

Prüfbericht-Nr.: <i>Test report no.:</i>	CN21UQOM 004	Auftrags-Nr.: <i>Order no.:</i>	168316899	Seite 1 von 20 <i>Page 1 of 20</i>	
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2021-05-10		
Auftraggeber: <i>Client:</i>	Telit Communications S.p.A., Viale Stazione di Prosecco 5/b, 34010, Trieste, Italy				
Prüfgegenstand: <i>Test item:</i>	Data Terminal Module				
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	ML865G1-WW				
Auftrags-Inhalt: <i>Order content:</i>	Test Report				
Prüfgrundlage: <i>Test specification:</i>	47 CFR FCC Part 2.1091		RSS-102 Issue 5		
Wareneingangsdatum: <i>Date of sample receipt:</i>	2021-05-18		Refer to Photo Documentation		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003047853-001, A003047853-002, A003047853-003				
Prüfzeitraum: <i>Testing period:</i>	2021-05-18 – 2021-06-23				
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.				
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.				
Prüfergebnis*: <i>Test result*:</i>	Pass				
geprüft von: <i>tested by:</i>	<input checked="" type="checkbox"/> <u>Hardy Suo</u>		genehmigt von: <i>authorized by:</i>	<input checked="" type="checkbox"/> <u>Sam Lin</u>	
Datum: <i>Date:</i>	2021-07-22		Ausstellungsdatum: <i>Issue date:</i>	2021-07-22	
Stellung / Position:	Sachverständige(r)/Expert		Stellung / Position:	Sachverständige(r)/Expert	
Sonstiges / Other:	FCC ID: RI7ML865G1WW; IC: 5131A-ML865G1WW This report is for RF exposure evaluation.				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>				
* Legende:	1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	4 = ausreichend N/A = nicht anwendbar	5 = mangelhaft N/T = nicht getestet
* Legend:	1 = very good P(ass) = passed a.m. test specification(s)	2 = good F(ail) = failed a.m. test specification(s)	3 = satisfactory F(ail) = failed a.m. test specification(s)	4 = sufficient N/A = not applicable	5 = poor N/T = not tested
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>					

V05

TEST SUMMARY

5.1.1 RF EXPOSURE COMPLIANCE

RESULT: Pass

CONTENTS

1.	GENERAL REMARKS	4
1.1	COMPLEMENTARY MATERIALS	4
1.2	LIST OF DOCUMENT CHANGE	4
2.	TEST SITES	5
2.1	TEST FACILITIES.....	5
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS.....	5
2.3	TRACEABILITY	6
2.4	CALIBRATION	6
2.5	MEASUREMENT UNCERTAINTY.....	6
2.6	LOCATION OF ORIGINAL DATA.....	6
2.7	STATUS OF FACILITY USED FOR TESTING.....	6
3.	GENERAL PRODUCT INFORMATION	7
3.1	PRODUCT FUNCTION AND INTENDED USE.....	7
3.2	RATINGS AND SYSTEM DETAILS	7
3.3	INDEPENDENT OPERATION MODES	8
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS	9
3.5	SUBMITTED DOCUMENTS.....	9
4.	TEST SET-UP AND OPERATION MODES	10
4.1	PRINCIPLE OF CONFIGURATION SELECTION.....	10
4.2	TEST OPERATION AND TEST SOFTWARE	10
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	10
4.4	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE.....	10
4.5	TEST SETUP DIAGRAM.....	11
5.	TEST RESULTS	12
5.1	TRANSMITTER REQUIREMENTS & TEST SUITES	12
5.1.1	<i>RF Exposure Compliance.....</i>	<i>12</i>
6.	LIST OF TABLES	20

1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Photographs of the Test Set-up

1.2 List of Document Change

No.	Report No.	Description
1	CN21UQOM 004	First release.

2. Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.
(FCC Registration No.: 694916 & IC Registration Number: 25069)

No. 362, Huanguan Road Middle, Longhua District, Shenzhen 518110, P.R. China

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Description	Manufacturer	Model	Serial No.	Calibrated until (DD.MM.YYYY)
Radio Spectrum Testing				
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	166305	20.09.2021
Signal Analyzer	Rohde & Schwarz	FSV 40	101475	20.09.2021
Vector Signal Generator	Rohde & Schwarz	SMBV100A	263466	20.09.2021
Signal Generator	Rohde & Schwarz	SMB100A	181041	17.12.2021
High Speed Power Supply	KEITHLEY	2303	4080052	17.12.2021
RF Control Unit	Tonscend	JS0806-1	19H8060192	N/A

2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table,

Items		Extended Uncertainty
Radio Spectrum	Output Power (dBm)	U=0.5dB, k=2, $\sigma=95\%$

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. facility located at No. 362, Huanguan Road Middle, Longhua District, Shenzhen 518110, P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3. General Product Information

3.1 Product Function and Intended Use

The EUT is wireless module which supports NB-IoT and eMTC wireless technology.
 For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

Technical Specification	Value
Kind of Equipment:	Data Terminal Module
Type Designation:	ML865G1-VV
FCC ID:	RI7ML865G1VV
IC:	5131A-ML865G1VV
Type of Equipment:	Single Module
Hardware Version:	0.0
Software Version:	MOC.500003
Wireless Technology:	GPRS/EGPRS, eMTC and NB-IoT
Operating Frequency Range:	GSM 850 PCS 1900 eMTC: Band 2/4/5/12/13/25/26/66/85 NB-IoT: Band 2/4/5/12/13/25/26/66/71/85
Rated RF Output Power:	GPRS 850: 33 dBm ± 2dB; GPRS 1900: 30 dBm ± 2dB EGPRS 850: 27 dBm ± 2dB; EGPRS 1900: 26 dBm ± 2dB eMTC and NB-IoT: 23 dBm ± 2dB NB-IoT Band 71: 20 dBm ± 2dB
Power Class:	GPRS 850: Class 4; GPRS 1900: Class 1 EGPRS 850: Class E2; EGPRS 1900: Class E2 Class 3 for eMTC and NB-IoT Class 5 for NB-IoT Band 71 only
Type of Modulation:	GPRS/EGPRS: GMSK, 8PSK eMTC: QPSK, 16QAM NB-IoT: BPSK, QPSK
Operating Voltage:	DC 3.8V via DC power supply
Antenna Type:	External Antenna
Number of Antenna:	1

Table 3: Marketed Antenna List

Description	Manufacturer	Model	S/N	Rating
LTE Magnetic Antenna	ATEL-CAB	T-AT305	N/A	Frequency Range: 700-960 MHz / 1710-2700 MHz Omnidirectional antenna Gain: 2.14 dBi (Max.) Cable: RG 174mm 2500

3.3 Independent Operation Modes

The basic operation modes are:

- A. Transmitting
 - 1. eMTC
 - a. Lowest channel
 - b. Middle channel
 - c. Highest channel
 - 2. NB-IoT
 - a. Lowest channel
 - b. Highest channel
 - c. Hopping mode
 - 3. GPRS/EGPRS
 - a. Lowest channel
 - b. Highest channel
 - c. Hopping mode
- B. Receiving
 - 1. eMTC
 - a. Lowest channel
 - b. Middle channel
 - c. Highest channel
 - 2. NB-IoT
 - a. Lowest channel
 - b. Highest channel
 - c. Hopping mode
 - 3. GPRS/EGPRS
 - a. Lowest channel
 - b. Highest channel
 - c. Hopping mode
 - 4. GNSS
 - a. GPS
 - b. Beidou
 - c. Galileo
 - d. GLONASS
- C. Standby
- D. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Bill of Material	- Circuit Diagram
- PCB Layout	- Instruction Manual
- Photo Document	- Rating Label

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5.

4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

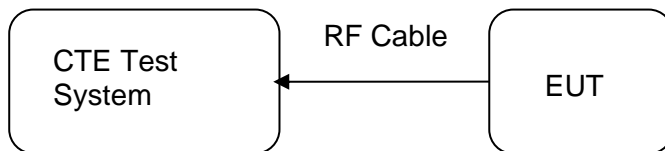
Name	Model	Manufacturer	S/N
Evaluation Kit	EVK2	Telit	N/A

4.4 Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Equipment Configuration for Transmitter Measurement



5. Test Results

5.1 Transmitter Requirements & Test Suites

5.1.1 RF Exposure Compliance

RESULT: Pass

Test date	:	2021-05-18 to 2021-06-23
Test standard	:	FCC 47 CFR Part 2 Section 2.1091 RSS-102 Issue 5 Section 3.2
Limit	:	Table 1 of FCC 47 CFR Part 1 Section 1.1310 Table 4 of RSS-102 Issue 5 Section 4
Kind of test site	:	Shielded room

TEST SETUP

Test Channel	:	Low/ Middle/ High
Operation Mode	:	A
Ambient temperature	:	24°C
Relative humidity	:	51%
Atmospheric pressure	:	101.0 kPa

This device is mobile device, and the applicant declares that the minimum separation distance is greater than 20cm. Therefore MPE measurement or computational modeling should be used to determine compliance.

