

Test Report No.50270936 001

Appendix D: Radiated and Mains Spurious Emission Data

(File: 50270936 001 Appendix D)

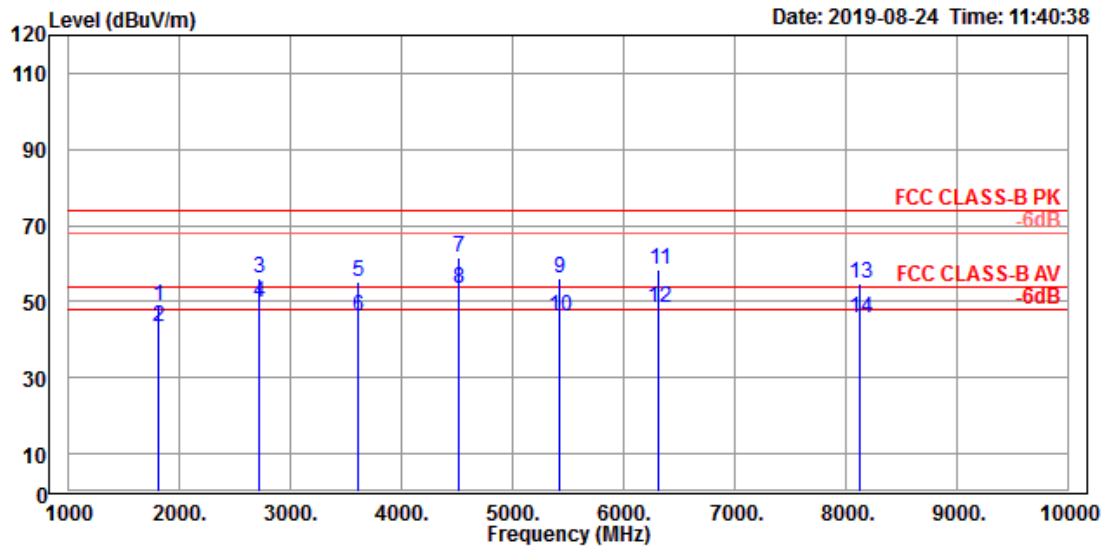
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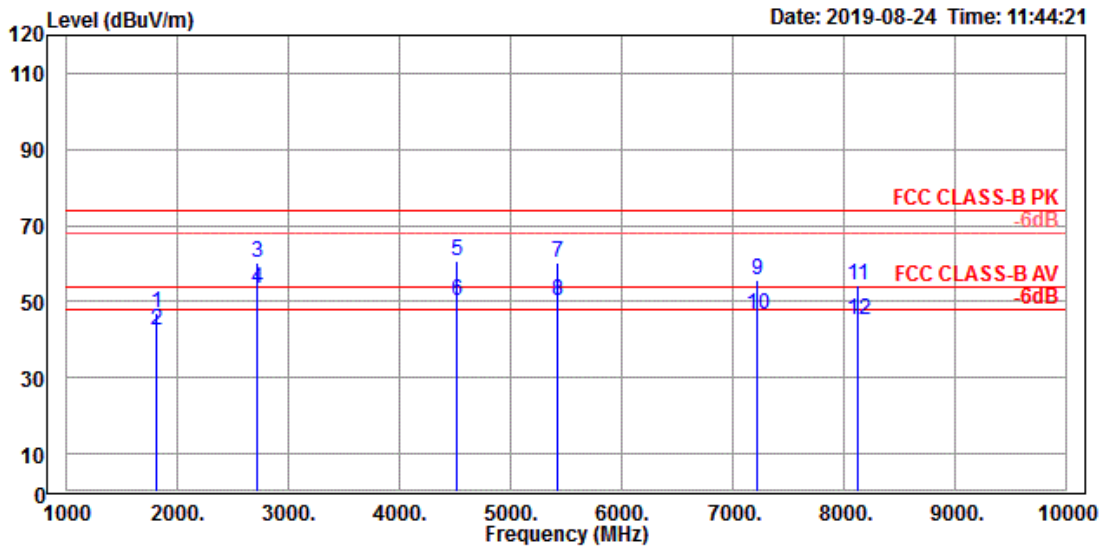


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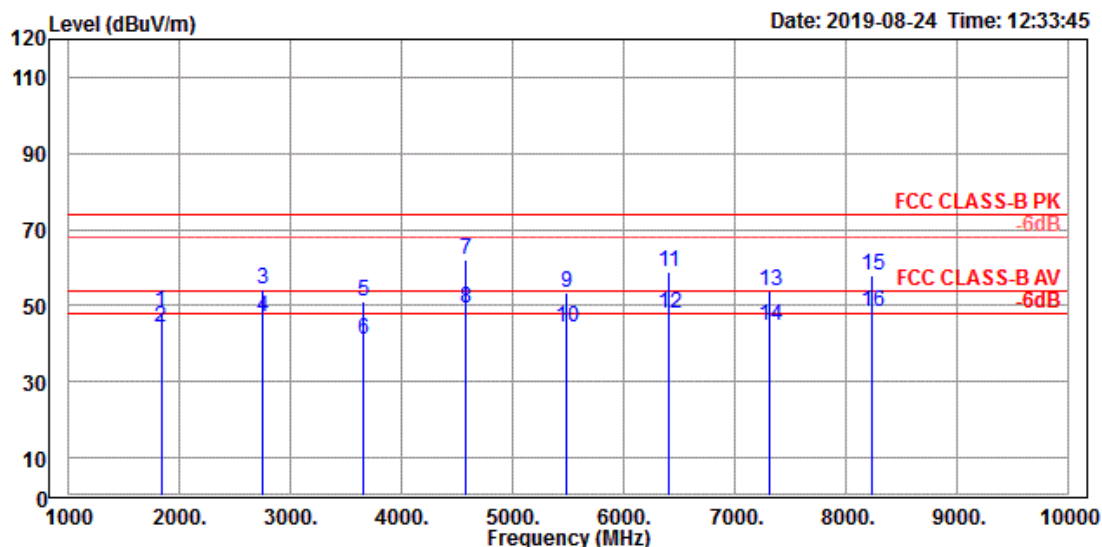
Site : 966B Chamber B
Condition : FCC CLASS-B PK 3m horizontal
Test Engineer: Kay Wu
Applicant : M2comm
Product : Aisle light
Model No. : ALE
Test Rating : 120Vac/60Hz
Tmp/Hum : 26°C/63%
Memo : TX_mode_903MHz
Plane : Y
Power Setting: 8 db

