

# SAR TEST EXCLUSION EVALUATION REPORT

**Product Name:** CloudBoxx  
**Trade Mark:** N/A  
**Model No. / HVIN:** CB1020  
**Report Number:** 2209291892RFC-2  
**Test Standards:** FCC 47 CFR Part 1 Subpart I  
RSS-102 Issue 5  
SPR-002 Issue 1  
**FCC ID:** 2ASRACB102001  
**IC:** 24868-CB102001  
**Test Result:** PASS  
**Date of Issue:** September 13, 2023

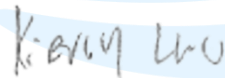
Prepared for:

**INVERS GmbH**  
**Untere Industriestr. 20 D-57250 Netphen Germany**

Prepared by:

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UTTR-RF-RSS102-V1.1

**Version**

Version No.	Date	Description
V1.0	September 13, 2023	Original

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## 1. GENERAL INFORMATION

### 1.1 CLIENT INFORMATION

<b>Applicant:</b>	INVERS GmbH
<b>Address of Applicant:</b>	Untere Industriestr. 20 D-57250 Netphen Germany
<b>Manufacturer 1:</b>	EPS Electronic Products & Systems GmbH
<b>Address of Manufacturer 1:</b>	Eiserfelder Straße 316 57080 Siegen
<b>Manufacturer 2:</b>	Reichardt Elektronik GmbH
<b>Address of Manufacturer 2:</b>	Eichelhainer Straße 18, 36369 Lautertal-Engelrod
<b>Manufacturer 3:</b>	duotec GmbH
<b>Address of Manufacturer 3:</b>	Humboldtstraße 8a D-58553 Halve

### 1.2 EUT INFORMATION

<b>Product Name:</b>	CloudBoxx	
<b>Model No. / HVIN:</b>	CB1020	
<b>Add. Model No:</b>	N/A	
<b>Trade Mark:</b>	N/A	
<b>DUT Stage:</b>	Production Unit	
<b>EUT Supports Function:</b>	GSM Bands:	GSM850/1900
	E-UTRA Bands:	FDD Band 2/ Band 4/ Band 5/ Band 12/ Band 13/ Band 25/ Band 26/Band 66/ Band 85
	2.4 GHz ISM Band:	IEEE 802.11b/g/n (only Rx) Bluetooth 5.0
	RFID:	125 kHz
<b>Sample no.:</b>	S20221116795-ZJA08/10	
<b>Software Version:</b>	2.15.1-0 (Provided by the customer)	
<b>Hardware Version:</b>	CB1020 (Provided by the customer)	
<b>Sample Received Date:</b>	November 16, 2022	
<b>Sample Tested Date:</b>	July 12, 2023 to July 28, 2023	

### 1.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

<b>For BT_LE</b>	
<b>Contains FCC ID: XPNINAB1, IC: 8598A-NINAB1</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 LE
<b>Type of Modulation:</b>	GFSK
<b>Number of Channels:</b>	40
<b>Channel Separation:</b>	2 MHz
<b>Antenna Type:</b>	PIFA Antenna
<b>Antenna Gain:</b>	3.0 dBi
<b>Maximum Peak Power:</b>	3.94 dBm

<b>For RFID</b>	
<b>Frequency Band:</b>	125 kHz
<b>Nominal Operating Frequency:</b>	125 kHz
<b>Type of Modulation:</b>	ASK
<b>Number of Channels:</b>	1
<b>Antenna Type: (Provided by the customer)</b>	Integral Antenna
<b>Maximum Field Strength:</b>	87.74 dBuV/m at 3 meter

