

Radio Exposure Evaluation Report

FCC ID : UXX-S5A440A
Contains FCC ID : UXX-2022EG060KNA
Equipment : Semi-ruggedized IoT Router
Brand Name : Ericsson
Model Name : S5A440A
Applicant : Ericsson Enterprise Solutions, Inc.
: 1100 W. Idaho St. Boise, ID 83702
Manufacturer : Ericsson Enterprise Solutions, Inc.
: 1100 W. Idaho St. Boise, ID 83702
Standard : 47 CFR FCC Part 2 Subpart J, section 2.1091

The product was received on Jun. 20, 2024, and testing was started from Jul. 26, 2024 and completed on Jul. 29, 2024. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 47 CFR FCC Part 2 Subpart J, section 2.1091 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.



Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory
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Photographs of EUT V01



History of this test report

Report No.	Version	Description	Issued Date
FA441838-02	01	Initial issue of report	Sep. 20, 2024



Summary of Test Result

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

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

None

Reviewed by: Terry Chang

Report Producer: Michelle Tsai

1 General Description

1.1 Information

1.1.1 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)
5GHz WLAN	5150 - 5250 5725 - 5850	5180 - 5240 5745 - 5825	802.11a/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Bluetooth	2400 - 2483.5	2402 - 2480	LE: DSSS (GFSK)

RF General Information		
Evaluation Mode	Frequency Range (MHz)	Modulation Type
LTE Band 2	1850 - 1910	LTE: QPSK / 16QAM / 64QAM / 256QAM
LTE Band 4	1710 - 1755	
LTE Band 5	824 - 849	
LTE Band 7	2500 - 2570	
LTE Band 12	699 - 716	
LTE Band 13	777 - 787	
LTE Band 14	788 - 798	
LTE Band 25	1850 - 1915	
LTE Band 26	814 - 824	
LTE Band 26	824 - 849	
LTE Band 30	2305 - 2315	
LTE Band 41	2496 - 2690	
LTE Band 48	3550 - 3700	
LTE Band 66	1710 - 1780	
LTE Band 71	663 - 698	



1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Support
1	WNC	170836-000	Dipole	Reverse SMA	2.4G+5G+BT
2	Ericsson	CP01	Monopole	Reverse SMA	2.4G+5G+BT
3	Ericsson	170704-002	Dipole	Reverse SMA	4G
4	Ericsson	170704-002	Dipole	Reverse SMA	4G
5	Ericsson	170704-002	Dipole	Reverse SMA	GPS

Ant.	Port	Gain (dBi)					
		2.4G	5G Band 1	5G Band 2	5G Band 3	5G Band 4	BT
1	1	2.47	2.18	2.19	2.14	2.47	2.47
2	2	5.71	4.4	4.63	5.6	5.19	5.71

Ant.	Port	WWAN 4G Gain (dBi)							
		LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 12	LTE Band 13	LTE Band 14	LTE Band 25
3	1	3.1	2.9	0	2.9	0.1	0.2	0.2	3.1
4	2	3.1	2.9	0	2.9	0.1	0.2	0.2	3.1

Ant.	Port	WWAN 4G Gain (dBi)						
		LTE Band 26 (814-824)	LTE Band 26 (824-849)	LTE Band 30	LTE Band 41	LTE Band 48	LTE Band 66	LTE Band 71
3	1	0	0	2.8	2.9	2.8	2.9	0
4	2	0	0	2.8	2.9	2.8	2.9	0

Note 1: The EUT has five antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n mode (1TX/1RX)

Ant. 1 (port 1) or Ant. 2 (port 2) could transmit/receive.

For 5GHz function:

For IEEE 802.11 a/n/ac mode (1TX/1RX)

Ant. 1 (port 1) or Ant. 2 (port 2) could transmit/receive.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Ant. 1 (port 1) or Ant. 2 (port 2) could transmit/receive.

For WWAN function (1TX/2RX):

Ant. 3 (port 1) or Ant. 4 (port 2) could transmit.

Ant. 3 (port 1) and Ant. 4 (port 2) could receive.

