

Test Report No.10048923 001

Appendix D: Radiated and Mains Spurious Emission Data

(File: 10048923AppendixD)

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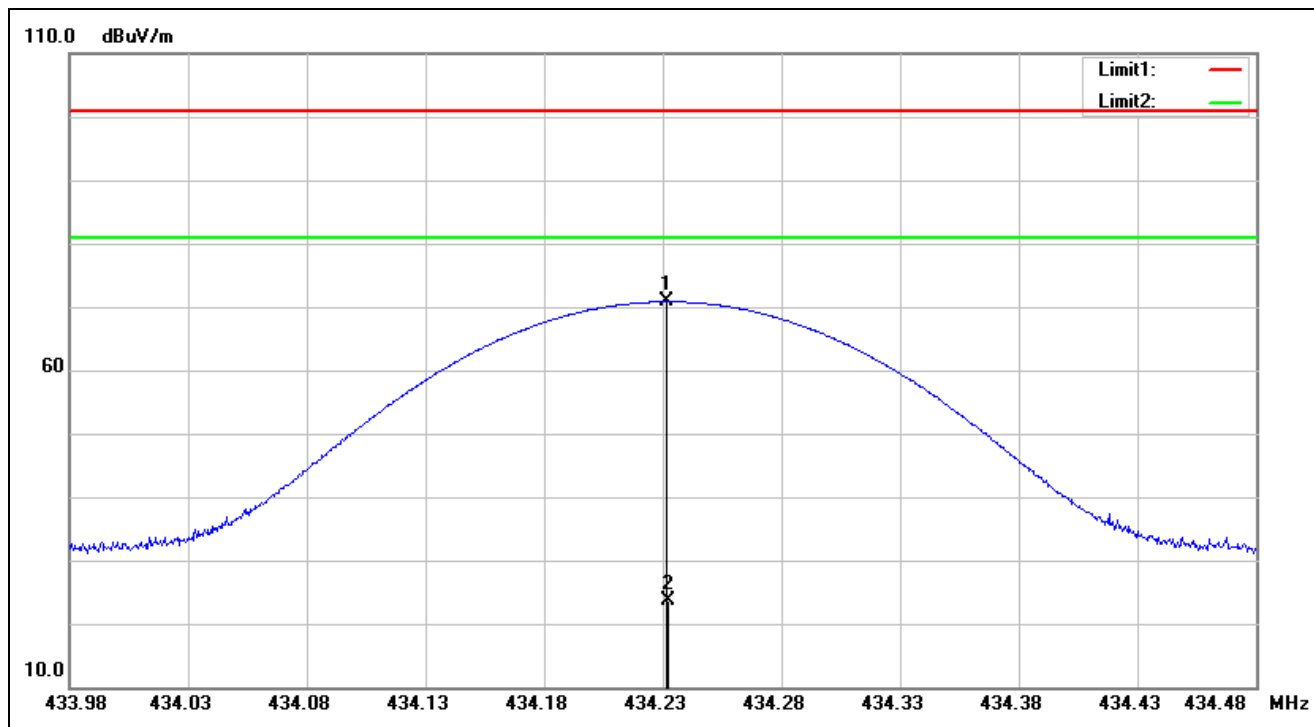
Emissions, Fundamental



