Testing Laboratory 3787

RADIO EXPOSURE TEST REPORT

FCC ID	:	RSL-TQ6702EGEN2
Equipment	:	IEEE802.11ax dual-radio 5G/2.4GHz 8x8+4x4 wireless AP
Brand Name	:	Allied Telesis
Model Name	:	AT-TQ6702e GEN2
Applicant	:	Allied Telesis K.K. 2nd. TOC Bldg.7-21-11 Nishi-Gotanda, Shinagawa-ku Tokyo 1410031 Japan
Manufacturer	:	Allied Telesis K.K. 2nd. TOC Bldg.7-21-11 Nishi-Gotanda, Shinagawa-ku Tokyo 1410031 Japan
Standard	:	47 CFR Part 2.1091

The product was received on Aug. 30, 2022, and testing was started from Oct. 07, 2022 and completed on Nov. 23, 2022. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 47 CFR Part 2.1091 and shown compliance with the applicable technical standards.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory
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Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FA281719-01	01	Initial issue of report	Jan. 19, 2023

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
2	-	Exposure evaluation	PASS	-

Declaration of Conformity:
1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results. 2. The measurement uncertainty please refer to report "Measurement Uncertainty".
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Wendy Pan

1 General Description

1.1 EUT General Information

RF General Information			
Evaluation Mode	**Frequency Range (MHz)**	**Operating Frequency (MHz)**	**Modulation Type**
2.4GHz WLAN	2400-2483.5	2412-2462	802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11g/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) VHT: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
5GHz WLAN	5150-5250 5250-5350 5470-5725 5725-5850	5180-5240 5260-5320 5500-5720 5745-5825	802.11a/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)

1.2 Antenna Information

Set	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1~8	WHAYU	C478-690079-A	Dipole	N-Type	Note 1
	1~8	WHAYU	C478-690080-A	Dipole	N-Type	
2	1~8	Angeei	EXD24140D01	Patch	N-Type	

Note1:

Set	Port	Antenna Gain (dBi)					Internal loss+ Surge protector					Net Gain (dBi)				
		WLAN 2.4GHz	WLAN 5GHz				WLAN 2.4GHz	WLAN 5GHz				WLAN 2.4GH	WLAN 5GHz			
			UNII 1	UNII 2A	UNII 2C	UNII 3		UNII 1	UNII 2A	UNII 2C	UNII 3		UNII 1	UNII 2A	UNII 2C	UNII 3
1 (Dual Band)	1	3.5	6	5.8	5.5	5.5	0.58	0.69	0.79	0.9	0.8	2.92	5.31	5.01	4.6	4.7
	2	3.5	6	5.8	5.5	5.5	1.09	1.53	1.7	1.6	1.64	2.41	4.47	4.1	3.9	3.86
	3	3.5	6	5.8	5.5	5.5	0.93	1.35	1.37	1.3	1.24	2.57	4.65	4.43	4.2	4.26
	4	3.5	6	5.8	5.5	5.5	0.62	0.75	0.71	0.49	0.59	2.88	5.25	5.09	5.01	4.91
	5	-	6	5.8	5.5	5.5	-	0.75	0.79	0.84	0.66	-	5.25	5.01	4.66	4.84
	6	-	6	5.8	5.5	5.5	-	1.3	1.35	1.28	1.27	-	4.7	4.45	4.22	4.23
	7	-	6	5.8	5.5	5.5	-	1.05	1.21	1.07	1.01	-	4.95	4.59	4.43	4.49
	8	-	6	5.8	5.5	5.5	-	1.28	1.49	1.44	1.28	-	4.72	4.31	4.06	4.22

