



Certificate #4312.01

# RF EXPOSURE EVALUATION REPORT

**Product Name:** Dual-band Wi-Fi 6 Router  
**Trade Mark:** GRANDSTREAM  
**Model No. / HVIN:** GWN7062  
**Report Number:** 210928005RFC-4  
**Test Standards:** FCC 47 CFR Part 1 Subpart I  
 RSS-102 Issue 5  
**FCC ID:** YZZGWN7062  
**IC:** 11964A-GWN7062  
**Test Result:** PASS  
**Date of Issue:** January 27, 2022

Prepared for:

**Grandstream Networks, Inc.**  
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Prepared by:

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**Version**

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## 1. GENERAL INFORMATION

### 1.1 CLIENT INFORMATION

<b>Applicant:</b>	Grandstream Networks, Inc.
<b>Address of Applicant:</b>	126 Brookline Ave., 3rd Floor Boston, MA 02215, USA
<b>Manufacturer:</b>	Grandstream Networks, Inc.
<b>Address of Manufacturer:</b>	126 Brookline Ave., 3rd Floor Boston, MA 02215, USA

### 1.2 EUT INFORMATION

<b>Product Name:</b>	Dual-band Wi-Fi 6 Router		
<b>Model No. / HVIN:</b>	GWN7062		
<b>Trade Mark:</b>	GRANDSTREAM		
<b>DUT Stage:</b>	Identical Prototype		
<b>EUT Supports Function:</b> (Provided by the customer)	2.4 GHz ISM Band:	IEEE 802.11b/g/n/ax	
	5 GHz U-NII Bands:	5 150 MHz to 5 250 MHz	IEEE 802.11a/n/ac/ax
		5 250 MHz to 5 350 MHz	IEEE 802.11a/n/ac/ax
		5 470 MHz to 5 725 MHz	IEEE 802.11a/n/ac/ax
		5 725 MHz to 5 850 MHz	IEEE 802.11a/n/ac/ax
<b>Sample Received Date:</b>	September 29, 2021		

### 1.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

For 2.4 GHz ISM Band of Wi-Fi	
<b>Frequency Band:</b>	2400 MHz to 2483.5 MHz
<b>Frequency Range:</b>	2412 MHz to 2462 MHz
<b>Support Standards:</b>	IEEE 802.11b, IEEE 802.11g, IEEE 802.11n-HT20, IEEE 802.11n-HT40, IEEE 802.11ax-HE20, IEEE 802.11ax-HE40
<b>Type of Modulation:</b>	IEEE 802.11b: DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM(64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11n-HT20: OFDM(64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11n-HT40: OFDM(64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11ax-HE20: OFDM(1024-QAM,256-QAM 64-QAM, 16-QAM, QPSK, BPSK) IEEE 802.11ax-HE40: OFDM(1024-QAM,256-QAM 64-QAM, 16-QAM, QPSK, BPSK)
<b>Data Rate:</b>	IEEE 802.11b: Up to 11 Mbps IEEE 802.11g: Up to 54 Mbps IEEE 802.11n-HT20: Up to MCS15 IEEE 802.11n-HT40: Up to MCS15 IEEE 802.11ax-HE20: Up to MCS15 IEEE 802.11ax-HE40: Up to MCS15
<b>Number of Channels:</b>	IEEE 802.11b: 11 IEEE 802.11g: 11 IEEE 802.11n-HT20: 11 IEEE 802.11n-HT40: 7 IEEE 802.11ax-HE20: 11 IEEE 802.11ax-HE40: 7
<b>Channel Separation:</b>	5 MHz
<b>Antenna Type:</b>	Chain 0 Dipole Antenna Chain 1 Dipole Antenna
<b>Antenna Gain:</b> (Provided by the customer)	Chain 0 4.0dBi Chain 1 4.5dBi
<b>Maximum Avg Power:</b>	SISO_ Chain 0 IEEE 802.11b: 23.98 dBm IEEE 802.11g: 25.52 dBm IEEE 802.11n-HT20: 22.73 dBm IEEE 802.11n-HT40: 23.53 dBm IEEE 802.11ax-HE20: 22.70 dBm IEEE 802.11ax-HE40: 23.10 dBm
	SISO_ Chain 1 IEEE 802.11b: 22.54 dBm IEEE 802.11g: 23.83 dBm IEEE 802.11n-HT20: 23.45 dBm IEEE 802.11n-HT40: 24.13 dBm IEEE 802.11ax-HE20: 23.35 dBm IEEE 802.11ax-HE40: 23.79 dBm
	MIMO_ Chain 0+1 IEEE 802.11n-HT20: 26.12 dBm IEEE 802.11n-HT40: 26.85 dBm IEEE 802.11ax-HE20: 26.05 dBm IEEE 802.11ax-HE40: 26.47 dBm

