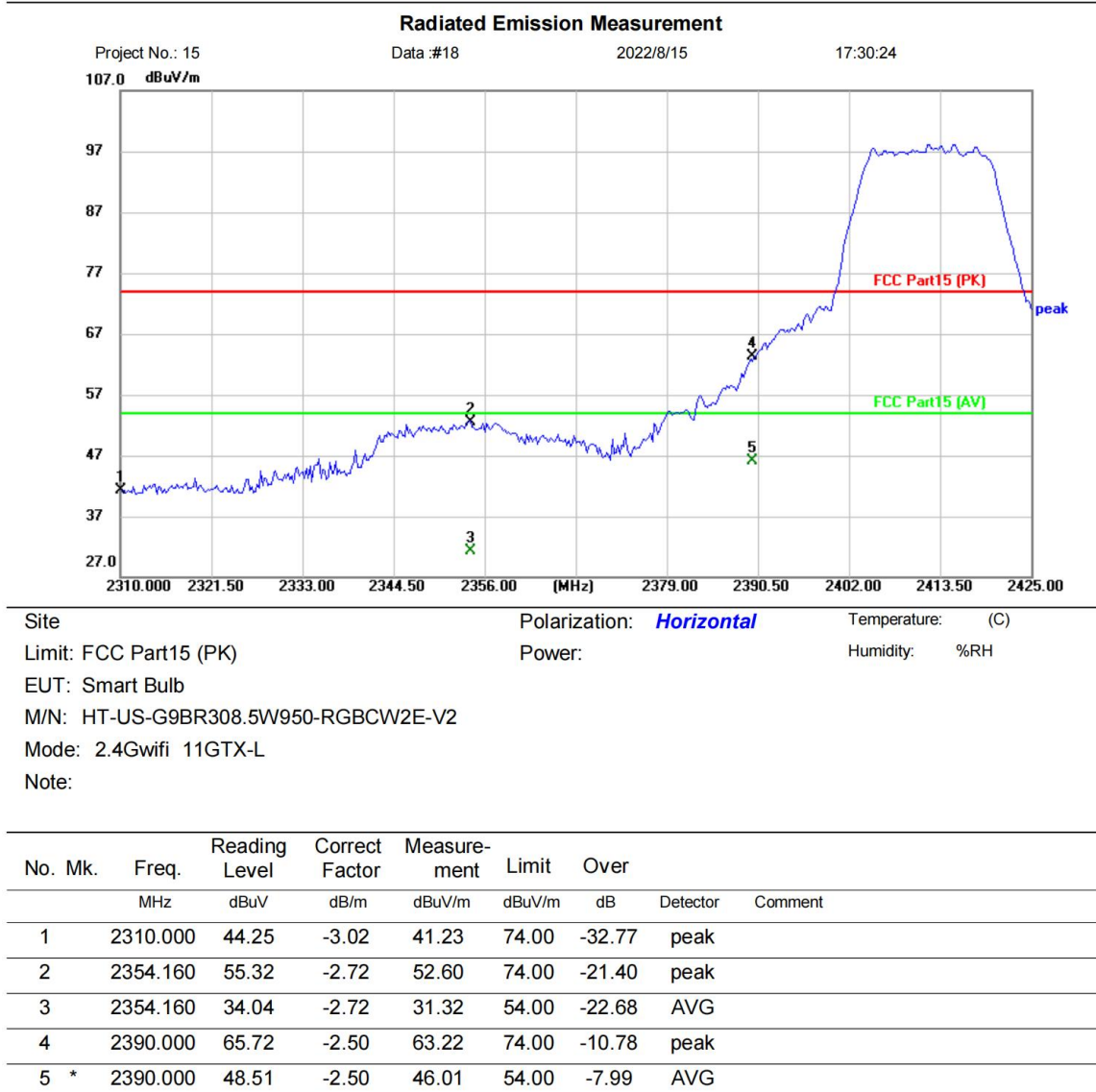


[TestMode: TX g low channel]; [Polarity: Horizontal]

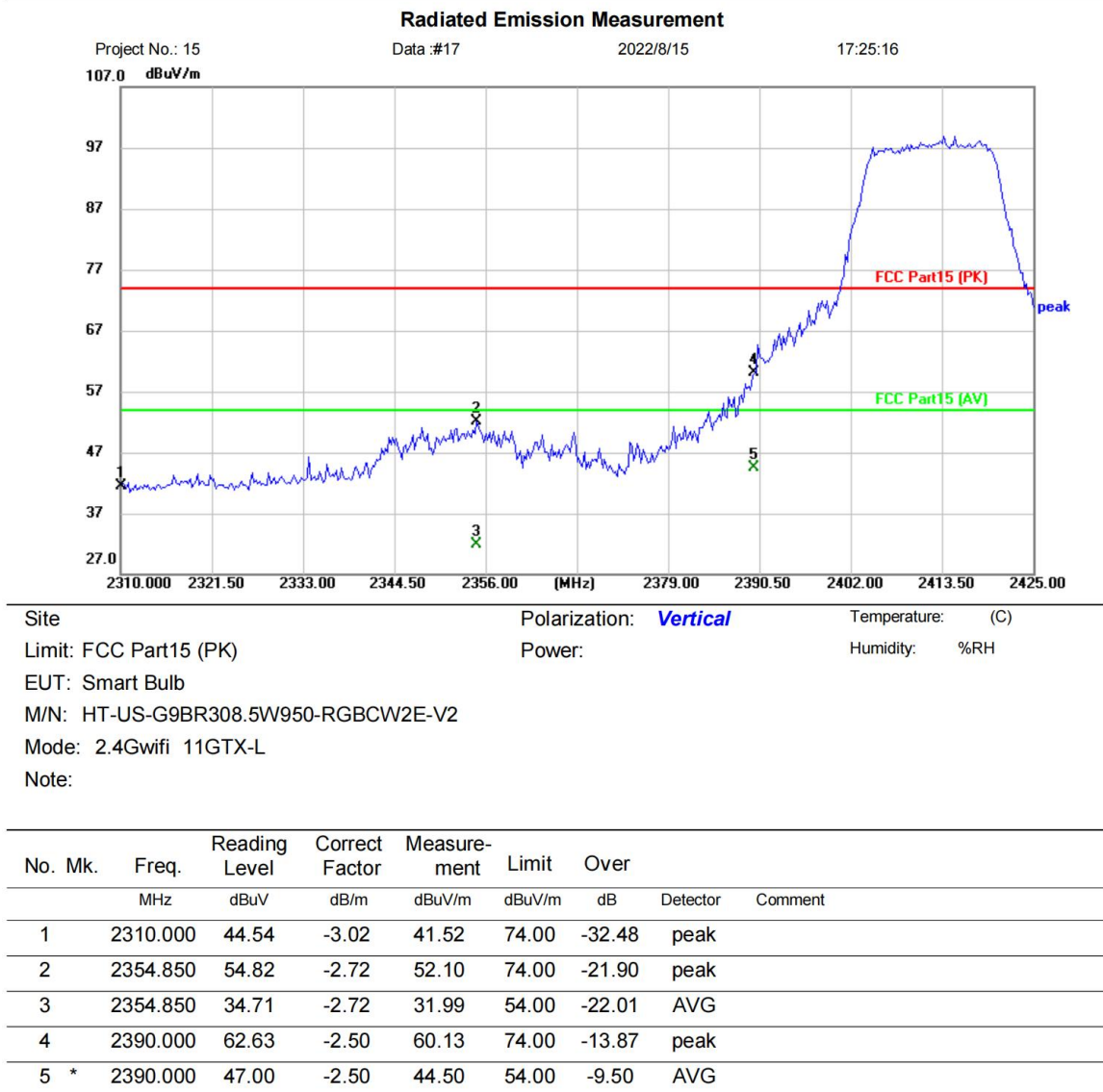


\*:Maximum data    x:Over limit    !:over margin

<Reference Only

**Test Result: Pass**

[TestMode: TX g low channel]; [Polarity: Vertical]

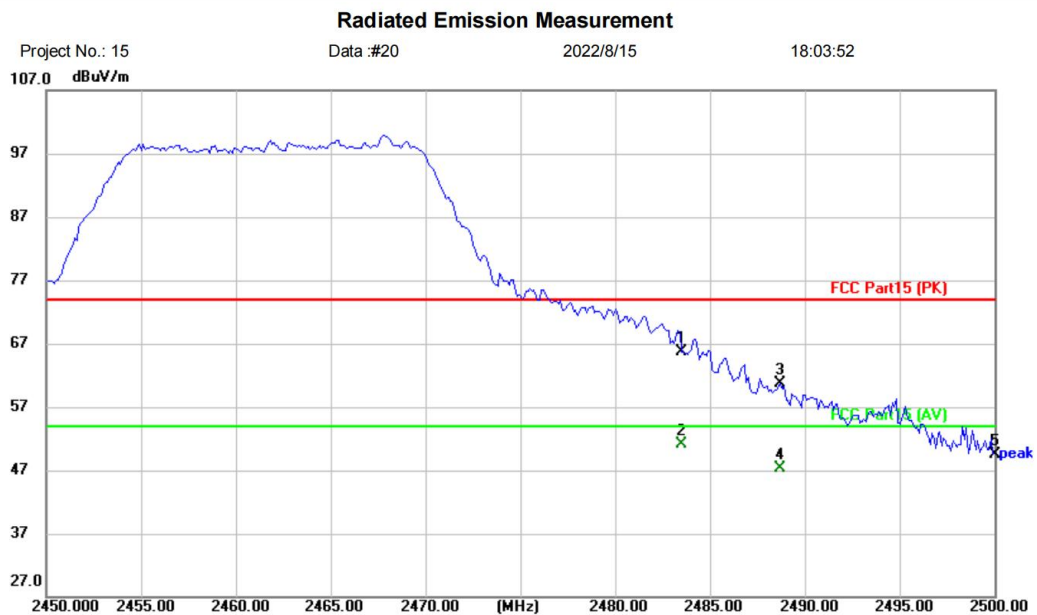


\*:Maximum data    x:Over limit    !:over margin

<Reference Only

**Test Result: Pass**

[TestMode: TX g high channel]; [Polarity: Horizontal]



Site:      Polarization: **Horizontal**      Temperature: (C)  
Limit: FCC Part15 (PK)      Power:      Humidity: %RH  
EUT: Smart Bulb  
M/N: HT-US-G9BR308.5W950-RGBCW2E-V2  
Mode: 2.4Gwifi 11GTX-H  
Note:

