

FCC Test Report

Project No. : 1408C169
Equipment : 802.11n VDSL2 IAD
Model Name : SR630n
Applicant : SmartRG Inc.
Address : 501 SE Columbia Shores Boulevard, Suite 500
Vancouver, Washington 98661

Date of Receipt : Aug 05, 2014
Date of Test : Aug 05, 2014~ Aug. 30, 2014
Issued Date : Sep. 03, 2014
Tested by : BTL Inc.

Testing Engineer : Kevin Kao
(Kevin Kao)

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C.**, or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

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BTL's laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCE-1-1408C169	Original Issue.	Sep. 03, 2014

1. CERTIFICATION

Equipment : 802.11n VDSL2 IAD
Brand Name : SmartRG
Model Name : SR630n
Applicant : SmartRG Inc.
Manufacturer : SmartRG Inc.
Address : 501 SE Columbia Shores Boulevard, Suite 500 Vancouver, Washington 98661
Factory : 1) Shenzhen Gongjin Electronics Co.,Ltd
2) Taicang T&W Electronics.Co.,Ltd
Address : 1) No 2&3 Buildings, Mingwei Factory Area, Songgang Road West,No. A
Building, 1#Songgang Road Songgang Sub-District, Shenzhen, Guangdong,
518105,P.R.China
2) Jiangnan Road 89, Ludu Town, Taicang, ,Suzhou, Jiangsu, 215412,
P.R.China
Date of Test : Aug 05, 2014~ Aug. 30, 2014
Standard(s) : FCC Part 15, Subpart B :2013
ANSI C63.4-2009

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCE-1-1408C169) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

EMC Emission				
Standard(s)	Test Item	Limit	Judgment	Remark
FCC Part15, Subpart B:2013	Conducted Emission	Class B	PASS	
	Radiated Emission	Class B	PASS	

NOTE:

(1) " N/A" denotes test is not applicable in this test report.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **C02/CB08** at the location of 1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR16-4-2:

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately **95%**.

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
C02	CISPR	150 KHz~30MHz	2.59	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U , (dB)	NOTE
CB08	CISPR	30MHz~200MHz	V	3.22	
		30MHz~200MHz	H	3.55	
		200MHz~ 1,000MHz	V	3.24	
		200MHz~ 1,000MHz	H	3.11	
		1,000MHz~18,000MHz	V	4.05	
		1,000MHz~18,000MHz	H	3.97	
		18,000MHz~40,000MHz	V	4.04	
		18,000MHz~40,000MHz	H	4.01	

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	802.11n VDSL2 IAD
Brand Name	SmartRG
Model Name	SR630n
Model Difference	N/A
PowerSource	DC Voltage supplied from AC/DC adapter. 1#Model: S24B12-120A200-Y4 2#Model: RDA024120020-AC
Power Rating	1# I/P:100-240V~50/60Hz Max 0.7A O/P:12V 2.0A 2# I/P:100-240V~50/60Hz 0.6A O/P:12V 2.0A

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. The maximum operating frequency is 2.4G

3.2 DESCRIPTION OF TEST MODES

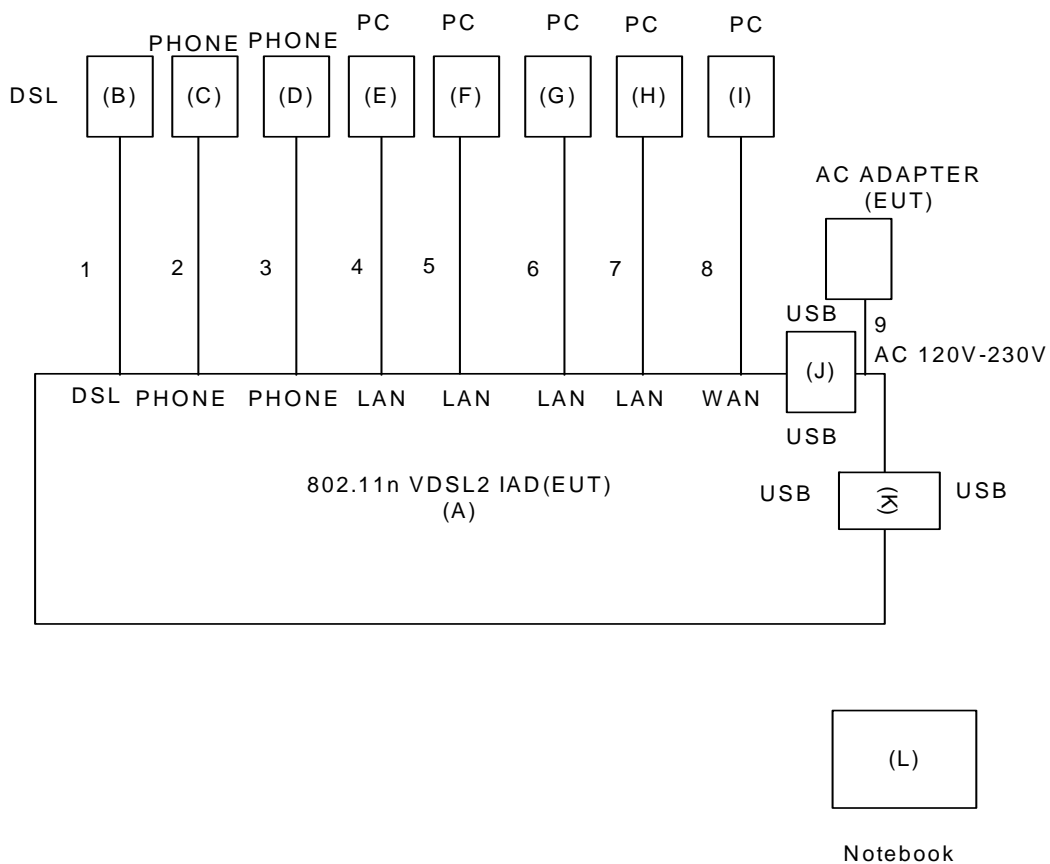
To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	Full Load

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted / Radiated Test	
Final Test Mode	Description
Mode 1	Full Load

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
B	ADSL	LOOP	0324DSL 10A-16C-G21-5A	N/A	20051214500100	
C	PHONE	CHINA TELECOM	N/A	N/A	N/A	
D	PHONE	CHINA TELECOM	N/A	N/A	N/A	
E	PC	HP	Dx7208	DOC	CNG7050PF6	
F	PC	HP	Dx7208	DOC	CNG7050PB7	
G	PC	Dell 745	DCSM	DOC	G7K832X	
H	PC	Dell 745	DCSM	DOC	J8K832X	
I	PC	HP	Dx7200MT	DOC	CNG60601DV	
J	Flash Disk	Kingston	DTI/1GB	DOC	39621564-014D5 17	
K	Flash Disk	Kingston	DTI/1GB	DOC	39621564-014D5 26	
L	Notebook	HP	8460P	N/A	CNU1301BJ3	

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.2m	DSL cable
2	NO	NO	1m	RJ11 cable
3	NO	NO	1m	RJ11 cable
4	NO	NO	6m	RJ45 cable
5	NO	NO	6m	RJ45 cable
6	NO	NO	6m	RJ45 cable
7	NO	NO	6m	RJ45 cable
8	NO	NO	6m	RJ45 cable
9	NO	NO	2m	AC Main cable

Note:

- (1) For detachable type I/O cable should be specified the length in m in 『Length』 column.

