

Test Report No.10043758 001

Appendix D: Radiated and Mains Spurious Emission Data

(File: 10043758AppendixD)

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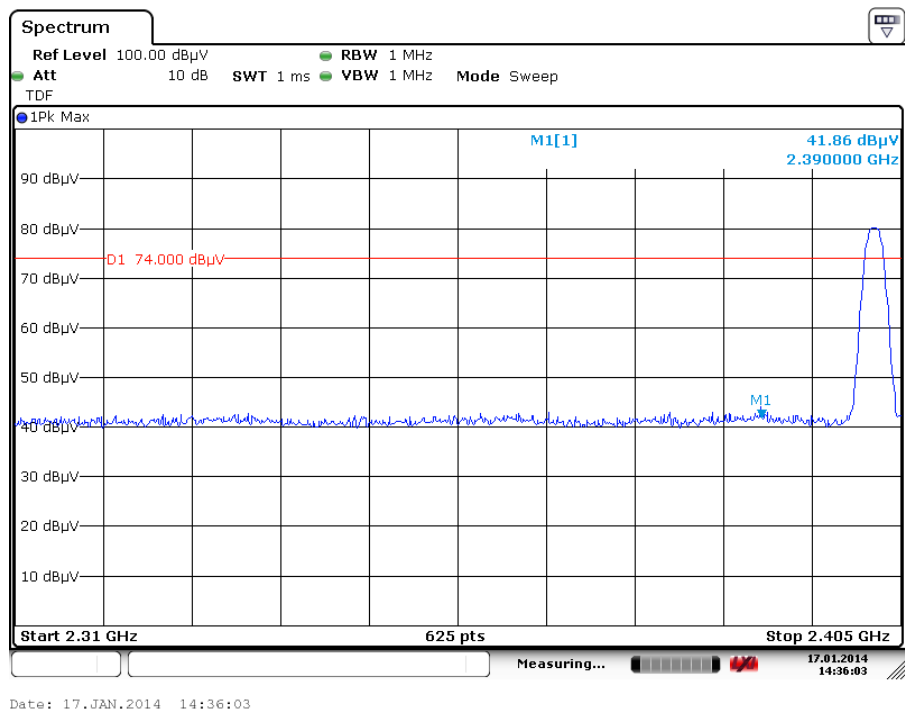
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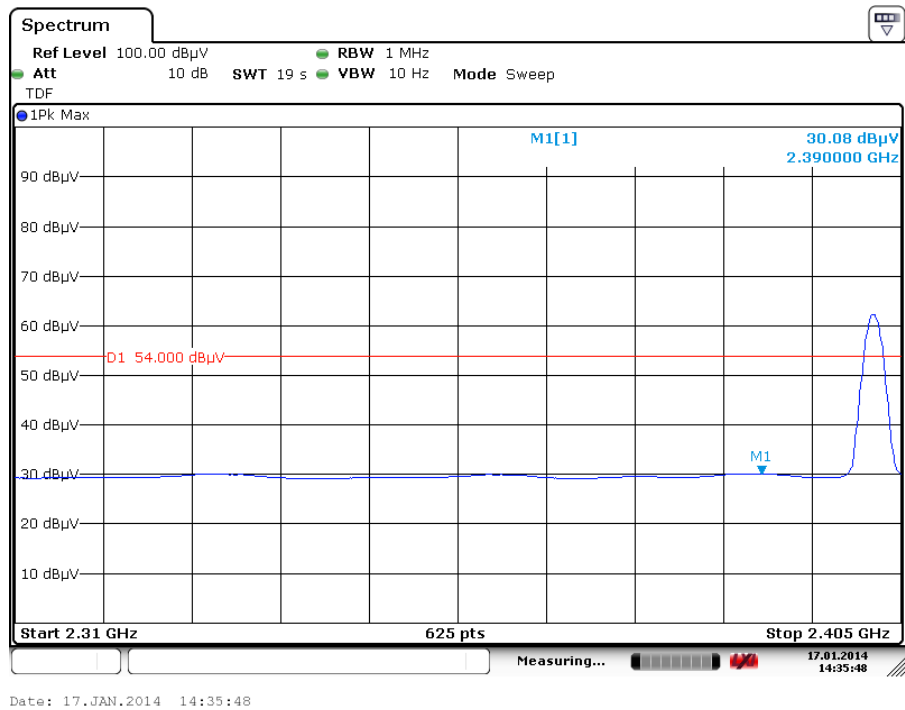
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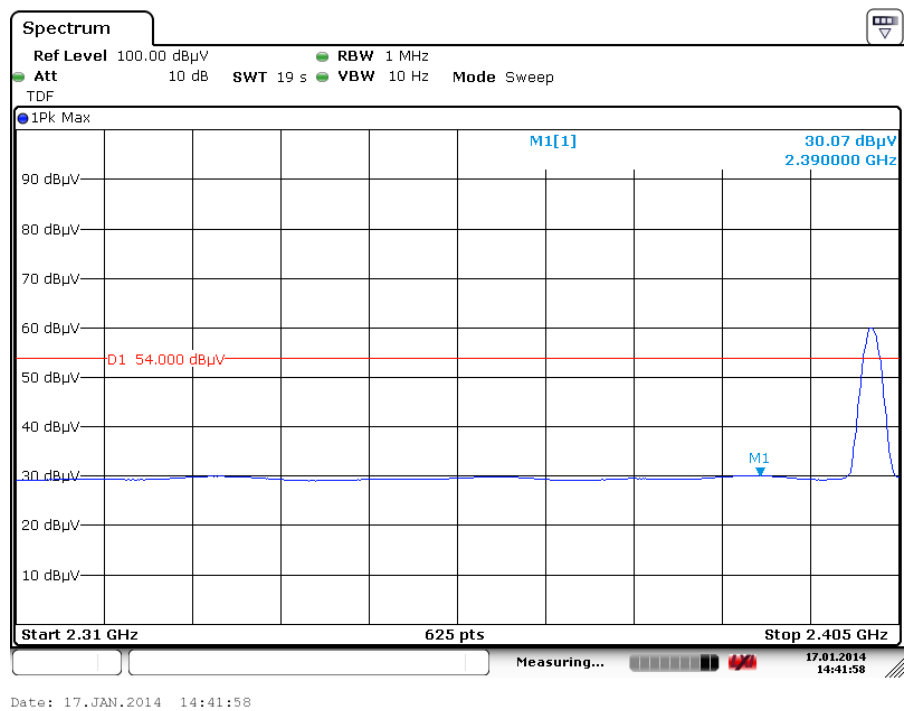
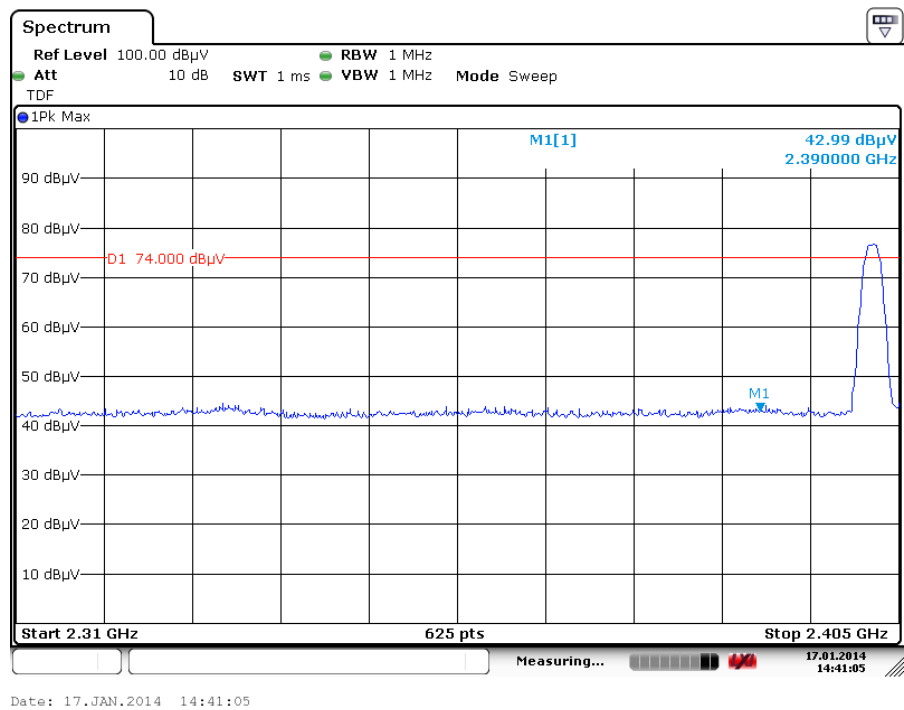
# Radiated Bandedge

Low Channel (Hor)



