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SAR Exclusion Evaluation Report

**FCC 47 CFR § 2.1093
IEEE Std 1528-2013**

For

Cisco Headset 720

Model: HS-WL-722, HS-WL-721

Trade Name: Cisco

**Issued to
Cisco Systems, Inc.
125 West Tasman Drive San Jose, CA 95134-1706 United States**

Prepared by
**Compliance Certification Services Inc.
Wugu Lab.
No.11, Wugong 6th Rd., Wugu Dist.,
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Issue Date: July 14, 2022**

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Revision History

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1 Attestation of Test Results

| | | | |
|--|---|--|--|
| Applicant Name | Cisco Systems Inc 125 West Tasman Drive San Jose, CA 95134-1706 United States | | |
| Model Name | HS-WL-722, HS-WL-721 | | |
| Applicable Standards | FCC 47 CFR § 2.1093 Published RF exposure KDB procedures IEEE Std 1528-2013 | | |
| Receive EUT Date: | January 25, 2022 | | |
| Date Tested | May 17, 2022 | | |
| Test Results | EXEMPT | | |
| <p>Compliance Certification Services Inc. , tested the above equipment in accordance with the requirements set forth in the above standards. Determination of compliance is based on the results of the compliance measurement,not taking into account measurement instrumentation uncertainty.All indications of Pass/Fail in this report are opinions expressed by Compliance Certification Services Inc, based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.</p> | | | |
| Approved & Released By: | | Tested by: | |
|  | |  | |
| Kevin Tsai Deputy Manager Compliance Certification Services Inc. | | Sky Zhou Asst. Section Manager Compliance Certification Services Inc. | |

2 Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEEE STD 1528-2013, the following FCC Published RF exposure KDB procedures:

- 447498 D01 General RF Exposure Guidance v07
- 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
- 865664 D02 RF Exposure Reporting v01r02

3 Device Under Test (DUT) Information

3.1 DUT Description

| | |
|----------------------|--|
| Applicant Name | Cisco Systems Inc |
| Applicant Address | 125 West Tasman Drive San Jose, CA 95134-1706 United States |
| Manufacturer Name | Cisco Systems, Inc. |
| Manufacturer Address | 125 West Tasman Drive San Jose, CA 95134-1706 United States |
| Product | Cisco Headset 720 |
| Trade Name | Cisco |
| Model No. | HS-WL-722, HS-WL-721 |
| Model Discrepancy | Basic model HS-WL-722: Wireless Dual On-Ear Headset Multi model HS-W-721 : Wireless Mono On-Ear Headset (One Speaker connected only) Difference in earphone number and accompany circuit board, electronic components, wire and indicator LED only for the extra earphone. |
| Back Cover | <input type="checkbox"/> Normal Battery Cover <input type="checkbox"/> Normal Battery Cover with NFC <input type="checkbox"/> Wireless Charger Battery Cover <input type="checkbox"/> Wireless Charger Battery Cover with NFC <input checked="" type="checkbox"/> The Back Cover is not removable. |
| Battery Options | <input checked="" type="checkbox"/> Standard – Lithium-ion battery, Rating 3.7Vdc, 1.85Wh <input type="checkbox"/> Extended (large capacity) <input type="checkbox"/> The rechargeable battery is not user accessible. |
| Hardware Version | HDT606-MAIN-R2-20211015 |
| Software Version | 1-8-m-168 |
| Sample Stage | PVT |

3.2 Wireless Technologies

Stereo

| Wireless technologies | Frequency bands | Peak Antenna Gain (dBi) | Operating mode | Duty Cycle |
|-----------------------|-----------------|-------------------------|----------------|------------|
| Bluetooth | 2.4 GHz | 5.01 dBi | | 77.6% |
| Antenna Specification | Brand Name | Merry | | |
| | Type | Monopole Antenna | | |
| | Parts Number | 09D4000000B | | |

Mono

| Wireless technologies | Frequency bands | Peak Antenna Gain (dBi) | Operating mode | Duty Cycle |
|-----------------------|-----------------|-------------------------|----------------|------------|
| Bluetooth | 2.4 GHz | 5.01 dBi | | 77.6% |
| Antenna Specification | Brand Name | Merry | | |
| | Type | Monopole Antenna | | |
| | Parts Number | 09D4000000B | | |

Notes:

- Duty cycle for BT is referenced from BT reports.

