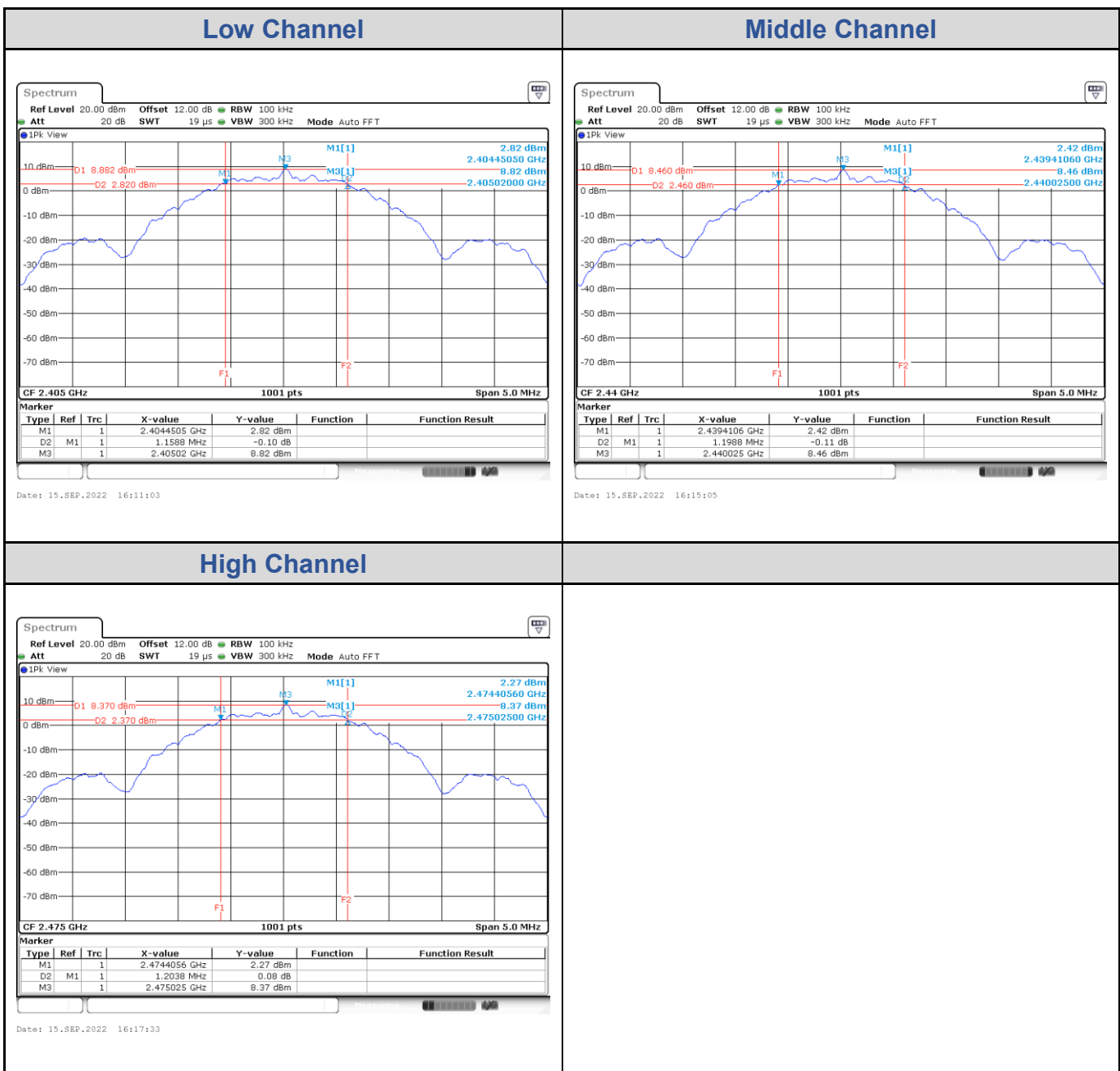


Appendix A: Test Results of Conducted Test

Test Result of 6 dB Bandwidth

IEEE802.15.4

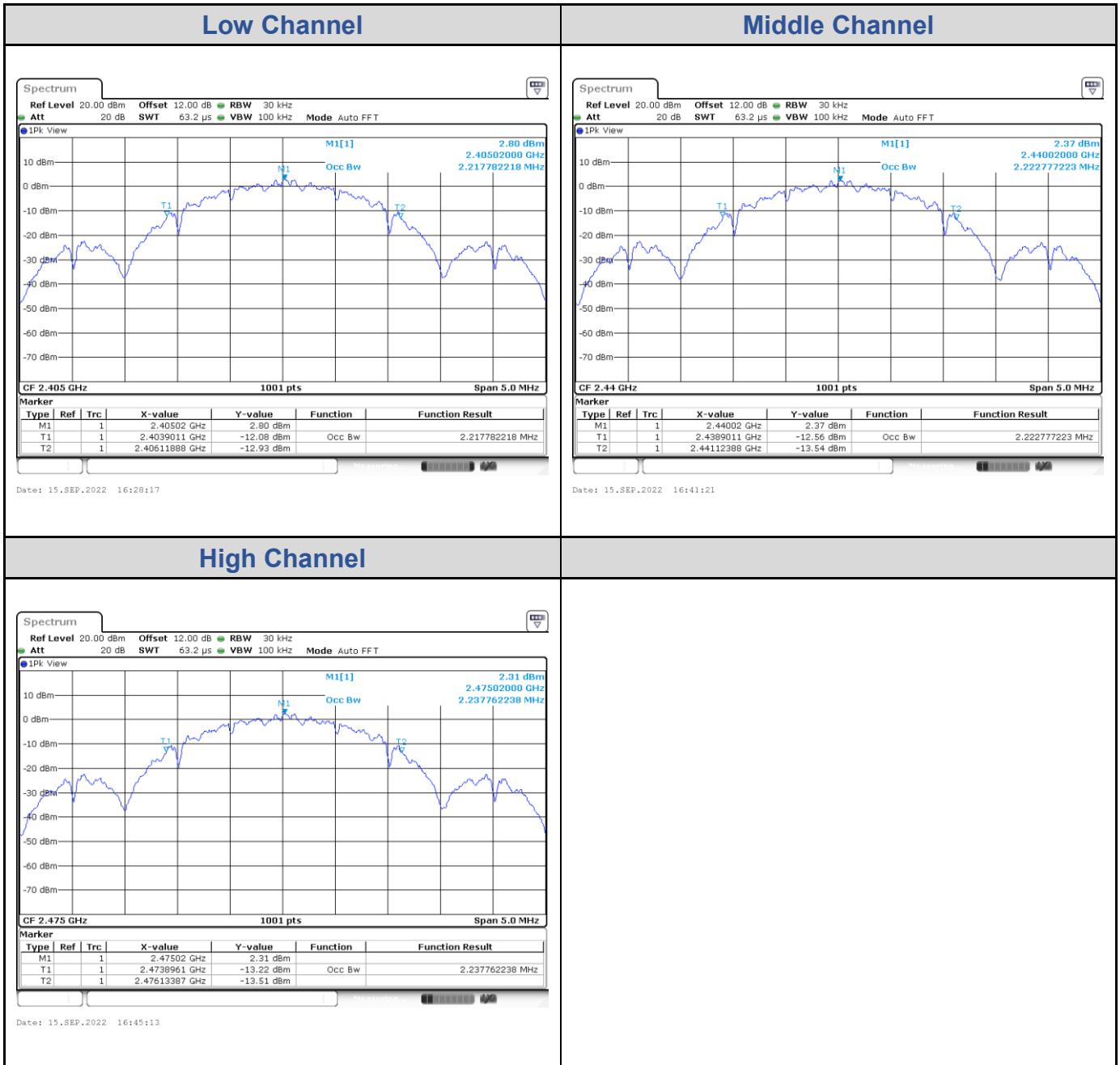
Channel	Channel Frequency (MHz)	6 dB Bandwidth (kHz)	Limit (kHz)	Result
Low Channel	2405	1158.8	> 500	Pass
