

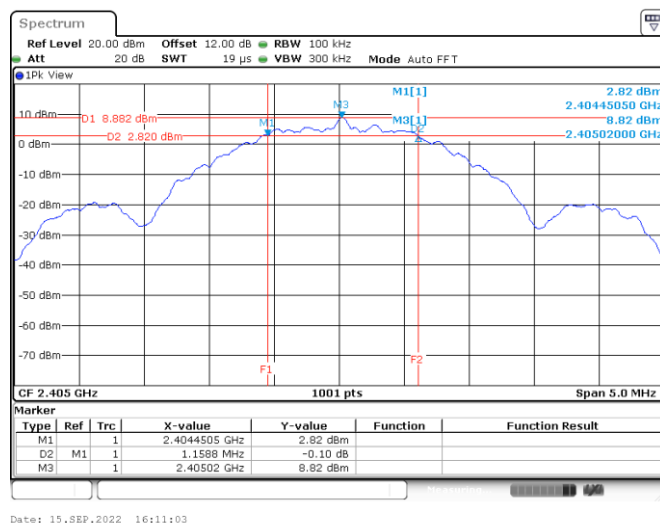
Appendix A: Test Results of Conducted Test

Test Result of 6 dB Bandwidth

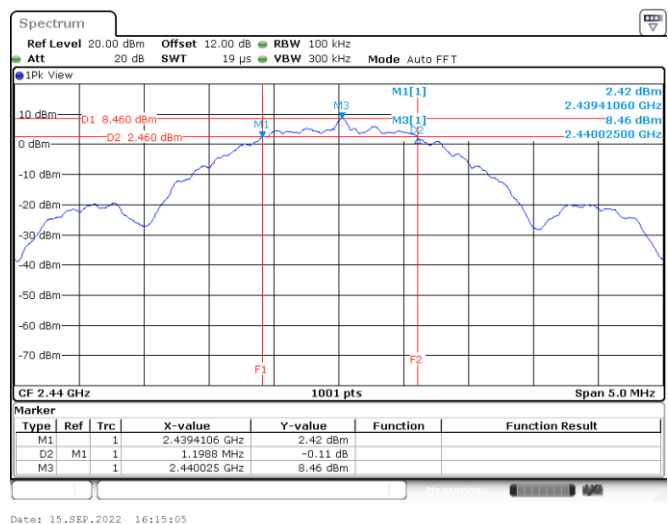
IEEE802.15.4

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

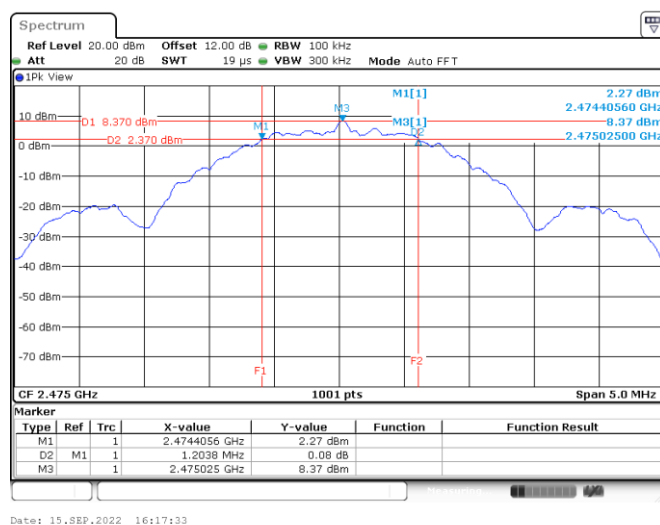
Low Channel



Middle Channel



High Channel

