



TEST REPORT

REPORT NUMBER: I21W00039

ON

Type of Equipment: Wireless communication module

Type of Designation: SLM900

Manufacturer: MeiG Smart Technology Co., Ltd

FCC ID: 2APJ4-SLM900

ACCORDING TO

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

FCC CFR 47 Part 1.1310 《Radiofrequency radiation exposure limits》

Chongqing Academy of Information and Communication Technology

Month date, year

Dec, 13, 2021

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
I21W00039	01	2021-12-13	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:	No. 8, Yuma Road, Chayuan New City, Nan'an District, Chongqing, P. R. China
Postal Code:	401336
Telephone:	0086-23-88069965
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1.2. Testing Environment

Normal Temperature:	21.3°C
Relative Humidity:	65%

1.3. Project Data

Testing Start Date:	2021-12-13
Testing End Date:	2021-12-13

1.4. Signature



2021-12-13

Fu Bohao
(Prepared this test report)

Date



2021-12-13

Wang Lili
(Reviewed this test report)

Date



2021-12-13

Xiang Luoyong
Director of the laboratory
(Approved this test report)

Date

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2. Client Information

2.1. Applicant Information

Company Name:	MeiG Smart Technology Co., Ltd
Address /Post:	Floor 2, No.5 Office Building, Lingxia Road, Fenghuang Community, Fuyong Street, Bao 'an District, Shenzhen
Telephone:	021-54278676
Fax:	--
Email:	louxinwei@meigsmart.com
Contact Person:	louxinwei

2.2. Manufacturer Information

Company Name:	MeiG Smart Technology Co., Ltd
Address /Post:	Floor 2, No.5 Office Building, Lingxia Road, Fenghuang Community, Fuyong Street, Bao 'an District, Shenzhen
Telephone:	021-54278676
Fax:	--
Email:	louxinwei@meigsmart.com
Contact Person:	louxinwei

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

3.1. About EUT

Description:	Wireless communication module
Model name:	SLM900
GSM Frequency Band	850/1900
WCDMA Frequency Band	Band2/4/5
LTE Frequency Band	Band2/4/5/7/12/13/17/25/26
WLAN Frequency Band	2.4G/5G
Bluetooth Frequency Band	--
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	8651710506935 25	SLM900_MB_V1 .01_PCB	SLM900A_EQ000_2774. 1F29708.FDF14BA_2108 31_100_V01_T04	2021-10-27

*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.

5. Test Results

5.1. RF Power Output

Frequency Band	Highest Averaged Power Output(dBm)	Highest Frame-Averaged Output Power (dBm)	Antenna Gain(dBi)
GSM 850	34.00	24.97	3.52
GPRS 850 1TS	33.80	24.77	3.52
EGPRS 850 1TS	33.80	24.77	3.52
GSM 1900	31.20	22.17	3.57
GPRS 1900 1TS	31.10	22.07	3.57
EGPRS 1900 1TS	31.10	22.07	3.57
WCDMA Band 2	27.64	27.64	3.57
WCDMA Band 4	27.69	27.69	3.99
WCDMA Band 5	27.97	27.97	3.52
LTE Band 2	21.90	21.90	3.57
LTE Band 4	23.05	23.05	3.99
LTE Band 5	23.40	23.40	3.52
LTE Band 7	23.08	23.08	5.19
LTE Band 12	23.73	23.73	3.18
LTE Band 13	23.15	23.15	3.42
LTE Band 17	23.18	23.18	3.18
LTE Band 25	21.65	21.65	3.57
LTE Band 26	22.76	22.76	3.52
Bluetooth	12.44	12.44	5.84
WIFI	25.88	25.88	5.84
UNII 1	16.74	16.74	6.49
UNII 2A	16.62	16.62	6.49
UNII 2C	14.79	14.79	6.49
UNII 3	16.24	16.24	6.49

Notes:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

2) According to the conducted power as above, the measurements are performed with 1Txslots for 850MHz and 1900MHz.