Middle Channel	2440	1198.8	> 500	Pass
High Channel	2475	1203.8	> 500	Pass



Test Result of 99% Occupied Bandwidth

IEEE802.15.4

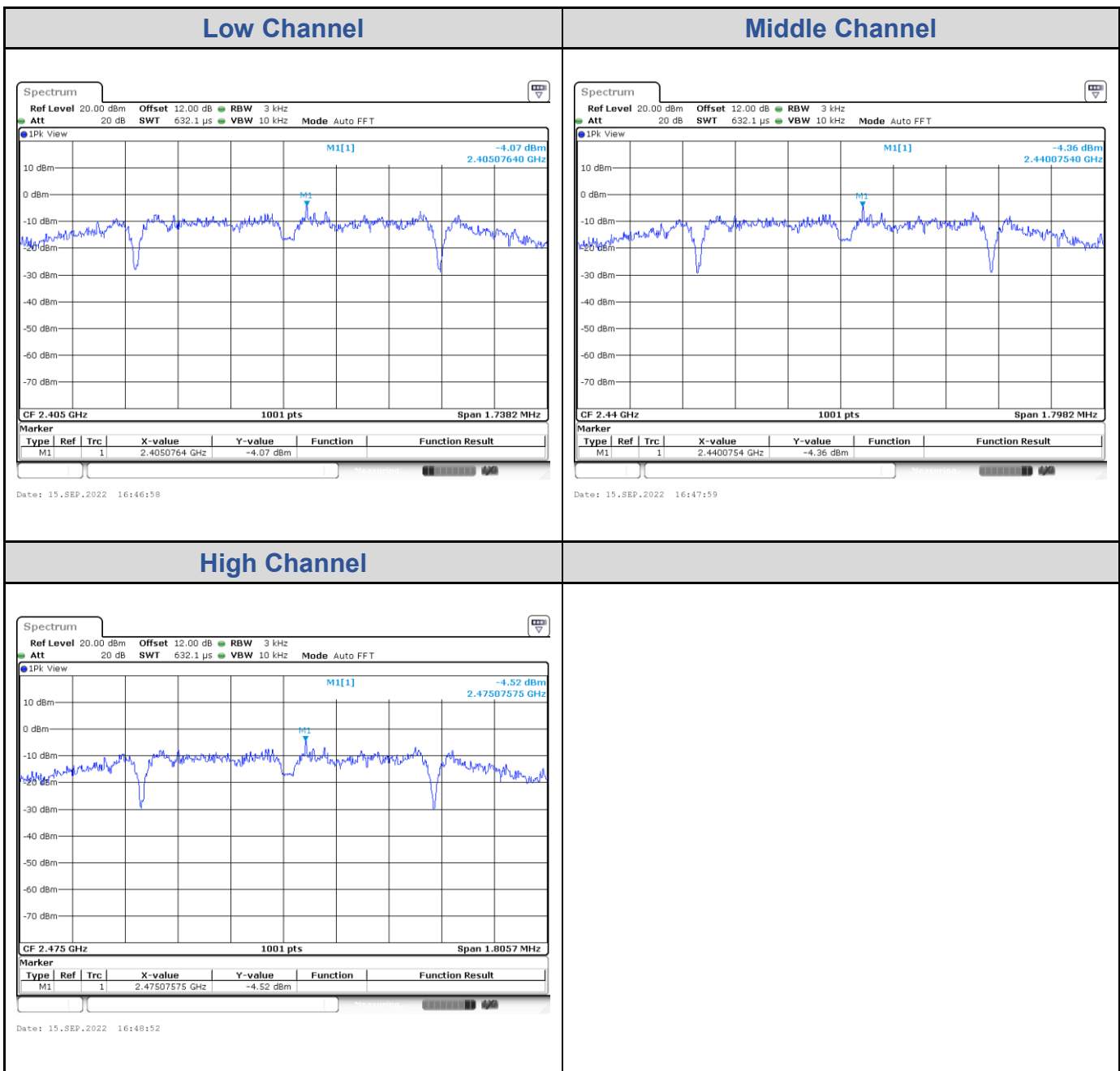
Channel	Channel Frequency (MHz)	99% Bandwidth (MHz)
Low Channel	2405	2.22
Middle Channel	2440	2.22
High Channel	2475	2.24