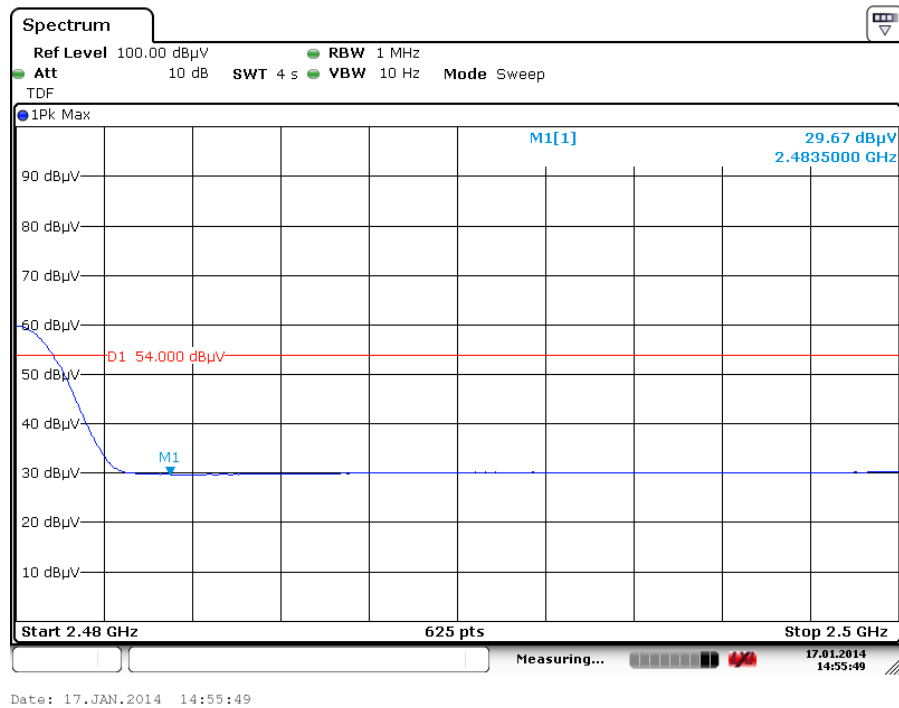
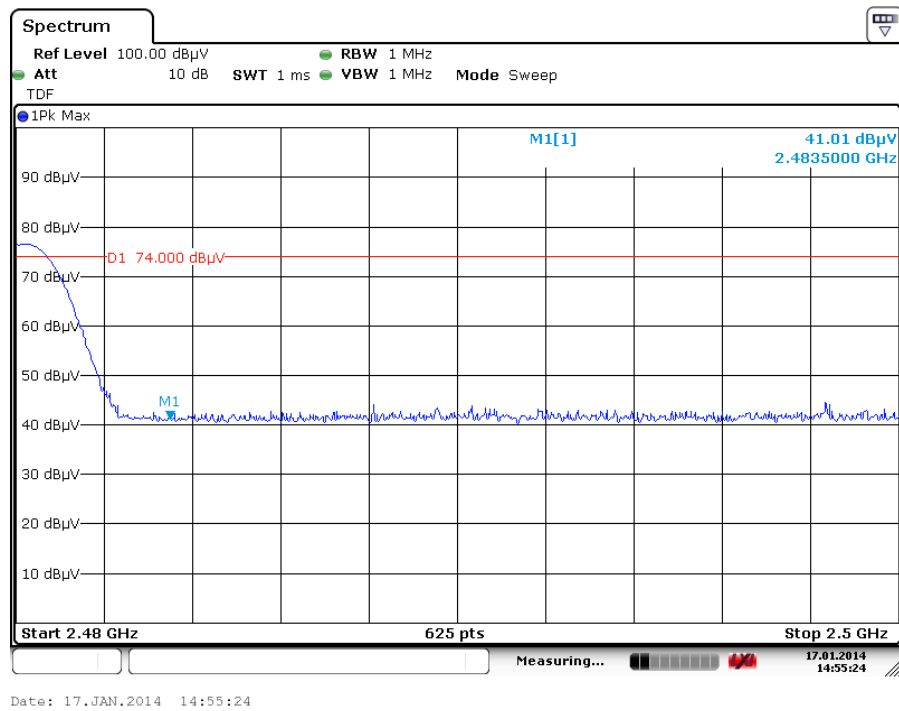


Low Channel (Ver)



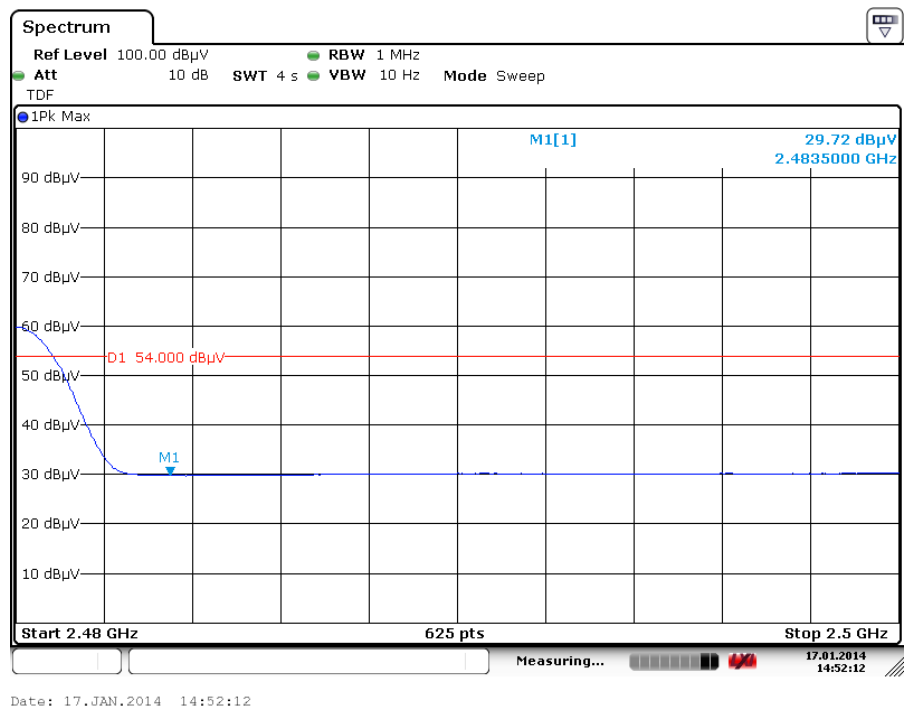
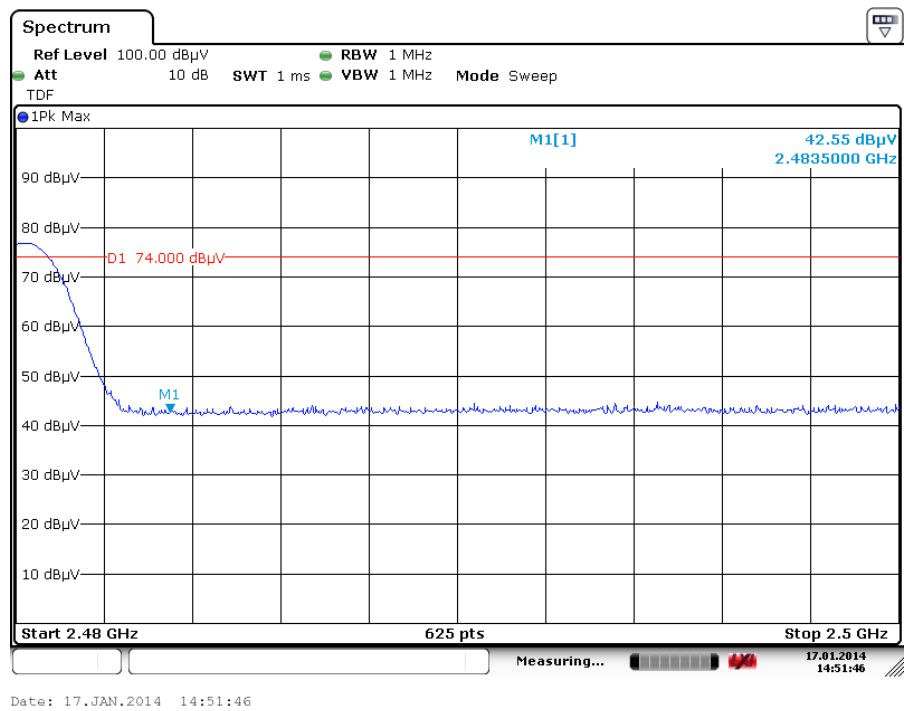
Spurious Emissions, Band Edge, 2.35-2.5G

