

Prüfbericht-Nr.: Test report no.:	CN2395LR 003	Auftrags-Nr.: Order no.:	168445729	Seite 1 von 20 Page 1 of 20
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2023-09-26	
Auftraggeber: Client:	ECARX (Hubei) Tech Co., Ltd B1336, Taizi Lake Industry Park, No 18 ShenLong AVE, WH, China			
Prüfgegenstand: Test item:	ECU-Display Head Unit			
Bezeichnung / Typ-Nr.: Identification / Type no.:	DHU-NA-006			
Auftrags-Inhalt: Order content:	Test Report			
Prüfgrundlage: Test specification:	CFR47 FCC Part 15: Subpart E Section 15.407 RSS-247 Issue 3 August 2023 RSS-Gen Issue 5 February 2021			
Wareneingangsdatum: Date of sample receipt:	2023-10-07	Please refer to Photo Document		
Prüfmuster-Nr.: Test sample no.:	A003572346-001			
Prüfzeitraum: Testing period:	2023-10-23 - 2023-11-01			
Ort der Prüfung: Place of testing:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: tested by:	 Hardy Suo		genehmigt von: authorized by:	 Lin Lin
Datum: Date:	2023-12-21		Ausstellungsdatum: Issue date:	2023-12-21
Stellung / Position:	Sachverständige(r)/Expert		Stellung / Position:	Sachverständige(r)/Expert
Sonstiges / Other:	FCC ID: 2BD49-DHUNA006 IC: 31788-DHUNA006, HVIN: DHU-NA-006 This report is for 5.8GHz Wi-Fi.			
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:	Prüfmuster vollständig und unbeschädigt Test item complete and undamaged			
* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet * Legend: P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.				

Prüfbericht-Nr.: CN2395LR 003
Test report no.:

Seite 2 von 20
Page 2 of 20

Anmerkungen
Remarks

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4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. <i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i>

Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER

RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY

RESULT: Pass

5.1.4 FREQUENCY STABILITY

RESULT: Pass

5.1.5 99% BANDWIDTH

RESULT: Pass

5.1.6 6dB BANDWIDTH

RESULT: Pass

5.1.7 RADIATED SPURIOUS EMISSION

RESULT: Pass

Contents

1	GENERAL REMARKS	5
1.1	COMPLEMENTARY MATERIALS	5
2	TEST SITES.....	6
2.1	TEST FACILITIES.....	6
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS	6
2.3	TRACEABILITY.....	7
2.4	CALIBRATION	7
2.5	MEASUREMENT UNCERTAINTY	7
2.6	LOCATION OF ORIGINAL DATA	7
2.7	STATUS OF FACILITY USED FOR TESTING	7
3	GENERAL PRODUCT INFORMATION.....	8
3.1	PRODUCT FUNCTION AND INTENDED USE.....	8
3.2	RATINGS AND SYSTEM DETAILS	8
3.3	INDEPENDENT OPERATION MODES	9
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS.....	9
3.5	SUBMITTED DOCUMENTS.....	9
4	TEST SET-UP AND OPERATION MODES	10
4.1	PRINCIPLE OF CONFIGURATION SELECTION	10
4.2	TEST OPERATION AND TEST SOFTWARE	10
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	10
4.4	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE	10
4.5	TEST SETUP DIAGRAM	11
5	TEST RESULTS.....	12
5.1	TRANSMITTER REQUIREMENT & TEST SUITES.....	12
5.1.1	<i>Antenna Requirement.....</i>	<i>12</i>
5.1.2	<i>Maximum Peak Conducted Output Power.....</i>	<i>13</i>
5.1.3	<i>Conducted Power Spectral Density.....</i>	<i>15</i>
5.1.4	<i>Frequency Stability.....</i>	<i>16</i>
5.1.5	<i>99% Bandwidth</i>	<i>17</i>
5.1.6	<i>6dB Bandwidth</i>	<i>18</i>
5.1.7	<i>Radiated Spurious Emission.....</i>	<i>19</i>
6	PHOTOGRAPHS OF THE TEST SET-UP.....	20
7	LIST OF TABLES	20

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of 5GHz Wi-Fi

Appendix B: Photographs of the Test Set-up

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China.

FCC Registration No.: 694916

ISED wireless device testing laboratory: 25069

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (SRD-Tonscend)				
Equipment	Manufacturer	Model	Serial No.	Cal. until
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY60241175	2024-09-21
MXG X-Series RF Vector Signal Generator	Keysight	N5182B	MY61250137	2024-09-21
EXG X-Series Microwave Analog Signal Generator	Keysight	N5173B	MY61250141	2024-09-21
DC power supply	Keysight	E3642A	MY61276100	2024-09-21
Power Control Unit	Tonscend	JS0806-4ADC	N/A	2024-09-21
Automation Control Unit	Tonscend	JS0806-2	21C8060396	2024-09-21
Test Software	Tonscend	JS1120-3	N/A	N/A
Control PC	Lenovo	TianYi510S-071MB	YLX23JMF	N/A
Shielding Room 8#	Albatross	SR8	APC17151-SR8	2024-06-22
Unwanted Emission Testing (TS9975)				
Equipment	Manufacturer	Model	Serial No.	Cal. until
EMI Test Receiver	R&S	ESR 7	102021	2024-07-25
Signal Analyzer	R&S	FSV 40	101439	2024-07-25
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	2024-07-25
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2024-07-25
Amplifier	R&S	SCU-18F	180070	2024-07-25
Amplifier	R&S	SCU40A	100475	2024-07-25
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2024-08-06
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	2024-08-06
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	2024-08-27

Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2024-08-06
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	2024-06-22

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Table 2: Measurement Uncertainty

Parameter	Uncertainty (k=2)
RF output power, conducted	± 0.99 dB
Occupied Channel Bandwidth	± 2.08 %
RF power density, conducted	± 0.99 dB
Unwanted Emissions, conducted	± 0.89 dB
All emissions, radiated	±4.17 dB

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. File for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China. is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is an ECU-Display Head Unit intended to be assembled into automotive environment, which supports Bluetooth (dual mode), FM, 2.4G Wi-Fi and 5.8G Wi-Fi technologies.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment:	ECU-Display Head Unit
Type Designation:	DHU-NA-006
FCC ID:	2BD49-DHUNA006
IC:	31788-DHUNA006
HVIN:	DHU-NA-006
Operating Voltage:	DC 12V
Testing Voltage:	DC 12V
Technical Specification of Wi-Fi 802.11 a/n/ac	
Operating Frequency:	5745-5825MHz
Type of Modulation:	OFDM(BPSK/QPSK/16QAM/64QAM/256QAM)
Channel Number:	8CHs, 802.11 a/n20/n40/ac20/ac40/ac80
Channel Separation:	5 MHz
Antenna Type:	Integral Antenna
Antenna Number:	1Tx1Rx
Antenna Gain:	4.27 dBi for ANT 2 (Provided by the Client)

Table 4: RF Channel and Frequency of 5.8GHz Wi-Fi

U-NII-3					
20MHz Bandwidth		40MHz Bandwidth		80MHz Bandwidth	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Wi-Fi transmitting mode
 - 1. Low channel
 - 2. Middle channel
 - 3. High channel
- B. On, Normal operation
- C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- | | |
|------------------------------|-------------------------|
| - Application Form | - User Manual |
| - ID Label and Location Info | - Operation Description |

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model DHU-NA-006 in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 5: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
DC power Supply	Topward	3303D	809332	0-30 Volts, 0-3 Amps
Laptop	Lenovo	T480	PF-16A6N8	N/A

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

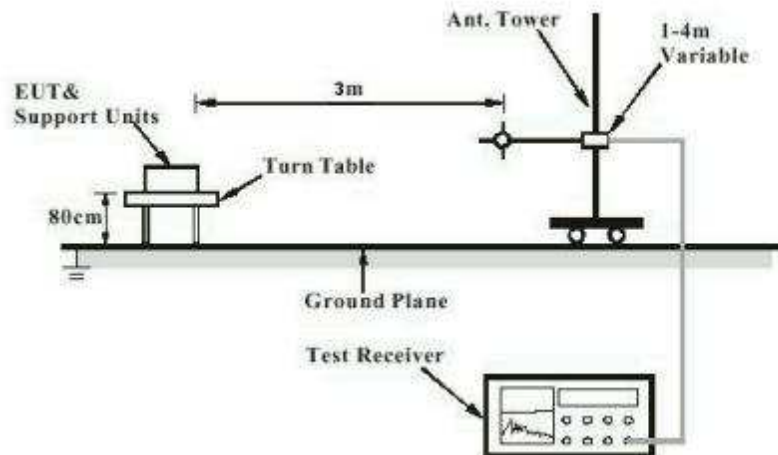


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

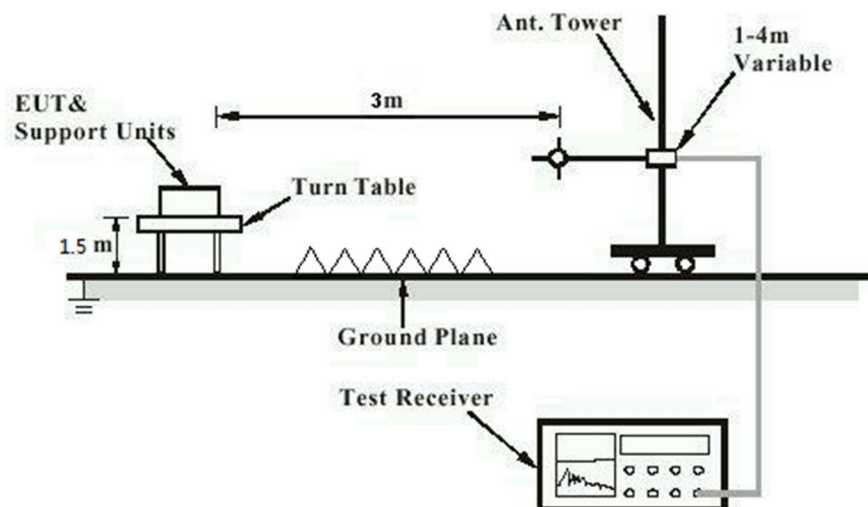
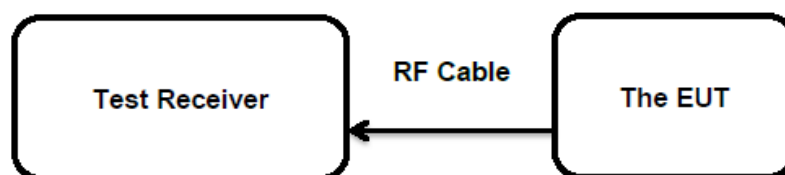


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Pass****Test Specification**

Test standard : FCC Part 15.203
RSS-Gen Clause 6.8

According to the manufacturer declared, the EUT have an integral antennas, the directional gain of antenna is 4.27 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement.

Therefore, the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

Prüfbericht - Nr.: CN2395LR 003

Test Report No.:

Seite 13 von 20

Page 13 of 20

5.1.2 Maximum Peak Conducted Output Power

RESULT:**Pass****Test Specification**

Test standard : FCC Part 15.407(a)(1)&(2)&(4)
RSS-247 clause 6.2

Basic standard : ANSI C63.10: 2013

Limits : FCC:
<1W (30dBm) (5725-5850MHz)

IC:
Max conducted output power <1W (30dBm) (5725-5850MHz)

Kind of test site : Shielded Room

Test Setup

Date of testing : 2023-10-23

Input voltage : DC 12V

Operation mode : A

Test channel : Low / Middle / High

Ambient temperature : 26.4 °C

Relative humidity : 47 %

Atmospheric pressure : 101 kPa

For details, refer to following test result.

