RADIO TEST REPORT
FCC ID: PUU-LEDX9DA21M

Product： RGB Speaker A21 Lamp

Trade Mark：

Model Name： LED+9DA21M/SWRGBSPK

Family Model： LED+9DA21M/DLRGBSPK

Report No.： S21041500201002

Prepared for

Savant Technologies LLC dba GE Lighting, a Savant Company

1975 Noble Road, Cleveland, Ohio, United States, 44112

Prepared by

Shenzhen NTEK Testing Technology Co., Ltd.

1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street
Bao'an District, Shenzhen 518126 P.R. China
Tel.: +86-755-6115 6588 Fax.: +86-755-6115 6599
Website:http//www.ntek.org.cn

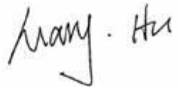
TEST RESULT CERTIFICATION

Applicant's name	:	Savant Technologies LLC dba GE Lighting, a Savant Company
Address	:	1975 Noble Road, Cleveland, Ohio, United States, 44112
Manufacturer's Name	:	SHENZHEN FENDA TECHNOLOGY CO., LTD.
Address	:	Fenda Hi-Tech Park, Zhoushi Road, Shiyan Town, Baoan District, Shenzhen City, China
Product description		
Product name	:	RGB Speaker A21 Lamp
Model and/or type reference	:	LED+9DA21M/SWRGBSPK
Family Model:		LED+9DA21M/DLRGBSPK
Rating(s)	:	AC 120V/60Hz
Standards	:	FCC Part15.249: 2018
Test procedure	:	ANSI C63.10-2013

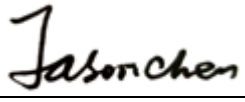
This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

This report shall not be reproduced except in full, without the written approval of NTEK, this document may be altered or revised by NTEK, personnel only, and shall be noted in the revision of the document.

Date of Test	:	
Date (s) of performance of tests	:	15 Apr. 2020 ~ 07 May. 2021
Date of Issue	:	07 May, 2021
Test Result	:	**Pass**

Testing Engineer : 

(Mary Hu)

Technical Manager : 

(Jason Chen)

Authorized Signatory : 

(Alex Li)

Table of Contents Page

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15, Subpart C (15.249)			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	Pass	
15.203	Antenna Requirement	Pass	
15.249 15.209	Radiated Spurious Emission	Pass	
15.249(2)	Frequency Tolerance	Pass	
15.249(a)	Fundamental Measurement	Pass	
15.205	Band Edge Emission	Pass	
15.215(c)	Occupied Bandwidth	Pass	

1.1 TEST FACILITY

Shenzhen NTEK Testing Technology Co., Ltd
Add. : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R. China.
FCC FRN Registration No.:463705; IC Registration No.:9270A-1
CNAS Registration No.:L5516

1.2 MEASUREMENT UNCERTAINTY

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

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	RF power,conducted	±0.16dB
3	Spurious emissions,conducted	±0.21dB
4	All emissions,radiated(<1G)	±4.68dB
5	All emissions,radiated(>1G)	±4.89dB
6	Temperature	±0.5°C
7	Humidity	±2%

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	RGB Speaker A21 Lamp
Trade Mark	
Model Name	LED+9DA21M/SWRGBSPK
Family Model	LED+9DA21M/DLRGBSPK
Model Difference	All the model are the same circuit and RF module, except the color temperature
Product Description	The EUT is a RGB Speaker A21 Lamp Operation Frequency: 5731MHz-5795MHz Modulation Type: GFSK Antenna Designation: FPC Antenna Antenna Gain(Peak) 3.56dBi Based on the application, features, or specification exhibited in User's Manual. More details of EUT technical specification, please refer to the User's Manual.
Channel List	Please refer to the Note 2.
Adapter	N/A
Battery	N/A
Power supply	AC 120V/60Hz
HW Version	A21 RGB-01-D
SW Version	V1.6

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	5731	07	5755	13	5779
02	5735	08	5759	14	5783
03	5739	09	5763	15	5787
04	5743	10	5767	16	5795
05	5747	11	5771		
06	5751	12	5775		

3.

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	N/A	FPC Antenna	N/A	3.56	Antenna

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates 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	CH01
Mode 2	CH10
Mode 3	CH16
Mode 4	Normal link

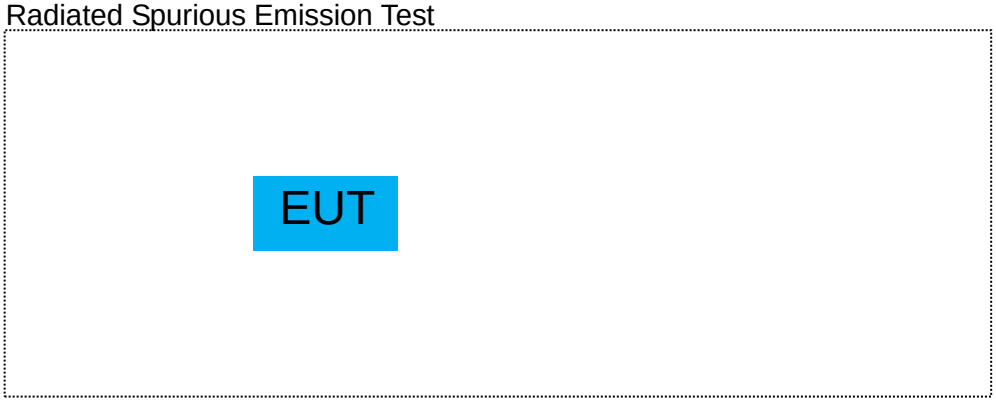
For Radiated Spurious Emission	
Pretest Mode	Description
Mode 1	CH01
Mode 2	CH10
Mode 3	CH16
Mode 4	Normal link

Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test



2.4 DESCRIPTION OF SUPPORT UNITS (CONDUCTED MODE)

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.	Series No.	Note

Item	Cable Type	Shielded Type	Ferrite Core	Length	Note

Note:

(1) The support equipment was authorized by Declaration of Confirmation.
(2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Aglient	E4407B	MY45108040	2020.05.11	2021.05.10	1 year
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2020.05.11	2021.05.10	1 year
3	EMI Test Receiver	Agilent	N9038A	MY53227146	2020.05.11	2021.05.10	1 year
4	Test Receiver	R&S	ESPI	101318	2020.05.11	2021.05.10	1 year
5	Bilog Antenna	TESEQ	CBL6111D	31216	2020.04.11	2021.04.10	1 year
6	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2020.05.11	2023.05.10	2 year
7	Horn Antenna	EM	EM-AH-10180	2011071402	2020.05.11	2021.05.10	1 year
8	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2020.05.11	2021.05.10	1 year
9	Amplifier	EMC	EMC051835SE	980246	2020.07.13	2021.07.12	1 year
10	Amplifier	MITEQ	TTA1840-35-HG	177156	2020.05.11	2021.05.10	1 year
11	Loop Antenna	ARA	PLA-1030/B	1029	2020.05.11	2021.05.10	1 year
12	Power Meter	DARE	RPR3006W	15I00041SNO84	2020.07.13	2021.07.12	1 year
13	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2020.05.11	2023.05.10	3 year
14	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2020.05.11	2023.05.10	3 year
15	High Test Cable(1G-40 GHz)	N/A	R-03	N/A	2020.05.11	2023.05.10	3 year
16	High Test Cable(1G-40 GHz)	N/A	R-04	N/A	2020.05.11	2023.05.10	3 year
17	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Note:
We will use the temporary antenna connector (soldered on the PCB board) When conducted test
And this temporary antenna connector is listed within the instrument list

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2020.05.11	2021.05.10	1 year
2	LISN	R&S	ENV216	101313	2020.05.11	2021.05.10	1 year
3	LISN	SCHWARZBECK	NNLK 8129	8129245	2020.05.11	2021.05.10	1 year
4	50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200983704	2020.05.11	2023.05.10	1 year
5	Test Cable (9KHz-30MHz)	N/A	C01	N/A	2020.05.11	2023.05.10	3 year
6	Test Cable (9KHz-30MHz)	N/A	C02	N/A	2020.05.11	2023.05.10	3 year
7	Test Cable (9KHz-30MHz)	N/A	C03	N/A	2020.05.11	2023.05.10	3 year

Note: Each piece of equipment is scheduled for calibration once a year except the Test Cable which is scheduled for calibration every 3 years.

