75	37.04	13.78	66.31	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE40 Full													H
CH 03		4844	38.65	-35.35	74	61.49	32.56	11.22	66.62	-	-	P	V
2422MHz		7266	44.35	-29.65	74	59.84	37.04	13.78	66.31	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 17+6	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)
		4854	39.15	-34.85	74	61.9	32.61	11.25	66.61	-	-	P	H
		7281	52.22	-21.78	74	67.76	36.98	13.79	66.31	232	343	P	H
		7281	42.35	-11.65	54	57.89	36.98	13.79	66.31	232	343	A	H
													H
													H
													H
													H
													H
													H
													H
I802.11ax													H
HE40 Full													H
CH 04		4854	39.81	-34.19	74	62.56	32.61	11.25	66.61	-	-	P	V
2427MHz		7281	51.09	-22.91	74	66.63	36.98	13.79	66.31	119	26	P	V
		7281	41.3	-12.7	54	56.84	36.98	13.79	66.31	119	26	A	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 17+6	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)
		4874	43.67	-30.33	74	66.31	32.65	11.3	66.59	100	67	P	H
		4874	34.14	-19.86	54	56.78	32.65	11.3	66.59	100	67	A	H
		7311	43.63	-30.37	74	59.28	36.88	13.8	66.33	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
I802.11ax													H
HE40 Full													H
CH 06		4874	40.11	-33.89	74	62.75	32.65	11.3	66.59	-	-	P	V
2437MHz		7311	44.53	-29.47	74	60.18	36.88	13.8	66.33	-	-	P	V
													V
													V
													V
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WIFI Ant. 17+6	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)
		4894	38.83	-35.17	74	61.36	32.69	11.35	66.57	-	-	P	H
		7341	52.7	-21.3	74	68.41	36.82	13.81	66.34	299	320	P	H
		7341	42.17	-11.83	54	57.88	36.82	13.81	66.34	299	320	A	H
													H
													H
													H
													H
													H
													H
													H
I802.11ax													H
HE40 Full													H
CH 08		4894	40.15	-33.85	74	62.68	32.69	11.35	66.57	-	-	P	V
2447MHz		7341	49.07	-24.93	74	64.78	36.82	13.81	66.34	100	28	P	V
		7341	39.17	-14.83	54	54.88	36.82	13.81	66.34	100	28	A	V
													V
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													V

WIFI Ant. 17+6	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)
		4904	39.34	-34.66	74	61.8	32.71	11.39	66.56	-	-	P	H
		7356	43.6	-30.4	74	59.36	36.78	13.81	66.35	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE40 Full													H
CH 09		4904	39.87	-34.13	74	62.33	32.71	11.39	66.56	-	-	P	V
2452MHz		7356	43.97	-30.03	74	59.73	36.78	13.81	66.35	-	-	P	V
													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 above 18GHz

2.4GHz WIFI 802.11ax HE40 (SHF)

WIFI Ant.	Note	Frequency	Level	Margin	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
17+6		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11ax HE40 SHF		24685	40.12	-33.88	74	56.45	39.63	-2.53	53.43	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		24482	40.41	-33.59	74	56.78	39.63	-2.49	53.51	-	-	P	V
													V
													V
													V
													V
													V
													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 with sufficient margin against limit line or noise floor only.

Emission below 1GHz

2.4GHz WIFI 802.11ax HE40 (LF)

WIFI Ant. 17+6	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)
2.4GHz 802.11ax HE40 LF		30.27	21.41	-18.59	40	28.86	24.28	0.71	32.44	-	-	P	H
		180.12	21.16	-22.34	43.5	36.57	15.04	1.89	32.34	-	-	P	H
		298.11	21.47	-24.53	46	32.12	19.2	2.56	32.41	-	-	P	H
		505.8	27.06	-18.94	46	32.55	23.94	3.26	32.69	-	-	P	H
		752.9	30.28	-15.72	46	30.4	28.15	4.24	32.51	-	-	P	H
		958.7	33.57	-12.43	46	29.28	30.92	4.8	31.43	-	-	P	H
													H
													H
													H
													H
													H
													H
		34.32	20.73	-19.27	40	29.95	22.45	0.79	32.46	-	-	P	V
		92.64	18.75	-24.75	43.5	34.86	14.95	1.35	32.41	-	-	P	V
		263.01	20.08	-25.92	46	30.12	20	2.38	32.42	-	-	P	V
		436.5	25.88	-20.12	46	32.29	22.96	3.14	32.51	-	-	P	V
		747.3	30.15	-15.85	46	30.26	28.18	4.23	32.52	-	-	P	V
		955.2	32.91	-13.09	46	28.74	30.85	4.79	31.47	-	-	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 limit** line.
P/A	**P**eak or **A**vg
H/V	**H**orizontal or **V**ertical

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

WIFI Ant. 17+6	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)
802.11b CH 01 2412MHz		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. Over Limit(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. Over Limit(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. Over Limit(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

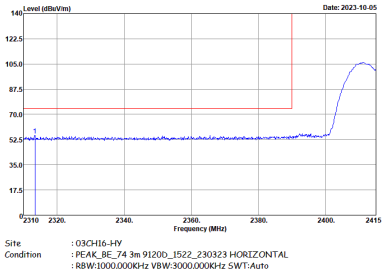
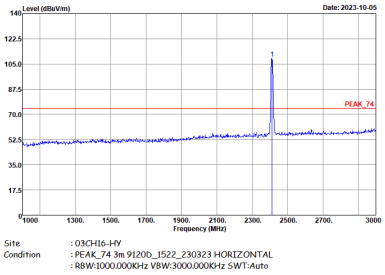
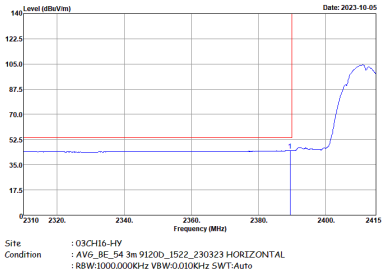
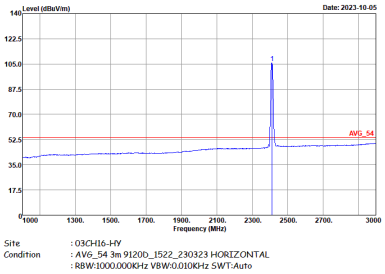
Test Engineer :	Jack Tsai, Gary Guo, and Steven Wu	**Temperature :**	20~25°C
		Relative Humidity :	50~65%

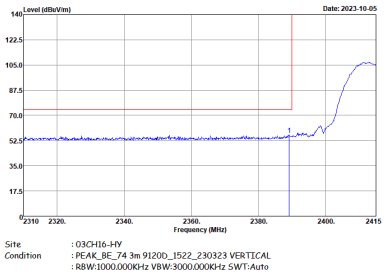
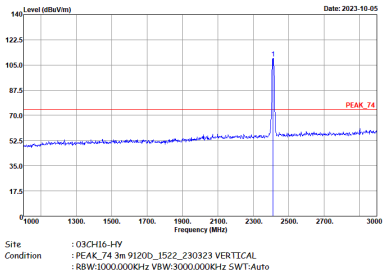
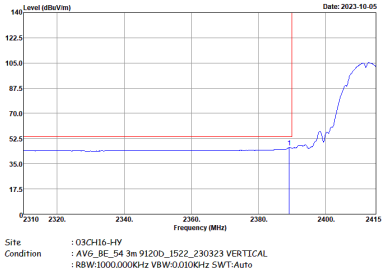
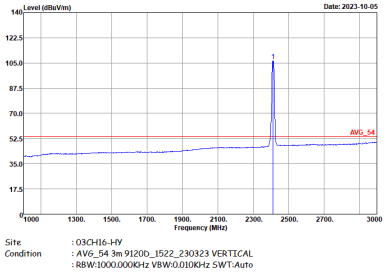
Note symbol

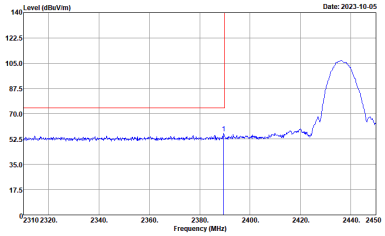
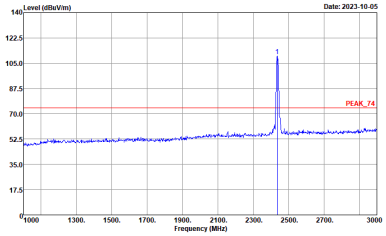
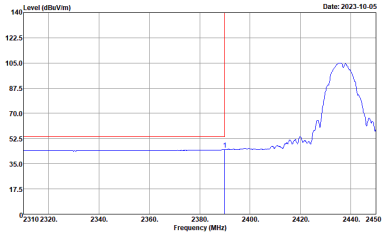
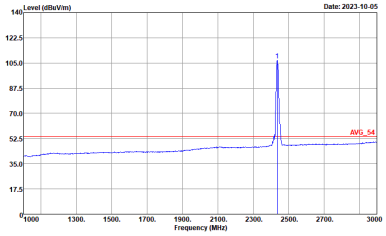
-L	**Low channel location**
-R	**High channel location**

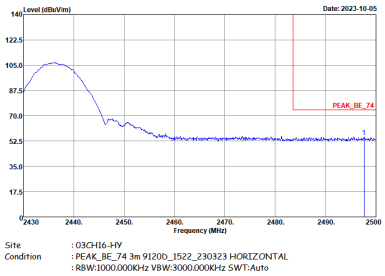
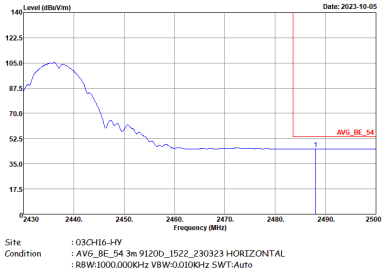
2.4GHz 2400~2483.5MHz

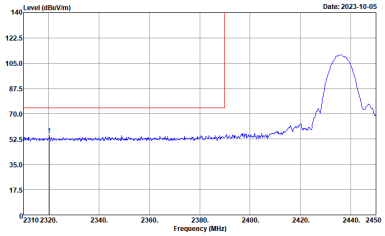
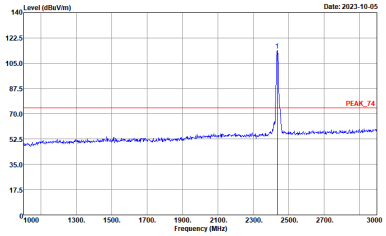
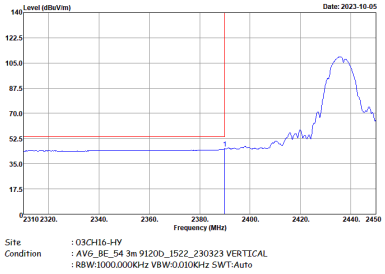
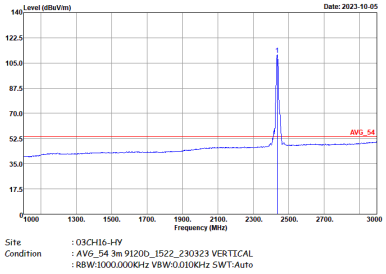
WIFI 802.11b (Band Edge @ 3m)

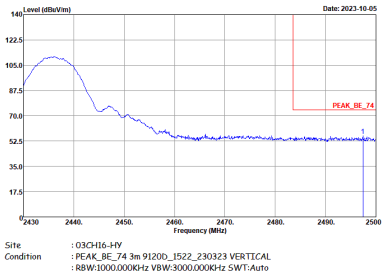
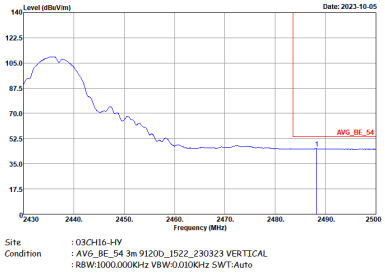
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
17+6	Horizontal	Fundamental
Peak		
Avg.		

