

# RF EXPOSURE EVALUATION REPORT

**Product Name:** 4K UHD Streaming Box  
**Trade Mark:** SKYWORTH, SDT, DIRECTV, THOMSON,  
STRONG, Tesla, MECOOL, CoLoVU  
**Model No. :** LEAP-S1  
**Add. Model No.:** OTT-01, HP40A, HP40A3, HP4005,  
SRT401,THA100,THA 100, HP4035,  
XA400, KM2, C1 Plus, Leap-S1  
**Report Number:** 210825002RFC-5  
**Test Standards:** FCC 47 CFR Part 1 Subpart I  
**FCC ID:** WNA-LEAPS1  
**Test Result:** PASS  
**Date of Issue:** November 16, 2022

Prepared for:


**Shenzhen Skyworth Digital Technology Co.,LTD.**  
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Prepared by:

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**Version**

Version No.	Date	Description
V1.0	November 16, 2022	Original

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## 1. GENERAL INFORMATION

### 1.1 CLIENT INFORMATION

<b>Applicant:</b>	Shenzhen Skyworth Digital Technology Co.,LTD.
<b>Address of Applicant:</b>	14/F, Block A, Skyworth Building, Gaoxin Ave.1.S., Nanshan District, Shenzhen, China
<b>Manufacturer:</b>	Shenzhen Skyworth Digital Technology Co.,LTD.
<b>Address of Manufacturer:</b>	14/F, Block A, Skyworth Building, Gaoxin Ave.1.S., Nanshan District, Shenzhen, China

### 1.2 EUT INFORMATION

<b>Product Name:</b>	4K UHD Streaming Box		
<b>Model No.:</b>	LEAP-S1		
<b>Add. Model No.:</b>	OTT-01, HP40A, HP40A3, HP4005, SRT401,THA100,THA 100, HP4035, XA400, KM2, C1 Plus, Leap-S1		
<b>Trade Mark:</b>	SKYWORTH, SDT, DIRECTV, THOMSON, STRONG, Tesla, MECOOL, CoLoVU		
<b>DUT Stage:</b>	Production Unit		
	2.4 GHz ISM Band:	IEEE 802.11b/g/n Bluetooth V4.2	
	5 GHz U-NII Bands:	5 150 MHz to 5 250 MHz	IEEE 802.11a/n/ac
		5 250 MHz to 5 350 MHz	IEEE 802.11a/n/ac
		5 470 MHz to 5 725 MHz	IEEE 802.11a/n/ac
		5 725 MHz to 5 850 MHz	IEEE 802.11a/n/ac
<b>Sample Received Date:</b>	September 1, 2021		
<b>Sample Tested Date:</b>	September 8, 2021 to October 28, 2021		

### 1.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

<b>For BT_LE</b>	
<b>Frequency Band:</b>	2400 MHz to 2483.5 MHz
<b>Frequency Range:</b>	2402 MHz to 2480 MHz
<b>Bluetooth Version:</b>	Bluetooth V4.2 LE
<b>Type of Modulation:</b>	GFSK
<b>Number of Channels:</b>	40
<b>Channel Separation:</b>	2 MHz
<b>Antenna Type:</b>	PCB Antenna
<b>Antenna Gain:</b>	1.87 dBi
<b>Maximum Peak Power:</b>	7.1 dBm

<b>For BT_EDR</b>	
<b>Frequency Band:</b>	2400 MHz to 2483.5 MHz
<b>Frequency Range:</b>	2402 MHz to 2480 MHz
<b>Bluetooth Version:</b>	Bluetooth BR + EDR
<b>Modulation Technique:</b>	Frequency Hopping Spread Spectrum(FHSS)
<b>Type of Modulation:</b>	GFSK, $\pi/4$ DQPSK, 8DPSK
<b>Number of Channels:</b>	79
<b>Channel Separation:</b>	1 MHz
<b>Antenna Type:</b>	PCB Antenna

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<b>Antenna Gain:</b>	1.87 dBi
<b>Maximum Peak Power:</b>	10.842 dBm

