

Appendix D: Test Results of Radiated Spurious Emissions Test

<Beamforming>

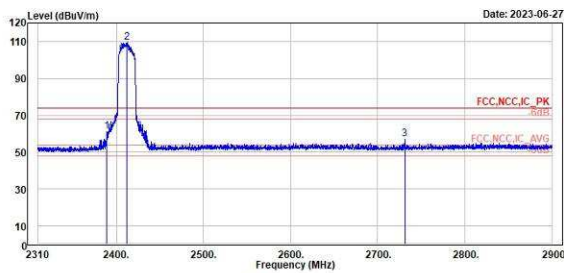
Band Edges, 2.31GHz ~ 2.9GHz

802.11ax HE20

Low Channel (Horizontal) Peak



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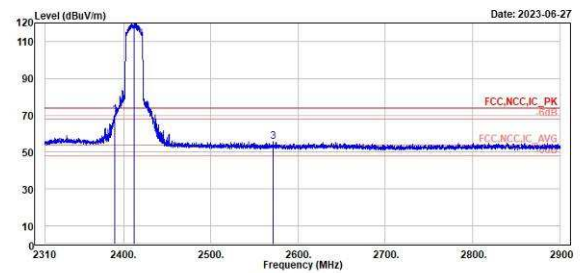


	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2389.06	61.05	23.47	37.58	74.00	-12.95	284	319	Peak	Horizontal		
2 *	2412.00	109.29	71.64	37.65	74.00	35.29	284	319	Peak	Horizontal		
3	2738.91	56.91	18.87	38.04	74.00	-17.09	284	319	Peak	Horizontal		

Low Channel (Vertical) Peak



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2389.53	70.19	32.61	37.58	74.00	-3.81	100	251	Peak	Vertical		
2 *	2412.00	120.69	83.04	37.65	74.00	46.69	100	251	Peak	Vertical		
3	2578.90	55.67	17.74	37.93	74.00	-18.33	100	251	Peak	Vertical		

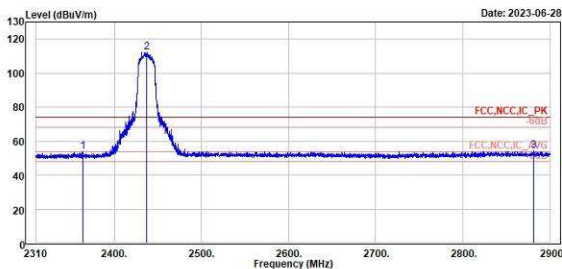
802.11ax HE20

Middle Channel (Horizontal) Peak

Middle Channel (Vertical) Peak



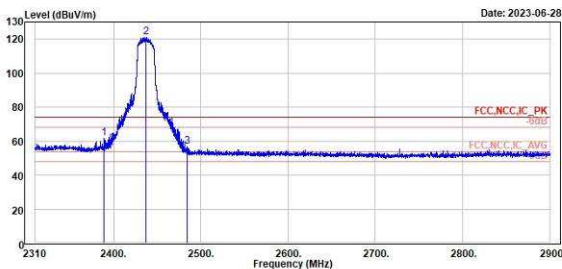
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Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2363.45	53.79	16.63	37.67	74.00	-20.36	162	342 Peak	Horizontal	
2 *	2437.00	112.37	75.01	37.36	74.00	38.37	162	342 Peak	Horizontal	
3	2881.36	54.16	16.28	37.68	74.00	-19.84	162	342 Peak	Horizontal	



