

Test Report No.50342226 001

Appendix D: Radiated and Mains Spurious Emission Data

(File: 50342226 001AppendixD)

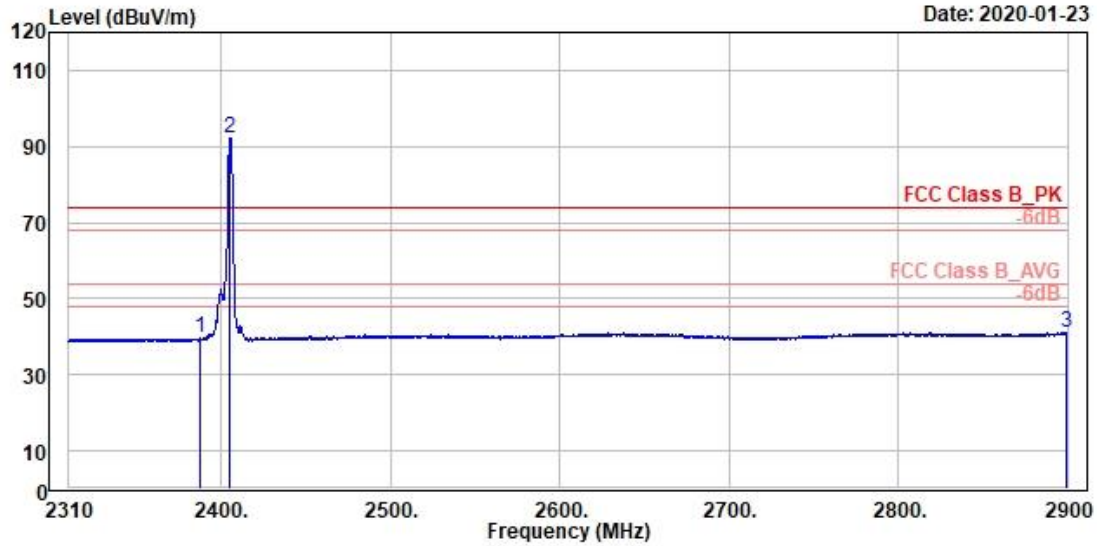
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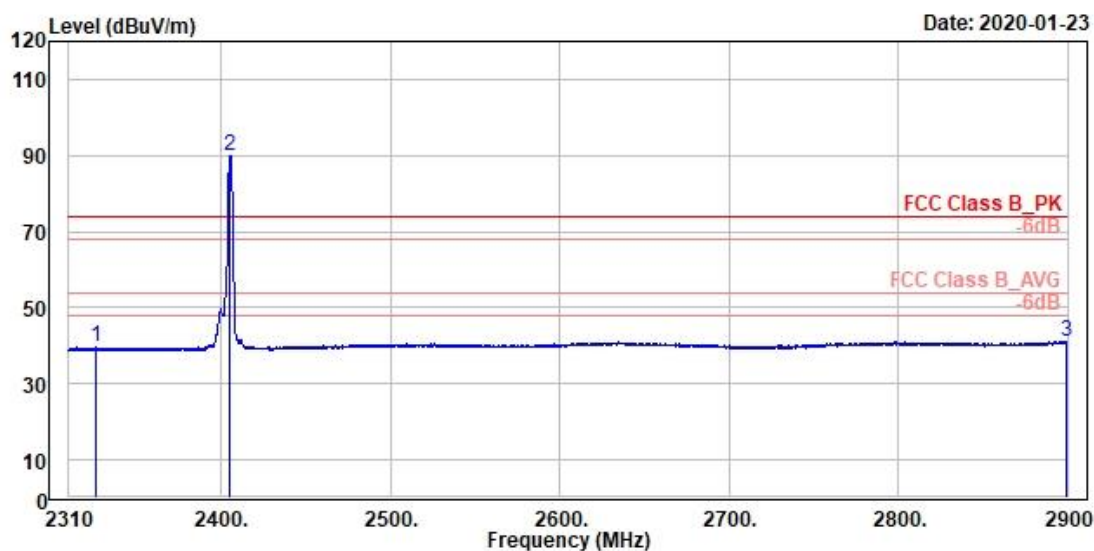
Spurious Emissions, Bandedge



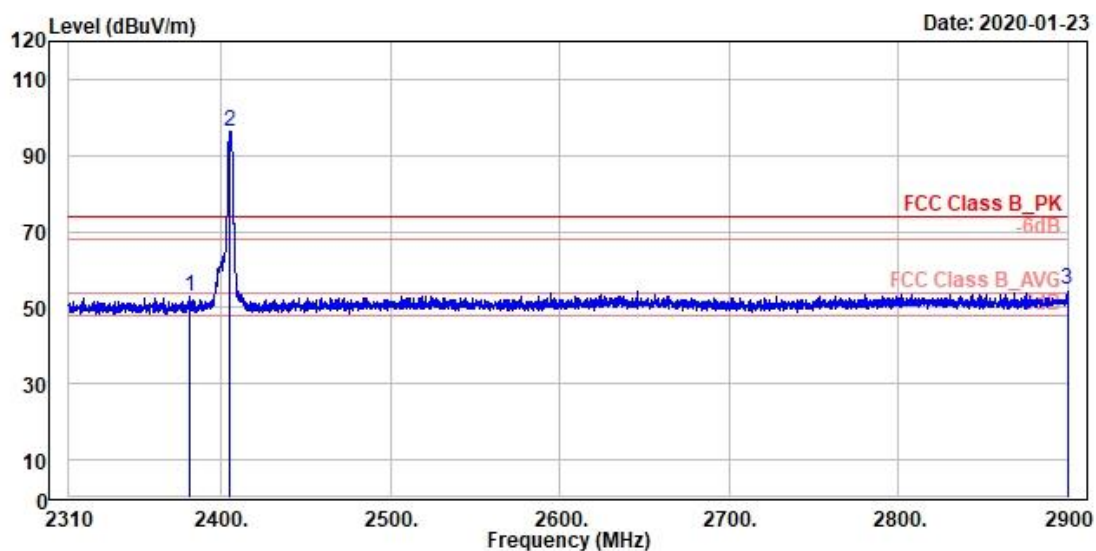
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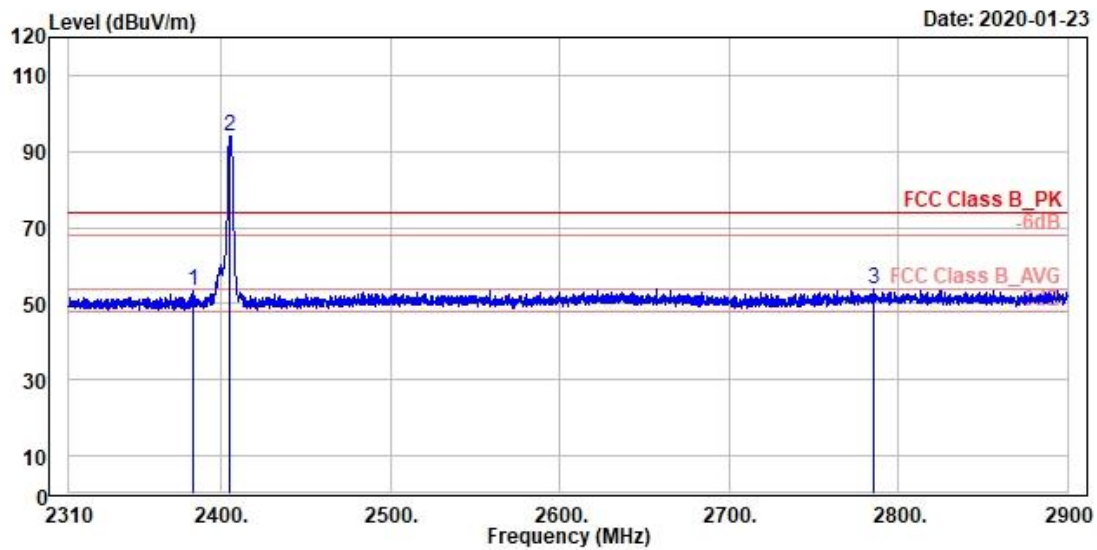
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1	2387.29	39.58	2.26	37.32	54.00	-14.42	144	190	Average	HORIZONTAL
2 *	2405.35	92.39	55.01	37.38	54.00	38.39	144	190	Average	HORIZONTAL
3	2899.53	41.14	2.82	38.32	54.00	-12.86	144	190	Average	HORIZONTAL



