

Test Report No.50162786 001

Appendix D: Radiated Spurious Emission Data

(File: 50162786Appendix D)

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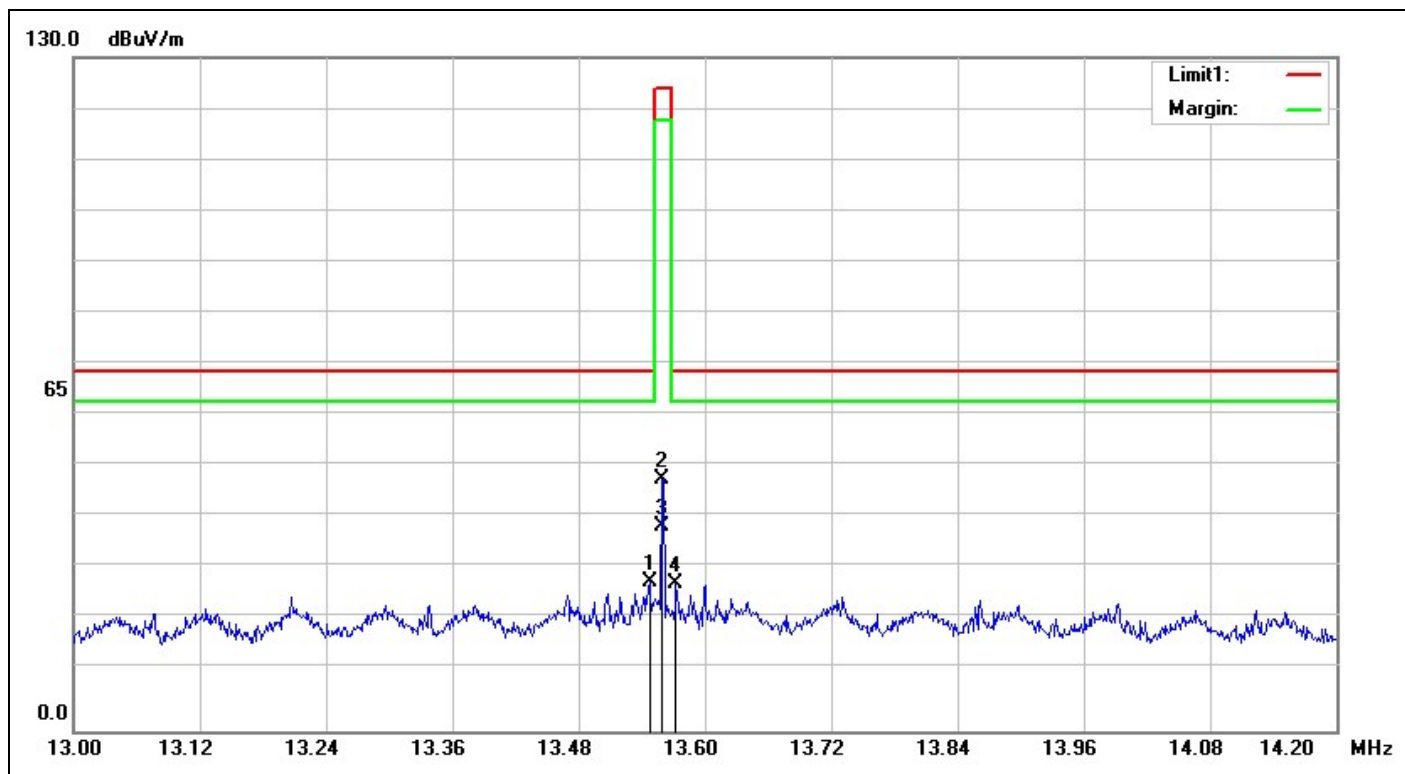
Emissions, Fundamental



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Service No.:	114077995	Test Distance:	3m
Test Standard:	NCC_13.56M_Fundamental 3m(QP)	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/7/3 19:43:41
Applicant:	MAX	Test Rating:	AC 110V/60Hz
Product:	Sign and Label Printer	Temp.(°C)/Hum.(%):	22.5(°C)/52%
Model No.:	CPM-100HG5M	Test Engineer:	Kevin.Kuo
Test Mode:	13.56 Fundamental		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	13.5472	20.83	7.86	28.69	69.50	-40.81	peak	100	233	
2	13.5592	20.83	27.68	48.51	123.90	-75.39	peak	100	24	
3	13.5592	20.83	18.67	39.50	123.90	-84.40	QP	100	103	
4	13.5724	20.83	7.51	28.34	69.50	-41.16	peak	100	10	

