

Test Report No.10048895 001

Appendix D: Radiated and Mains Spurious Emission Data

(File: 10048895AppendixD)

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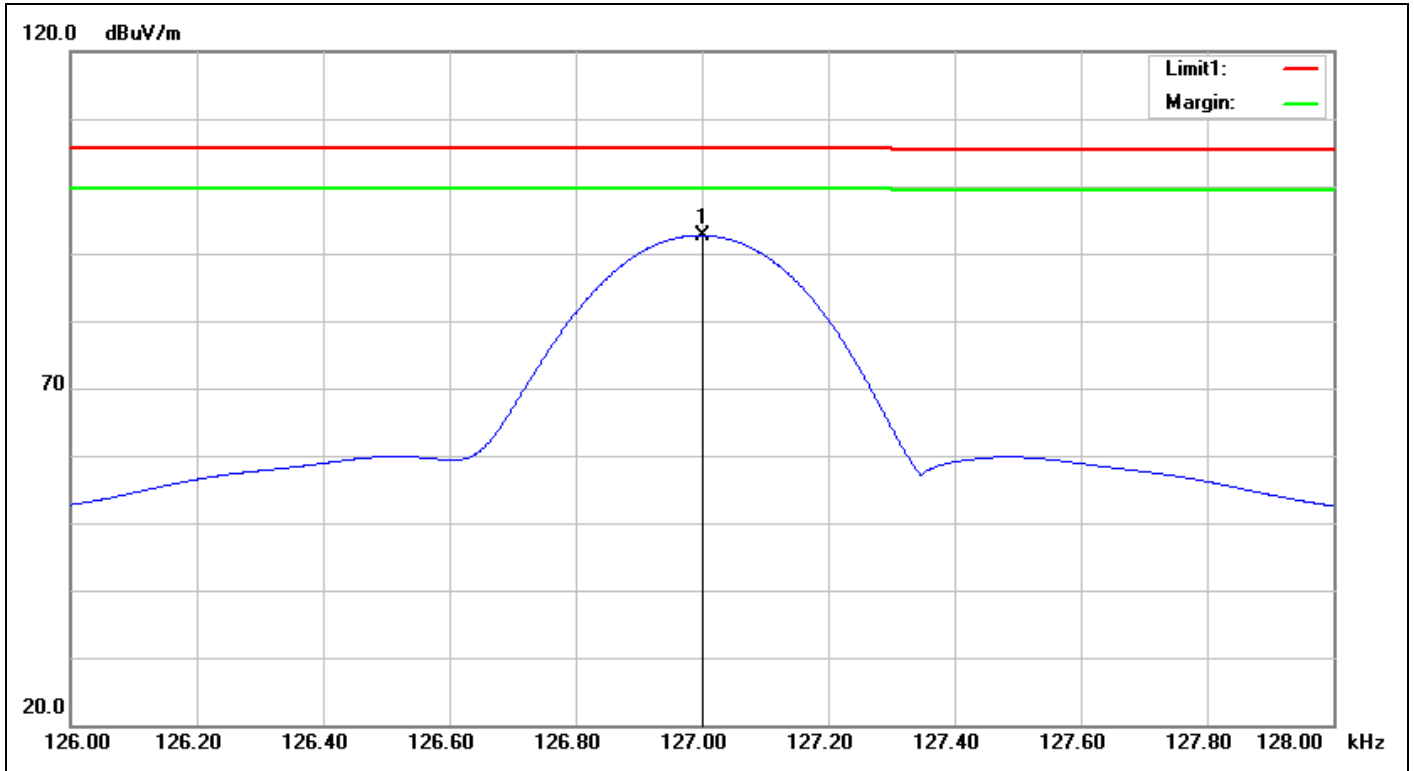
Spurious Emissions, Fundamental



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Service No.:	114031713-FCC	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2015/5/20 20:55:07
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Anti-Pilferage System	Temp.(°C)/Hum.(%):	23.1(°C)/51%
Model No.:	ASSY FC180R RF+MD	Test Engineer:	Hugo Chang
Test Mode:	Fundamental Field Strength		
Remark:	TX		
	125KHz		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.1270	19.24	73.44	92.68	105.52	-12.84	peak		0	

