

# Test Report No.50238183 001

## Appendix D: Radiated and Mains Spurious Emission Data

(File: 50238183 001AppendixD)

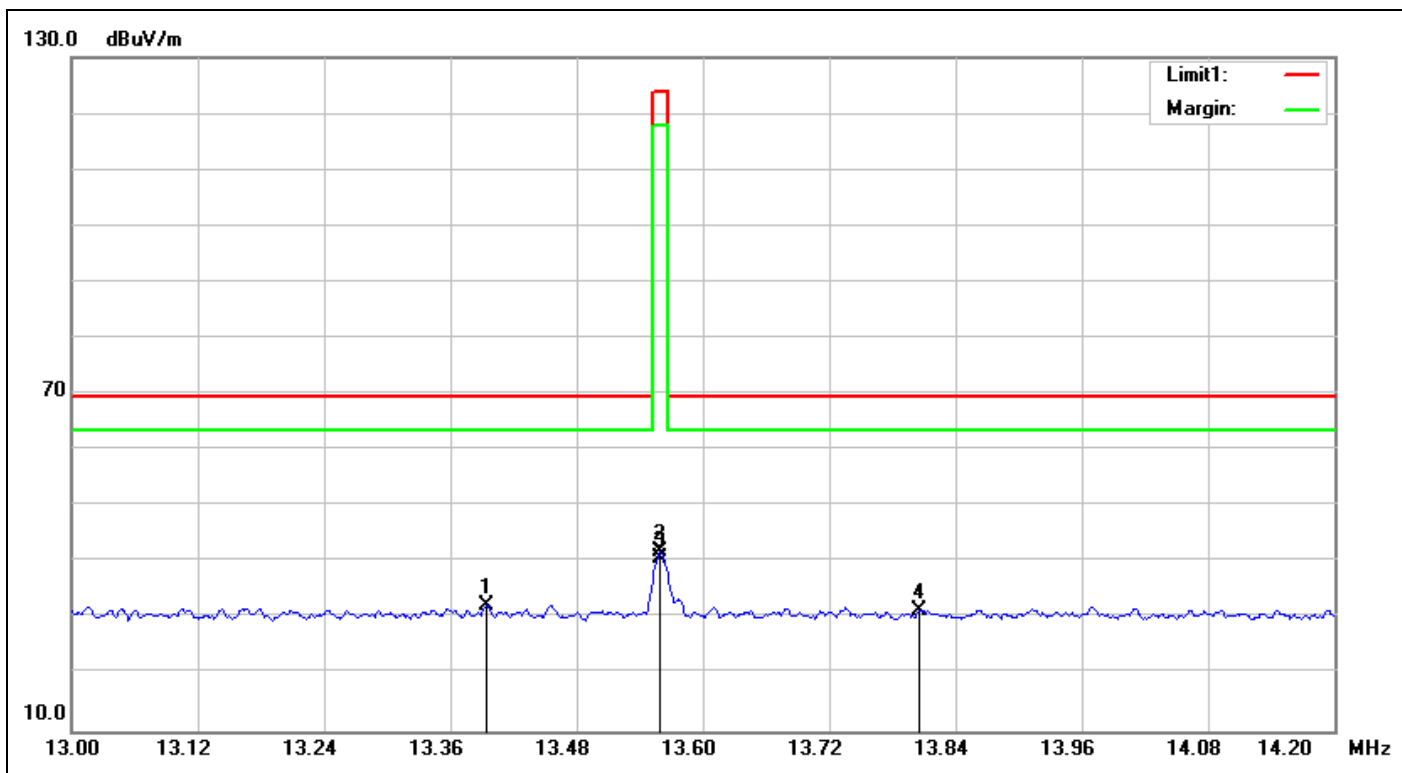
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# Emissions, Fundamental



