

Test Report No.10048904 001

Appendix D: Radiated Emission Data

(File: 10048904AppendixD)

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Spurious Emissions, Fundamental

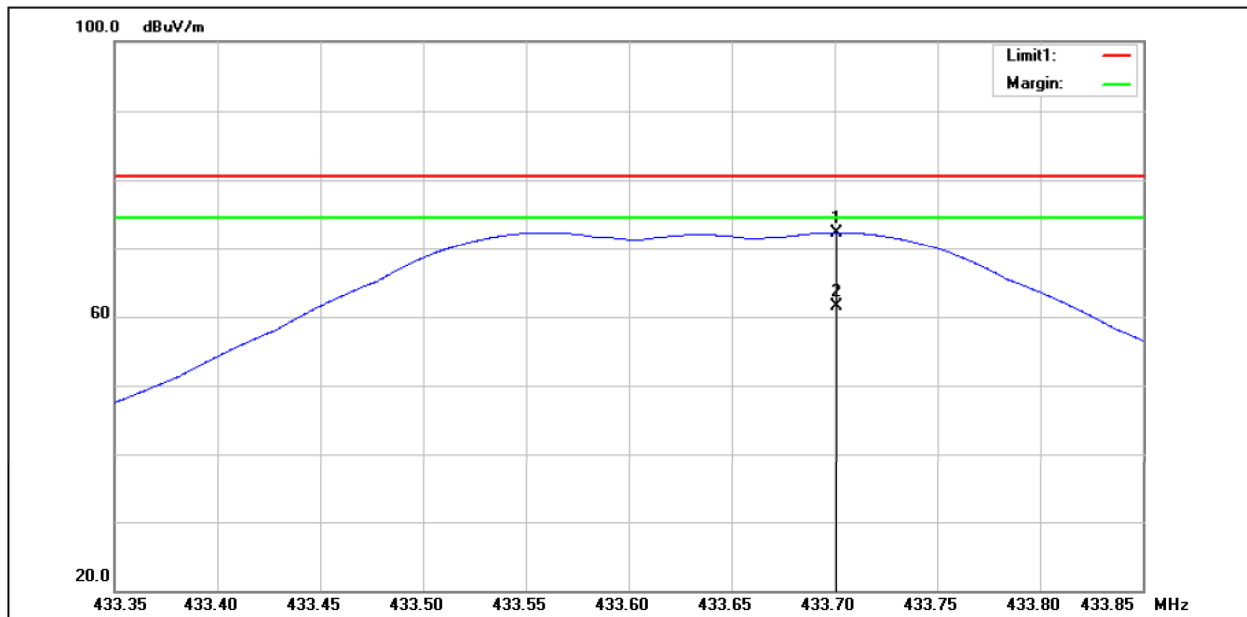


TUV Taiwan
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105
Tel:+886-2172-7000 fax:+886-2528-0018