For 5 GHz U-NII Bands of Wi-Fi		
<b>Frequency Bands:</b>	5150 MHz to 5250 MHz (U-NII-1)	
	5250 MHz to 5350 MHz (U-NII-2A)	
	5470 MHz to 5725 MHz (U-NII-2C)	
	5 725 MHz to 5 850 MHz (U-NII-3)	
<b>Frequency Ranges:</b>	5180 MHz to 5240 MHz	
	5260 MHz to 5320 MHz	
	5500 MHz to 5700 MHz	
	5 745 MHz to 5 825 MHz	
<b>Support Standards:</b>	IEEE 802.11a/n/ac/ax	
<b>TPC Function:</b>	Not Support	
<b>DFS Operational mode:</b>	Master	
<b>Type of Modulation:</b>	IEEE 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK)	
	IEEE 802.11n: OFDM(64QAM, 16QAM, QPSK, BPSK)	
	IEEE 802.11ac: OFDM(256QAM, 64QAM, 16QAM, QPSK, BPSK)	
	IEEE 802.11ac/ax: OFDM(1024-QAM,256QAM, 64QAM, 16QAM, QPSK, BPSK)	
<b>Channel Spacing:</b>	IEEE 802.11a/n-HT20/ac-VHT20/ax-HE20: 20 MHz	
	IEEE 802.11n-HT40/ac-VHT40/ax-HE40: 40 MHz	
	IEEE 802.11ac-VHT80/ax-HE80: 80 MHz	
<b>Data Rate:</b>	IEEE 802.11a: Up to 54 Mbps	
	IEEE 802.11n-HT20: Up to MCS15	
	IEEE 802.11n-HT40: Up to MCS15	
	IEEE 802.11ac-VHT20: Up to MCS8	
	IEEE 802.11ac-VHT40: Up to MCS9	
	IEEE 802.11ac-VHT80: Up to MCS9	
	IEEE 802.11ax-HE20: Up to MCS8	
	IEEE 802.11ax-HE40: Up to MCS11	
IEEE 802.11ax HE80: Up to MCS11		
<b>Number of Channels:</b>	5150 MHz to 5250 MHz: 4 for IEEE 802.11a/n-HT20/ac-VHT20/ax-HE20 2 for IEEE 802.11n-HT40/ac-VHT40/ax-HE40 1 for IEEE 802.11acVHT80/ax-HE80	
	5250 MHz to 5350 MHz: 4 for IEEE 802.11a/n-HT20/ac-VHT20/ax-HE20 2 for IEEE 802.11n-HT40/ac-VHT40/ax-HE40 1 for IEEE 802.11acVHT80/ax-HE80	
	5470 MHz to 5725 MHz: 11 for IEEE 802.11a/n-HT20/ac-VHT20//ax-HE20 5 for IEEE 802.11n-HT40/ac-VHT40//ax-HE40 2 for IEEE 802.11ac-VHT80/ax-HE80	
	5725 MHz to 5850 MHz: 5 for IEEE 802.11a/n-HT20/ac-VHT20/ax-HE20 2 for IEEE 802.11n-HT40/ac-VHT40//ax-HE40 1 for IEEE 802.11ac-VHT80//ax-HE80	
<b>Antenna Type:</b>	Chain 0	Dipole Antenna
	Chain 1	Dipole Antenna
<b>Antenna Gain:</b> (Provided by the customer)	Chain 0	5150 MHz to 5250 MHz: 5.0dBi
		5250 MHz to 5350 MHz: 5.0dBi

