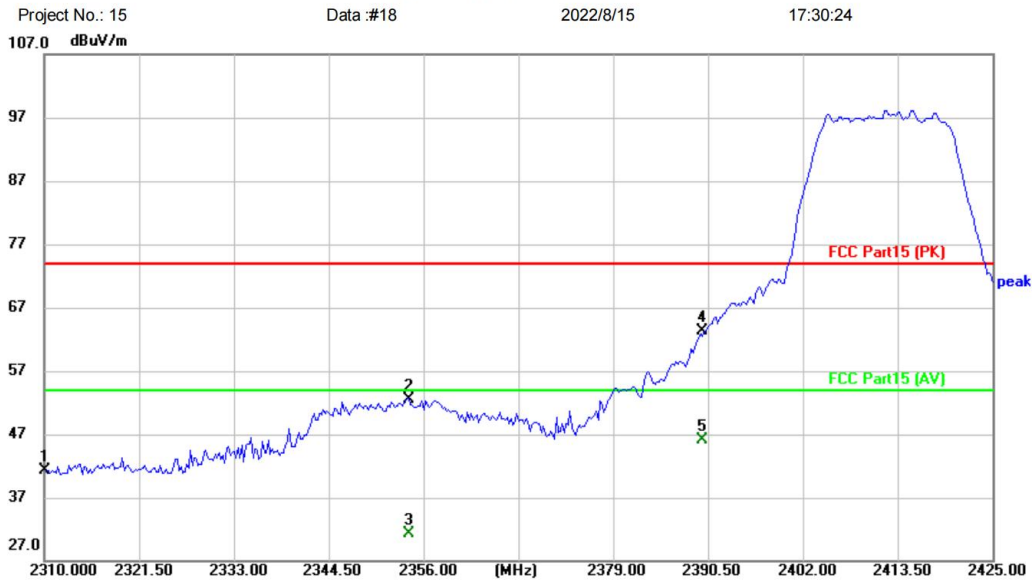


[TestMode: TX g low channel]; [Polarity: Horizontal]

Radiated Emission Measurement



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-L
Note:

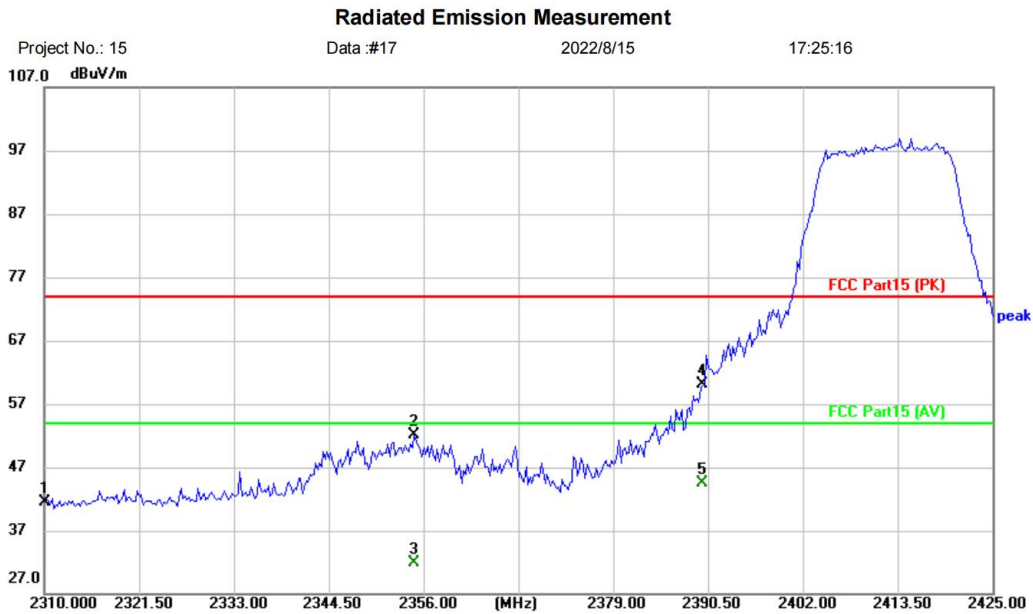
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		2310.000	44.25	-3.02	41.23	74.00	-32.77	peak	
2		2354.160	55.32	-2.72	52.60	74.00	-21.40	peak	
3		2354.160	34.04	-2.72	31.32	54.00	-22.68	AVG	
4		2390.000	65.72	-2.50	63.22	74.00	-10.78	peak	
5	*	2390.000	48.51	-2.50	46.01	54.00	-7.99	AVG	

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

<Reference Only

Test Result: Pass

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



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

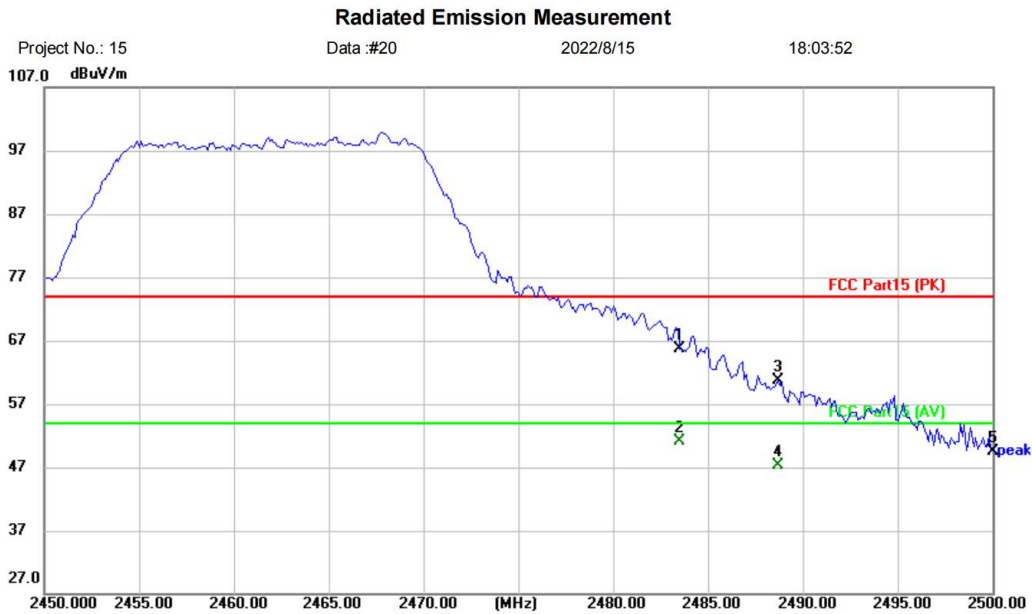
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2310.000	44.54	-3.02	41.52	74.00	-32.48	peak	
2		2354.850	54.82	-2.72	52.10	74.00	-21.90	peak	
3		2354.850	34.71	-2.72	31.99	54.00	-22.01	AVG	
4		2390.000	62.63	-2.50	60.13	74.00	-13.87	peak	
5	*	2390.000	47.00	-2.50	44.50	54.00	-9.50	AVG	

*: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:

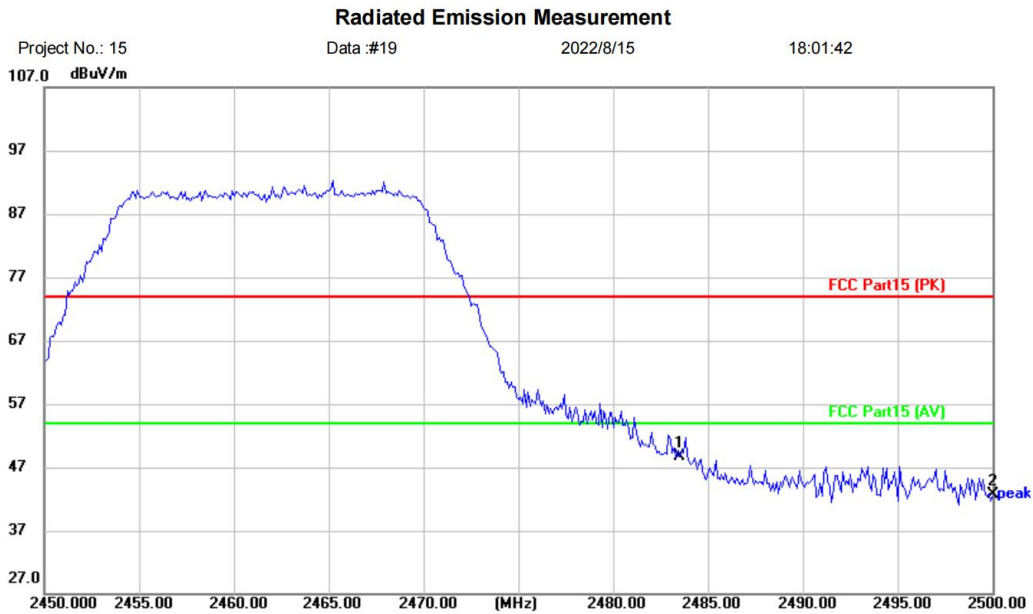
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2483.560	68.23	-2.52	65.71	74.00	-8.29	peak	
2	*	2483.560	53.53	-2.52	51.01	54.00	-2.99	AVG	
3		2488.700	63.27	-2.54	60.73	74.00	-13.27	peak	
4		2488.700	49.86	-2.54	47.32	54.00	-6.68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



