

Test Report No.10048905 001

Appendix D: Radiated and Mains Spurious Emission Data

(File: 10048905AppendixD)

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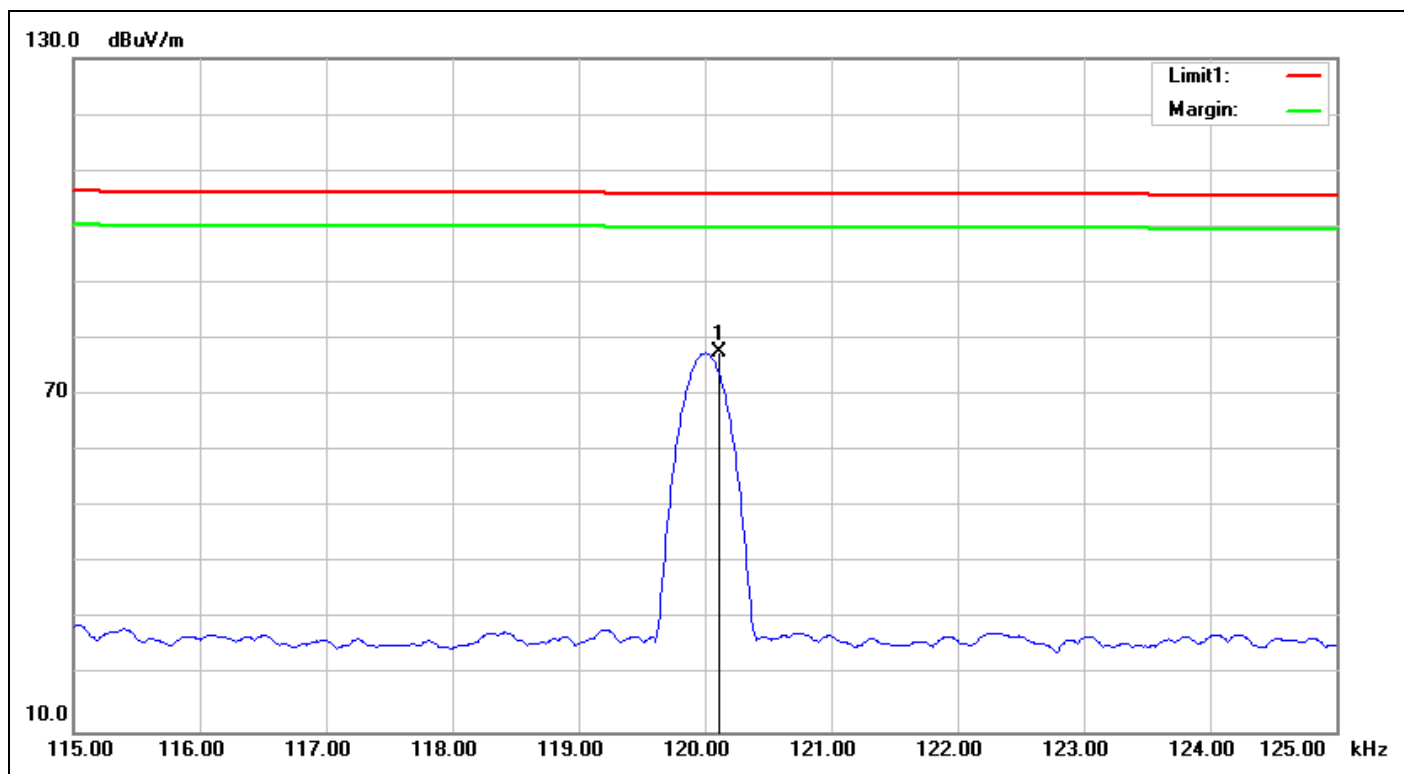
Emissions, Fundamental



