

# Test Report No.50074869 002

## Appendix D: Radiated and Mains Spurious Emission Data

(File: 50074869 AppendixD)

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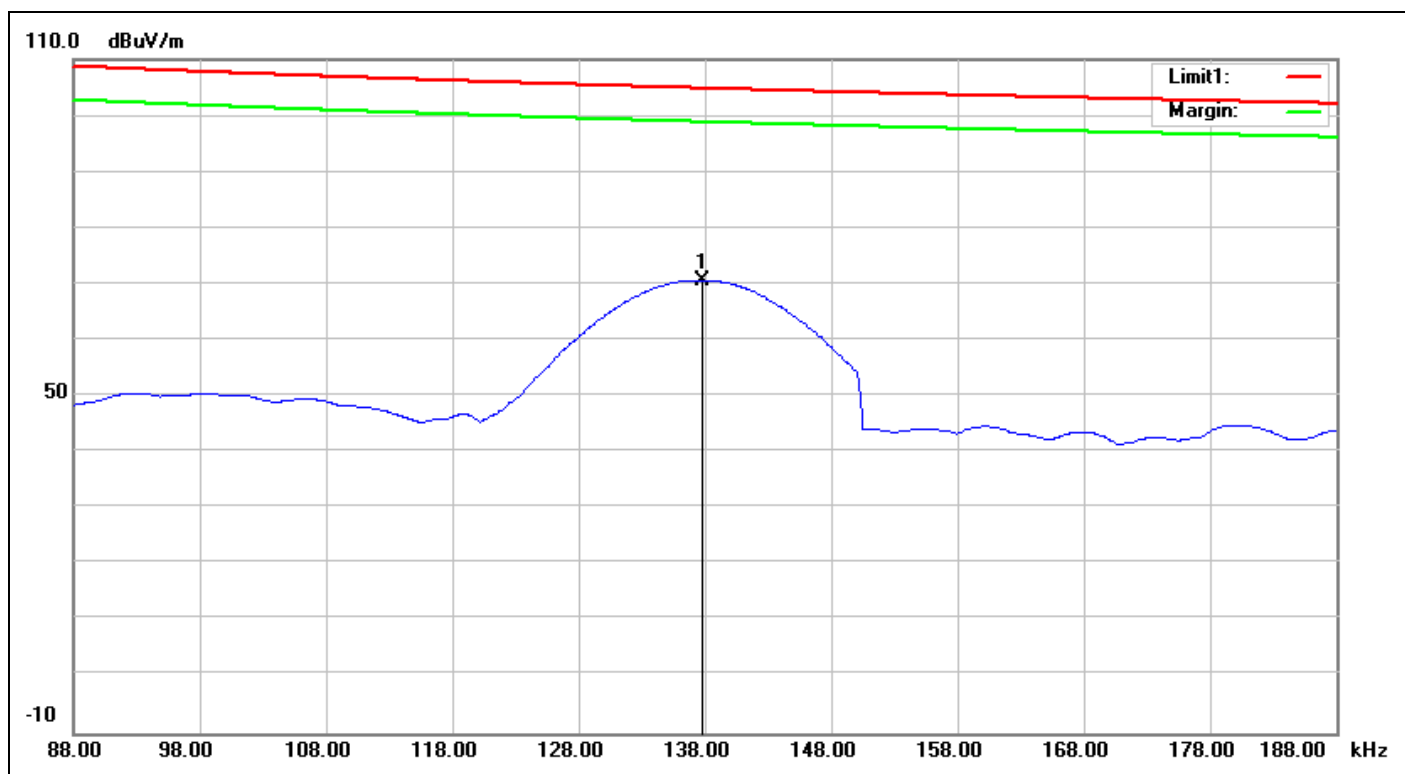
## Emissions, Fundamental