Set	Port	Antenna Gain (dBi)				Internal loss+ Surge protector				Net Gain (dBi)			
		WLAN 5GHz				WLAN 5GHz				WLAN 5GHz			
		UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 1	UNII 2A	UNII 2C	UNII 3
1 (Single Band)	1	6.91	6.72	6.34	7.08	0.69	0.79	0.9	0.8	6.22	5.93	5.44	6.28
	2	6.91	6.72	6.34	7.08	1.53	1.7	1.6	1.64	5.38	5.02	4.74	5.44
	3	6.91	6.72	6.34	7.08	1.35	1.37	1.3	1.24	5.56	5.35	5.04	5.84
	4	6.91	6.72	6.34	7.08	0.75	0.71	0.49	0.59	6.16	6.01	5.85	6.49
	5	6.91	6.72	6.34	7.08	0.75	0.79	0.84	0.66	6.16	5.93	5.5	6.42
	6	6.91	6.72	6.34	7.08	1.3	1.35	1.28	1.27	5.61	5.37	5.06	5.81
	7	6.91	6.72	6.34	7.08	1.05	1.21	1.07	1.01	5.86	5.51	5.27	6.07
	8	6.91	6.72	6.34	7.08	1.28	1.49	1.44	1.28	5.63	5.23	4.9	5.8

Set	Port	Antenna Gain (dBi)		2M N-type cable loss		Internal loss+ Surge protector					Net Gain (dBi)				
		WLAN 2.4GHz	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz				WLAN 2.4GHz	WLAN 5GHz			
							UNII 1	UNII 2A	UNII 2C	UNII 3		UNII 1	UNII 2A	UNII 2C	UNII 3
2 (2M N-type cable)	1	13	16	0.75	1.23	0.58	0.69	0.79	0.9	0.8	11.67	14.08	13.98	13.87	13.97
	2	13	16	0.75	1.23	1.09	1.53	1.7	1.6	1.64	11.16	13.24	13.07	13.17	13.13
	3	13	16	0.75	1.23	0.93	1.35	1.37	1.3	1.24	11.32	13.42	13.4	13.47	13.53
	4	13	16	0.75	1.23	0.62	0.75	0.71	0.49	0.59	11.63	14.02	14.06	14.28	14.18
	5	-	16	-	1.23	-	0.75	0.79	0.84	0.66	-	14.02	13.98	13.93	14.11
	6	-	16	-	1.23	-	1.3	1.35	1.28	1.27	-	13.47	13.42	13.49	13.5
	7	-	16	-	1.23	-	1.05	1.21	1.07	1.01	-	13.72	13.56	13.7	13.76
	8	-	16	-	1.23	-	1.28	1.49	1.44	1.28	-	13.49	13.28	13.33	13.49

Set	Port	Antenna Gain (dBi)		2M N-type cable loss		10M N-type cable loss		Internal loss+ Surge protector					Net Gain (dBi)				
		WLAN 2.4GHz	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz				WLAN 2.4GHz	WLAN 5GHz			
									UNII 1	UNII 2A	UNII 2C	UNII 3		UNII 1	UNII 2A	UNII 2C	UNII 3
2 (2M + 10M N-type cable)	1	13	16	0.75	1.23	3.77	6.16	0.58	0.69	0.79	0.9	0.8	7.9	7.92	7.82	7.71	7.81
	2	13	16	0.75	1.23	3.77	6.16	1.09	1.53	1.7	1.6	1.64	7.39	7.08	6.91	7.01	6.97
	3	13	16	0.75	1.23	3.77	6.16	0.93	1.35	1.37	1.3	1.24	7.55	7.26	7.24	7.31	7.37
	4	13	16	0.75	1.23	3.77	6.16	0.62	0.75	0.71	0.49	0.59	7.86	7.86	7.9	8.12	8.02
	5	-	16	-	1.23	3.77	6.16	-	0.75	0.79	0.84	0.66		7.86	7.82	7.77	7.95
	6	-	16	-	1.23	3.77	6.16	-	1.3	1.35	1.28	1.27		7.31	7.26	7.33	7.34
	7	-	16	-	1.23	3.77	6.16	-	1.05	1.21	1.07	1.01		7.56	7.4	7.54	7.6
	8	-	16	-	1.23	3.77	6.16	-	1.28	1.49	1.44	1.28		7.33	7.12	7.17	7.33