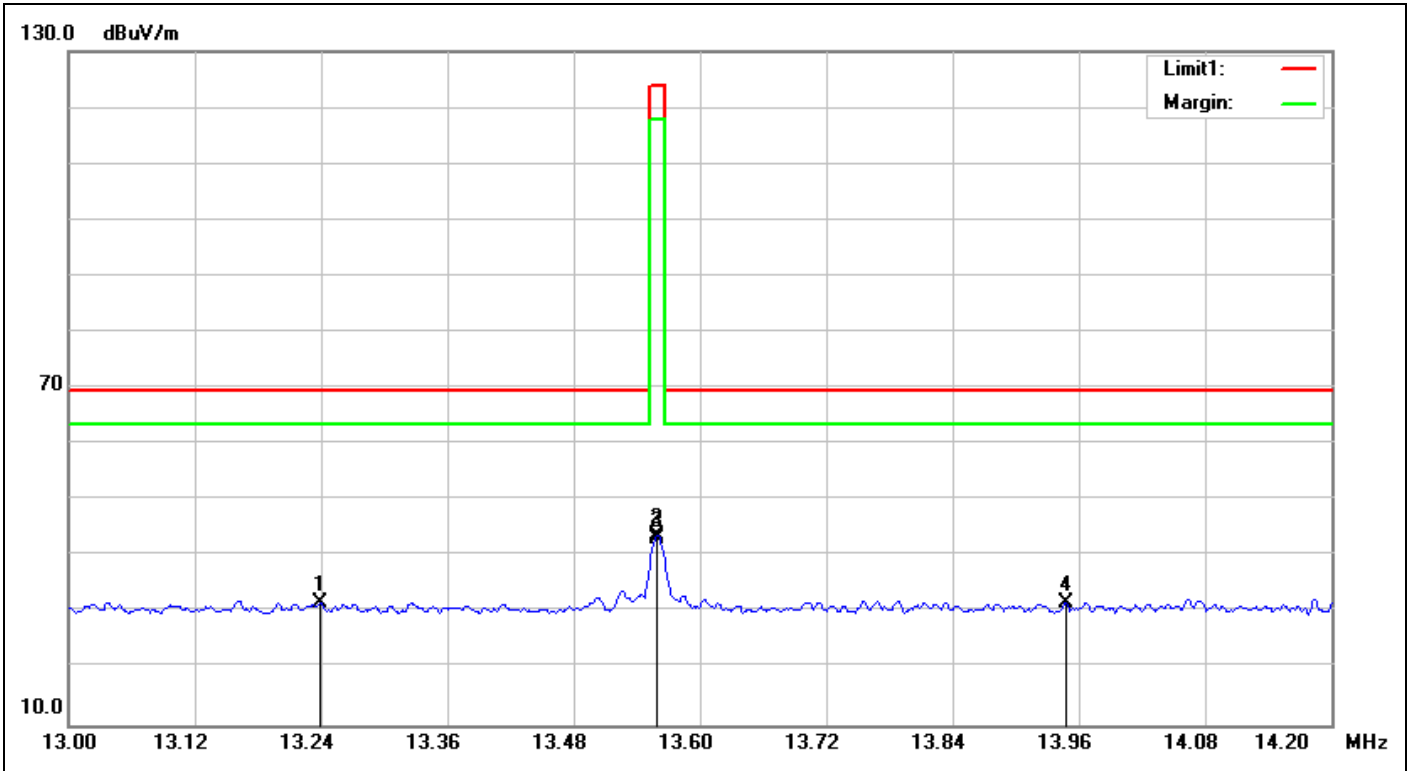
**TUV Rheinland Taiwan Ltd.**  
 11F., No.758, Sec.4 Bade Road, Songshan Dist, Taipei City 105  
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Service No.:	238101198NCC	Test Distance:	3m
Test Standard:	NCC_13.56M_Fundamental 3m(QP)	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/3/19 11:32:57
Applicant:	HiTi	Test Rating:	AC 110V/60Hz
Product:	Photo Printer	Temp.(°C)/Hum.(%):	19.5(°C)/65.6%
Model No.:	P52XXX	Test Engineer:	Curry Chen
Test Mode:	TX+RX 13.56MHz		
Remark:	TX+RX 短線		