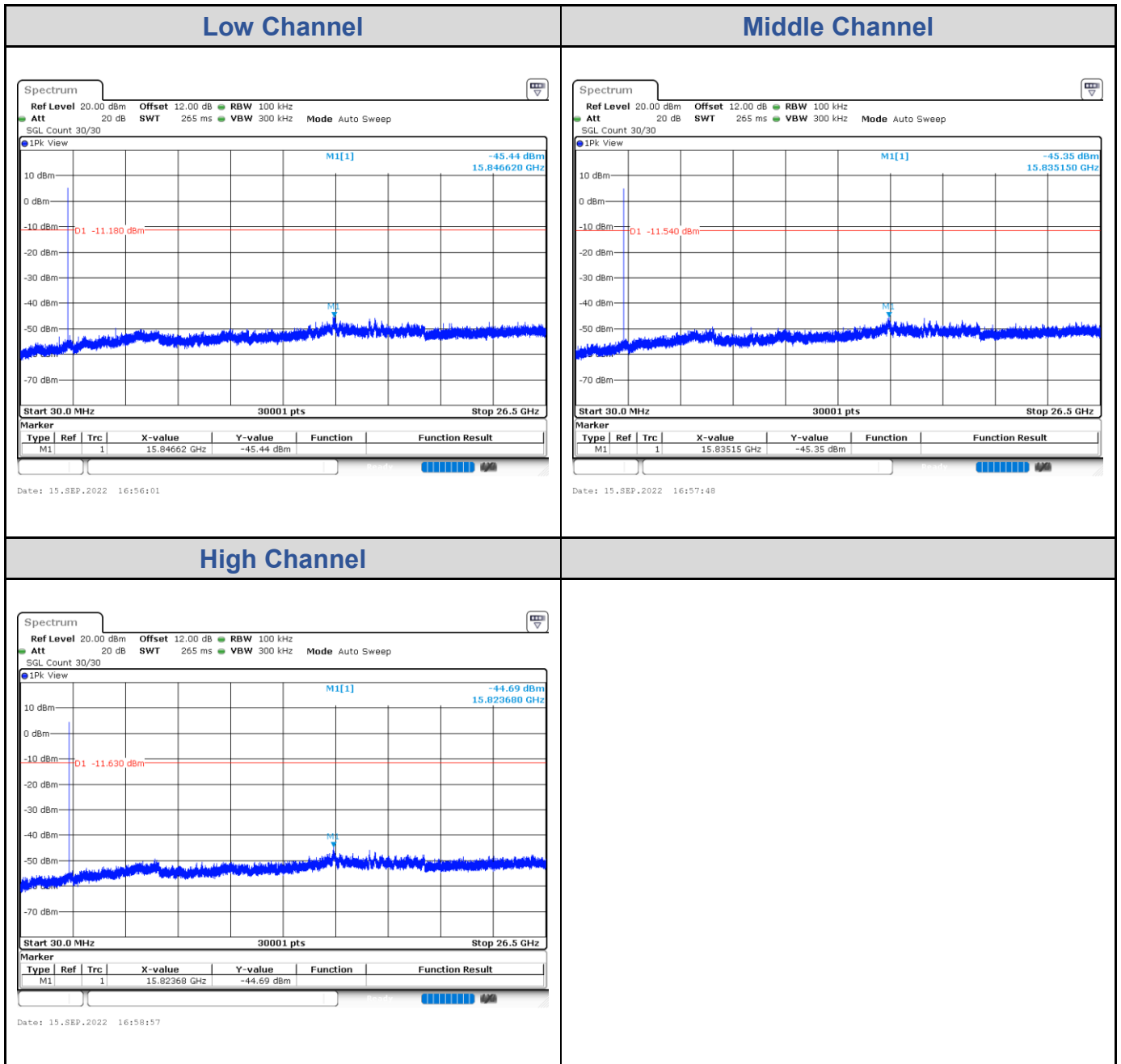
Test Result of Power Spectral Density

IEEE802.15.4

Channel	Channel Frequency (MHz)	Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	2405	-4.07	8	Pass
Middle Channel	2440	-4.36	8	Pass
High Channel	2475	-4.52	8	Pass