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
<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)
<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
<b>Number of Channels:</b>	IEEE 802.11b: 11 IEEE 802.11g: 11 IEEE 802.11n-HT20: 11 IEEE 802.11n-HT40: 9
<b>Channel Separation:</b>	5 MHz
<b>Antenna Type:</b>	Chain 0 PIFA Antenna
	Chain 1 PIFA Antenna
<b>Antenna Gain:</b>	Chain 0 3.18 dBi
	Chain 1 3.18 dBi
<b>Directional gain:</b>	6.19 dBi
<b>Maximum Peak Power:</b>	SISO_ Chain 0 IEEE 802.11b: 11.97dBm IEEE 802.11g: 9.20dBm IEEE 802.11n-HT20: 9.11dBm IEEE 802.11n-HT40: 5.93dBm
	SISO_ Chain 1 IEEE 802.11b: 11.86dBm IEEE 802.11g: 9.29dBm IEEE 802.11n-HT20: 9.40dBm IEEE 802.11n-HT40: 5.92dBm
	MIMO_ Chain 0+1 IEEE 802.11n-HT20: 12.27dBm IEEE 802.11n-HT40: 8.93dBm

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
<b>TPC Function:</b>	Not Support
<b>DFS Operational mode:</b>	Slave without radar Interference detection function
<b>Type of Modulation:</b>	IEEE 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK)
	IEEE 802.11n: OFDM(64QAM, 16QAM, QPSK, BPSK)

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	IEEE 802.11ac: OFDM(256QAM, 64QAM, 16QAM, QPSK, BPSK)				
<b>Channel Spacing:</b>	IEEE 802.11a/n-HT20/ac-VHT20: 20 MHz				
	IEEE 802.11n-HT40/ac-VHT40: 40 MHz				
	IEEE 802.11ac-VHT80: 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				
<b>Number of Channels:</b>	5150 MHz to 5250 MHz: 4 for IEEE 802.11a/n-HT20/ac-VHT20 2 for IEEE 802.11n-HT40/ac-VHT40 1 for IEEE 802.11acVHT80				
	5250 MHz to 5350 MHz: 4 for IEEE 802.11a/n-HT20/ac-VHT20 2 for IEEE 802.11n-HT40/ac-VHT40 1 for IEEE 802.11acVHT80				
	5470 MHz to 5725 MHz: 11 for IEEE 802.11a/n-HT20/ac-VHT20 5 for IEEE 802.11n-HT40/ac-VHT40 2 for IEEE 802.11ac-VHT80				
	5725 MHz to 5850 MHz: 5 for IEEE 802.11a/n-HT20/ac-VHT20 2 for IEEE 802.11n-HT40/ac-VHT40 1 for IEEE 802.11ac-VHT80				
<b>Antenna Type:</b>	Chain 0	PIFA Antenna			
	Chain 1	PIFA Antenna			
<b>Antenna Gain:</b>	Chain 0	5150 MHz to 5250 MHz: 1.3 dBi			
		5250 MHz to 5350 MHz: 1.72 dBi			
		5470 MHz to 5725 MHz: 3.48 dBi			
		5725 MHz to 5850 MHz: 3.54 dBi			
	Chain 1	5150 MHz to 5250 MHz: 1.3 dBi			
		5250 MHz to 5350 MHz: 1.72 dBi			
		5470 MHz to 5725 MHz: 3.48 dBi			
		5725 MHz to 5850 MHz: 3.54 dBi			
<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:	14.45	14.92	15.82	12.53
	<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:	14.17	14.62	15.64	9.73
	<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:	15.39	15.85	16.46	13.60
	IEEE 802.11n-HT40:	15.25	15.82	16.83	15.23
	IEEE802.11ac-VHT20:	15.39	15.79	16.36	13.68
	IEEE802.11ac-VHT40:	15.37	15.88	16.83	13.45
IEEE802.11ac-VHT80:	15.44	15.91	16.96	13.45	

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### 1.4 OTHER INFORMATION

Test channels for BT_LE				
Type of Modulation	Tx/Rx Frequency	Test RF Channel Lists		
GFSK	2402 MHz to 2480 MHz	Lowest(L)	Middle(M)	Highest(H)
		Channel 0	Channel 19	Channel 39
		2402 MHz	2440 MHz	2480 MHz

Test channels for BT_EDR				
Mode	Tx/Rx Frequency	Test RF Channel Lists		
GFSK (DH1, DH3, DH5)	2402 MHz to 2480 MHz	Lowest(L)	Middle(M)	Highest(H)
		Channel 0	Channel 39	Channel 78
$\pi$ /4DQPSK (DH1, DH3, DH5)	2402 MHz to 2480 MHz	2402 MHz	2441 MHz	2480 MHz
		Channel 0	Channel 39	Channel 78
8DPSK (DH1, DH3, DH5)	2402 MHz to 2480 MHz	2402 MHz	2441 MHz	2480 MHz
		Channel 0	Channel 39	Channel 78

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

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

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		5510 MHz	5550 MHz	5670 MHz
	5725 MHz to 5850 MHz	Channel 151	--	Channel 159
		5755 MHz	--	5795 MHz
IEEE 802.11ac-VHT80	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**

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.