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	APos	TPos	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
1	1806.000	53.89	-5.20	48.69	74.00	-25.31	100	149	Peak
2	1806.000	48.64	-5.20	43.44	54.00	-10.56	100	149	Average
3	2709.000	56.96	-0.76	56.20	74.00	-17.80	100	82	Peak
4 !	2709.000	50.51	-0.76	49.75	54.00	-4.25	100	82	Average
5	3612.000	53.33	1.72	55.05	74.00	-18.95	100	96	Peak
6	3612.000	44.47	1.72	46.19	54.00	-7.81	100	96	Average
7	4515.000	56.83	4.63	61.46	74.00	-12.54	200	154	Peak
8 !	4515.000	48.69	4.63	53.32	54.00	-0.68	200	154	Average
9	5418.000	49.27	6.99	56.26	74.00	-17.74	100	109	Peak
10	5418.000	39.22	6.99	46.21	54.00	-7.79	100	109	Average
11	6321.000	49.94	8.34	58.28	74.00	-15.72	100	171	Peak
12 !	6321.000	40.21	8.34	48.55	54.00	-5.45	100	171	Average
13	8127.000	46.46	8.07	54.53	74.00	-19.47	100	153	Peak
14	8127.000	37.50	8.07	45.57	54.00	-8.43	100	153	Average



Site : 966B Chamber B
Condition : FCC CLASS-B PK 3m vertical
Test Engineer: Kay Wu
Product : Aisle light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 26°C/63%
Memo : TX_mode_903MHz
Plane : Y
Power Setting: 8 db

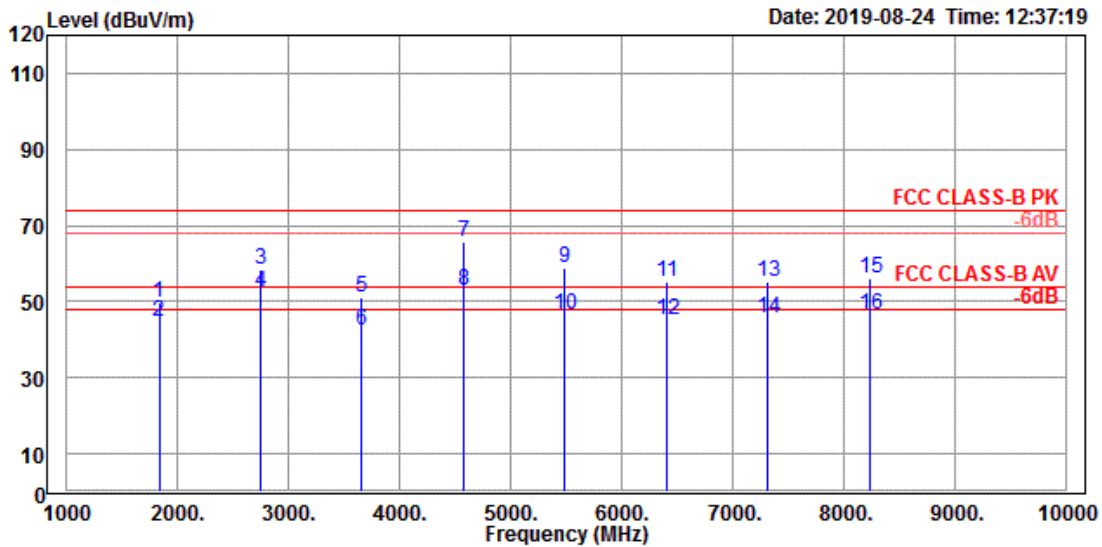
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	APos	TPos	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
1	1806.000	52.04	-5.20	46.84	74.00	-27.16	100	116	Peak
2	1806.000	47.67	-5.20	42.47	54.00	-11.53	100	116	Average
3	2709.000	60.80	-0.76	60.04	74.00	-13.96	200	130	Peak
4 !	2709.000	54.28	-0.76	53.52	54.00	-0.48	200	130	Average
5	4515.000	56.05	4.63	60.68	74.00	-13.32	100	160	Peak
6 !	4515.000	45.75	4.63	50.38	54.00	-3.62	100	160	Average
7	5418.000	53.27	6.99	60.26	74.00	-13.74	100	155	Peak
8 !	5418.000	42.98	6.99	49.97	54.00	-4.03	100	155	Average
9	7224.000	48.00	7.71	55.71	74.00	-18.29	100	121	Peak
10	7224.000	38.98	7.71	46.69	54.00	-7.31	100	121	Average
11	8127.000	46.16	8.07	54.23	74.00	-19.77	100	125	Peak
12	8127.000	37.22	8.07	45.29	54.00	-8.71	100	125	Average



Site : 966B Chamber B
Condition : FCC CLASS-B PK 3m horizontal
Test Engineer: Kay Wu
Product : Aisle light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 26°C/63%
Memo : TX_mode_915MHz
Plane : Y
Power Setting: 7 db

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	APos	TPos	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
1	1830.000	53.06	-4.80	48.26	74.00	-25.74	100	140	Peak
2	1830.000	49.09	-4.80	44.29	54.00	-9.71	100	140	Average
3	2745.000	55.07	-0.67	54.40	74.00	-19.60	100	140	Peak
4	2745.000	47.83	-0.67	47.16	54.00	-6.84	100	140	Average
5	3660.000	49.28	1.95	51.23	74.00	-22.77	100	149	Peak
6	3660.000	39.13	1.95	41.08	54.00	-12.92	100	149	Average
7	4575.000	57.26	4.81	62.07	74.00	-11.93	150	132	Peak
8	4575.000	44.33	4.81	49.14	54.00	-4.86	150	132	Average
9	5490.000	46.29	6.96	53.25	74.00	-20.75	100	122	Peak
10	5490.000	37.10	6.96	44.06	54.00	-9.94	100	122	Average
11	6405.000	50.48	8.48	58.96	74.00	-15.04	150	155	Peak
12	6405.000	39.58	8.48	48.06	54.00	-5.94	150	155	Average
13	7320.000	46.37	7.67	54.04	74.00	-19.96	100	188	Peak
14	7320.000	37.01	7.67	44.68	54.00	-9.32	100	188	Average
15	8235.000	50.03	8.13	58.16	74.00	-15.84	100	162	Peak

