

# Test Report No.10041102 001

## Appendix D: Radiated Spurious Emission Data

(File: 10041102AppendixD)

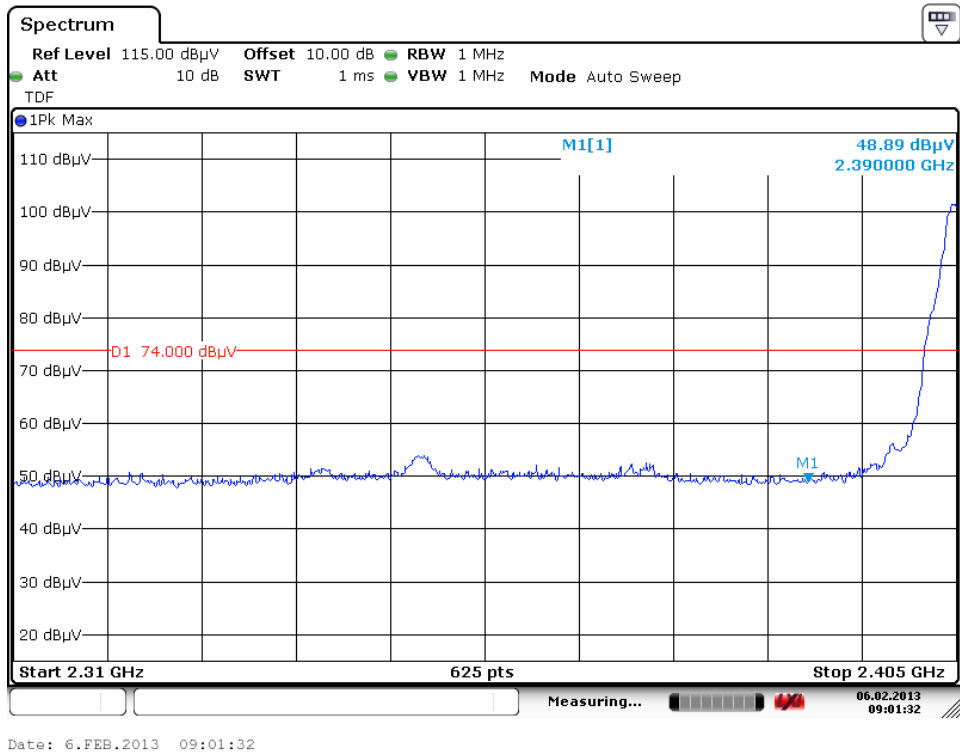
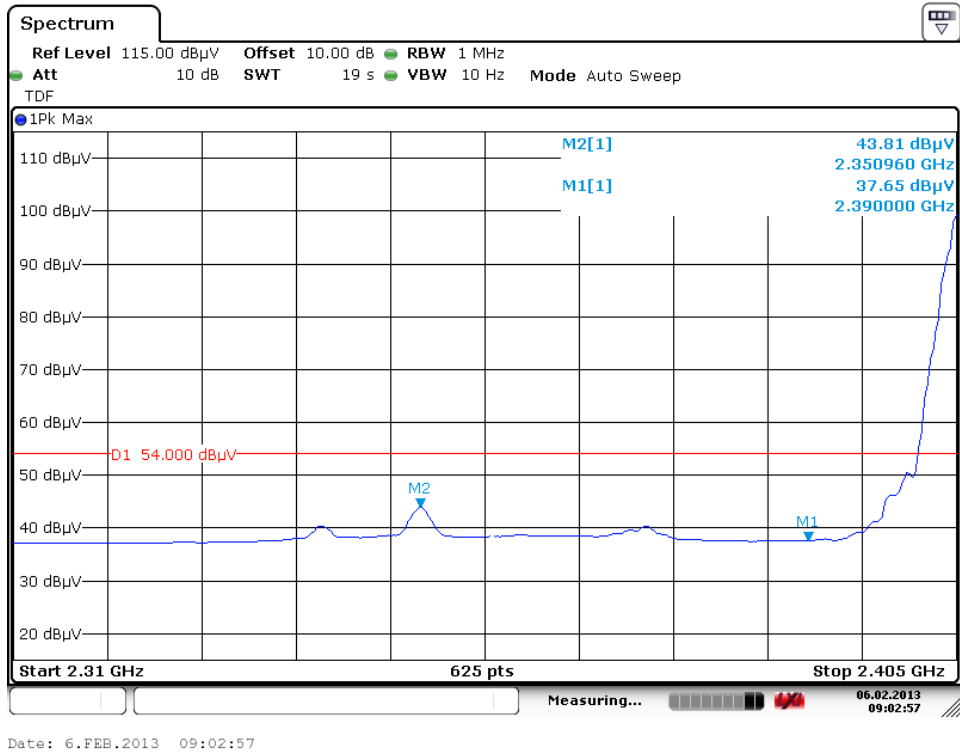
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# Spurious Emissions, Band Edges, 2.35-2.5G

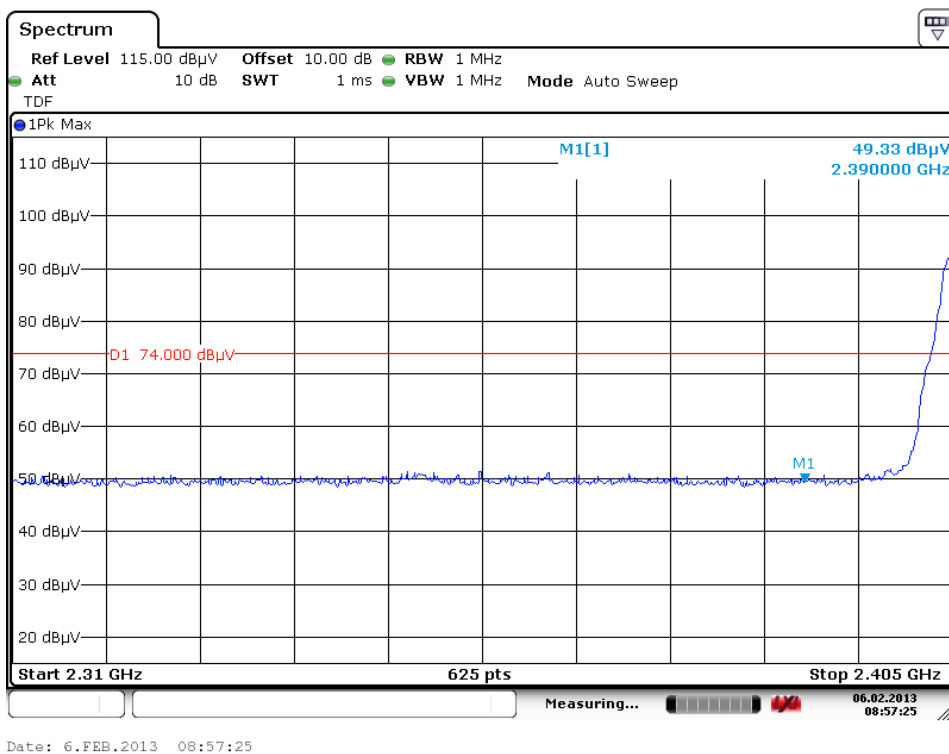
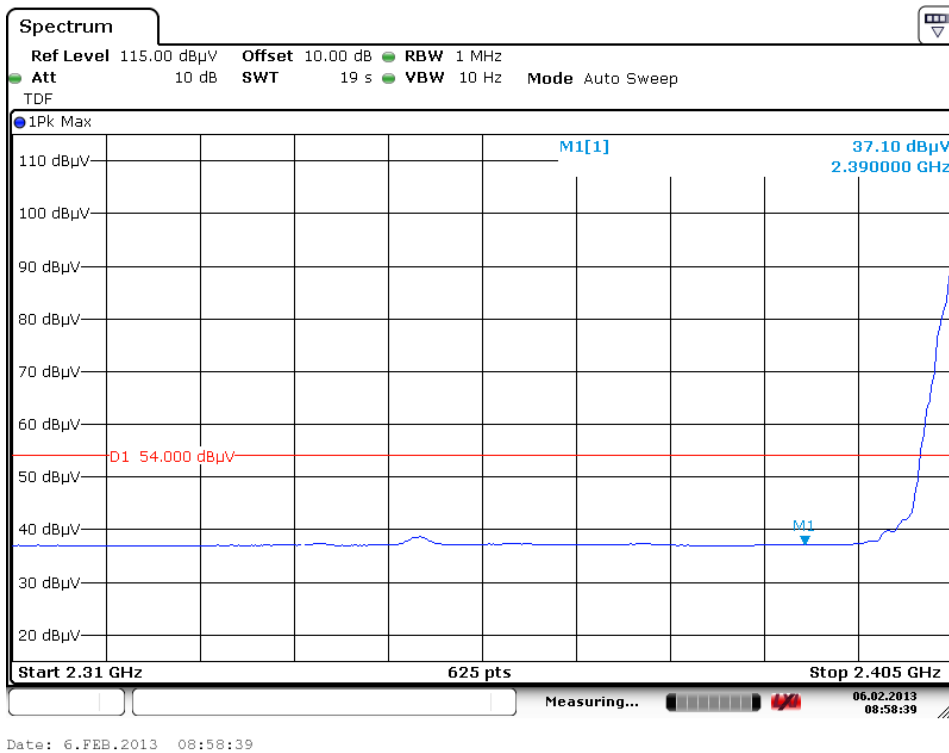
## Radiated Bandedge

### Low Channel (Hor)



# Spurious Emissions, Band Edge, 2.35-2.5G

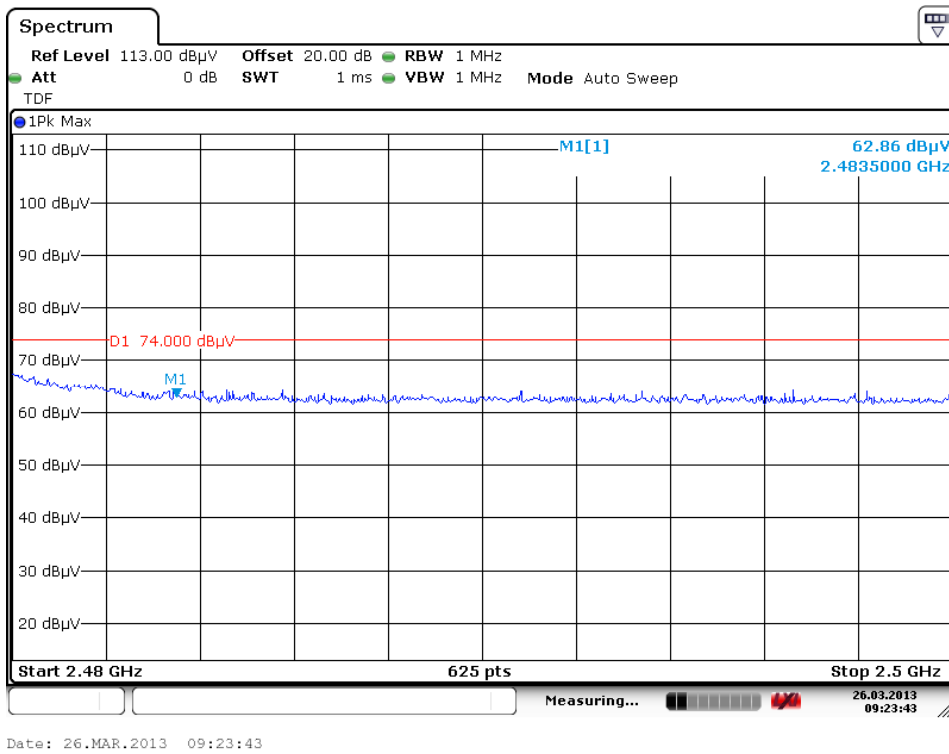
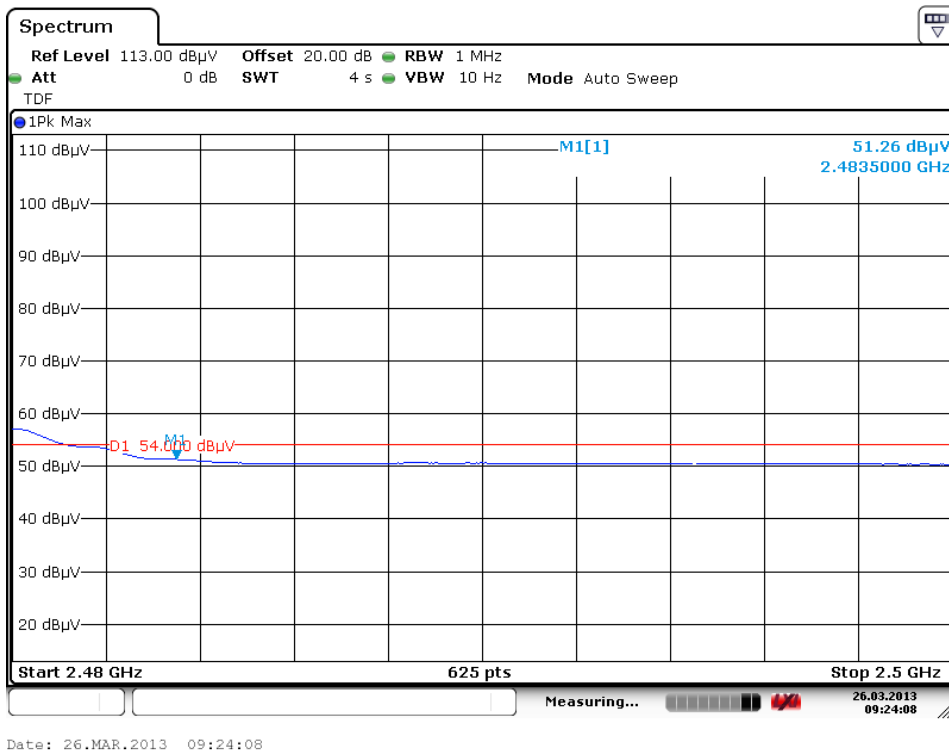
## Low Channel (Ver)