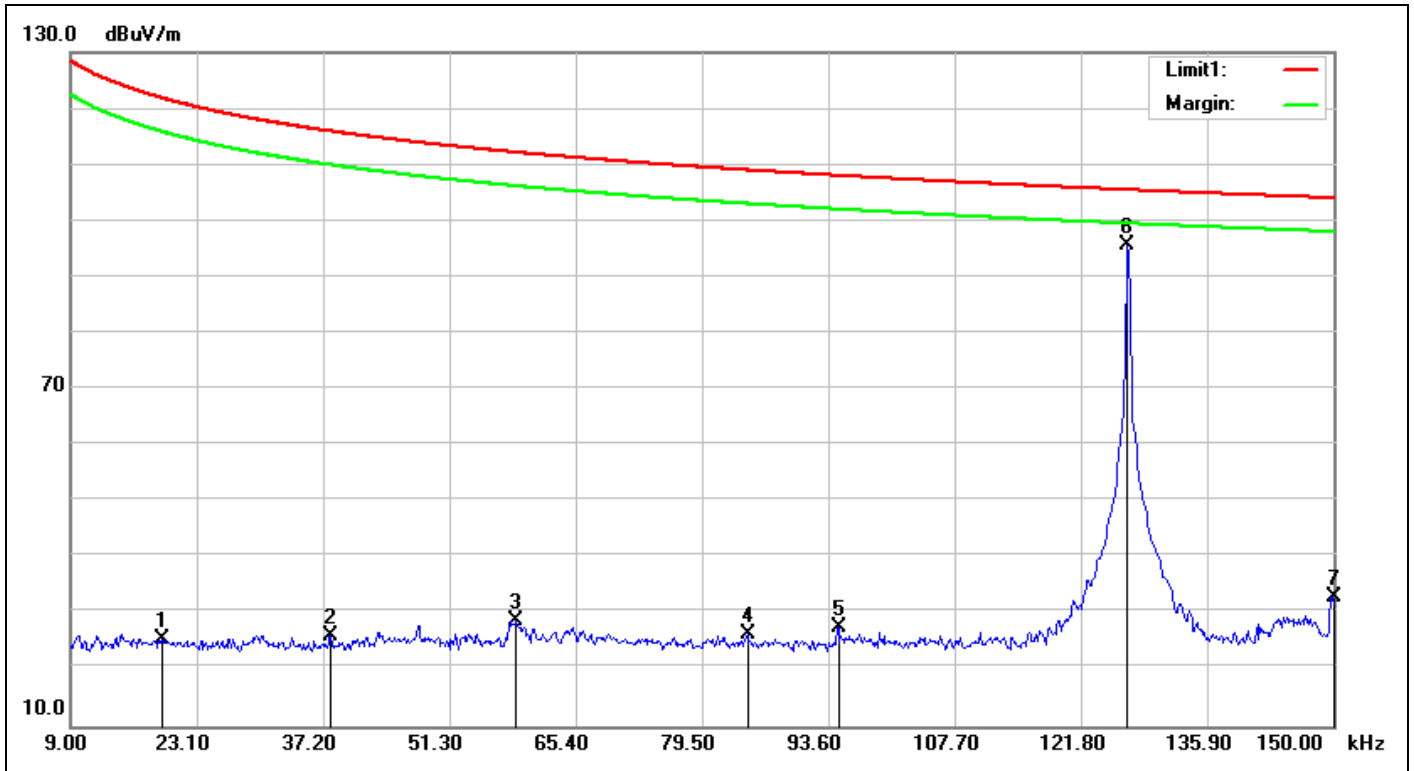
Spurious Emissions, TX Mode, 0.009-30M



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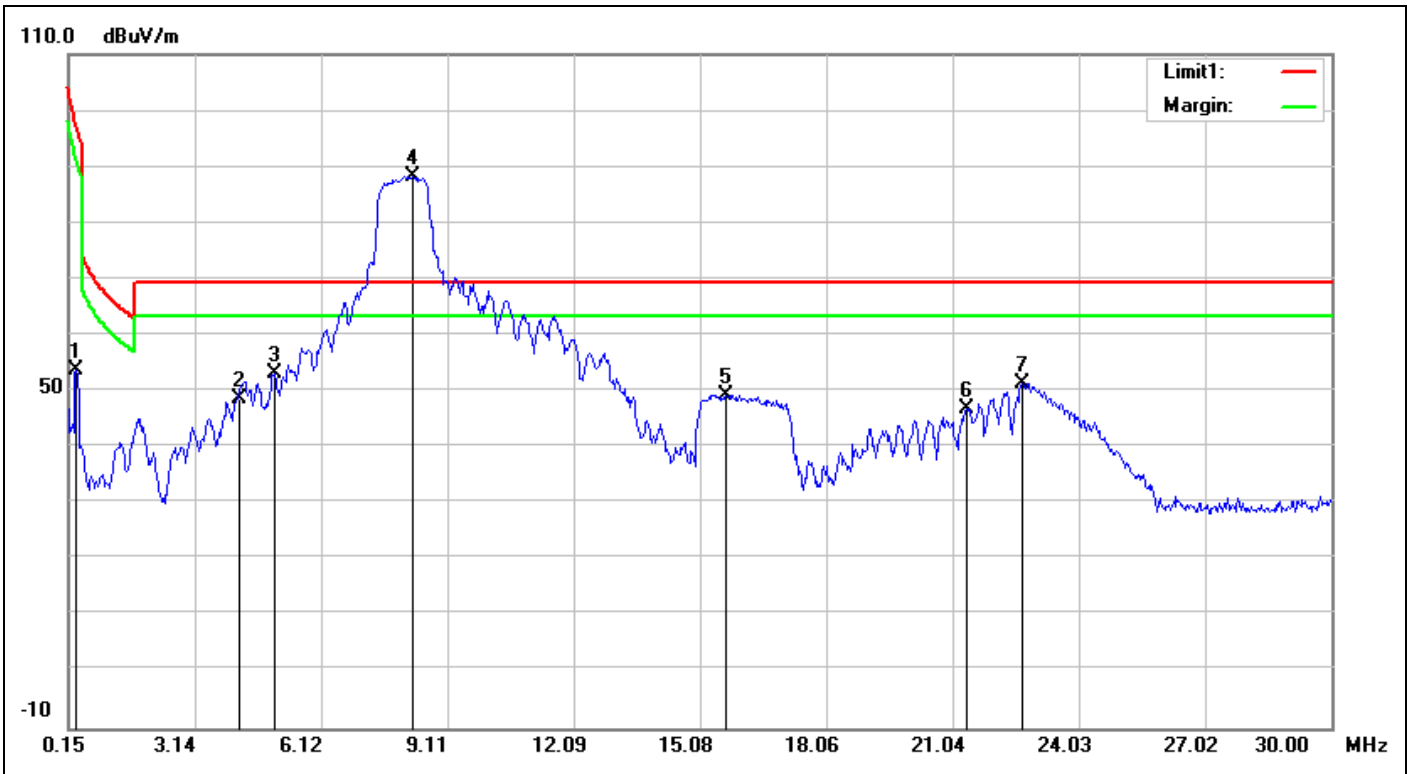
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Service No.:	114031713-FCC	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2015/5/20 20:05:31
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Anti-Pilferage System	Temp.(°C)/Hum.(%):	23.1(°C)/51%
Model No.:	ASSY FC180R RF+MD	Test Engineer:	Hugo Chang
Test Mode:	Full system,normal operation		
Remark:	TX		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0193	20.48	5.07	25.55	121.80	-96.25	QP		0	
2	0.0380	20.10	6.05	26.15	115.93	-89.78	QP		0	
3	0.0588	19.55	9.29	28.84	112.15	-83.31	QP		0	
4	0.0846	19.35	6.87	26.22	109.00	-82.78	QP		0	
5	0.0947	19.28	8.27	27.55	108.03	-80.48	QP		0	
6	0.1270	19.24	76.39	95.63	105.49	-9.86	peak		0	TX
7	0.1500	19.25	13.63	32.88	104.05	-71.17	QP		0	