Site: 966 Chamber

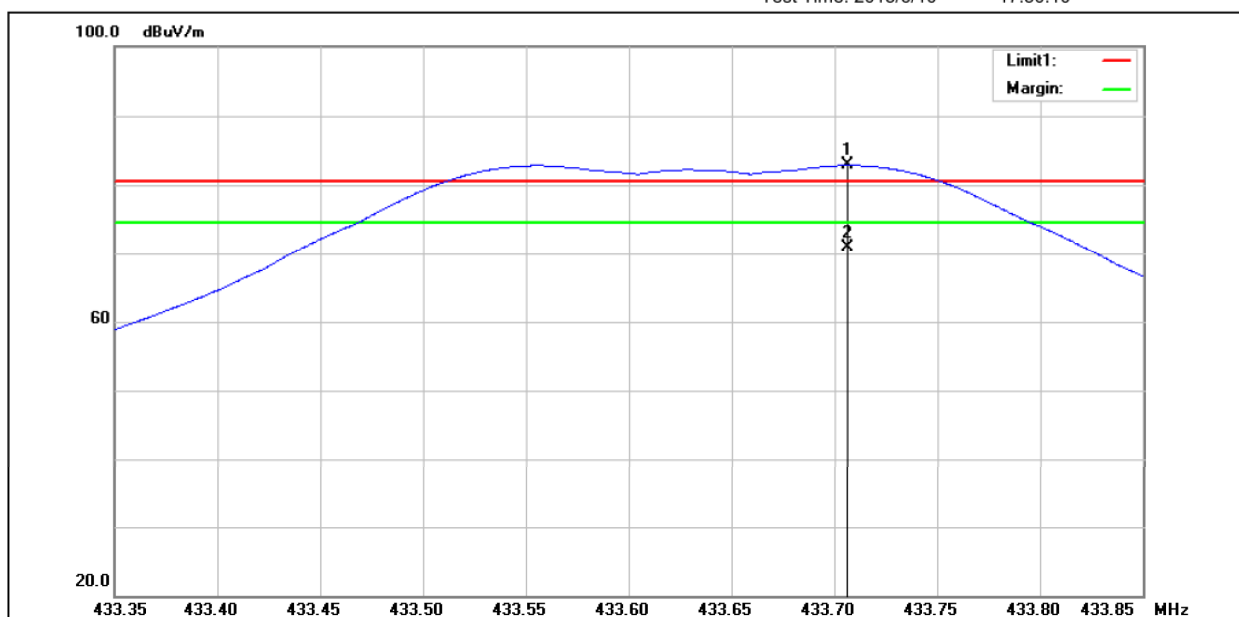
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Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC 15.231_field strength_3m(dBuV/m)	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Temp.(°C)/Hum.(%):	23.9(°C) / 55 %
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Ultimate System Central Unit	Test Engineer:	Freeman Wang
Model No.:	Transit Ultimate 9215689		
Test Mode:	TX 433MHz		
Remark:	Z		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	433.7005	-8.22	80.61	72.39	80.52	-8.13	peak		0	P	
2	433.7005	-8.22	69.70	61.48	80.52	-19.04	QP		0	P	



Service No.: 114036404-FCC

Test Standard: FCC 15.231_field strength_3m(dBuV/m)

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Nedap

Temp.(°C)/Hum.(%): 23.9(°C) / 55 %

Product: Ultimate System Central Unit

Test Rating: AC 120V/60Hz

Model No.: Transit Ultimate 9215689

Test Engineer: Freeman Wang

Test Mode: TX 433MHz

Remark: Z

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	433.7065	-8.22	91.06	82.84	80.52	2.32	peak			F	
2	433.7065	-8.22	79.06	70.84	80.52	-9.68	QP	100	0	P	