MPE Calculation is based on the conducted power, and considering maximum power and antenna gain. The following formula is used to MPE evaluation.

$$Pd = \frac{P_{out} * G}{4R^2\pi}$$

Where

P_d = power density in mW/cm² or W/m²

P_{out} = output power to antenna in mW or W

G_{num} = Antenna gain in numeric

π = 3.14159

R = Distance between observation point and the center of radiator in cm or m

Table 5: Permissive Gain Calculations for FCC

Operating Mode	Band	Maximum Conducted Output Power		E.I.R.P /ERP Limit (dBm)	Allowed Antenna Gain_Power (dBi)	MPE		Allowed Antenna Gain_MPE (dBi)	Permissive Antenna Gain (dBi)
		Measured Power (dBm)	Max. Power incl. tune-up (dBm)			Limit (mW/cm ²)	Limit (dBm)		
NB-IoT	2	23.86	25	33.01	8.0	1.0	37.01	12.01	8.00
	4	23.60	25	30.00	5.0	1.0	37.01	12.01	5.00
	5	23.36	25	40.60	15.6	0.5	34.41	9.41	9.40
	12	23.47	25	36.92	11.9	0.5	33.70	8.70	8.60
	13	23.59	25	36.92	11.9	0.5	34.16	9.16	9.10
	25	23.94	25	33.01	8.0	1.0	37.01	12.01	8.00
	26	23.42	25	40.60	15.6	0.5	34.36	9.36	9.30
	66	23.38	25	30.00	5.0	1.0	37.01	12.01	5.00
	71	21.78	22	36.92	14.9	0.4	33.47	11.47	11.40
85	23.47	25	36.92	11.9	0.5	33.69	8.69	8.60	
eMTC	2	23.63	25	33.01	8.0	1.0	37.01	12.01	8.00
	4	23.55	25	30.00	5.0	1.0	37.01	12.01	5.00
	5	23.57	25	40.60	15.6	0.5	34.41	9.41	9.40
	12	23.52	25	36.92	11.9	0.5	33.70	8.70	8.60
	13	23.89	25	36.92	11.9	0.5	34.16	9.16	9.10
	25	23.93	25	33.01	8.0	1.0	37.01	12.01	8.00
	26	23.67	25	40.60	15.6	0.5	34.36	9.36	9.30
	66	23.34	25	30.00	5.0	1.0	37.01	12.01	5.00
85	23.41	25	36.92	11.9	0.5	33.69	8.69	8.60	
GPRS	2	25.13	25.98	33.01	7.0	1.0	37.01	11.03	7.00
	5	26.86	28.98	40.60	11.6	0.5	34.41	5.43	5.40
EGPRS	2	21.06	22.99	33.01	10.0	1.0	37.01	14.02	10.00
	5	22.07	23.99	40.60	16.6	0.5	34.41	10.42	10.40