Site	Polarization: Vertical	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:		

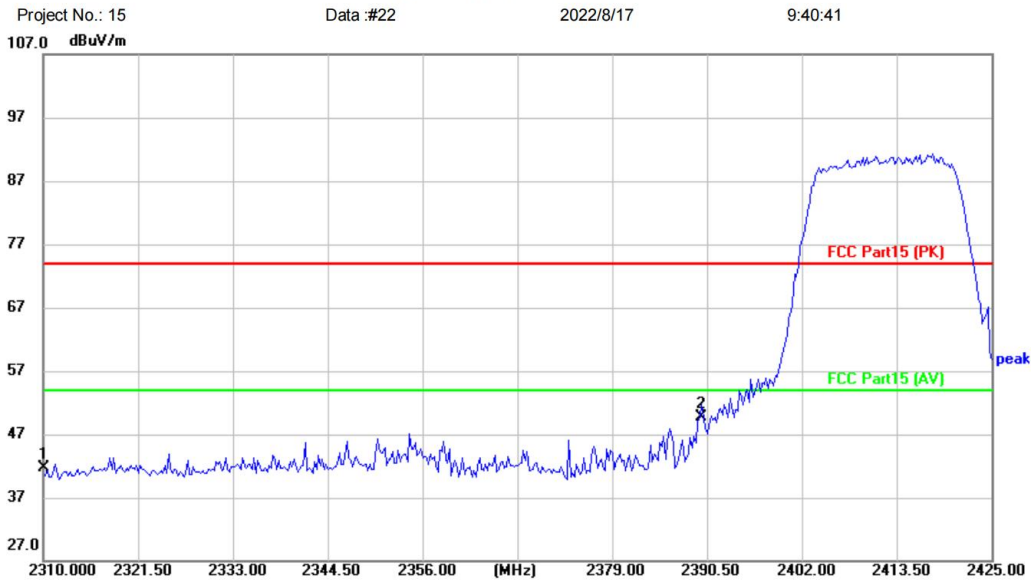
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2483.500	51.21	-2.52	48.69	74.00	-25.31	peak	
2		2500.000	45.32	-2.55	42.77	74.00	-31.23	peak	

*:Maximum data x:Over limit !:over margin <Reference Only

Test Result: Pass

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

Radiated Emission Measurement



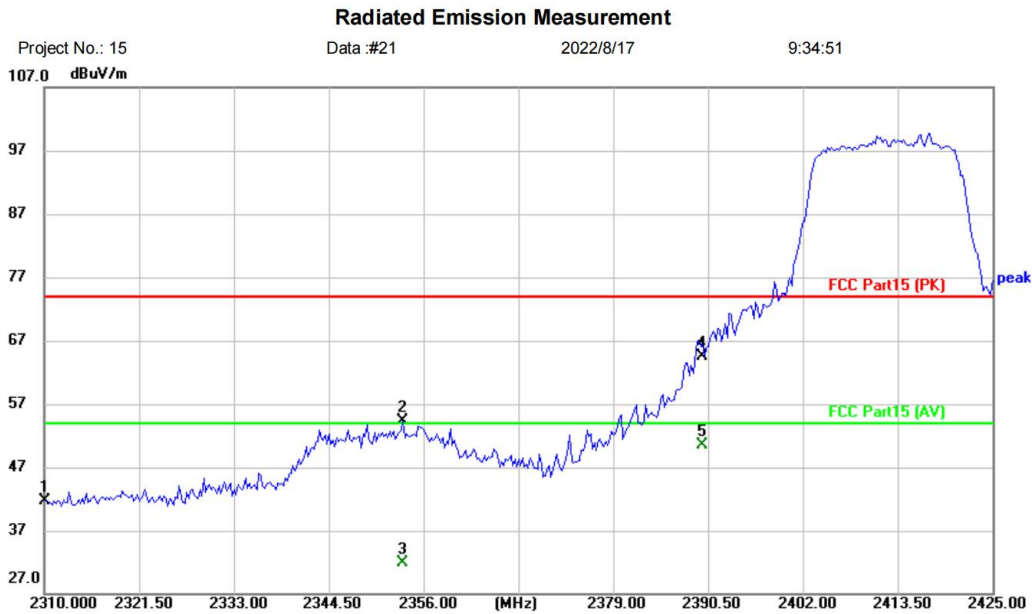
Site: Polarization: **Vertical** Temperature: (C)
 Limit: FCC Part15 (PK) Power: Humidity: %RH
 EUT: Smart Bulb
 M/N: HT-US-G9BR308.5W950-RGBCW2E-V2
 Mode: 2.4Gwifi 11N20 TX-L
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2310.000	44.66	-3.02	41.64	74.00	-32.36	peak	
2	*	2390.000	52.23	-2.50	49.73	74.00	-24.27	peak	

*:Maximum data x:Over limit !:over margin <Reference Only

Test Result: Pass

[TestMode: TX n20 low 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 11N20 TX-L
 Note:

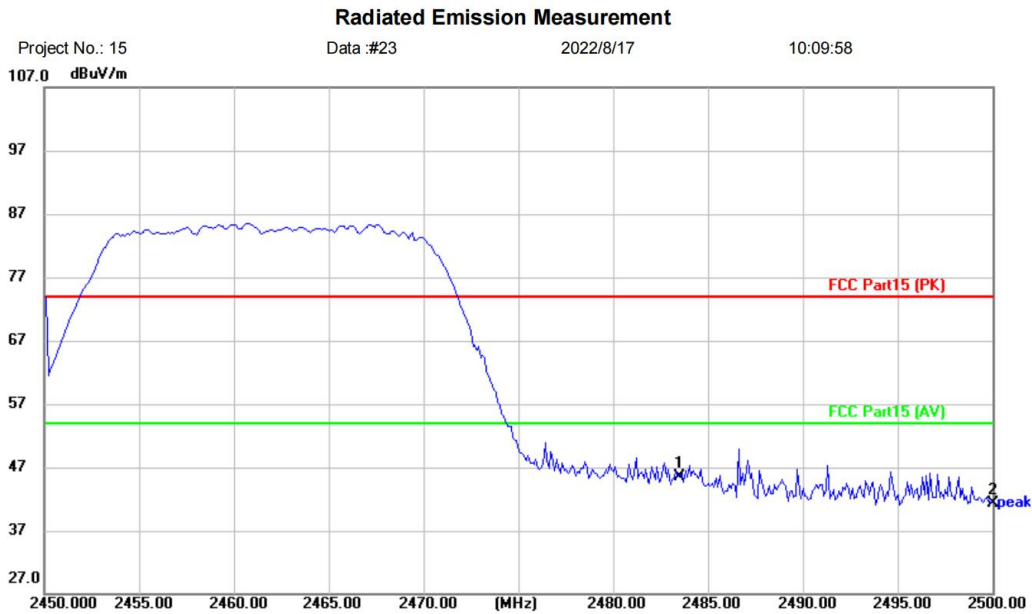
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2310.000	44.81	-3.02	41.79	74.00	-32.21	peak	
2		2353.470	57.03	-2.73	54.30	74.00	-19.70	peak	
3		2353.470	34.70	-2.73	31.97	54.00	-22.03	AVG	
4		2390.000	67.07	-2.50	64.57	74.00	-9.43	peak	
5	*	2390.000	53.06	-2.50	50.56	54.00	-3.44	AVG	

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

<Reference Only

Test Result: Pass

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



Site	Polarization: Vertical	Temperature: (C)
Limit: FCC Part15 (PK)	Power:	Humidity: %RH
EUT: Smart Bulb		
M/N: HT-US-G9BR308.5W950-RGBCW2E-V2		
Mode: 2.4Gwifi 11N20 TX-H		
Note:		