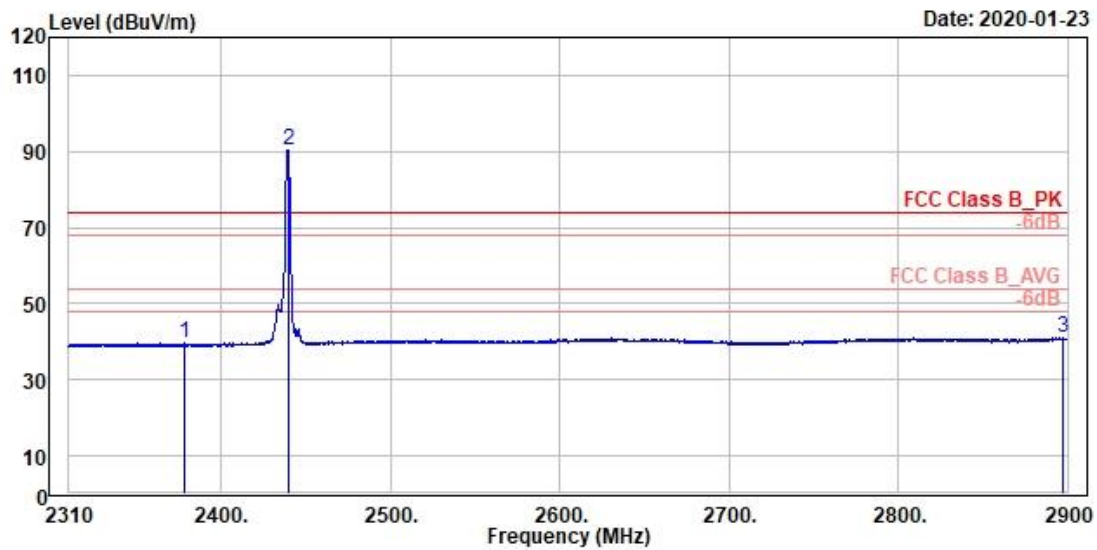
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1	2325.46	39.58	2.45	37.13	54.00	-14.42	336	231	Average	VERTICAL
2 *	2405.35	90.08	52.70	37.38	54.00	36.08	336	231	Average	VERTICAL
3	2899.88	40.96	2.64	38.32	54.00	-13.04	336	231	Average	VERTICAL



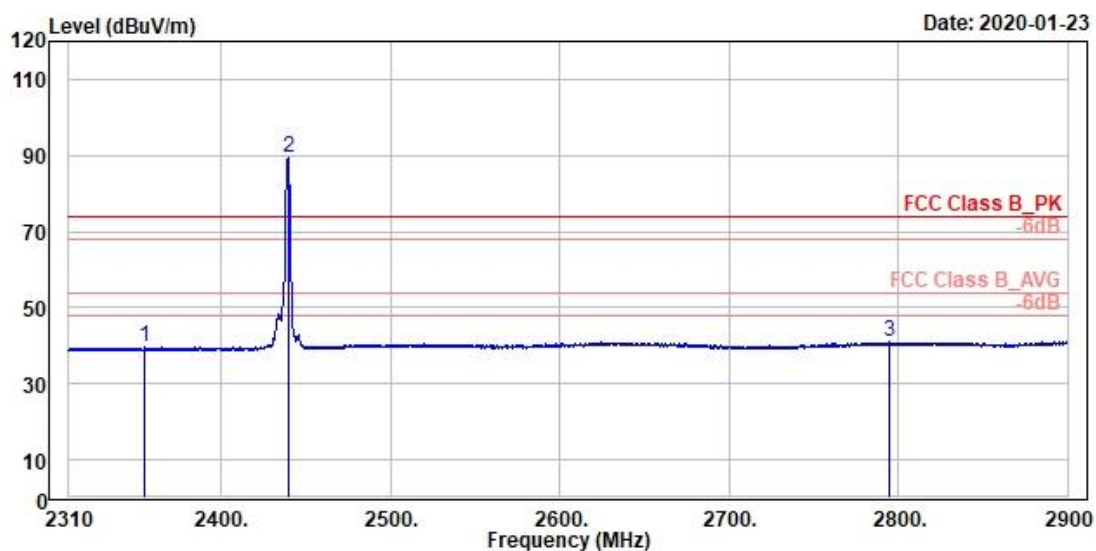
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1	2381.51	52.72	15.42	37.30	74.00	-21.28	144	190	Peak	HORIZONTAL
2 *	2405.35	96.39	59.01	37.38	74.00	22.39	144	190	Peak	HORIZONTAL
3	2900.00	54.93	16.61	38.32	74.00	-19.07	144	190	Peak	HORIZONTAL



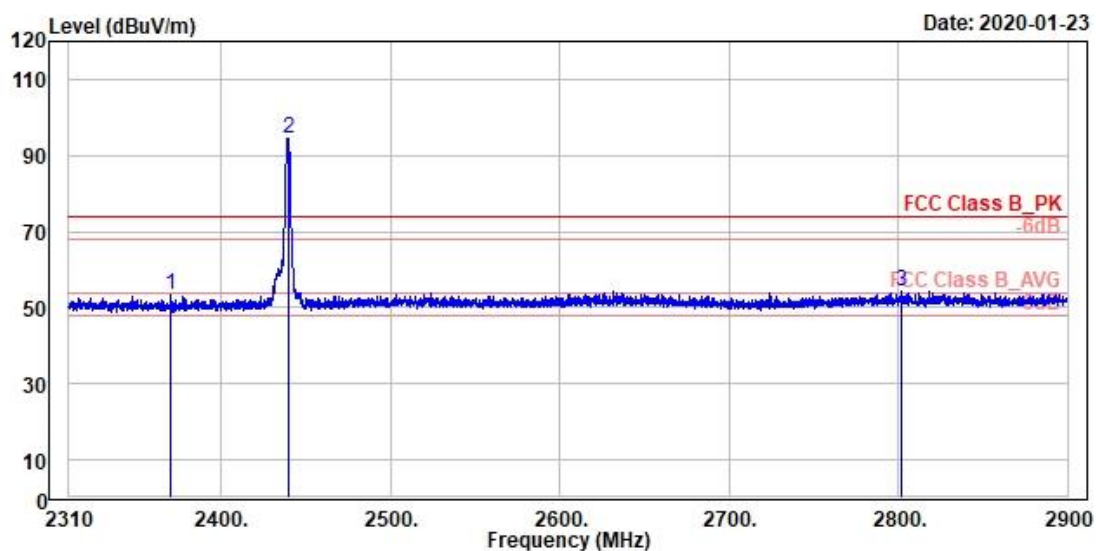
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1	2383.87	53.30	15.98	37.32	74.00	-20.70	336	231	Peak	VERTICAL
2 *	2405.35	93.96	56.58	37.38	74.00	19.96	336	231	Peak	VERTICAL
3	2785.54	53.83	15.94	37.89	74.00	-20.17	336	231	Peak	VERTICAL



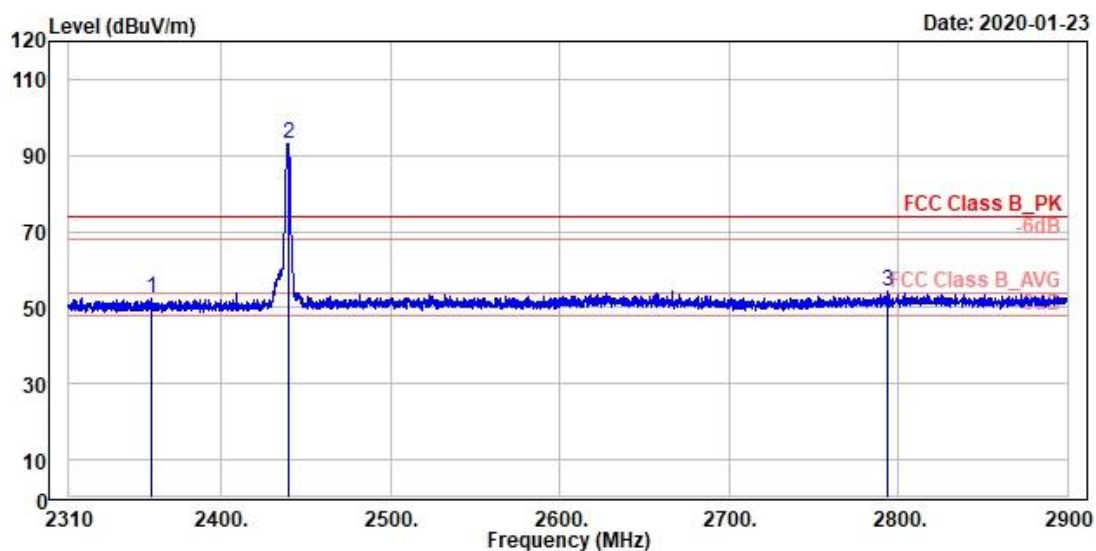
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1	2378.44	39.58	2.28	37.30	54.00	-14.42	176	190	Average	HORIZONTAL
2 *	2439.35	90.34	52.85	37.49	54.00	36.34	176	190	Average	HORIZONTAL
3	2897.05	40.95	2.64	38.31	54.00	-13.05	176	190	Average	HORIZONTAL



