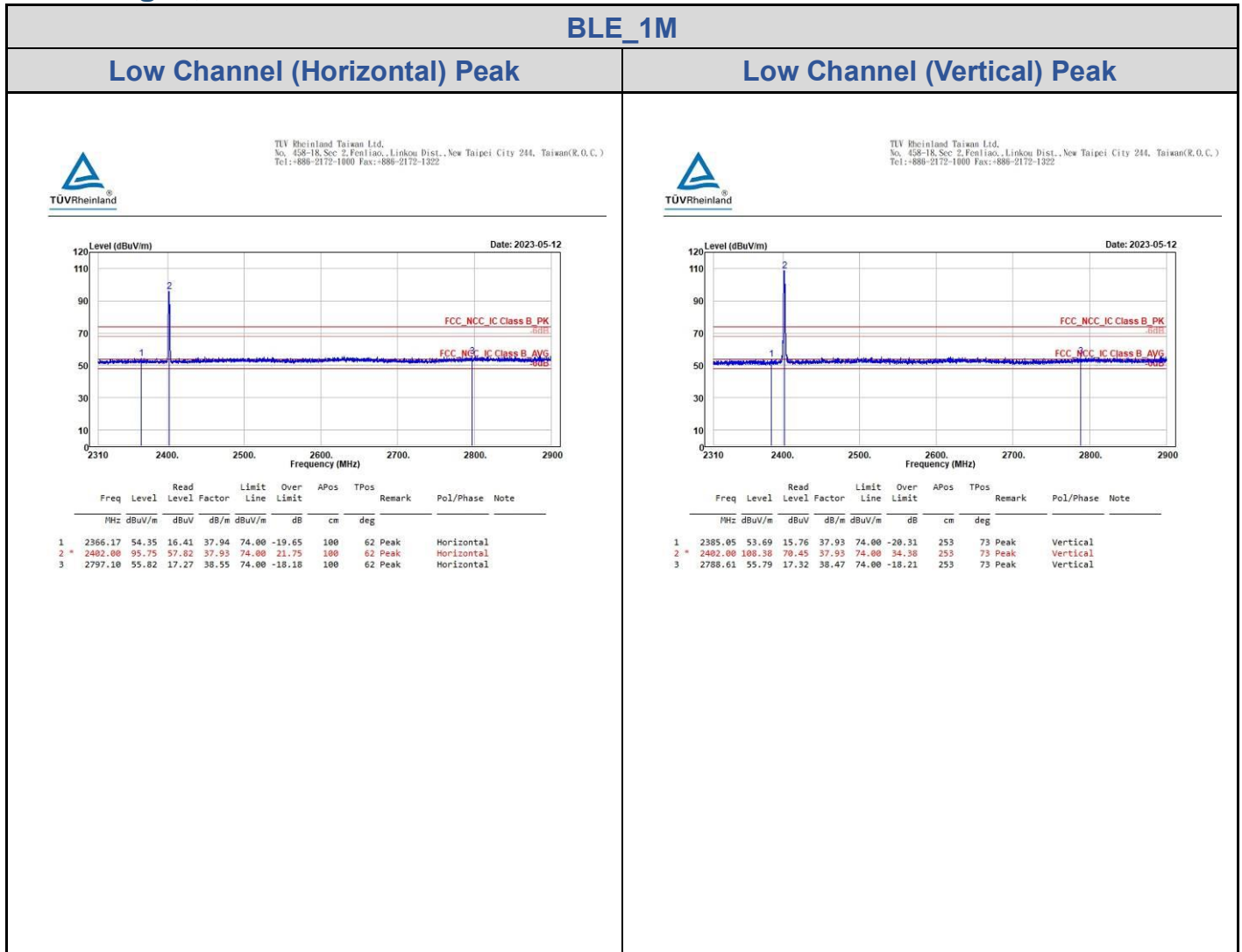


Appendix B: Test Results of Radiated Spurious Emissions & Conducted Emissions on a.c. mains port Test