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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
GSM 850	0.55	0.141	Pass
GPRS 850 1TS	0.55	0.134	Pass
EGPRS 850 1TS	0.55	0.134	Pass
GSM 1900	1.00	0.075	Pass
GPRS 1900 1TS	1.00	0.073	Pass
EGPRS 1900 1TS	1.00	0.073	Pass
WCDMA Band 2	1.00	0.263	Pass
WCDMA Band 4	1.00	0.293	Pass
WCDMA Band 5	0.55	0.280	Pass
LTE Band 2	1.00	0.070	Pass
LTE Band 4	1.00	0.112	Pass
LTE Band 5	0.55	0.098	Pass
LTE Band 7	1.00	0.134	Pass
LTE Band 12	0.47	0.098	Pass
LTE Band 13	0.50	0.090	Pass
LTE Band 17	0.47	0.086	Pass
LTE Band 25	1.00	0.066	Pass
LTE Band 26	0.54	0.084	Pass
Bluetooth	1.00	0.013	Pass
WIFI 2.4G	1.00	0.296	Pass
UNII 1	1.00	0.042	Pass
UNII 2A	1.00	0.041	Pass
UNII 2C	1.00	0.027	Pass

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UNII 3	1.00	0.037	Pass
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5.4. Simultaneous transmission

From (5.3. Results) We can get the combination of the maximum value of simultaneous transmission as
WCDMA Band5 and WIFI 2.4G: $0.28/0.55+0.296/1.000=0.509+0.296=0.805$

Conclusion: max ratio 0.805 is less than 1,so complianc RF exposure requirement.

5.5. Result of GSM 850

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 824.2 ~ 848.8 MHz; The maximum conducted is 24.97 dBm. The maximum gain is 3.52 dBi. Therefore, maximum limit for general public RF exposure: $824.2/1500=0.55$ mW/cm².

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

P= input power of the antenna (314.051 mW)

G = antenna gain (2.249 numeric)

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

$$S=(314.051*2.249)/(4\pi*20^2)=0.141 \text{ mW/cm}^2$$

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

5.6. Result of GSM 850

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 824.2 ~ 848.8 MHz; The maximum conducted is 24.97 dBm. The maximum gain is 3.52 dBi. Therefore, maximum limit for general public RF exposure: $824.2/1500=0.55$ mW/cm².

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

P= input power of the antenna (314.051 mW)

G = antenna gain (2.249 numeric)

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

$$S=(314.051*2.249)/(4\pi*20^2)=0.141 \text{ mW/cm}^2$$

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

5.7. Result of GPRS 850 1TS

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 824.2 ~ 848.8 MHz; The maximum conducted is 24.77 dBm. The maximum gain is 3.52 dBi. Therefore, maximum limit for general public RF exposure: $824.2/1500=0.55$ mW/cm².

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

P= input power of the antenna (299.916 mW)

G = antenna gain (2.249 numeric)

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

$$S=(299.916*2.249)/(4\pi*20^2)=0.134 \text{ mW/cm}^2$$

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

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5.8. Result of EGPRS 850 1TS

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 824.2 ~ 848.8 MHz; The maximum conducted is 24.77 dBm. The maximum gain is 3.52 dBi. Therefore, maximum limit for general public RF exposure: $824.2/1500=0.55$ mW/cm².

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

P= input power of the antenna (299.916 mW)

G = antenna gain (2.249 numeric)

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

$$S=(299.916*2.249)/(4\pi*20^2)=0.134$$
 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 0.55mW/cm²limit for uncontrolled exposure.

5.9. Result of GSM 1900

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1850.2 ~ 1909.8 MHz; The maximum conducted is 22.17 dBm. The maximum gain is 3.57 dBi. Therefore, maximum limit for general public RF exposure: 1 mW/cm².

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

P= input power of the antenna (164.816 mW)

G = antenna gain (2.275 numeric)

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

$$S=(164.816*2.275)/(4\pi*20^2)=0.075$$
 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1 mW/cm²limit for uncontrolled exposure.

5.10. Result of GPRS 1900 1TS

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1850.2 ~ 1909.8 MHz; The maximum conducted is 22.07 dBm. The maximum gain is 3.57 dBi. Therefore, maximum limit for general public RF exposure: 1 mW/cm².

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

P= input power of the antenna (161.065 mW)

G = antenna gain (2.275 numeric)

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

$$S=(161.065*2.275)/(4\pi*20^2)=0.073$$
 mW/cm²

Therefore, at 20 cm the spectral power density is less than the 1 mW/cm²limit for uncontrolled exposure.

5.11. Result of EGPRS 1900 1TS

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1850.2 ~ 1909.8 MHz; The maximum conducted is 22.07 dBm. The maximum gain is 3.57 dBi. Therefore, maximum limit for general public RF exposure: 1 mW/cm².

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

P= input power of the antenna (161.065 mW)

G = antenna gain (2.275 numeric)

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

$$S=(161.065*2.275)/(4 \pi*20^2)=0.073 \text{ mW/cm}^2$$

Therefore, at 20 cm the spectral power density is less than the 1 mW/cm² limit for uncontrolled exposure.