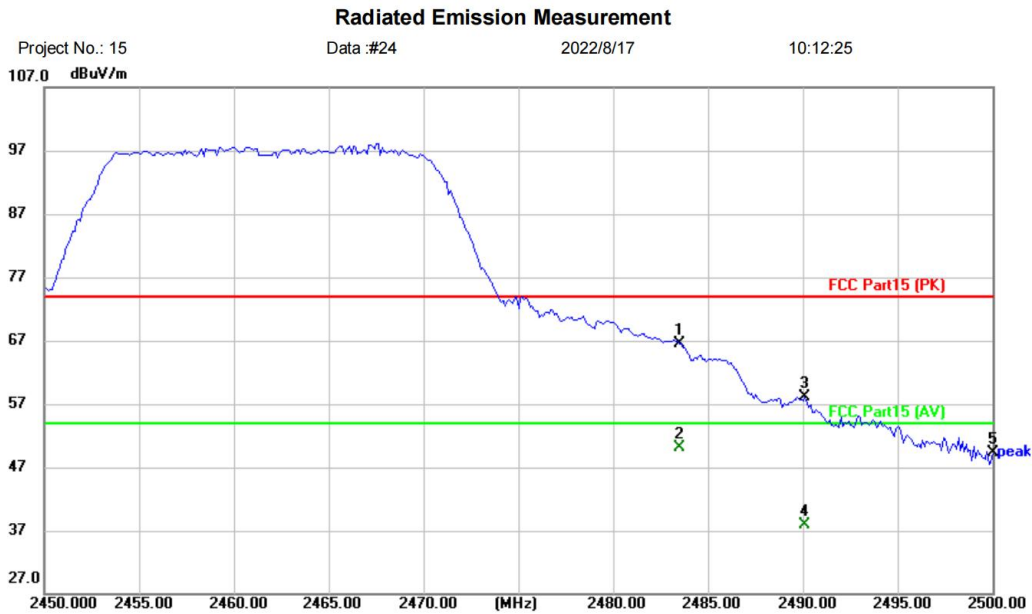
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2483.500	48.11	-2.52	45.59	74.00	-28.41	peak	
2		2500.000	43.90	-2.55	41.35	74.00	-32.65	peak	

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

<Reference Only

Test Result: Pass

[TestMode: TX n20 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 11N20 TX-H		
Note:		

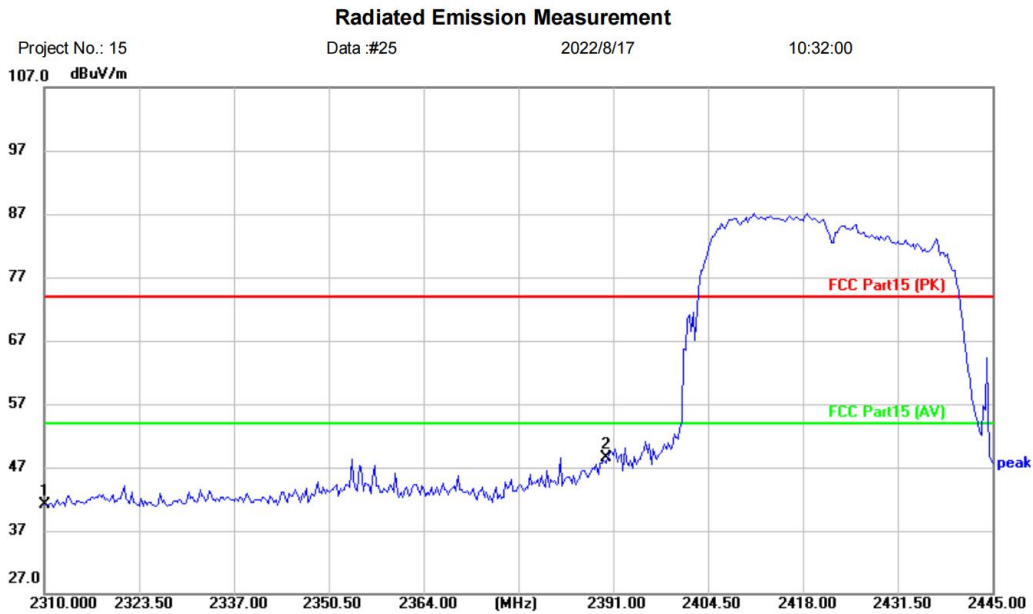
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		2483.500	68.99	-2.52	66.47	74.00	-7.53	peak	
2	*	2483.500	52.63	-2.52	50.11	54.00	-3.89	AVG	
3		2490.100	60.66	-2.53	58.13	74.00	-15.87	peak	
4		2490.100	40.38	-2.53	37.85	54.00	-16.15	AVG	
5		2500.000	51.90	-2.55	49.35	74.00	-24.65	peak	

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

<Reference Only

Test Result: Pass

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



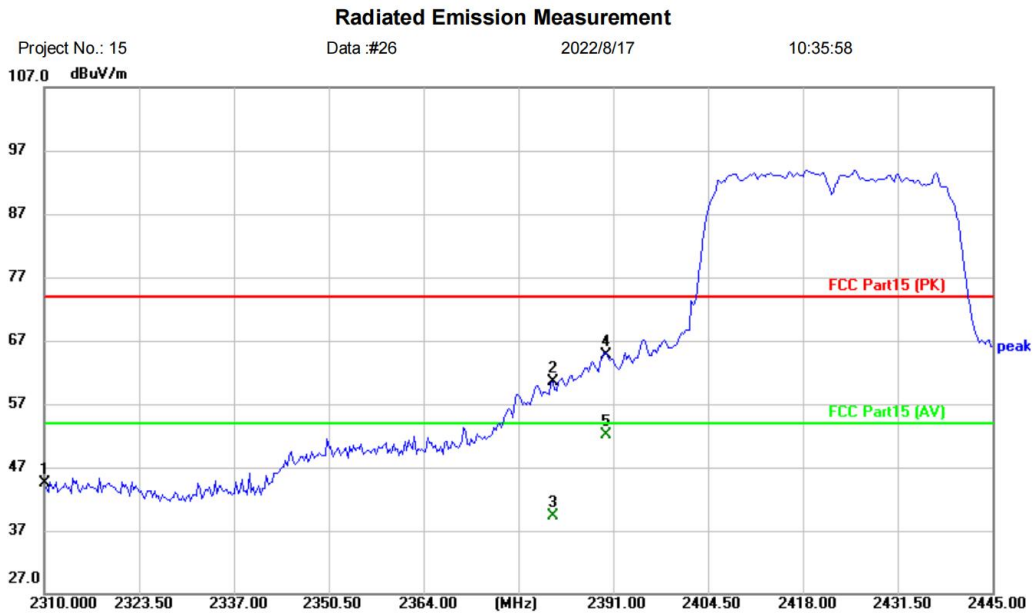
Site: Polarization: **Vertical** Temperature: (C)
 Limit: FCC Part15 (PK) Power: Humidity: %RH
 EUT: Smart Bulb
 M/N: HT-US-G9BR308.5W950-RGBCW2E-V2
 Mode: 2.4Gwifi 11N40 TX-L
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		2310.000	44.16	-3.02	41.14	74.00	-32.86	peak	
2	*	2390.000	51.02	-2.50	48.52	74.00	-25.48	peak	

*:Maximum data x:Over limit !:over margin <Reference Only

Test Result: Pass

[TestMode: TX n40 low 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 11N40 TX-L		
Note:		

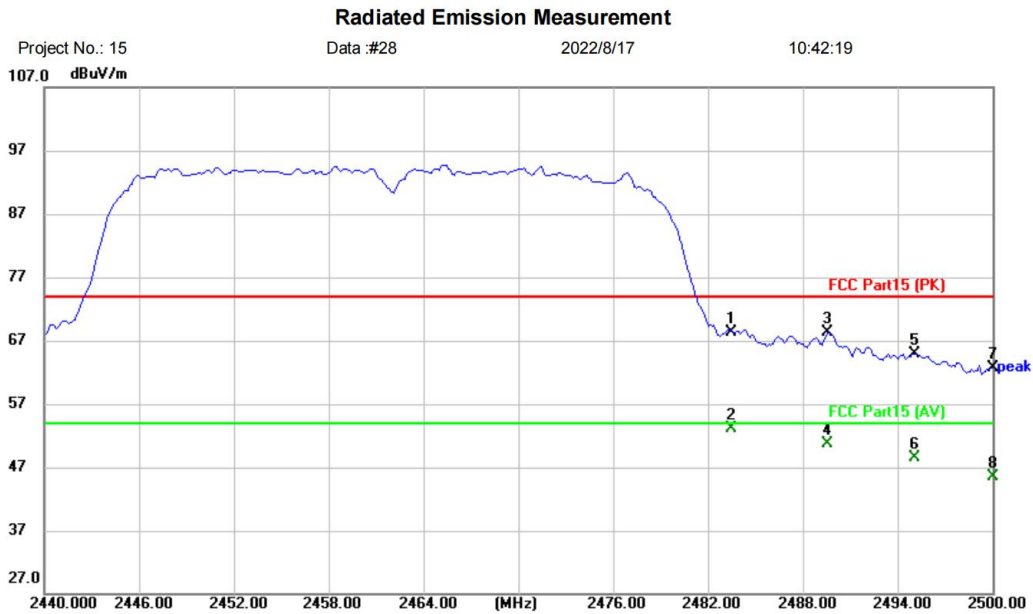
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		2310.000	47.61	-3.02	44.59	74.00	-29.41	peak	
2		2382.360	63.04	-2.54	60.50	74.00	-13.50	peak	
3		2382.360	41.80	-2.54	39.26	54.00	-14.74	AVG	
4		2390.000	67.13	-2.50	64.63	74.00	-9.37	peak	
5	*	2390.000	54.66	-2.50	52.16	54.00	-1.84	AVG	