Band Edges, 2.31GHz ~ 2.9GHz



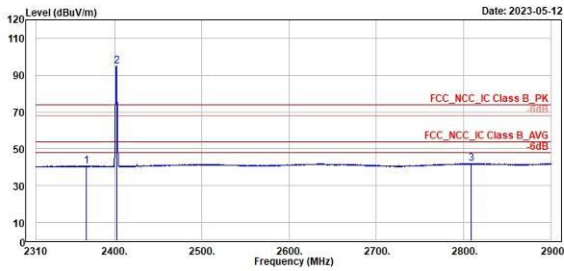
BLE_1M

Low Channel (Horizontal) Average

Low Channel (Vertical) Average



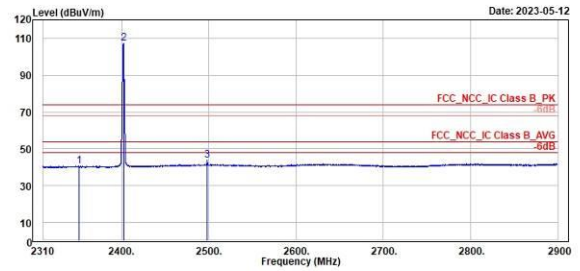
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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2367.70	40.71	2.77	37.94	54.00	-13.29	180	62 Average	Horizontal	
2 *	2402.00	94.73	56.80	37.93	54.00	40.73	180	62 Average	Horizontal	
3	2888.43	41.96	3.37	38.59	54.00	-12.04	180	62 Average	Horizontal	



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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	2351.06	40.63	2.67	37.96	54.00	-13.37	253	73 Average	Vertical	
2 *	2402.00	107.39	69.46	37.93	54.00	53.39	253	73 Average	Vertical	
3	2497.86	43.85	5.52	38.33	54.00	-10.15	253	73 Average	Vertical	

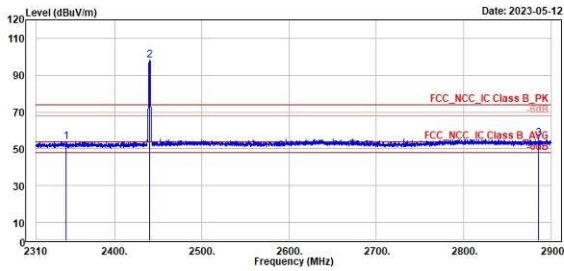
BLE_1M

Middle Channel (Horizontal) Peak

Middle Channel (Vertical) Peak



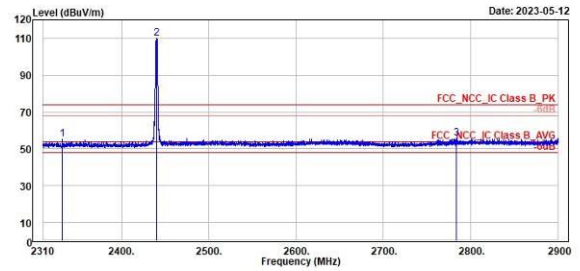
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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2344.69	53.90	15.99	37.91	74.00	-20.10	180	55 Peak	Horizontal	
2 *	2440.00	98.27	60.87	38.20	74.00	24.27	180	55 Peak	Horizontal	
3	2885.49	55.47	16.72	38.75	74.00	-18.53	180	55 Peak	Horizontal	



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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	2332.18	55.00	17.20	37.80	74.00	-19.00	180	70 Peak	Vertical	
2 *	2440.00	118.10	71.90	38.20	74.00	36.10	180	70 Peak	Vertical	
3	2783.30	55.77	17.34	38.43	74.00	-18.23	180	70 Peak	Vertical	