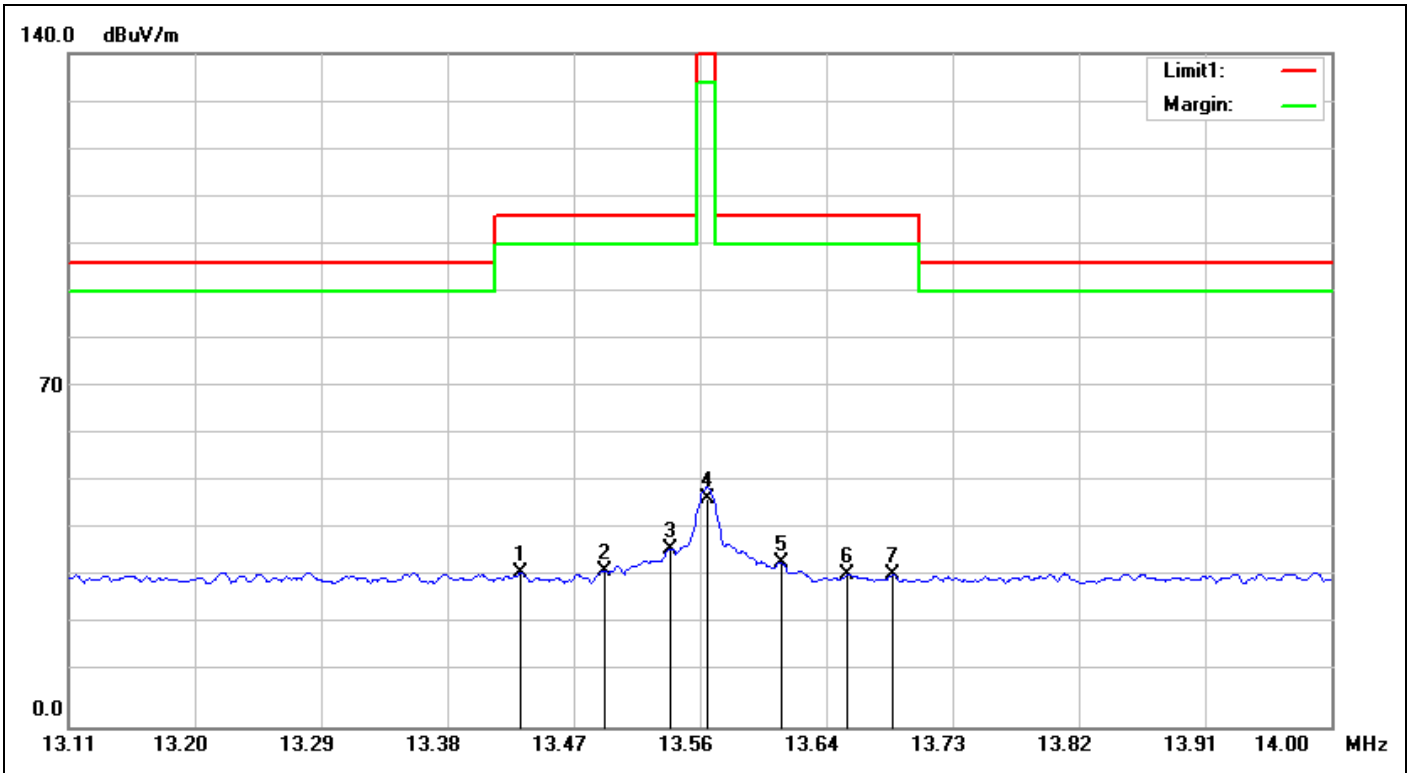
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	13.3948	20.83	11.67	32.50	69.50	-37.00	QP	100	273	
2	13.5600	20.85	20.96	41.81	124.00	-82.19	peak	100	269	
3	13.5600	20.85	19.95	40.80	124.00	-83.20	QP	100	269	
4	13.8052	20.88	10.48	31.36	69.50	-38.14	QP	100	240	

## Spurious Emissions, TX Mode 150 kHz -30MHz



Service No.:	238101198NCC	Test Distance:	3m
Test Standard:	NCC_13.56M_Fundamental 3m(QP)	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/3/19 11:36:27
Applicant:	HiTi	Test Rating:	AC 110V/60Hz
Product:	Photo Printer	Temp.(°C)/Hum.(%):	19.5(°C)/65.6%
Model No.:	P52XXX	Test Engineer:	Curry Chen
Test Mode:	TX+RX 13.56MHz		
Remark:	TX+RX 長線		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	13.2388	20.82	10.98	31.80	69.50	-37.70	QP	100	302	
2	13.5592	20.85	22.90	43.75	124.00	-80.25	peak	100	98	TX
3	13.5592	20.85	22.30	43.15	124.00	-80.85	QP	100	98	TX
4	13.9480	20.90	10.84	31.74	69.50	-37.76	QP	100	191	



Service No.:	238101198NCC	Test Distance:	1.2m
Test Standard:	FCC 15.225_Fundamental_1.2m(dBuV/m)	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/3/20 18:58:29
Applicant:	HiTi	Test Rating:	AC 110V/60Hz
Product:	Photo Printer	Temp.(°C)/Hum.(%):	20(°C)/65%
Model No.:	P52XXX	Test Engineer:	Amy Hsu
Test Mode:	TX 13.56MHz		
Remark:	長線 9K		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	13.4286	20.84	11.14	31.98	106.40	-74.42	QP	100	200	
2	13.4874	20.84	11.61	32.45	106.40	-73.95	QP	100	80	
3	13.5345	20.85	16.24	37.09	106.40	-69.31	QP	100	80	
4	13.5595	20.85	26.55	47.40	139.90	-92.50	QP	100	97	TX
5	13.6120	20.86	13.28	34.14	106.40	-72.26	QP	100	80	
6	13.6591	20.86	10.77	31.63	106.40	-74.77	QP	100	305	
7	13.6912	20.87	10.71	31.58	106.40	-74.82	QP	100	64	