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

<Reference Only

Test Result: Pass

[TestMode: TX n40 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 11N40 TX-H
 Note:

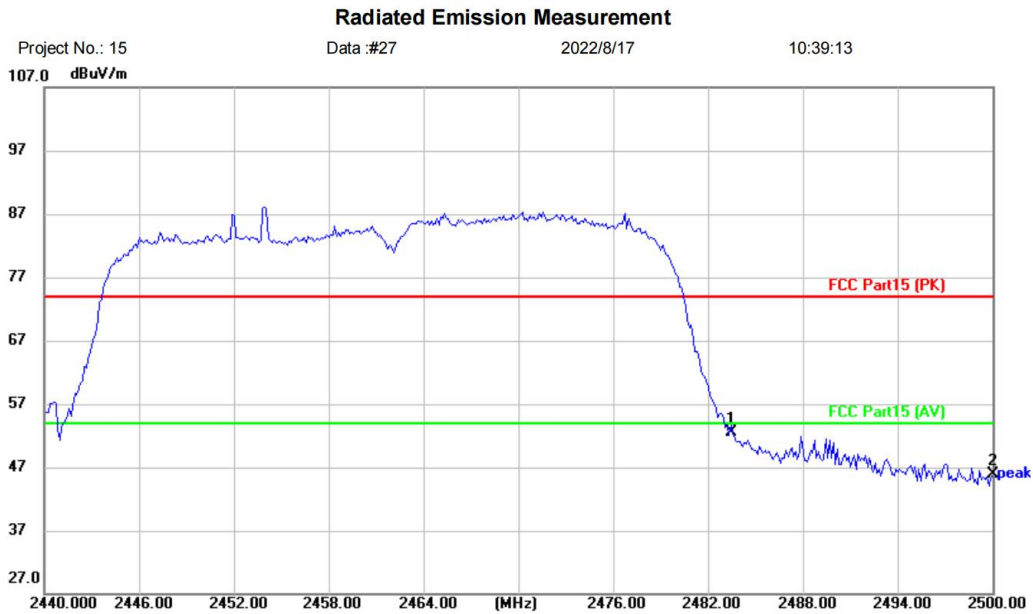
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2483.500	70.83	-2.52	68.31	74.00	-5.69	peak	
2	*	2483.500	55.70	-2.52	53.18	54.00	-0.82	AVG	
3		2489.560	70.86	-2.54	68.32	74.00	-5.68	peak	
4		2489.560	53.19	-2.54	50.65	54.00	-3.35	AVG	
5		2495.080	67.51	-2.55	64.96	74.00	-9.04	peak	
6		2495.080	51.12	-2.55	48.57	54.00	-5.43	AVG	
7		2500.000	65.19	-2.55	62.64	74.00	-11.36	peak	
8		2500.000	48.08	-2.55	45.53	54.00	-8.47	AVG	

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

<Reference Only

Test Result: Pass

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



Site: Polarization: **Vertical** Temperature: (C)
 Limit: FCC Part15 (PK) Power: Humidity: %RH
 EUT: Smart Bulb
 M/N: HT-US-G9BR308.5W950-RGBCW2E-V2
 Mode: 2.4Gwifi 11N40 TX-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	*	2483.500	54.97	-2.52	52.45	74.00	-21.55	peak	
2		2500.000	48.42	-2.55	45.87	74.00	-28.13	peak	

*:Maximum data x:Over limit !:over margin <Reference Only

Test Result: Pass

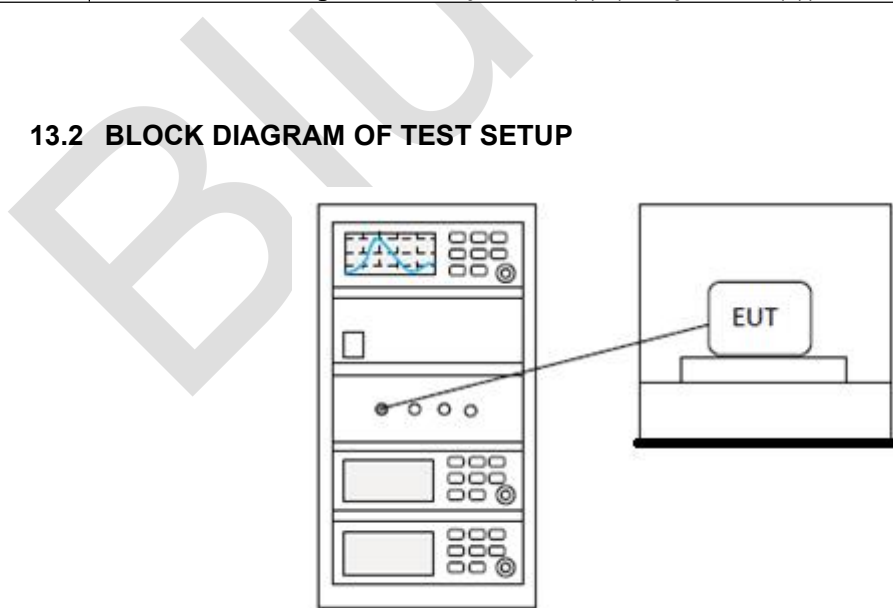
13 CONDUCTED SPURIOUS EMISSIONS

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	Jozu
Temperature	25°C
Humidity	60%

13.1 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)).
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13.2 BLOCK DIAGRAM OF TEST SETUP



13.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

BlueAsia

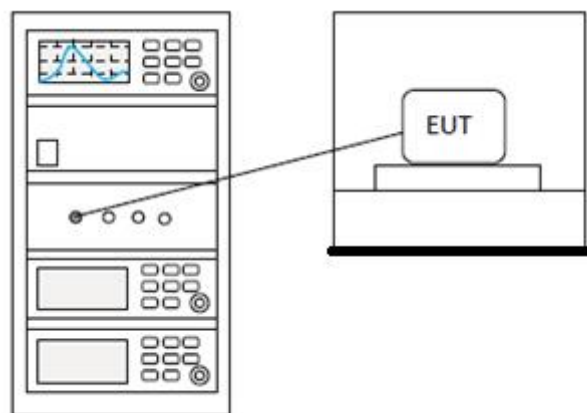
14 CONDUCTED BAND EDGES MEASUREMENT

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	Jozu
Temperature	25°C
Humidity	60%