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

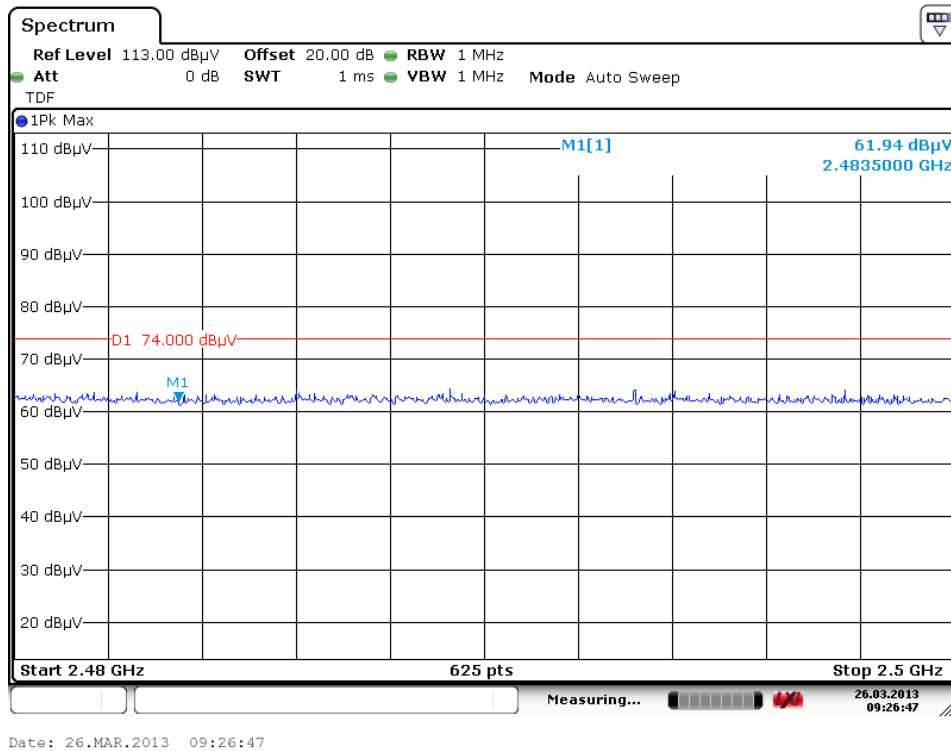
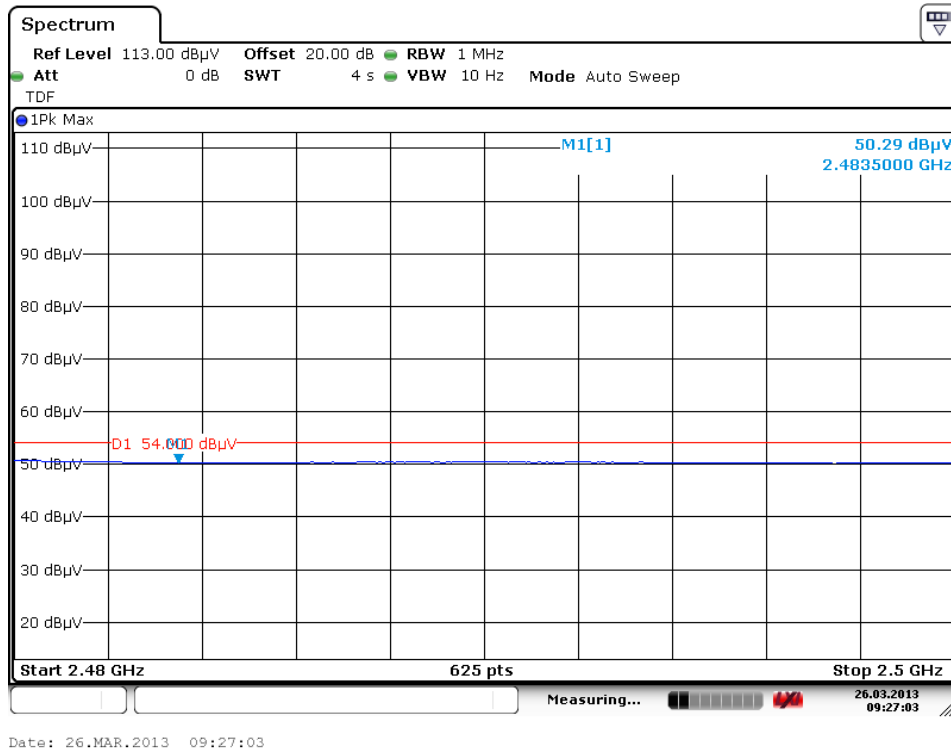
# Radiated Bandedge

## High Channel (Hor) 2475



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

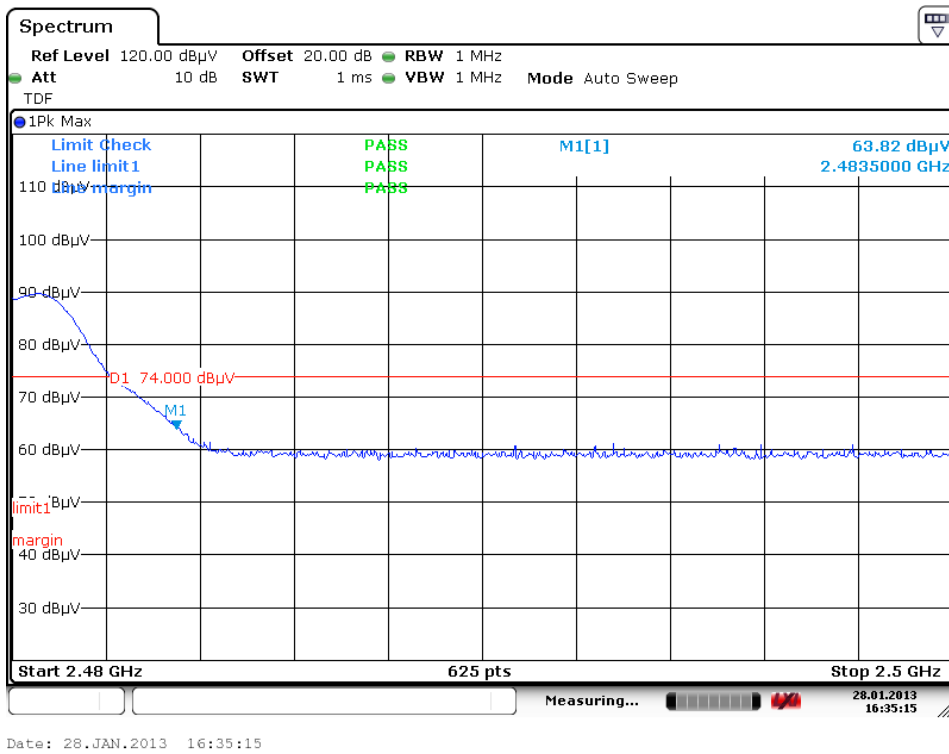
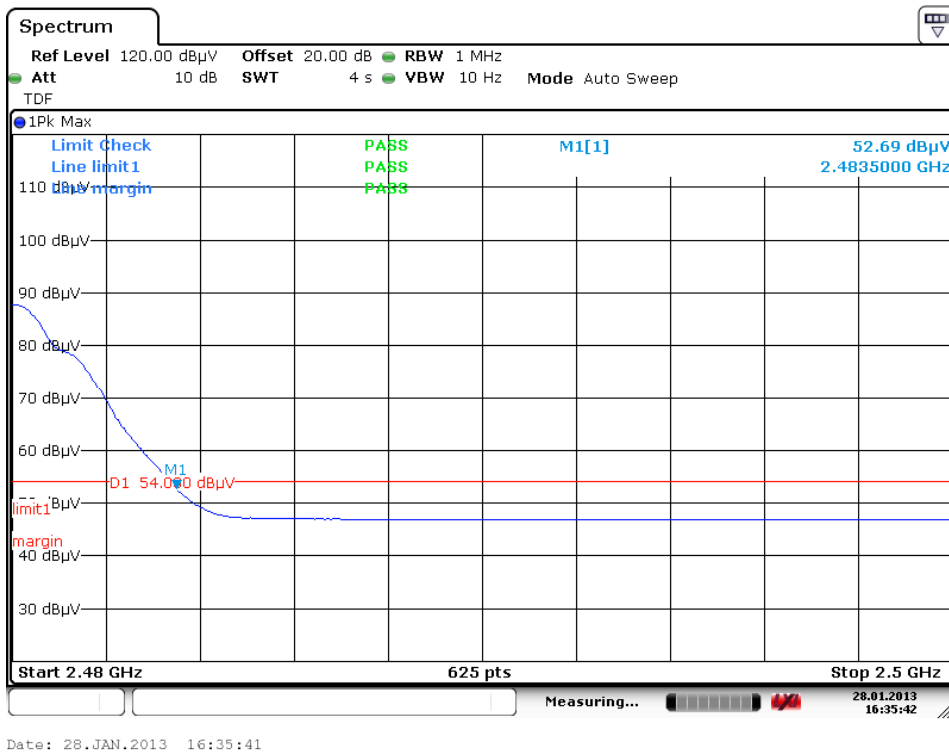
# High Channel (Ver) 2475