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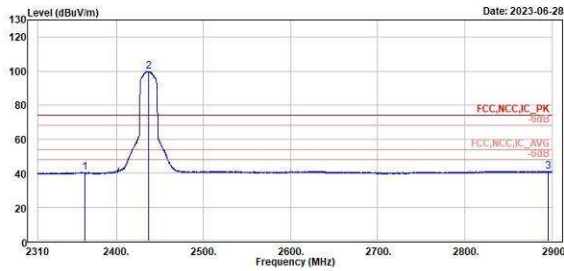
Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2388.84	61.86	24.76	37.10	74.00	-12.14	121	251 Peak	Vertical	
2 *	2457.00	121.34	83.98	37.36	74.00	47.34	121	251 Peak	Vertical	
3	2484.64	56.67	19.18	37.49	74.00	-17.33	121	251 Peak	Vertical	

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Middle Channel (Horizontal) Average



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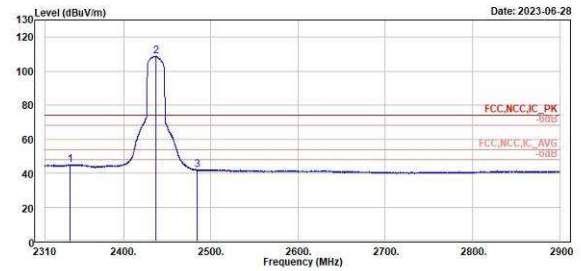


	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2364.04	40.35	3.28	37.07	54.00	-13.65	162	342	Average	Horizontal	
2 *	2437.00	100.03	62.67	37.36	54.00	46.03	162	342	Average	Horizontal	
3	2895.63	41.24	3.30	37.94	54.00	-12.76	162	342	Average	Horizontal	

Middle Channel (Vertical) Average



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	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2338.56	45.11	8.13	36.98	54.00	-8.89	121	251	Average	Vertical	
2 *	2437.00	100.03	71.47	37.56	54.00	54.03	121	251	Average	Vertical	
3	2484.40	42.21	4.72	37.49	54.00	-11.79	121	251	Average	Vertical	

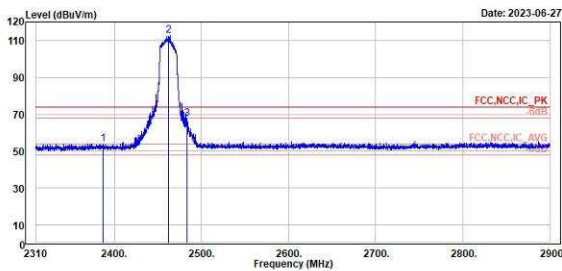
802.11ax HE20

High Channel (Horizontal) Peak

High Channel (Vertical) Peak



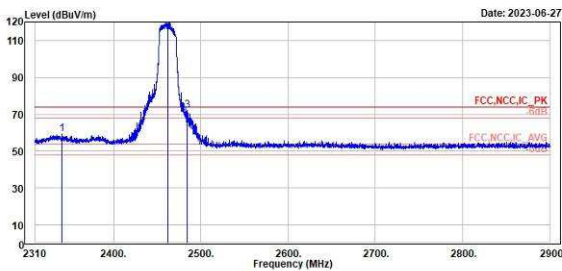
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	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2385.58	54.03	16.46	37.57	74.00	-19.97	176	341	Peak	Horizontal	
2 *	2462.00	112.55	74.82	37.73	74.00	38.55	176	341	Peak	Horizontal	
3	2483.81	67.45	29.65	37.80	74.00	-6.55	176	341	Peak	Horizontal	



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	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2341.03	59.54	22.28	37.34	74.00	-14.46	138	253	Peak	Vertical	
2 *	2462.00	119.79	82.03	37.73	74.00	45.79	138	253	Peak	Vertical	
3 !	2484.64	71.92	34.12	37.80	74.00	-2.08	138	253	Peak	Vertical	

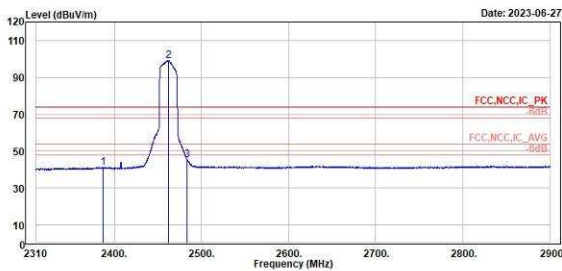
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High Channel (Horizontal) Average