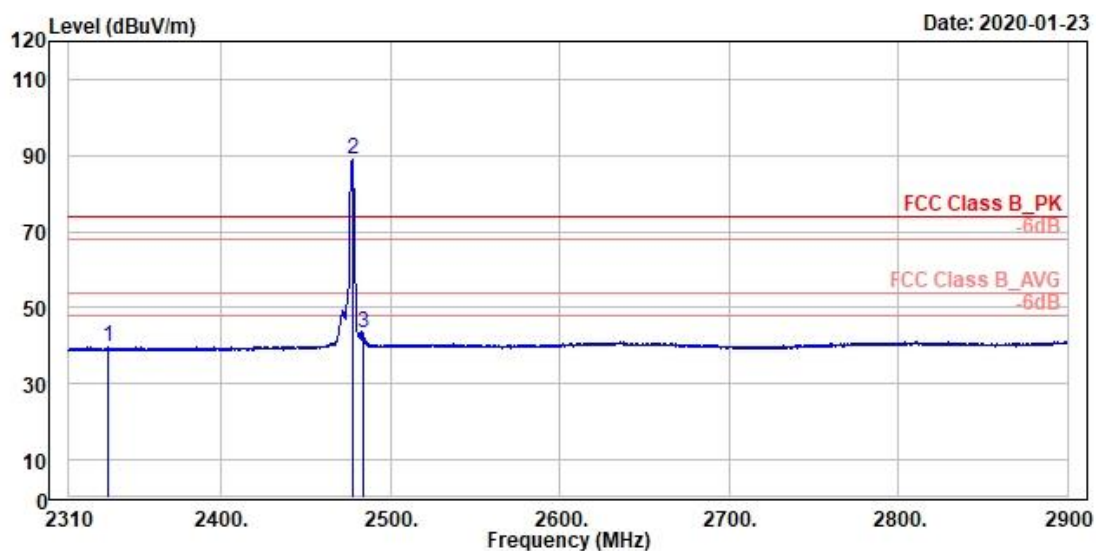
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1	2354.60	39.60	2.38	37.22	54.00	-14.40	380	333	Average	Vertical
2 *	2439.35	89.29	51.80	37.49	54.00	35.29	380	333	Average	Vertical
3	2794.86	40.98	3.08	37.90	54.00	-13.02	380	333	Average	Vertical



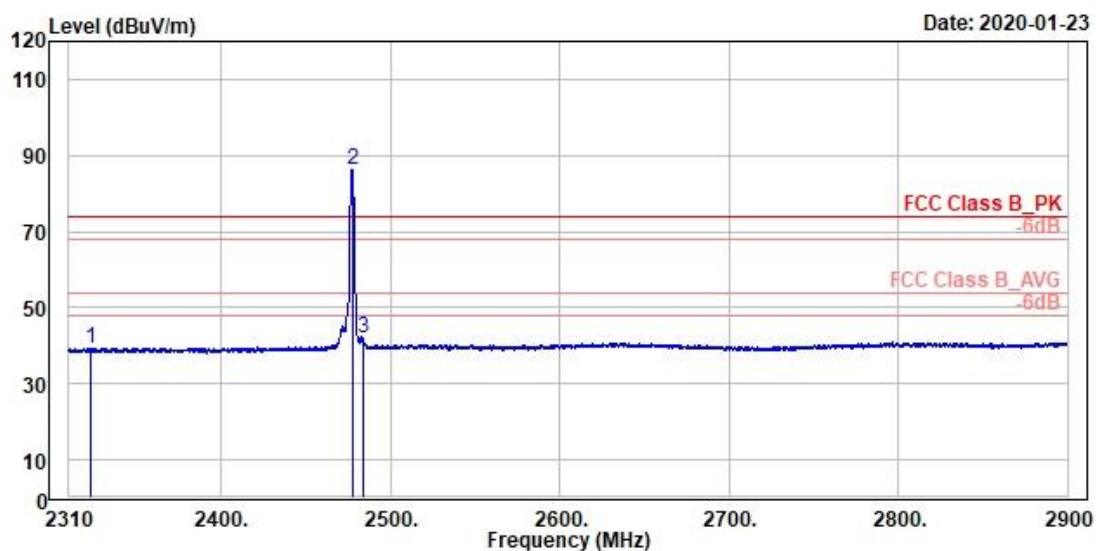
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1	2369.94	53.41	16.14	37.27	74.00	-20.59	176	190	Peak	HORIZONTAL
2 *	2439.35	94.45	56.96	37.49	74.00	20.45	176	190	Peak	HORIZONTAL
3	2802.41	54.44	16.53	37.91	74.00	-19.56	176	190	Peak	HORIZONTAL



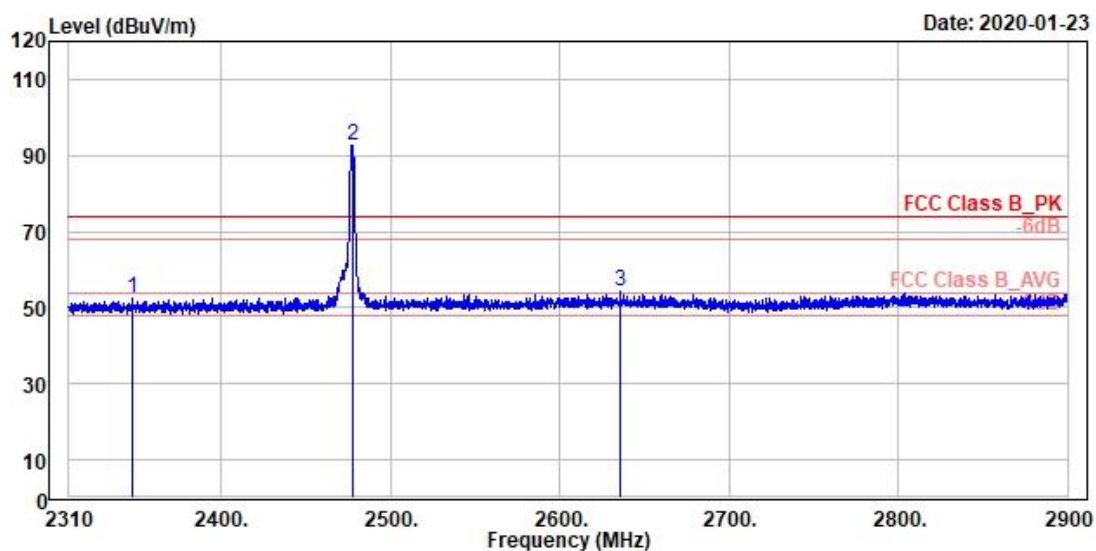
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1	2358.50	52.55	15.31	37.24	74.00	-21.45	380	333	Peak	Vertical
2 *	2439.35	93.13	55.64	37.49	74.00	19.13	380	333	Peak	Vertical
3	2793.45	54.44	16.54	37.90	74.00	-19.56	380	333	Peak	Vertical



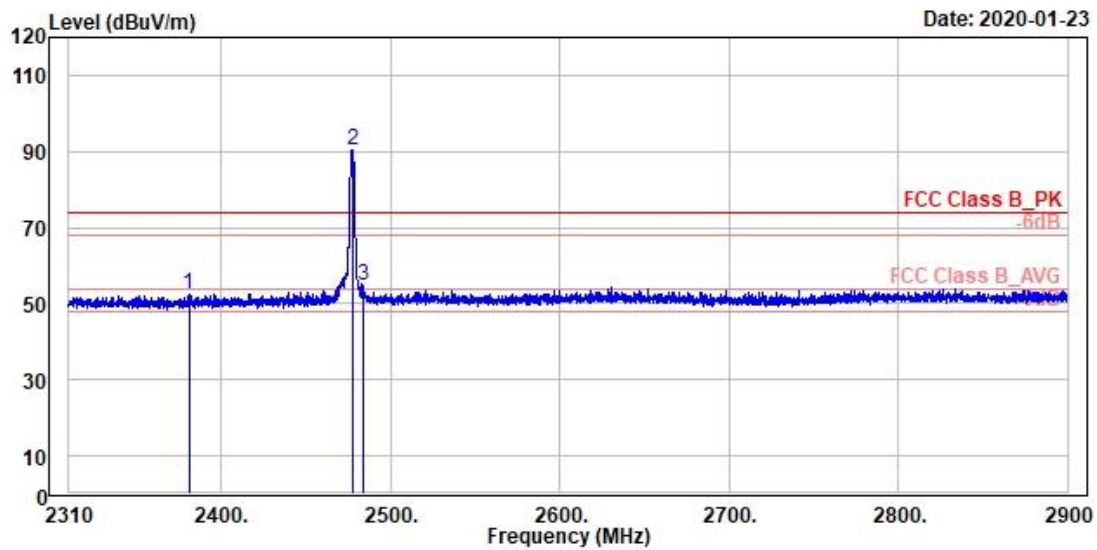
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	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2333.48	39.60	2.44	37.16	54.00	-14.40	174	189	Average	HORIZONTAL
2 *	2477.35	88.86	51.31	37.55	54.00	34.86	174	189	Average	HORIZONTAL
3	2483.93	43.41	5.85	37.56	54.00	-10.59	174	189	Average	HORIZONTAL



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2322.51	39.42	2.30	37.12	54.00	-14.58	363	360	Average	VERTICAL
2 *	2477.35	86.30	48.75	37.55	54.00	32.30	363	360	Average	VERTICAL
3	2483.93	41.91	4.35	37.56	54.00	-12.09	363	360	Average	VERTICAL