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

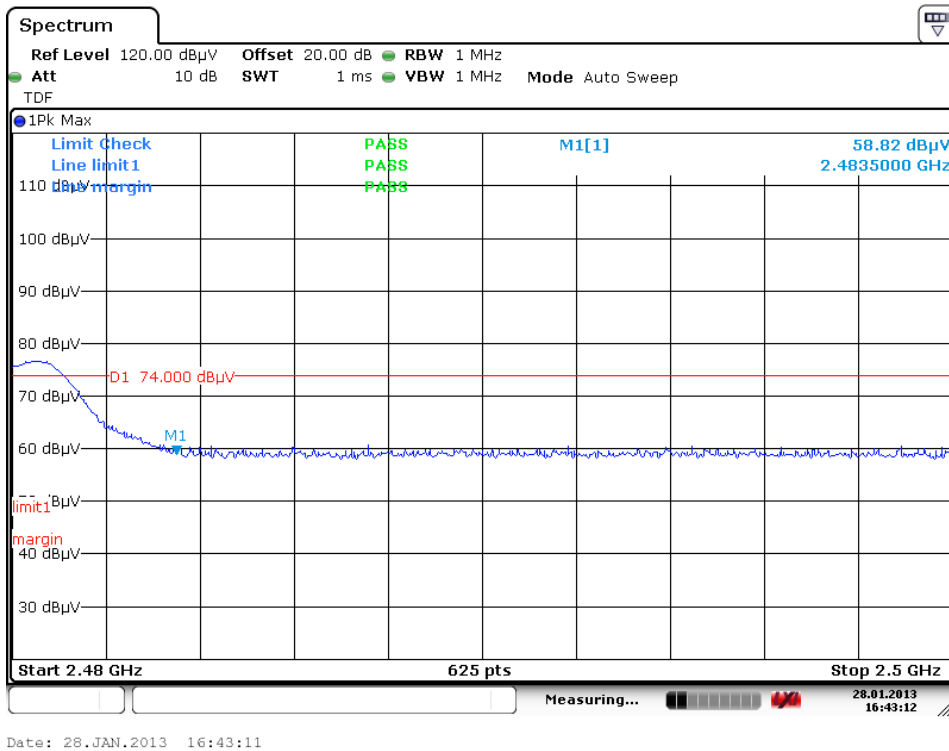
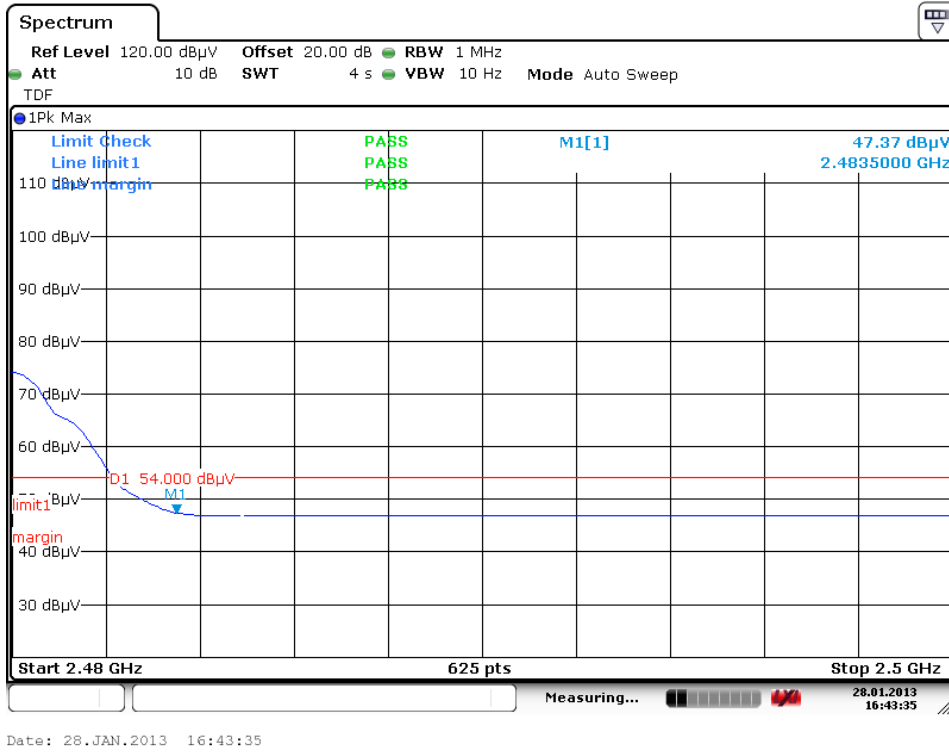
# Radiated Bandedge

## High Channel (Hor) 2480



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

# High Channel (Ver) 2480



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

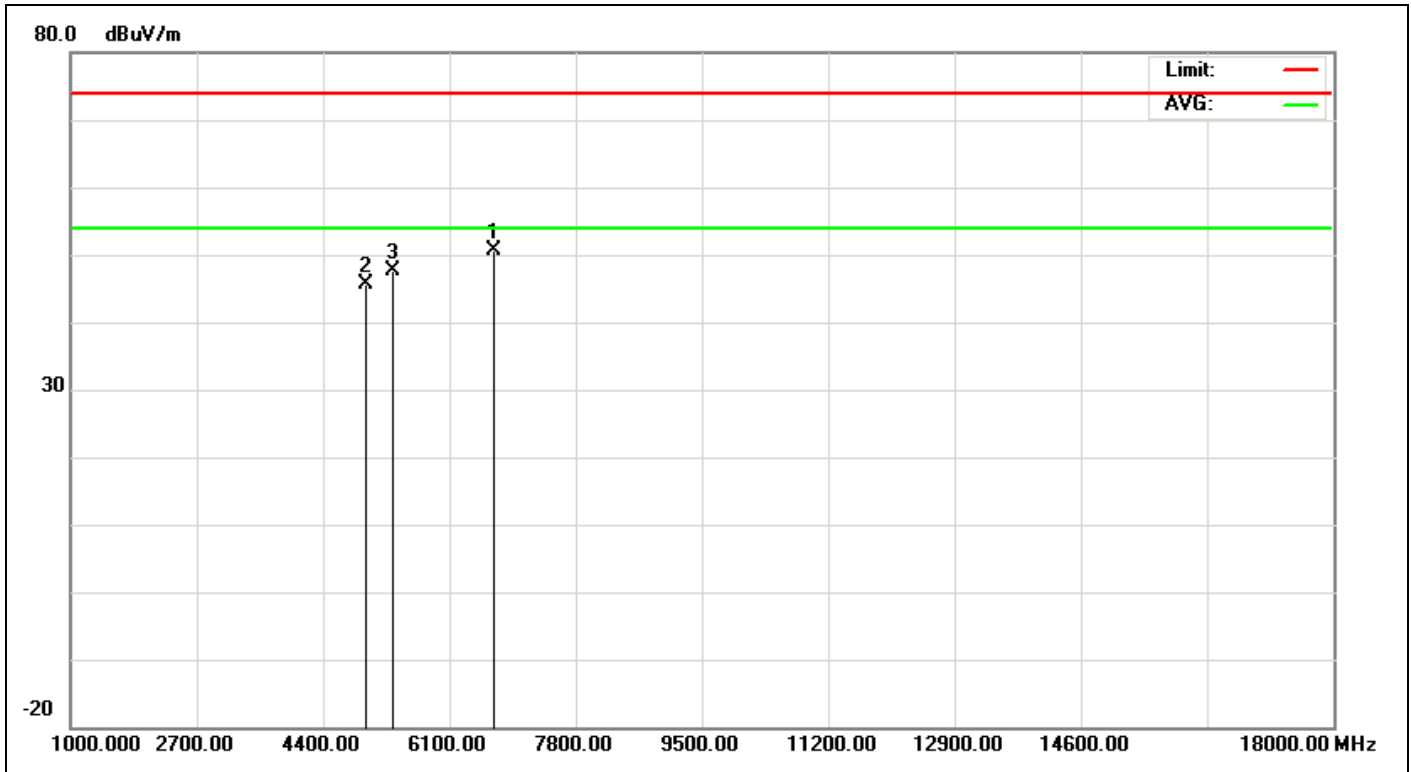
# Spurious Emissions, TX Mode, 1-18G



**TUV Taiwan**

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

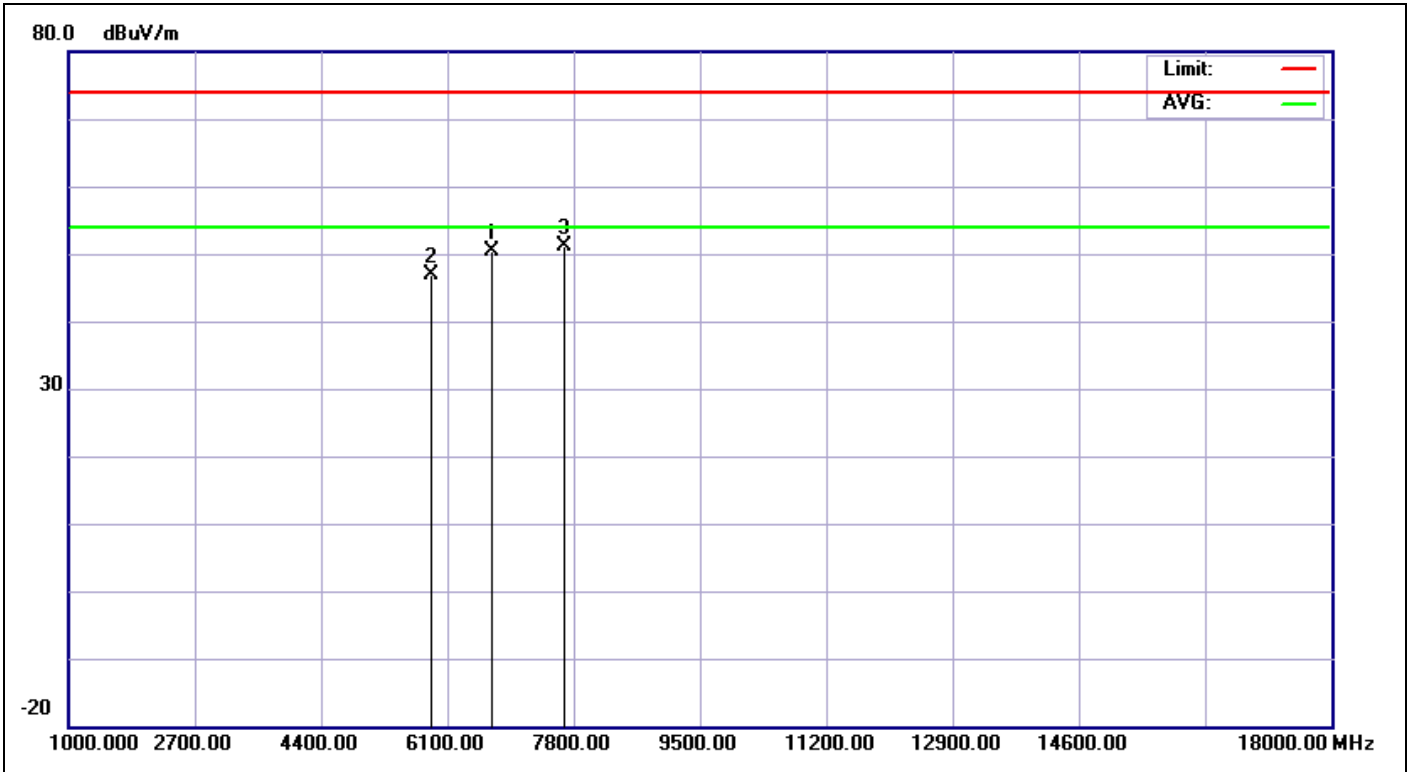
Tel:+886-2172-7000 fax:+886-2528-0018



<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Horizontal
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/2/6 AM 09:05:29
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	21(°C)/55%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2405		
<b>Remark:</b>			

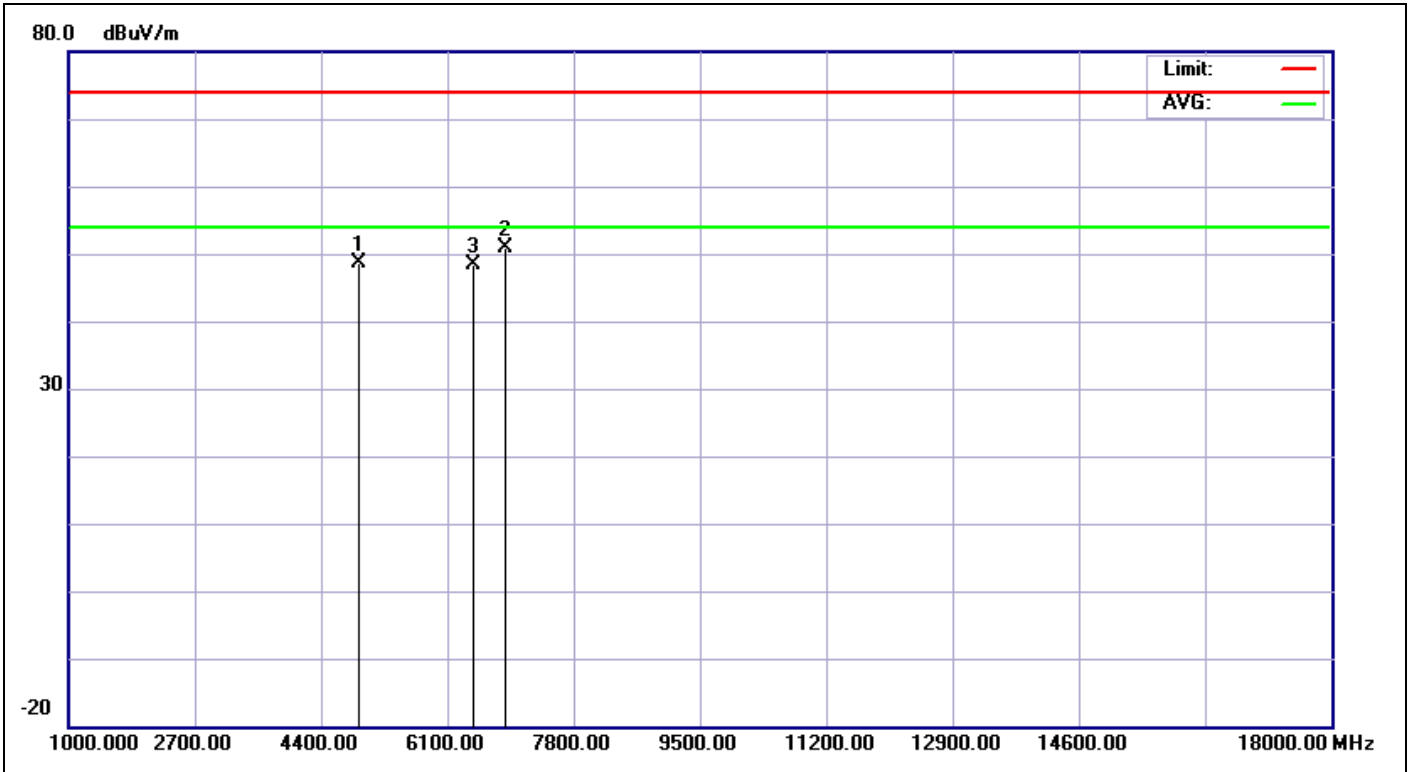
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	6698.000	5.18	45.40	50.58	74.00	-23.42	peak	100	360	
2	4985.000	-3.31	49.02	45.71	74.00	-28.29	peak	100	360	
3	5338.000	-1.44	49.19	47.75	74.00	-26.25	peak	100	360	