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	Chain 1	5470 MHz to 5725 MHz: 5.0dBi			
		5725 MHz to 5850 MHz: 5.0dBi			
		5150 MHz to 5250 MHz: 4.5dBi			
		5250 MHz to 5350 MHz: 4.5dBi			
		5470 MHz to 5725 MHz: 4.5dBi			
		5725 MHz to 5850 MHz: 4.5dBi			
<b>Maximum conducted output power (dBm):</b>	<b>SISO_Chain 0</b>	<b>U-NII-1</b>	<b>U-NII-2A</b>	<b>U-NII-2C</b>	<b>U-NII-3</b>
	IEEE 802.11a:	22.72	22.03	21.12	21.47
	<b>SISO_Chain 1</b>	<b>U-NII-1</b>	<b>U-NII-2A</b>	<b>U-NII-2C</b>	<b>U-NII-3</b>
	IEEE 802.11a:	22.40	21.93	21.57	21.42
	<b>MIMO_Chain 0+1</b>	<b>U-NII-1</b>	<b>U-NII-2A</b>	<b>U-NII-2C</b>	<b>U-NII-3</b>
	IEEE 802.11n-HT20:	24.59	20.07	19.70	23.15
	IEEE 802.11n-HT40:	26.62	21.38	21.97	23.88
	IEEE 802.11ac-VHT20:	24.67	20.38	19.65	22.71
	IEEE 802.11ac-VHT40:	26.63	21.35	22.03	23.82
	IEEE 802.11ac-VHT80:	15.07	14.11	17.03	24.00
	IEEE 802.11ax-HE20:	24.54	19.75	19.45	22.58
	IEEE 802.11ax-HE40:	25.73	20.88	21.54	23.35
	IEEE 802.11ax-HE80:	14.89	13.98	16.87	23.84

### 1.4 OTHER INFORMATION

Test channels for 2.4 GHz ISM Band of Wi-Fi				
Mode	Tx/Rx Frequency	Test RF Channel Lists		
		Lowest(L)	Middle(M)	Highest(H)
IEEE 802.11b	2412 MHz to 2462 MHz	Channel 1	Channel 6	Channel 11
		2412 MHz	2437 MHz	2462 MHz
IEEE 802.11g	2412 MHz to 2462 MHz	Channel 1	Channel 6	Channel 11
		2412 MHz	2437 MHz	2462 MHz
IEEE 802.11n-HT20 IEEE 802.11ax-HE20	2412 MHz to 2462 MHz	Channel 1	Channel 6	Channel 11
		2412 MHz	2437 MHz	2462 MHz
IEEE 802.11n-HT40 IEEE 802.11ax-HE40	2422 MHz to 2452 MHz	Channel 3	Channel 6	Channel 9
		2422 MHz	2437 MHz	2452 MHz



Test channels for 5 GHz U-NII Bands of Wi-Fi				
Mode	Tx/Rx Frequency	Test RF Channel Lists		
		Lowest(L)	Middle(M)	Highest(H)
IEEE 802.11a IEEE 802.11n-HT20 IEEE 802.11ac-VHT20 IEEE 802.11ax-HE20	5150 MHz to 5250 MHz	Channel 36	Channel 44	Channel 48
		5180 MHz	5220 MHz	5240 MHz
	5250 MHz to 5350 MHz	Channel 52	Channel 60	Channel 64
		5260 MHz	5300 MHz	5320 MHz
	5470 MHz to 5725 MHz	Channel 100	Channel 116	Channel 140
		5500 MHz	5580 MHz	5700 MHz
	5725 MHz to 5850 MHz	Channel 149	Channel 157	Channel 165
		5745 MHz	5785 MHz	5825 MHz
IEEE 802.11n-HT40 IEEE 802.11ac-VHT40 IEEE 802.11ax-HE40	5150 MHz to 5250 MHz	Channel 38	--	Channel 46
		5190 MHz	--	5230 MHz
	5250 MHz to 5350 MHz	Channel 54	--	Channel 62
		5270 MHz	--	5310 MHz
	5470 MHz to 5725 MHz	Channel 102	Channel 110	Channel 134
		5510 MHz	5550 MHz	5670 MHz
	5725 MHz to 5850 MHz	Channel 151	--	Channel 159
		5755 MHz	--	5795 MHz
IEEE 802.11ac-VHT80 IEEE 802.11ax-HE80	5150 MHz to 5250 MHz	--	Channel 42	--
		--	5210 MHz	--
	5250 MHz to 5350 MHz	--	Channel 58	--
		--	5290 MHz	--
	5470 MHz to 5725 MHz	Channel 106	--	--
		5530 MHz	--	--
	5725 MHz to 5850 MHz	--	Channel 155	--
		--	5775 MHz	--

