


 Report No.: ZEWM2306000856RG03
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TEST REPORT

Application No.: ZEWM2306000856RG
Applicant: Askey Computer Corporation
Address of Applicant: 10F, No. 119, Jiankang Rd., Zhonghe Dist., New Taipei City, Taiwan
Manufacturer: Askey Computer Corporation
Address of Manufacturer: 10F, No. 119, Jiankang Rd., Zhonghe Dist., New Taipei City, Taiwan
EUT Description: 5G NR Sub 6 WiFi 7 Router
Model No.: ASK-NCM1100E
Trade Mark: Verizon
FCC ID: H8N-ASK-NCM1100E
Standards: 47 CFR Part 96.47
Date of Receipt: 2023/06/28 (for original report ZEWM2306000857RG03)
 2023/06/28 (for new report ZEWM2306000856RG03)
Date of Test: 2023/08/03 to 2023/08/03 (for original report ZEWM2306000857RG03)
Date of Issue: 2023/11/16

Test Result :	PASS *
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* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Authorized Signature:

 Keny Xu
 Laboratory Manager


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1 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2023/11/16		Original

Prepared By	 _____ (Jack Huang) / Test Engineer
Checked By	 _____ (Flora Wang) / Reviewer



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2 Test Summary

Test Item	FCC Rule No.	Test Result	Verdict
End User Device additional requirement	§96.47	Clause 4.1	Pass

Remark for report ZEWM2306000856RG03 issue on 2023/11/16:

This test report (Report No.: ZEWM2306000856RG03 issue on 2023/11/16) is based on the original test report (Report No.: ZEWM2306000857RG03 issue on 2023/10/23) .

Review this report and original report, this report just changing the parts according to the declaration letter from client.

Therefore in this report all items do not need to retest and all test data in this report are based on the previous report with report number ZEWM2306000857RG03 (FCC ID: H8N-ASK-NCM1100) issue on 2023/10/23.





3 General Information

3.1 Details of Client

Applicant:	Askey Computer Corporation
Address of Applicant:	10F, No. 119, Jiankang Rd., Zhonghe Dist., New Taipei City, Taiwan
Manufacturer:	Askey Computer Corporation
Address of Manufacturer:	10F, No. 119, Jiankang Rd., Zhonghe Dist., New Taipei City, Taiwan

3.2 Test Location

Company:	SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
Address:	No. 1 Workshop, M-10, Middle section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China
Post code:	518057
Test engineer:	Jinhua Wei

3.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

- **FCC –Designation Number: CN1336**

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch has been recognized as an accredited testing laboratory.

Designation Number: CN1336.

Test Firm Registration Number: 787754



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3.4 General Description of EUT

EUT Description:	5G NR Sub 6 WiFi 7 Router
Model No.:	ASK-NCM1100E
Trade Mark:	Verizon
Hardware Version:	Rev4
Software Version:	SDK 2.0.6
Power Supply:	input 100~120V output:12V
IMEI:	358664490000842
Antenna Type:	Dipole Antenna
Transmitter Frequency Band:	LTE Band 48; LTE CA_48C;
Transmitter Frequency Range:	3550 to 3700 MHz
Antenna Gain:	LTE Band 48: -2.3dBi (Ant3); -2.3dBi (Ant8)
	LTE CA_48C: -2.3dBi (Ant3); -2.3dBi (Ant8)
	Note: The antenna gain are derived from the gain information report provided by the manufacturer.
Remark:	As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.





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3.5 Test Environment

Environment Parameter	101 kPa Selected Values During Tests	
Relative Humidity	44-60 % RH Ambient	
Value	Temperature(°C)	Voltage(V)
NTNV	22~25	12
Remark: NV: Normal Voltage NT: Normal Temperature		

3.6 Description of Support Units

Description	Manufacturer	Model No.
LTE Base Station	Baicells Technologies Co.,Ltd.	mBS31001 (FCC ID: 2AG32MBS3100196N)



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4 Description of Tests

4.1 End User Device additional requirement

Test Requirement:	FCC Part 96.47
Test Method:	WINNF-18-IN-00178 CBRS End User Devices as UUT Test Guidelines
Requirement:	(a)End User Devices may operate only if they can positively receive and decode anauthorization signal transmitted by a CBSD, including the frequencies and power limits fortheir operation. (1)An End User Device must discontinue operations, change frequencies, or changeits operational power level within 10 seconds of receiving instructions from its associated CBSD.
Test Procedure:	<ol style="list-style-type: none"> 1. Setup with frequency 3550-3570MHz and power level 20dBm/MHz 2. Enable AP service from Ruckus Cloud management 3. Check EUD Tx Frequency and power 4. Disable AP service from Ruckus Cloud management 5. Check EUD stops transmission within 10seconds. 6. Setup with 3590-3610MHz & power level 8dBm/MHz 7. Enable AP service from Ruckus Cloud management 8. Check EUD Tx Frequency and power 9. Disable AP service from Ruckus Cloud management 10. Check EUD stops transmission within 10seconds.
Test setup:	<p>The diagram illustrates the test setup. A Spectrum Analyzer (green box) is connected to an ATT (Attenuator, black box). The ATT is connected to a Direct Coupler (black box). The Direct Coupler is connected to a Companion Device (white box) and an EUT (End User Test, yellow box).</p>