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION (FREQUENCY RANGE 150 KHZ-30 MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.50 - 5.0	73.00	60.00	56.00	46.00
5.0 - 30.0	73.00	60.00	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

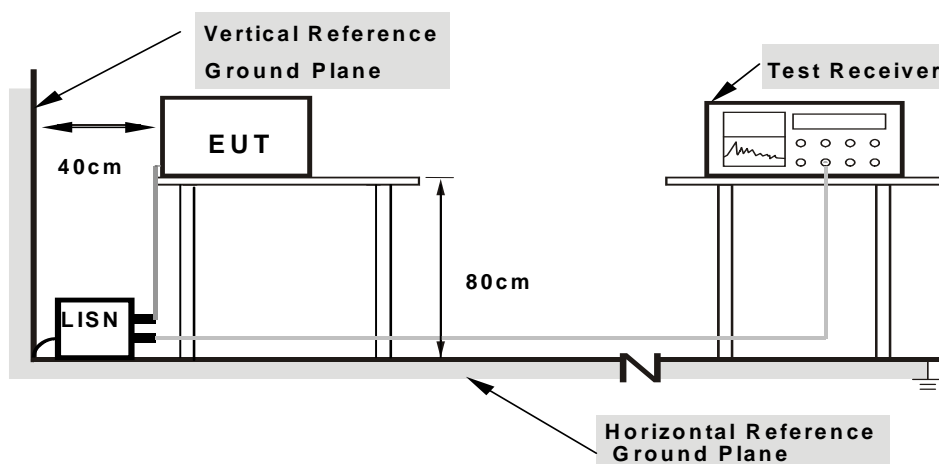
4.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the groundplane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.3 DEVIATION FROM TEST STANDARD

No deviation

4.1.4 TESTSETUP



- Note:**
1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

5.1.5 EUT OPERATING CONDITIONS

The EUT exercise program used during radiated and/or conducted emission measurement was designed to exercise the various system components in a manner similar to a typical use.

5.1.6 TEST RESULTS

Please refer to the Attachment A.

Remark

- (1) All readings are QP Mode value unless otherwise stated AVG in column of 『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform. In this case, a " * " marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150KHz to 30MHz.

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Below 1 GHz

Measurement Method and Applied Limits:

ANSI C63.4:

Frequency(MHz)	Class A (at 10m)		Class B (at 3m)	
	(uV/m) Field strength	(dBuV/m) Field strength	(uV/m) Field strength	(dBuV/m) Field strength
30 - 88	90	39	100	40
88 - 216	150	43.5	150	43.5
216 - 960	210	46.4	200	46
Above 960	300	49.5	500	54

CISPR 22 or CAN/CSA CISPR 22-10:

Frequency (MHz)	Class A (at 10m)	Class B (at 10m)
	dBuV/m	
30 - 230	40	30
230 - 1000	47	37

Above 1 GHz

Measurement Method and Applied Limits:

ANSI C63.4:

Frequency (MHz)	Class A				Class B	
	(dBuV/m) (at 3m)		(dBuV/m) (at 10m)		(dBuV/m) (at 3m)	
	Peak	Average	Peak	Average	Peak	Average
Above 1000	80	60	69.5	49.5	74	54

FREQUENCY RANGE OF RADIATED MEASUREMENT (FOR UNINTENTIONAL RADIATORS)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5 th harmonic of the highest frequency or 40 GHz, whichever is lower

NOTE:

- (1) The limit for radiated test was performed according to as following:
FCC Part 15, Subpart B: 2013
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
3m Emission level = 10m Emission level + 20log(10m/3m).
- (4) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
Margin Level = Measurement Value - Limit Value

4.2.2 TEST PROCEDURE

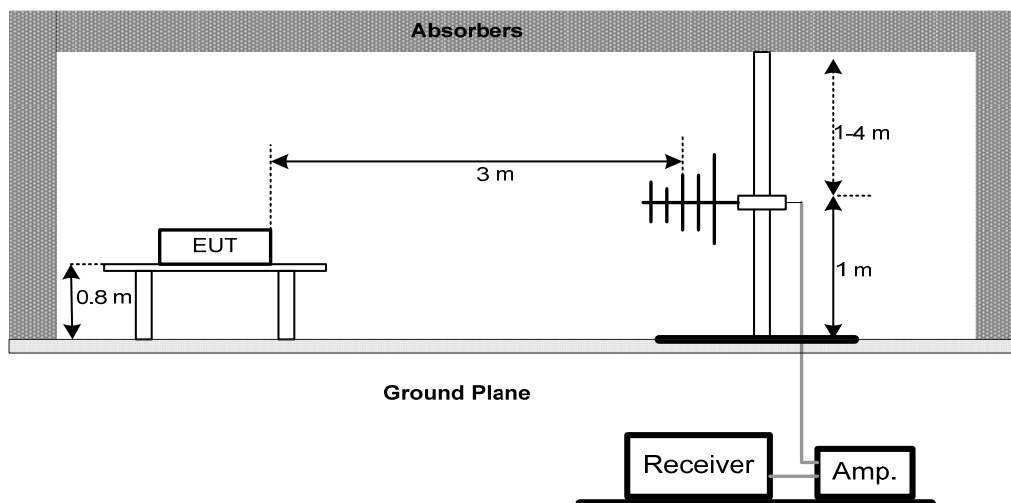
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then QuasiPeak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3 DEVIATION FROM TEST STANDARD

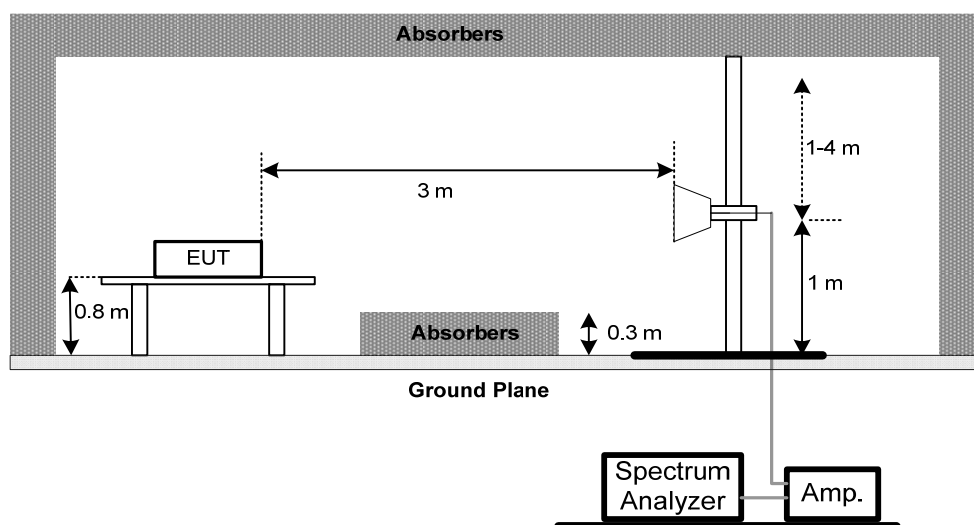
No deviation

4.2.4 TESTSETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



4.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

5.2.6 TEST RESULTS(30 TO 1000 MHZ)

Please refer to the Attachment B.