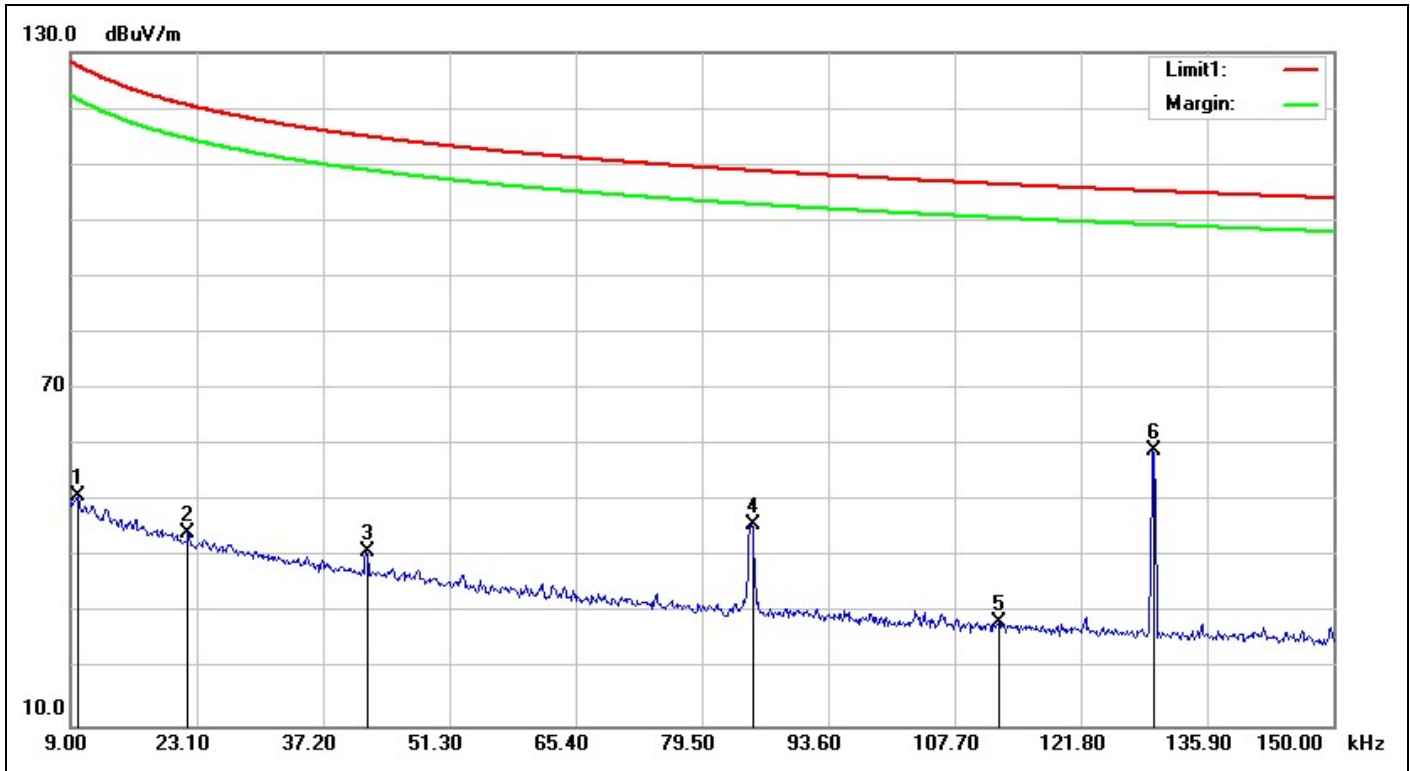
Spurious Emissions, TX+RX Mode, 9K-30M



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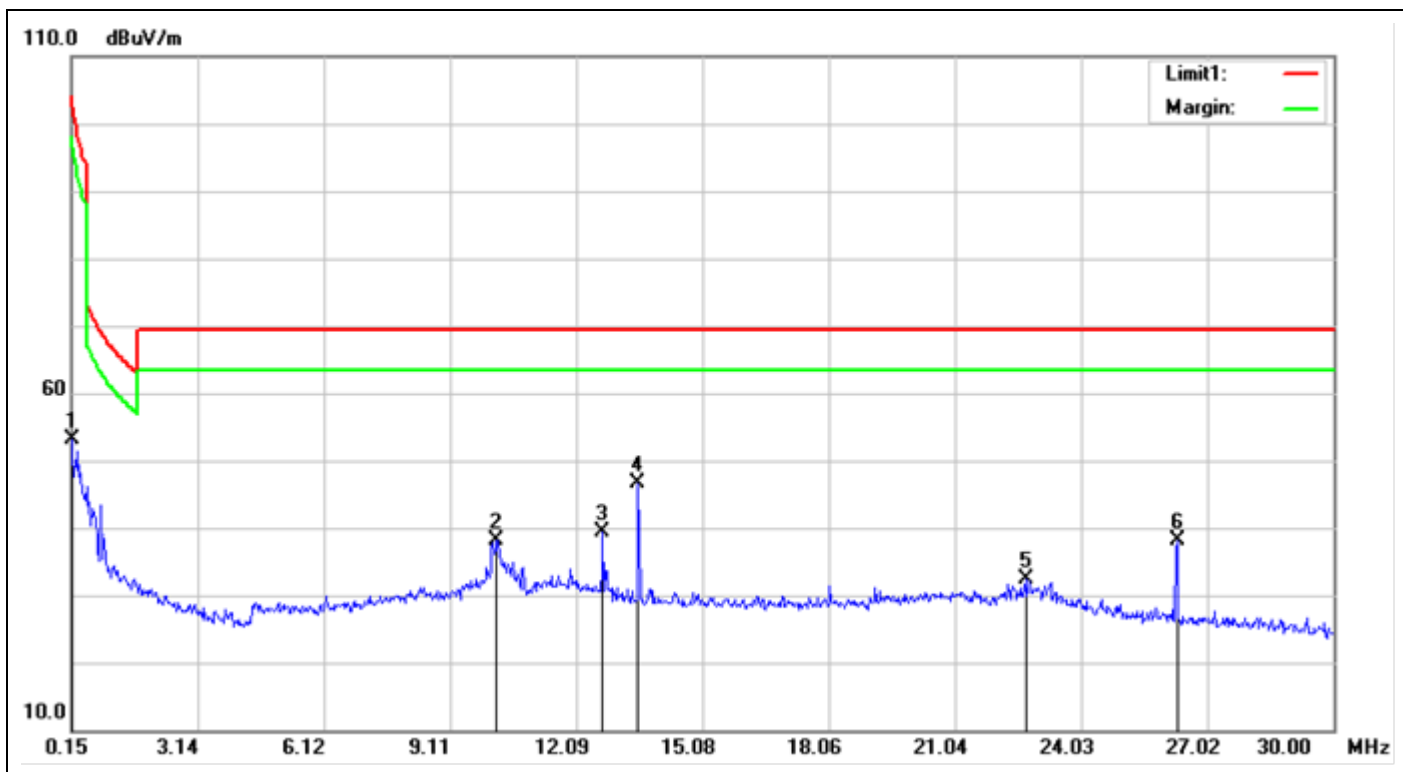
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Service No.:	114077995	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/7/2 19:20:22
Applicant:	MAX	Test Rating:	AC 110V/60Hz
Product:	Sign and Label Printer	Temp.(°C)/Hum.(%)	22(°C)/49%
Model No.:	CPM-100HG5M	Test Engineer:	Kevin.Kuo
Test Mode:	13.56 9K TX+RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0098	18.50	32.36	50.86	127.57	-76.71	QP	100	305	
2	0.0221	19.02	25.24	44.26	120.55	-76.29	QP	100	217	
3	0.0420	19.09	21.93	41.02	115.01	-73.99	QP	100	108	
4	0.0850	18.51	27.23	45.74	108.92	-63.18	QP	100	47	
5	0.1126	18.34	10.15	28.49	106.49	-78.00	QP	100	33	
6	0.1298	18.34	40.77	59.11	105.27	-46.16	QP	100	201	