Table 6: Test Result of Maximum Peak Conducted Output Power, 5.8GHz Wi-Fi

Test Mode	Antenna	Channel	Result [dBm]	Result [W]	Limit [W]	Verdict
11A	Ant1	5745	10.86	0.0122	<1.0	PASS
		5785	11.95	0.0157	<1.0	PASS
		5825	11.61	0.0145	<1.0	PASS
11N20	Ant1	5745	8.43	0.0070	<1.0	PASS
	Ant1	5785	8.37	0.0069	<1.0	PASS
	Ant1	5825	9.05	0.0080	<1.0	PASS
11N40	Ant1	5755	9.12	0.0082	<1.0	PASS
	Ant1	5795	8.88	0.0077	<1.0	PASS
11AC20	Ant1	5745	9.40	0.0087	<1.0	PASS
	Ant1	5785	7.55	0.0057	<1.0	PASS
	Ant1	5825	8.13	0.0065	<1.0	PASS
11AC40	Ant1	5755	8.19	0.0066	<1.0	PASS
	Ant1	5795	8.98	0.0079	<1.0	PASS
11AC80	Ant1	5775	9.96	0.0099	<1.0	PASS

Max. e.i.r.p.=11.95dBm+4.27dBi=16.22dBm, which is less than 36dBm=4W.

Note:

- 1) The cable loss is taken into account in results.
- 2) Antenna gain(G): 4.27 dBi

Prüfbericht - Nr.: CN2395LR 003

Test Report No.:

Seite 15 von 20

Page 15 of 20

5.1.3 Conducted Power Spectral Density

RESULT:**Pass****Test Specification**

Test standard	: FCC part 15.407(a) RSS-247 clause 6.2
Basic standard	: ANSI C63.10: 2013 KDB 789033 D02 v01r03
Limits	: FCC: <30dBm/500KHz (5725-5850MHz) IC: e.i.r.p. spectral density <30dBm/500KHz (5725-5850MHz)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2023-10-23
Input voltage	: DC 12V
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 26.4 °C
Relative humidity	: 47 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

5.1.4 Frequency Stability

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.407(g) RSS-Gen Clause 6.11
Basic standard	: ANSI C63.10: 2013
Limits	: Within assigned bands
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2023-10-23
Input voltage	: DC 12V
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 26.4 °C
Relative humidity	: 47 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

Prüfbericht - Nr.: **CN2395LR 003**
Test Report No.:Seite 17 von 20
Page 17 of 20**5.1.5 99% Bandwidth****RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.407(e) RSS-Gen Clause 6.6
Basic standard	: ANSI C63.10: 2013
Limits	: N/A
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2023-10-23
Input voltage	: DC 12V
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 26.4 °C
Relative humidity	: 47 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

Prüfbericht - Nr.: **CN2395LR 003**
Test Report No.:Seite 18 von 20
Page 18 of 20

5.1.6 6dB Bandwidth

RESULT:**Pass****Test Specification**

Test standard : FCC Part 15.407(e)
RSS-Gen Clause 6.6

Basic standard : ANSI C63.10: 2013

Limits : At least 500KHz (5725-5850MHz)

Kind of test site : Shielded Room

Test Setup

Date of testing : 2023-10-23

Input voltage : DC 12V

Operation mode : A

Test channel : Low / Middle / High

Ambient temperature : 26.4 °C

Relative humidity : 47 %

Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

5.1.7 Radiated Spurious Emission

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.407(b) & FCC Part 15.205 & FCC Part 15.209 RSS-247 clause 6.2 & RSS-GEN clause 8.9 and 8.10
Basic standard	: ANSI C63.10: 2013 KDB 789033 D02 v01r03
Limits	: • For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. • Restricted Bands meet the requirement of 15.209 limit and RSS-GEN
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: 2023-10-31 to 2023-11-01
Input voltage	: Fully charged battery
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: Refer to test result
Relative humidity	: Refer to test result
Atmospheric pressure	: 101 kPa

Remark:

Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix A.

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix B.

7 List of Tables

Table 1: List of Test and Measurement Equipment.....	6
Table 2: Measurement Uncertainty.....	7
Table 3: Technical Specification of EUT.....	8
Table 4: RF Channel and Frequency of 5.8GHz Wi-Fi.....	8
Table 5: List of Accessories and Auxiliary Equipment.....	10
Table 6: Test Result of Maximum Peak Conducted Output Power, 5.8GHz Wi-Fi.....	14

Appendix A: Test Results of 5.8GHz Wi-Fi

APPENDIX A: TEST RESULTS OF 5.8GHZ WI-FI.....	1
APPENDIX A.1: TEST RESULTS OF CONDUCTED POWER SPECTRAL DENSITY	2
APPENDIX A.2: TEST RESULTS OF FREQUENCY STABILITY	8
APPENDIX A.3: TEST RESULTS OF 99% BANDWIDTH.....	9
APPENDIX A.4: TEST RESULTS OF 6dB BANDWIDTH	15
APPENDIX A.5: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS.....	21
30MHz - 1GHz (Worst case).....	21
1GHz - 18GHz.....	23
APPENDIX A.6: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS.....	39
Wi-Fi 802.11 a mode.....	39
Wi-Fi 802.11 n(HT20) mode.....	43
Wi-Fi 802.11 n(HT40) mode.....	47
Wi-Fi 802.11 ac(VHT80) mode.....	51

Appendix A.1: Test Results of Conducted Power Spectral Density

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant2	5745	-1.92	≤30.00	PASS
		5785	-1	≤30.00	PASS
		5825	-1.85	≤30.00	PASS
11N20	Ant2	5745	-5.15	≤30.00	PASS
	Ant2	5785	-5.23	≤30.00	PASS
	Ant2	5825	-5	≤30.00	PASS
11N40	Ant2	5755	-7.63	≤30.00	PASS
	Ant2	5795	-7.82	≤30.00	PASS
11AC20	Ant2	5745	-3.82	≤30.00	PASS
	Ant2	5785	-3.87	≤30.00	PASS
	Ant2	5825	-5.83	≤30.00	PASS
11AC40	Ant2	5755	-8.38	≤30.00	PASS
	Ant2	5795	-7.32	≤30.00	PASS
11AC80	Ant2	5775	-8.89	≤30.00	PASS

Note: 1. The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
 2. The Duty Cycle Factor and RBW Factor is compensated in the graph.

11A_Ant2_5745



11A_Ant2_5785



11A_Ant2_5825



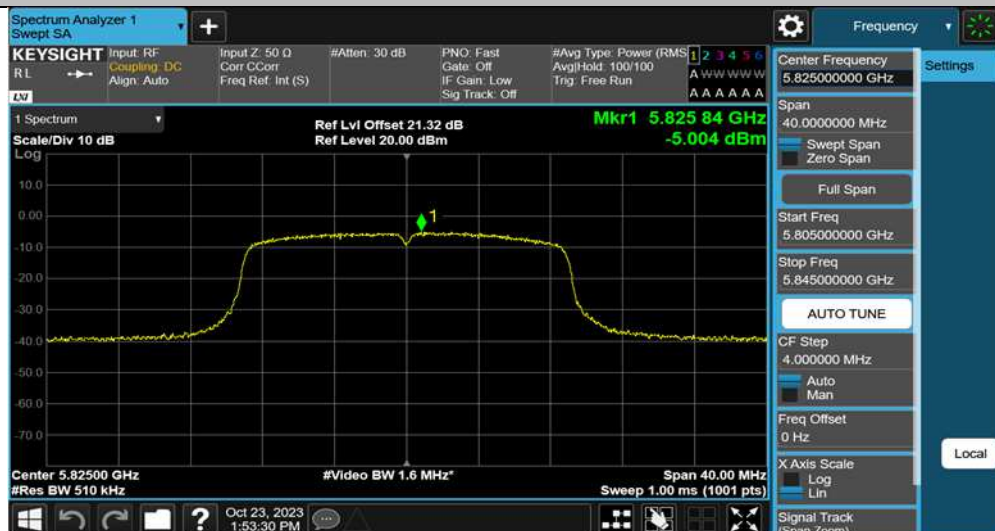
11N20_Ant2_5745



11N20_Ant2_5785



11N20_Ant2_5825



11N40_Ant2_5755



11N40_Ant2_5795



11AC20_Ant2_5745



11AC20_Ant2_5785



11AC20_Ant2_5825



11AC40_Ant2_5755



11AC40_Ant2_5795



11AC80_Ant2_5775



Appendix A.2: Test Results of Frequency Stability

Voltage								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20	Ant2	5745	NV	NT	-16000.00	-2.785030	20	PASS
		5785	NV	NT	-19000.00	-3.284356	20	PASS
		5825	NV	NT	-18000.00	-3.090129	20	PASS
11AC40	Ant2	5755	NV	NT	-18000.00	-3.127715	20	PASS
		5795	NV	NT	-18000.00	-3.106126	20	PASS
11AC80	Ant2	5775	NV	NT	-19000.00	-3.290043	20	PASS

Temperature								
TestMode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11AC20	Ant2	5745	NV	0	-19000.00	-3.307224	20	PASS
			NV	40	-19000.00	-3.307224	20	PASS
		5785	NV	0	-20000.00	-3.457217	20	PASS
			NV	40	-20000.00	-3.457217	20	PASS
		5825	NV	0	-20000.00	-3.433476	20	PASS
			NV	40	-20000.00	-3.433476	20	PASS
11AC40	Ant2	5755	NV	0	-20000.00	-3.475239	20	PASS
			NV	40	-20000.00	-3.475239	20	PASS
		5795	NV	0	-20000.00	-3.451251	20	PASS
			NV	40	-21000.00	-3.623814	20	PASS
11AC80	Ant2	5775	NV	0	-21000.00	-3.636364	20	PASS
			NV	40	-21000.00	-3.636364	20	PASS

Appendix A.3: Test Results of 99% Bandwidth

TestMode	Antenna	Channel	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant2	5745	16.439	5736.7376	5753.1766	---	PASS
		5785	16.445	5776.7536	5793.1986	---	PASS
		5825	16.422	5816.7641	5833.1861	---	PASS
11N20	Ant2	5745	17.543	5736.1900	5753.7330	---	PASS
		5785	17.540	5776.2057	5793.7457	---	PASS
		5825	17.563	5816.1769	5833.7399	---	PASS
11N40	Ant2	5755	36.096	5736.9517	5773.0477	---	PASS
		5795	36.138	5776.8799	5813.0179	---	PASS
11AC20	Ant2	5745	17.523	5736.1946	5753.7176	---	PASS
		5785	17.577	5776.1879	5793.7649	---	PASS
		5825	17.567	5816.1744	5833.7414	---	PASS
11AC40	Ant2	5755	36.059	5736.9358	5772.9948	---	PASS
		5795	36.063	5776.8875	5812.9505	---	PASS
11AC80	Ant2	5775	75.408	5737.0505	5812.4585	---	PASS

