

TEST REPORT

Reference No...... : WTX21X11131153W-2
FCC ID : 2AABK-SKYV3
Applicant : Shenzhen Chuangwei Electronic Appliance Tech Co., Ltd.
Address : 4F & 6F, Overseas plant south, Skyworth Industrial Park, Shiyan Street,
Bao'an District, Shenzhen, China
Product Name : 10 inch WIFI Digital Photo Frame
Test Model. : SKYV3
Standards : FCC Part 15.247
Date of Receipt sample : Nov. 29, 2021
Date of Test..... : Nov. 29, 2021 to Dec. 10, 2021
Date of Issue : Dec. 10, 2021
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:

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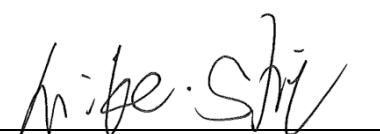
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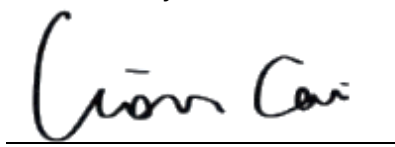
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Report version

Version No.	Date of issue	Description
Rev.00	Dec. 10, 2021	Original
/	/	/

1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Shenzhen Chuangwei Electronic Appliance Tech Co., Ltd.
Address of applicant: 4F & 6F, Overseas plant south, Skyworth Industrial Park,
Shiyan Street, Bao'an District, Shenzhen, China

Manufacturer: Shenzhen Chuangwei Electronic Appliance Tech Co., Ltd.
Address of manufacturer: 4F & 6F, Overseas plant south, Skyworth Industrial Park,
Shiyan Street, Bao'an District, Shenzhen, China

General Description of EUT	
Product Name:	10 inch WIFI Digital Photo Frame
Trade Name:	Skylight
Model No.:	SKYV3
Adding Model:	/
Rated Voltage:	DC 5V
Battery Capacity:	/
Power Adapter:	MODEL: S005A02 INPUT:AC100-240V, 50/60Hz, 0.3A OUTPUT: DC5V, 2.0A
Note: The test data is gathered from a production sample provided by the manufacturer.	

Technical Characteristics of EUT	
Support Standards:	802.11b, 802.11g, 802.11n
Frequency Range:	2412-2462MHz for 802.11b/g/n(HT20) 2422-2452MHz for 802.11n(HT40)
RF Output Power:	13.89dBm (Conducted)
Type of Modulation:	DBPSK,BPSK,DQPSK,QPSK,16QAM,64QAM
Quantity of Channels:	11 for 802.11b/g/n(HT20); 7 for 802.11n(HT40)
Channel Separation:	5MHz
Type of Antenna:	Integral Antenna
Antenna Gain:	2.51dBi

1.2 Test Standards

The tests were performed according to following standards:

FCC Rules Part 15.247: Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.

558074 D01 15.247 Meas Guidance v05r02: Guidance for Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating under section 15.247 of the FCC rules.

662911 D01 Multiple Transmitter Output v02r01: Emissions Testing of Transmitters with Multiple Outputs in the Same Band.

ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, KDB 558074 D01 15.247 Meas Guidance v05r02, KDB 662911 D01 Multiple Transmitter Output v02r01

The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted accordingly in reference to the Operating Instructions.

1.4 Test Facility

Address of the test laboratory

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990

Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. The Designation Number is CN5010, and Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

1.5 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, with a duty cycle equal to 100%, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	802.11b	Low:2412MHz, Middle:2437MHz,High:2462MHz
TM2	802.11g	Low:2412MHz, Middle:2437MHz,High:2462MHz
TM3	802.11n-HT20	Low:2412MHz, Middle:2437MHz,High:2462MHz
TM4	802.11n-HT40	Low:2422MHz, Middle:2437MHz,High:2452MHz
Note1: All test modes (different data rate and different modulation) are performed, but only the worst case is recorded in this report.		
Note2: Testing for screen model are: SAT101AT40I28Y03-26228M022IB-438 and SPEC-WJWX 101196A.		

Test Conditions	
Temperature:	22~25 °C
Relative Humidity:	45~55 %.
ATM Pressure:	1019 mbar

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Core
DC Cable	1.8	Unshielded	Without Ferrite

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Computer	Lenovo	TianYi310-14ISK	/

1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	$\pm 0.42\text{dB}$
Occupied Bandwidth	Conducted	$\pm 1.5\%$
Power Spectral Density	Conducted	$\pm 1.8\text{dB}$
Conducted Spurious Emission	Conducted	$\pm 2.17\text{dB}$
Conducted Emissions	Conducted	9-150kHz $\pm 3.74\text{dB}$
		0.15-30MHz $\pm 3.34\text{dB}$
Transmitter Spurious Emissions	Radiated	30-200MHz $\pm 4.52\text{dB}$
		0.2-1GHz $\pm 5.56\text{dB}$
		1-6GHz $\pm 3.84\text{dB}$
		6-26GHz $\pm 3.92\text{dB}$

1.7 Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due. Date
SEMT-1075	Communication Tester	Rohde & Schwarz	CMW500	148650	2021-03-27	2022-03-26
SEMT-1063	GSM Tester	Rohde & Schwarz	CMU200	114403	2021-03-27	2022-03-26
SEMT-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2021-03-27	2022-03-26
SEMT-1079	Spectrum Analyzer	Agilent	N9020A	US47140102	2021-03-27	2022-03-26
SEMT-1080	Signal Generator	Agilent	83752A	3610A01453	2021-03-27	2022-03-26
SEMT-1081	Vector Signal Generator	Agilent	N5182A	MY47070202	2021-03-27	2022-03-26
SEMT-1028	Power Divider	Weinschel	1506A	PM204	2021-03-27	2022-03-26
SEMT-1082	Power Divider	RF-Lambda	RFLT4W5M18G	14110400027	2021-03-27	2022-03-26
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2021-03-27	2022-03-26
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2021-03-27	2022-03-26
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2021-04-12	2022-04-11
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2021-04-12	2022-04-11
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2021-03-19	2023-03-18
SEMT-1068	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2021-03-19	2023-03-18
SEMT-1042	Horn Antenna	ETS	3117	00086197	2021-03-19	2023-03-18
SEMT-1121	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170582	2021-04-27	2023-04-26
SEMT-1169	Pre-amplifier	Direction Systems Inc.	PAP-2640	14145-14153	2021-04-27	2022-04-26
SEMT-1163	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2021-03-27	2022-03-26
SEMT-1166	Power Limiter	Agilent	N9356B	MY45450376	2021-03-27	2022-03-26
SEMT-1076	RF Switcher	Top Precision	RCS03-A2	/	2021-03-19	2023-03-18
SEMT-C001	Cable	Zheng DI	LL142-07-07-10M(A)	/	/	/
SEMT-C002	Cable	Zheng DI	ZT40-2.92J-2.92J-6M	/	/	/
SEMT-C003	Cable	Zheng DI	ZT40-2.92J-2.92J-2.5M	/	/	/
SEMT-C004	Cable	Zheng DI	2M0RFC	/	/	/
SEMT-C005	Cable	Zheng DI	1M0RFC	/	/	/
SEMT-C006	Cable	Zheng DI	1M0RFC	/	/	/

Software List			
Description	Manufacturer	Model	Version
EMI Test Software (Radiated Emission)*	Farad	EZ-EMC	RA-03A1
EMI Test Software (Conducted Emission)*	Farad	EZ-EMC	RA-03A1

*Remark: indicates software version used in the compliance certification testing

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§15.203; §15.247(b)(4)(i)	Antenna Requirement	Compliant
§15.205	Restricted Band of Operation	N/A
§15.207(a)	Conducted Emission	Compliant
§15.247(e)	Power Spectral Density	N/A
§15.247(a)(2)	DTS Bandwidth	N/A
§15.247(b)(3)	RF Output Power	N/A
§15.209(a)	Radiated Emission	Compliant
§15.247(d)	Band Edge (Out of Band Emissions)	Compliant

N/A: Data refer to the original report WTX21X05051655W-3.

Note: Report is for C2PC only. The test data includes Conducted Emission, Radiated Emission and Band Edge. Those not tested mark with N/A (not effected by the C2PC).

3. Antenna Requirement

3.1 Standard Applicable

According to FCC Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

3.2 Evaluation Information

This product has an integral antenna, fulfill the requirement of this section.

4. Field Strength of Spurious Emissions

4.1 Standard Applicable

According to §15.247(d), in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply. Spurious Radiated Emissions measurements starting below or at the lowest crystal frequency.

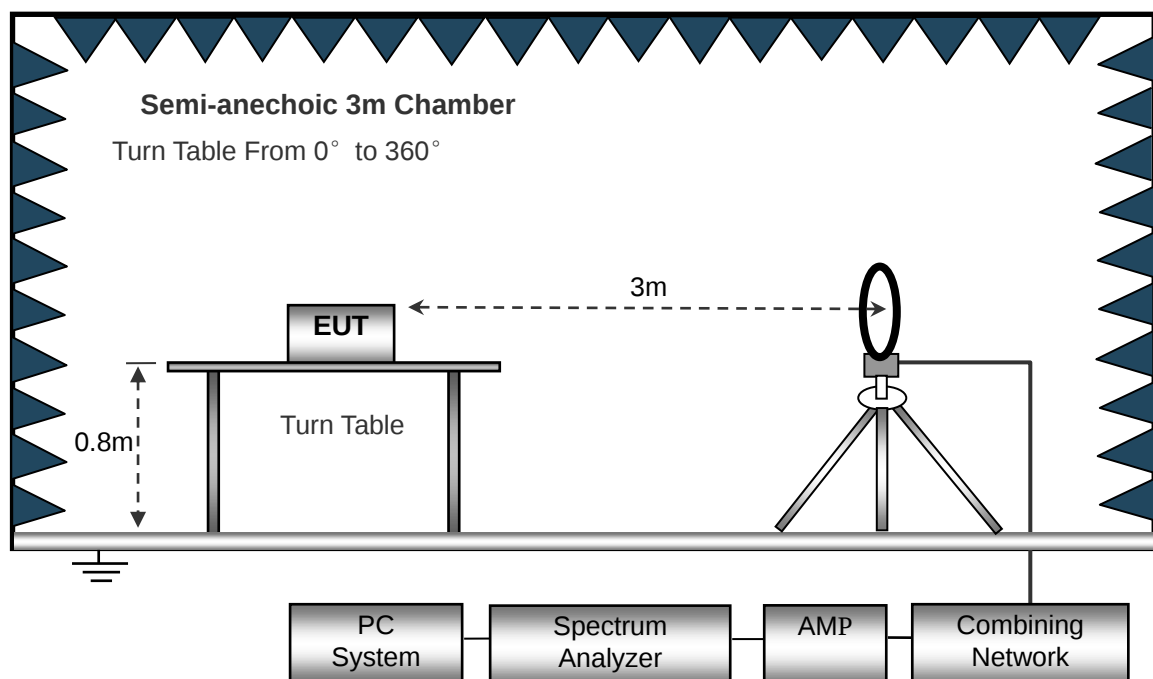
4.2 Test Procedure

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.205 15.247(a) and FCC Part 15.209 Limit.