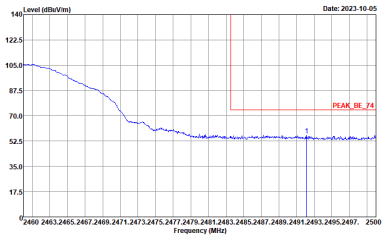
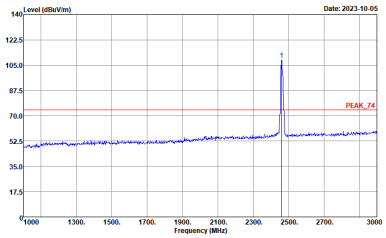
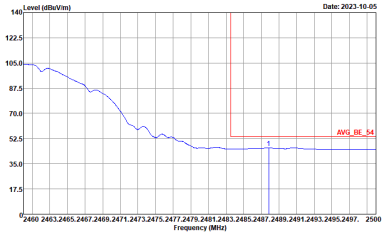
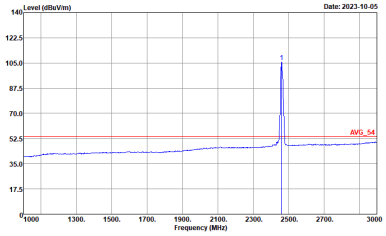
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
17+6	Vertical	Fundamental
Peak		
Avg.		

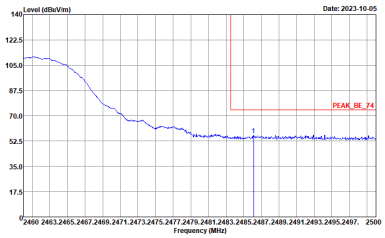
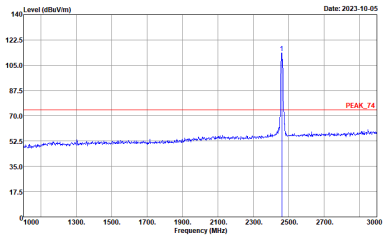
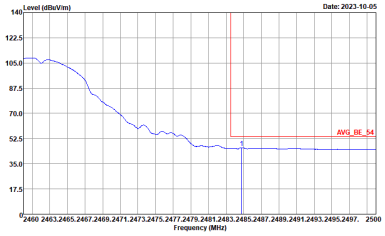
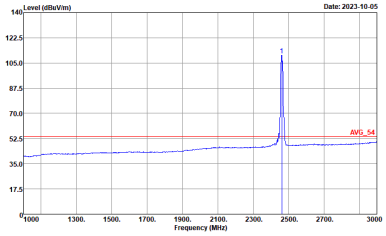
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
17+6	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
17+6	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
17+6	Vertical	Fundamental
Peak		
Avg.		

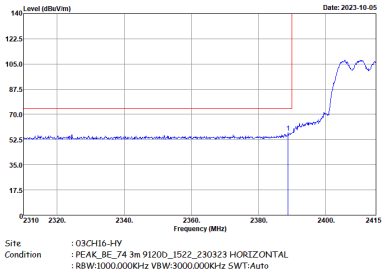
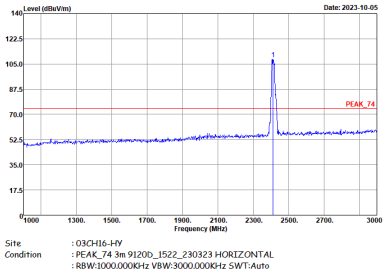
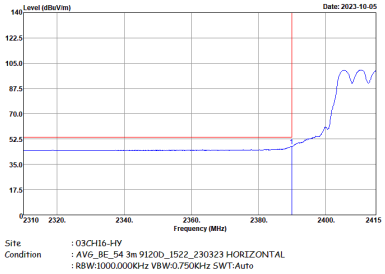
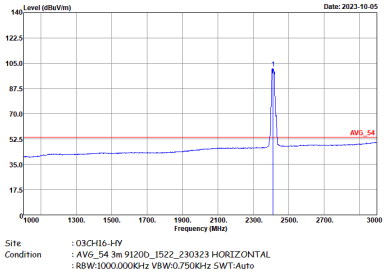
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
17+6	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

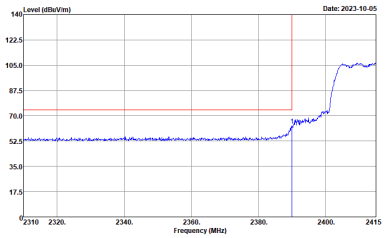
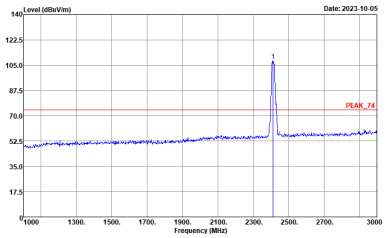
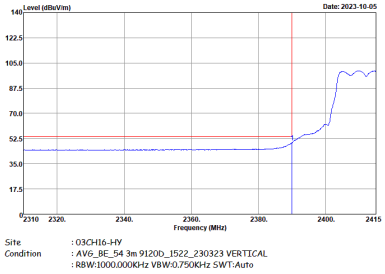
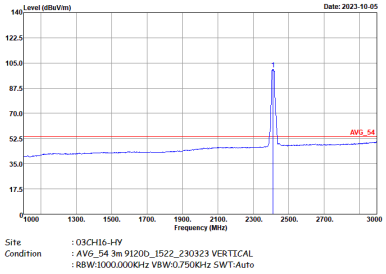
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
17+6	Horizontal	Fundamental
Peak		
Avg.		

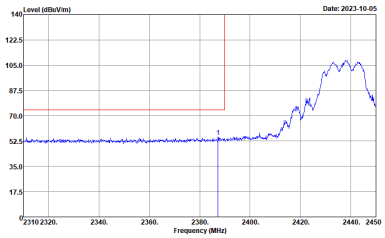
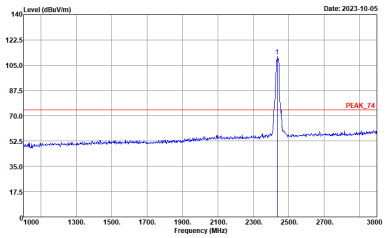
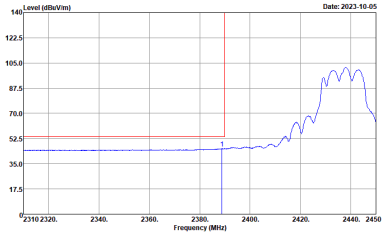
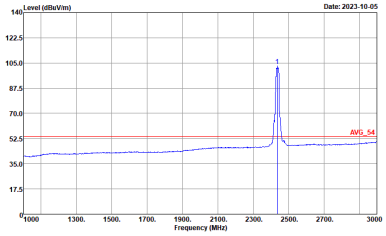
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
17+6	Vertical	Fundamental
Peak		
Avg.		

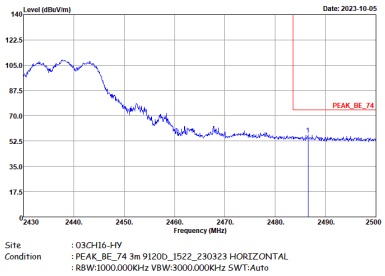
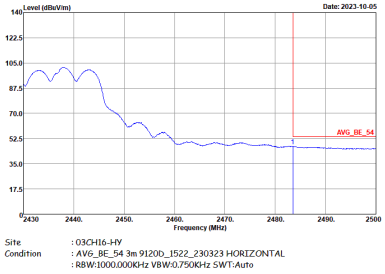
2.4GHz 2400~2483.5MHz

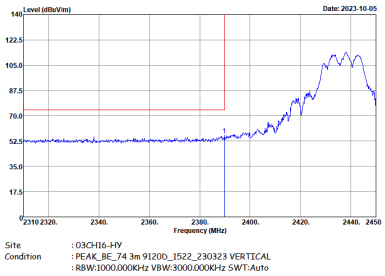
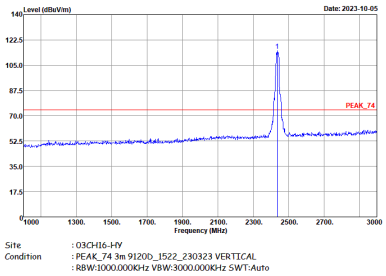
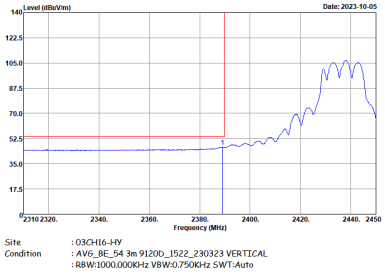
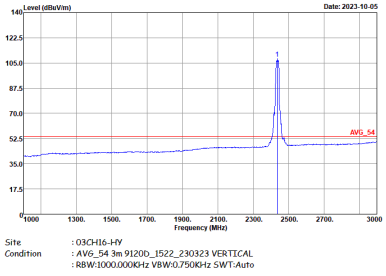
WIFI 802.11g (Band Edge @ 3m)

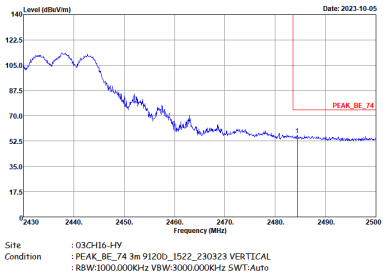
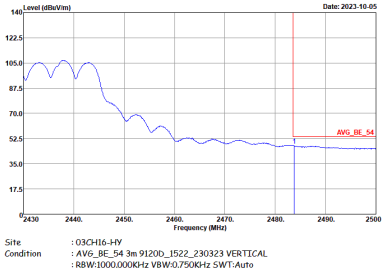
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
17+6	Horizontal	Fundamental
Peak		
Avg.		

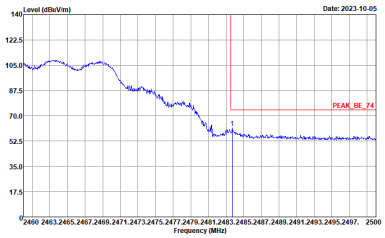
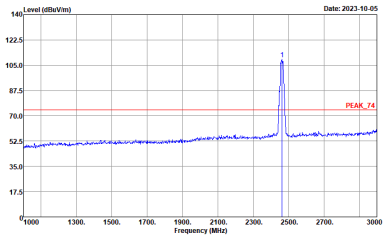
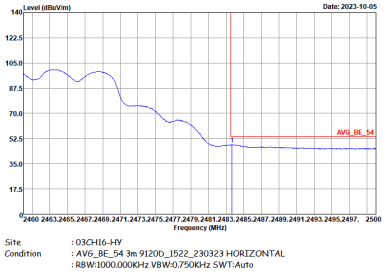
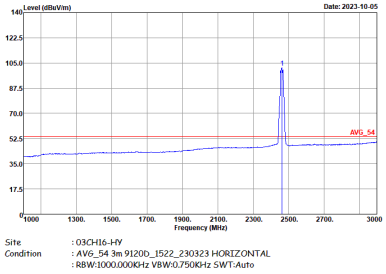
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
17+6	Vertical	Fundamental
Peak		
Avg.		

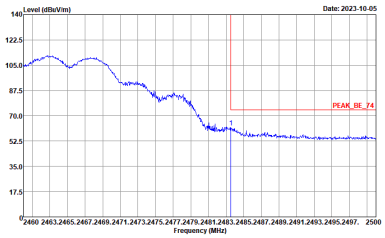
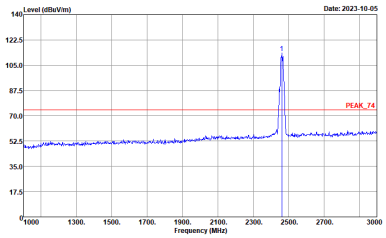
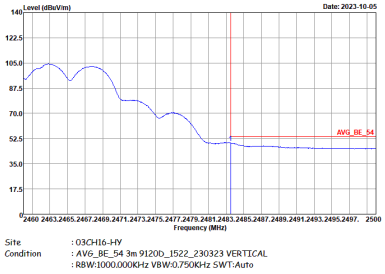
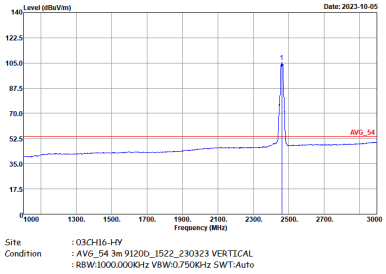
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
17+6	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
17+6	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
17+6	Vertical	Fundamental
Peak		
Avg.		