Table 6: Permissive Gain Calculations for ISED

Operating Mode	Band	Maximum Conducted Output Power		E.I.R.P /ERP Limit (dBm)	Allowed Antenna Gain_Power (dBi)	MPE		Allowed Antenna Gain_MPE (dBi)	Permissive Antenna Gain (dBi)
		Measured Power (dBm)	Max. Power incl. tune-up (dBm)			Limit (W/m ²)	Limit (dBm)		
NB-IoT	2	23.86	25	33.01	8.01	4.5	33.52	8.52	8.00
	4	23.60	25	30.00	5.00	4.2	33.29	8.29	5.00
	5	23.36	25	42.75	17.75	2.6	31.12	6.12	6.10
	12	23.47	25	36.92	11.92	2.3	30.63	5.63	5.60
	13	23.59	25	36.92	11.92	2.5	30.95	5.95	5.90
	25	23.94	25	33.01	8.01	4.5	33.52	8.52	8.00
	26	23.40	25	42.75	17.75	2.6	31.09	6.09	6.00
	66	23.38	25	30.00	5.00	4.2	33.29	8.29	5.00
	71	21.78	22	36.92	14.92	2.2	30.48	8.48	8.40
85	23.47	25	36.92	11.92	2.3	30.63	5.63	5.60	
eMTC	2	23.63	25	33.01	8.01	4.5	33.52	8.52	8.00
	4	23.55	25	30.00	5.00	4.2	33.29	8.29	5.00
	5	23.57	25	42.75	17.75	2.6	31.12	6.12	6.10
	12	23.52	25	36.92	11.92	2.3	30.63	5.63	5.60
	13	23.89	25	36.92	11.92	2.5	30.95	5.95	5.90
	25	23.93	25	33.01	8.01	4.5	33.52	8.52	8.00
	26	23.49	25	42.75	17.75	2.6	31.09	6.09	6.00
	66	23.34	25	30.00	5.00	4.2	33.29	8.29	5.00
85	23.41	25	36.92	11.92	2.3	30.63	5.63	5.60	
GPRS	2	25.13	25.98	33.01	7.03	4.5	33.52	7.54	7.00
	5	26.86	28.98	42.75	13.77	2.6	31.12	2.14	2.10
EGPRS	2	21.06	22.99	33.01	10.02	4.5	33.52	10.53	10.00
	5	22.07	23.99	42.75	18.76	2.6	31.12	7.13	7.10

Table 7: Summary of Maximum Permissive Gain

Operating Mode	Band	Permissive Antenna Gain based on Operating Mode (dBi)								Max. Permissive Antenna Gain (dBi)
		NB-IoT		eMTC		GPRS		EGPRS		
		FCC	ISED	FCC	ISED	FCC	ISED	FCC	ISED	
NB-IoT/eMTC/GPRS/EGPRS	2	8.00	8.00	8.00	8.00	7.00	7.00	10.00	10.00	7.0
	4	5.00	5.00	5.00	5.00	--	--	--	--	5.0
	5	9.40	6.10	9.40	6.10	5.40	2.10	10.40	7.10	2.1
	12	8.60	5.60	8.60	5.60	--	--	--	--	5.6
	13	9.10	5.90	9.10	5.90	--	--	--	--	5.9
	25	8.00	8.00	8.00	8.00	--	--	--	--	8.0
	26	9.30	6.00	9.30	6.00	--	--	--	--	6.0
	66	5.00	5.00	5.00	5.00	--	--	--	--	5.0
	71	11.40	8.40	--	--	--	--	--	--	8.4
85	8.60	5.60	8.60	5.60	--	--	--	--	5.6	

Table 8: Test Results of RF Exposure Calculations based on Specific Antenna for FCC

Operating Mode	Band	Maximum Conducted Output Power (P _{out})		Antenna Gain (dBi)	Numeric Gain G _{num} (dB)	Distance R (cm)	MPE P _d (mW/cm ²)	Limit (mW/cm ²)	Verdict
		dBm	mW						
NB-IoT	2	23.86	243.22	2.14	1.64	20	0.079	1.0	Pass
	4	23.60	229.09	2.14	1.64	20	0.075	1.0	Pass
	5	23.36	216.77	2.14	1.64	20	0.071	0.55	Pass
	12	23.47	222.33	2.14	1.64	20	0.072	0.47	Pass
	13	23.59	228.56	2.14	1.64	20	0.074	0.52	Pass
	25	23.94	247.74	2.14	1.64	20	0.081	1.0	Pass
	26	23.42	219.79	2.14	1.64	20	0.072	0.54	Pass
	66	23.38	217.77	2.14	1.64	20	0.071	1.0	Pass
	71	21.78	150.66	2.14	1.64	20	0.049	0.44	Pass
eMTC	85	23.47	222.33	2.14	1.64	20	0.072	0.47	Pass
	2	23.63	230.67	2.14	1.64	20	0.075	1.0	Pass
	4	23.55	226.46	2.14	1.64	20	0.074	1.0	Pass
	5	23.57	227.51	2.14	1.64	20	0.074	0.55	Pass
	12	23.52	224.91	2.14	1.64	20	0.073	0.47	Pass
	13	23.89	244.91	2.14	1.64	20	0.080	0.52	Pass
	25	23.93	247.17	2.14	1.64	20	0.081	1.0	Pass
	26	23.67	232.81	2.14	1.64	20	0.076	0.54	Pass
	66	23.34	215.77	2.14	1.64	20	0.070	1.0	Pass
GPRS	85	23.41	219.28	2.14	1.64	20	0.071	0.47	Pass
	2	25.13	325.84	2.14	1.64	20	0.106	1.0	Pass
EGPRS	5	26.86	485.29	2.14	1.64	20	0.158	0.55	Pass
	2	21.06	127.64	2.14	1.64	20	0.042	1.0	Pass
EGPRS	5	22.07	161.06	2.14	1.64	20	0.052	0.55	Pass