5.12. Result of WCDMA Band 2

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1852.5 ~ 1907.5 MHz; The maximum conducted is 27.64 dBm. The maximum gain is 3.57 dBi. Therefore, maximum limit for general public RF exposure: 1 mW/cm².

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

P= input power of the antenna (580.764 mW)

G = antenna gain (2.275 numeric)

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

$$S=(580.764*2.275)/(4 \pi*20^2)=0.263 \text{ mW/cm}^2$$

Therefore, at 20 cm the spectral power density is less than the 1 mW/cm² limit for uncontrolled exposure.

5.13. Result of WCDMA Band 4

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1712.5 ~ 1752.5 MHz; The maximum conducted is 27.69 dBm. The maximum gain is 3.99 dBi. Therefore, maximum limit for general public RF exposure: 1 mW/cm².

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

P= input power of the antenna (587.489 mW)

G = antenna gain (2.506 numeric)

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

$$S=(587.489*2.506)/(4 \pi*20^2)=0.293 \text{ mW/cm}^2$$

Therefore, at 20 cm the spectral power density is less than the 1 mW/cm² limit for uncontrolled exposure.

5.14. Result of WCDMA Band 5

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 826.5 ~ 842.5 MHz; The maximum conducted is 27.97dBm. The maximum gain is 3.52 dBi. Therefore, maximum limit for general public RF exposure: $826.5/1500=0.551$ mW/cm².

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

P= input power of the antenna (626.614 mW)

G = antenna gain (2.249numeric)

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

$$S=(626.614 * 2.249)/(4 \pi * 20^2)=0.280 \text{ mW/cm}^2$$

Therefore, at 20 cm the spectral power density is less than the 0.551 mW/cm² limit for uncontrolled exposure.

5.15. Result of LTE Band 2

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1850.0 ~ 1909.9 MHz; The maximum conducted is 21.90dBm. The maximum gain is 3.57 dBi. Therefore, maximum limit for general public RF exposure: 1.0 mW/cm².

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

P= input power of the antenna (154.882 mW)

G = antenna gain (2.275numeric)

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

$$S=(154.882 * 2.275)/(4 \pi * 20^2)=0.070 \text{ mW/cm}^2$$

Therefore, at 20 cm the spectral power density is less than the 1.0 mW/cm² limit for uncontrolled exposure.

5.16. Result of LTE Band 4

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1710.0 ~ 1754.9MHz; The maximum conducted is 23.50 dBm. The maximum gain is 3.99 dBi. Therefore, maximum limit for general public RF exposure: 1.0 mW/cm².

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

P= input power of the antenna (223.872 mW)

G = antenna gain (2.506numeric)

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

$$S=(223.872 * 2.506)/(4 \pi * 20^2)=0.112 \text{ mW/cm}^2$$

Therefore, at 20 cm the spectral power density is less than the 1.0 mW/cm² limit for uncontrolled exposure.

5.17. Result of LTE Band 5

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 824.0 ~ 848.9 MHz; The maximum conducted is 23.40 dBm. The maximum gain is 3.52 dBi. Therefore, maximum limit for general public RF exposure: $824.0/1500=0.549$ mW/cm².

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

P= input power of the antenna (218.776 mW)

G = antenna gain (2.249numeric)

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

$$S=(218.776*2.249)/(4 \pi *20^2)=0.098\text{mW/cm}^2$$

Therefore, at 20 cm the spectral power density is less than the 0.549mW/cm² limit for uncontrolled exposure.

5.18. Result of LTE Band 7

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 2500.0 ~ 2569.9 MHz; The maximum conducted is 23.08 dBm. The maximum gain is 5.19 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 (203.236 mW)

G = antenna gain (3.304 numeric)

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

$$S=(203.236*3.304)/(4 \pi *20^2)=0.134\text{mW/cm}^2$$

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

5.19. Result of LTE Band 12

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 699.0 ~ 715.9 MHz; The maximum conducted is 23.73dBm. The maximum gain is 3.18 dBi. Therefore, maximum limit for general public RF exposure: $699.0/1500=0.466$ mW/cm².

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

P= input power of the antenna (236.048 mW)

G = antenna gain (2.080numeric)

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

$$S=(236.048*2.080)/(4 \pi *20^2)=0.098\text{mW/cm}^2$$

Therefore, at 20 cm the spectral power density is less than the 0.466mW/cm² limit for uncontrolled exposure.