TUV Taiwan

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Service No.: 114036404-FCC

Test Standard: FCC15.209_9k-1G_3m

Test item: Radiation Emission

Applicant: Nedap

Product: Transit Ultimate

Model No.: 9215689

Test Mode: 120KHz

Remark: Fundamental

Test Distance: 3m

Ant. Polarization: Vertical

Test Time: 2015/8/20 10:05:44

Test Rating: AC 120V/60Hz

Temp.(°C)/Hum.(%): 22.4(°C)/50%

Test Engineer: Hugo Chang

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.1200	19.24	58.30	77.54	125.94	-48.40	peak			

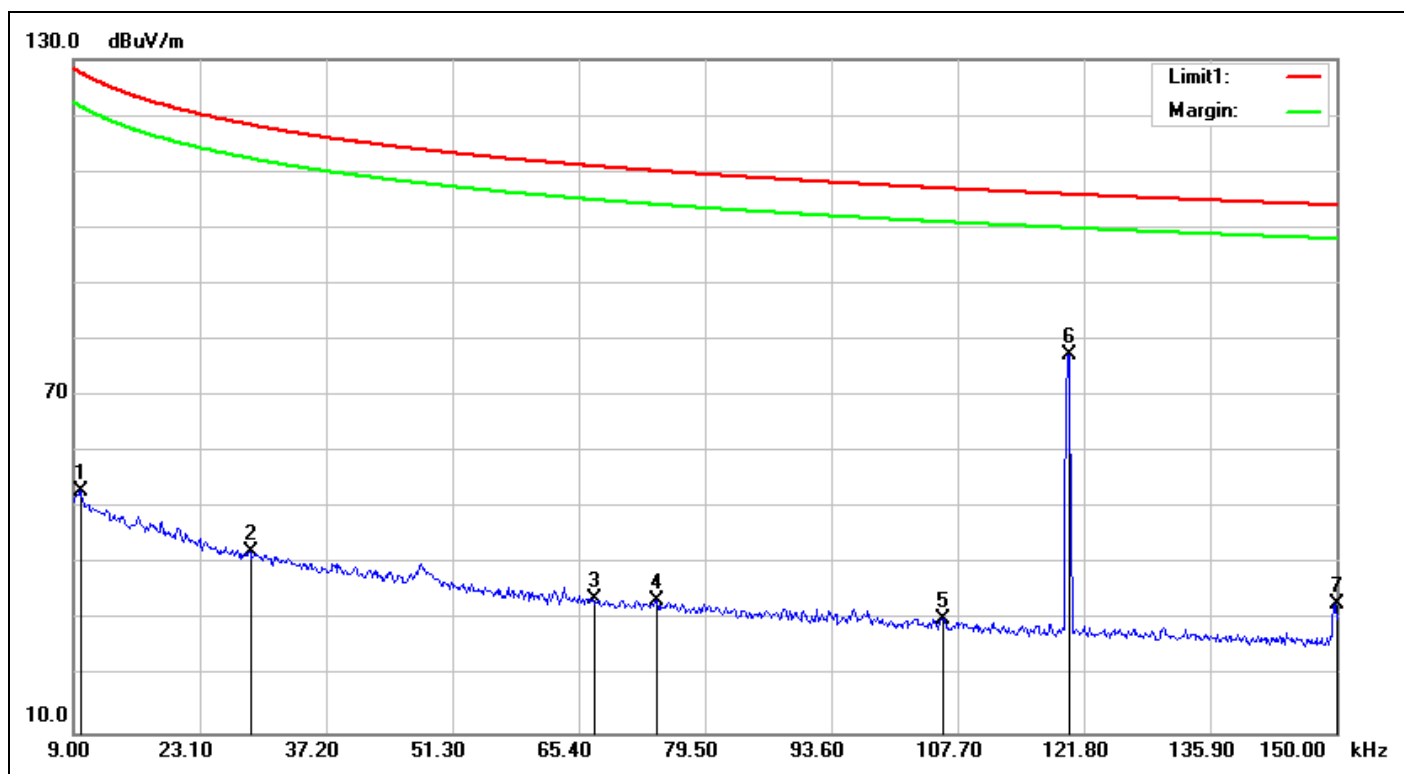
Spurious Emissions, TX Mode, 0.009-30M



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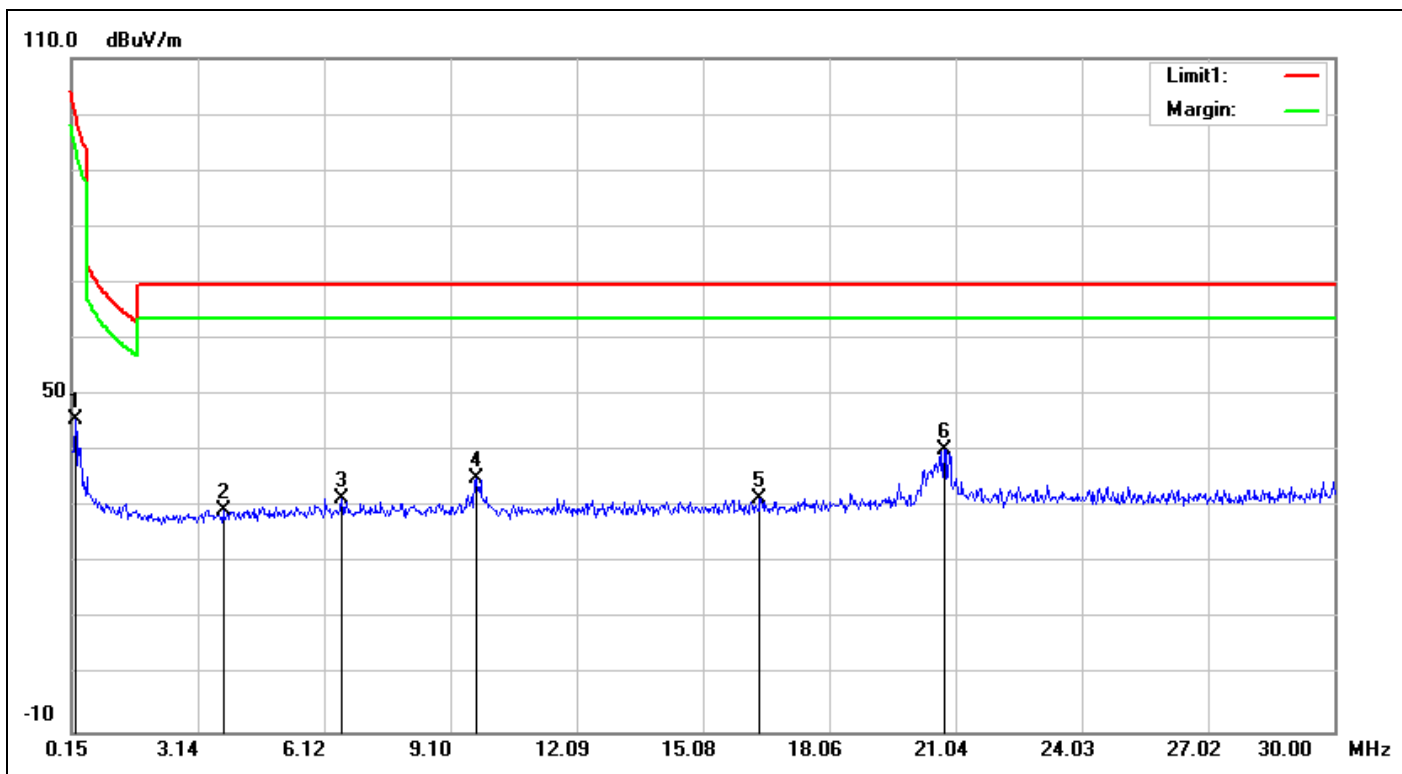
Tel:+886-2172-7000 fax:+886-2528-0018



Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2015/8/20 10:00:31
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Transit Ultimate	Temp.(°C)/Hum.(%):	22.4(°C)/50%
Model No.:	9215689	Test Engineer:	Hugo Chang
Test Mode:	120KHz		
Remark:	TX		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0098	20.43	32.65	53.08	127.57	-74.49	QP		0	
2	0.0286	20.44	21.96	42.40	118.32	-75.92	QP		0	
3	0.0670	19.49	14.29	33.78	110.98	-77.20	QP		0	
4	0.0741	19.44	14.12	33.56	110.11	-76.55	QP		0	
5	0.1059	19.24	11.14	30.38	107.02	-76.64	QP		0	
6	0.1200	19.24	58.08	77.32	105.94	-28.62	QP		0	
7	0.1500	19.25	13.69	32.94	104.02	-71.08	QP		0	TX

Spurious Emissions, TX Mode 0.009-30M



Service No.: 114036404-FCC

Test Distance: 3m

Test Standard: FCC15.209_9k-1G_3m

Ant. Polarization: Vertical

Test item: Radiation Emission

Test Time: 2015/8/20 10:08:40

Applicant: Nedap

Test Rating: AC 120V/60Hz

Product: Transit Ultimate

Temp.(°C)/Hum.(%): 22.4(°C)/50%

Model No.: 9215689

Test Engineer: Hugo Chang

Test Mode: 120KHz

Remark: TX

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.2396	19.26	26.35	45.61	99.97	-54.36	QP			
2	3.7320	19.30	10.28	29.58	69.50	-39.92	QP			
3	6.5379	19.95	11.67	31.62	69.50	-37.88	QP			
4	9.7020	20.44	14.80	35.24	69.50	-34.26	QP			
5	16.4183	21.30	10.13	31.43	69.50	-38.07	QP			
6	20.7764	21.79	18.48	40.27	69.50	-29.23	QP			