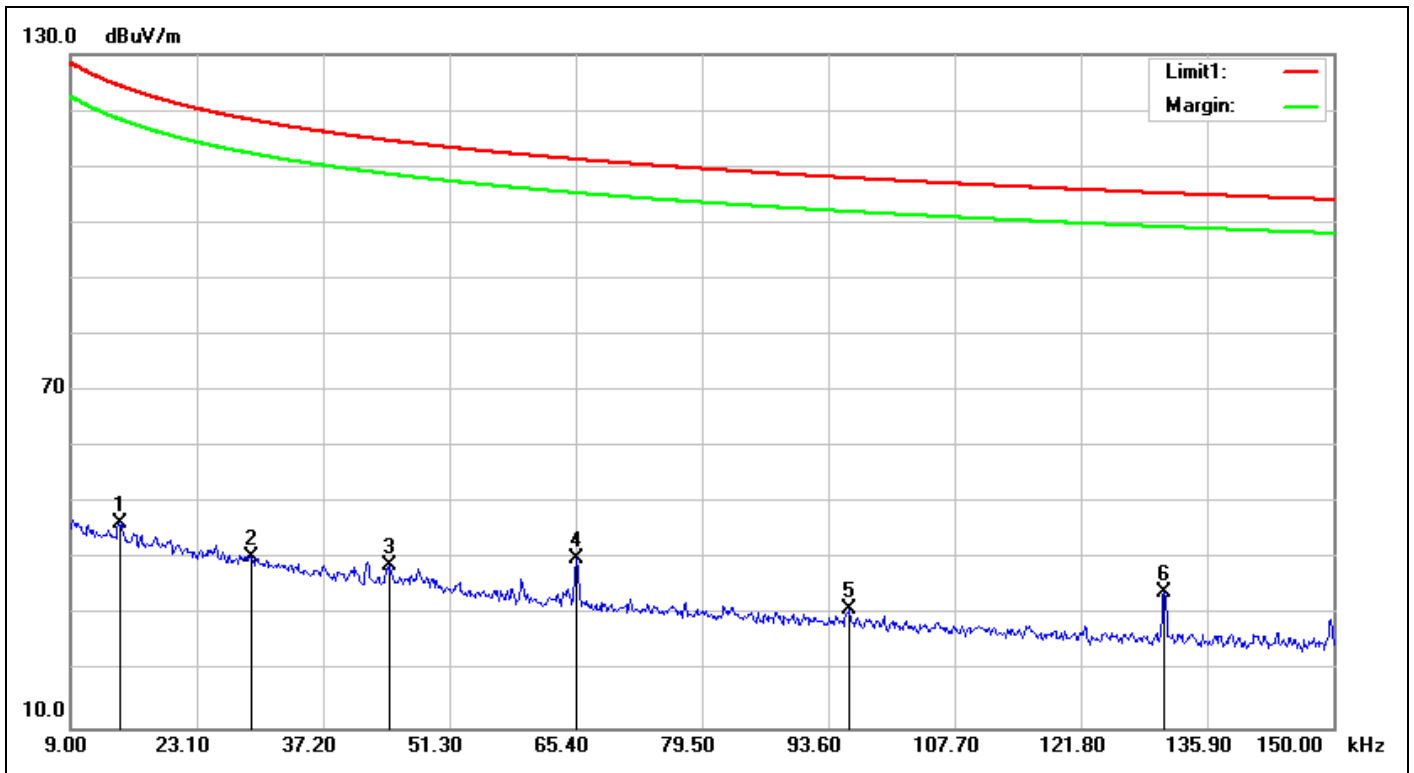
# Spurious Emissions, TX Mode, 9-150 kHz



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Service No.:	238101198NCC	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/3/19 11:36:59
Applicant:	HiTi	Test Rating:	AC 110V/60Hz
Product:	Photo Printer	Temp.(°C)/Hum.(%):	19.5(°C)/65.6%
Model No.:	P52XXX	Test Engineer:	Curry Chen
Test Mode:	TX+RX 13.56MHz		
Remark:	TX+RX 長線		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0144	18.70	27.82	46.52	124.42	-77.90	QP	100	82	
2	0.0292	19.29	21.21	40.50	118.28	-77.78	QP	100	194	
3	0.0447	19.03	19.78	38.81	114.59	-75.78	QP	100	66	
4	0.0655	18.73	21.56	40.29	111.27	-70.98	QP	100	233	
5	0.0960	18.38	12.71	31.09	107.95	-76.86	QP	100	181	
6	0.1311	18.35	15.80	34.15	105.25	-71.10	QP	100	253	