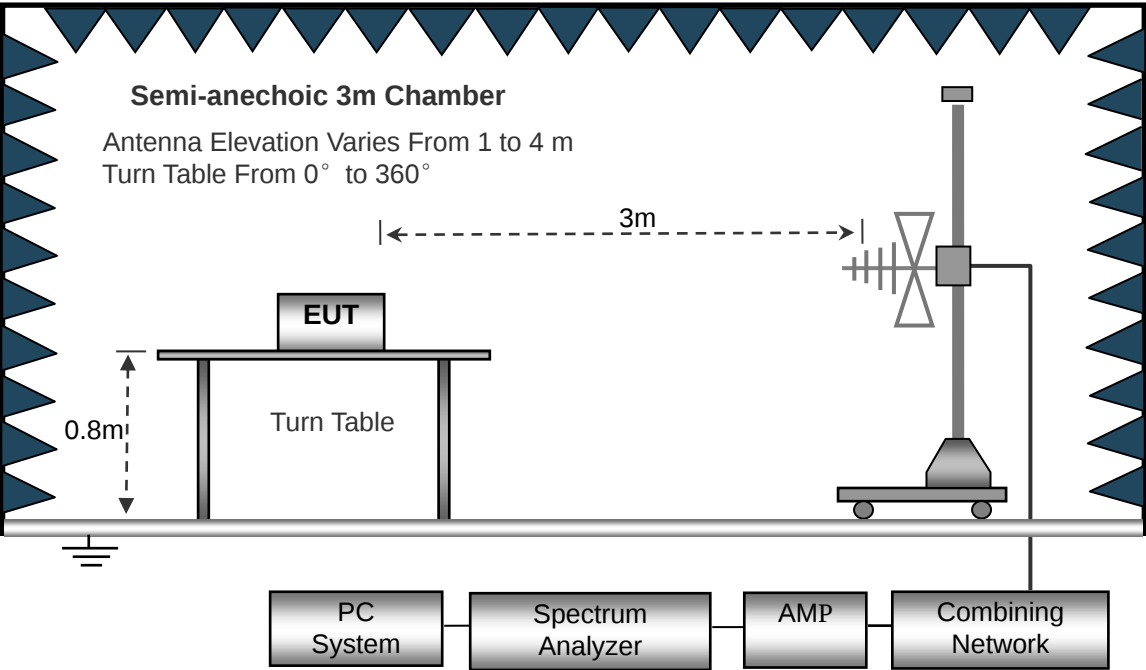
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

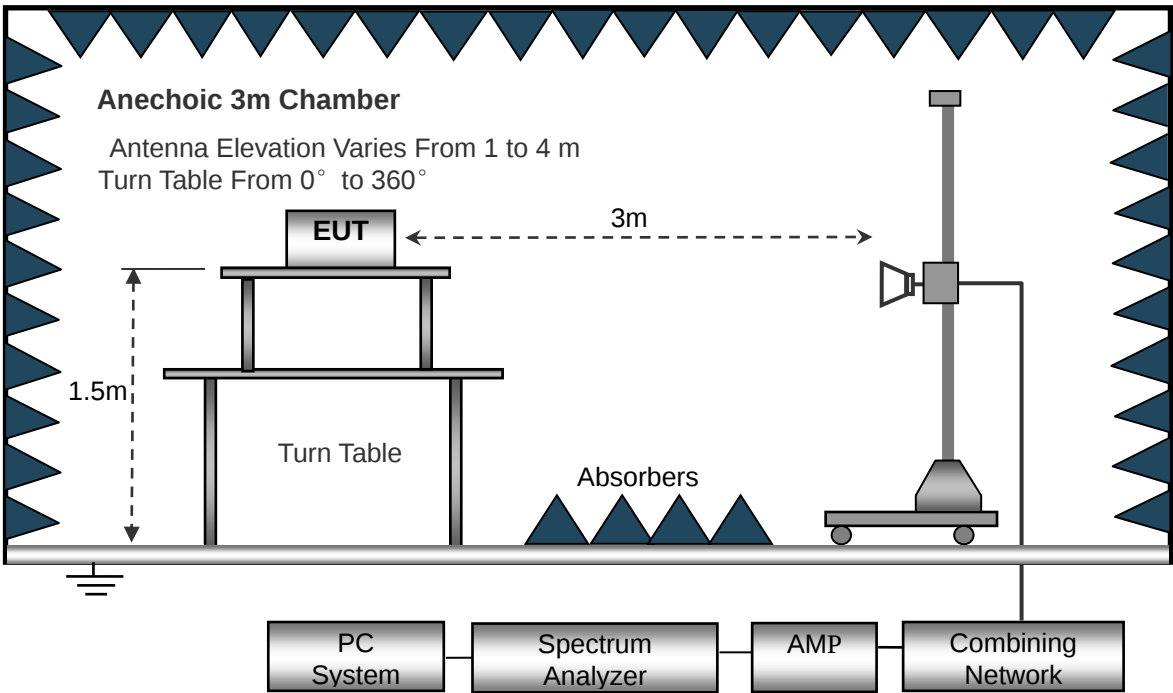
The test setup for emission measurement below 30MHz..



The test setup for emission measurement from 30 MHz to 1 GHz..



The test setup for emission measurement above 1 GHz..



Frequency :9kHz-30MHz	Frequency :30MHz-1GHz	Frequency :Above 1GHz
RBW=10KHz,	RBW=120KHz,	RBW=1MHz,
VBW =30KHz	VBW=300KHz	VBW=3MHz(Peak), 10Hz(AV)
Sweep time= Auto	Sweep time= Auto	Sweep time= Auto
Trace = max hold	Trace = max hold	Trace = max hold
Detector function = peak	Detector function = peak, QP	Detector function = peak, AV

4.3 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Ant. Factor} + \text{Cable Loss} - \text{Ampl. Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15 Limit}$$

4.4 Summary of Test Results/Plots

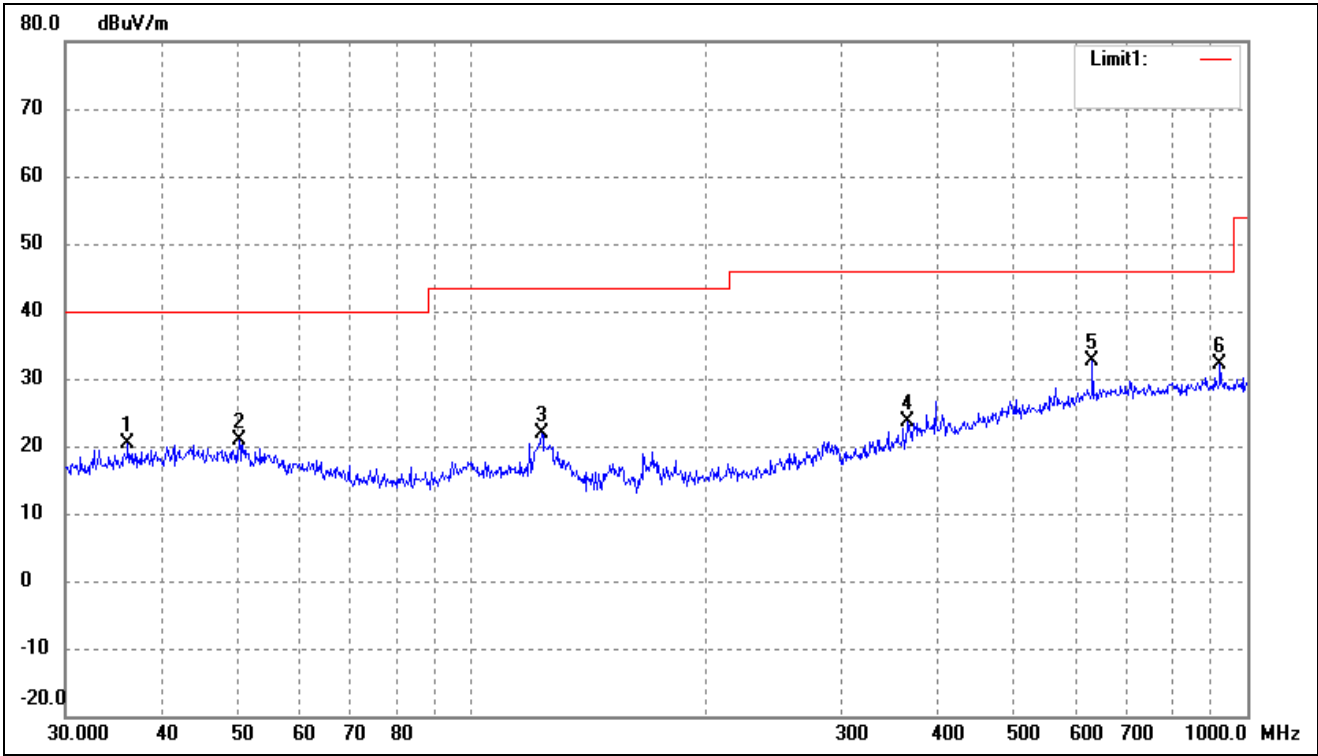
Note: 1.This EUT was tested in 3 orthogonal positions and the worst case position data was reported.

All test modes (different data rate and different modulation) are performed, but only the worst case(802.11b_11Mbps) is recorded in this report.

Screen model: SAT101AT40I28Y03-26228M022IB-438 (Worst case)