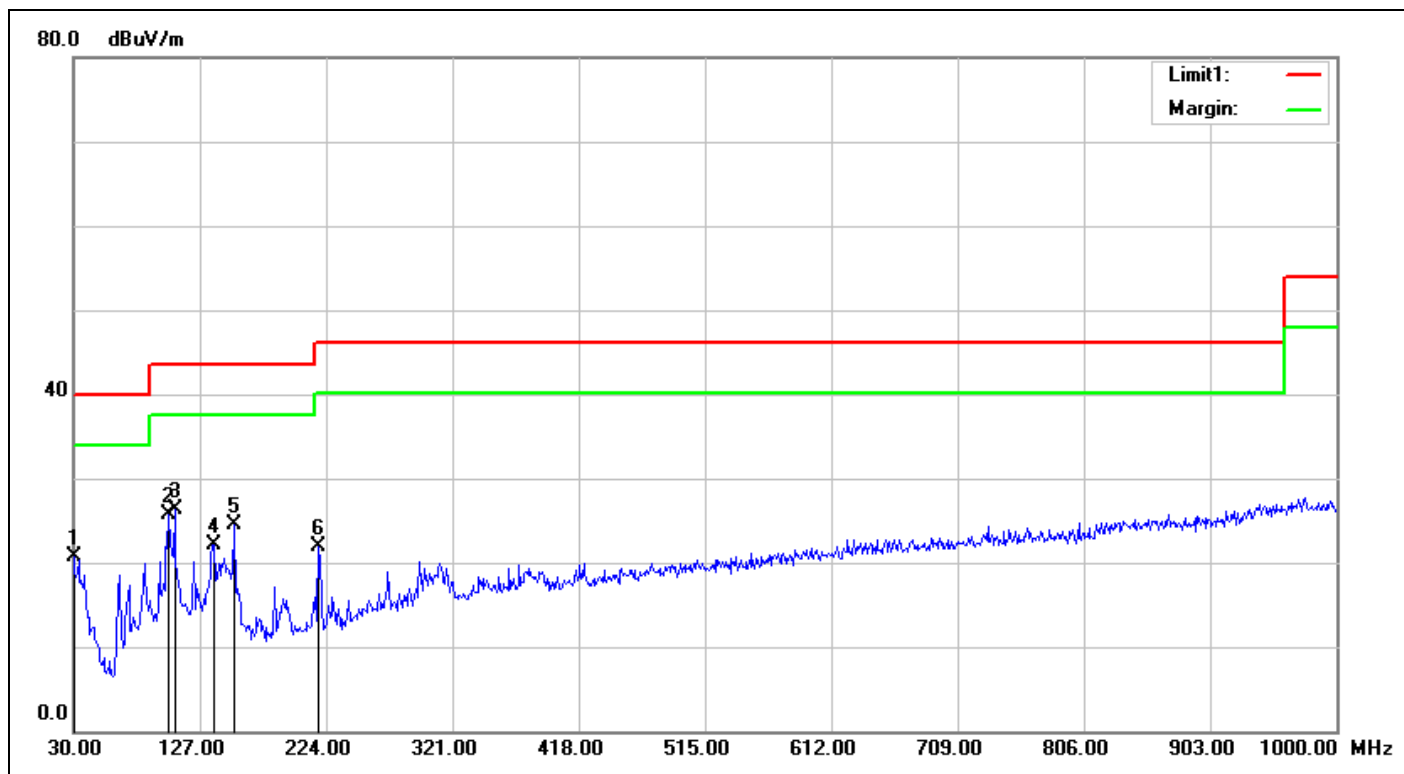
Spurious Emissions, TX Mode, 30M-1G



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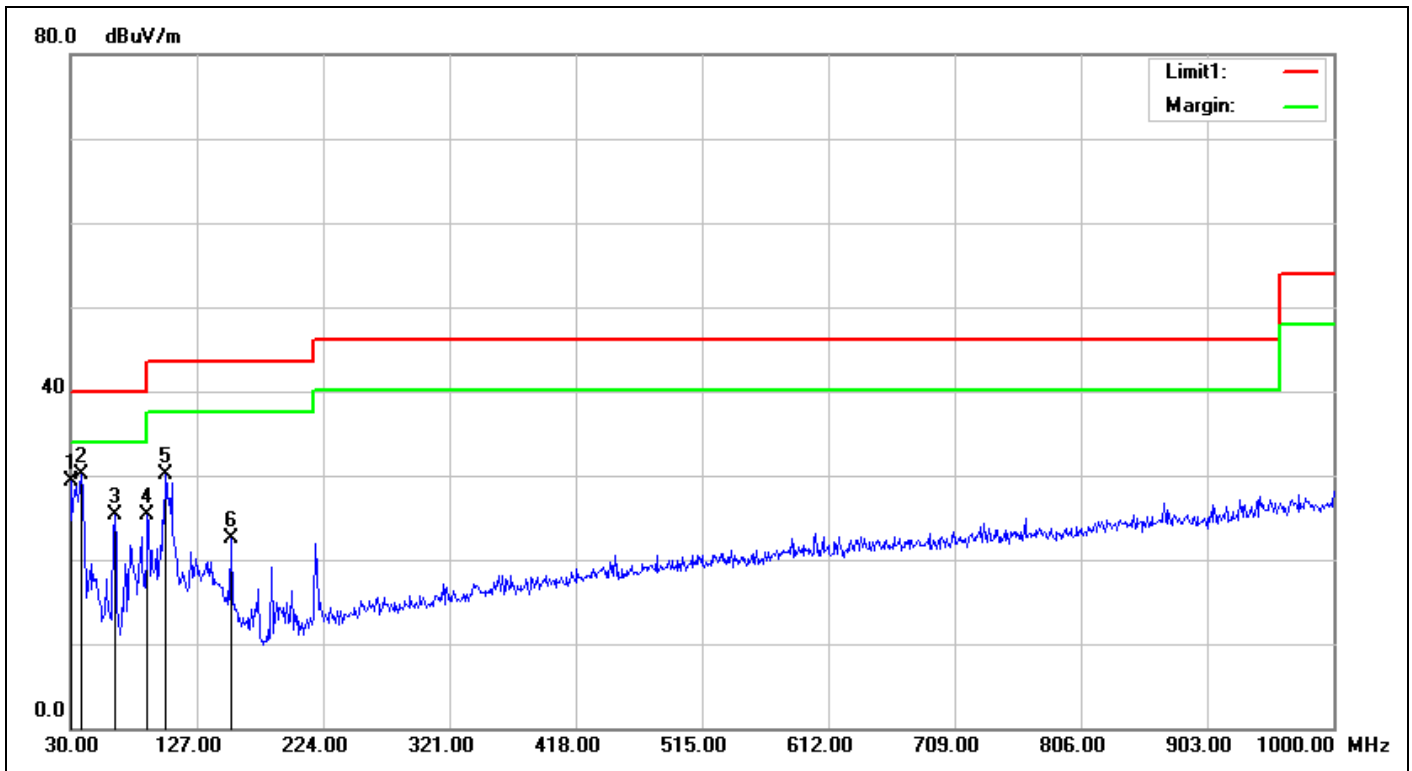
Tel:+886-2172-7000 fax:+886-2528-0018



Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC 15.209_30M-40G_3m	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/6/11 20:58:11
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Ultimate System Central Unit	Temp.(°C)/Hum.(%)	20.9(°C)/54%
Model No.:	Transit Ultimate 9215689	Test Engineer:	Freeman Wang
Test Mode:	TX 120kHz		
Remark:	Z		

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	26.60	20.77	40.00	-19.23	QP	400	28	
2	102.7500	-14.38	40.03	25.65	43.52	-17.87	QP	300	134	
3	107.5999	-13.81	40.11	26.30	43.52	-17.22	QP	200	118	
4	137.6699	-12.64	34.77	22.13	43.52	-21.39	QP	300	224	
5	153.1899	-13.39	37.85	24.46	43.52	-19.06	QP	200	256	
6	218.1800	-14.23	36.13	21.90	46.02	-24.12	QP	100	53	

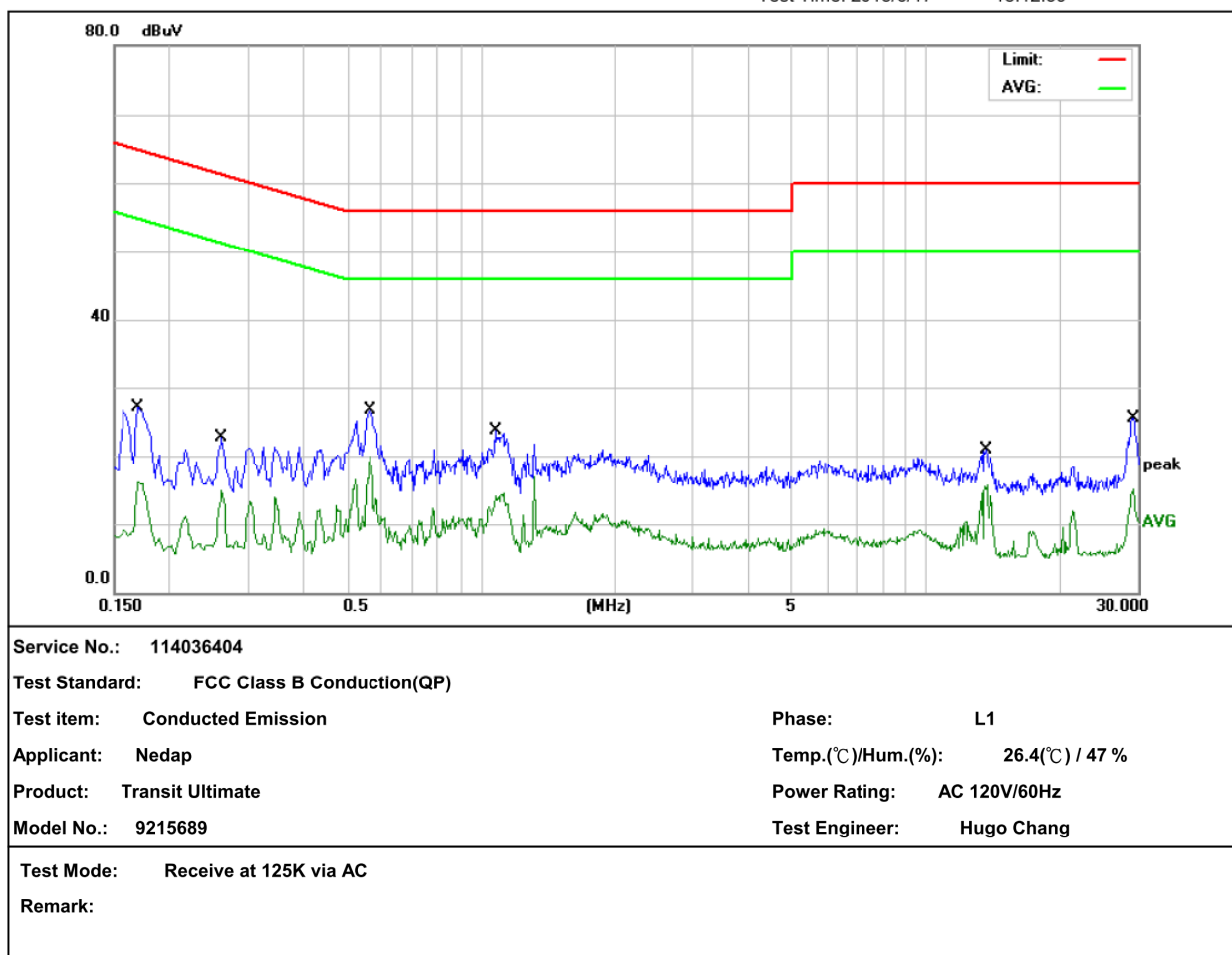
Spurious Emissions, Mains, 150kHz - 30MHz



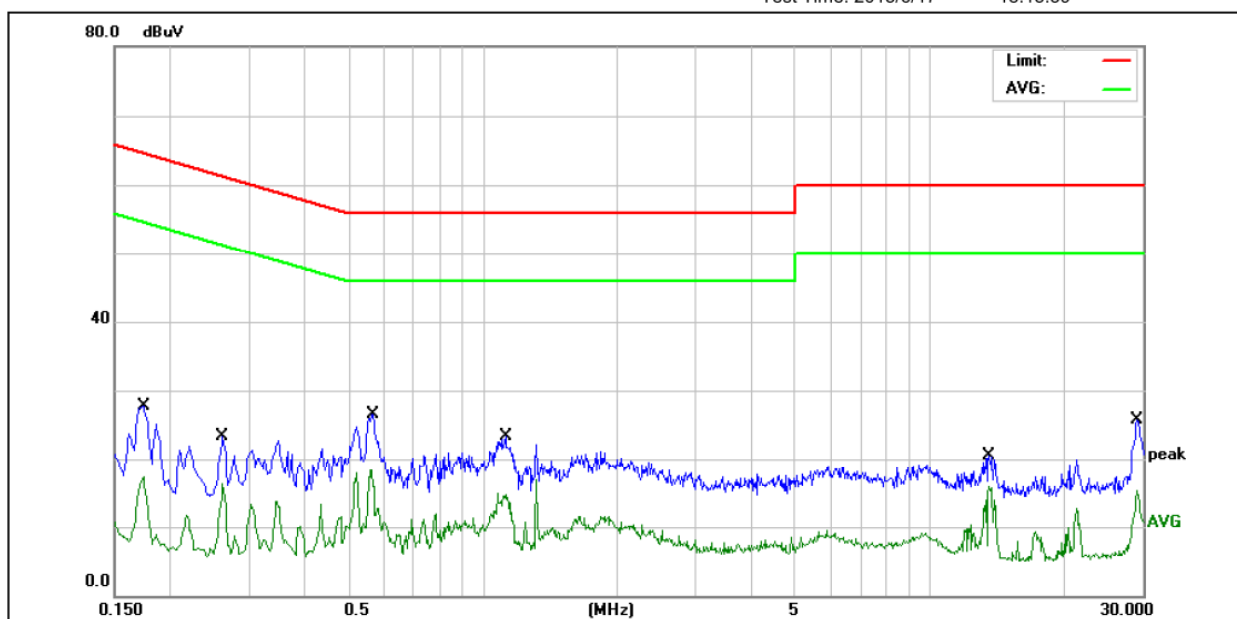
Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC 15.209_30M-40G_3m	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/6/11 21:03:07
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Ultimate System Central Unit	Temp.(°C)/Hum.(%)	20.9(°C)/54%
Model No.:	Transit Ultimate 9215689	Test Engineer:	Freeman Wang
Test Mode:	TX 120kHz		
Remark:	Z		