1.1.3 Table for Multiple Listing

Items	component	SKU list																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Power Supply	Adapter (24W)	X	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-	-
	Adapter (36W)	-	-	-	-	-	-	X	X	X	X	X	X	-	-	-	-	-	-
	PoE (PHIHONG)	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	X	X	X
Module	DB9/Serial Expansion Module	X	-	-	X	-	-	X	-	-	X	-	-	X	-	-	X	-	-
	Dual Ethernet Expansion Module	-	X	-	-	X	-	-	X	-	-	X	-	-	X	-	-	X	-
	GPIO Expansion Module	-	-	X	-	-	X	-	-	X	-	-	X	-	-	X	-	-	X
Bracket	Bracket (Ceiling bracket)	X	X	X	-	-	-	X	X	X	-	-	-	X	X	X	-	-	-
	Bracket (DIN Rail)	-	-	-	X	X	X	-	-	-	X	X	X	-	-	-	X	X	X

From the above SKUs, SKU 8 was selected as representative SKU for the test and its data was recorded in this report.

1.1.4 Accessories

Accessories				
AC Adapter 1 (24W)	Brand Name	APD	Model Name	WB-24M12R
	Power Rating	I/P: 100 - 240Vac, 0.7A, O/P: 12Vdc, 2A		
	Power Cord	1.45 meter, non-shielded cable, w/o ferrite core		
AC Adapter 2 (36W)	Brand Name	APD	Model Name	WA-36N12R
	Power Rating	I/P: 100 - 240Vac, 0.9A, O/P: 12Vdc, 3A		
	Power Cord	1.45 meter, non-shielded cable, w/o ferrite core		
PoE	Brand Name	PHIHONG	Model Name	POE15M-AFA
	Power Rating	I/P: 100-240Vac, 0.8A, O/P: 56Vdc, 0.275A		
Ceiling Bracket	Brand Name	Ericsson	Model Name	170920-000
DIN Rail	Brand Name	Ericsson	Model Name	170904-001
DB9/Serial Expansion Module	Brand Name	Ericsson	Model Name	MC20-SRL
Dual Ethernet Expansion Module	Brand Name	Ericsson	Model Name	MC20-ETH
GPIO Expansion Module	Brand Name	Ericsson	Model Name	MC20-GPO
WLAN ANT 1 (Dipole)	Brand Name	WNC	Model Name	170836-000
WLAN ANT 2 (Monopole)	Brand Name	Ericsson	Model Name	CP01
LTE ANT	Brand Name	Ericsson	Model Name	170704-002

Reminder: Regarding to more detail and other information, please refer to user manual.

1.2 Applicable Standards

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

- ♦ 47 CFR FCC Part 2 Subpart J, section 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

1.3 Testing Location

Test Lab. : Sporton International Inc. Hsinhua Laboratory		
☒	Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.) TEL: 886-3-327-3456 FAX: 886-3-327-0973
Test site Designation No. TW3785 with FCC.		
☐	Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: 886-3-318-0787 FAX: 886-3-318-0287
Test site Designation No. TW0008 with FCC.		
Subcontractor : 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. TW0006 with FCC.		

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/ cm ²)	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/ cm ²)	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

Multiple Transmitters Condition

Co-location as simultaneously transmitting (co-transmitting) and the evaluation shall be consider that simultaneous transmissions from co-located devices the individual transmitters are evaluated separately. After sum of the individual value (basic restriction / reference level) are measured/calculated also have to under basic restriction / reference level.

Co-transmitting mode:

1. Wi-Fi (2.4GHz) + Bluetooth + WWAN (4G)
2. Wi-Fi (5GHz) + Bluetooth + WWAN (4G)

2.2 RF Exposure Exempt Measurement

Option	Refer Std.	Exemption Exposure Thresholds (TL)
A	§1.1307(b)(3)(i)(A)	Available maximum time-averaged power is no more than 1 mW
B	§1.1307(b)(3)(i)(B)	$P_{th}(mW) = \begin{cases} ERP_{20cm} (d / 20cm)^x \rightarrow d \leq 20cm \\ ERP_{20cm} \rightarrow 20cm < d \leq 40cm \end{cases}$ $x = -\log_{10} \left(\frac{60}{ERP_{20cm} \sqrt{f}} \right) \text{ and } f \text{ is in GHz}$ $\begin{cases} ERP_{20cm} : 0.3GHz \leq f < 1.5GHz \rightarrow 2040f(mW) \\ ERP_{20cm} : 1.5GHz \leq f \leq 6GHz \rightarrow 3060(mW) \end{cases}$
C	§1.1307(b)(3)(i)(C)	$\begin{cases} 0.3 \sim 1.34MHz \rightarrow ERP(W) = 1920R^2 \\ 1.34 \sim 30MHz \rightarrow ERP(W) = 3450R^2 / f^2 \\ 30 \sim 300MHz \rightarrow ERP(W) = 3.83R^2 \\ 300 \sim 1500MHz \rightarrow ERP(W) = 0.0128R^2 f \\ 1500 \sim 100000MHz \rightarrow ERP(W) = 19.2R^2 \end{cases}$ $f \text{ is in MHz; } R \text{ is in m; } R > \lambda / 2\pi$

2.3 Multiple RF Sources Exposure

Refer Std.	Exemption Exposure Thresholds (TL)
§1.1307(b)(3)(ii)(A)	The available maximum time-averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters between any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required)
§1.1307(b)(3)(ii)(B)	$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{ExposureLimit_k} \leq 1$ a = number of fixed, mobile, or portable RF sources claiming exemption using paragraph §1.1307(b)(3)(i)(B) of this section for P , including existing exempt transmitters and those being added. b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph §1.1307(b)(3)(i)(C) of this section for Threshold ERP, including existing exempt transmitters and those being added. c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters. P_i = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive). P_{th,i} = the exemption threshold power (P_{th}) according to paragraph §1.1307(b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i. ERP_j = the ERP of fixed, mobile, or portable RF source j. ERP_{th,j} = exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least λ/2π according to the applicable formula of paragraph §1.1307(b)(3)(i)(C) of this section. Evaluated_k = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure. Evaluated Limit_k = either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k, as applicable from § 1.1310 of this chapter.



2.4 MPE Calculation Method

The MPE was calculated at 20 cm to show compliance with the power density limit.
The following formula was used to calculate the Power Density:

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

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

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



2.5 Calculated Result and Limit

Exposure Environment: General Population / Uncontrolled Exposure

Dipole Antenna

WLAN 2.4GHz

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	2.47	19.44	21.91	0.50	106.20	20.00	0.03465	1.00000	B	3060.000	0.0347
2.4G;D1D	2.47	18.84	21.31	0.50	92.49	20.00	0.03018	1.00000	B	3060.000	0.0302

WLAN 5GHz

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	2.18	16.25	18.43	0.50	47.66	20.00	0.01555	1.00000	B	3060.000	0.0156
5.8G;D1D	2.47	14.38	16.85	0.50	33.12	20.00	0.01081	1.00000	B	3060.000	0.0108

Bluetooth

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Option	TL ERP (mW)	TL Ratio
2.4G;BT-LE	2.47	5.27	7.74	0.50	4.07	20.00	0.00133	1.00000	B	3060.000	0.0013

WWAN (4G)

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Option	TL ERP (mW)	TL Ratio
LTE Band 2	3.1	23.31	26.41	0.50	299.30	20.00	0.09766	1.00000	B	3060.000	0.0978
LTE Band 4	2.9	23.52	26.42	0.50	299.99	20.00	0.09789	1.00000	B	3060.000	0.0980
LTE Band 5	0	23.15	23.15	0.50	141.29	20.00	0.04610	0.55767	B	1706.460	0.0828
LTE Band 7	2.9	23.41	26.31	0.50	292.49	20.00	0.09544	1.00000	B	3060.000	0.0956
LTE Band 12	0.1	23.29	23.39	0.50	149.32	20.00	0.04872	0.47167	B	1443.300	0.1035
LTE Band 13	0.2	23.20	23.40	0.50	149.66	20.00	0.04883	0.52133	B	1595.280	0.0938
LTE Band 14	0.2	23.21	23.41	0.50	150.01	20.00	0.04895	0.53033	B	1622.820	0.0924
LTE Band 25	3.1	23.19	26.29	0.50	291.15	20.00	0.09500	1.00000	B	3060.000	0.0951
LTE Band 26	0	23.14	23.14	0.50	140.96	20.00	0.04600	0.56433	B	1726.860	0.0816
LTE Band 26	0	23.15	23.15	0.50	141.29	20.00	0.04610	0.55767	B	1706.460	0.0828
LTE Band 30	2.8	19.34	22.14	0.50	111.97	20.00	0.03654	1.00000	B	3060.000	0.0366
LTE Band 41	2.9	23.39	26.29	0.50	291.15	20.00	0.09500	1.00000	B	3060.000	0.0951
LTE Band 48	2.8	18.92	21.72	0.50	101.65	20.00	0.03317	1.00000	B	3060.000	0.0332
LTE Band 66	2.9	23.22	26.12	0.50	279.97	20.00	0.09135	1.00000	B	3060.000	0.0915
LTE Band 71	0	23.23	23.23	0.50	143.92	20.00	0.04696	0.45367	B	1388.220	0.1037