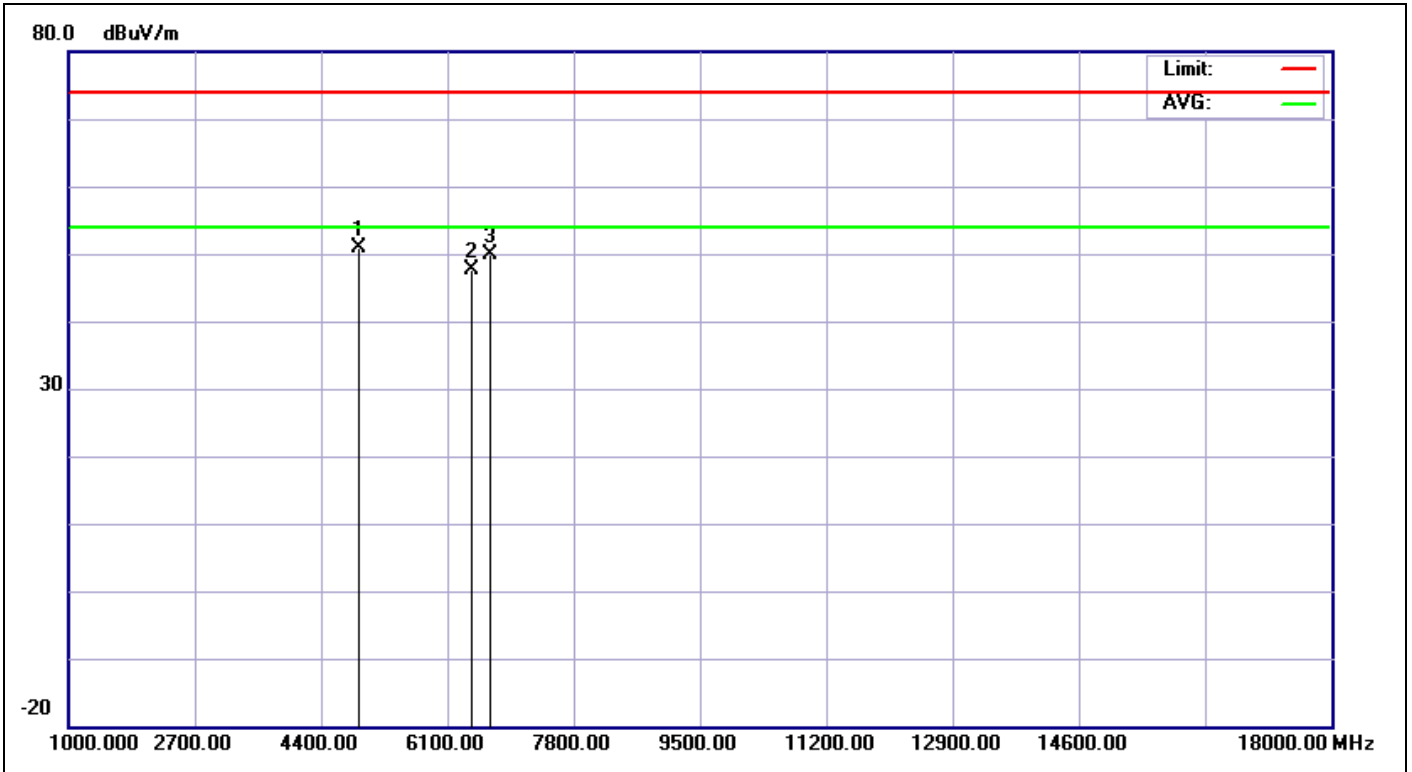
<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Vertical
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/2/6 AM 09:09:44
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	21(°C)/55%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2405		
<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	6698.000	5.18	45.18	50.36	74.00	-23.64	peak	100	0	
2	5882.000	1.99	44.86	46.85	74.00	-27.15	peak	100	0	
3	7678.000	7.53	43.71	51.24	74.00	-22.76	peak	100	0	



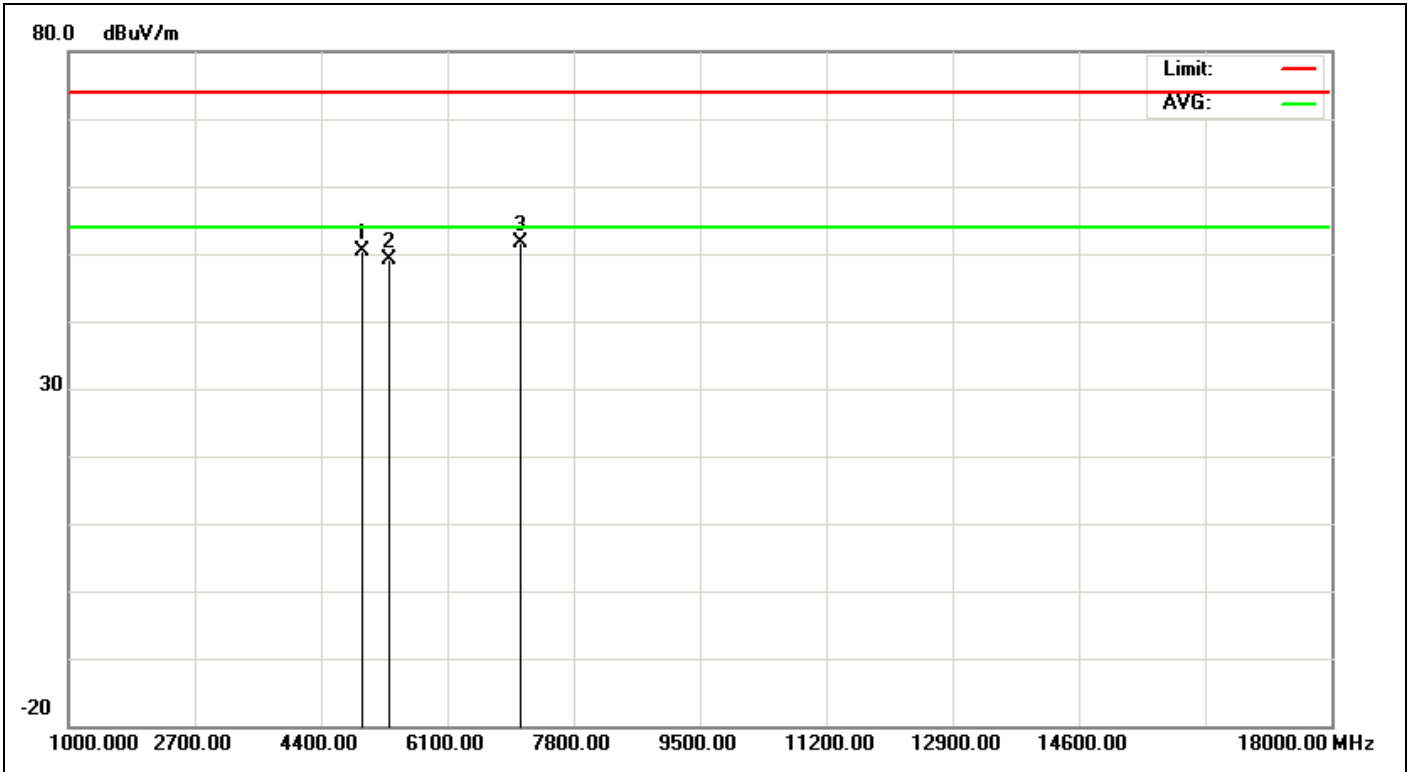
<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Horizontal
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/2/6 AM 09:11:56
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	21(°C)/55%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2445		
<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	4903.000	-3.67	52.26	48.59	74.00	-25.41	peak	100	360	
2	6889.000	5.41	45.56	50.97	74.00	-23.03	peak	100	360	
3	6454.000	4.74	43.62	48.36	74.00	-25.64	peak	100	360	



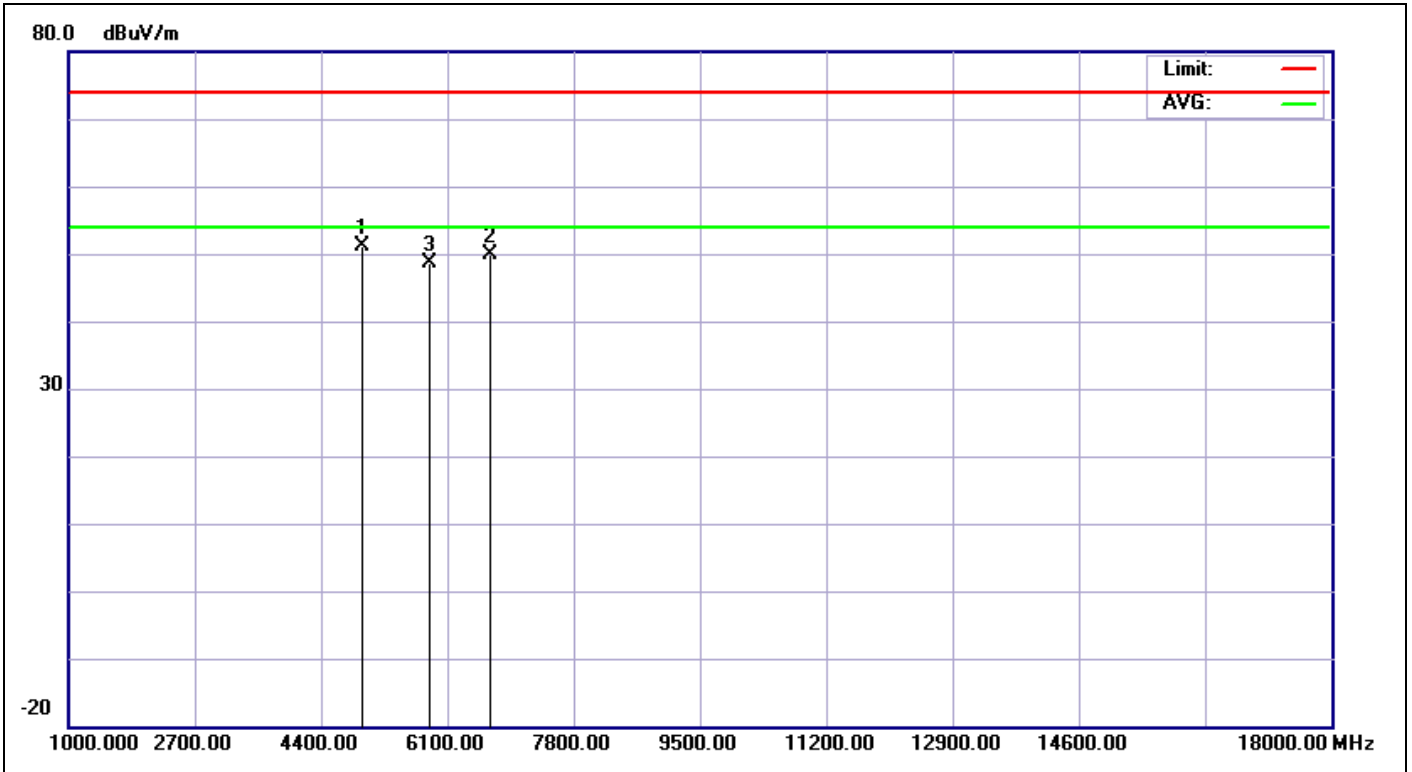
Service No.:	113154038-RF	Test Distance:	3M
Test Standard:	FCC above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2013/2/6 AM 09:13:38
Applicant:	Schneider Electric	Test Rating:	AC 120V/60Hz
Product:	ZigBee device	Temp.(°C)/Hum.(%):	21(°C)/55%
Model No.:	EZI	Test Engineer:	Hugo Chang
Test Mode:	CH2445		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4903.000	-3.67	54.46	50.79	74.00	-23.21	peak	100	0	
2	6426.000	4.62	42.99	47.61	74.00	-26.39	peak	100	0	
3	6671.000	5.14	44.75	49.89	74.00	-24.11	peak	100	0	