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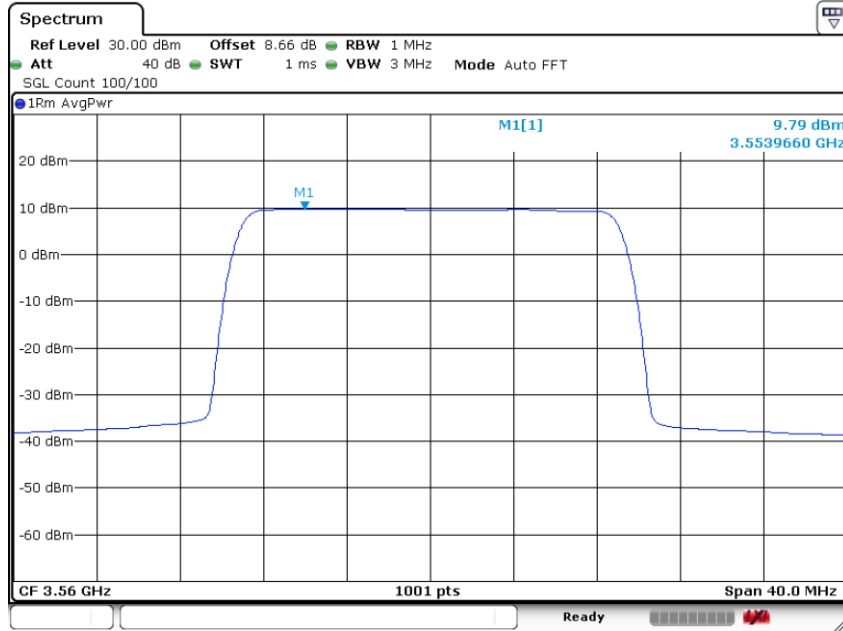


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[Step 1] Setup with frequency 3550-3570MHz and power level 20dBm/MHz

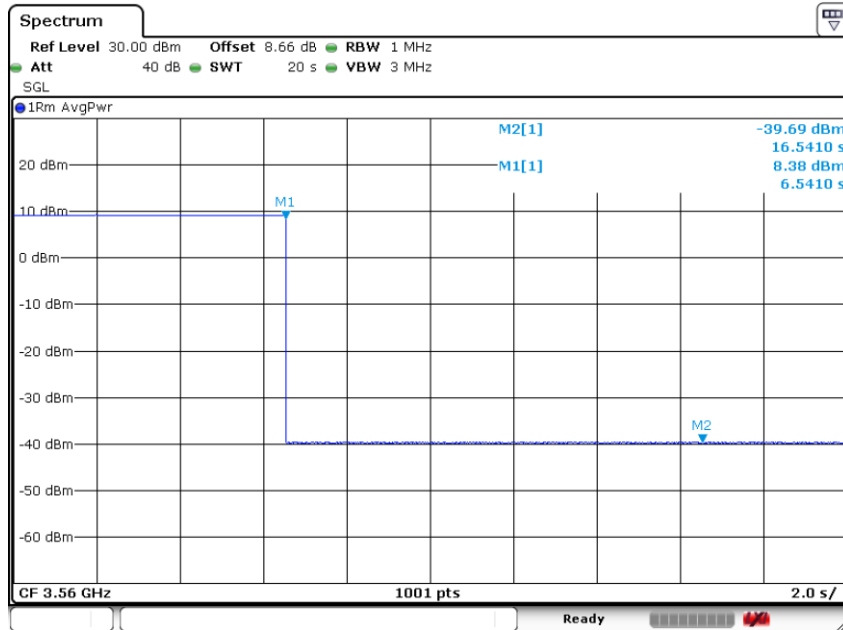
[Step 3] Check EUD Tx Frequency and power



Date: 3.AUG.2023 16:55:45

EIRP PSD=9.79-2.3+1.1=8.59dBm/MHz, Antenna gain is -2.3dBi, the pass loss is 1.1dB

[Step 5] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.



