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APPLICATION CERTIFICATION FCC Part 15.247 & RSS-247 On Behalf of Edifier International Limited

B8 Soundbar Active Speaker system Model No.: B8 Soundbar

FCC ID: Z9G-EDF75 IC: 10004A-EDF75

Prepared for : Edifier International Limited

Address : P.O. Box 6264, General Post Office, Hong Kong

Prepared by : Shenzhen Accurate Technology Co., Ltd.

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Report No. : ATE20191038

Date of Test : June 27-July 1, 2019

Date of Report : July 12, 2019





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Test Report Certification

Applicant : Edifier International Limited

Address : P.O. Box 6264, General Post Office, Hong Kong

Manufacturer : Beijing Edifier Technology Co., Ltd.

Address : 8th floor, ZuoAn Building, NO.68 BeiSiHuanXiLu, Haidian District,

Beijing 100080, CHINA

Factory : Dongguan Edifier Technology Co., Ltd.

Address : No.2 Gongyedong Road, Songshan Lake Sci&Tech Industry

Park, Dongguan, Guangdong 523808, PR.China

Product : B8 Soundbar Active Speaker system

Model No. : B8 Soundbar

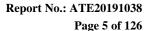
Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.247 ANSI C63.10: 2013 RSS-247 Issue 2 February 2017 RSS-Gen Issue 5 April 2018

The device described above is tested by Shenzhen Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 and RSS-247 limits. The measurement results are contained in this test report and Shenzhen Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Accurate Technology Co., Ltd.

Date of Test:	June 27-July 1, 2019
Date of Report :	July 12, 2019
Prepared by :	(St FY 13 F County)
Approved & Authorized Signer :	(Sean Liu, Manager)





1. GENERAL INFORMATION

1.1.Description of Device (EUT)

Model Number : B8 Soundbar

HVIN : B8

Bluetooth Version : V5.0+EDR

Range of Frequency : 2402-2480MHz

Number of Channels : 79

Antenna Gain(Max) : 2.5dBi

Type of Antenna : Integral Antenna

Modulation mode : GFSK, $\pi/4$ DQPSK, 8DPSK

Power supply : AC $100-240V \sim 50/60Hz 450mA$

1.2. Accessory and Auxiliary Equipment

Notebook PC: Manufacturer: Lenovo

M/N: ThinkPad X240

S/N: n.a



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1.3.Description of Test Facility

EMC Lab : Recognition of accreditation by Federal Communications

Commission (FCC)

The Designation Number is CN1189 The Registration Number is 708358

Listed by Innovation, Science and Economic Development

Canada (ISEDC)

The Registration Number is 5077A-2

Accredited by China National Accreditation Service for

Conformity Assessment (CNAS)

The Registration Number is CNAS L3193

Accredited by American Association for Laboratory

Accreditation (A2LA)

The Certificate Number is 4297.01

Name of Firm : Shenzhen Accurate Technology Co., Ltd.

Site Location : 1/F., Building A, Changyuan New Material Port, Science

& Industry Park, Nanshan District, Shenzhen, Guangdong,

P.R. China

1.4. Measurement Uncertainty

Radiated Emission Expanded Uncertainty : U=2.66dB, k=2

(9kHz-30MHz)

Radiated Emission Expanded Uncertainty : U=4.28dB, k=2

(30MHz-1000MHz)

Radiated Emission Expanded Uncertainty : U=4.98dB, k=2

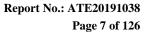
(1G-18GHz)

Radiated Emission Expanded Uncertainty : U=5.06dB, k=2

(18G-26.5GHz)

Conduction Emission Expanded Uncertainty : U=2.72dB, k=2

(Mains ports, 9kHz-30MHz)



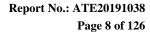


2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Cal. Interval
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 05, 2019	One Year
EMI Test Receiver	Rohde&Schwarz	ESR	101817	Jan. 05, 2019	One Year
Spectrum Analyzer	Rohde&Schwarz	FSV-40	101495	Jan. 05, 2019	One Year
Pre-Amplifier	Compliance Direction	RSU-M2	38322	Jan. 05, 2019	One Year
Pre-Amplifier	Agilent	8447D	294A10619	Jan. 05, 2019	One Year
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 05, 2019	One Year
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 05, 2019	One Year
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 05, 2019	One Year
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 05, 2019	One Year
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 05, 2019	One Year
Highpass Filter	Wainwright Instruments	WHKX3.6/18 G-10SS	N/A	Jan. 05, 2019	One Year
Band Reject Filter	Wainwright Instruments	WRCG2400/2 485-2375/2510 -60/11SS	N/A	Jan. 05, 2019	One Year
RF Coaxial Cable (Conducted Emission)	SUHNER	N-2m	No.2	Jan. 05, 2019	One Year
RF Coaxial Cable (Radiated Emission)	RESENBERGER	N-12m	No.11	Jan. 05, 2019	One Year
RF Coaxial Cable (Radiated Emission)	RESENBERGER	N-0.5m	No.12	Jan. 05, 2019	One Year
RF Coaxial Cable (Radiated Emission)	SUHNER	N-2m	No.13	Jan. 05, 2019	One Year
RF Coaxial Cable (Radiated Emission)	SUHNER	N-0.5m	No.15	Jan. 05, 2019	One Year
RF Coaxial Cable (Radiated Emission)	SUHNER	N-2m	No.16	Jan. 05, 2019	One Year
RF Coaxial Cable (Radiated Emission)	RESENBERGER	N-6m	No.17	Jan. 05, 2019	One Year

Radiated Emission Measurement Software: EZ_EMC V1.1.4.2





3. OPERATION OF EUT DURING TESTING

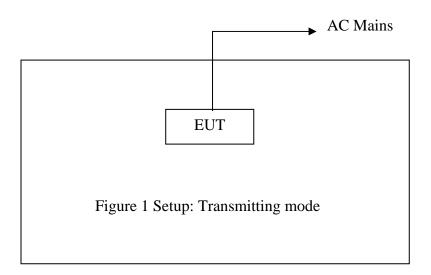
3.1. Operating Mode

The mode is used: Transmitting mode

Low Channel: 2402MHz Middle Channel: 2441MHz High Channel: 2480MHz

Hopping

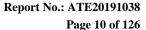
3.2.Configuration and peripherals





4. TEST PROCEDURES AND RESULTS

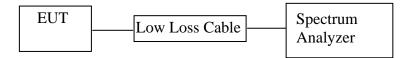
FCC & IC Rules	Description of Test	Result
FCC Section 15.247(a)(1) RSS-247 Section 5.1(a)	20dB Bandwidth Test	Compliant
RSS-Gen Section 6.7	99% Occupied Bandwidth Test	Compliant
FCC Section 15.247(a)(1) RSS-247 Section 5.1(b)	Carrier Frequency Separation Test	Compliant
FCC Section 15.247(a)(1)(iii) RSS-247 Section 5.1(d)	Number Of Hopping Frequency Test	Compliant
FCC Section 15.247(a)(1)(iii) RSS-247 Section 5.1(d)	Dwell Time Test	Compliant
FCC Section 15.247(b)(1) RSS-247 Section 5.4(b)	Maximum Peak Output Power Test	Compliant
FCC Section 15.247(d) FCC Section 15.209 RSS-247 Section 5.5 RSS-Gen Section 6.13 RSS-Gen Section 8.9	Radiated Emission Test	Compliant
FCC Section 15.247(d) RSS-247 Section 5.5 RSS-Gen Section 8.9 RSS-Gen Section 8.10	Band Edge Compliance Test	Compliant
FCC Section 15.207 RSS-Gen Section 8.8	AC Power Line Conducted Emissions Limits Test	Compliant
FCC Section 15.247(d) RSS-247 Section 5.5	Conducted Spurious Emission Test	Compliant
FCC Section 15.203 RSS-Gen Section 6.8	Antenna Requirement	Compliant





5. 20DB BANDWIDTH TEST

5.1.Block Diagram of Test Setup



5.2. The Requirement For Section 15.247(a)(1)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

5.3. The Requirement For RSS-247 Section 5.1(a)

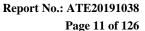
The bandwidth of a frequency hopping channel is the 20 dB emission bandwidth, measured with the hopping stopped. The system's radio frequency (RF) bandwidth is equal to the channel bandwidth multiplied by the number of channels in the hopset. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

5.4.EUT Configuration on Test

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.5. Operating Condition of EUT

- 5.5.1. Setup the EUT and simulator as shown as Section 5.1.
- 5.5.2. Turn on the power of all equipment.
- 5.5.3.Let the EUT work in TX (Hopping off) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, and 2480MHz TX frequency to transmit.





5.6.Test Procedure

- 5.6.1.Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 5.6.2. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW.
- 5.6.3.RBW shall be in the range of 1% to 5% of the OBW and VBW shall be approximately three times RBW.
- 5.6.4. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

5.7.Test Result

Channel	Frequency (MHz)	GFSK 20dB Bandwidth (MHz)	8DPSK 20dB Bandwidth (MHz)	Result
Low	2402	0.938	1.216	Pass
Middle	2441	0.955	1.229	Pass
High	2480	0.964	1.229	Pass

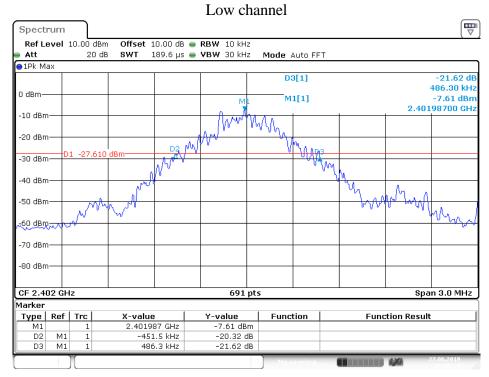
The spectrum analyzer plots are attached as below.



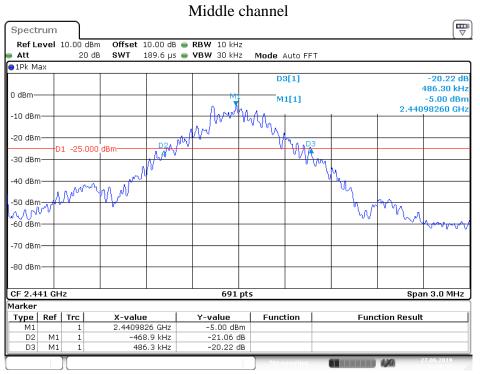




GFSK Mode



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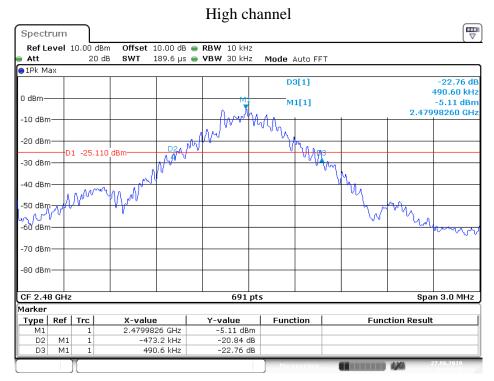


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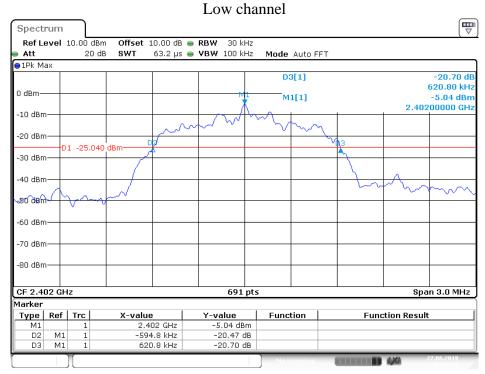
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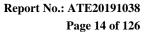


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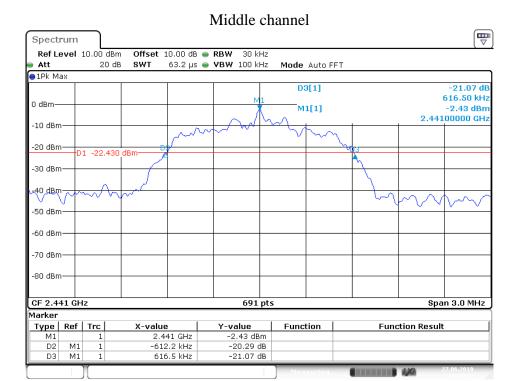
8DPSK Mode



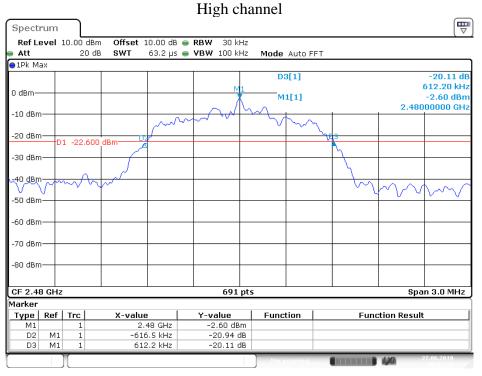
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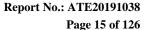




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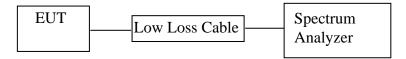
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6. 99% OCCUPIED BANDWIDTH TEST

6.1.Block Diagram of Test Setup



6.2. The Requirement for RSS-Gen Clause 6.7

The occupied bandwidth or the "99% emission bandwidth" is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

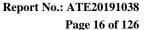
In some cases, the "x dB bandwidth" is required, which is defined as the frequency range between two points, one at the lowest frequency below and one at the highest frequency above the carrier frequency, at which the maximum power level of the transmitted emission is attenuated x dB below the maximum in-band power level of the modulated signal, where the two points are on the outskirts of the in-band emission.

6.3.EUT Configuration on Test

The equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.4. Operating Condition of EUT

- 6.4.1. Setup the EUT and simulator as shown as Section 6.1.
- 6.4.2. Turn on the power of all equipment.
- 6.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, 2480MHz TX frequency to transmit.





6.5. Test Procedure

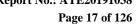
- 6.5.1. The transmitter shall be operated at its maximum carrier power measured under normal test conditions. The transmitter output was connected to the spectrum analyzer through a low loss cable.
- 6.5.2. The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.
- 6.5.3. The detector of the spectrum analyzer shall be set to "Sample". However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or "Max Hold") may be necessary to determine the occupied / x dB bandwidth if the device is not transmitting continuously.
- 6.5.4. 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. Video averaging is not permitted.

6.6.Test Result

Channel	Frequency (MHz)	GFSK 99% Bandwidth (MHz)	8DPSK 99% Bandwidth (MHz)	Result
Low	2402	0.842	1.159	Pass
Middle	2441	0.829	1.155	Pass
High	2480	0.842	1.155	Pass

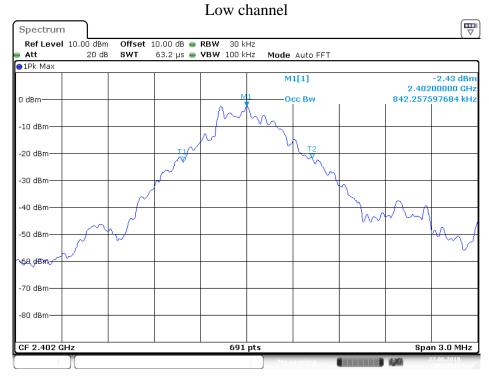
The spectrum analyzer plots are attached as below.



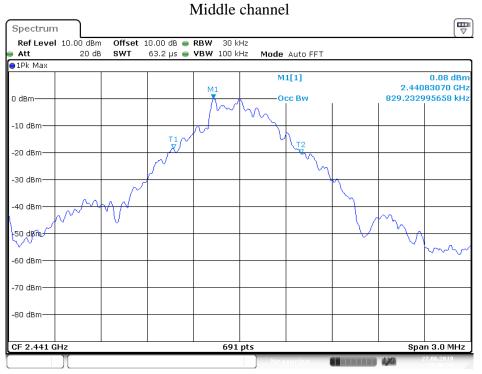


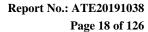


GFSK Mode

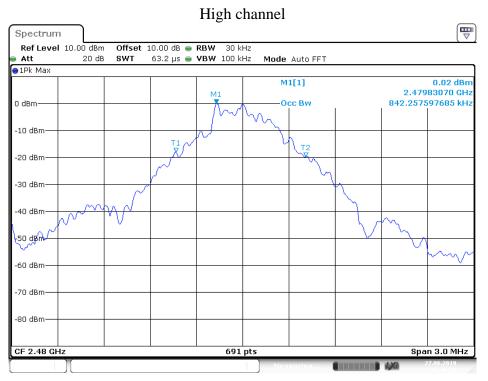


Date: 27.JUN.2019 16:47:31



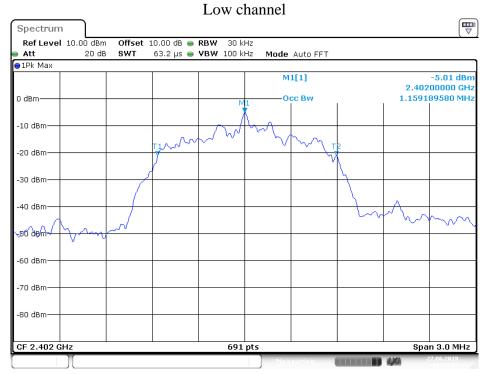




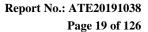


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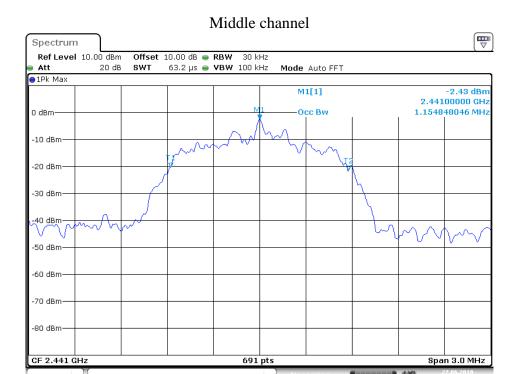
8DPSK Mode



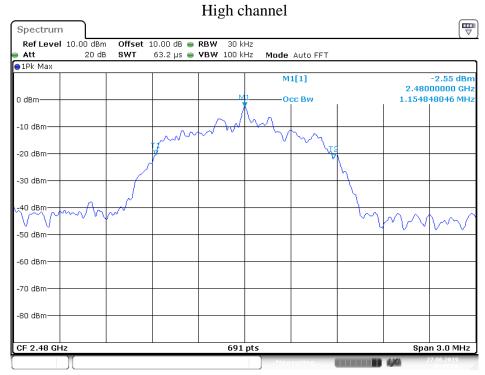
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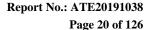




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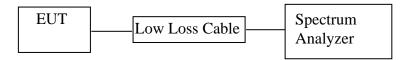
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7. CARRIER FREQUENCY SEPARATION TEST

7.1.Block Diagram of Test Setup



7.2. The Requirement For Section 15.247(a)(1)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

7.3. The Requirement For RSS-247 Section 5.1(b)

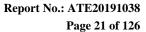
FHSs shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, FHSs operating in the band 2400-2483.5 MHz may have hopping channel carrier frequencies that are separated by 25 kHz or two thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided that the systems operate with an output power no greater than 0.125 W.