14.1 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)).
---------------	--

14.2 BLOCK DIAGRAM OF TEST SETUP



14.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

BlueAsia

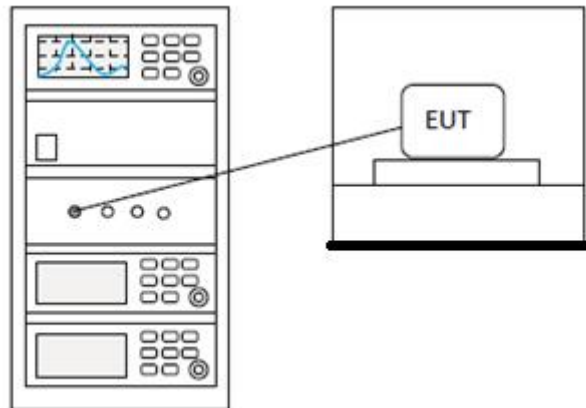
15 MINIMUM 6DB BANDWIDTH

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°C
Humidity	60%

15.1 LIMITS

Limit:	≥ 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

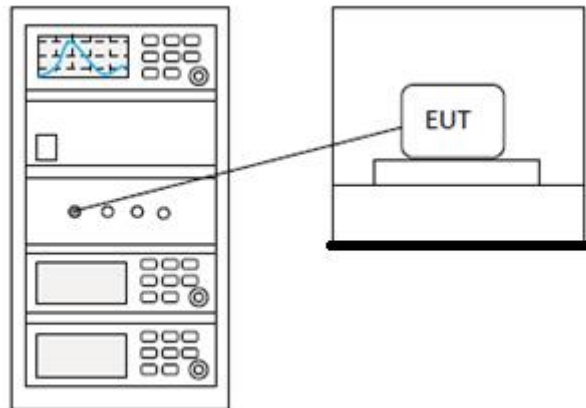
16 POWER SPECTRUM DENSITY

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

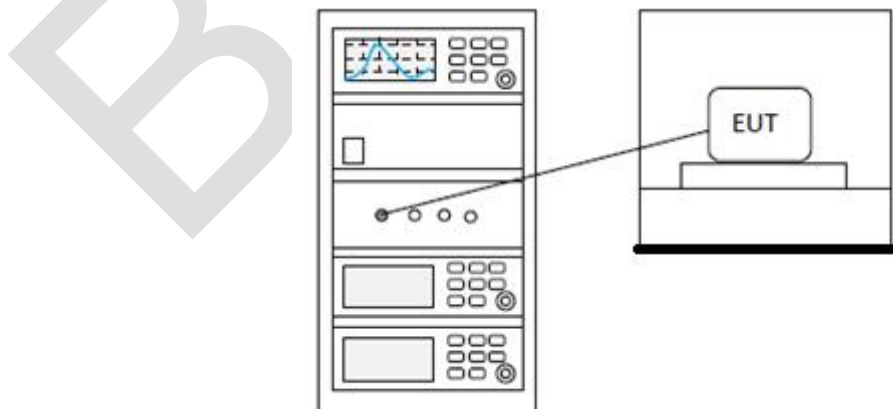
17 CONDUCTED PEAK OUTPUT POWER

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 ≥ 50 hopping channels
	0.25 for $25 \leq$ hopping channels < 50
	1 for digital modulation
2400-2483.5	1 for ≥ 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

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

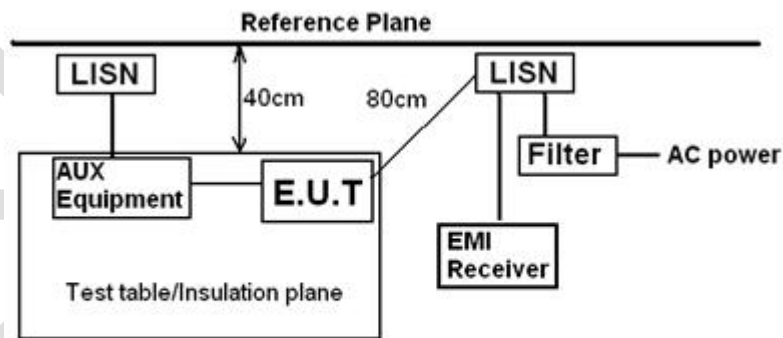
Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 6.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25°C
Humidity	60%

18.1 LIMITS

Frequency of emission(MHz)	Conducted limit(dB μ V)	
	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



Remark:
 E.U.T: Equipment Under Test
 LISN: Line Impedance Stabilization Network
 Test table height=0.8m

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.

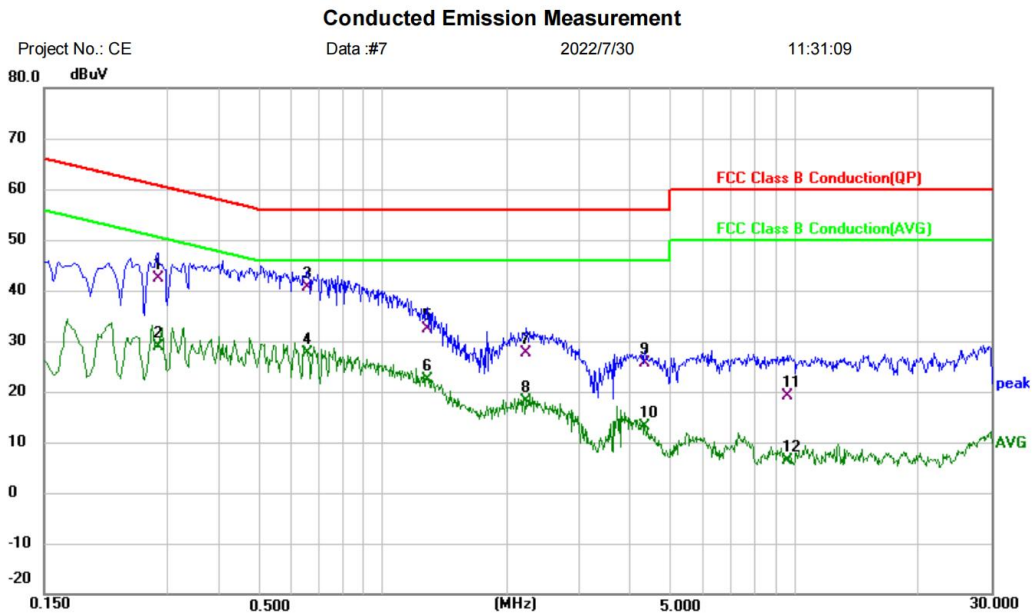
5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

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

BlueAsia

18.4 TEST DATA

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



Site: Phase: **N** 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.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.2819	32.61	9.77	42.38	60.76	-18.38	QP	
2	0.2819	19.19	9.77	28.96	50.76	-21.80	AVG	
3 *	0.6540	30.86	9.82	40.68	56.00	-15.32	QP	
4	0.6540	17.80	9.82	27.62	46.00	-18.38	AVG	
5	1.2860	22.41	9.85	32.26	56.00	-23.74	QP	
6	1.2860	12.63	9.85	22.48	46.00	-23.52	AVG	
7	2.2300	17.82	9.87	27.69	56.00	-28.31	QP	
8	2.2300	8.35	9.87	18.22	46.00	-27.78	AVG	
9	4.3180	15.75	9.92	25.67	56.00	-30.33	QP	
10	4.3180	3.13	9.92	13.05	46.00	-32.95	AVG	
11	9.6140	9.10	10.14	19.24	60.00	-40.76	QP	
12	9.6140	-3.69	10.14	6.45	50.00	-43.55	AVG	

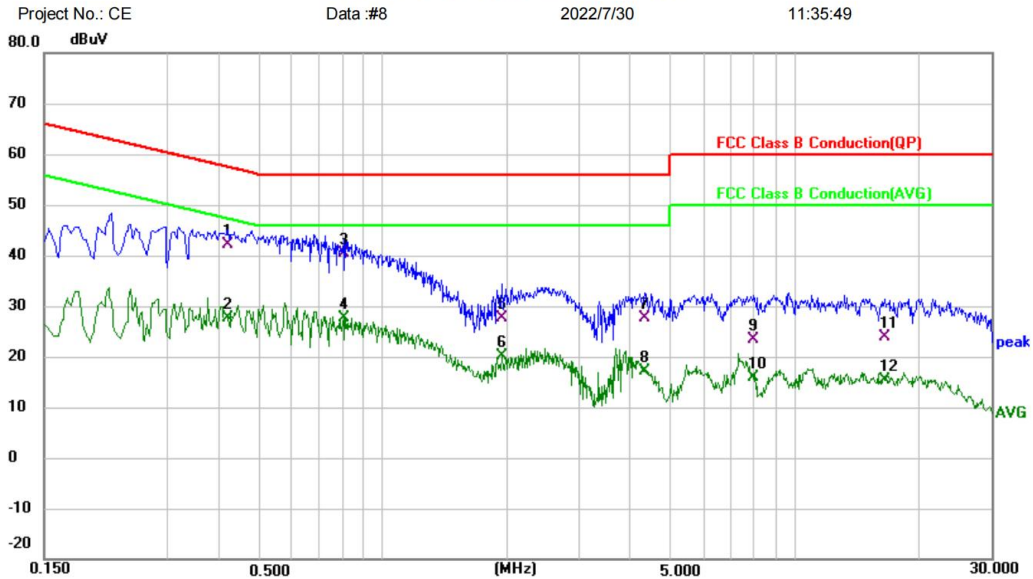
*:Maximum data x:Over limit !:over margin