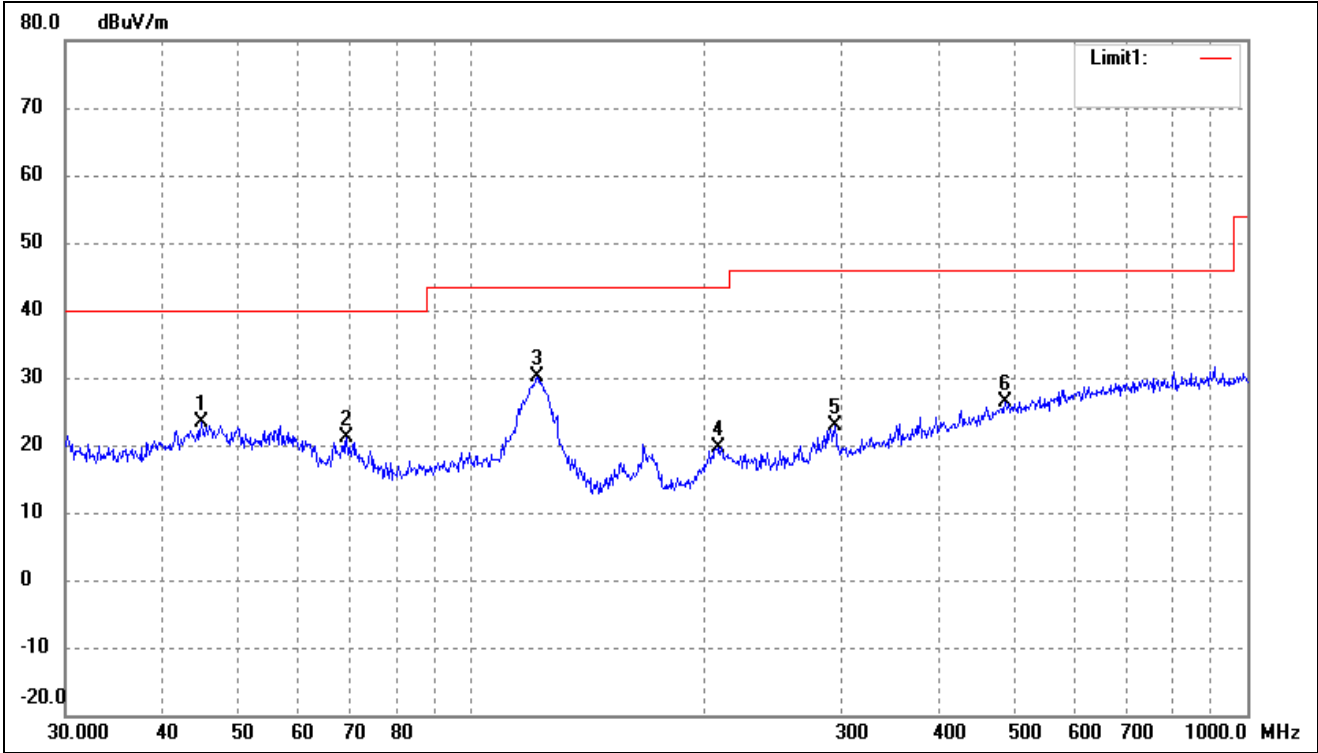
Spurious Emissions Below 1GHz

802.11b_11Mbps			
Test Channel	Low	Polarity:	Horizontal



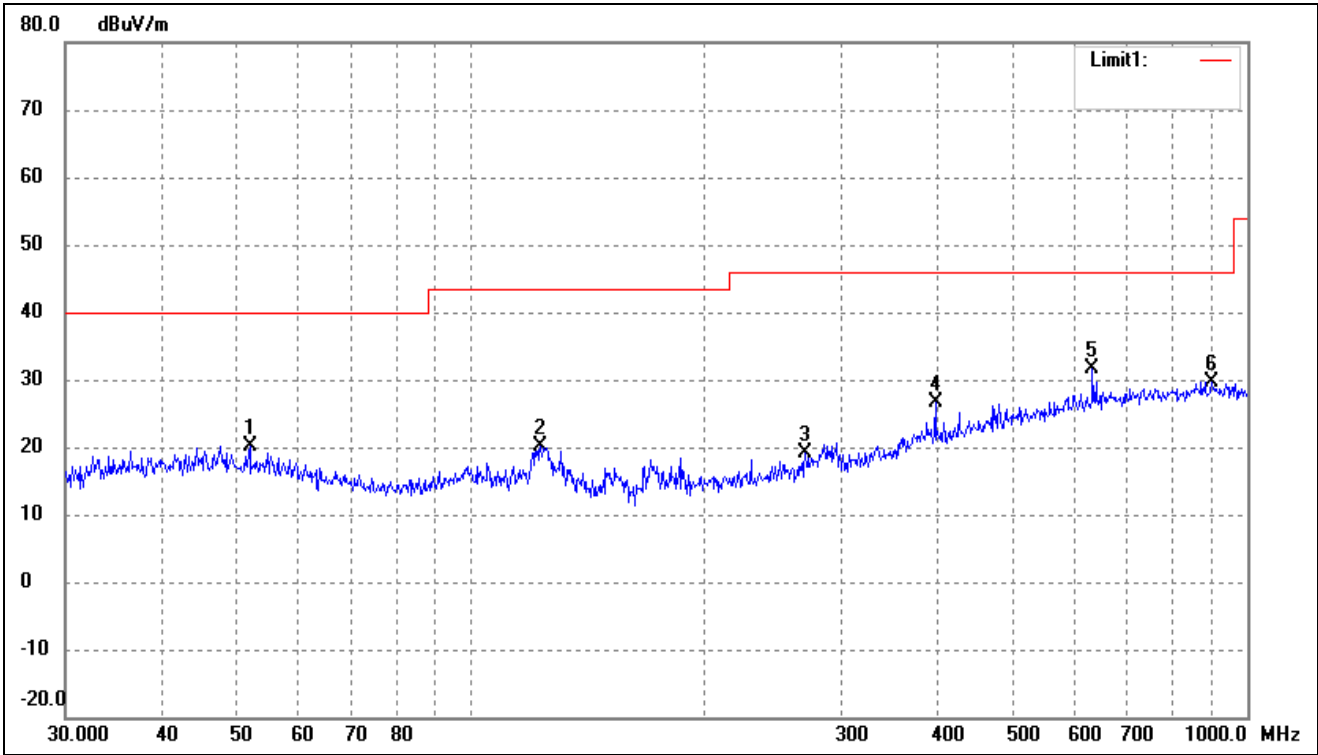
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	36.1272	28.30	-7.95	20.35	40.00	-19.65	-	-	peak
2	50.2325	27.75	-6.99	20.76	40.00	-19.24	-	-	peak
3	123.2655	32.14	-10.20	21.94	43.50	-21.56	-	-	peak
4	365.5391	28.53	-4.93	23.60	46.00	-22.40	-	-	peak
5	631.6884	32.01	0.72	32.73	46.00	-13.27	-	-	peak
6	922.5157	29.39	2.67	32.06	46.00	-13.94	-	-	peak

802.11b_11Mbps			
Test Channel	Low	Polarity:	Vertical



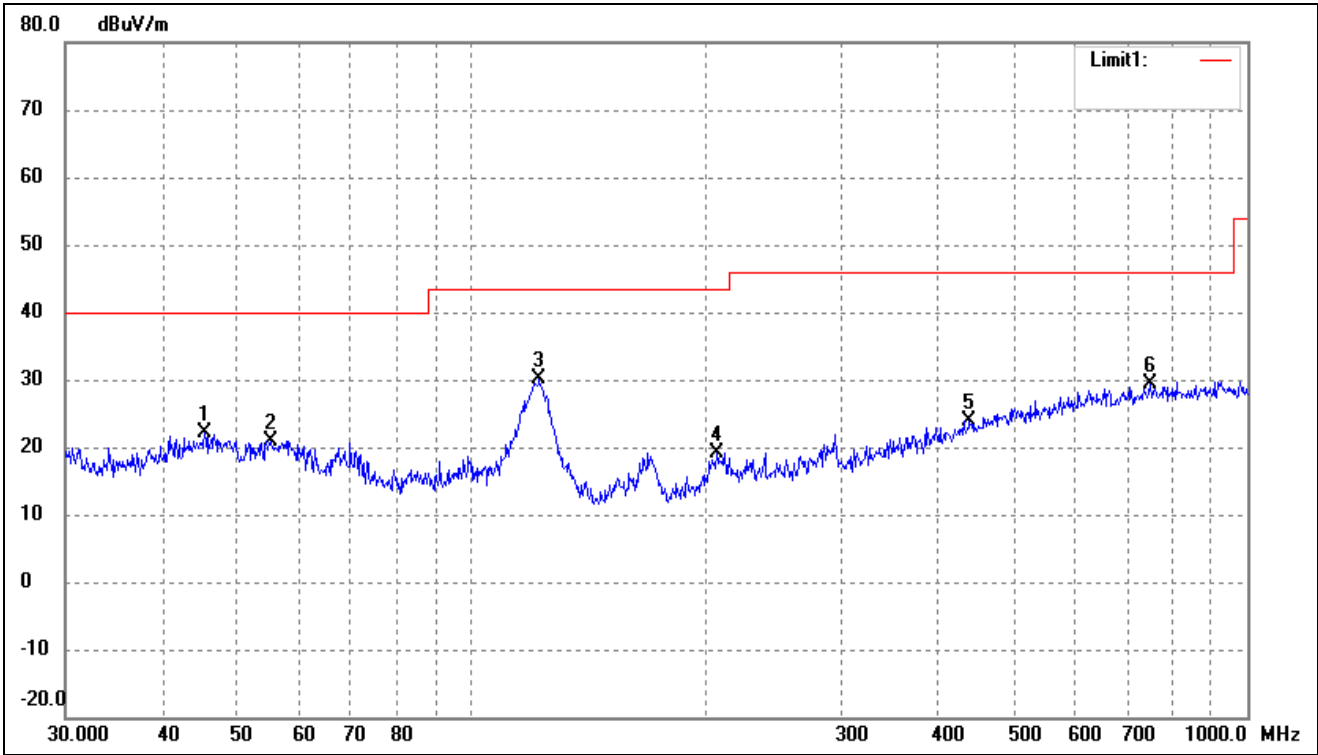
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	44.9006	30.39	-6.98	23.41	40.00	-16.59	-	-	peak
2	69.1141	31.14	-10.01	21.13	40.00	-18.87	-	-	peak
3	121.5486	40.02	-9.88	30.14	43.50	-13.36	-	-	peak
4	207.8501	29.20	-9.48	19.72	43.50	-23.78	-	-	peak
5	294.1137	29.92	-7.12	22.80	46.00	-23.20	-	-	peak
6	487.3151	27.99	-1.62	26.37	46.00	-19.63	-	-	peak

802.11b_11Mbps			
Test Channel	Middle	Polarity:	Horizontal



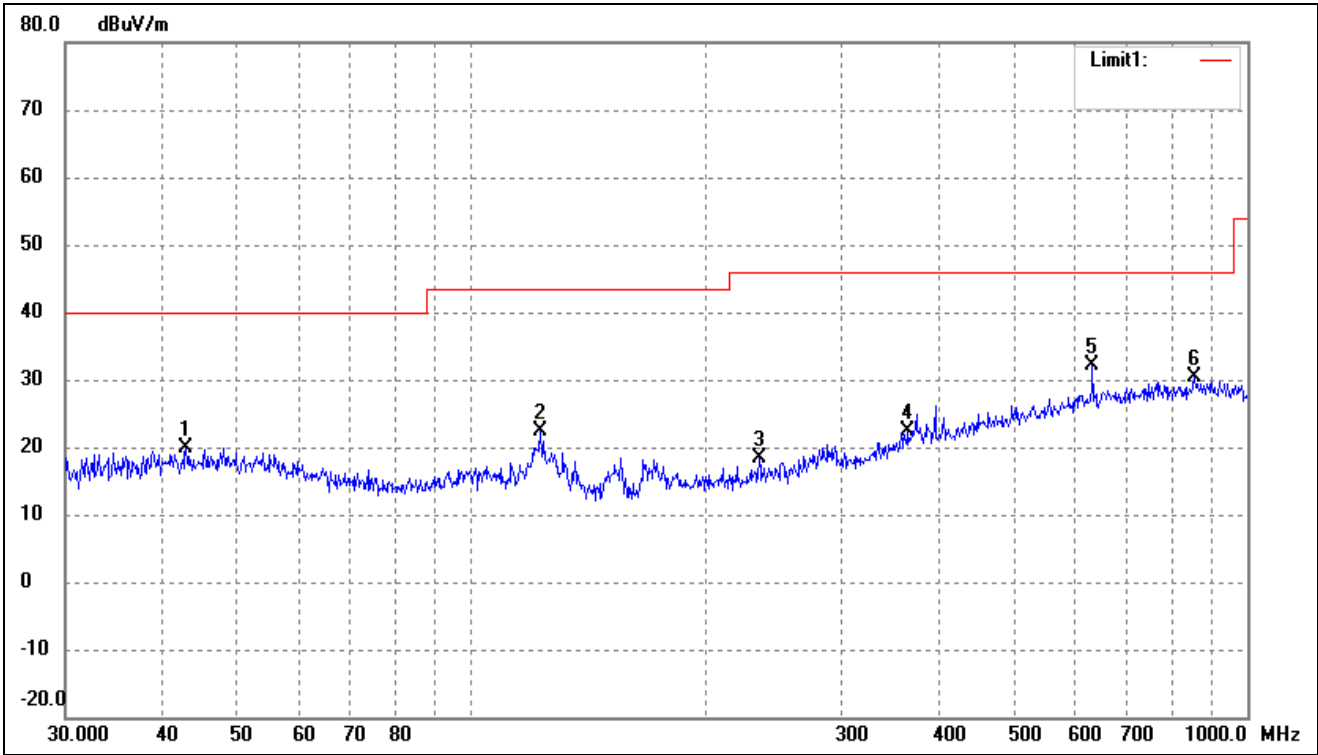
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	51.8430	27.41	-7.23	20.18	40.00	-19.82	-	-	peak
2	122.8340	30.19	-10.12	20.07	43.50	-23.43	-	-	peak
3	269.4284	26.93	-7.77	19.16	46.00	-26.84	-	-	peak
4	396.2415	30.57	-4.01	26.56	46.00	-19.44	-	-	peak
5	631.6884	30.90	0.72	31.62	46.00	-14.38	-	-	peak
6	900.1474	26.94	2.75	29.69	46.00	-16.31	-	-	peak