Spurious Emissions, TX Mode 0.009-30M



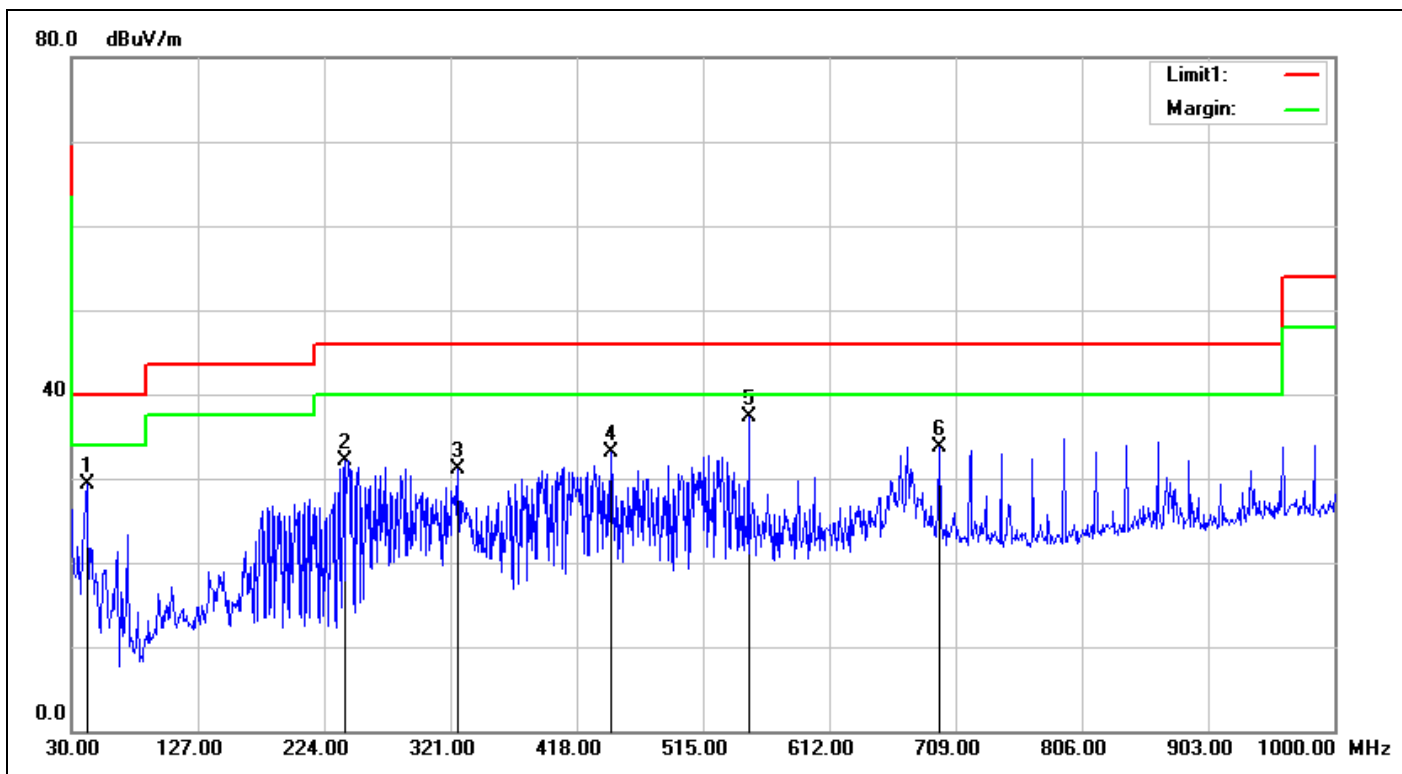
Service No.:	114031713-FCC	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/20 20:08:43
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Anti-Pilferage System	Temp.(°C)/Hum.(%):	23.1(°C)/51%
Model No.:	ASSY FC180R RF+MD	Test Engineer:	Hugo Chang
Test Mode:	Full system,normal operation		
Remark:	TX		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.3291	19.27	34.38	53.65	97.24	-43.59	QP		0	
2	4.1499	19.43	29.14	48.57	69.50	-20.93	QP		0	
3	5.0156	19.70	33.55	53.25	69.50	-16.25	QP		0	
4	8.2692	20.21	67.95	88.16	69.50	18.66	peak		0	TX
5	15.7019	21.20	28.18	49.38	69.50	-20.12	QP		0	
6	21.3733	21.82	24.94	46.76	69.50	-22.74	QP		0	
7	22.6868	21.89	29.50	51.39	69.50	-18.11	QP		0	