## Spurious Emissions, TX Mode 150 kHz -30MHz

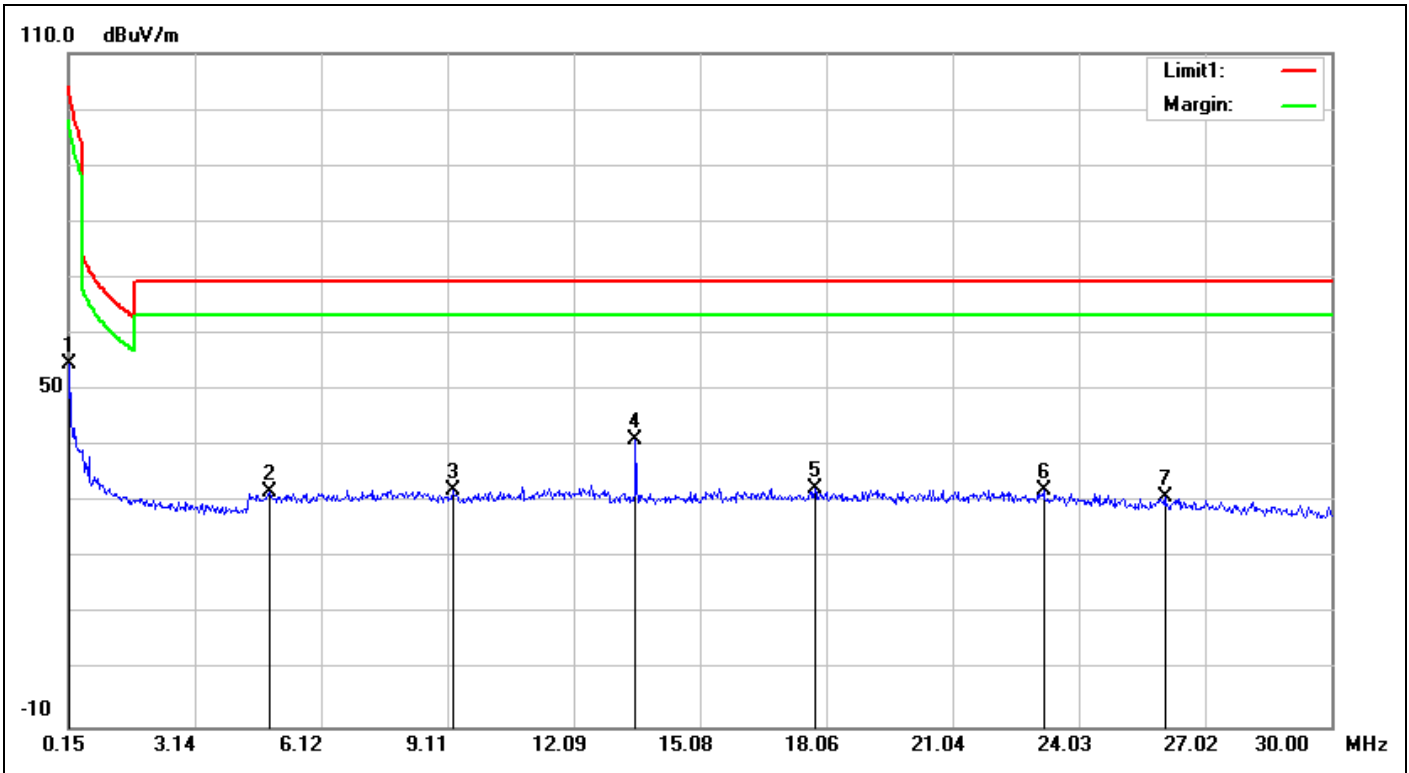
# Spurious Emissions, TX Mode, 150 kHz -30MHz