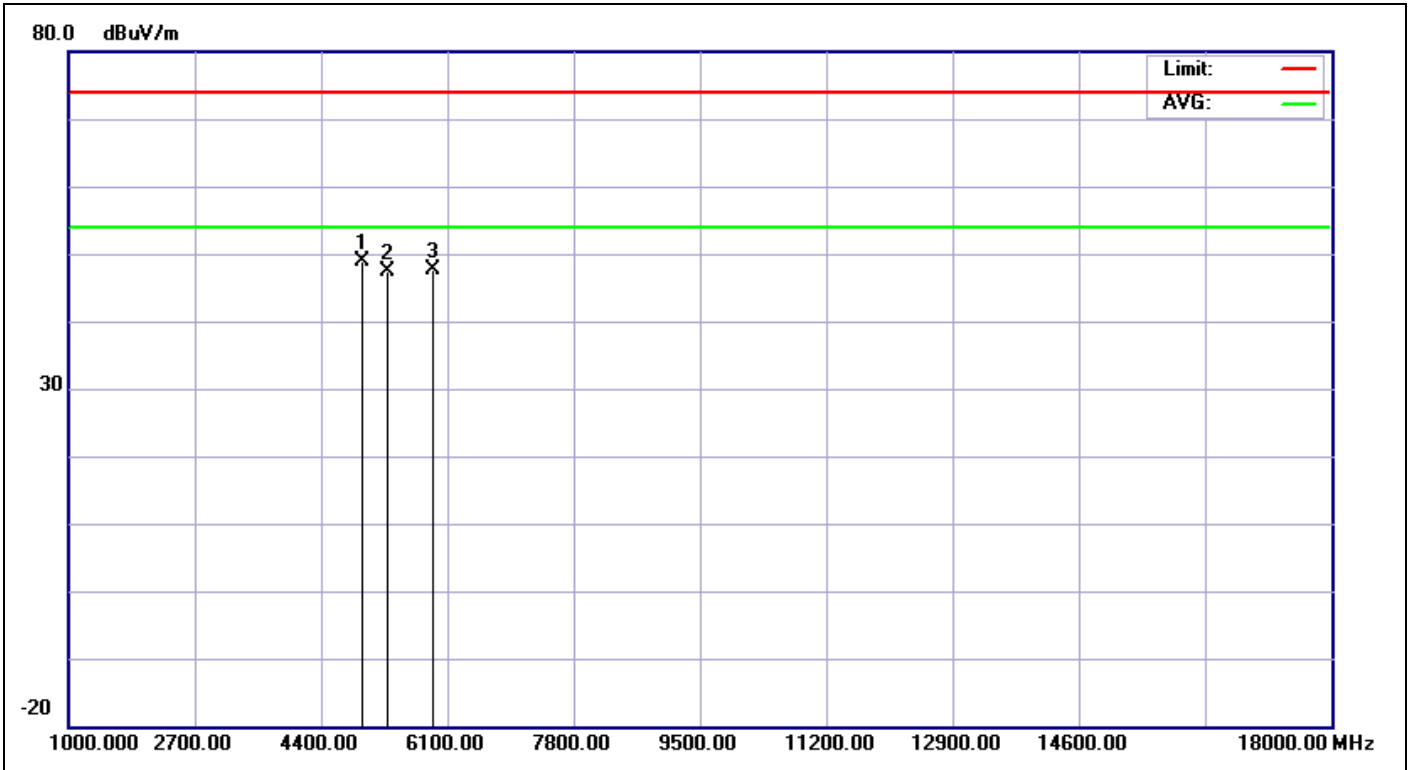
<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Horizontal
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/3/26 AM 09:10:07
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	20(°C)/58%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2475		
<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	4958.000	-0.14	50.45	50.31	74.00	-23.69	peak	100	360	
2	5311.000	1.35	47.66	49.01	74.00	-24.99	peak	100	360	
3	7079.000	7.41	44.33	51.74	74.00	-22.26	peak	100	360	



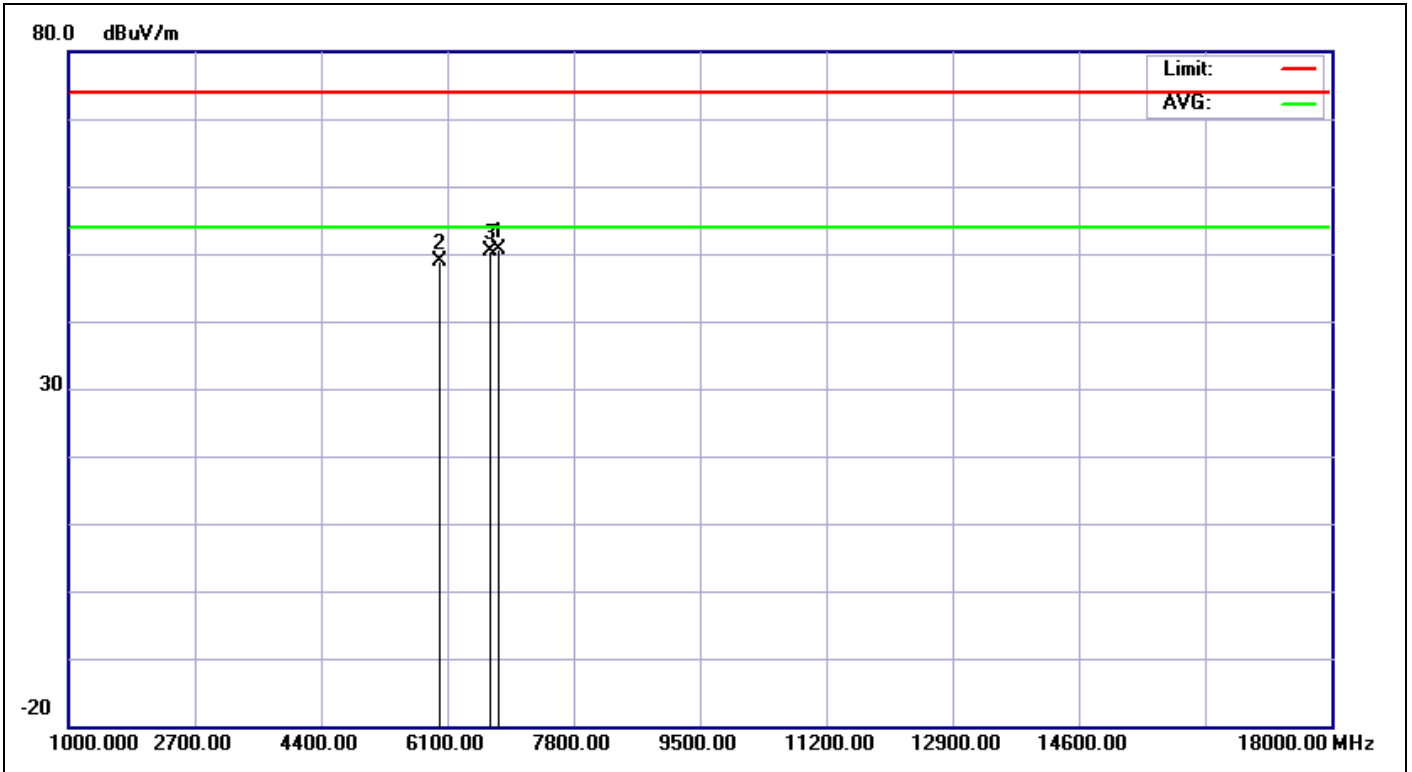
<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Vertical
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/3/26 AM 09:12:14
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	20(°C)/58%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2475		
<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	4958.000	-0.14	51.15	51.01	74.00	-22.99	peak	100	0	
2	6671.000	6.05	43.84	49.89	74.00	-24.11	peak	100	0	
3	5855.000	3.68	45.01	48.69	74.00	-25.31	peak	100	0	



<b>Service No.:</b>	<b>113154038-RF</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>2013/1/28 PM 04:56:50</b>
<b>Applicant:</b>	<b>Schneider Electric</b>	<b>Test Rating:</b>	<b>AC 120V/60Hz</b>
<b>Product:</b>	<b>ZigBee device</b>	<b>Temp.(°C)/Hum.(%):</b>	<b>20(°C)/56%</b>
<b>Model No.:</b>	<b>EZI</b>	<b>Test Engineer:</b>	<b>Hugo Chang</b>
<b>Test Mode:</b>	<b>CH2480</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	4947.000	-3.47	52.40	48.93	74.00	-25.07	peak	100	0	
2	5300.000	-1.63	48.98	47.35	74.00	-26.65	peak	100	0	
3	5899.000	2.11	45.47	47.58	74.00	-26.42	peak	100	0	



<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Vertical
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/1/28 PM 04:58:33
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	20(°C)/56%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2480		
<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	6796.000	5.30	45.28	50.58	74.00	-23.42	peak	100	360	
2	6008.000	2.81	46.15	48.96	74.00	-25.04	peak	100	360	
3	6688.000	5.16	45.26	50.42	74.00	-23.58	peak	100	360	