Note2: The above information was declared by manufacturer.
For conducted and radiated above 1GHz, The EUT has two types of antenna. Only the highest gain antenna was selected from each different types of antenna to test and record in this report.
Set 1: Dual Band antenna was selected for WLAN 2.4GHz and Single Band antenna was selected for WLAN 5GHz to perform the test.
Set 2: 2M N-type cable was selected to perform the test.
Polarization of antenna set 2:
2.4GHz: 2*Horizontal, 2*Vertical. so array gain only adds 10log (2).
5GHz: 4*Horizontal, 4*Vertical. so array gain only adds 10log (4).
For WLAN 2.4GHz function:
For IEEE 802.11b/g/n/VHT/ax mode (4TX/4RX):
Port 1 ~ Port 4 can be used as transmitting/receiving antenna.
Port 1 ~ Port 4 could transmit/receive simultaneously.
For WLAN 5GHz function:
For IEEE 802.11a/n/ac/ax mode (8TX/8RX):
Port 1 ~ Port 8 can be used as transmitting/receiving antenna.

Port 1 ~ Port 8 could transmit/receive simultaneously.

Note3:

Directional gain information

Type	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for N ANT ≤ 4 Array Gain = 5 log(NANT/NSS) dB or 3 dB, whichever is less, for 20-MHz channel widths with NANT ≥ 5.	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left[\sum_{k=1}^{N_{ANT}} g_{j,k}\right]^2}{N_{ANT}}\right]$
BF	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left[\sum_{k=1}^{N_{ANT}} g_{j,k}\right]^2}{N_{ANT}}\right]$	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left[\sum_{k=1}^{N_{ANT}} g_{j,k}\right]^2}{N_{ANT}}\right]$

Ex.

Directional Gain (NSS1) formula : $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left[\sum_{k=1}^{N_{ANT}} g_{j,k}\right]^2}{N_{ANT}}\right]$

Directional gain For PSD and TXBF Power

$NSS1(g1,2) = 10^{G1/20}$; $NSS1(g1,2) = 10^{G2/20}$;
$NSS1(g1,3) = 10^{G3/20}$; $NSS1(g1,4) = 10^{G4/20}$
$NSS1(g1,5) = 10^{G5/20}$; $NSS1(g1,6) = 10^{G6/20}$;
$NSS1(g1,7) = 10^{G7/20}$; $NSS1(g1,8) = 10^{G8/20}$ $gj,k = (Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4) + Nss1(g1,5) + Nss1(g1,6) + Nss1(g1,7) + Nss1(g1,8))^2$

$DG = 10\ \log[(Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4) + (Nss1(g,5) + Nss1(g1,6) + Nss1(g1,7) + Nss1(g1,8))^2 / N_{ANT}] => 10\ \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/2} + 10^{G5/20} + 10^{G6/20} + 10^{G7/20} + 10^{G8/20})^2 / N_{ANT}]$

Directional gain For nonTXBF 20Mhz Power

$NSS1(g1,2) = 10^{G1/20}$; $NSS1(g1,2) = 10^{G2/20}$;
$NSS1(g1,3) = 10^{G3/20}$; $NSS1(g1,4) = 10^{G4/20}$
$NSS1(g1,5) = 10^{G5/20}$; $NSS1(g1,6) = 10^{G6/20}$;
$NSS1(g1,7) = 10^{G7/20}$; $NSS1(g1,8) = 10^{G8/20}$ $gj,k = (Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4) + Nss1(g1,5) + Nss1(g1,6) + Nss1(g1,7) + Nss1(g1,8))^2$