Remark :

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Modewith Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz.
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz.
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.

5.2.7 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment C

Remark :

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (3) Data of measurement within this frequency range shown “ * ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

5. MEASUREMENT INSTRUMENTS LIST

Conducted Emission					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	V-LISN	Schwarzbeck	NSLK 8127	8127-685	Jun. 02, 2015
2	Transient Limiter	EM	EM-7600	772	Aug. 21, 2015
3	Test Cable	TIMES	CFD300-NL	C02	Jun. 15, 2015
4	EMI Test Receiver	Agilent	N9038A	MY51210215	Feb. 24, 2015
5	Measurement Software	EZ	EZ EMC (Version NB-03A)	N/A	N/A

Radiated Emission					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Log-Bicon Antenna	Schwarzbeck	VULB 9168	9168-352	Jun. 17, 2015
2	Pre-Amplifier	Anritsu	MH648A	M92649	Jun. 17, 2015
3	Microflex Cable	Harbour industries	27478LL142	1M	May. 12, 2015
4	Test Cable	TIMES	LMR-400	12M	May. 13, 2015
5	Test Cable	TIMES	LMR-400	3M	May. 13, 2015
6	EMI Test Receiver	Agilent	N9038A	MY51210215	Feb. 24, 2015
7	Horn Antenna (1G)	Schwarzbeck	BBHA 9120 D	9120D-325	Jun. 14, 2015
8	Pre_Amplifier	Agilent	8449B	3008A01714	Apr. 15, 2015
9	Microflex Cable	HARBOUR INDUSTRIES	27478 LL142	1M	May. 12, 2015
10	Microflex Cable	EMC	S104-SMA	8M	May. 14, 2015
11	Microflex Cable	HARBOUR INDUSTRIES	27478 LL142	3M	May. 12, 2015
12	EMI Test Receiver	Agilent	N9038A	MY51210215	Feb. 24, 2015
13	Measurement Software	EZ	EZ EMC (Version NB-03A)	N/A	N/A

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of Equipment List is One Year.

6.EUT TEST PHOTO

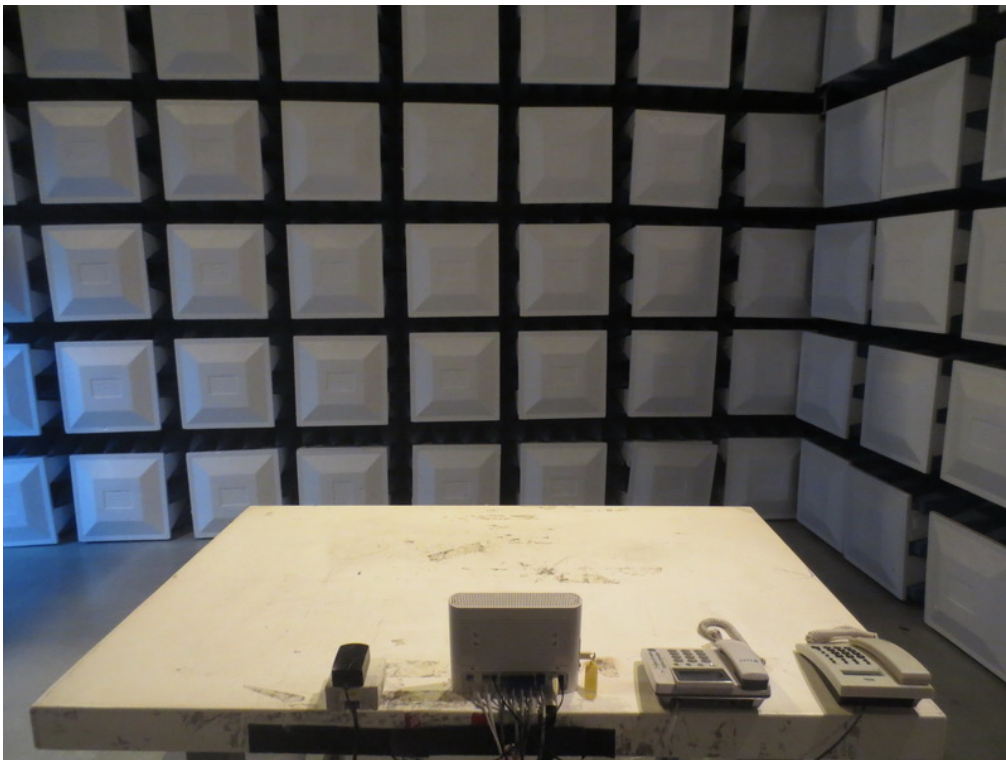
Conducted Measurement Photos
Adapter: S24B12-120A200-Y4



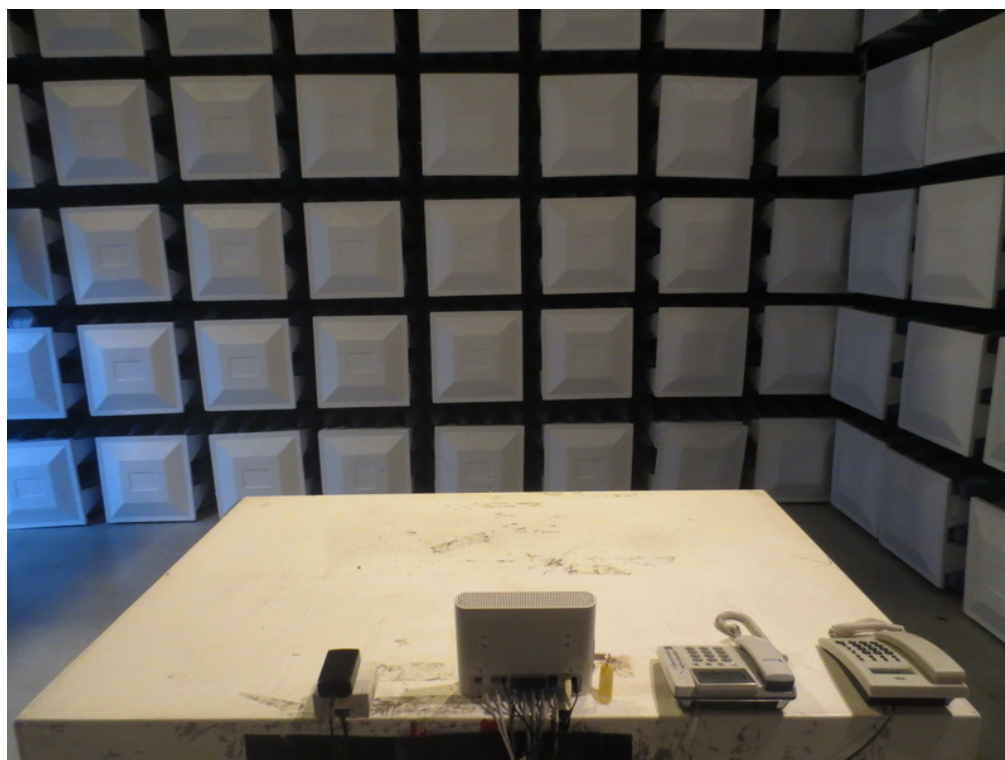
Conducted Measurement Photos
Adapter: RDA024120020-AC