7.4.EUT Configuration on Test

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.5. Operating Condition of EUT

- 7.5.1. Setup the EUT and simulator as shown as Section 7.1.
- 7.5.2. Turn on the power of all equipment.
- 7.5.3.Let the EUT work in TX (Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, and 2480MHz TX frequency to transmit.





7.6.Test Procedure

- 7.6.1.The transmitter output was connected to the spectrum analyzer through a low loss cable.
- 7.6.2.Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz. Adjust Span to 3 MHz.
- 7.6.3. Set the adjacent channel of the EUT maxhold another trace.
- 7.6.4. Measurement the channel separation

7.7.Test Result

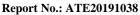
GFSK Mode

Channel	Frequency	Channel	Limit	Result
Chainlei	(MHz)	Separation(MHz)	(MHz)	Kesuit
Low	2402	1.0029	25KHz or 2/3*20dB	Pass
Low	2403	1.0029	bandwidth	rass
Middle	2440	1.0029	25KHz or 2/3*20dB	Pass
Middle	2441	1.0029	bandwidth	rass
High	2479	1.0029	25KHz or 2/3*20dB	Pass
High	2480	1.0029	bandwidth	rass

8DPSK Mode

Channel	Frequency (MHz)	Channel Separation(MHz)	Limit (MHz)	Result
Low	2402	1.0029	25KHz or 2/3*20dB	Pacc
Low	2403	1.0027	bandwidth	Pass Pass Pass
Middle	2440	1.0029	25KHz or 2/3*20dB	Dogg
Middle	2441	1.0029	bandwidth	rass
High	2479	1.0029	25KHz or 2/3*20dB	Dogg
Trigii	2480	1.0029	bandwidth	rass

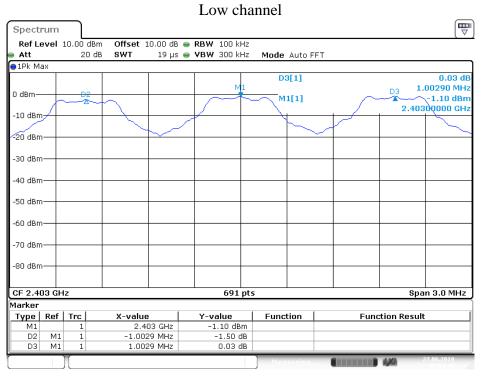
The spectrum analyzer plots are attached as below.



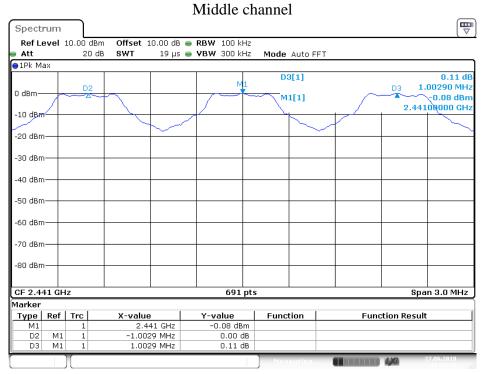
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GFSK Mode



Date: 27.JUN.2019 17:04:41

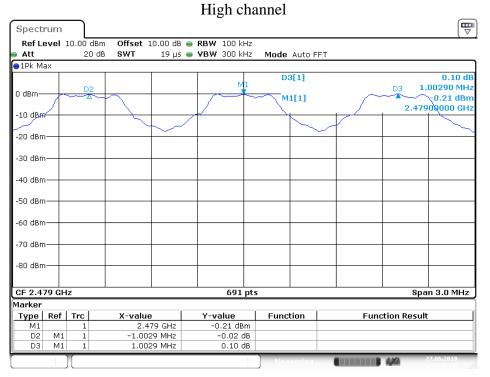


Date: 27.JUN.2019 17:03:45



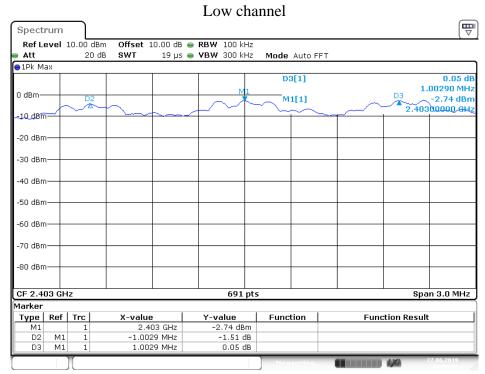
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Date: 27.JUN.2019 17:02:41

8DPSK Mode

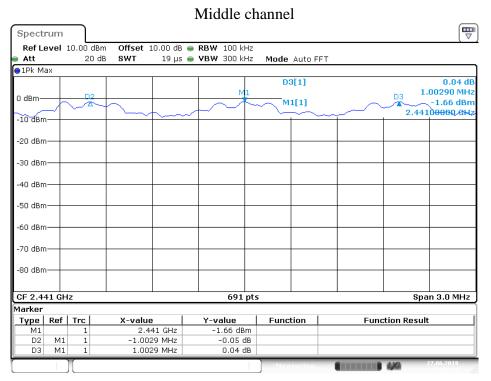


Date: 27.JUN.2019 16:59:05

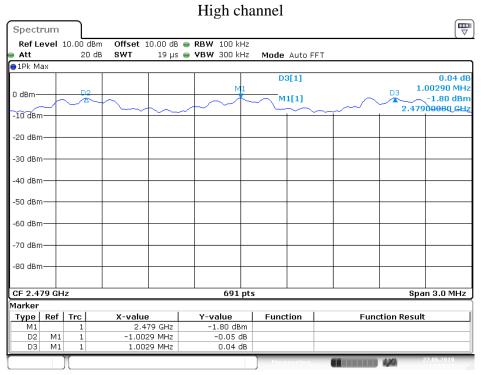


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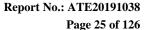




Date: 27.JUN.2019 17:00:24



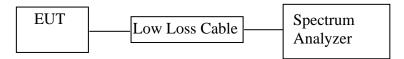
Date: 27.JUN.2019 17:01:29





8. NUMBER OF HOPPING FREQUENCY TEST

8.1.Block Diagram of Test Setup



8.2. The Requirement For Section 15.247(a)(1)(iii)

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

8.3. The Requirement For RSS-247 Section 5.1(d)

FHSs operating in the band 2400-2483.5 MHz shall use at least 15 hopping channels.

8.4.EUT Configuration on Test

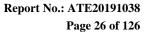
The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

8.5. Operating Condition of EUT

- 8.5.1. Setup the EUT and simulator as shown as Section 8.1.
- 8.5.2. Turn on the power of all equipment.
- 8.5.3.Let the EUT work in TX (Hopping on) modes measure it.

8.6.Test Procedure

- 8.6.1.The transmitter output was connected to the spectrum analyzer through a low loss cable
- 8.6.2. Set the spectrum analyzer as RBW=100 kHz, VBW=300 kHz.
- 8.6.3. Max hold, view and count how many channel in the band.



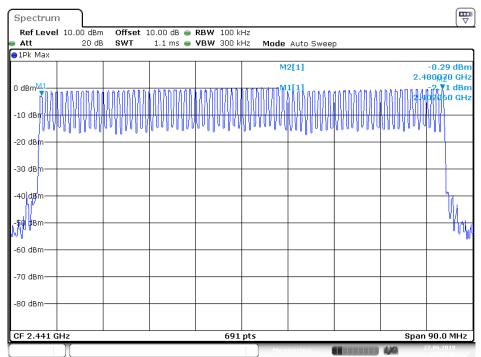


8.7.Test Result

Total number of	Measurement result(CH)	Limit(CH)	Result
hopping channel	79	≥15	Pass

The spectrum analyzer plots are attached as below.

Number of hopping channels (GFSK Mode)



Date: 27.JUN.2019 17:05:47

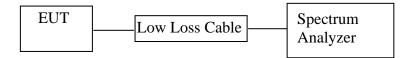


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9. DWELL TIME TEST

9.1.Block Diagram of Test Setup



9.2. The Requirement For Section 15.247(a)(1)(iii)

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

9.3. The Requirement For RSS-247 Section 5.1(d)

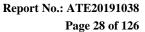
FHSs operating in the band 2400-2483.5 MHz shall use at least 15 hopping channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds, multiplied by the number of hopping channels employed. Transmissions on particular hopping frequencies may be avoided or suppressed provided that at least 15 hopping channels are used.

9.4.EUT Configuration on Test

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

9.5. Operating Condition of EUT

- 9.5.1. Setup the EUT and simulator as shown as Section 9.1.
- 9.5.2. Turn on the power of all equipment.
- 9.5.3.Let the EUT work in TX (Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, and 2480MHz TX frequency to transmit.





9.6.Test Procedure

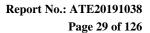
- 9.6.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.
- 9.6.2.Set center frequency of spectrum analyzer = operating frequency.
- 9.6.3.Set the spectrum analyzer as RBW=1MHz, VBW=3MHz, Span=0Hz, Adjust Sweep=5ms, 10ms, 15ms. Get the pulse time.
- 9.6.4.Repeat above procedures until all frequency measured were complete.

9.7.Test Result

Pass.

GFSK Mode

Mode	Channel Frequency (MHz)	Pulse Time (ms)	Dwell Time (ms)	Limit (ms)
	2402	0.442	141.44	400
DH1	2441	0.435	139.20	400
	2480	0.442	141.44	400
A period to	ransmit time = $0.4 \times 79 =$	= 31.6 Dwell time = pu	alse time \times (1600/(2*)	79))×31.6
	2402	1.710	273.60	400
DH3	2441	1.710	273.60	400
	2480	1.710	273.60	400
A period to	ransmit time = 0.4×79 =	= 31.6 Dwell time = pu	ulse time \times (1600/(4*)	79))×31.6
	2402	2.978	317.65	400
DH5	2441	2.957	315.41	400
	2480	2.978	317.65	400
A period transr	$nit time = 0.4 \times 79 = 31.6$	5 Dwell time = pulse t	$ime \times (1600/(6*79))^{2}$	×31.6





8DPSK Mode

Mode	Channel Frequency (MHz)	Pulse Time (ms)	Dwell Time (ms)	Limit (ms)
	2402	0.449	143.68	400
3DH1	2441	0.457	146.24	400
	2480	0.449	143.68	400
A period to	ransmit time = $0.4 \times 79 =$	31.6 Dwell time = pu	alse time \times (1600/(2*)	79))×31.6
	2402	1.725	276.00	400
3DH3	2441	1.710	273.60	400
	2480	1.710	273.60	400
A period to	ransmit time = 0.4×79 =	31.6 Dwell time = pu	ulse time \times (1600/(4*'	79))×31.6
	2402	2.978	317.65	400
3DH5	2441	2.978	317.65	400
	2480	2.978	317.65	400
A period transmit time = $0.4 \times 79 = 31.6$ Dwell time = pulse time $\times (1600/(6*79)) \times 31.6$				

The spectrum analyzer plots are attached as below.



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GFSK Mode

Spectrum

Att

0 dBm-

-10 dBm -20 dBm

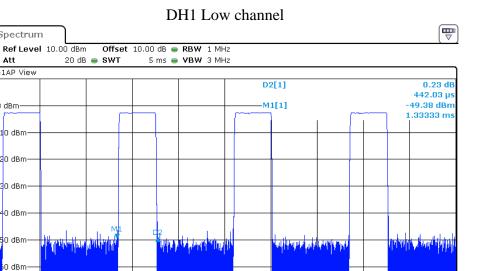
-30 dBm

40 dBm

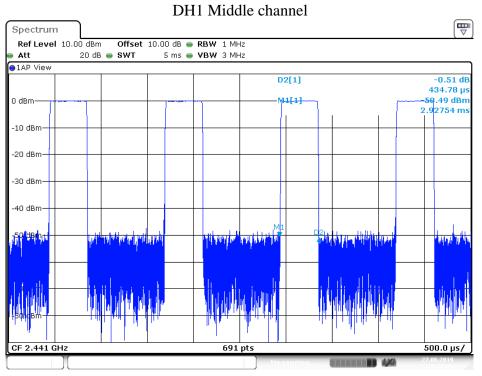
0 dBm BO dBm

CF 2.402 GHz

●1AP View



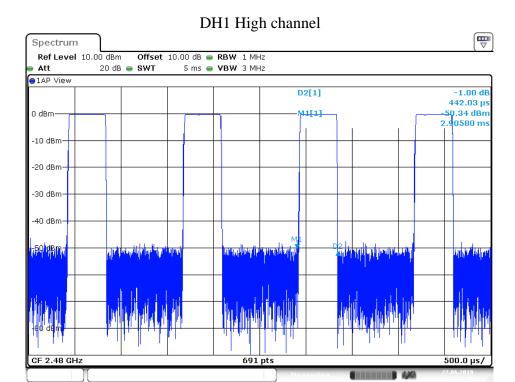
Date: 27.JUN.2019 17:39:05



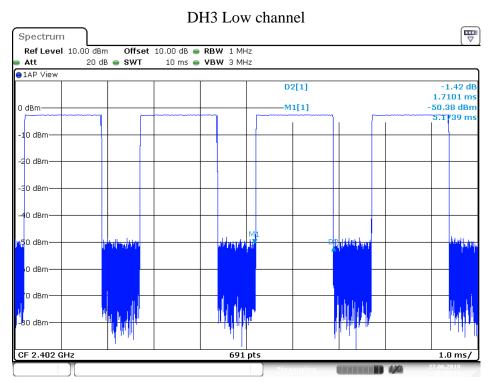


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Date: 27.JUN.2019 17:37:47



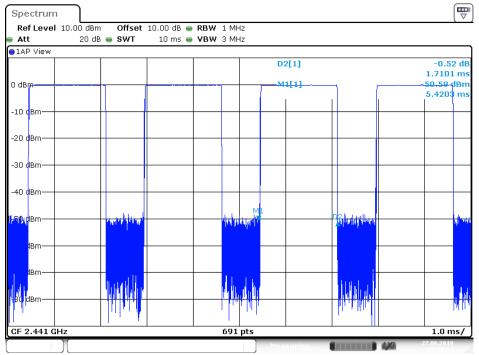
Date: 27.JUN.2019 17:34:52



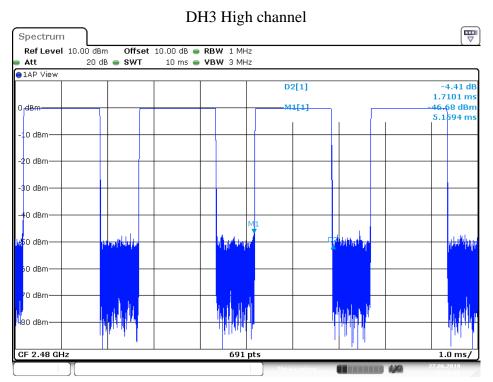
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Date: 27.JUN.2019 17:35:35

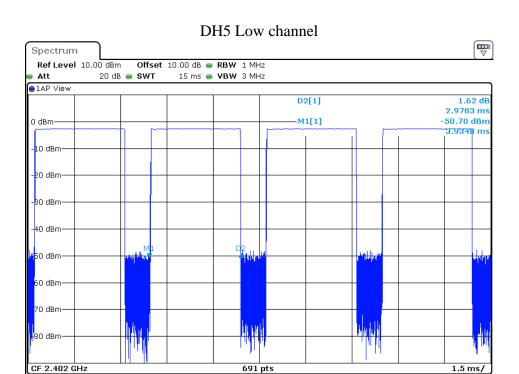


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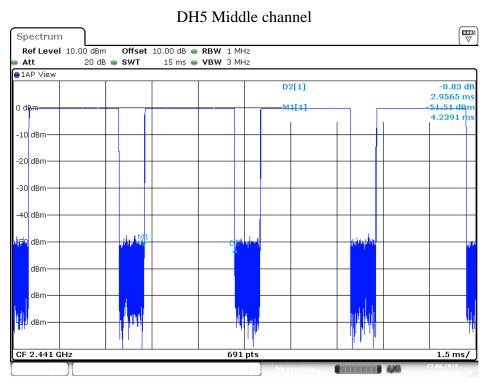


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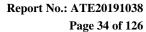




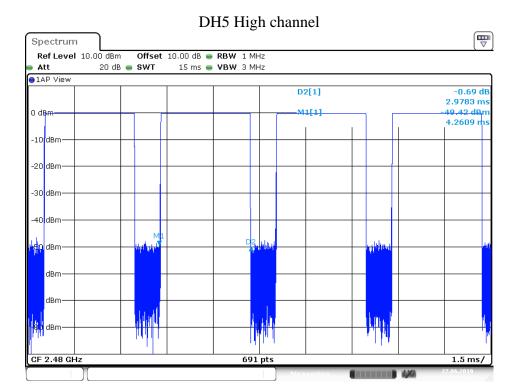
Date: 27.JUN.2019 17:33:55



Date: 27.JUN.2019 17:33:18







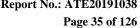
Date: 27.JUN.2019 17:32:43

8DPSK Mode

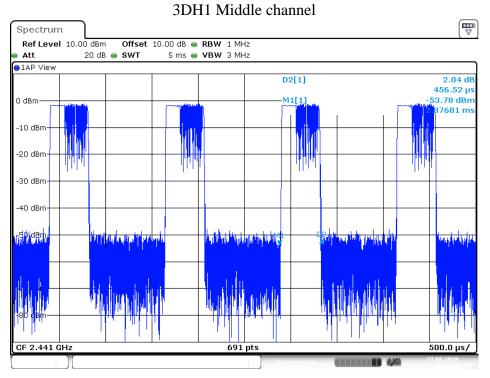
3DH1 Low channel Spectrum Ref Level 10.00 dBm Offset 10.00 dB RBW 1 MHz 5 ms • **VBW** 3 MHz 20 dB 🅌 SWT Att ●1AP View D2[1] 449.28 µs -50.43 dBm 2.84058 ms -M1[1] 0 dBm -10 dBm -30 dBm -40 dBm 500.<u>0 μs/</u> 691 pts CF 2.402 GHz