## 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	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.

### 3.2.2 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 and operating at 5150 MHz to 5250 MHz for IEEE802.11a/n/ac and operating at 5250 MHz to 5350 MHz for IEEE802.11a/n/ac and operating at 5470 MHz to 5725 MHz for IEEE802.11a/n/ac and operating at 5725 MHz to 5850 MHz for IEEE802.11a/n/ac.

#### 3.4.1.1 Antenna Type:

**Chain 0:** PIFA Antenna

**Chain 1:** PIFA Antenna

#### 3.4.1.2 Antenna Gain:

**Chain 0:** 2412MHz to 2462 MHz: 3.18 dBi  
 5150 MHz to 5250 MHz: 1.3 dBi  
 5250 MHz to 5350 MHz: 1.72 dBi  
 5470 MHz to 5725 MHz: 3.48 dBi  
 5725 MHz to 5850 MHz: 3.54 dBi

**Chain 1:** Same as chain 0

For MIMO mode (2Tx/2Rx), there are two transmission antennas. Both Chain 0 and Chain 1 used at the same time and antenna ports have uniform output powers. The Chain 0 and Chain 1 antenna ports can be used alone. The transmit signals are correlated with each other.

$$\text{The directional gain} = G_{ANT} + 10 \log(N_{ANT}) \text{ dBi}$$

For SISO mode (1Tx/1Rx), there are two transmission antennas. Both Chain 0 and Chain 1 used at the same time and antenna ports have uniform output powers. The Chain 0 and Chain 1 antenna ports cannot be used alone

$$\text{The antenna gain} = \text{Chain 0 or Chain 1}$$

**3.4.1.3 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	12	1	3.18	16.18	41.50	1	0.00826
		2437	12	1	3.18	16.18	41.50	1	0.00826
		2462	12	1	3.18	16.18	41.50	1	0.00826
	IEEE 802.11g	2412	9.5	1	3.18	13.68	23.33	1	0.00464
		2437	9.5	1	3.18	13.68	23.33	1	0.00464
		2462	9.5	1	3.18	13.68	23.33	1	0.00464
	IEEE 802.11a	5180	14	1.5	1.3	16.8	47.86	1	0.00953
		5220	14	1.5	1.3	16.8	47.86	1	0.00953
		5240	14	1.5	1.3	16.8	47.86	1	0.00953
		5260	14	1.5	1.72	17.22	52.72	1	0.01049
		5300	14	1.5	1.72	17.22	52.72	1	0.01049
		5320	14	1.5	1.72	17.22	52.72	1	0.01049
5500		15	1.5	3.48	19.98	99.54	1	0.01981	
5580		15	1.5	3.48	19.98	99.54	1	0.01981	
5700		15	1.5	3.48	19.98	99.54	1	0.01981	
5745		12	1.5	3.54	17.04	50.58	1	0.01007	
5785		12	1.5	3.54	17.04	50.58	1	0.01007	
5825	12	1.5	3.54	17.04	50.58	1	0.01007		

**For MIMO (2TX/2RX) 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> )	
IEEE 802.11n-HT20	2412	12	1.5	3.18	16.68	46.56	1	0.00927
	2437	12	1.5	3.18	16.68	46.56	1	0.00927
	2462	12	1.5	3.18	16.68	46.56	1	0.00927
IEEE 802.11n-HT40	2422	9	1.0	3.18	13.18	20.80	1	0.00414
	2437	9	1.0	3.18	13.18	20.80	1	0.00414
	2452	9	1.0	3.18	13.18	20.80	1	0.00414
IEEE 802.11n-HT20	5180	16	1.0	1.3	18.3	67.61	1	0.01346
	5220	16	1.0	1.3	18.3	67.61	1	0.01346
	5240	16	1.0	1.3	18.3	67.61	1	0.01346
	5260	16	1.0	1.72	18.72	74.47	1	0.01482
	5300	16	1.0	1.72	18.72	74.47	1	0.01482
	5320	16	1.0	1.72	18.72	74.47	1	0.01482
	5500	17	1.0	3.48	21.48	140.60	1	0.02799
	5580	17	1.0	3.48	21.48	140.60	1	0.02799
	5700	17	1.0	3.48	21.48	140.60	1	0.02799
	5745	13	1.5	3.54	18.04	63.68	1	0.01268
	5785	13	1.5	3.54	18.04	63.68	1	0.01268
5850	13	1.5	3.54	18.04	63.68	1	0.01268	