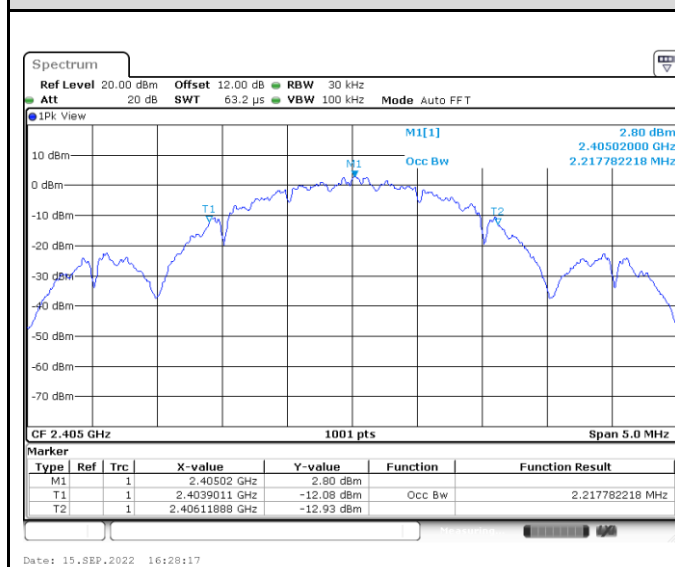


Test Result of 99% Occupied Bandwidth

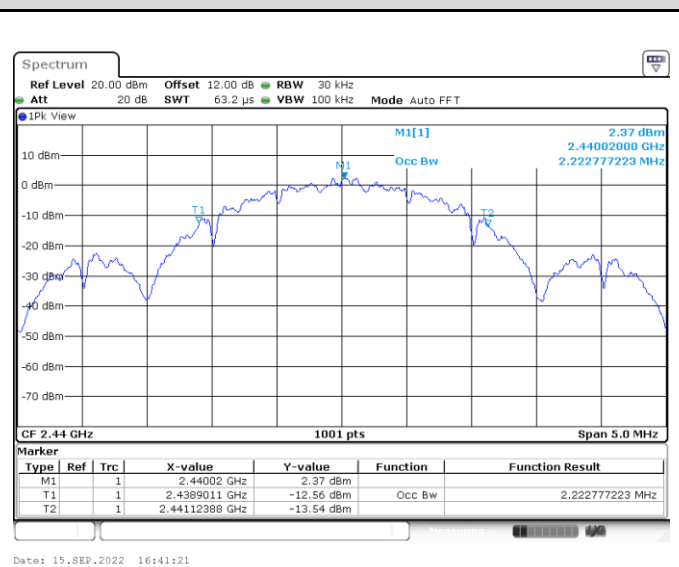
IEEE802.15.4

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

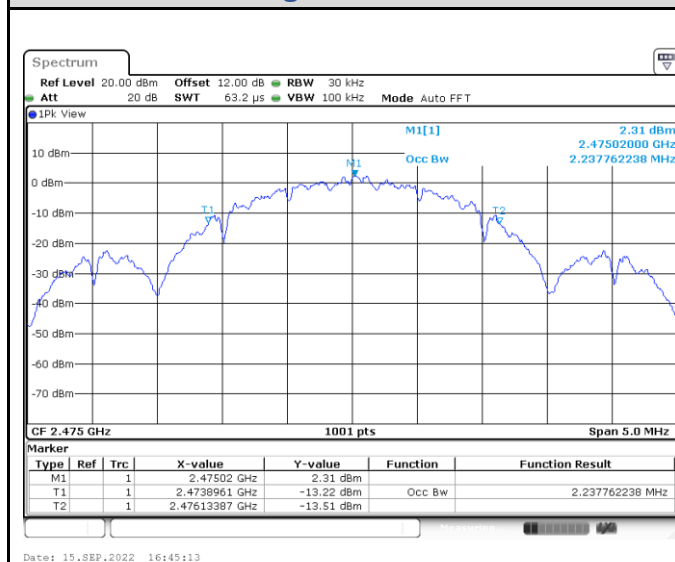
Low Channel



Middle Channel



High Channel

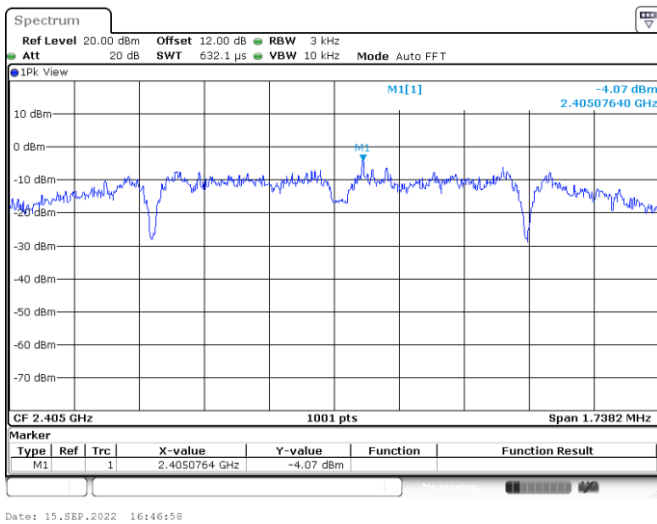