## High Channel (Hor)



## Spurious Emissions, Band Edge, 2.35-2.5G

High Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

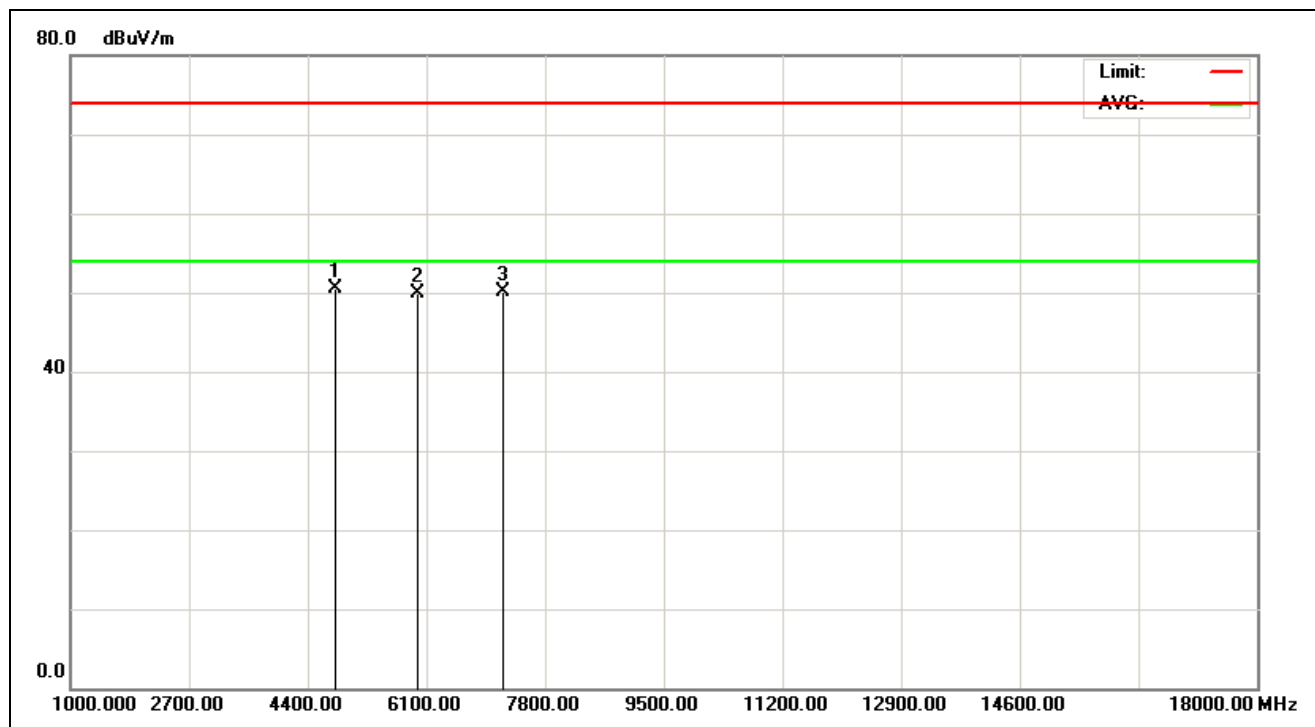
# Spurious Emissions, TX Mode, 1-18G



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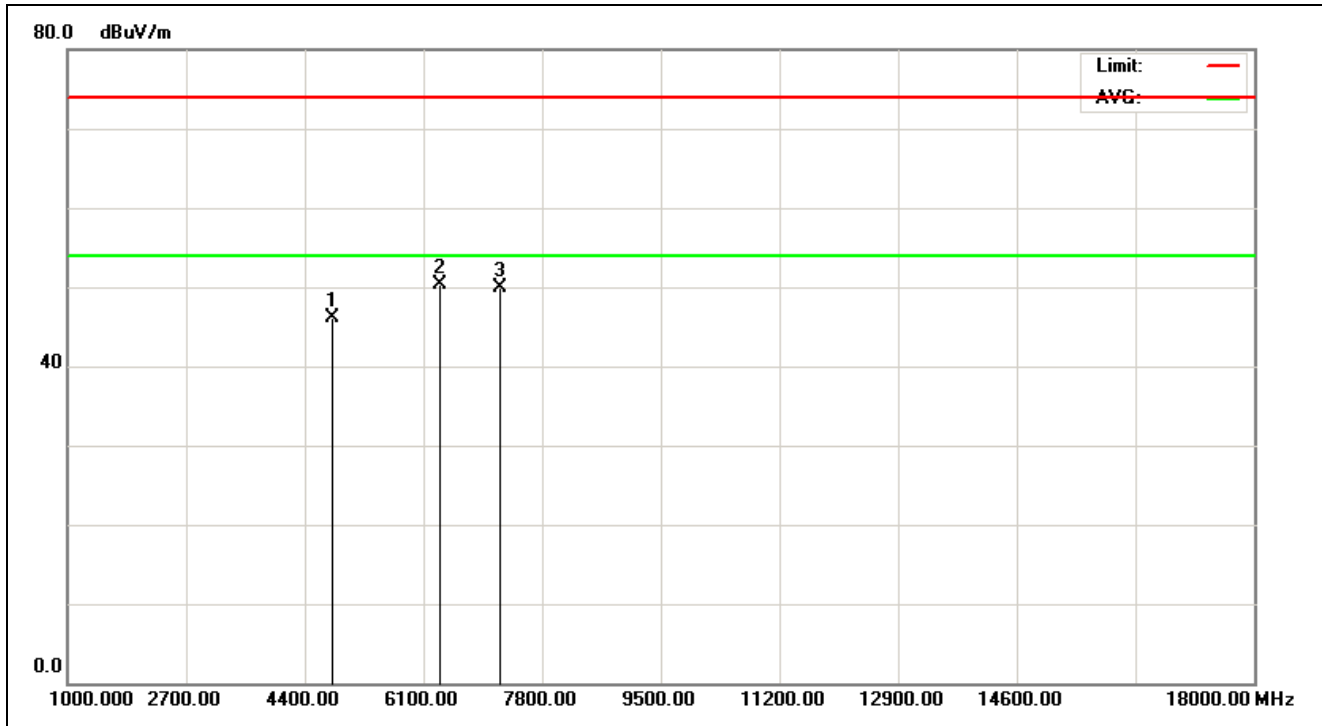
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



<b>Service No.:</b>	<b>E-Box-LE</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>FCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Horizontal</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2014/1/17 15:09:01</b>
<b>Applicant:</b>	<b>Jingtek</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>	<b>Smart Ebox</b>	<b>Temp.(°C)/Hum.(%):</b>	<b>18(°C)/56%</b>
<b>Model No.:</b>	<b>E-Box SMA01</b>	<b>Test Engineer:</b>	<b>Hugo Chang</b>
<b>Test Mode:</b>	<b>2402-TX</b>		
<b>Remark:</b>			

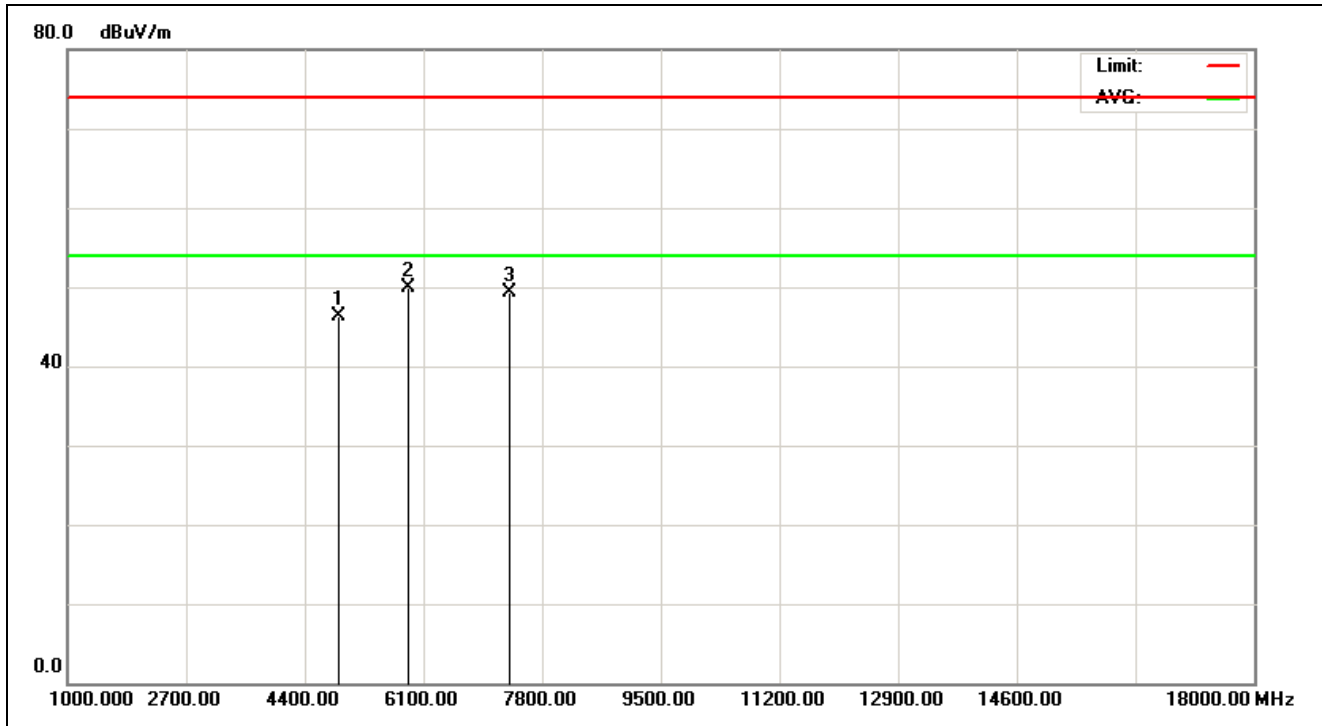
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth ( ° )	Remark
1	4804.000	-2.59	53.07	50.48	74.00	-23.52	peak	100	160	
2	5985.577	3.62	46.22	49.84	74.00	-24.16	peak	100	351	
3	7206.000	5.44	44.59	50.03	74.00	-23.97	peak			



<b>Service No.:</b>	<b>E-Box-LE</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>FCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2014/1/17 15:10:03</b>
<b>Applicant:</b>	<b>Jingtek</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>	<b>Smart Ebox</b>	<b>Temp.(°C)/Hum.(%):</b>	<b>18(°C)/56%</b>
<b>Model No.:</b>	<b>E-Box SMA01</b>	<b>Test Engineer:</b>	<b>Hugo Chang</b>
<b>Test Mode:</b>	<b>2402-TX</b>		
<b>Remark:</b>			

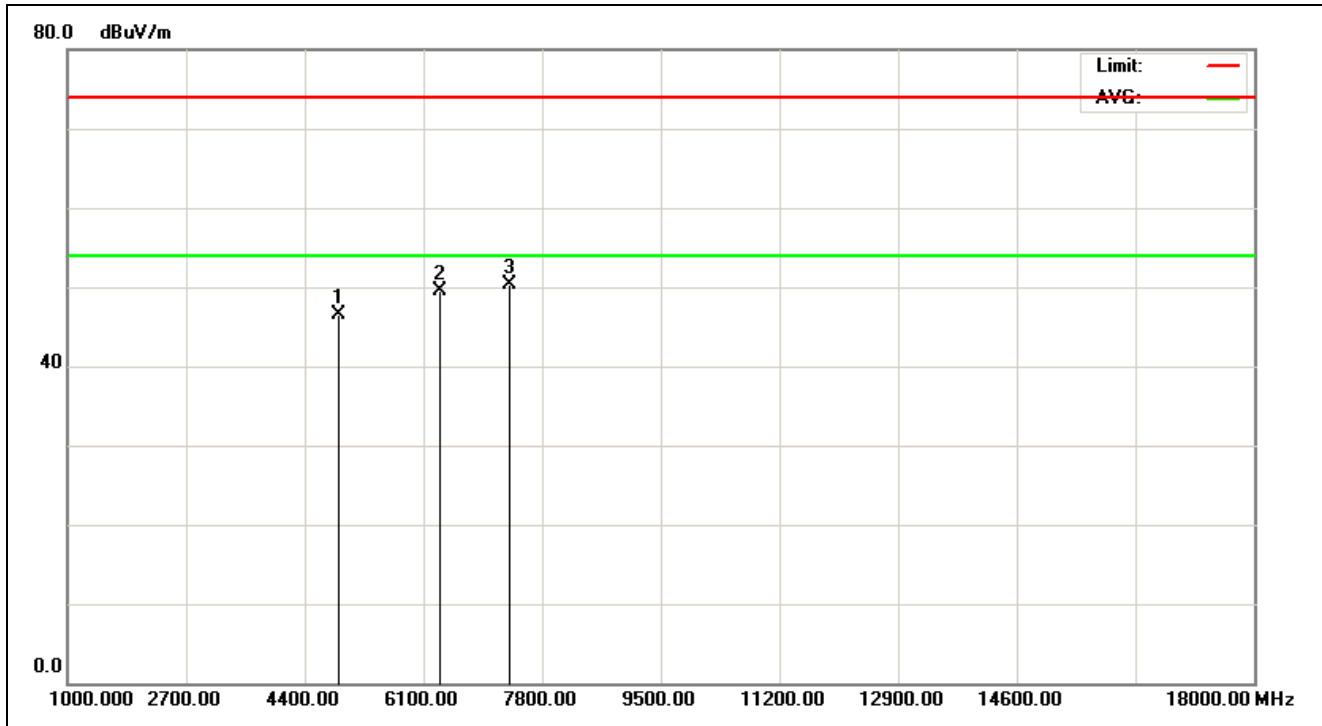
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth ( ° )	Remark
1	4804.000	-2.59	48.73	46.14	74.00	-27.86	peak			
2	6339.744	4.90	45.31	50.21	74.00	-23.79	peak	100	33	
3	7206.000	5.44	44.49	49.93	74.00	-24.07	peak			