802.11b_11Mbps			
Test Channel	Middle	Polarity:	Vertical



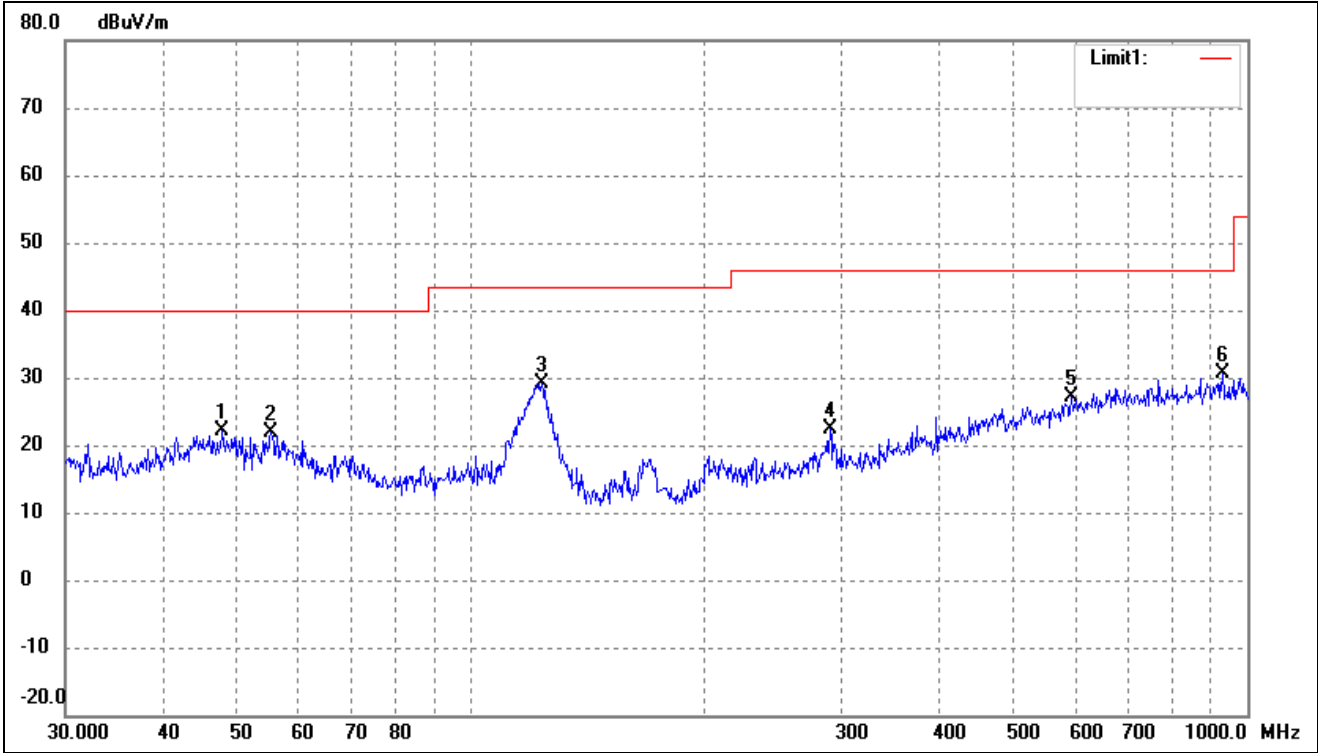
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	45.3755	29.05	-6.97	22.08	40.00	-17.92	-	-	peak
2	55.2207	28.73	-7.73	21.00	40.00	-19.00	-	-	peak
3	122.4040	40.27	-10.05	30.22	43.50	-13.28	-	-	peak
4	207.1226	28.61	-9.51	19.10	43.50	-24.40	-	-	peak
5	438.6554	26.77	-2.86	23.91	46.00	-22.09	-	-	peak
6	750.1083	27.63	1.76	29.39	46.00	-16.61	-	-	peak

802.11b_11Mbps			
Test Channel	High	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	42.8998	26.82	-6.99	19.83	40.00	-20.17	-	-	peak
2	122.8340	32.44	-10.12	22.32	43.50	-21.18	-	-	peak
3	234.9909	27.22	-8.74	18.48	46.00	-27.52	-	-	peak
4	365.5391	27.41	-4.93	22.48	46.00	-23.52	-	-	peak
5	631.6884	31.43	0.72	32.15	46.00	-13.85	-	-	peak
6	854.0247	28.05	2.41	30.46	46.00	-15.54	-	-	peak

802.11b_11Mbps			
Test Channel	High	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	47.8260	29.15	-6.96	22.19	40.00	-17.81	-	-	peak
2	55.2207	29.69	-7.73	21.96	40.00	-18.04	-	-	peak
3	123.2655	39.45	-10.20	29.25	43.50	-14.25	-	-	peak
4	290.0172	29.73	-7.23	22.50	46.00	-23.50	-	-	peak
5	593.0497	26.81	0.25	27.06	46.00	-18.94	-	-	peak
6	929.0082	27.87	2.66	30.53	46.00	-15.47	-	-	peak

Remark: ‘-’Means’ the test Degree and Height are not recorded by the test software and only show the worst case in the test report.

- Spurious Emissions Above 1GHz
- Screen model: SAT101AT40I28Y03-26228M022IB-438 (Worst case)
- Test Mode: 802.11b_11Mbps (worst case)

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
Low Channel-2412MHz							
4824.00	59.27	-4.50	54.77	74	-19.23	H	PK
4824.00	48.59	-4.50	44.09	54	-9.91	H	AV
7236.00	52.38	1.14	53.52	74	-20.48	H	PK
7236.00	45.24	1.14	46.38	54	-7.62	H	AV
4824.00	58.81	-4.50	54.31	74	-19.69	V	PK
4824.00	56.85	-4.50	52.35	54	-1.65	V	AV
7236.00	50.87	1.14	52.01	74	-21.99	V	PK
7236.00	42.82	1.14	43.96	54	-10.04	V	AV
Middle Channel-2437MHz							
4874.00	58.13	-4.47	53.66	74	-20.34	H	PK
4874.00	48.37	-4.47	43.90	54	-10.10	H	AV
7311.00	54.02	1.47	55.49	74	-18.51	H	PK
7311.00	43.68	1.47	45.15	54	-8.85	H	AV
4874.00	59.98	-4.47	55.51	74	-18.49	V	PK
4874.00	57.32	-4.47	52.85	54	-1.15	V	AV
7311.00	51.33	1.47	52.80	74	-21.20	V	PK
7311.00	42.78	1.47	44.25	54	-9.75	V	AV
High Channel-2462MHz							
4924.00	58.31	-4.44	53.87	74	-20.13	H	PK
4924.00	48.23	-4.44	43.79	54	-10.21	H	AV
7386.00	53.84	1.79	55.63	74	-18.37	H	PK
7386.00	44.47	1.79	46.26	54	-7.74	H	AV
4924.00	59.96	-4.44	55.52	74	-18.48	V	PK
4924.00	56.14	-4.44	51.70	54	-2.30	V	AV
7386.00	51.69	1.79	53.48	74	-20.52	V	PK
7440.00	42.87	1.79	44.66	54	-9.34	V	AV

Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, other than listed in the table above are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

5. Out of Band Emissions

5.1 Standard Applicable

According to §15.247(d), in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

5.2 Test Procedure

According to the KDB 558074D01 v05r02 Subclause 8.4 and ANSI C63.10-2013 Subclause 11.11, the Emissions in nonrestricted frequency bands test method as follows:

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW $\geq [3 \times \text{RBW}]$.
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

According to the KDB 558074 D01 v05r02 Subclause 8.5 and ANSI C63.10-2013 Subclause 11.12, the Emissions in restricted frequency bands test method as follows:

A. Radiated emission measurements:

Set span = wide enough to capture the peak level of the emission operating on the channel closest to the bandedge, as well as any modulation products which fall outside of the authorized band of operation (2310MHz to 2420MHz for low bandedge, 2460MHz to 2500MHz for the high bandedge)

RBW = 1MHz, VBW = 1MHz for peak value measured

RBW = 1MHz, VBW = 10Hz for average value measured

Sweep = auto; Detector function = peak/average; Trace = max hold

All the trace to stabilize, set the marker on the emission at the bandedge, or on the highest modulation product outside of the band, if this level is greater than that at the bandedge. Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission. Those emission must comply with the 15.209 limit for fall in the restricted bands listed in section 15.205. Note that the method of measurement

KDB publication number: 913591 may be used for the radiated bandedge measurements.

B. Antenna-port conducted measurements

Peak emission levels are measured by setting the instrument as follows:

- a) RBW = as specified in Table 9.
- b) $VBW \geq [3 \times RBW]$.
- c) Detector = peak.
- d) Sweep time = auto.
- e) Trace mode = max hold.
- f) Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be lengthened for low-duty-cycle applications.)

Table 9—RBW as a function of frequency

Frequency	RBW
9 kHz to 150 kHz	200 Hz to 300 Hz
0.15 MHz to 30 MHz	9 kHz to 10 kHz
30 MHz to 1000 MHz	100 kHz to 120 kHz
>1000 MHz	1 MHz

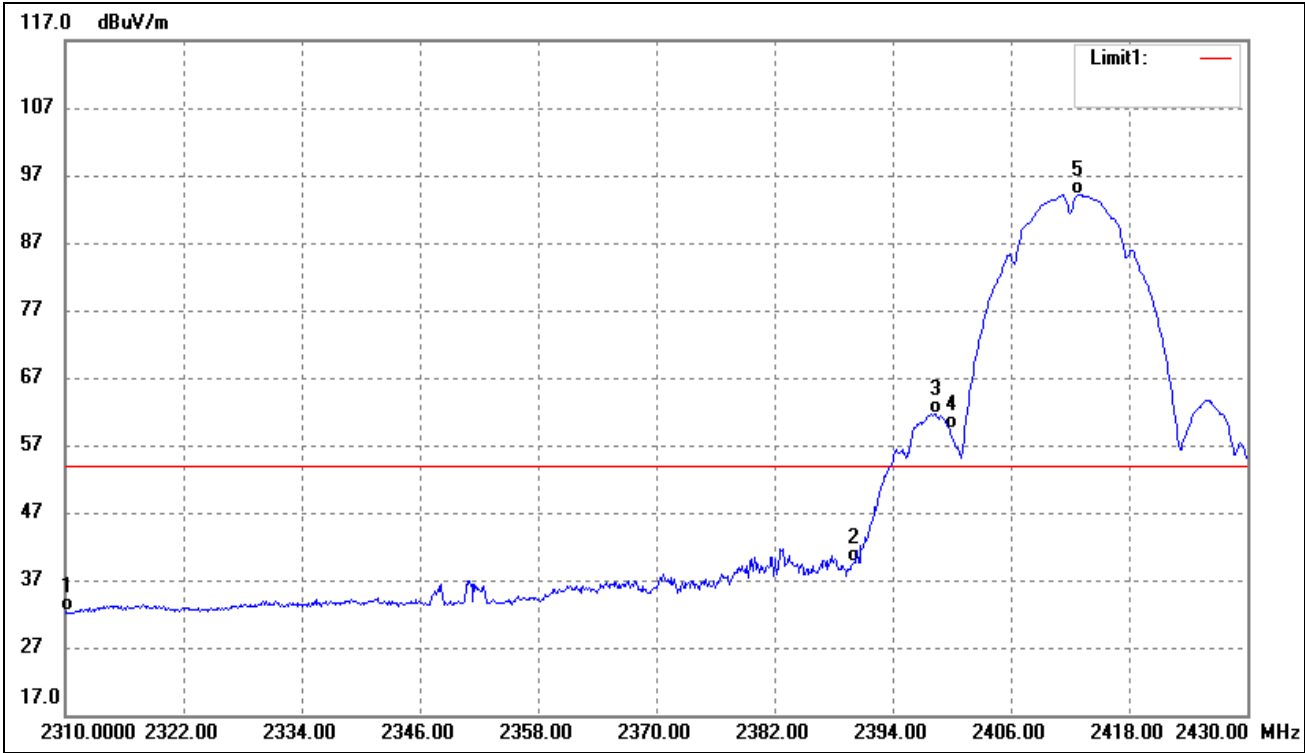
If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements specified in section 8.1. Report the three highest emissions relative to the limit.