**Radiated Measurement Photos
Below 1G Adapter:S24B12-120A200-Y4**



**Radiated Measurement Photos
Below 1G Adapter: RDA024120020-AC**



Radiated Measurement Photos
Above 1G Adapter:S24B12-120A200-Y4



**Radiated Measurement Photos
Above 1G Adapter: RDA024120020-AC**



ATTACHMENT A - CONDUCTED EMISSION

Test Voltage:	AC 120V/60Hz
Test Mode:	Full Load_Adapter: S24B12-120A200-Y4

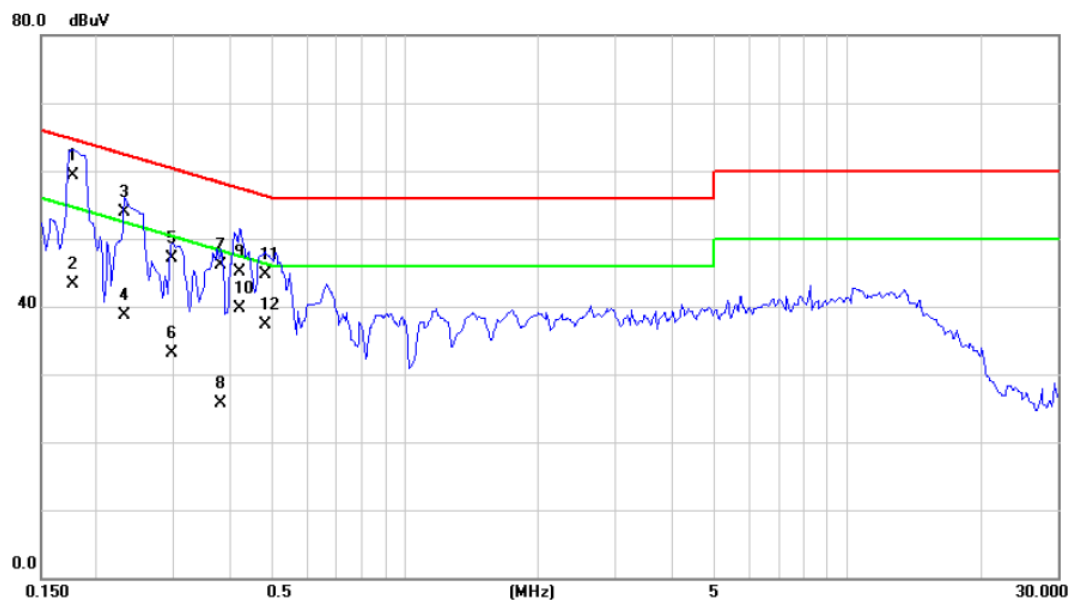
Line



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.1695	47.56	9.53	57.09	64.98	-7.89	QP	
2	0.1695	32.00	9.53	41.53	54.98	-13.45	AVG	
3	0.2320	42.00	9.55	51.55	62.38	-10.83	QP	
4	0.2320	28.00	9.55	37.55	52.38	-14.83	AVG	
5	0.2906	38.50	9.59	48.09	60.51	-12.42	QP	
6 *	0.2906	36.00	9.59	45.59	50.51	-4.92	AVG	
7	0.4156	36.00	9.65	45.65	57.54	-11.89	QP	
8	0.4156	31.00	9.65	40.65	47.54	-6.89	AVG	
9	0.4742	31.20	9.69	40.89	56.44	-15.55	QP	
10	0.4742	26.00	9.69	35.69	46.44	-10.75	AVG	
11	10.6094	34.00	10.10	44.10	60.00	-15.90	QP	
12	10.6094	22.00	10.10	32.10	50.00	-17.90	AVG	

Test Voltage:	AC 120V/60Hz
Test Mode:	Full Load_Adapter: S24B12-120A200-Y4

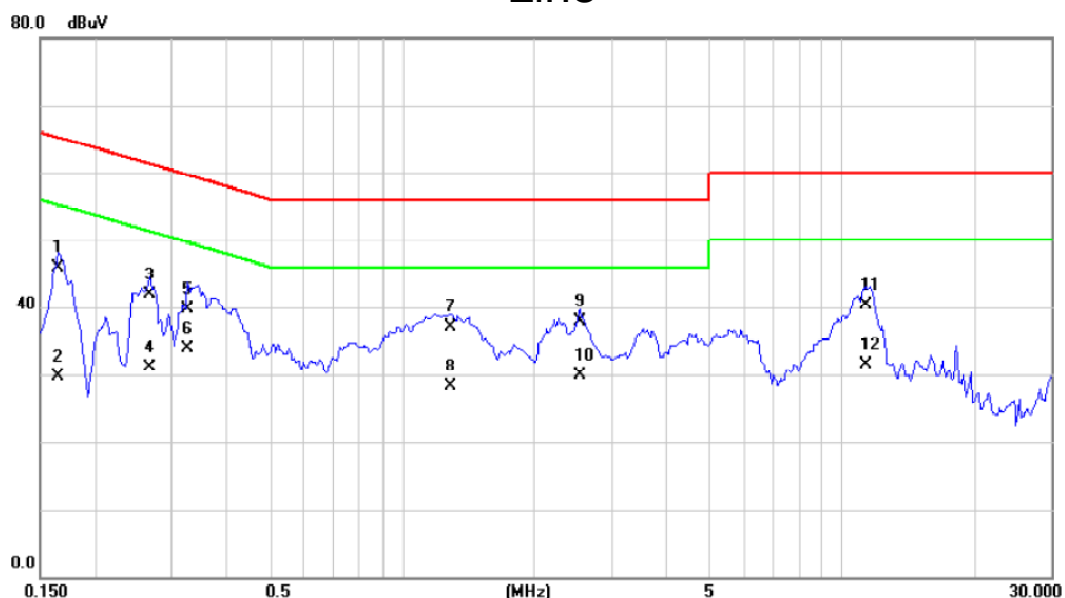
Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1773	49.60	9.62	59.22	64.61	-5.39	QP	
2		0.1773	33.60	9.62	43.22	54.61	-11.39	AVG	
3		0.2320	44.20	9.61	53.81	62.38	-8.57	QP	
4		0.2320	29.00	9.61	38.61	52.38	-13.77	AVG	
5		0.2983	37.50	9.62	47.12	60.29	-13.17	QP	
6		0.2983	23.54	9.62	33.16	50.29	-17.13	AVG	
7		0.3844	36.40	9.63	46.03	58.18	-12.15	QP	
8		0.3844	16.00	9.63	25.63	48.18	-22.55	AVG	
9		0.4234	35.40	9.63	45.03	57.38	-12.35	QP	
10		0.4234	30.00	9.63	39.63	47.38	-7.75	AVG	
11		0.4820	35.10	9.64	44.74	56.30	-11.56	QP	
12		0.4820	27.60	9.64	37.24	46.30	-9.06	AVG	

