



RADIO EXPOSURE TEST REPORT

FCC ID : H8NTCG400

Equipment : Strand Mount Access Point

Brand Name : ASKEY

Model Name : TCG400-o

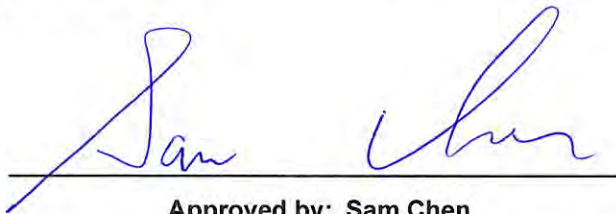
Applicant : Askey Computer Corp
10F, No. 119, JIANKANG RD., ZHONGHE DIST.,
NEW TAIPEI CITY 23585, Taiwan

Manufacturer : Askey Computer Corp
10F, No. 119, JIANKANG RD., ZHONGHE DIST.,
NEW TAIPEI CITY 23585, Taiwan

Standard : 47 CFR Part 2.1091

The product was received on May 12, 2025, and testing was started from May 13, 2025 and completed on Aug. 04, 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
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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 : Aug. 20, 2025
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: Vicky Huang



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, 1024QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM) 802.11be: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM)
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, 1024QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM) 802.11be: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM)



1.2 Antenna Information

Ant.	Port					Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz	DFS	GPS					
1	1	4	-	-	-	AWAN	CHS3320N-D388	PIFA	I-Pex	Note1
2	3	2	-	-	-	AWAN	CHS3320N-D388	PIFA	I-Pex	
3	4	1	-	-	-	AWAN	CHS3320N-D388	PIFA	I-Pex	
4	2	3	-	-	-	AWAN	CHS3320N-D388	PIFA	I-Pex	
5	-	-	4	-	-	AWAN	CHS3320N-D388	PIFA	I-Pex	
6	-	-	2	-	-	AWAN	CHS3320N-D388	PIFA	I-Pex	
7	-	-	1	-	-	AWAN	CHS3320N-D388	PIFA	I-Pex	
8	-	-	3	-	-	AWAN	CHS3320N-D388	PIFA	I-Pex	
9	-	-	-	1	-	AWAN	CHS3320N-D388	PIFA	I-Pex	4.57
10	-	-	-	-	1	AWAN	CHS3320N-D388	PIFA	I-Pex	4.33

Note 1:

Ant.	Gain (dBi)						
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 6GHz UNII 5	WLAN 6GHz UNII 7
1	3.95	4.15	3.85	4.42	3.96	-	-
2	4.3	4.09	4.01	4.25	4.5	-	-
3	4.32	4.32	4.55	4.46	4.05	-	-
4	4.48	3.89	4.65	4.51	4.26	-	-
5	-	-	-	-	-	3.96	4.28
6	-	-	-	-	-	4.65	4.35
7	-	-	-	-	-	4.08	4.41
8	-	-	-	-	-	4.34	4.33



Ant.	Gain (dBi) for 30 degree						
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 6GHz UNII 5	WLAN 6GHz UNII 7
1	-6.36	-10.16	-9.11	-10.23	-9.48	-	-
2	-6.43	-9.07	-10.09	-9.8	-10.18	-	-
3	-5.51	-9.52	-9.39	-11.15	-9.38	-	-
4	-3.55	-8	-7.24	-10.16	-10.54	-	-
5	-	-	-	-	-	-9.84	-9.85
6	-	-	-	-	-	-11.47	-11.66
7	-	-	-	-	-	-7.43	-9.67
8	-	-	-	-	-	-6.17	-7.94

Ant.	Uncorrelated (dBi)						
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 6GHz UNII 5	WLAN 6GHz UNII 7
Directional Gain (dBi) (4T1S)	5.9949	4.904	4.8922	4.9339	5.7697	7.063	7.3218
Ant.	Uncorrelated (dBi) for 30 degree						
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 6GHz UNII 5	WLAN 6GHz UNII 7
Directional Gain (dBi) (4T1S)	-3.9751	-7.4643	-8.2236	-8.6723	-8.0708	-7.483	-7.6229

Ant.	Correlated Gain (dBi)						
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 6GHz UNII 5	WLAN 6GHz UNII 7
Directional Gain (dBi) (4T1S)	6.4216	5.2513	5.8649	5.9053	5.4561	7.5772	7.1478
Ant.	Correlated Gain (dBi) for 30 degree						
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 6GHz UNII 5	WLAN 6GHz UNII 7
Directional Gain (dBi) (4T1S)	0.4203	-1.267	-1.5559	-2.1588	-1.2549	-1.3096	-1.4423



Note2: The above information was declared by manufacturer.

Note3: During operating in 5GHz, the antenna 9 which has the receiving function only is used for DFS.

Note4: The DFS function of EUT was not enabled at this time.

Note5: The 6GHz function of Antennas 5~8 doesn't be enabled at this time

For WLAN 2.4GHz function:

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

Port 1~4 can be used as transmitting/receiving antenna.

Port 1~4 could transmit/receive simultaneously.

For WLAN 5GHz function:

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

Port 1~4 can be used as transmitting/receiving antenna.

Port 1~4 could transmit/receive simultaneously.

For additional DFS function (1RX):

Only Port 1(Ant. 9) can be used as a receiving antenna.

For WLAN 6GHz function:

For IEEE 802.11ax/be (4TX/4RX):

Port 1~4 can be used as transmitting/receiving antenna.

Port 1~4 could transmit/receive simultaneously.

For GPS Function:

For GPS mode (1RX)

Only Port 1 can be use as receive antenna.

1.3 Accessories

Accessories
Sealing collar 1*1
Sealing collar 2*1
Ground cable*1: Non-Shielded, 3m
Bracket*2
Grounding screw*1

1.4 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 26 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)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
2.4G;G1D	5.99	29.94	35.93	0.06	35.99	3.97192	26	0.46756	1.00000	0.46756
5.8G;D1D	5.77	29.91	35.68	0.31	35.99	3.97192	26	0.46756	1.00000	0.46756

Simultaneous Transmission Analysis Mode: WLAN 2.4GHz+WLAN 5GHz

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Tune-up EIRP (W)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
2.4G;G1D	5.99	29.94	35.93	0.06	35.99	3.97192	26	0.46756	1.00000	0.46756
5.8G;D1D	5.77	29.91	35.68	0.31	35.99	3.97192	26	0.46756	1.00000	0.46756
									Sum Ratio	0.93512
									Ratio Limit	1

Note: The above antenna gain was declared by manufacturer.

————THE END————