3. ANTENNA REQUIREMENT

3.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 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.

3.2 EUT ANTENNA

The EUT antenna is permanent attached FPC Antenna (Gain: 3.56dBi). It comply with the standard requirement.

3.3 CONDUCTED EMISSION MEASUREMENT

3.3.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56*	56-46*
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. *Decreases with the logarithm of the frequency
2. The lower limit shall apply at the transition frequencies
3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

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

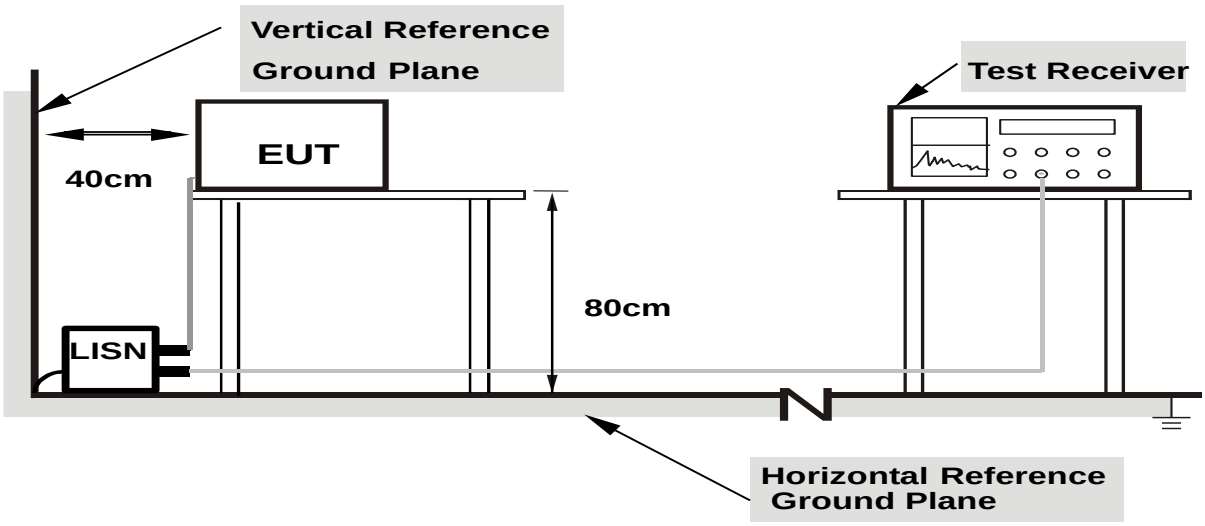
3.3.2 TEST PROCEDURE

a. The EUT was placed 0.4 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 ground plane 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.

3.3.3 DEVIATION FROM TEST STANDARD

No deviation

3.3.4 TEST SETUP



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

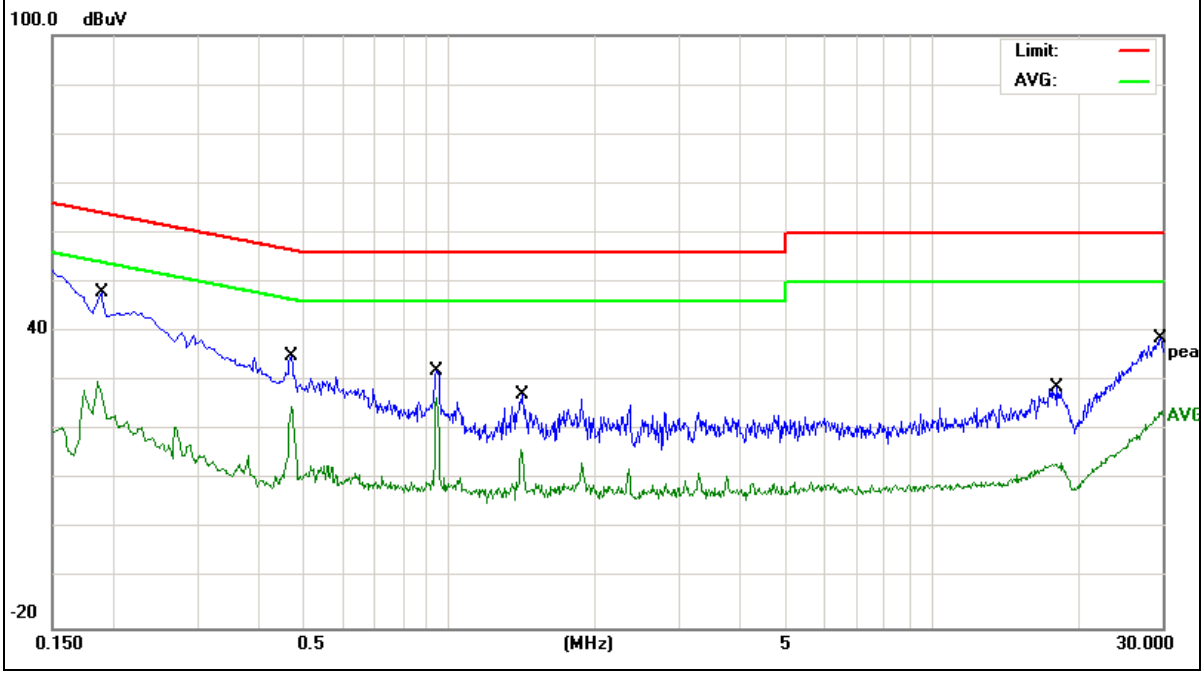
3.2.5 TEST RESULT

EUT：	RGB Speaker A21 Lamp	Model Name. ：	LED+9DA21M/SWRGBSPK
Temperature：	25 ℃	Relative Humidity：	55%
Pressure：	1010hPa	Phase：	L
Test Voltage ：	AC 120V/60Hz	Test Mode：	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1900	38.29	9.55	47.84	64.03	-16.19	QP
0.1900	20.30	9.55	29.85	54.03	-24.18	AVG
0.4699	25.47	9.55	35.02	56.52	-21.50	QP
0.4699	15.20	9.55	24.75	46.52	-21.77	AVG
0.9419	22.43	9.56	31.99	56.00	-24.01	QP
0.9419	17.07	9.56	26.63	46.00	-19.37	AVG
1.4139	17.84	9.56	27.40	56.00	-28.60	QP
1.4139	6.61	9.56	16.17	46.00	-29.83	AVG
18.1698	18.84	9.87	28.71	60.00	-31.29	QP
18.1698	3.45	9.87	13.32	50.00	-36.68	AVG
29.6140	28.15	9.95	38.10	60.00	-21.90	QP
29.6140	13.70	9.95	23.65	50.00	-26.35	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