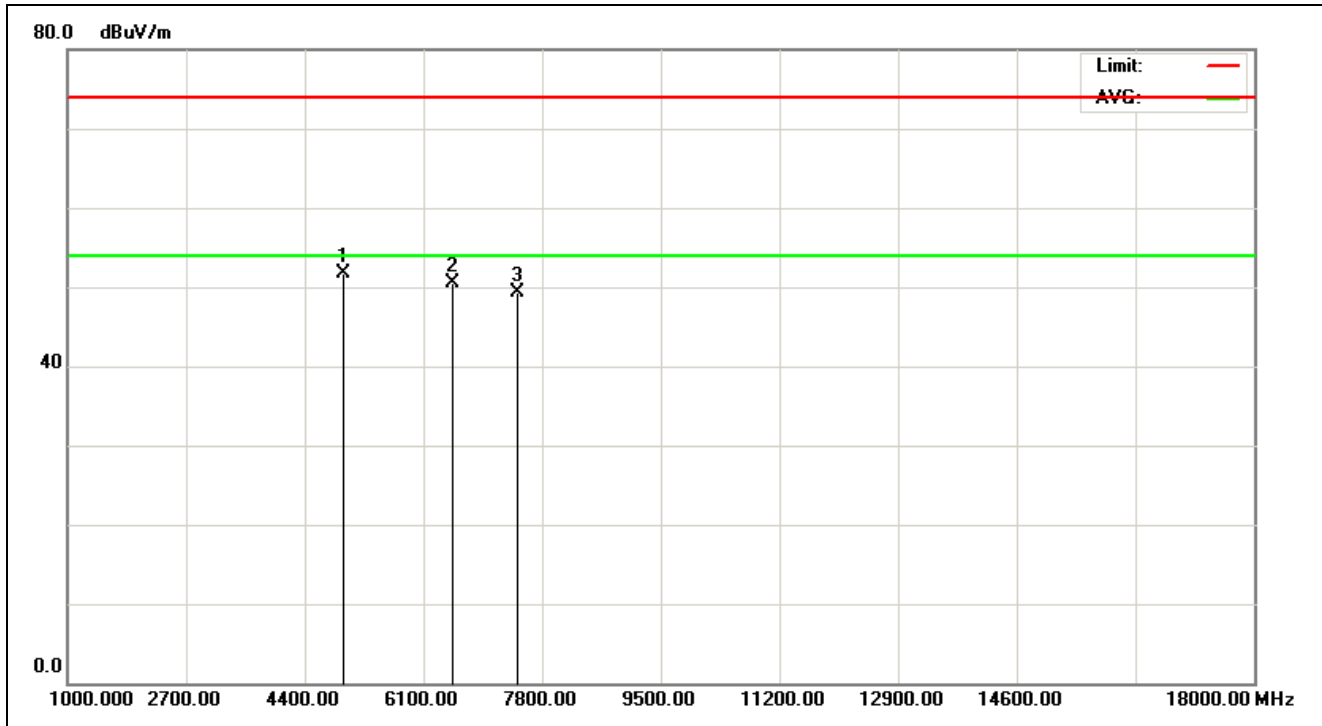
<b>Service No.:</b>	<b>E-Box-LE</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>FCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Horizontal</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2014/1/17 15:01:11</b>
<b>Applicant:</b>	<b>Jingtek</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>	<b>Smart Ebox</b>	<b>Temp.(°C)/Hum.(%):</b>	<b>18(°C)/56%</b>
<b>Model No.:</b>	<b>E-Box SMA01</b>	<b>Test Engineer:</b>	<b>Hugo Chang</b>
<b>Test Mode:</b>	<b>2442-TX</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	4884.000	-2.38	48.67	46.29	74.00	-27.71	peak			
2	5876.602	2.88	47.00	49.88	74.00	-24.12	peak	100	285	
3	7326.000	5.78	43.58	49.36	74.00	-24.64	peak			



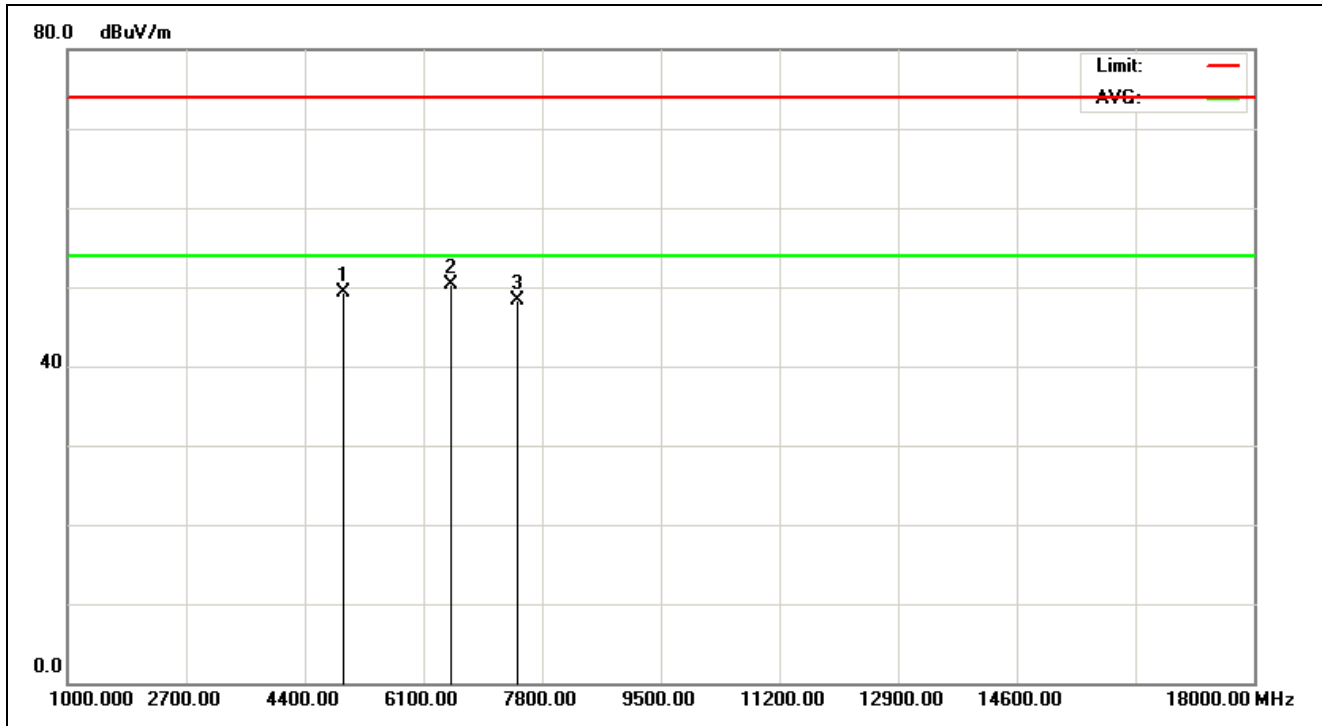
<b>Service No.:</b>	<b>E-Box-LE</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>FCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2014/1/17 15:02:13</b>
<b>Applicant:</b>	<b>Jingtek</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>	<b>Smart Ebox</b>	<b>Temp.(°C)/Hum.(%):</b>	<b>18(°C)/56%</b>
<b>Model No.:</b>	<b>E-Box SMA01</b>	<b>Test Engineer:</b>	<b>Hugo Chang</b>
<b>Test Mode:</b>	<b>2442-TX</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	4884.000	-2.38	48.93	46.55	74.00	-27.45	peak			
2	6339.743	4.90	44.58	49.48	74.00	-24.52	peak	100	189	
3	7326.000	5.78	44.47	50.25	74.00	-23.75	peak			



<b>Service No.:</b>	<b>E-Box-LE</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>FCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Horizontal</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2014/1/17 14:56:51</b>
<b>Applicant:</b>	<b>Jingtek</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>	<b>Smart Ebox</b>	<b>Temp.(°C)/Hum.(%):</b>	<b>18(°C)/56%</b>
<b>Model No.:</b>	<b>E-Box SMA01</b>	<b>Test Engineer:</b>	<b>Hugo Chang</b>
<b>Test Mode:</b>	<b>2480-TX</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	4960.000	-2.19	53.91	51.72	74.00	-22.28	peak	100	152	
2	6530.449	5.43	45.17	50.60	74.00	-23.40	peak	100	360	
3	7440.000	6.09	43.27	49.36	74.00	-24.64	peak	100	80	



