

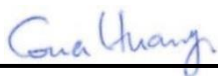
RF EXPOSURE EVALUATION REPORT

FCC ID : UXX-2022EG060KNA
Equipment : LTE-A Cat 6 LGA Module
Brand Name : Ericsson
Model Name : EG060K-NA
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 Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit.

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

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



Approved by: Cona Huang / Deputy Manager



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History of this test report

Report No.	Version	Description	Issued Date
FA441838-01	Rev. 01	Initial issue of report	Sep. 19, 2024

**1. Description of Equipment Under Test (EUT)**

Product Feature & Specification	
EUT Type	LTE-A Cat 6 LGA Module
Brand Name	Ericsson
Model Name	EG060K-NA
FCC ID	UXX-2022EG060KNA
Wireless Technology and Frequency Range	LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz
Mode	LTE: QPSK, 16QAM

Reviewed by: Jason Wang**Report Producer: Paula Chen**

**2. Maximum RF average output power among production units**

Band	Maximum Tune-up Power (dBm)
LTE Band 2	25
LTE Band 4	25
LTE Band 5	25
LTE Band 7	25
LTE Band 12	25
LTE Band 13	25
LTE Band 14	25
LTE Band 25	25
LTE Band 26	25
LTE Band 30	21.18
LTE Band 41	25
LTE Band 48	20.2
LTE Band 66	25
LTE Band 71	25

3. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
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				
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

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:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna



4. Radio Frequency Radiation Exposure Evaluation

4.1. Standalone Power Density Calculation

Band	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum ERP (dBm)	Maximum ERP (W)	Maximum EIRP (dBm)	Maximum EIRP (W)	Maximum ERP Limit (W)	Maximum EIRP Limit (W)	Maximum PG (mW)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)
LTE Band 2	8.00	25.00	30.850	1.216	33.000	1.995	2.000	2.000	1995.262	0.397	1.000
LTE Band 4	5.00	25.00	27.850	0.610	30.000	1.000	1.000	1.000	1000.000	0.199	1.000
LTE Band 5	6.00	25.00	28.850	0.767	31.000	1.259	7.000	7.000	1258.925	0.251	0.549
LTE Band 7	8.00	25.00	30.850	1.216	33.000	1.995	2.000	2.000	1995.262	0.397	1.000
LTE Band 12	5.50	25.00	28.350	0.684	30.500	1.122	3.000	3.000	1122.018	0.223	0.466
LTE Band 13	5.50	25.00	28.350	0.684	30.500	1.122	3.000	3.000	1122.018	0.223	0.518
LTE Band 14	5.50	25.00	28.350	0.684	30.500	1.122	3.000	3.000	1122.018	0.223	0.525
LTE Band 25	8.00	25.00	30.850	1.216	33.000	1.995	2.000	2.000	1995.262	0.397	1.000
LTE Band 26	6.00	25.00	28.850	0.767	31.000	1.259	7.000	7.000	1258.925	0.251	0.543
LTE Band 30	2.80	21.18	21.830	0.152	23.980	0.250	0.250	0.250	250.035	0.050	1.000
LTE Band 41	8.00	25.00	30.850	1.216	33.000	1.995	2.000	2.000	1995.262	0.397	1.000
LTE Band 48	2.80	20.20	20.850	0.122	23.000	0.200	0.200	0.200	199.526	0.040	1.000
LTE Band 66	5.00	25.00	27.850	0.610	30.000	1.000	1.000	1.000	1000.000	0.199	1.000
LTE Band 71	5.00	25.00	27.850	0.610	30.000	1.000	3.000	3.000	1000.000	0.199	0.442

4.2. Collocated Power Density Calculation

Note:

1. This MPE analysis is applicable to any collocated transmitters, with the maximum EIRP for WLAN assumed to be 30 dBm and the maximum EIRP for BT assumed to be 20 dBm.
2. Σ (Power Density / Limit): This is a summation of [(power density for each transmitter/antenna included in the simultaneous transmission)/ (corresponding MPE limit)], for WWAN + WLAN + Bluetooth.
3. Considering the WWAN module collocation with the WLAN and Bluetooth transmitter of the EIRP performance listed in the table above, the aggregated (power density /limit) is smaller than 1, and MPE of all collocated transmitters is compliant.

Band	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Maximum PG (mW)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)	Power Density / Limit
LTE Band 2	6.00	25.00	31.0	1.26	1258.93	0.251	1.000	0.251
LTE Band 4	5.00	25.00	30.0	1.00	1000.00	0.199	1.000	0.199
LTE Band 5	3.50	25.00	28.5	0.71	707.95	0.141	0.549	0.257
LTE Band 7	7.00	25.00	32.0	1.58	1584.89	0.315	1.000	0.315
LTE Band 12	3.00	25.00	28.0	0.63	630.96	0.126	0.466	0.270
LTE Band 13	3.50	25.00	28.5	0.71	707.95	0.141	0.518	0.272
LTE Band 14	3.50	25.00	28.5	0.71	707.95	0.141	0.525	0.268
LTE Band 25	6.00	25.00	31.0	1.26	1258.93	0.251	1.000	0.251
LTE Band 26	3.50	25.00	28.5	0.71	707.95	0.141	0.543	0.260
LTE Band 30	2.80	21.18	24.0	0.25	250.03	0.050	1.000	0.050
LTE Band 41	7.00	25.00	32.0	1.58	1584.89	0.315	1.000	0.315
LTE Band 48	2.80	20.20	23.0	0.20	199.53	0.040	1.000	0.040
LTE Band 66	5.00	25.00	30.0	1.00	1000.00	0.199	1.000	0.199
LTE Band 71	3.00	25.00	28.0	0.63	630.96	0.126	0.442	0.284
WLAN2.4GHz Band			30.0	1.00	1000.00	0.199	1.000	0.199
WLAN5GHz Band			30.0	1.00	1000.00	0.199	1.000	0.199
Bluetooth			20.0	0.10	100.00	0.020	1.000	0.020

Maximum WWAN Power Density / Limit	Maximum WLAN Power Density / Limit	Maximum Bluetooth Power Density / Limit	Σ (Power Density / Limit) of WWAN + WLAN + Bluetooth
0.315	0.199	0.020	0.534

**Conclusion:**

Based on FCC 47 CFR §1.1307, the analysis concludes that this product when transmitting in standalone within a host device, is compliant with the FCC RF exposure requirements in mobile exposure condition, provided the conducted power and antenna gain do not exceed the limits for each given frequency band per wireless technology as follow table:

Device	Technology	Band	Maximum Conducted Power (dBm)	Standalone Maximum Antenna Gain (dBi)	Collocated Maximum Antenna Gain (dBi)
EG060K-NA	LTE	LTE Band 2	25.0	8.0	6.0
		LTE Band 4	25.0	5.0	5.0
		LTE Band 5	25.0	6.0	3.5
		LTE Band 7	25.0	8.0	7.0
		LTE Band 12	25.0	5.5	3.0
		LTE Band 13	25.0	5.5	3.5
		LTE Band 14	25.0	5.5	3.5
		LTE Band 25	25.0	8.0	6.0
		LTE Band 26	25.0	6.0	3.5
		LTE Band 30	21.18	2.8	2.8
		LTE Band 41	25.0	8.0	7.0
		LTE Band 48	20.2	2.8	2.8
		LTE Band 66	25.0	5.0	5.0
		LTE Band 71	25.0	5.0	3.0