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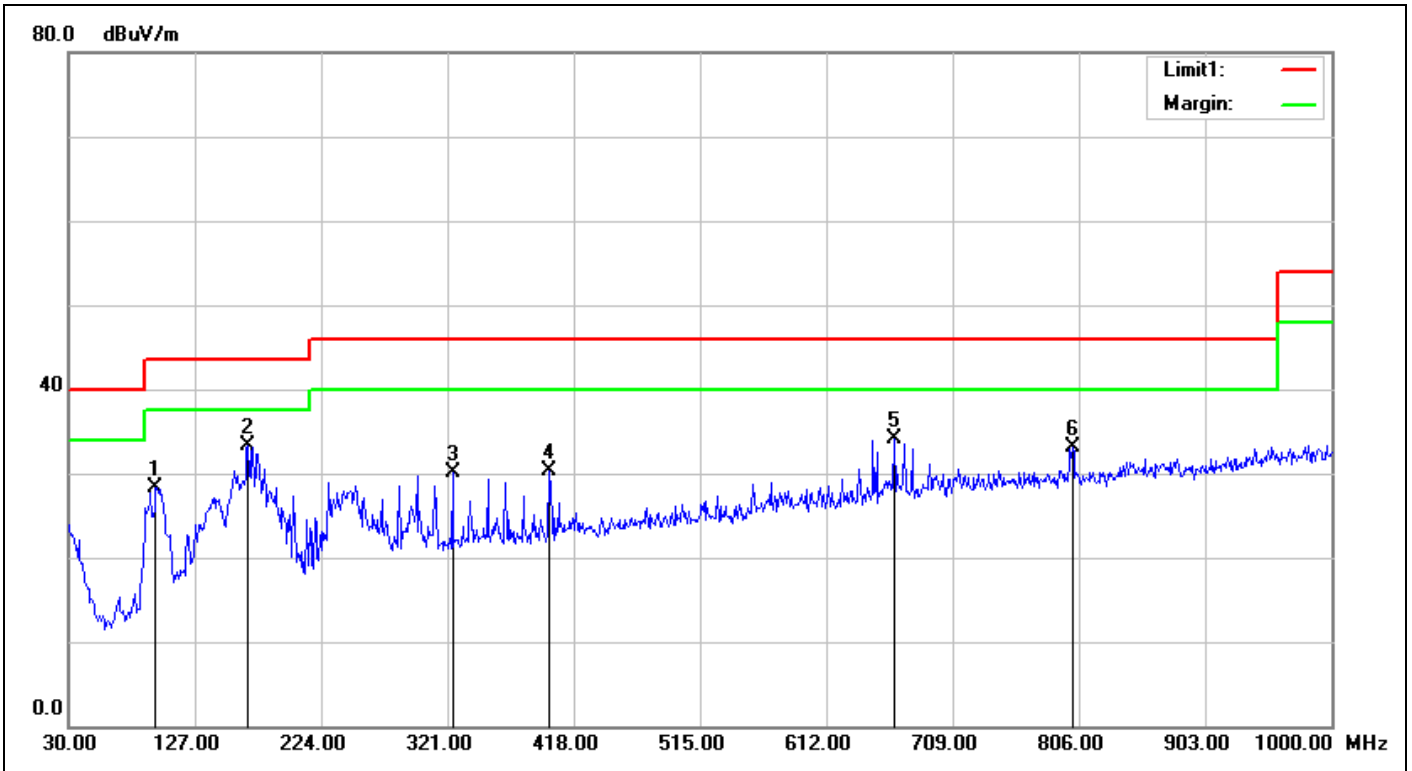
Service No.:	238101198NCC	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/3/19 13:08:43
Applicant:	HiTi	Test Rating:	AC 110V/60Hz
Product:	Photo Printer	Temp.(°C)/Hum.(%):	19.5(°C)/65.6%
Model No.:	P52XXX	Test Engineer:	Curry Chen
Test Mode:	TX+RX 13.56MHz		
Remark:	TX+RX 長線		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.1799	18.37	36.31	54.68	102.50	-47.82	QP	100	336	
2	4.8961	19.42	12.39	31.81	69.50	-37.69	QP	100	52	
3	9.2244	20.29	11.99	32.28	69.50	-37.22	QP	100	312	
4	13.5600	20.85	20.27	41.12	69.50	-28.38	QP	100	82	TX
5	17.7914	21.35	10.97	32.32	69.50	-37.18	QP	100	280	
6	23.1942	21.73	10.43	32.16	69.50	-37.34	QP	100	39	
7	26.0598	21.82	9.26	31.08	69.50	-38.42	QP	100	200	

# Spurious Emissions, TX Mode, 30MHz-1GHz



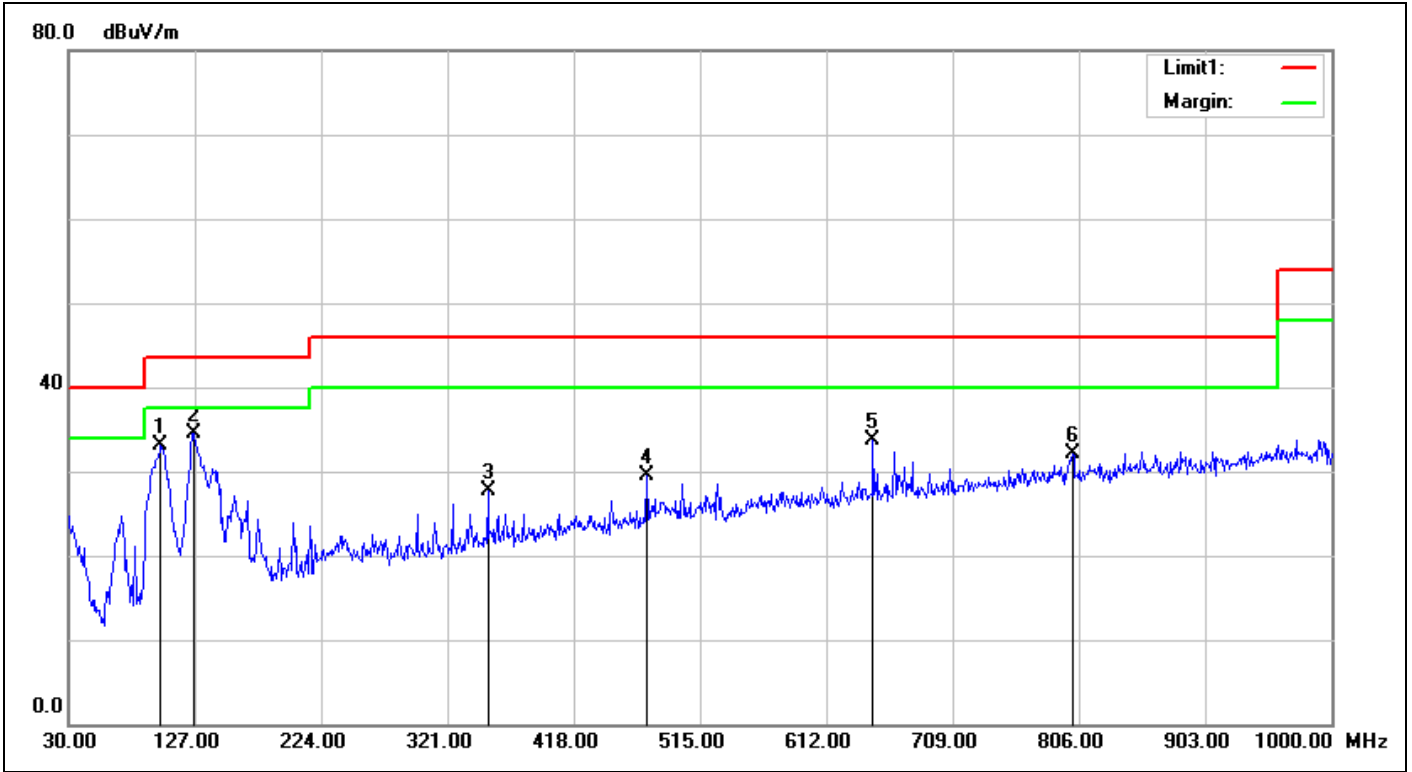
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Service No.:	238101198NCC	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/3/19 11:09:13
Applicant:	HiTi	Test Rating:	AC 110V/60Hz
Product:	Photo Printer	Temp.(°C)/Hum.(%):	19.5(°C)/65.6%
Model No.:	P52XXX	Test Engineer:	Curry Chen
Test Mode:	TX+RX 13.56MHz		
Remark:	TX+RX 長線		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	96.9300	-10.04	38.44	28.40	43.50	-15.10	QP	100	115	
2	167.7400	-8.76	42.05	33.29	43.50	-10.21	QP	100	98	
3	324.8800	-4.18	34.33	30.15	46.00	-15.85	QP	100	171	
4	398.6000	-2.37	32.70	30.33	46.00	-15.67	QP	100	66	
5	664.3800	0.99	33.05	34.04	46.00	-11.96	QP	100	95	
6	801.1500	3.12	30.03	33.15	46.00	-12.85	QP	100	154	