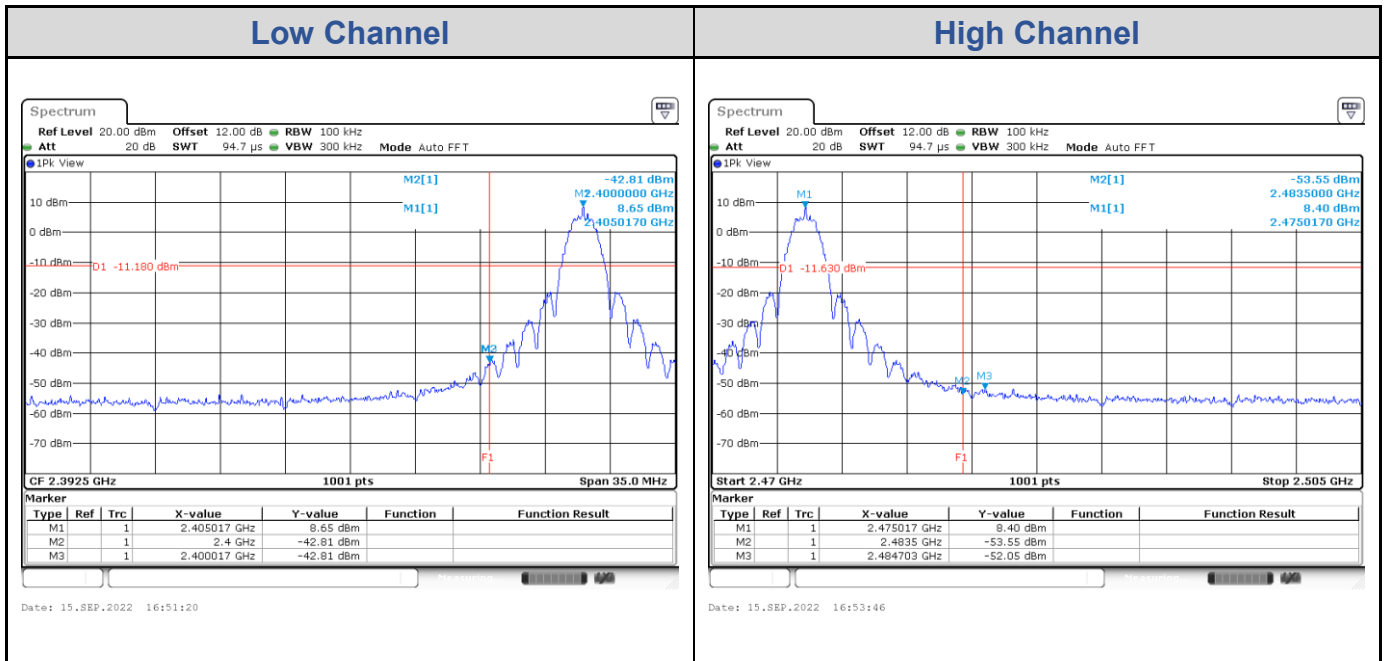


Test Result of Conducted Spurious Emissions, Tx Mode
IEEE802.15.4



Test Result of Conducted Band Edge, Tx Mode

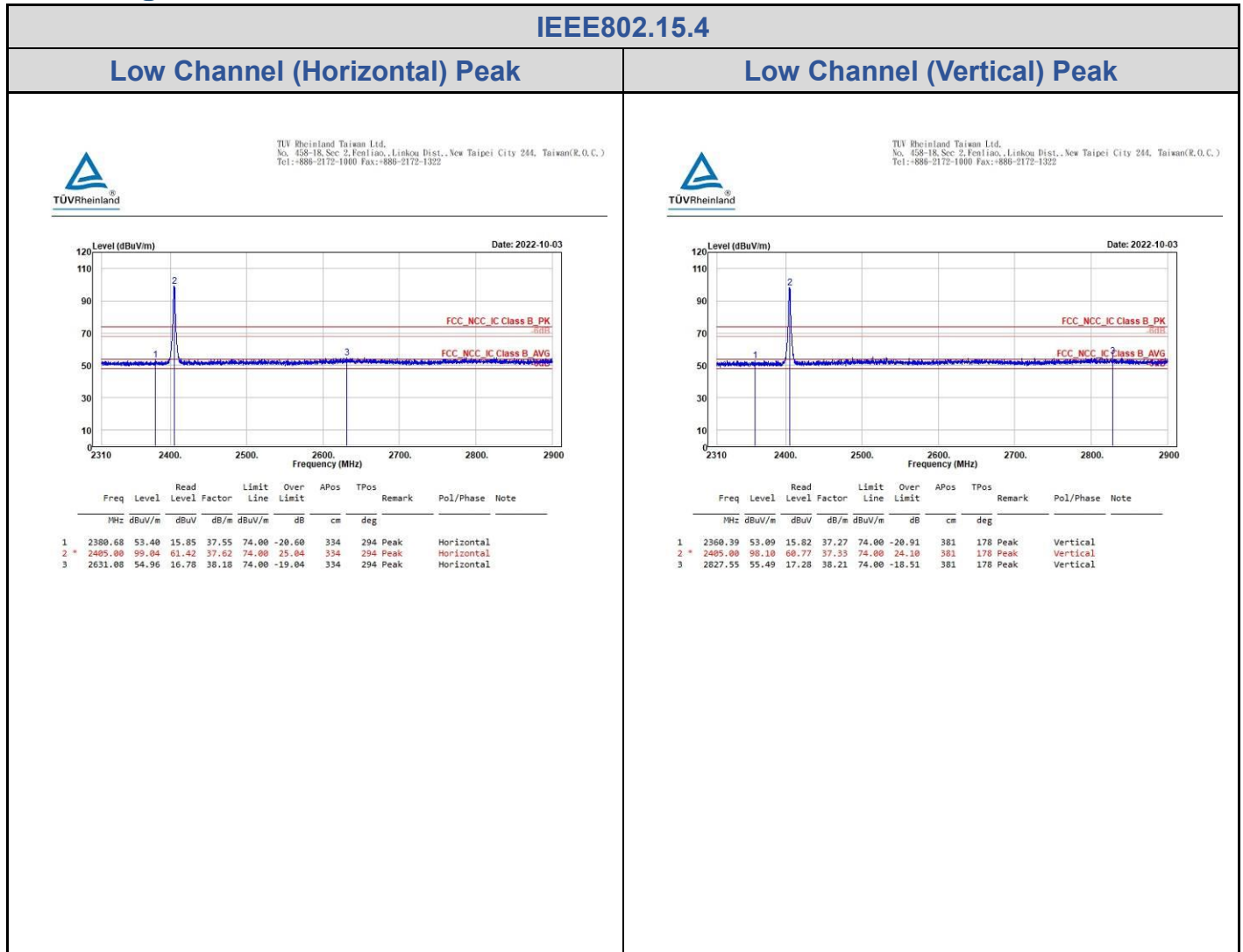
IEEE802.15.4



Appendix B: Test Results of Radiated Spurious Emissions & Mains

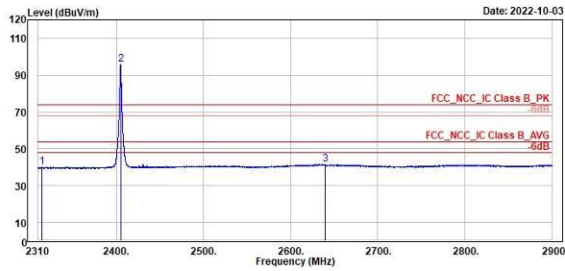
Conducted Emission Test

Band Edges, 2.31GHz ~ 2.9GHz



IEEE802.15.4
Low Channel (Horizontal) Average
Low Channel (Vertical) Average

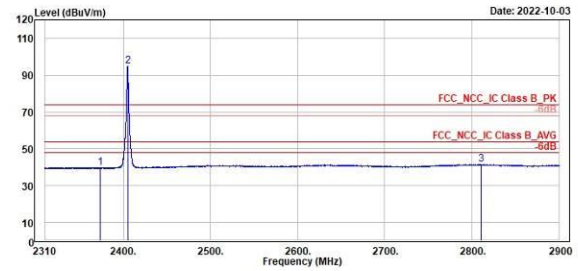

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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2314.72	48.03	2.68	37.35	54.00	-13.97	334	294 Average	Horizontal	
2 *	2405.00	95.64	58.82	37.82	54.00	41.64	334	294 Average	Horizontal	
3	2639.46	41.50	3.31	38.19	54.00	-12.50	334	294 Average	Horizontal	



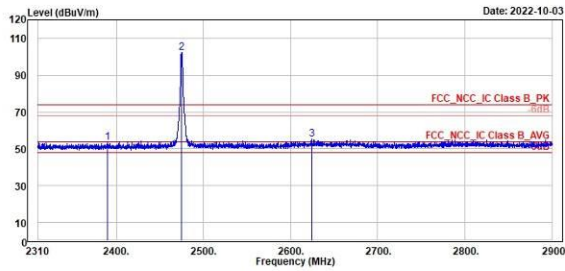
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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2373.13	39.87	2.59	37.28	54.00	-14.13	381	178 Average	Vertical	
2 *	2405.00	94.95	57.62	37.33	54.00	40.95	381	178 Average	Vertical	
3	2810.32	41.50	3.31	38.19	54.00	-12.50	381	178 Average	Vertical	