Table 9: Test Results of RF Exposure Calculations based on Maximum Permissive Gain for FCC

Operating Mode	Band	Maximum Conducted Output Power (P_{out})		Antenna Gain (dBi)	Numeric Gain G_{num} (dB)	Distance R (cm)	MPE P_d (mW/cm ²)	Limit (mW/cm ²)	Verdict
		dBm	mW						
NB-IoT	2	23.86	243.22	8.00	6.31	20	0.305	1.0	Pass
	4	23.60	229.09	5.00	3.16	20	0.144	1.0	Pass
	5	23.36	216.77	9.40	8.71	20	0.376	0.55	Pass
	12	23.47	222.33	8.60	7.24	20	0.321	0.47	Pass
	13	23.59	228.56	9.10	8.13	20	0.370	0.52	Pass
	25	23.94	247.74	8.00	6.31	20	0.311	1.0	Pass
	26	23.42	219.79	9.30	8.51	20	0.372	0.54	Pass
	66	23.38	217.77	5.00	3.16	20	0.137	1.0	Pass
	71	21.78	150.66	11.40	13.80	20	0.414	0.44	Pass
85	23.47	222.33	8.60	7.24	20	0.321	0.47	Pass	
eMTC	2	23.63	230.67	8.00	6.31	20	0.290	1.0	Pass
	4	23.55	226.46	5.00	3.16	20	0.143	1.0	Pass
	5	23.57	227.51	9.40	8.71	20	0.394	0.55	Pass
	12	23.52	224.91	8.60	7.24	20	0.324	0.47	Pass
	13	23.89	244.91	9.10	8.13	20	0.396	0.52	Pass
	25	23.93	247.17	8.00	6.31	20	0.310	1.0	Pass
	26	23.67	232.81	9.30	8.51	20	0.394	0.54	Pass
	66	23.34	215.77	5.00	3.16	20	0.136	1.0	Pass
85	23.41	219.28	8.60	7.24	20	0.316	0.47	Pass	
GPRS	2	25.13	325.84	7.00	5.01	20	0.325	1.0	Pass
	5	26.86	485.29	5.40	3.47	20	0.335	0.55	Pass
EGPRS	2	21.06	127.64	10.00	10.00	20	0.254	1.0	Pass
	5	22.07	161.06	10.40	10.96	20	0.352	0.55	Pass

Table 10: Test Results of RF Exposure Calculations based on Specific Antenna for ISSED

Operating Mode	Band	Maximum Conducted Output Power (P_{out})		Antenna Gain (dBi)	Numeric Gain G_{num} (dB)	Distance R (m)	MPE P_d (W/m ²)	Limit (W/m ²)	Verdict
		dBm	W						
NB-IoT	2	23.86	0.243	2.14	1.64	2	0.792	4.5	Pass
	4	23.60	0.229	2.14	1.64	4	0.746	4.2	Pass
	5	23.36	0.216	2.14	1.64	5	0.704	2.6	Pass
	12	23.47	0.222	2.14	1.64	12	0.723	2.3	Pass
	13	23.59	0.228	2.14	1.64	13	0.743	2.5	Pass
	25	23.94	0.247	2.14	1.64	25	0.805	4.5	Pass
	26	23.40	0.218	2.14	1.64	26	0.710	2.6	Pass
	66	23.38	0.217	2.14	1.64	66	0.707	4.2	Pass
	71	21.78	0.150	2.14	1.64	71	0.489	2.2	Pass
85	23.47	0.222	2.14	1.64	85	0.723	2.3	Pass	
eMTC	2	23.63	0.230	2.14	1.64	2	0.749	4.5	Pass
	4	23.55	0.226	2.14	1.64	4	0.736	4.2	Pass
	5	23.57	0.227	2.14	1.64	5	0.740	2.6	Pass
	12	23.52	0.224	2.14	1.64	12	0.730	2.3	Pass
	13	23.89	0.244	2.14	1.64	13	0.795	2.5	Pass
	25	23.93	0.247	2.14	1.64	25	0.805	4.5	Pass
	26	23.49	0.223	2.14	1.64	26	0.727	2.6	Pass
	66	23.34	0.215	2.14	1.64	66	0.700	4.2	Pass
85	23.41	0.219	2.14	1.64	85	0.714	2.3	Pass	
GPRS	2	25.13	0.325	2.14	1.64	2	1.059	4.5	Pass
	5	26.86	0.485	2.14	1.64	5	1.580	2.6	Pass
EGPRS	2	21.06	0.127	2.14	1.64	2	0.414	4.5	Pass
	5	22.07	0.161	2.14	1.64	5	0.525	2.6	Pass