Test Voltage:	AC 120V/60Hz
Test Mode:	Full Load_Adapter: RDA024120020-AC

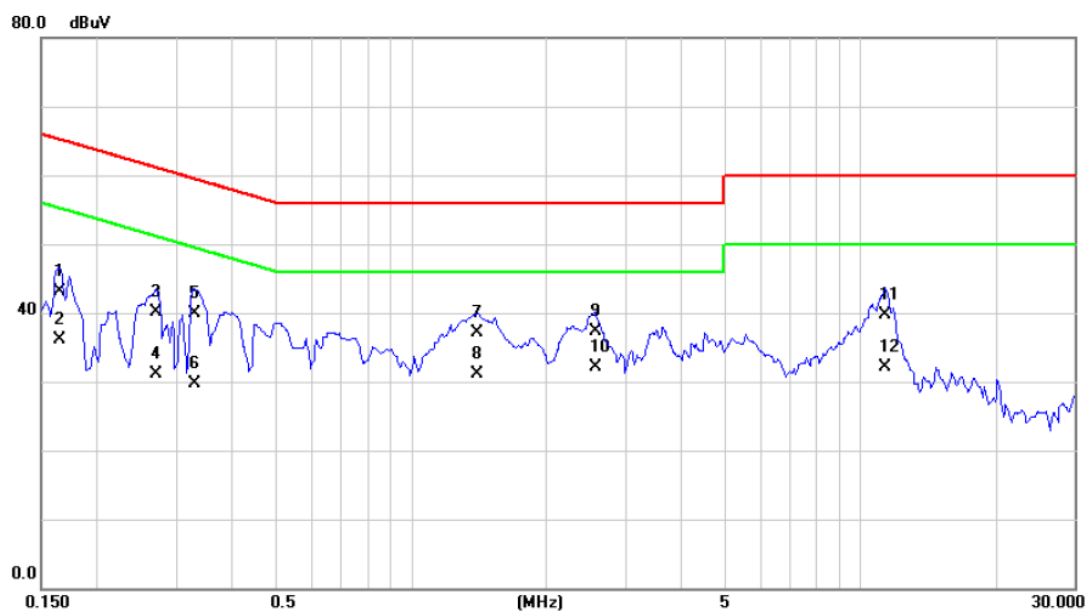
Line



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.1655	36.40	9.53	45.93	65.18	-19.25	QP	
2	0.1655	20.10	9.53	29.63	55.18	-25.55	AVG	
3	0.2671	32.40	9.58	41.98	61.21	-19.23	QP	
4	0.2672	21.50	9.58	31.08	51.20	-20.12	AVG	
5	0.3256	30.20	9.60	39.80	59.56	-19.76	QP	
6 *	0.3258	24.30	9.60	33.90	49.56	-15.66	AVG	
7	1.2943	27.50	9.70	37.20	56.00	-18.80	QP	
8	1.2944	18.60	9.70	28.30	46.00	-17.70	AVG	
9	2.5482	28.20	9.74	37.94	56.00	-18.06	QP	
10	2.5484	20.10	9.74	29.84	46.00	-16.16	AVG	
11	11.3632	30.20	10.13	40.33	60.00	-19.67	QP	
12	11.3633	21.40	10.13	31.53	50.00	-18.47	AVG	

Test Voltage:	AC 120V/60Hz
Test Mode:	Full Load_ Adapter: RDA024120020-AC

Neutral

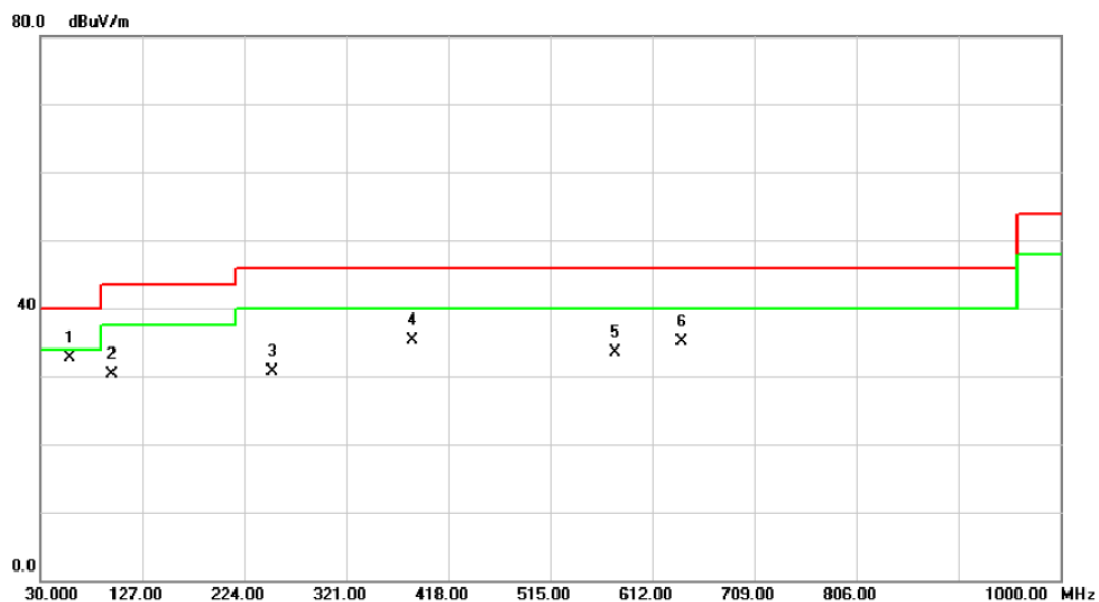


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1655	33.50	9.62	43.12	65.18	-22.06	QP	
2		0.1655	26.40	9.62	36.02	55.18	-19.16	AVG	
3		0.2710	30.40	9.62	40.02	61.09	-21.07	QP	
4		0.2711	21.50	9.62	31.12	51.08	-19.96	AVG	
5		0.3296	30.20	9.62	39.82	59.46	-19.64	QP	
6		0.3297	20.10	9.62	29.72	49.46	-19.74	AVG	
7		1.4040	27.50	9.70	37.20	56.00	-18.80	QP	
8		1.4040	21.50	9.70	31.20	46.00	-14.80	AVG	
9		2.5680	27.60	9.77	37.37	56.00	-18.63	QP	
10	*	2.5680	22.40	9.77	32.17	46.00	-13.83	AVG	
11		11.4140	29.60	10.15	39.75	60.00	-20.25	QP	
12		11.4141	22.00	10.15	32.15	50.00	-17.85	AVG	

ATTACHMENT B - RADIATED EMISSION (30MHZ TO 1000MHZ)