High Channel (Vertical) Average



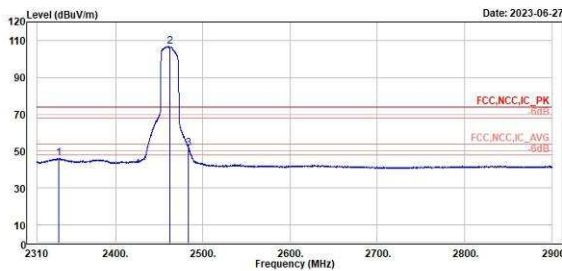
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Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2386.58	41.11	3.54	37.57	54.00	-12.89	176	341 Average	Horizontal	
2 *	2462.00	99.12	61.99	37.73	54.00	45.12	176	341 Average	Horizontal	
3	2483.81	45.31	7.51	37.80	54.00	-8.69	176	341 Average	Horizontal	



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Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2334.00	45.95	8.62	37.33	54.00	-8.05	138	253 Average	Vertical	
2 *	2462.00	106.09	69.16	37.73	54.00	52.89	138	253 Average	Vertical	
3	2483.46	51.62	13.82	37.80	54.00	-2.38	138	253 Average	Vertical	

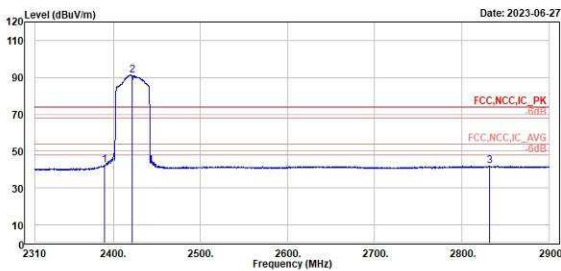
802.11ax HE40

Low Channel (Horizontal) Average

Low Channel (Vertical) Average



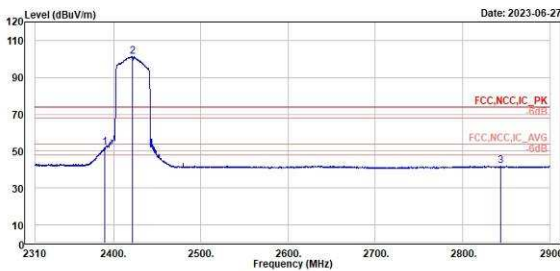
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Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2398.00	42.55	4.97	37.58	54.00	-11.45	194	335 Average	Horizontal	
2 *	2422.00	91.33	53.67	37.66	54.00	37.33	194	335 Average	Horizontal	
3	2831.91	41.91	3.73	38.18	54.00	-12.09	194	335 Average	Horizontal	