5.20. Result of LTE Band 13

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 746.0 ~ 755.9 MHz; The maximum conducted is 23.15dBm. The maximum gain is 3.42 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 (206.538 mW)

G = antenna gain (2.198numeric)

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

$$S=(206.538 * 2.198)/(4 \pi * 20^2)=0.090\text{mW/cm}^2$$

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

5.21. Result of LTE Band 17

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 704.0 ~ 715.9 MHz; The maximum conducted is 23.18dBm. The maximum gain is 3.18 dBi. Therefore, maximum limit for general public RF exposure: $704.0/1500=0.47$ mW/cm².

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

P= input power of the antenna (207.970 mW)

G = antenna gain (2.080numeric)

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

$$S=(207.970*2.080)/(4 \pi * 20^2)=0.086\text{mW/cm}^2$$

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

5.22. Result of LTE Band 25

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 1850.0 ~ 1914.9 MHz; The maximum conducted is 21.65dBm. The maximum gain is 3.57 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 (146.218 mW)

G = antenna gain (2.275numeric)

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

$$S=(146.218*2.275)/(4 \pi * 20^2)=0.066\text{mW/cm}^2$$

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

5.23. Result of LTE Band 26

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 814.0 ~ 848.9 MHz; The maximum conducted is 22.76dBm. The maximum gain is 3.52 dBi. Therefore, maximum limit for general public RF exposure: 814.0/1500=0.54 mW/cm².

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

P= input power of the antenna (188.799 mW)

G = antenna gain (2.249numeric)

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

$$S=(188.799*2.249)/(4 \pi *20^2)=0.084mW/cm^2$$

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

5.24. Result of Bluetooth

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 2402.0 ~ 2480.0 MHz; The maximum conducted is 12.44 dBm. The maximum gain is 5.84 dBi. Therefore, maximum limit for general public RF exposure: 1.0 mW/cm².

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

P= input power of the antenna (17.539 mW)

G = antenna gain (3.837numeric)

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

$$S=(17.539*3.837)/(4 \pi *20^2)=0.013mW/cm^2$$

Therefore, at 20 cm the spectral power density is less than the 1.0 mW/cm² limit for uncontrolled exposure.

5.25. Result of WIFI 2.4G

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 2412.0 ~ 2484.00 MHz; The maximum conducted is 25.88 dBm. The maximum gain is 5.84 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 (387.258 mW)

G = antenna gain (3.837numeric)

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

$$S=(387.258*3.837)/(4 \pi *20^2)=0.296mW/cm^2$$

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

5.26. Result of WIFI 5G UNII 1

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 5150.0 ~ 5250.0 MHz; The maximum conducted is 16.74 dBm. The maximum gain is 6.49 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 (47.206 mW)

G = antenna gain (4.457numeric)

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

$$S=(47.206*4.457)/(4\pi*20^2)=0.042\text{mW}/\text{cm}^2$$

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

5.27. Result of WIFI 5G UNII 2A

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 5250.0 ~ 5350.0 MHz; The maximum conducted is 16.62 dBm. The maximum gain is 6.49 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 (45.920 mW)

G = antenna gain (4.457numeric)

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

$$S=(45.920 *4.457)/(4\pi*20^2)=0.041\text{mW}/\text{cm}^2$$

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

5.28. Result of WIFI 5G UNII 2A

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 5250.0 ~ 5350.0 MHz; The maximum conducted is 16.62 dBm. The maximum gain is 6.49 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 (45.920 mW)

G = antenna gain (4.457numeric)

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

$$S=(45.920 *4.457)/(4\pi*20^2)=0.041\text{mW}/\text{cm}^2$$

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

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5.29. Result of WIFI 5G UNII 2C

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 5470.0 ~ 5725.0 MHz; The maximum conducted is 14.79 dBm. The maximum gain is 6.49 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 (30.130 mW)

G = antenna gain (4.457numeric)

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

$$S=(30.130 *4.457)/(4 \pi *20^2)=0.027\text{mW}/\text{cm}^2$$

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

5.30. Result of WIFI 5G UNII 3

Test Results: MPE Limit Calculation: the EUT'S operating frequencies @ 5725.0 ~ 5850.0 MHz; The maximum conducted is 16.24 dBm. The maximum gain is 6.49 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 (42.073 mW)

G = antenna gain (4.457numeric)

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

$$S=(42.073 *4.457)/(4 \pi *20^2)=0.037\text{mW}/\text{cm}^2$$

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

ANNEX A: EUT photograph

See the document" SLM900 -External Photos".

END OF REPORT