IEEE802.15.4
High Channel (Horizontal) Peak
High Channel (Vertical) Peak

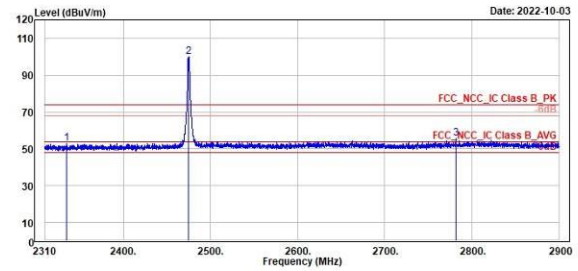

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Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	53.45	15.87	37.58	74.00	-20.55	316	294	Peak	Horizontal	
2 *	2475.00	102.22	64.62	37.60	74.00	28.22	316	294	Peak	Horizontal	
3	2624.47	55.29	17.12	38.17	74.00	-18.71	316	294	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	dB/m	dBuV/m	dB	cm	deg			
1	2335.25	52.89	15.74	37.15	74.00	-21.11	354	171	Peak	Vertical	
2 *	2475.00	99.91	62.26	37.65	74.00	25.91	354	171	Peak	Vertical	
3	2781.65	55.70	17.58	38.12	74.00	-18.30	354	171	Peak	Vertical	

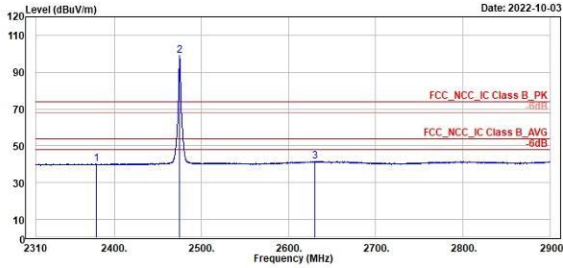
IEEE802.15.4

High Channel (Horizontal) Average

High Channel (Vertical) Average



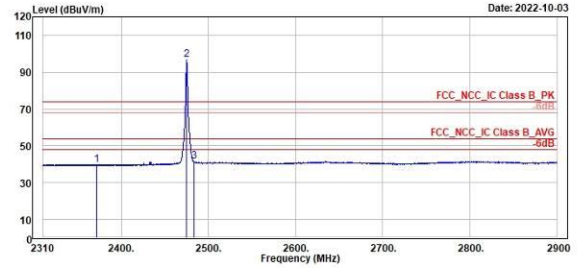
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Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2379.15	48.87	2.52	37.55	54.00	-13.93	316	294 Average	Horizontal
2 *	2475.00	98.97	61.37	37.68	54.00	44.97	316	294 Average	Horizontal
3	2638.25	41.61	3.43	38.18	54.00	-12.39	316	294 Average	Horizontal



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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	2371.48	39.92	2.64	37.28	54.00	-14.08	354	171 Average	Vertical
2 *	2475.00	96.62	58.97	37.65	54.00	42.62	354	171 Average	Vertical
3	2483.81	41.48	3.77	37.71	54.00	-12.52	354	171 Average	Vertical

Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

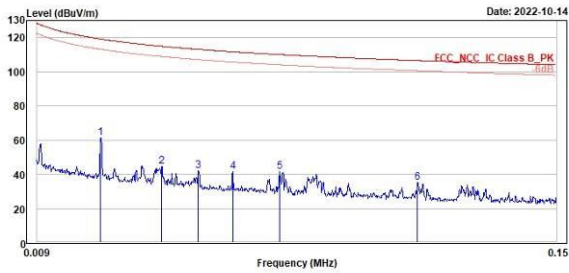
IEEE802.15.4

Low Channel (Open) 9kHz~150kHz

Low Channel (Open) 150kHz~30MHz



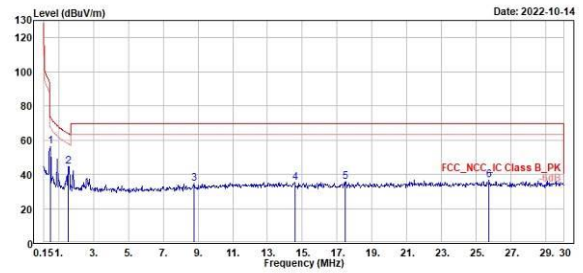
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Peak	Freq (MHz)	Level (dBuV/m)	Read Level (dBuV)	Factor (dB/m)	Limit Line (dBuV/m)	Over Limit (dB)	APos (cm)	TPos (deg)	Remark	Pol/Phase	Note
1	0.03	61.52	42.34	19.18	119.18	-57.66	100	60	QP	Open	
2	0.04	44.66	25.28	19.38	114.96	-70.30	100	237	QP	Open	
3	0.05	41.91	22.66	19.25	113.13	-71.22	100	88	QP	Open	
4	0.06	41.61	22.57	19.04	111.72	-70.11	100	220	QP	Open	
5	0.07	41.32	22.56	18.76	110.10	-68.78	100	230	QP	Open	
6	0.11	35.04	16.78	18.26	106.59	-71.55	100	230	QP	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	Pol/Phase	Note
1	0.51	56.20	37.26	18.94	73.40	-17.20	100	258	QP	Open	
2	1.55	44.60	25.27	19.33	63.78	-19.18	100	276	QP	Open	
3	8.78	34.59	13.72	20.87	69.50	-34.91	100	180	QP	Open	
4	14.57	35.21	13.51	21.70	69.50	-34.29	100	224	QP	Open	
5	17.46	35.53	13.64	21.89	69.50	-33.97	100	157	QP	Open	
6	25.73	36.66	14.38	22.28	69.50	-32.84	100	204	QP	Open	