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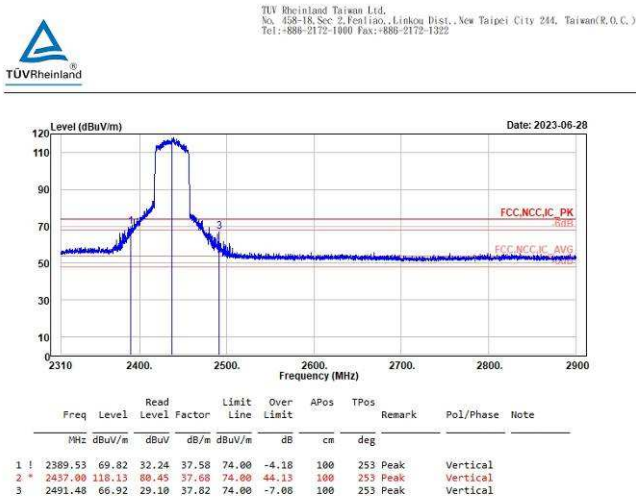
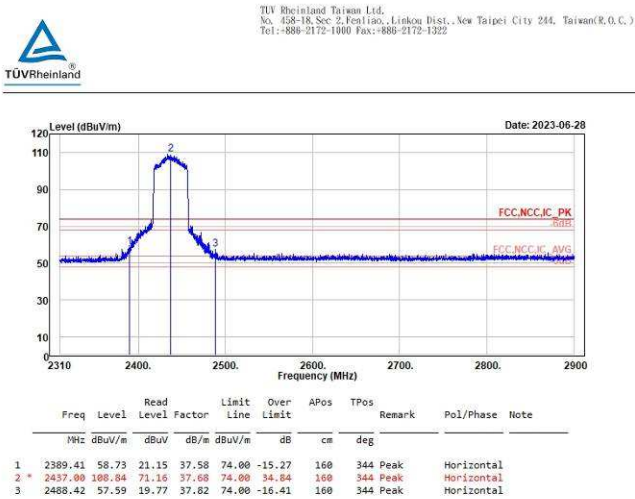


Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2398.00	51.93	14.35	37.58	54.00	-2.07	100	235 Average	Vertical	
2 *	2422.00	101.44	63.78	37.66	54.00	47.44	100	235 Average	Vertical	
3	2843.36	41.93	3.76	38.17	54.00	-12.07	100	235 Average	Vertical	

802.11ax HE40

Middle Channel (Horizontal) Peak

Middle Channel (Vertical) Peak

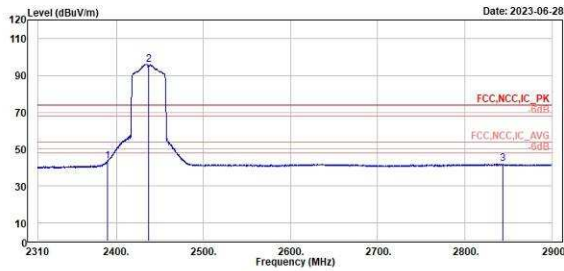


802.11ax HE40

Middle Channel (Horizontal) Average



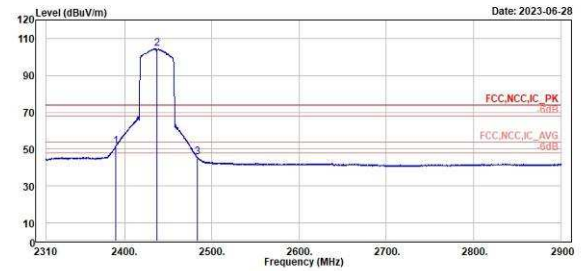
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Middle Channel (Vertical) Average



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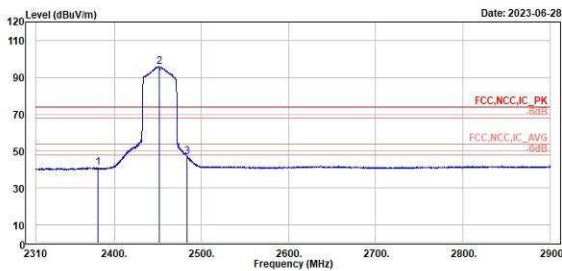
802.11ax HE40

High Channel (Horizontal) Average

High Channel (Vertical) Average



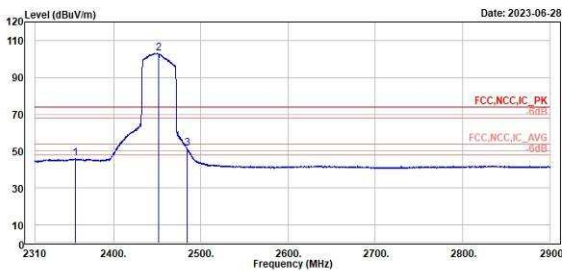
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Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2381.15	49.94	3.41	37.53	54.00	-13.06	154	342 Average	Horizontal	
2 *	2452.00	95.97	58.28	37.69	54.00	41.97	194	342 Average	Horizontal	
3	2483.46	47.22	9.42	37.80	54.00	-6.78	154	342 Average	Horizontal	