Service No.:	114077995	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/7/2 19:27:09
Applicant:	MAX	Test Rating:	AC 110V/60Hz
Product:	Sign and Label Printer	Temp.(°C)/Hum.(%)	22(°C)/49%
Model No.:	CPM-100HG5M	Test Engineer:	Kevin.Kuo
Test Mode:	13.56 150K TX+RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.1500	18.36	34.69	53.05	104.08	-51.03	QP	100	201	
2	10.2095	20.44	17.74	38.18	69.50	-31.32	QP	100	359	
3	12.7169	20.74	18.69	39.43	69.50	-30.07	QP	100	107	
4	13.5527	20.83	22.65	42.48	69.50	-22.95	QP	100	135	
5	22.7166	21.69	10.69	32.38	69.50	-37.12	QP	100	318	
6	26.2986	21.82	16.31	38.13	69.50	-31.37	QP	100	257	

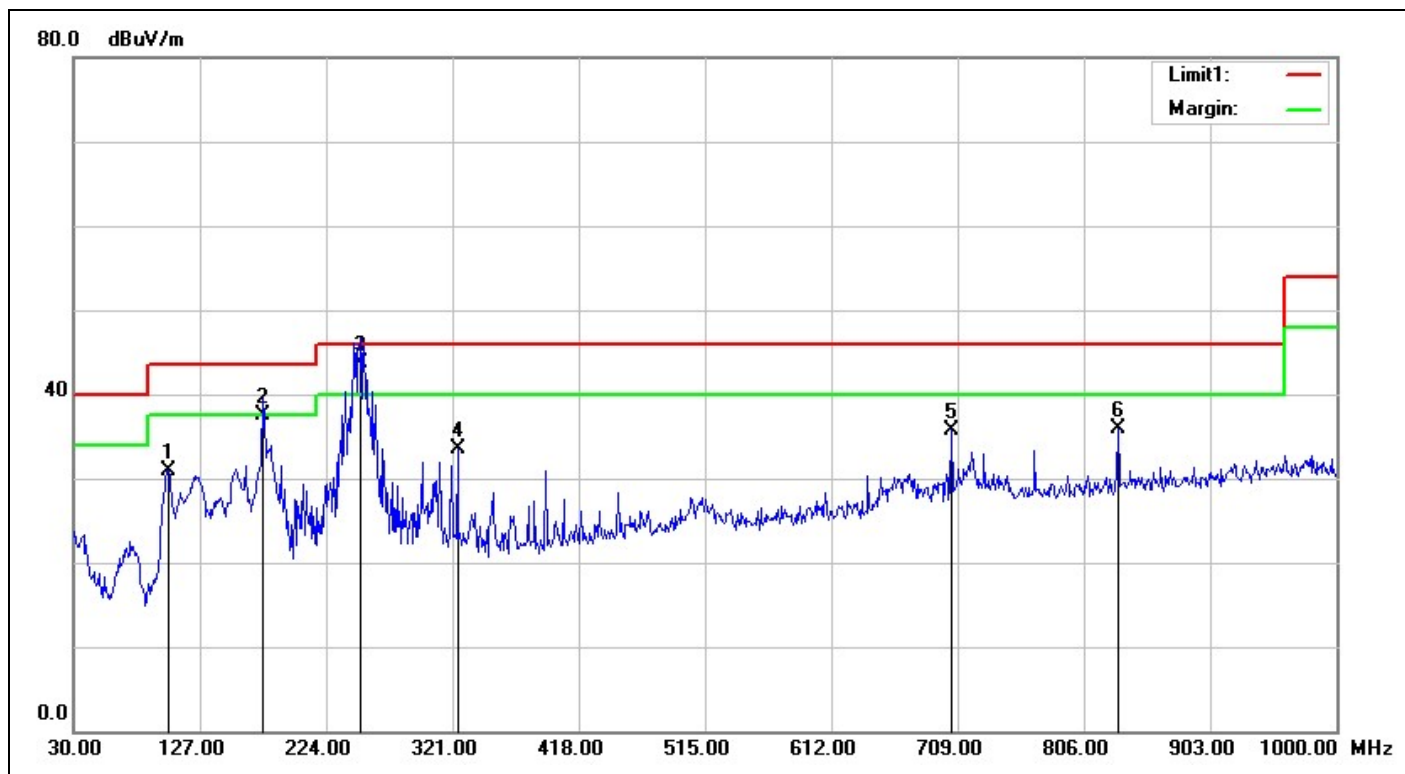
Spurious Emissions, TX+RX Mode,30M-1G