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

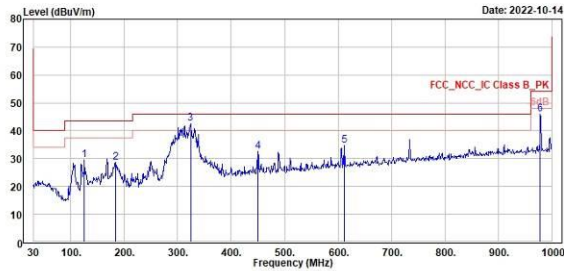
IEEE802.15.4

Low Channel (Horizontal)

Low Channel (Vertical)



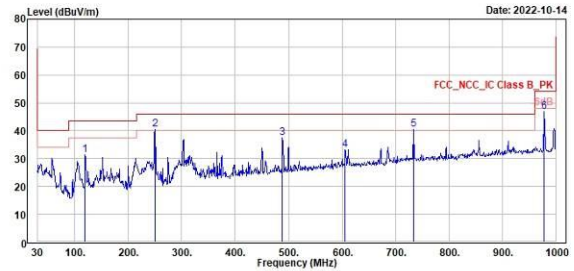
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Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	125.06	29.56	37.30	-7.74	43.50	-13.94	300	227 QP	Horizontal
2	183.26	28.50	36.09	-7.59	43.50	-15.00	200	242 QP	Horizontal
3	323.91	42.55	46.71	-4.16	46.00	-3.45	100	203 QP	Horizontal
4	450.01	32.61	34.62	-2.01	46.00	-13.39	200	234 QP	Horizontal
5	612.00	34.74	34.21	0.53	46.00	-11.26	200	175 QP	Horizontal
6	978.66	45.87	39.92	5.95	54.00	-8.13	100	213 QP	Horizontal



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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	119.24	31.26	39.73	-8.47	43.50	-12.24	100	194 QP	Vertical
2	250.19	40.61	47.08	-6.47	46.00	-5.39	100	282 QP	Vertical
3	488.81	37.50	39.22	-1.72	46.00	-8.50	100	158 QP	Vertical
4	606.18	33.17	32.74	0.43	46.00	-12.83	100	165 QP	Vertical
5	733.25	40.44	38.21	2.23	46.00	-5.56	100	167 QP	Vertical
6	978.66	46.96	41.01	5.95	54.00	-7.04	100	214 QP	Vertical

Spurious Emissions, Tx Mode, 1GHz ~ 26.5GHz

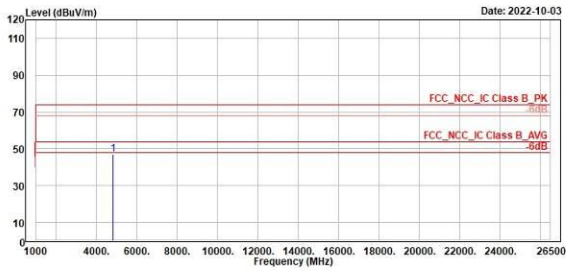
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Low Channel (Horizontal)

Low Channel (Vertical)



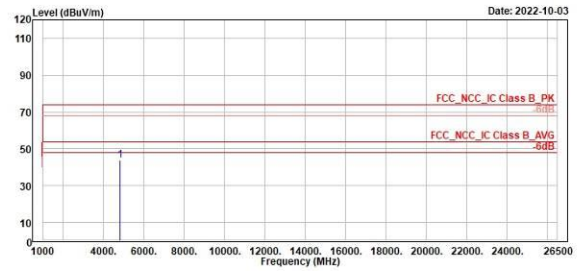
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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	PoI/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4810.00	46.87	55.89	-9.02	74.00	-27.13	300	211 Peak	Horizontal	



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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	PoI/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4810.00	43.64	53.04	-9.40	74.00	-30.36	289	146 Peak	Vertical	

IEEE802.15.4

Middle Channel (Horizontal)

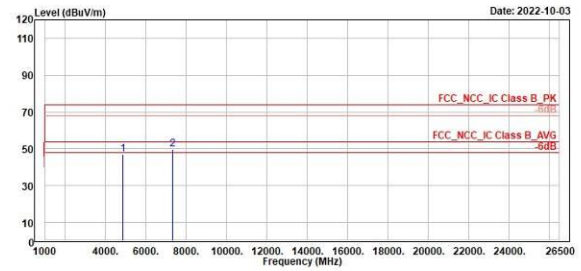
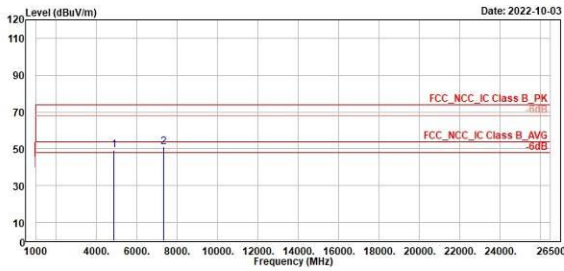
Middle Channel (Vertical)



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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	PoI/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4889.00	49.17	58.17	-9.00	74.00	-24.83	300	206 Peak	Horizontal	
2	7328.00	58.94	57.45	-6.51	74.00	-23.06	200	224 Peak	Horizontal	

Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	PoI/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4889.00	46.93	56.29	-9.36	74.00	-27.07	300	179 Peak	Vertical	
2	7328.00	49.70	56.33	-6.63	74.00	-24.30	100	170 Peak	Vertical	