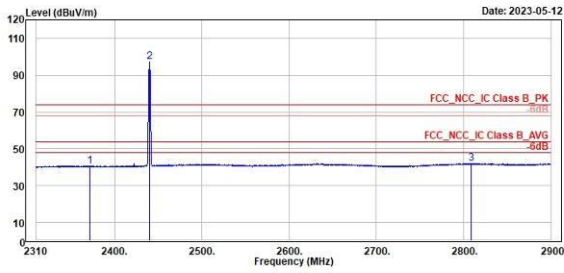
BLE_1M

Middle Channel (Horizontal) Average

Middle Channel (Vertical) Average



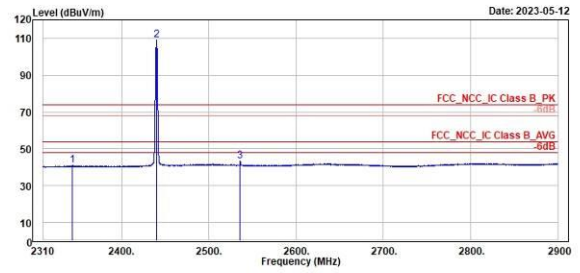
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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2371.68	48.71	2.77	37.94	54.00	-13.29	180	55 Average	Horizontal	
2 *	2440.00	97.22	59.82	38.20	54.00	43.22	180	55 Average	Horizontal	
3	2809.02	42.84	3.45	38.59	54.00	-11.96	180	55 Average	Horizontal	



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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	2343.87	41.26	3.36	37.90	54.00	-12.74	180	70 Average	Vertical	
2 *	2440.00	109.07	70.87	38.20	54.00	55.87	180	70 Average	Vertical	
3	2535.97	43.21	4.98	38.23	54.00	-10.79	180	70 Average	Vertical	

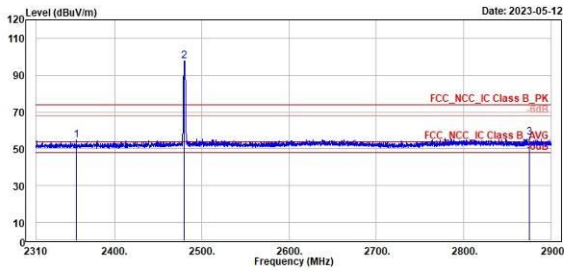
BLE_1M

High Channel (Horizontal) Peak

High Channel (Vertical) Peak



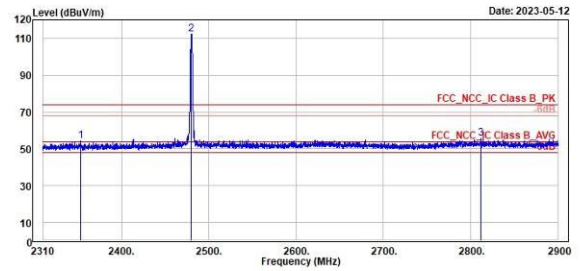
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Peak	Freq (MHz)	Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit Line (dBuV/m)	Over Limit (dB)	APos (cm)	TPos (deg)	Remark	Pol/Phase	Note
1	2356.37	54.74	16.79	37.95	74.00	-19.26	128	71	Peak	Horizontal	
2 *	2489.00	97.75	59.44	38.31	74.00	23.75	128	71	Peak	Horizontal	
3	2875.22	55.96	17.24	38.72	74.00	-18.04	128	71	Peak	Horizontal	



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Peak	Freq (MHz)	Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit Line (dBuV/m)	Over Limit (dB)	APos (cm)	TPos (deg)	Remark	Pol/Phase	Note
1	2353.42	54.50	16.55	37.95	74.00	-19.50	244	66	Peak	Vertical	
2 *	2489.00	112.26	73.95	38.31	74.00	38.26	244	66	Peak	Vertical	
3	2811.26	55.50	16.91	38.59	74.00	-18.50	244	66	Peak	Vertical	