## 1.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product, according to the specifications of the manufacturers. It must comply with the requirements of the following standards:

**FCC 47 CFR Part 1 Subpart I**  
**RSS-102 Issue 5**

All test items have been performed and recorded as per the above standards

## 1.6 DEVIATION FROM STANDARDS

None.

## 1.7 ABNORMALITIES FROM STANDARD CONDITIONS

None.

## 1.8 OTHER INFORMATION REQUESTED BY THE CUSTOMER

None.

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## 2. EQUIPMENT LIST

Please refer to the RF test report.



### 3. MPE EVALUATION

#### 3.1 REFERENCE DOCUMENTS FOR EVALUATION

No.	Identity	Document Title
1	FCC 47 CFR Part 1 Subpart I	PROCEDURES IMPLEMENTING THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969
2	RSS-102 Issue 5	Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)
3	KDB 447498 D01 General RF Exposure Guidance v06	RF EXPOSURE PROCEDURES AND EQUIPMENT AUTHORIZATION POLICIES FOR MOBILE AND PORTABLE DEVICES

#### 3.2 MPE COMPLIANCE REQUIREMENT

##### 3.2.1 Limits

##### 3.2.1.1 FCC 47 CFR Part 1 Subpart I

According to §1.1307(b)(1), system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

##### Limits for Occupational / Controlled Exposure

Frequency range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Times   E   <sup>2</sup> ,   H   <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	F/300	6
1500-100000	/	/	5	6

##### Limits for General Population / Uncontrolled Exposure

Frequency range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Times   E   <sup>2</sup> ,   H   <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	F/1500	30
1500-100000	/	/	1	30

**Note:** f = frequency in MHz: \* = Plane-wave equivalent power density.

### 3.2.1.2 RSS-102 Issue 5

According to RSS-102 Issue 5, system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

According to RSS-102 Issue 5, system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows:

- below 20 MHz<sup>6</sup> and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 1 W (adjusted for tune-up tolerance);
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than  $4.49/f^{0.5}$  W (adjusted for tune-up tolerance), where  $f$  is in MHz;
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance);
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than  $1.31 \times 10^{-2} f^{0.6834}$  W (adjusted for tune-up tolerance), where  $f$  is in MHz;
- at or above 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 5 W (adjusted for tune-up tolerance).

In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the e.i.r.p. was derived.

### 3.2.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

## 3.3 MPE CALCULATION METHOD

### FCC 47 CFR Part 1 Subpart I

$$S = PG/4\pi R^2 = EIRP/4\pi R^2$$

S = power density (in appropriate units, e.g., mw/cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mw)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor is normally numeric gain.

R = distance to the center of radiation of the antenna (in appropriate units, e.g., cm)

## 3.4 MPE CALCULATION RESULTS

**Note:** For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

### 3.4.1 For WLAN

For Wi-Fi function, operating at 2412MHz to 2462 MHz for IEEE802.11b/g/n/ax and  
 operating at 5150 MHz to 5250 MHz for IEEE802.11a/n/ac/ax and  
 operating at 5250 MHz to 5350 MHz for IEEE802.11a/n/ac/ax and  
 operating at 5470 MHz to 5725 MHz for IEEE802.11a/n/ac/ax and  
 operating at 5725 MHz to 5850 MHz for IEEE802.11a/n/ac/ax.