**TUV Taiwan**

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<b>Service No.:</b>	<b>114060767</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>FCC 15.209_9k-30M_3m(dBuV/m)</b>	<b>Ant. Polarization:</b>	
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2017/3/7 09:36:41</b>
<b>Applicant:</b>	<b>U-Way</b>	<b>Test Rating:</b>	<b>AC 120V/60Hz</b>
<b>Product:</b>	<b>Insignia Fast Charging Pad</b>	<b>Temp.(°C)/Hum.(%):</b>	<b>20.2(°C)/53%</b>
<b>Model No.:</b>	<b>NS-MWPC2</b>	<b>Test Engineer:</b>	<b>Hugo Chang</b>
<b>Test Mode:</b>	<b>Fundamental</b>		
<b>Remark:</b>			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth ( ° )	Remark
1	0.1374	18.81	51.87	70.68	104.84	-34.16	AVG			

## Emissions, Fundamental

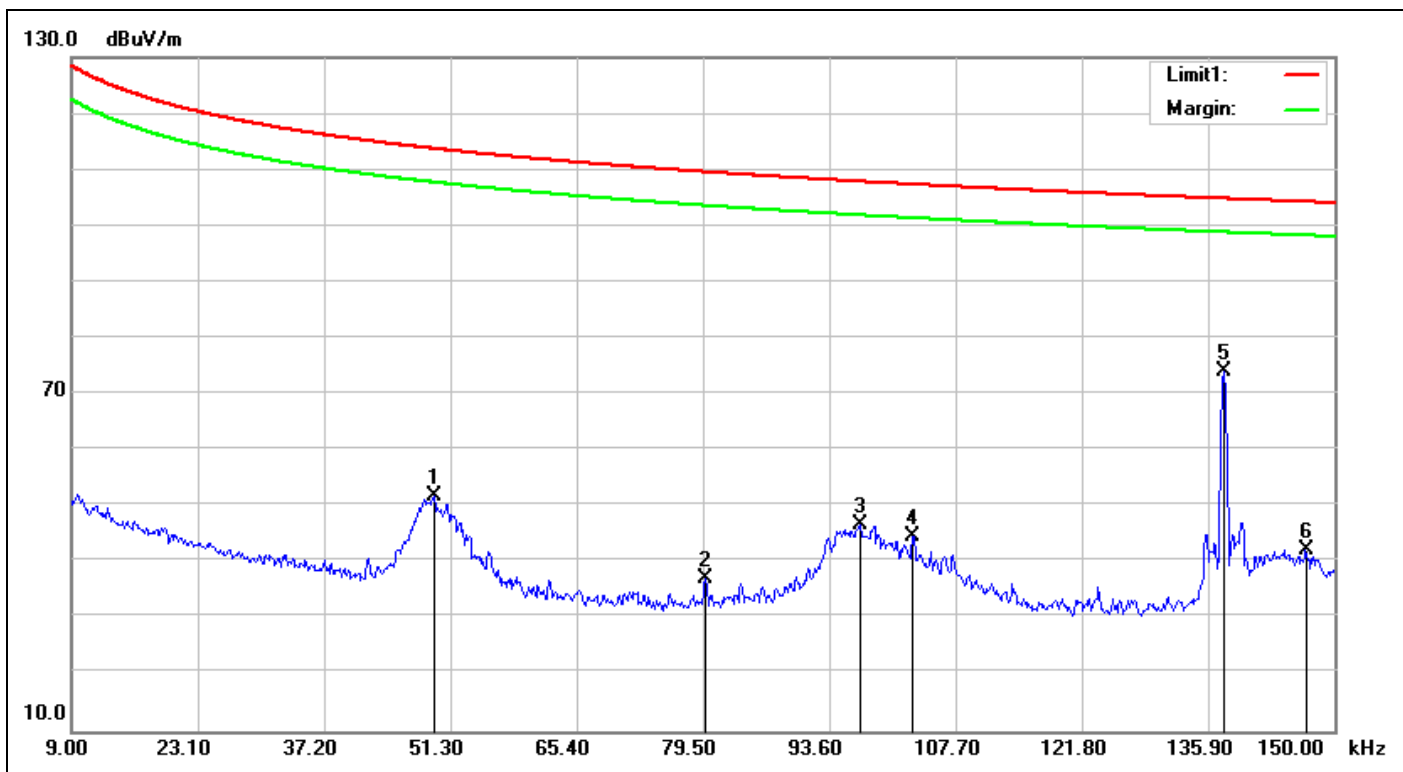
# Spurious Emissions, TX Mode, 0.009-30M