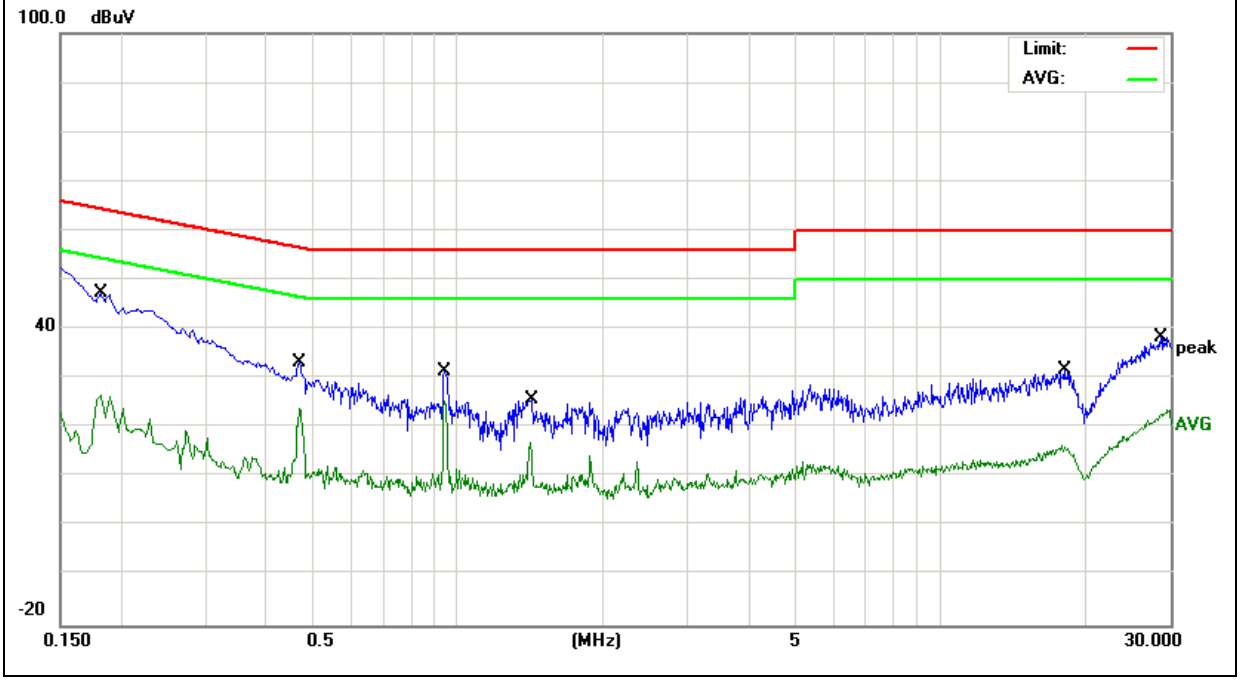


EUT：	RGB Speaker A21 Lamp	Model Name ：	LED+9DA21M/SWRGBSPK
Temperature：	21.5℃	Relative Humidity：	41%
Pressure：	1010hPa	Phase：	N
Test Voltage ：	AC120V/60Hz	Test Mode：	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1819	37.69	9.54	47.23	64.39	-17.16	QP
0.1819	17.24	9.54	26.78	54.39	-27.61	AVG
0.4700	23.63	9.54	33.17	56.51	-23.34	QP
0.4700	14.29	9.54	23.83	46.51	-22.68	AVG
0.9420	21.98	9.55	31.53	56.00	-24.47	QP
0.9420	15.88	9.55	25.43	46.00	-20.57	AVG
1.4260	16.34	9.55	25.89	56.00	-30.11	QP
1.4260	7.43	9.55	16.98	46.00	-29.02	AVG
18.1299	21.85	9.85	31.70	60.00	-28.30	QP
18.1299	6.69	9.85	16.54	50.00	-33.46	AVG
28.6060	28.32	9.91	38.23	60.00	-21.77	QP
28.6060	13.05	9.91	22.96	50.00	-27.04	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



3.4 RADIATED EMISSION MEASUREMENT

3.4.1 Radiated Emission Limits (FCC 15.209)

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
Frequency (MHz)	Limit (dBuV)	
30~88	40	3
88~216	43.5	3
216~960	46	3
960 -10000	54.00	3
*902 - 928	94.00	3

Note:

(1) The tighter limit applies at the band edges.

(2) Emission level (dBuV/m)=20log Emission level (uV/m).

(3) *Note: This is the limit for the fundamental frequency.

LIMITS OF RADIATED EMISSION MEASUREMENT (FCC 15.249)

Frequency of Emission (MHz)	Field Strength of fundamental ((millivolts /meter)	Field Strength of Harmonics (microvolts/meter)
5725-5825	50	500

Notes:

(1) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1MHz / 1MHz for Peak

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.4.2 TEST PROCEDURE

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; 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 Quasi Peak 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.

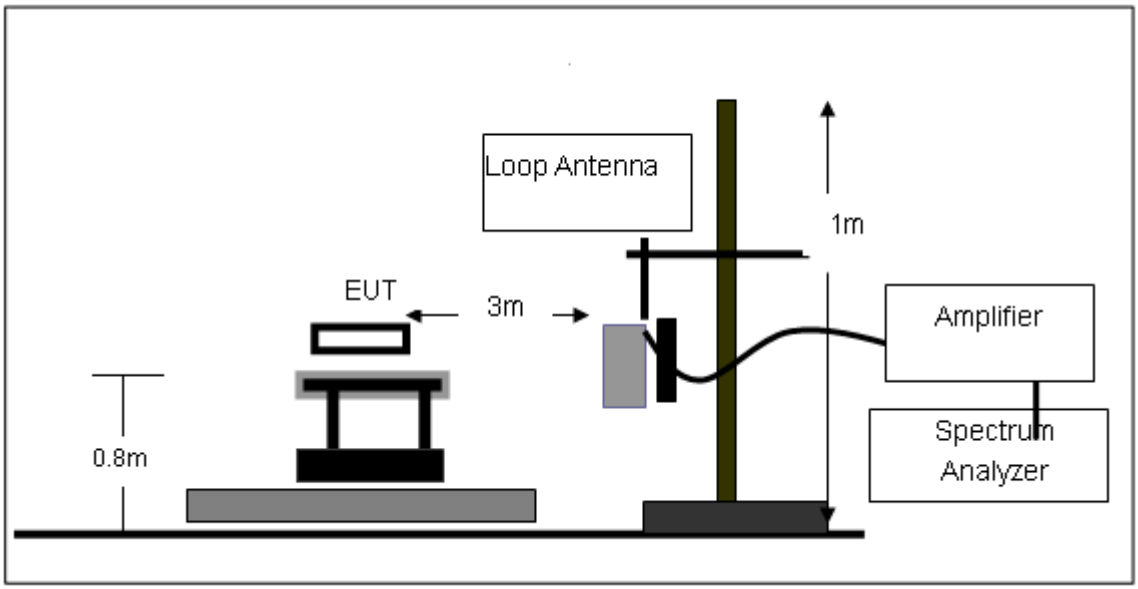
Note:

Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

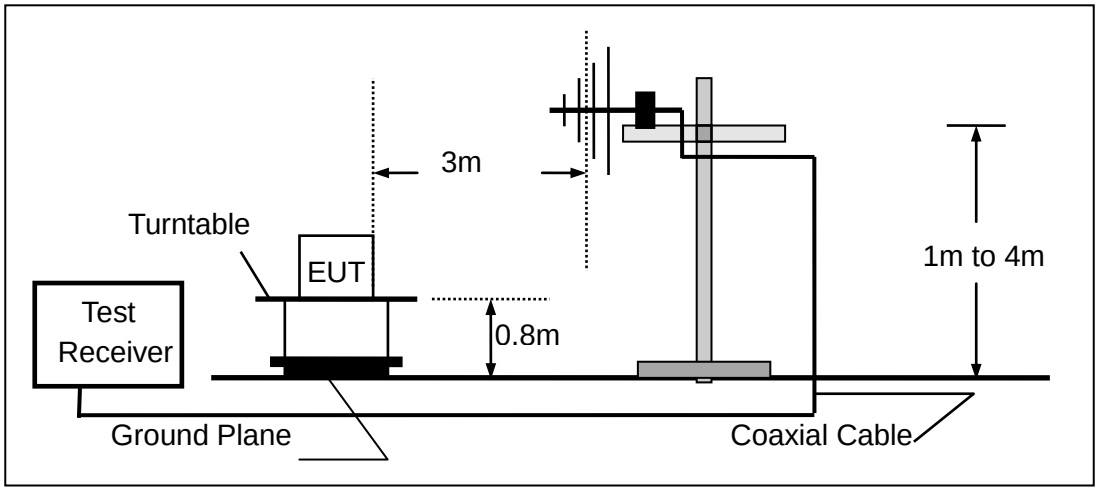
3.4.3 DEVIATION FROM TEST STANDARD

No deviation

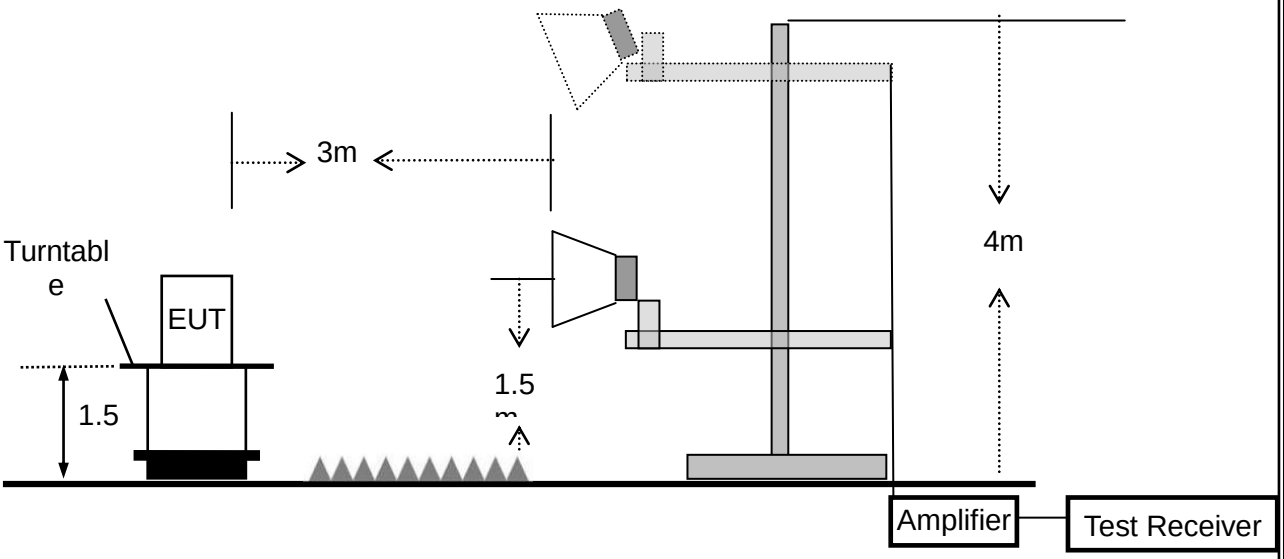
（A）Radiated Emission Test-Up Frequency Below 30MHz



（B）Radiated Emission Test-Up Frequency 30MHz~1GHz



（C）Radiated Emission Test-Up Frequency Above 1GHz



3.4.4 TEST RESULTS (BELOW 30MHz)

EUT：	RGB Speaker A21 Lamp	Model Name. ：	LED+9DA21M/SWRG BSPK
Temperature：	20 ℃	Relative Humidtity：	48%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Remark:1. Emission level in dBuV/m=20 log (uV/m)

2. Measurement was performed at an antenna to the closed point of EUT distance of meters.

3. For Frequency 9kHz~30MHz:

Distance extrapolation factor =40log(Specific distance/ test distance)(dB);

Limit line=Specific limits(dBuV) + distance extrapolation factor.

For Frequency above 30MHz:

Distance extrapolation factor =20log(Specific distance/ test distance)(dB);

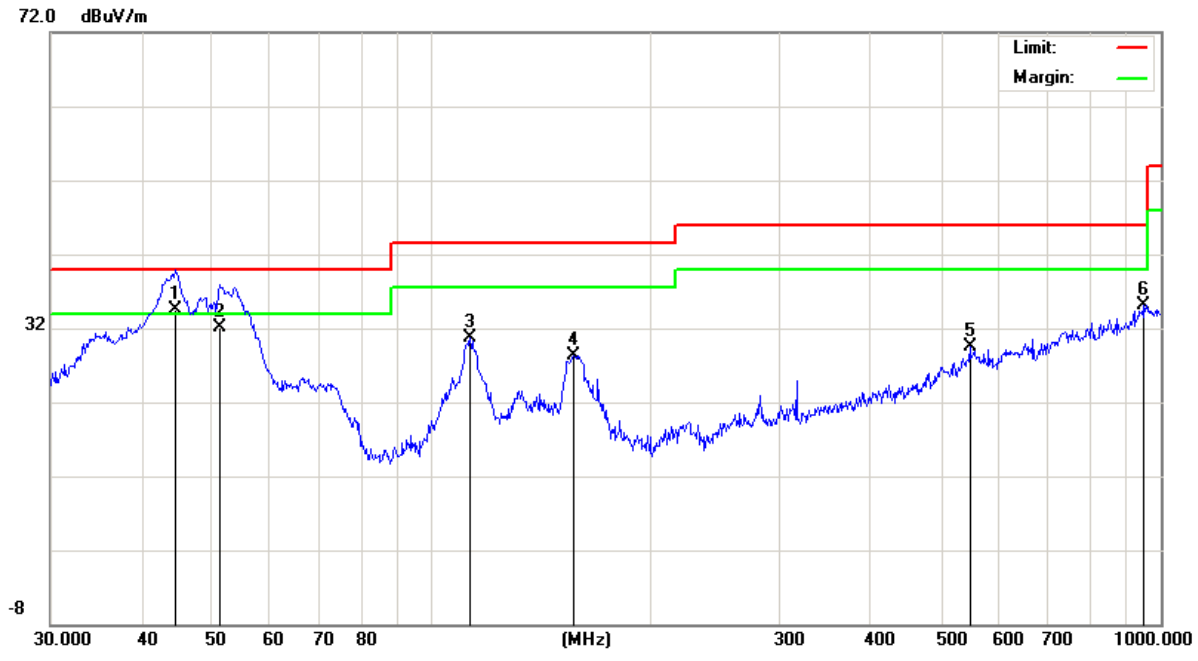
Limit line=Specific limits(dBuV) + distance extrapolation factor.

