

Test Report No.10048914 001

Appendix D: Radiated Emission Data

(File: 10048914AppendixD)

Contents

Spurious Emissions, Fundamental 2

Spurious Emissions, TX Mode, 1-10G..... 3

Spurious Emissions, TX Mode, 30M-1G 5

Spurious Emissions, Fundamental

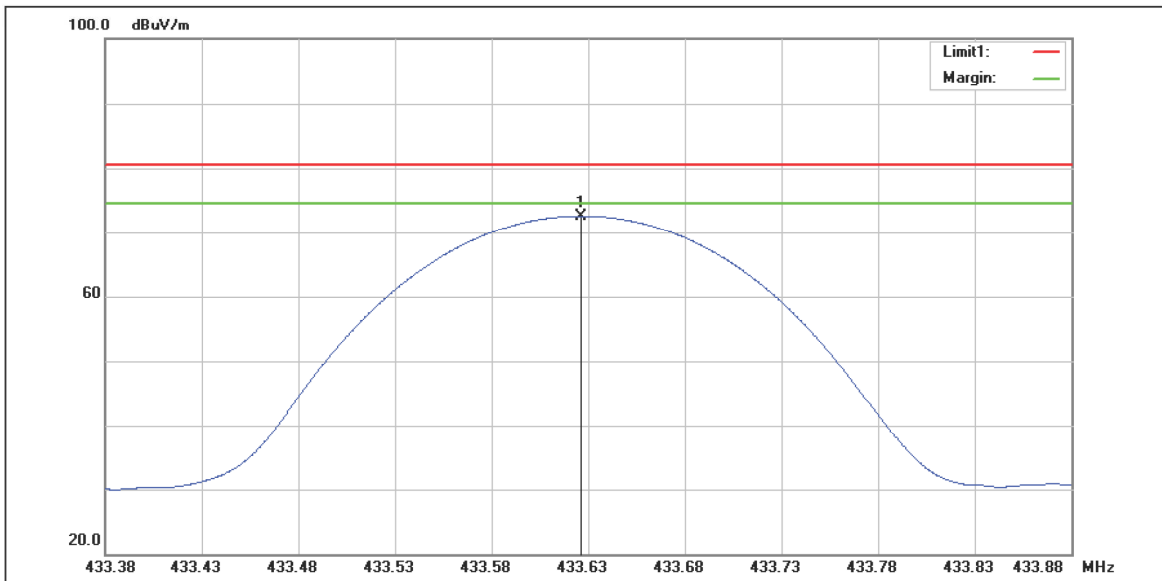


TUV Taiwan
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105
Tel:+886-2172-7000 fax:+886-2528-0018

Site: 966 Chamber

Test Time: 2015/6/12

11:44:27



Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC 15.231_field strength_3m(dBuV/m)	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Temp.(°C)/Hum.(%):	20.9(°C) / 54 %
Applicant:	Nedap	Test Rating:	
Product:	Windows Tag with SmartCard Booster	Test Engineer:	Freeman Wang
Model No.:	Smartcard Booster Ultimate		
Test Mode:	TX 433MHz		
Remark:	X		
	worst		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	433.6304	-8.22	80.81	72.59	80.52	-7.93	peak			P	