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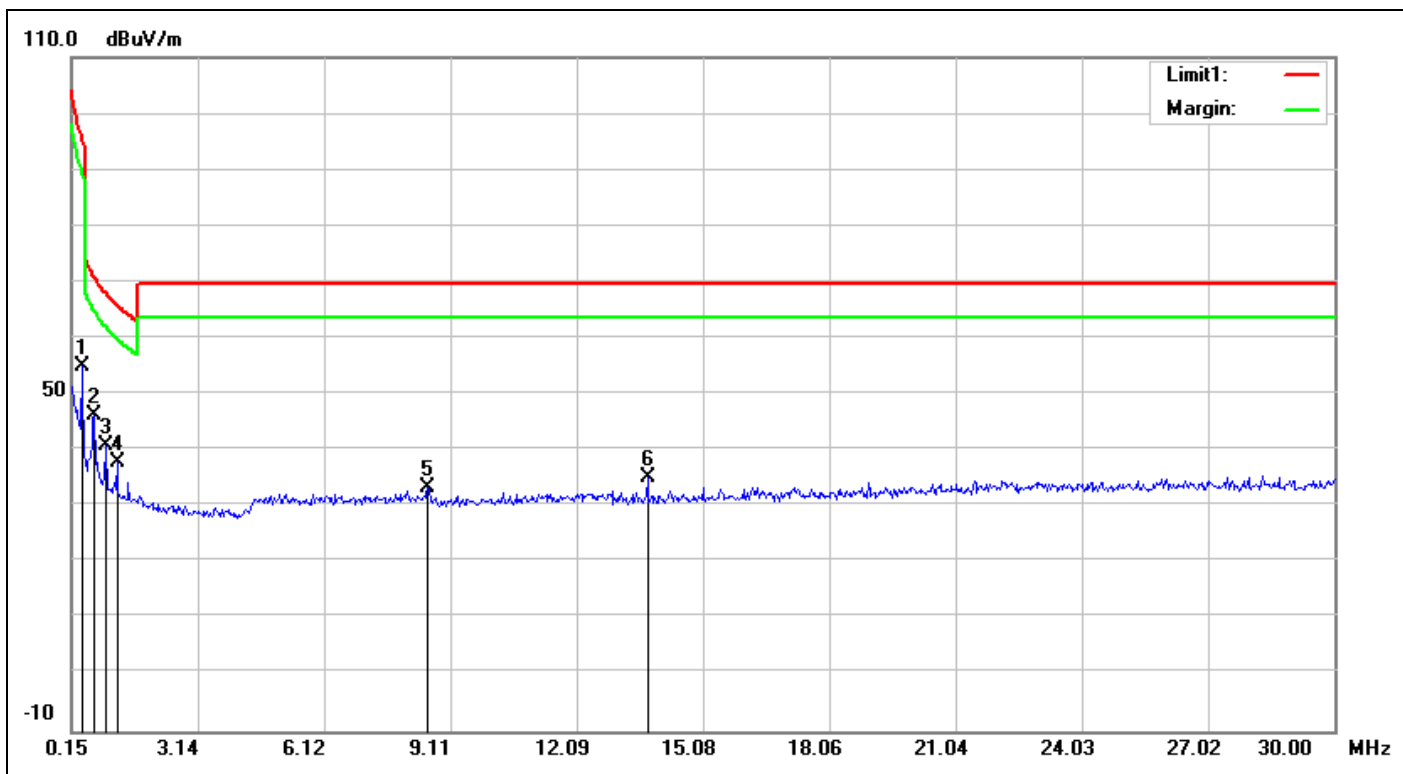
Tel: +886-2172-7000 fax: +886-2528-0018