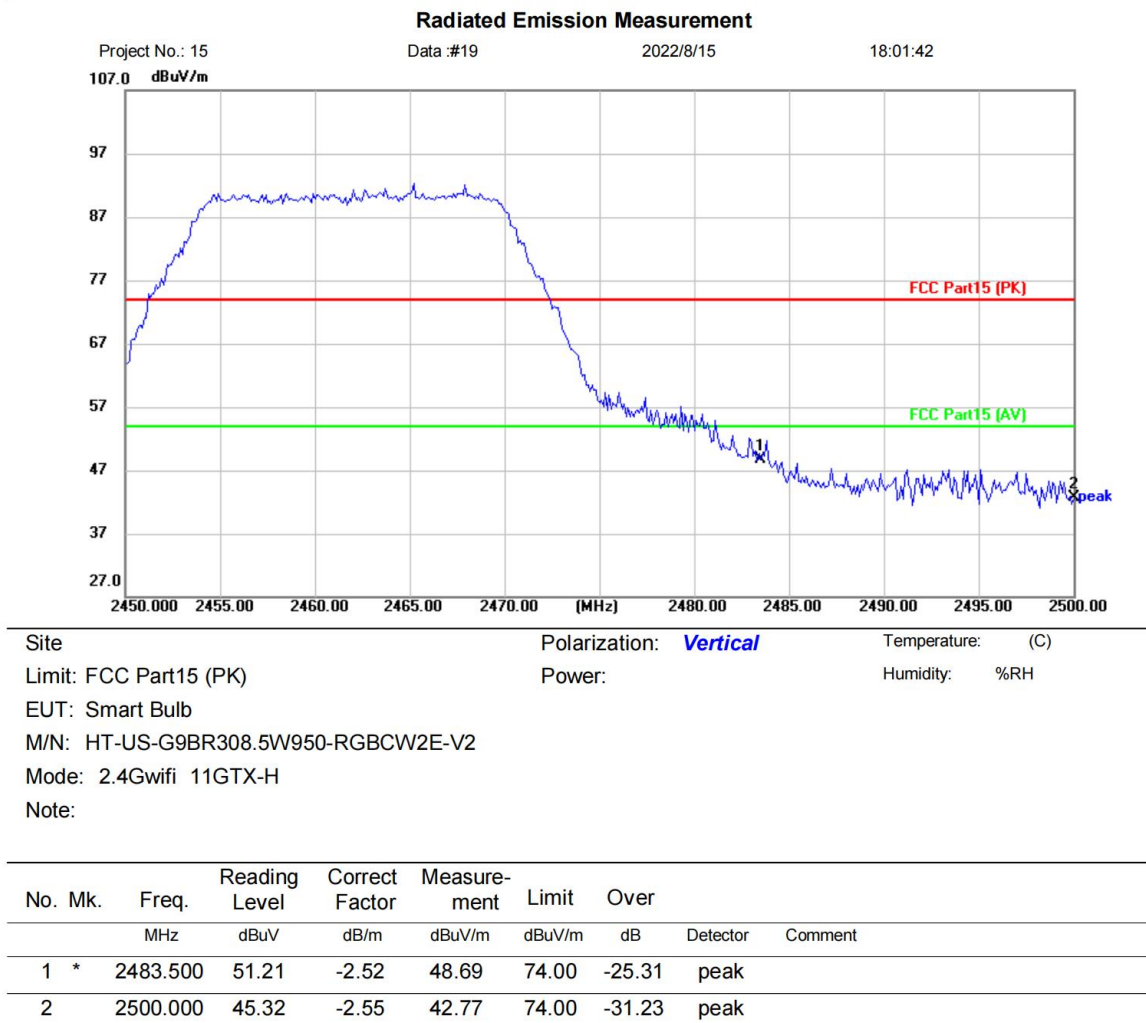
No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2483.560	68.23	-2.52	65.71	74.00	-8.29	peak	
2 *	2483.560	53.53	-2.52	51.01	54.00	-2.99	AVG	
3	2488.700	63.27	-2.54	60.73	74.00	-13.27	peak	
4	2488.700	49.86	-2.54	47.32	54.00	-6.68	AVG	
5	2500.000	52.02	-2.55	49.47	74.00	-24.53	peak	

\*:Maximum data    x:Over limit    !:over margin

<Reference Only

**Test Result: Pass**

[TestMode: TX g high channel]; [Polarity: Vertical]

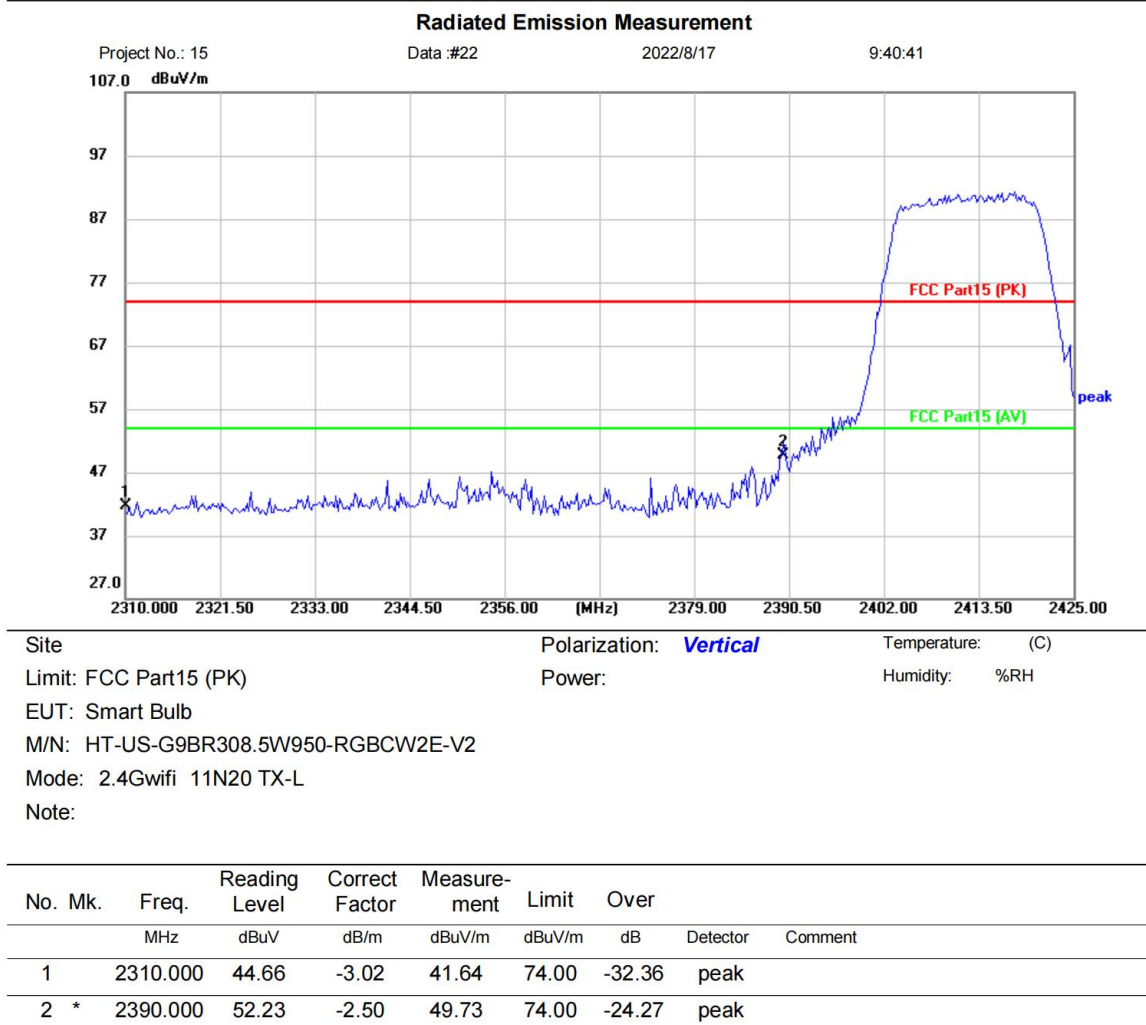


\*:Maximum data    x:Over limit    !:over margin

⟨Reference Only

**Test Result: Pass**

[TestMode: TX n20 low channel]; [Polarity: Vertical]

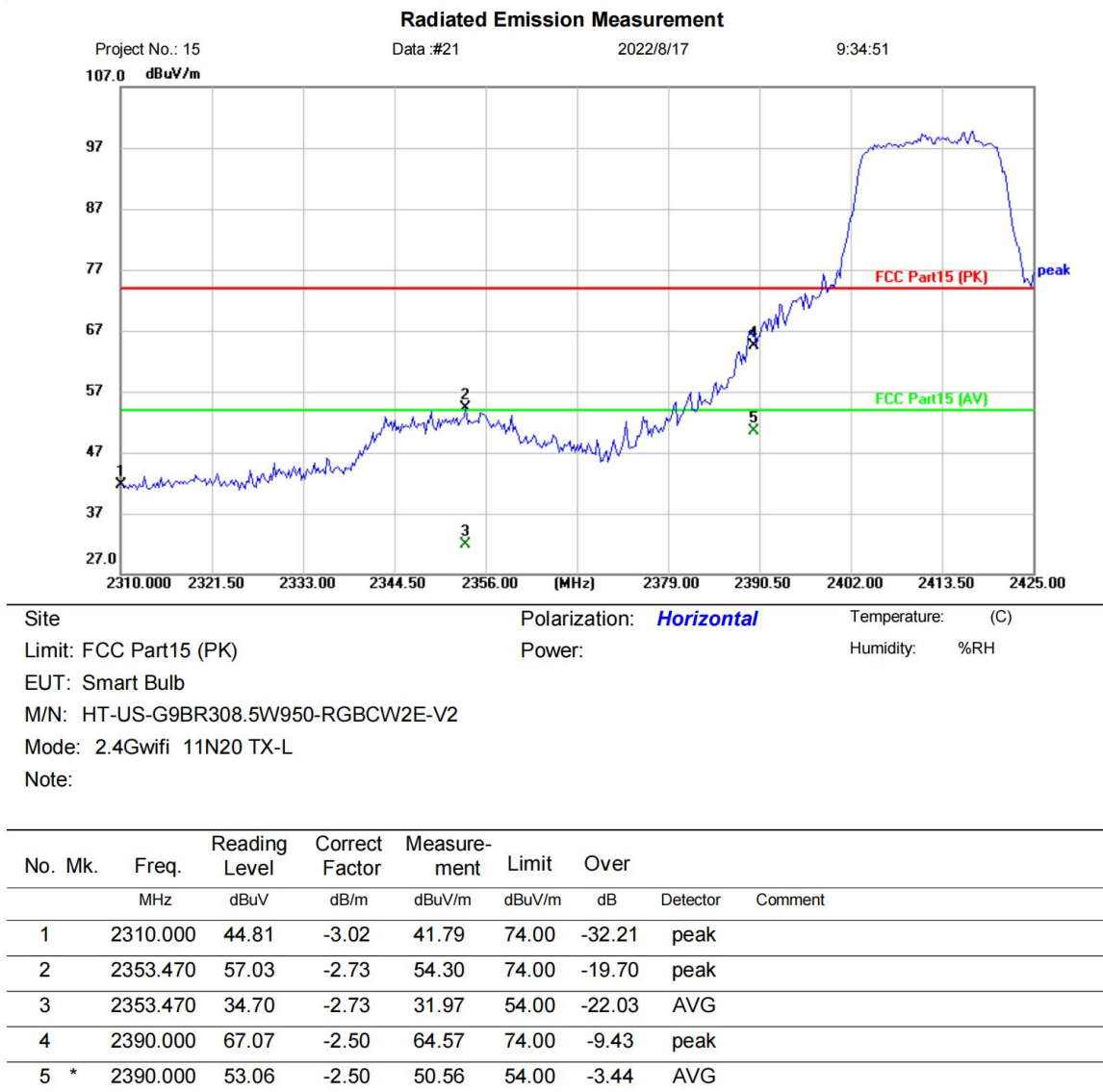


\*:Maximum data    x:Over limit    !:over margin

⟨Reference Only

**Test Result: Pass**

[TestMode: TX n20 low channel]; [Polarity: Horizontal]