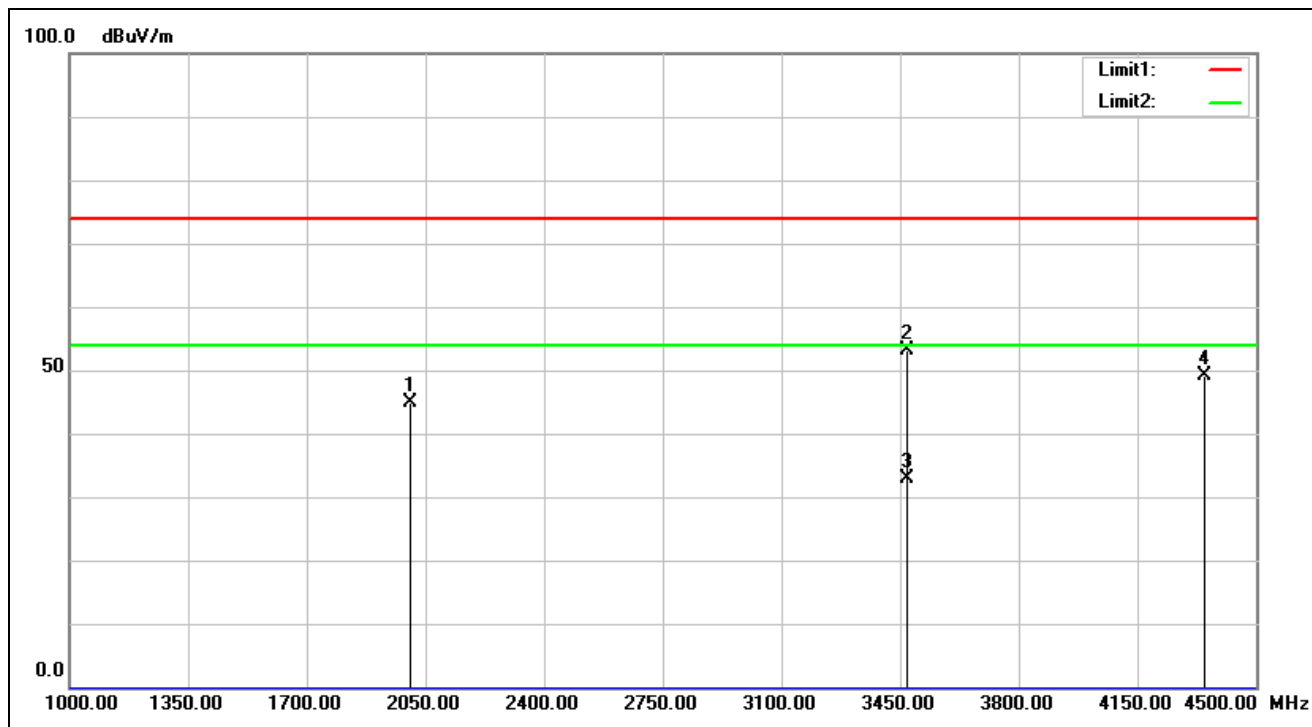
Spurious Emissions, TX Mode, 1-10G



TUV Taiwan

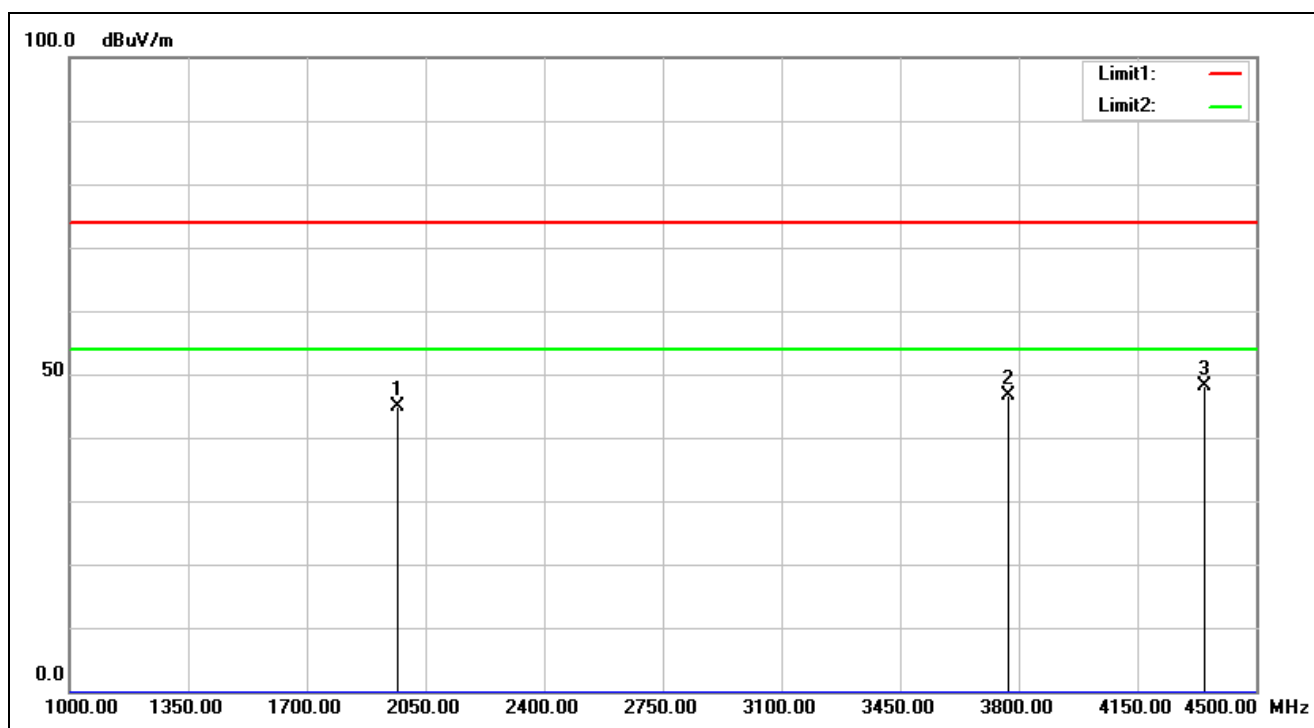
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/6/12 14:17:44
Applicant:	Nedap	Test Rating:	
Product:	Windows Tag with SmartCard Booster	Temp.(°C)/Hum.(%):	20.9(°C)/54%
Model No.:	Smartcard Booster Ultimate	Test Engineer:	Freeman Wang
Test Mode:	TX 433MHz		
Remark:	x		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	2004.500	-7.16	52.15	44.99	74.00	-29.01	peak	100	0	
2	3471.000	-5.54	58.62	53.08	74.00	-20.92	peak	100	244	
3	3471.000	-5.54	38.41	32.87	54.00	-21.13	AVG	100	244	
4	4346.000	-3.71	52.86	49.15	74.00	-24.85	peak	100	269	



Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/6/12 14:18:47
Applicant:	Nedap	Test Rating:	
Product:	Windows Tag with SmartCard Booster	Temp.(°C)/Hum.(%)	20.9(°C)/54%
Model No.:	Smartcard Booster Ultimate	Test Engineer:	Freeman Wang
Test Mode:	TX 433MHz		
Remark:	x		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1969.500	-7.35	52.30	44.95	74.00	-29.05	peak	100	312	
2	3768.500	-5.29	51.95	46.66	74.00	-27.34	peak	100	210	
3	4346.000	-3.71	51.88	48.17	74.00	-25.83	peak	100	19	

