



TEST REPORT

REPORT NUMBER: I23W00005-MPE

ON

Type of Equipment: SIMCom Module
Type of Designation: SIM8260A
Manufacturer: SIMCom Wireless Solutions Limited
Brand Name: SIMCom
FCC ID: 2AJYU-8XN0001

ACCORDING TO

FCC CFR 47 Part 2.1091 《Radiofrequency radiation exposure evaluation: mobile devices》

FCC CFR 47 Part1.1310 《Radiofrequency radiation exposure limits》

Chongqing Academy of Information and Communication Technology

Month date, year

Mar. 17th, 2023

Signature

Xiang Luoyong

Director

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of Chongqing Academy of Information and Communications Technology.



Revision Version

Report Number	Revision	Date	Memo
I23W00005-MPE	00	2023-3-17	Initial creation of test report



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1. Test Laboratory

1.1. Testing Location

Company Name:	Chongqing Academy of Information and Communications Technology
Address:	Building C, Technology Innovation Center, No.8, Yuma Road, Chayuan New Area, Nan'an District, Chongqing, People's Republic of China
Postal Code:	401336
Telephone:	0086-23-88069965
Fax:	0086-23-88608777

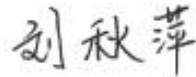
1.2. Testing Environment

Normal Temperature:	21.3℃
Relative Humidity:	65.0%

1.3. Project Data

Testing Start Date:	2023-3-17
Testing End Date:	2023-3-17

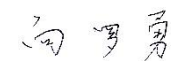
1.4. Signature



2023-3-17

Liu Qiuping**Date****(Prepared this test report)**

2023-3-17

Yu Chun**Date****(Reviewed this test report)**

2023-3-17

Xiang Luoyong**Date****Director of the laboratory****(Approved this test report)****Chongqing Academy of Information and Communication Technology**Address: No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China, 401336
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2. Client Information

2.1. Applicant Information

Company Name:	SIMCom Wireless Solutions Limited
Address /Post:	SIMCom Headquarters Building, Building 3, No.289 Linhong Road, Changning District, Shanghai, China
Country:	China
Telephone:	+86 21 3157 5100
Fax:	--
Email:	Yongsheng Li@simcom.com
Contact Person:	Yongsheng Li

2.2. Manufacturer Information

Company Name:	SIMCom Wireless Solutions Limited
Address /Post:	SIMCom Headquarters Building, Building 3, No.289 Linhong Road, Changning District, Shanghai, China
Country:	China
Telephone:	+86 21 3157 5100
Fax:	--
Email:	Yongsheng Li@simcom.com
Contact Person:	Yongsheng Li

3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

EUT Description:	SIMCom Module
Model name:	SIM8260A
WCDMA Frequency Band:	B2/B4/B5
LTE Frequency Band:	B1/B2/B4/B5/B7/B12/B13/B14/B17/B25/B26/B29/B30/B48/B66/B71
NR Frequency Band	N2/N5/N7N12/N14/N25/N26/N41/N48/N66/N71/N77/N78
Note: Photographs of EUT are shown in ANNEX A of this test report.	

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
S1	864284040456399	V1.02	V1.0.01	2022-03-28

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE used during the test

EUT ID*	SN	Description
NA	NA	NA

*AE ID: is used to identify the test sample in the lab internally.

4. Reference Documents

4.1. Applicable Standards

The MPE report was carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part 2.1091.

FCC CFR 47 Part 2.1091: Radiofrequency radiation exposure evaluation: mobile devices

4.2. Test Limits

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2m normally can be maintained between the user and the device.

MPE for the upper tier (people in controlled environments)

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 Exposure				
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
1500-100000	--	--	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
1500-100000	--	--	1.0	30

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

For the DUT, the limits for the general public when an RF safety program is unavailable.