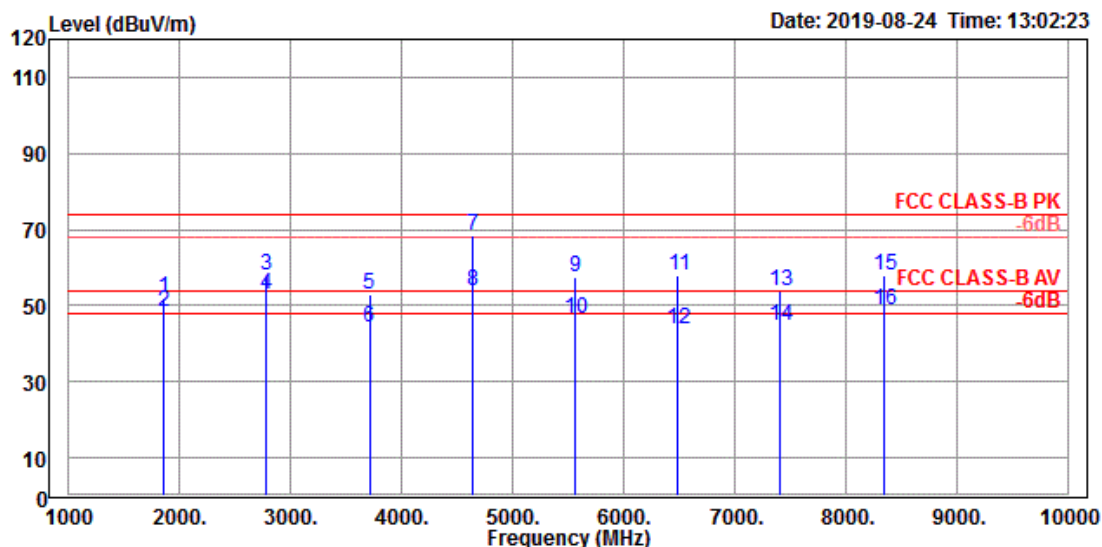
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	APos	TPos	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
16	! 8235.000	40.36	8.13	48.49	54.00	-5.51	100	162	Average



Site : 966B Chamber B
Condition : FCC CLASS-B PK 3m vertical
Test Engineer: Kay Wu
Product : Aisle light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 26°C/63%
Memo : TX_mode_915MHz
Plane : Y
Power Setting: 7 db

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	APos	TPos	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
1	1830.000	54.44	-4.80	49.64	74.00	-24.36	100	96	Peak
2	1830.000	49.72	-4.80	44.92	54.00	-9.08	100	96	Average
3	2745.000	59.19	-0.67	58.52	74.00	-15.48	150	152	Peak
4	2745.000	53.02	-0.67	52.35	54.00	-1.65	150	152	Average
5	3660.000	49.15	1.95	51.10	74.00	-22.90	150	116	Peak
6	3660.000	40.52	1.95	42.47	54.00	-11.53	150	116	Average
7	4575.000	60.75	4.81	65.56	74.00	-8.44	200	126	Peak
8	4575.000	48.29	4.81	53.10	54.00	-0.90	200	126	Average
9	5490.000	52.07	6.96	59.03	74.00	-14.97	150	143	Peak
10	5490.000	39.76	6.96	46.72	54.00	-7.28	150	143	Average
11	6405.000	46.79	8.48	55.27	74.00	-18.73	100	145	Peak
12	6405.000	36.82	8.48	45.30	54.00	-8.70	100	145	Average
13	7320.000	47.56	7.67	55.23	74.00	-18.77	100	139	Peak
14	7320.000	37.85	7.67	45.52	54.00	-8.48	100	139	Average
15	8235.000	47.76	8.13	55.89	74.00	-18.11	100	131	Peak

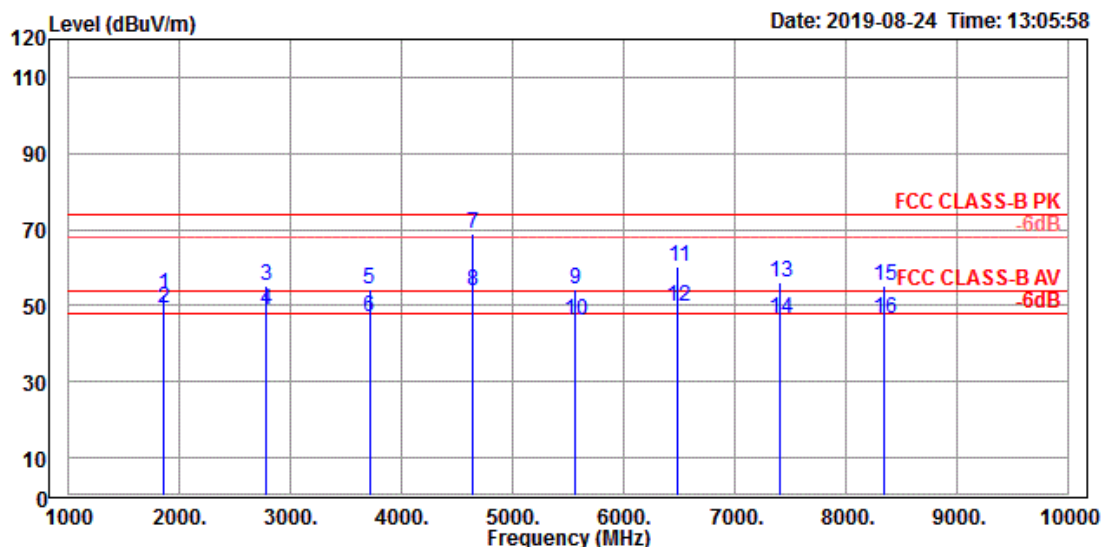
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	APos	TPos	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
16	8235.000	38.29	8.13	46.42	54.00	-7.58	100	131	Average



Site : 966B Chamber B
Condition : FCC CLASS-B PK 3m horizontal
Test Engineer: Kay Wu
Product : Aisle light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 26°C/63%
Memo : TX_mode_927MHz
Plane : Y
Power Setting: 7 db