5.3 Summary of Test Results/Plots

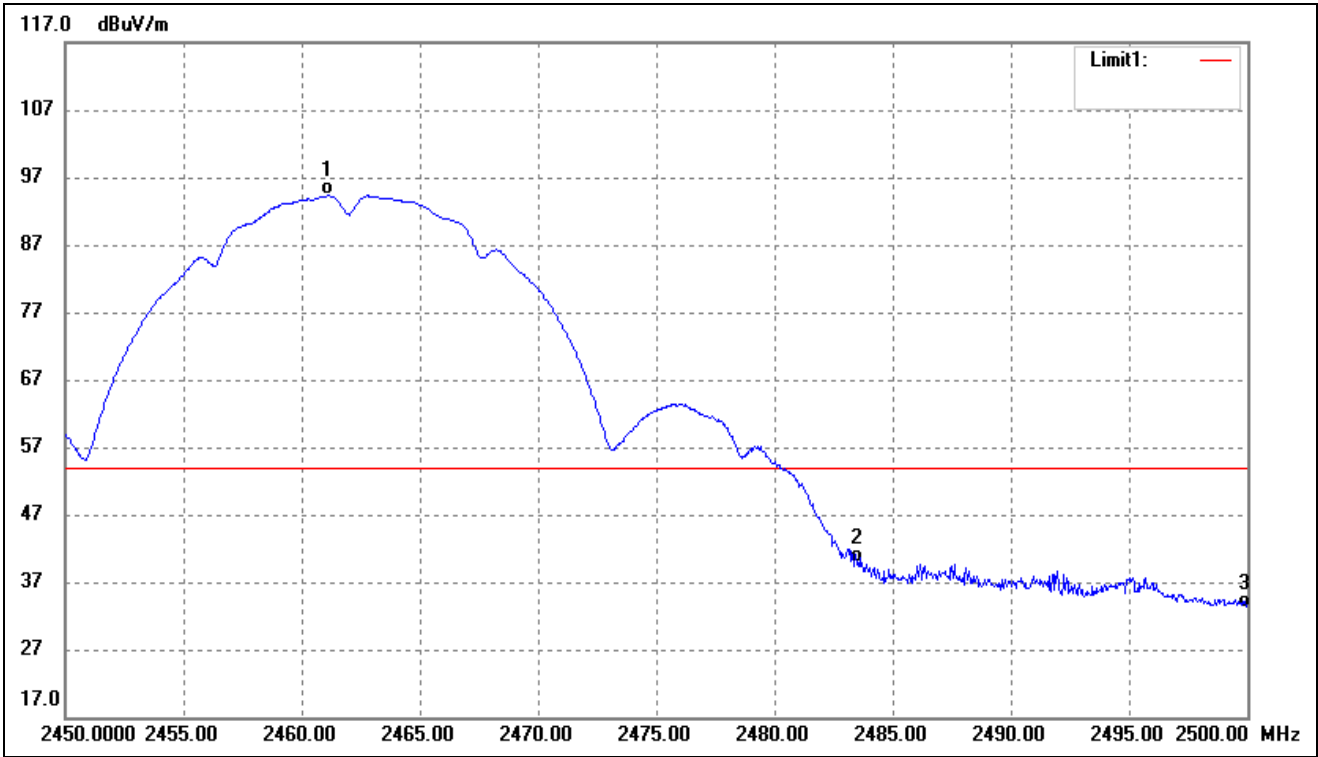
- Radiated test
- Screen model: SAT101AT40I28Y03-26228M022IB-438 (Worst case)

802.11b_11Mbps			
Test Channel	Low	Polarity:	Vertical (worst case)



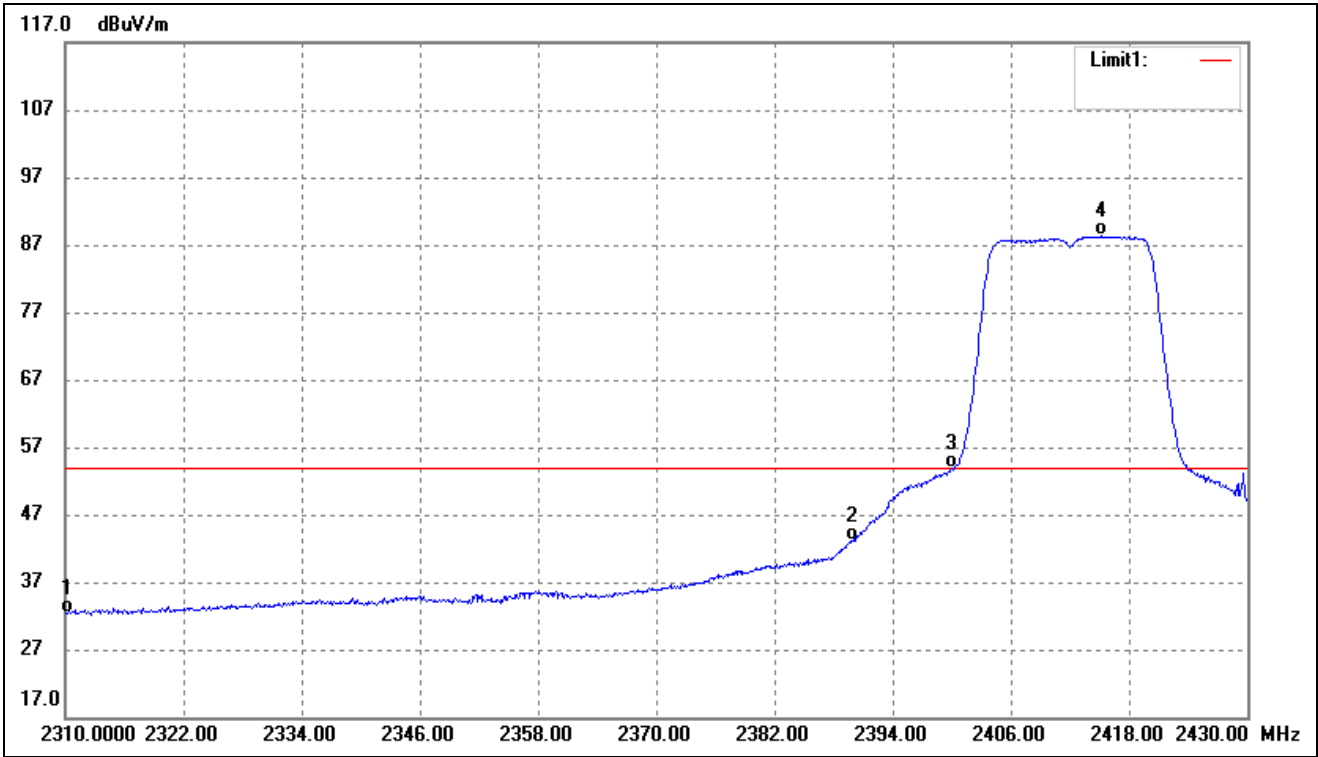
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	43.08	-10.82	32.26	54.00	-21.74	Average Detector
	2310.000	53.32	-10.82	42.50	74.00	-31.50	Peak Detector
2	2390.000	50.35	-10.70	39.65	54.00	-14.35	Average Detector
	2390.000	59.54	-10.70	48.84	74.00	-25.16	Peak Detector
3	2398.320	72.35	-10.69	61.66	Delta=32.55dBc		Average Detector
4	2412.840	104.88	-10.67	94.21			Average Detector

802.11b_11Mbps			
Test Channel	High	Polarity:	Vertical(worst case)



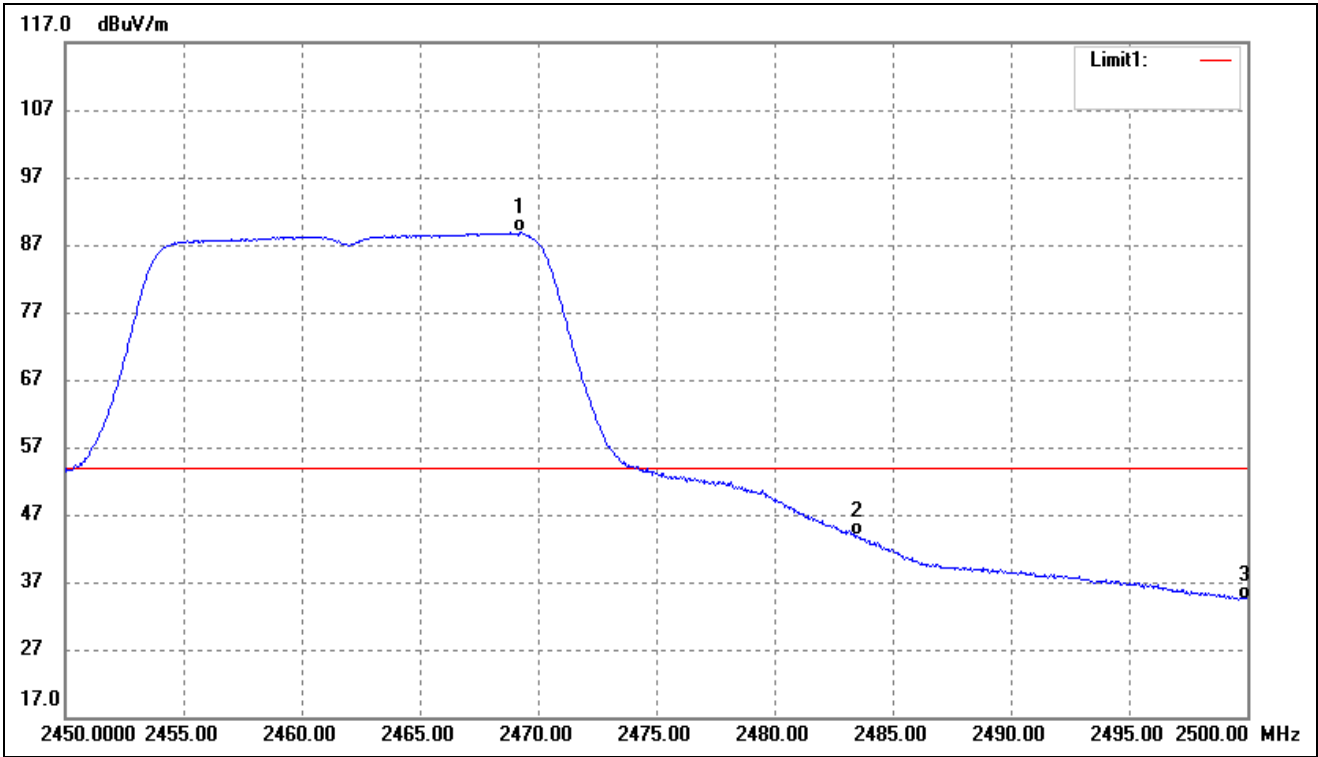
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2461.100	104.88	-10.61	94.27	/	/	Average Detector
	2463.350	109.15	-10.60	98.55	/	/	Peak Detector
2	2483.500	50.46	-10.58	39.88	54.00	-14.12	Average Detector
	2483.500	58.73	-10.58	48.15	74.00	-25.85	Peak Detector
3	2500.000	43.80	-10.55	33.25	54.00	-20.75	Average Detector
	2500.000	54.83	-10.55	44.28	74.00	-29.72	Peak Detector