3.4.5 TEST RESULTS (BELOW 1000 MHz)

EUT：	RGB Speaker A21 Lamp	Model Name ：	LED+9DA21M/SWRGBSPK
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Model 1	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
44.5868	22.92	11.58	34.50	40.00	-5.50	QP
51.1209	23.79	8.31	32.10	40.00	-7.90	QP
112.9196	18.81	11.92	30.73	43.50	-12.77	QP
156.4578	16.88	11.42	28.30	43.50	-15.20	QP
547.0977	7.23	22.33	29.56	46.00	-16.44	QP
948.7609	6.80	28.35	35.15	46.00	-10.85	QP

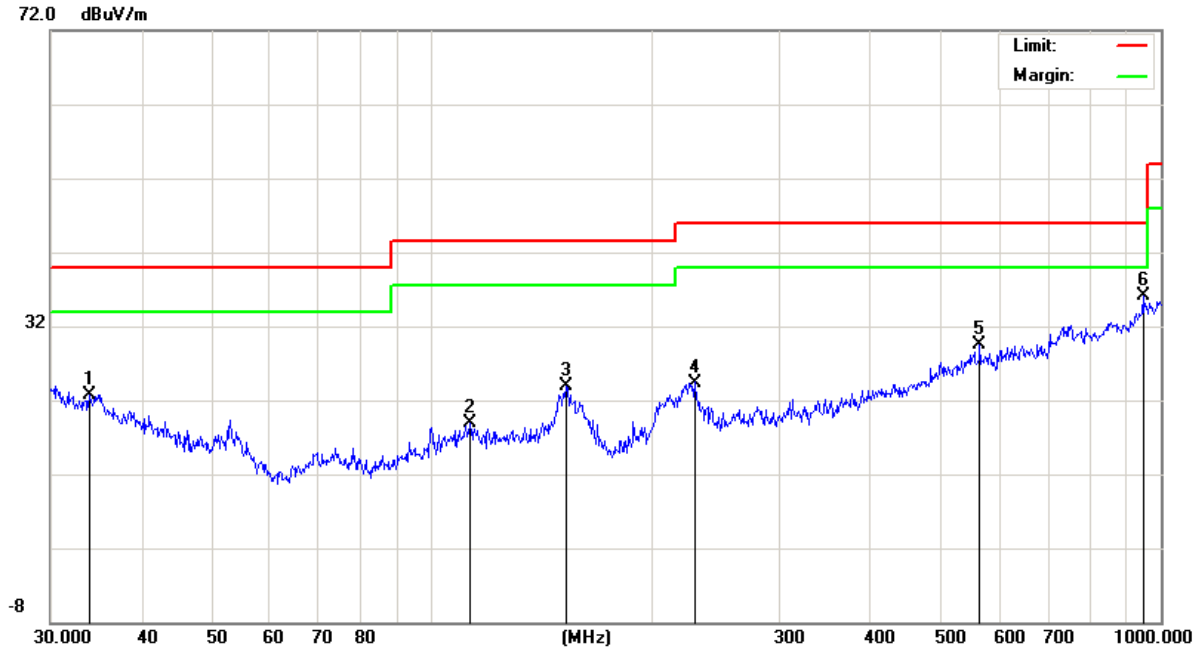
Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	RGB Speaker A21 Lamp	Model Name ：	LED+9DA21M/SWRGBSPK
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Model 1	Polarization：	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
33.9174	5.34	17.34	22.68	40.00	-17.32	QP
112.9196	7.01	11.92	18.93	43.50	-24.57	QP
153.2004	12.02	11.79	23.81	43.50	-19.69	QP
229.2931	13.60	10.80	24.40	46.00	-21.60	QP
564.6389	7.40	22.12	29.52	46.00	-16.48	QP
945.4398	7.95	28.21	36.16	46.00	-9.84	QP

Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

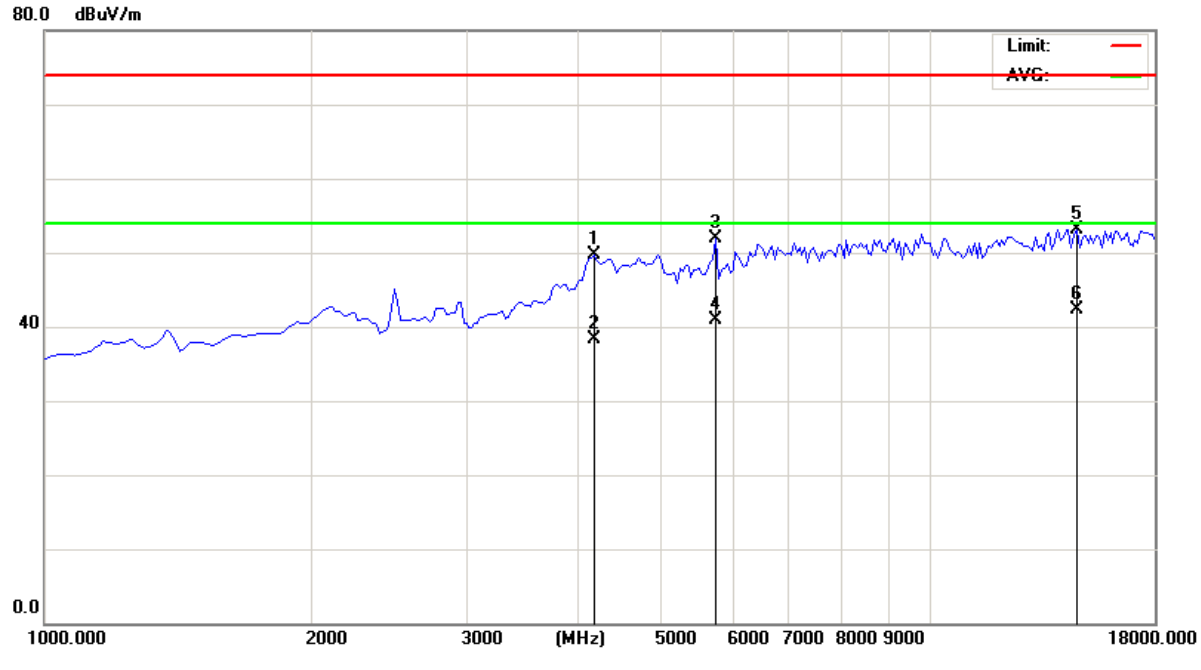


3.4.6 TEST RESULTS (ABOVE 1000 MHZ)

EUT：	RGB Speaker A21 Lamp	Model Name ：	LED+9DA21M/SWRGBSPK
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Model 1	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
4187.500	65.73	-16.02	49.71	74.00	-24.29	peak
4187.500	54.36	-16.02	38.34	54.00	-15.66	AVG
5760.000	66.53	-14.53	52.00	74.00	-22.00	peak
5760.000	55.39	-14.53	40.86	54.00	-13.14	AVG
14770.000	56.43	-3.23	53.20	74.00	-20.80	peak
14770.000	45.54	-3.23	42.31	54.00	-11.69	AVG

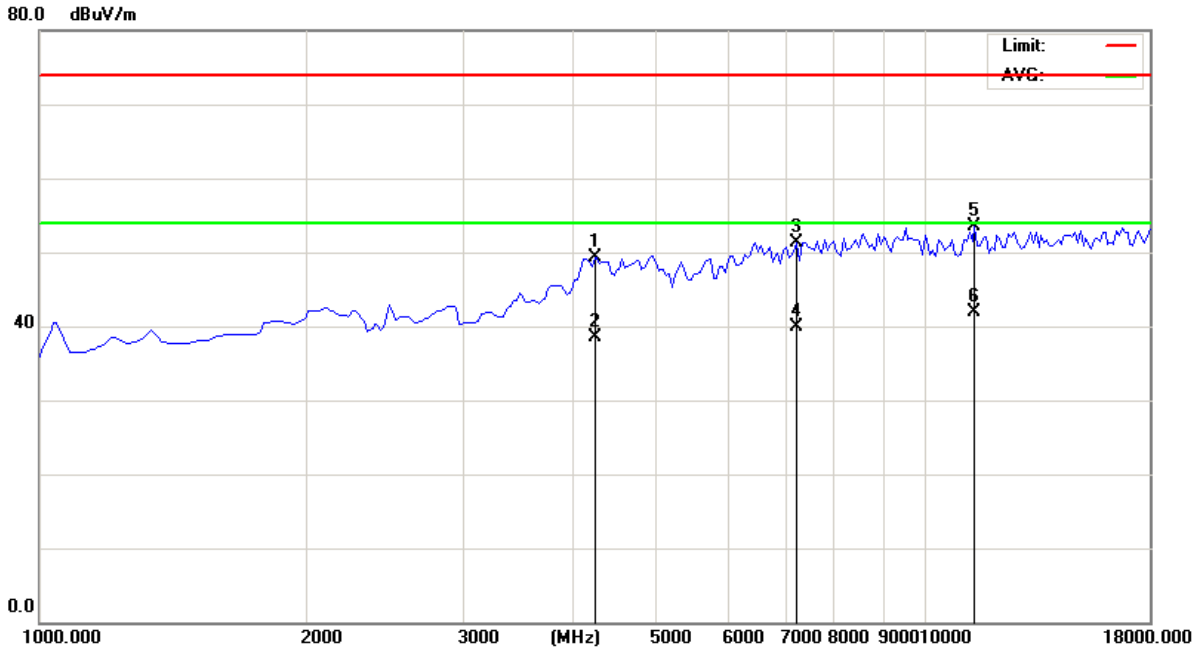
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.