Test Result of Power Spectral Density

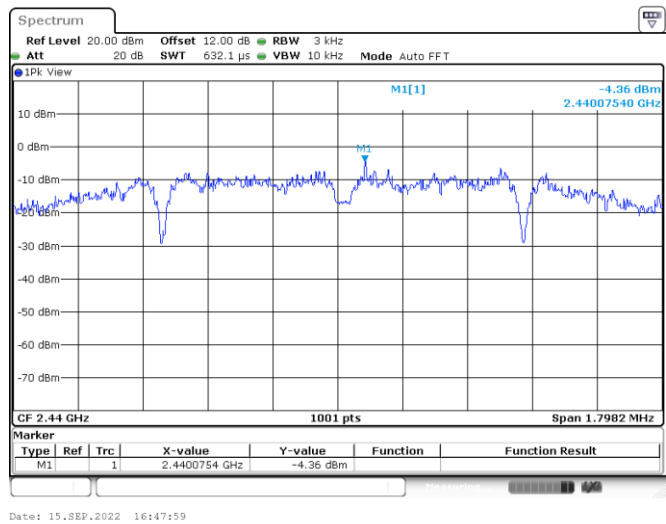
IEEE802.15.4

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

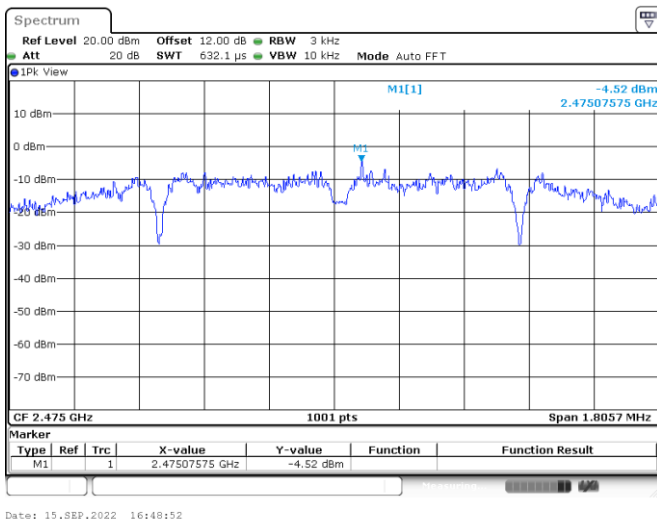
Low Channel



Middle Channel



High Channel

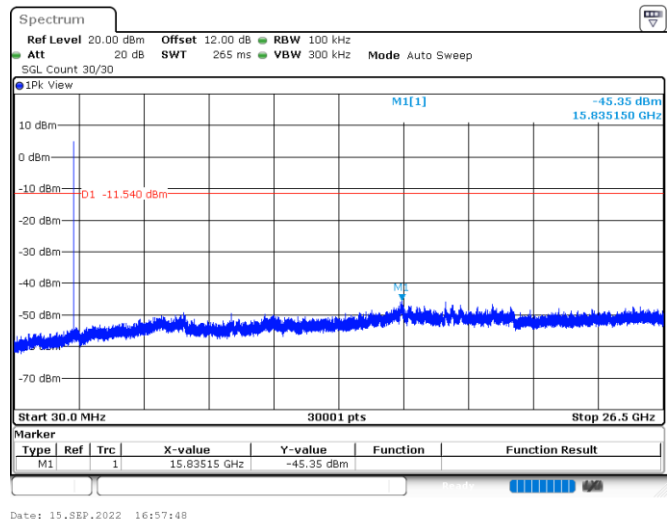
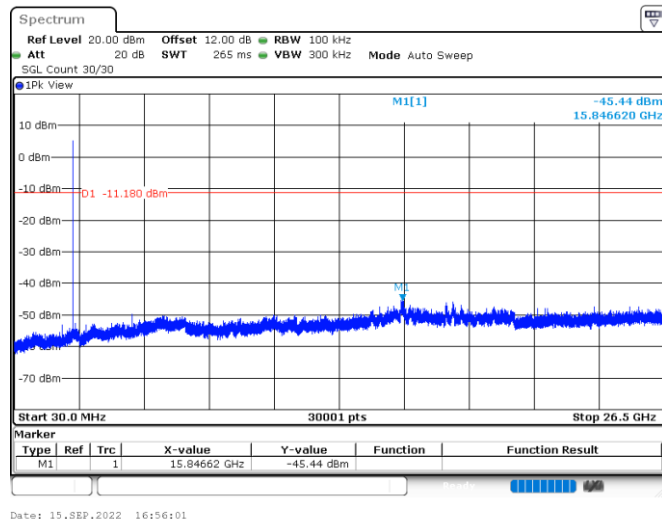