11A_Ant2_5745



11A_Ant2_5785



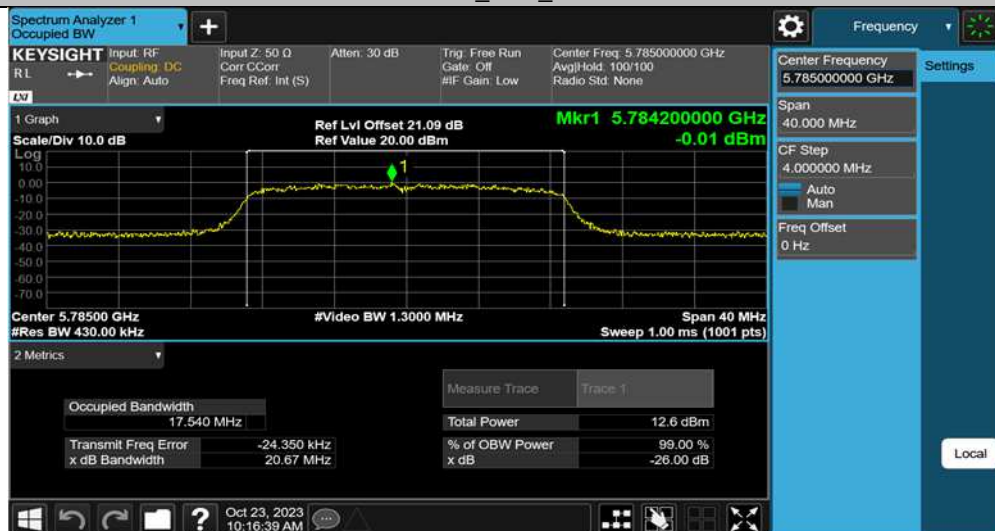
11A_Ant2_5825



11N20_Ant2_5745



11N20_Ant2_5785



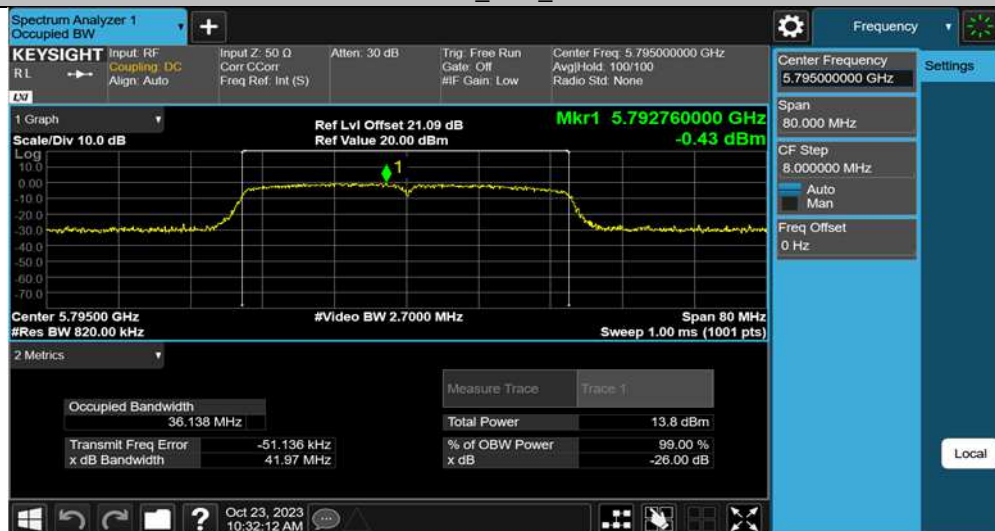
11N20_Ant2_5825



11N40_Ant2_5755



11N40_Ant2_5795



11AC20_Ant2_5745



11AC20_Ant2_5785



11AC20_Ant2_5825



11AC40_Ant2_5755



11AC40_Ant2_5795



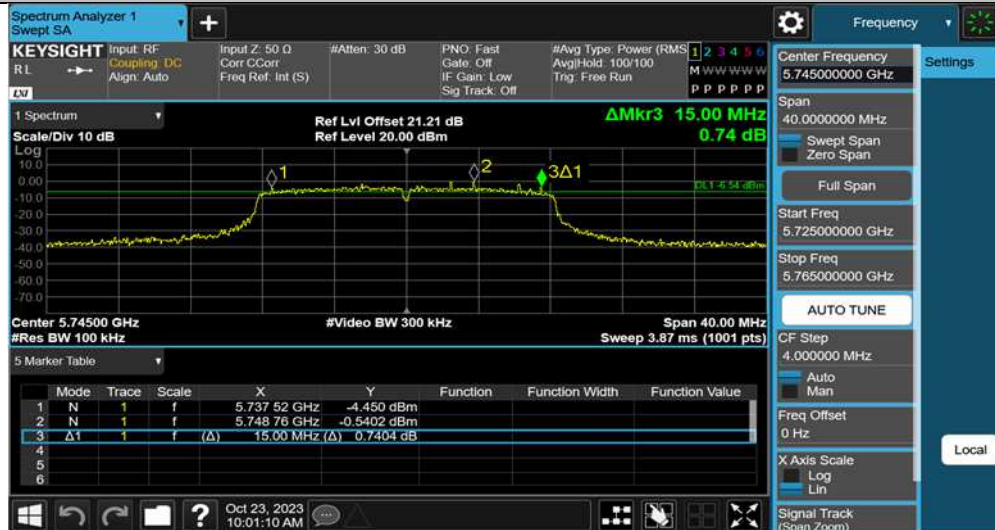
11AC80_Ant2_5775



Appendix A.4: Test Results of 6dB Bandwidth

TestMode	Antenna	Channel	6db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant2	5745	15.000	5737.520	5752.520	0.5	PASS
		5785	14.480	5777.440	5791.920	0.5	PASS
		5825	15.000	5817.520	5832.520	0.5	PASS
11N20	Ant2	5745	15.000	5737.520	5752.520	0.5	PASS
		5785	15.400	5777.080	5792.480	0.5	PASS
		5825	15.440	5817.080	5832.520	0.5	PASS
11N40	Ant2	5755	35.040	5737.480	5772.520	0.5	PASS
		5795	33.760	5778.680	5812.440	0.5	PASS
11AC20	Ant2	5745	15.000	5737.520	5752.520	0.5	PASS
		5785	14.440	5778.120	5792.560	0.5	PASS
		5825	15.040	5817.440	5832.480	0.5	PASS
11AC40	Ant2	5755	35.040	5737.480	5772.520	0.5	PASS
		5795	33.840	5778.680	5812.520	0.5	PASS
11AC80	Ant2	5775	75.040	5737.400	5812.440	0.5	PASS

11A_Ant2_5745



11A_Ant2_5785



11A_Ant2_5825



11N20_Ant2_5745



11N20_Ant2_5785



11N20_Ant2_5825



11N40_Ant2_5755



11N40_Ant2_5795



11AC20_Ant2_5745



11AC20_Ant2_5785



11AC20_Ant2_5825



11AC40_Ant2_5755



11AC40_Ant2_5795



11AC80_Ant2_5775



Appendix A.5: Test Results of Radiated Spurious Emissions

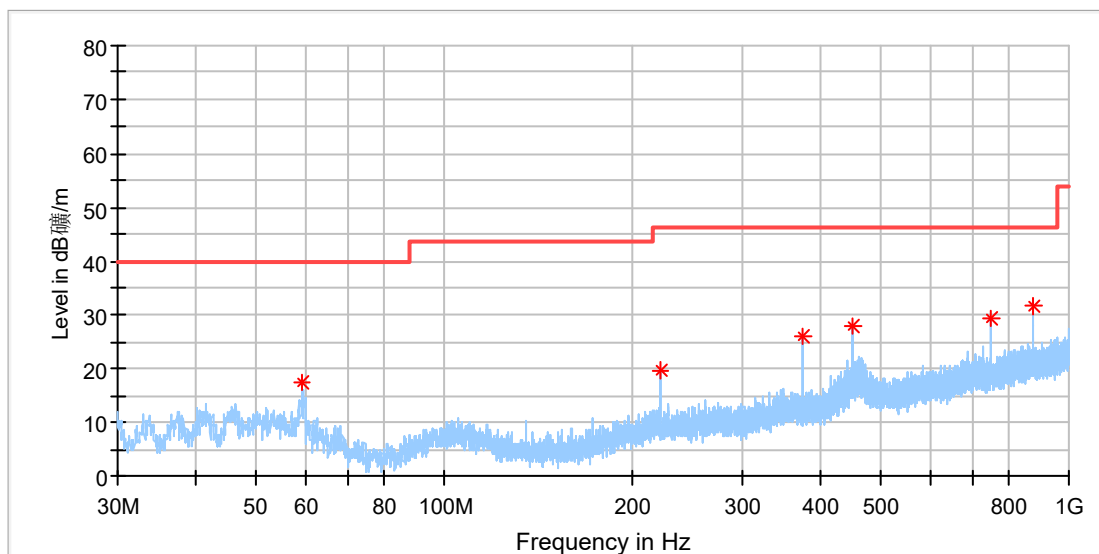
Note:

- 1) This testing was carried out on different modulations, but only the worst case was presented in this report.
- 2) Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and above 18GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

30MHz - 1GHz (Worst case)

EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11a_Ch157
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

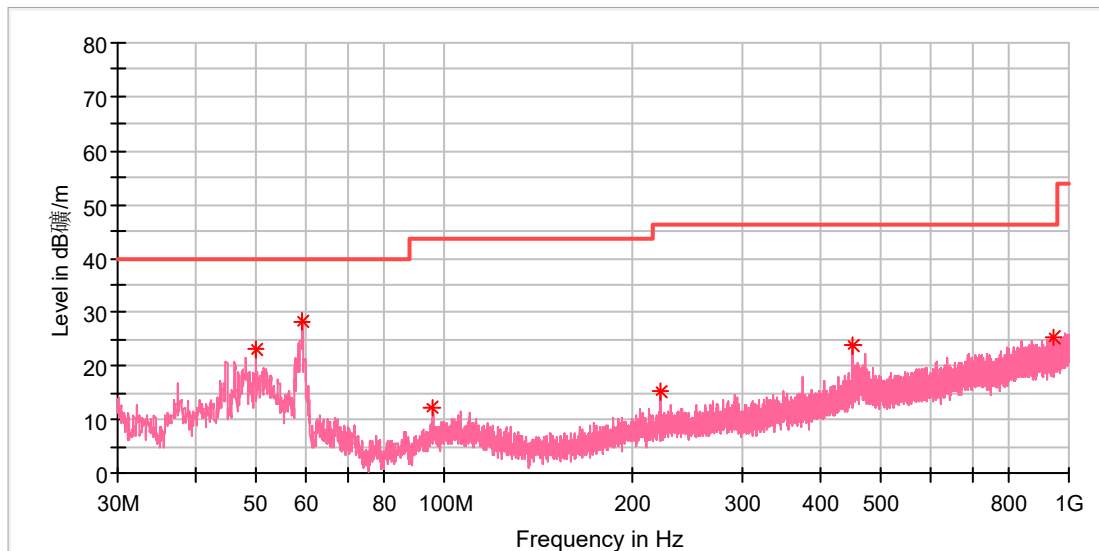
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
59.062692	17.30	40.00	22.70	100.0	H	344.0	-19.2
221.201923	19.72	46.00	26.28	100.0	H	98.0	-18.8
374.984231	26.17	46.00	19.83	100.0	H	318.0	-14.7
450.010000	27.74	46.00	18.26	100.0	H	344.0	-13.3
750.038462	29.25	46.00	16.75	100.0	H	285.0	-7.6
875.056539	31.72	46.00	14.28	100.0	H	0.0	-5.6

Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11a_Ch157
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.996923	22.92	40.00	17.08	100.0	V	0.0	-18.6
59.361154	28.29	40.00	11.71	100.0	V	118.0	-19.2
95.885385	12.31	43.50	31.19	100.0	V	0.0	-19.9
221.201923	15.12	46.00	30.88	100.0	V	150.0	-18.8
450.010000	23.68	46.00	22.32	100.0	V	34.0	-13.3
939.673462	25.32	46.00	20.68	100.0	V	158.0	-5.0