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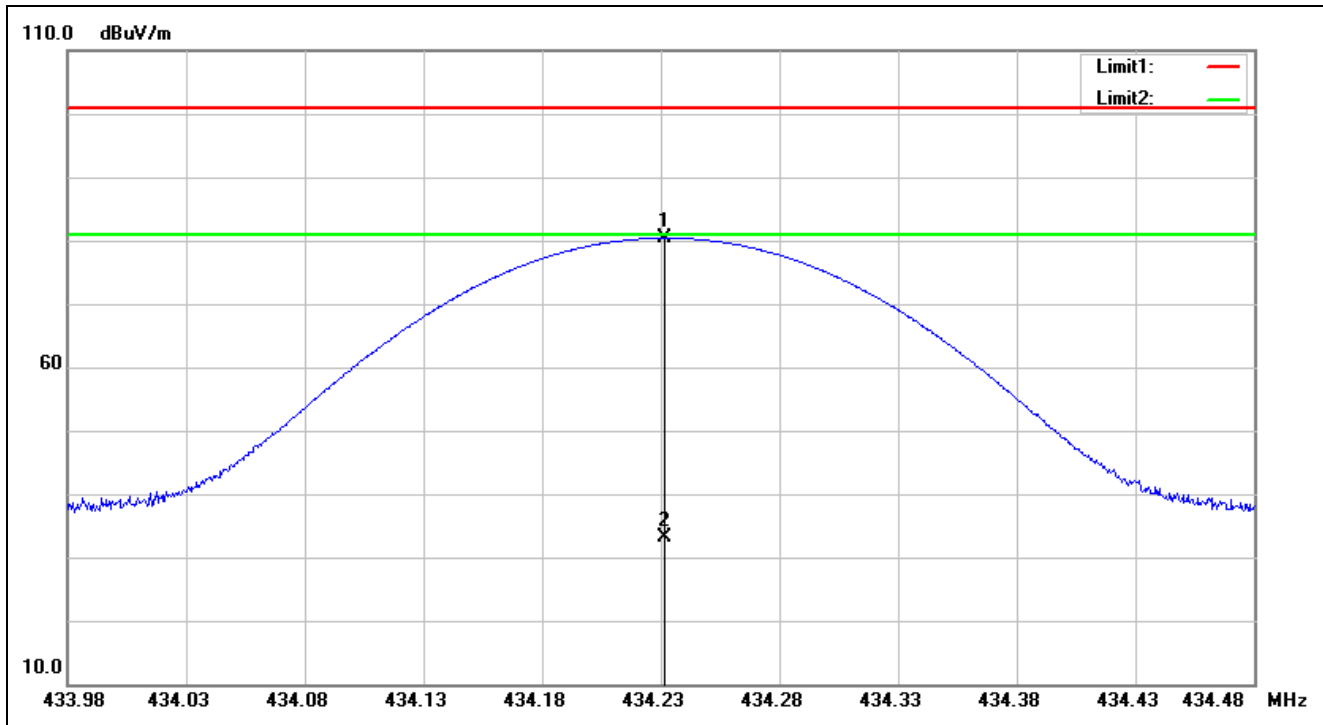
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Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC 15.231_field strength_3m_PK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/6/18 18:56:31
Applicant:	Nedap	Test Rating:	DC 3V
Product:	Window Tag Ultimate	Temp.(°C)/Hum.(%):	24.6(°C)/55%
Model No.:	9564314	Test Engineer:	Hugo Chang
Test Mode:	Fundamental Field Strength		
Remark:	Y		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	434.2307	-8.20	79.04	70.84	100.80	-29.96	peak		0	
2	434.2308	-8.20	31.94	23.74	80.80	-57.06	AVG	100	115	

Spurious Emissions, Fundamental



Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC 15.231_field strength_3m_PK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/6/18 18:57:42
Applicant:	Nedap	Test Rating:	DC 3V
Product:	Window Tag Ultimate	Temp.(°C)/Hum.(%)	24.6(°C)/55%
Model No.:	9564314	Test Engineer:	Hugo Chang
Test Mode:	Fundamental Field Strength		
Remark:	Y		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	434.2308	-8.20	88.62	80.42	100.80	-20.38	peak	100	115	
2	434.2308	-8.20	41.37	33.17	80.80	-47.63	AVG	100	115	

