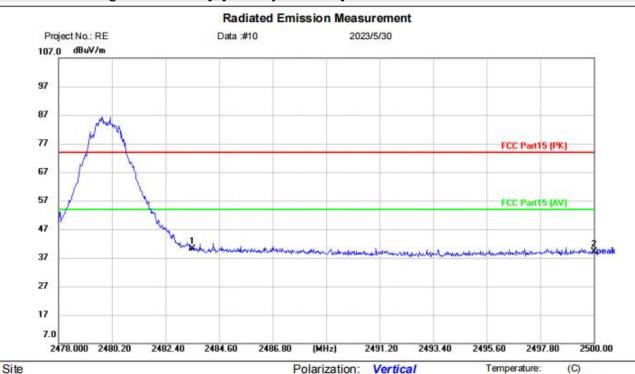
Humidity:

%RH



# [TestMode: TX highest channel]; [Polarity: Vertical]



Limit: FCC Part15 (PK)

EUT: Subwoofor Mode: TX-H

Note:

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1	٠	2483.500	44.04	-3.96	40.08	74.00	-33.92	peak		
2		2500.000	43.06	-4.00	39.06	74.00	-34.94	peak		

Power:

**Test Result: Pass** 



Page 42 of 102

# **18 ANTENNA REQUIREMENT**

Test Standard	47 CFR Part 15, Subpart C 15.247			
Test Method	N/A			

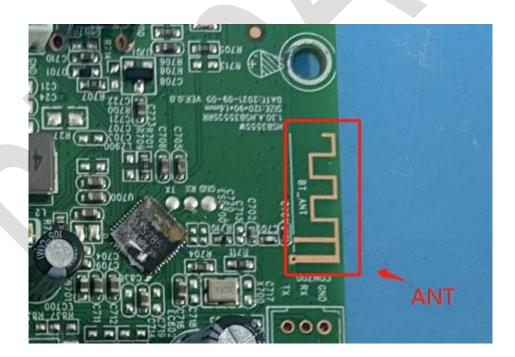
#### 18.1 CONCLUSION

# Standard Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

### **EUT Antenna:**

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 2.85dBi.





Page 43 of 102

### 19 CONDUCTED SPURIOUS EMISSIONS

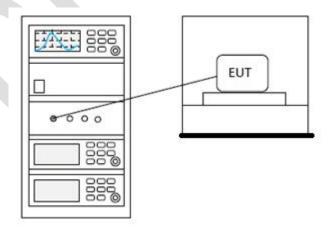
Test Standard	47 CFR Part 15, Subpart C 15.247				
Test Method	ANSI C63.10 (2013) Section 7.8.6 & Section 11.11				
Test Mode (Pre-Scan)	TX				
Test Mode (Final Test)	TX				
Tester	Charlie				
Temperature	25℃				
Humidity	60%				

#### **19.1 LIMITS**

Limit:

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

## 19.2 BLOCK DIAGRAM OF TEST SETUP





Page 44 of 102

# 19.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details





Page 45 of 102

#### 20 CONDUCTED BAND EDGES MEASUREMENT

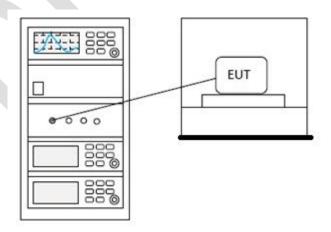
Test Standard	47 CFR Part 15, Subpart C 15.247				
Test Method	ANSI C63.10 (2013) Section 7.8.8 & Section 11.13.3.2				
Test Mode (Pre-Scan)	TX				
Test Mode (Final Test)	TX				
Tester	Charlie				
Temperature	25℃				
Humidity	60%				

#### **20.1 LIMITS**

Limit:

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

## 20.2 BLOCK DIAGRAM OF TEST SETUP





Page 46 of 102

# 20.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details





# 21 APPENDIX

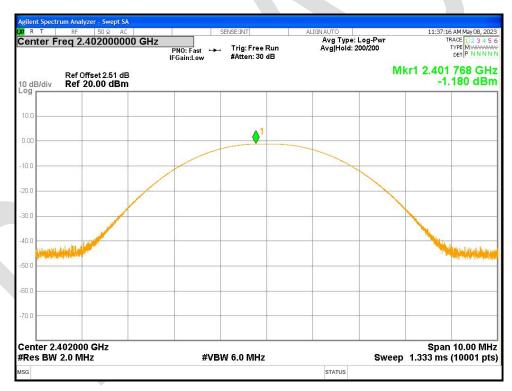
Report No.: BLA-EMC-202305-A7102 Page 47 of 102