Service No.:	E-Box-LE	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2014/1/17 14:57:53
Applicant:	Jingtek	Test Rating:	DC 5V
Product:	Smart Ebox	Temp.(°C)/Hum.(%):	18(°C)/56%
Model No.:	E-Box SMA01	Test Engineer:	Hugo Chang
Test Mode:	2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4960.000	-2.19	51.50	49.31	74.00	-24.69	peak	100	179	
2	6503.205	5.45	44.86	50.31	74.00	-23.69	peak	100	357	
3	7440.000	6.09	42.20	48.29	74.00	-25.71	peak	100	336	

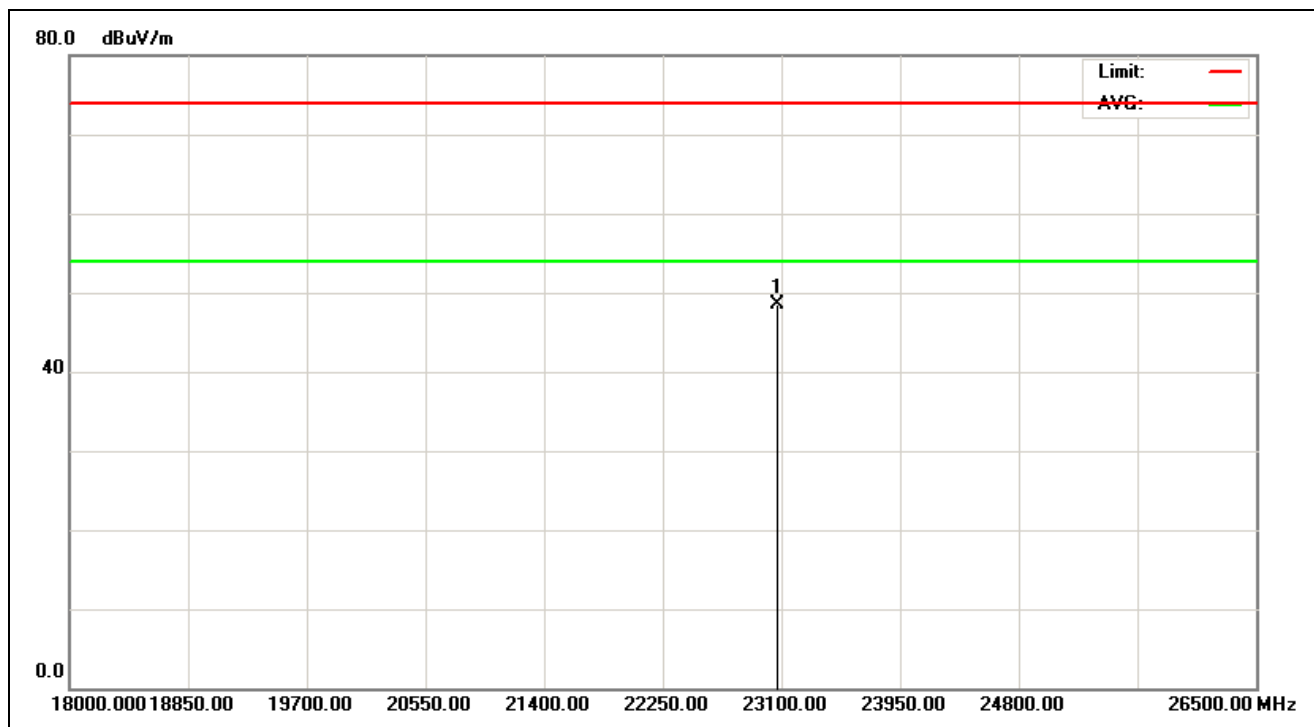
# Spurious Emissions, TX Mode, 18-26G



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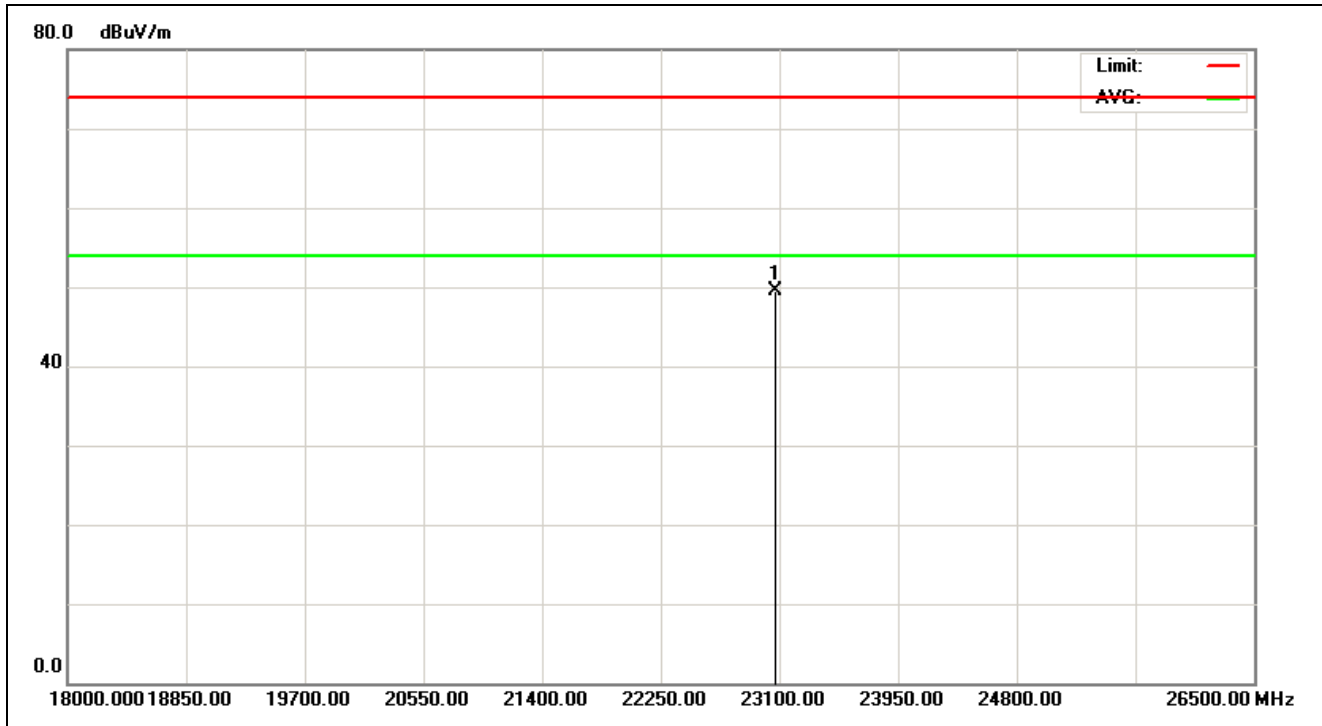
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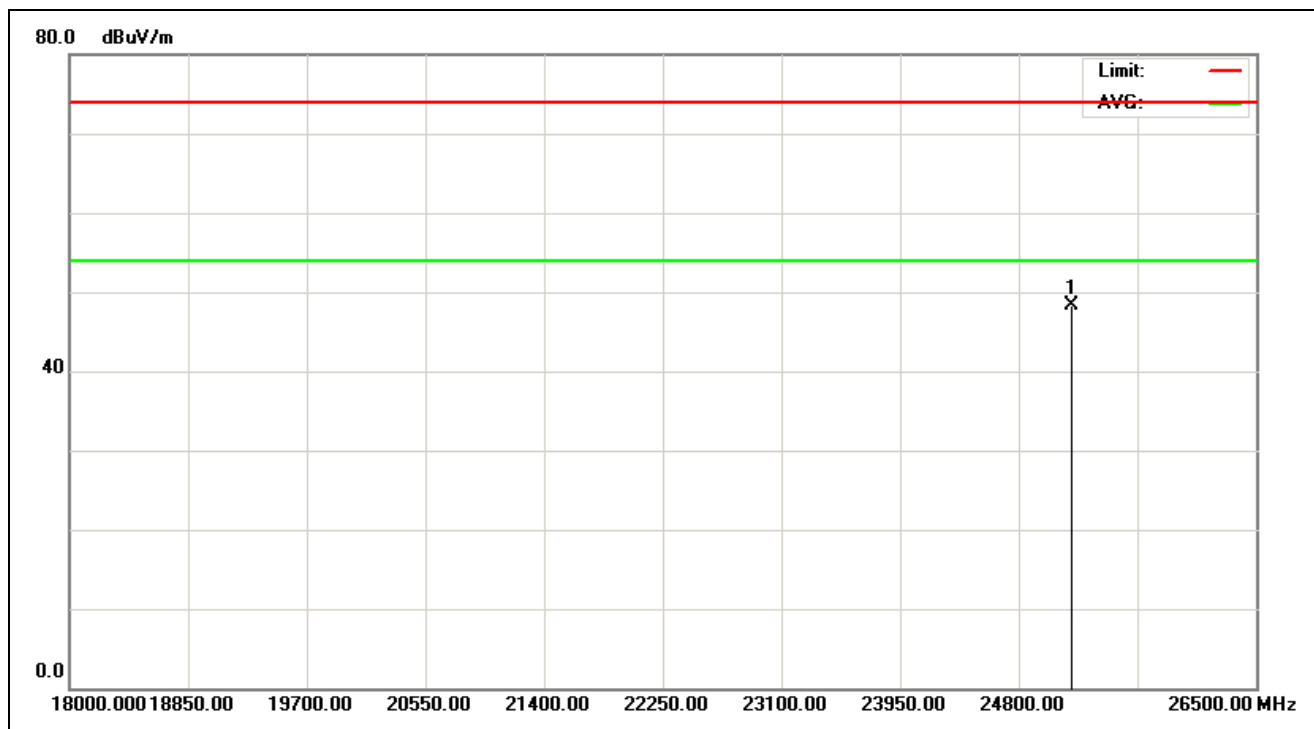
Service No.:	E-Box-LE	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2014/1/17 15:24:20
Applicant:	Jingtek	Test Rating:	DC 5V
Product:	Smart Ebox	Temp.(°C)/Hum.(%):	18(°C)/56%
Model No.:	E-Box SMA01	Test Engineer:	Hugo Chang
Test Mode:	2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23067.308	30.25	18.33	48.58	74.00	-25.42	peak			