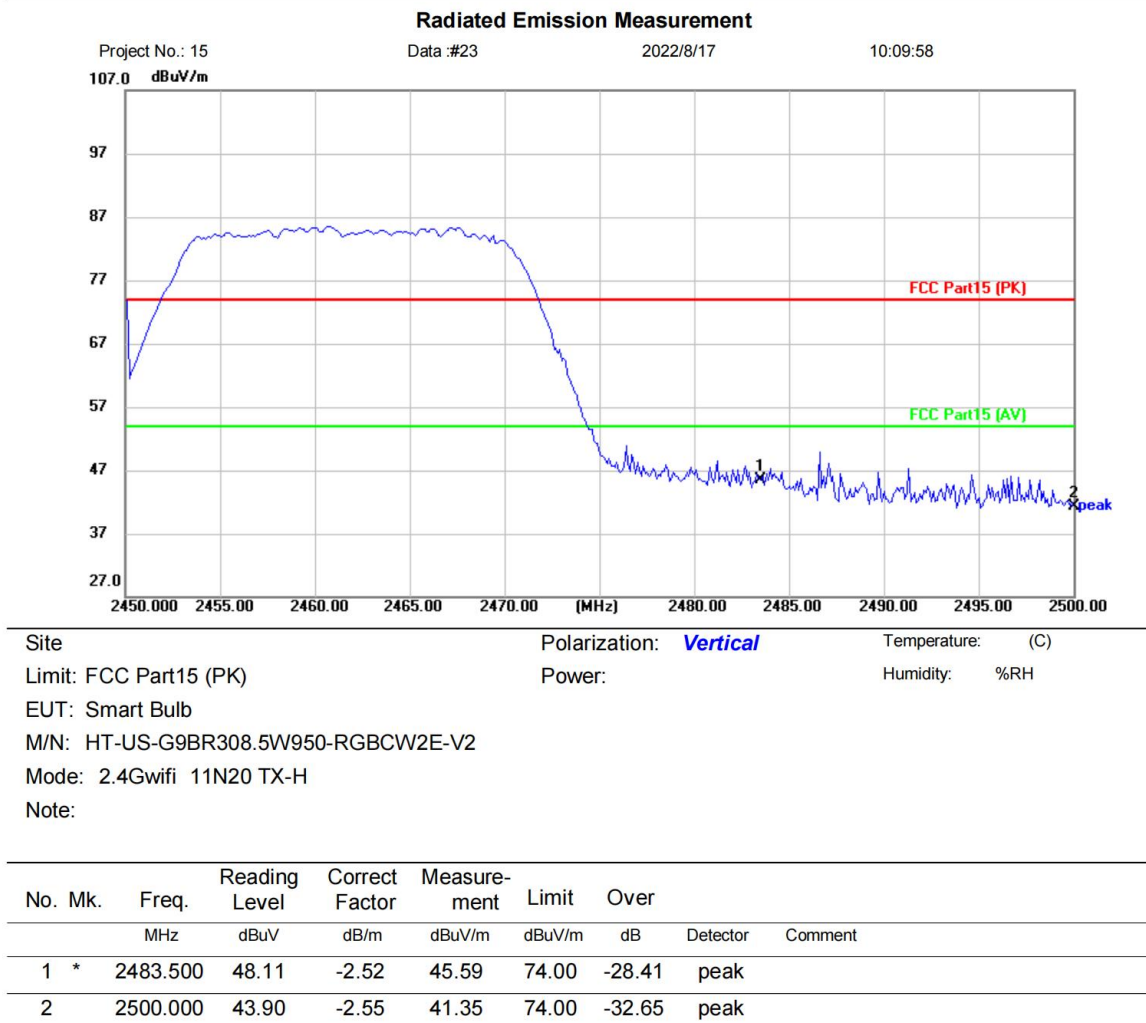


\*:Maximum data    x:Over limit    !:over margin

<Reference Only

**Test Result: Pass**

[TestMode: TX n20 high channel]; [Polarity: Vertical]

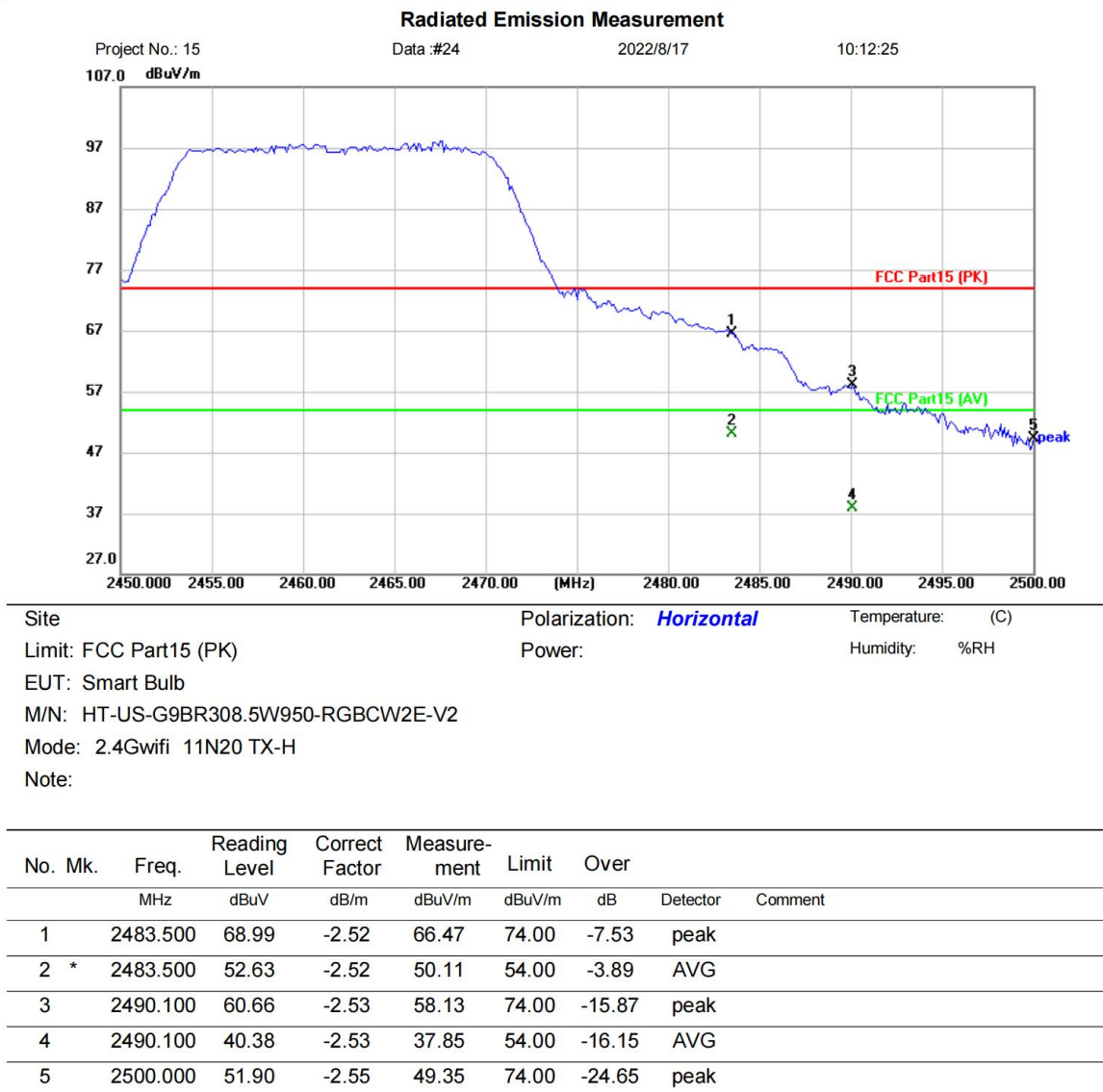


\*:Maximum data    x:Over limit    !:over margin

⟨Reference Only

**Test Result: Pass**

[TestMode: TX n20 high channel]; [Polarity: Horizontal]

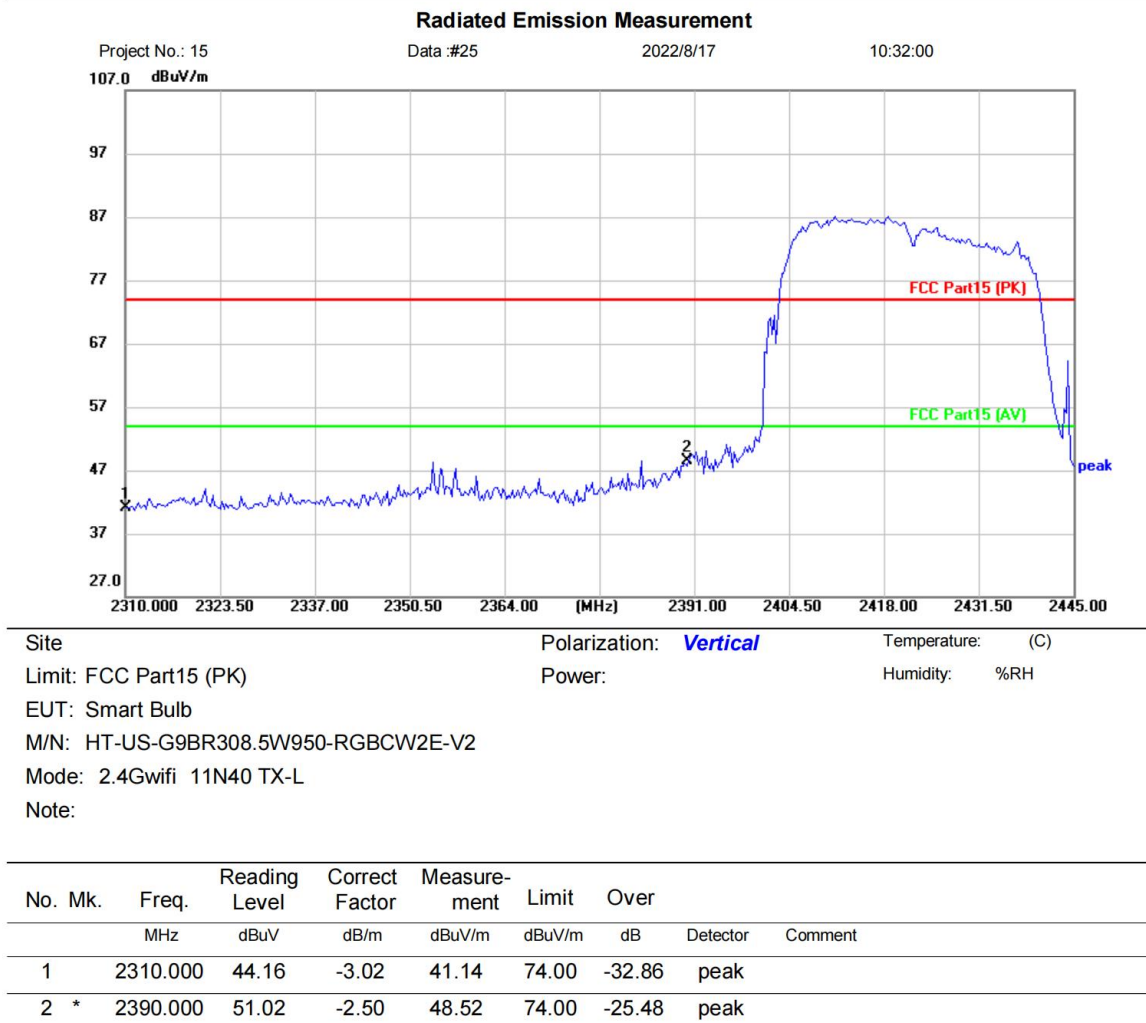


\*:Maximum data    x:Over limit    !:over margin

<Reference Only

**Test Result: Pass**

[TestMode: TX n40 low channel]; [Polarity: Vertical]