Final Result

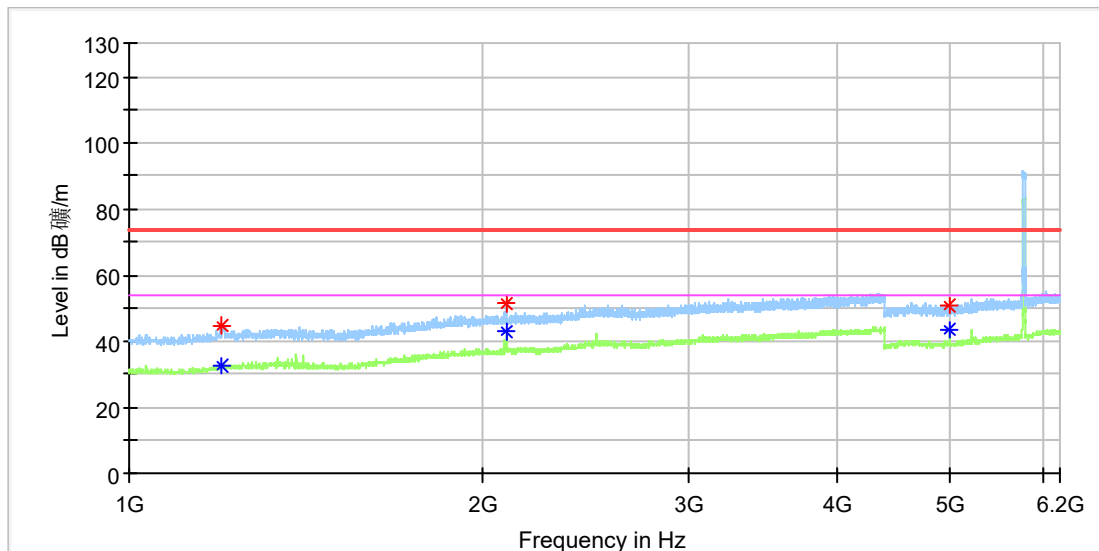
Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

1GHz - 18GHz

Note: The highest waveform in the figure is 5GHz Wi-Fi Fundamental.

EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11a_Ch157
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

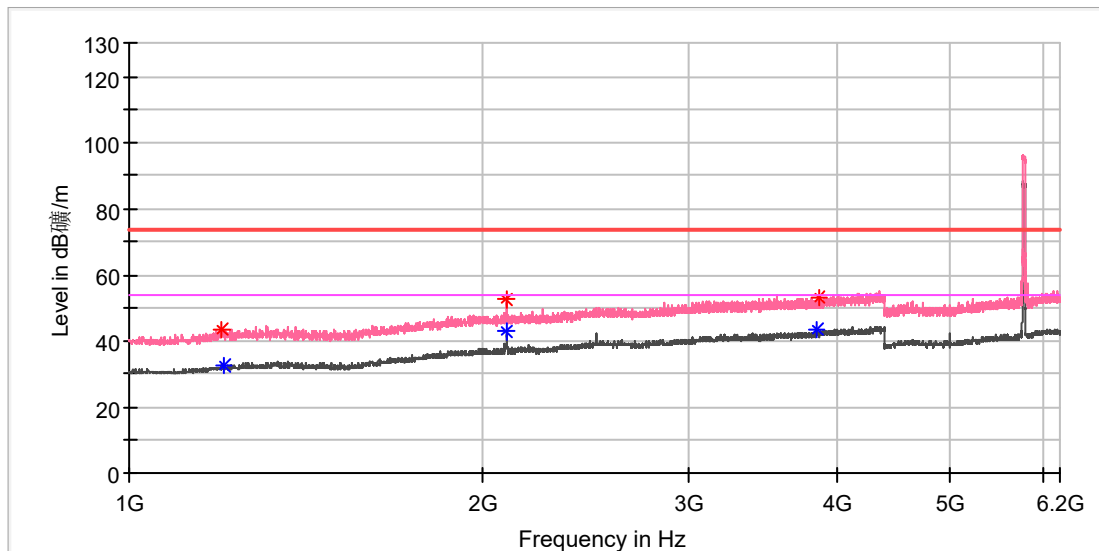
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1200.000000	---	32.91	54.00	21.09	150.0	H	278.0	1.1
1200.000000	44.58	---	74.00	29.42	150.0	H	278.0	1.1
2093.500000	51.26	---	74.00	22.74	150.0	H	144.0	6.0
2093.500000	---	43.17	54.00	10.83	150.0	H	144.0	6.0
4990.000000	50.92	---	74.00	23.08	150.0	H	247.0	11.8
5000.000000	---	43.39	54.00	10.61	150.0	H	341.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11a_Ch157
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

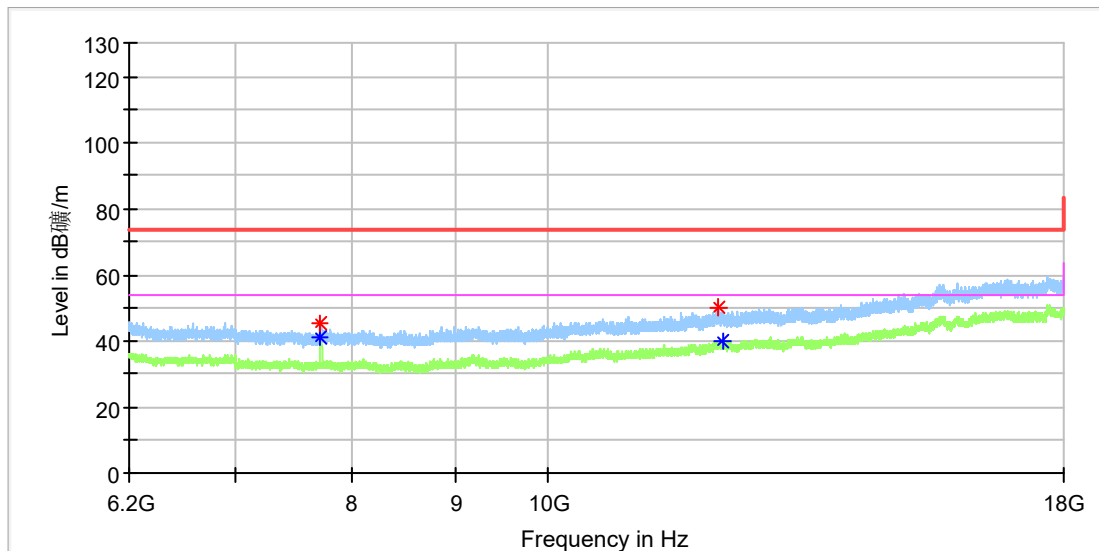
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1199.000000	43.50	---	74.00	30.50	150.0	V	237.0	1.1
1201.000000	---	32.71	54.00	21.29	150.0	V	213.0	1.1
2091.000000	52.64	---	74.00	21.36	150.0	V	19.0	6.0
2093.000000	---	43.11	54.00	10.89	150.0	V	19.0	6.0
3856.500000	---	43.57	54.00	10.43	150.0	V	141.0	9.9
3860.500000	53.14	---	74.00	20.86	150.0	V	5.0	9.9

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11a_Ch157
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

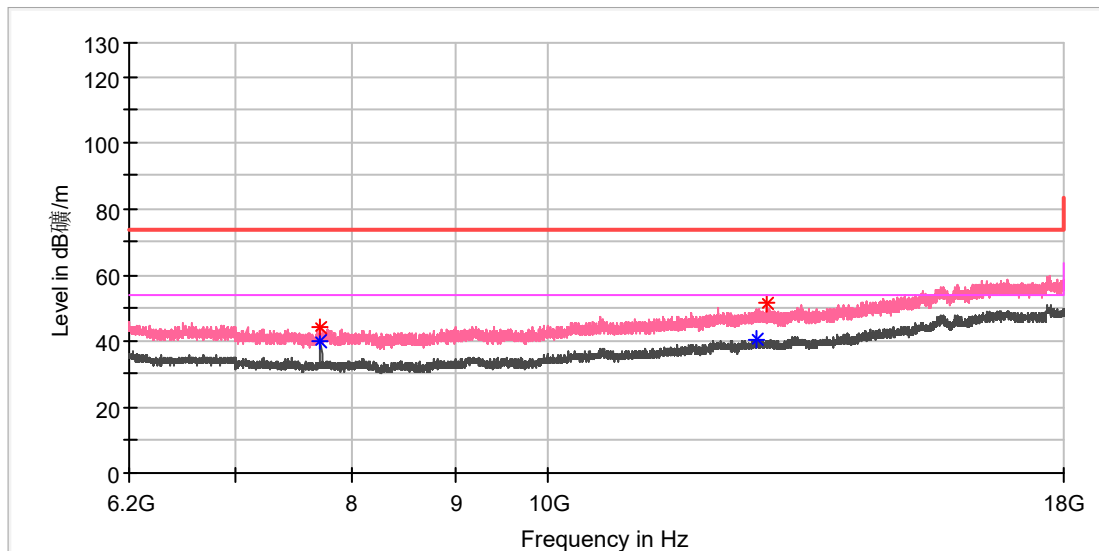
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7712.858333	---	41.09	54.00	12.91	150.0	H	31.0	8.7
7713.350000	45.32	---	74.00	28.68	150.0	H	358.0	8.7
12159.491667	50.02	---	74.00	23.98	150.0	H	194.0	14.5
12189.975000	---	40.05	54.00	13.95	150.0	H	288.0	14.6

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11a_Ch157
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

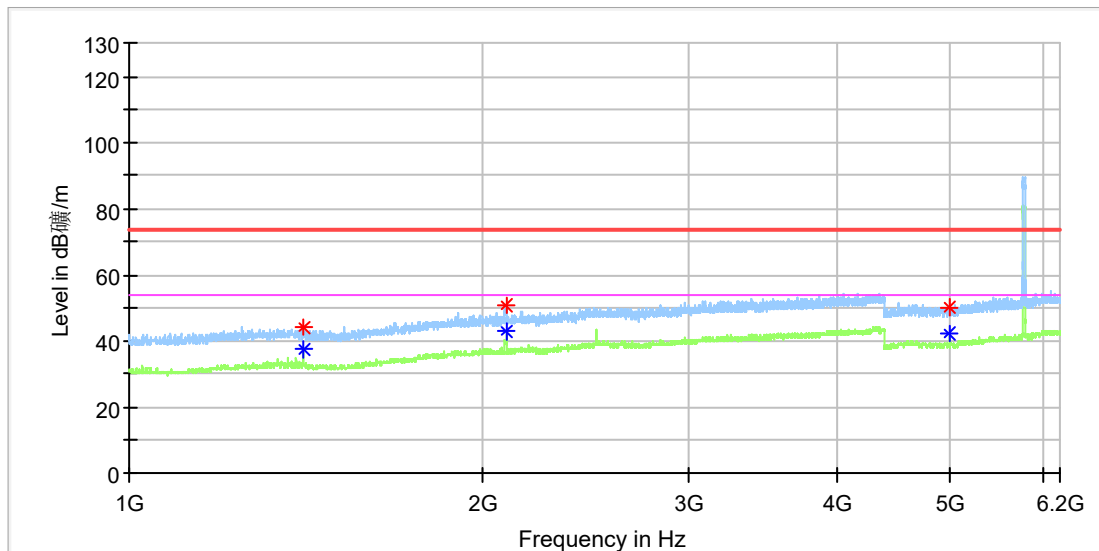
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7713.350000	44.43	---	74.00	29.57	150.0	V	44.0	8.7
7713.350000	---	39.88	54.00	14.12	150.0	V	44.0	8.7
12681.150000	---	40.52	54.00	13.48	150.0	V	177.0	15.1
12831.600000	51.24	---	74.00	22.76	150.0	V	239.0	15.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11n20_Ch157
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