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5. Test Results

5.1. Tune Up Power

Frequency Band	Highest Averaged Tune up power(dBm)	Highest Frame-Averaged Tune up power (dBm)	Antenna Gain(dBi)
WCDMA Band 2	24.10	24.10	2.53
WCDMA Band 4	24.20	24.20	2.53
WCDMA Band 5	25.30	25.30	2.86
LTE Band 2	28.40	28.40	1.25
LTE Band 4	28.80	28.80	1.25
LTE Band 5	29.40	29.40	2.86
LTE Band 7	27.70	27.70	1.15
LTE Band 12	28.90	28.90	2.86
LTE Band 13	29.30	29.30	2.86
LTE Band 14	29.00	29.00	2.86
LTE Band 17	29.00	29.00	2.86
LTE Band 25	28.50	28.50	1.25
LTE Band 26	29.00	29.00	2.86
LTE Band 41	25.20	25.20	1.19
LTE Band 48	22.90	22.90	2.38
LTE Band 66	25.20	25.20	1.25
LTE Band 71	27.20	27.20	2.86

Notes:

1) Disclaimers: The highest tune up power and antenna gain in the above table are provided by the customer

Frequency Band	Highest Averaged Tune up power(dBm)	Highest Frame-Averaged Tune up power (dBm)	Antenna Gain(dBi)
NR N2	23.71	23.71	1.25
NR N5	24.40	24.40	2.86
NR N7	24.50	24.50	1.15
NR N12	23.00	23.00	2.86
NR V14	24.00	24.00	1.89
NR N25	24.30	24.30	1.25
NR N26	24.00	24.00	2.86
NR N41	26.70	26.70	1.19
NR N48	21.40	21.40	2.38
NR N66	24.50	24.50	1.25
NR N71	24.50	24.50	2.86
NR N 77	26.80	26.80	2.38
NR N78	26.50	26.50	2.38

Notes:

1) Disclaimers: The highest tune up power and antenna gain in the above table are provided by the customer

5.2. Calculation Information

For conservative evaluation consideration, only maximum power of each frequency band based on the tighter limits respectively are used to calculate the boundary power density.

Based on the FCC KDB 447498 D01 and 47 CFR §2.1091, the DUT is evaluated as a mobile device.

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

Where

P = Power in Watts

G = Numeric antenna gain

d = Distance in meters

S = Power density in milliwatts / square centimeter

5.3. Results

Frequency range	Limit(mW/cm ²)	Results(mW/cm ²)	Verdict
WCDMA Band 2	1.00	0.09	PASS
WCDMA Band 4	1.00	0.09	PASS
WCDMA Band 5	0.55	0.13	PASS
LTE Band 2	1.00	0.18	PASS
LTE Band 4	1.00	0.20	PASS
LTE Band 5	0.55	0.33	PASS
LTE Band 7	1.00	0.15	PASS
LTE Band 12	0.47	0.30	PASS
LTE Band 13	0.33	0.33	PASS
LTE Band 14	0.51	0.31	PASS
LTE Band 17	0.47	0.31	PASS
LTE Band 25	1.00	0.19	PASS
LTE Band 26	0.54	0.31	PASS
LTE Band 41	1.00	0.09	PASS
LTE Band 48	1.00	0.07	PASS
LTE Band 66	1.00	0.09	PASS
LTE N1	0.44	0.20	PASS
NR N2	1.00	0.06	PASS
NR N5	0.55	0.11	PASS
NR N7	1.00	0.07	PASS
NR N12	0.47	0.08	PASS
NR N14	0.53	0.08	PASS
NR N 25	1.00	0.07	PASS
NR N26	0.54	0.10	PASS
NR N41	1.00	0.12	PASS
NR N48	1.00	0.05	PASS
NR N66	1.00	0.07	PASS
NR N71	0.44	0.11	PASS
NR N 77	1.00	0.16	PASS
NR N78	1.00	0.15	PASS