Test Result of Conducted Spurious Emissions, Tx Mode

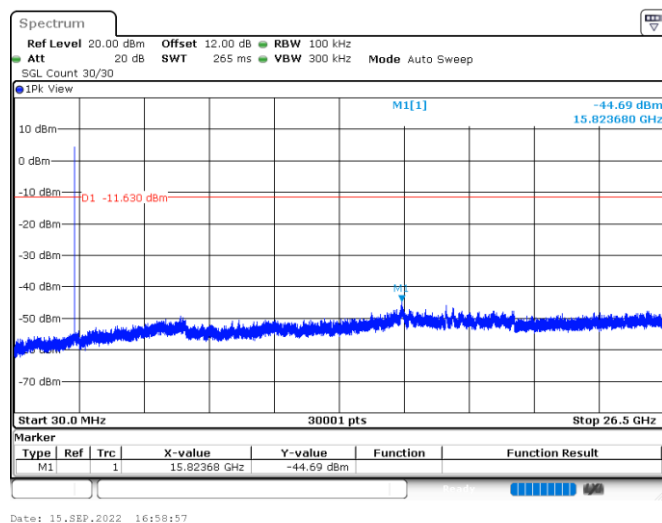
IEEE802.15.4

Low Channel

Middle Channel

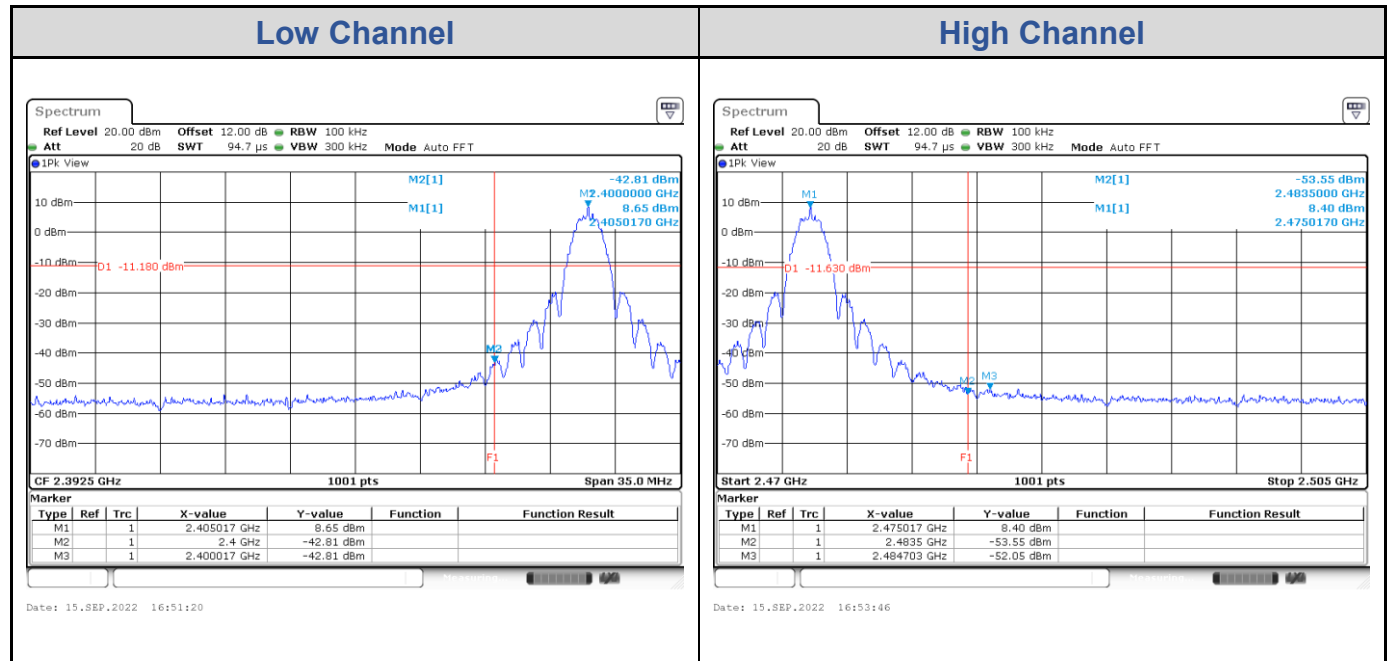


High Channel



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

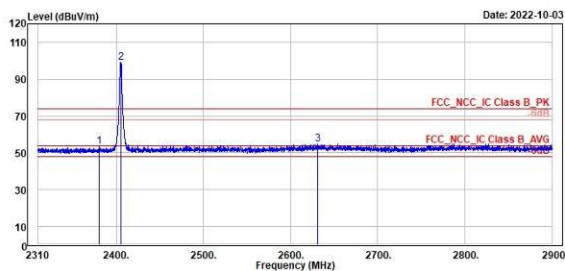
IEEE802.15.4

Low Channel (Horizontal) Peak

Low Channel (Vertical) Peak



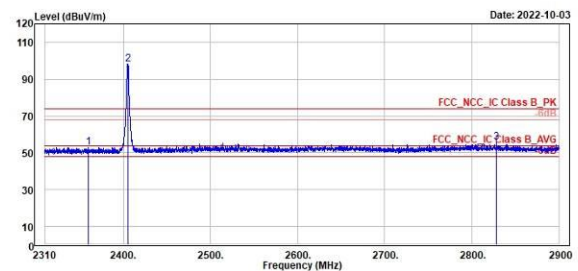
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2389.68	53.40	15.85	37.55	74.00	-20.60	334	294 Peak	Horizontal			
2 *	2405.00	99.04	61.42	37.62	74.00	25.04	334	294 Peak	Horizontal			
3	2631.08	54.96	16.78	38.18	74.00	-19.04	334	294 Peak	Horizontal			



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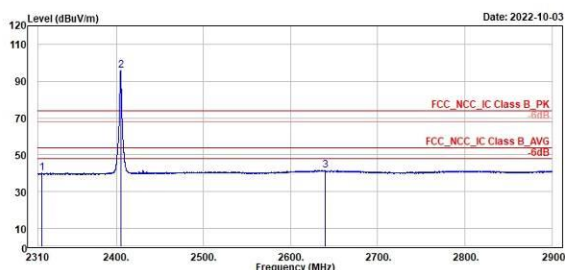
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2369.39	53.09	15.82	37.27	74.00	-20.91	381	178 Peak	Vertical			
2 *	2405.00	98.10	60.77	37.33	74.00	24.10	381	178 Peak	Vertical			
3	2827.55	55.49	17.28	38.21	74.00	-18.51	381	178 Peak	Vertical			