Date: 27.JUN.2019 17:25:23

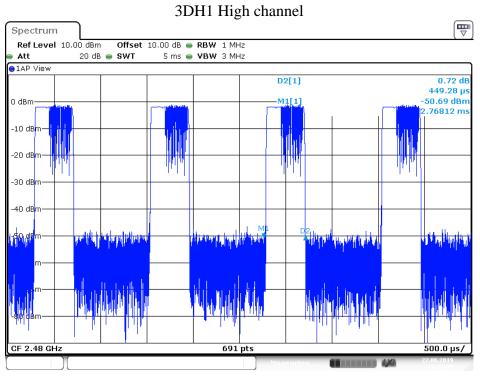




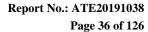




Date: 27.JUN.2019 17:26:14

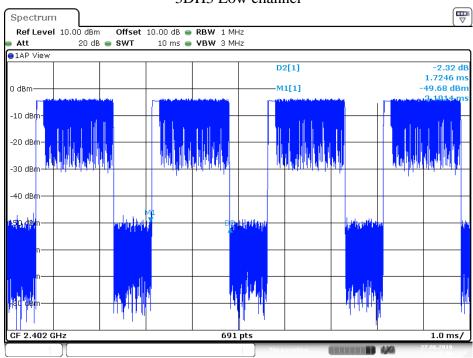


Date: 27.JUN.2019 17:26:50



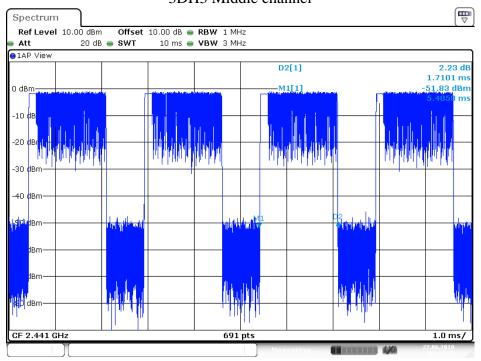


3DH3 Low channel

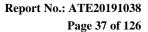


Date: 27.JUN.2019 17:29:00

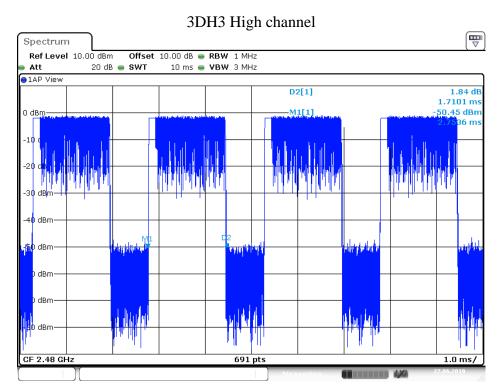
3DH3 Middle channel



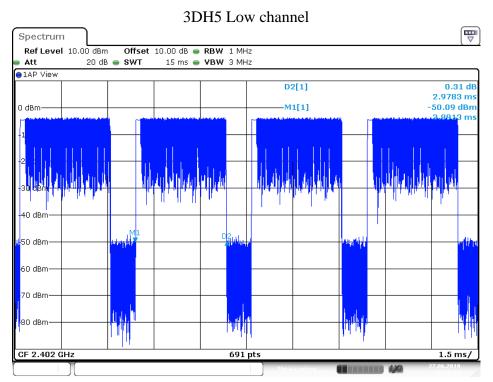
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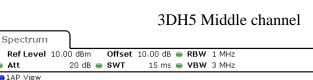


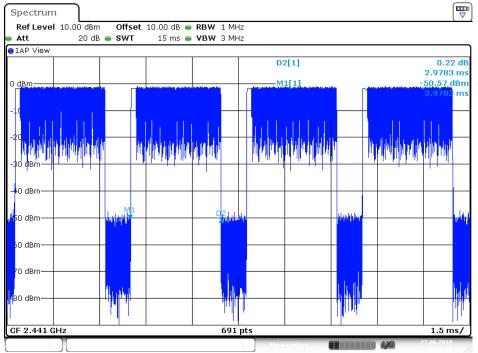
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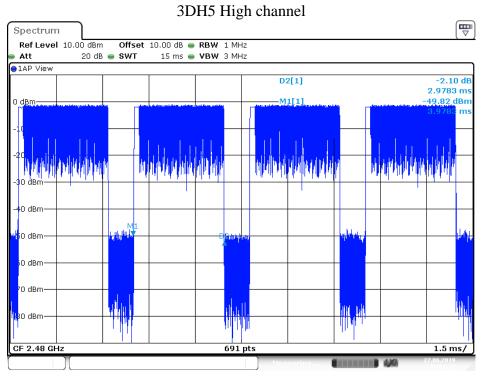
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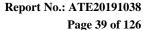




Date: 27.JUN.2019 17:30:38



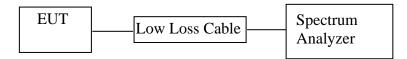
Date: 27.JUN.2019 17:31:17





10.MAXIMUM PEAK OUTPUT POWER TEST

10.1.Block Diagram of Test Setup



10.2. The Requirement For Section 15.247(b)(1)

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

10.3. The Requirement For RSS-247 Section 5.4(b)

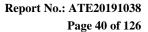
For FHSs operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1.0 W if the hopset uses 75 or more hopping channels; the maximum peak conducted output power shall not exceed 0.125 W if the hopset uses less than 75 hopping channels. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e).

10.4.EUT Configuration on Test

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

10.5. Operating Condition of EUT

- 10.5.1. Setup the EUT and simulator as shown as Section 10.1.
- 10.5.2. Turn on the power of all equipment.
- 10.5.3.Let the EUT work in TX (Hopping off) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, and 2480MHz TX frequency to transmit.





10.6.Test Procedure

10.6.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

10.6.2.Set RBW of spectrum analyzer to 3MHz and VBW to 10MHz.

10.6.3. Measurement the maximum peak output power.

10.7.Test Result

GFSK Mode

Frequency (MHz)	Peak Output Power (dBm/W)	E.I.R.P (dBm/W)	Limits (dBm/W)	Result
2402	-2.31/0.0006	0.19/0.0010	21 / 0.125	Pass
2441	0.34/0.0011	2.84/0.0019	21 / 0.125	Pass
2480	0.21/0.0010	2.71/0.0019	21 / 0.125	Pass

8DPSK Mode

Frequency (MHz)	Peak Output Power (dBm/W)	E.I.R.P (dBm/W)	Limits (dBm/W)	Result
2402	-2.54/0.0006	-0.04/0.0010	21 / 0.125	Pass
2441	-0.17/0.0010	2.33/0.0017	21 / 0.125	Pass
2480	-0.30/0.0009	2.20/0.0017	21 / 0.125	Pass

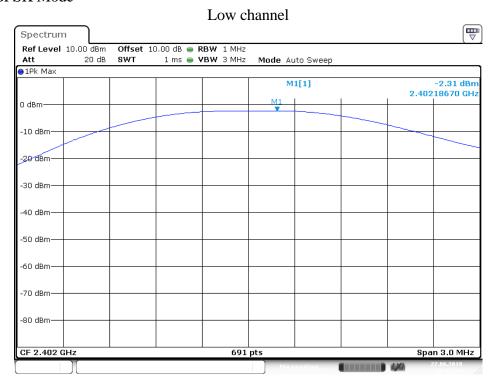
The spectrum analyzer plots are attached as below.



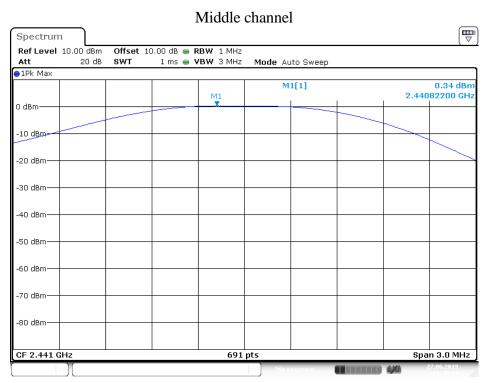
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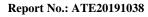
GFSK Mode



Date: 27.JUN.2019 16:17:45

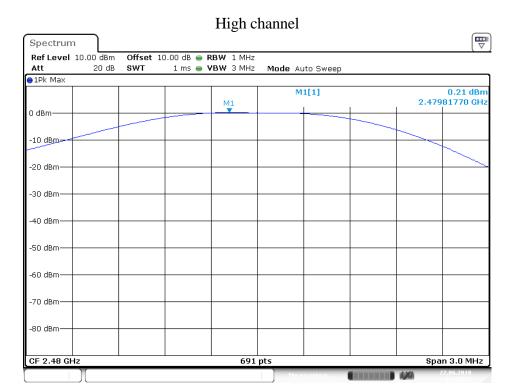


Date: 27.JUN.2019 16:40:15



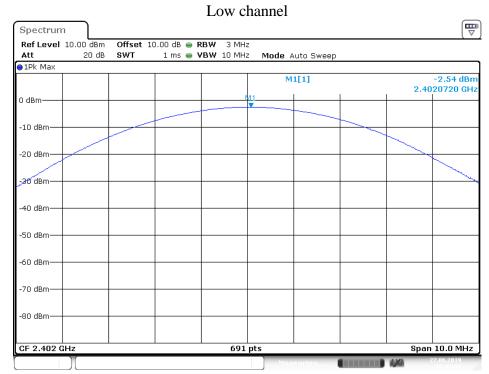
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Date: 27.JUN.2019 16:40:52

8DPSK Mode

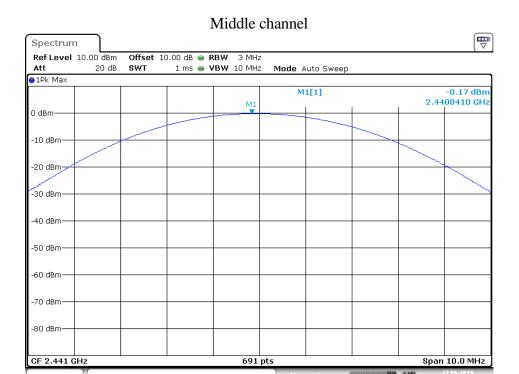


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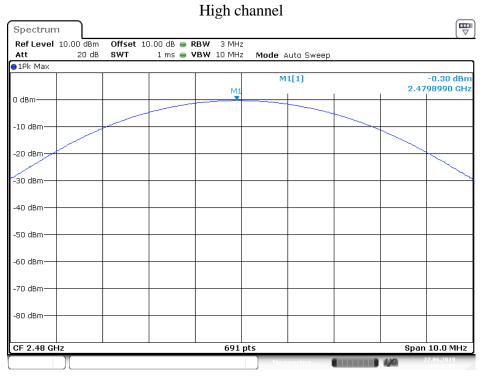


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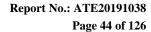




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Date: 27.JUN.2019 16:42:01

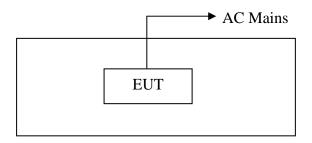




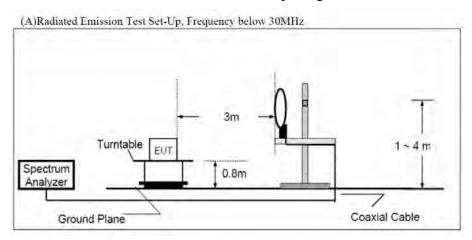
11.RADIATED EMISSION TEST

11.1.Block Diagram of Test Setup

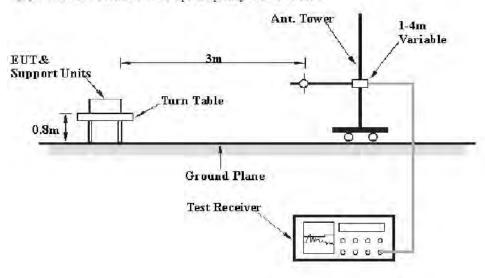
11.1.1.Block diagram of connection between the EUT and peripherals

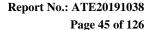


11.1.2.Semi-Anechoic Chamber Test Setup Diagram



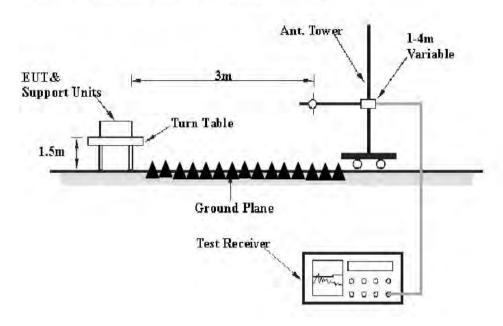
(B)Radiated Emission Test Set-Up, Frequency 30MHz-1GHz





ATC

(C) Radiated Emission Test Set-Up. Frequency above 1GHz

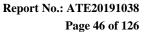


11.2. The Requirement For Section 15.247(d)

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 Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

11.3. The Requirement for RSS-247 section 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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 that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.





11.4. Transmitter Emission Limit

Except where otherwise indicated in the applicable RSS, radiated emissions shall comply with the field strength limits shown in table 5 and table 6. Additionally, the level of any transmitter unwanted emission shall not exceed the level of the transmitter's fundamental emission

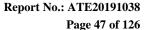
Table 5 – General field strength limits at frequencies above 30 MHz

Frequency (MHz)	Field strength (μV/m at 3 m)
30 – 88	100
88 – 216	150
216 – 960	200
Above 960	500

Table 6 - General field strength limits at frequencies below 30 MHz

Frequency	Magnetic field strength (H- Field) (μΑ/m)	Measurement distance (m)
9 - 490 kHz ¹	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.





11.5.Restricted bands of operation

Restricted frequency bands, identified in table 7, are designated primarily for safety-of-life services (distress calling and certain aeronautical activities), certain satellite downlinks, radio astronomy and some government uses. Except where otherwise indicated, the following conditions related to the restricted frequency bands apply:

- (a) The transmit frequency, including fundamental components of modulation, of licence-exempt radio apparatus shall not fall within the restricted frequency bands listed in table 7 except for apparatus compliant with RSS-287, *Emergency Position Indicating Radio Beacons (EPIRB)*, *Emergency Locator Transmitters (ELT)*, *Personal Locator Beacons (PLB)*, and Maritime Survivor Locator Devices (MSLD).
- (b) Unwanted emissions that fall into restricted frequency bands listed in table 7 shall comply with the limits specified in table 5 and table 6.
- (c) Unwanted emissions that fall into restricted frequency bands listed in table 7 shall comply with the limits specified in table 5 and table 6.

Table 7 - Restricted frequency bands*

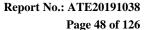
MHz

MHz	
0.090 - 0.110	
0.495 - 0.505	
2.1735 - 2.1905	
3.020 - 3.026	
4.125 - 4.128	
4.17725 - 4.17775	
4.20725 - 4.20775	
5.677 - 5.683	
6.215 - 6.218	
6.26775 - 6.26825	
6.31175 - 6.31225	
8.291 - 8.294	
8.362 - 8.366	
8.37625 - 8.38675	
8.41425 - 8.41475	
12.29 - 12.293	
12.51975 - 12.52025	
12.57675 - 12.57725	
13.36 - 13.41	
16.42 - 16.423	
16.69475 - 16.69525	
16.80425 - 16.80475	
25.5 - 25.67	
37.5 - 38.25	
73 - 74.6	
74.8 - 75.2	
108 - 138	

149.	9 - 150.05
156.5247	75 - 156.52525
156	.7 - 156.9
162.01	125 - 167.17
167.	72 - 173.2
24	10 - 285
32	2 - 335.4
399	9.9 - 410
60	08 - 614
96	0 - 1427
143	5 - 1626.5
1645	.5 - 1646.5
166	50 - 1710
1718	.8 - 1722.2
220	00 - 2300
231	10 - 2390
2483	3.5 - 2500
265	55 - 2900
326	60 - 3267
333	32 - 3339
334:	5.8 - 3358
350	00 - 4400
450	00 - 5150
535	0 - 5460
725	50 - 7750
802	25 - 8500

GHz	
9.0 - 9.2	
9.3 - 9.5	
10.6 - 12.7	
13.25 - 13.4	
14.47 - 14.5	5
15.35 - 16.2	2
17.7 - 21.4	
22.01 - 23.1	2
23.6 - 24.0	
31.2 - 31.8	1
36.43 - 36.5	5
Above 38.6	5

* Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licenceexempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.





11.6.EUT Configuration on Test

The equipment is installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

11.7.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground(Below 1GHz). The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground(Above 1GHz). The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. This EUT was tested in 3 orthogonal positions and the worst case position data was reported.

During the radiated emission test, the spectrum analyzer was set with the following configurations:

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
- 4. All modes of operation were investigated and the worse case emissions are reported.





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11.8.Data Sample

Frequency	Reading	Factor	Result	Limit	Margin	Remark
(MHz)	(dBµv)	(dB/m)	(dBµv/m)	(dBµv/m)	(dB)	
X.XX	28.66	-15.19	13.47	40.0	-26.53	QP

Frequency(MHz) = Emission frequency in MHz

Reading($dB\mu\nu$) = Uncorrected Analyzer/Receiver reading

Factor (dB/m) = Antenna factor + Cable Loss – Amplifier gain

Result($dB\mu v/m$) = Reading($dB\mu v$) + Factor(dB/m)

Limit $(dB\mu v/m) = Limit$ stated in standard

Margin (dB) = Result(dB μ v/m) - Limit (dB μ v/m)

QP = Quasi-peak Reading

Calculation Formula:

 $Margin(dB) = Result (dB\mu V/m) - Limit(dB\mu V/m)$

Result($dB\mu V/m$)= Reading($dB\mu V$)+ Factor(dB/m)

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit.