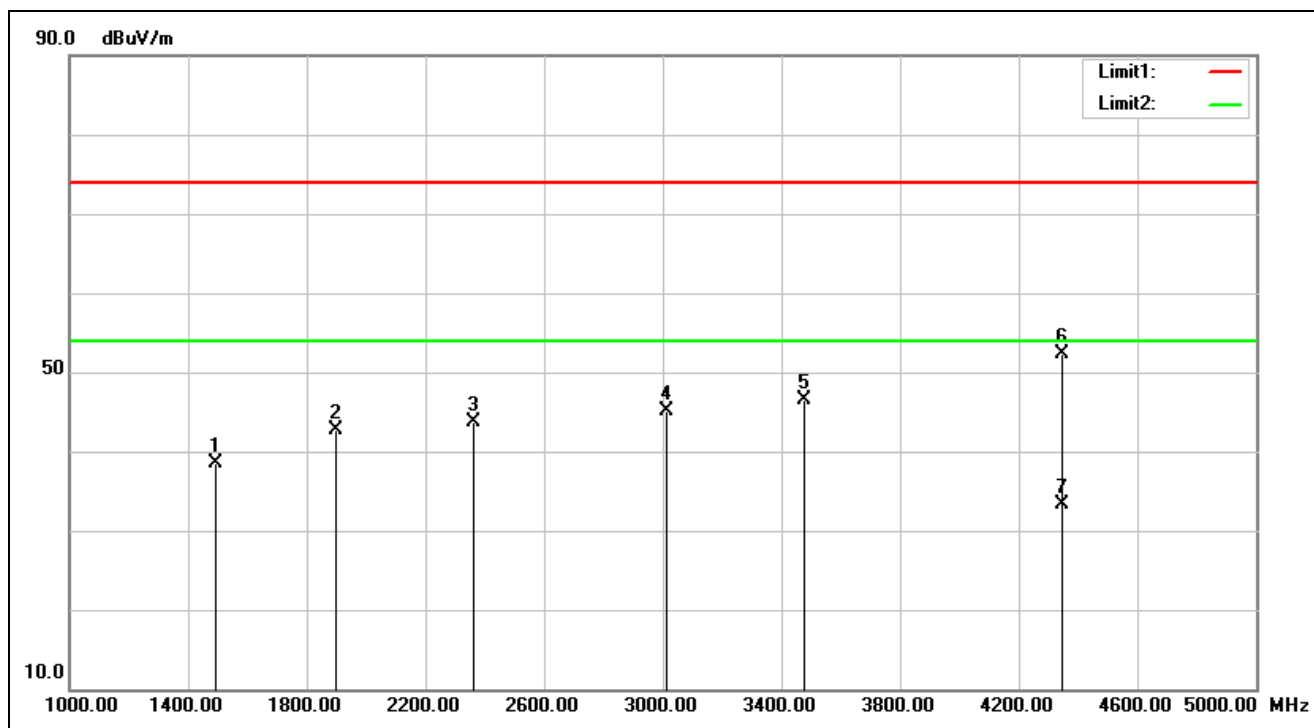
Spurious Emissions, TX Mode, 1-5G



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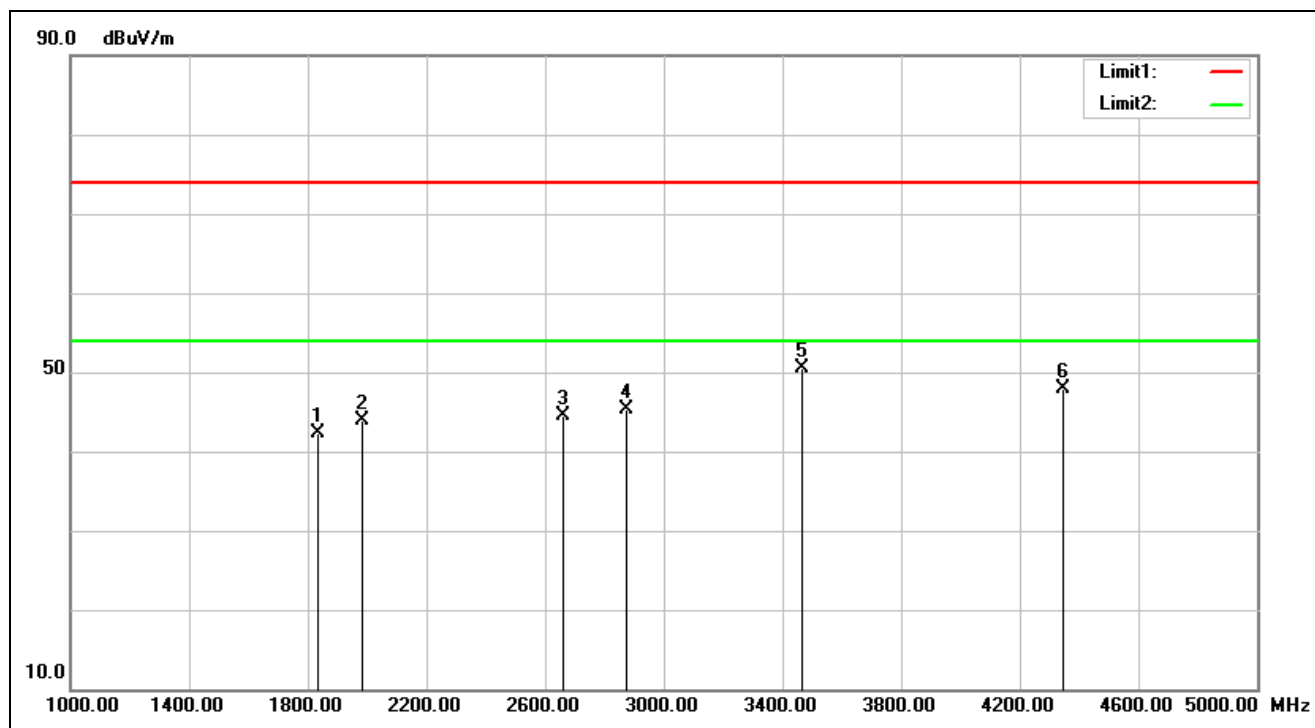
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Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/6/16 19:52:25
Applicant:	Nedap	Test Rating:	DC 3V
Product:	Window Tag Ultimate	Temp.(°C)/Hum.(%):	25.0(°C)/51%
Model No.:	9564314	Test Engineer:	Hugo Chang
Test Mode:	TX 433MHz		
Remark:	Y		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1492.000	-11.15	49.66	38.51	74.00	-35.49	peak	100	330	
2	1896.000	-8.76	51.41	42.65	74.00	-31.35	peak	100	106	
3	2364.000	-7.71	51.44	43.73	74.00	-30.27	peak	100	357	
4	3012.000	-6.55	51.68	45.13	74.00	-28.87	peak	100	130	
5	3476.000	-6.24	52.77	46.53	74.00	-27.47	peak	100	258	
6	4344.000	-4.11	56.41	52.30	74.00	-21.70	peak	100	359	
7	4344.000	-4.11	37.32	33.21	54.00	-20.79	AVG	100	359	

Spurious Emissions, TX Mode, 1-10G



Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/6/16 19:53:28
Applicant:	Nedap	Test Rating:	DC 3V
Product:	Window Tag Ultimate	Temp.(°C)/Hum.(%)	25.0(°C)/51%
Model No.:	9564314	Test Engineer:	Hugo Chang
Test Mode:	TX 433MHz		
Remark:	Y		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1836.000	-9.11	51.38	42.27	74.00	-31.73	peak	100	221	
2	1984.000	-8.22	52.17	43.95	74.00	-30.05	peak	100	42	
3	2660.000	-7.24	51.79	44.55	74.00	-29.45	peak	100	196	
4	2876.000	-6.80	52.09	45.29	74.00	-28.71	peak	100	64	
5	3468.000	-6.24	56.76	50.52	74.00	-23.48	peak	100	343	
6	4344.000	-4.11	52.06	47.95	74.00	-26.05	peak	100	102	