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2347.29	52.56	15.37	37.19	74.00	-21.44	174	189	Peak	HORIZONTAL
2 *	2477.35	92.71	55.16	37.55	74.00	18.71	174	189	Peak	HORIZONTAL
3	2635.80	54.14	16.25	37.89	74.00	-19.86	174	189	Peak	HORIZONTAL

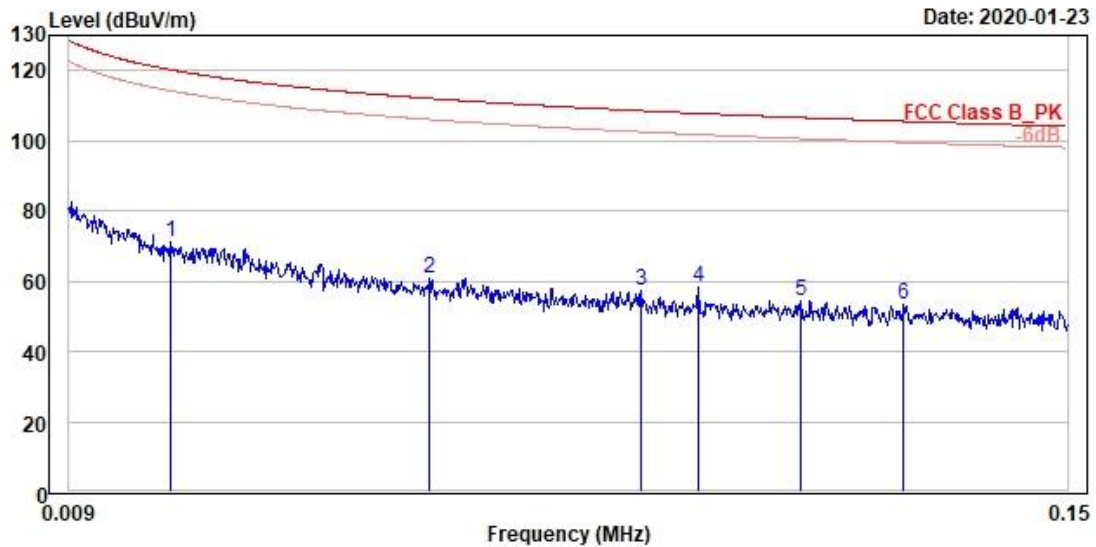


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2380.80	52.32	15.02	37.30	74.00	-21.68	363	360	Peak	VERTICAL
2 *	2477.35	90.37	52.82	37.55	74.00	16.37	363	360	Peak	VERTICAL
3	2484.17	54.91	17.35	37.56	74.00	-19.09	363	360	Peak	VERTICAL

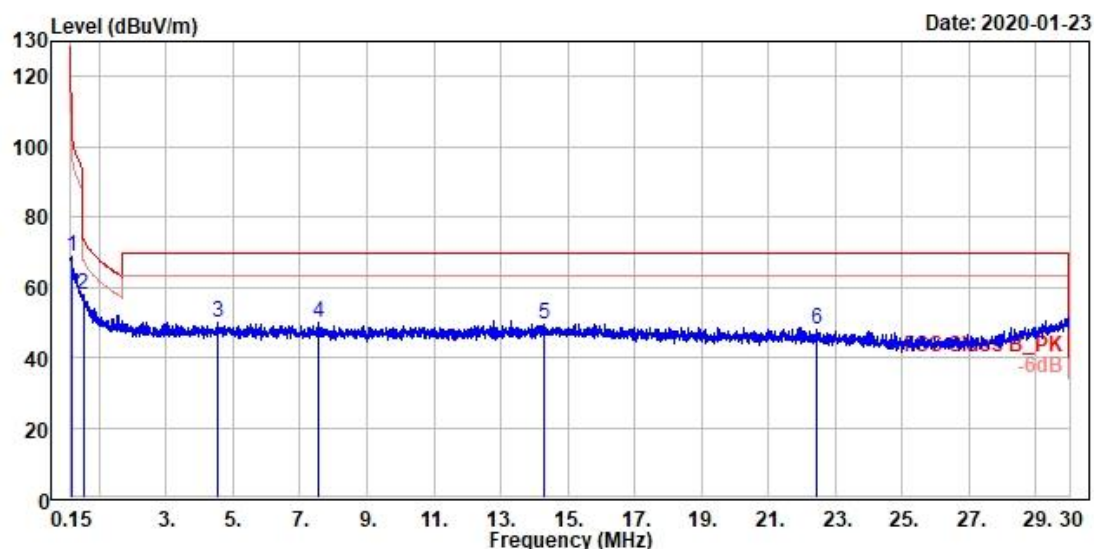
Spurious Emissions, TX Mode, 9kHz-30MHz



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	Freq	Level	Read		Limit	Over	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	Level	Factor	Line	Limit				
			dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.02	71.24	-0.72	71.96	120.26	-49.02	100	319	QP	vertical
2	0.06	60.83	-2.83	63.66	112.05	-51.22	100	329	QP	vertical
3	0.09	57.32	-3.15	60.47	108.53	-51.21	100	129	QP	vertical
4	0.10	58.35	-1.16	59.51	107.79	-49.44	100	48	QP	vertical
5	0.11	54.45	-4.08	58.53	106.59	-52.14	100	95	QP	vertical
6	0.13	53.61	-4.08	57.69	105.53	-51.92	100	98	QP	vertical

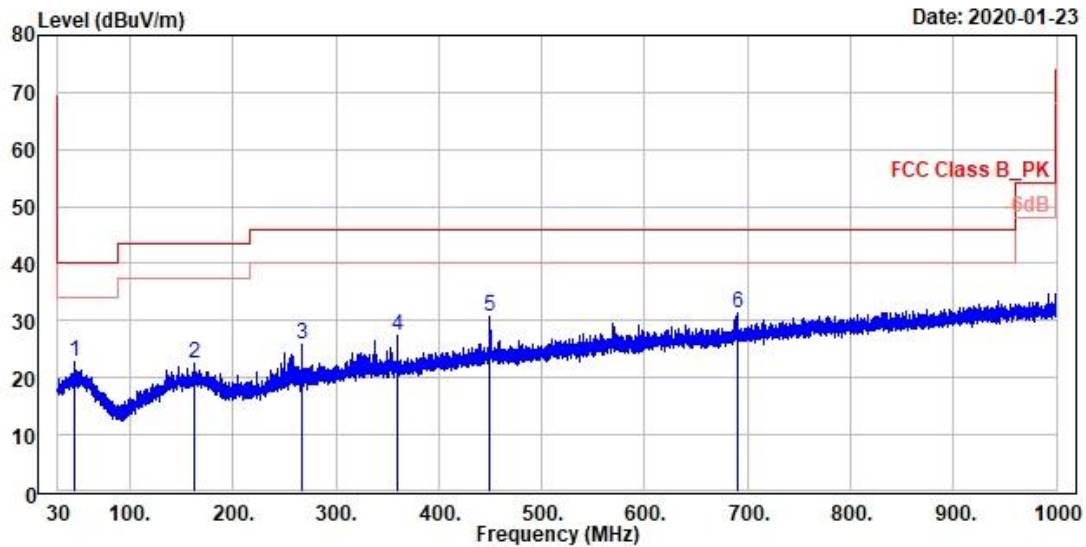


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.16	68.61	12.61	56.00	103.74	-35.13	100	347	QP	vertical
2	0.51	58.03	11.49	46.54	73.38	-15.35	100	73	QP	vertical
3	4.55	49.82	11.49	38.33	69.50	-19.68	100	270	QP	vertical
4	7.56	49.82	11.62	38.20	69.50	-19.68	100	132	QP	vertical
5	14.29	49.62	11.97	37.65	69.50	-19.88	100	98	QP	vertical
6	22.46	47.75	12.02	35.73	69.50	-21.75	100	322	QP	vertical