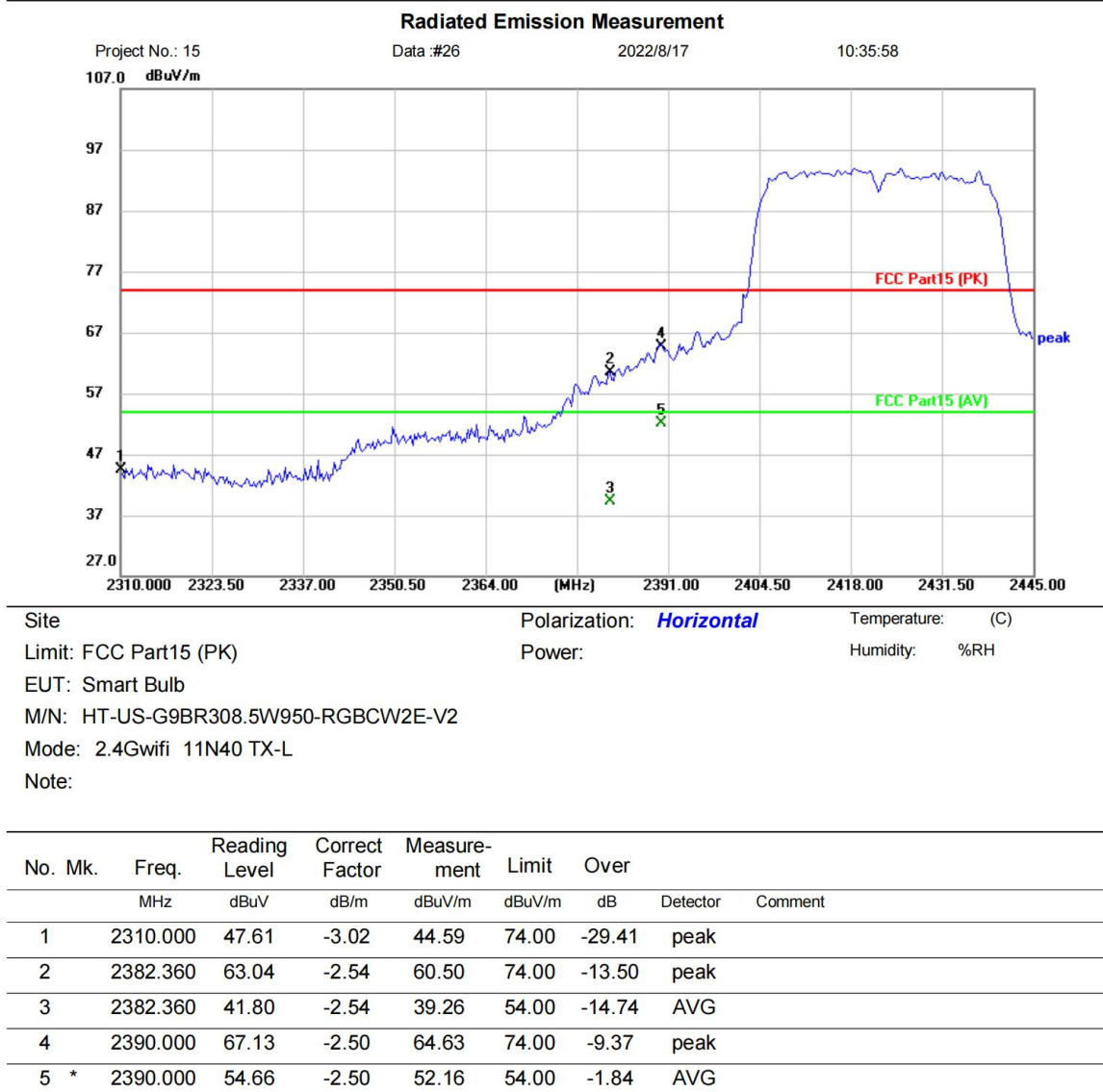


\*:Maximum data    x:Over limit    !:over margin

⟨Reference Only

**Test Result: Pass**

[TestMode: TX n40 low channel]; [Polarity: Horizontal]

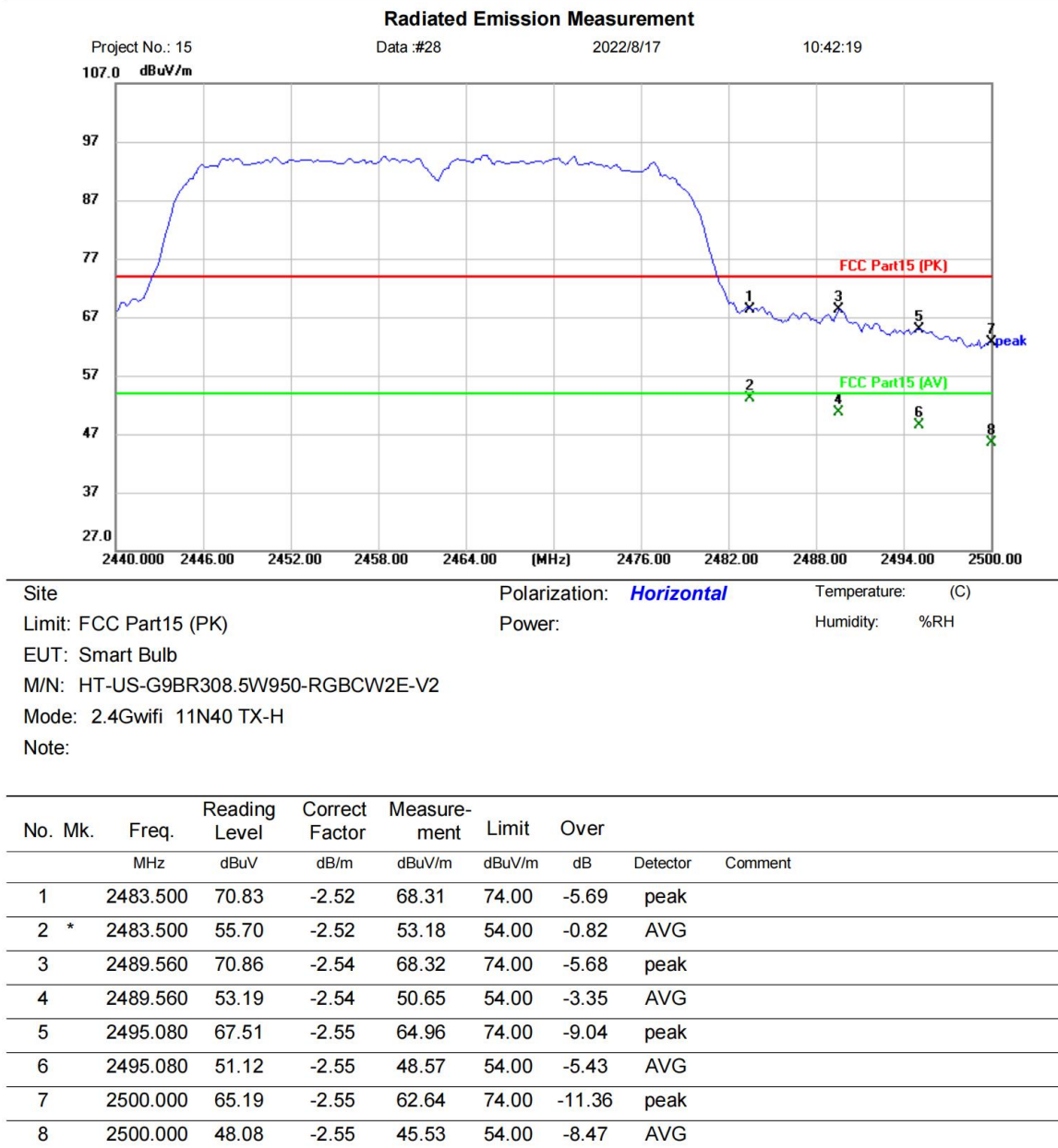


\*:Maximum data    x:Over limit    !:over margin

<Reference Only

**Test Result: Pass**

[TestMode: TX n40 high channel]; [Polarity: Horizontal]