EUT：	RGB Speaker A21 Lamp	Model Name ：	LED+9DA21M/SWRGBSPK
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Model 1	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
4272.500	65.03	-15.65	49.38	74.00	-24.62	peak
4272.500	54.06	-15.65	38.41	54.00	-15.59	AVG
7205.000	62.74	-11.44	51.30	74.00	-22.70	peak
7205.000	51.34	-11.44	39.90	54.00	-14.10	AVG
11497.500	59.91	-6.41	53.50	74.00	-20.50	peak
11497.500	48.23	-6.41	41.82	54.00	-12.18	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.
No emission above 18GHz.



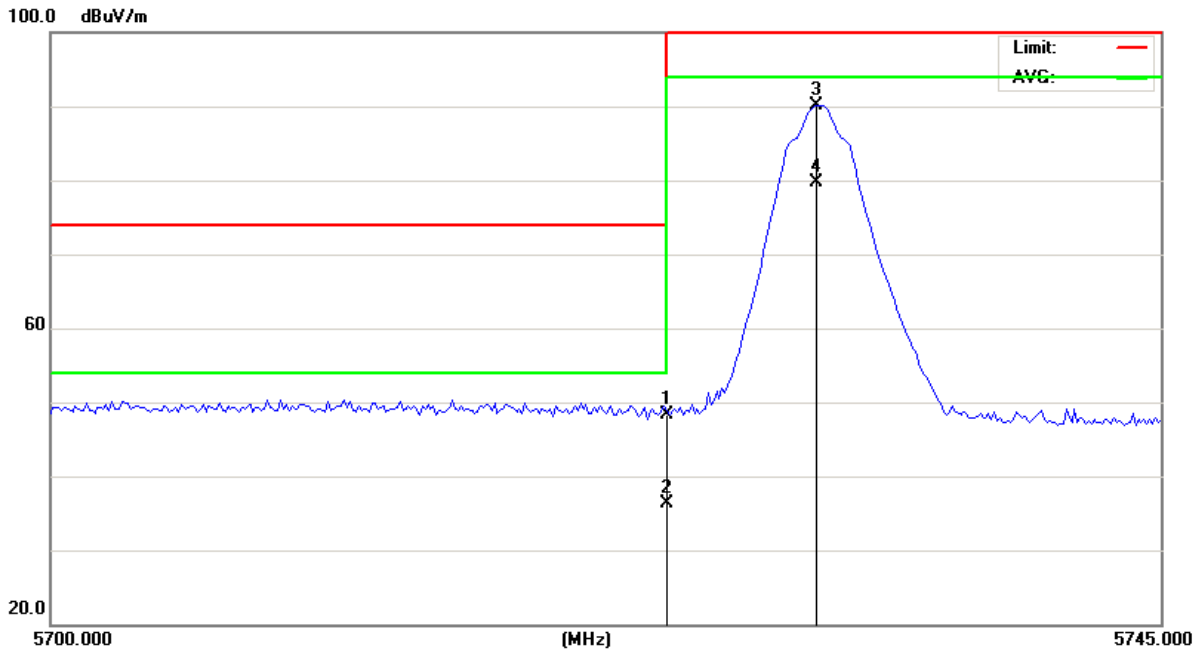
Note: EUT Pre-scan X/Y/Z orientation, only worst case is presented in the report(X orientation).

3.4.7 TEST RESULTS (RESTRICTED BANDS REQUIREMENTS)

EUT：	RGB Speaker A21 Lamp	Model Name ：	LED+9DA21M/SWRGBSPK
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Mode 1	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
5725.000	62.75	-14.53	48.22	74.00	-25.78	QP
5725.000	50.75	-14.53	36.22	54.00	-17.78	QP
5731.000	104.62	-14.53	90.09	114.00	-23.91	QP
5731.000	94.22	-14.53	79.69	94.00	-14.31	QP

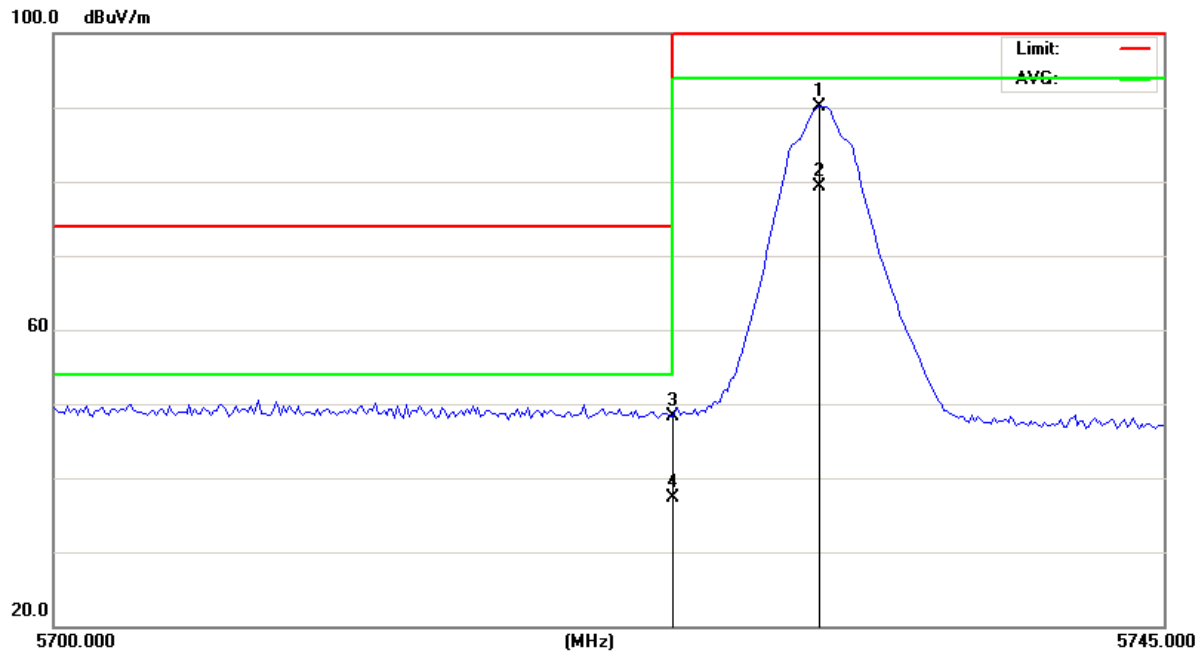
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	RGB Speaker A21 Lamp	Model Name ：	LED+9DA21M/SWRGBSPK
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Mode 1	Polarization：	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
5731.000	104.61	-14.53	90.08	114.00	-23.92	peak
5731.000	93.89	-14.53	79.36	94.00	-14.64	AVG
5725.000	62.81	-14.53	48.28	74.00	-25.72	peak
5725.000	51.79	-14.53	37.26	54.00	-16.74	AVG