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	35.13	29.30	40.00	-10.70	QP	100	120	
2	37.7599	-10.18	40.33	30.15	40.00	-9.85	QP	100	104	
3	63.9500	-19.34	44.61	25.27	40.00	-14.73	QP	100	360	
4	89.1700	-16.60	41.86	25.26	43.52	-18.26	QP	100	62	
5	102.7500	-14.38	44.52	30.14	43.52	-13.38	QP	200	181	
6	153.1900	-13.39	35.98	22.59	43.52	-20.93	QP	100	320	

Mains Spurious Emissions



No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1700	9.65	14.22	23.87	64.96	-41.09	QP	P	
2	0.1700	9.65	4.83	14.48	54.96	-40.48	AVG	P	
3	0.2620	9.62	10.44	20.06	61.36	-41.30	QP	P	
4	0.2620	9.62	5.76	15.38	51.36	-35.98	AVG	P	
5	0.5660	9.63	14.36	23.99	56.00	-32.01	QP	P	
6	0.5660	9.63	8.41	18.04	46.00	-27.96	AVG	P	
7	1.0820	9.63	8.87	18.50	56.00	-37.50	QP	P	
8	1.0820	9.63	4.52	14.15	46.00	-31.85	AVG	P	
9	13.6580	9.81	7.51	17.32	60.00	-42.68	QP	P	
10	13.6580	9.81	5.26	15.07	50.00	-34.93	AVG	P	
11	29.3380	9.88	10.82	20.70	60.00	-39.30	QP	P	
12	29.3380	9.88	4.40	14.28	50.00	-35.72	AVG	P	



Service No.: 114036404

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Phase: N

Applicant: Nedap

Temp.(°C)/Hum.(%): 26.4(°C) / 47 %

Product: Transit Ultimate

Power Rating: AC 120V/60Hz

Model No.: 9215689

Test Engineer: Hugo Chang

Test Mode: Receive at 125K via AC

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1740	9.66	15.03	24.69	64.76	-40.07	QP	P	
2	0.1740	9.66	6.61	16.27	54.76	-38.49	AVG	P	
3	0.2620	9.64	10.42	20.06	61.36	-41.30	QP	P	
4	0.2620	9.64	5.79	15.43	51.36	-35.93	AVG	P	
5	0.5700	9.64	13.70	23.34	56.00	-32.66	QP	P	
6	0.5700	9.64	6.15	15.79	46.00	-30.21	AVG	P	
7	1.1260	9.64	9.00	18.64	56.00	-37.36	QP	P	
8	1.1260	9.64	4.34	13.98	46.00	-32.02	AVG	P	
9	13.5740	9.86	7.85	17.71	60.00	-42.29	QP	P	
10	13.5740	9.86	5.70	15.56	50.00	-34.44	AVG	P	
11	29.0820	10.09	9.58	19.67	60.00	-40.33	QP	P	
12	29.0820	10.09	4.34	14.43	50.00	-35.57	AVG	P	