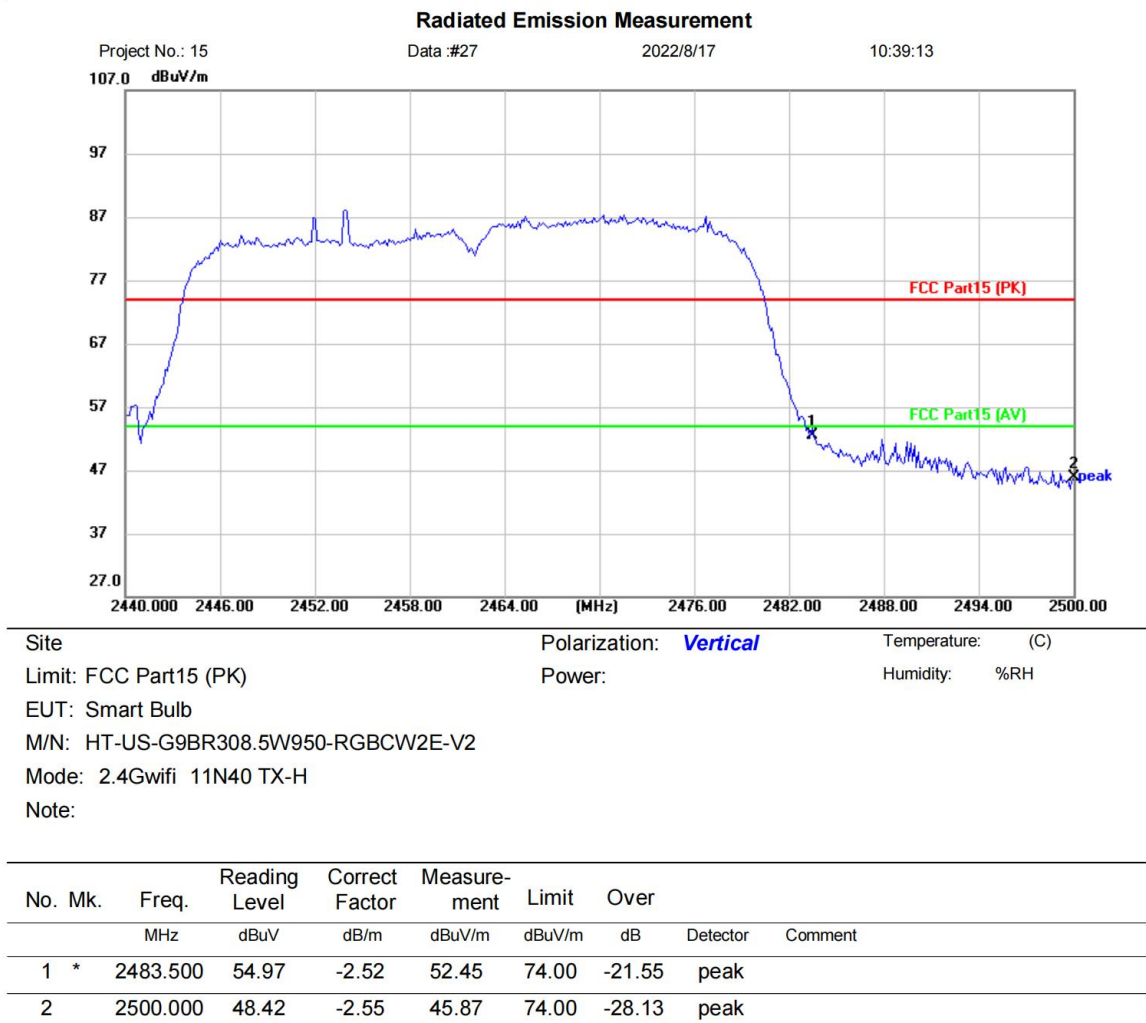


\*:Maximum data    x:Over limit    !:over margin

<Reference Only

**Test Result: Pass**

[TestMode: TX n40 high channel]; [Polarity: Vertical]



\*:Maximum data    x:Over limit    !:over margin

⟨Reference Only

**Test Result: Pass**

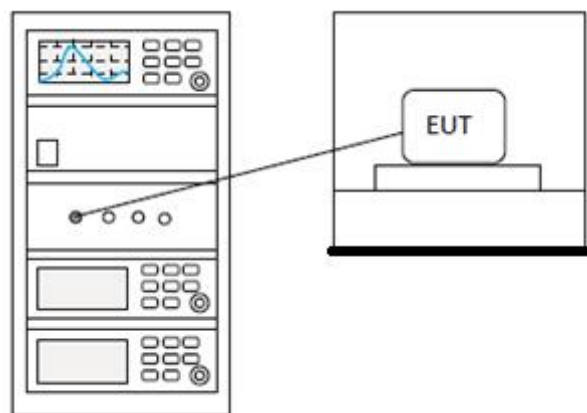
### 13 CONDUCTED SPURIOUS EMISSIONS

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

#### 13.1 LIMITS

<b>Limit:</b>	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)).
---------------	--

#### 13.2 BLOCK DIAGRAM OF TEST SETUP



### 13.3 TEST DATA

**Pass: Please Refer To Appendix: Appendix1 For Details**

BlueAsia

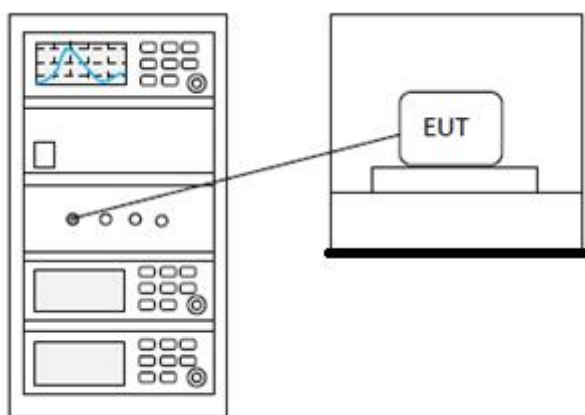
## 14 CONDUCTED BAND EDGES MEASUREMENT

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

### 14.1 LIMITS

<b>Limit:</b>	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)).
---------------	--

### 14.2 BLOCK DIAGRAM OF TEST SETUP



**14.3 TEST DATA**

**Pass: Please Refer To Appendix: Appendix1 For Details**

BlueAsia

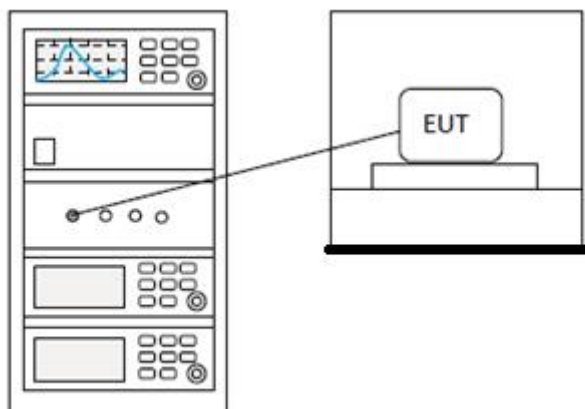
## 15 MINIMUM 6DB BANDWIDTH

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 11.8.1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

### 15.1 LIMITS

Limit:	$\geq 500$ kHz
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### 15.2 BLOCK DIAGRAM OF TEST SETUP



### 15.3 TEST DATA

**Pass: Please Refer To Appendix: Appendix1 For Details**

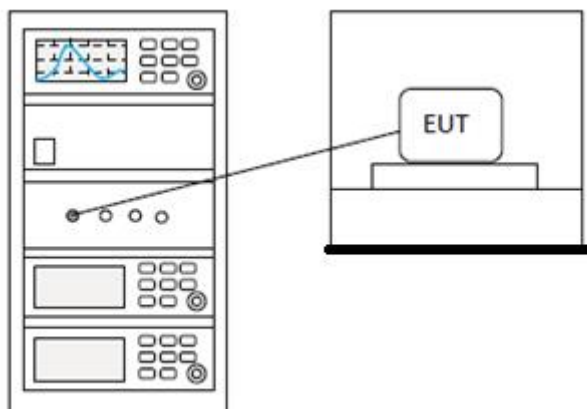
## 16 POWER SPECTRUM DENSITY

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 11.10.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25°C
Humidity	60%

### 16.1 LIMITS

**Limit:**  $\leq 8\text{dBm}$  in any 3 kHz band during any time interval of continuous transmission

### 16.2 BLOCK DIAGRAM OF TEST SETUP



### 16.3 TEST DATA

**Pass: Please Refer To Appendix: Appendix1 For Details**

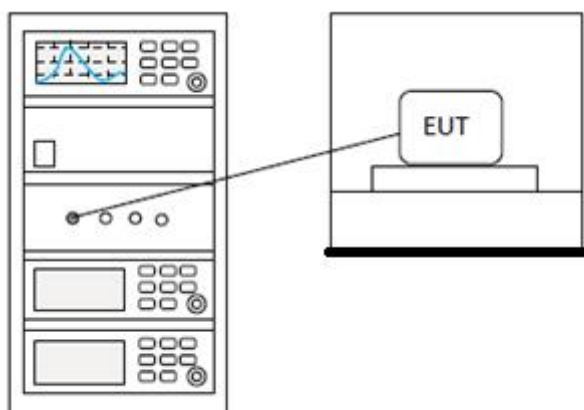
## 17 CONDUCTED PEAK OUTPUT POWER

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.5 & Section 11.9.1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25°C
Humidity	60%

### 17.1 LIMITS

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for $\geq 50$ hopping channels
	0.25 for $25 \leq \text{hopping channels} < 50$
	1 for digital modulation
2400-2483.5	1 for $\geq 75$ non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

### 17.2 BLOCK DIAGRAM OF TEST SETUP



**17.3 TEST DATA****Pass: Please Refer To Appendix: Appendix1 For Details**

BlueAsia

## 18 CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ)

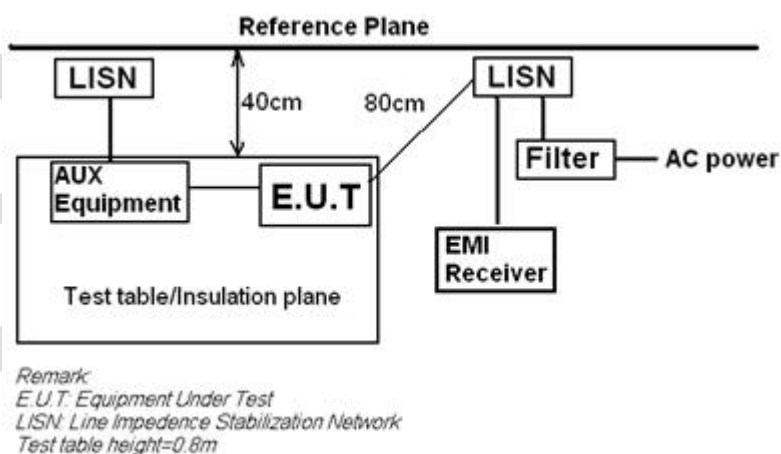
Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 6.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

### 18.1 LIMITS

Frequency of emission(MHz)	Conducted limit(dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\*Decreases with the logarithm of the frequency.