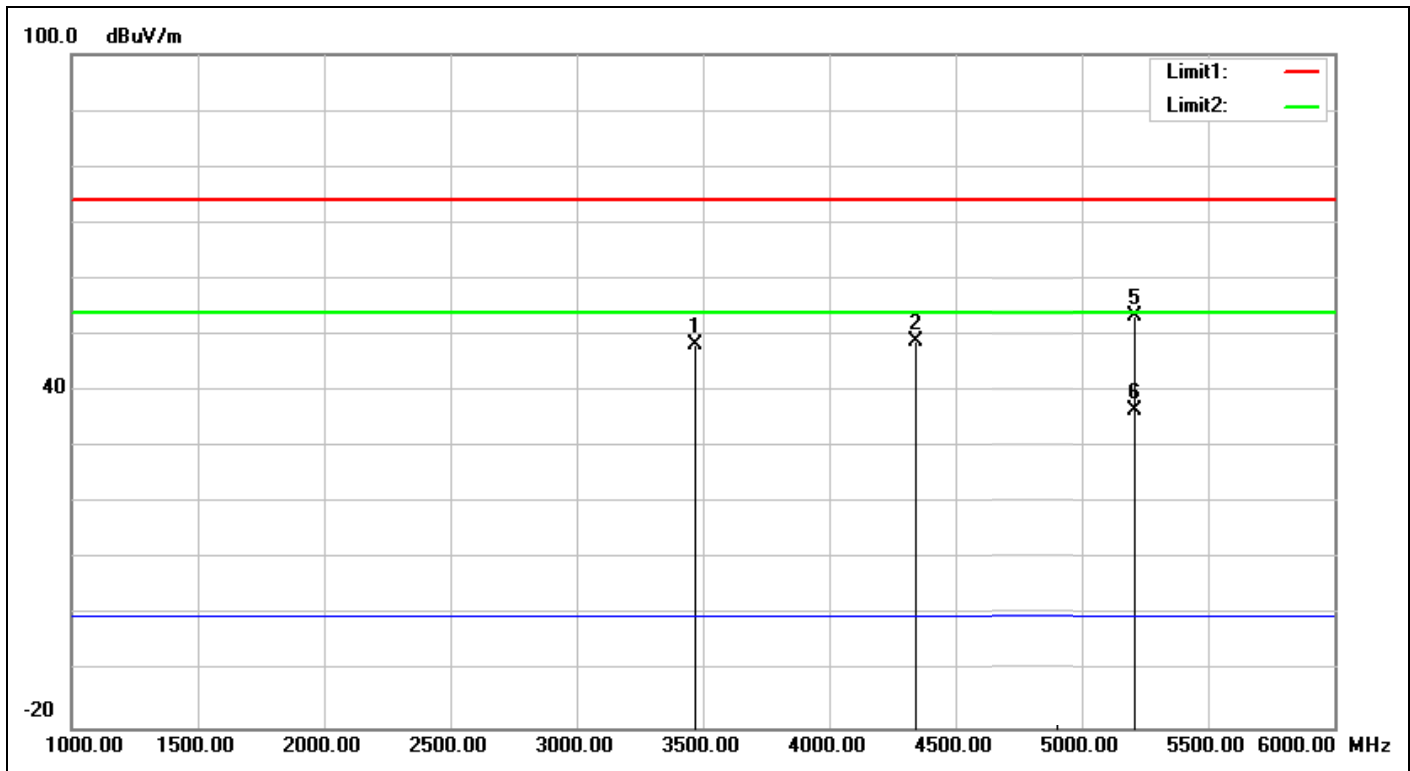
Spurious Emissions, TX Mode, 1-6G



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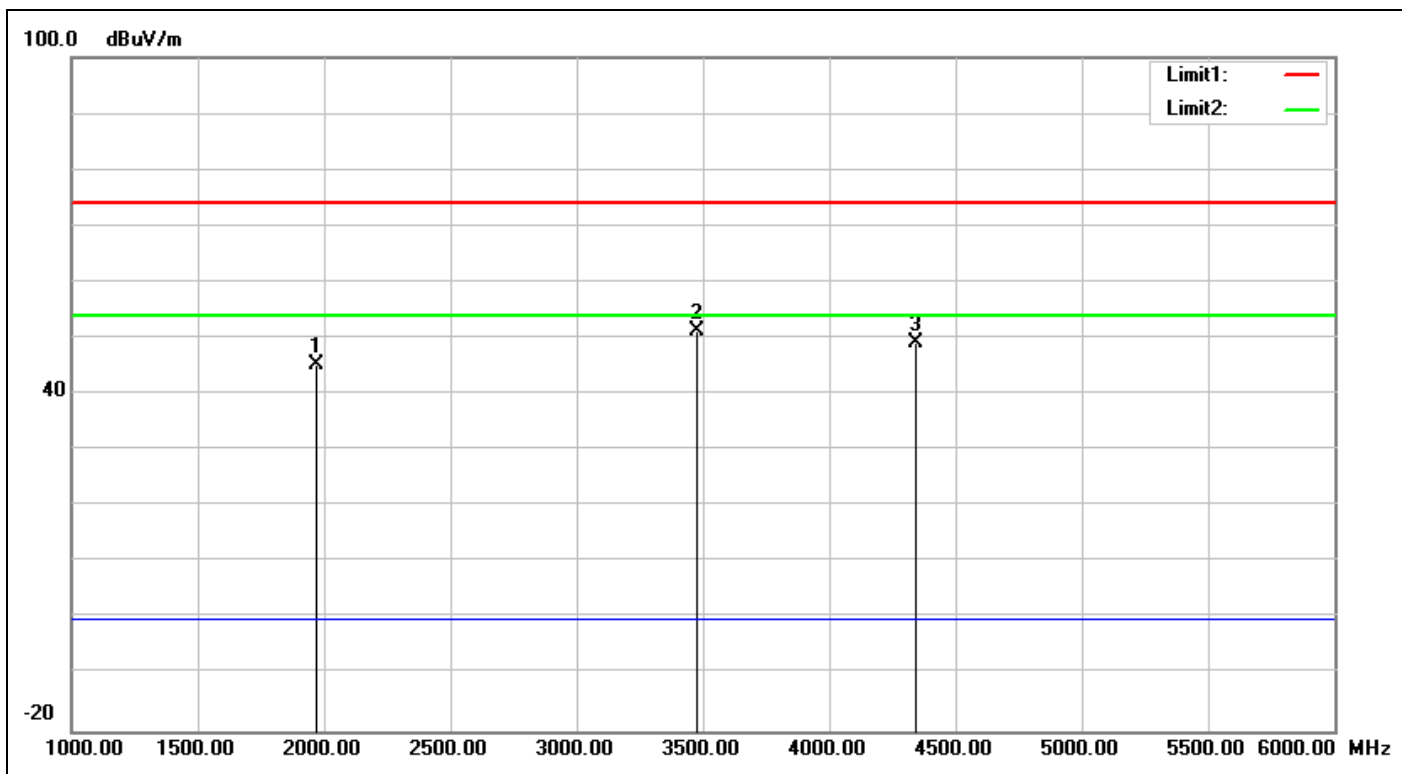
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Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/6/10 19:33:46
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Ultimate System Central Unit	Temp.(°C)/Hum.(%)	23.9(°C)/55 %
Model No.:	Transit Ultimate 9215689	Test Engineer:	Freeman Wang
Test Mode:	TX 433MHz		
Remark:	Z		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	3470.000	-5.55	53.81	48.26	74.00	-25.74	peak	100	319	
2	4340.000	-3.74	52.73	48.99	74.00	-25.01	peak	100	9	
5	5203.44	-0.73	54.07	53.34	74.00	-20.66	peak	100	321	
6	5203.44	-0.73	37.14	36.41	54.00	-17.59	AVG	100	321	

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:	2015/6/10 19:34:48
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Ultimate System Central Unit	Temp.(°C)/Hum.(%)	23.9(°C)/55%
Model No.:	Transit Ultimate 9215689	Test Engineer:	Freeman Wang
Test Mode:	TX 433MHz		
Remark:	Z		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1970.000	-7.34	52.71	45.37	74.00	-28.63	peak	100	293	
2	3468.96	-5.55	56.68	51.13	74.00	-22.87	peak	100	2	
3	4345.000	-3.71	52.90	49.19	74.00	-24.81	peak	100	116	