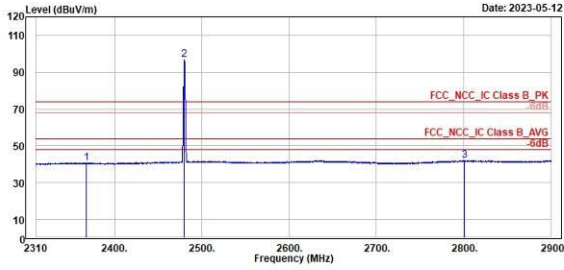
BLE_1M

High Channel (Horizontal) Average

High Channel (Vertical) Average



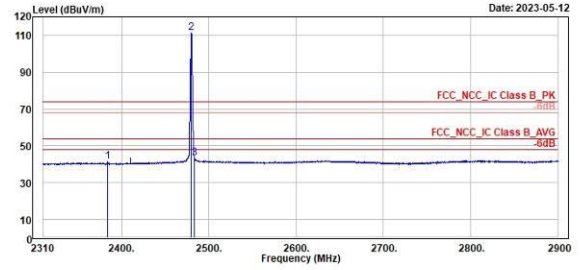
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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2367.35	40.61	2.66	37.95	54.00	-13.39	128	71 Average	Horizontal	
2 *	2489.00	96.72	56.41	38.31	54.00	42.72	128	71 Average	Horizontal	
3	2800.88	41.93	3.35	38.58	54.00	-12.07	128	71 Average	Horizontal	



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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	2363.75	41.32	3.39	37.93	54.00	-12.68	244	66 Average	Vertical	
2 *	2489.00	111.25	72.94	38.31	54.00	57.25	244	66 Average	Vertical	
3	2483.58	43.30	4.99	38.31	54.00	-10.70	244	66 Average	Vertical	

Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

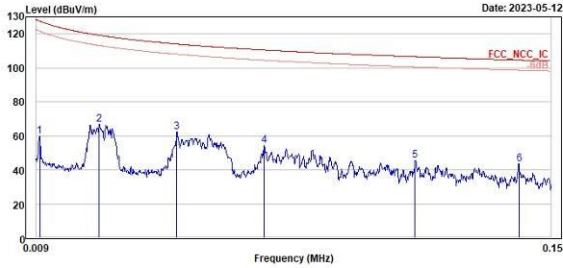
BLE_1M

High Channel (Open) 9kHz~150kHz

High Channel (Open) 150kHz~30MHz



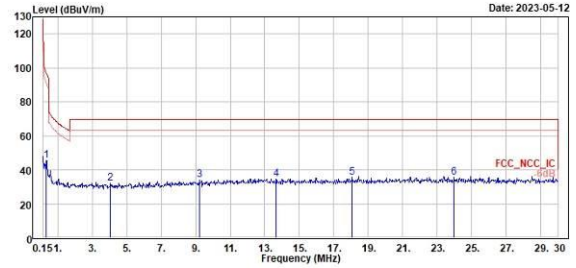
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Peak	Freq (MHz)	Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit Line (dBuV/m)	Over Limit (dB)	APos (cm)	TPos (deg)	Remark	PoI/Phase	Note
1	0.01	59.50	41.86	17.72	127.60	-68.02	100	104	Peak	Open	
2	0.03	66.62	47.68	18.94	119.18	-52.56	100	234	Peak	Open	
3	0.05	62.20	43.07	19.13	114.06	-51.86	100	258	Peak	Open	
4	0.07	54.50	35.90	18.60	110.51	-56.01	100	258	Peak	Open	
5	0.11	45.51	27.54	17.97	106.95	-61.04	100	254	Peak	Open	
6	0.14	43.28	25.19	18.09	104.60	-61.32	100	254	Peak	Open	

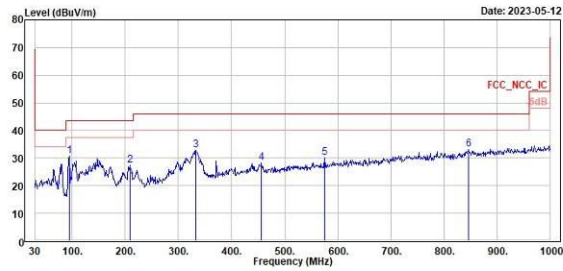


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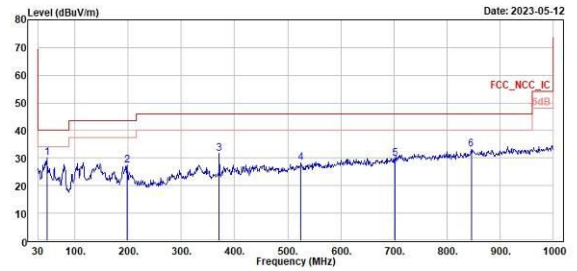