Spurious Emissions, TX Mode, 30M-1G

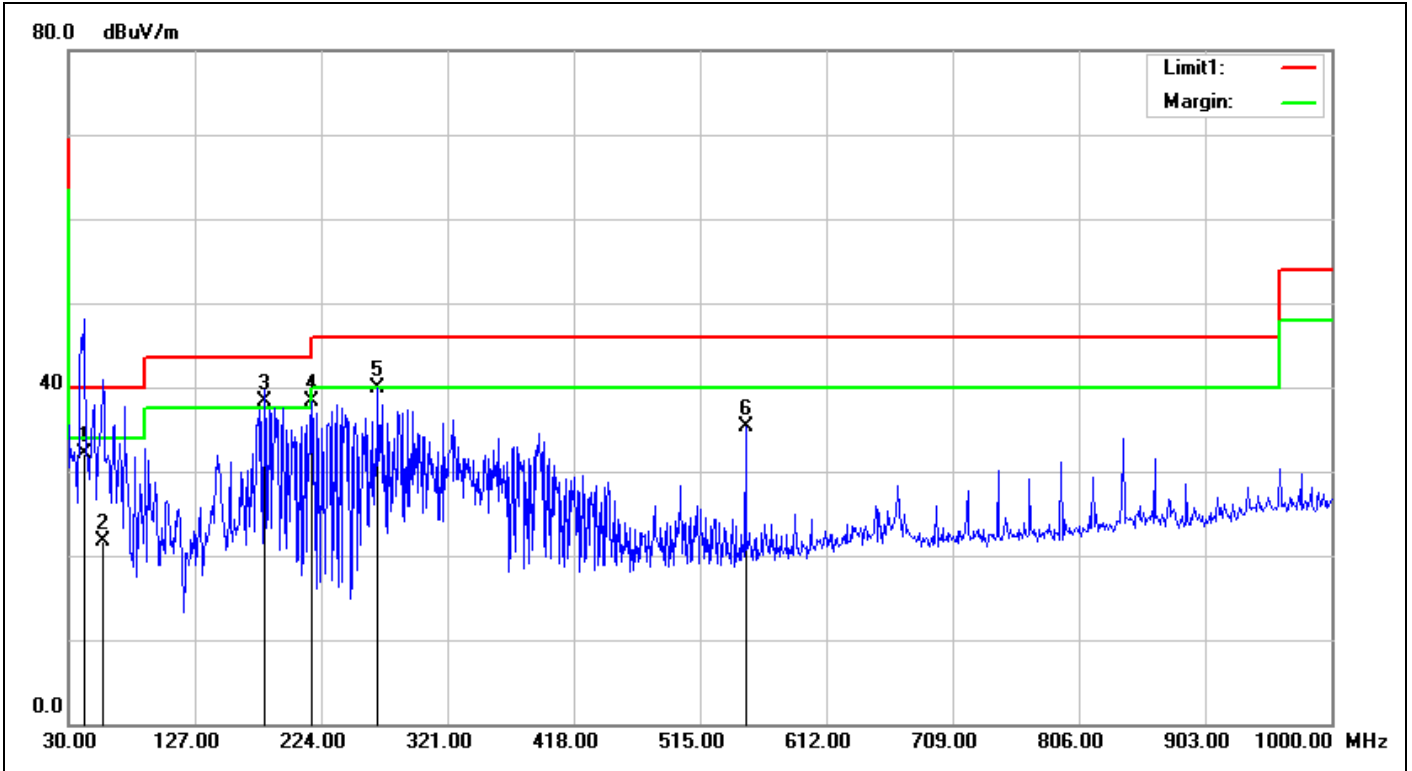


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Service No.:	114031713-FCC	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/20 20:39:40
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Anti-Pilferage System	Temp.(°C)/Hum.(%):	23.1(°C)/51%
Model No.:	ASSY FC180R RF+MD	Test Engineer:	Hugo Chang
Test Mode:	Full system, normal operation		
Remark:	TX		