<b>For WWAN</b>		
<b>Contains FCC ID: XMR202005BG95M5, IC: 10224A-2020BG95M5</b>		
<b>Support Networks:</b>	GPRS, EDGE, LTE	
<b>Type of Modulation:</b>	GPRS:	GMSK
	EDGE:	GMSK, 8PSK
	LTE Band 2/4/5/12/13/25/26/66/85:	QPSK, 16QAM, 64QAM
<b>Antenna Type: (Provided by the customer)</b>	External Antenna	
<b>Antenna Gain: (Provided by the customer)</b>	GPRS& EDGE 850:	0 dBi
	GPRS& EDGE 1900:	0 dBi
	LTE Band 2:	0 dBi
	LTE Band 4:	0 dBi
	LTE Band 5:	0 dBi
	LTE Band 12:	0 dBi
	LTE Band 13:	0 dBi
	LTE Band 25:	0 dBi
	LTE Band 26:	0 dBi
	LTE Band 66:	0 dBi
LTE Band 85:	0 dBi	
<b>Maximum EIRP/ERP Power:</b>	GPRS& EDGE 850:	25.97 dBm
	GPRS& EDGE 1900:	22.97 dBm
	LTE Band 2:	25.00 dBm
	LTE Band 4:	25.00 dBm
	LTE Band 5:	25.00 dBm

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LTE Band 12:	25.00 dBm
LTE Band 13:	25.00 dBm
LTE Band 25:	25.00 dBm
LTE Band 26:	25.00 dBm
LTE Band 66:	25.00 dBm
LTE Band 85:	25.00 dBm

## 1.4 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**  
**RSS-102 Issue 5 Amendment 1 (February 2021)**  
**SPR-002 Issue 1 (September 2016)**

All test items have been performed and recorded as per the above standards

## 1.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested with associated equipment below.

### 1) Support Equipment

Description	Manufacturer	Model No.	Serial Number	Supplied by
Multicard Reader II	INVERS	N/A	76893	Applicant
Relay	Panasonic	CB1-M-12V	91206M	Applicant
Speaker	INVERS	N/A	Sample no: S20221116795-PJA02	Applicant
CAN Test - Tool	INVERS	CAN-PID-Lomo	13416	Applicant
RFID-Sticker	INVERS	5160254	N/A	Applicant
Smart Phone	NOKIA	TA-1361	N/A	UnionTrust
Storage Battery	Camel	58500 6-QWLZ-48	2602010594	UnionTrust

## 1.6 TEST LOCATION

### **Shenzhen UnionTrust Quality and Technology Co., Ltd.**

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## 1.7 TEST FACILITY

The test facility is recognized, certified, or accredited by the following organizations:

**CNAS-Lab Code: L9069**

The measuring equipment utilized to perform the tests documented in this report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable under the ISO/IEC 17025 to international or national standards. Equipment has been calibrated by accredited calibration laboratories.

**A2LA-Lab Certificate No.: 4312.01**

Shenzhen UnionTrust Quality and Technology Co., Ltd. has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

**ISED Wireless Device Testing Laboratories**

CAB identifier: CN0032

**FCC Accredited Lab.**

Designation Number: CN1194

Test Firm Registration Number: 259480

## 1.8 ABNORMALITIES FROM STANDARD CONDITIONS

None.

## 1.9 OTHER INFORMATION REQUESTED BY THE CUSTOMER

None.

## 1.10 MEASUREMENT UNCERTAINTY

The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% Confidence level using a coverage factor of  $k=2$ .

No.	Item	Measurement Uncertainty
1	electromagnetic field	5%

## 2. EQUIPMENT LIST

Test Equipment List						
Used	Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
<input checked="" type="checkbox"/>	Electric and magnetic field analyzer	Narda	EHP-50F	510WY90119	July 21, 2022	July 20, 2023
<input checked="" type="checkbox"/>	Electric and magnetic field analyzer	Narda	EHP-200A	170wx90206	July 21, 2022	July 20, 2023
<input checked="" type="checkbox"/>	Probe holder	STT	TR-01	N/A	N/A	N/A
<input checked="" type="checkbox"/>	Optical fiber line	STT	L=5M	N/A	N/A	N/A
<input checked="" type="checkbox"/>	Spectrum analyzer	ROHDE & SCHWARZ	FSV40-N	101653	Apr. 14, 2023	Apr. 13, 2024

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### 3. SAR TEST EXCLUSION 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	RSS-102 Issue 5 Amendment 1	Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)
3	SPR-002 Issue 1	Supplementary Procedure for Assessing Compliance of Equipment Operating from 3 kHz to 10 MHz with RSS-102
4	KDB 447498 D01 General RF Exposure Guidance v06	RF EXPOSURE PROCEDURES AND EQUIPMENT AUTHORIZATION POLICIES FOR MOBILE AND PORTABLE DEVICES