### 18.2 BLOCK DIAGRAM OF TEST SETUP



### 18.3 PROCEDURE

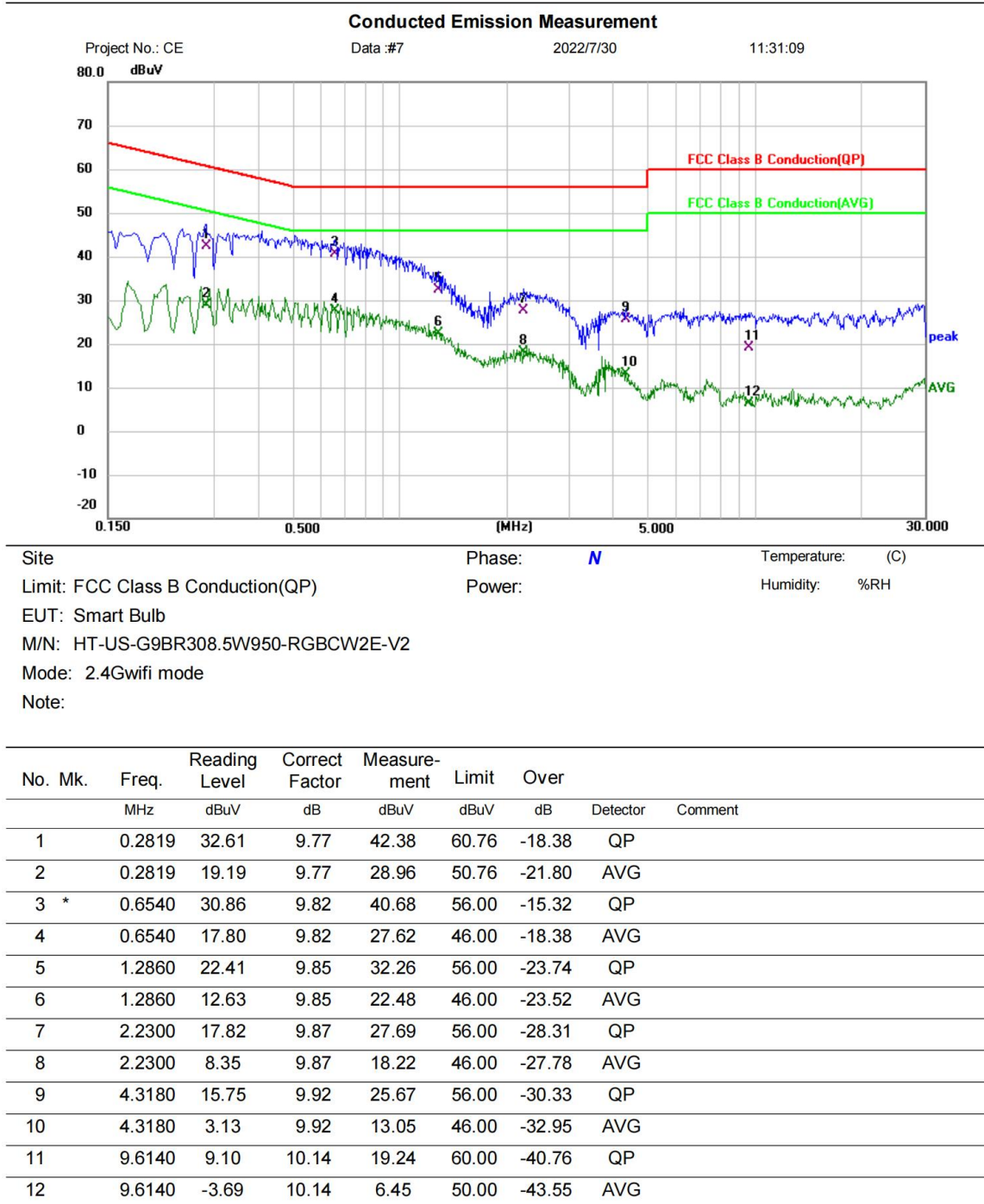
- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50H + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark:  $LISN = Read\ Level + Cable\ Loss + LISN\ Factor$

## 18.4 TEST DATA

[TestMode: TX]; [Line: Nutral] ;[Power:AC120V/60Hz]



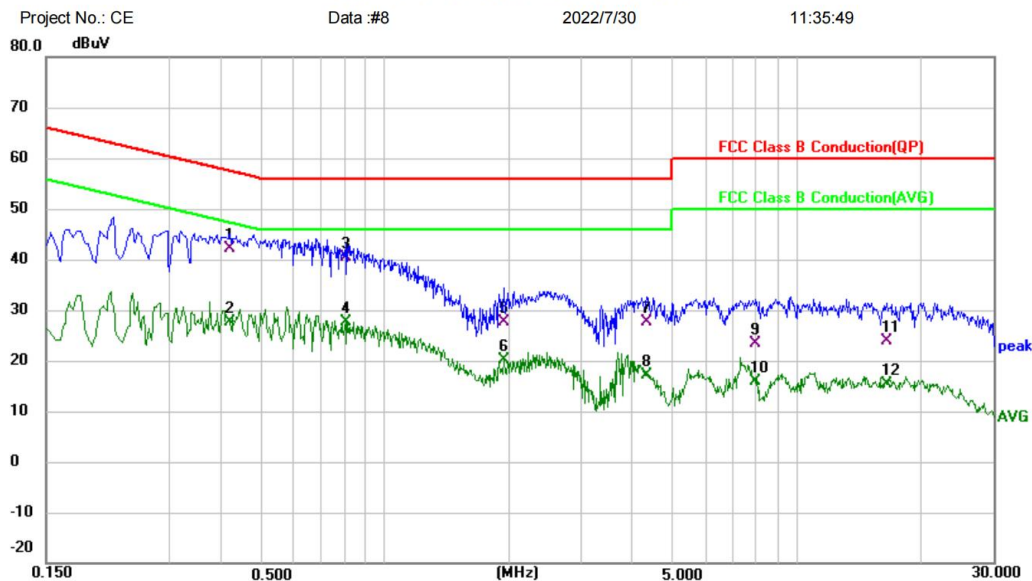
\*:Maximum data    x:Over limit    !:over margin

⟨Reference Only

**Test Result: Pass**

[TestMode: TX]; [Line: Line] ;[Power:AC120V/60Hz]

### Conducted Emission Measurement



Site: Phase: **L1** Temperature: (C)  
Limit: FCC Class B Conduction(QP) Power: Humidity: %RH  
EUT: Smart Bulb  
M/N: HT-US-G9BR308.5W950-RGBCW2E-V2  
Mode: 2.4Gwifi mode  
Note:

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1 *	0.4180	32.16	9.85	42.01	57.49	-15.48	QP	
2	0.4180	17.90	9.85	27.75	47.49	-19.74	AVG	
3	0.8020	30.39	9.91	40.30	56.00	-15.70	QP	
4	0.8020	17.75	9.91	27.66	46.00	-18.34	AVG	
5	1.9460	17.59	9.94	27.53	56.00	-28.47	QP	
6	1.9460	10.07	9.94	20.01	46.00	-25.99	AVG	
7	4.3340	17.66	9.92	27.58	56.00	-28.42	QP	
8	4.3340	7.25	9.92	17.17	46.00	-28.83	AVG	
9	7.9740	13.39	10.11	23.50	60.00	-36.50	QP	
10	7.9740	5.72	10.11	15.83	50.00	-34.17	AVG	
11	16.5700	13.52	10.37	23.89	60.00	-36.11	QP	
12	16.5700	5.05	10.37	15.42	50.00	-34.58	AVG	

\*:Maximum data x:Over limit !:over margin

<Reference Only

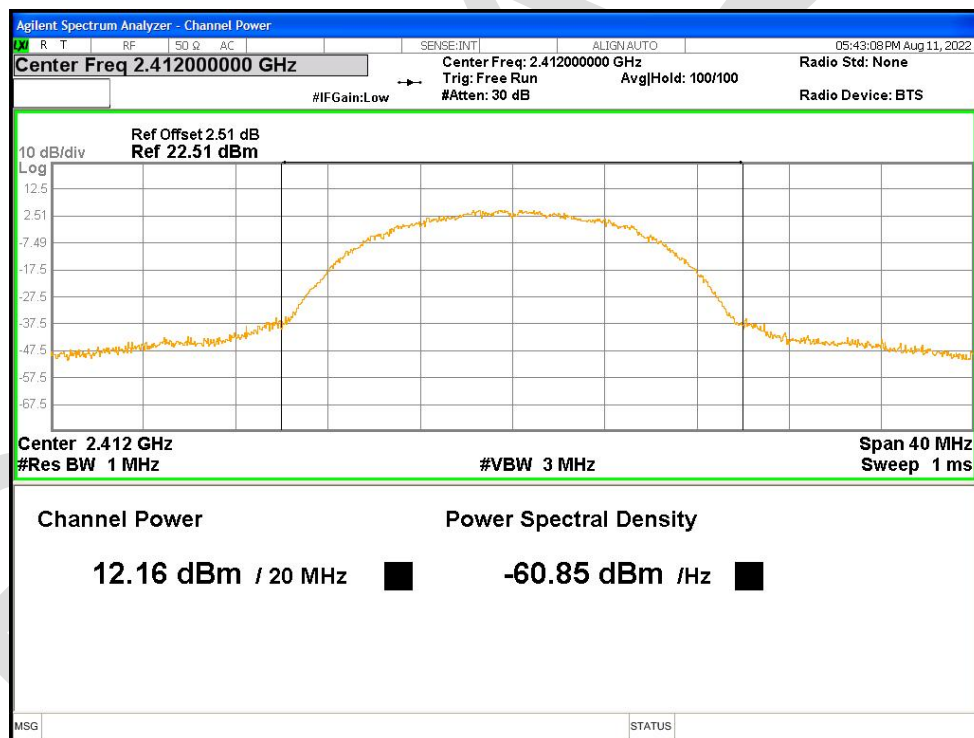
**Test Result: Pass**

## 19 APPENDIX

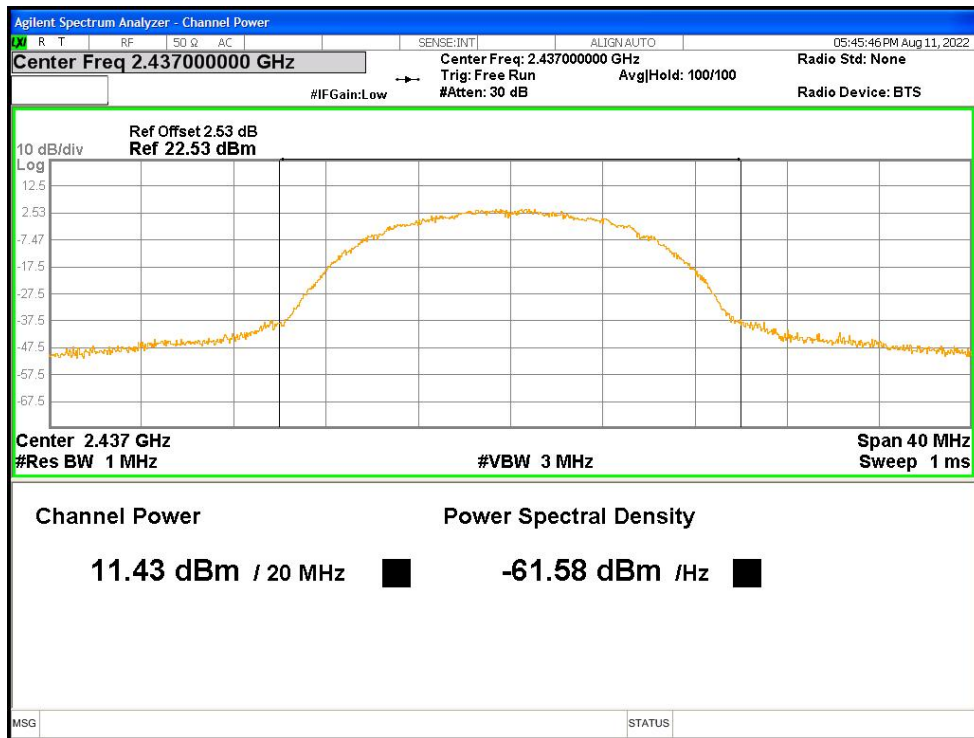
### Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	12.162	30	Pass
NVNT	b	2437	Ant1	11.432	30	Pass
NVNT	b	2462	Ant1	13.112	30	Pass
NVNT	g	2412	Ant1	11.149	30	Pass
NVNT	g	2437	Ant1	10.111	30	Pass
NVNT	g	2462	Ant1	12.046	30	Pass
NVNT	n20	2412	Ant1	9.974	30	Pass
NVNT	n20	2437	Ant1	9.079	30	Pass
NVNT	n20	2462	Ant1	10.845	30	Pass
NVNT	n40	2422	Ant1	9.339	30	Pass
NVNT	n40	2437	Ant1	8.476	30	Pass
NVNT	n40	2452	Ant1	8.701	30	Pass