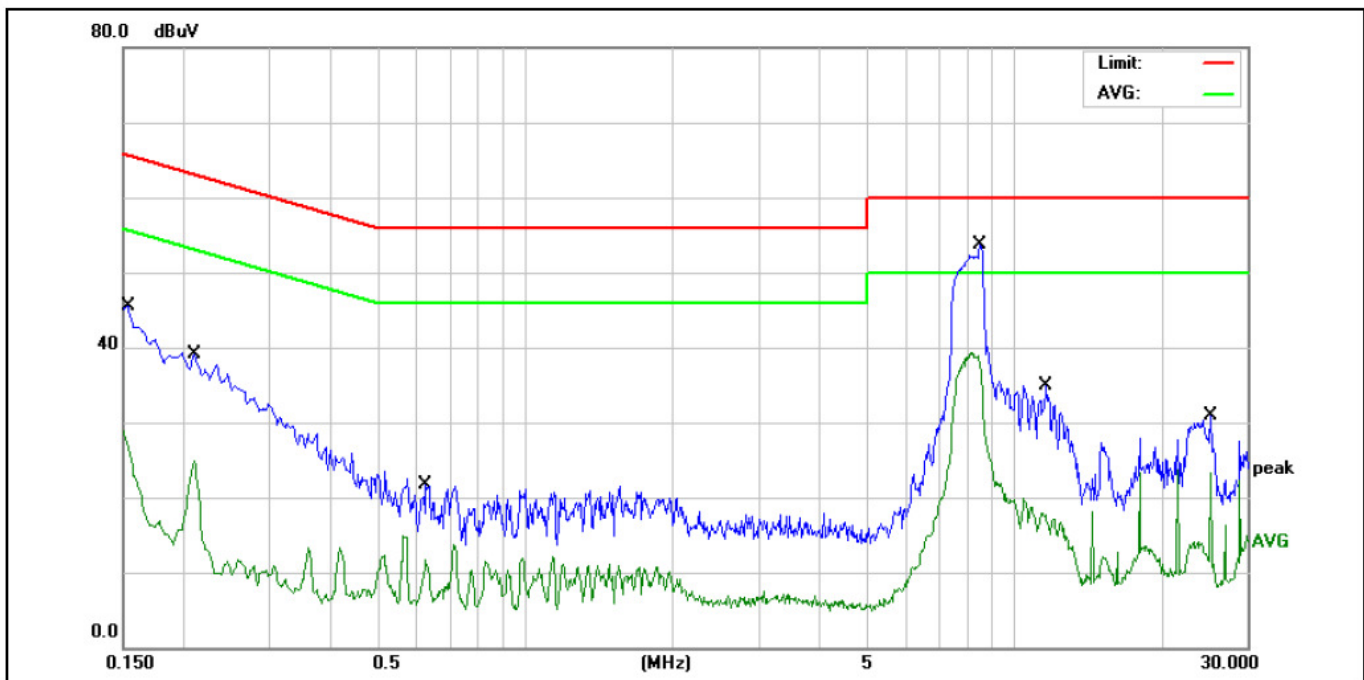
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	41.6400	-12.37	41.67	29.30	40.00	-10.70	QP	100	266	
2	240.4900	-12.63	44.79	32.16	46.00	-13.84	QP	100	218	
3	326.8200	-9.89	40.99	31.10	46.00	-14.90	QP	100	346	
4	444.1900	-8.07	41.12	33.05	46.00	-12.95	QP	100	260	
5	549.9200	-6.96	44.21	37.25	46.00	-8.75	QP	100	306	
6	696.3900	-5.11	38.91	33.80	46.00	-12.20	QP	100	268	



Service No.:	114031713-FCC	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/20 20:40:43
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Anti-Pilferage System	Temp.(°C)/Hum.(%):	23.1(°C)/51%
Model No.:	ASSY FC180R RF+MD	Test Engineer:	Hugo Chang
Test Mode:	Full system, normal operation		
Remark:	TX		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	41.5600	-12.32	44.47	32.15	40.00	-7.85	QP	100	246	
2	56.0152	-18.66	40.29	21.63	40.00	-18.37	QP	100	276	
3	180.8045	-15.57	53.83	38.26	43.50	-5.24	QP	100	321	
4	216.2400	-14.28	52.52	38.24	46.00	-7.76	QP	100	308	
5	267.6500	-11.20	51.16	39.96	46.00	-6.04	QP	100	332	
6	549.9200	-6.96	42.21	35.25	46.00	-10.75	QP	100	305	