11.9.Test Result

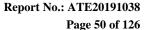
Pass.

The frequency range from 9KHz to 40GHz is investigated. 26.5GHz to 40GH data reference to the SMQ report number (WT198003434).

We tested GFSK mode, $\Pi/4$ -DQPSK & 8DPSK Mode and recorded the worse case data (GFSK mode) for all test mode.

Note: EUT has Bluetooth and 5.8G wireless, radiated emission test Bluetooth transmit mode, 5.8G and Bluetooth simultaneous transmit two mode.

The spectrum analyzer plots are attached as below.





9kHz-30MHz test data: Bluetooth

ACCURATE TECHNOLOGY CO., LTD

FCC Part 15C 3M Radiated

B8 Soundbar Active Speaker system M/N:B8 Soundbar

Edifier Manufacturer: Operating Condition: TX 2402MHz Test Site: 2# Chamber

Operator: WADE

Test Specification: AC 120V/60Hz

Comment: X

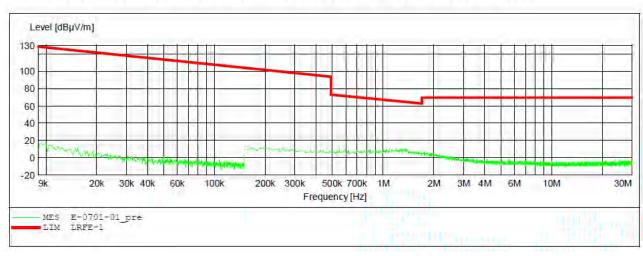
Start of Test: 2019-7-01 /

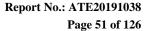
SCAN TABLE: "LFRE Fin"
Short Description: SUB STD VTERM2 1.70

Start Stop Step Detector Meas. IF Transducer

Frequency Frequency Width Time Bandw.

9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M







FCC Part 15C 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier Operating Condition: TX 2402MHz 2# Chamber Test Site: Operator: WADE

Test Specification: AC 120V/60Hz

Comment:

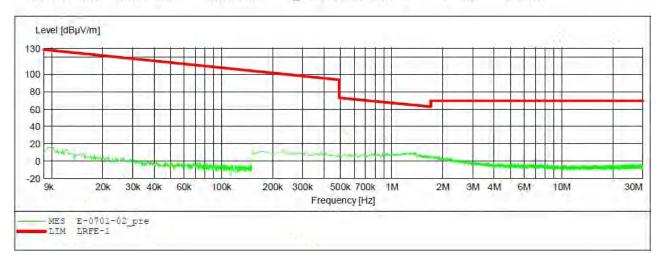
2019-7-01 / Start of Test:

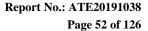
SCAN TABLE: "LFRE Fin"
Short Description: SUB STD VTERM2 1.70

Stop Start Step Detector Meas. IF Transducer

Width Time Frequency Frequency Bandw.

9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M







FCC Part 15C 3M Radiated

B8 Soundbar Active Speaker system M/N:B8 Soundbar EUT:

Manufacturer: Edifier Operating Condition: TX 2402MHz 2# Chamber Test Site:

Operator: WADE

Test Specification: AC 120V/60Hz

Comment:

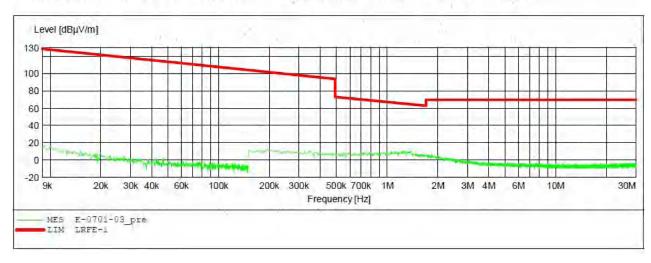
2019-7-01 / Start of Test:

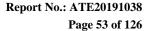
SCAN TABLE: "LFRE Fin"
Short Description: _SUB_STD_VTERM2 1.70

Detector Meas. Stop Start Step IF Transducer

Frequency Frequency Width Time Bandw.

9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 1516M 200 Hz 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M







FCC Part 15C 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier Operating Condition: TX 2441MHz 2# Chamber Test Site:

Operator: WADE

Test Specification: AC 120V/60Hz

Comment: X

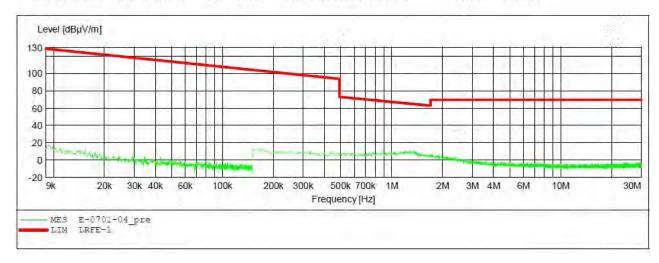
2019-7-01 / Start of Test:

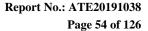
SCAN TABLE: "LFRE Fin"
Short Description: SUB STD VTERM2 1.70

IF Start Stop Step Detector Meas. Transducer

Frequency Frequency Width Time Bandw.

150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M 9.0 kHz 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M







FCC Part 15C 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier Operating Condition: TX 2441MHz Test Site: 2# Chamber

Operator: WADE Test Specification: AC 120V/60Hz

Comment:

2019-7-01 / Start of Test:

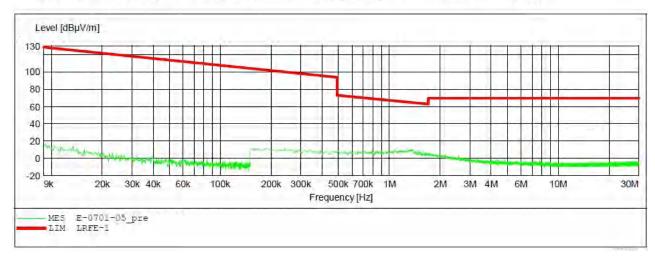
SCAN TABLE: "LFRE Fin"

_SUB_STD_VTERM2 1.70 Short Description:

Start Stop Step Detector Meas. IF Transducer

Frequency Frequency Width Time Bandw.

9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M





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FCC Part 15C 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier Operating Condition: TX 2441MHz Test Site: 2# Chamber

Operator: WADE

Test Specification: AC 120V/60Hz

Comment:

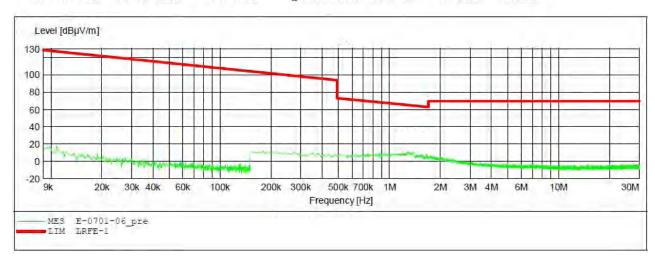
2019-7-01 / Start of Test:

SCAN TABLE: "LFRE Fin"
Short Description:

SUB STD VTERM2 1.70 Start Stop Step Detector Meas. IF Transducer

Frequency Frequency Width Time Bandw.

9.0 kHz 1516M 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 150.0 kHz 30.0 MHz QuasiPeak 1.0 s 9 kHz 5.0 kHz 1516M





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FCC Part 15C 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier Operating Condition: TX 2480MHz Test Site: 2# Chamber

Operator: WADE

Test Specification: AC 120V/60Hz

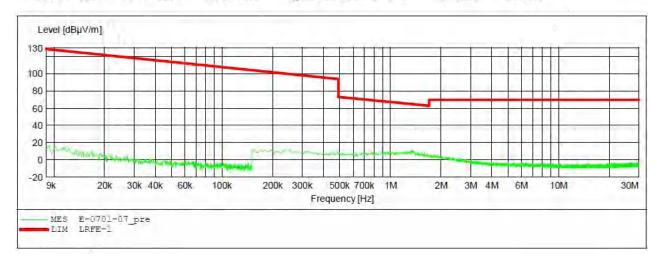
X Comment:

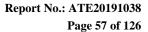
2019-7-01 / Start of Test:

SCAN TABLE: "LFRE Fin"
Short Description: _SUB_STD_VTERM2 1.70 IF Transducer Start Stop Detector Meas. Step

Bandw.

Frequency Frequency Width Time
9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 200 Hz 1516M QuasiPeak 1.0 s 9 kHz 1516M







FCC Part 15C 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier Operating Condition: TX 2480MHz Test Site: 2# Chamber WADE

Operator:

Test Specification: AC 120V/60Hz Comment:

Start of Test: 2019-7-01 /

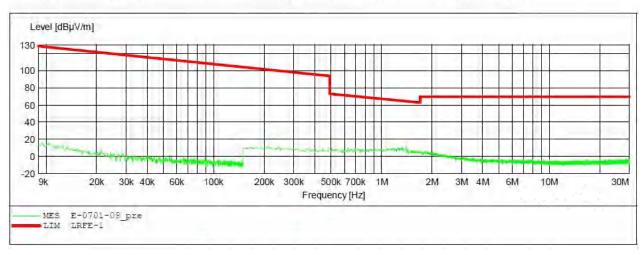
SCAN TABLE: "LFRE Fin"

SUB STD VTERM2 1.70 Short Description:

Start Detector Meas. IF Transducer Step Stop

Time Bandw.

Frequency Frequency Width
9.0 kHz 150.0 kHz 100.0 Hz
150.0 kHz 30.0 MHz 5.0 kHz 9.0 kHz QuasiPeak 1.0 s 200 Hz 1516M QuasiPeak 1.0 s 9 kHz 1516M





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FCC Part 15C 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier Operating Condition: TX 2480MHz Test Site: 2# Chamber

Operator: WADE

Test Specification: AC 120V/60Hz

Comment:

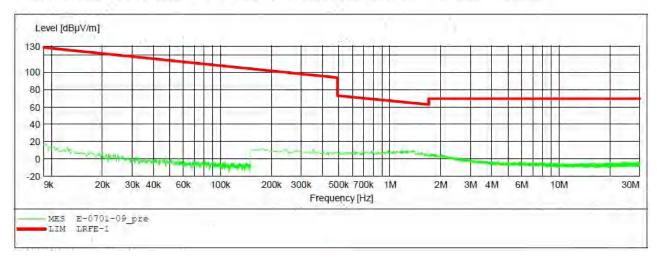
2019-7-01 / Start of Test:

SCAN TABLE: "LFRE Fin"
Short Description:

SUB STD VTERM2 1.70 Stop Start Step Detector Meas. IF Transducer

Frequency Frequency Width Time Bandw.

9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M





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Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

30MHz-1GHz test data: Bluetooth



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Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m

Job No.: LGW2019 #2643

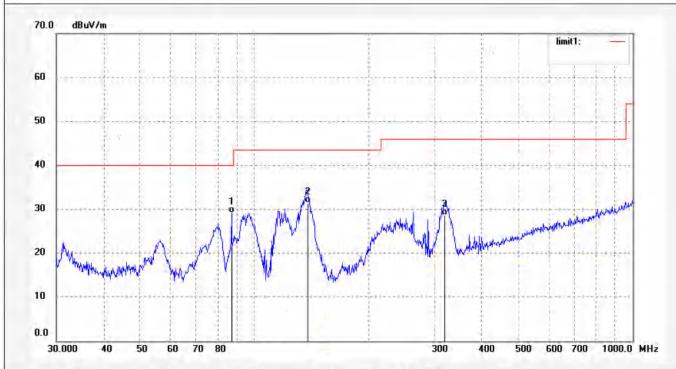
Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz
Model: B8 Soundbar
Manufacturer: EDIFIER



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg_)	Remark	
1	87.1116	44.30	-15.19	29.11	40.00	-10.89	QP				
2	138.3873	46.20	-14.76	31.44	43.50	-12.06	QP				
3	318.8170	37.07	-8.48	28.59	46.00	-17.41	QP				



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Job No.: LGW2019 #2644

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz
Model: B8 Soundbar
Manufacturer: EDIFIER

Polarization: Vertical

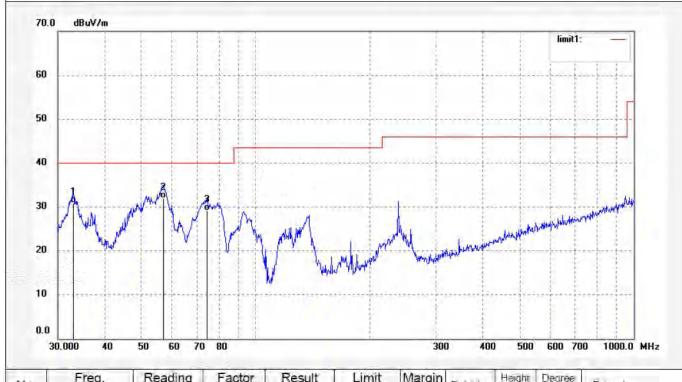
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg_)	Remark
1	32.9791	40.64	-9.82	30.82	40.00	-9.18	QP			
2	56.9911	45.30	-13.33	31.97	40.00	-8.03	QP			
3	74.3953	45.76	-16.63	29.13	40,00	-10.87	QP			



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Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LGW2019 #2646

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2441MHz B8 Soundbar Model: Manufacturer: EDIFIER

Horizontal Polarization:

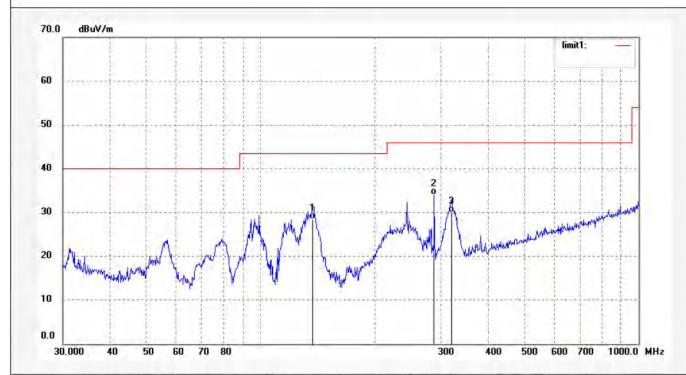
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	137.4201	43.05	-14.53	28.52	43.50	-14.98	QP				
2	287.9904	43,29	-9.34	33.95	46.00	-12.05	QP				
3	319.9370	38,52	-8.45	30.07	46.00	-15.93	QP				



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Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LGW2019 #2645

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2441MHz Model: **B8** Soundbar Manufacturer: EDIFIER

Polarization: Vertical

Power Source: AC 120V/60Hz

Date: 19/06/27/

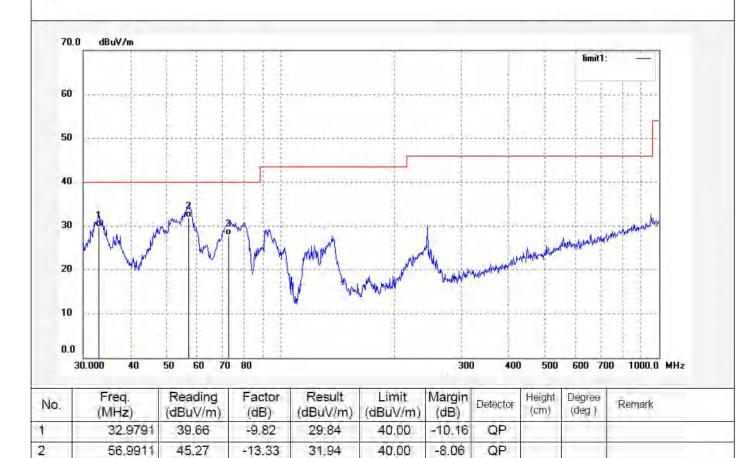
Time:

Engineer Signature: WADE

Distance: 3m

Note:

3



40.00

-12.09

QP

72.8465

44.35

-16.44

27.91



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Job No.: LGW2019 #2647

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2480MHz
Model: B8 Soundbar
Manufacturer: EDIFIER

Polarization: Horizontal

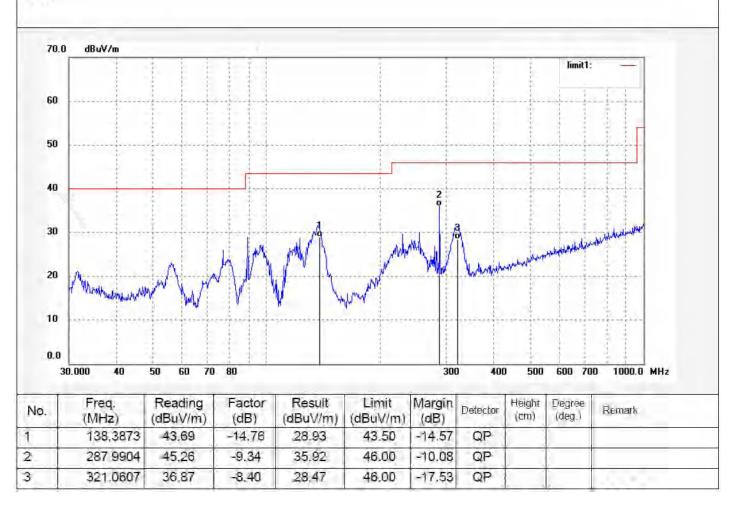
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m





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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LGW2019 #2648

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2480MHz Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Vertical

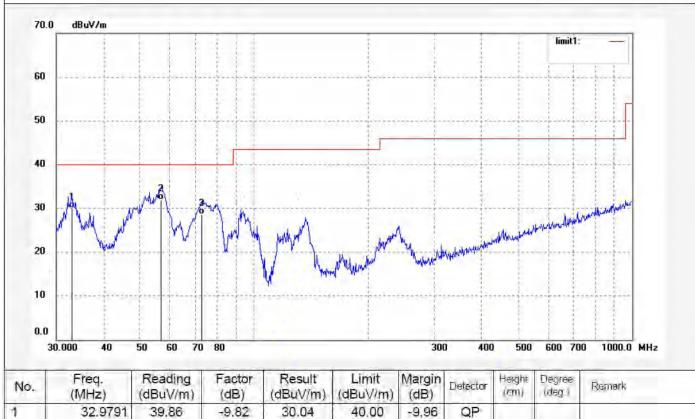
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	32.9791	39.86	-9.82	30.04	40.00	-9,96	QP				
2	56.7916	45.29	-13.29	32.00	40.00	-8.00	QP				
3	72.8465	45.01	-16.44	28.57	40.00	-11.43	QP				