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	APos	TPos	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
1	1854.000	56.63	-4.45	52.18	74.00	-21.82	100	146	Peak
2	1854.000	52.73	-4.45	48.28	54.00	-5.72	100	146	Average
3	2781.000	58.71	-0.57	58.14	74.00	-15.86	100	132	Peak
4	2781.000	53.40	-0.57	52.83	54.00	-1.17	100	132	Average
5	3708.000	50.69	2.29	52.98	74.00	-21.02	100	154	Peak
6	3708.000	42.05	2.29	44.34	54.00	-9.66	100	154	Average
7	4635.000	63.13	5.12	68.25	74.00	-5.75	100	154	Peak
8	4635.000	48.67	5.12	53.79	54.00	-0.21	100	154	Average
9	5562.000	50.61	6.92	57.53	74.00	-16.47	100	114	Peak
10	5562.000	39.80	6.92	46.72	54.00	-7.28	100	114	Average
11	6489.000	49.37	8.38	57.75	74.00	-16.25	150	165	Peak
12	6489.000	35.54	8.38	43.92	54.00	-10.08	150	165	Average
13	7416.000	46.17	7.64	53.81	74.00	-20.19	100	190	Peak
14	7416.000	37.22	7.64	44.86	54.00	-9.14	100	190	Average
15	8343.000	49.85	8.11	57.96	74.00	-16.04	100	163	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	APos	TPos	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
16	! 8343.000	40.80	8.11	48.91	54.00	-5.09	100	163	Average



Site : 966B Chamber B
Condition : FCC CLASS-B PK 3m vertical
Test Engineer: Kay Wu
Product : Aisle light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 26°C/63%
Memo : TX_mode_927MHz
Plane : Y
Power Setting: 7 db

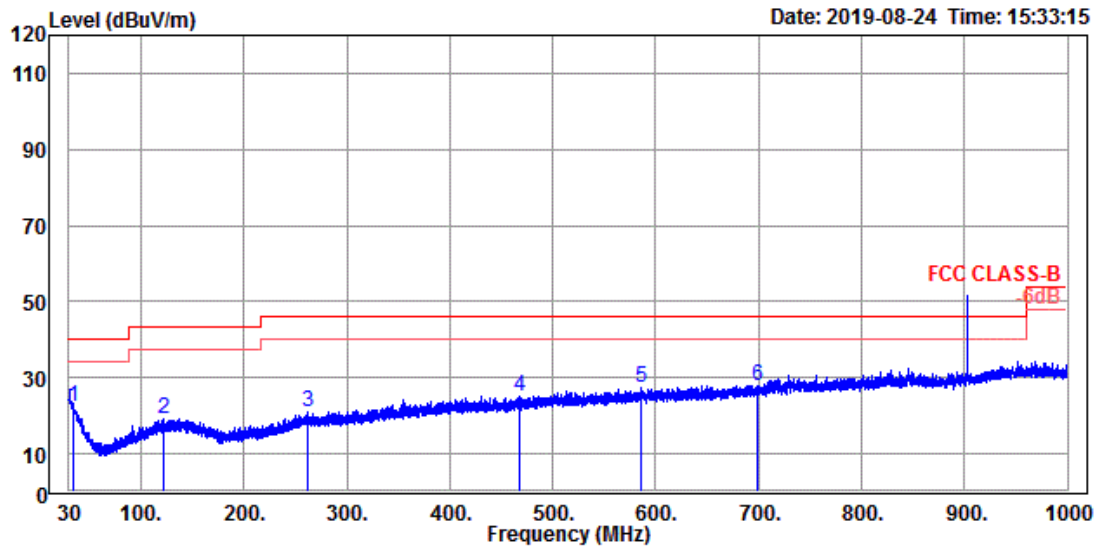
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	APos	TPos	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
1	1854.000	57.60	-4.45	53.15	74.00	-20.85	100	98	Peak
2 !	1854.000	53.52	-4.45	49.07	54.00	-4.93	100	98	Average
3	2781.000	55.88	-0.57	55.31	74.00	-18.69	100	115	Peak
4 !	2781.000	49.29	-0.57	48.72	54.00	-5.28	100	115	Average
5	3708.000	52.03	2.29	54.32	74.00	-19.68	150	141	Peak
6	3708.000	44.54	2.29	46.83	54.00	-7.17	150	141	Average
7 !	4635.000	63.63	5.12	68.75	74.00	-5.25	105	130	Peak
8 !	4635.000	48.78	5.12	53.90	54.00	-0.10	105	130	Average
9	5562.000	47.58	6.92	54.50	74.00	-19.50	150	177	Peak
10	5562.000	39.04	6.92	45.96	54.00	-8.04	150	177	Average
11	6489.000	52.04	8.38	60.42	74.00	-13.58	150	150	Peak
12 !	6489.000	41.31	8.38	49.69	54.00	-4.31	150	150	Average
13	7416.000	48.61	7.64	56.25	74.00	-17.75	100	124	Peak
14	7416.000	38.75	7.64	46.39	54.00	-7.61	100	124	Average
15	8343.000	47.09	8.11	55.20	74.00	-18.80	100	129	Peak

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	APos	TPos	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
16	8343.000	38.57	8.11	46.68	54.00	-7.32	100	129	Average

