



FCC TEST REPORT

FCC ID: 2BNOECHNYHR-ZNBB

Product	:	Ltelligent whitebard
Model Name	:	YHR6500
Serial model	:	YHR4900,YHR5500,YHR7500,YHR8500
Brand	:	N/A
Report No.	:	PTC25010900703E-FC05
Prepared for		
Suzhou Yuhuarong Optoelectronics Technology Co., Ltd		
Suzhou Wuzhong Economic Development Zone, Yuexi Street, Qianzhu Road No. 3, Building 8, second floor east		
Prepared by		
Precise Testing & Certification Co., Ltd.		
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TEST RESULT CERTIFICATION

Applicant's name : Suzhou Yuhuarong Optoelectronics Technology Co., Ltd
Address : Suzhou Wuzhong Economic Development Zone, Yuexi Street,
Qianzhu Road No. 3, Building 8, second floor east
Manufacture's name : Suzhou Yuhuarong Optoelectronics Technology Co., Ltd
Address : Suzhou Wuzhong Economic Development Zone, Yuexi Street,
Qianzhu Road No. 3, Building 8, second floor east
Product name : Ltelligent whitebard
Model name : YHR6500
Serial model : YHR4900,YHR5500,YHR7500,YHR8500
Test procedure : FCC CFR47 Part 1.1307(b)(1)
Test Date : Jan. 15, 2025 to Feb. 18, 2025
Date of Issue : Feb. 18, 2025
Test Result : PASS

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

A handwritten signature in black ink, appearing to read 'Jack Zhou'.

Jack zhou / Engineer

Technical Manager:

A handwritten signature in black ink, appearing to read 'Simon Pu'.

Simon Pu / Manager



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2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	part 2.1091.(i)	PASS
Remark:		
N/A: Not Applicable		



3 General Information

3.1 General Description of E.U.T.

Product Name	:	Intelligent whiteboard
Model Name	:	YHR6500
Additional model	:	YHR4900,YHR5500,YHR7500,YHR8500
Test Model	:	YHR6500
Differences Description	:	Only different size, other exactly the same
Specification	:	BT BDR+EDR+BLE 802.11b/g/n HT20/HT40 802.11a/n HT20/HT40/ac20/ac40/ac80
Operation Frequency	:	2402-2480MHz for BT 2412-2462MHz for 802.11b/g/ n(HT20) 2422-2452MHz for 802.11 n(HT40) 5.1G Wifi:5180-5240 MHz
Number of Channel	:	79 channels for BDR+EDR 40 channels For DTS 11 channels for 802.11b/g/ n(HT20) 7 channels for 802.11n(HT40) 4 channels for 802.11a/n20/ac20 5180-5240 MHz 2 channels for 802.11n40/ac40 5180-5250 MHz 1 channels for 11ac80 5180-5250 MHz
Type of Modulation	:	GFSK, $\pi/4$ -DQPSK,8DPSK For DSS GFSK, For DTS DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11n/a/ac
Antenna installation	:	External antenna
Antenna Gain	:	2.4G:3.15 dBi;5.1G:3.58dBi;
Rated Power Supply	:	AC100V ~ 240 V,50/60Hz 150W
Hardware Version	:	N/A
Software Version	:	N/A



4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : KDB 447498 D01 General RF Exposure Guidance v06

4.1 Requirements

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 levels 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 0.2 m normally can be maintained between the user and the device.

4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	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	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	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



4.3 MPE Calculation Method

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

E = Electric field (V/m)

P = Peak 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

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

Antenna Gain (numeric) = $10^{(\text{Antenna Gain}/10)}$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

4.4 Test Result

Test Mode	Test Frequency(MHz)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Tune up tolerance (dBm)	Max Tune Up Power (mW)	Power Density (mW/cm ²)	Limit of Power Density (mW/cm ²)	Result
3DH5	2480	2.065380	3.79	3.79 ± 1	3.01301	0.00124	1	Pass
BLE_1M	2480	2.065380	4.35	4.35 ± 1	3.42768	0.00141	1	Pass
11N40SISO	2437	2.065380	21.46	21.46 ± 1	176.19760	0.07240	1	Pass
11A	5240	2.280342	18.67	18.67 ± 1	92.68298	0.04205	1	Pass



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5 simultaneous MPE Result

BT (BLE_1M) MPE ratio	2.4G WIFI (11N40SISO) MPE ratio	5.1G WIFI (11A) MPE ratio	simultaneous MPE ratio	MPE Limits ratio	Test result
0.00141	0.053669	0.04205	0.119594	1	PASS

*****THE END REPORT*****