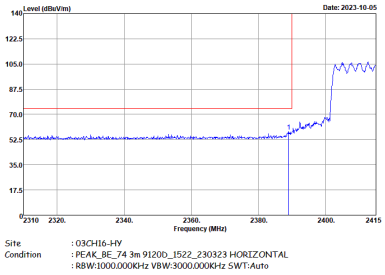
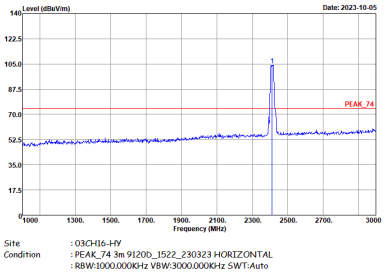
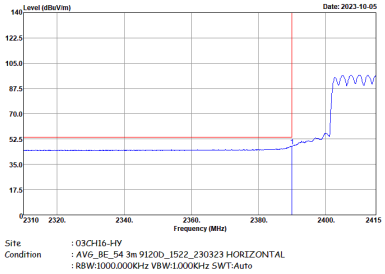
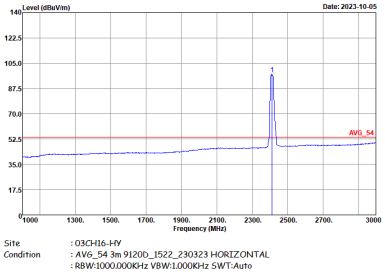
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
17+6	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

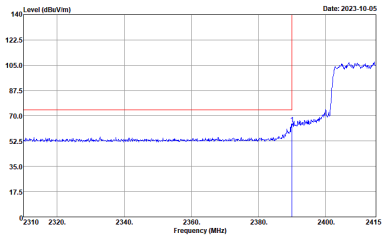
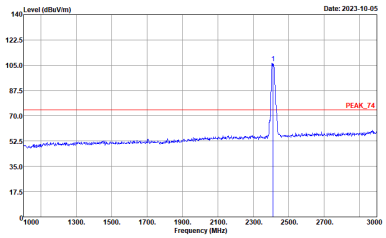
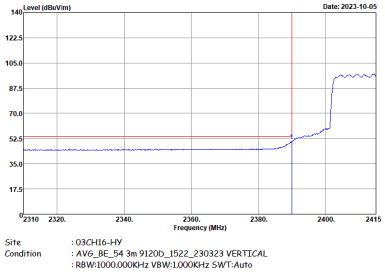
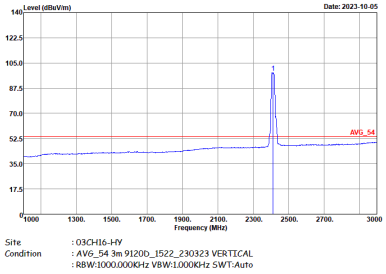
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
17+6	Horizontal	Fundamental
Peak		
Avg.		

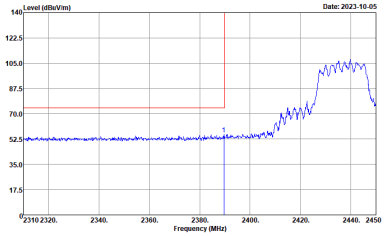
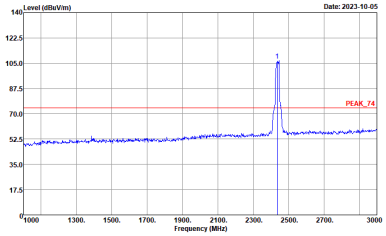
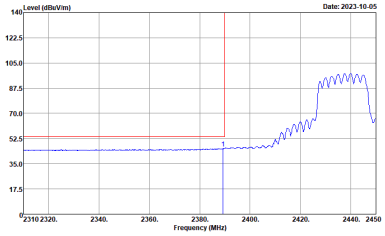
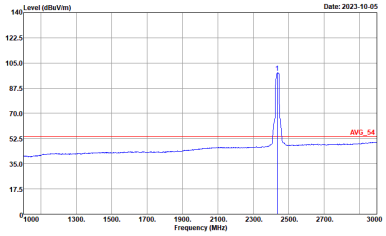
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
17+6	Vertical	Fundamental
Peak		
Avg.		

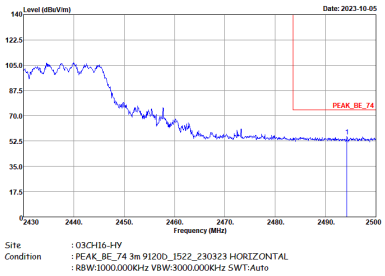
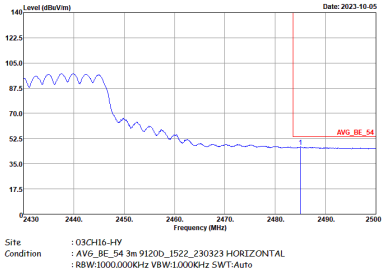
2.4GHz 2400~2483.5MHz

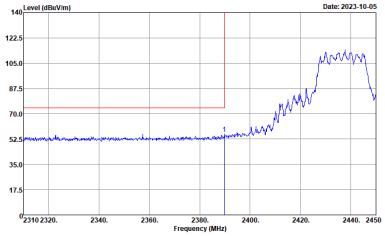
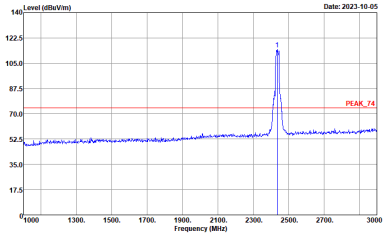
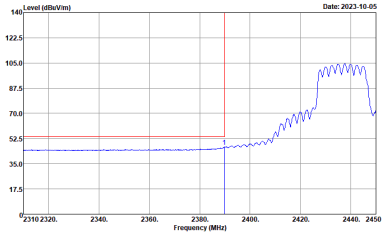
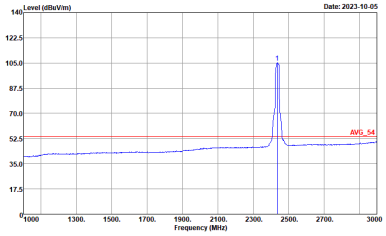
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

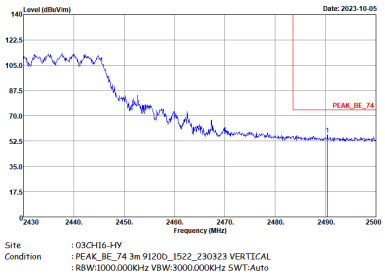
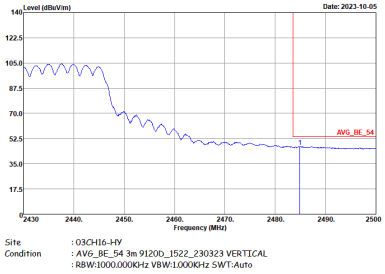
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH01 2412MHz	
17+6	Horizontal	Fundamental
Peak		
Avg.		

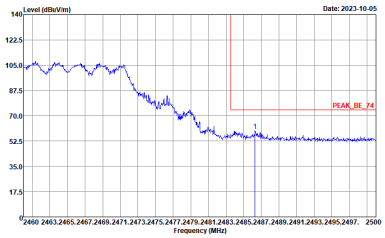
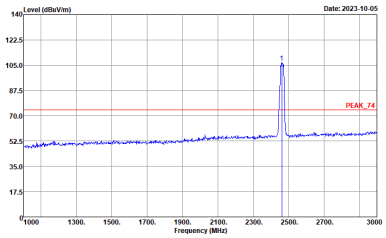
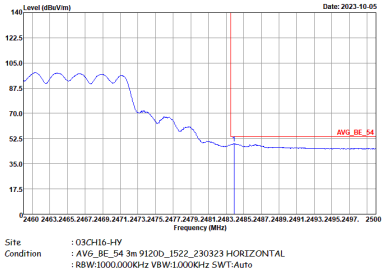
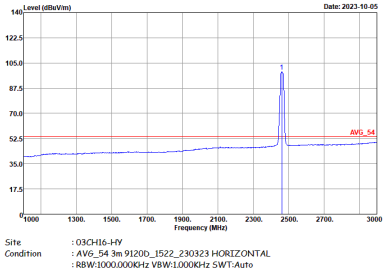
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH01 2412MHz	
17+6	Vertical	Fundamental
Peak		
Avg.		

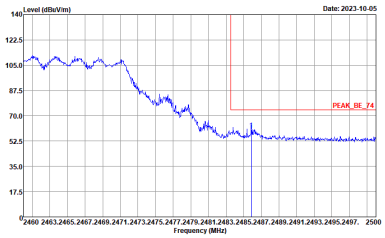
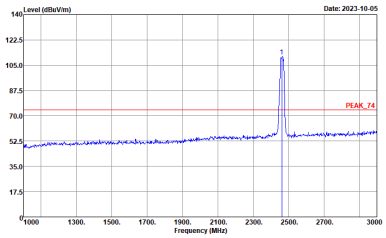
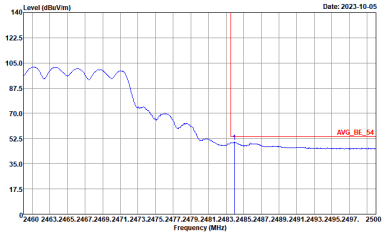
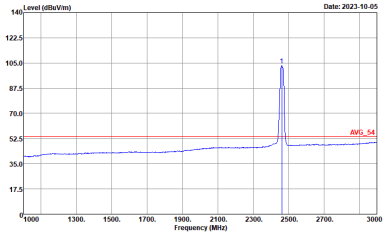
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - L	
17+6	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - R	
17+6	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - L	
17+6	Vertical	Fundamental
Peak		
Avg.		

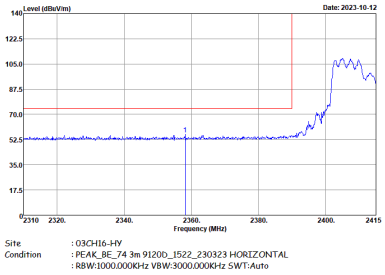
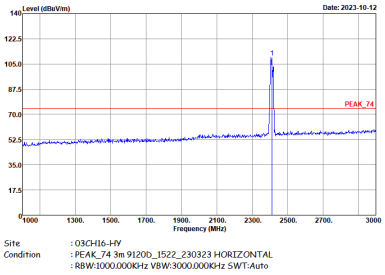
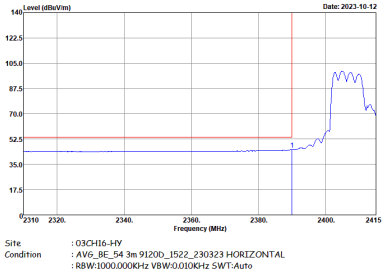
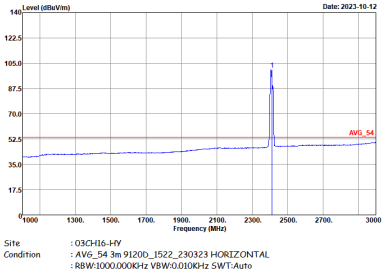
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - R	
17+6	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

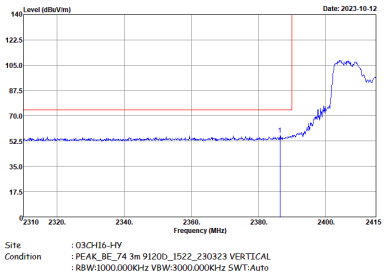
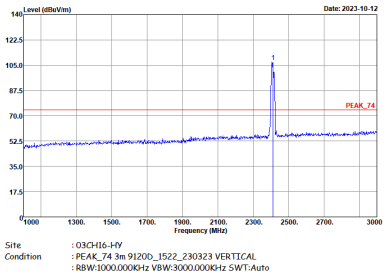
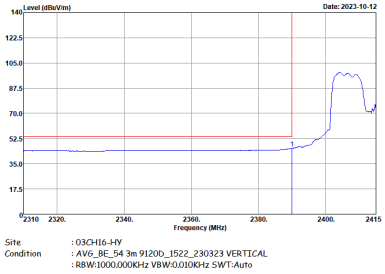
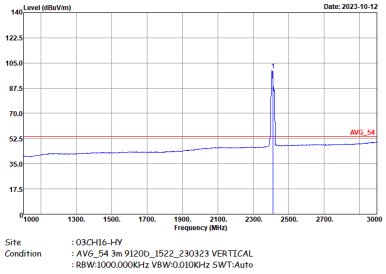
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH11 2462MHz	
17+6	Horizontal	Fundamental
Peak		
Avg.		