#### 3.2 EXEMPTION LIMITS FOR ROUTINE EVALUATION – SAR EVALUATION

##### 3.2.1 SAR Test Exclusion Threshold

###### 3.2.1.1 FCC 47 CFR Part 1 Subpart I

According to 47 CFR §1.1310, 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 <sup>2</sup>	30
30-300	27.5	0.073	0.2	30
300-1,500	/	/	f/1500	30
1,500-100,000	/	/	1.0	30

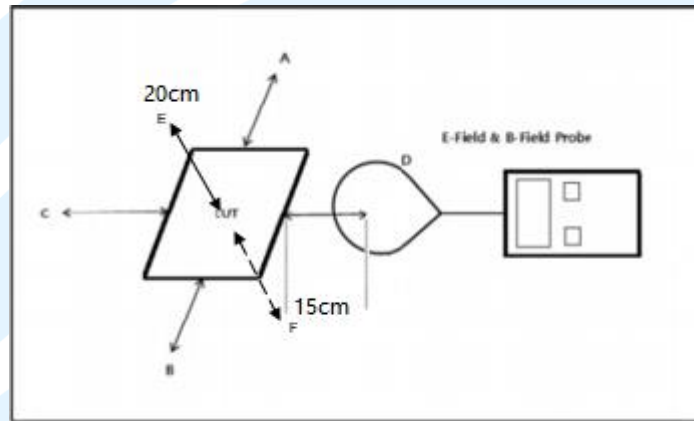
**Note:** f = frequency in MHz; \* = Plane-wave equivalent power density.

**Testing Procedure**

Enabled the EUT to transmit and receive data continue

- a. The field strength of both E-field and H-field was measured at 15 cm surrounding the device and 20 cm above the top surface using the equipment list above for determining compliance with the MPE requirements of FCC Part 1.1310.
- b. The RF power density was measured with the battery at 3 different charge conditions: battery at less than 1 % , battery at 50% charger, battery at 99% charger,.
- c. Maximum E-field and H-field measurements were made 15cm from each side of the EUT. Along the side of the EUT and still 15cm away from the edge of the EU T, the field probes were positioned at the location where there is maximum field strength. The maximum E-field and H-field is reported below.
- d. This device uses a wireless charging circuit for power transfer operating at the frequency of X kHz. Thus, the 300 kHz limits were used: E-field Limit = 614 (V/m); H-field limit = 1.63 (A/m).

**Test setup**



**Note:**

The RF exposure test is performed in the shield room  
 The test distance is between the edge of the charger and the geometric center of probe  
 The aggregate at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated.

**3.2.1.2 RSS-102 Issue 5**

According to RSS-102 Issue 5 , 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.

According to RSS-102 Issue 5 , 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.

RF exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20 cm, except when the device operates as follows:

- below 20 MHz<sup>6</sup> and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 1 W (adjusted for tune-up tolerance);
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than  $4.49/f^{0.5}$  W (adjusted for tune-up tolerance), where  $f$  is in MHz;
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance);
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than  $1.31 \times 10^{-2} f^{0.6834}$  W (adjusted for tune-up tolerance), where  $f$  is in MHz;
- at or above 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 5 W (adjusted for tune-up tolerance).

In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the e.i.r.p. was derived.

**Shenzhen UnionTrust Quality and Technology Co., Ltd.**

Reference: RSS-102 Issue 5

Limits for General Population/Uncontrolled Exposure

Frequency range [MHz]	Electric field strength [V/m]	Magnetic field strength [A/m]	Power density [mW/cm <sup>2</sup> ]	Averaging time [minutes]
0.003 – 10	83	90	-	Instantaneous
0.1 – 10	-	0.73/ <i>f</i>	-	6
1.1 – 10	87/ <i>f</i> <sup>0.5</sup>	-	-	6
10 – 20	27.46	0.0728	-2	6
20 – 48	58.07/ <i>f</i> <sup>0.25</sup>	0.1540/ <i>f</i> <sup>0.25</sup>	8.944/ <i>f</i> <sup>0.5</sup>	6
48 – 300	22.06	0.05852	1.291	6
300 – 6 000	3.142 <i>f</i> <sup>0.3417</sup>	0.008335 <i>f</i> <sup>0.3417</sup>	0.02619 <i>f</i> <sup>0.6834</sup>	6
6 000 – 15 000	61.4	0.163	10	6
15 000 – 150 000	61.4	0.163	10	616000/ <i>f</i> <sup>1.2</sup>
150 000 – 300 000	0.158 <i>f</i> <sup>0.5</sup>	4.21 x 10 <sup>-4</sup> <i>f</i> <sup>0.5</sup>	6.67 x 10 <sup>-5</sup> <i>f</i>	616000/ <i>f</i> <sup>1.2</sup>