$DG = 10\ \log[(Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4) + (Nss1(g,5) + Nss1(g1,6) + Nss1(g1,7) + Nss1(g1,8))^2 / N_{ANT}] => 5\ \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/2} + 10^{G5/20} + 10^{G6/20} + 10^{G7/20} + 10^{G8/20})^2 / N_{ANT}]$

Where ;

Dipole

2.4G G1= 2.92 dBi ;

2.4G G2= 2.41 dBi ;

2.4G G3= 2.57 dBi ;

2.4G G4= 2.88 dBi ;

DG= 8.72 dBi

5G UNII1 G1= 6.22 dBi ;

5G UNII1 G2= 5.38 dBi ;

5G UNII1 G3= 5.56 dBi ;

5G UNII1 G4= 6.16 dBi ;

5G UNII1 G5= 6.16 dBi ;

5G UNII1 G6= 5.61 dBi ;

5G UNII1 G7= 5.86 dBi ;

5G UNII1 G8= 5.63 dBi ;

DG=14.86 dBi

5G UNII2A G1= 5.93 dBi ;

5G UNII2A G2= 5.02 dBi ;

5G UNII2A G3= 5.35 dBi ;

5G UNII2A G4= 6.01 dBi ;

5G UNII2A G5= 5.93 dBi ;

5G UNII2A G6= 5.37 dBi ;

5G UNII2A G7= 5.51 dBi ;

5G UNII2A G8= 5.23 dBi ;

DG=14.58 dBi

5G UNII2C G1= 5.44 dBi ;

5G UNII2C G2= 4.74 dBi ;

5G UNII2C G3= 5.04 dBi ;

5G UNII2C G4= 5.85 dBi ;

5G UNII2C G5= 5.5 dBi ;

5G UNII2C G6= .06 dBi ;

5G UNII2C G7= 5.27 dBi ;

5G UNII2C G8= 4.9 dBi ;

DG=14.26 dB

5G UNII4 G1= 6.28 dBi ;

5G UNII3 G2= 5.44 dBi ;

5G UNII3 G3= 5.84 dBi ;

5G UNII3 G4= 6.49 dBi ;

5G UNII3 G5= 6.42 dBi ;

5G UNII3 G6= 5.81 dBi ;

5G UNII3 G7= 6.07 dBi ;

5G UNII3 G8= 5.8 dBi ;

DG=15.06 dBi

Patch Cross-Polarized Antenna
2.4G G1= 11.67 dBi ;
2.4G G2= 11.16 dBi ;
2.4G G3= 11.23 dBi ;
2.4G G4= 11.63 dBi ;
DG=14.46 dBi

5G UNII1 G1= 14.08 dBi ;
5G UNII1 G2= 13.24 dBi ;
5G UNII1 G3= 13.42 dBi ;
5G UNII1 G4= 14.02 dBi ;
5G UNII1 G5= 14.02 dBi ;
5G UNII1 G6= 13.47 dBi ;
5G UNII1 G7= 13.72 dBi ;
5G UNII1 G8= 13.49 dBi ;
DG= 19.71 dBi

5G UNII2A G1= 13.98 dBi ;
5G UNII2A G2= 13.07 dBi ;
5G UNII2A G3= 13.4 dBi ;
5G UNII2A G4= 14.06 dBi ;
5G UNII2A G5= 13.98 dBi ;
5G UNII2A G6= 13.42 dBi ;
5G UNII2A G7= 13.56 dBi ;
5G UNII2A G8= 13.28 dBi ;
DG= 19.62 dBi

5G UNII2C G1= 13.87 dBi ;
5G UNII2C G2= 13.17 dBi ;
5G UNII2C G3= 13.47 dBi ;
5G UNII2C G4= 14.28 dBi ;
5G UNII2C G5= 13.93 dBi ;
5G UNII2C G6= 13.49 dBi ;
5G UNII2C G7= 13.7 dBi ;
5G UNII2C G8= 13.33 dBi ;
DG= 19.68 dBi