#### 3.4.1.1 Antenna Type:

**Chain 0:** Dipole Antenna

**Chain 1:** Dipole Antenna

**Antenna Gain:**

**Chain 0:** 2412MHz to 2462 MHz: 4.0dBi  
 5150 MHz to 5250 MHz: 5.0dBi  
 5250 MHz to 5350 MHz: 5.0dBi  
 5470 MHz to 5725 MHz: 5.0dBi  
 5725 MHz to 5850 MHz: 5.0dBi

**Chain 1:** 2412MHz to 2462 MHz: 4.5dBi  
 5150 MHz to 5250 MHz: 4.5dBi  
 5250 MHz to 5350 MHz: 4.5dBi  
 5470 MHz to 5725 MHz: 4.5dBi  
 5725 MHz to 5850 MHz: 4.5dBi

**3.4.1.2 Results for FCC 47 CFR Part 1 Subpart I**

**For SISO (1TX/1RX) Mode**

Operating Mode	Freq.	Declared maximum conducted average output power	Max. positive tolerance according manufacturer	Antenna Gain	Calculated maximum EIRP	Declared maximum EIRP	MPE Limit	MPE Value	
	(MHz)	(dBm)		(dBi)	(dBm)	(mW)	(mW/cm <sup>2</sup> )		
SISO	IEEE 802.11b	2412-2462	22	2	7.26	31.26	1336.5955	1	0.2659
	IEEE 802.11g	2412&2462	19	1	7.26	27.26	532.1083	1	0.1059
		2437	24	2	7.26	33.26	2118.3611	1	0.4214
	IEEE 802.11a	5180-5240	22	1	7.76	30.76	1191.2420	1	0.2370
		5260-5320	21	2	7.76	30.76	1191.2420	1	0.2370
		5500-5700	21	1	7.76	29.76	946.2372	1	0.1882
	5745-5825	21	1	7.76	29.76	946.2372	1	0.1882	

**For MIMO (2TX/2RX) Mode**

Operating Mode	Freq.	Declared maximum conducted average output power	Max. positive Tolerance according manufacturer	Directional Gain	Calculated maximum EIRP	Declared maximum EIRP	MPE Limit	MPE Value	
	(MHz)	(dBm)		(dBi)	(dBm)	(mW)	(mW/cm <sup>2</sup> )		
MIMO (2TX/2RX)	IEEE 802.11n-HT20 802.11ax-HE20	2412&2462	19	1	7.26	27.26	532.1083	1	0.1059
		2437	26	1	7.26	34.26	2666.8587	1	0.5305
	IEEE 802.11n-HT40 802.11ax-HE40	2422&2452	19	1	7.26	27.26	532.1083	1	0.1059
		2437	26	1	7.26	34.26	2666.8587	1	0.5305
	IEEE 802.11n-HT20 802.11ac-VHT20 802.11ax-HE20	5180&5240	20	1	7.76	28.76	751.6229	1	0.1495
		5220	24	1	7.76	32.76	1887.9913	1	0.3756
		5260-5320	20	1	7.76	28.76	751.6229	1	0.1495
		5500-5700	19	1	7.76	27.76	597.0353	1	0.1188
		5745-5825	23	1	7.76	31.76	1499.6848	1	0.2983
	IEEE 802.11n-HT40 802.11ac-VHT40 802.11ax-HE40	5190	17	1	7.76	25.76	376.7038	1	0.0749
		5230	26	1	7.76	34.76	2992.2646	1	0.5953
		5270	21	1	7.76	29.76	946.2372	1	0.1882
		5310	17	1	7.76	25.76	376.7038	1	0.0749
		5510&5670	16	1	7.76	24.76	299.2265	1	0.0595