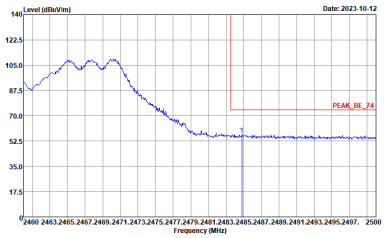
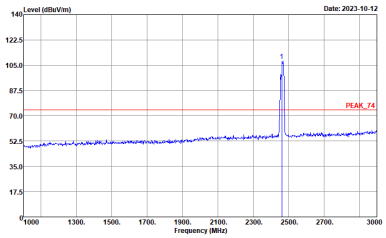
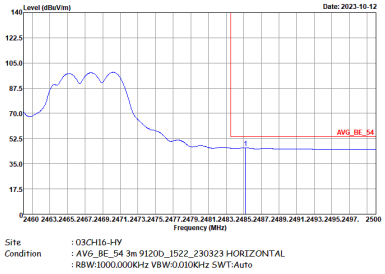
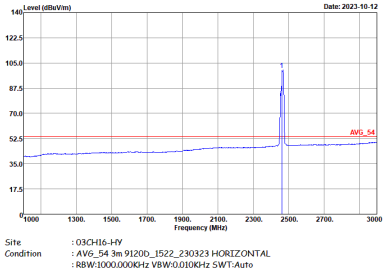
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH11 2462MHz	
17+6	Vertical	Fundamental
Peak		
Avg.		

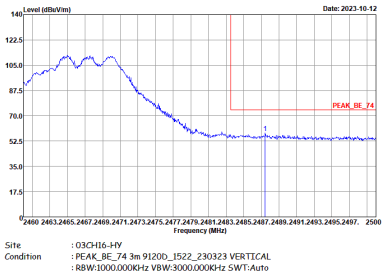
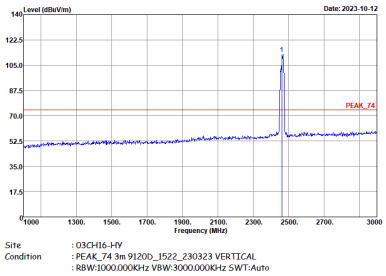
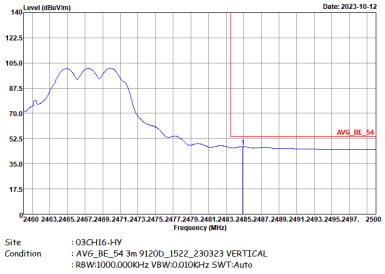
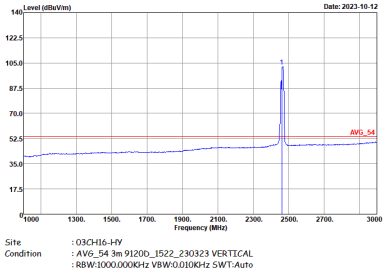
2.4GHz 2400~2483.5MHz

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	
17+6	Horizontal	Fundamental
Peak		
Avg.		

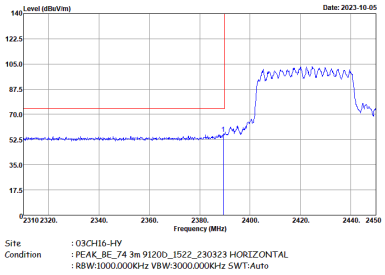
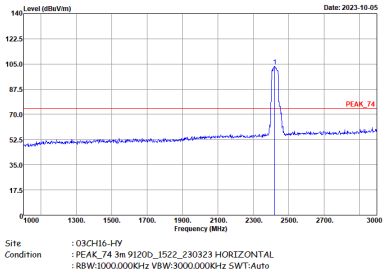
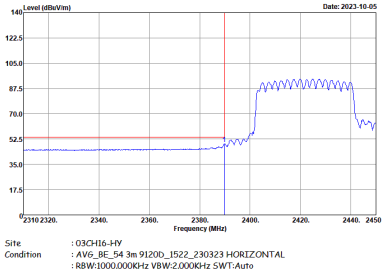
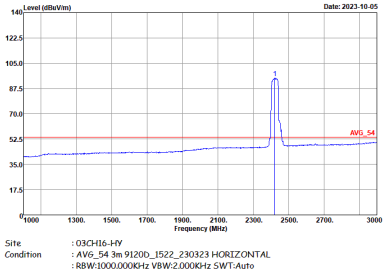
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH01 2412MHz	
17+6	Vertical	Fundamental
Peak		
Avg.		

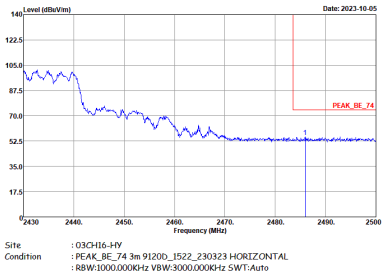
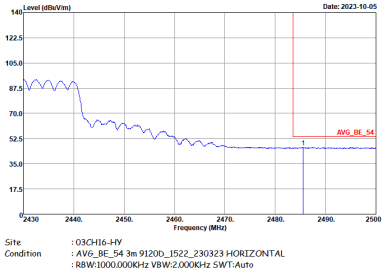
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH11 2462MHz	
17+6	Horizontal	Fundamental
Peak		
Avg.		

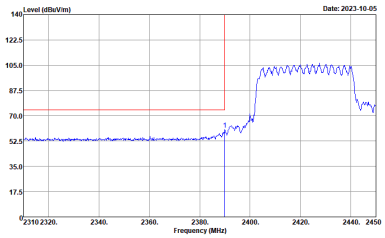
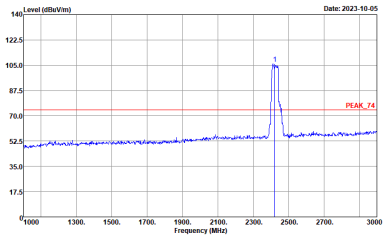
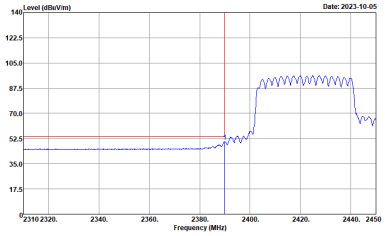
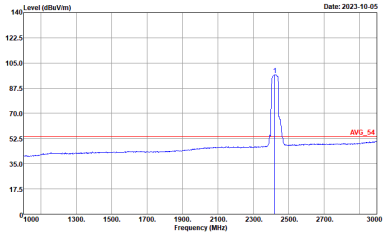
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH11 2462MHz	
17+6	Vertical	Fundamental
Peak		
Avg.		

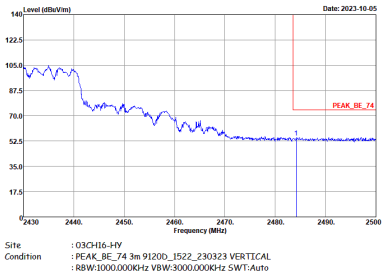
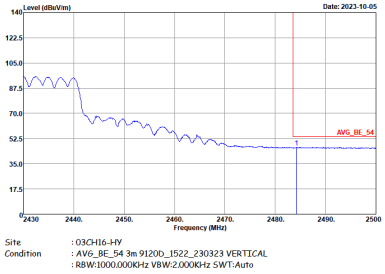
2.4GHz 2400~2483.5MHz

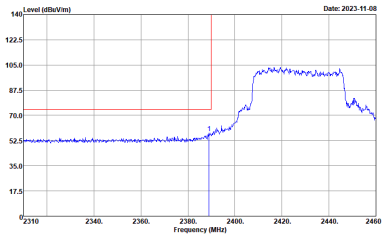
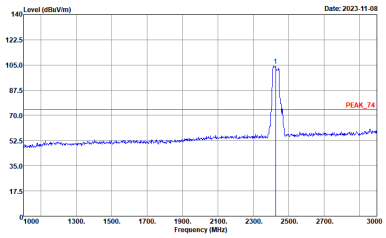
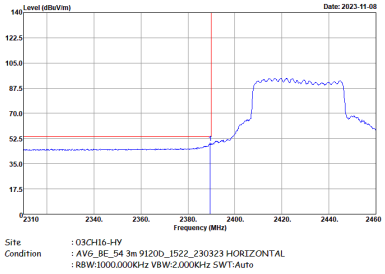
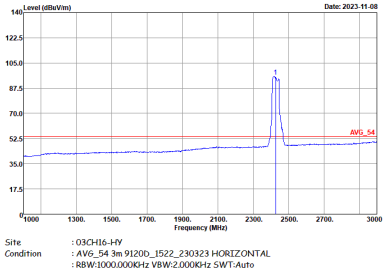
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

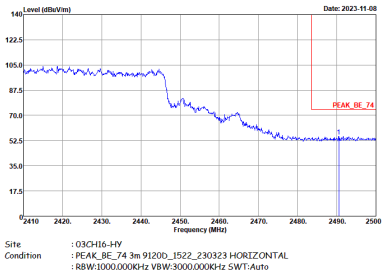
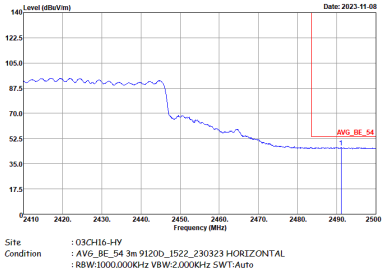
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH03 2422MHz - L	
17+6	Horizontal	Fundamental
Peak		
Avg.		

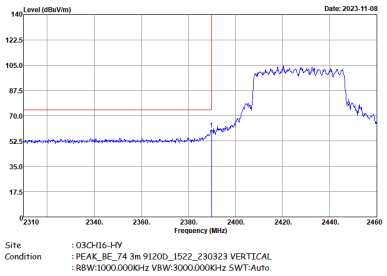
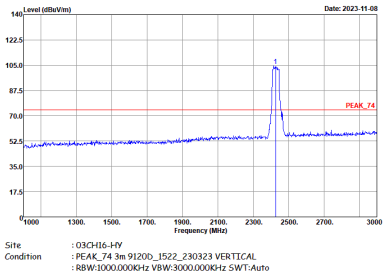
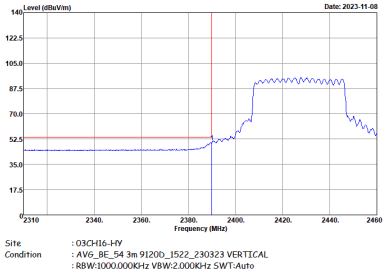
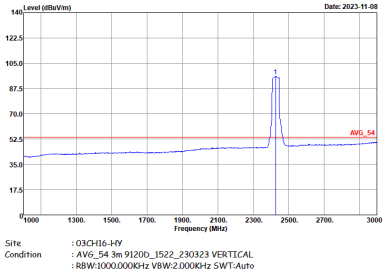
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH03 2422MHz - R	
17+6	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

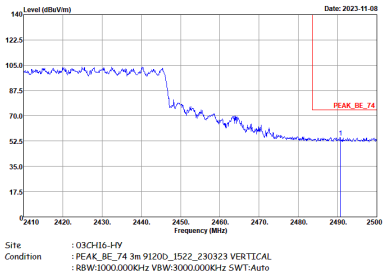
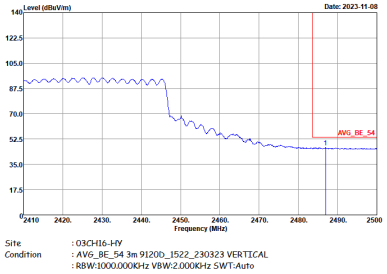
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH03 2422MHz - L	
17+6	Vertical	Fundamental
Peak		
Avg.		