Spurious Emissions, TX Mode, 30M-1G

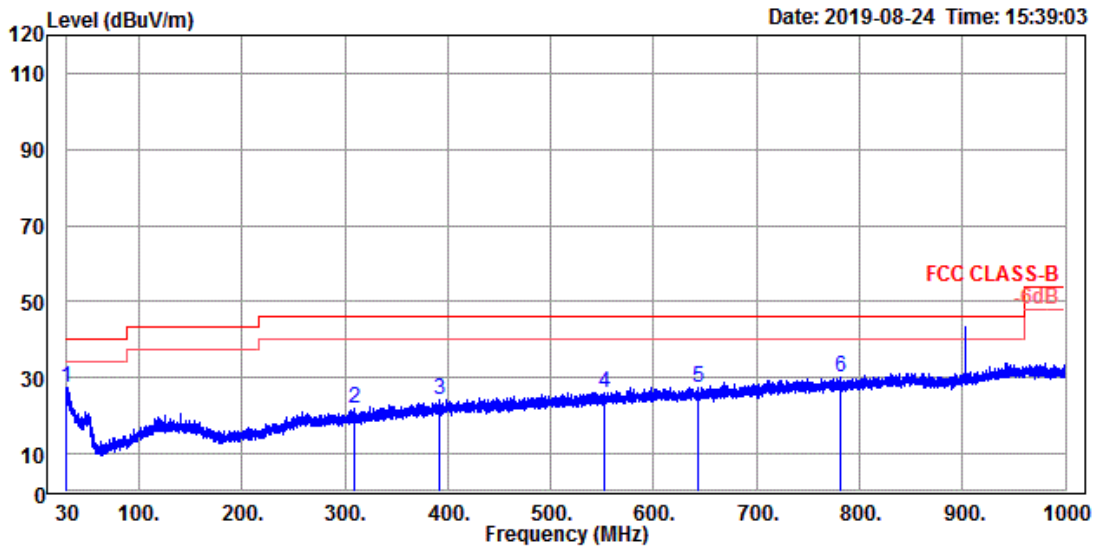


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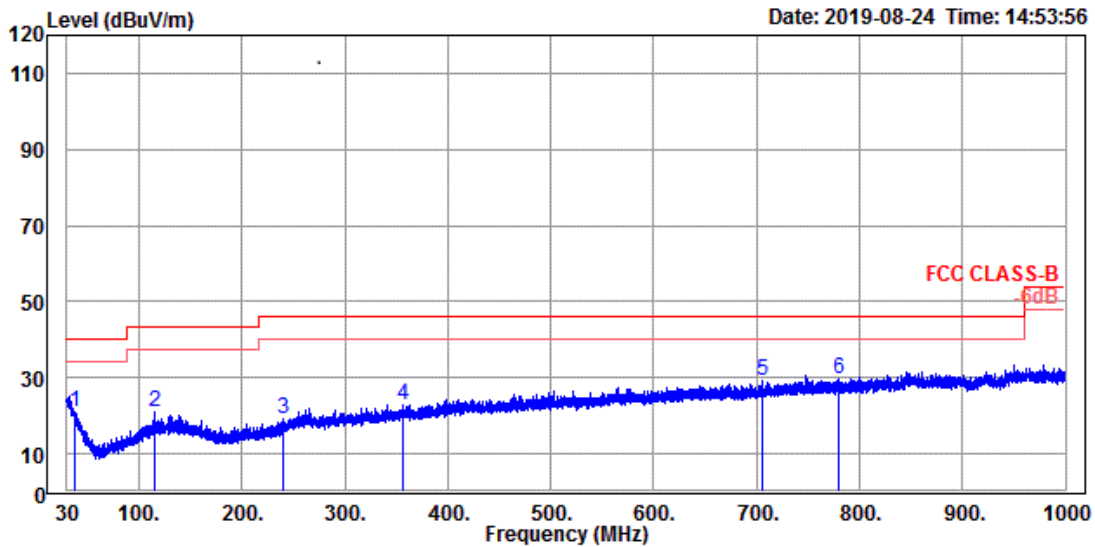
Site : 966B Chamber B
Condition : FCC CLASS-B 3m horizontal
Test Engineer: Kay Wu
Product : Aisle light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 26°C/63%
Memo : TX_mode_903MHz
Plane : Y
Power Setting: 8 db

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	APos	TPos	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
1	34.171	28.32	-5.74	22.58	40.00	-17.42	400	127	QP
2	121.374	29.89	-10.75	19.14	43.50	-24.36	300	55	QP
3	262.024	29.53	-8.41	21.12	46.00	-24.88	400	2	QP
4	467.664	30.12	-4.97	25.15	46.00	-20.85	300	198	QP
5	586.586	30.34	-3.13	27.21	46.00	-18.79	100	339	QP
6	699.203	29.64	-1.58	28.06	46.00	-17.94	300	78	QP



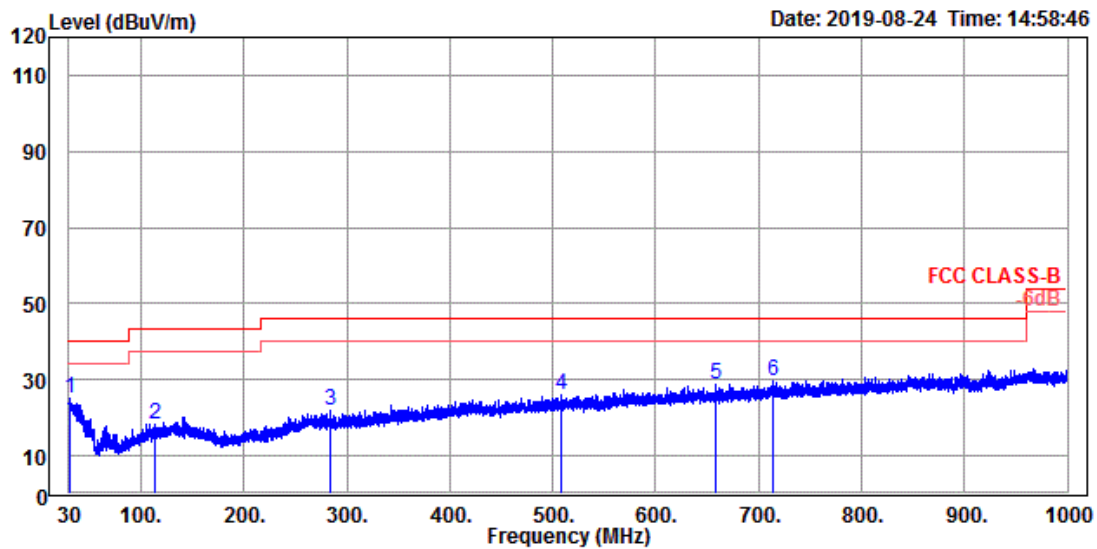
Site : 966B Chamber B
Condition : FCC CLASS-B 3m vertical
Test Engineer: Kay Wu
Product : Aisle light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 26°C/63%
Memo : TX_mode_903MHz
Plane : Y
Power Setting: 8 db

		Read		Limit	Over	APos	TPos	
	Freq	Level	Factor	Level	Line	Limit		Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg
1	30.000	30.62	-3.28	27.34	40.00	-12.66	100	317 QP
2	309.554	29.85	-7.75	22.10	46.00	-23.90	200	283 QP
3	392.198	30.10	-5.86	24.24	46.00	-21.76	400	239 QP
4	552.539	29.79	-3.69	26.10	46.00	-19.90	100	21 QP
5	643.331	30.07	-2.56	27.51	46.00	-18.49	400	190 QP
6	782.235	30.15	-0.11	30.04	46.00	-15.96	100	14 QP