Note 1: Option A, B and C refer as clause 2.2

Note 2: For option B, Pth(mW) convert to TL ERP(mW); For option C, ERP(W) convert to TL ERP(mW)

Note 3: TL Ratio=Tune-up ERP(mW)/TL ERP(mW)

**Simultaneous Transmission Analysis Mode:
Wi-Fi (2.4GHz) + Bluetooth + WWAN (4G)**

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	2.47	19.44	21.91	0.50	106.20	20.00	0.03465	1.00000	B	3060.000	0.0347
2.4G;BT-LE	2.47	5.27	7.74	0.50	4.07	20.00	0.00133	1.00000	B	3060.000	0.0013
LTE Band 4	2.9	23.52	26.42	0.50	299.99	20.00	0.09789	1.00000	B	3060.000	0.0980
										Sum Ratio	0.1340
										Ratio Limit	1

Wi-Fi (5GHz) + Bluetooth + WWAN (4G)

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Option	TL ERP (mW)	TL Ratio
5.6G;D1D	2.14	15.93	18.07	0.50	43.86	20.00	0.01431	1.00000	B	3060.000	0.0143
2.4G;BT-LE	2.47	5.27	7.74	0.50	4.07	20.00	0.00133	1.00000	B	3060.000	0.0013
LTE Band 4	2.9	23.52	26.42	0.50	299.99	20.00	0.09789	1.00000	B	3060.000	0.0980
										Sum Ratio	0.1136
										Ratio Limit	1

Note 1: Option A, B and C refer as clause 2.2

Note 2: For option B, Pth(mW) convert to TL ERP(mW); For option C, ERP(W) convert to TL ERP(mW)

Note 3: TL Ratio=Tune-up ERP(mW)/TL ERP(mW)

Note 4: Refer as clause 2.3 Multiple RF Sources Exposure. Please follow below option and sum TL ration table.

Option	Sum TL Ratio_B	Option	Sum TL Ratio_C	Option	Sum TL Ratio_E
B	$\sum_{i=1}^a \frac{P_i}{P_{th,i}}$	C	$\sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}}$	E	$\sum_{k=1}^c \frac{Evaluated_k}{ExposureLimit_k}$

Note: The above antenna gain was declared by manufacturer.

**Monopole Antenna
WLAN 2.4GHz**

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	5.71	19.60	25.31	0.50	232.33	20.00	0.07581	1.00000	B	3060.000	0.0759
2.4G;D1D	5.71	18.96	24.67	0.50	200.49	20.00	0.06542	1.00000	B	3060.000	0.0655

WLAN 5GHz

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	4.40	16.25	20.65	0.50	79.45	20.00	0.02593	1.00000	B	3060.000	0.0260
5.8G;D1D	5.19	14.38	19.57	0.50	61.96	20.00	0.02022	1.00000	B	3060.000	0.0202

Bluetooth

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Option	TL ERP (mW)	TL Ratio
2.4G;BT-LE	5.71	5.25	10.96	0.50	8.53	20.00	0.00278	1.00000	B	3060.000	0.0028

WWAN (4G)