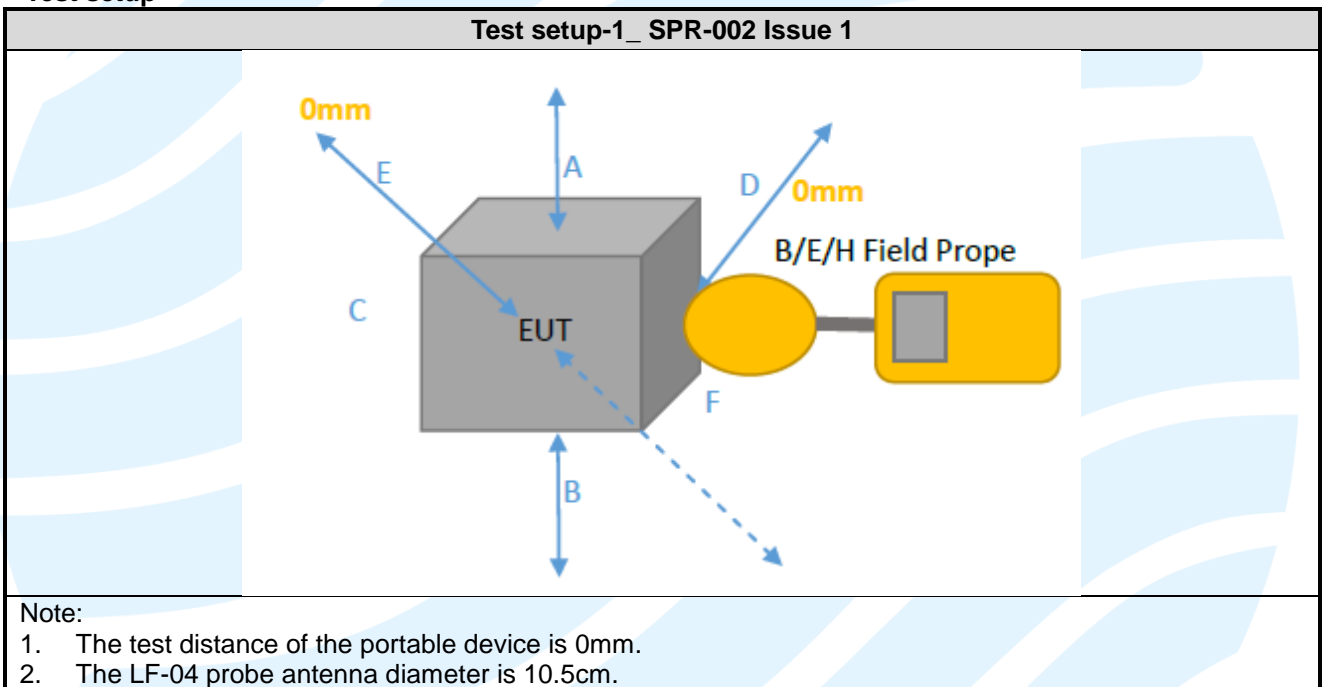
Limits for Occupational/Controlled Exposure