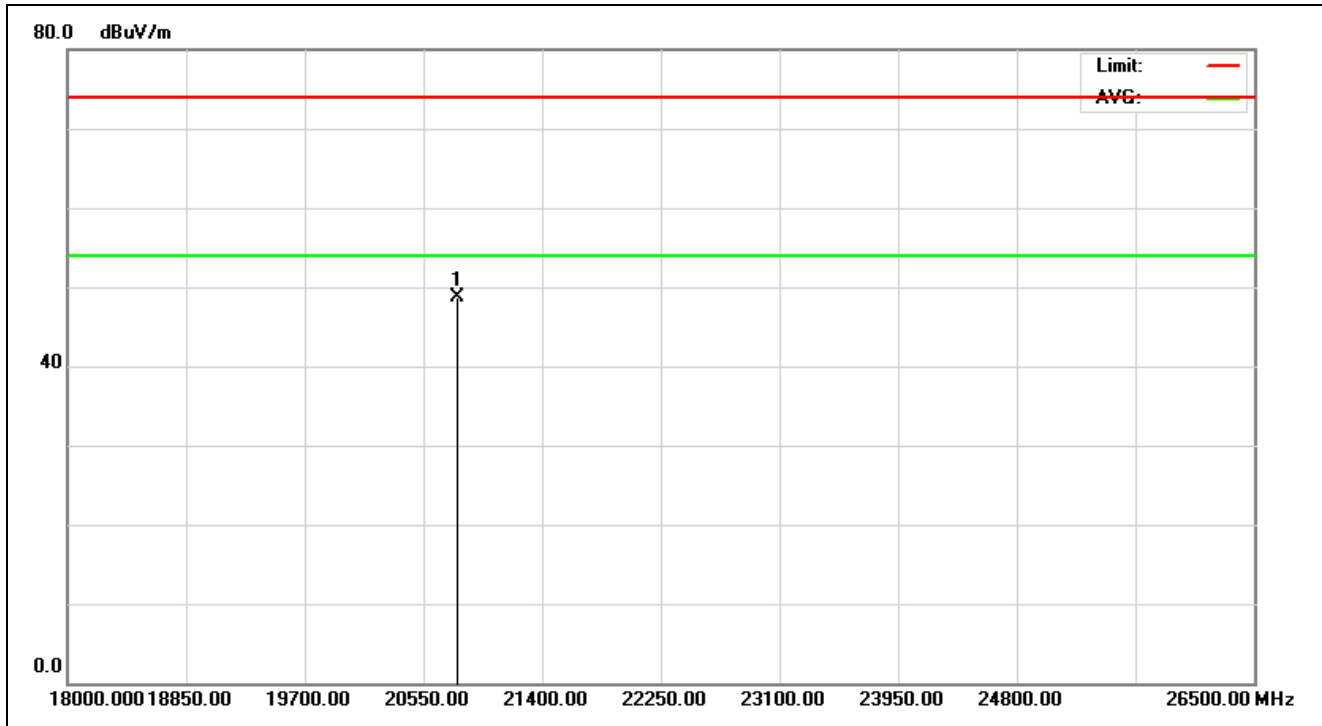
Service No.:	E-Box-LE	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2014/1/17 15:24:51
Applicant:	Jingtek	Test Rating:	DC 5V
Product:	Smart Ebox	Temp.(°C)/Hum.(%):	18(°C)/56%
Model No.:	E-Box SMA01	Test Engineer:	Hugo Chang
Test Mode:	2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23067.308	30.25	19.19	49.44	74.00	-24.56	peak			



Service No.:	E-Box-LE	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2014/1/17 15:25:19
Applicant:	Jingtek	Test Rating:	DC 5V
Product:	Smart Ebox	Temp.(°C)/Hum.(%):	18(°C)/56%
Model No.:	E-Box SMA01	Test Engineer:	Hugo Chang
Test Mode:	2442-TX		
Remark:			

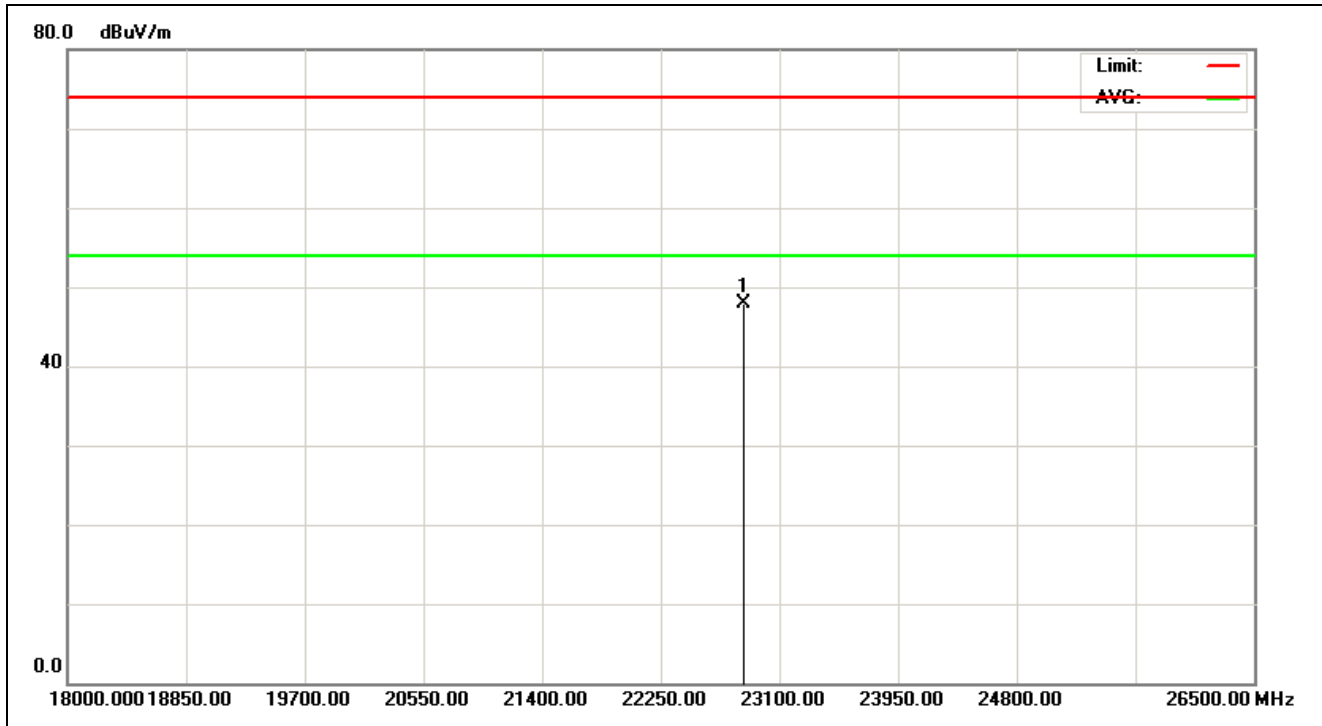
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	25178.686	30.66	17.60	48.26	74.00	-25.74	peak			



<b>Service No.:</b>	<b>E-Box-LE</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>FCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2014/1/17 15:25:45</b>
<b>Applicant:</b>	<b>Jingtek</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>	<b>Smart Ebox</b>	<b>Temp.(°C)/Hum.(%):</b>	<b>18(°C)/56%</b>
<b>Model No.:</b>	<b>E-Box SMA01</b>	<b>Test Engineer:</b>	<b>Hugo Chang</b>
<b>Test Mode:</b>	<b>2442-TX</b>		
<b>Remark:</b>			

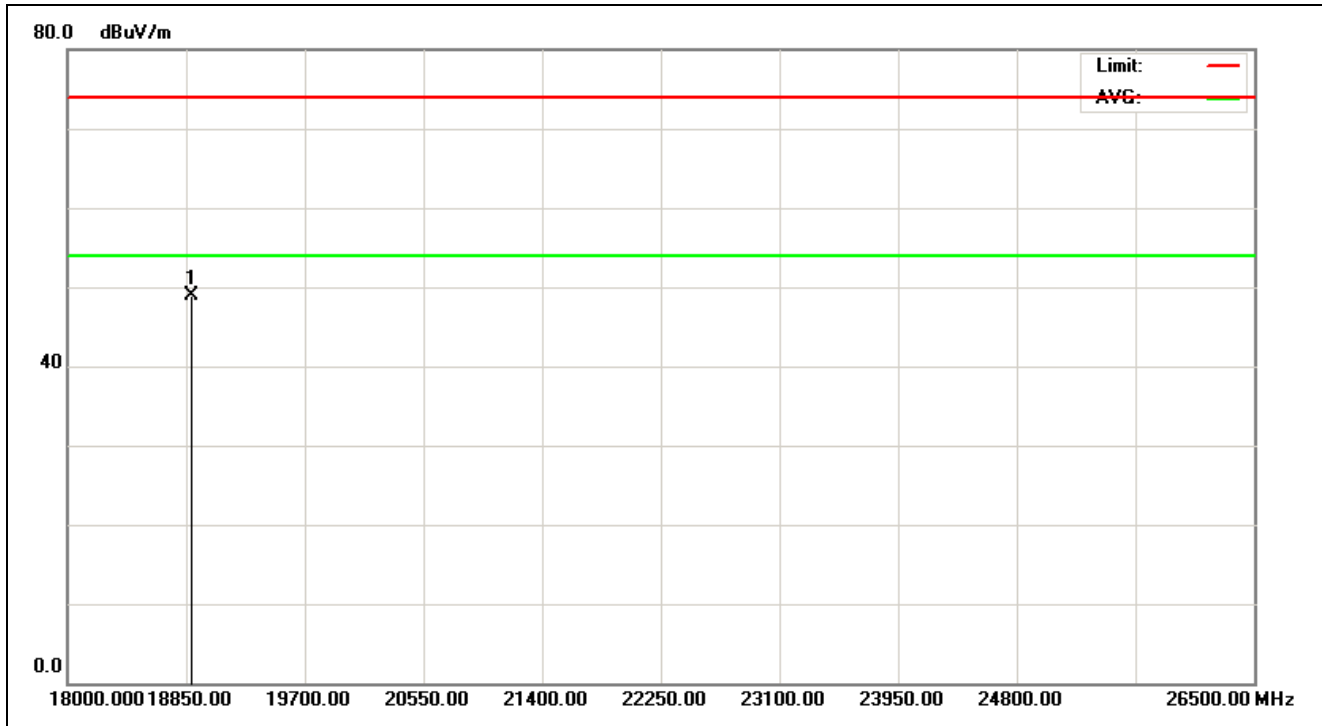
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20792.468	29.58	19.16	48.74	74.00	-25.26	peak			