<b>Service No.:</b>	<b>114060767</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>FCC 15.209_9k-30M_3m(dBuV/m)</b>	<b>Ant. Polarization:</b>	
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2017/3/7 09:31:08</b>
<b>Applicant:</b>	<b>U-Way</b>	<b>Test Rating:</b>	<b>AC 120V/60Hz</b>
<b>Product:</b>	<b>Insignia Fast Charging Pad</b>	<b>Temp.(°C)/Hum.(%):</b>	<b>20.2(°C)/53%</b>
<b>Model No.:</b>	<b>NS-MWPC2</b>	<b>Test Engineer:</b>	<b>Hugo Chang</b>
<b>Test Mode:</b>	<b>Normal operation</b>		
<b>Remark:</b>			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth ( ° )	Remark
1	0.0495	19.24	32.57	51.81	113.71	-61.90	QP			
2	0.0798	18.99	18.07	37.06	109.56	-72.50	QP			
3	0.0970	18.86	27.97	46.83	107.87	-61.04	QP			
4	0.1029	18.84	25.91	44.75	107.36	-62.61	QP			
5	0.1376	18.81	55.30	74.11	104.83	-30.72	QP			
6	0.1468	18.80	23.58	42.38	104.27	-61.89	QP			

## Spurious Emissions, TX Mode 0.009-30M



<b>Service No.:</b>	<b>114060767</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>FCC 15.209_9k-30M_3m(dBuV/m)</b>	<b>Ant. Polarization:</b>	
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2017/3/7 09:33:08</b>
<b>Applicant:</b>	<b>U-Way</b>	<b>Test Rating:</b>	<b>AC 120V/60Hz</b>
<b>Product:</b>	<b>Insignia Fast Charging Pad</b>	<b>Temp.(°C)/Hum.(%):</b>	<b>20.2(°C)/53%</b>
<b>Model No.:</b>	<b>NS-MWPC2</b>	<b>Test Engineer:</b>	<b>Hugo Chang</b>
<b>Test Mode:</b>	<b>Normal operation</b>		
<b>Remark:</b>			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth ( ° )	Remark
1	0.3888	18.60	36.31	54.91	95.81	-40.90	QP			
2	0.6873	18.72	27.59	46.31	70.87	-24.56	QP			
3	0.9560	19.02	21.93	40.95	68.01	-27.06	QP			
4	1.2246	19.04	18.68	37.72	65.87	-28.15	QP			
5	8.5677	20.16	13.15	33.31	69.54	-36.23	QP			
6	13.7616	20.82	14.24	35.06	69.54	-34.48	QP			