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Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2356.49	45.98	8.57	37.41	54.00	-8.02	100	73 Average	Vertical	
2 *	2452.00	103.03	65.34	37.69	54.00	49.03	100	73 Average	Vertical	
3	2484.05	51.76	13.96	37.80	54.00	-2.24	100	73 Average	Vertical	

Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

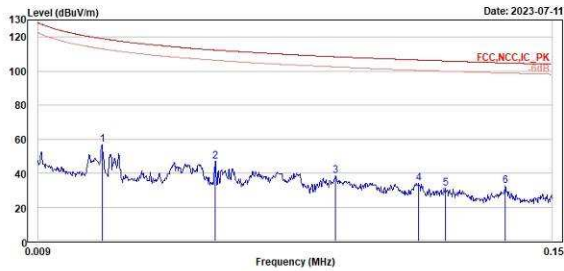
802.11ax HE20

Middle Channel 9kHz~150kHz(Open)

Middle Channel 150kHz~30MHz(Open)



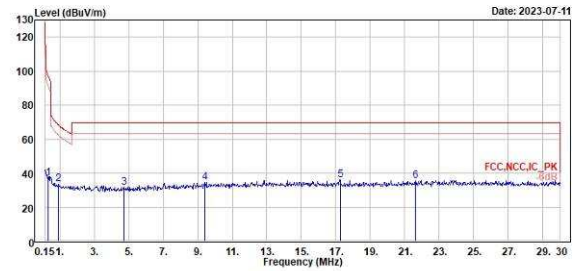
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	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.03	56.63	37.67	18.96	119.08	-62.45	100	278 Peak	Open	
2	0.06	47.18	28.24	18.94	112.38	-65.20	100	95 Peak	Open	
3	0.09	38.74	20.60	18.14	106.45	-69.71	100	162 Peak	Open	
4	0.11	34.01	16.03	17.98	106.51	-72.50	100	162 Peak	Open	
5	0.12	30.97	12.96	18.01	105.97	-75.00	100	205 Peak	Open	
6	0.14	32.54	14.46	18.08	104.85	-72.31	100	182 Peak	Open	



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	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.33	37.32	18.57	18.75	97.26	-59.84	100	222 Peak	Open	
2	0.93	35.44	14.48	19.04	68.27	-34.83	100	258 Peak	Open	
3	4.72	31.62	12.11	19.51	69.50	-37.88	100	360 Peak	Open	
4	9.43	34.61	13.29	21.32	69.50	-34.89	100	294 Peak	Open	
5	17.25	36.05	13.99	22.06	69.50	-33.45	100	95 Peak	Open	
6	21.61	35.76	13.51	22.25	69.50	-33.74	100	287 Peak	Open	

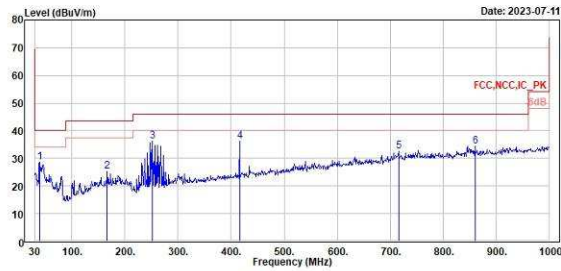
Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

802.11ax HE20

Middle Channel (Horizontal)



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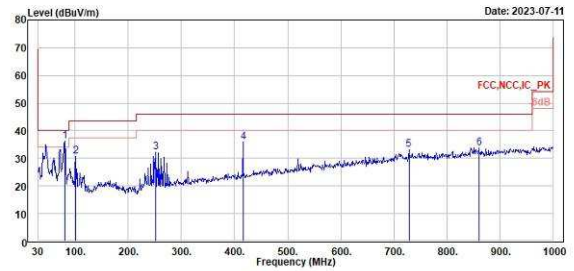


