

FCC RF EXPOSURE REPORT

For

Rear Display

MODEL NUMBER: THRS

PROJECT NUMBER: 4790783952

REPORT NUMBER: 4790783952-2

FCC ID: A269ZUA170

IC: 700B-UA170

HVIN: THRS

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Prepared for

ALPS ALPINE CO., LTD.

Prepared by

UL-CCIC COMPANY LIMITED No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, China Tel: +86 512-6808 6400 Fax: +86 512-6808 4099 Website: www.ul.com



Revision History

Rev.	Issue Date	Revisions	Revised By
V0	07/10/2023	Initial Issue	

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TEST RESULTS

Complies

1. APPLICANT INFORMATION

ALPS ALPINE CO., LTD.
20-1 Yoshima Industrial Park Iwaki, Fukushima 970-1192 Japan
ALPS ALPINE CO., LTD.
20-1 Yoshima Industrial Park Iwaki, Fukushima 970-1192 Japan
Rear Display
THRS
6221813
Jun. 27, 2023
Jun. 27, 2023~ Jul. 09, 2023

APPLICABLE STANDARDS

STANDARD

FCC Guidelines for Human Exposure IEEE

C95.1

Prepared By:

Tom Tang

Reviewed By:

Tom Tang

Authorized By:

Chris Zhong

Chris Zhong EMC&RF Lab Operations Manager Leon Wu

Leon Wu



2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v06 and FCC Guidelines for Human Exposure IEEE C95.1.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	A2LA (Certificate No.: 4829.01) UL-CCIC COMPANY LIMITED has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1247) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules. IC (IC Designation No.: 25056; CAB No.: CN0073) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.
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Note 1: All tests measurement facilities use to collect the measurement data are located at No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, China.

Note 2: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. These measurements below 30MHz had been correlated to measurements performed on an OFS.

Note 3: The test anechoic chamber in UL-CCIC COMPANY LIMITED had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.



4. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty			
Output Power to Antenna	± 1.3dB			
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.				



5. REQUIREMENT

<u>LIMIT</u>

Limits for General Population/Uncontrolled Exposure

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/f2)*	30		
30-300	27.5	0.073	0.2	30		
300-1500			f/150	30		
1500-100,000			1.0	30		
Note 1: f = frequency in MHz, * means Plane-wave equivalent power density						

Note 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Note 3: The limit value 1.0mW/cm² is available for this EUT.

MPE CALCULATION METHOD

$S = PG/(4\pi R2)$

where: S = power density (in appropriate units, e.g. mW/ cm2)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)



CALCULATED RESULTS

Bluetooth – BR & EDR (Worst case)										
Module	Mode	Frequency	Output Power to Antenna		Antenna Gain		Power Density	Limit	Verdict	
		(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm ²)	(mW/cm ²)		
1	DH5	2402-2480	7.5	5.62	3.7	2.34	0.003	1	Complies	
2	DH5	2402-2480	7.5	5.62	3.7	2.34	0.003	1	Complies	
1+2	DH5	2402-2480	/	/	/	/	0.006	1	Complies	

Note:

- 1. Two BT modules are installed in this product.
- 2. The output power to antenna and antenna gain are from operation description.
- 3. The minimum separation distance of the device is greater than 20 cm.
- 4. All the modes and channels had been tested, but only the worst data was recorded in the report.
- 5. The calculated result for the sample received is <Pass> according to < 47 CFR FCC Part 2 Subpart J, section 2.1091> when <Accuracy Method> decision rule is applied.

END OF REPORT

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