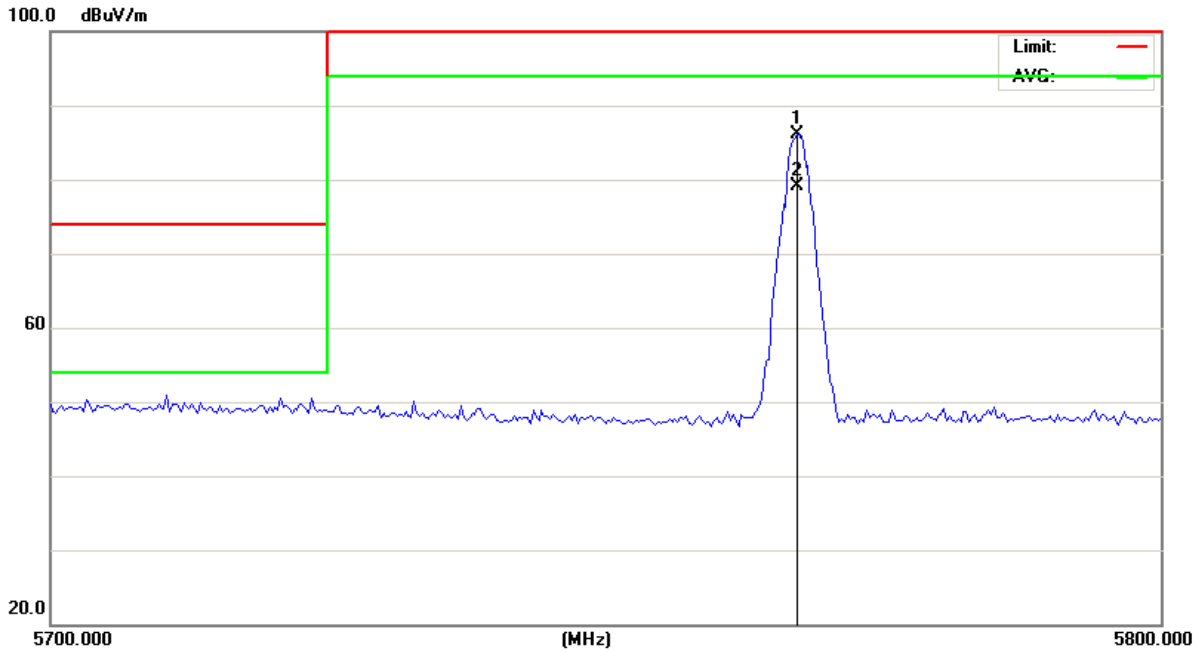
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	RGB Speaker A21 Lamp	Model Name ：	LED+9DA21M/SWRGBSPK
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Mode 2	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
5767.000	100.64	-14.54	86.10	114.00	-27.90	peak
5767.000	93.64	-14.54	79.10	94.00	-14.90	AVG

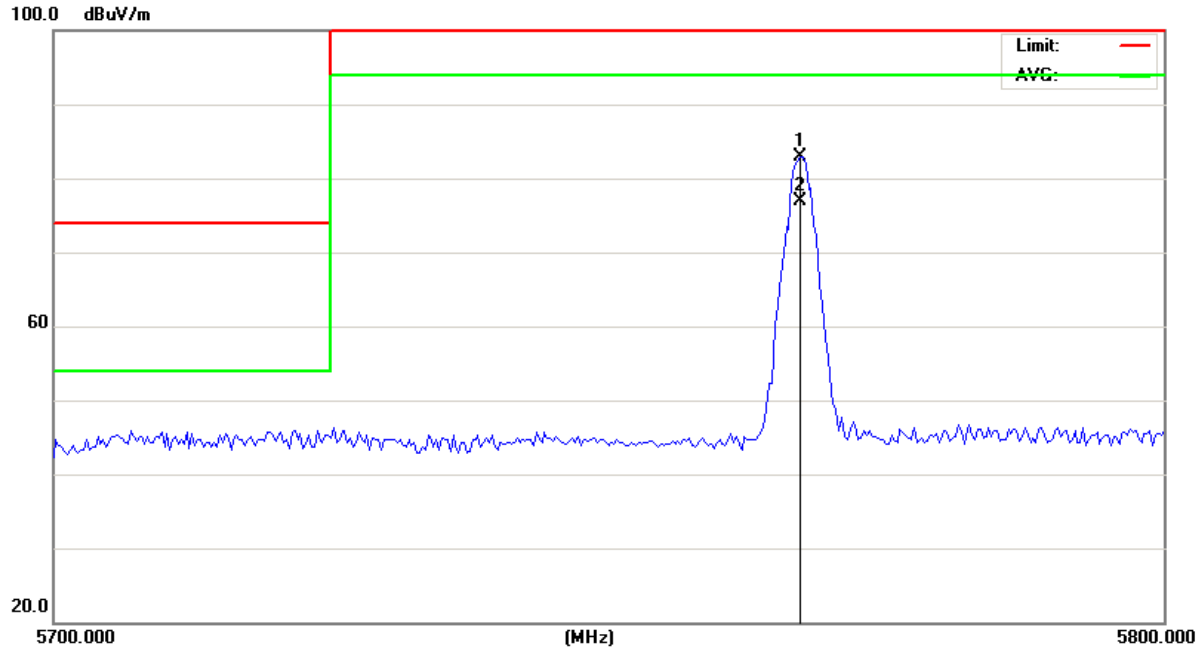
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	RGB Speaker A21 Lamp	Model Name ：	LED+9DA21M/SWRGBSPK
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Mode 2	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
5767.000	97.43	-14.54	82.89	114.00	-31.11	peak
5767.000	91.43	-14.54	76.89	94.00	-17.11	AVG

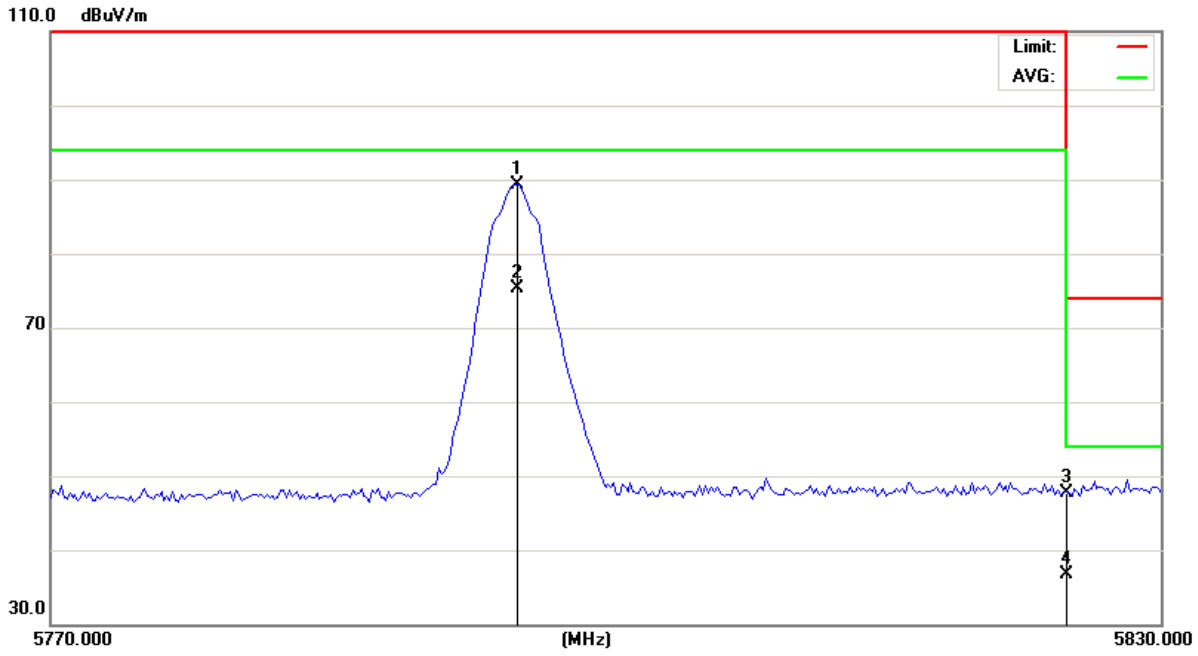
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	RGB Speaker A21 Lamp	Model Name ：	LED+9DA21M/SWRGBSPK
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Mode 3	Polarization：	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
5795.200	103.78	-14.54	89.24	114.00	-24.76	QP
5795.200	89.78	-14.54	75.24	94.00	-18.76	QP
5825.000	62.21	-14.42	47.79	74.00	-26.21	QP
5825.000	51.21	-14.42	36.79	54.00	-17.21	QP