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1GHz-18GHz test data: Bluetooth



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Job No.: LGW2019 #2611

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz
Model: B8 Soundbar
Manufacturer: EDIFIER

Polarization: Horizontal

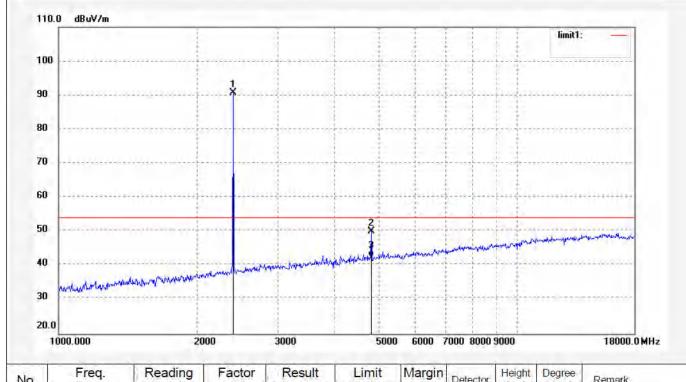
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	89.82	0.89	90.71	I	-1	peak			
2	4804.025	42.67	7.40	50.07	74.00	-23.93	peak			
3	4804.025	35.17	7.40	42.57	54.00	-11.43	AVG			



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Job No.: LGW2019 #2612

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz

Model: B8 Soundbar

Manufacturer: EDIFIER

Polarization: Vertical

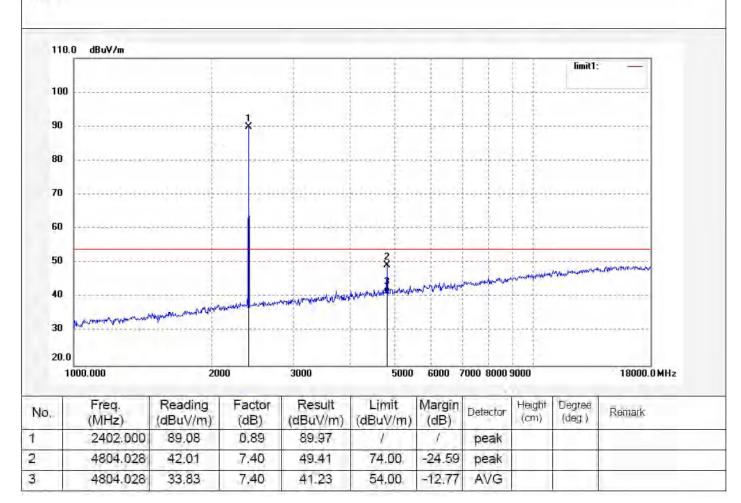
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m





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Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LGW2019 #2615

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2441MHz Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

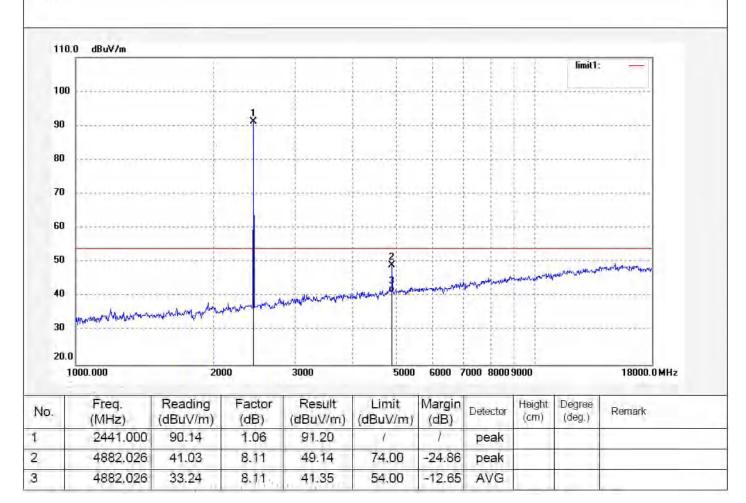
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m





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Job No.: LGW2019 #2616

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2441MHz

Model: B8 Soundbar

Manufacturer: EDIFIER

Polarization: Vertical

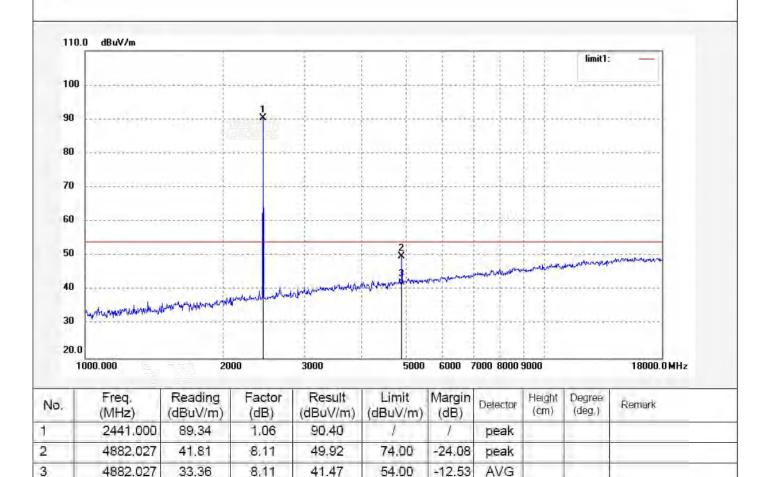
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m





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F1,Bldg,A,Changyuan New Material Port Keyuan Rd,

Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396



Job No.: LGW2019 #2618

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2480MHz
Model: B8 Soundbar
Manufacturer: EDIFIER

Polarization: Horizontal

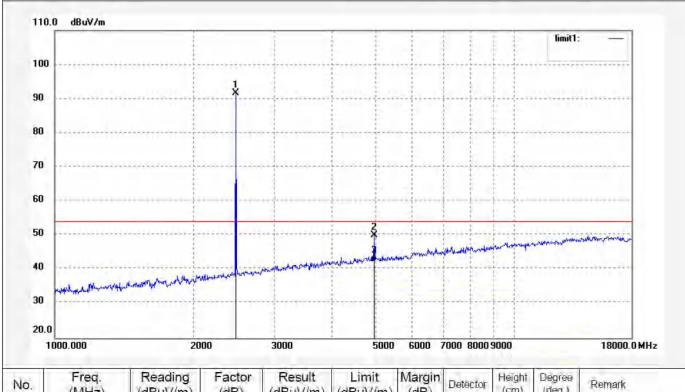
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2480.000	90.46	1.10	91.56	1	1	peak				
2	4960.026	41.54	8.60	50.14	74.00	-23.86	peak				
3	4960.026	33.87	8.60	42.47	54.00	-11.53	AVG				



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Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LGW2019 #2617

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2480MHz Model: B8 Soundbar Manufacturer: EDIFIER

Polarization: Vertical

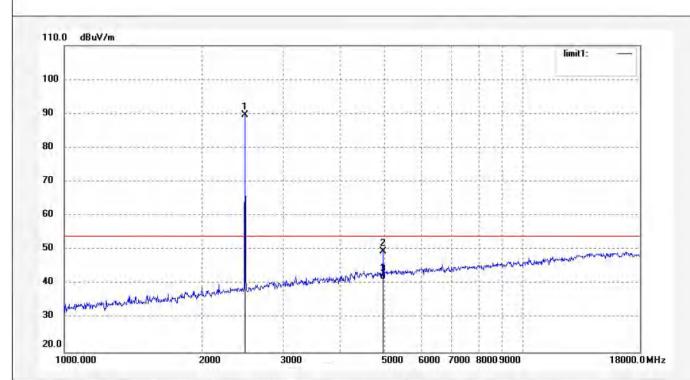
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2480.000	88.49	1.10	89.59	1	1	peak				
2	4960.029	40.95	8.60	49.55	74.00	-24.45	peak				
3	4960.029	32.60	8.60	41.20	54.00	-12.80	AVG				



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18GHz-26.5GHz test data: Bluetooth



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Job No.: LGW2019 #2622

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

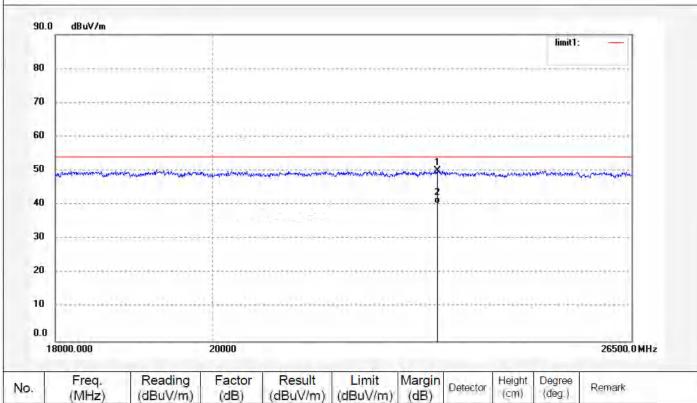
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg)	Remark	
1	23261.561	17.79	32,38	50.17	74.00	-23.83	peak				
2	23261,561	7.97	32.38	40.35	54,00	-13.65	AVG				



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Job No.: LGW2019 #2621

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Vertical

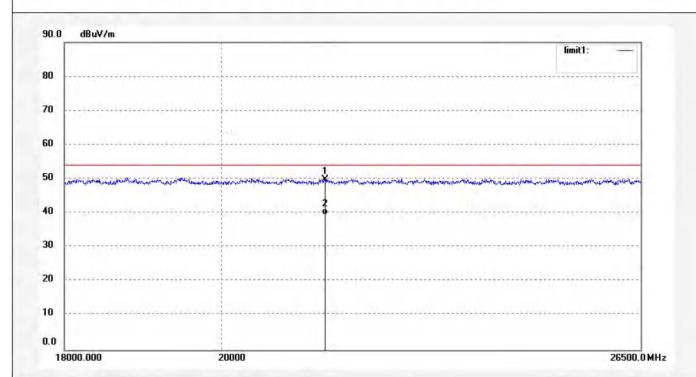
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	21446.896	17.71	32.16	49.87	74.00	-24.13	peak				
2	21446.896	7.25	32.16	39.41	54.00	-14.59	AVG				



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Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LGW2019 #2623

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2441MHz Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

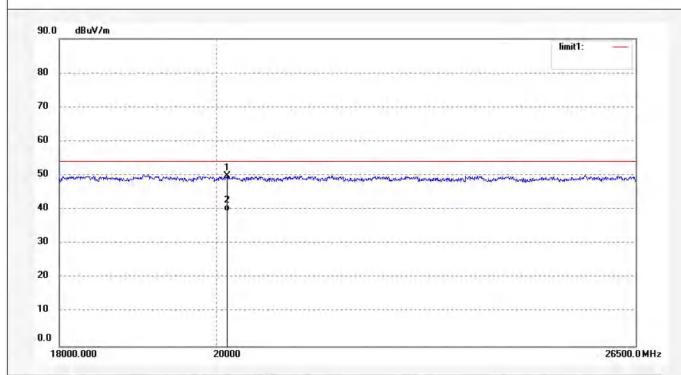
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	20144.327	18.30	31.43	49,73	74.00	-24.27	peak				
2	20144.327	8,12	31,43	39,55	54.00	-14.45	AVG				



Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China

Job No.: LGW2019 #2624 Polariza

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2441MHz Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Vertical

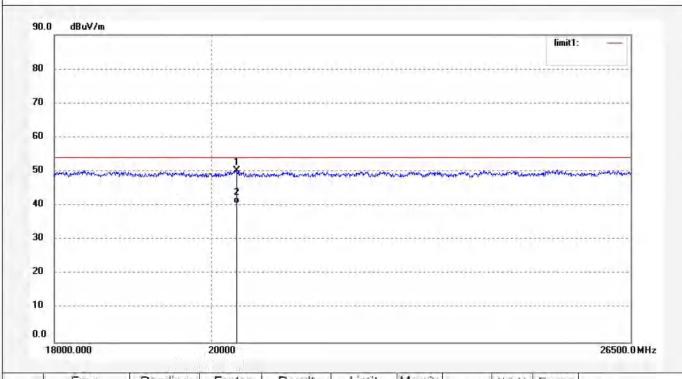
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE





No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	20347.922	18.80	31.55	50.35	74.00	-23.65	peak				
2	20347.922	9.11	31.55	40.66	54.00	-13.34	AVG				



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Job No.: LGW2019 #2626

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2480MHz Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

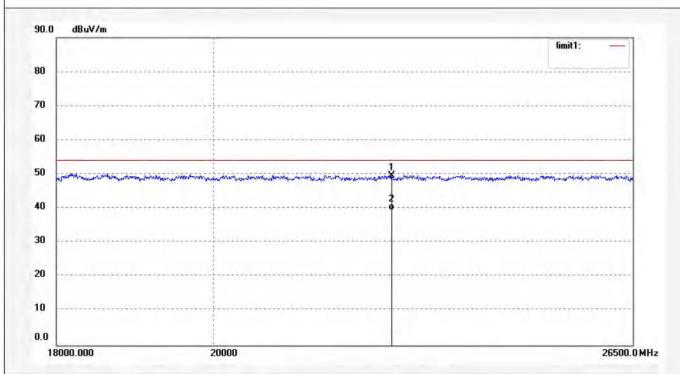
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	22544.105	17.03	32.49	49.52	74.00	-24.48	peak				
2.	22544.105	6.92	32.49	39.41	54.00	-14.59	AVG				



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Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LGW2019 #2625

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2480MHz Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Vertical

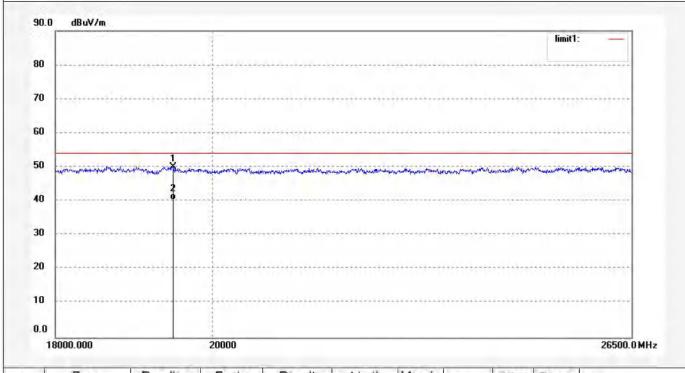
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	19477.763	18.76	31,26	50.02	74.00	-23.98	peak			
2	19477.763	9,08	31,26	40,34	54.00	-13.66	AVG			



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9kHz-30MHz test data: Bluetooth+5.8G Wireless

ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier

Operating Condition: TX 2402MHz + TX 5731MHz Test Site: 2# Chamber

Operator: WADE

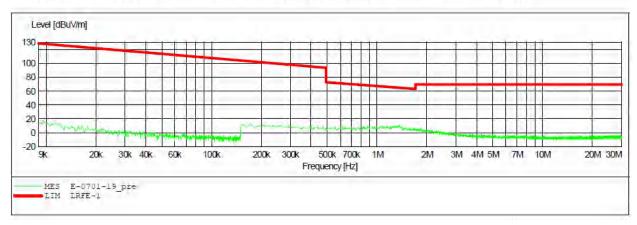
Test Specification: AC 120V/60Hz Comment: Start of Test: 2019-7-01 /

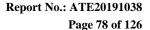
SCAN TABLE: "LFRE Fin"
Short Description: _SUB_STD_VTERM2 1.70

Detector Meas. IF Transducer Start Step Stop

Frequency Frequency Width Time Bandw.

9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M







FCC Class B 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier

Operating Condition: TX 2402MHz + TX 5731MHz

2# Chamber Test Site:

WADE Operator:

Test Specification: AC 120V/60Hz

Comment: Y

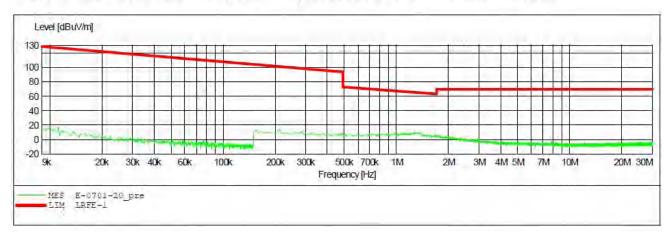
Start of Test: 2019-7-01 /

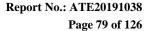
SCAN TABLE: "LFRE Fin"
Short Description: SUB STD VTERM2 1.70

Stop Step Detector Meas. Start IF Transducer

Frequency Frequency Width Time Bandw.

9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M







FCC Class B 3M Radiated

B8 Soundbar Active Speaker system M/N:B8 Soundbar EUT:

Manufacturer: Edifier

Operating Condition: TX 2402MHz + TX 5731MHz

2# Chamber Test Site:

Operator: WADE

AC 120V/60Hz Test Specification: Comment:

Start of Test: 2019-7-01 /

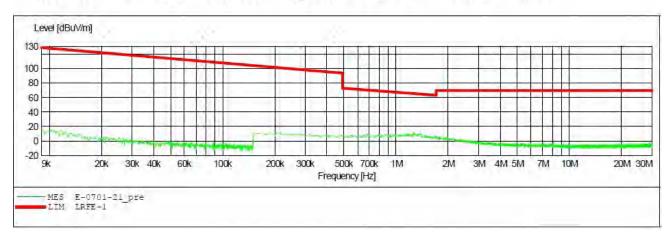
SCAN TABLE: "LFRE Fin"

SUB STD VTERM2 1.70 Short Description:

Start Stop Step Detector Meas. IF Transducer

Bandw.