5G UNII3 G1= 13.97 dBi ;
5G UNII3 G2= 13.13 dBi ;
5G UNII3 G3= 13.53 dBi ;
5G UNII3 G4= 14.18 dBi ;
5G UNII3 G5= 14.11 dBi ;
5G UNII3 G6= 13.5 dBi ;
5G UNII3 G7= 13.76 dBi ;
5G UNII3 G8= 13.49 dBi ;
DG= 19.71 dBi

1.3 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FA281719

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Adding the UNII 2A and UNII 2C (5250~5350MHz and 5470~5725MHz) for this device. 2. Adding the 80+80MHz mode.	MPE

Note: WLAN 2.4GH and WLAN 5GHz UNII 1 and UNII 3 MPE results were based on original report.

1.4 Accessories

Accessories
N type antenna cable1*8: shielded, 2m (for set 2 antenna use only) N type extension antenna cable 2*8: shielded, 10m (for set 2 antenna and must be used with N type antenna cable1 only). External surge protectors*8 Sealing Collar*1 Ground cable*1: shielded, 1.75m Mounting Base*1 Pole-mount bracket*1

1.5 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 2.1091
- KDB 447498 D04 Interim General RF Exposure Guidance v01

The following reference test guidance is not within the scope of accreditation of TAF.

- 47 CFR Part 1.1307
- 47 CFR Part 1.1310

1.6 Testing Location

Testing Location Information		
Test Lab.：Sporton International Inc. Hsinchu Laboratory		
Hsinchu (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)	
	TEL: 886-3-656-9065	FAX: 886-3-656-9085
	Test site Designation No. TW3787 with FCC.	
	Conformity Assessment Body Identifier (CABID) TW3787 with ISED.	

2 Maximum Permissible Exposure

2.1 Limit of Maximum Permissible Exposure

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time |E|²,|H|² or S (minutes)
0.3-3.0	614	1.63	*(100)	<6
3.0-30	1842/f	4.89/f	*(900/f^2)	<6
30-300	61.4	0.163	1.0	<6
300-1500	-	-	f/300	<6
1500-100,000	-	-	5	<6

(B) 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/ cm²)	Averaging Time |E|²,|H|² or S (minutes)
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f^2)	<30
30-300	27.5	0.073	0.2	<30
300-1500	-	-	f/1500	<30
1500-100,000	-	-	1.0	<30

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

2.2 MPE Calculation Method

The MPE was calculated at Antenna set 1 is 46 cm and Antenna Set 2 is 51 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

E (V/m) = $\frac{\sqrt{30 \times P \times G}}{d}$ Power Density: *Pd* (W/m²) = $\frac{E^2}{377}$

E = Electric field (V/m)

P = RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

Pd = $\frac{30 \times P \times G}{377 \times d^2}$

2.3 MPE Exemption

Option (A): 1.1307(b)(3)(i)(A): Available maximum time-averaged power is < 1 mW

Option (B): 1.1307(b)(3)(i)(B): Device operates between 300 MHz and 6 GHz and the maximum time-averaged power or effective radiated power (ERP), whichever is greater, <= Pth.

$$P_{th}\ (\text{mW}) = \begin{cases} ERP_{20\ cm}(d/20\ \text{cm})^{x} & d \le 20\ \text{cm} \\ ERP_{20\ cm} & 20\ \text{cm} < d \le 40\ \text{cm} \end{cases}$$

Where

$$x = -\log_{10}\left(\frac{60}{ERP_{20\ cm}\sqrt{f}}\right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20\ cm}\ (\text{mW}) = \begin{cases} 2040f & 0.3\ \text{GHz} \le f < 1.5\ \text{GHz} \\ 3060 & 1.5\ \text{GHz} \le f \le 6\ \text{GHz} \end{cases}$$

d = the separation distance (cm);

Option (C): 1.1307(b)(3)(i)(C): ERP is below a threshold calculated based on the distance R between the person and the antenna / radiating structure, where R > λ / 2 π.