# Appendix1

#### 21.1 MAXIMUM CONDUCTED OUTPUT POWER

Condition	Mode	Frequency	Antenna	Conducted Power	Limit	Verdict
		(MHz)		(dBm)	(dBm)	
NVNT	1-DH1	2402	Ant1	-1.18	21	Pass
NVNT	1-DH1	2441	Ant1	-1.448	21	Pass
NVNT	1-DH1	2480	Ant1	-1.156	21	Pass
NVNT	2-DH1	2402	Ant1	-0.962	21	Pass
NVNT	2-DH1	2441	Ant1	-1.239	21	Pass
NVNT	2-DH1	2480	Ant1	-0.93	21	Pass
NVNT	3-DH1	2402	Ant1	-0.447	21	Pass
NVNT	3-DH1	2441	Ant1	-0.679	21	Pass
NVNT	3-DH1	2480	Ant1	-0.357	21	Pass

# Power NVNT 1-DH1 2402MHz Ant1



Power NVNT 1-DH1 2441MHz Ant1





Power NVNT 1-DH1 2480MHz Ant1



Power NVNT 2-DH1 2402MHz Ant1



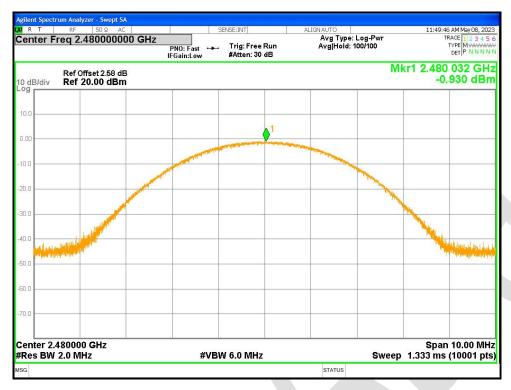


Power NVNT 2-DH1 2441MHz Ant1



Power NVNT 2-DH1 2480MHz Ant1



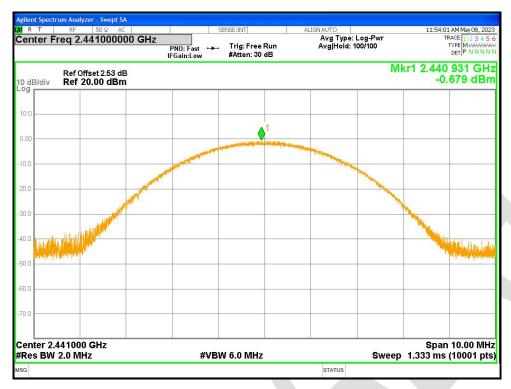


Power NVNT 3-DH1 2402MHz Ant1

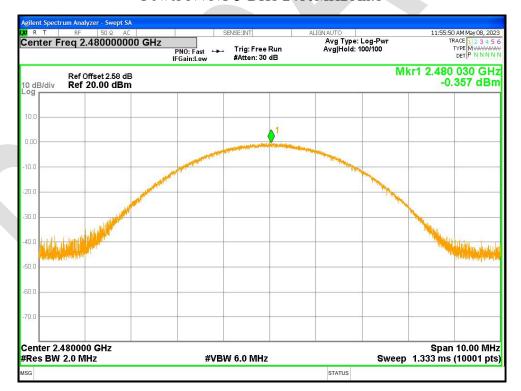


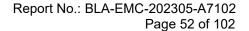
Power NVNT 3-DH1 2441MHz Ant1





Power NVNT 3-DH1 2480MHz Ant1







## **21.2 -20DB BANDWIDTH**

Condition	Mode	Frequency	Antenna	-20 dB Bandwidth	Limit -20 dB	Verdict
		(MHz)		(MHz)	Bandwidth (MHz)	
NVNT	1-DH1	2402	Ant1	0.884	0	Pass
NVNT	1-DH1	2441	Antl	0.887	0	Pass
NVNT	1-DH1	2480	Ant1	0.92	0	Pass
NVNT	2-DH1	2402	Antl	1.315	0	Pass
NVNT	2-DH1	2441	Ant1	1.318	0	Pass
NVNT	2-DH1	2480	Antl	1.317	0	Pass
NVNT	3-DH1	2402	Ant1	1.264	0	Pass
NVNT	3-DH1	2441	Ant1	1.263	0	Pass
NVNT	3-DH1	2480	Antl	1.263	0	Pass