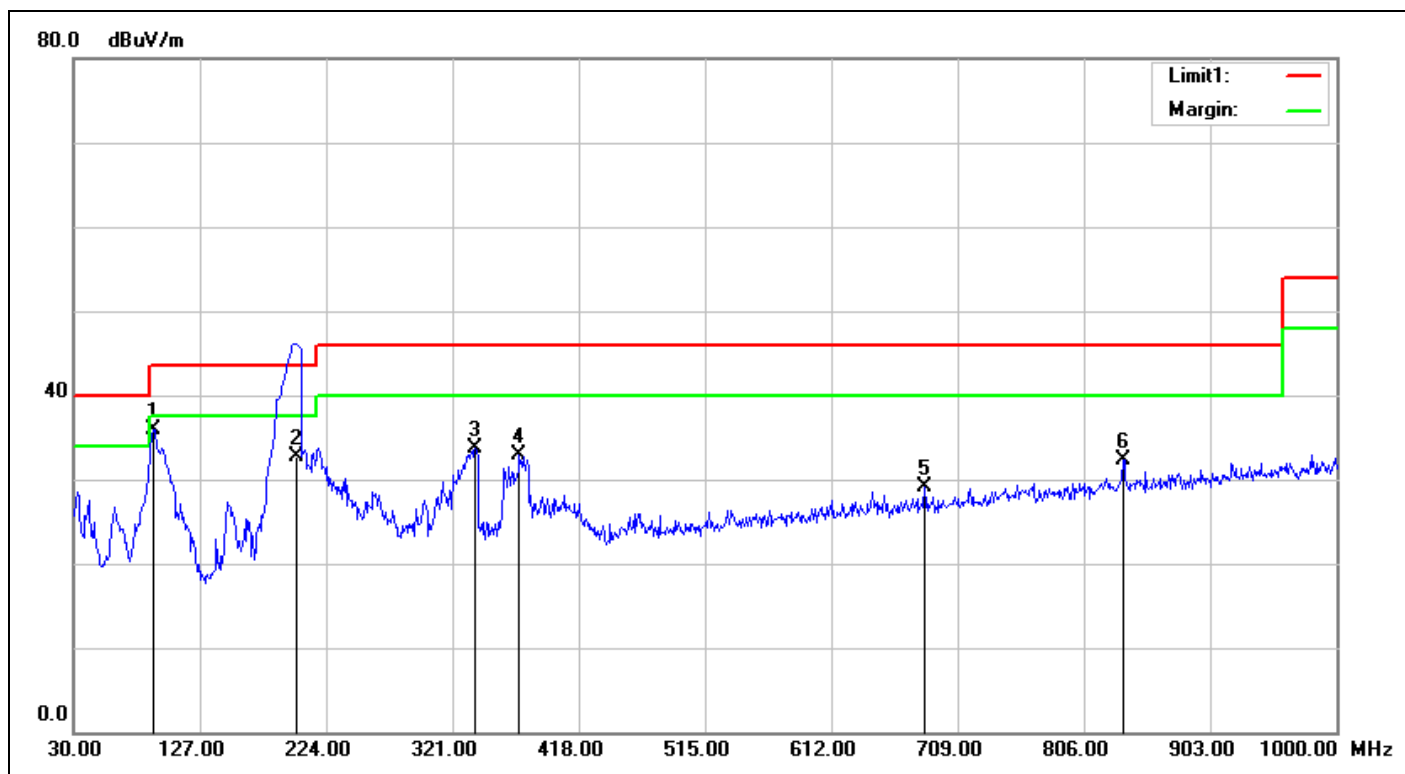
# Spurious Emissions, TX Mode, 30M-1G



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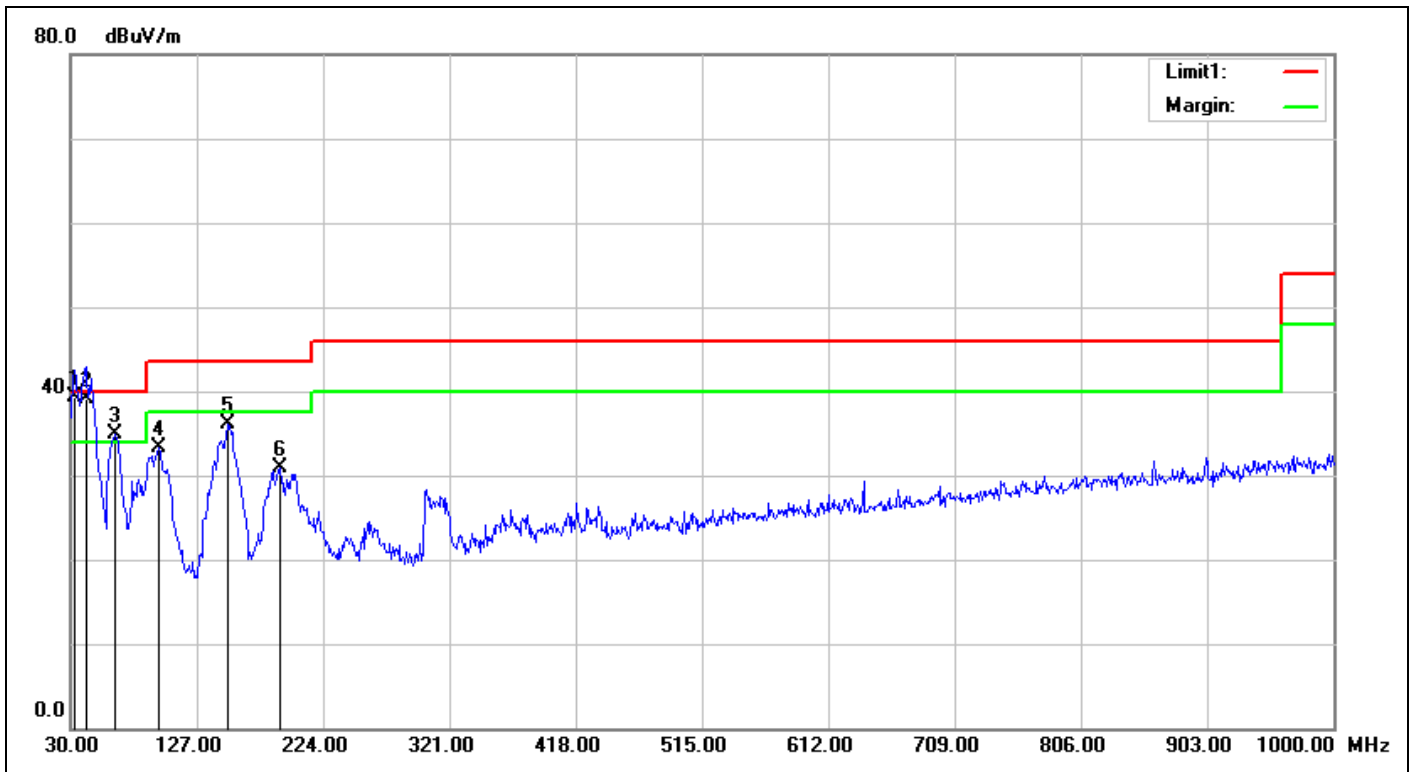
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<b>Service No.:</b>	<b>114060767</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>FCC Class B 3M Radiation</b>	<b>Ant. Polarization:</b>	<b>Horizontal</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2017/3/7 09:06:49</b>
<b>Applicant:</b>	<b>U-Way</b>	<b>Test Rating:</b>	<b>AC 120V/60Hz</b>
<b>Product:</b>	<b>Insignia Fast Charging Pad</b>	<b>Temp.(°C)/Hum.(%):</b>	<b>20.2(°C)/53%</b>
<b>Model No.:</b>	<b>NS-MWPC2</b>	<b>Test Engineer:</b>	<b>Hugo Chang</b>
<b>Test Mode:</b>	<b>Normal operation</b>		
<b>Remark:</b>			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth ( ° )	Remark
1	91.1100	-10.70	46.70	36.00	43.50	-7.50	QP	200	292	
2	200.7200	-8.88	41.68	32.80	43.50	-10.70	QP	100	81	
3	338.4600	-3.69	37.38	33.69	46.00	-12.31	QP	100	209	
4	372.4100	-3.10	36.01	32.91	46.00	-13.09	QP	100	207	
5	683.7800	0.90	28.28	29.18	46.00	-16.82	QP	200	234	
6	836.0700	3.44	28.90	32.34	46.00	-13.66	QP	100	126	