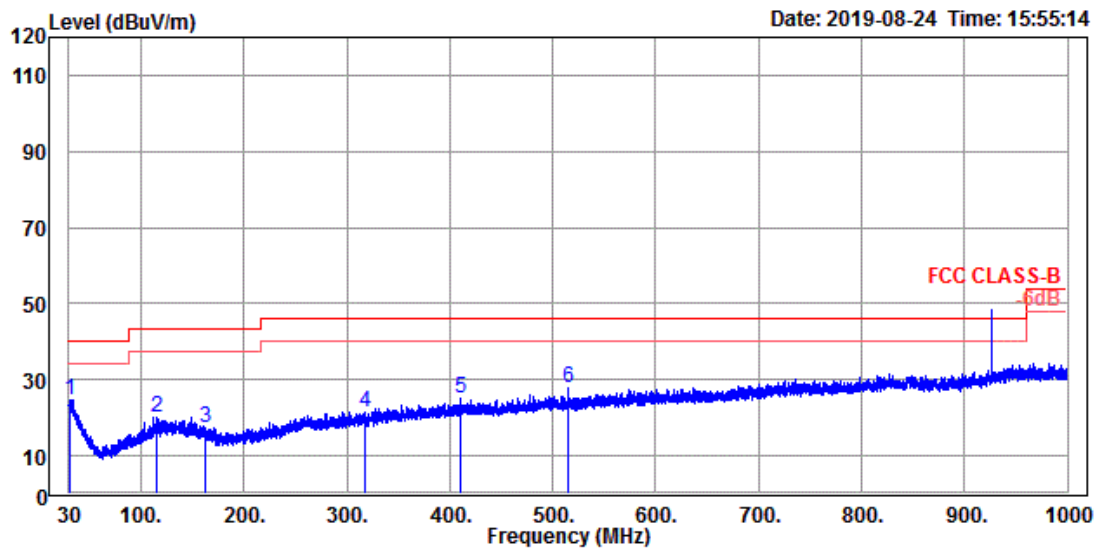
Site : 966B Chamber B
 Condition : FCC CLASS-B 3m horizontal
 Test Engineer: Kay Wu
 Product : Aisle light
 Model No. : Aisle light
 Test Rating : 120Vac/60Hz
 Tmp/Hum : 26°C/63%
 Memo : TX_mode_915MHz
 Plane : Y
 Power Setting: 7 db

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	APos	TPos	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
1	37.922	28.58	-7.67	20.91	40.00	-19.09	100	127	QP
2	115.198	32.16	-11.22	20.94	43.50	-22.56	400	264	QP
3	240.571	29.13	-10.05	19.08	46.00	-26.92	200	347	QP
4	356.971	29.59	-6.62	22.97	46.00	-23.03	300	178	QP
5	705.039	30.96	-1.85	29.11	46.00	-16.89	300	360	QP
6	780.053	30.19	-0.41	29.78	46.00	-16.22	100	360	QP



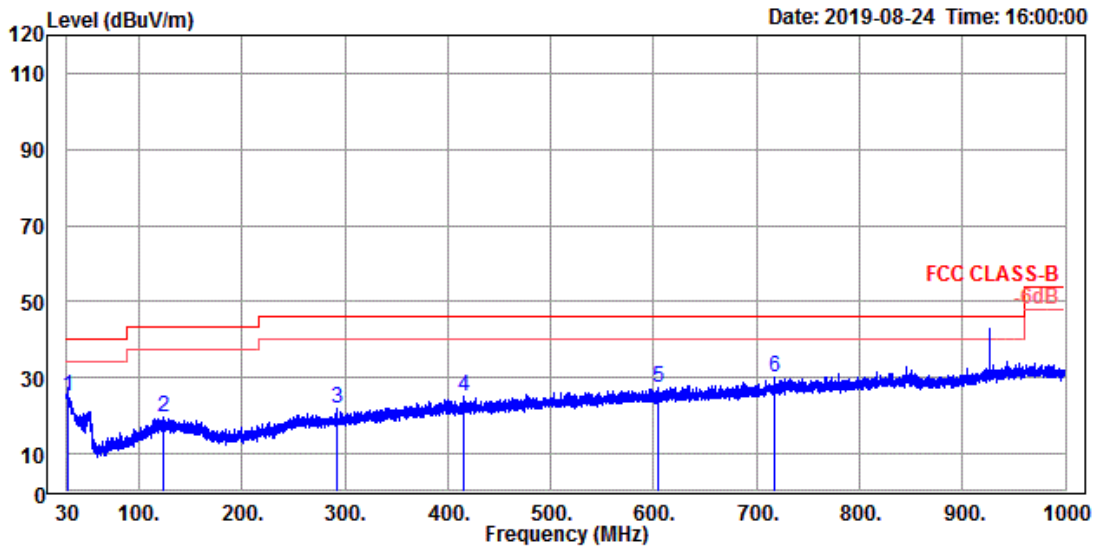
Site : 966B Chamber B
 Condition : FCC CLASS-B 3m vertical
 Test Engineer: Kay Wu
 Product : Aisle light
 Model No. : Aisle light
 Test Rating : 120Vac/60Hz
 Temp/Hum : 26°C/63%
 Memo : TX_mode_915MHz
 Plane : Y
 Power Setting: 7 db

	Freq	Level	Factor	Level	Line	Limit	Remark	
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg
1	30.889	28.81	-3.83	24.98	40.00	-15.02	200	359 QP
2	114.067	29.45	-11.25	18.20	43.50	-25.30	300	260 QP
3	284.140	30.23	-8.32	21.91	46.00	-24.09	100	301 QP
4	508.857	30.08	-4.25	25.83	46.00	-20.17	300	16 QP
5	657.752	30.86	-2.27	28.59	46.00	-17.41	300	51 QP
6	713.931	31.37	-1.76	29.61	46.00	-16.39	300	360 QP



Site : 966B Chamber B
Condition : FCC CLASS-B 3m horizontal
Test Engineer: Kay Wu
Product : Aisle light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 26°C/63%
Memo : TX_mode_927MHz
Plane : Y
Power Setting: 7 dB

		Read			Limit	Over	APos	TPos	
	Freq	Level	Factor	Level	Line	Limit			Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
1	30.388	28.36	-3.50	24.86	40.00	-15.14	200	195	QP
2	115.263	31.19	-11.12	20.07	43.50	-23.43	100	84	QP
3	161.920	28.77	-11.33	17.44	43.50	-26.06	400	360	QP
4	317.508	29.17	-7.54	21.63	46.00	-24.37	100	257	QP
5	411.210	30.78	-5.62	25.16	46.00	-20.84	200	25	QP
6	515.485	31.85	-4.14	27.71	46.00	-18.29	100	146	QP