IEEE802.15.4

Low Channel (Horizontal) Average



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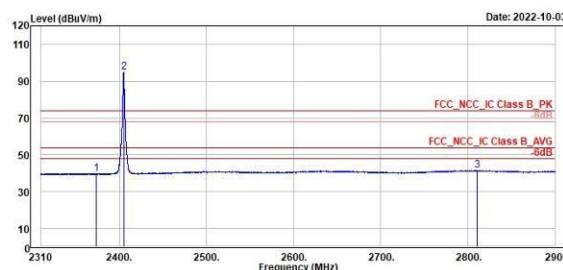


	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2314.72	48.83	2.68	37.35	54.00	-13.97	334	294	Average	Horizontal		
2 *	2405.00	95.64	56.82	37.62	54.00	41.64	334	294	Average	Horizontal		
3	2639.46	41.50	3.31	38.19	54.00	-12.50	334	294	Average	Horizontal		

Low Channel (Vertical) Average



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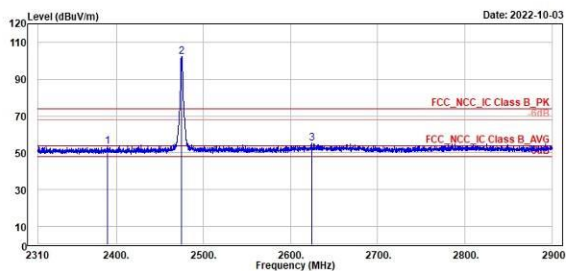
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2373.13	39.87	2.59	37.28	54.00	-14.13	381	178	Average	Vertical		
2 *	2405.00	94.95	57.62	37.33	54.00	40.95	381	178	Average	Vertical		
3	2810.32	41.50	3.31	38.19	54.00	-12.50	381	178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

IEEE802.15.4

High Channel (Horizontal) Peak



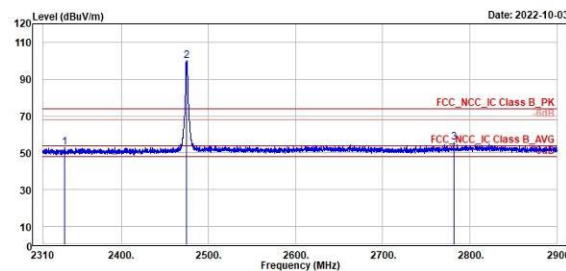
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	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	53.45	15.87	37.58	74.00	-20.55	316		294 Peak	Horizontal	
2 *	2475.00	102.22	64.62	37.60	74.00	28.22	316		294 Peak	Horizontal	
3	2624.47	55.29	17.12	38.17	74.00	-18.71	316		294 Peak	Horizontal	



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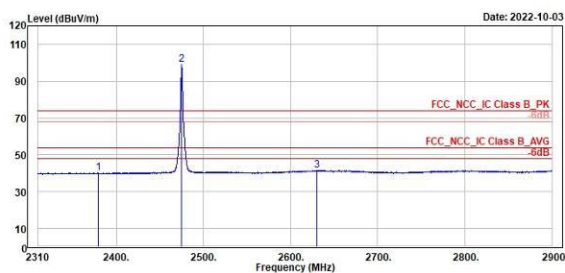
	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2335.25	52.89	15.74	37.15	74.00	-21.11	354		171 Peak	Vertical	
2 *	2475.00	99.91	62.26	37.65	74.00	25.91	354		171 Peak	Vertical	
3	2781.65	55.70	17.58	38.12	74.00	-18.30	354		171 Peak	Vertical	

IEEE802.15.4

High Channel (Horizontal) Average



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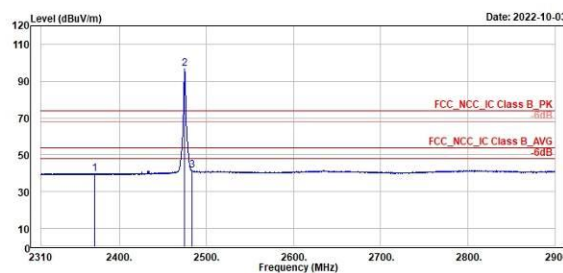


	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2379.15	49.87	2.52	37.55	54.00	-13.93		316	294	Average	Horizontal	
2 *	2475.00	98.97	61.37	37.68	54.00	44.97		316	294	Average	Horizontal	
3	2638.25	41.61	3.43	38.18	54.00	-12.39		316	294	Average	Horizontal	