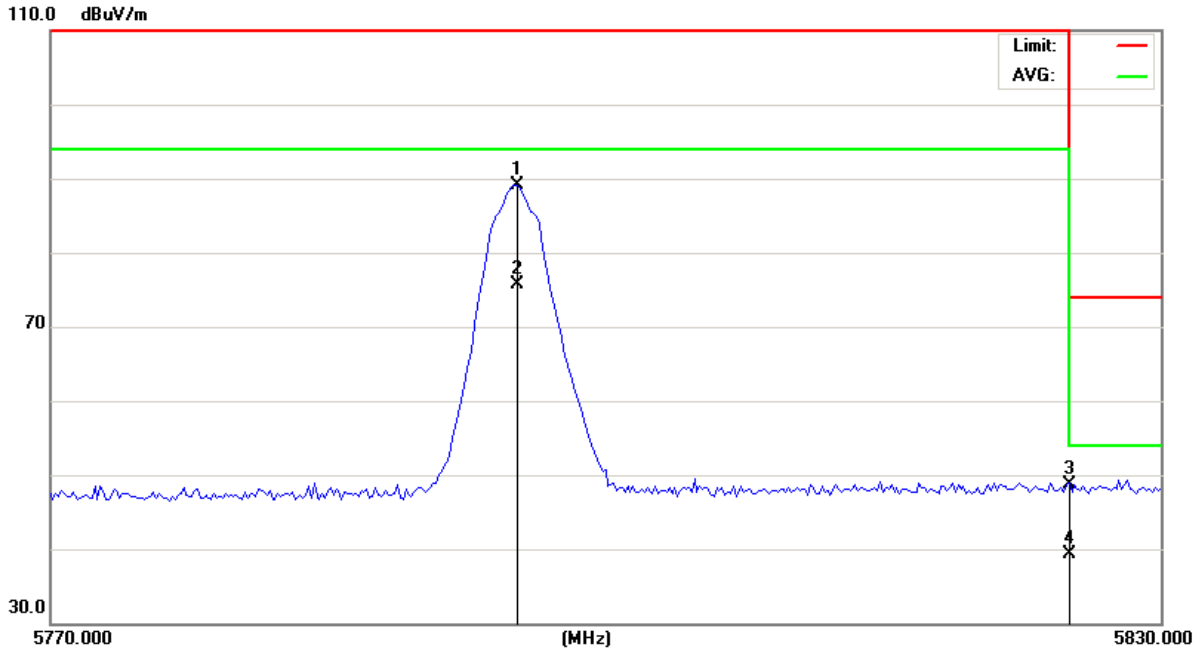
Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT：	RGB Speaker A21 Lamp	Model Name ：	LED+9DA21M/SWRGBSPK
Temperature：	25 ℃	Relative Humidity：	51%
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Mode 3	Polarization：	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
5795.200	103.62	-14.54	89.08	114.00	-24.92	peak
5795.200	90.23	-14.54	75.69	94.00	-18.31	AVG
5825.000	63.22	-14.42	48.80	74.00	-25.20	peak
5825.000	53.68	-14.42	39.26	54.00	-14.74	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



4. BANDWIDTH TEST

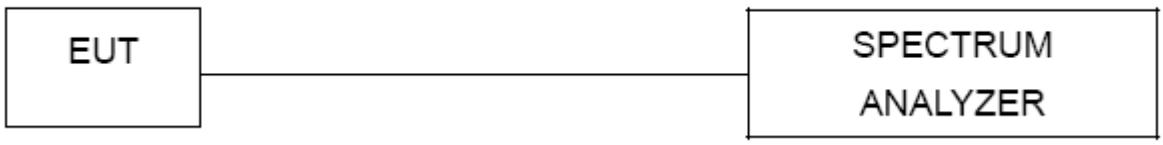
5.1 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum setting: The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value.

5.2 DEVIATION FROM STANDARD

No deviation.

5.3 TEST SETUP



5.4 TEST RESULTS

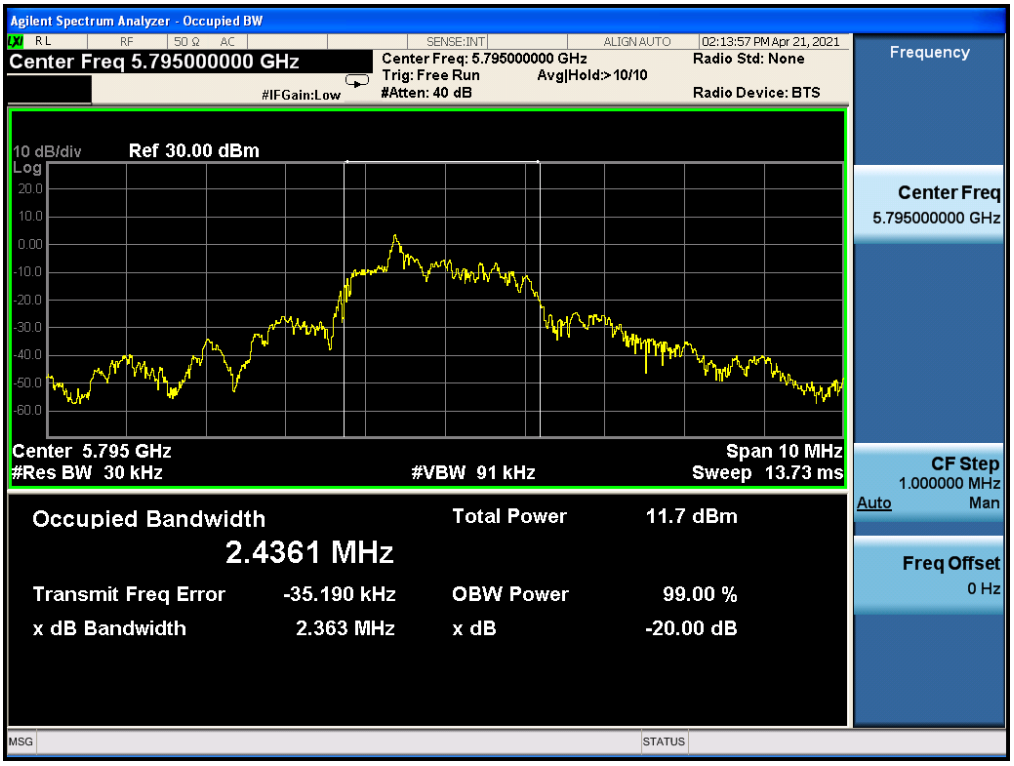
EUT：	RGB Speaker A21 Lamp	Model Name ：	LED+9DA21M/SWRGBSPK
Temperature：	26 ℃	Relative Humidity：	53%
Pressure：	1020 hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	Model 1/2/3		

Test Channel	Frequency (MHz)	20 dBc Bandwidth (MHz)
CH01	5731	2.226
CH10	5767	2.303
CH16	5795	2.363

5731 MHz

5767 MHz

5795 MHz



END OF REPORT