Test Voltage:	AC 120V/60Hz
Test Mode:	Full Load_ Adapter: S24B12-120A200-Y4

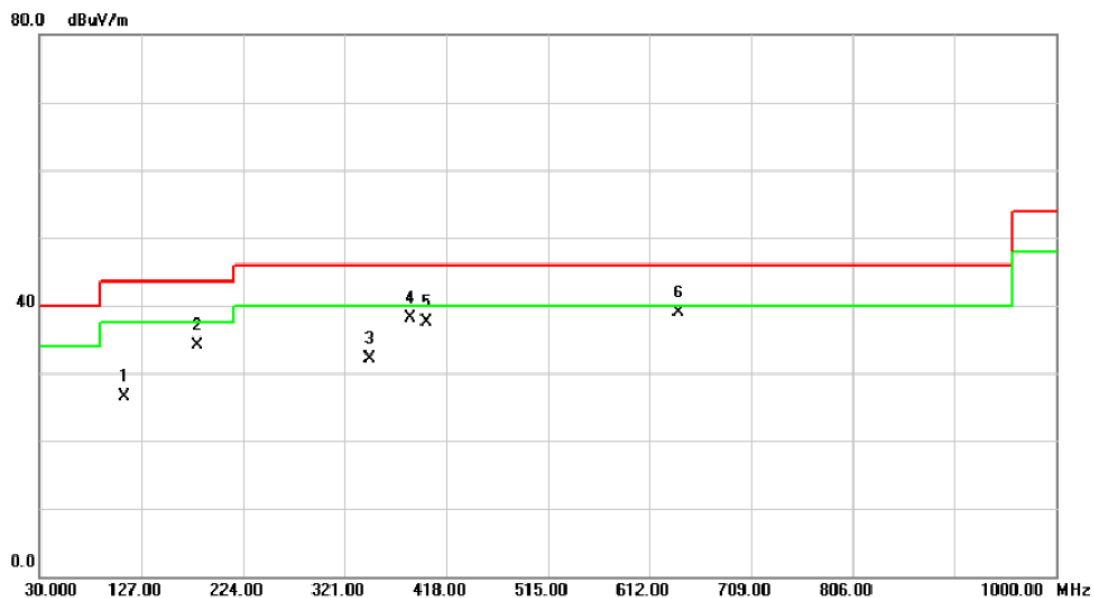
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	57.1600	47.38	-14.64	32.74	40.00	-7.26	QP	
2		97.9000	46.95	-16.68	30.27	43.50	-13.23	QP	
3		250.1900	44.65	-14.02	30.63	46.00	-15.37	QP	
4		384.0500	45.50	-10.25	35.25	46.00	-10.75	QP	
5		576.1100	41.50	-7.92	33.58	46.00	-12.42	QP	
6		640.1300	40.76	-5.69	35.07	46.00	-10.93	QP	

Test Voltage:	AC 120V/60Hz
Test Mode:	Full Load_ Adapter: S24B12-120A200-Y4

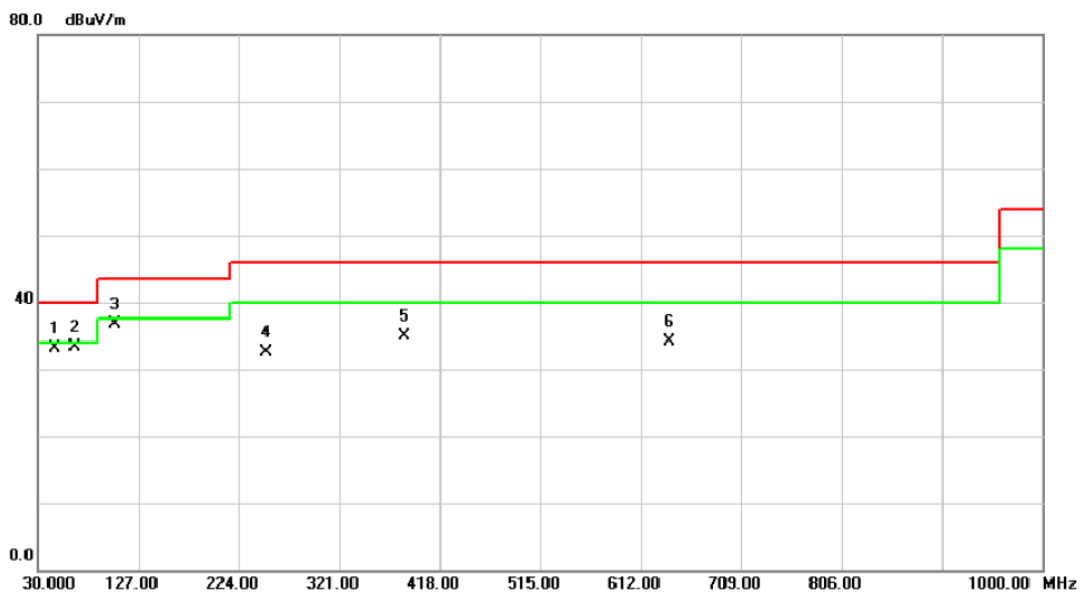
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		110.5100	41.67	-15.22	26.45	43.50	-17.05	QP	
2		180.3500	47.19	-13.05	34.14	43.50	-9.36	QP	
3		344.2800	43.84	-11.69	32.15	46.00	-13.85	QP	
4		384.0500	48.37	-10.25	38.12	46.00	-7.88	QP	
5		399.5700	46.99	-9.55	37.44	46.00	-8.56	QP	
6	*	640.1300	44.56	-5.69	38.87	46.00	-7.13	QP	

Test Voltage:	AC 120V/60Hz
Test Mode:	Full Load_ Adapter: RDA024120020-AC

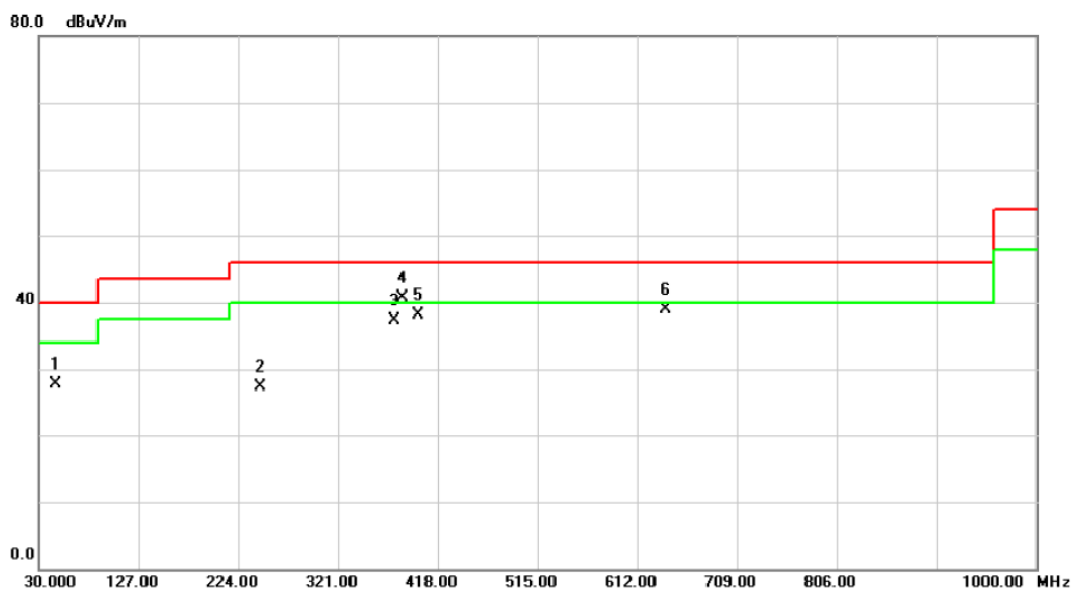
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		46.4900	46.87	-13.71	33.16	40.00	-6.84	QP	
2	*	64.9200	48.89	-15.54	33.35	40.00	-6.65	QP	
3		104.6900	52.59	-15.87	36.72	43.50	-6.78	QP	
4		250.1900	46.61	-14.02	32.59	46.00	-13.41	QP	
5		384.0500	45.08	-10.25	34.83	46.00	-11.17	QP	
6		640.1300	39.88	-5.69	34.19	46.00	-11.81	QP	