Peak	Freq (MHz)	Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit Line (dBuV/m)	Over Limit (dB)	APos (cm)	TPos (deg)	Remark	PoI/Phase	Note
1	0.33	45.57	26.03	18.74	97.26	-51.69	100	243	Peak	Open	
2	4.06	32.18	12.59	19.51	69.50	-37.40	100	152	Peak	Open	
3	9.22	34.17	13.00	21.17	69.50	-35.33	100	142	Peak	Open	
4	13.67	34.69	12.95	21.74	69.50	-34.81	100	51	Peak	Open	
5	18.06	35.82	13.79	22.03	69.50	-33.68	100	147	Peak	Open	
6	23.97	35.37	13.18	22.19	69.50	-34.13	100	168	Peak	Open	

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz
BLE_1M
High Channel (Horizontal)
High Channel (Vertical)

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Peak	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	94.02	30.66	42.40	-11.74	43.50	-12.84	400	124 Peak	Horizontal	
2	288.48	27.46	36.13	-8.67	43.50	-16.04	100	269 Peak	Horizontal	
3	332.64	32.87	36.67	-3.80	46.00	-13.13	100	288 Peak	Horizontal	
4	456.80	28.23	30.32	-2.09	46.00	-17.77	100	62 Peak	Horizontal	
5	575.14	30.09	30.61	-0.52	46.00	-15.91	100	204 Peak	Horizontal	
6	846.74	33.15	29.05	4.10	46.00	-12.85	300	45 Peak	Horizontal	


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Peak	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	46.49	30.08	35.95	-5.87	40.00	-9.92	100	243 Peak	Vertical	
2	197.81	27.27	35.76	-8.49	43.50	-16.23	100	360 Peak	Vertical	
3	371.44	31.74	35.11	-3.37	46.00	-14.26	100	44 Peak	Vertical	
4	524.70	28.31	29.15	-0.84	46.00	-17.69	200	60 Peak	Vertical	
5	702.21	29.78	27.58	2.20	46.00	-16.22	300	189 Peak	Vertical	
6	845.77	33.06	28.95	4.10	46.00	-12.94	300	127 Peak	Vertical	

Spurious Emissions, Tx Mode, 1GHz ~ 26.5GHz

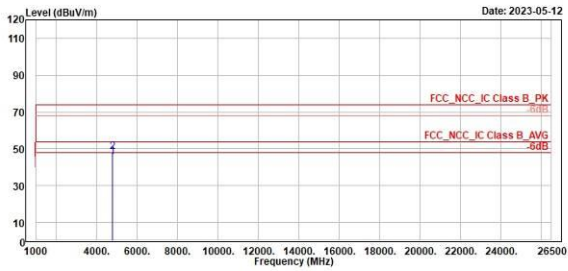
BLE_1M

Low Channel (Horizontal)

Low Channel (Vertical)



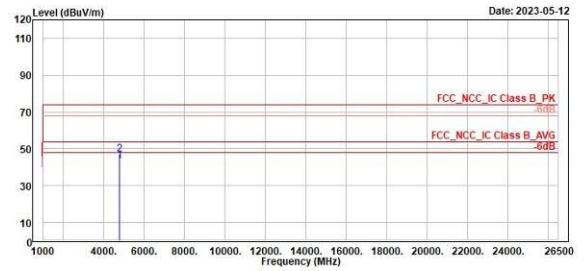
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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4884.00	45.51	53.37	-7.86	54.00	-8.49	319	183 Average	Horizontal	
2	4884.00	48.22	56.08	-7.86	74.00	-25.78	319	183 Peak	Horizontal	