Frequency Frequency Width Time 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 9.0 kHz 1516M 200 Hz 150.0 kHz 30.0 MHz 5.0 kHz 9 kHz 1516M QuasiPeak 1.0 s





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ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier

Operating Condition: TX 2441MHz + TX 5773MHz

Test Site: 2# Chamber

Operator: WADE

Test Specification: AC 120V/60Hz Comment: X

Start of Test: 2019-7-01 /

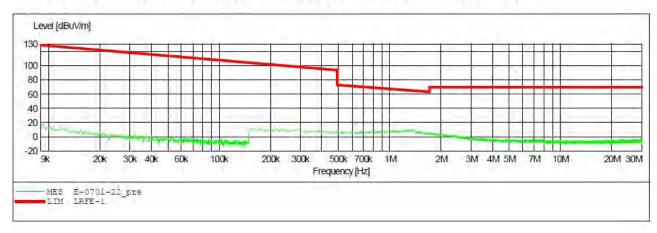
SCAN TABLE: "LFRE Fin"

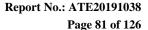
Short Description: SUB STD_VTERM2 1.70

Start Stop Step Detector Meas. IF Transducer

Frequency Frequency Width Time Bandw.

9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M







FCC Class B 3M Radiated

B8 Soundbar Active Speaker system M/N:B8 Soundbar EUT:

Manufacturer: Edifier

Operating Condition: TX 2441MHz + TX 5773MHz

Test Site: 2# Chamber

Operator: WADE

Test Specification: AC 120V/60Hz

Comment:

Start of Test: 2019-7-01 /

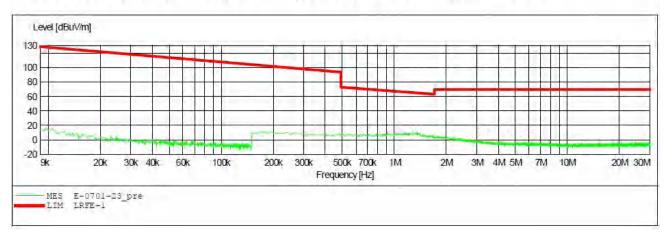
SCAN TABLE: "LFRE Fin"

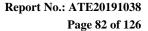
SUB STD VTERM2 1.70 Short Description:

Stop Start Step Detector Meas. IF Transducer

Bandw. Time

Frequency Frequency Width 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M







FCC Class B 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier

Operating Condition: TX 2441MHz + TX 5773MHz

2# Chamber Test Site:

Operator: WADE

Test Specification: AC 120V/60Hz

Comment:

Start of Test: 2019-7-01 /

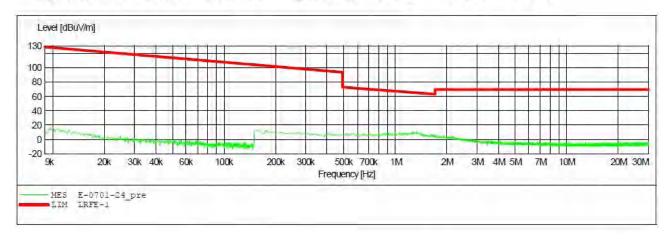
SCAN TABLE: "LFRE Fin" Short Description:

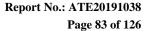
SUB STD VTERM2 1.70

Start Stop Step Detector Meas. IF Transducer

Frequency Frequency Width Time Bandw.

9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M QuasiPeak 1.0 s 150.0 kHz 30.0 MHz 5.0 kHz 9 kHz 1516M







FCC Class B 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier

Operating Condition: TX 2480MHz + TX 5820MHz

2# Chamber Test Site:

Operator: WADE

Test Specification: AC 120V/60Hz

Comment:

Start of Test: 2019-7-01 /

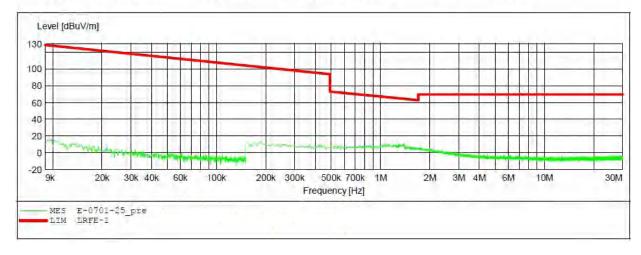
SCAN TABLE: "LFRE Fin" Short Description:

_SUB_STD_VTERM2 1.70

IF Start Stop Step Detector Meas. Transducer

Time Bandw.

Frequency Frequency Width 9.0 kHz 150.0 kHz 100.0 Hz 150.0 kHz QuasiPeak 1.0 s 200 Hz 1516M QuasiPeak 1.0 s 9 kHz 1516M





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FCC Class B 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier

Operating Condition: TX 2480MHz + TX 5820MHz

2# Chamber Test Site: Operator: WADE

Test Specification: AC 120V/60Hz

Comment:

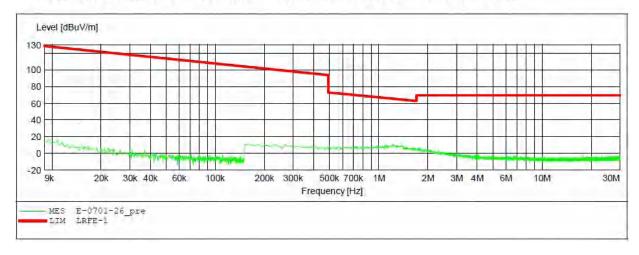
Start of Test: 2019-7-01 /

SCAN TABLE: "LFRE Fin"
Short Description:

_SUB_STD_VTERM2 1.70

IF Start Stop Step Detector Meas. Transducer

Frequency Frequency Width Time Bandw.
9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M
150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M





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ACCURATE TECHNOLOGY CO., LTD

FCC Class B 3M Radiated

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier

Operating Condition: TX 2480MHz + TX 5820MHz

Test Site: 2# Chamber

Operator: WADE

Test Specification: AC 120V/60Hz

Comment:

Start of Test: 2019-7-01 /

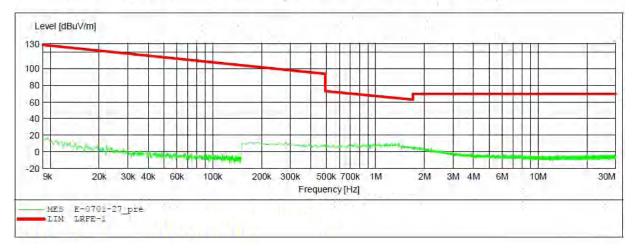
SCAN TABLE: "LFRE Fin" Short Description:

SUB_STD_VTERM2 1.70

Start IF Transducer Stop Step Detector Meas.

Frequency Frequency Width Time Bandw.

150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz 1516M 9.0 kHz 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz 1516M





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30MHz-1GHz test data: Bluetooth+5.8G Wireless



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Job No.: LGW2019 #2773

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz + TX 5731MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 19/07/07/

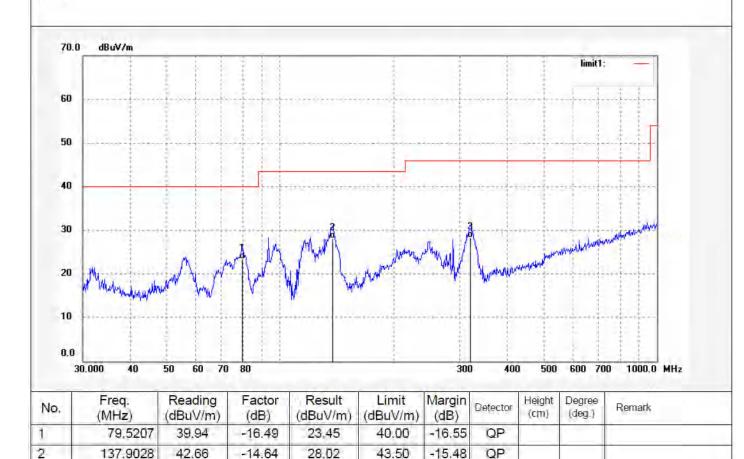
Time:

Engineer Signature: WADE

Distance: 3m

Note:

3



319,9370

36.63

-8.45

28.18

46.00

-17.82

QP



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Job No.: LGW2019 #2774

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz + TX 5731MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Vertical

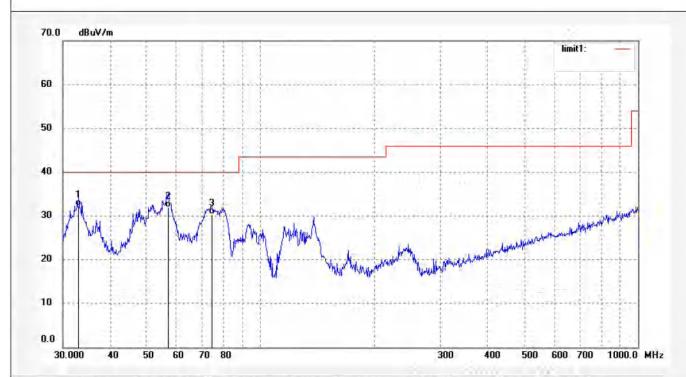
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	32,9791	42.12	-9.82	32.30	40.00	-7.70	QP				
2	56,9911	45.33	-13.33	32.00	40.00	-8.00	QP			1	
3	74.3953	46.91	-16.63	30,28	40.00	-9.72	QP				



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Job No.: LGW2019 #2776 Polarization

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2441MHz+TX 5773MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

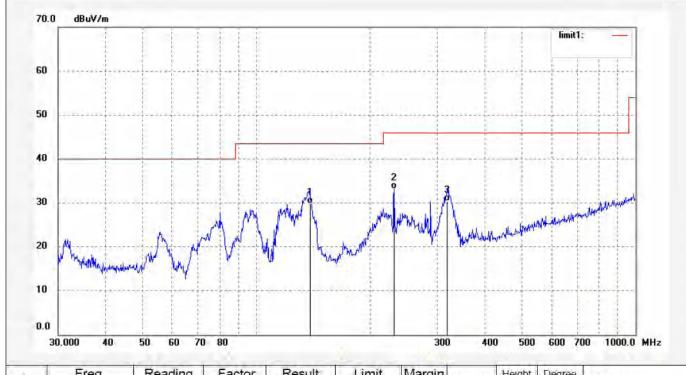
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	138.3873	44.66	-14.76	29.90	43.50	-13.60	QP			
2	230.9068	44.13	-11.05	33.08	46.00	-12.92	QP			
3	318.8170	38.88	-8.48	30.40	46.00	-15.60	QP			



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Job No.: LGW2019 #2775

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2441MHz+TX 5773MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Vertical

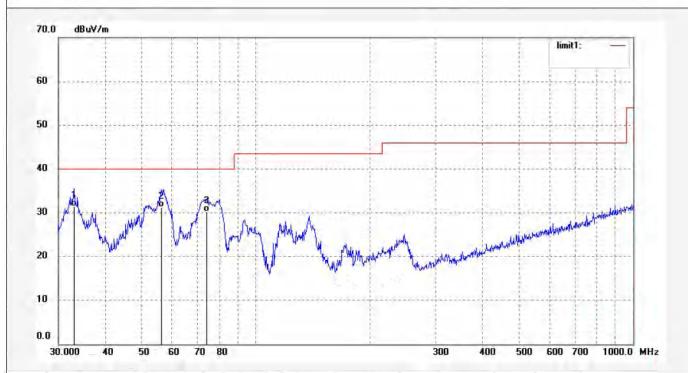
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	32.9791	41.31	-9.82	31.49	40.00	-8.51	QP				
2	56.1974	44.50	-13.18	31.32	40.00	-8.68	QP				
3	74.1350	46.80	-16.59	30.21	40.00	-9.79	QP				



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Job No.: LGW2019 #2777

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2480MHz+TX 5820MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

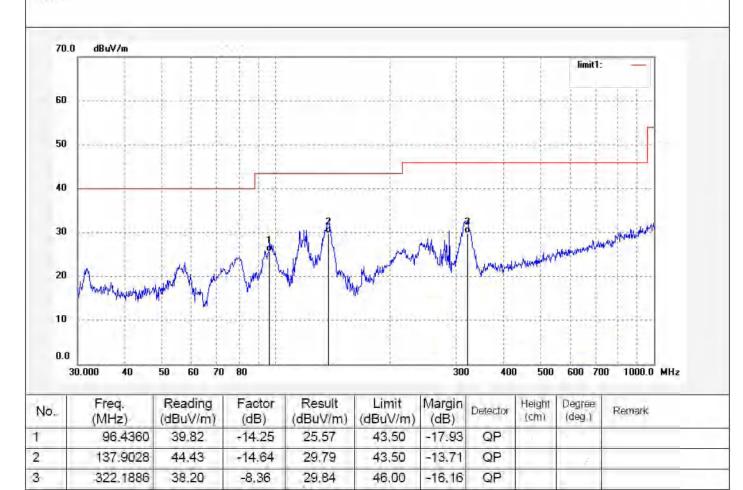
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

Distance: 3m





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Job No.: LGW2019 #2778

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2480MHz+TX 5820MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Vertical

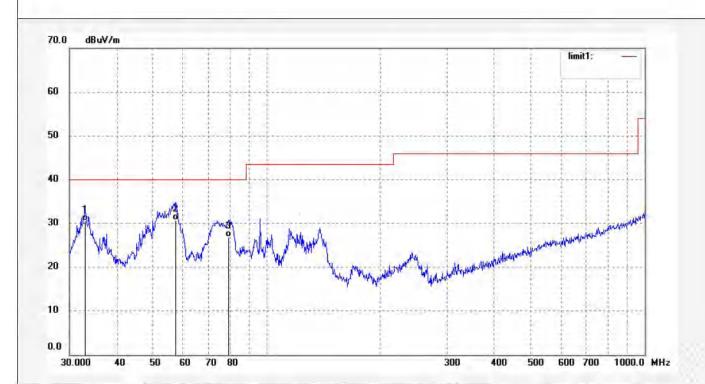
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Eretector	Height (cm)	Degree (deg.)	Remark	
1	32.9791	40.28	-9.82	30.46	40.00	-9.54	QP				
2	57.3922	44.14	-13.41	30.73	40.00	-9.27	QP				
3	79,2425	43.30	-16.51	26.79	40.00	-13.21	QP		l m		



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1GHz-18GHz test data: Bluetooth+5.8G Wireless

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Job No.: LGW2019 #2779

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz+TX 5731MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

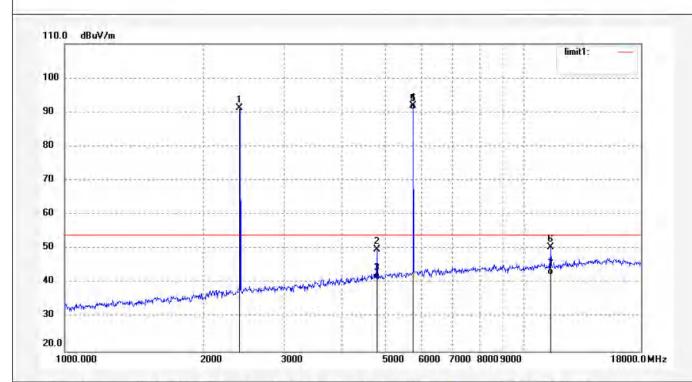
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	90.37	0.89	91.26	1	1	peak			
2	4804.026	42.31	7.40	49.71	74.00	-24.29	peak			
3	4804.026	33.87	7.40	41.27	54,00	-12.73	AVG			
4	5731.000	81.79	10.18	91.97	114.00	-22.03	peak			
5	5731.000	80.49	10.18	90.67	94.00	-3.33	AVG			
6	11462.238	34.86	15.55	50.41	74.00	-23,59	peak			
7	11462.238	26.80	15.55	42.35	54.00	-11.65	AVG			



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Job No.: LGW2019 #2780

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz+TX 5731MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Vertical

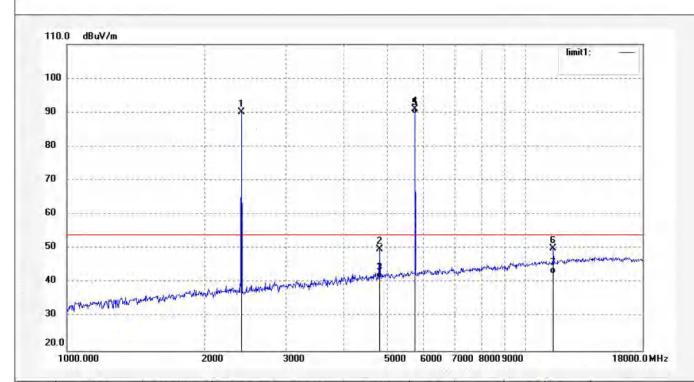
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	89.17	0.89	90.06	1	/	peak			
2	4804.027	42.42	7.40	49.82	74.00	-24.18	peak			
3	4804.027	33.95	7.40	41.35	54.00	-12.65	AVG			
4	5731.000	80.80	10.18	90.98	114.00	-23.02	peak			
5	5731.000	79.50	10.18	89.68	94.00	-4.32	AVG			
6	11462.242	34.60	15.55	50.15	74.00	-23.85	peak			
7	11462.242	27.02	15.55	42.57	54.00	-11.43	AVG			



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Job No.: LGW2019 #2782

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2441MHz+TX 5773MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

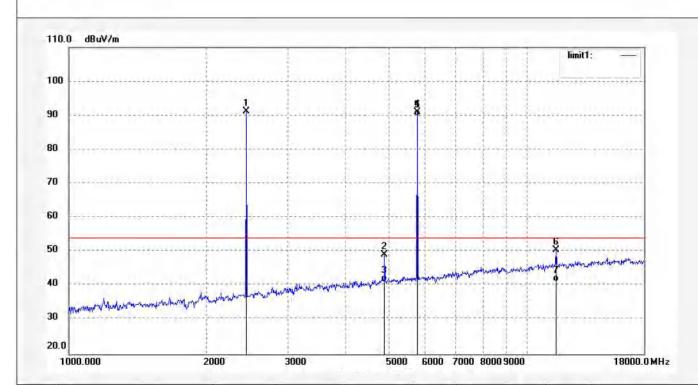
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