Single RF Sources Subject to Routine Environmental Evaluation	
RF Source frequency (MHz)	**Threshold ERP (watts)**
0.3-1.34	1,920 R^2.
1.34-30	3,450 R^2/f^2.
30-300	3.83 R^2.
300-1,500	0.0128 R^2f.
1,500-100,000	19.2R^2.
Note: R is in meters, f is in MHz.	

2.4 Calculated Result and Limit

Exposure Environment: General Population / Uncontrolled Exposure

For Antenna Set 1 (Dipole)

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm^2)	S Limit (mW/cm^2)
2.4G;G1D	8.72	24.64	33.36	0.50	33.86	2.43220	46	0.09147	1.00000
5.2G;D1D	14.86	21.12	35.98	0.01	35.99	3.97192	46	0.14937	1.00000
5.3G;D1D	14.58	15.39	29.97	0.02	29.99	0.99770	46	0.03752	1.00000
5.6G;D1D	14.26	15.65	29.91	0.08	29.99	0.99770	46	0.03752	1.00000
5.8G;D1D	15.06	20.88	35.94	0.05	35.99	3.97192	46	0.14937	1.00000

For Antenna Set 2 (Patch)

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm^2)	S Limit (mW/cm^2)
2.4G;G1D	11.67	24.30	35.97	0.02	35.99	3.97192	51	0.12152	1.00000
5.2G;D1D	19.71	16.01	35.72	0.27	35.99	3.97192	51	0.12152	1.00000
5.3G;D1D	19.62	10.30	29.92	0.07	29.99	0.99770	51	0.03052	1.00000
5.6G;D1D	19.68	10.29	29.97	0.02	29.99	0.99770	51	0.03052	1.00000
5.8G;D1D	19.74	16.22	35.96	0.03	35.99	3.97192	51	0.12152	1.00000

For Antenna Set 1 (Dipole)

MPE Exemption Option C							
Frequency (MHz)	λ/2π (m)	R (m)	Tune-up EIRP (dBm)	Tune-up ERP (dBm)	Tune-up ERP (W)	ERP Threshold (W)	MPE Exemption
2437	0.0196	0.46	33.86	31.71	1.483	4.063	Complies
5190	0.0092		35.99	33.84	2.421	4.063	Complies

Simultaneous Transmission Analysis Mode: WLAN 2.4GHz+WLAN 5GHz

Simultaneous Transmissions Option C							
Frequency (MHz)	R (m)	Tune-up EIRP (dBm)	Tune-up ERP (dBm)	Tune-up ERP (W)	ERP Threshold (W)	Simultaneous Transmissions	Simultaneous Transmissions Limit
2437	0.46	33.86	31.71	1.483	4.063	0.96	<= 1
5190		35.99	33.84	2.421	4.063		

For Antenna Set 2 (Patch)

MPE Exemption Option C							
Frequency (MHz)	λ/2π (m)	R (m)	Tune-up EIRP (dBm)	Tune-up ERP (dBm)	Tune-up ERP (W)	ERP Threshold (W)	MPE Exemption
2437	0.0196	0.51	35.99	33.84	2.421	4.994	Complies
5785	0.0082		35.99	33.84	2.421	4.994	Complies

Simultaneous Transmission Analysis Mode: WLAN 2.4GHz+WLAN 5GHz

Simultaneous Transmissions Option C							
Frequency (MHz)	R (m)	Tune-up EIRP (dBm)	Tune-up ERP (dBm)	Tune-up ERP (W)	ERP Threshold (W)	Simultaneous Transmissions	Simultaneous Transmissions Limit
2437	0.51	35.99	33.84	2.421	4.994	0.97	<= 1
5785		35.99	33.84	2.421	4.994		

———THE END———