Frequency range [MHz]	Electric field strength [V/m]	Magnetic field strength [A/m]	Power density [mW/cm <sup>2</sup> ]	Averaging time [minutes]
0.003 – 10	170	180	-	Instantaneous
0.1 – 10	-	1.6/ <i>f</i>	-	6
1.29 – 10	193/ <i>f</i> <sup>0.5</sup>	-	-	6
10 – 20	61.4	0.163	-10	6
20 – 48	129.8/ <i>f</i> <sup>0.25</sup>	0.3444/ <i>f</i> <sup>0.25</sup>	44.72/ <i>f</i> <sup>0.5</sup>	6
48 – 100	49.33	0.1309	6.455	6
100 – 6000	15.60 <i>f</i> <sup>0.25</sup>	0.04138 <i>f</i> <sup>0.25</sup>	0.6455 <i>f</i> <sup>0.5</sup>	6
6000 – 15000	137	0.364	50	6
15000 – 150000	137	0.364	50	616000/ <i>f</i> <sup>1.2</sup>
150000 – 300000	0.354 <i>f</i> <sup>0.5</sup>	9.40 x 10 <sup>-4</sup> <i>f</i> <sup>0.5</sup>	3.33 x 10 <sup>-4</sup> <i>f</i>	616000/ <i>f</i> <sup>1.2</sup>

**Testing Procedure**

- a. Installing the magnetic field probe and turn on the LF-04 power switch, select the magnetic field test mode and the Aim unit, select the peak detection mode, select the Max-Hold display.
- b. Measured the ambient noise at this time and record.
- c. Make EUT work at maximum transmit power.
- d. During the measurement, the magnetic field probe center of the LF-04 is kept in 10cm distance from each test surface of the wireless charging base, and recorded the measured values of the Front, Rear, Left, Right, and Top side are separately.
- e. After all the measured values of the Front. Rear, Left, Right. And Top side are subtracted the background noise separately, they are the true magnetic field strength values at that point.
- f. Replace the electric field test probe and select the electric field test mode and the Vim unit, select the peak detection mode, select the Max-Hold display.
- g. Repeat step 3 to 5 and then get the strength of the electric field. For mobile RF exposure condition, due to installation limitations no tests from the underside of the charging device are required.

**Test setup**



**3.3 MPE CALCULATION FORMULA**

**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 BLE & WWAN

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

For WWAN function, operating at GSM 850/1900, LTE Band 2/4/5/12/13/25/26/66/85

#### 3.4.2 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	4	1	3.0	8.0	6.3096	1	0.00126

Operating Mode	Freq.	Calculated maximum EIRP (Time Average)	Declared maximum EIRP	MPE Limit	MPE Value
	(MHz)	(dBm)	(mW)	(mW/cm <sup>2</sup> )	
GSM 850	824-849	25.97	395.3666	0.5493	0.0787
PCS 1 900	1850-1910	22.97	198.1527	1	0.0394
LTE Band 2	1850-1910	25.00	316.2278	1	0.0629
LTE Band 4	1710-1755	25.00	316.2278	1	0.0629
LTE Band 5	824-849	25.00	316.2278	0.5493	0.0629
LTE Band 12	699-716	25.00	316.2278	0.4660	0.0629
LTE Band 13	777-787	25.00	316.2278	0.5180	0.0629
LTE Band 25	1850 -1915	25.00	316.2278	1	0.0629
LTE Band 26	814-849	25.00	316.2278	0.5427	0.0629
LTE Band 66	1710-1780	25.00	316.2278	1	0.0629
LTE Band 85	698 - 716	25.00	316.2278	0.4653	0.0629

So, the transmitter complies with the RF exposure requirements and the SAR is not required.

**3.4.3 Results for RSS-102 Issue 5**

Operating Mode	Freq.	Declared maximum conducted average output power	Max. positive tolerance according manufacturer	Antenna Gain	Calculated maximum EIRP	Declared maximum EIRP	Limit
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(W)	(W)
LE	2402-2480	4	1	3.0	8.0	0.00631	2.6764

Operating Mode	Freq.	Calculated maximum EIRP (Time Average)	Declared maximum EIRP	Limit
	(MHz)	(dBm)	(W)	(W)
GSM 850	824-849	25.97	0.395367	1.2883
PCS 1 900	1850-1910	22.97	0.198153	2.2390
LTE Band 2	1850-1910	25.00	0.316228	2.2390
LTE Band 4	1710-1755	25.00	0.316228	2.1218
LTE Band 5	824-849	25.00	0.316228	1.2883
LTE Band 12	699-716	25.00	0.316228	1.1513
LTE Band 13	777-787	25.00	0.316228	1.2376
LTE Band 25	1850 -1915	25.00	0.316228	2.2390
LTE Band 26	814-849	25.00	0.316228	1.2776
LTE Band 66	1710-1780	25.00	0.316228	2.1218
LTE Band 85	698 - 716	25.00	0.316228	1.1502

So, the transmitter complies with the RF exposure requirements and the SAR is not required.