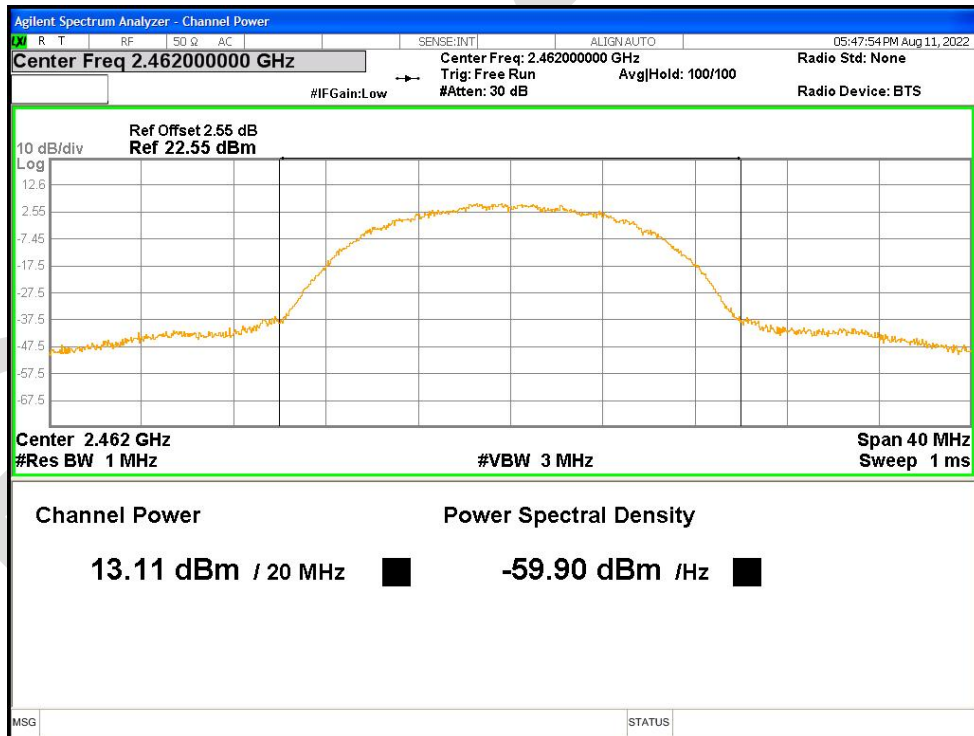
Power NVNT b 2412MHz Ant1



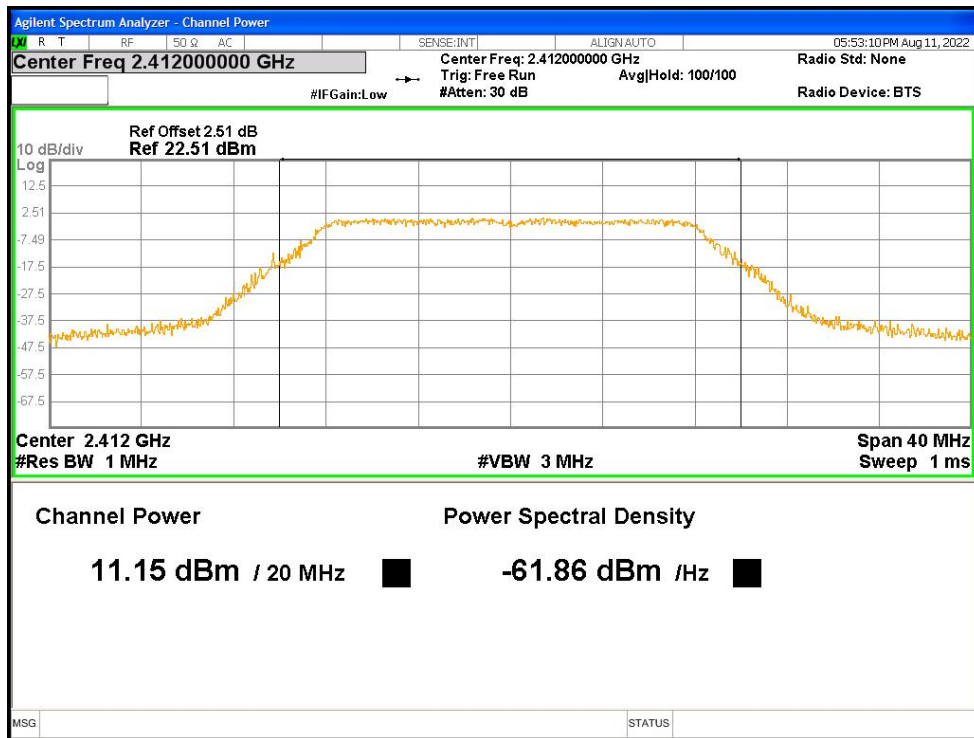
Power NVNT b 2437MHz Ant1



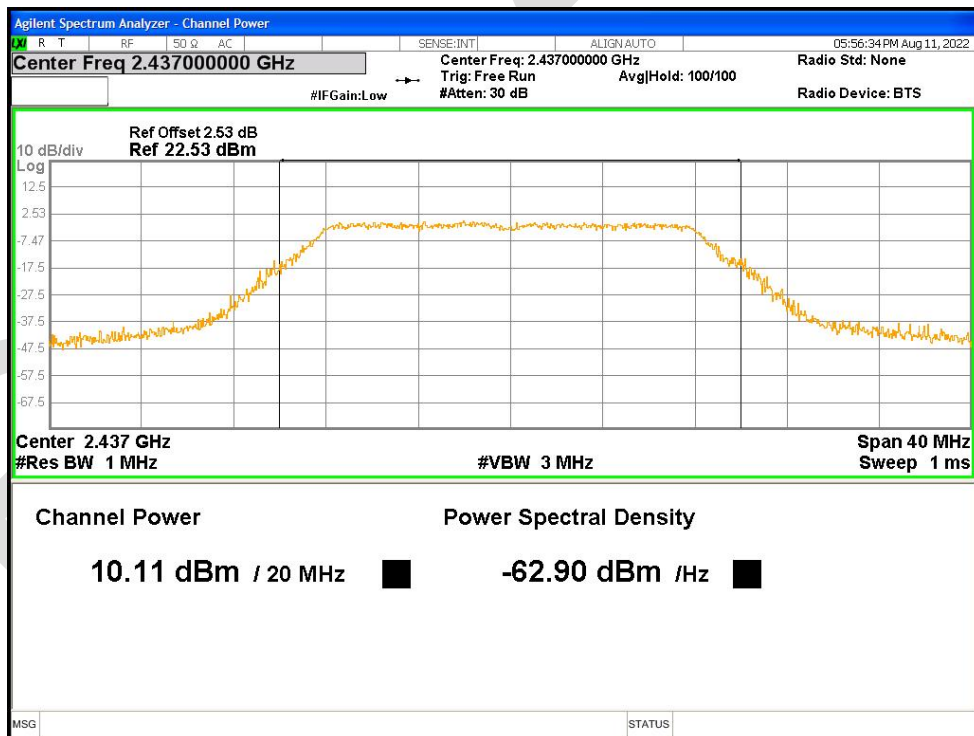
Power NVNT b 2462MHz Ant1



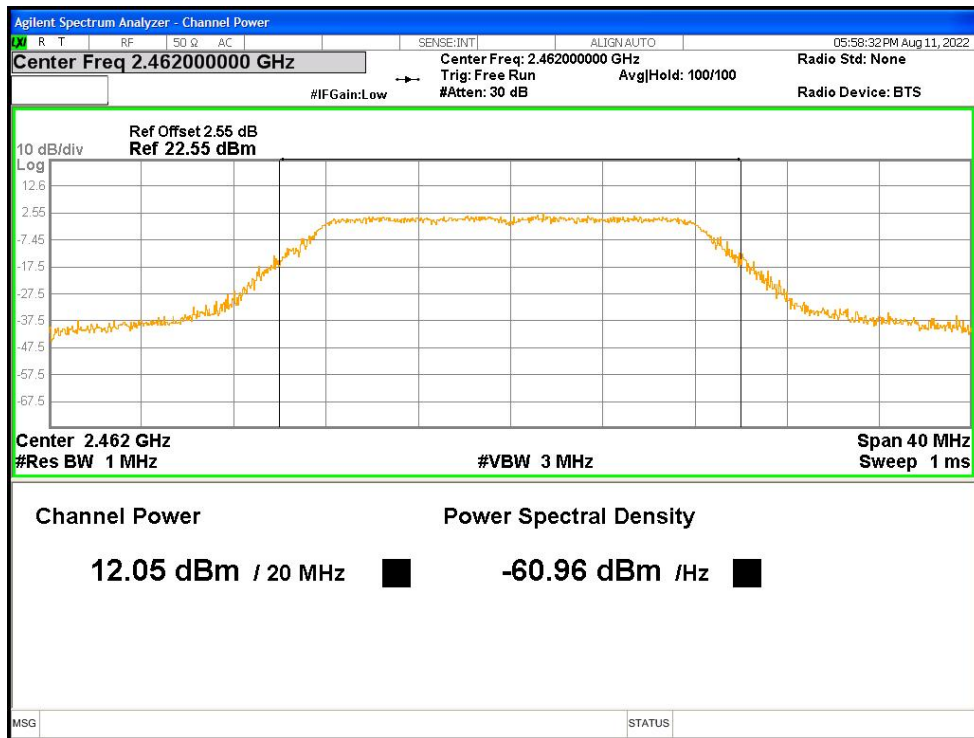
Power NVNT g 2412MHz Ant1



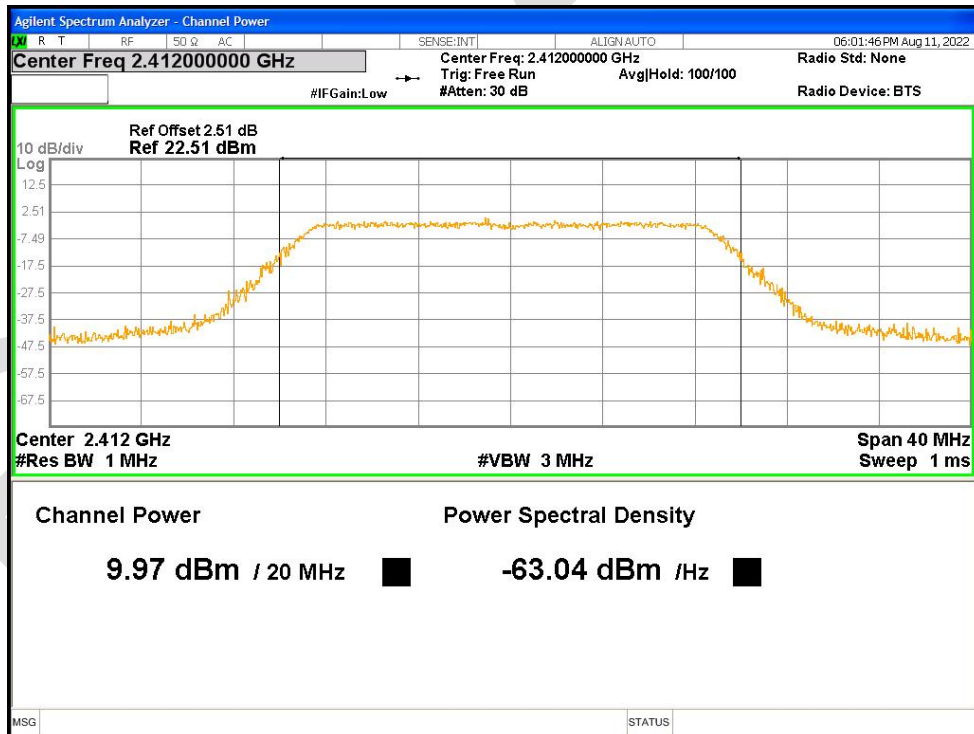
Power NVNT g 2437MHz Ant1