802.11g_54Mbps			
Test Channel	Low	Polarity:	Vertical (worst case)



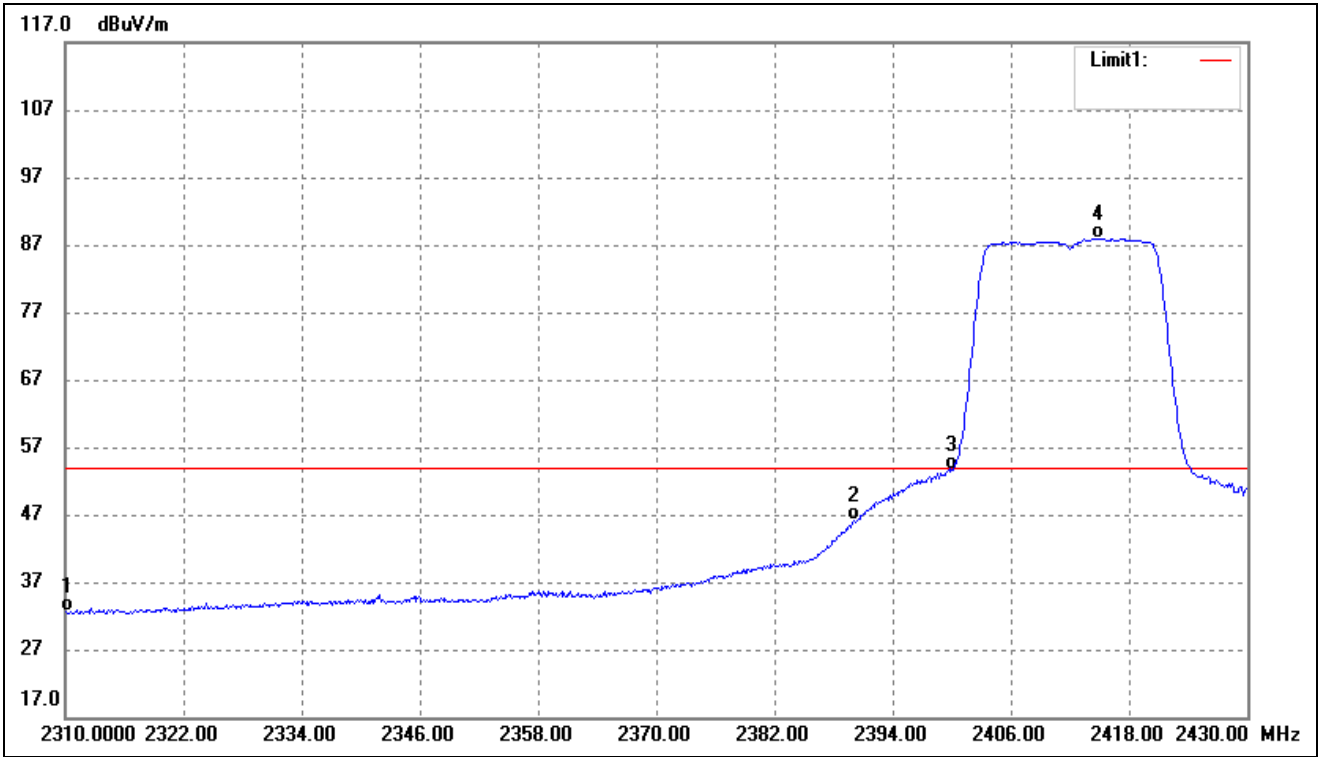
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	43.17	-10.82	32.35	54.00	-21.65	Average Detector
	2310.000	54.48	-10.82	43.66	74.00	-30.34	Peak Detector
2	2390.000	53.88	-10.70	43.18	54.00	-10.82	Average Detector
	2390.000	67.39	-10.70	56.69	74.00	-17.31	Peak Detector
3	2400.000	64.53	-10.69	53.84	54.00	-0.16	Average Detector
	2400.000	83.35	-10.69	72.66	74.00	-1.34	Peak Detector
4	2415.240	98.94	-10.66	88.28	/	/	Average Detector
	2407.320	109.00	-10.68	98.32	/	/	Peak Detector

802.11g_54Mbps			
Test Channel	High	Polarity:	Vertical (worst case)



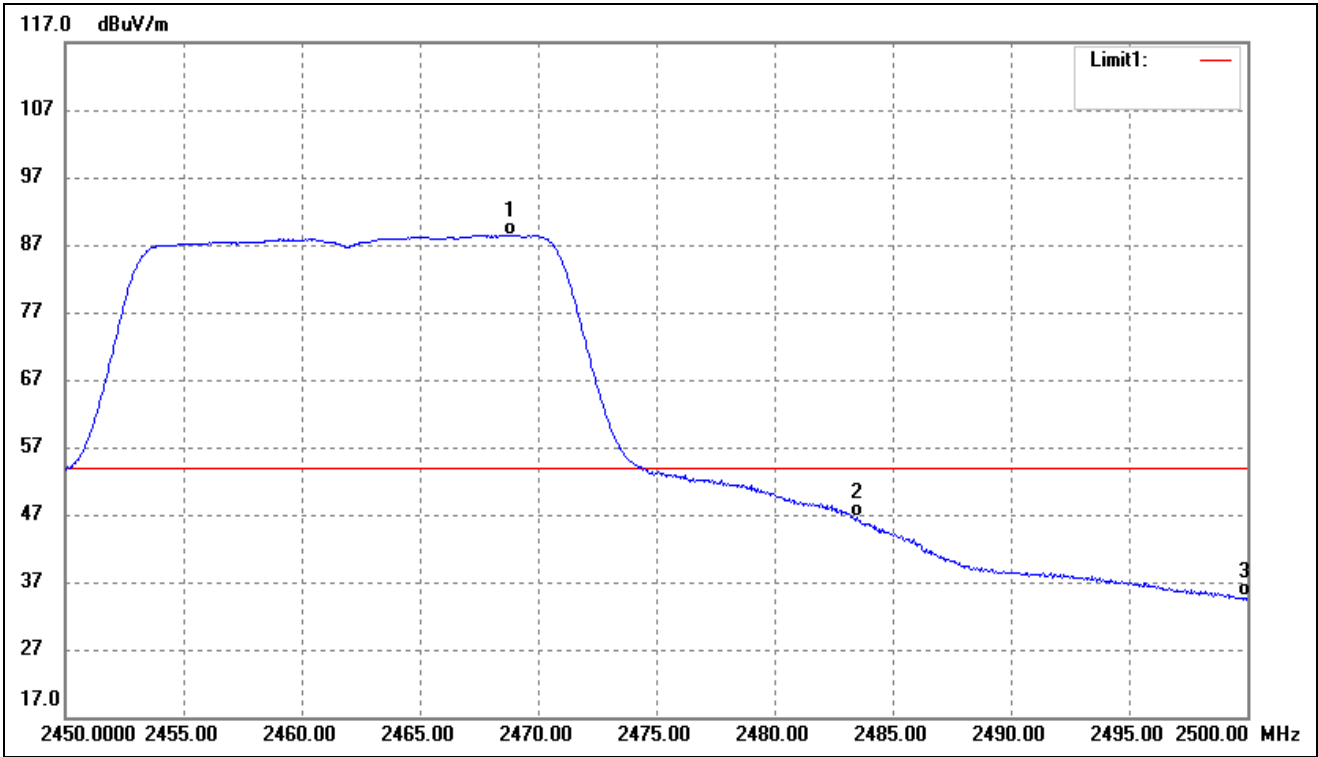
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2469.200	99.38	-10.59	88.79	/	/	Average Detector
	2457.350	108.95	-10.61	98.34	/	/	Peak Detector
2	2483.500	54.36	-10.58	43.78	54.00	-10.22	Average Detector
	2483.500	69.15	-10.58	58.57	74.00	-15.43	Peak Detector
3	2500.000	44.85	-10.55	34.30	54.00	-19.70	Average Detector
	2500.000	55.31	-10.55	44.76	74.00	-29.24	Peak Detector

802.11n-HT20_MCS7			
Test Channel	Low	Polarity:	Vertical (worst case)



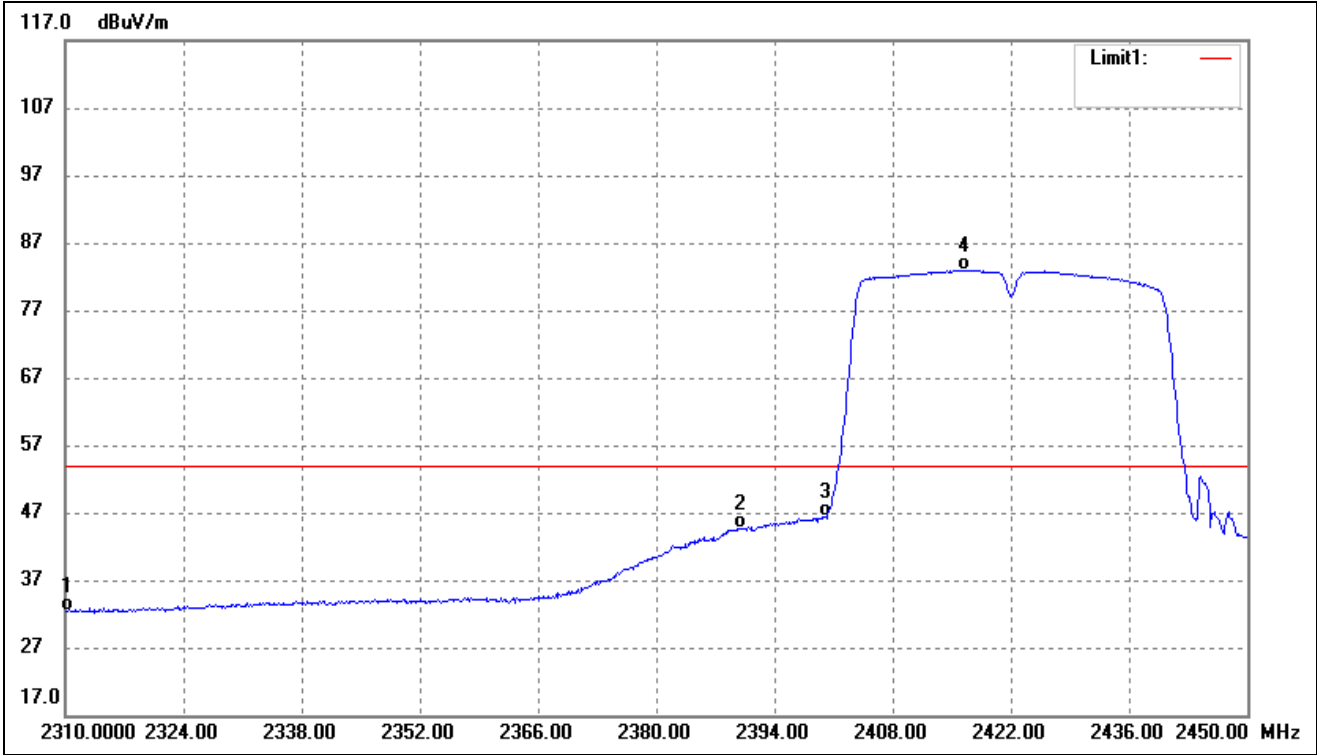
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	43.40	-10.82	32.58	54.00	-21.42	Average Detector
	2310.000	54.71	-10.82	43.89	74.00	-30.11	Peak Detector
2	2390.000	56.73	-10.70	46.03	54.00	-7.97	Average Detector
	2390.000	69.91	-10.70	59.21	74.00	-14.79	Peak Detector
3	2400.000	64.43	-10.69	53.74	54.00	-0.26	Average Detector
	2400.000	78.37	-10.69	67.68	74.00	-6.32	Peak Detector
4	2414.880	98.58	-10.66	87.92	/	/	Average Detector
	2416.920	107.99	-10.66	97.33	/	/	Peak Detector