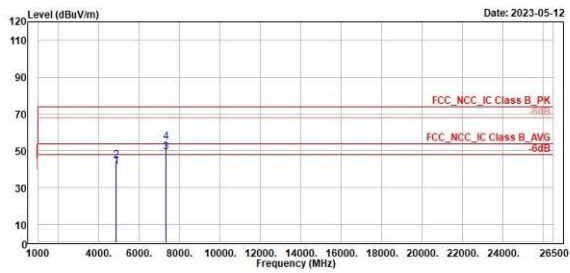
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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4884.00	43.19	51.05	-7.86	54.00	-10.81	221	85 Average	Vertical	
2	4884.00	47.00	54.86	-7.86	74.00	-27.00	221	85 Peak	Vertical	

BLE_1M
Middle Channel (Horizontal)
Middle Channel (Vertical)

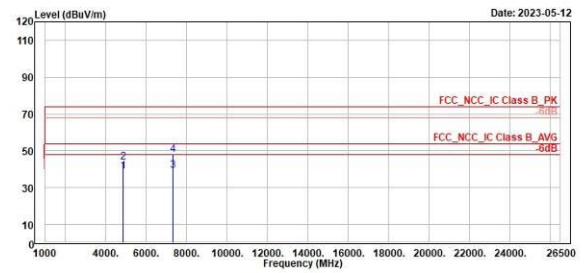

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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4889.00	41.46	49.32	-7.86	54.00	-12.54	480	58 Average	Horizontal	
2	4889.00	44.71	52.57	-7.86	74.00	-29.29	480	58 Peak	Horizontal	
3	7328.00	49.25	54.81	-5.56	54.00	-4.75	200	80 Average	Horizontal	
4	7328.00	54.77	60.33	-5.56	74.00	-19.23	200	80 Peak	Horizontal	



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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	4889.00	38.88	46.74	-7.86	54.00	-15.12	123	36 Average	Vertical	
2	4889.00	43.70	51.56	-7.86	74.00	-30.30	123	36 Peak	Vertical	
3	7328.00	39.21	44.77	-5.56	54.00	-14.79	100	14 Average	Vertical	
4	7328.00	48.88	53.64	-5.56	74.00	-25.92	100	14 Peak	Vertical	

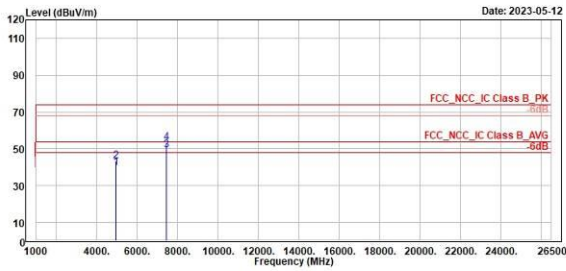
BLE_1M

High Channel (Horizontal)

High Channel (Vertical)



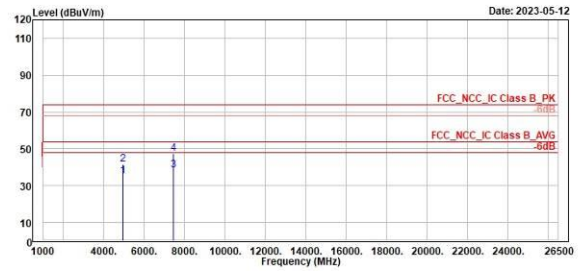
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	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4969.00	39.61	47.26	-7.65	54.00	-14.39	480	45	Average	Horizontal	
2	4969.00	43.22	50.87	-7.65	74.00	-30.78	480	45	Peak	Horizontal	
3	7448.00	49.43	55.08	-5.65	54.00	-4.57	191	81	Average	Horizontal	
4	7448.00	53.33	58.98	-5.65	74.00	-20.67	191	81	Peak	Horizontal	