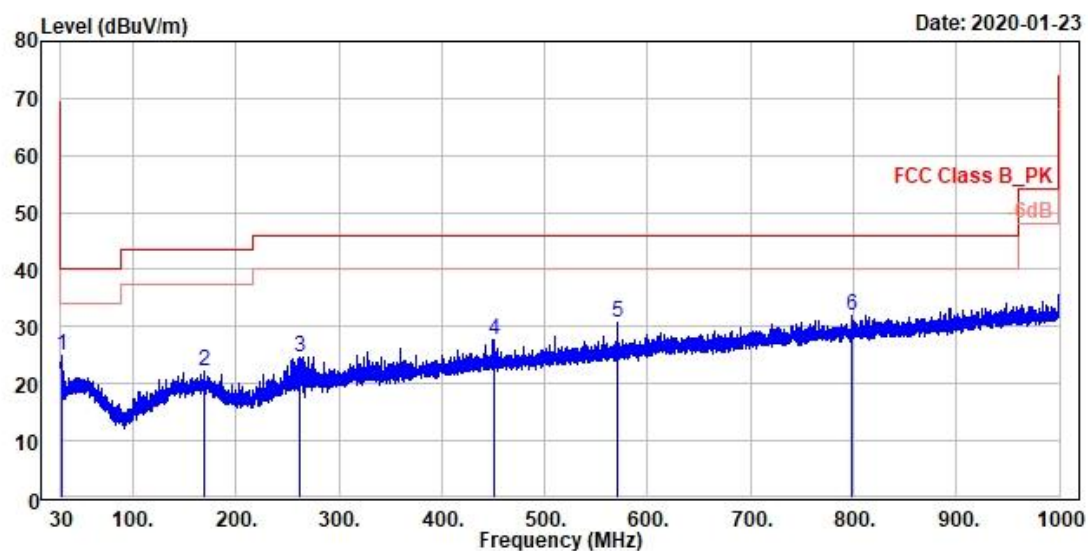
Spurious Emissions, TX Mode, 30MHz-1GHz



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	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	46.30	22.77	30.30	-7.53	40.00	-17.23	400	0	QP	horizontal
2	161.73	22.57	29.96	-7.39	43.50	-20.93	275	0	QP	horizontal
3	266.78	25.99	33.79	-7.80	46.00	-20.01	100	168	QP	horizontal
4	359.99	27.47	33.00	-5.53	46.00	-18.53	100	42	QP	horizontal
5	449.91	30.66	34.41	-3.75	46.00	-15.34	400	289	QP	horizontal
6	689.99	31.36	31.35	0.01	46.00	-14.64	200	139	QP	horizontal

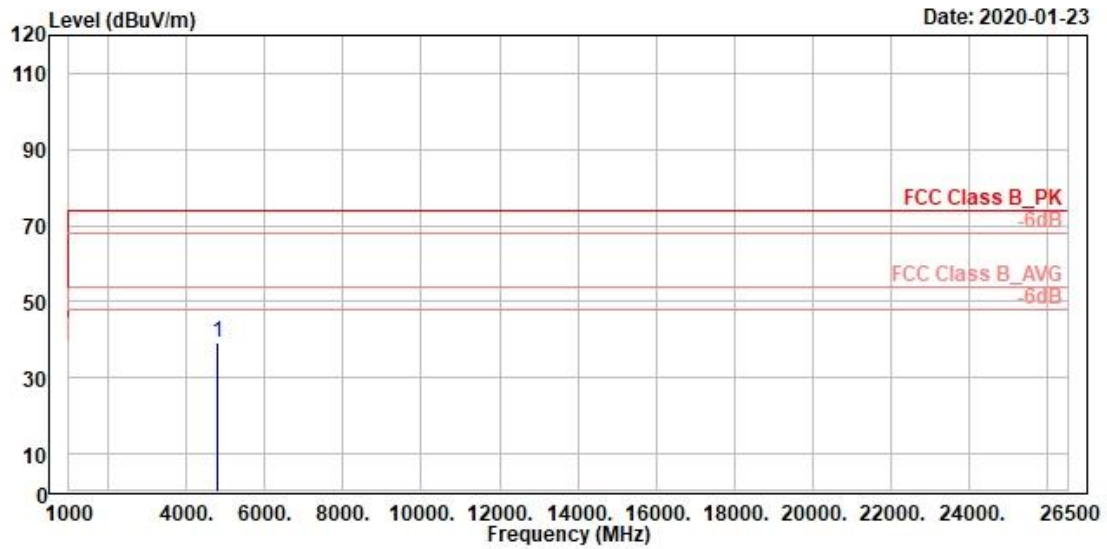


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	30.10	25.09	34.26	-9.17	40.00	-14.91	100	117	QP	vertical
2	169.97	22.16	29.43	-7.27	43.50	-21.34	100	68	QP	vertical
3	262.41	24.78	32.52	-7.74	46.00	-21.22	100	112	QP	vertical
4	450.20	27.83	31.57	-3.74	46.00	-18.17	100	356	QP	vertical
5	570.19	30.86	32.68	-1.82	46.00	-15.14	100	356	QP	vertical
6	798.14	31.97	30.29	1.68	46.00	-14.03	100	168	QP	vertical

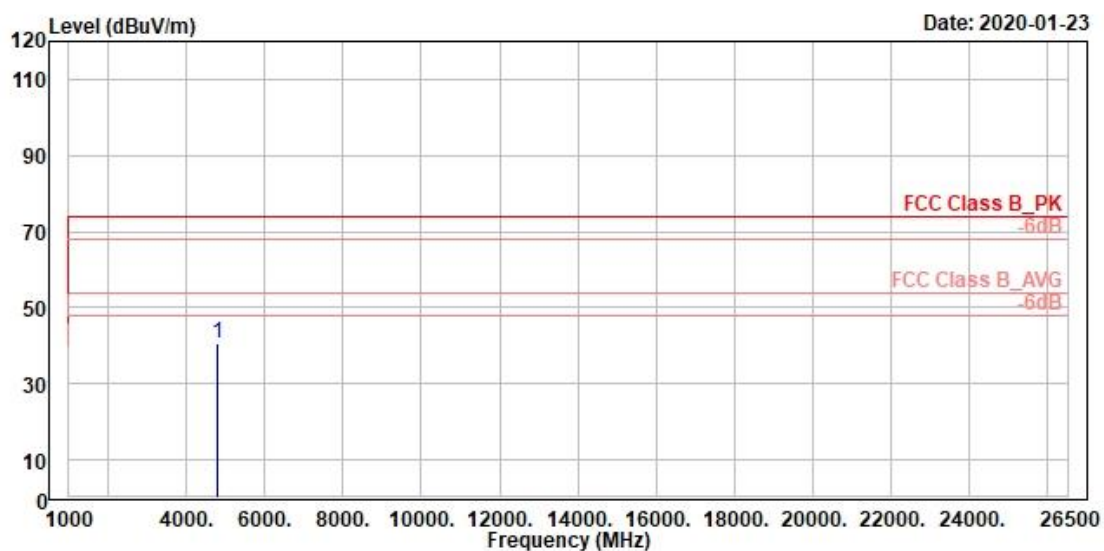
Spurious Emissions, TX Mode, 1GHz-26.5GHz



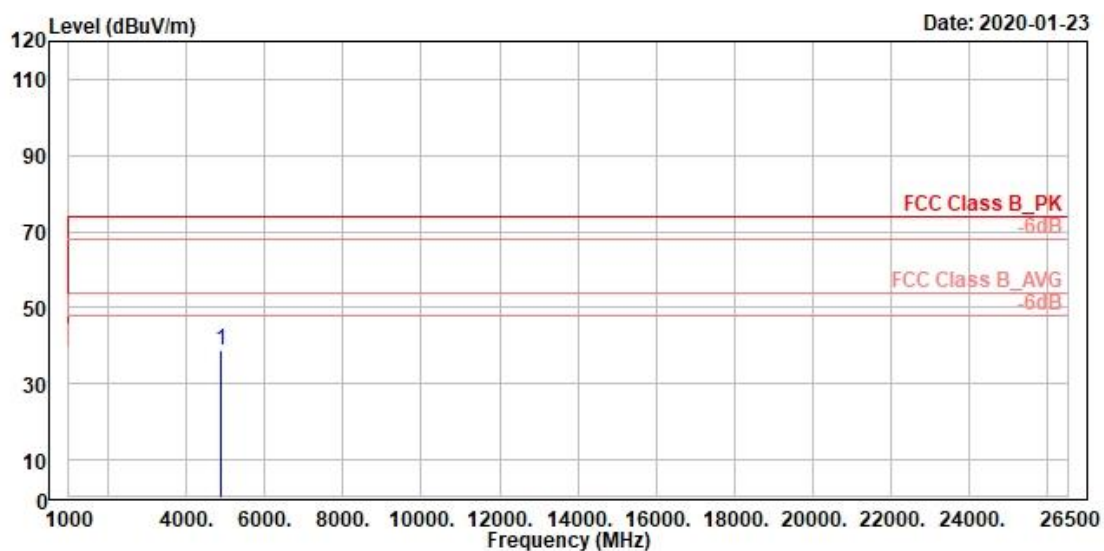
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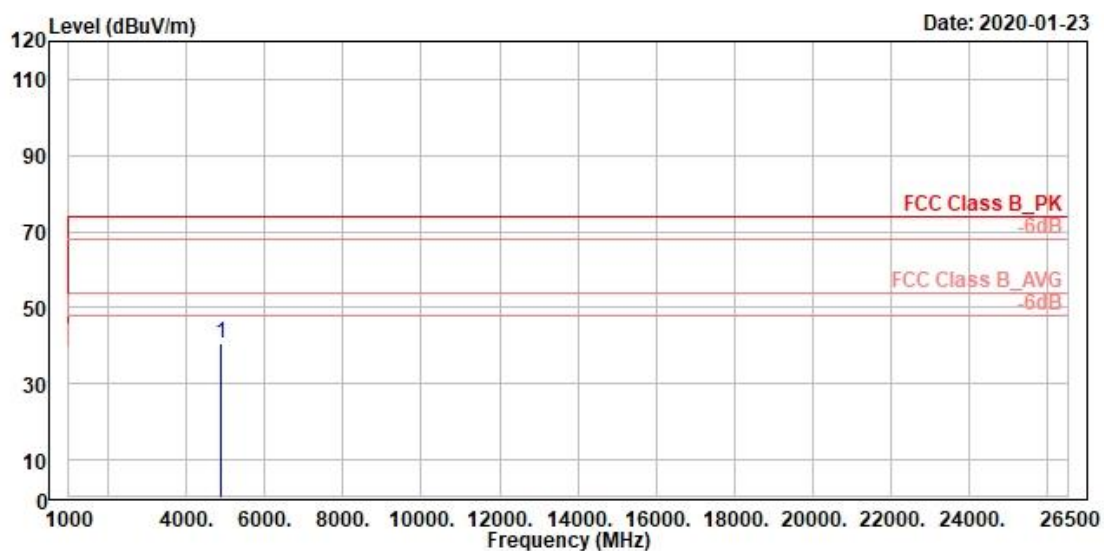
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	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4810.70	39.20	49.38	-10.18	74.00	-34.80	100	297	Peak	horizontal