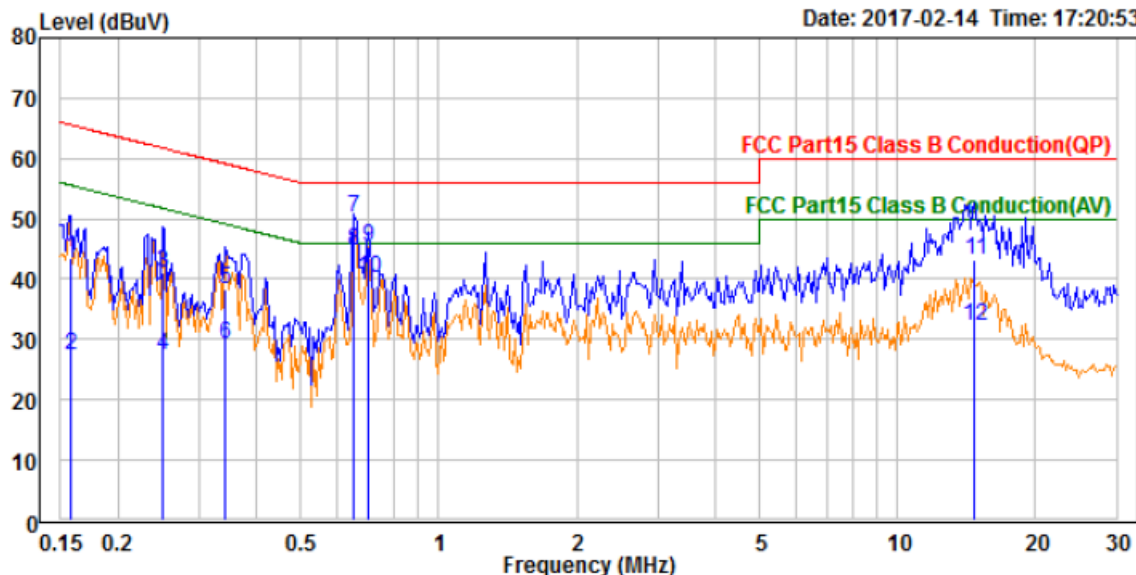
<b>Service No.:</b>	<b>114060767</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>FCC Class B 3M Radiation</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2017/3/7 09:09:08</b>
<b>Applicant:</b>	<b>U-Way</b>	<b>Test Rating:</b>	<b>AC 120V/60Hz</b>
<b>Product:</b>	<b>Insignia Fast Charging Pad</b>	<b>Temp.(°C)/Hum.(%):</b>	<b>20.2(°C)/53%</b>
<b>Model No.:</b>	<b>NS-MWPC2</b>	<b>Test Engineer:</b>	<b>Hugo Chang</b>
<b>Test Mode:</b>	<b>Normal operation</b>		
<b>Remark:</b>			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	32.9099	-1.74	41.04	39.30	40.00	-0.70	QP	104	0	
2	41.6400	-6.73	45.83	39.10	40.00	-0.90	QP	100	73	
3	63.9500	-13.46	48.33	34.87	40.00	-5.13	QP	200	51	
4	97.9000	-9.75	42.99	33.24	43.50	-10.26	QP	200	79	
5	151.2500	-7.49	43.59	36.10	43.50	-7.40	QP	200	279	
6	191.0200	-9.50	40.34	30.84	43.50	-12.66	QP	100	37	

# Mains Spurious Emissions

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Date: 2017-02-14 Time: 17:20:53