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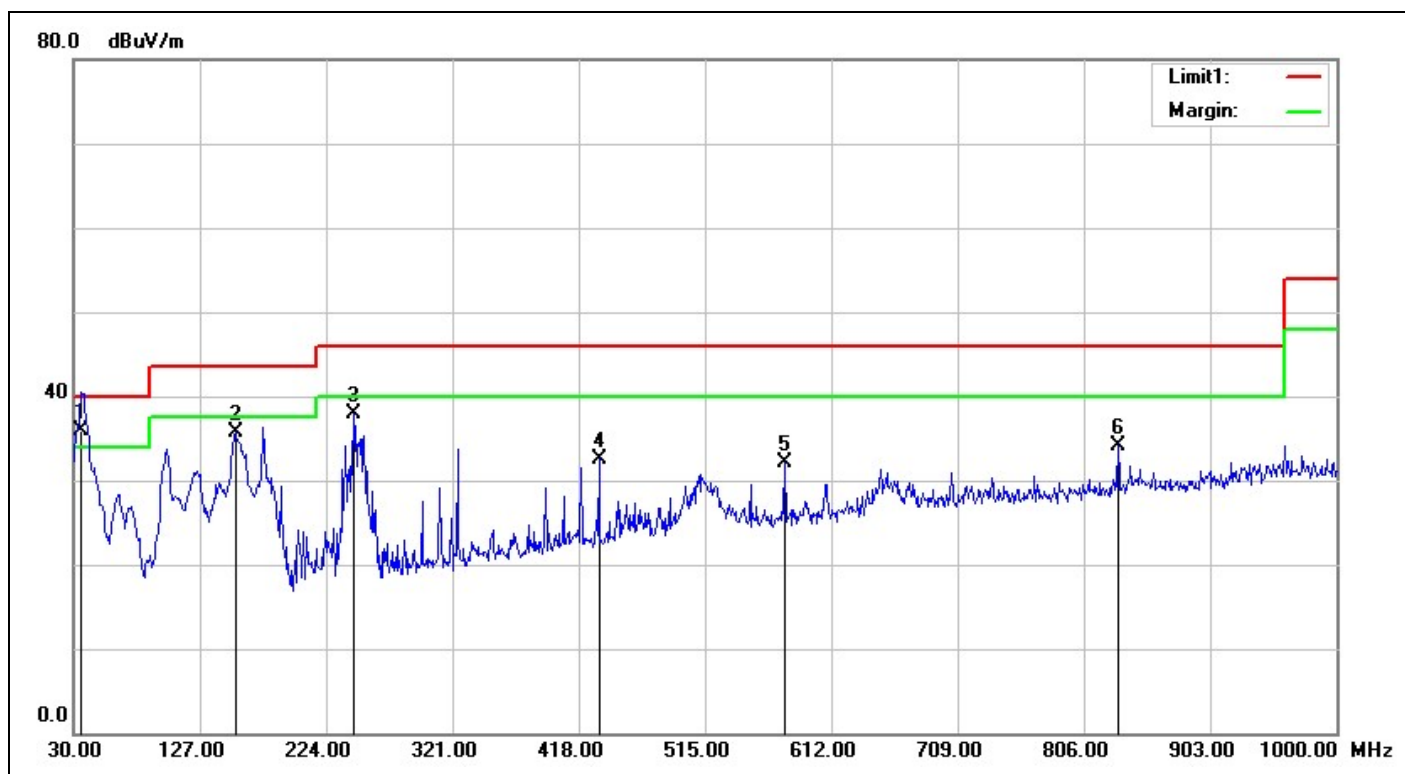
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Service No.:	114077995	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/7/2 18:47:29
Applicant:	MAX	Test Rating:	AC 110V/60Hz
Product:	Sign and Label Printer	Temp.(°C)/Hum.(%)	22(°C)/49%
Model No.:	CPM-100HG5M	Test Engineer:	Kevin.Kuo
Test Mode:	13.56 TX+RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	102.7500	-9.08	40.00	30.92	43.50	-12.58	QP	100	230	
2	175.5000	-9.28	46.88	37.60	43.50	-5.90	QP	100	232	
3	250.1900	-5.66	49.36	43.70	46.00	-2.30	QP	100	294	
4	324.8800	-3.84	37.32	33.48	46.00	-12.52	QP	100	259	
5	704.1500	1.52	34.21	35.73	46.00	-10.27	QP	100	206	
6	832.1900	3.58	32.34	35.92	46.00	-10.08	QP	100	158	