-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



11:41:29 AM May 08, 2023 Center Freq: 2.441000000 GHz Trig: Free Run Avg #Atten: 30 dB Center Freq 2.441000000 GHz Radio Std: None Avg|Hold: 300/300 Radio Device: BTS #IFGain:Low Ref Offset 2.53 dB Ref 22.53 dBm Mkr3 2.441436 GHz -24.560 dBm 10 dB/div  $\Diamond^1$ Span 2 MHz Sweep 2.667 ms Center 2.441 GHz #Res BW 30 kHz **#VBW 100 kHz Total Power** 4.99 dBm Occupied Bandwidth 847.47 kHz **Transmit Freq Error** -7.241 kHz **OBW Power** 99.00 % x dB Bandwidth 887.0 kHz -20.00 dB x dB

-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



11:46:04 AM May 08, 2023 Center Freq: 2.402000000 GHz Trig: Free Run Avg #Atten: 30 dB Center Freq 2.402000000 GHz Radio Std: None Avg|Hold: 300/300 Radio Device: BTS #IFGain:Low Mkr3 2.402646 GHz Ref Offset 2.51 dB Ref 22.51 dBm -26.151 dBm 10 dB/div Span 2 MHz Sweep 2.667 ms Center 2.402 GHz #Res BW 30 kHz **#VBW 100 kHz Total Power** 3.40 dBm Occupied Bandwidth 1.1825 MHz **Transmit Freq Error** -11.856 kHz **OBW Power** 99.00 % x dB Bandwidth 1.315 MHz x dB -20.00 dB

-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1



11:50:14 AM May 08, 2023 Center Freq: 2.480000000 GHz Trig: Free Run Avg #Atten: 30 dB Center Freq 2.480000000 GHz Radio Std: None Avg|Hold: 300/300 Radio Device: BTS #IFGain:Low Mkr3 2.480647 GHz Ref Offset 2.58 dB Ref 22.58 dBm -26.606 dBm 10 dB/div Span 2 MHz Sweep 2.667 ms Center 2.48 GHz #Res BW 30 kHz **#VBW 100 kHz Total Power** 3.38 dBm Occupied Bandwidth 1.1824 MHz **Transmit Freq Error** -11.330 kHz **OBW Power** 99.00 % x dB Bandwidth 1.317 MHz x dB -20.00 dB

-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



11:54:35 AM May 08, 2023 Center Freq: 2.441000000 GHz Trig: Free Run Avg #Atten: 30 dB Center Freq 2.441000000 GHz Radio Std: None Avg|Hold: 300/300 Radio Device: BTS #IFGain:Low Mkr3 2.441635 GHz Ref Offset 2.53 dB Ref 22.53 dBm -27.496 dBm 10 dB/div Span 2 MHz Sweep 2.667 ms Center 2.441 GHz #Res BW 30 kHz **#VBW 100 kHz Total Power** 3.35 dBm Occupied Bandwidth 1.1664 MHz **Transmit Freq Error** 3.047 kHz **OBW Power** 99.00 % x dB Bandwidth 1.263 MHz -20.00 dB x dB

## -20dB Bandwidth NVNT 3-DH1 2480MHz Ant1





## 21.3 OCCUPIED CHANNEL BANDWIDTH

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.83836
NVNT	1-DH1	2441	Ant1	0.84578
NVNT	1-DH1	2480	Ant1	0.84431
NVNT	2-DH1	2402	Ant1	1.1836
NVNT	2-DH1	2441	Ant1	1.1834
NVNT	2-DH1	2480	Ant1	1.1820
NVNT	3-DH1	2402	Ant1	1.1683
NVNT	3-DH1	2441	Ant1	1.1641
NVNT	3-DH1	2480	Ant1	1.1662

OBW NVNT 1-DH1 2402MHz Ant1



OBW NVNT 1-DH1 2441MHz Ant1





## OBW NVNT 1-DH1 2480MHz Ant1



OBW NVNT 2-DH1 2402MHz Ant1





## OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1





## OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1