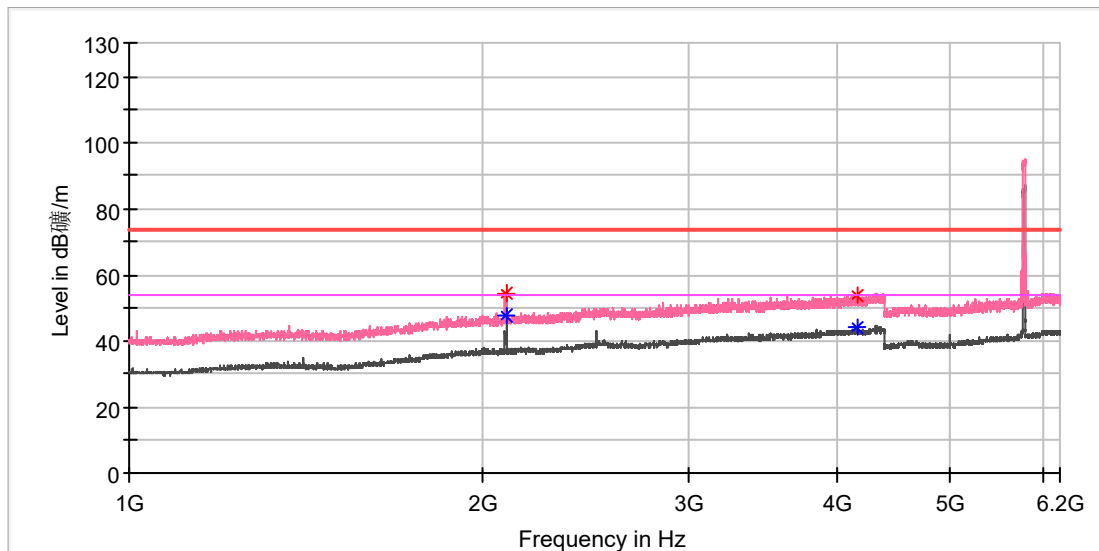
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1407.500000	---	37.70	54.00	16.30	150.0	H	74.0	1.7
1408.000000	44.44	---	74.00	29.56	150.0	H	74.0	1.7
2093.000000	50.83	---	74.00	23.17	150.0	H	340.0	6.0
2093.000000	---	42.80	54.00	11.20	150.0	H	340.0	6.0
4997.000000	50.40	---	74.00	23.60	150.0	H	343.0	11.8
5000.000000	---	42.52	54.00	11.48	150.0	H	284.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11n20_Ch157
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

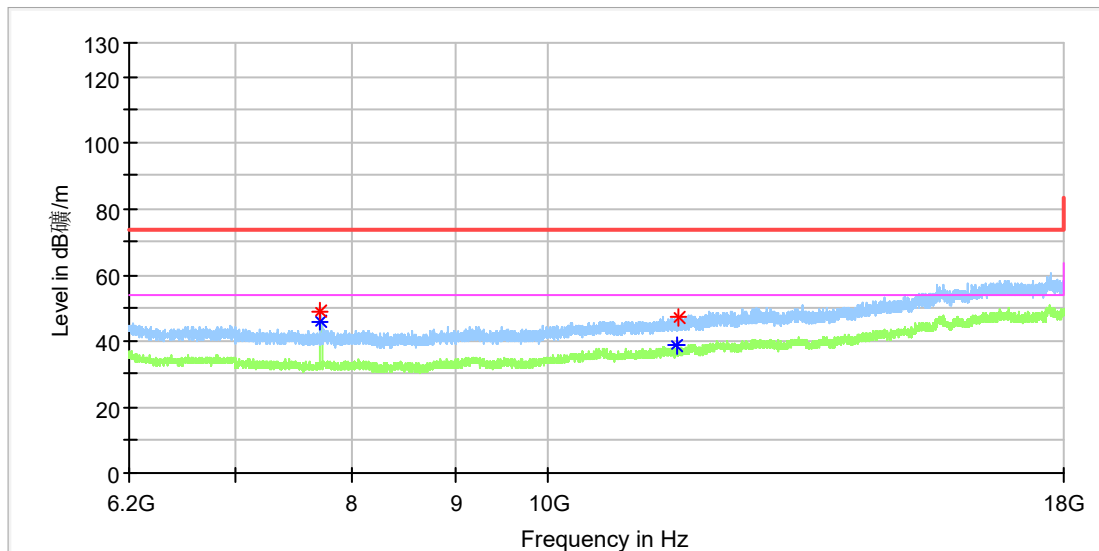
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2093.500000	---	47.61	54.00	6.39	150.0	V	278.0	6.0
2093.500000	54.49	---	74.00	19.51	150.0	V	278.0	6.0
4172.500000	---	44.05	54.00	9.95	150.0	V	293.0	10.2
4174.500000	53.93	---	74.00	20.07	150.0	V	194.0	10.2

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11n20_Ch157
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

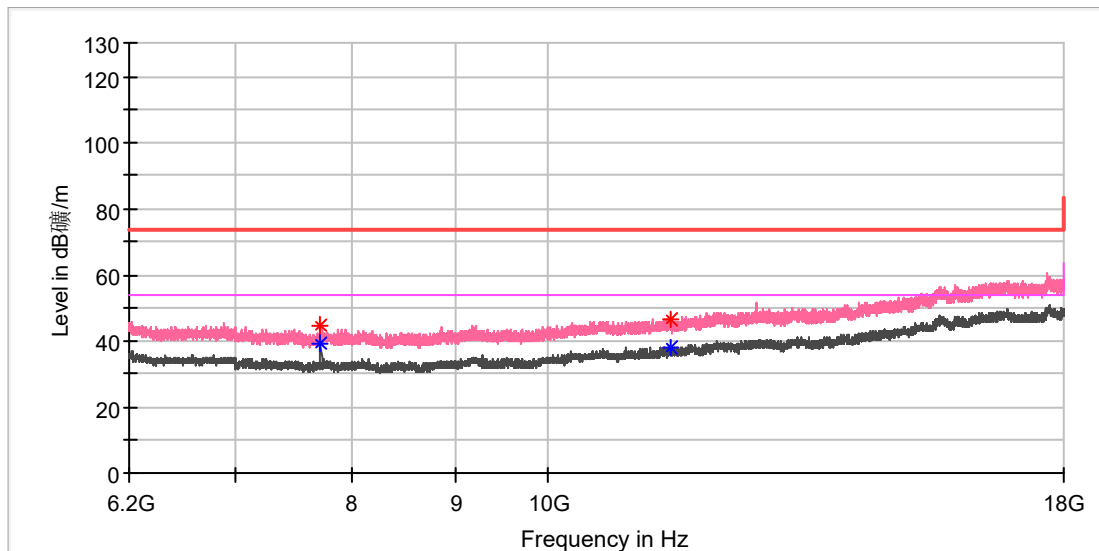
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7712.858333	---	45.86	54.00	8.14	150.0	H	60.0	8.7
7713.350000	49.07	---	74.00	24.93	150.0	H	48.0	8.7
11576.866667	---	38.42	54.00	15.58	150.0	H	244.0	13.4
11598.008333	47.12	---	74.00	26.88	150.0	H	60.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11n20_Ch157
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

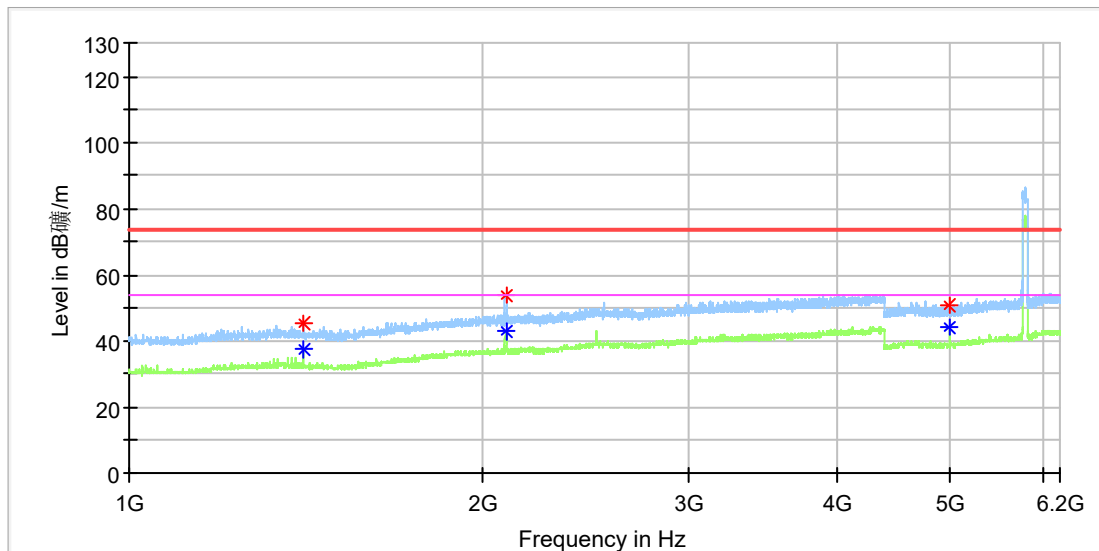
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7713.350000	44.62	---	74.00	29.38	150.0	V	56.0	8.7
7713.350000	---	39.12	54.00	14.88	150.0	V	56.0	8.7
11503.116667	---	38.18	54.00	15.82	150.0	V	258.0	13.7
11505.575000	46.84	---	74.00	27.16	150.0	V	104.0	13.7

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11n40_Ch159
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

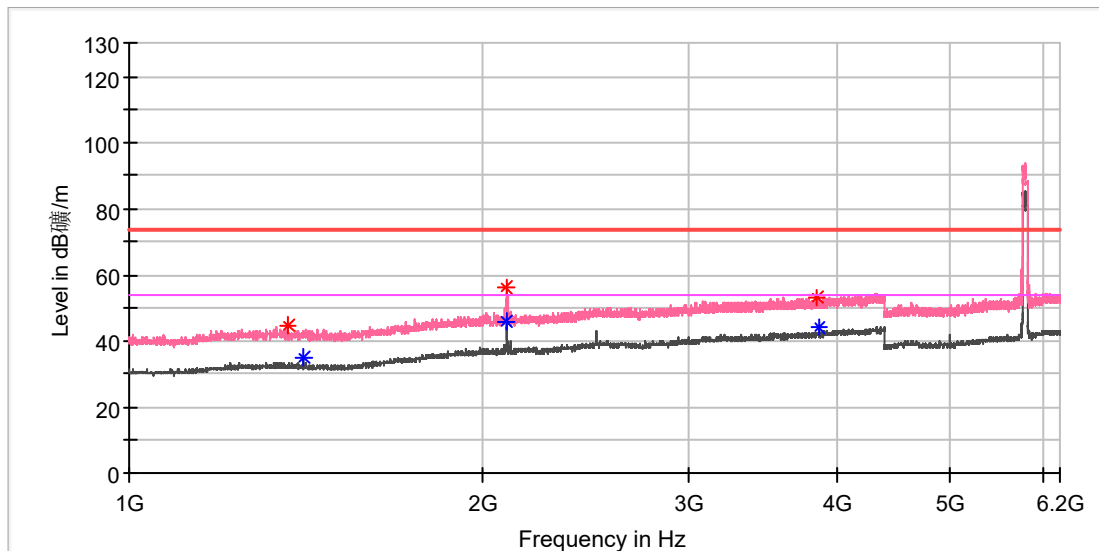
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1407.500000	45.53	---	74.00	28.47	150.0	H	73.0	1.7
1408.000000	---	37.25	54.00	16.75	150.0	H	67.0	1.7
2090.500000	53.98	---	74.00	20.02	150.0	H	239.0	6.0
2090.500000	---	42.97	54.00	11.03	150.0	H	239.0	6.0
5000.000000	50.90	---	74.00	23.10	150.0	H	284.0	11.8
5000.000000	---	44.13	54.00	9.87	150.0	H	284.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11n40_Ch159
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