Service No.:	114077995	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/7/2 18:48:33
Applicant:	MAX	Test Rating:	AC 110V/60Hz
Product:	Sign and Label Printer	Temp.(°C)/Hum.(%)	22(°C)/49%
Model No.:	CPM-100HG5M	Test Engineer:	Kevin.Kuo
Test Mode:	13.56 TX+RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	35.8200	-3.53	39.43	35.90	40.00	-4.10	QP	100	208	
2	154.1600	-7.57	43.33	35.76	43.50	-7.74	QP	100	192	
3	245.3400	-6.17	44.08	37.91	46.00	-8.09	QP	100	147	
4	433.5200	-1.94	34.39	32.45	46.00	-13.55	QP	100	99	
5	576.1100	-0.03	32.07	32.04	46.00	-13.96	QP	100	1	
6	832.1900	3.58	30.47	34.05	46.00	-11.95	QP	100	294	

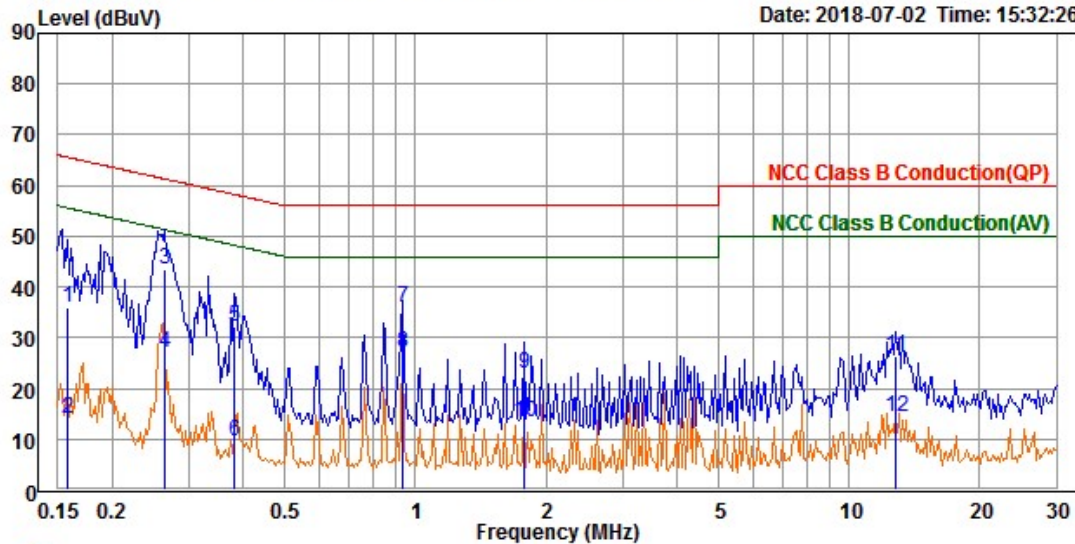
Spurious Emissions, Mains, 150kHz - 30MHz



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Date: 2018-07-02 Time: 15:32:26