Test Voltage:	AC 120V/60Hz
Test Mode:	Full Load_ Adapter: RDA024120020-AC

Horizontal

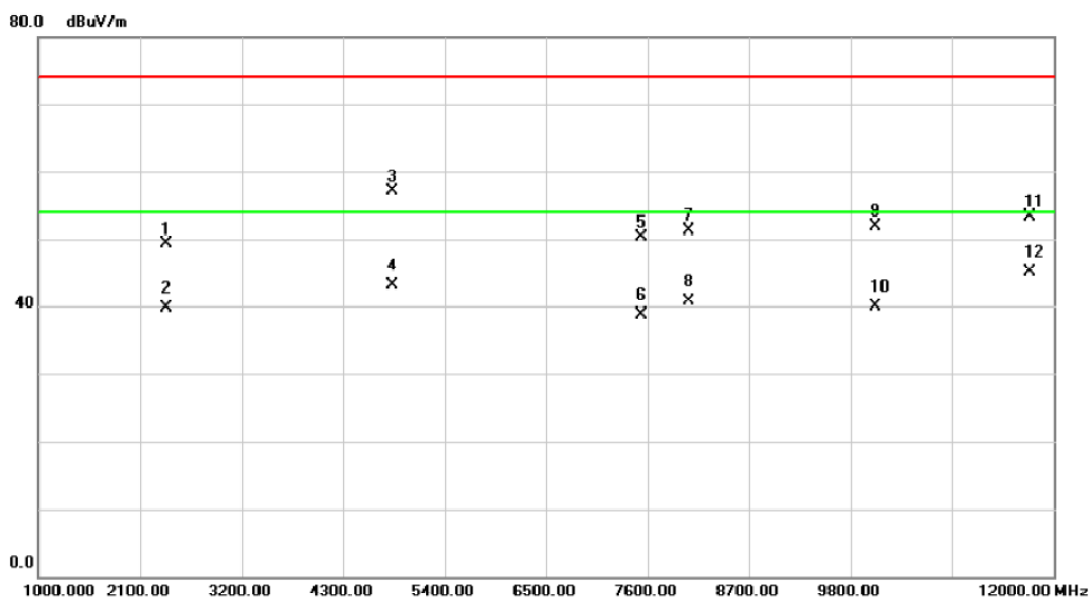


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		45.5200	41.43	-13.67	27.76	40.00	-12.24	QP	
2		245.3400	41.36	-14.03	27.33	46.00	-18.67	QP	
3		375.3200	47.85	-10.64	37.21	46.00	-8.79	QP	
4	*	384.0500	50.87	-10.25	40.62	46.00	-5.38	QP	
5		399.5700	47.72	-9.55	38.17	46.00	-7.83	QP	
6		640.1300	44.50	-5.69	38.81	46.00	-7.19	QP	

ATTACHMENT C - RADIATED EMISSION (ABOVE 1000MHZ)

Test Voltage:	AC 120V/60Hz
Test Mode:	Full Load_Adapter:S24B12-120A200-Y4

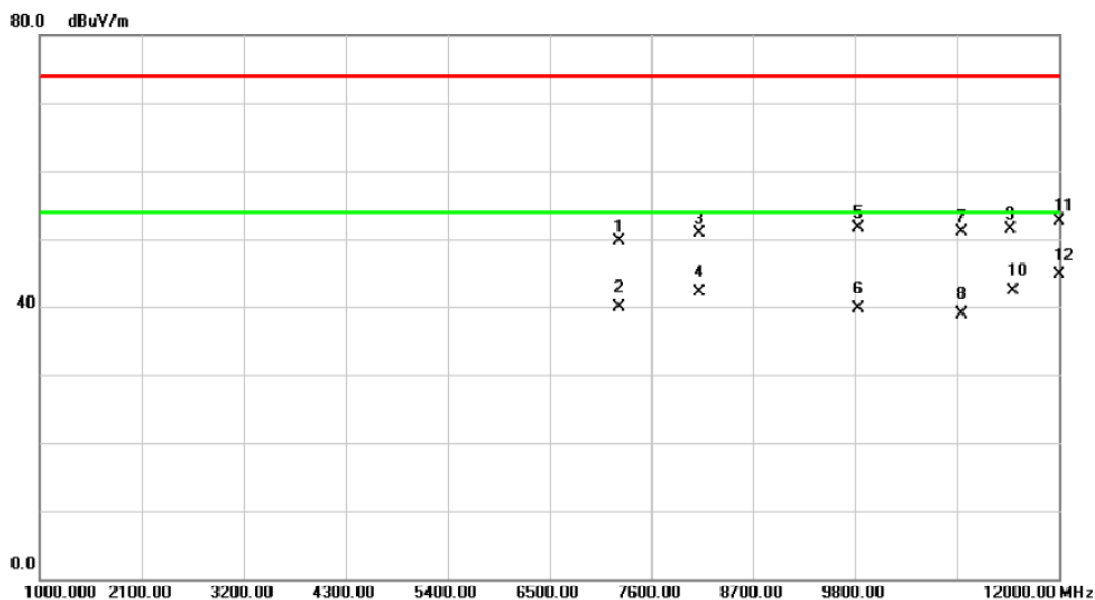
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2386.000	51.86	-2.47	49.39	74.00	-24.61	peak	
2		2386.000	42.10	-2.47	39.63	54.00	-14.37	AVG	
3		4828.000	53.40	3.62	57.02	74.00	-16.98	peak	
4		4828.000	39.50	3.62	43.12	54.00	-10.88	AVG	
5		7534.000	39.83	10.50	50.33	74.00	-23.67	peak	
6		7534.000	28.30	10.50	38.80	54.00	-15.20	AVG	
7		8040.000	40.88	10.43	51.31	74.00	-22.69	peak	
8		8040.000	30.30	10.43	40.73	54.00	-13.27	AVG	
9		10064.000	40.33	11.52	51.85	74.00	-22.15	peak	
10		10064.000	28.30	11.52	39.82	54.00	-14.18	AVG	
11		11736.000	40.57	12.79	53.36	74.00	-20.64	peak	
12	*	11736.000	32.30	12.79	45.09	54.00	-8.91	AVG	