	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	39.78	28.62	36.63	-8.01	40.00	-11.38	300	183 Peak	Horizontal		
2	166.77	25.39	32.32	-6.93	43.50	-18.11	200	258 Peak	Horizontal		
3	252.13	36.08	44.05	-7.97	46.00	-9.92	100	115 Peak	Horizontal		
4	416.06	36.32	40.42	-4.10	46.00	-9.68	200	85 Peak	Horizontal		
5	715.79	32.63	31.04	1.59	46.00	-13.37	100	0 Peak	Horizontal		
6	860.32	34.30	30.61	3.69	46.00	-11.70	100	353 Peak	Horizontal		

Middle Channel (Vertical)



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	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	80.44	36.22	48.45	-12.23	40.00	-3.78	100	108 Peak	Vertical		
2	100.81	30.87	42.81	-11.94	43.50	-12.63	100	359 Peak	Vertical		
3	252.13	32.33	40.30	-7.97	46.00	-13.67	100	104 Peak	Vertical		
4	416.06	35.98	40.08	-4.10	46.00	-10.02	100	143 Peak	Vertical		
5	728.40	33.13	31.49	1.64	46.00	-12.87	100	269 Peak	Vertical		
6	860.32	33.75	30.06	3.69	46.00	-12.25	200	139 Peak	Vertical		

Spurious Emissions, Tx Mode, 1GHz ~ 26.5GHz

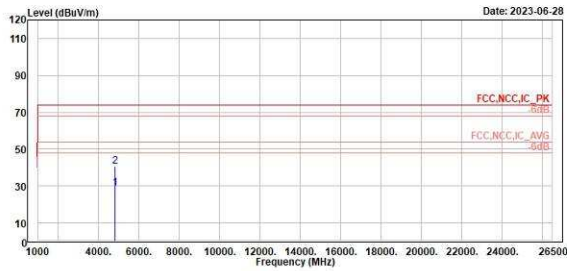
802.11ax HE20

Low Channel (Horizontal)

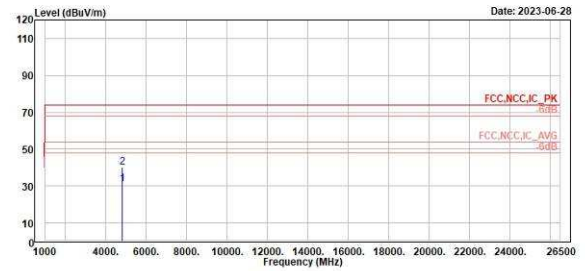
Low Channel (Vertical)



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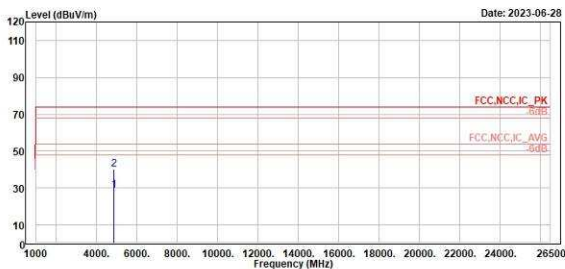
802.11ax HE20

Middle Channel (Horizontal)

Middle Channel (Vertical)



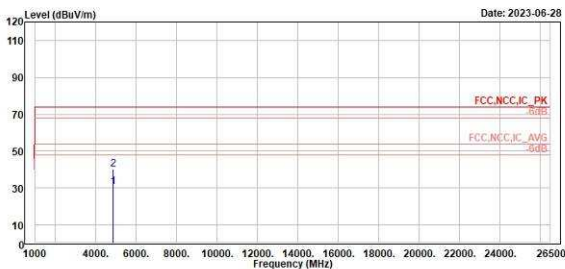
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Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	4874.00	28.87	39.20	-10.33	54.00	-25.13	100	135	Average	Horizontal	
2	4874.00	48.22	58.55	-10.33	74.00	-33.78	100	135	Peak	Horizontal	