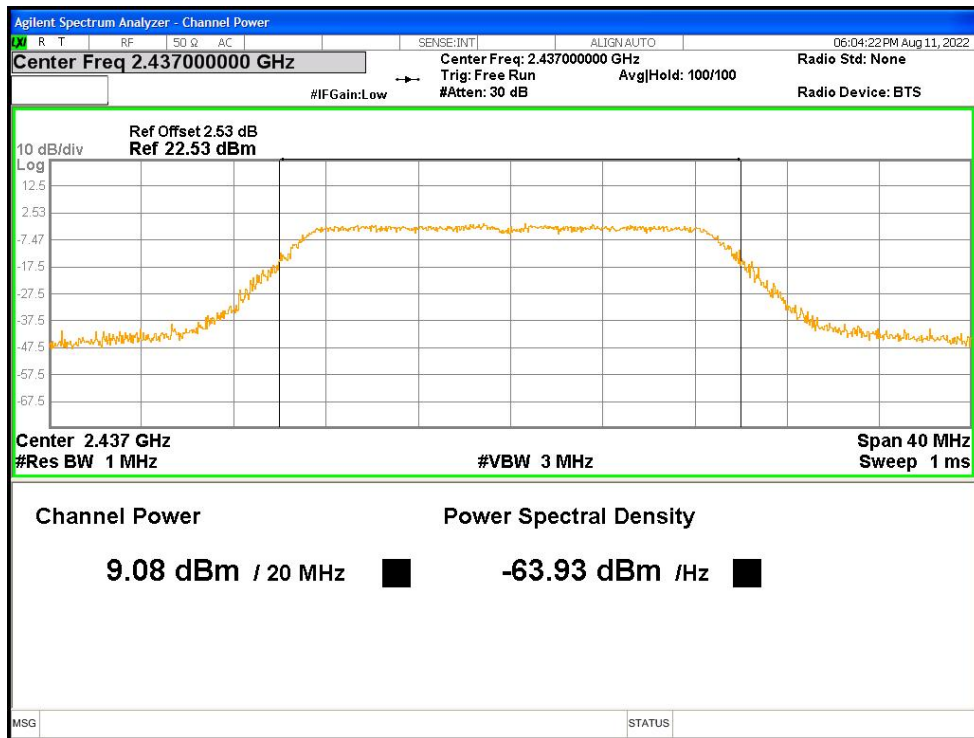
Power NVNT g 2462MHz Ant1



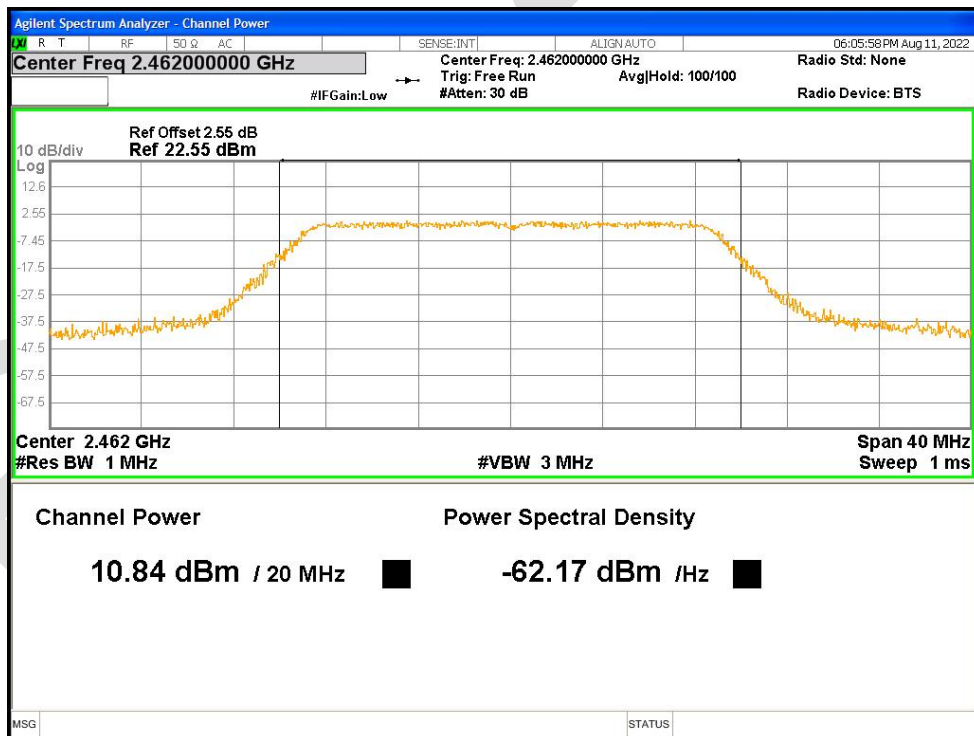
Power NVNT n20 2412MHz Ant1



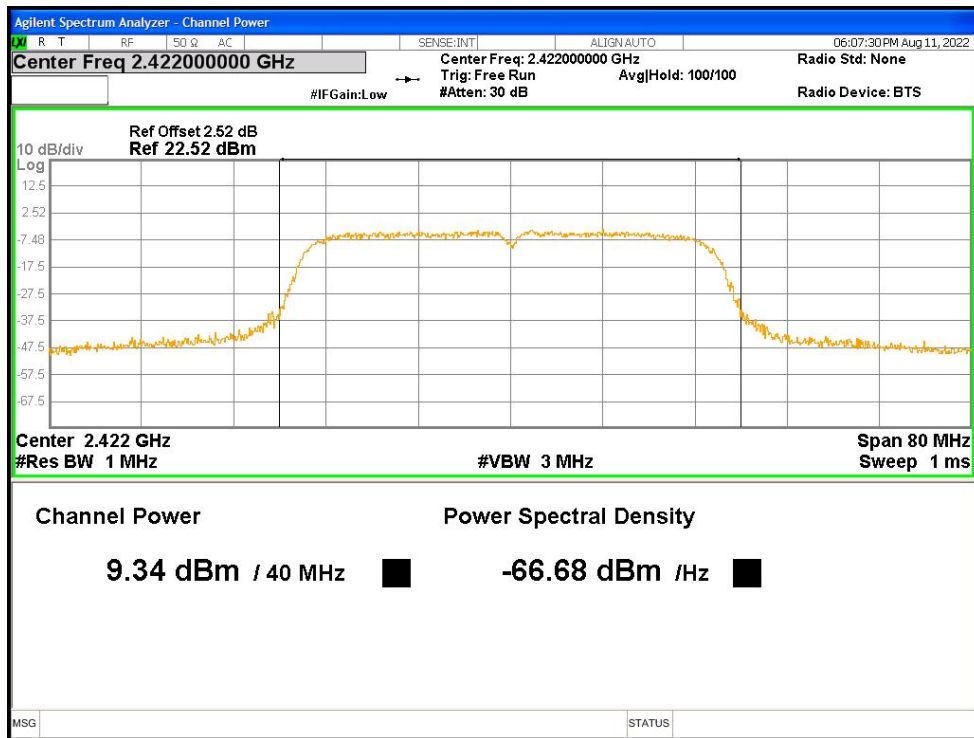
Power NVNT n20 2437MHz Ant1



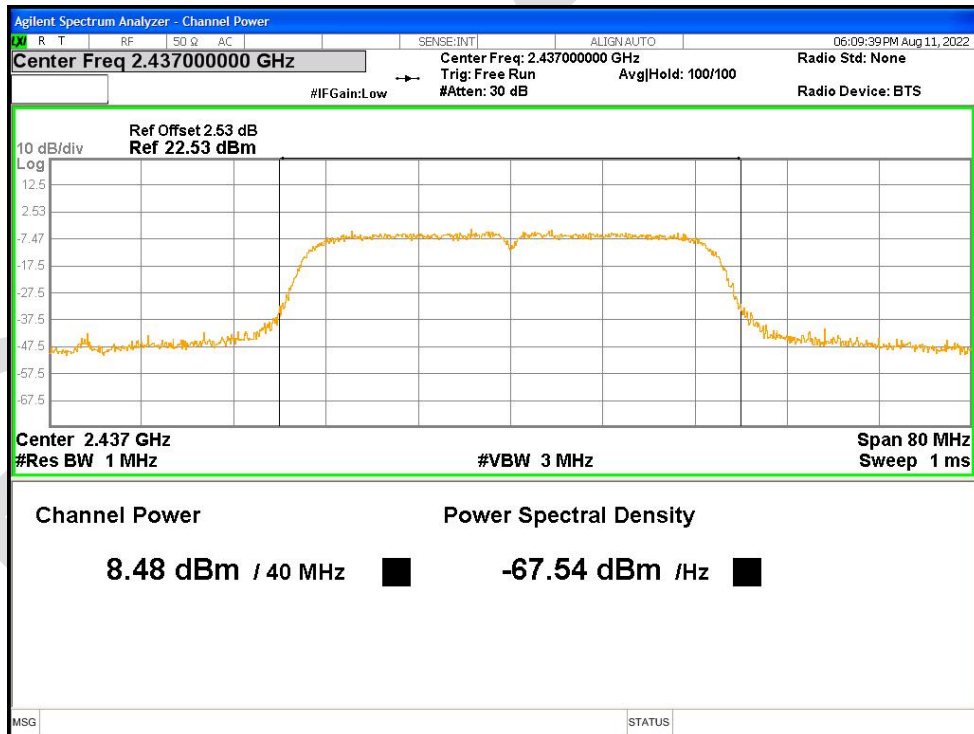
Power NVNT n20 2462MHz Ant1



Power NVNT n40 2422MHz Ant1



Power NVNT n40 2437MHz Ant1



Power NVNT n40 2452MHz Ant1