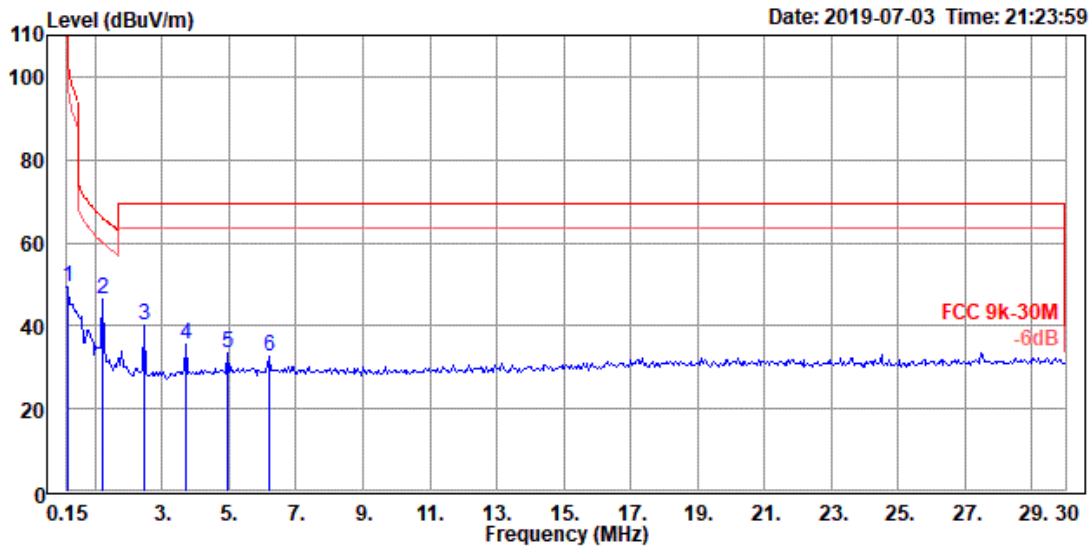
Site : 966B Chamber B
Condition : FCC CLASS-B 3m vertical
Test Engineer: Kay Wu
Product : Aisle light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 26°C/63%
Memo : TX_mode_927MHz
Plane : Y
Power Setting: 7 db

		Read			Limit	Over	APos	TPos	
	Freq	Level	Factor	Level	Line	Limit			Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	deg	
1	31.067	28.84	-3.91	24.93	40.00	-15.07	100	76	QP
2	124.381	30.39	-10.59	19.80	43.50	-23.70	100	160	QP
3	292.773	29.98	-8.13	21.85	46.00	-24.15	200	332	QP
4	414.799	30.46	-5.58	24.88	46.00	-21.12	300	220	QP
5	603.852	30.07	-2.89	27.18	46.00	-18.82	100	25	QP
6	717.439	31.19	-1.24	29.95	46.00	-16.05	200	4	QP

Spurious Emissions, TX Mode, 9K-30M

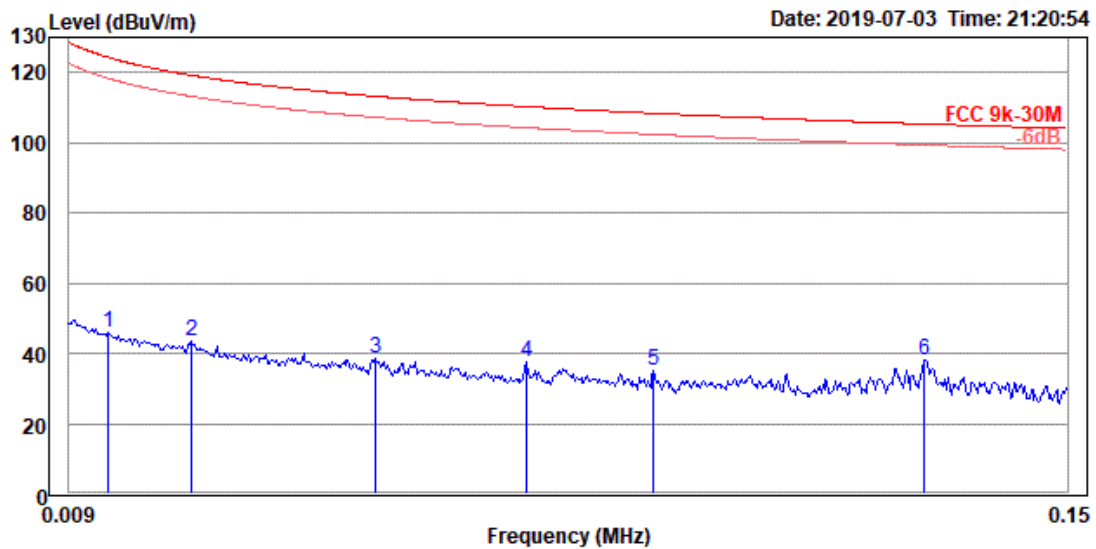


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Site : 966A Chamber A
Condition : FCC 9k-30M 3m vertical
Test Engineer: Amy Hsu
Product : Aisle Light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 21.4°C / 56%
Memo : TX_mode_903MHz
Plane : Y
Power Setting: 8 db

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Note
	MHz	dBUV/m	dBuV	dB/m	dBUV/m	dB	cm	deg		
1	0.193	49.51	31.04	18.47	101.88	-52.37	100	102	QP	
2	1.232	46.56	27.81	18.75	65.82	-19.26	100	324	QP	
3	2.443	40.03	21.37	18.66	69.50	-29.47	100	226	QP	
4	3.697	35.53	16.60	18.93	69.50	-33.97	100	130	QP	
5	4.952	33.61	14.09	19.52	69.50	-35.89	100	127	QP	
6	6.207	32.65	12.88	19.77	69.50	-36.85	100	104	QP	