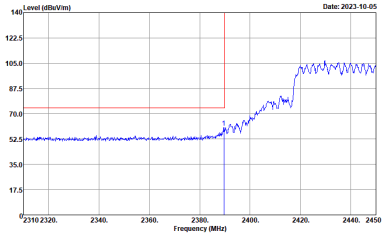
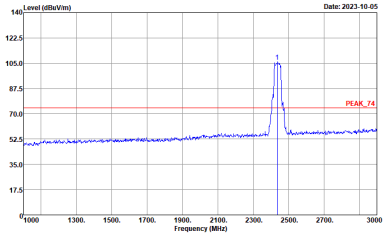
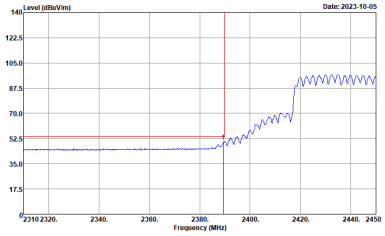
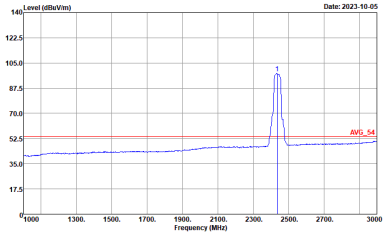
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH03 2422MHz - R	
17+6	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

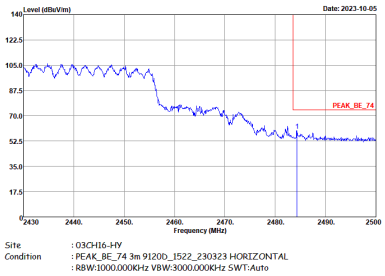
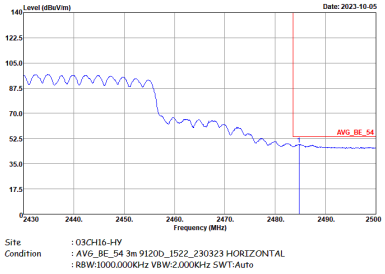
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH04 2427MHz - L	
17+6	Horizontal	Fundamental
Peak		
Avg.		

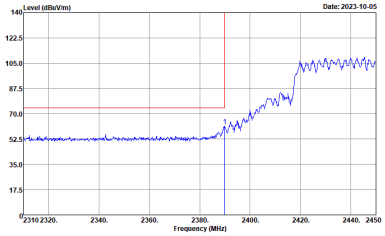
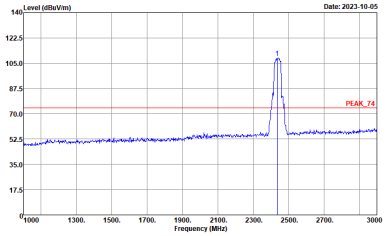
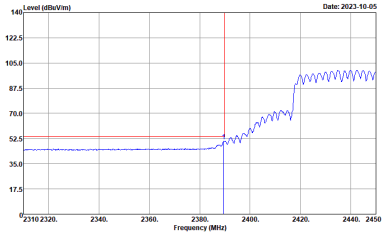
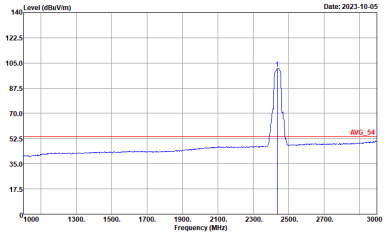
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH04 2427MHz - R	
17+6	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

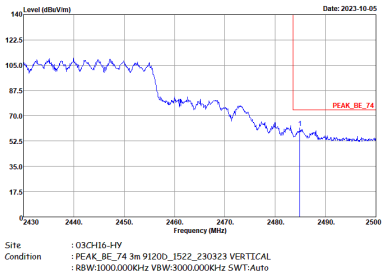
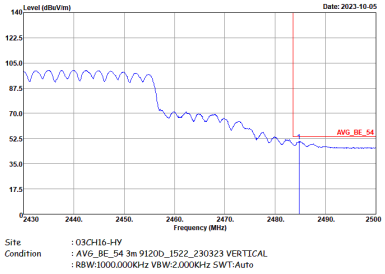
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH04 2427MHz - L	
17+6	Vertical	Fundamental
Peak		
Avg.		

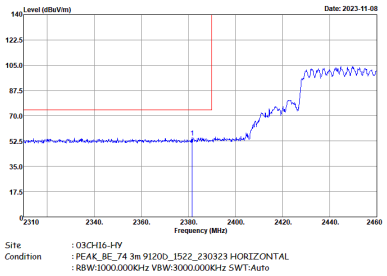
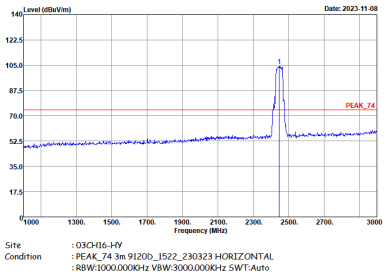
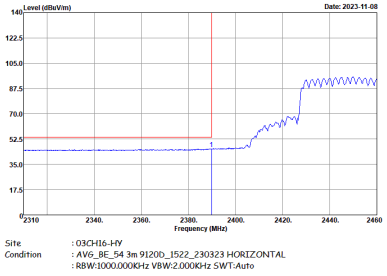
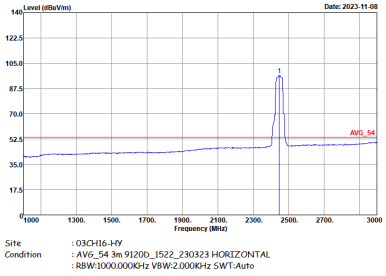
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH04 2427MHz - R	
17+6	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

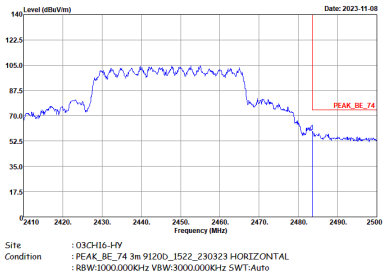
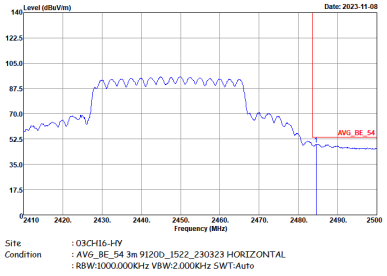
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH06 2437MHz - L	
17+6	Horizontal	Fundamental
Peak		
Avg.		

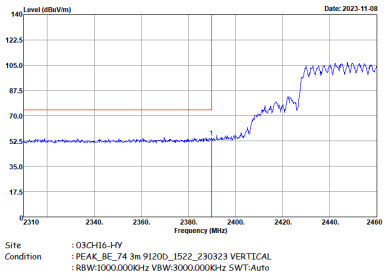
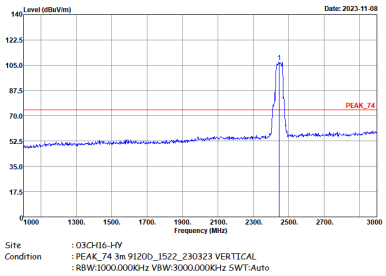
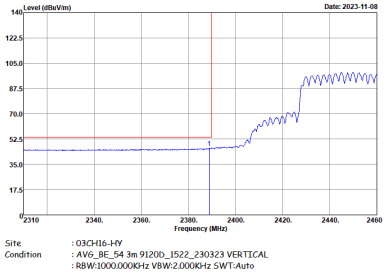
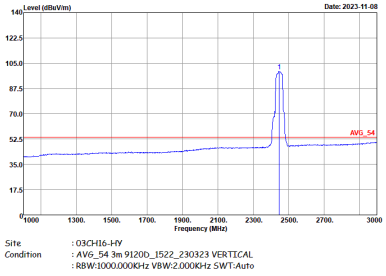
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH06 2437MHz - R	
17+6	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

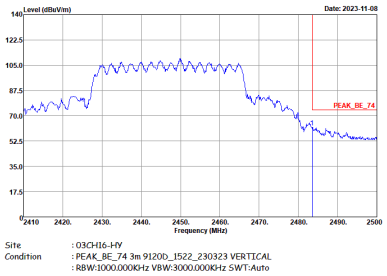
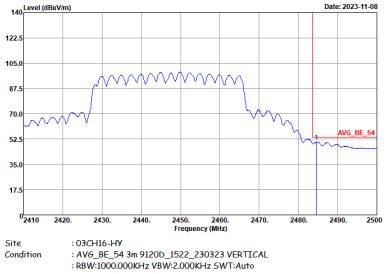
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH06 2437MHz - L	
17+6	Vertical	Fundamental
Peak		
Avg.		

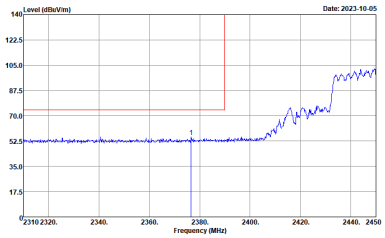
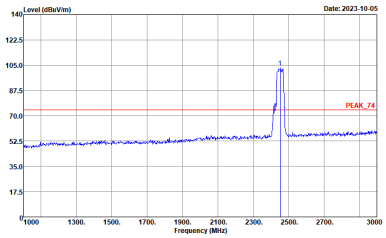
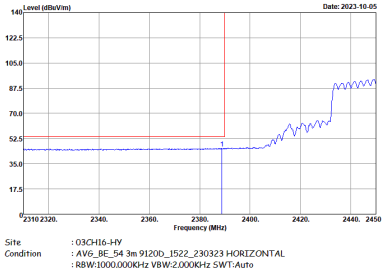
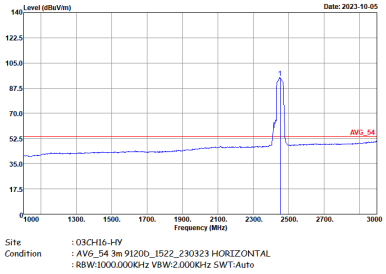
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH06 2437MHz - R	
17+6	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

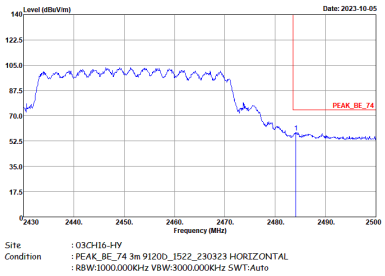
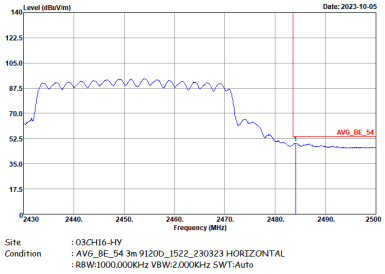
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH08 2447MHz - L	
17+6	Horizontal	Fundamental
Peak		
Avg.		

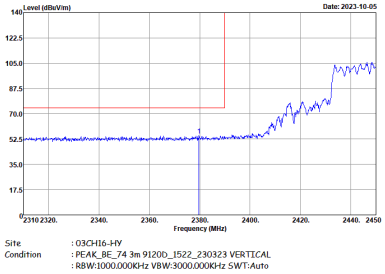
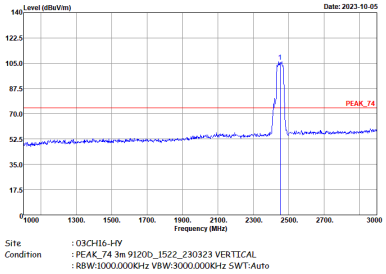
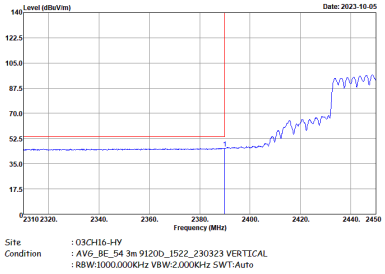
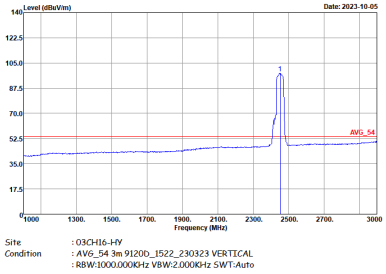
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH08 2447MHz - R	
17+6	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

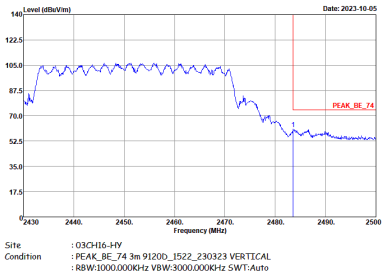
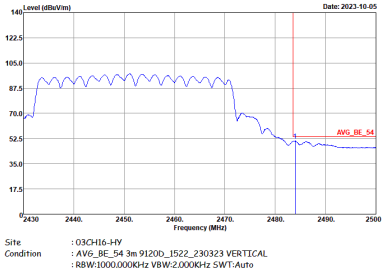
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH08 2447MHz - L	
17+6	Vertical	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH08 2447MHz - R	
17+6	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH09 2452MHz - L	
17+6	Horizontal	Fundamental
Peak		
Avg.		