Service No.:	E-Box-LE	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2014/1/17 15:26:13
Applicant:	Jingtek	Test Rating:	DC 5V
Product:	Smart Ebox	Temp.(°C)/Hum.(%):	18(°C)/56%
Model No.:	E-Box SMA01	Test Engineer:	Hugo Chang
Test Mode:	2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22849.359	29.90	18.08	47.98	74.00	-26.02	peak			



Service No.:	E-Box-LE	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2014/1/17 15:26:39
Applicant:	Jingtek	Test Rating:	DC 5V
Product:	Smart Ebox	Temp.(°C)/Hum.(%):	18(°C)/56%
Model No.:	E-Box SMA01	Test Engineer:	Hugo Chang
Test Mode:	2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	18885.417	29.62	19.20	48.82	74.00	-25.18	peak			

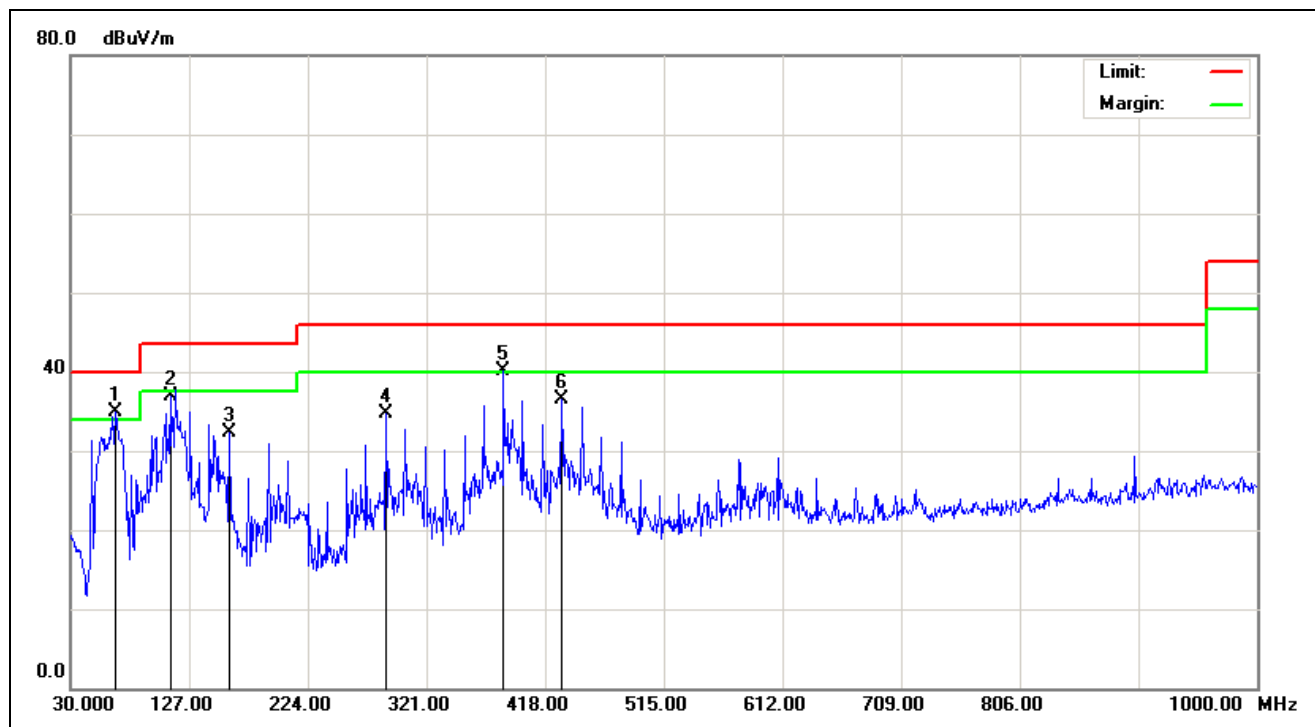
# Spurious Emissions, TX Mode, 30M-1G



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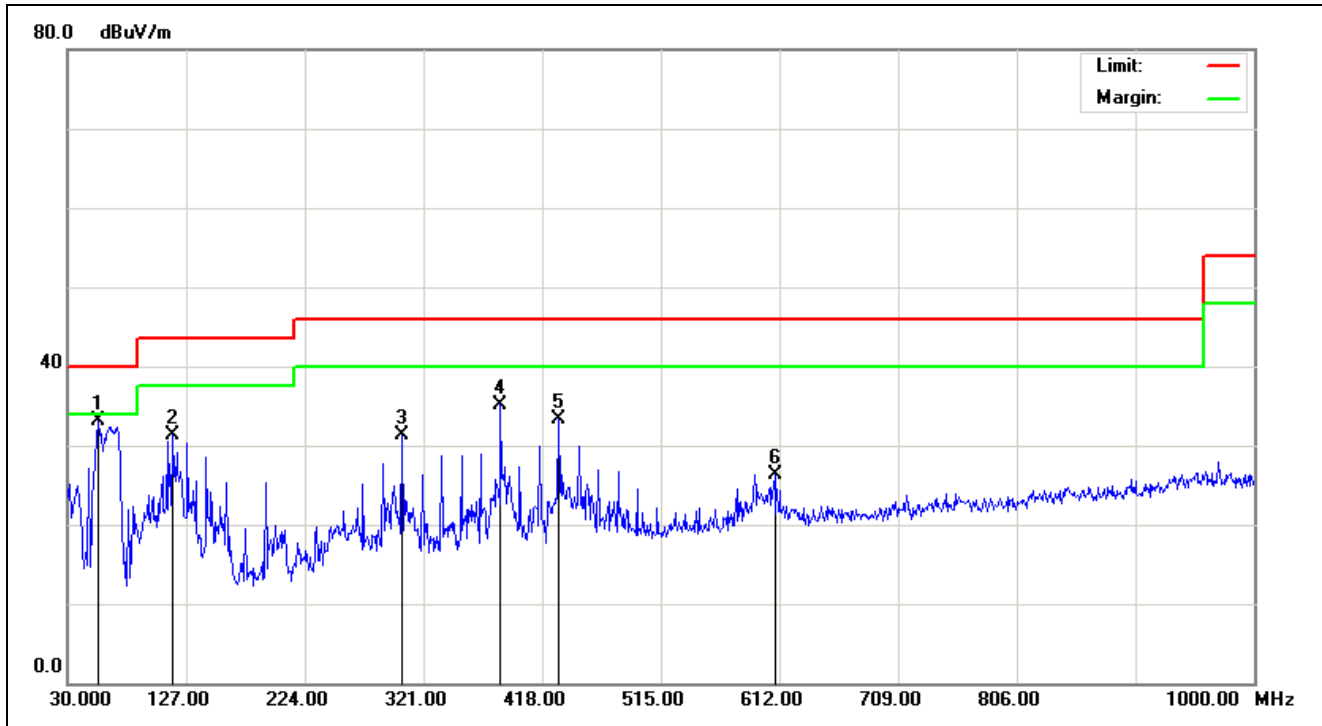


Service No.:	E-Box-LE	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2014/1/17 09:50:44
Applicant:	Jingtek	Test Rating:	DC 5V
Product:	Smart Ebox	Temp.(°C)/Hum.(%)	18(°C)/56%
Model No.:	E-Box SMA01	Test Engineer:	Hugo Chang
Test Mode:			
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	66.8599	-19.08	53.91	34.83	40.00	-5.17	QP	100	91	
2	111.4800	-13.95	50.83	36.88	43.50	-6.62	QP	100	110	
3	159.9799	-13.95	46.25	32.30	43.50	-11.20	QP	100	265	
4	288.0199	-10.83	45.54	34.71	46.00	-11.29	QP	100	123	
5	384.0500	-8.89	48.94	40.05	46.00	-5.95	QP	100	284	
6	431.5799	-8.19	44.71	36.52	46.00	-9.48	QP	100	120	