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MIMO	IEEE 802.11n-HT40	5190	16	1.5	1.3	18.8	75.86	1	0.01510
		5230	16	1.5	1.3	18.8	75.86	1	0.01510
		5270	16	1.5	1.72	19.22	83.56	1	0.01663
		5310	16	1.5	1.72	19.22	83.56	1	0.01663
		5510	16	1.5	3.48	20.98	125.31	1	0.02494
		5550	16	1.5	3.48	20.98	125.31	1	0.02494
		5670	16	1.5	3.48	20.98	125.31	1	0.02494
		5755	15	1	3.54	19.54	89.95	1	0.01790
		5795	15	1	3.54	19.54	89.95	1	0.01790
	IEEE 802.11ac-VHT20	5180	16	1	1.3	18.3	67.61	1	0.01346
		5220	16	1	1.3	18.3	67.61	1	0.01346
		5240	16	1	1.3	18.3	67.61	1	0.01346
		5260	16	1	1.72	18.72	74.47	1	0.01482
		5300	16	1	1.72	18.72	74.47	1	0.01482
		5320	16	1	1.72	18.72	74.47	1	0.01482
		5500	16	1.5	3.48	20.98	125.31	1	0.02494
		5580	16	1.5	3.48	20.98	125.31	1	0.02494
		5700	16	1.5	3.48	20.98	125.31	1	0.02494
		5745	13	1.5	3.54	18.04	63.68	1	0.01268
		5785	13	1.5	3.54	18.04	63.68	1	0.01268
	5825	13	1.5	3.54	18.04	63.68	1	0.01268	
	IEEE 802.11ac-VHT40	5190	15	1.5	1.3	17.8	60.26	1	0.01199
		5230	15	1.5	1.3	17.8	60.26	1	0.01199
		5270	15	1.5	1.72	18.22	66.37	1	0.01321
		5310	15	1.5	1.72	18.22	66.37	1	0.01321
		5510	16	1.5	3.48	20.98	125.31	1	0.02494
		5550	16	1.5	3.48	20.98	125.31	1	0.02494
		5670	16	1.5	3.48	20.98	125.31	1	0.02494
		5755	13	1.5	3.54	18.04	63.68	1	0.01268
		5795	13	1.5	3.54	18.04	63.68	1	0.01268
	IEEE 802.11ac-VHT80	5210	16	1	1.3	18.3	67.61	1	0.01346
		5290	16	1	1.72	18.72	74.47	1	0.01482
		5610	14	1	3.48	18.48	70.47	1	0.01403
		5530	14	1	3.48	18.48	70.47	1	0.01403
		5775	14	1	3.54	18.54	71.45	1	0.01422

**3.4.2 For BT**

For BT\_LE function, operating at 2402MHz to 2480 MHz for GFSK and

For BT\_EDR function, operating at 2402MHz to 2480 MHz for GFSK,  $\pi/4$  DQPSK, 8DPSK

**3.4.2.1 Antenna Type:**

Chain 0: PCB Antenna

**3.4.2.2 Antenna Gain:**

Chain 0: 2402MHz to 2480 MHz: 1.5dBi

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

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)	(dBm)	(dBm)	(dBm)	(mW)	(mW/cm <sup>2</sup> )	
LE	2402-2480	6	2	1.87	9.87	9.7051	1	0.00193
EDR	2402-2480	8	2	1.87	11.87	15.3815	1	0.00306

### 3.4.3 Simultaneous Multi-band Transmission MPE Analysis

#### 3.4.4.1 List of Mode for Simultaneous Multi-band Transmission

No.	Configurations	Support/Not Support
1	2.4G_WLAN + BT	Support
2	5G_WLAN + BT	Support

#### 3.4.4.1 Results for transmit simultaneously

No.	Configurations	Maximum MPE Value (mw/cm <sup>2</sup> )			Limits (mw/cm <sup>2</sup> )
		WLAN	BT	Transmit simultaneously	
1	2.4G_SISO_WLAN + BT	0.00826	0.00306	0.01132	1
2	2.4G_MIMO_WLAN + BT	0.00927	0.00306	0.01233	1
3	5G_SISO_WLAN + BT	0.01981	0.00306	0.02287	1
4	5G_MIMO_WLAN + BT	0.02799	0.00306	0.03105	1

**Note 1:** According to KDB 447498 D01 General RF Exposure Guidance v06, At the transmit simultaneously calculation method is as follows:

$$\text{Transmit simultaneously MPE} = \Sigma \text{ of MPE ratios}$$

$$\text{MPE ratios} = [(MPE1/ \text{limit}) + (MPE2/ \text{limit}) + \dots] \text{ at the test frequency}$$

## 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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