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TEST REPORT

Report No. : CQASZ20241202717E-02
Applicant: Shenzhen Chengyisheng Electronics Co., Ltd
Address of Applicant: 1901, Block A, Building 1, Anhongji Xingyao Plaza, No. 32 Huaxing Road, Tongsheng Community, Dalang Street, Longhua District, Shenzhen
Equipment Under Test (EUT):
EUT Name: HDMI Transmitter and Receiver
Model No.: X1, X2, X3, X4, X5
Test Model No.: X1
Brand Name: N/A
FCC ID: 2BM35-X1
47 CFR Part 1.1307
Standards: 47 CFR Part 1.1310
KDB447498D01 General RF Exposure Guidance v06
Date of Receipt: 2024-12-25
Date of Test: 2024-12-25 to 2025-01-08
Date of Issue: 2025-01-14
Test Result : **PASS**

Tested By:

Lewis Zhou

(Lewis Zhou)

Reviewed By:

Timo Lei

(Timo Lei)

Approved By:

Jack Ai

(Jack Ai)



The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CQA, this report can't be reproduced except in full.

1. Version

Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20241202717E-02	Rev.01	Initial report	2025-01-14

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3. Client Information

Applicant:	Shenzhen Chengyisheng Electronics Co., Ltd
Address of Applicant:	1901, Block A, Building 1, Anhongji Xingyao Plaza, No. 32 Huaxing Road, Tongsheng Community, Dalang Street, Longhua District, Shenzhen
Manufacturer:	Shenzhen Chengyisheng Electronics Co., Ltd
Address of Manufacturer:	1901, Block A, Building 1, Anhongji Xingyao Plaza, No. 32 Huaxing Road, Tongsheng Community, Dalang Street, Longhua District, Shenzhen
Factory:	Huizhou Chengyisheng Electronics Co., Ltd
Address of Factory:	5F and 6F of Building 19, No. 8, Junluo 6th Road, Shuikou Street, Huicheng District, Huizhou City

4. General Description of EUT

Product Name:	HDMI Transmitter and Receiver
Model No.:	X1, X2, X3, X4, X5
Test Model No.:	X1
Trade Mark:	N/A
Software Version:	16467036
Hardware Version:	CYS-TX-V1
Modulation Type:	IEEE for 802.11a/n: OFDM(256QAM, 64QAM, 16QAM, QPSK, BPSK)
Transfer Rate:	802.11a: 6M/9M/12M/18M/24M/36M/48M/54M bps 802.11n: ~72M bps
Number of Channel:	IEEE 802.11a/n(20M): 5150MHz ~5250MHz/ 4 channel IEEE 802.11a/n(20M): 5725MHz ~5850MHz/ 5 channel
Antenna Type:	PCB antenna
Antenna Gain:	1.76dBi@5GHz: Wi-Fi: U-NII-1, 2.03dBi@5GHz: Wi-Fi: U-NII-3
Product Type:	☐ Mobile ☒ Portable ☐ Fix Location
Power Supply:	Power supply DC 5V

5. RF Exposure Evaluation

RF Exposure Compliance Requirement

Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$\left[\frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \right] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$
$$f(\text{GHz}) \text{ is the RF channel transmit frequency in GHz}$$

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

EUT RF Exposure

1) For 5G WIFI U-NII-1

Measurement Data

Worst case: 11A				
Test Channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(5180MHz)	6.36	6.5±1	7.5	5.62
Middle(5200MHz)	5.90	6.0±1	7	5.01
Highest(5240MHz)	3.68	3.5±1	4.5	2.82

Worst case: 11A			
Channel	Maximum tuneup Power (mW)	Calculated value	Exclusion threshold
Lowest (5180MHz)	5.62	2.560	3.0
Middle (5200MHz)	5.01	2.286	
Highest (5240MHz)	2.82	1.290	
Conclusion: the calculated value ≤3.0, SAR is exempted.			

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20241202717E-01

1) For 5G WIFI U-NII-3

Measurement Data

Worst case: N20				
Test Channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(5745MHz)	3.44	3.5±1	4.5	2.82
Middle(5785MHz)	4.12	4.0±1	5	3.16
Highest(5825MHz)	-0.85	-1±1	0	1.00

Worst case: N20			
Channel	Maximum tuneup Power (mW)	Calculated value	Exclusion threshold
Lowest (5745MHz)	2.82	1.351	3.0
Middle (5785MHz)	3.16	1.521	
Highest (5825MHz)	1.00	0.483	
Conclusion: the calculated value ≤3.0, SAR is exempted.			

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20241202717E-01