

# TEST REPORT

FCC/ISED MPE Test for 1080i  
Certification

**APPLICANT**  
Ericsson-LG Enterprise Co., Ltd.

**REPORT NO.**  
HCT-RF-2104-FI006

**DATE OF ISSUE**  
April 1, 2021

**Tested by**  
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**TEST  
REPORT**

FCC MPE Test for  
1080i

**REPORT NO.**

HCT-RF-2104-FI006

**DATE OF ISSUE**

April 01, 2021

**Additional Model**

VIP-1080i-00

**Applicant**

**Ericsson-LG Enterprise Co., Ltd.**

LG Gasan digital Center 11F, Gasan digital 1-ro 189, Geumchun-gu, Seoul  
08503, Korea

**Eut Type  
Model Name**

IP Phone  
1080i

**FCC ID**

2ABGA1080I

**Date of Receipt**

April 01, 2021

**Frequency range**

2 402 MHz ~ 2 480 MHz (Bluetooth)  
2 412 MHz ~ 2 462 MHz (WLAN)  
5 180 MHz ~ 5 825 MHz (UNII)

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.

This test results were applied only to the test methods required by the standard.

## REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	April 01, 2021	Initial Release

### Engineering Statement:

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of the FCC Rules under normal use and maintenance

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## RF Exposure Statement

### 1. Limit

According to § 1.1310, § 2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
0.3 - 1.34.....	614	1.63	*(100)	30
1.34 - 30.....	824/f	2.19/f	*(180/ f <sup>2</sup> )	30
30 - 300.....	27.5	0.073	0.2	30
300 - 1500.....	.....	.....	f/1500	30
1500 - 100.000.....	.....	.....	1.0	30

F = frequency in MHz

\* = Plane-wave equivalent power density

### 2. Maximum Permissible Exposure Prediction

Prediction of MPE limit at a given distance

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

S = Power density

P = Power input to antenna

G = Power gain to the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation of the antenna

### 3. RESULTS

#### 3-1. Bluetooth

Average output Power at antenna input terminal	8.00	dBm
Average output Power at antenna input terminal	6.31	mW
Prediction distance	20.00	cm
Prediction frequency	2402 – 2480	MHz
Antenna Gain(typical)	0.730	dBi
Antenna Gain(numeric)	1.183	-
Power density at prediction frequency( S)	0.0015	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

#### 2.1091

EIRP	8.73	(dBm)
ERP	6.58	(dBm)
ERP	0.005	(W)
ERP Limit	3.00	(W)
MARGIN	28.19	(dB)

**3-1. BT LE**

Average output Power at antenna input terminal	5.00	dBm
Average output Power at antenna input terminal	3.16	mW
Prediction distance	20.00	cm
Prediction frequency	2402 – 2480	MHz
Antenna Gain(typical)	0.730	dBi
Antenna Gain(numeric)	1.183	-
Power density at prediction frequency( S)	0.0007	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

**2.1091**

EIRP	5.73	(dBm)
ERP	3.58	(dBm)
ERP	0.002	(W)
ERP Limit	3.00	(W)
MARGIN	31.19	(dB)

### 3-1. DTS

Average output Power at antenna input terminal	16.00	dBm
Average output Power at antenna input terminal	39.81	mW
Prediction distance	20.00	cm
Prediction frequency	2412 – 2472	MHz
Antenna Gain(typical)	0.730	dBi
Antenna Gain(numeric)	1.183	-
Power density at prediction frequency( S)	0.0094	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

### 2.1091

EIRP	16.73	(dBm)
ERP	14.58	(dBm)
ERP	0.029	(W)
ERP Limit	3.00	(W)
MARGIN	20.19	(dB)

**3-1. UNII**

Average output Power at antenna input terminal	16.00	dBm
Average output Power at antenna input terminal	39.81	mW
Prediction distance	20.00	cm
Prediction frequency	5180 – 5825	MHz
Antenna Gain(typical)	2.040	dBi
Antenna Gain(numeric)	1.600	-
Power density at prediction frequency( S)	0.0127	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

**2.1091**

EIRP	18.04	(dBm)
ERP	15.89	(dBm)
ERP	0.039	(W)
ERP Limit	3.00	(W)
MARGIN	18.88	(dB)

**Worst Case: Simultaneous MPE 20cm is**

$$5G\ WLAN\ (0.0127) + BT\ (0.0015) = 0.0142 < 1$$