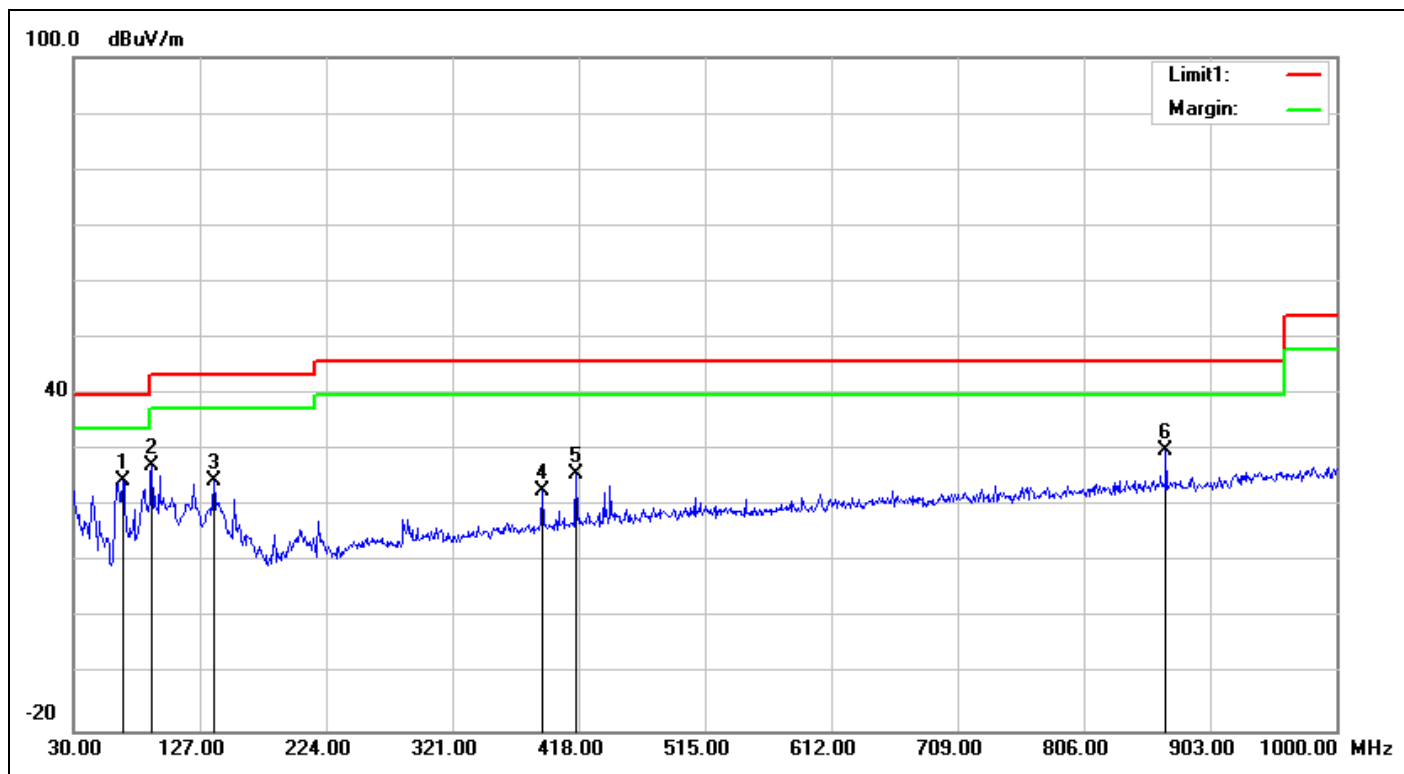
Spurious Emissions, TX Mode, 30M-1G



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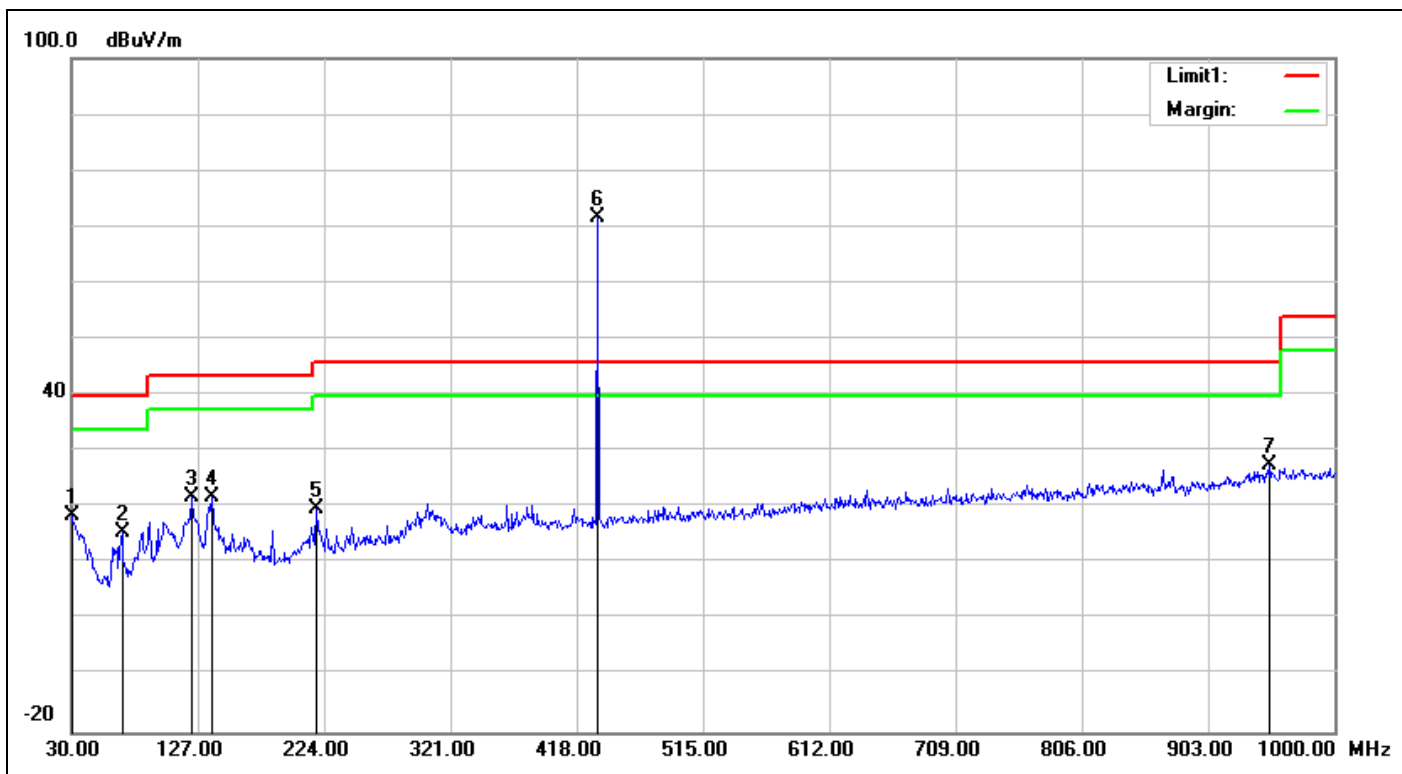
Tel:+886-2172-7000 fax:+886-2528-0018



Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/6/10 18:00:03
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Ultimate System Central Unit	Temp.(°C)/Hum.(%)	23.9(°C)/55%
Model No.:	Transit Ultimate 9215689	Test Engineer:	Freeman Wang
Test Mode:	TX 433MHz		
Remark:	Z		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	67.8299	-18.99	43.46	24.47	40.00	-15.53	QP	100	179	
2	90.1400	-16.48	43.86	27.38	43.50	-16.12	QP	100	259	
3	137.6699	-12.64	37.05	24.41	43.50	-19.09	QP	100	78	
4	389.8700	-8.80	31.62	22.82	46.00	-23.18	QP	100	352	
5	416.0600	-8.44	34.09	25.65	46.00	-20.35	QP	100	360	
6	867.24	-2.30	32.39	30.09	46.00	-15.91	QP	100	102	