### 3.5 FOR RFID

#### 3.5.1 Result for 47 CFR §1.1310

##### Electric Field Strength

Test Position	Test distance (cm)	Test result (V/m)	Limit (V/m)	Result (Pass/Fail)
A: Right	15	0.22483	614	Pass
B: Left	15	0.06805	614	Pass
C: Front	15	0.02311	614	Pass
D: Back	15	0.02309	614	Pass
E: Top	20	0.1542	614	Pass
F: Bottom	15	0.22709	614	Pass

##### Magnetic Field Strength

Test Position	Test distance (cm)	Test result (A/m)	Limit (A/m)	Result (Pass/Fail)
A: Right	15	0.01127	1.63	Pass
B: Left	15	0.01148	1.63	Pass
C: Front	15	0.01141	1.63	Pass
D: Back	15	0.01214	1.63	Pass
E: Top	20	0.0138	1.63	Pass
F: Bottom	15	0.01412	1.63	Pass

Note:

1. Test with 15cm distance from the center of the probe(s) to the edge of the device, 20 cm for top (Position E) test



### 3.5.2 Result for SPR-002 Issue 1

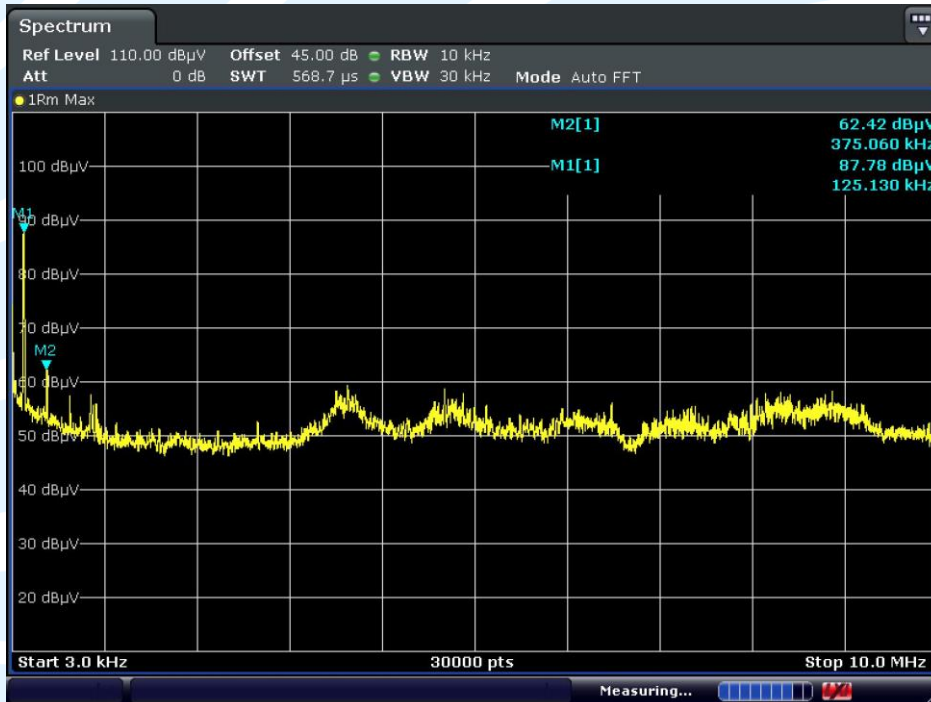
#### Test result (125 kHz)

Test Position	Test distance (cm)	Magnetic Field Strength				Electric Field Strength			Result (Pass/Fail)
		Test result (A/m)	Limit (A/m)	Max. percentage (%)	Limit 6 minutes (A/m)	Test result (V/m)	Limit (V/m)	Max. percentage (%)	
A: Right	0	0.39369	90	0.62 Note 2	5.84 Note 1	0.59971	83	2.92	Pass
B: Left	0	0.03867	90			0.82895	83		Pass
C: Front	0	0.08141	90			0.69349	83		Pass
D: Back	0	0.31691	90			0.5493	83		Pass
E: Top	0	0.55434	90			2.2421	83		Pass
F: Bottom	0	0.37041	90			1.3031	83		Pass