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No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	90.14	1.06	91.20	Ì	1	peak			
2	4882.025	41.03	8.11	49.14	74.00	-24.86	peak			
3	4882.025	33.24	8.11	41.35	54.00	-12.65	AVG			
4	5773.000	80.57	10.44	91.01	114.00	-22.99	peak			
5	5773.000	79.37	10.44	89.81	94.00	-4.19	AVG			
6	11546.233	34.89	15.70	50.59	74.00	-23.41	peak			
7	11546.233	25.63	15.70	41.33	54.00	-12.67	AVG			



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Job No.: LGW2019 #2781

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2441MHz+TX 5773MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Vertical

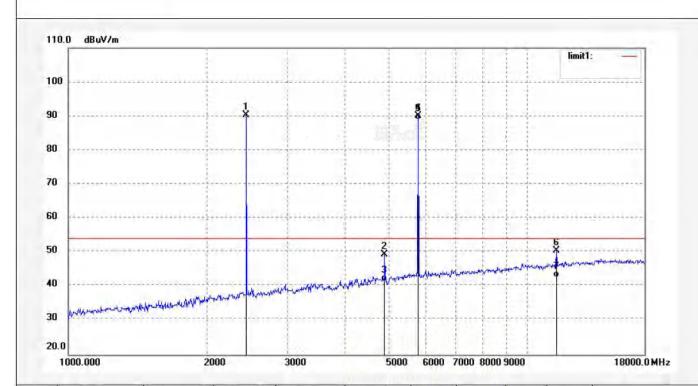
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

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1.4	UL	-	•



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	89.27	1.06	90.33	T	1	peak			
2	4882.028	41.23	8.11	49.34	74.00	-24.66	peak			
3	4882.028	33.46	8.11	41.57	54.00	-12.43	AVG			
4	5773.000	79.64	10.44	90.08	114.00	-23.92	peak			
5	5773.000	78.44	10.44	88,88	94.00	-5.12	AVG			
6	11546.247	34.83	15.70	50.53	74.00	-23.47	peak			
7	11546.247	26.87	15.70	42.57	54.00	-11.43	AVG			



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Job No.: LGW2019 #2783

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2480MHz+TX 5820MHz

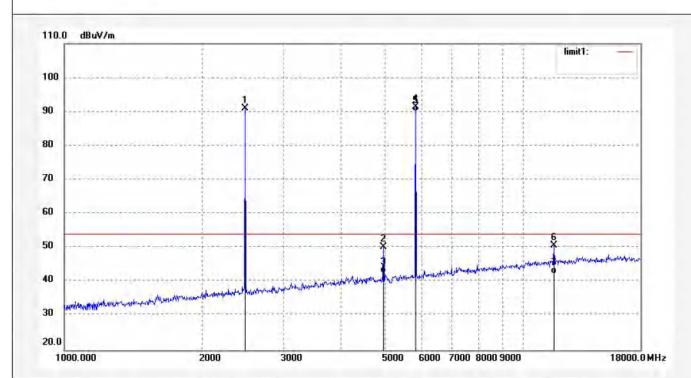
Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	89.79	1.10	90.89	1	1	peak	- 4	-2 ;	
2	4960.027	41.65	8.60	50.25	74.00	-23.75	peak	1145		
3	4960.027	33.98	8.60	42.58	54.00	-11.42	AVG			
4	5820.000	80.84	10.66	91.50	114.00	-22.50	peak			
5	5820.000	79.44	10.66	90.10	94.00	-3.90	AVG			
6	11640.243	34.49	16.16	50.65	74.00	-23.35	peak			
7	11640.243	26.19	16,16	42.35	54.00	-11.65	AVG		**	



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Job No.: LGW2019 #2784

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

TX 2480MHz+TX 5820MHz Mode:

Model: B8 Soundbar Manufacturer: EDIFIER

Polarization: Vertical

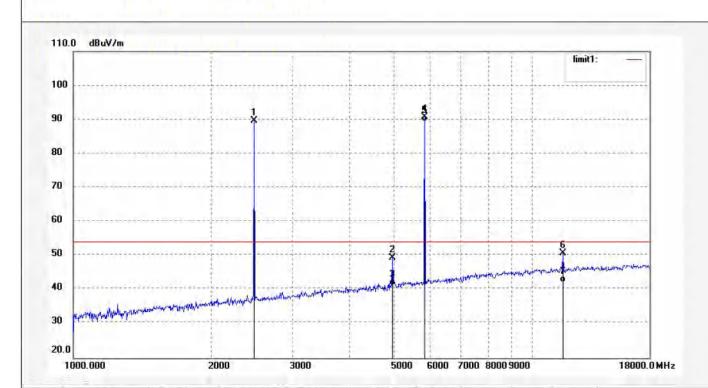
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	88.50	1.10	89.60	Ì	1	peak			
2	4960.029	40.68	8.60	49.28	74.00	-24.72	peak			
3	4960.029	32.75	8.60	41.35	54.00	-12.65	AVG			
4	5820.000	80.17	10.66	90.83	114.00	-23.17	peak			
5	5820.000	78.77	10.66	89.43	94.00	-4.57	AVG			
6	11640.246	34.65	16.16	50.81	74.00	-23.19	peak			
7	11640.246	25.98	16.16	42.14	54.00	-11.86	AVG			



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18GHz-26.5GHz test data: Bluetooth+5.8G Wireless

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Job No.: LGW2019 #2786

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz+TX 5731MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

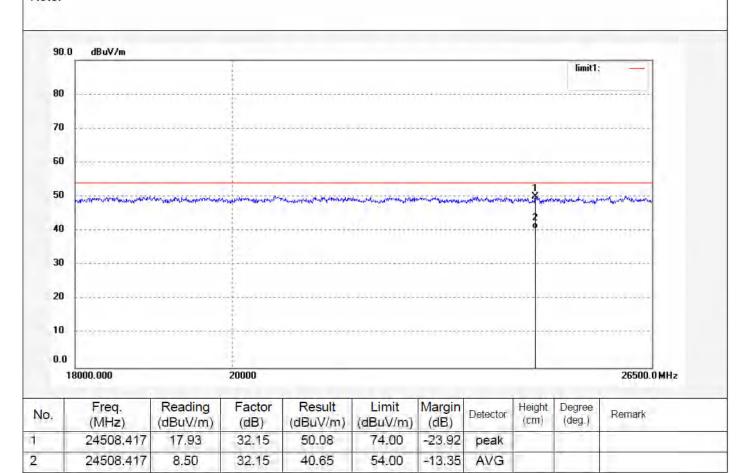
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

Distance: 3m





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Job No.: LGW2019 #2785

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz+TX 5731MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Vertical

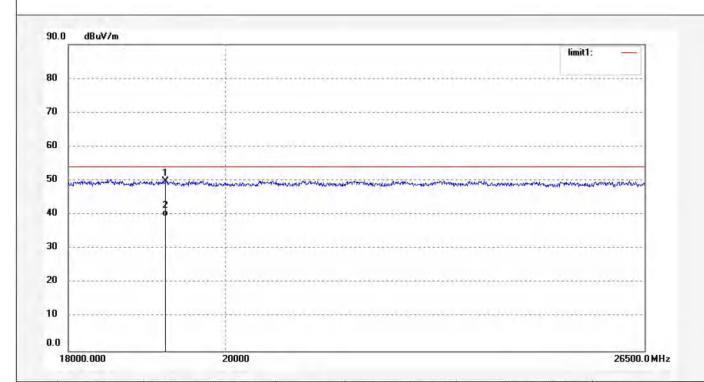
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	19215.868	18.67	31.20	49.87	74.00	-24.13	peak			Carati -	
2	19215.868	8.25	31.20	39.45	54.00	-14.55	AVG			00110	



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Job No.: LGW2019 #2787

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2441MHz+TX 5773MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

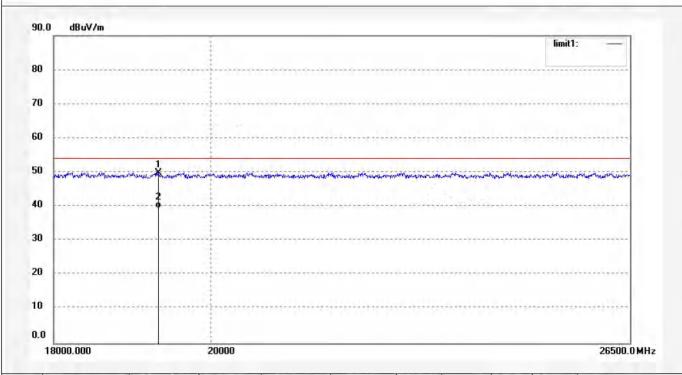
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

Distance: 3m



No,	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	19312.730	19,05	30.70	49.75	74.00	-24,25	peak			
2	19312.730	8.87	30.70	39.57	54.00	-14.43	AVG			



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Job No.: LGW2019 #2788

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2441MHz+TX 5773MHz

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Vertical

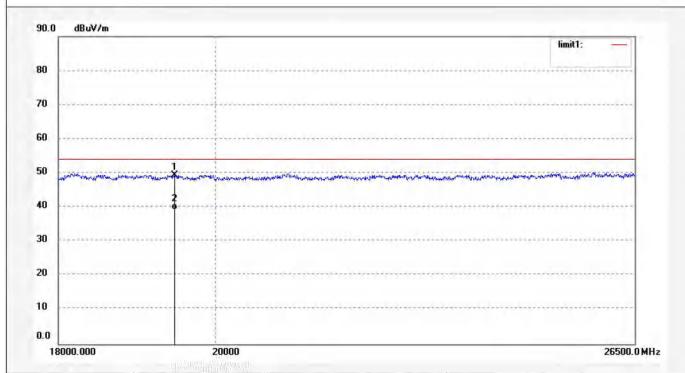
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	19462.702	18.14	31.25	49.39	74.00	-24.61	peak			
2	19462.702	7.98	31.25	39.23	54.00	-14.77	AVG			



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Job No.: LGW2019 #2790

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

TX 2480MHz+TX 5820MHz Mode:

Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

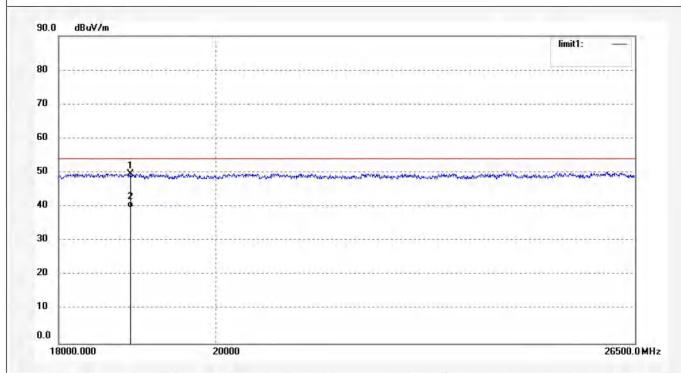
Power Source: AC 120V/60Hz

Date: 19/07/07/

Time:

Engineer Signature: WADE

N	0	te	9:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	18891.619	19.21	30.42	49.63	74.00	-24.37	peak				
2	18891.619	9.33	30.42	39.75	54.00	-14.25	AVG				



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Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LGW2019 #2789

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

TX 2480MHz+TX 5820MHz Mode:

Model: B8 Soundbar Manufacturer: EDIFIER

Note:

Polarization: Vertical

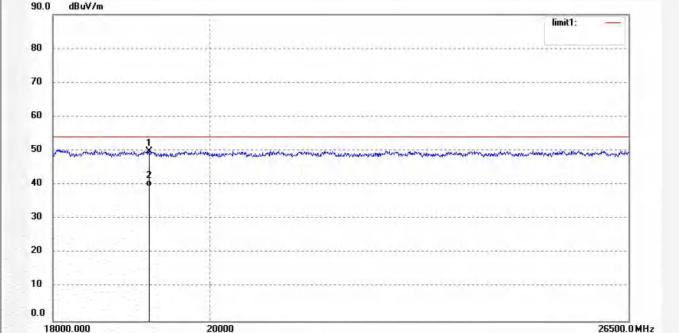
Power Source: AC 120V/60Hz

Date: 19/07/07/

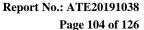
Time:

Engineer Signature: WADE

10.0 dBuV/m	
	limit1: —



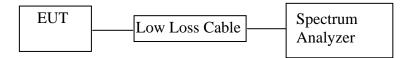
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	19201.009	18.58	31.20	49.78	74.00	-24.22	peak			
2	19201.009	8.37	31.20	39.57	54.00	-14.43	AVG			





12.BAND EDGE COMPLIANCE TEST

12.1.Block Diagram of Test Setup



12.2. The Requirement For Section 15.247(d)

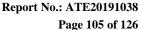
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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 Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

12.3. The Requirement For RSS-247 Section 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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 that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

12.4.EUT Configuration on Test

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.





12.5. Operating Condition of EUT

- 12.5.1. Setup the EUT and simulator as shown as Section 12.1.
- 12.5.2. Turn on the power of all equipment.
- 12.5.3.Let the EUT work in TX (Hopping off, Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2480MHz TX frequency to transmit.

12.6.Test Procedure

- 12.6.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.
- 12.6.2.Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz with convenient frequency span including 100 kHz bandwidth from band edge.
- 12.6.3. The band edges was measured and recorded.

12.7.Test Result

Conducted Band Edge Result

Non-hopping mode

Frequency	Result of Band Edge	Limit of Band Edge	Result	
(MHz)	(dBc)	(dBc)		
GFSK mode				
2376.150	50.82	> 20dBc	Pass	
2493.171	60.59	> 20dBc	Pass	
8DPSK mode				
2400.000	49.62	> 20dBc	Pass	
2483.500	55.02	> 20dBc	Pass	





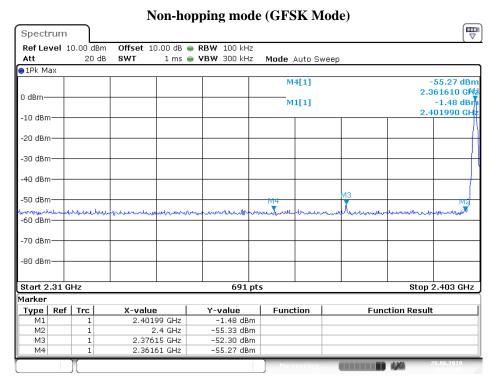
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Hopping mode

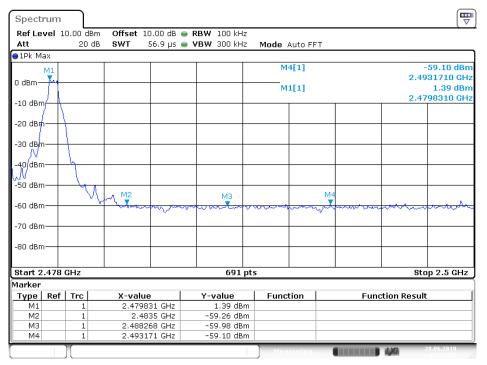
Hopping mode				
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)	Result	
GFSK mode				
2350.900	35.96	> 20dBc	Pass	
2485.471	50.08	> 20dBc	Pass	
	8DPSK mo	ode		
2365.200	49.02	> 20dBc	Pass	
2491.995	52.61	> 20dBc	Pass	

The spectrum analyzer plots are attached as below.



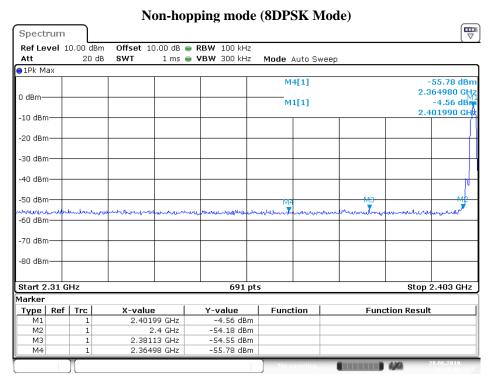


Date: 28.JUN.2019 08:33:00

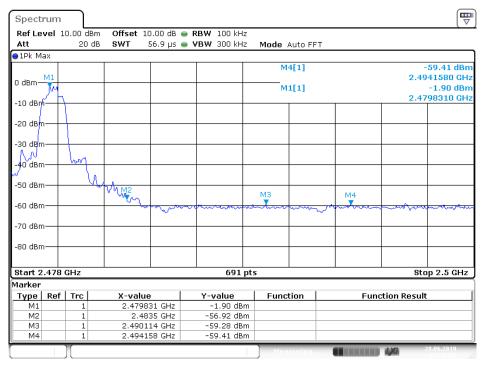


Date: 28.JUN.2019 08:31:59



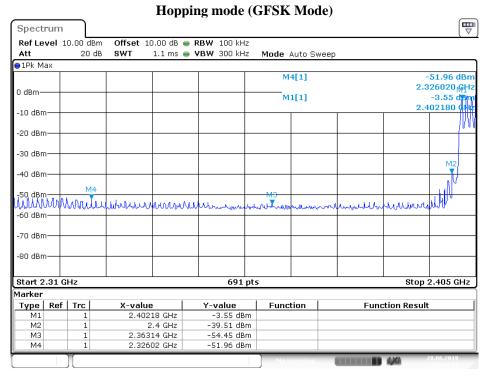


Date: 28.JUN.2019 08:29:05

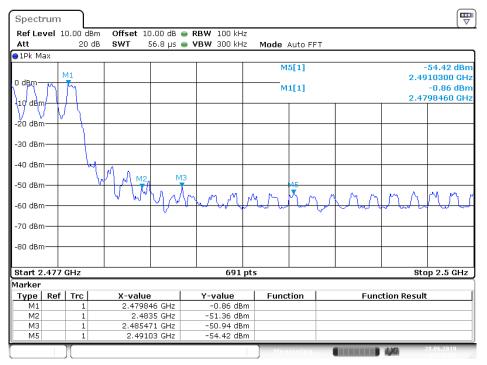


Date: 28.JUN.2019 08:30:15



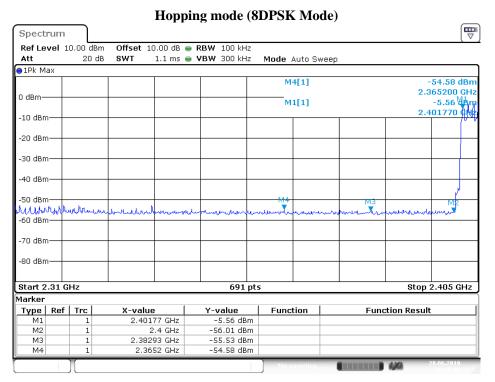


Date: 28.JUN.2019 08:34:34



Date: 28.JUN.2019 08:35:36





Date: 28.JUN.2019 08:38:09



Date: 28.JUN.2019 08:37:09



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Radiated Band Edge Result

Note:

- 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
- 2. The field strength is calculated by adding the antenna factor, high Pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

3. Display the measurement of peak values.

Test Procedure:

The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. This EUT was tested in 3 orthogonal positions and the worst case position data was reported.