Trace: 1

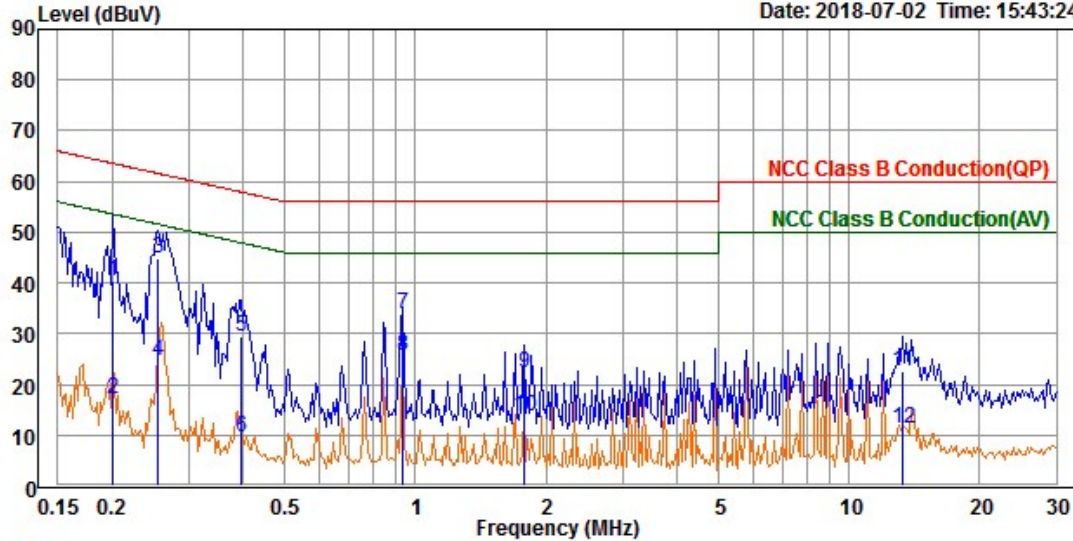
Site : Conduction room
Condition : NCC Class B Conduction(QP) line1
Test Engineer: Kevin Kuo
Applicant : MAX

Model No. : CPM-100HG5M
Test Rating : 110Vac/60Hz
Tmp/Hum : 23.7°C / 36%
Memo : AC Mains

	Read			Limit	Over	
Freq	Level	Factor	Level	Line	Limit	Remark
MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.158	26.42	9.68	36.10	65.59	-29.49 QP
2	0.158	4.38	9.68	14.06	55.59	-41.53 Average
3	0.264	33.73	9.68	43.41	61.29	-17.88 QP
4	0.264	17.30	9.68	26.98	51.29	-24.31 Average
5	0.382	22.33	9.69	32.02	58.24	-26.22 QP
6	0.382	0.01	9.69	9.70	48.24	-38.54 Average
7	0.934	26.15	9.70	35.85	56.00	-20.15 QP
8	0.934	17.28	9.70	26.98	46.00	-19.02 Average
9	1.783	13.08	9.72	22.80	56.00	-33.20 QP
10	1.783	3.51	9.72	13.23	46.00	-32.77 Average
11	12.760	16.59	9.84	26.43	60.00	-33.57 QP
12	12.760	4.55	9.84	14.39	50.00	-35.61 Average

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Date: 2018-07-02 Time: 15:43:24



Trace: 1

Site : Conduction room
Condition : NCC Class B Conduction(QP) neutral
Test Engineer: Kevin Kuo
Applicant : MAX

Model No. : CPM-100HG5M
Test Rating : 110Vac/60Hz
Tmp/Hum : 23.7°C / 36%
Memo : AC Mains

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.200	30.77	9.68	40.45	63.61	-23.16	QP
2	0.200	7.54	9.68	17.22	53.61	-36.39	Average
3	0.254	35.05	9.68	44.73	61.62	-16.89	QP
4	0.254	15.02	9.68	24.70	51.62	-26.92	Average
5	0.397	19.87	9.68	29.55	57.91	-28.36	QP
6	0.397	0.01	9.68	9.69	47.91	-38.22	Average
7	0.934	24.29	9.70	33.99	56.00	-22.01	QP
8	0.934	15.92	9.70	25.62	46.00	-20.38	Average
9	1.783	12.66	9.72	22.38	56.00	-33.62	QP
10	1.783	4.04	9.72	13.76	46.00	-32.24	Average
11	13.278	12.71	9.86	22.57	60.00	-37.43	QP
12	13.278	1.55	9.86	11.41	50.00	-38.59	Average