802.11n-HT20_MCS7			
Test Channel	High	Polarity:	Vertical (worst case)



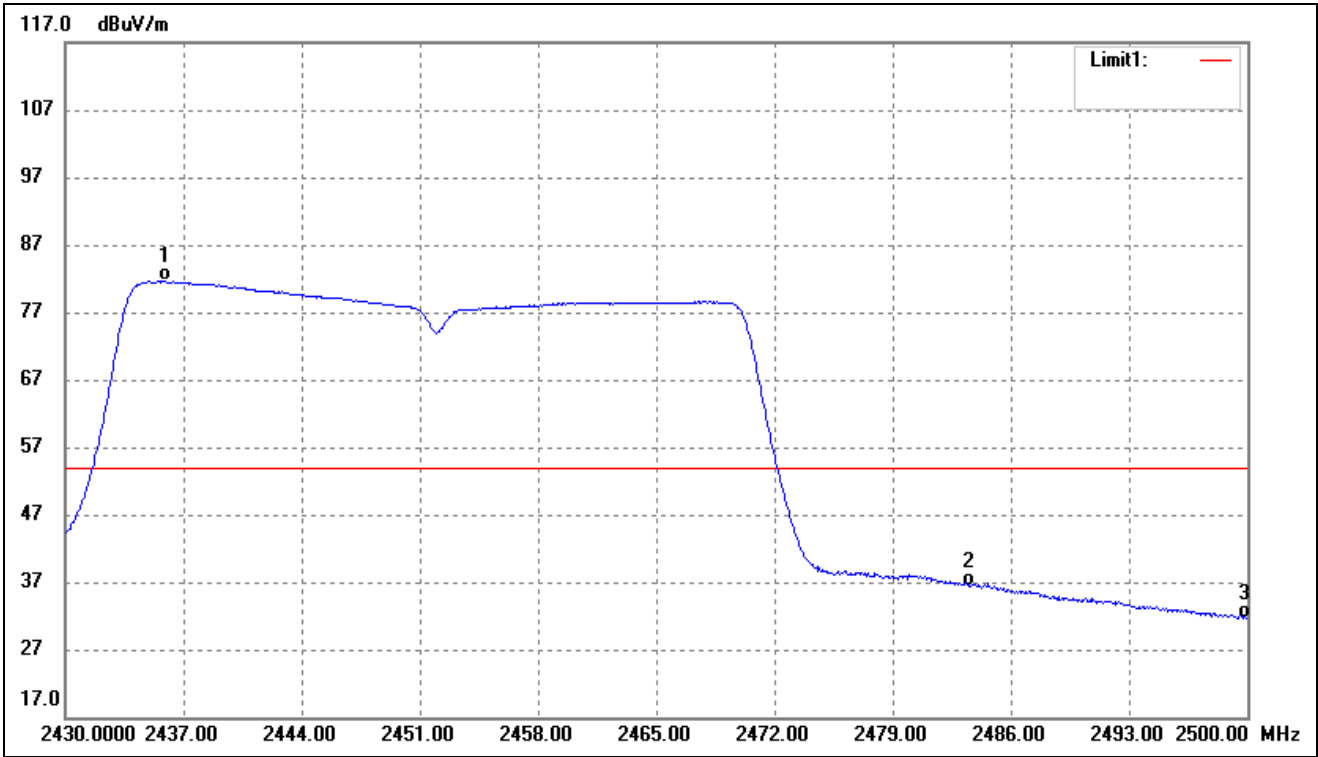
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2468.850	99.09	-10.59	88.50	/	/	Average Detector
	2467.000	108.34	-10.59	97.75	/	/	Peak Detector
2	2483.500	57.09	-10.58	46.51	54.00	-7.49	Average Detector
	2483.500	72.12	-10.58	61.54	74.00	-12.46	Peak Detector
3	2500.000	45.54	-10.55	34.99	54.00	-19.01	Average Detector
	2500.000	56.21	-10.55	45.66	74.00	-28.34	Peak Detector

802.11n-HT40_MCS7			
Test Channel	Low	Polarity:	Vertical (worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2310.000	43.21	-10.82	32.39	54.00	-21.61	Average Detector
	2310.000	54.19	-10.82	43.37	74.00	-30.63	Peak Detector
2	2390.000	55.31	-10.70	44.61	54.00	-9.39	Average Detector
	2390.000	71.54	-10.70	60.84	74.00	-13.16	Peak Detector
3	2400.000	57.07	-10.69	46.38	54.00	-7.62	Average Detector
	2400.000	74.03	-10.69	63.34	74.00	-10.66	Peak Detector
4	2416.400	93.65	-10.66	82.99	/	/	Average Detector
	2419.060	102.89	-10.66	92.23	/	/	Peak Detector

802.11n-HT40_MCS7			
Test Channel	High	Polarity:	Vertical (worst case)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2435.880	92.26	-10.64	81.62	/	/	Average Detector
	2460.100	103.70	-10.61	93.09	/	/	Peak Detector
2	2483.500	47.07	-10.58	36.49	54.00	-17.51	Average Detector
	2483.500	73.04	-10.58	62.46	74.00	-11.54	Peak Detector
3	2500.000	42.28	-10.55	31.73	54.00	-22.27	Average Detector
	2500.000	61.56	-10.55	51.01	74.00	-22.99	Peak Detector

6. Conducted Emissions

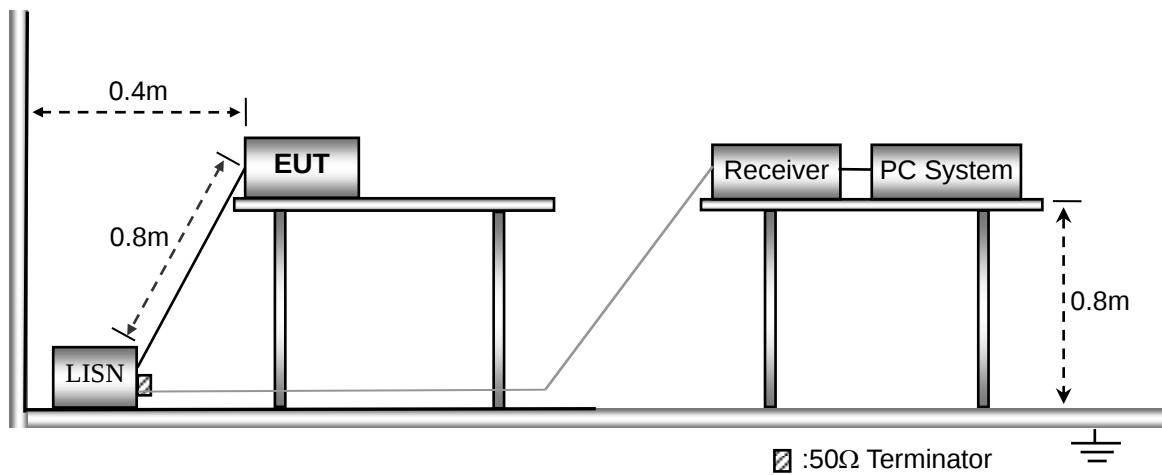
6.1 Test Procedure

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

6.2 Basic Test Setup Block Diagram



6.3 Test Receiver Setup

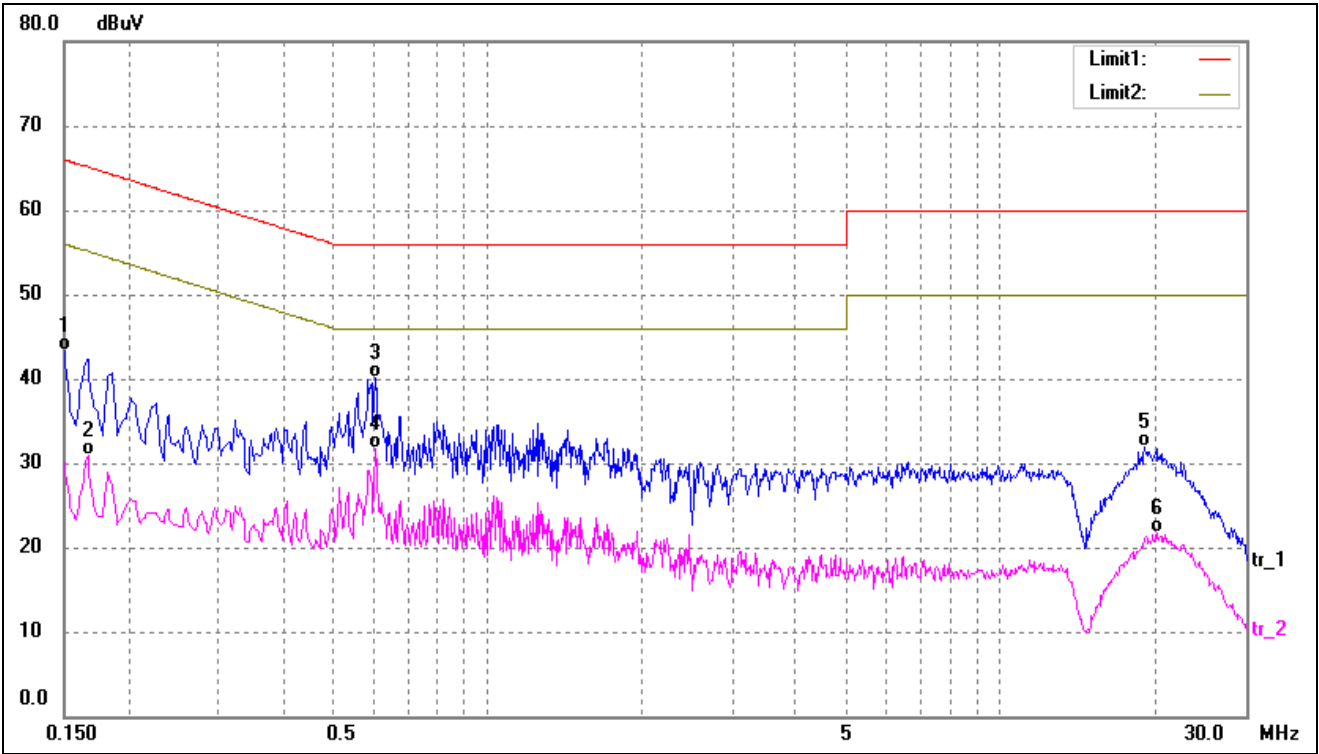
During the conducted emission test, the test receiver was set with the following configurations:

Start Frequency	150 kHz
Stop Frequency	30 MHz
Sweep Speed	Auto
IF Bandwidth.....	10 kHz
Quasi-Peak Adapter Bandwidth	9 kHz
Quasi-Peak Adapter Mode	Normal