Let the EUT work in TX (Hopping off, Hopping on) modes measure it. We select 2402MHz, 2480MHz TX frequency to transmit(Hopping off mode). We select 2402-2480MHz TX frequency to transmit(Hopping on mode).

During the radiated emission test, the spectrum analyzer was set with the following configurations:

- 1. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
- 3. All modes of operation were investigated and the worse case (GFSK mode) emissions are reported.

The spectrum analyzer plots are attached as below.



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Science & Industry Park, Nanshan Shenzhen, P.R. China

Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LGW2019 #2614

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Horizontal

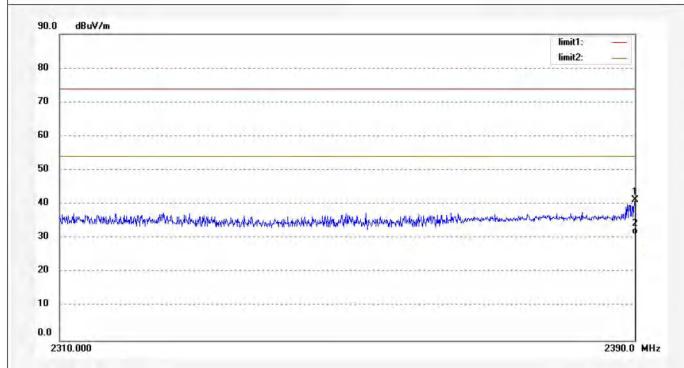
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	40.56	0.79	41.35	74.00	-32,65	peak			
2	2390.000	30.42	0.79	31.21	54.00	-22.79	AVG			



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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LGW2019 #2613

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2402MHz Model: B8 Soundbar Manufacturer: EDIFIER Polarization: Vertical

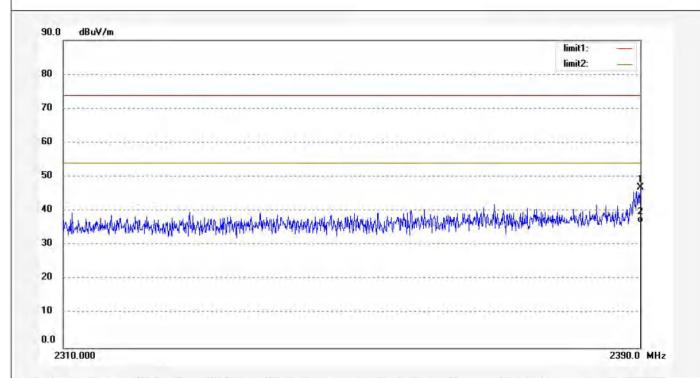
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark	
1	2390.000	46.09	0.79	46.88	74.00	-27.12	peak				
2	2390,000	35,66	0.79	36,45	54.00	-17.55	AVG				



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Job No.: LGW2019 #2619

Standard: FCC (Band Edge)
Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2480MHz
Model: B8 Soundbar
Manufacturer: EDIFIER

Polarization: Horizontal

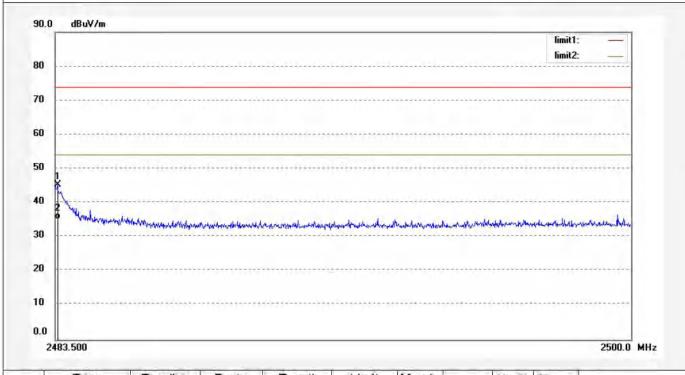
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



No,	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg)	Remark	
1	2483.566	44.17	1.10	45.27	74.00	-28.73	peak				
2	2483.566	34.14	1.10	35.24	54.00	-18.76	AVG		1 -: 1		



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F1,Bldg,A,Changyuan New Material Port Keyuan Rd, Science & Industry Park,Nanshan Shenzhen,P.R.China Site: 2# Chamber Tel:+86-0755-26503290 Fax:+86-0755-26503396

Job No.: LGW2019 #2620

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: B8 Soundbar Active Speaker system

Mode: TX 2480MHz
Model: B8 Soundbar
Manufacturer: EDIFIER

Polarization: Vertical

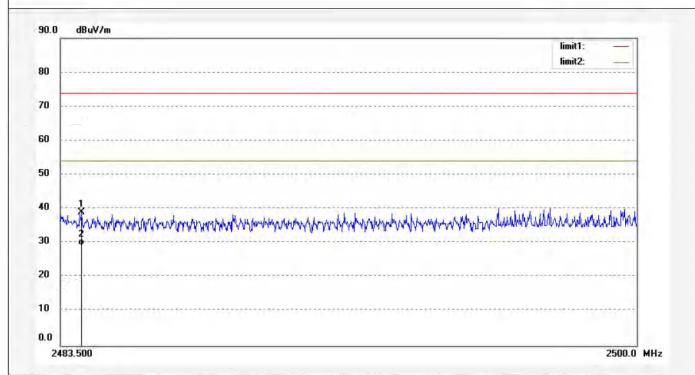
Power Source: AC 120V/60Hz

Date: 19/06/27/

Time:

Engineer Signature: WADE

Distance: 3m



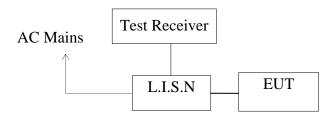
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)		Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2484.110	38.00	1.09	39.09	74.00	-34.91	peak			
2	2484.110	28.36	1.09	29.45	54.00	-24.55	AVG			



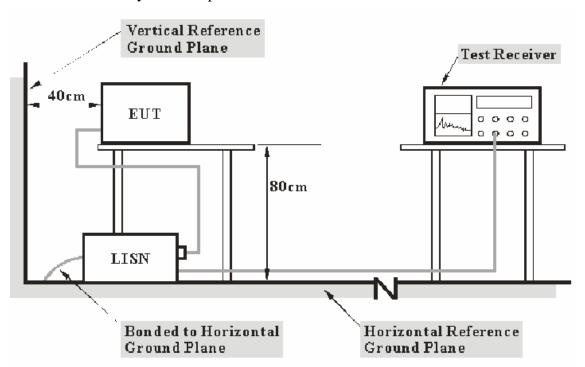
13.AC POWER LINE CONDUCTED EMISSION TEST

13.1.Block Diagram of Test Setup

13.1.1.Block diagram of connection between the EUT and simulators

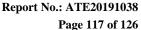


13.1.2.Test System Setup



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMIN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.





13.2.Conducted Emission Test Limits

Frequency	Conducted L	imit dB(μV)
(MHz)	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0

NOTE1: The lower limit shall apply at the transition frequencies.

NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

13.3.EUT Configuration on Test

The equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

13.4. Operating Condition of EUT

- 13.4.1. Setup the EUT and simulator as shown as Section 13.1.
- 13.4.2. Turn on the power of all equipment.
- 13.4.3.Let the EUT work in test mode and measure it.

13.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.



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13.6.Data Sample

Frequency	Transducer	QuasiPeak	Average	QuasiPeak	Average	QuasiPeak	Average	Remark
(MHz)	value	Level	Level	Limit	Limit	Margin	Margin	(Pass/Fail)
	(dB)	(dBµV)	$(dB\mu V)$	$(dB\mu V)$	$(dB\mu V)$	(dB)	(dB)	
X.XX	10.6	25.3	17.0	59.0	49.0	33.4	31.7	Pass

Frequency(MHz) = Emission frequency in MHz Transducer value(dB) = Insertion loss of LISN + Cable Loss Level(dB μ V) = Quasi-peak Reading/Average Reading + Transducer value Limit (dB μ V) = Limit stated in standard Margin = Limit (dB μ V) - Level (dB μ V)

Calculation Formula:

 $Margin = Limit (dB\mu V) - Level (dB\mu V)$

13.7.Test Result

Pass.

The frequency range from 150kHz to 30MHz is checked.

Maximizing procedure was performed on the six (6) highest emissions of the EUT. Emissions attenuated more than 20 dB below the permissible value are not reported.

All data was recorded in the Quasi-peak and average detection mode.

The spectral diagrams are attached as below.



ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 C

FUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier

Operating Condition: BT Communication Test Site: 1#Shielding Room

Operator: WADE

Test Specification: L 120V/60Hz Mains port 6/21/2019 / Comment: Start of Test:

SCAN TABLE: "V 9K-30MHz fin"

_SUB_STD_VTERM2 1,70 Short Description:

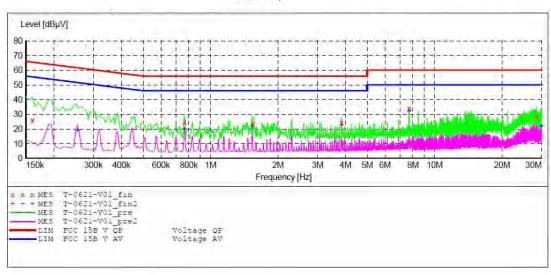
Step Detector Meas. Start Stop IF Transducer Frequency Frequency Width Time Bandw.

9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008

Average

QuasiPeak 1.0 s 150.0 kHz 30.0 MHz 5.0 kHz 9 kHz NSLK8126 2008

Average



MEASUREMENT RESULT: "T-0621-V01 fin"

6/21/2019 Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.160000 0.765000	25.70 24.30	10.5	66 56	39.8 31.7	QP OP	L1 L1	GND GND
1.535000	23.80	10.7	56	32.2	QP	L1	GND
3.840000	24.10	10.8	56	31.9	QP	L1	GND
7.680000	33.50	10.9	60	26.5	QP	L1	GND
28.420000	28.30	11.0	60	31.7	QP	L1	GND

MEASUREMENT RESULT: "T-0621-V01 fin2"

6/21/2019 Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.255000	19.00	10.5	52	32.6	AV	L1	GND
0.765000	19.80	10.6	46	26.2	AV	Ll	GND
1.535000	21.30	10.7	46	24.7	AV	L1	GND
3.840000	22.50	10.8	46	23.5	AV	L1	GND
7.680000	32.40	10.9	50	17.6	AV	L1	GND
29.950000	22.00	11.0	50	28.0	AV	L1	GND





ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 C

EUT: B8 Soundbar Active Speaker system M/N:B8 Soundbar

Manufacturer: Edifier

Operating Condition: BT Communication Test Site: 1#Shielding Room

Operator: WADE

Test Specification: N 120V/60Hz Comment: Mains port Start of Test: 6/21/2019 /

SCAN TABLE: "V 9K-30MHz fin"

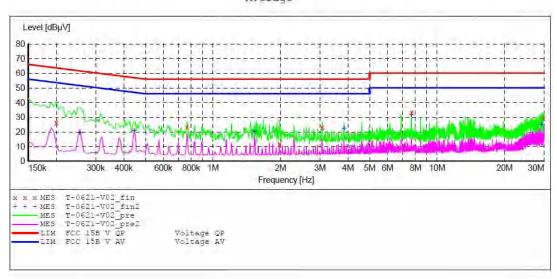
Short Description: SUB_STD_VTERM2 1.70

Start Stop Step Detector Meas. IF Transducer Frequency Frequency Width Time Bandw.

Frequency Frequency Width Time Bandw. 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008

Average 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008

Ãverage



MEASUREMENT RESULT: "T-0621-V02 fin"

6/21/2019 Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.200000	26.10	10.5	64	37.5	QP	N	GND
0.765000	23.20	10.6	56	32.8	QP	N	GND
1.975000	11.70	10.7	56	44.3	QP	N	GND
3.070000	23.00	10.8	56	33.0	QP	N	GND
7.680000	33.30	10.9	60	26.7	QP	N	GND
29.755000	29.20	11.0	60	30.8	QP	N	GND

MEASUREMENT RESULT: "T-0621-V02_fin2"

6/21/2019 Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.255000	19.20	10.5	52	32.4	AV	N	GND
0.445000	20.90	10.6	47	26.1	AV	N	GND
1.535000	19.80	10.7	46	26.2	AV	N	GND
3.840000	22.20	10.8	46	23.8	AV -	N	GND
7.680000	31.60	10.9	50	18.4	AV	N	GND
29.185000	25.20	11.0	50	24.8	AV	N	GND

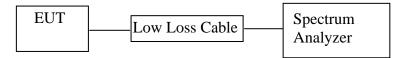


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14. CONDUCTED SPURIOUS EMISSION COMPLIANCE TEST

14.1.Block Diagram of Test Setup



14.2. The Requirement For Section 15.247(d)

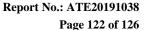
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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 Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

14.3. The Requirement for RSS-247 section 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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 that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

14.4.EUT Configuration on Measurement

The equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.





14.5. Operating Condition of EUT

- 14.5.1. Setup the EUT and simulator as shown as Section 14.1.
- 14.5.2. Turn on the power of all equipment.
- 14.5.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480 MHz. We select 2402MHz, 2441MHz, and 2480MHz TX frequency to transmit.

14.6.Test Procedure

- 14.6.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.
- 14.6.2.Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz
- 14.6.3. The Conducted Spurious Emission was measured and recorded.

14.7.Test Result

Pass.

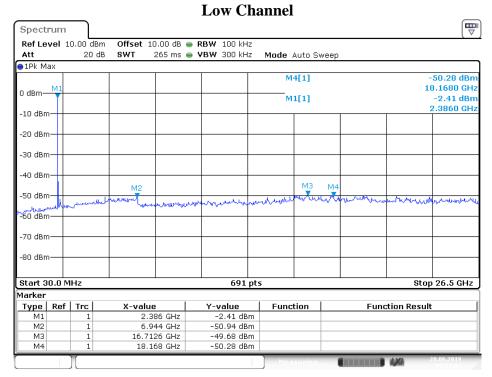
The spectrum analyzer plots are attached as below.



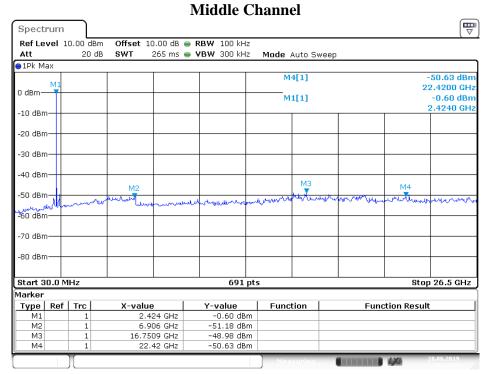
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GFSK mode



Date: 28.JUN.2019 08:23:03

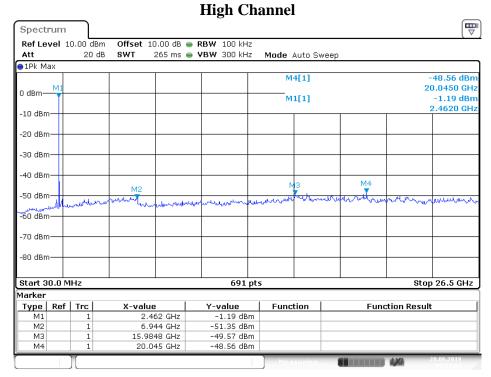


Date: 28.JUN.2019 08:24:08



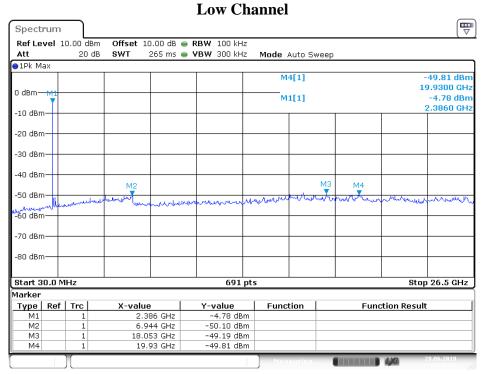
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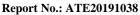


Date: 28.JUN.2019 08:24:54

8DPSK mode

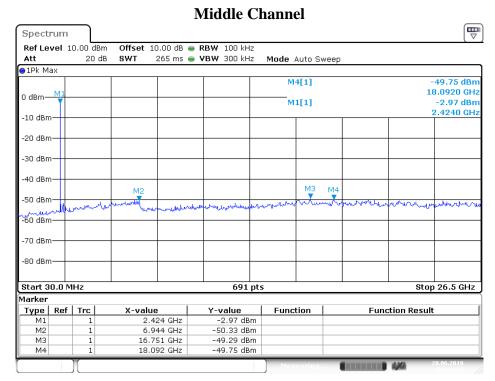


Date: 28.JUN.2019 08:27:53

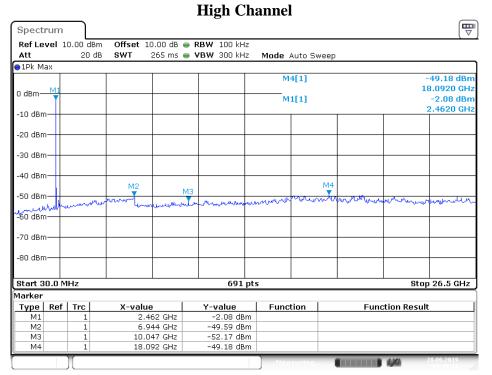


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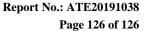




Date: 28.JUN.2019 08:27:00



Date: 28.JUN.2019 08:26:12





15.ANTENNA REQUIREMENT

15.1.The Requirement

According to Section Section 15.203 and RSS GEN 6.8, 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.

15.2. Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The max antenna gain of EUT is 2.5dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203 and RSS GEN 6.8.

***** End of Test Report *****