5.4. Result of WCDMA Band 2

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1852.4 MHz ~ 1907.6 MHz; The maximum conducted is 24.10 dBm. The maximum gain is 2.53 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.09mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.5. Result of WCDMA Band 4

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1712.4 MHz ~ 1752.5MHz; The maximum conducted is 24.20 dBm. The maximum gain is 2.53 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.09 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.6. Result of WCDMA Band 5

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 826.4 MHz ~ 846.6 MHz; The maximum conducted is 25.30 dBm. The maximum gain is 2.86 dBi. Therefore, maximum limit for general public RF exposure: 826.4/1500=0.55 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.13mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.55 mW/cm² limit for uncontrolled exposure.

5.7. Result of LTE Band 2

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1850.00 MHz~1909.90MHz; The maximum conducted is 28.40 dBm. The maximum gain is 1.25 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.18 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.8. Result of LTE Band 4

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1710.0 MHz ~ 1754.9MHz; The maximum conducted is 28.80dBm. The maximum gain is 1.25 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.20 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.9. Result of LTE Band 5

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 824.0 MHz ~ 848.9MHz; The maximum conducted is 29.40 dBm. The maximum gain is 2.86dBi. Therefore, maximum limit for general public RF exposure: 824.0/1500=0.55 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.33 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.55 mW/cm² limit for uncontrolled exposure.

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5.10. Result of LTE Band 7

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 2500.0MHz ~ 2569.9MHz; The maximum conducted is 27.70 dBm. The maximum gain is 1.15 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.15 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.11. Result of LTE Band 12

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 699.00 MHz ~ 715.90 MHz; The maximum conducted is 28.90 dBm. The maximum gain is 2.86 dBi. Therefore, maximum limit for general public RF exposure: 699.0/1500=0.47 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.30 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.47 mW/cm² limit for uncontrolled exposure.

5.12. Result of LTE Band 13

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 746.00 MHz ~ 755.90 MHz; The maximum conducted is 29.30 dBm. The maximum gain is 2.86 dBi. Therefore, maximum limit for general public RF exposure: 746.0/1500=0.50 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.33 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.50 mW/cm² limit for uncontrolled exposure.

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5.13. Result of LTE Band 14

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 758.0 MHz ~ 767.9 MHz; The maximum conducted is 29.00 dBm. The maximum gain is 2.86 dBi. Therefore, maximum limit for general public RF exposure: $758.0/1500=0.51 \text{ mW/cm}^2$.

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.31 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.51 mW/cm² limit for uncontrolled exposure.

5.14. Result of LTE Band 17

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 704.0 MHz ~ 715.9MHz; The maximum conducted is 29.00 dBm. The maximum gain is 2.86 dBi. Therefore, maximum limit for general public RF exposure: $704.0/1500=0.47 \text{ mW/cm}^2$.

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.31 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.47 mW/cm² limit for uncontrolled exposure.

5.15. Result of LTE Band 25

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1850.0 MHz ~ 1914.9MHz; The maximum conducted is 28.50 dBm. The maximum gain is 1.25 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm^2 .

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.19mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.16. Result of LTE Band 26

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 807.0 MHz ~ 823.9 MHz; The maximum conducted is 29.00 dBm. The maximum gain is 2.86 dBi. Therefore, maximum limit for general public RF exposure: $807.00/1500=0.54 \text{ mW/cm}^2$.

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.31 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.54 mW/cm² limit for uncontrolled exposure.

5.17. Result of LTE Band 41

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 2496.00 MHz ~ 2689.90 MHz; The maximum conducted is 25.20 dBm. The maximum gain is 1.19 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.09 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.18. Result of LTE Band 48

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 3550.0 MHz ~ 3700.0 MHz; The maximum conducted is 22.90 dBm. The maximum gain is 2.38 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.07 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.19. Result of LTE Band 66

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1710.0 MHz ~ 1780.0 MHz; The maximum conducted is 25.20 dBm. The maximum gain is 1.25 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.09 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.20. Result of LTE Band 71

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 663.0MHz ~ 698.0MHz; The maximum conducted is 27.20 dBm. The maximum gain is 2.86 dBi. Therefore, maximum limit for general public RF exposure: 663.0/1500=0.44 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.20mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.44 mW/cm² limit for uncontrolled exposure.