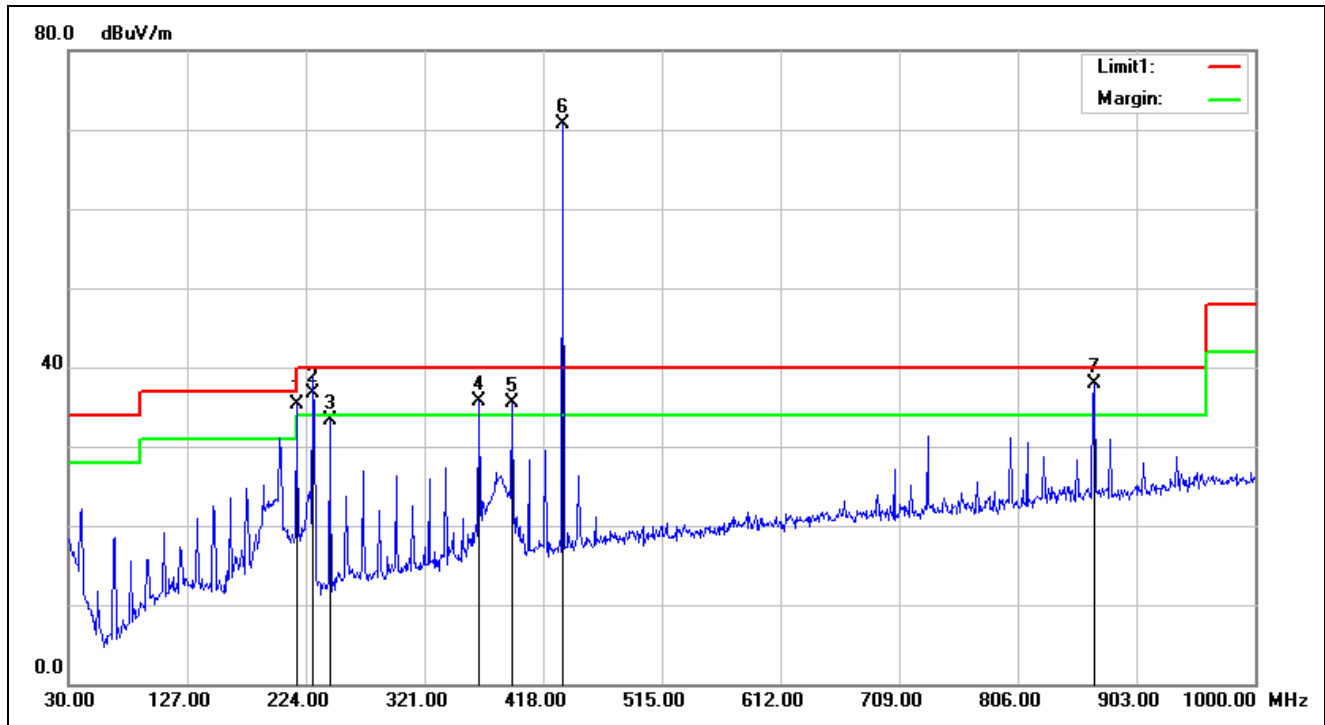
Spurious Emissions, TX Mode, 30M-1G



TUV Taiwan

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

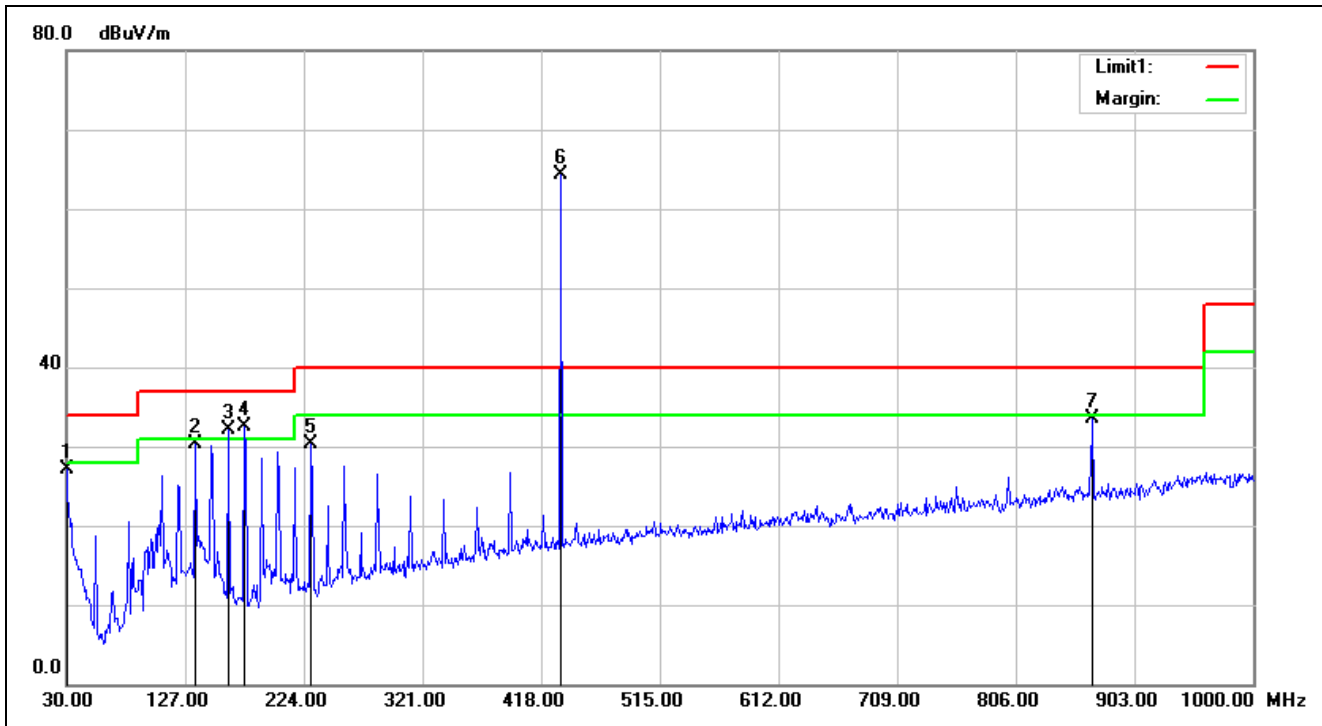
Tel:+886-2172-7000 fax:+886-2528-0018



Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC part 15.209	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/6/12 12:02:56
Applicant:	Nedap	Test Rating:	
Product:	Windows Tag with SmartCard Booster	Temp.(°C)/Hum.(%)	20.9(°C)/54%
Model No.:	Smartcard Booster Ultimate	Test Engineer:	Freeman Wang
Test Mode:	TX 433MHz		
Remark:	x		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	216.2400	-14.28	49.51	35.23	40.00	-4.77	peak	128	0	
2	229.8199	-13.54	50.24	36.70	40.00	-3.30	peak	128	0	
3	243.4000	-12.33	45.56	33.23	40.00	-6.77	peak	128	0	
4	365.6200	-9.16	44.82	35.66	40.00	-4.34	peak	100	14	
5	392.7799	-8.76	44.22	35.46	40.00	-4.54	peak	101	0	
6	433.5199	-8.23	78.92	70.69	40.00	30.69	peak	200	112	TX
7	869.0499	-2.30	40.11	37.81	40.00	-2.19	peak	120	0	

Spurious Emissions, Mains, 150kHz - 30MHz



Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC part 15.209	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/6/12 12:05:15
Applicant:	Nedap	Test Rating:	
Product:	Windows Tag with SmartCard Booster	Temp.(°C)/Hum.(%)	20.9(°C)/54%
Model No.:	Smartcard Booster Ultimate	Test Engineer:	Freeman Wang
Test Mode:	TX 433MHz		
Remark:	x		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.0000	-5.83	33.00	27.17	34.00	-6.83	peak	106	0	
2	134.7600	-12.63	42.85	30.22	37.00	-6.78	peak	100	144	
3	161.9200	-14.01	46.13	32.12	37.00	-4.88	peak	100	144	
4	175.5000	-15.24	47.75	32.51	37.00	-4.49	peak	100	324	
5	229.8200	-13.54	43.89	30.35	40.00	-9.65	peak	200	97	
6	434.4900	-8.20	72.45	64.25	40.00	24.25	peak	200	182	TX
7	869.0500	-2.30	35.87	33.57	40.00	-6.43	peak	200	264	