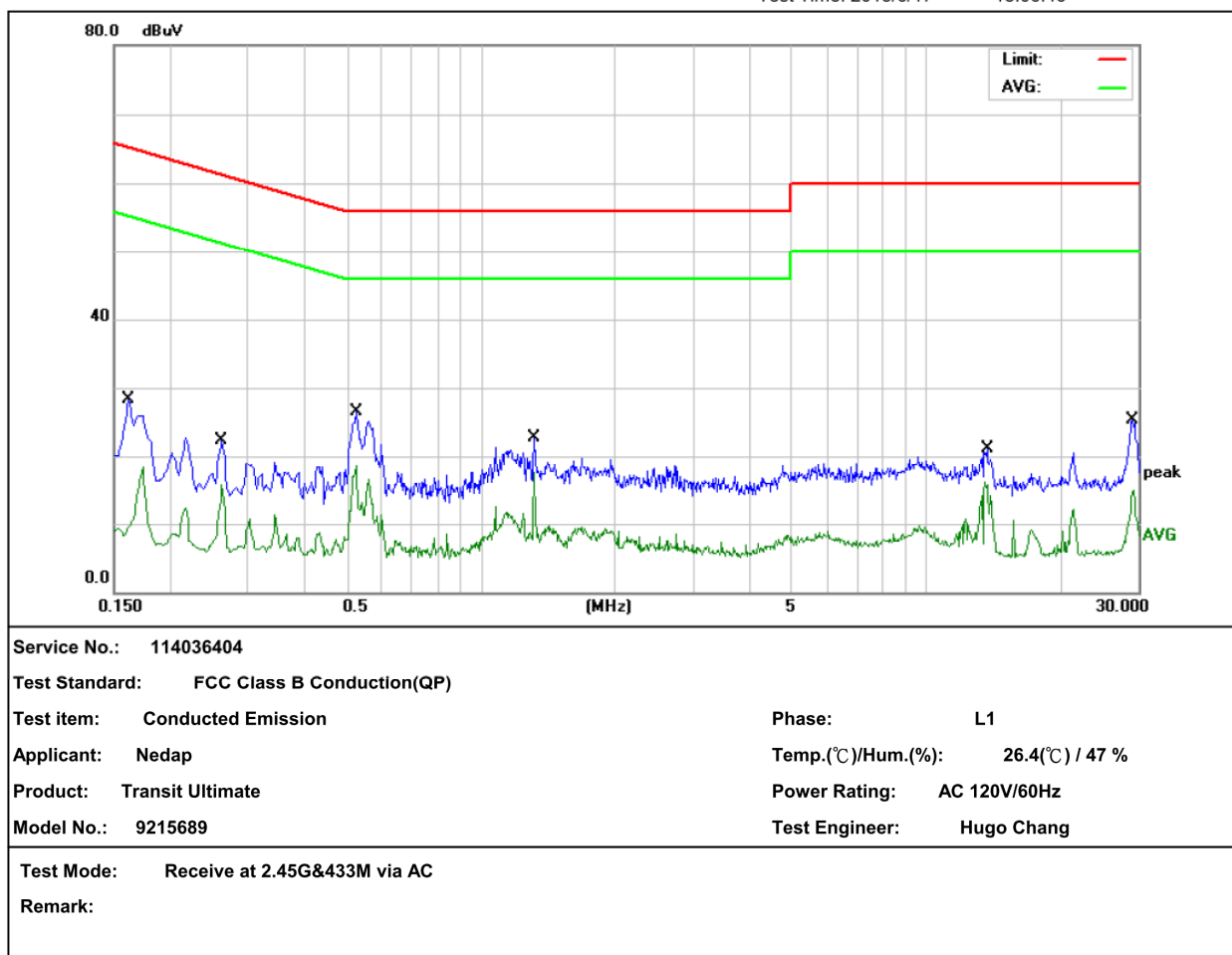
Spurious Emissions, TX Mode, 30M-1G



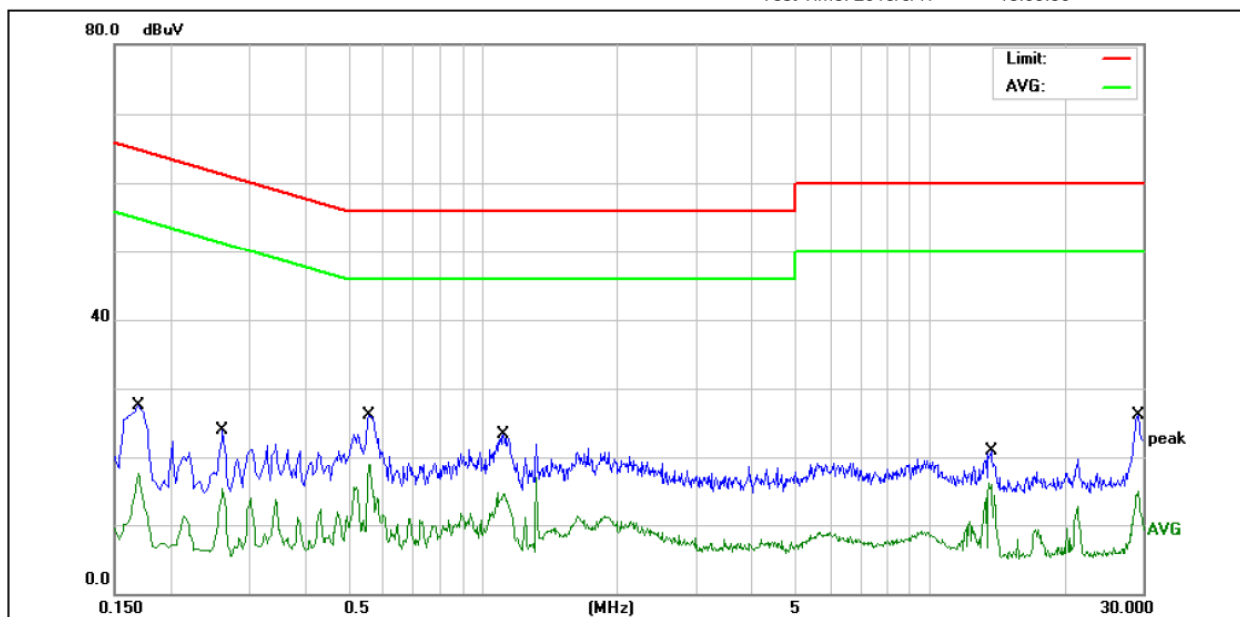
Service No.:	114036404-FCC	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/6/10 17:58:59
Applicant:	Nedap	Test Rating:	AC 120V/60Hz
Product:	Ultimate System Central Unit	Temp.(°C)/Hum.(%)	23.9(°C)/55%
Model No.:	Transit Ultimate 9215689	Test Engineer:	Freeman Wang
Test Mode:	TX 433MHz		
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	24.44	18.61	40.00	-21.39	QP	100	102	
2	68.7999	-18.92	34.46	15.54	40.00	-24.46	QP	100	274	
3	122.1500	-12.90	34.63	21.73	43.50	-21.77	QP	100	256	
4	137.6699	-12.64	34.44	21.80	43.50	-21.70	QP	100	237	
5	218.1800	-14.23	33.84	19.61	46.00	-26.39	QP	100	237	
6	433.5199	-8.23	80.03	71.80	46.00	25.80	QP	100	358	TX
7	950.5299	-0.54	28.08	27.54	46.00	-18.46	QP	100	136	

Mains Spurious Emissions



No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1620	9.65	13.63	23.28	65.36	-42.08	QP	P	
2	0.1620	9.65	0.71	10.36	55.36	-45.00	AVG	P	
3	0.2620	9.62	8.15	17.77	61.36	-43.59	QP	P	