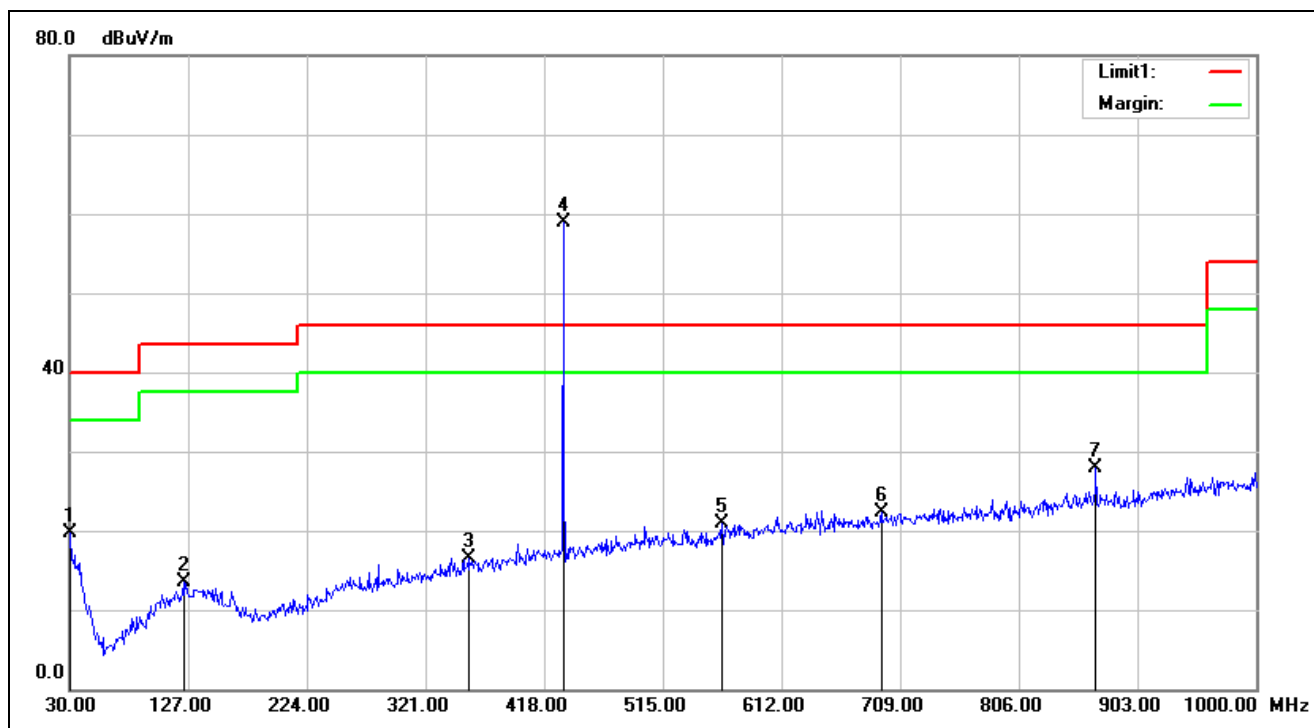
Spurious Emissions, TX Mode, 30M-1G



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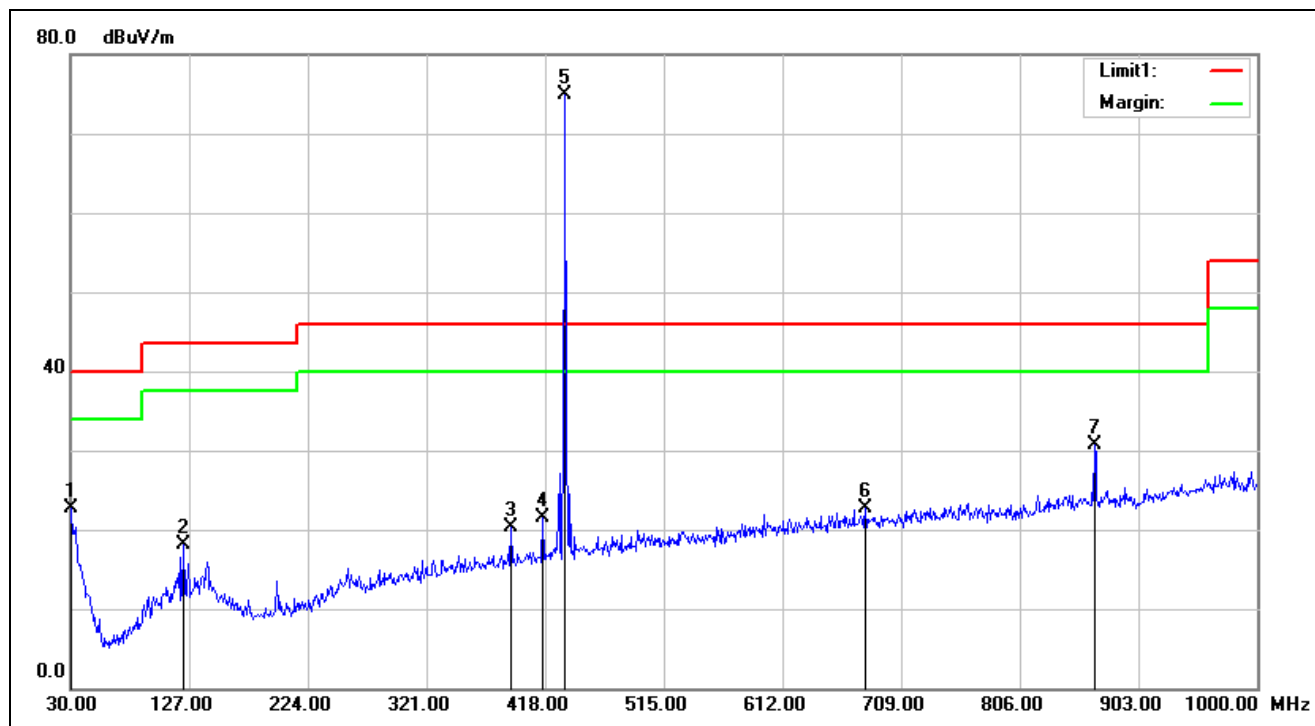
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Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/6/18 18:29:35
Applicant:	Nedap	Test Rating:	DC 3V
Product:	Window Tag Ultimate	Temp.(°C)/Hum.(%)	24.6(°C)/55%
Model No.:	9564314	Test Engineer:	Hugo Chang
Test Mode:	TX 433MHz		
Remark:	Y		

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	25.54	19.71	40.00	-20.29	peak	100	317	
2	123.1200	-12.87	26.43	13.56	43.50	-29.94	peak	100	51	
3	355.9200	-9.29	25.83	16.54	46.00	-29.46	peak	100	11	
4	433.5199	-8.23	67.19	58.96	46.00	12.96	peak	100	75	TX
5	563.5000	-6.69	27.55	20.86	46.00	-25.14	peak	100	325	
6	693.4800	-5.13	27.50	22.37	46.00	-23.63	peak	100	317	
7	869.0499	-2.30	30.14	27.84	46.00	-18.16	peak	100	272	

Spurious Emissions, TX Mode, 30M-1G



Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/6/30 21:55:20
Applicant:	Nedap	Test Rating:	DC 3V
Product:	Window Tag Ultimate	Temp.(°C)/Hum.(%)	21.6(°C)/53%
Model No.:	9564314	Test Engineer:	Hugo Chang
Test Mode:	TX 433MHz		
Remark:	Y		

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	28.61	22.78	40.00	-17.22	peak	100	288	
2	122.1500	-12.90	30.96	18.06	43.50	-25.44	peak	100	293	
3	389.8700	-8.80	29.19	20.39	46.00	-25.61	peak	100	254	
4	416.0600	-8.44	30.00	21.56	46.00	-24.44	peak	100	254	
5	434.4900	-8.20	83.08	74.88	46.00	28.88	peak	100	70	TX
6	679.9000	-5.21	27.85	22.64	46.00	-23.36	peak	100	336	
7	867.1100	-2.33	32.94	30.61	46.00	-15.39	peak	100	152	