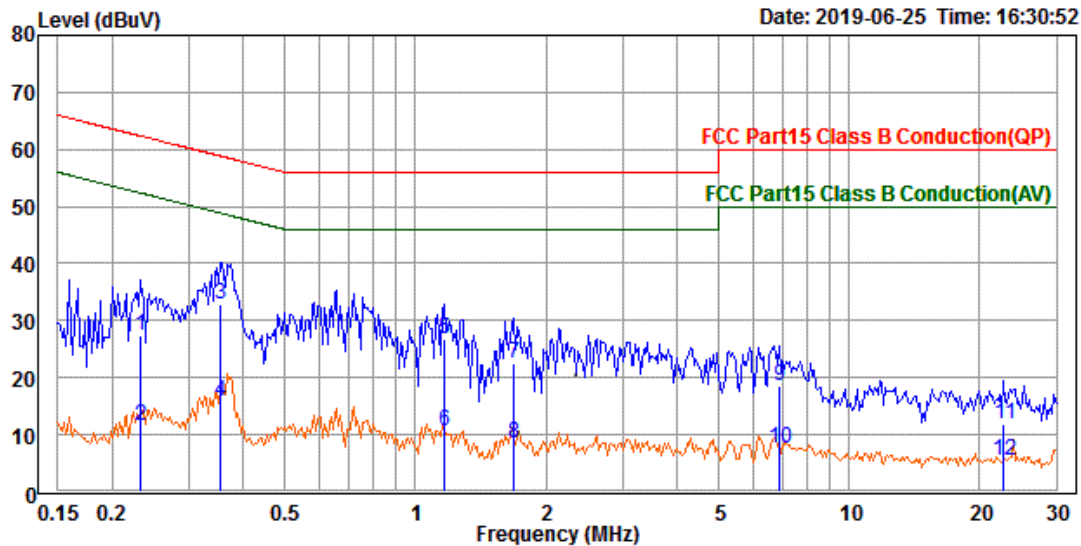
Site : 966A Chamber A
Condition : FCC 9k-30M 3m vertical
Test Engineer: Amy Hsu
Product : Aisle Light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 21.4°C / 56%
Memo : TX_mode_903MHz
Plane : Y
Power Setting: 8 db

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.015	45.82	27.06	18.76	124.35	-78.53	100	127	QP	
2	0.026	43.65	24.42	19.23	119.17	-75.52	100	196	QP	
3	0.052	38.73	19.78	18.95	113.22	-74.49	100	228	QP	
4	0.074	37.41	18.70	18.71	110.26	-72.85	100	151	QP	
5	0.092	34.87	16.37	18.50	108.36	-73.49	100	23	QP	
6	0.130	37.91	19.49	18.42	105.33	-67.42	100	263	QP	

Spurious Emissions, AC Mains



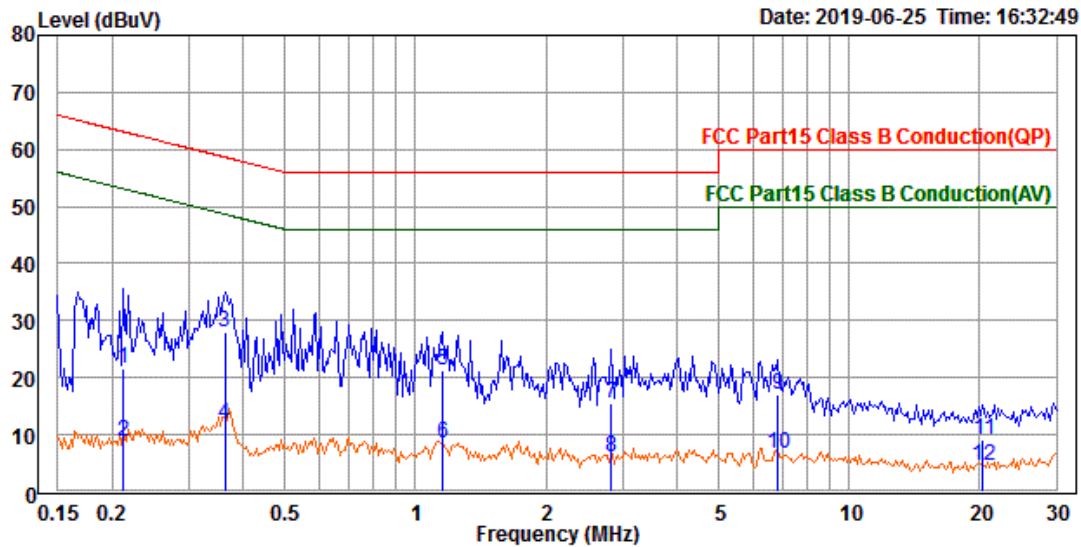
TUV Rheinland Taiwan Ltd.
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105
Tel:+886-2172-7000 Fax:+886-2528-0018



Trace: 1

Site : Conduction room
Condition : FCC Part15 Class B Conduction(QP) line1
Test Engineer: Amy Hsu
Product : Aisle Light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 23.3°C /33%
Memo : TX_mode_903MHz
Plane : Y
Power Setting: 8 db

	Read Freq	Level dBuV	Factor dB	Level dBuV	Limit Line dBuV	Over Limit dB	Remark
	MHz						
1	0.232	17.75	9.69	27.44	62.37	-34.93	QP
2	0.232	1.97	9.69	11.66	52.37	-40.71	Average
3	0.356	23.23	9.70	32.93	58.82	-25.89	QP
4	0.356	6.10	9.70	15.80	48.82	-33.02	Average
5	1.163	16.94	9.69	26.63	56.00	-29.37	QP
6	1.163	1.08	9.69	10.77	46.00	-35.23	Average
7	1.679	12.78	9.70	22.48	56.00	-33.52	QP
8	1.679	-1.24	9.70	8.46	46.00	-37.54	Average
9	6.889	8.97	9.73	18.70	60.00	-41.30	QP
10	6.889	-2.19	9.73	7.54	50.00	-42.46	Average
11	22.711	1.92	9.80	11.72	60.00	-48.28	QP
12	22.711	-4.20	9.80	5.60	50.00	-44.40	Average



Trace: 1

Site : Conduction room
Condition : FCC Part15 Class B Conduction(QP) neutral
Test Engineer: Amy Hsu
Product : Aisle Light
Model No. : Aisle light
Test Rating : 120Vac/60Hz
Tmp/Hum : 23.3°C /33%
Memo : TX_mode_903MHz
Plane : Y
Power Setting: 8 db

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.212	11.92	9.68	21.60	63.11	-41.51	QP
2	0.212	-0.97	9.68	8.71	53.11	-44.40	Average
3	0.363	18.37	9.68	28.05	58.65	-30.60	QP
4	0.363	2.19	9.68	11.87	48.65	-36.78	Average
5	1.151	11.68	9.68	21.36	56.00	-34.64	QP
6	1.151	-1.04	9.68	8.64	46.00	-37.36	Average
7	2.816	5.97	9.69	15.66	56.00	-40.34	QP
8	2.816	-3.48	9.69	6.21	46.00	-39.79	Average
9	6.821	7.25	9.72	16.97	60.00	-43.03	QP
10	6.821	-2.96	9.72	6.76	50.00	-43.24	Average
11	20.359	-0.54	9.81	9.27	60.00	-50.73	QP
12	20.359	-5.19	9.81	4.62	50.00	-45.38	Average