IEEE802.15.4

High Channel (Horizontal)

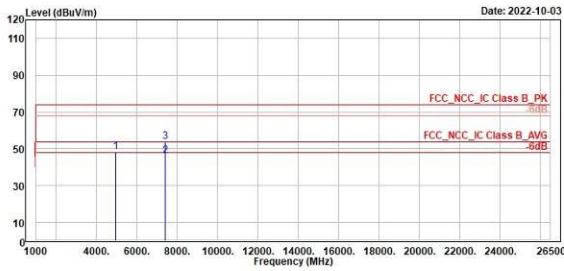
High Channel (Vertical)



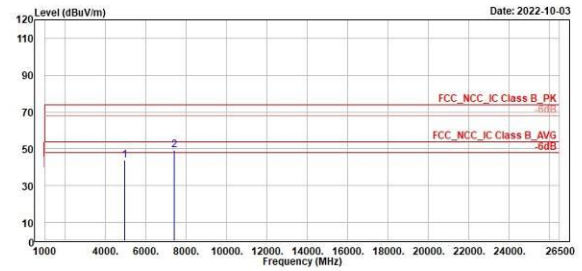
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Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4959.00	48.42	57.29	-8.87	74.00	-25.58	300	206 Peak	Horizontal	
2	7425.00	45.94	52.29	-6.26	54.00	-8.06	100	62 Average	Horizontal	
3	7425.00	53.85	60.11	-6.26	74.00	-20.15	100	62 Peak	Horizontal	



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	4959.00	43.65	52.92	-9.27	74.00	-30.35	300	192 Peak	Vertical	
2	7425.00	49.40	55.96	-6.56	74.00	-24.60	100	192 Peak	Vertical	

Mains Conducted Emission, 150kHz ~ 30MHz

IEEE802.15.4

(Line)

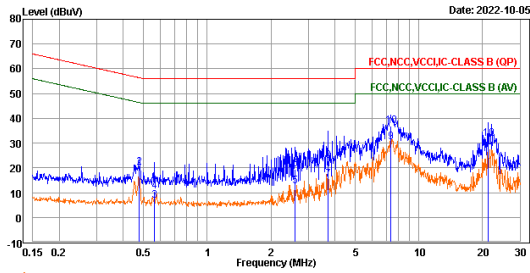
(Neutral)



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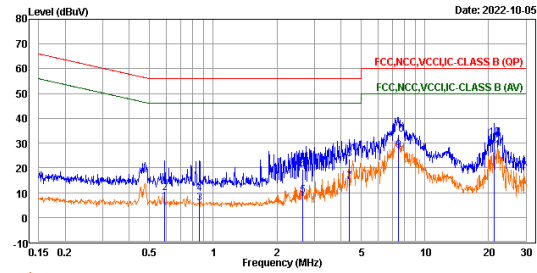


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Trace: 1

Line	Freq	Level	Read Level	Factor	Limit	Over	Remark	Pol/Phase	Note
	MHz	dBuV	dBuV	dB	dBuV	dB			
1	0.48	16.47	6.85	9.62	46.40	-29.93	Average	line1	
2	0.48	20.14	10.52	9.62	56.40	-36.26	QP	line1	
3	0.56	6.63	-2.99	9.62	46.00	-39.37	Average	line1	
4	0.56	10.49	0.87	9.62	56.00	-45.51	QP	line1	
5	2.61	12.62	2.97	9.65	46.00	-33.38	Average	line1	
6	2.61	19.59	9.94	9.65	56.00	-36.41	QP	line1	
7	3.72	15.41	5.74	9.67	46.00	-30.59	Average	line1	
8	3.72	23.01	13.34	9.67	56.00	-32.99	QP	line1	
9	7.36	30.35	20.64	9.71	50.00	-19.65	Average	line1	
10	7.36	36.88	27.17	9.71	60.00	-23.12	QP	line1	
11	21.27	26.40	16.70	9.70	50.00	-23.60	Average	line1	
12	21.27	31.68	21.98	9.70	60.00	-28.32	QP	line1	



Trace: 1

Line	Freq	Level	Read Level	Factor	Limit	Over	Remark	Pol/Phase	Note
	MHz	dBuV	dBuV	dB	dBuV	dB			
1	0.59	6.00	-3.60	9.60	46.00	-40.00	Average	neutral	
2	0.59	9.84	0.24	9.60	56.00	-46.16	QP	neutral	
3	0.86	5.72	-3.88	9.60	46.00	-40.28	Average	neutral	
4	0.86	9.55	-0.05	9.60	56.00	-46.45	QP	neutral	
5	2.65	8.84	-0.80	9.64	46.00	-37.16	Average	neutral	
6	2.65	19.57	9.93	9.64	56.00	-36.43	QP	neutral	
7	4.40	14.39	4.71	9.68	46.00	-31.61	Average	neutral	
8	4.40	23.38	13.70	9.68	56.00	-32.62	QP	neutral	
9	7.47	26.97	17.26	9.71	50.00	-23.03	Average	neutral	
10	7.47	33.62	23.91	9.71	60.00	-26.38	QP	neutral	
11	21.27	26.97	17.17	9.80	50.00	-23.03	Average	neutral	
12	21.27	32.14	22.34	9.80	60.00	-27.86	QP	neutral	