⟨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

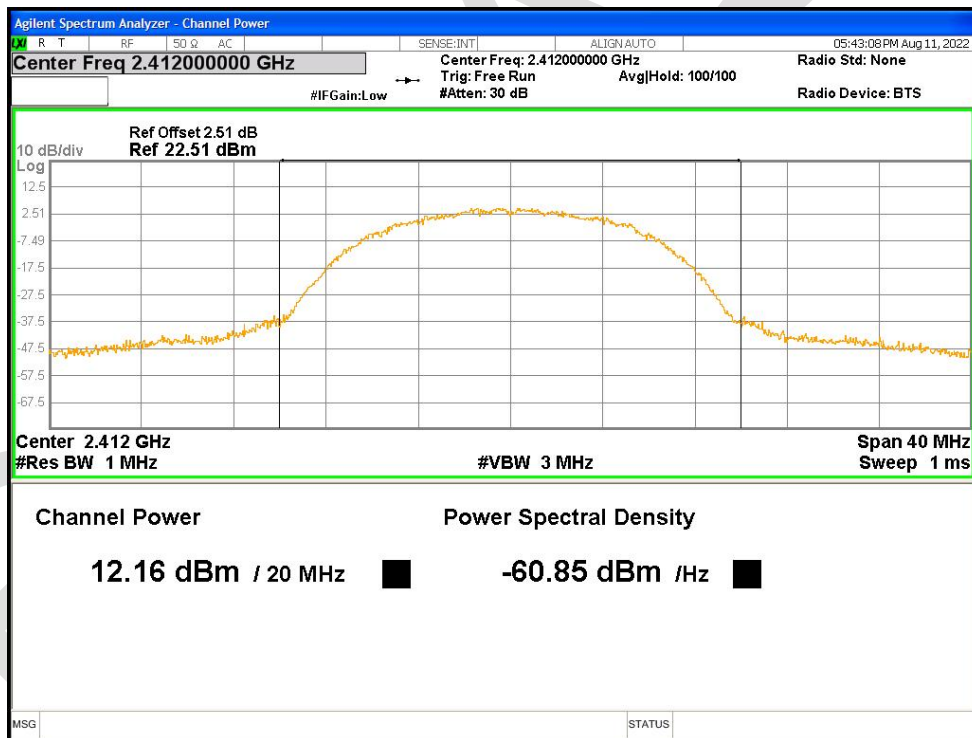
Test Result: Pass

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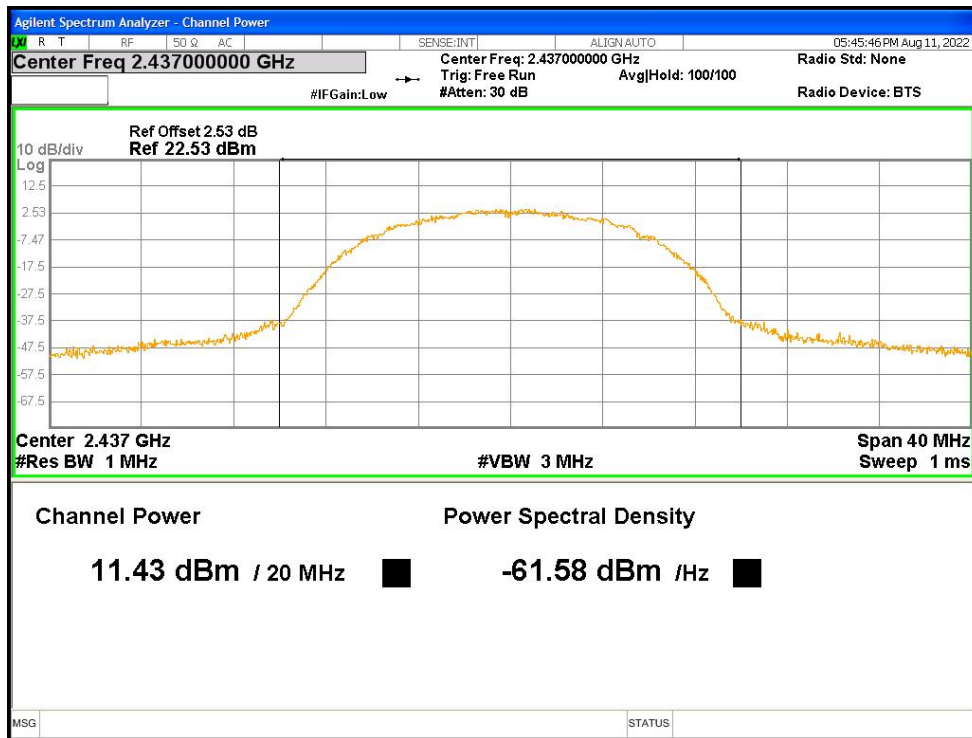
Maximum Conducted Output Power