6.4 Summary of Test Results/Plots

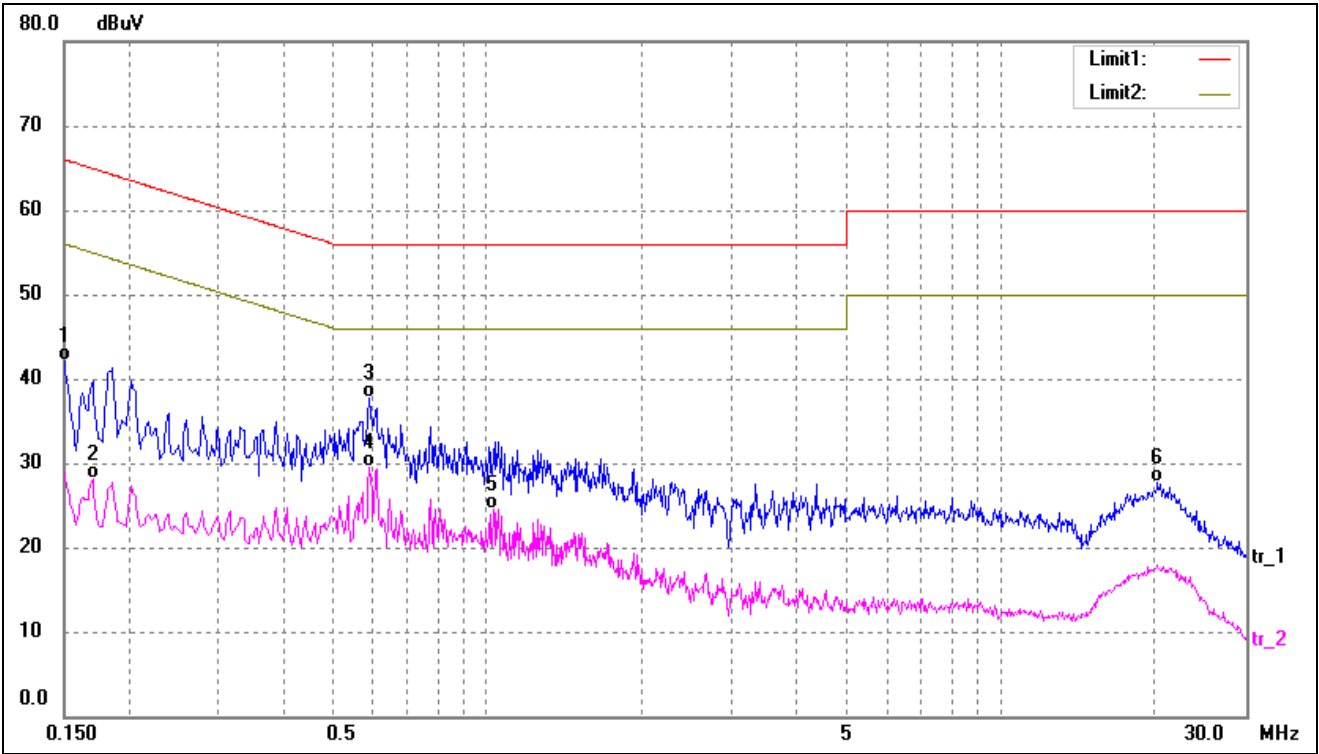
Screen model: SAT101AT40I28Y03-26228M022IB-438

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1499	32.98	10.38	43.36	66.00	-22.64	QP
2	0.1660	20.49	10.37	30.86	55.15	-24.29	AVG
3	0.6059	29.87	10.32	40.19	56.00	-15.81	QP
4*	0.6059	21.48	10.32	31.80	46.00	-14.20	AVG
5	19.1060	21.70	10.23	31.93	60.00	-28.07	QP
6	20.0820	11.42	10.25	21.67	50.00	-28.33	AVG

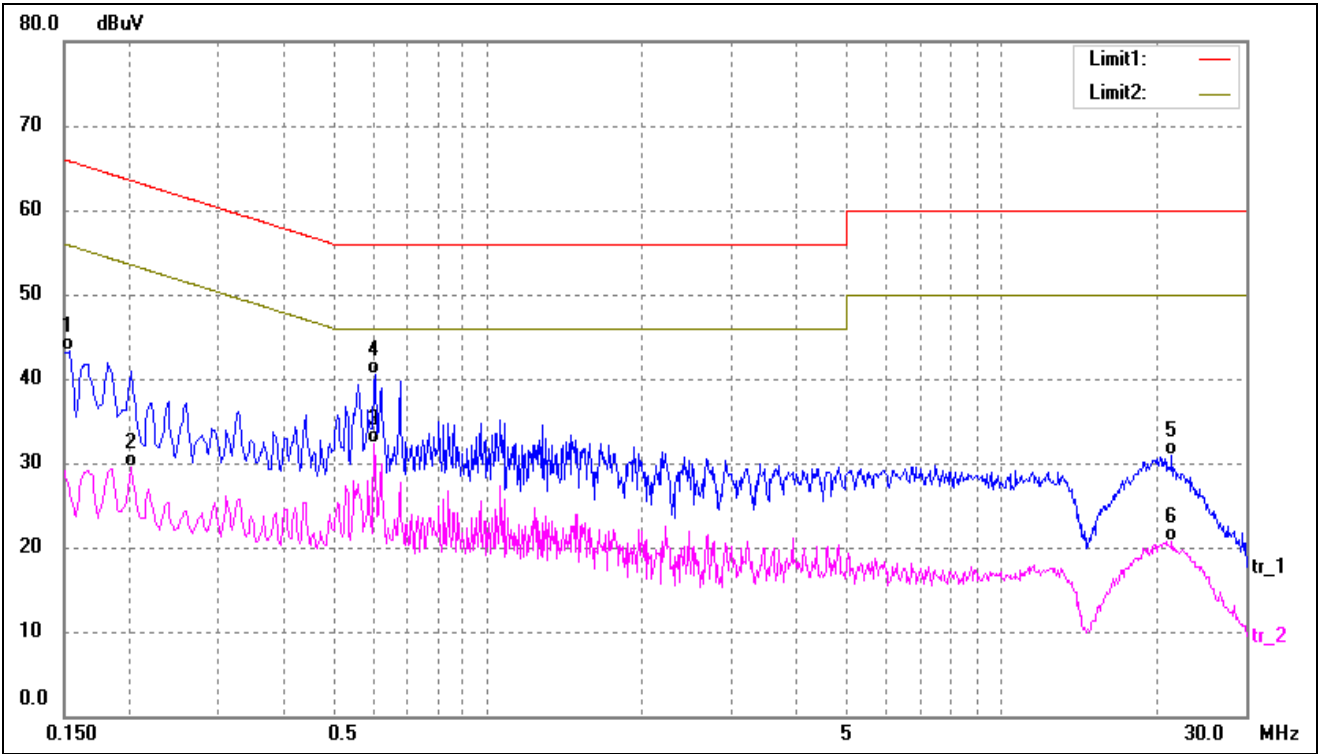
Test Mode	Communication	AC120V 60Hz	Polarity:	Line
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1500	31.73	10.38	42.11	66.00	-23.89	QP
2	0.1700	17.77	10.37	28.14	54.96	-26.82	AVG
3	0.5900	27.32	10.31	37.63	56.00	-18.37	QP
4*	0.5900	19.28	10.31	29.59	46.00	-16.41	AVG
5	1.0300	14.03	10.55	24.58	46.00	-21.42	AVG
6	20.2100	17.53	10.25	27.78	60.00	-32.22	QP

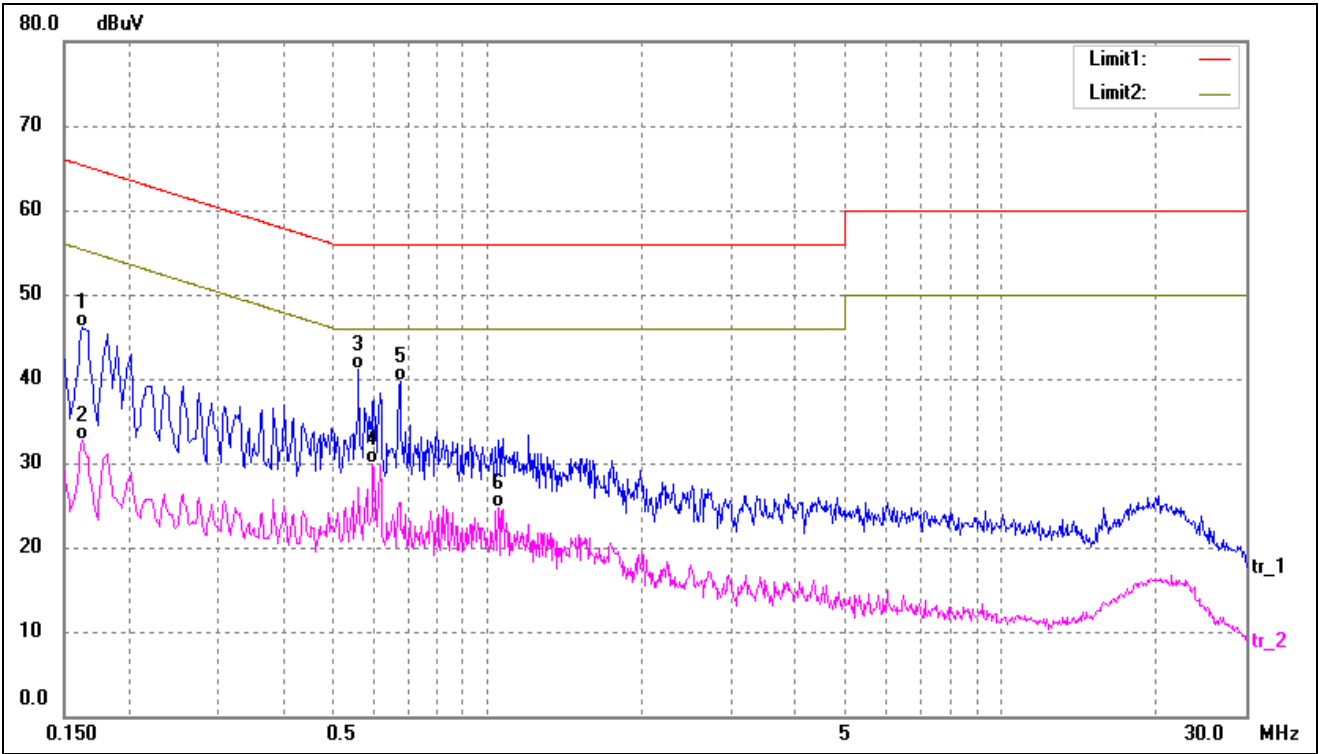
Screen model: SPEC-WJWX101196A

Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1540	32.87	10.37	43.24	65.78	-22.54	QP
2	0.2020	19.12	10.37	29.49	53.53	-24.04	AVG
3*	0.6020	22.06	10.32	32.38	46.00	-13.62	AVG
4	0.6060	30.20	10.32	40.52	56.00	-15.48	QP
5	21.5980	20.59	10.24	30.83	60.00	-29.17	QP
6	21.5980	10.53	10.24	20.77	50.00	-29.23	AVG

Test Mode	Communication	AC120V 60Hz	Polarity:	Line
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1620	35.68	10.37	46.05	65.36	-19.31	QP
2	0.1620	22.29	10.37	32.66	55.36	-22.70	AVG
3*	0.5620	30.79	10.30	41.09	56.00	-14.91	QP
4	0.5980	19.53	10.32	29.85	46.00	-16.15	AVG
5	0.6780	29.35	10.37	39.72	56.00	-16.28	QP
6	1.0540	14.08	10.54	24.62	46.00	-21.38	AVG

APPENDIX PHOTOGRAPHS

Please refer to “ANNEX”

******* END OF REPORT *******