4	0.2620	9.62	3.73	13.35	51.36	-38.01	AVG	P	
5	0.5260	9.63	12.20	21.83	56.00	-34.17	QP	P	
6	0.5260	9.63	5.14	14.77	46.00	-31.23	AVG	P	
7	1.3220	9.63	8.90	18.53	56.00	-37.47	QP	P	
8	1.3220	9.63	7.36	16.99	46.00	-29.01	AVG	P	
9	13.7460	9.81	8.03	17.84	60.00	-42.16	QP	P	
10	13.7460	9.81	6.04	15.85	50.00	-34.15	AVG	P	
11	29.0820	9.90	10.16	20.06	60.00	-39.94	QP	P	
12	29.0820	9.90	4.70	14.60	50.00	-35.40	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 2.45G&433M via AC

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1700	9.66	15.11	24.77	64.96	-40.19	QP	P	
2	0.1700	9.66	6.35	16.01	54.96	-38.95	AVG	P	
3	0.2620	9.64	9.73	19.37	61.36	-41.99	QP	P	
4	0.2620	9.64	5.34	14.98	51.36	-36.38	AVG	P	
5	0.5580	9.64	13.40	23.04	56.00	-32.96	QP	P	
6	0.5580	9.64	7.67	17.31	46.00	-28.69	AVG	P	
7	1.1140	9.64	8.90	18.54	56.00	-37.46	QP	P	
8	1.1140	9.64	4.37	14.01	46.00	-31.99	AVG	P	
9	13.7460	9.86	7.78	17.64	60.00	-42.36	QP	P	
10	13.7460	9.86	5.78	15.64	50.00	-34.36	AVG	P	
11	29.2540	10.08	10.88	20.96	60.00	-39.04	QP	P	
12	29.2540	10.08	4.79	14.87	50.00	-35.13	AVG	P	