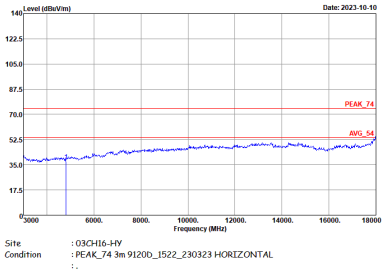
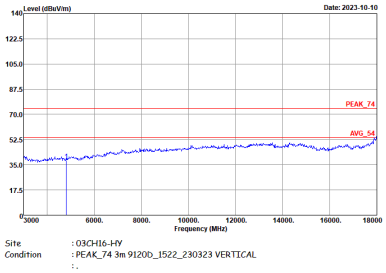
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH09 2452MHz - R	
17+6	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

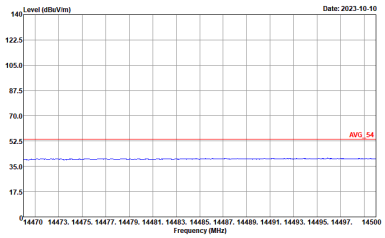
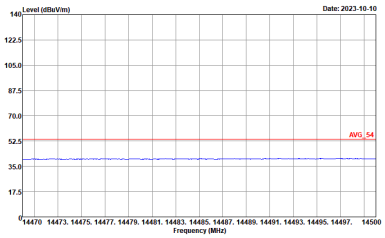
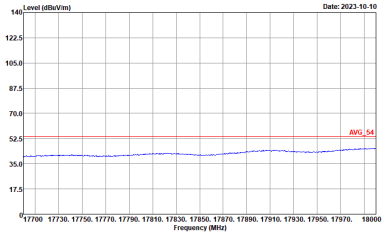
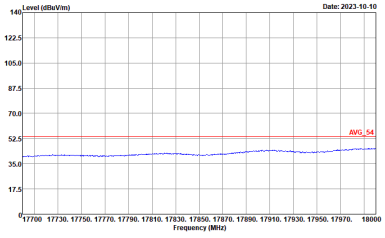
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH09 2452MHz - L	
17+6	Vertical	Fundamental
Peak		
Avg.		

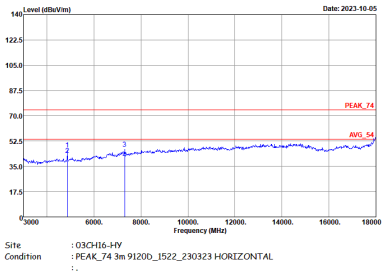
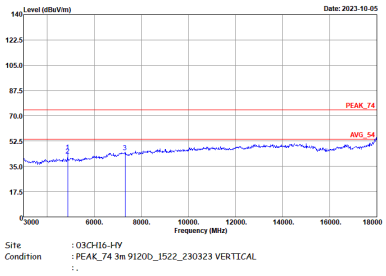
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH09 2452MHz - R	
17+6	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

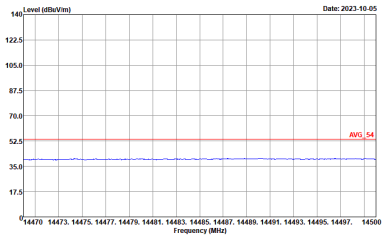
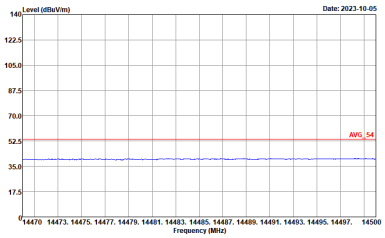
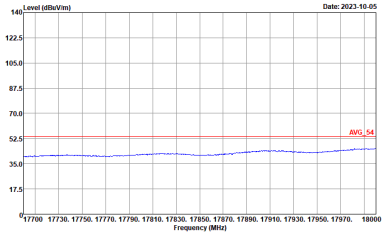
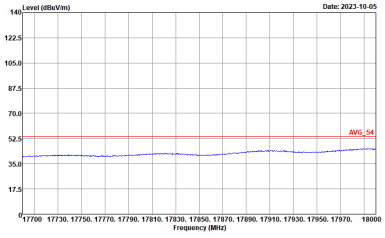
2.4GHz 2400~2483.5MHz

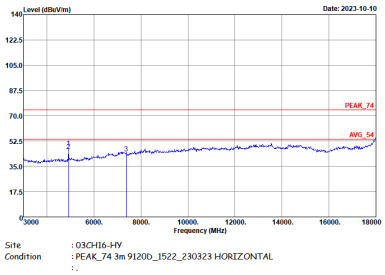
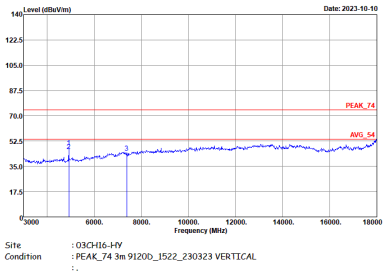
WIFI 802.11b (Harmonic @ 3m)

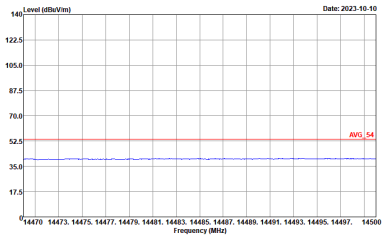
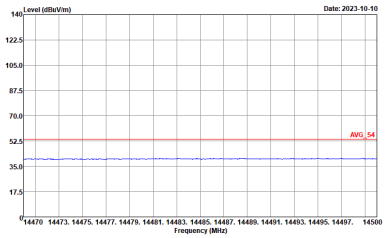
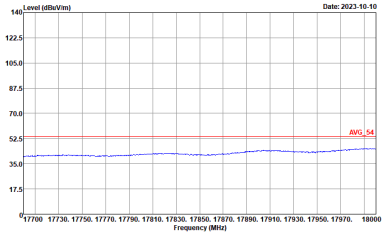
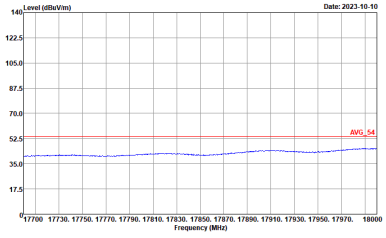
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
17+6	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
17+6	Horizontal	Vertical
Peak Avg.		

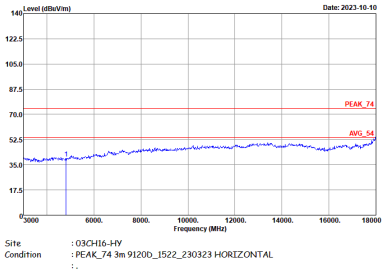
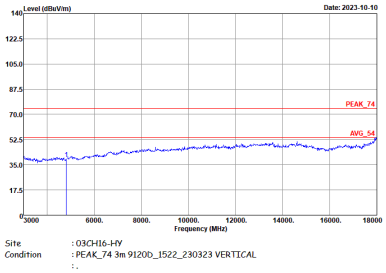
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

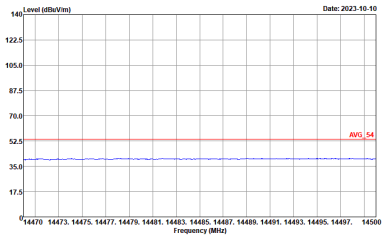
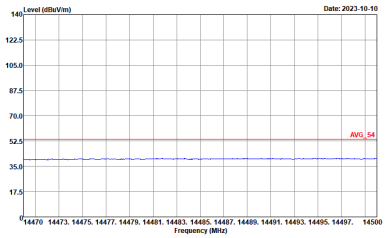
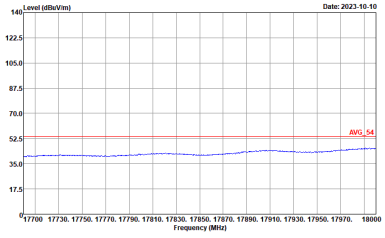
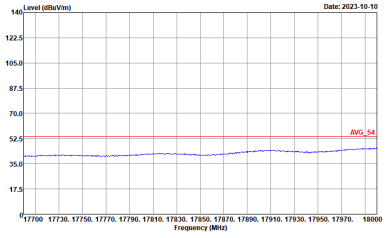
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
17+6	Horizontal	Vertical
Peak Avg.		

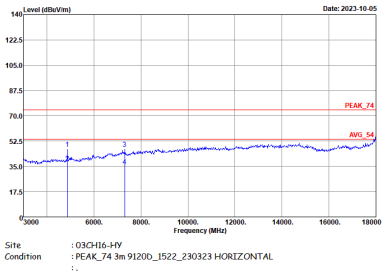
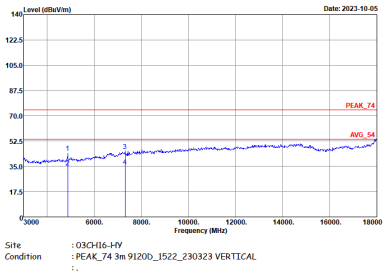
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

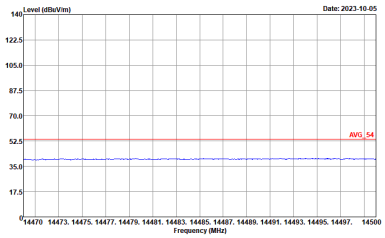
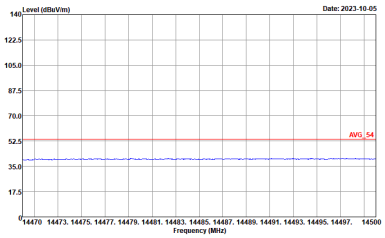
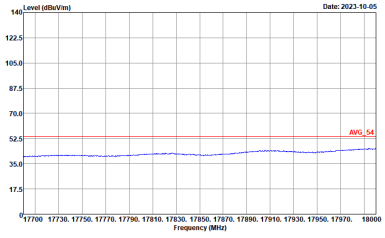
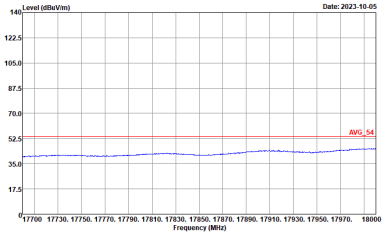
2.4GHz 2400~2483.5MHz

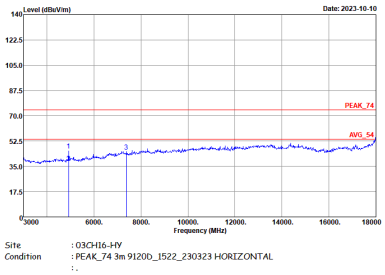
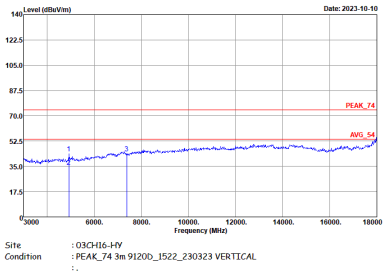
WIFI 802.11g (Harmonic @ 3m)

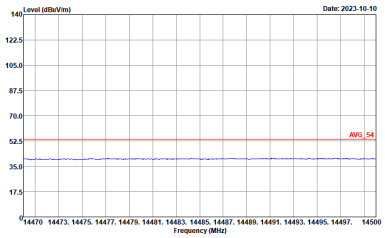
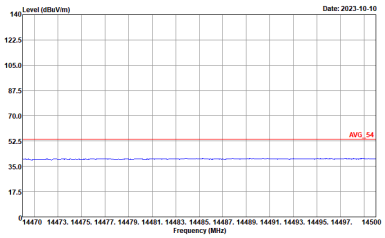
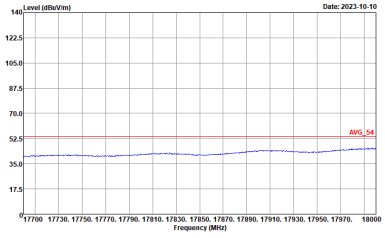
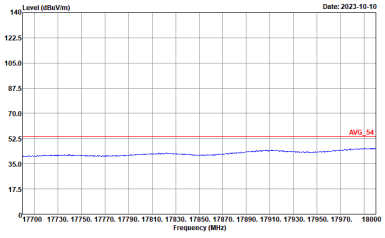
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
17+6	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
17+6	Horizontal	Vertical
Peak Avg.		