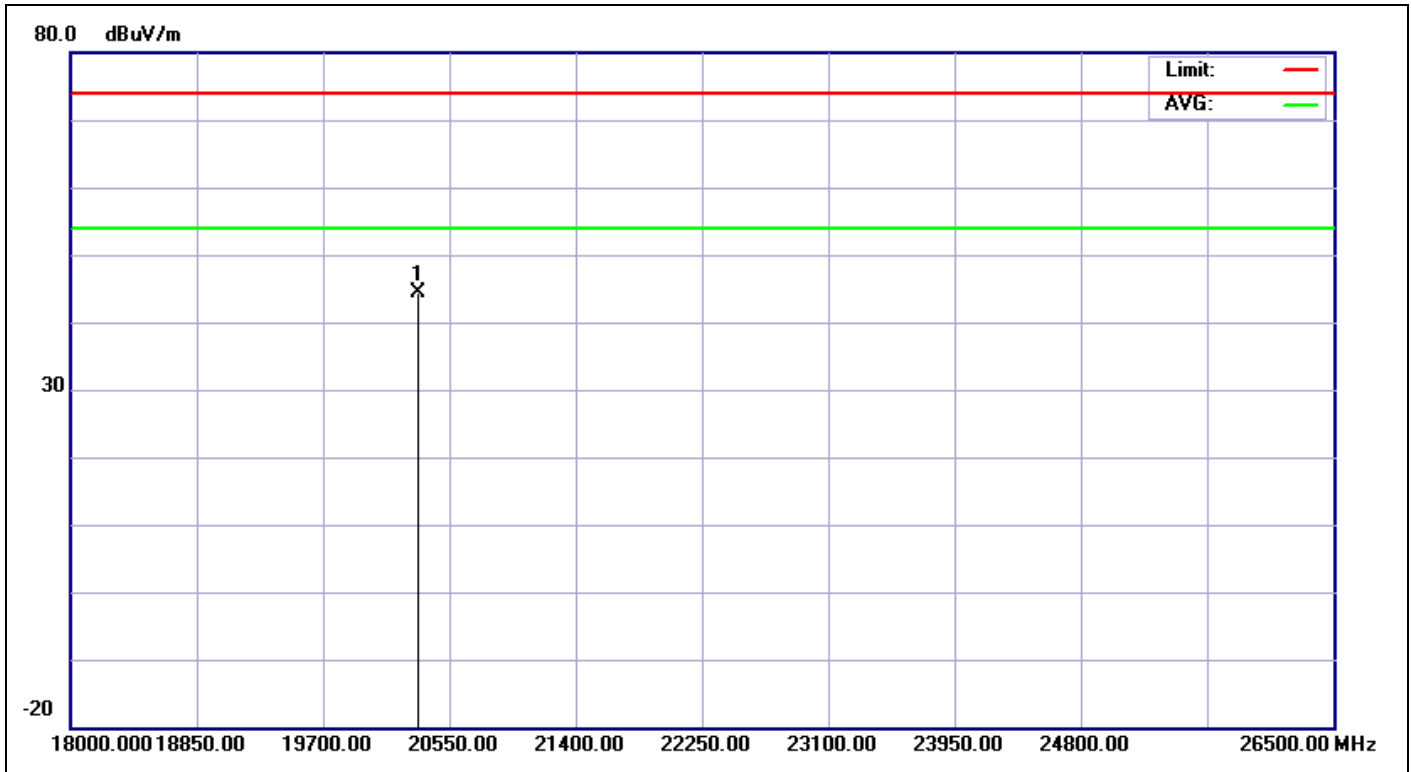
# Spurious Emissions, TX Mode, 18-26G



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

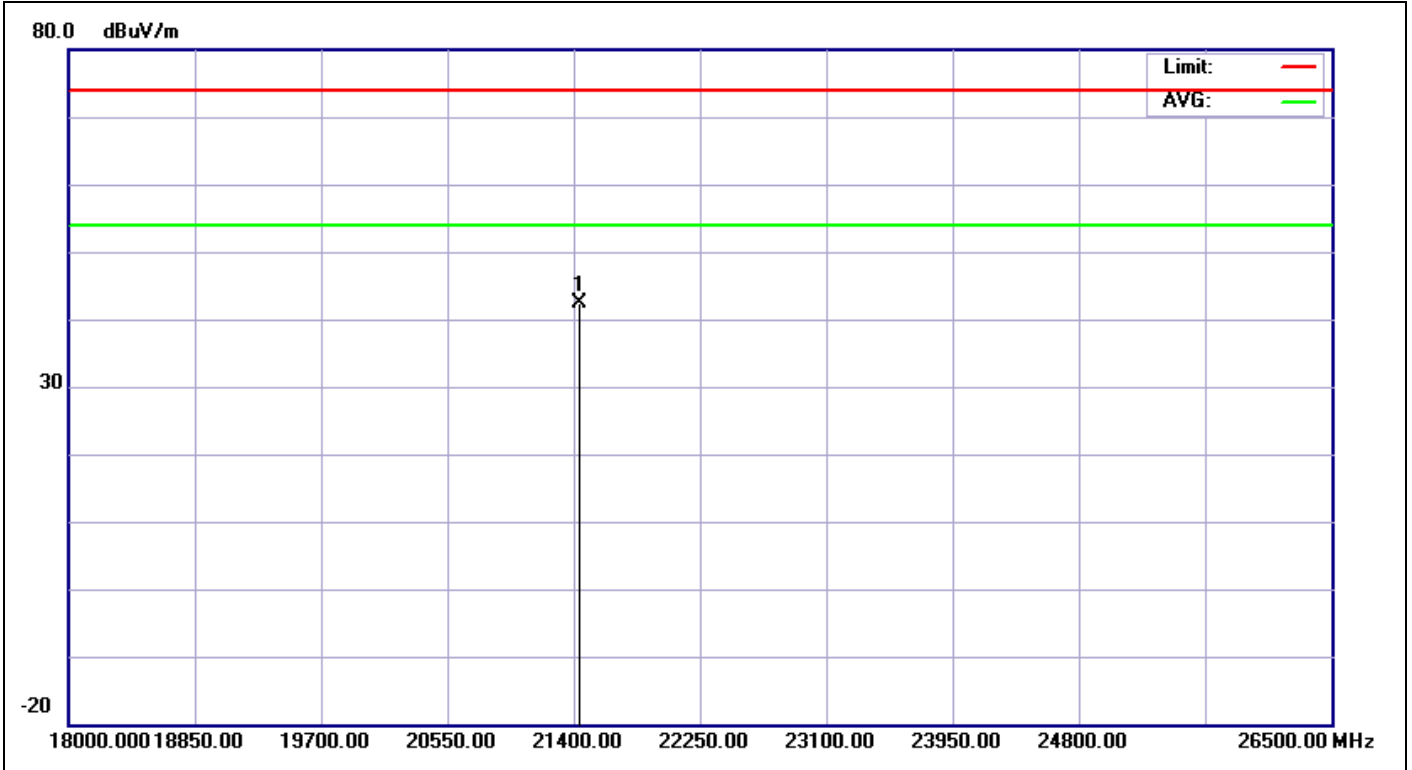
Tel:+886-2172-7000 fax:+886-2528-0018



<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Horizontal
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/1/28 PM 08:51:09
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	20(°C)/56%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2405		
<b>Remark:</b>			

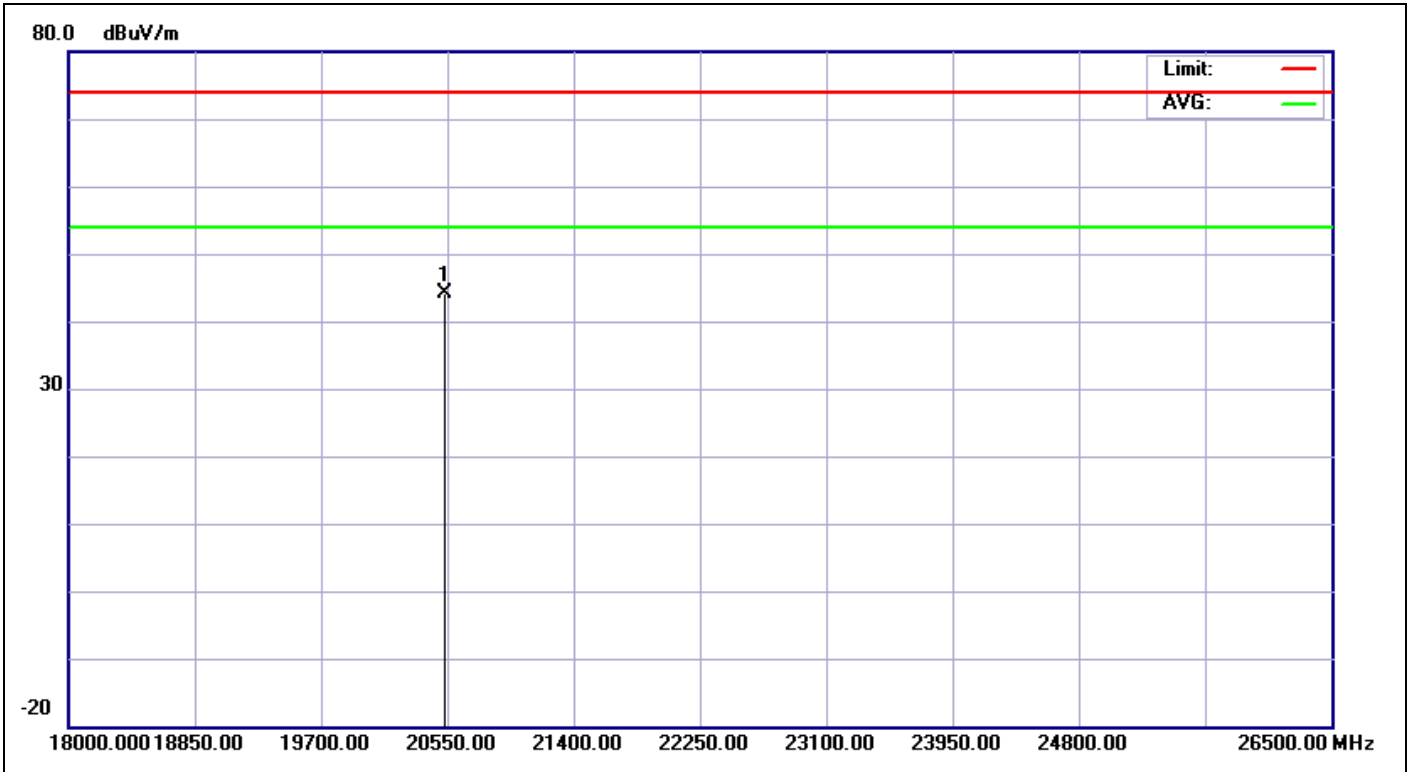
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20346.000	26.55	17.82	44.37	74.00	-29.63	peak	100	360	





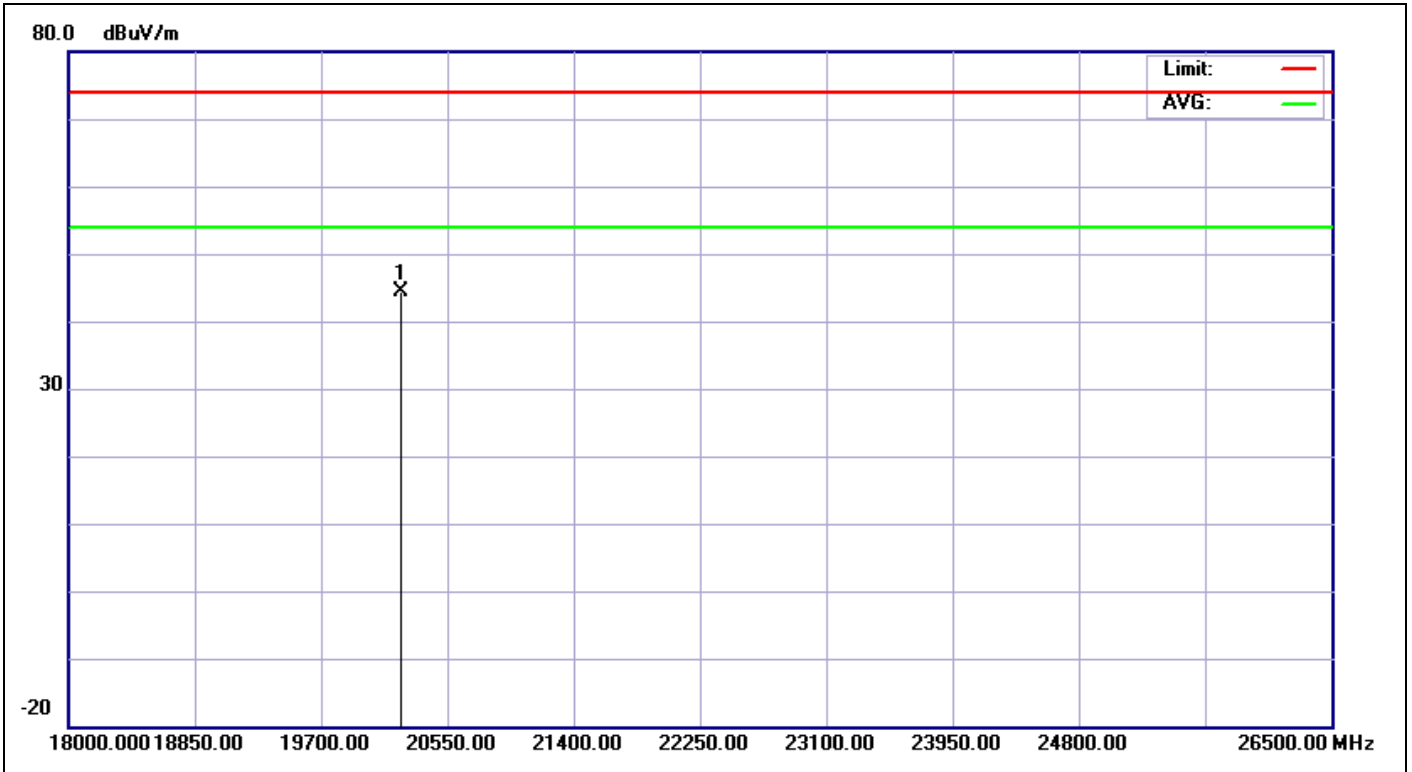
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<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Vertical
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/1/28 PM 08:52:04
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	20(°C)/56%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2405		
<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	21434.000	25.50	16.84	42.34	74.00	-31.66	peak	100	360	