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Option	TL ERP (mW)	TL Ratio
LTE Band 2	3.1	23.31	26.41	0.50	299.30	20.00	0.09766	1.00000	B	3060.000	0.0978
LTE Band 4	2.9	23.52	26.42	0.50	299.99	20.00	0.09789	1.00000	B	3060.000	0.0980
LTE Band 5	0	23.15	23.15	0.50	141.29	20.00	0.04610	0.55767	B	1706.460	0.0828
LTE Band 7	2.9	23.41	26.31	0.50	292.49	20.00	0.09544	1.00000	B	3060.000	0.0956
LTE Band 12	0.1	23.29	23.39	0.50	149.32	20.00	0.04872	0.47167	B	1443.300	0.1035
LTE Band 13	0.2	23.20	23.40	0.50	149.66	20.00	0.04883	0.52133	B	1595.280	0.0938
LTE Band 14	0.2	23.21	23.41	0.50	150.01	20.00	0.04895	0.53033	B	1622.820	0.0924
LTE Band 25	3.1	23.19	26.29	0.50	291.15	20.00	0.09500	1.00000	B	3060.000	0.0951
LTE Band 26	0	23.14	23.14	0.50	140.96	20.00	0.04600	0.56433	B	1726.860	0.0816
LTE Band 26	0	23.15	23.15	0.50	141.29	20.00	0.04610	0.55767	B	1706.460	0.0828
LTE Band 30	2.8	19.34	22.14	0.50	111.97	20.00	0.03654	1.00000	B	3060.000	0.0366
LTE Band 41	2.9	23.39	26.29	0.50	291.15	20.00	0.09500	1.00000	B	3060.000	0.0951
LTE Band 48	2.8	18.92	21.72	0.50	101.65	20.00	0.03317	1.00000	B	3060.000	0.0332
LTE Band 66	2.9	23.22	26.12	0.50	279.97	20.00	0.09135	1.00000	B	3060.000	0.0915
LTE Band 71	0	23.23	23.23	0.50	143.92	20.00	0.04696	0.45367	B	1388.220	0.1037

Note 1: Option A, B and C refer as clause 2.2

Note 2: For option B, Pth(mW) convert to TL ERP(mW); For option C, ERP(W) convert to TL ERP(mW)

Note 3: TL Ratio=Tune-up ERP(mW)/TL ERP(mW)



Simultaneous Transmission Analysis Mode:

Wi-Fi (2.4GHz) + Bluetooth + WWAN (4G)

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Option	TL ERP (mW)	TL Ratio
2.4G;G1D	5.71	19.60	25.31	0.50	232.33	20.00	0.07581	1.00000	B	3060.000	0.0759
2.4G;BT-LE	5.71	5.25	10.96	0.50	8.53	20.00	0.00278	1.00000	B	3060.000	0.0028
LTE Band 4	2.9	23.52	26.42	0.50	299.99	20.00	0.09789	1.00000	B	3060.000	0.0980
										Sum Ratio	0.1767
										Ratio Limit	1

Wi-Fi (5GHz) + Bluetooth + WWAN (4G)

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up ERP (mW)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Option	TL ERP (mW)	TL Ratio
5.2G;D1D	4.40	16.25	20.65	0.50	79.45	20.00	0.02593	1.00000	B	3060.000	0.0260
2.4G;BT-LE	5.71	5.25	10.96	0.50	8.53	20.00	0.00278	1.00000	B	3060.000	0.0028
LTE Band 4	2.9	23.52	26.42	0.50	299.99	20.00	0.09789	1.00000	B	3060.000	0.0980
										Sum Ratio	0.1268
										Ratio Limit	1

Note 1: Option A, B and C refer as clause 2.2

Note 2: For option B, Pth(mW) convert to TL ERP(mW); For option C, ERP(W) convert to TL ERP(mW)

Note 3: TL Ratio=Tune-up ERP(mW)/TL ERP(mW)

Note 4: Refer as clause 2.3 Multiple RF Sources Exposure. Please follow below option and sum TL ration table.

Option	Sum TL Ratio_B	Option	Sum TL Ratio_C	Option	Sum TL Ratio_E
B	$\sum_{i=1}^a \frac{P_i}{P_{th,i}}$	C	$\sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}}$	E	$\sum_{k=1}^c \frac{Evaluated_k}{ExposureLimit_k}$

Note: The above antenna gain was declared by manufacturer.

—THE END—