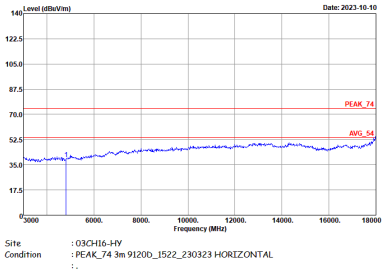
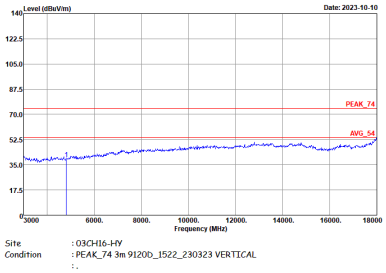
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

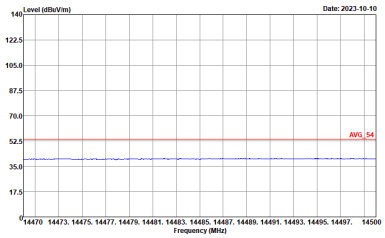
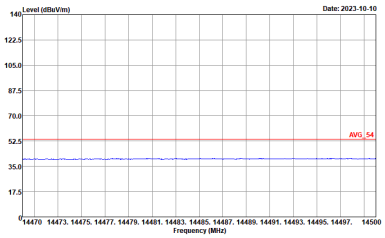
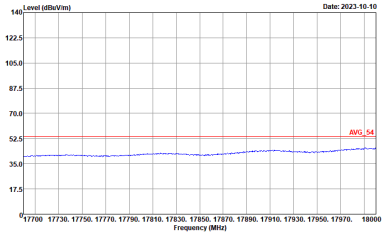
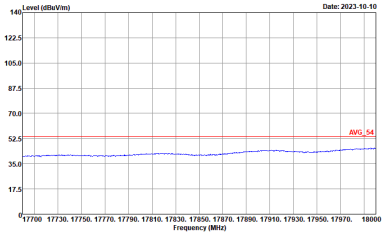
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
17+6	Horizontal	Vertical
Peak Avg.		

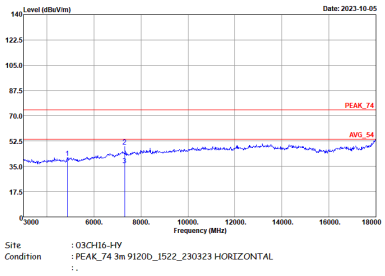
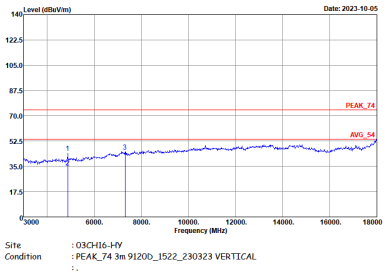
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

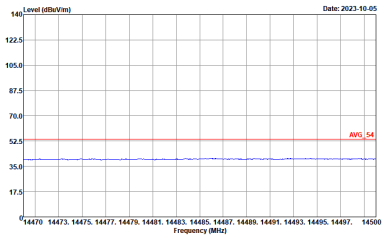
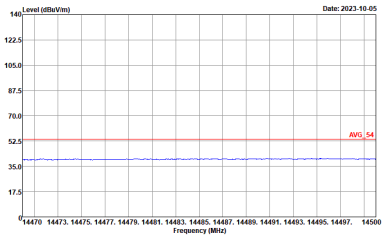
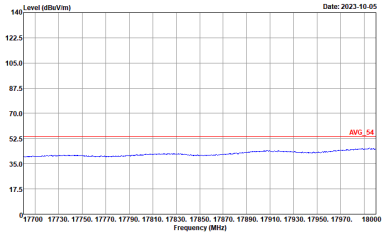
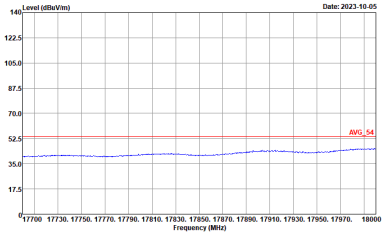
2.4GHz 2400~2483.5MHz

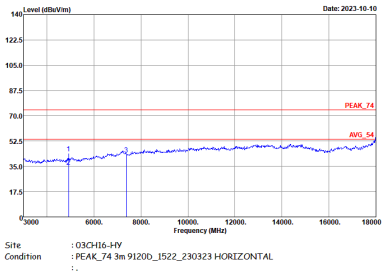
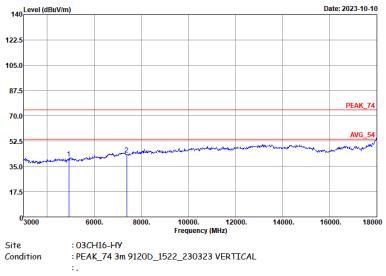
WIFI 802.11 ax HE20 Full (Harmonic @ 3m)

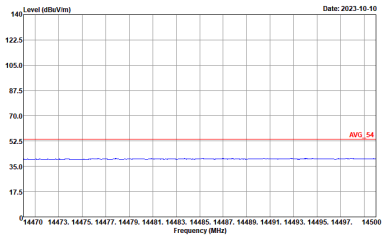
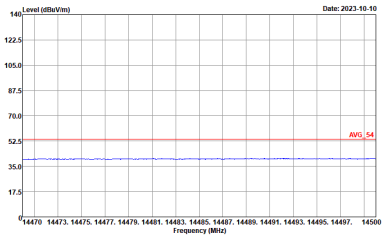
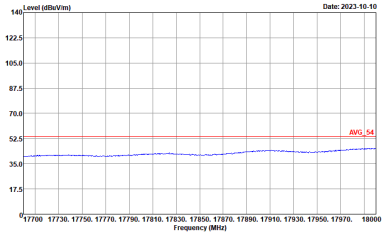
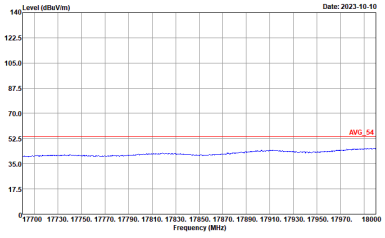
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH01 2412MHz	
17+6	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH01 2412MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH06 2437MHz	
17+6	Horizontal	Vertical
Peak Avg.		

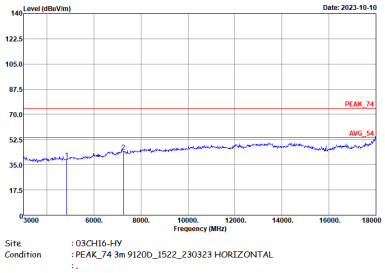
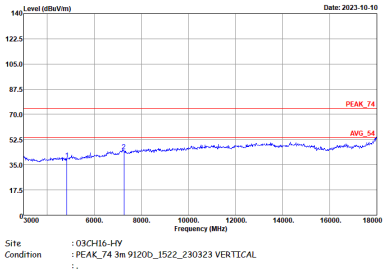
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH06 2437MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

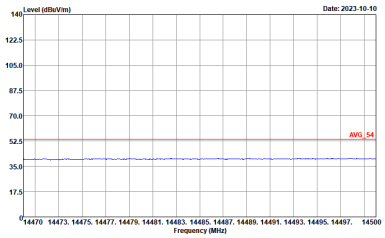
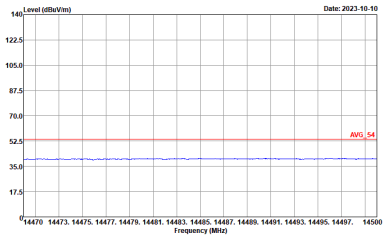
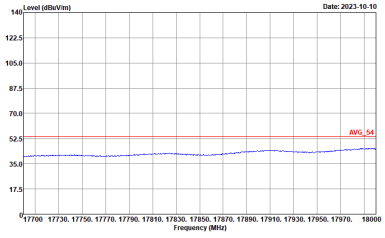
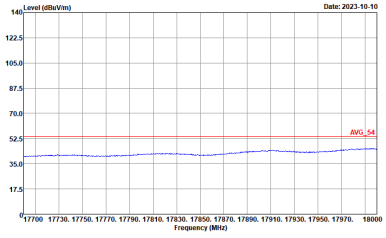
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH11 2462MHz	
17+6	Horizontal	Vertical
Peak Avg.		

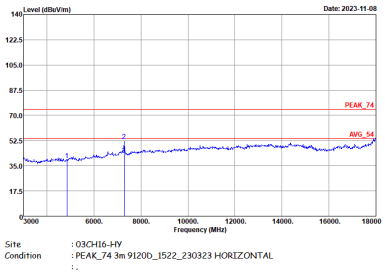
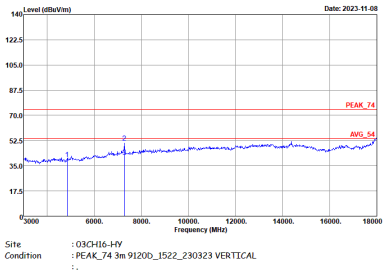
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH11 2462MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

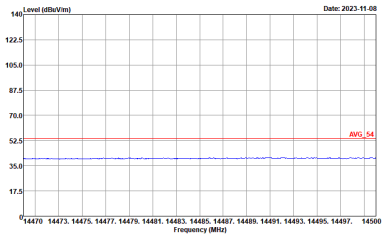
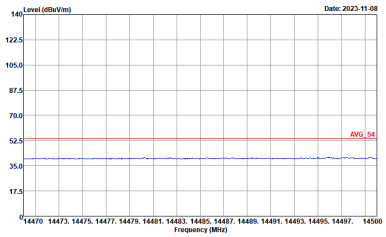
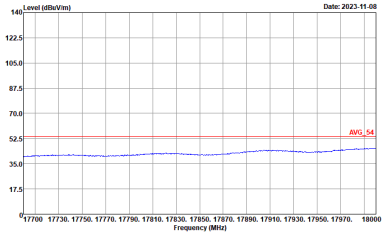
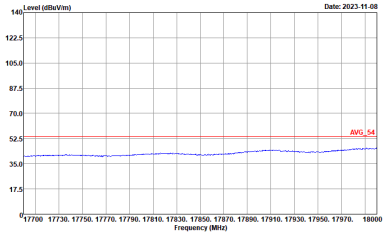
2.4GHz 2400~2483.5MHz

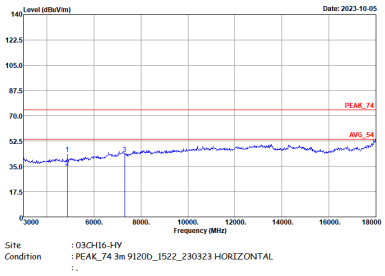
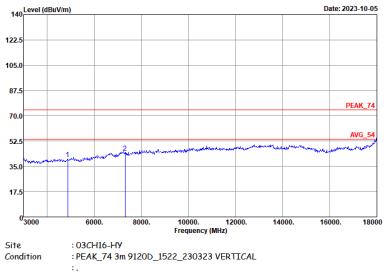
WIFI 802.11 ax HE40 Full (Harmonic @ 3m)

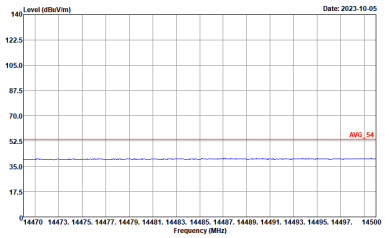
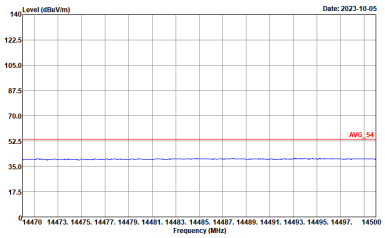
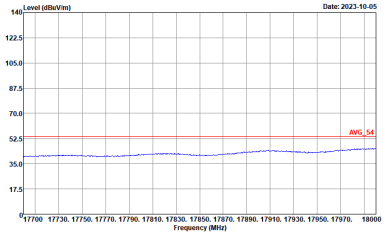
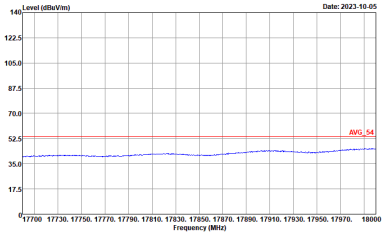
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE40 Full CH03 2422MHz	
17+6	Horizontal	Vertical
Peak Avg.		