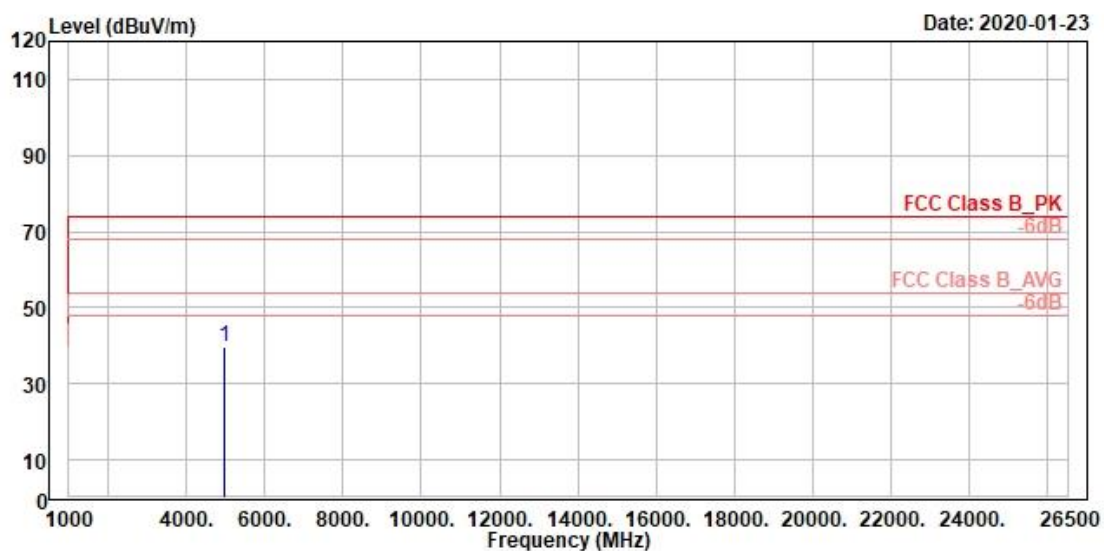
	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4810.70	40.42	50.60	-10.18	74.00	-33.58	100	267	Peak	vertical



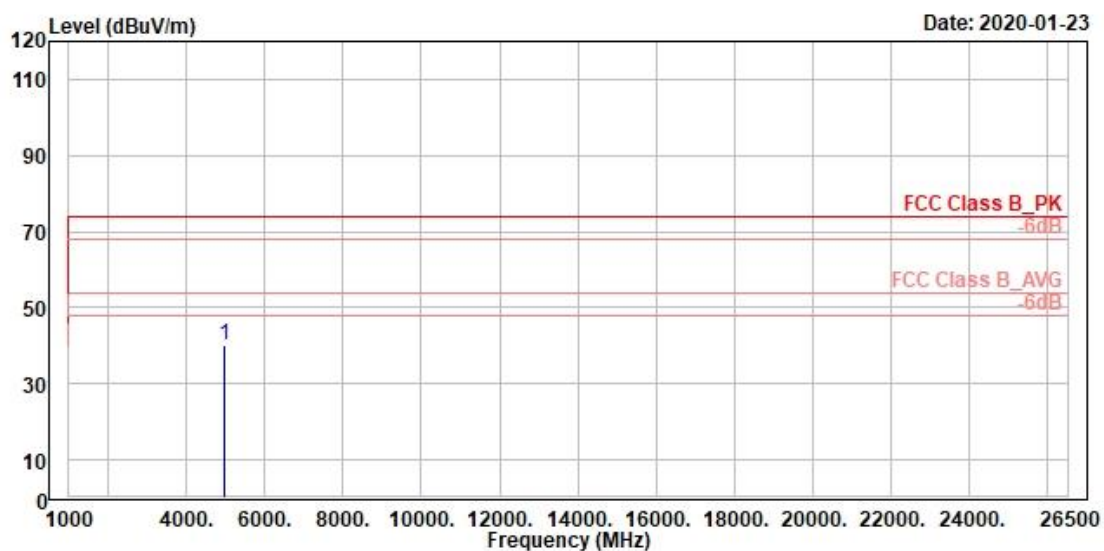
	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4878.70	38.92	48.98	-10.06	74.00	-35.08	200	60	Peak	horizontal



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4879.00	40.40	50.46	-10.06	74.00	-33.60	100	305	Peak	vertical



	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4954.70	39.78	49.51	-9.73	74.00	-34.22	100	56	Peak	horizontal

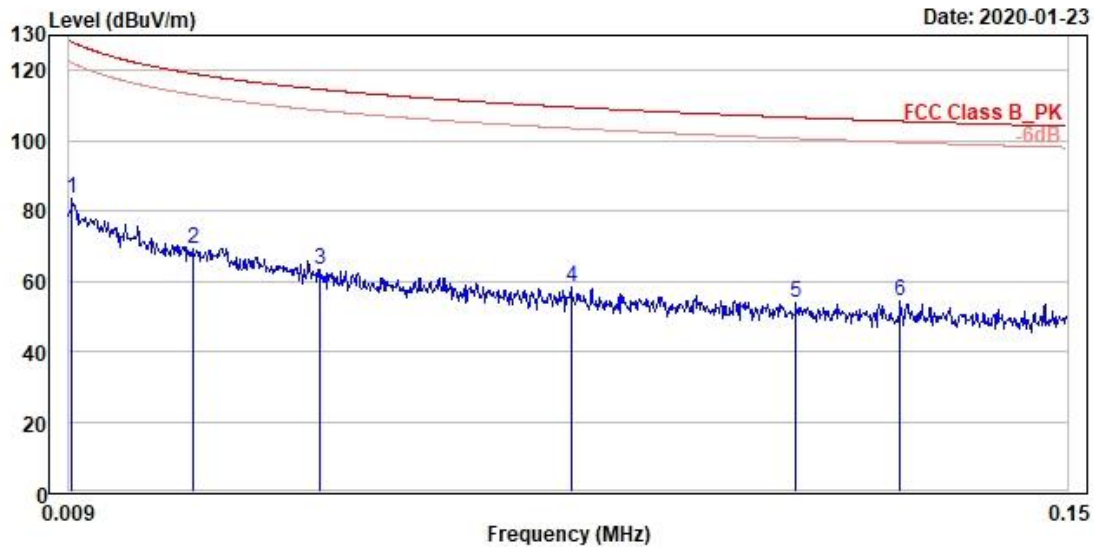


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4954.70	40.00	49.73	-9.73	74.00	-34.00	300	361	Peak	vertical

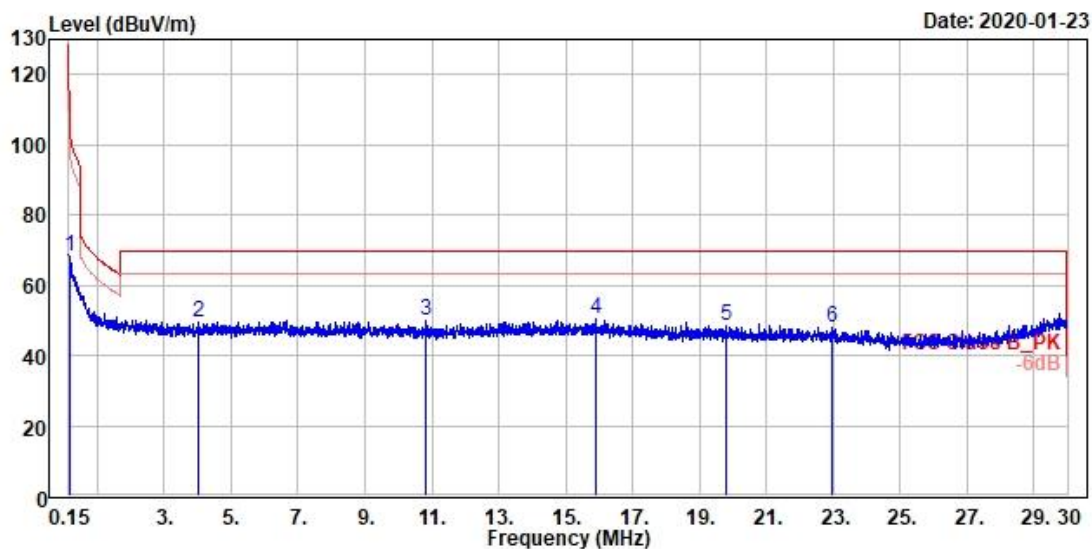
Spurious Emissions, RX Mode, 9kHz-30MHz



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	Freq	Level	Read		Limit	Over	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	Level	Factor	Line	Limit				
			dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.01	83.34	3.87	79.47	128.10	-44.76	100	274 QP		vertical
2	0.03	69.39	-1.98	71.37	119.13	-49.74	100	0 QP		vertical
3	0.04	63.44	-3.01	66.45	114.65	-51.21	100	159 QP		vertical
4	0.08	58.31	-2.95	61.26	109.54	-51.23	100	253 QP		vertical
5	0.11	53.71	-4.86	58.57	106.64	-52.93	100	12 QP		vertical
6	0.13	54.30	-3.42	57.72	105.56	-51.26	100	308 QP		vertical