Test Voltage:	AC 120V/60Hz
Test Mode:	Full Load_Adapter:S24B12-120A200-Y4

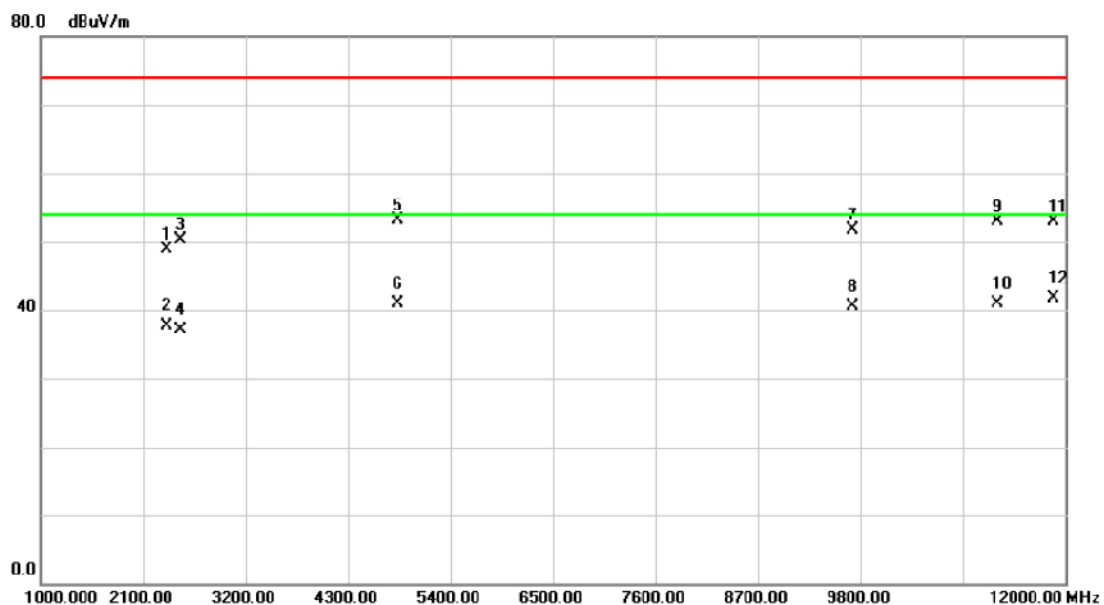
Horizontal



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	7259.000	40.14	9.65	49.79	74.00	-24.21	peak	
2	7259.000	30.20	9.65	39.85	54.00	-14.15	AVG	
3	8117.000	40.54	10.45	50.99	74.00	-23.01	peak	
4	8117.000	31.60	10.45	42.05	54.00	-11.95	AVG	
5	9833.000	40.32	11.43	51.75	74.00	-22.25	peak	
6	9833.000	28.30	11.43	39.73	54.00	-14.27	AVG	
7	10955.000	39.83	11.34	51.17	74.00	-22.83	peak	
8	10955.000	27.60	11.34	38.94	54.00	-15.06	AVG	
9	11483.000	38.59	12.89	51.48	74.00	-22.52	peak	
10	11483.000	29.40	12.89	42.29	54.00	-11.71	AVG	
11	12000.000	40.19	12.61	52.80	74.00	-21.20	peak	
12 *	12000.000	32.00	12.61	44.61	54.00	-9.39	AVG	

Test Voltage:	AC 120V/60Hz
Test Mode:	Full Load_Adapter: RDA024120020-AC

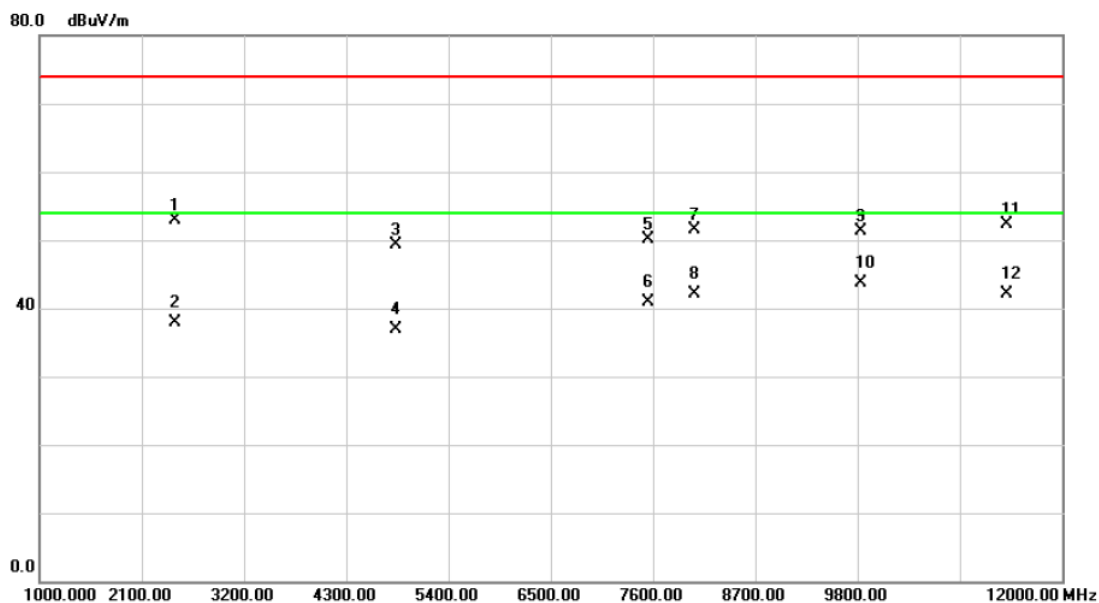
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2353.000	51.44	-2.52	48.92	74.00	-25.08	peak	
2		2353.000	40.20	-2.52	37.68	54.00	-16.32	AVG	
3		2507.000	52.57	-2.29	50.28	74.00	-23.72	peak	
4		2507.000	39.40	-2.29	37.11	54.00	-16.89	AVG	
5		4828.000	49.41	3.62	53.03	74.00	-20.97	peak	
6		4828.000	37.20	3.62	40.82	54.00	-13.18	AVG	
7		9712.000	40.46	11.30	51.76	74.00	-22.24	peak	
8		9712.000	29.20	11.30	40.50	54.00	-13.50	AVG	
9		11274.000	40.61	12.23	52.84	74.00	-21.16	peak	
10		11274.000	28.60	12.23	40.83	54.00	-13.17	AVG	
11		11868.000	40.26	12.69	52.95	74.00	-21.05	peak	
12	*	11868.000	29.10	12.69	41.79	54.00	-12.21	AVG	

Test Voltage:	AC 120V/60Hz
Test Mode:	Full Load_Adapter: RDA024120020-AC

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2463.000	55.20	-2.37	52.83	74.00	-21.17	peak	
2		2463.000	40.30	-2.37	37.93	54.00	-16.07	AVG	
3		4828.000	45.76	3.62	49.38	74.00	-24.62	peak	
4		4828.000	33.20	3.62	36.82	54.00	-17.18	AVG	
5		7545.000	39.67	10.50	50.17	74.00	-23.83	peak	
6		7545.000	30.40	10.50	40.90	54.00	-13.10	AVG	
7		8051.000	41.00	10.44	51.44	74.00	-22.56	peak	
8		8051.000	31.60	10.44	42.04	54.00	-11.96	AVG	
9		9833.000	39.97	11.43	51.40	74.00	-22.60	peak	
10	*	9833.000	32.30	11.43	43.73	54.00	-10.27	AVG	
11		11406.00	39.74	12.65	52.39	74.00	-21.61	peak	
12		11406.00	29.40	12.65	42.05	54.00	-11.95	AVG	