**Note:**

- limit = 0.73/f A/m (f is frequency in MHz), f = 0.125 MHz
- the maximum instantaneous magnetic field level is 4.5434 A/m, it is less than the limit of specific absorption rate (SAR)

**Spectrum test:**



Date: 28.JUL.2023 15:46:01



### 3.6 Simultaneous multi-band transmission analysis

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

No.	Configurations	Support/Not Support
1	GSM + BT + RFID	Support
2	E-UTRA + BT+ RFID	Support

#### 3.6.2 Results for transmit simultaneously

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No.	Configurations	Maximum MPE Ratios				Max. Transmit simultaneously	Limit
		WWAN	BT	RFID (Electric Field Strength)	RFID (Magnetic Field Strength)		
1	GSM 850 + BT + RFID	0.1433	0.00126	0.00037	0.00866	0.15322	1
2	PCS 1 900 + BT + RFID	0.0394	0.00126	0.00037	0.00866	0.04932	1
3	LTE Band 2 + BT + RFID	0.0629	0.00126	0.00037	0.00866	0.07282	1
4	LTE Band 4 + BT + RFID	0.0629	0.00126	0.00037	0.00866	0.07282	1
5	LTE Band 5 + BT + RFID	0.1145	0.00126	0.00037	0.00866	0.12442	1
6	LTE Band 12 + BT + RFID	0.1350	0.00126	0.00037	0.00866	0.14492	1
7	LTE Band 13 + BT + RFID	0.1214	0.00126	0.00037	0.00866	0.13132	1
8	LTE Band 25 + BT + RFID	0.0629	0.00126	0.00037	0.00866	0.07282	1
9	LTE Band 26 + BT + RFID	0.1159	0.00126	0.00037	0.00866	0.12582	1
10	LTE Band 66 + BT + RFID	0.0629	0.00126	0.00037	0.00866	0.07282	1
11	LTE Band 85 + BT + RFID	0.1352	0.00126	0.00037	0.00866	0.14512	1

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

*Transmit simultaneously MPE =  $\Sigma$  of MPE ratios*

*MPE ratios = Field strengths or power density / MPE limit at the test frequency*

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No.	Configurations	Maximum MPE Ratios				Max. Transmit simultaneously	Limit
		WWAN	BT	RFID (Electric Field Strength)	RFID (Magnetic Field Strength)		
1	GSM 850 + BT + RFID	0.3069	0.0024	0.02701	0.00616	0.33631	1
2	PCS 1 900 + BT + RFID	0.0885	0.0024	0.02701	0.00616	0.11791	1
3	LTE Band 2 + BT + RFID	0.1412	0.0024	0.02701	0.00616	0.17061	1
4	LTE Band 4 + BT + RFID	0.1490	0.0024	0.02701	0.00616	0.17841	1
5	LTE Band 5 + BT + RFID	0.2455	0.0024	0.02701	0.00616	0.27491	1
6	LTE Band 12 + BT + RFID	0.2747	0.0024	0.02701	0.00616	0.30411	1
7	LTE Band 13 + BT + RFID	0.2555	0.0024	0.02701	0.00616	0.28491	1
8	LTE Band 25 + BT + RFID	0.1412	0.0024	0.02701	0.00616	0.17061	1
9	LTE Band 26 + BT + RFID	0.2475	0.0024	0.02701	0.00616	0.27691	1
10	LTE Band 66 + BT + RFID	0.1490	0.0024	0.02701	0.00616	0.17841	1
11	LTE Band 85 + BT + RFID	0.2749	0.0024	0.02701	0.00616	0.30431	1

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

*Transmit simultaneously MPE =  $\Sigma$  of MPE ratios*

*MPE ratios = Field strengths or power density / MPE limit at the test frequency*

## APPENDIX 1 PHOTOS OF TEST SETUP

See test photos attached in Appendix 1 for the actual connections between Product and support equipment.

## APPENDIX 1 PHOTOS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal Photos.

\*\*\* End of Report \*\*\*

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