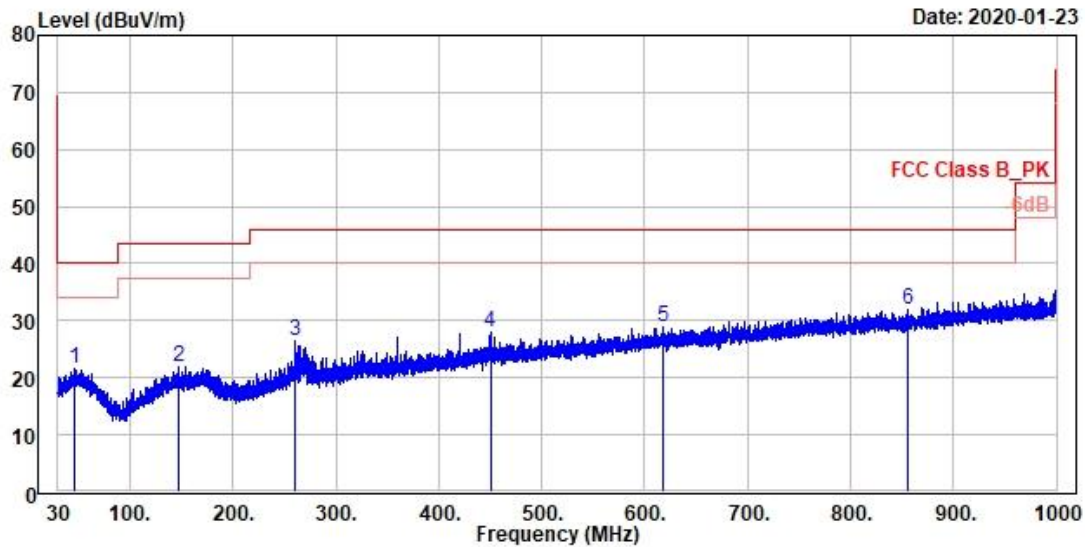


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.17	68.33	13.02	55.31	103.10	-34.77	100	241	QP	vertical
2	4.03	49.48	11.15	38.33	69.50	-20.02	100	90	QP	vertical
3	10.82	50.06	12.79	37.27	69.50	-19.44	100	339	QP	vertical
4	15.89	50.26	12.71	37.55	69.50	-19.24	100	272	QP	vertical
5	19.82	48.43	12.13	36.30	69.50	-21.07	100	186	QP	vertical
6	22.97	47.89	12.30	35.59	69.50	-21.61	100	160	QP	vertical

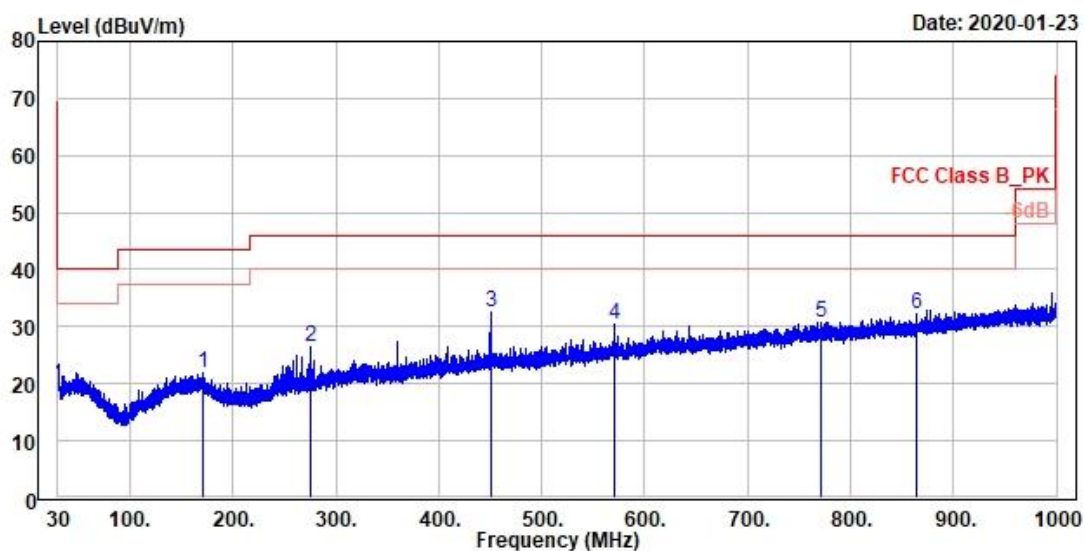
Spurious Emissions, RX Mode, 30MHz-1GHz



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	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	46.59	21.73	29.26	-7.53	40.00	-18.27	162	360	QP	horizontal
2	146.98	21.91	29.55	-7.64	43.50	-21.59	200	127	QP	horizontal
3	260.86	26.56	34.36	-7.80	46.00	-19.44	115	360	QP	horizontal
4	450.11	28.14	31.88	-3.74	46.00	-17.86	100	89	QP	horizontal
5	618.69	28.95	29.78	-0.83	46.00	-17.05	269	0	QP	horizontal
6	855.86	32.05	29.61	2.44	46.00	-13.95	248	0	QP	horizontal

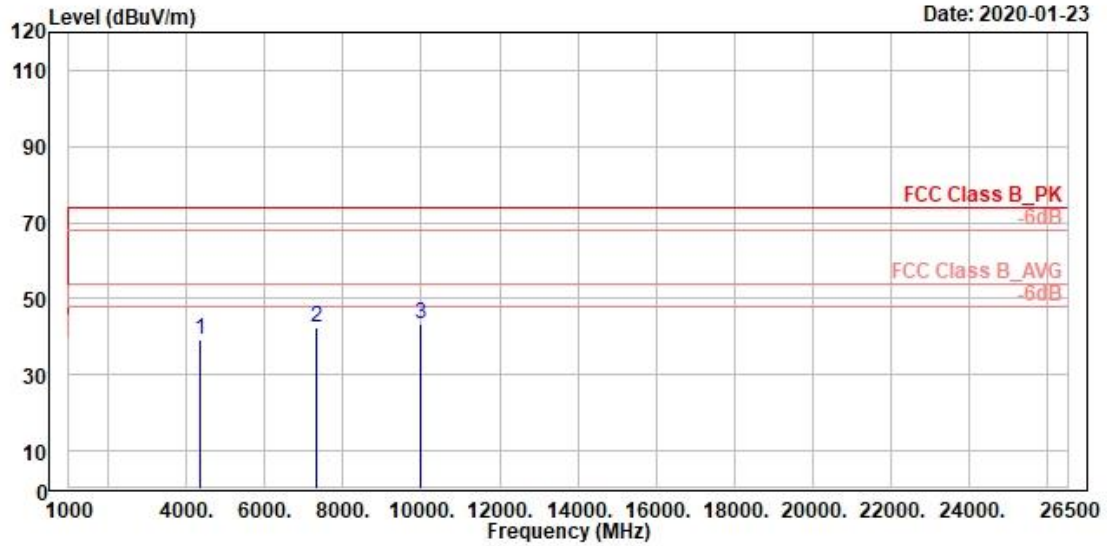


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	170.26	21.82	29.11	-7.29	43.50	-21.68	100	66	QP	vertical
2	275.31	26.42	33.59	-7.17	46.00	-19.58	200	31	QP	vertical
3	450.30	32.47	36.20	-3.73	46.00	-13.53	100	340	QP	vertical
4	570.00	30.41	32.24	-1.83	46.00	-15.59	100	344	QP	vertical
5	772.05	30.87	29.41	1.46	46.00	-15.13	300	220	QP	vertical
6	864.10	32.34	29.76	2.58	46.00	-13.66	132	360	QP	vertical