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Operating Mode	Freq.	Declared maximum conducted average output power	Max. positive Tolerance according manufacturer	Directional Gain	Calculated maximum EIRP	Declared maximum EIRP	MPE Limit	MPE Value
	(MHz)	(dBm)		(dBi)	(dBm)	(mW)	(mW/cm <sup>2</sup> )	
IEEE 802.11ac-VHT80 802.11ax-HE80	5550	22	1	7.76	30.76	1191.2420	1	0.2370
	5755-5795	23	1	7.76	31.76	1499.6848	1	0.2983
	5210	15	1	7.76	23.76	237.6840	1	0.0473
	5290	14	1	7.76	22.76	188.7991	1	0.0376
	5530	17	1	7.76	25.76	376.7038	1	0.0749
	5775	24	1	7.76	32.76	1887.9913	1	0.3756

**3.4.1.3 Results for RSS-102 Issue 5**

**For SISO (1TX/1RX) Mode**

Operating Mode	Freq.	Declared maximum conducted average output power	Max. positive tolerance according manufacturer	Antenna Gain	Calculated maximum EIRP	Declared maximum EIRP	Limit	
	(MHz)	(dBm)		(dBi)	(dBm)	(W)	(W)	
SISO	IEEE 802.11b	2412-2462	22	2	7.26	31.26	1.3366	2.6840
	IEEE 802.11g	2412&2462	19	1	7.26	27.26	0.5321	2.6840
		2437	24	2	7.26	33.26	2.1184	2.7030
	IEEE 802.11a	5180-5240	22	1	7.76	30.76	1.1912	4.5253
		5260-5320	21	2	7.76	30.76	1.1912	4.5729
		5500-5700	21	1	7.76	29.76	0.9462	4.7145
		5745-5825	21	1	7.76	29.76	0.9462	4.8570

**For MIMO (2TX/2RX) Mode**

Operating Mode	Freq.	Declared maximum conducted average output power	Max. positive Tolerance according manufacturer	Directional Gain	Calculated maximum EIRP	Declared maximum EIRP	Limit	
	(MHz)	(dBm)		(dBi)	(dBm)	(W)	(W)	
MIMO (2TX/2RX)	IEEE 802.11n-HT20 802.11ax-HE20	2412&2462	19	1	7.26	27.26	0.5321	2.6840
		2437	26	1	7.26	34.26	2.6669	2.7030
	IEEE 802.11n-HT40 802.11ax-HE40	2422&2452	19	1	7.26	27.26	0.5321	2.6916
		2437	26	1	7.26	34.26	2.6669	2.7030
	IEEE 802.11n-HT20 802.11ac-VHT20 802.11ax-HE20	5180&5240	20	1	7.76	28.76	0.7516	4.5253
		5220	24	1	7.76	32.76	1.8880	4.5491
		5260-5320	20	1	7.76	28.76	0.7516	4.5729
		5500-5700	19	1	7.76	27.76	0.5970	4.7145
	IEEE 802.11n-HT40 802.11ac-VHT40 802.11ax-HE40	5745-5825	23	1	7.76	31.76	1.4997	4.8570
		5190	17	1	7.76	25.76	0.3767	4.5312
		5230	26	1	7.76	34.76	2.9923	4.5551
		5270	21	1	7.76	29.76	0.9462	4.5789
		5310	17	1	7.76	25.76	0.3767	4.6026
		5510&5670	16	1	7.76	24.76	0.2992	4.7204
		5550	22	1	7.76	30.76	1.1912	4.7437

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Operating Mode	Freq.	Declared maximum conducted average output power	Max. positive Tolerance according manufacturer	Directional Gain	Calculated maximum EIRP	Declared maximum EIRP	Limit
	(MHz)	(dBm)		(dBi)	(dBm)	(W)	(W)
IEEE 802.11ac-VHT80 802.11ax-HE80	5755-5795	23	1	7.76	31.76	1.4997	4.8628
	5210	15	1	7.76	23.76	0.2377	4.5432
	5290	14	1	7.76	22.76	0.1888	4.5907
	5530	17	1	7.76	25.76	0.3767	4.7321
	5775	24	1	7.76	32.76	1.8880	4.8743

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## APPENDIX 1 PHOTOS OF TEST SETUP

N/A

## APPENDIX 2 PHOTOS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal Photos.

\*\*\* End of Report \*\*\*

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The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of UnionTrust, this report can't be reproduced except in full.

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