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Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	4874.00	38.50	48.83	-10.33	54.00	-23.50	137	360	Average	Vertical	
2	4874.00	48.04	58.37	-10.33	74.00	-33.96	137	360	Peak	Vertical	

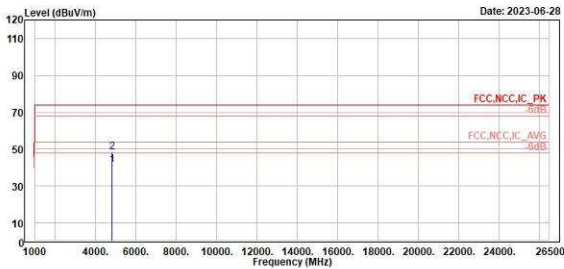
802.11ax HE40

Low Channel (Horizontal)

Low Channel (Vertical)



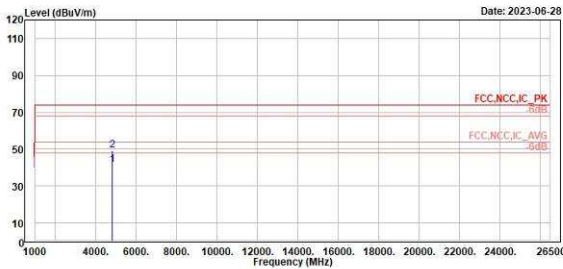
TUV Rheinland Taiwan Ltd.
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Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	4844.00	41.31	51.58	-10.27	54.00	-12.69	332	210	Average	Horizontal	
2	4844.00	48.55	58.82	-10.27	74.00	-25.45	332	210	Peak	Horizontal	



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Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	4844.00	41.71	51.98	-10.27	54.00	-12.29	100	117	Average	Vertical	
2	4844.00	49.47	59.74	-10.27	74.00	-24.53	100	117	Peak	Vertical	

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APOS	TPOS	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4874.00	28.91	39.24	-10.33	54.00	-25.09	200	131	Average	Vertical	
2	4874.00	42.74	53.07	-10.33	74.00	-31.26	200	131	Peak	Vertical	

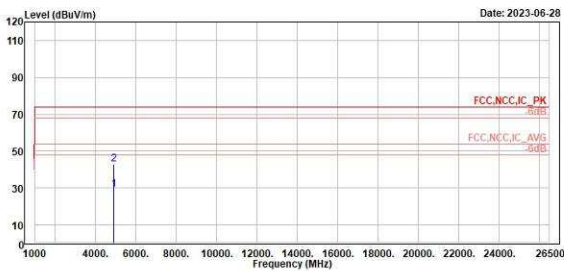
802.11ax HE40

High Channel (Horizontal)

High Channel (Vertical)



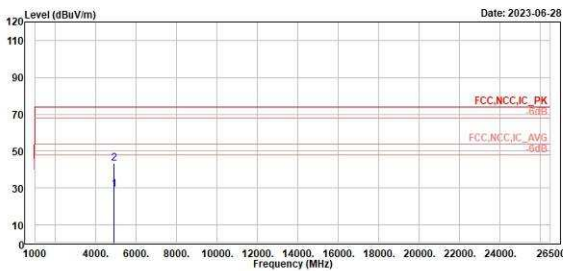
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Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	4904.00	29.19	39.56	-10.37	54.00	-24.81	300	27	Average	Horizontal	
2	4904.00	42.87	53.24	-10.37	74.00	-31.13	300	27	Peak	Horizontal	



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Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	4904.00	29.42	39.79	-10.37	54.00	-24.58	200	203	Average	Vertical	
2	4904.00	43.38	53.75	-10.37	74.00	-30.62	200	203	Peak	Vertical	