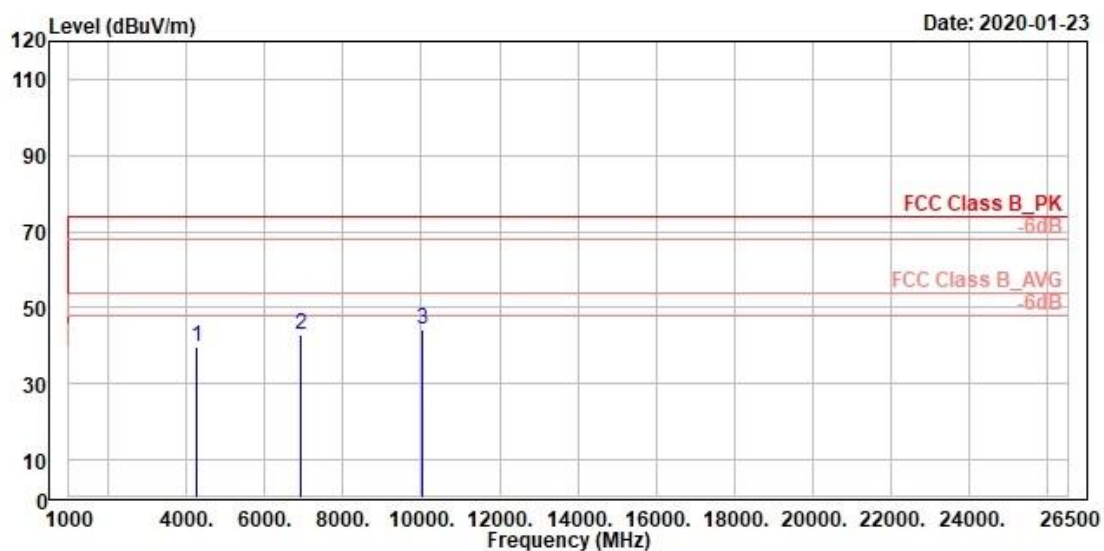
Spurious Emissions, RX Mode, 1GHz-26.5GHz



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	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4344.28	39.42	50.34	-10.92	74.00	-34.58	100	10	Peak	horizontal
2	7330.61	42.37	50.16	-7.79	74.00	-31.63	100	186	Peak	horizontal
3	9987.33	43.54	48.02	-4.48	74.00	-30.46	100	360	Peak	horizontal

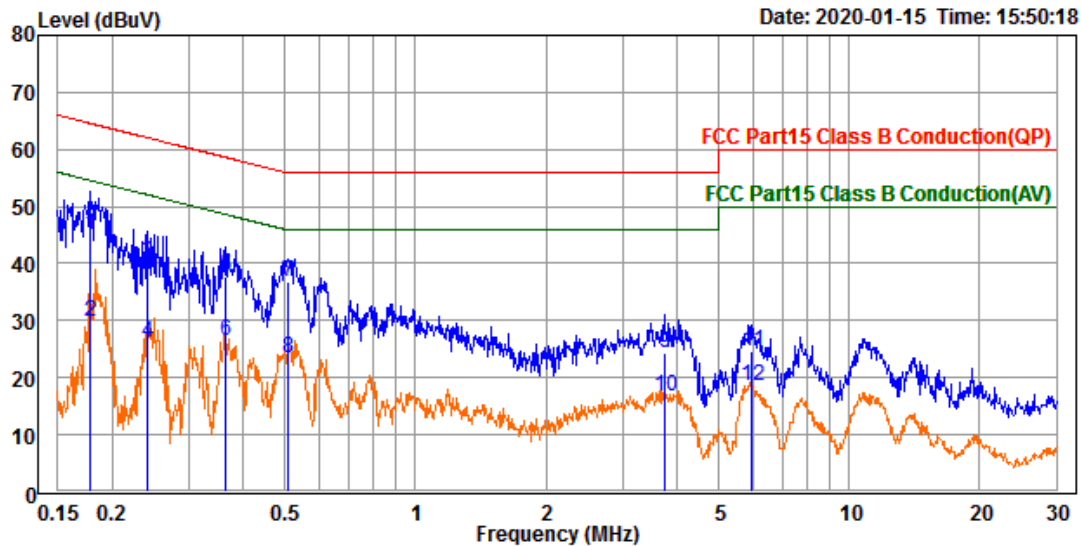


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4267.78	39.48	50.45	-10.97	74.00	-34.52	100	281	Peak	vertical
2	6929.22	42.74	50.58	-7.84	74.00	-31.26	100	0	Peak	vertical
3	10046.83	44.46	48.85	-4.39	74.00	-29.54	100	68	Peak	vertical

Spurious Emissions, AC Mains



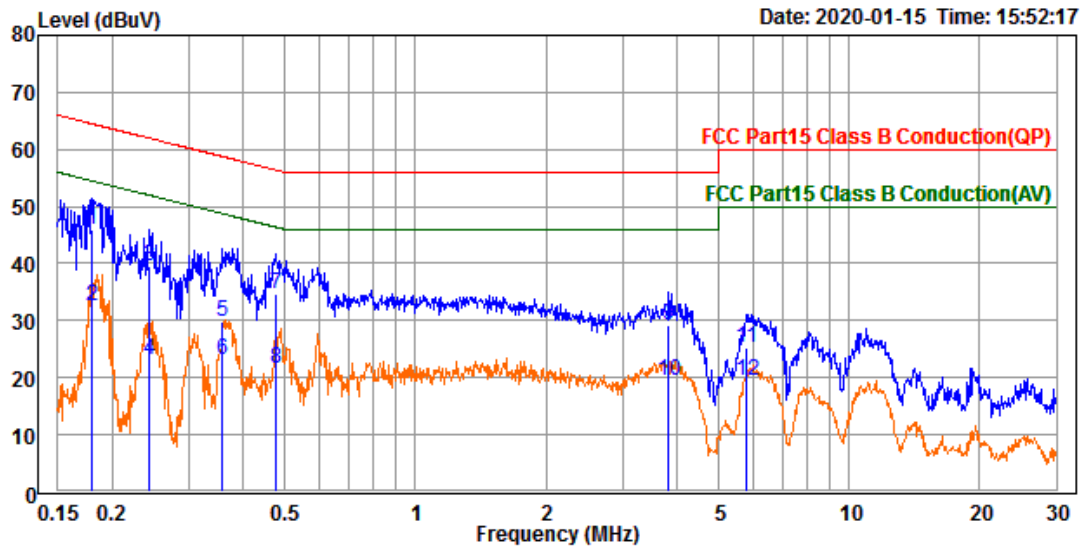
TUV Rheinland Taiwan Ltd.
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105
Tel:+886-2172-7000 Fax:+886-2528-0018



Trace: 1

Site : Conduction room
Condition : FCC Part15 Class B Conduction(QP) line1
Test Engineer: Kevin Kuo
Product : HyperX Cloud Flight Wireless Adapter
Model No. : CF001WA
Test Rating : 120Vac, 60Hz
Tmp/Hum : 22°C / 50%
Mode : 2.4G SRD
Memo : Normal Operation

	Read Freq	Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.179	35.35	9.61	44.96	64.55	-19.59	QP
2	0.179	20.10	9.61	29.71	54.55	-24.84	Average
3	0.241	30.50	9.61	40.11	62.07	-21.96	QP
4	0.241	16.41	9.61	26.02	52.07	-26.05	Average
5	0.364	27.98	9.62	37.60	58.63	-21.03	QP
6	0.364	16.80	9.62	26.42	48.63	-22.21	Average
7	0.509	27.18	9.62	36.80	56.00	-19.20	QP
8	0.509	13.72	9.62	23.34	46.00	-22.66	Average
9	3.754	14.73	9.67	24.40	56.00	-31.60	QP
10	3.754	7.15	9.67	16.82	46.00	-29.18	Average
11	5.967	14.90	9.69	24.59	60.00	-35.41	QP
12	5.967	8.90	9.69	18.59	50.00	-31.41	Average



Trace: 1

Site : Conduction room

Condition : FCC Part15 Class B Conduction(QP) neutral

Test Engineer: Kevin Kuo

Product : HyperX Cloud Flight Wireless Adapter

Model No. : CF001WA

Test Rating : 120Vac, 60Hz

Tmp/Hum : 22°C / 50%

Mode : 2.4G SRD

Memo : Normal Operation

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.179	36.17	9.62	45.79	64.51	-18.72	QP
2	0.179	22.88	9.62	32.50	54.51	-22.01	Average
3	0.243	29.95	9.62	39.57	61.98	-22.41	QP
4	0.243	13.52	9.62	23.14	51.98	-28.84	Average
5	0.359	20.29	9.63	29.92	58.76	-28.84	QP
6	0.359	13.45	9.63	23.08	48.76	-25.68	Average
7	0.477	25.13	9.63	34.76	56.40	-21.64	QP
8	0.477	11.95	9.63	21.58	46.40	-24.82	Average
9	3.829	19.38	9.68	29.06	56.00	-26.94	QP
10	3.829	9.83	9.68	19.51	46.00	-26.49	Average
11	5.791	15.48	9.70	25.18	60.00	-34.82	QP
12	5.791	9.86	9.70	19.56	50.00	-30.44	Average