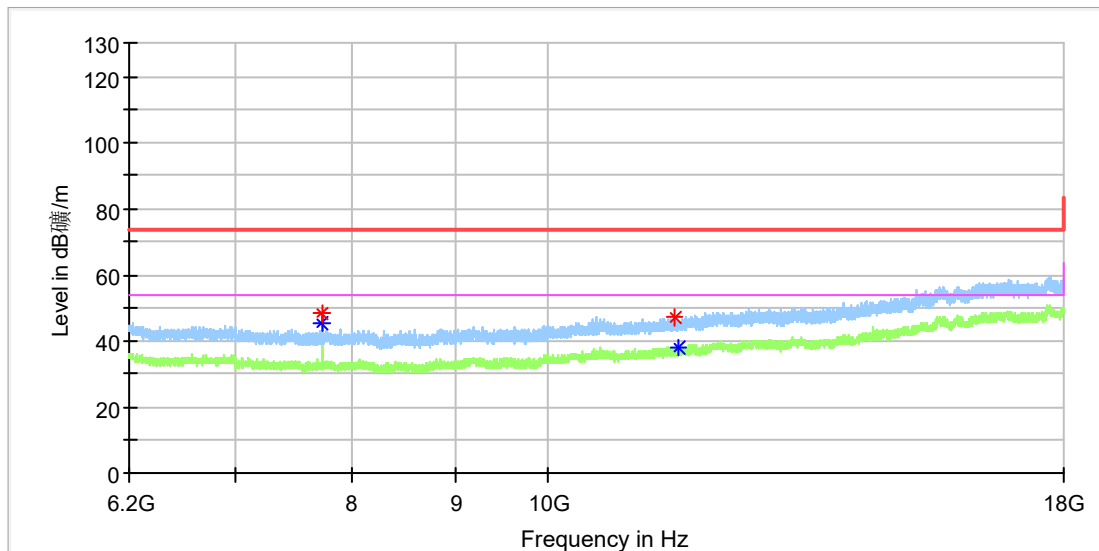
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1364.000000	44.97	---	74.00	29.03	150.0	V	89.0	2.0
1408.000000	---	35.28	54.00	18.72	150.0	V	103.0	1.7
2092.500000	---	46.07	54.00	7.93	150.0	V	18.0	6.0
2095.000000	56.35	---	74.00	17.65	150.0	V	236.0	6.0
3857.000000	53.06	---	74.00	20.94	150.0	V	38.0	9.9
3863.500000	---	44.23	54.00	9.77	150.0	V	51.0	9.9

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11n40_Ch159
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

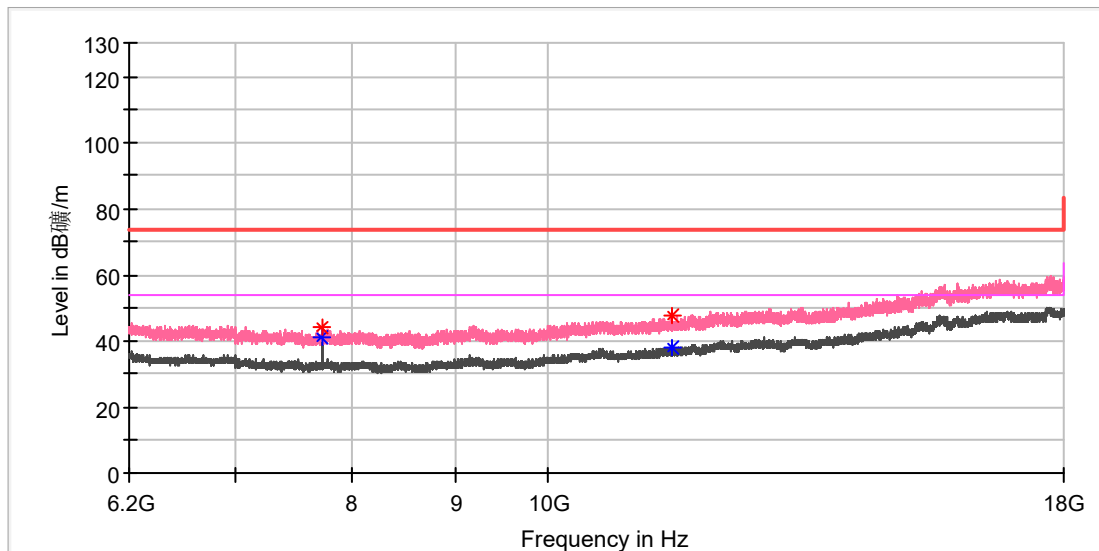
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7726.133333	48.19	---	74.00	25.81	150.0	H	57.0	8.7
7726.133333	---	45.08	54.00	8.92	150.0	H	57.0	8.7
11536.550000	46.95	---	74.00	27.05	150.0	H	328.0	13.5
11592.600000	---	38.11	54.00	15.89	150.0	H	183.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11n40_Ch159
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

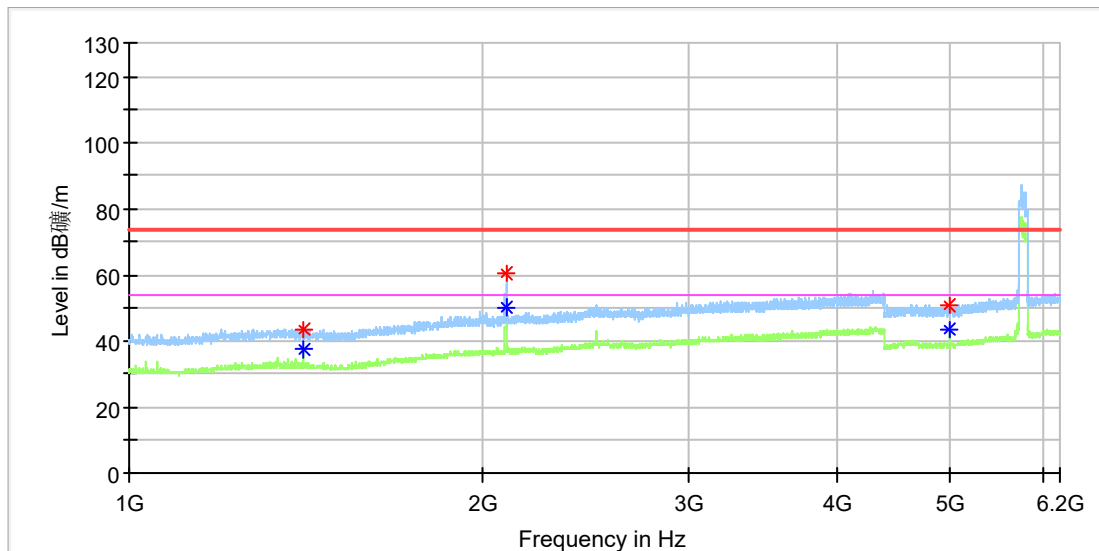
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7726.625000	44.42	---	74.00	29.58	150.0	V	68.0	8.7
7726.625000	---	41.20	54.00	12.80	150.0	V	68.0	8.7
11531.633333	47.58	---	74.00	26.42	150.0	V	20.0	13.6
11534.091667	---	38.39	54.00	15.61	150.0	V	176.0	13.6

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11ac80_Ch155
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

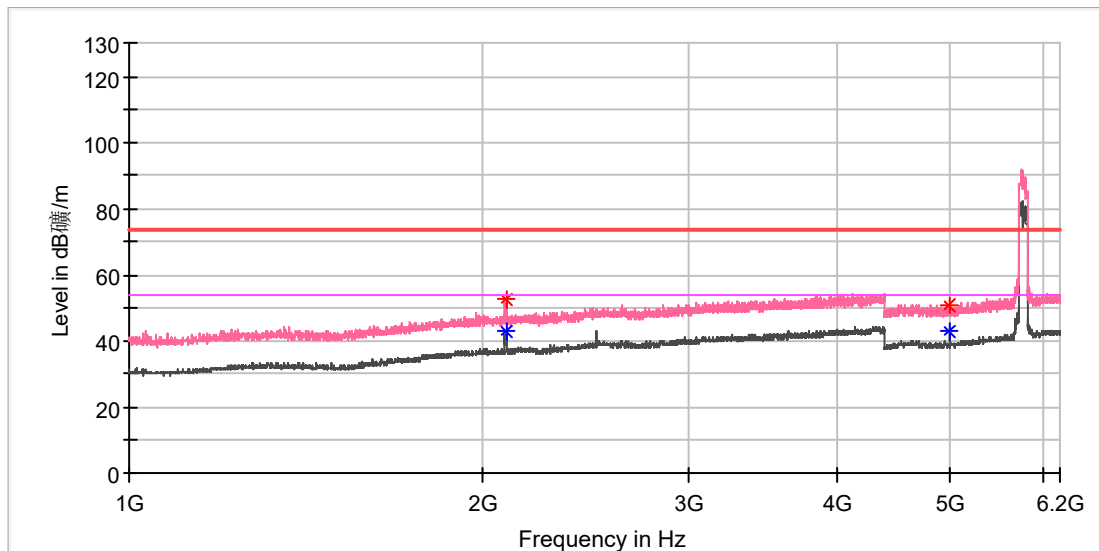
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1406.500000	43.42	---	74.00	30.58	150.0	H	300.0	1.7
1408.000000	---	37.48	54.00	16.52	150.0	H	78.0	1.7
2094.000000	---	49.93	54.00	4.07	150.0	H	320.0	6.0
2094.500000	60.60	---	74.00	13.40	150.0	H	320.0	6.0
5000.000000	50.81	---	74.00	23.19	150.0	H	325.0	11.8
5000.000000	---	43.46	54.00	10.54	150.0	H	325.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11ac80_Ch155
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