Date: 3.AUG.2023 17:07:02



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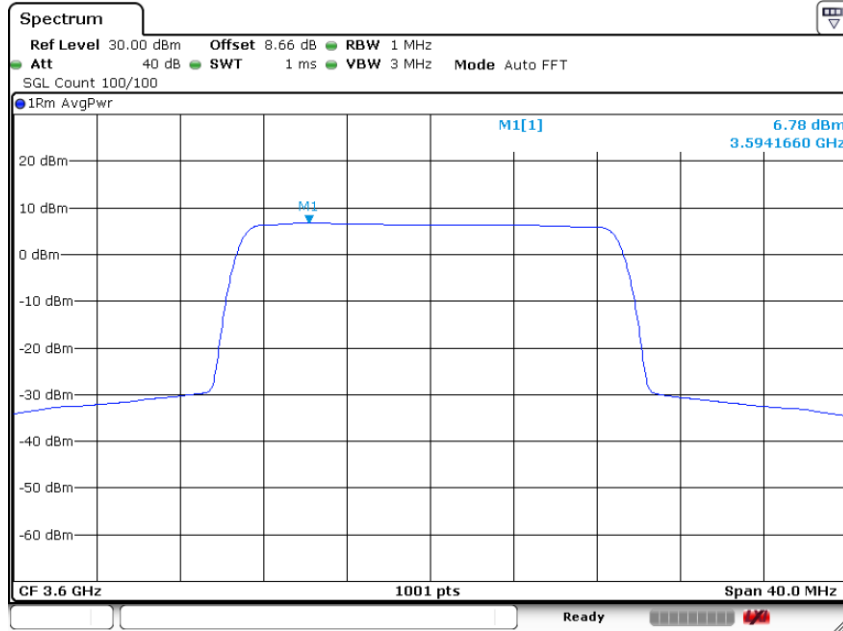


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[Step 6] Setup with 3590-3610MHz & power level 8dBm/MHz

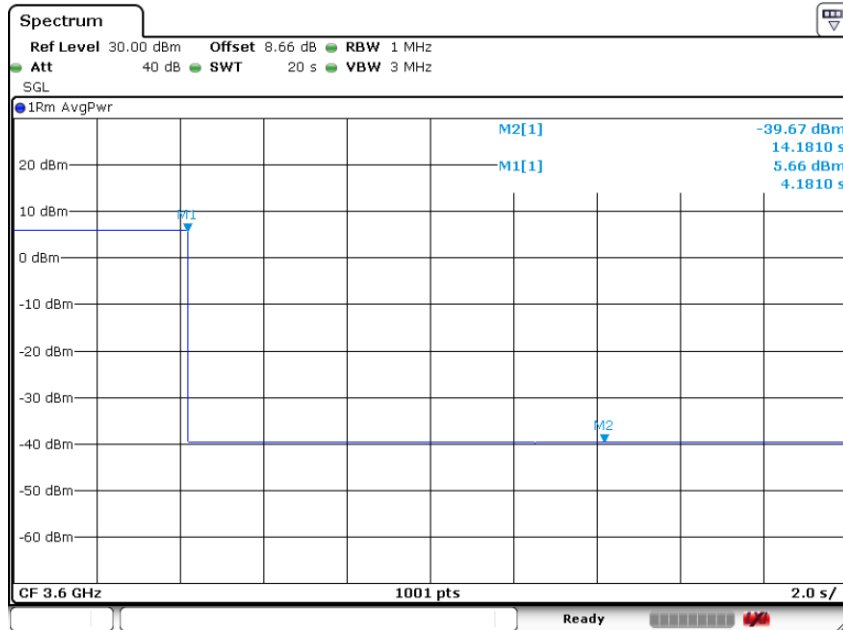
[Step 8] Check EUD Tx Frequency and power



Date: 3.AUG.2023 16:57:56

EIRP PSD=6.78-2.3+1.1=5.58dBm/MHz, Antenna gain is -2.3dBi, the pass loss is 1.1dB

[Step 10] EUD stops transmission within 10 seconds of receiving instructions from its associated CBSD.



Date: 3.AUG.2023 17:03:01



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5 Main Test Instruments

RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy/mm/dd)	Cal.Due date (yyyy/mm/dd)
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	HTC-1	SZ-WRG-M-032	2023/02/17	2024/02/16
Signal &Spectrum Analyzer	Rohde & Schwarz	FSV	SZ-WRG-M-012	2023/02/16	2024/02/15




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6 Measurement Uncertainty

For a 95% confidence level ($k = 2$), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 9.84\text{Hz}$
2	RF conducted power	$\pm 0.42\text{dB}$

Remark:

The U_{lab} (lab Uncertainty) is less than $U_{\text{CISPR/ETSI}}$ (CISPR/ETSI Uncertainty), so the test results
 – compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
 – non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.



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7 Appendixes

Setup Photos	Appendix A.2 - Setup Photos-part96.47
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---End of Report---


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