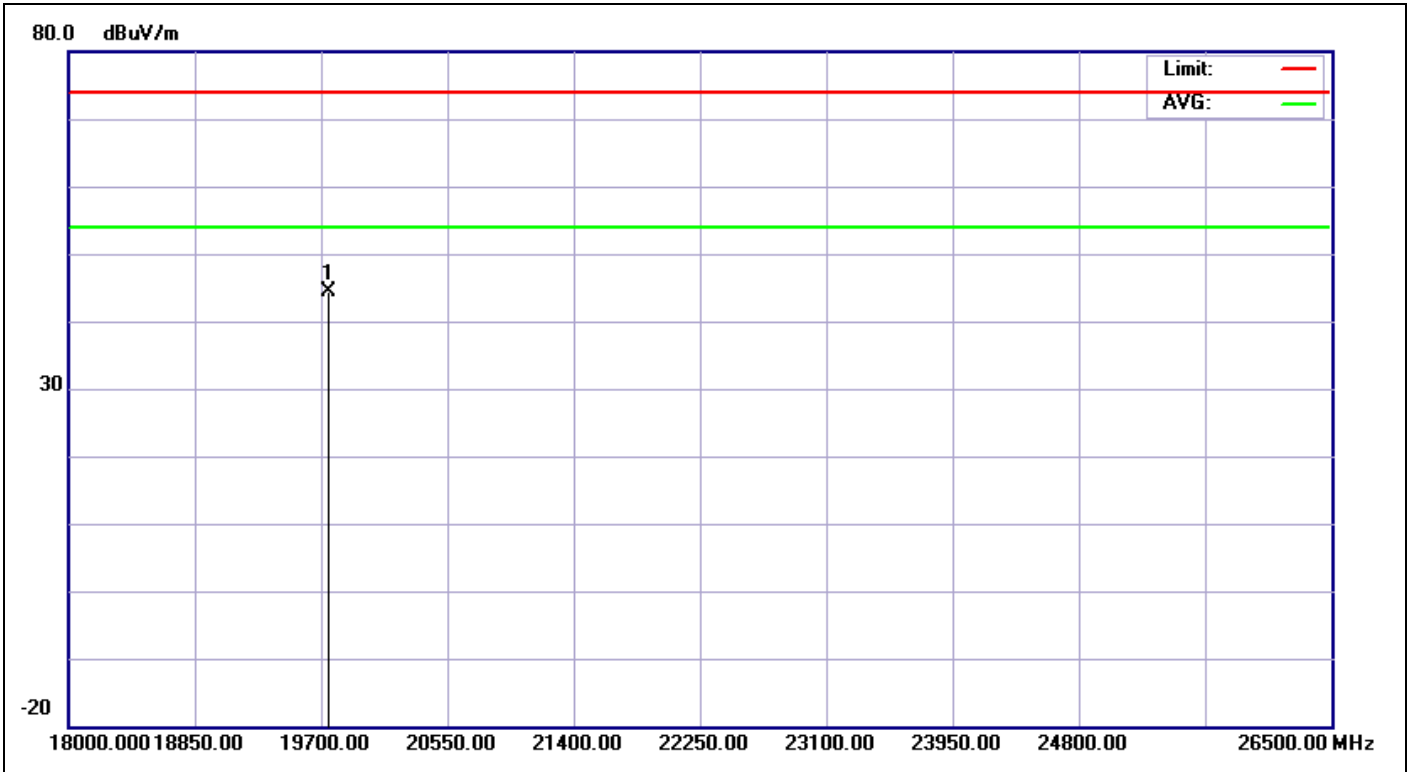
<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Horizontal
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/1/28 PM 08:52:48
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	20(°C)/56%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2445		
<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	20536.000	26.56	17.69	44.25	74.00	-29.75	peak	100	360	



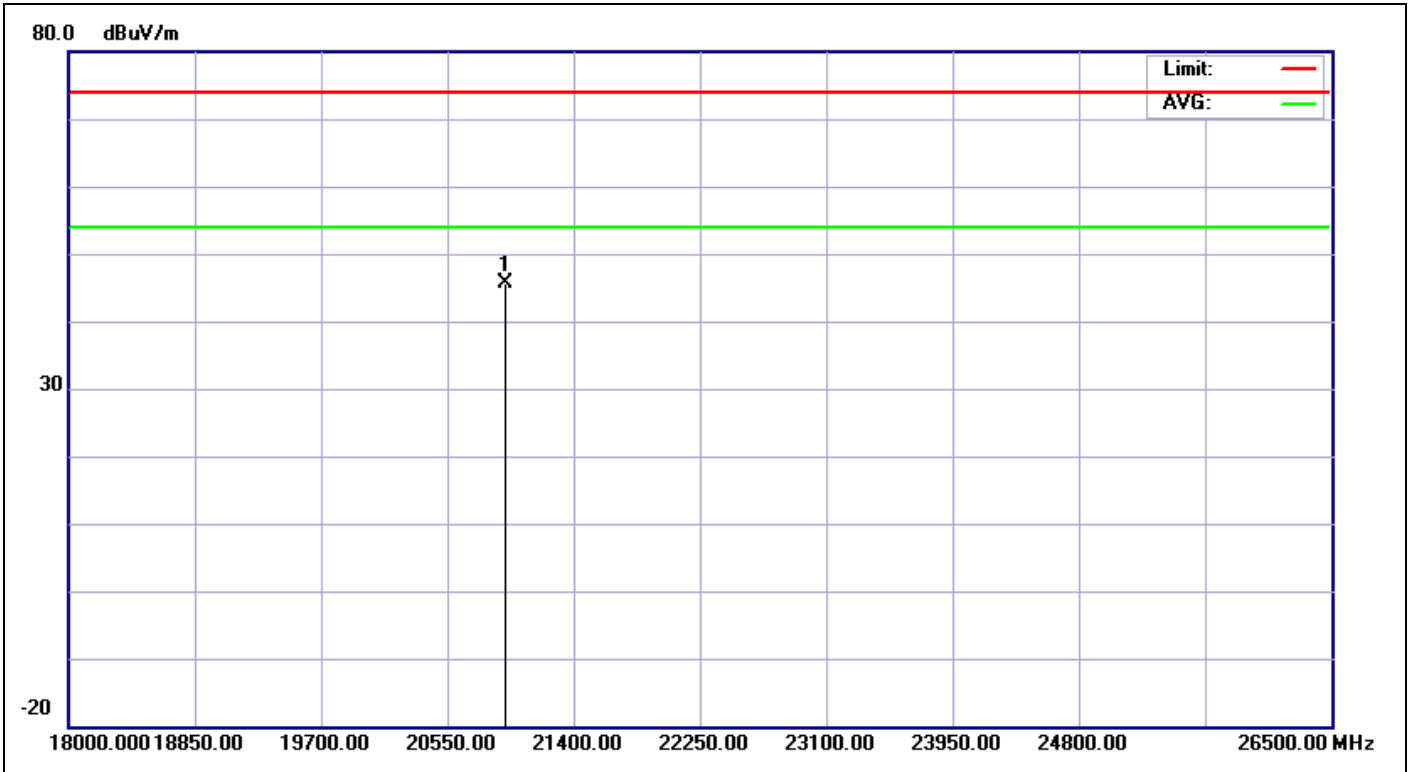
<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Vertical
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/1/28 PM 08:54:35
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	20(°C)/56%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2445		
<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	20237.000	26.47	17.90	44.37	74.00	-29.63	peak	100	360	



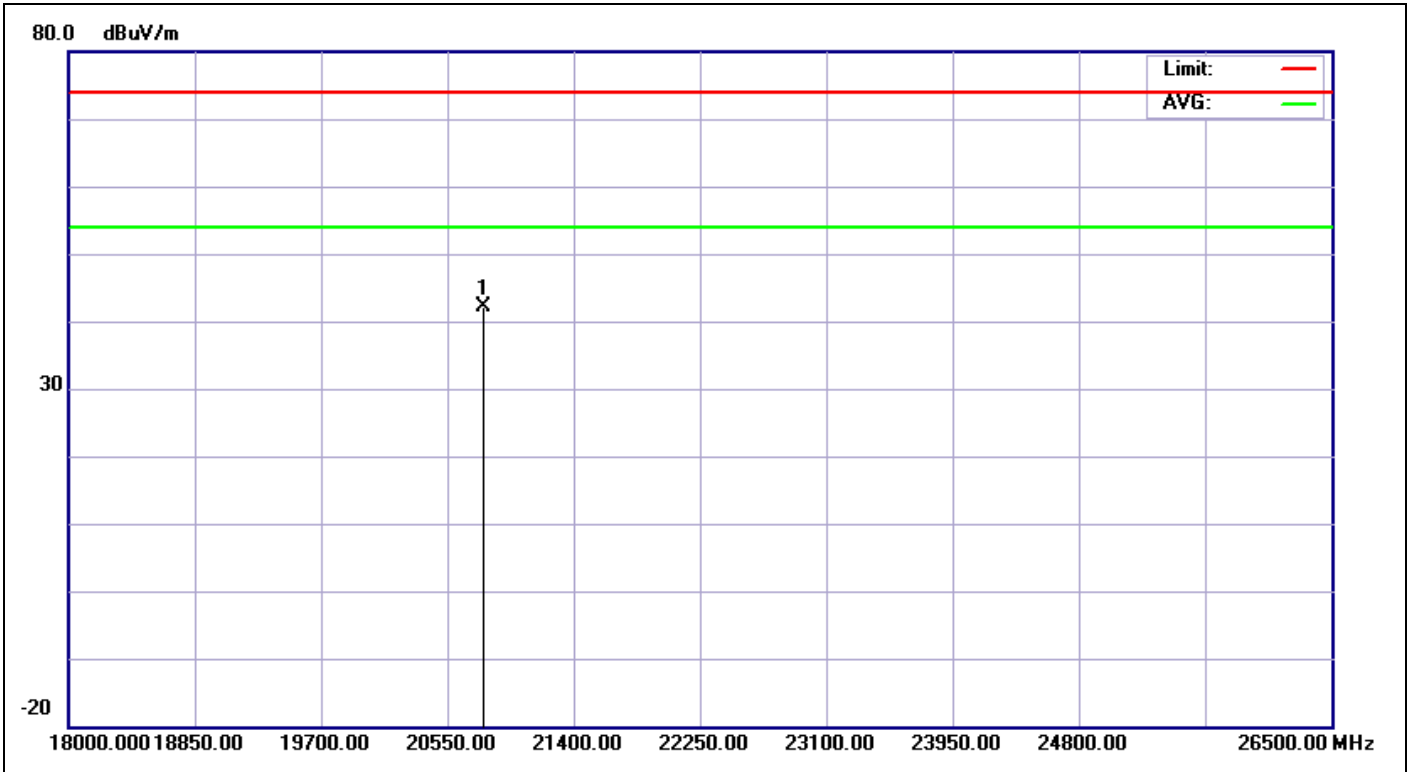
<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Horizontal
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/3/26 AM 09:30:38
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	20(°C)/58%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2475		
<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	19748.000	25.94	18.41	44.35	74.00	-29.65	peak	100	175	



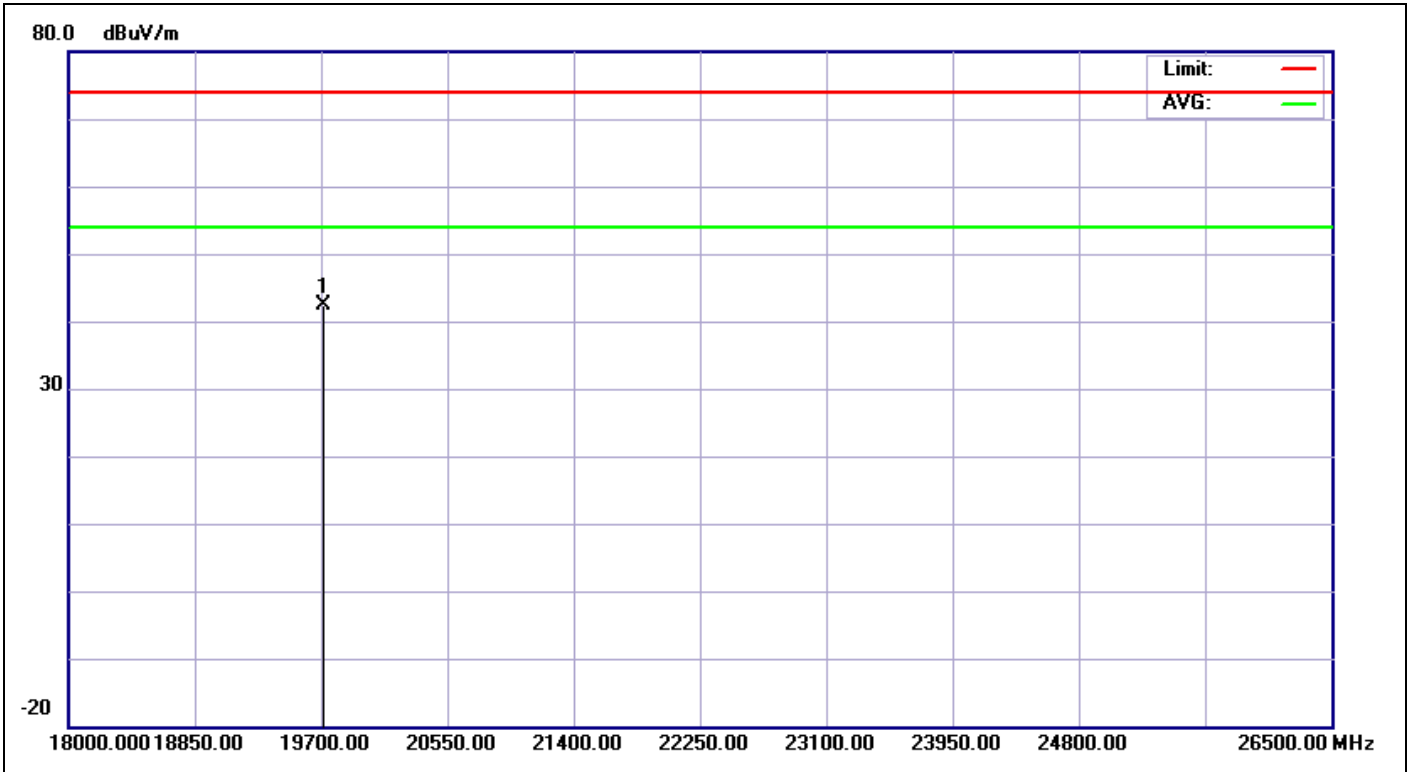
<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Vertical
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/3/26 AM 09:31:16
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	20(°C)/58%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2475		
<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	20944.000	25.31	20.21	45.52	74.00	-28.48	peak	100	175	