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	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	4969.00	35.19	42.84	-7.65	54.00	-18.81	308	107	Average	Vertical	
2	4969.00	41.57	49.22	-7.65	74.00	-32.43	308	107	Peak	Vertical	
3	7448.00	38.19	43.84	-5.65	54.00	-15.81	236	10	Average	Vertical	
4	7448.00	47.22	52.87	-5.65	74.00	-26.78	236	10	Peak	Vertical	

Conducted Emissions on a.c. mains port, 150kHz ~ 30MHz

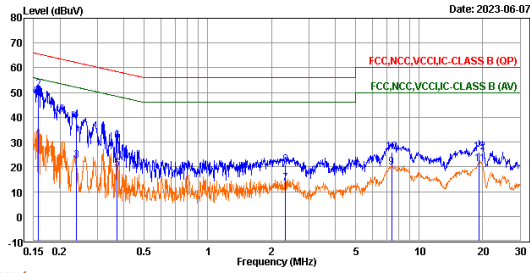
LE 2480 MHz, IEEE 802.11ax HE20 2412 MHz, IEEE 802.11a 5475 MHz
and IEEE 802.11ax HE20 5955 MHz

(Line)

(Neutral)



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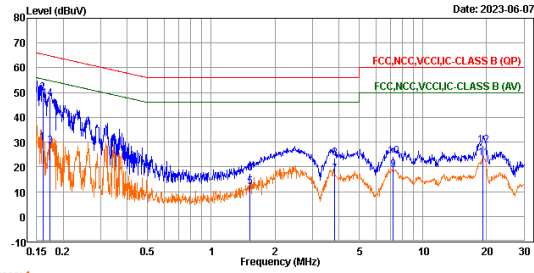


Trace: 1

	Freq	Level	Read	Limit	Over			
	MHz	dBuV	Level	Line	Limit	Remark	Pol/Phase	Note
		dBuV	Factor	dB	dBuV	dB		
1	0.16	30.89	21.27	9.62	55.59	-24.70 Average	line1	
2	0.16	51.38	41.76	9.62	65.59	-14.21 QP	line1	
3	0.24	22.36	12.74	9.62	52.15	-29.79 Average	line1	
4	0.24	38.77	29.15	9.62	62.15	-23.38 QP	line1	
5	0.37	19.03	9.40	9.63	48.47	-29.44 Average	line1	
6	0.37	30.49	20.86	9.63	58.47	-27.98 QP	line1	
7	2.33	13.41	3.75	9.66	46.00	-32.59 Average	line1	
8	2.33	20.89	11.23	9.66	56.00	-35.11 QP	line1	
9	7.39	19.83	10.10	9.73	50.00	-30.17 Average	line1	
10	7.39	25.85	16.12	9.73	60.00	-34.15 QP	line1	
11	19.25	20.99	11.22	9.77	50.00	-29.01 Average	line1	
12	19.25	25.98	16.21	9.77	60.00	-34.02 QP	line1	



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Trace: 1

	Freq	Level	Read	Limit	Over			
	MHz	dBuV	Level	Line	Limit	Remark	Pol/Phase	Note
		dBuV	Factor	dB	dBuV	dB		
1	0.16	29.62	20.00	9.62	55.46	-25.84 Average	neutral	
2	0.16	49.87	40.25	9.62	65.46	-15.59 QP	neutral	
3	0.17	28.37	18.75	9.62	54.84	-26.47 Average	neutral	
4	0.17	47.44	37.82	9.62	64.84	-17.40 QP	neutral	
5	1.52	11.95	2.29	9.66	46.00	-34.05 Average	neutral	
6	1.52	17.48	7.82	9.66	56.00	-38.52 QP	neutral	
7	3.81	17.02	7.33	9.69	46.00	-28.98 Average	neutral	
8	3.81	23.55	13.86	9.69	56.00	-32.45 QP	neutral	
9	7.25	18.58	8.83	9.75	50.00	-31.42 Average	neutral	
10	7.25	24.16	14.41	9.75	60.00	-35.84 QP	neutral	
11	19.25	23.59	13.73	9.86	50.00	-26.41 Average	neutral	
12	19.25	28.76	18.90	9.86	60.00	-31.24 QP	neutral	