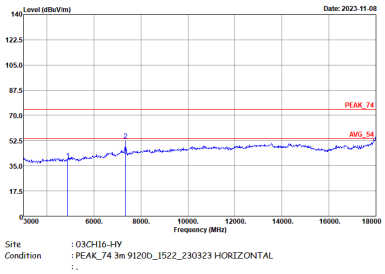
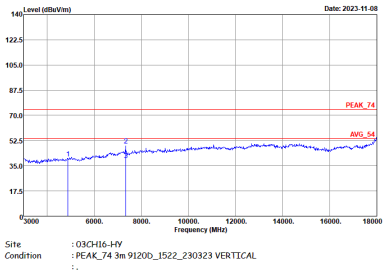
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE40 Full CH03 2422MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

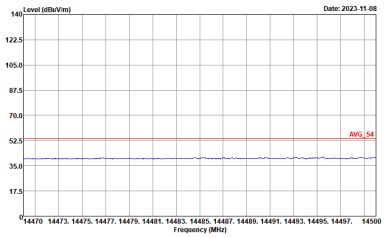
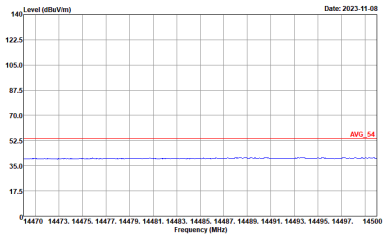
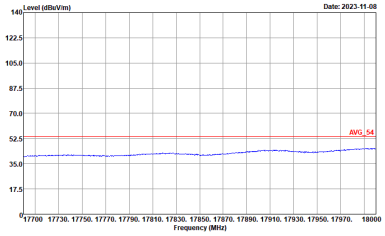
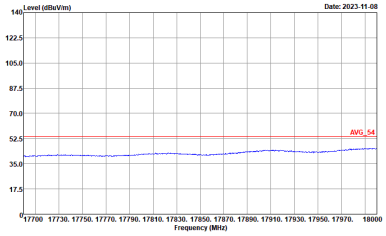
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE40 Full CH04 2427MHz	
17+6	Horizontal	Vertical
Peak Avg.		

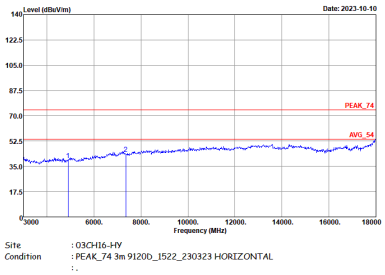
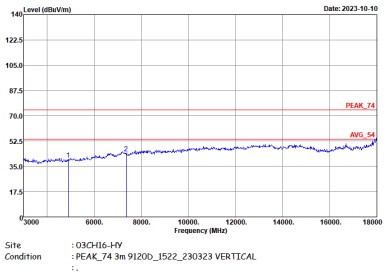
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE40 Full CH04 2427MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

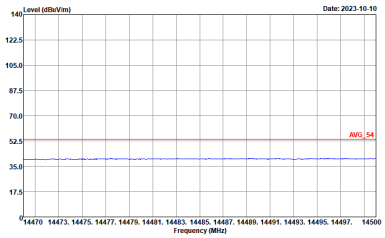
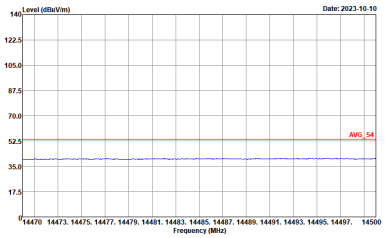
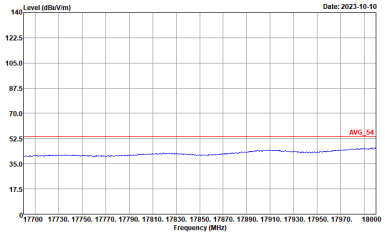
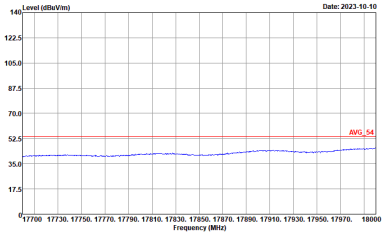
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE40 Full CH06 2437MHz	
17+6	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE40 Full CH06 2437MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE40 Full CH08 2447MHz	
17+6	Horizontal	Vertical
Peak Avg.		

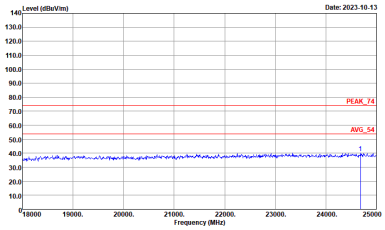
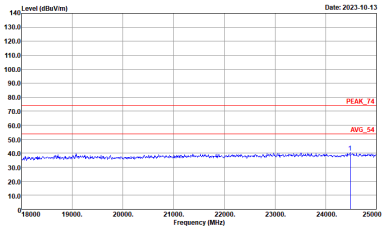
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE40 Full CH08 2447MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE40 Full CH09 2452MHz	
17+6	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE40 Full CH09 2452MHz	
17+6	Horizontal	Vertical
14.47G ~14.5G Avg.		
17.7G ~18G Avg		

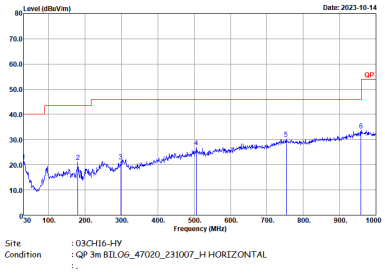
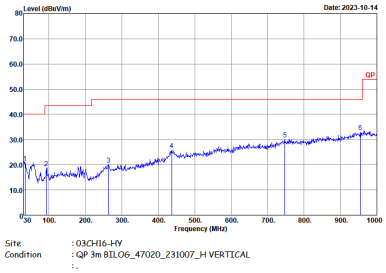
Emission above 18GHz

2.4GHz WIFI 802.11ax HE40 Full (SHF @ 1m)

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11ax HE40 Full SHF	
17+6	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

2.4GHz WIFI 802.11ax HE40 Full (LF)

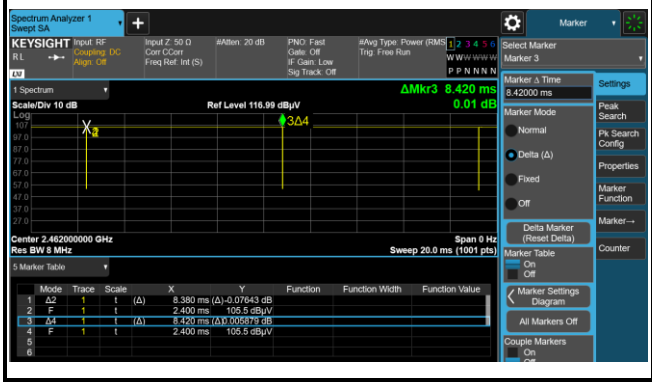
WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11ax HE40 Full LF	
17+6	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

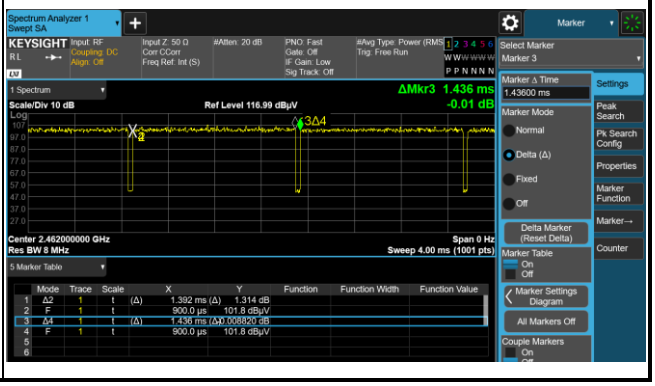
Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
17+6	802.11b	99.52	-	-	10Hz
17+6	802.11g	96.94	1392	0.72	750Hz
17+6	802.11ax HE20 Full RU	95.75	1014	0.99	1kHz
17+6	802.11ax HE20 106 RU	98.37	-	-	10Hz
17+6	802.11ax HE40 Full RU	92.07	534	1.87	2KHz

<MIMO Ant. 17 + Ant. 6>

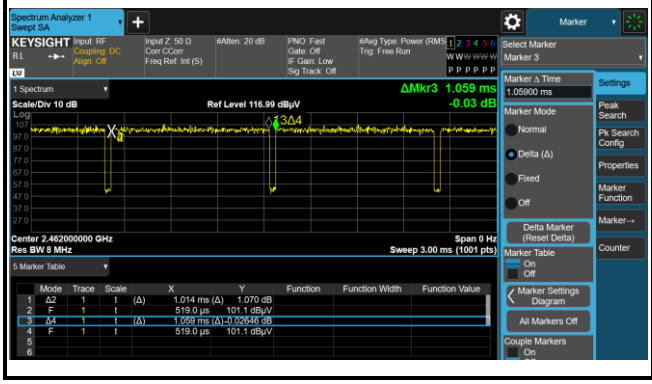
802.11b



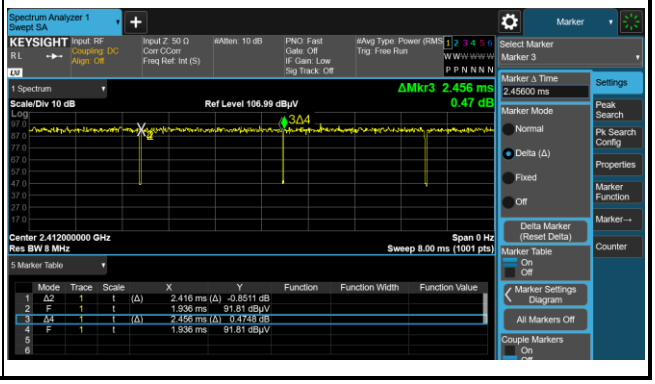
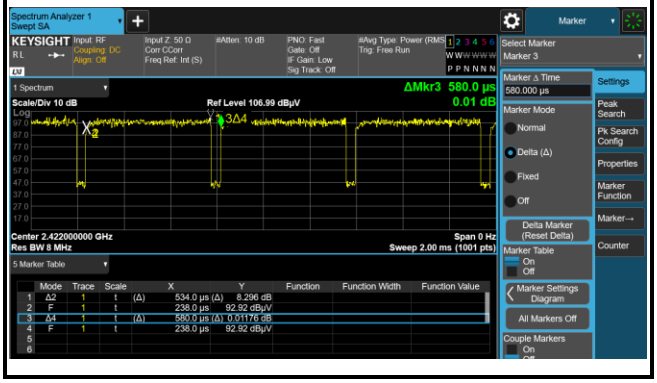
802.11g



802.11ax HE20 Full RU



802.11ax HE20 106 RU



802.11ax HE40 Full RU