<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Horizontal
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/1/28 PM 08:55:03
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	20(°C)/56%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2480		
<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	20795.000	25.76	16.41	42.17	74.00	-31.83	peak	100	360	



<b>Service No.:</b>	113154038-RF	<b>Test Distance:</b>	3M
<b>Test Standard:</b>	FCC above 1G PEAK	<b>Ant. Polarization:</b>	Vertical
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2013/1/28 PM 08:55:33
<b>Applicant:</b>	Schneider Electric	<b>Test Rating:</b>	AC 120V/60Hz
<b>Product:</b>	ZigBee device	<b>Temp.(°C)/Hum.(%):</b>	20(°C)/56%
<b>Model No.:</b>	EZI	<b>Test Engineer:</b>	Hugo Chang
<b>Test Mode:</b>	CH2480		
<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	19720.000	25.90	16.44	42.34	74.00	-31.66	peak	100	360	

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



TUV Taiwan

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

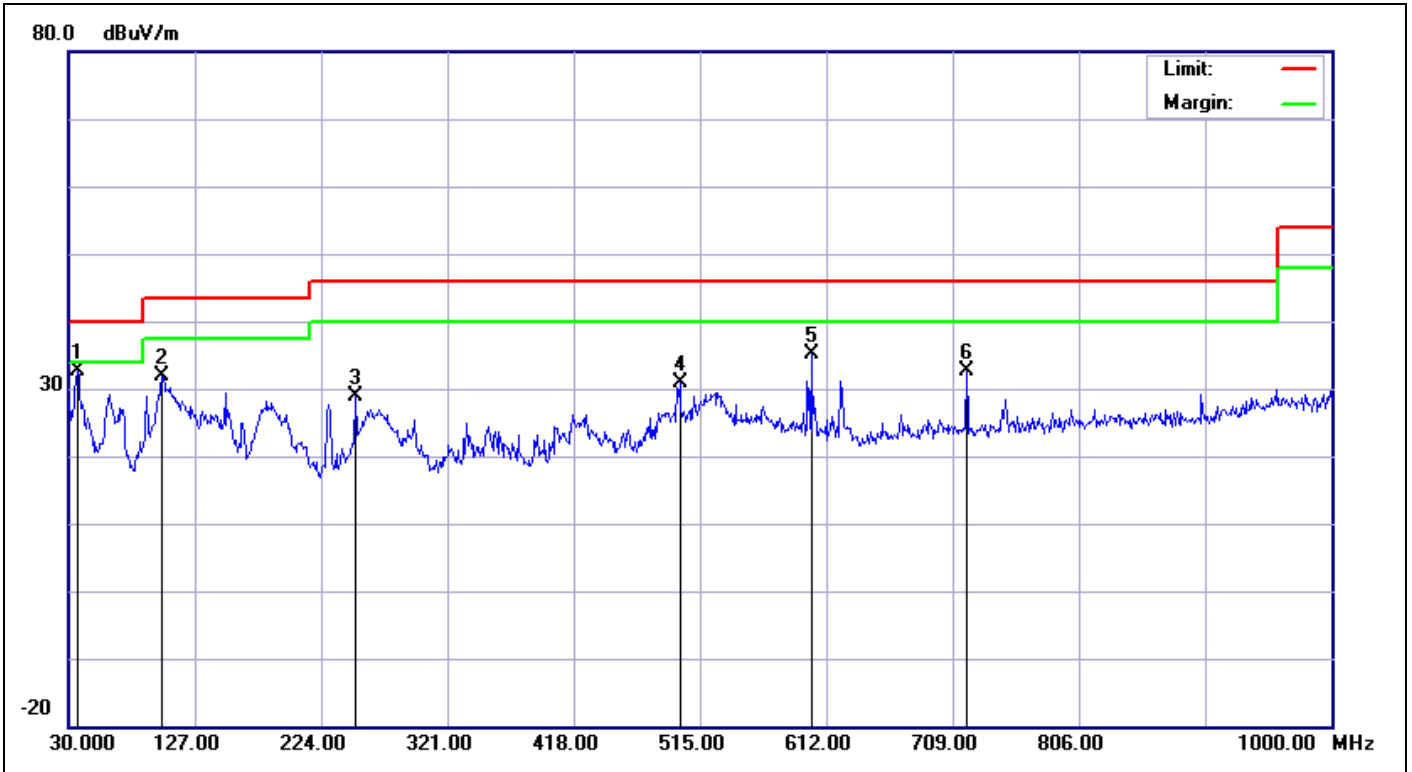
Tel:+886-2172-7000 fax:+886-2528-0018



Service No.:	113154038-RF	Test Distance:	3M
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2013/1/28 PM 07:21:48
Applicant:	Schneider Electric	Test Rating:	AC 120V/60Hz
Product:	ZigBee device	Temp.(°C)/Hum.(%):	20(°C)/56%
Model No.:	EZI	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	109.5400	-14.91	46.12	31.21	43.50	-12.29	QP			
2	181.3200	-16.04	49.33	33.29	43.50	-10.21	QP			
3	250.1900	-12.79	52.13	39.34	46.00	-6.66	QP			
4	271.5300	-11.74	48.73	36.99	46.00	-9.01	QP			
5	622.6700	-5.60	35.55	29.95	46.00	-16.05	QP			
6	719.6700	-4.30	35.59	31.29	46.00	-14.71	QP			

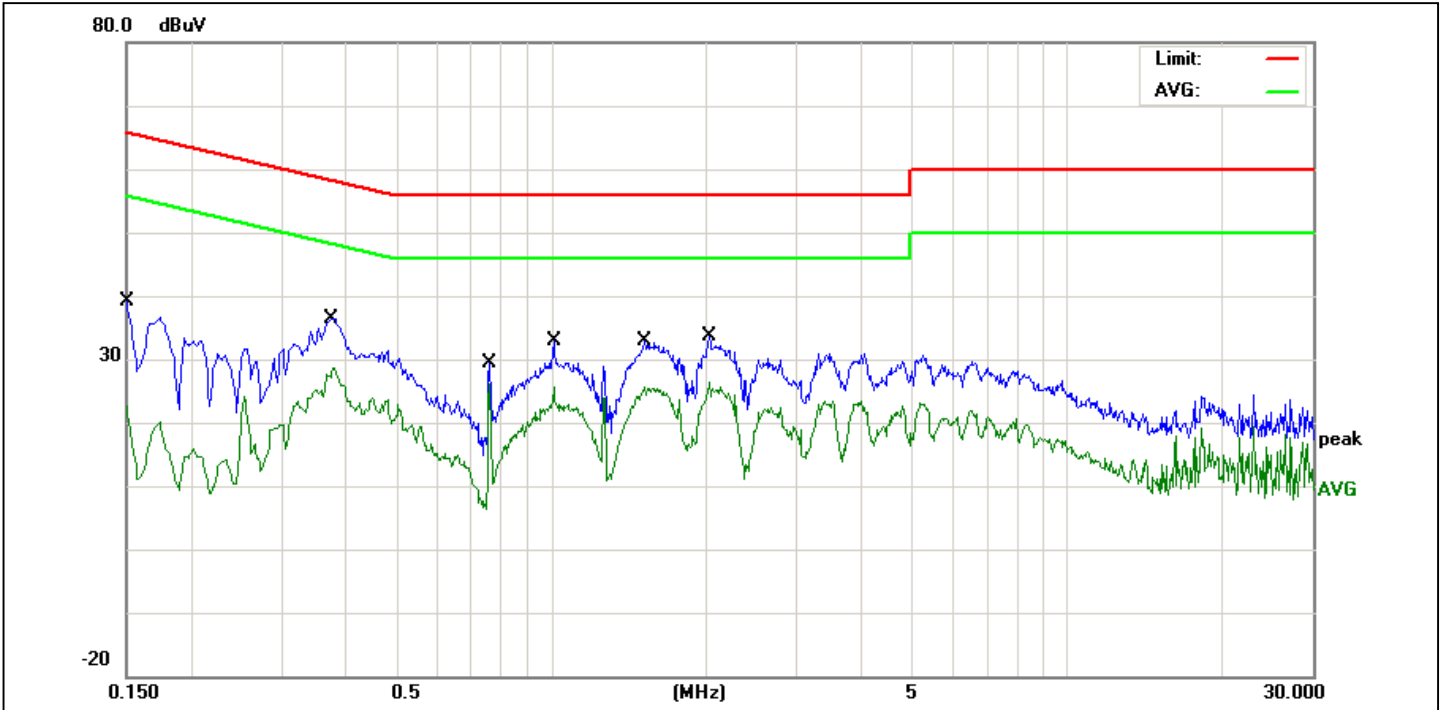




Service No.:	113154038-RF	Test Distance:	3M
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2013/1/28 PM 07:24:49
Applicant:	Schneider Electric	Test Rating:	AC 120V/60Hz
Product:	ZigBee device	Temp.(°C)/Hum.(%):	20(°C)/56%
Model No.:	EZI	Test 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	36.7900	-11.31	43.88	32.57	40.00	-7.43	QP			
2	101.7800	-15.70	47.50	31.80	43.50	-11.70	QP			
3	250.1900	-12.79	41.69	28.90	46.00	-17.10	QP			
4	499.4800	-7.61	38.60	30.99	46.00	-15.01	QP			
5	600.3600	-5.87	40.93	35.06	46.00	-10.94	QP			
6	719.6700	-4.30	36.81	32.51	46.00	-13.49	QP			

# Mains Spurious Emissions



Service No.: 113154038

Test Standard: FCC Part 15 Class B Conduction

Test item: Conducted Emission Phase: L1

Applicant: Schneider Electric Temp.(°C)/Hum.(%): 22(°C) / 53 %

Product: ZigBee device Power Rating: AC 120V/60Hz

Model No.: EZI Test Engineer: Hugo Chang

Test Mode: Normal Link

Remark:

No.	Frequency (MHz)	Factor (dBuV)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1500	9.55	27.66	37.21	65.99	-28.78	QP	P	
2	0.1500	9.55	10.63	20.18	55.99	-35.81	AVG	P	
3	0.3740	9.62	24.57	34.19	58.41	-24.22	QP	P	
4	0.3740	9.62	17.35	26.97	48.41	-21.44	AVG	P	
5	0.7620	9.60	17.20	26.80	56.00	-29.20	QP	P	
6	0.7620	9.60	16.18	25.78	46.00	-20.22	AVG	P	
7	1.0140	9.62	20.18	29.80	56.00	-26.20	QP	P	
8	1.0140	9.62	15.60	25.22	46.00	-20.78	AVG	P	
9	1.5220	9.61	22.24	31.85	56.00	-24.15	QP	P	
10	1.5220	9.61	17.53	27.14	46.00	-18.86	AVG	P	
11	2.0260	9.60	21.17	30.77	56.00	-25.23	QP	P	
12	2.0260	9.60	16.02	25.62	46.00	-20.38	AVG	P	