5.21. Result of NR N2

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1850.0 MHz ~ 1910.0 MHz; The maximum conducted is 23.71 dBm. The maximum gain is 1.25 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.06 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.22. Result of NR N5

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 824.0 MHz ~ 849.0 MHz; The maximum conducted is 24.40 dBm. The maximum gain is 2.86 dBi. Therefore, maximum limit for general public RF exposure: $824.0/1500=0.55 \text{ mW/cm}^2$.

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.11 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.55 mW/cm² limit for uncontrolled exposure.

5.23. Result of NR N7

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @2500.0 MHz ~ 2570.0 MHz; The maximum conducted is 24.50 dBm. The maximum gain is 1.15 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.07 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.24. Result of NR N12

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 699.0 MHz ~ 716.0 MHz; The maximum conducted is 23.00 dBm. The maximum gain is 2.86 dBi. Therefore, maximum limit for general public RF exposure: $699.0/1500=0.47 \text{ mW/cm}^2$.

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.08mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.47 mW/cm² limit for uncontrolled exposure.

5.25. Result of NR N14

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 788.0 MHz ~ 798.0 MHz; The maximum conducted is 24.00 dBm. The maximum gain is 1.89 dBi. Therefore, maximum limit for general public RF exposure: $788.0/1500=0.53 \text{ mW/cm}^2$.

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.08mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.53 mW/cm² limit for uncontrolled exposure.

5.26. Result of NR N25

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1850.0 MHz ~ 1915.0 MHz; The maximum conducted is 24.30 dBm. The maximum gain is 1.25 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm^2 .

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.07mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.27. Result of NR N26

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 814.0 MHz ~ 849.0 MHz; The maximum conducted is 24.00 dBm. The maximum gain is 2.86 dBi. Therefore, maximum limit for general public RF exposure: $814.0/1500=0.54 \text{ mW/cm}^2$.

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.15mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.54 mW/cm² limit for uncontrolled exposure.

5.28. Result of NR N41

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 2496.0 MHz~2690.0 MHz; The maximum conducted is 26.70 dBm. The maximum gain is 1.19 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.10 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.29. Result of NR N48

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 3550.0 MHz~3700.0 MHz; The maximum conducted is 21.40 dBm. The maximum gain is 2.38 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.05 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.30. Result of NR N66

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1710.0 MHz~1780.0 MHz; The maximum conducted is 24.50 dBm. The maximum gain is 1.25 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.07 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.31. Result of NR N 71

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 663.0 MHz ~ 698.0 MHz; The maximum conducted is 24.50 dBm. The maximum gain is 2.86 dBi. Therefore, maximum limit for general public RF exposure: $663.0/1500=0.44\text{mW/cm}^2$.

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.11 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.44 mW/cm² limit for uncontrolled exposure.

5.32. Result of NR N77

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 3300.0 MHz ~ 4200.0 MHz; The maximum conducted is 26.80 dBm. The maximum gain is 2.38 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.16 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.

5.33. Result of NR N78

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 3300.0 MHz ~ 3800.0 MHz; The maximum conducted is 26.50 dBm. The maximum gain is 2.38 dBi. Therefore, maximum limit for general public RF exposure: 1.00 mW/cm².

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

P= input power of the antenna (mW)

G = antenna gain (numeric)

r = distance to the center of radiation of antenna (in meter)=20 cm

S=0.15 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1.00 mW/cm² limit for uncontrolled exposure.



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ANNEX A: EUT photograph

See the document” SIMCom Module Photos”.

*****END OF REPORT*****

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