## Spurious Emissions, Mains, 150kHz - 30MHz



Service No.:	238101198NCC	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/3/19 11:10:06
Applicant:	HiTi	Test Rating:	AC 110V/60Hz
Product:	Photo Printer	Temp.(°C)/Hum.(%):	19.5(°C)/65.6%
Model No.:	P52XXX	Test Engineer:	Curry Chen
Test Mode:	TX+RX 13.56MHz		
Remark:	TX+RX 長線		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	100.8100	-9.35	42.43	33.08	43.50	-10.42	QP	100	6	
2	126.0300	-7.20	41.71	34.51	43.50	-8.99	QP	100	167	
3	352.0400	-3.26	30.96	27.70	46.00	-18.30	QP	100	202	
4	474.2600	-1.59	31.15	29.56	46.00	-16.44	QP	100	186	
5	647.8900	0.79	33.00	33.79	46.00	-12.21	QP	100	81	
6	801.1500	3.12	29.08	32.20	46.00	-13.80	QP	100	88	

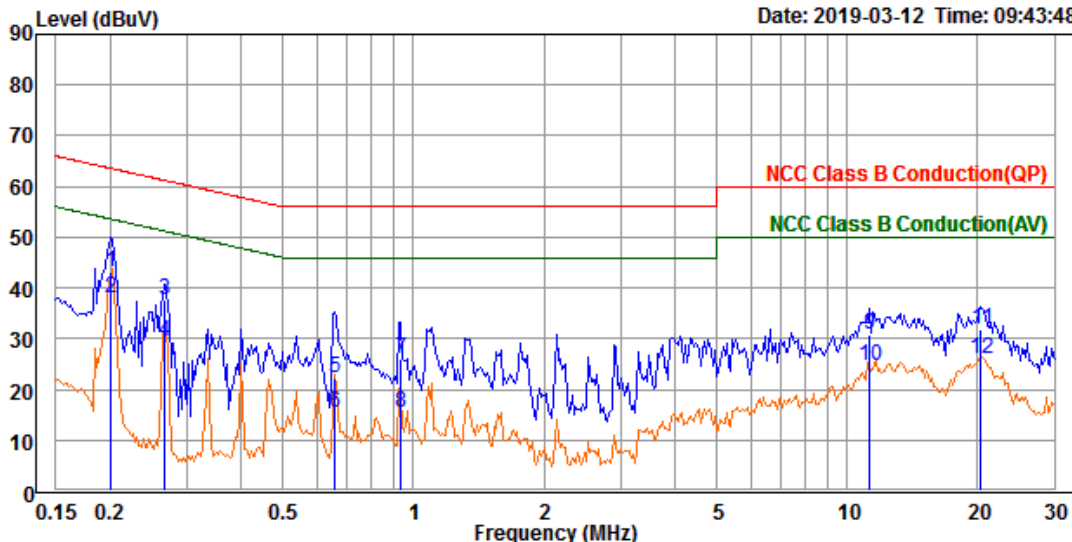
Spurious Emissions, Mains, 150kHz - 30MHz