Trace: 1

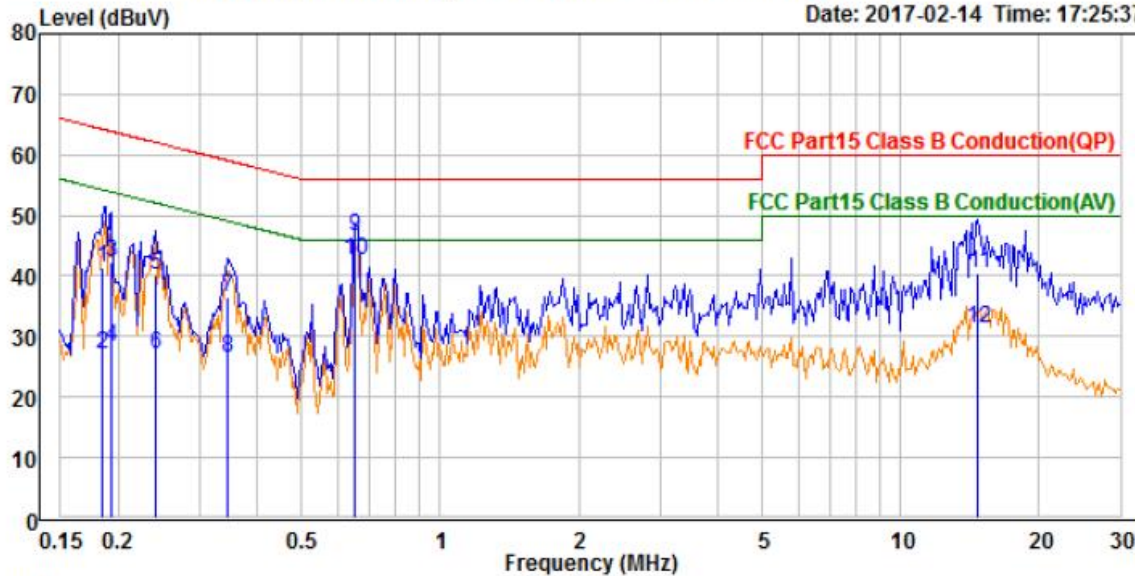
Site : Conduction room  
Condition : FCC Part15 Class B Conduction(QP) line1  
Test Engineer: Sam Su  
Applicant : UWay  
Product : Insignia Fast Charging Pad  
Model No. : NS-MWPC2  
Test Rating : AC120V/50Hz  
Tmp/Hum : 22.2(°C) / 46 %  
Memo : Charging with load

	Freq	Level	Read	Limit	Over	
	MHz	dBuV	Level	Line	Limit	Remark
		dBuV	Factor	dB	dB	
1	0.158	43.52	33.74	9.78	65.56	-22.04 QP
2	0.158	27.23	17.45	9.78	55.56	-28.33 Average
3	0.249	41.01	31.25	9.76	61.78	-20.77 QP
4	0.249	27.35	17.59	9.76	51.78	-24.43 Average
5	0.343	38.28	28.53	9.75	59.13	-20.85 QP
6	0.343	29.13	19.38	9.75	49.13	-20.00 Average
7	0.654	50.27	40.52	9.75	56.00	-5.73 QP
8	0.654	44.76	35.01	9.75	46.00	-1.24 Average
9	0.705	45.21	35.46	9.75	56.00	-10.79 QP
10	0.705	40.06	30.31	9.75	46.00	-5.94 Average
11	14.750	43.07	33.15	9.92	60.00	-16.93 QP
12	14.750	32.21	22.29	9.92	50.00	-17.79 Average



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Date: 2017-02-14 Time: 17:25:37



Trace: 1

Site : Conduction room  
Condition : FCC Part15 Class B Conduction(QP) neutral  
Test Engineer: Sam Su  
Applicant : UWay  
Product : Insignia Fast Charging Pad  
Model No. : NS-MWPC2  
Test Rating : AC120V/50Hz  
Tmp/Hum : 22.2(°C) / 46 %  
Memo : Charging with load

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBuV	dBuV	dB	dBuV	dB	
1	0.185	41.28	31.58	9.70	64.24	-22.96	QP
2	0.185	27.14	17.44	9.70	54.24	-27.10	Average
3	0.193	42.33	32.64	9.69	63.89	-21.56	QP
4	0.193	28.37	18.68	9.69	53.89	-25.52	Average
5	0.242	40.23	30.54	9.69	62.04	-21.81	QP
6	0.242	26.93	17.24	9.69	52.04	-25.11	Average
7	0.346	36.45	26.77	9.68	59.05	-22.60	QP
8	0.346	26.43	16.75	9.68	49.05	-22.62	Average
9	0.654	46.51	36.82	9.69	56.00	-9.49	QP
10	0.654	42.55	32.86	9.69	46.00	-3.45	Average
11	14.750	40.44	30.54	9.90	60.00	-19.56	QP
12	14.750	31.27	21.37	9.90	50.00	-18.73	Average