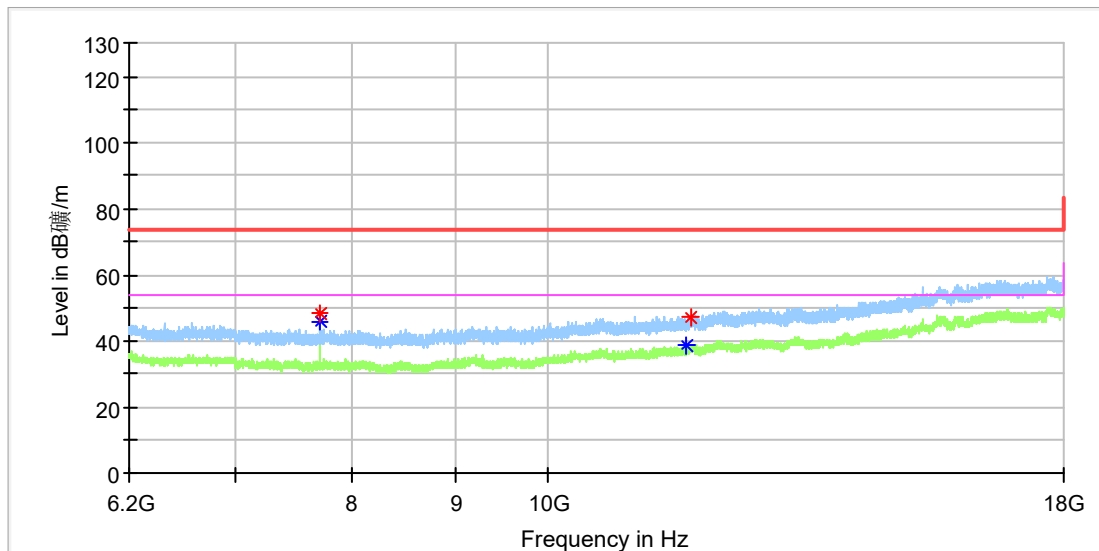
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2091.000000	52.33	---	74.00	21.67	150.0	V	22.0	6.0
2092.000000	---	43.03	54.00	10.97	150.0	V	22.0	6.0
4991.500000	50.63	---	74.00	23.37	150.0	V	262.0	11.8
5000.000000	---	43.18	54.00	10.82	150.0	V	168.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11ac80_Ch155
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

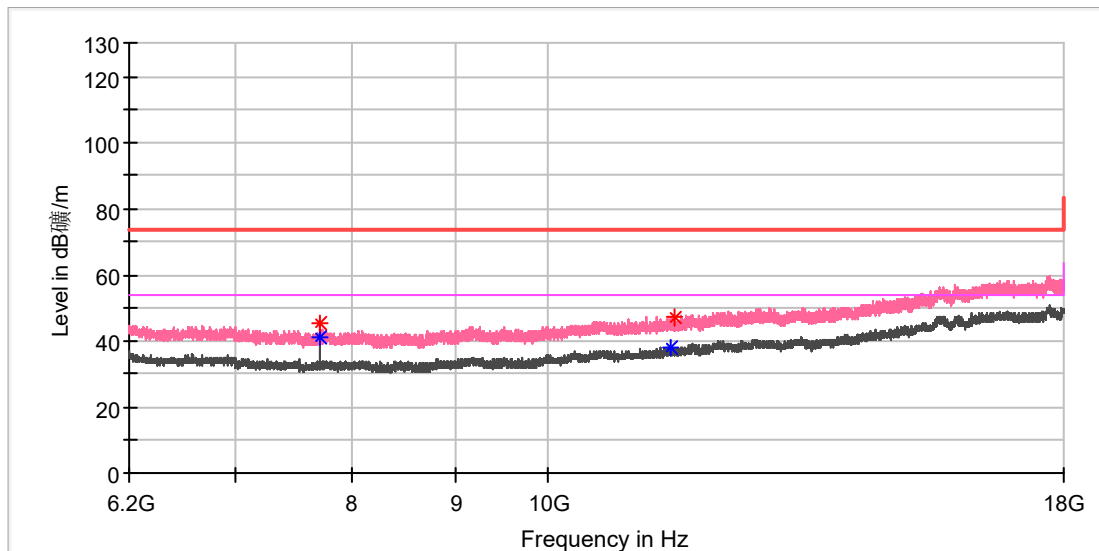
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7699.583333	---	45.74	54.00	8.26	150.0	H	47.0	8.7
7700.075000	48.42	---	74.00	25.58	150.0	H	47.0	8.7
11715.516667	---	38.76	54.00	15.24	150.0	H	33.0	13.3
11769.108333	47.37	---	74.00	26.63	150.0	H	183.0	13.4

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11ac80_Ch155
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7699.583333	---	41.18	54.00	12.82	150.0	V	70.0	8.7
7700.075000	45.13	---	74.00	28.87	150.0	V	93.0	8.7
11506.066667	---	38.13	54.00	15.87	150.0	V	47.0	13.7
11541.466667	47.11	---	74.00	26.89	150.0	V	326.0	13.5

Final Result

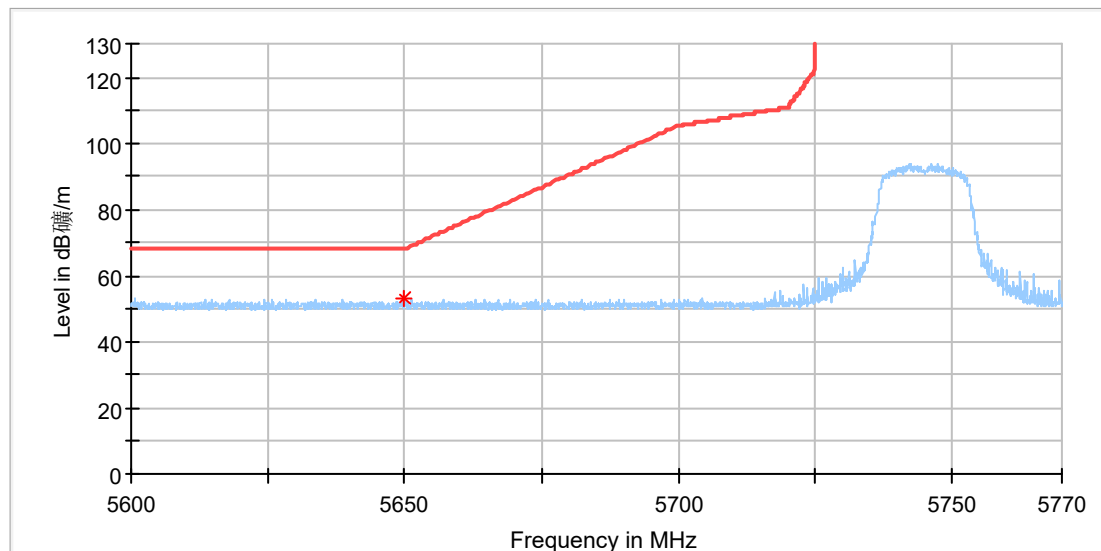
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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Appendix A.6: Test Results of Radiated Emissions in Restricted Bands

Wi-Fi 802.11 a mode

EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11a_Ch149
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

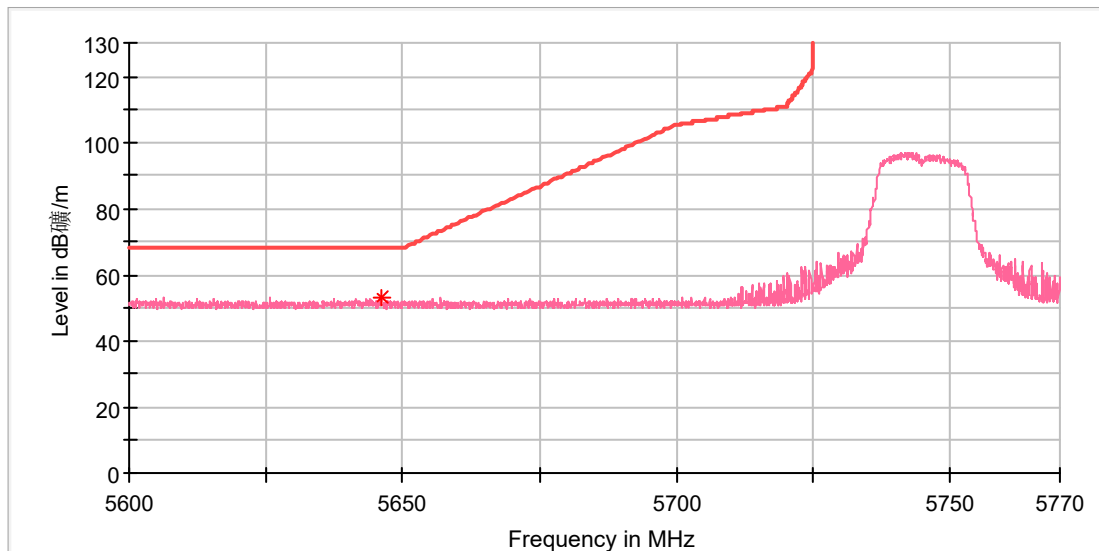
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5649.744445	53.36	68.20	14.84	150.0	H	311.0	13.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11a_Ch149
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

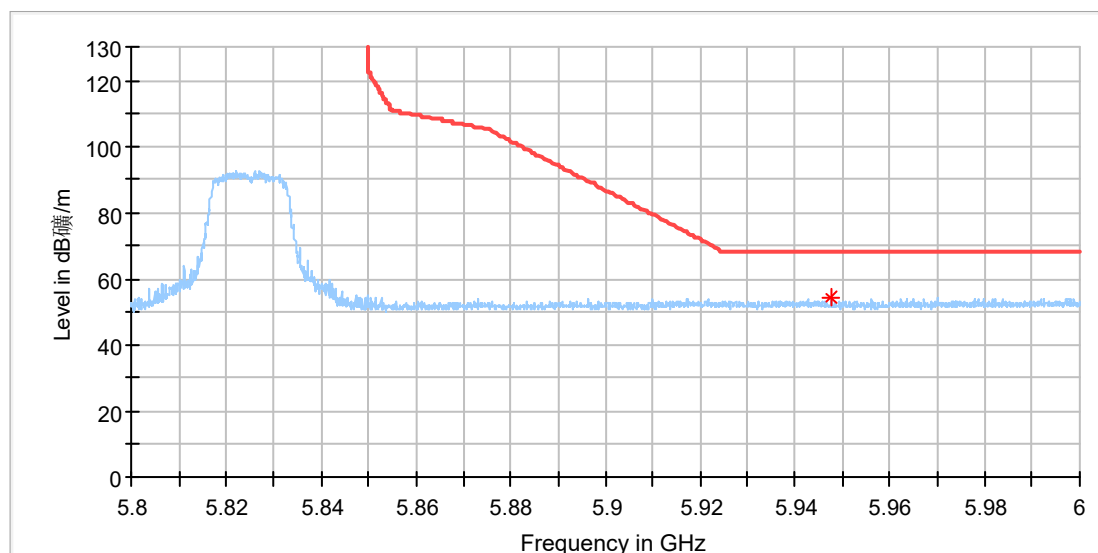
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5646.077778	53.48	68.20	14.72	150.0	V	208.0	13.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11a_Ch165
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

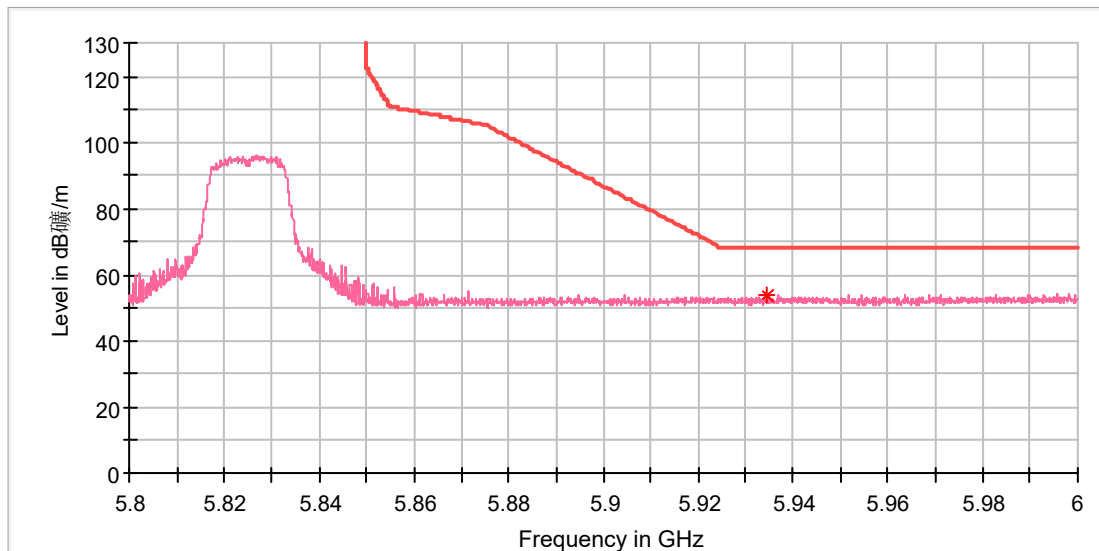
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5947.750000	54.55	68.20	13.65	150.0	H	321.0	14.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11a_Ch165
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5934.534722	53.79	68.20	14.41	150.0	V	4.0	14.7