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

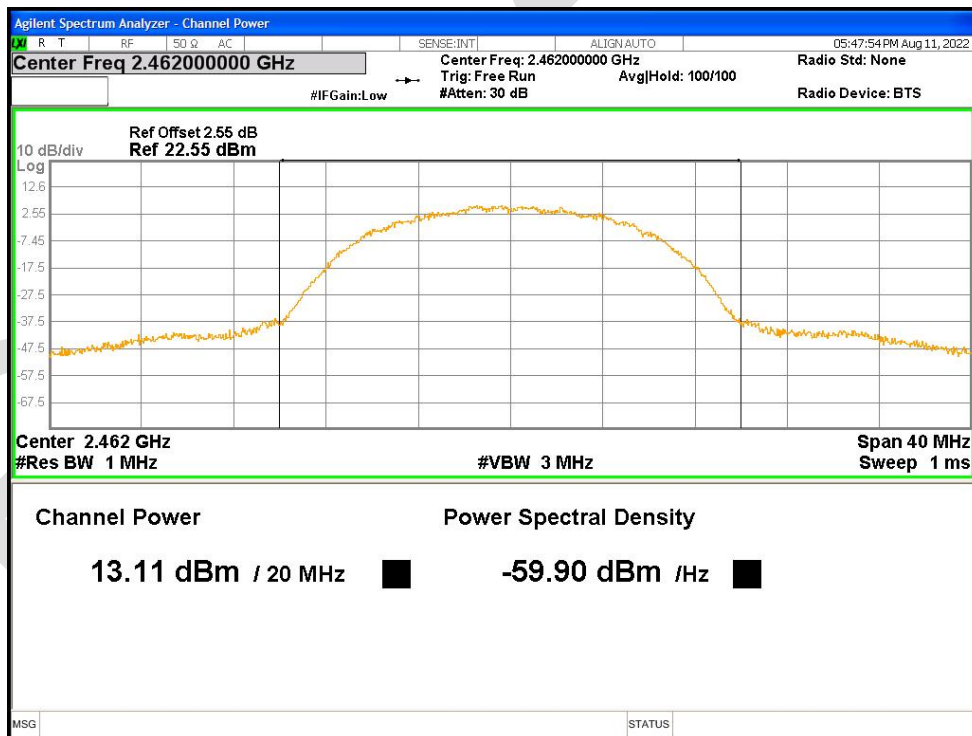
Power NVNT b 2412MHz Ant1



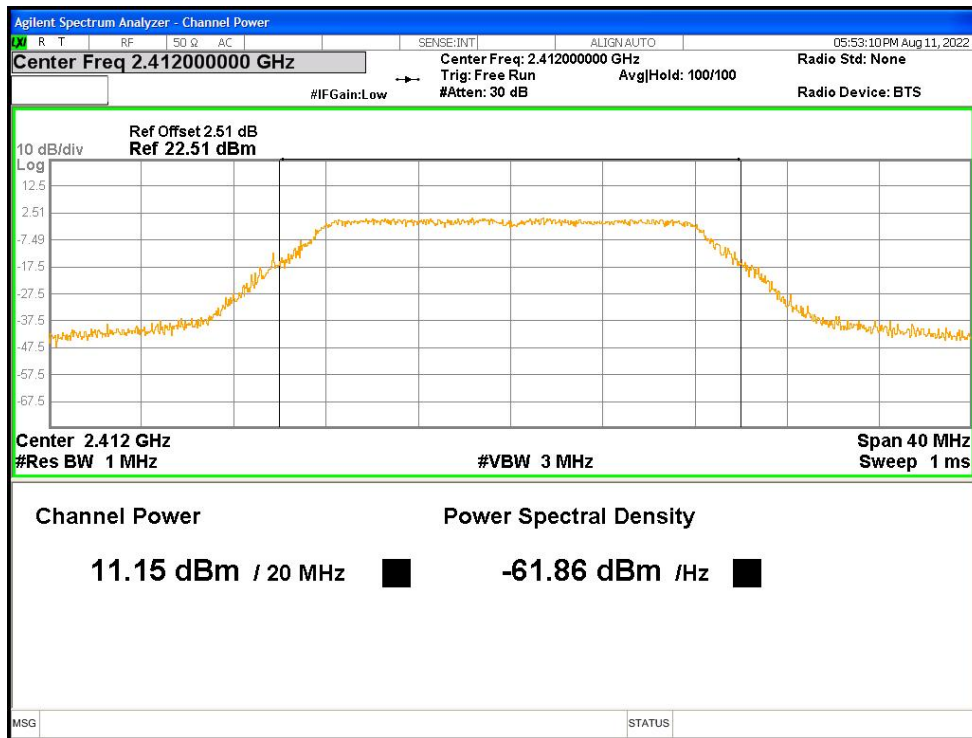
Power NVNT b 2437MHz Ant1



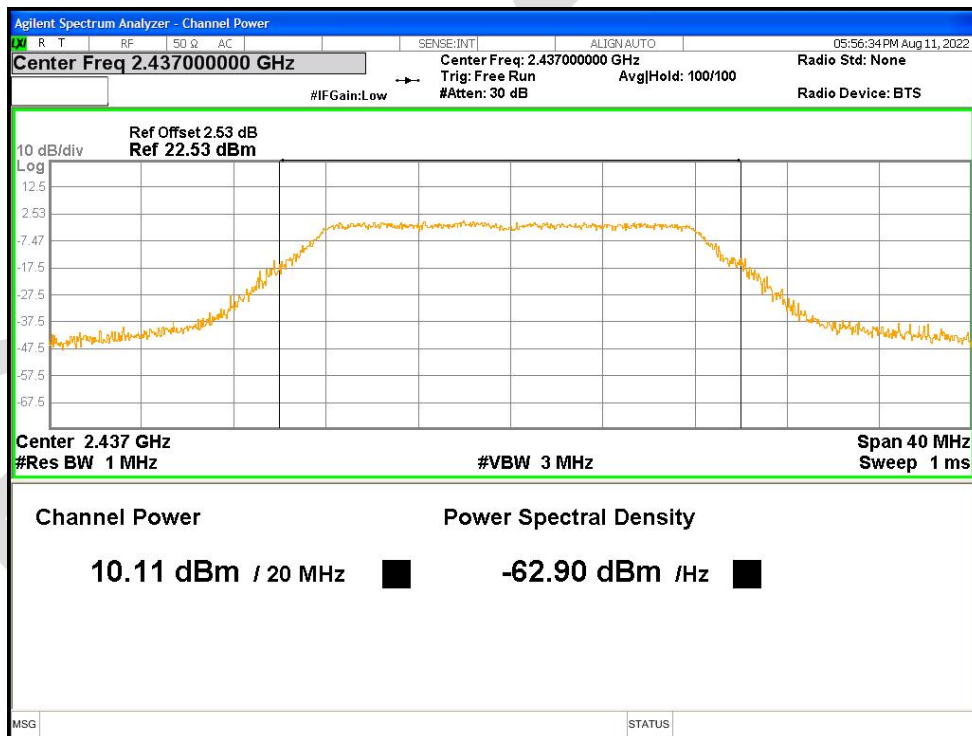
Power NVNT b 2462MHz Ant1



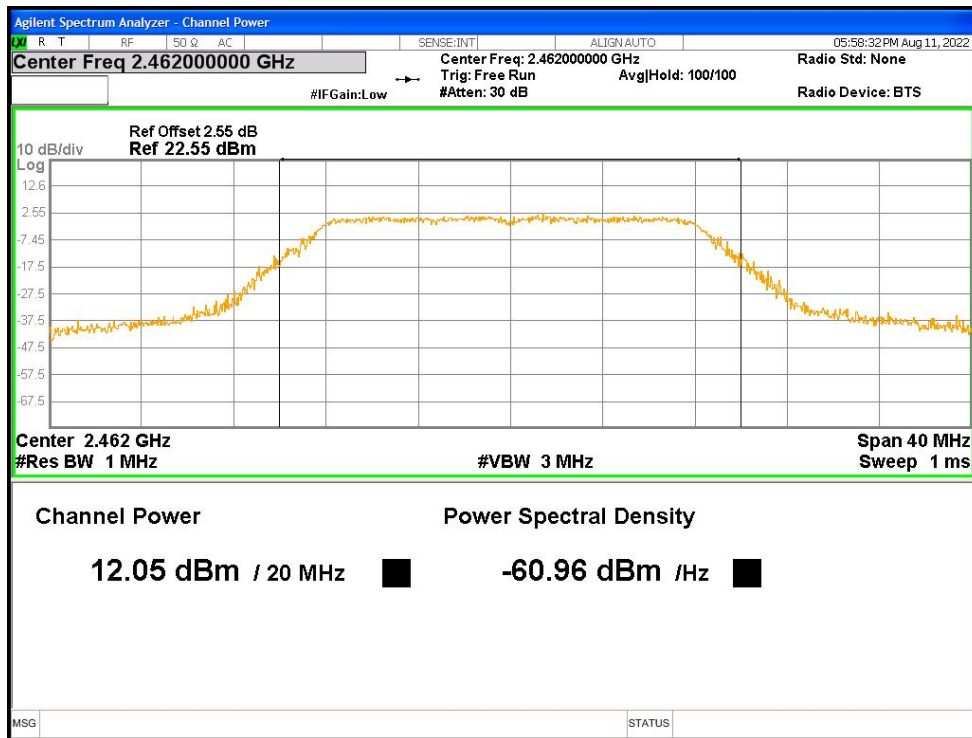
Power NVNT g 2412MHz Ant1



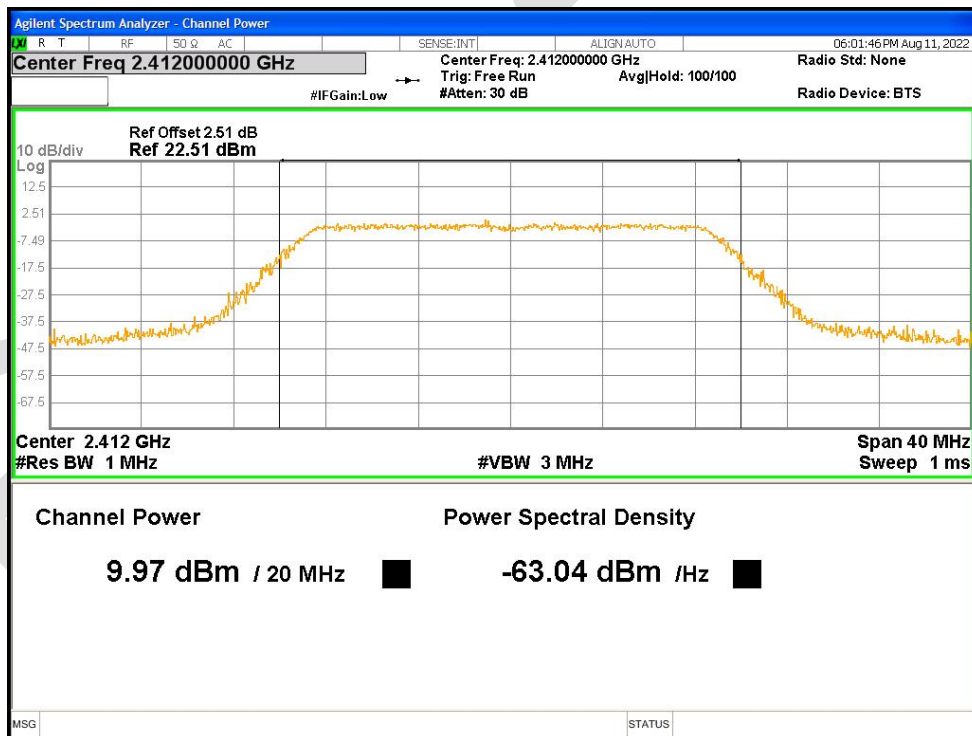
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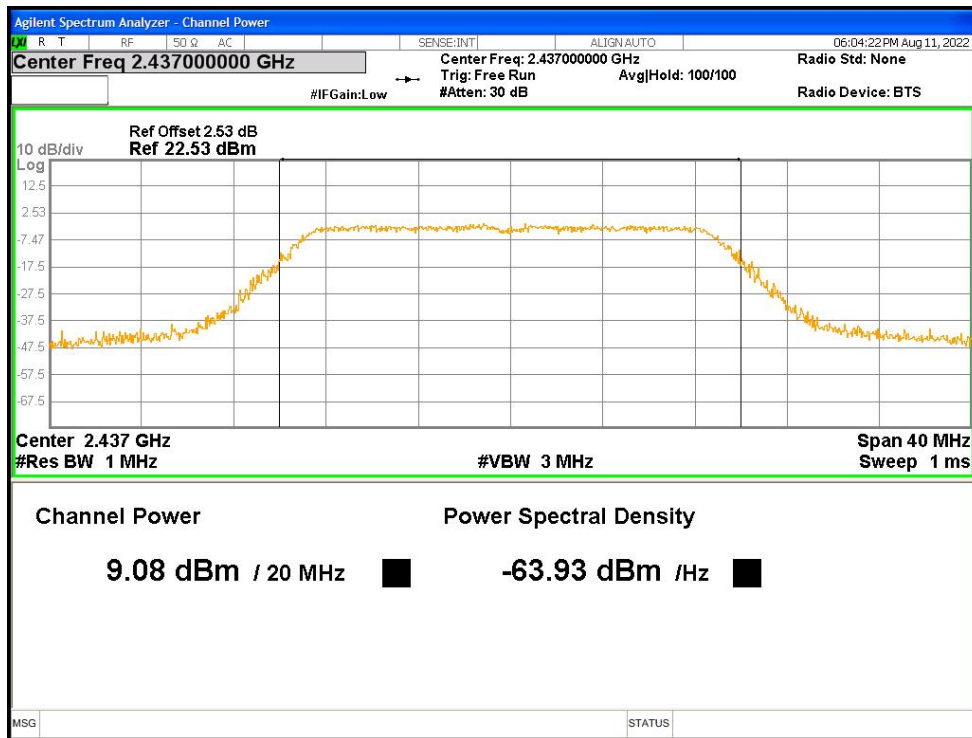
Power NVNT g 2462MHz Ant1