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

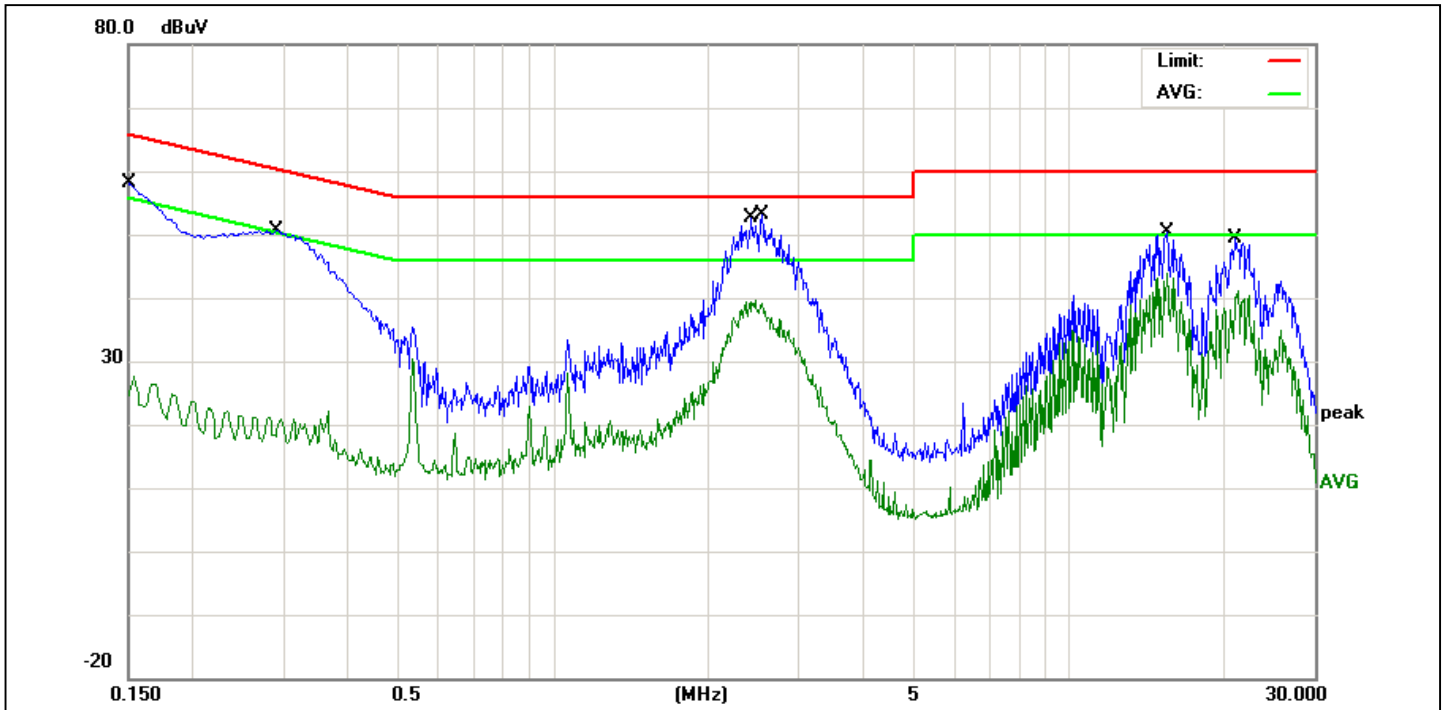




Service No.:	E-Box-LE	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2014/1/17 09:51:46
Applicant:	Jingtek	Test Rating:	DC 5V
Product:	Smart Ebox	Temp.(°C)/Hum.(%):	18(°C)/56%
Model No.:	E-Box SMA01	Test Engineer:	Hugo Chang
Test Mode:			
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	55.2200	-18.39	51.53	33.14	40.00	-6.86	QP	100	150	
2	116.3300	-13.58	44.97	31.39	43.50	-12.11	QP	100	195	
3	303.5400	-10.33	41.69	31.36	46.00	-14.64	QP	100	190	
4	384.0500	-8.89	44.09	35.20	46.00	-10.80	QP	100	13	
5	431.5800	-8.19	41.45	33.26	46.00	-12.74	QP	100	190	
6	608.1200	-5.89	32.23	26.34	46.00	-19.66	QP	100	360	

# Mains Spurious Emissions


**Service No.:** 114011504

**Test Standard:** CISPR22 Class B Conduction

**Test item:** Conducted Emission

**Phase:** L1

**Applicant:** Jingtek

**Temp.(°C)/Hum.(%):** 27(°C) / 60 %

**Product:** E-box mini

**Power Rating:** DC 30V

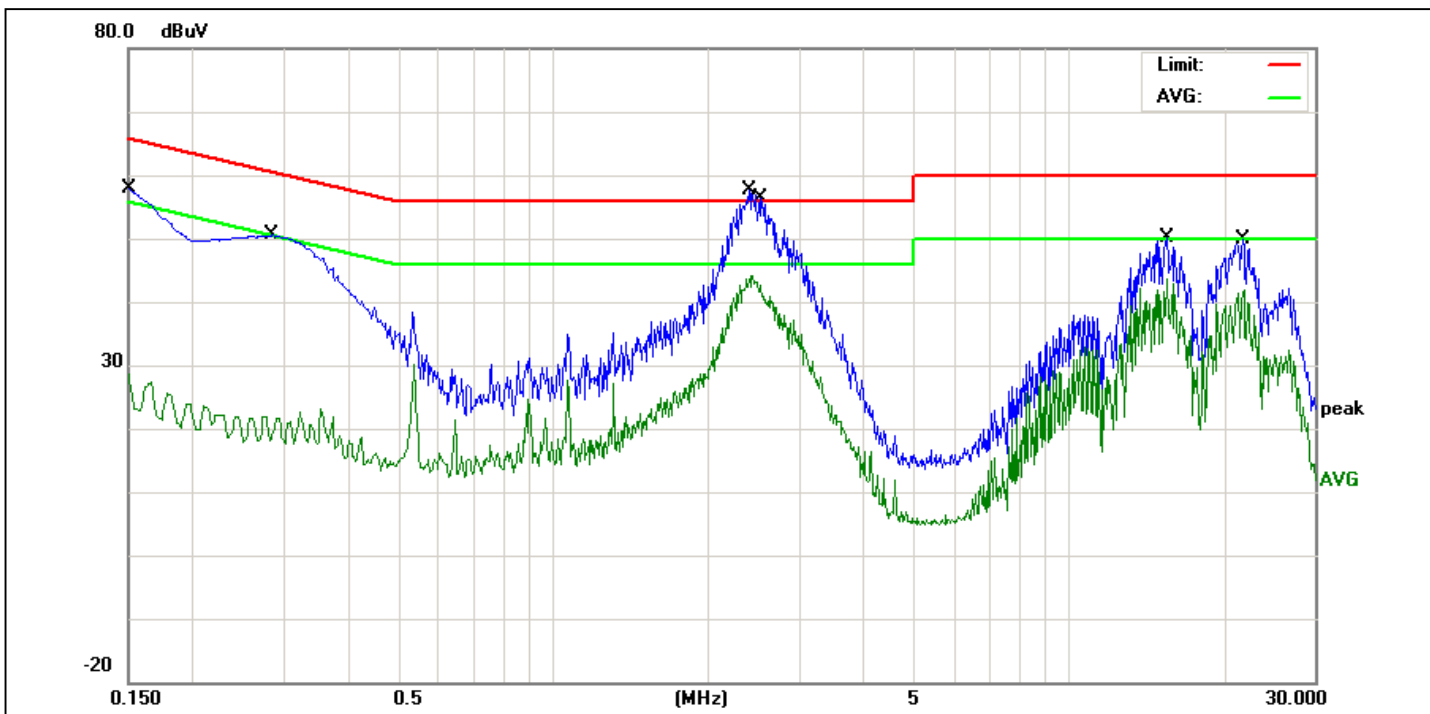
**Model No.:** Smart Ebox

**Test Engineer:** Freeman Wang

**Test Mode:** Normal link

**Remark:** power supply:2250

No.	Frequency (MHz)	Factor (dBuV)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1500	9.62	42.15	51.77	65.99	-14.22	QP	P	
2	0.1500	9.62	15.58	25.20	55.99	-30.79	AVG	P	
3	0.2900	9.59	34.04	43.63	60.52	-16.89	QP	P	
4	0.2900	9.59	8.77	18.36	50.52	-32.16	AVG	P	
5	2.4219	9.63	37.79	47.42	56.00	-8.58	QP	P	
6	2.4219	9.63	28.80	38.43	46.00	-7.57	AVG	P	
7	2.5420	9.63	37.07	46.70	56.00	-9.30	QP	P	
8	2.5420	9.63	27.29	36.92	46.00	-9.08	AVG	P	
9	15.4740	9.77	38.38	48.15	60.00	-11.85	QP	P	
10	15.4740	9.77	31.15	40.92	50.00	-9.08	AVG	P	
11	21.1460	9.82	35.76	45.58	60.00	-14.42	QP	P	
12	21.1460	9.82	29.09	38.91	50.00	-11.09	AVG	P	


**Service No.:** 114011504

**Test Standard:** CISPR22 Class B Conduction

**Test item:** Conducted Emission

**Phase:** N

**Applicant:** Jingtek

**Temp.(°C)/Hum.(%):** 27(°C) / 60 %

**Product:** E-box mini

**Power Rating:** DC 30V

**Model No.:** Smart Ebox

**Test Engineer:** Freeman Wang

**Test Mode:** Normal link

**Remark:** power supply:2250

No.	Frequency (MHz)	Factor (dBuV)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1500	9.59	42.24	51.83	65.99	-14.16	QP	P	
2	0.1500	9.59	15.88	25.47	55.99	-30.52	AVG	P	
3	0.2860	9.56	34.22	43.78	60.64	-16.86	QP	P	
4	0.2860	9.56	9.31	18.87	50.64	-31.77	AVG	P	
5	2.4020	9.59	40.18	49.77	56.00	-6.23	QP	P	
6	2.4020	9.59	31.63	41.22	46.00	-4.78	AVG	P	
7	2.5140	9.59	40.00	49.59	56.00	-6.41	QP	P	
8	2.5140	9.59	30.99	40.58	46.00	-5.42	AVG	P	
9	15.4780	9.77	37.51	47.28	60.00	-12.72	QP	P	
10	15.4780	9.77	30.86	40.63	50.00	-9.37	AVG	P	
11	21.7340	9.85	36.78	46.63	60.00	-13.37	QP	P	
12	21.7340	9.85	29.77	39.62	50.00	-10.38	AVG	P	