# Mains Spurious Emissions

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Date: 2019-03-12 Time: 09:43:48



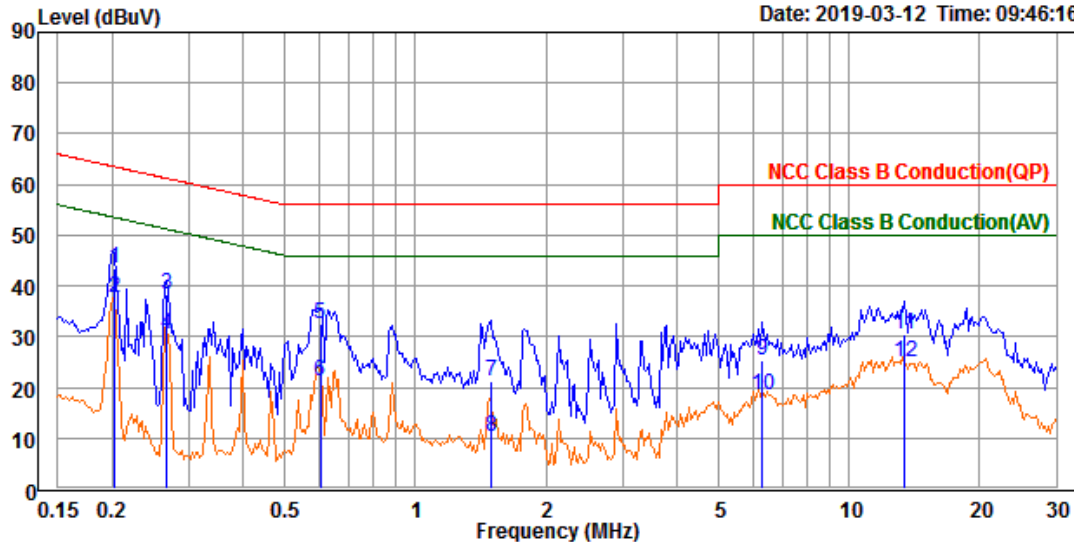
Trace: 1

Site : Conduction room  
 Condition : NCC Class B Conduction(QP) line1  
 Test Engineer: Joe Tien  
 Applicant : HiTi  
 Product : Photo printer  
 Model No. : P528L  
 Test Rating : 110Vac/60Hz  
 Tmp/Hum : 19.6°C/49%  
 Memo : Normal operation-Long cable(USB connect+RFID Tag+print)

	Read Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.200	33.53	9.68	43.21	63.61	-20.40	QP
2	0.200	28.22	9.68	37.90	53.61	-15.71	Average
3	0.267	28.08	9.68	37.76	61.21	-23.45	QP
4	0.267	19.81	9.68	29.49	51.21	-21.72	Average
5	0.660	12.42	9.69	22.11	56.00	-33.89	QP
6	0.660	5.75	9.69	15.44	46.00	-30.56	Average
7	0.934	16.17	9.70	25.87	56.00	-30.13	QP
8	0.934	5.65	9.70	15.35	46.00	-30.65	Average
9	11.213	21.01	9.83	30.84	60.00	-29.16	QP
10	11.213	14.80	9.83	24.63	50.00	-25.37	Average
11	20.359	21.87	9.86	31.73	60.00	-28.27	QP
12	20.359	16.02	9.86	25.88	50.00	-24.12	Average

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Date: 2019-03-12 Time: 09:46:16



Trace: 1

Site : Conduction room  
 Condition : NCC Class B Conduction(QP) neutral  
 Test Engineer: Joe Tien  
 Applicant : HiTi  
 Product : Photo printer  
 Model No. : P528L  
 Test Rating : 110Vac/60Hz  
 Tmp/Hum : 19.6°C/49%  
 Memo : Normal operation-Long cable(USB connect+RFID Tag+print)

	Read Freq	Level	Factor	Level	Limit	Over	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.202	33.64	9.68	43.32	63.52	-20.20	QP
2	0.202	27.94	9.68	37.62	53.52	-15.90	Average
3	0.267	28.78	9.68	38.46	61.21	-22.75	QP
4	0.267	20.68	9.68	30.36	51.21	-20.85	Average
5	0.603	22.73	9.68	32.41	56.00	-23.59	QP
6	0.603	11.49	9.68	21.17	46.00	-24.83	Average
7	1.491	11.52	9.71	21.23	56.00	-34.77	QP
8	1.491	0.47	9.71	10.18	46.00	-35.82	Average
9	6.300	15.48	9.79	25.27	60.00	-34.73	QP
10	6.300	8.62	9.79	18.41	50.00	-31.59	Average
11	13.410	20.71	9.86	30.57	60.00	-29.43	QP
12	13.410	15.05	9.86	24.91	50.00	-25.09	Average