



RADIO EXPOSURE TEST REPORT

FCC ID : 2BPQQ-R405LQ
Equipment : COREXOM
Brand Name : CRI
Model Name : LR405, R405LQ
Applicant : Coretronic Reality Inc.
15F., No 225, Sec.3, Beixin Rd., Xindian Dist., New
Taipei City 231 Taiwan
Manufacturer : Coretronic Reality Inc.
15F., No 225, Sec.3, Beixin Rd., Xindian Dist., New
Taipei City 231 Taiwan
Standard : 47 CFR Part 2.1091

The product was received on Sep. 09, 2025, and testing was started from Sep. 16, 2025 and completed on Dec. 03, 2025. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 47 CFR Part 2.1091 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 EUT General Information	5
1.2 Antenna Information	6
1.3 Table for Multiple Listing	8
1.4 Accessories	8
1.5 Testing Location	8
2 Maximum Permissible Exposure	9
2.1 Limit of Maximum Permissible Exposure	9
2.2 MPE Calculation Method	9
2.3 Calculated Result and Limit.....	10
Photographs of EUT v01	



History of this test report

TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A1_1 Ver1.1

Page Number : 3 of 10
Issued Date : Feb. 23, 2026
Report Version : 01



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
2	-	Exposure evaluation	PASS	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sam Chen

Report Producer: Wendy Pan



1 General Description

1.1 EUT General Information

RF General Information			
Evaluation Mode	Frequency Range (MHz)	Operating Frequency (MHz)	Modulation Type
2.4GHz WLAN	2400-2483.5	2412-2462	802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11g/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) VHT: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
5GHz WLAN	5150-5250 5725-5850	5180-5240 5745-5825	802.11a/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)



1.2 Antenna Information

Ant. Set	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	ALFA	ARS-NT5B	Dipole Antenna	I-PEX	Note 1
	2	ALFA	ARS-NT5B			
	3	ALFA	ARS-NT5B			
	4	ALFA	ARS-NT5B			
2	1	SmartAnt	CIR22-440330	Dipole Antenna	I-PEX	2.0
	2	SmartAnt	CIR22-440330			2.0
	3	SmartAnt	CIR22-440330			2.0
	4	SmartAnt	CIR22-440330			2.0

Note 1:

Ant. Set	Port	Antenna Gain (dBi)		Cable Loss (dB)		Net Gain (dBi)	
		WLAN	WLAN	WLAN	WLAN	WLAN	WLAN
		2.4GHz	5GHz	2.4GHz	5GHz	2.4GHz	5GHz
1	1	5.0	5.0	1.3	2.4	3.7	2.6
	2	5.0	5.0	1.3	2.4	3.7	2.6
	3	5.0	5.0	1.3	2.4	3.7	2.6
	4	5.0	5.0	1.3	2.4	3.7	2.6

Note 2: The above information was declared by manufacturer.

Only the highest gain antenna was selected to test.

Thus antenna set 1 were selected to perform the test and recorded in this report.

For 2.4GHz function:

IEEE 802.11b/g/n/VHT/ax (4TX/4RX):

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For 5GHz function:

IEEE 802.11a/n/ac/ax (4TX/4RX):

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

Note 3: Directional gain information

Type	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$
BF	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$

Ex.

Directional Gain (NSS1) formula :

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ; NSS1(g1,2) = 10^{G3/20} ; NSS1(g1,2) = 10^{G4/20} \quad g_{j,k}$$

$$= (NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2 / N_{ANT}] \Rightarrow 10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / N_{ANT}]$$

Where ;

2.4G G1= 3.7 dBi ; G2= 3.7 dBi ; G3= 3.7 dBi ; G4= 3.7 dBi ;DG= 9.72dBi

5G UNII-1 G1= 2.6 dBi ; G2= 2.6 dBi ; G3= 2.6 dBi ; G4= 2.6 dBi ;DG= 8.62dBi

5G UNII-3 G1= 2.6 dBi ; G2= 2.6 dBi ; G3= 2.6 dBi ; G4= 2.6 dBi ;DG= 8.62dBi



1.3 Table for Multiple Listing

The EUT has two model names which are identical to each other in all aspects except for the following table:

Model Name	EUT	Power Connector	DC Power Jack	IC WCN3988 (Location: W_U1)	USB 2.0 (Location: CON7)
LR405	EUT 1	Mandatory	Without	With	Without
R405LQ	EUT 2	Option	With	Without	With

Note 1: only EUT 2 was selected to test and record the results in the report.

Note 2: The above information was declared by manufacturer.

1.4 Accessories

N/A

1.5 Testing Location

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)
(TAF: 3787)	TEL: 886-3-656-9065 FAX: 886-3-656-9085
	Test site Designation No. TW3787 with FCC.
	Conformity Assessment Body Identifier (CABID) TW3787 with ISED.



2 Maximum Permissible Exposure

2.1 Limit of Maximum Permissible Exposure

(A) 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 ²)	Averaging Time E ² , H ² or S (minutes)
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
1500-100,000	-	-	5	<6

(B) 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 ²)	Averaging Time E ² , H ² or S (minutes)
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
1500-100,000	-	-	1.0	<30

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

2.2 MPE Calculation Method

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$



2.3 Calculated Result and Limit

Exposure Environment: General Population / Uncontrolled Exposure

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
2.4G;D1D	3.70	29.74	33.44	0.50	33.94	20	0.49287	1.00000	0.49287
5.2G;D1D	2.60	23.89	26.49	0.50	26.99	20	0.09948	1.00000	0.09948
5.8G;D1D	2.60	29.98	32.58	0.50	33.08	20	0.40432	1.00000	0.40432

————THE END————