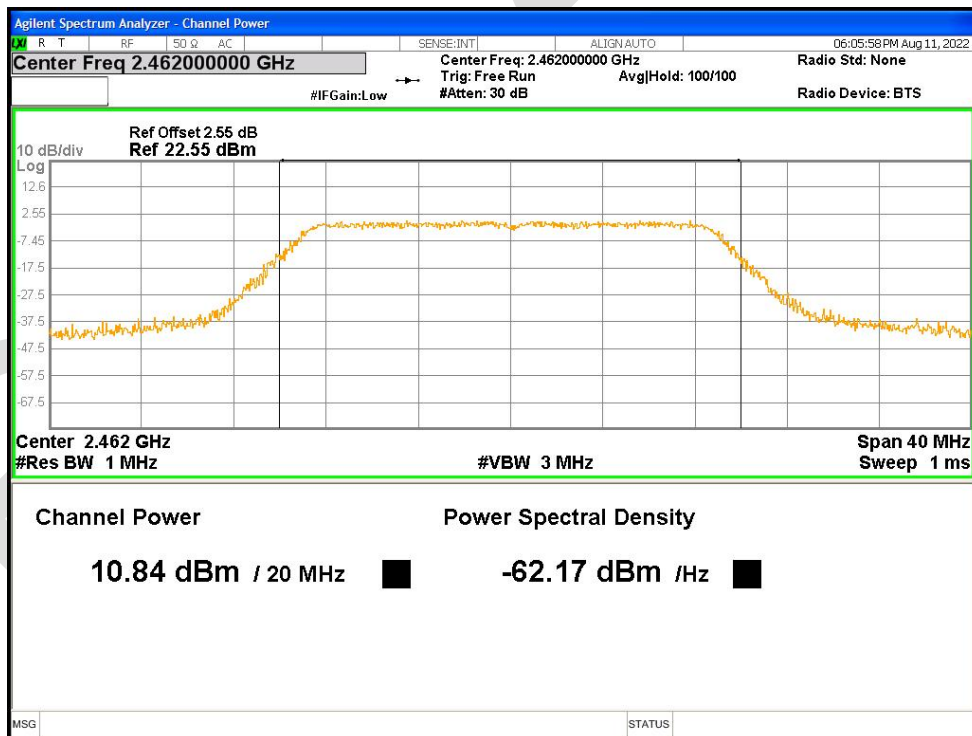
Power NVNT n20 2412MHz Ant1



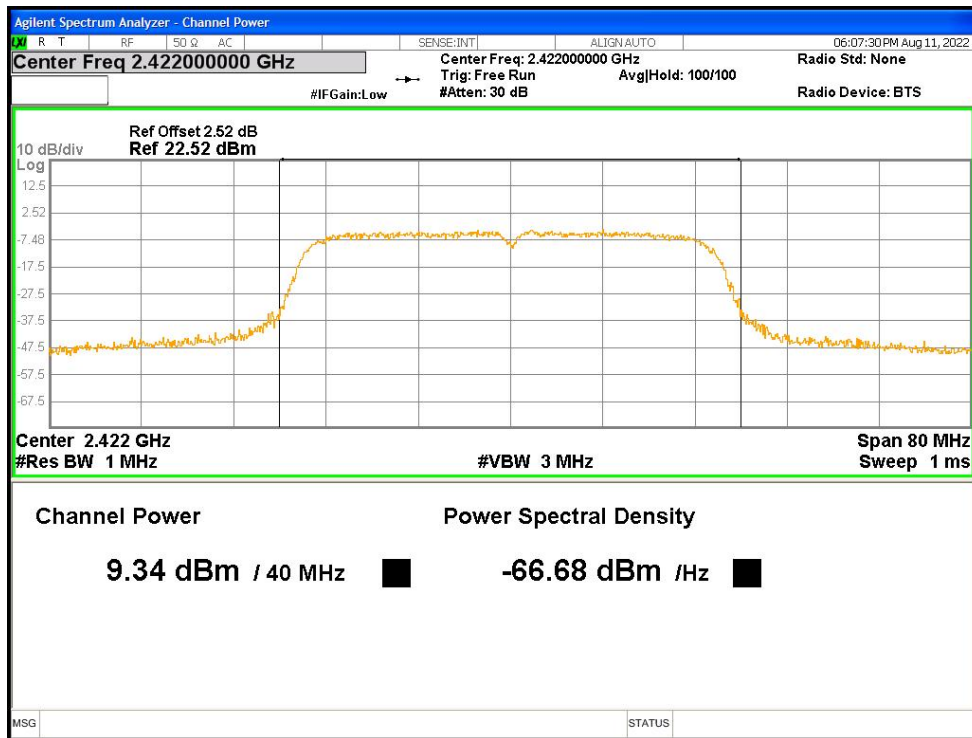
Power NVNT n20 2437MHz Ant1



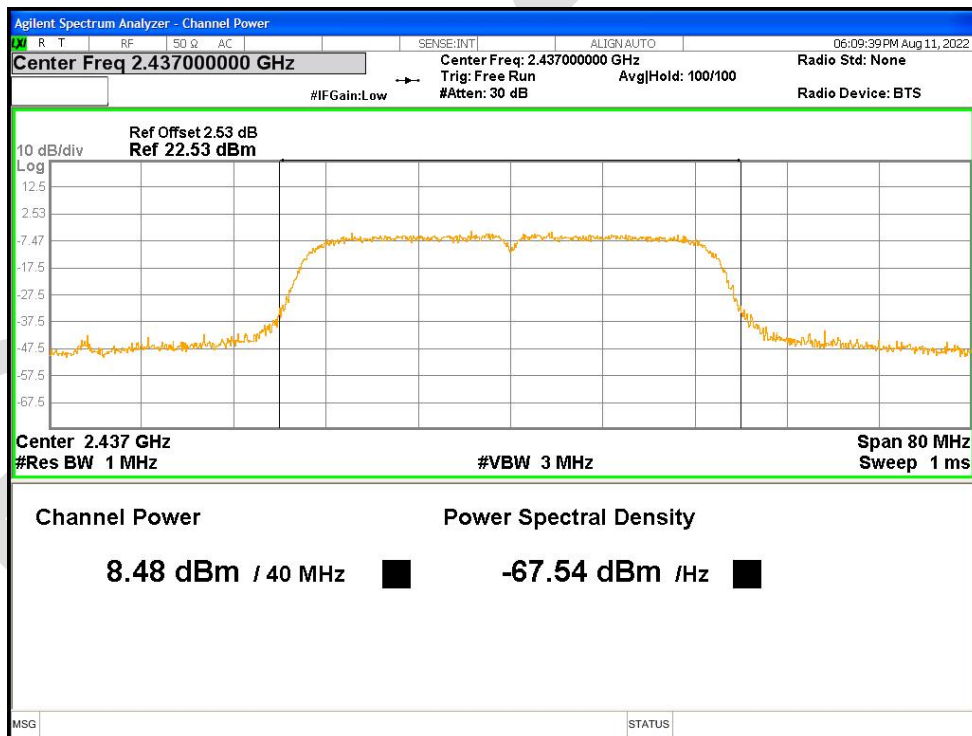
Power NVNT n20 2462MHz Ant1



Power NVNT n40 2422MHz Ant1



Power NVNT n40 2437MHz Ant1



Power NVNT n40 2452MHz Ant1