Table 11: Test Results of RF Exposure Calculations based on Maximum Permissive Gain for ISED

Operating Mode	Band	Maximum Conducted Output Power (P_{out})		Antenna Gain (dBi)	Numeric Gain G_{num} (dB)	Distance R (m)	MPE P_d (W/m ²)	Limit (W/m ²)	Verdict
		dBm	W						
NB-IoT	2	23.86	0.243	8.00	6.31	0.2	3.05	4.5	Pass
	4	23.60	0.229	5.00	3.16	0.2	1.44	4.2	Pass
	5	23.36	0.216	6.10	4.07	0.2	1.75	2.6	Pass
	12	23.47	0.222	5.60	3.63	0.2	1.60	2.3	Pass
	13	23.59	0.228	5.90	3.89	0.2	1.77	2.5	Pass
	25	23.94	0.247	8.00	6.31	0.2	3.10	4.5	Pass
	26	23.40	0.218	6.00	3.98	0.2	1.73	2.6	Pass
	66	23.38	0.217	5.00	3.16	0.2	1.37	4.2	Pass
	71	21.78	0.150	8.40	6.92	0.2	2.07	2.2	Pass
85	23.47	0.222	5.60	3.63	0.2	1.60	2.3	Pass	
eMTC	2	23.63	0.230	8.00	6.31	0.2	2.89	4.5	Pass
	4	23.55	0.226	5.00	3.16	0.2	1.42	4.2	Pass
	5	23.57	0.227	6.10	4.07	0.2	1.84	2.6	Pass
	12	23.52	0.224	5.60	3.63	0.2	1.62	2.3	Pass
	13	23.89	0.244	5.90	3.89	0.2	1.89	2.5	Pass
	25	23.93	0.247	8.00	6.31	0.2	3.10	4.5	Pass
	26	23.49	0.223	6.00	3.98	0.2	1.77	2.6	Pass
	66	23.34	0.215	5.00	3.16	0.2	1.35	4.2	Pass
85	23.41	0.219	5.60	3.63	0.2	1.58	2.3	Pass	
GPRS	2	24.39	0.274	7.00	5.01	0.2	2.73	4.5	Pass
	5	26.86	0.485	2.10	1.62	0.2	1.57	2.6	Pass
EGPRS	2	21.06	0.127	10.00	10.00	0.2	2.53	4.5	Pass
	5	22.07	0.161	7.10	5.13	0.2	1.64	2.6	Pass

6. List of Tables

Table 1: List of Test and Measurement Equipment	5
Table 2: Technical Specification of EUT	7
Table 3: Marketed Antenna List.....	8
Table 4: List of Accessories and Auxiliary Equipment	10
Table 5: Permissive Gain Calculations for FCC	13
Table 6: Permissive Gain Calculations for ISED	14
Table 7: Summary of Maximum Permissive Gain.....	15
Table 8: Test Results of RF Exposure Calculations based on Specific Antenna for FCC.....	16
Table 9: Test Results of RF Exposure Calculations based on Maximum Permissive Gain for FCC.....	17
Table 10: Test Results of RF Exposure Calculations based on Specific Antenna for ISED	18
Table 11: Test Results of RF Exposure Calculations based on Maximum Permissive Gain for ISED....	19

===== END OF REPORT =====