High Channel (Vertical) Average



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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	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

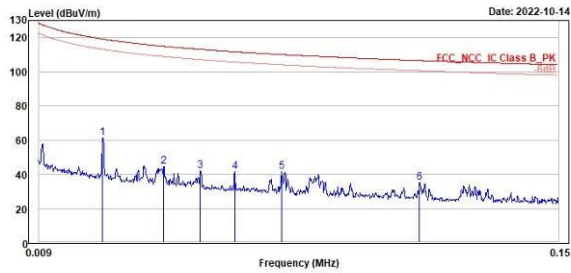
IEEE802.15.4

Low Channel (Open) 9kHz~150kHz

Low Channel (Open) 150kHz~30MHz



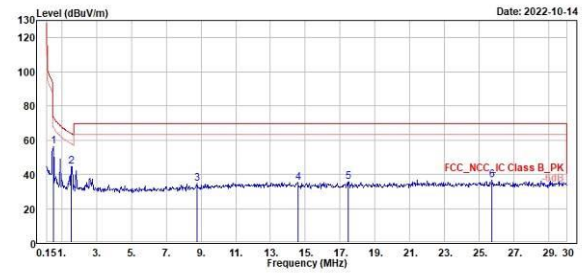
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	0.03	61.52	42.34	19.18	119.18	-57.66	100	60	QP	Open		
2	0.04	44.66	25.28	19.38	114.96	-70.30	100	237	QP	Open		
3	0.05	41.91	22.66	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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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	0.51	56.20	37.26	18.94	73.40	-17.28	100	258	QP	Open		
2	1.55	44.60	26.27	18.33	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		

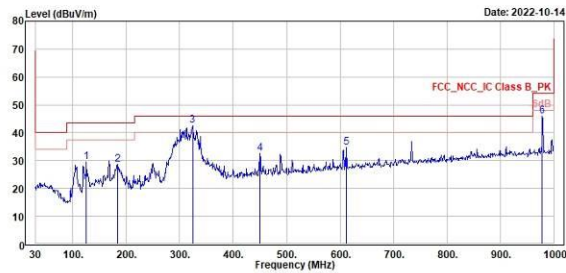
Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

IEEE802.15.4

Low Channel (Horizontal)



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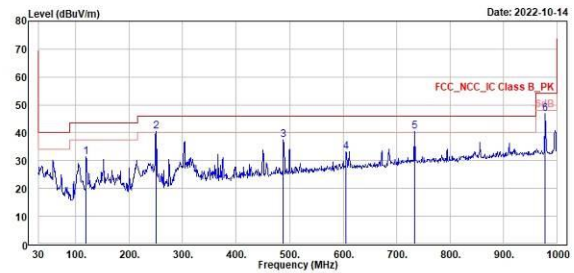


	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	125.06	29.56	37.30	-7.74	43.50	-13.94	300	227	QP		Horizontal	
2	183.26	28.50	36.09	-7.59	43.50	-15.00	200	242	QP		Horizontal	
3	323.91	42.55	46.71	-4.16	46.00	-3.45	100	203	QP		Horizontal	
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	

Low 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	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	

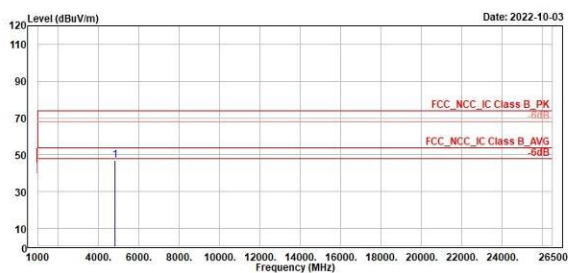
Spurious Emissions, Tx Mode, 1GHz ~ 26.5GHz