4 RF Exposure Conditions (Test Configurations)

Refer to Appendixes 1 for the specific details of the antenna-to-antenna and antenna-to-edge(s) distances.

4.1 Standalone SAR Test Exclusion Considerations

Since the Dedicated Host Approach is applied, the SAR-based exemption in Appendix B of KDB 447498 is applied together with KDB 616217 § 4.3 to determine the minimum test separation distance:

- When the separation distance from the antenna to an adjacent edge is ≤ 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.
- When the separation distance from the antenna to an adjacent edge is > 5 mm, the actual antenna-to-edge separation distance is applied to determine SAR test exclusion.

SAR Test Exclusion Calculations for $1.5 \text{ GHz} \leq f \leq 6 \text{ GHz}$

| Tx Interface | Frequency (GHz) | Output Power | | Antenna Gain (dBi) | ERP (dBm) | ERP Threshold (mW) | Separation Distances (cm) | P _{em} (mW) | Exemption result |
|-------------------|-----------------|--------------|----|--------------------|-----------|--------------------|---------------------------|----------------------|------------------|
| | | dBm | mW | | | | | | |
| 1.5GHz ≤ f ≤ 6GHz | | | | | | | | | |
| Stereo_Head | | | | | | | | | |
| Bluetooth | 2.48 | 4.00 | 3 | 5.01 | 6.86 | 4.85 | 2 | 38 | -EXEMPT- |
| Stereo_Limb | | | | | | | | | |
| Bluetooth | 2.48 | 4.00 | 3 | 5.01 | 6.86 | 4.85 | 0.5 | 7 | -EXEMPT- |
| Mono_Head | | | | | | | | | |
| Bluetooth | 2.48 | 4.00 | 3 | 5.01 | 6.86 | 4.85 | 2 | 38 | -EXEMPT- |
| Mono_Limb | | | | | | | | | |
| Bluetooth | 2.48 | 4.00 | 3 | 5.01 | 6.86 | 4.85 | 0.5 | 7 | -EXEMPT- |

4.2 Required Test Configurations

The table below identifies the standalone test configurations required for this device according to the findings in Section 6.1:

| Test Configurations | Stereo_Head | Stereo_Limb | Mono_Head | Mono_Limb |
|---------------------|-------------|-------------|-----------|-----------|
| 1.5GHz ≤ f ≤ 6GHz | | | | |
| Bluetooth | No | No | No | No |

Note(s):

Yes = Testing is required.

No = Testing is not required.

5 Conducted Output Power Measurements

5.1 Bluetooth.

Average Power Measured Results

| Mode | Ch # | Freq. (MHz) | Meas. Avg Pwr (dBm) | Meas. Avg Pwr (mW) | Tune-up Limit |
|-----------------------|------|----------------|------------------------|-----------------------|------------------|
| GFSK | 0 | 2402 | 3.96 | 2.49 | 4.00 |
| | 39 | 2441 | 3.99 | 2.51 | |
| | 78 | 2480 | 3.95 | 2.48 | |
| EDR, $\pi/4$ DQPSK | 0 | 2402 | 3.85 | 2.43 | 4.00 |
| | 39 | 2441 | 3.84 | 2.42 | |
| | 78 | 2480 | 3.86 | 2.43 | |
| EDR, 8-DPSK | 0 | 2402 | 3.95 | 2.48 | 4.00 |
| | 39 | 2441 | 3.97 | 2.49 | |
| | 78 | 2480 | 3.98 | 2.50 | |
| LE, GFSK | 0 | 2402 | 3.98 | 2.50 | 4.00 |
| | 19 | 2440 | 3.97 | 2.49 | |
| | 39 | 2480 | 3.95 | 2.48 | |

6 Facilities

All measurement facilities used to collect the measurement data are located at

☒ No.11, Wugong 6th Rd., Wugu Dist., New Taipei City 24891, Taiwan. (R.O.C.)

7 Appendixes

| Exhibit | Content |
|---------|------------------|
| 1 | SAR Setup Photos |

END OF REPORT