Mains Spurious Emissions



Service No.: 114031713

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Phase: N

Applicant: Nedap

Temp.(°C)/Hum.(%): 22.0(°C) / 50 %

Product: Anti-Pilferage System

Power Rating: AC 120V/60Hz

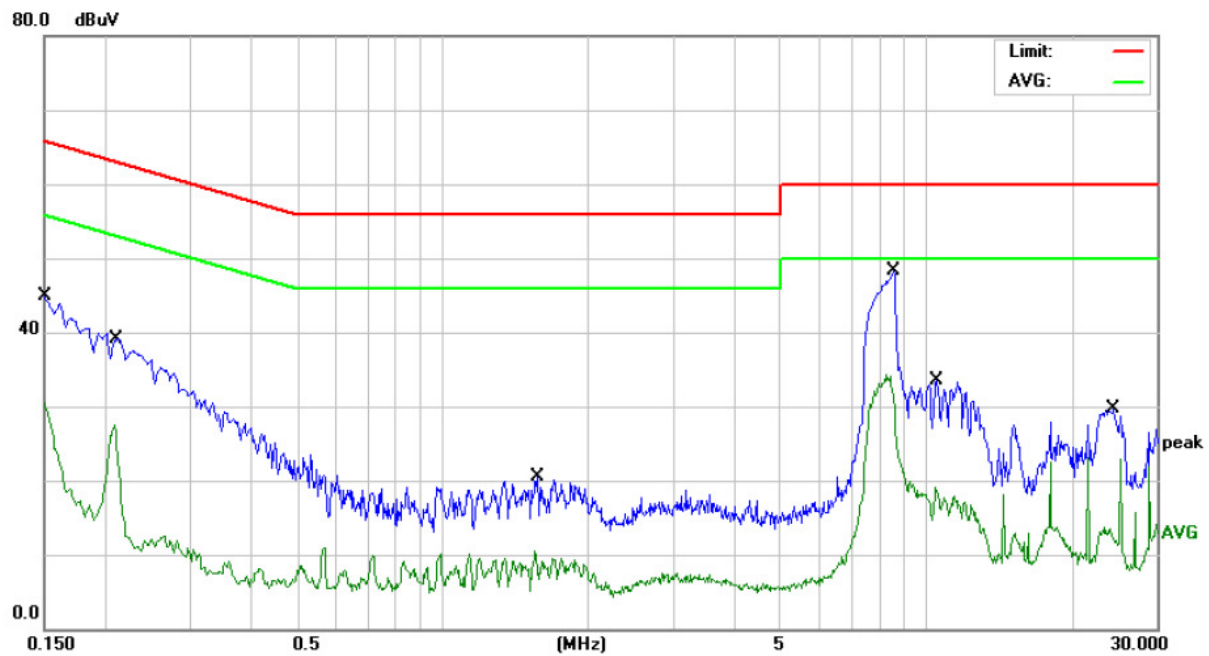
Model No.: ESA FCF

Test Engineer: Freeman Wang

Test Mode: (b)Standby mode

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1539	9.66	27.75	37.41	65.78	-28.37	QP	P	
2	0.1539	9.66	15.83	25.49	55.78	-30.29	AVG	P	
3	0.2100	9.65	21.65	31.30	63.20	-31.90	QP	P	
4	0.2100	9.65	14.00	23.65	53.20	-29.55	AVG	P	
5	0.6260	9.64	4.73	14.37	56.00	-41.63	QP	P	
6	0.6260	9.64	1.17	10.81	46.00	-35.19	AVG	P	
7	8.5219	9.77	40.97	50.74	60.00	-9.26	QP	P	
8	8.5219	9.77	26.99	36.76	50.00	-13.24	AVG	P	
9	11.6540	9.82	17.83	27.65	60.00	-32.35	QP	P	
10	11.6540	9.82	6.45	16.27	50.00	-33.73	AVG	P	
11	25.3140	10.04	15.51	25.55	60.00	-34.45	QP	P	
12	25.3140	10.04	13.08	23.12	50.00	-26.88	AVG	P	



Service No.: 114031713

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Phase: L1

Applicant: Nedap

Temp.(°C)/Hum.(%): 22.0(°C) / 50 %

Product: Anti-Pilferage System

Power Rating: AC 120V/60Hz

Model No.: ESA FCF

Test Engineer: Freeman Wang

Test Mode: (b)Standby mode

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1500	9.65	28.29	37.94	65.99	-28.05	QP	P	
2	0.1500	9.65	20.82	30.47	55.99	-25.52	AVG	P	
3	0.2100	9.63	22.77	32.40	63.20	-30.80	QP	P	
4	0.2100	9.63	17.32	26.95	53.20	-26.25	AVG	P	
5	1.5700	9.64	2.82	12.46	56.00	-43.54	QP	P	
6	1.5700	9.64	-2.41	7.23	46.00	-38.77	AVG	P	
7	8.5540	9.74	35.15	44.89	60.00	-15.11	QP	P	
8	8.5540	9.74	21.36	31.10	50.00	-18.90	AVG	P	
9	10.5300	9.77	17.83	27.60	60.00	-32.40	QP	P	
10	10.5300	9.77	8.46	18.23	50.00	-31.77	AVG	P	
11	24.5260	9.91	13.06	22.97	60.00	-37.03	QP	P	
12	24.5260	9.91	1.16	11.07	50.00	-38.93	AVG	P	