IEEE802.15.4

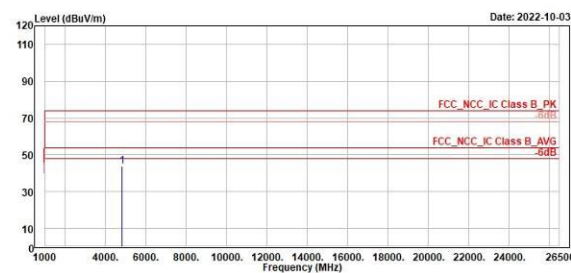
Low Channel (Horizontal)



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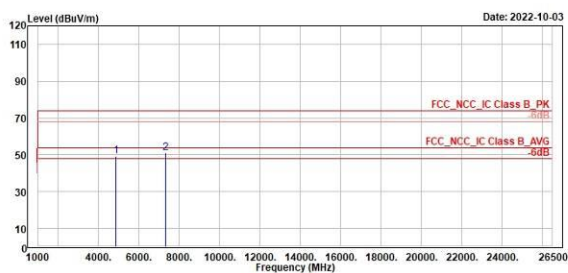


IEEE802.15.4

Middle Channel (Horizontal)



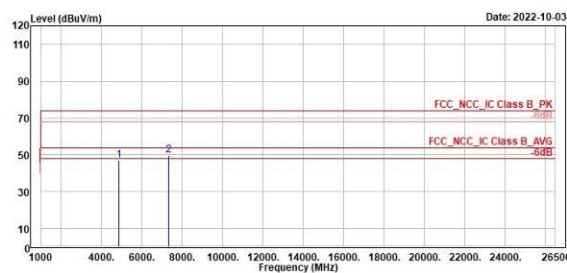
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Middle Channel (Vertical)



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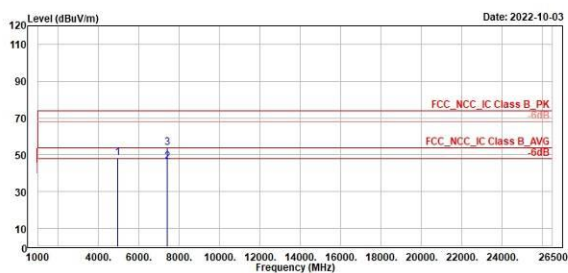


IEEE802.15.4

High Channel (Horizontal)



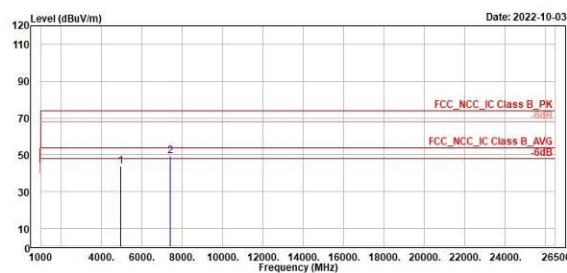
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High Channel (Vertical)



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Mains Conducted Emission, 150kHz ~ 30MHz

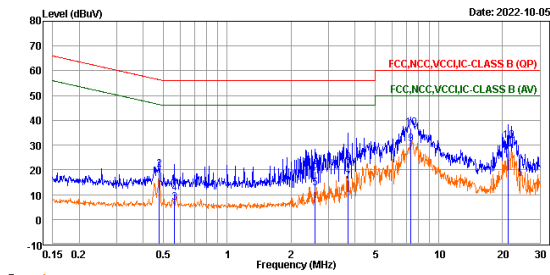
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(Line)

(Neutral)



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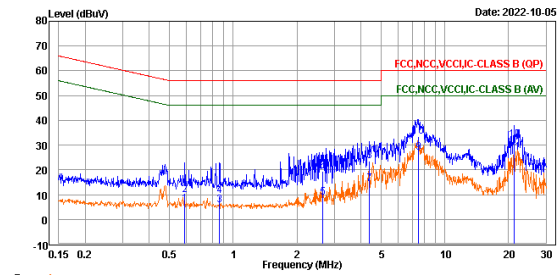


Trace: 1

	Freq	Level	Read	Limit	Over			
	MHz	dBuV	Factor	Line	Limit	Remark	Pol/Phase	Note
		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	



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Trace: 1

	Freq	Level	Read	Limit	Over			
	MHz	dBuV	Factor	Line	Limit	Remark	Pol/Phase	Note
		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	