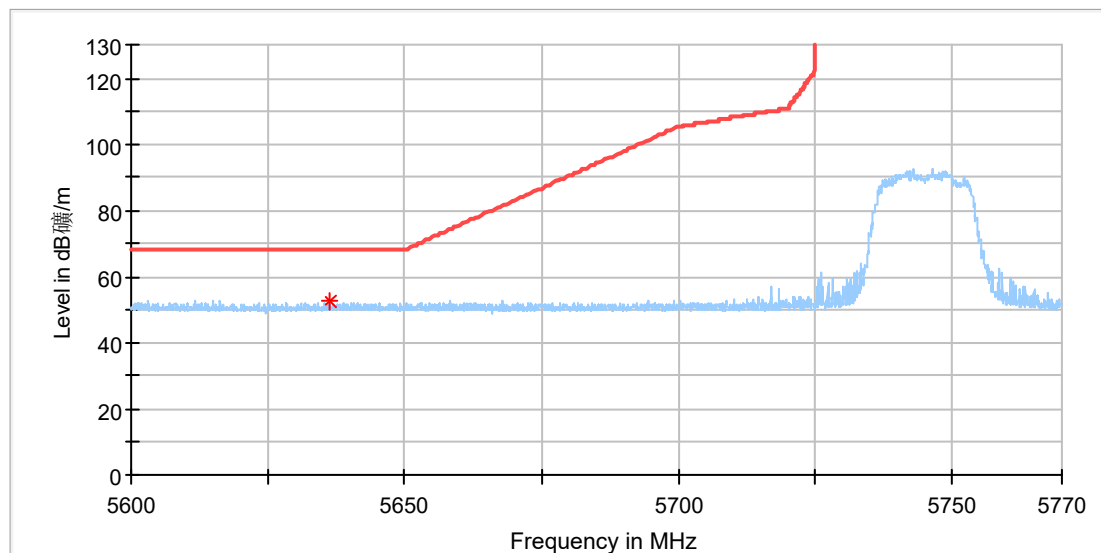
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Wi-Fi 802.11 n(HT20) mode

EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11n20_Ch149
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

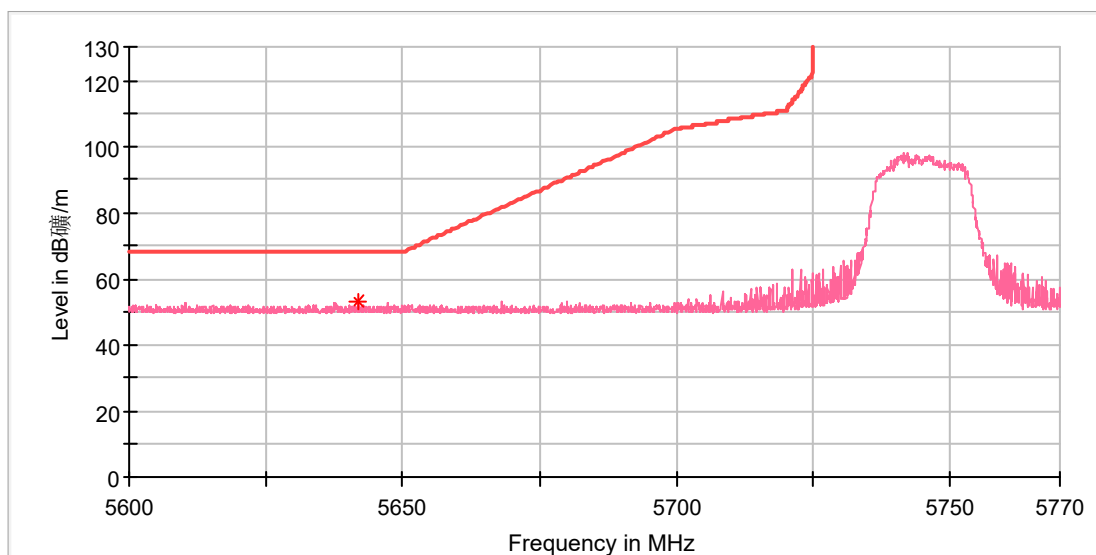
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5636.238889	52.71	68.20	15.49	150.0	H	49.0	13.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11n20_Ch149
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

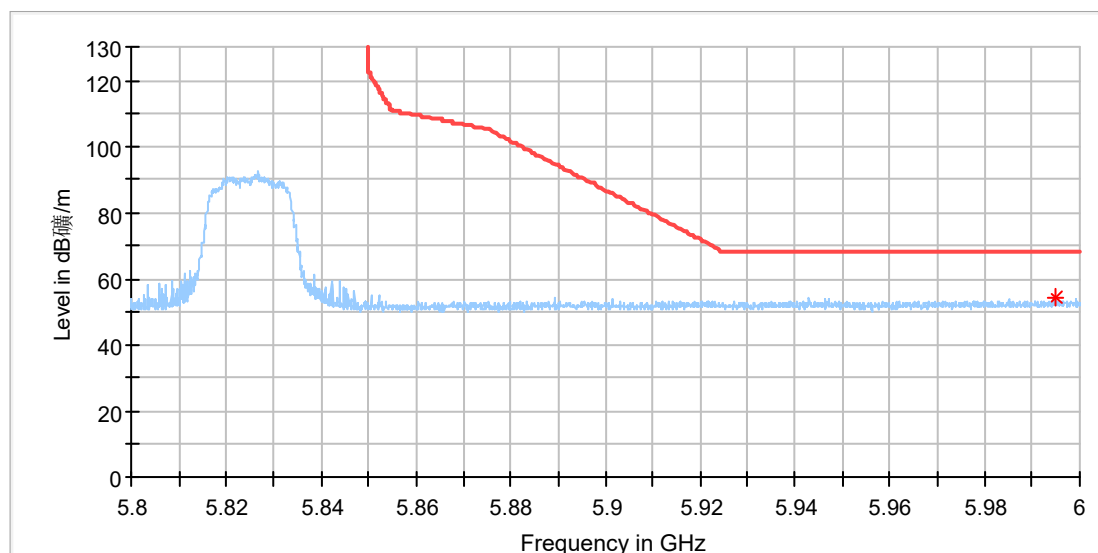
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5641.738889	53.40	68.20	14.80	150.0	V	145.0	13.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11n20_Ch165
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

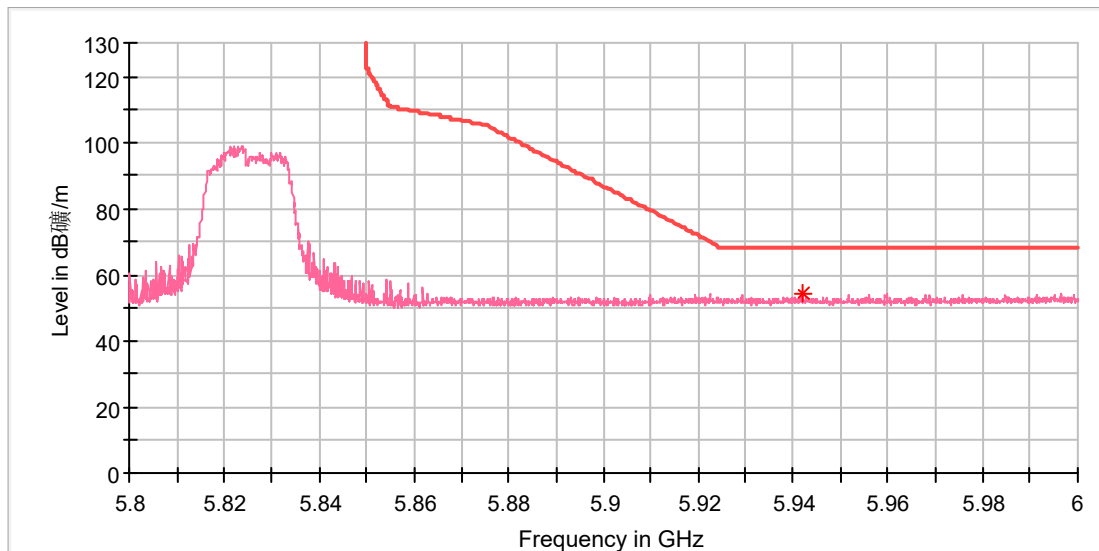
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5994.729167	54.72	68.20	13.48	150.0	H	35.0	15.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: ECU-Display Head Unit
Model: DHU-NA-006
Test Mode: WIFI 5G_11n20_Ch165
Order No/Sample No: 168445729/A003572346-001
Test Voltage: DC 12V From DC Source
Remark: Temp 22 Humi:55%
Test Standard: FCC 15.407
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5942.020833	54.53	68.20	13.67	150.0	V	112.0	14.7

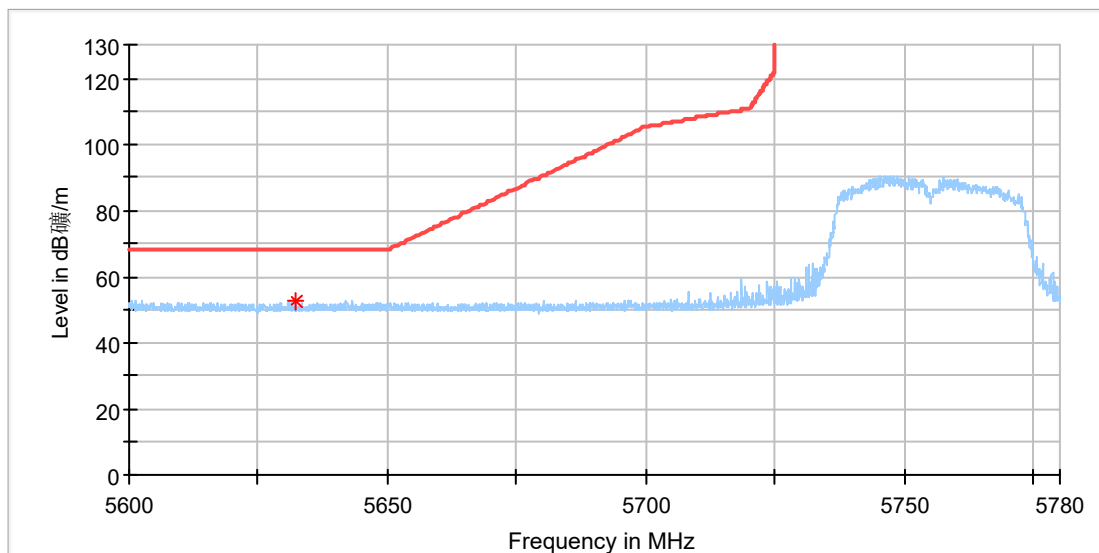
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Wi-Fi 802.11 n(HT40) mode

EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11n40_Ch151
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

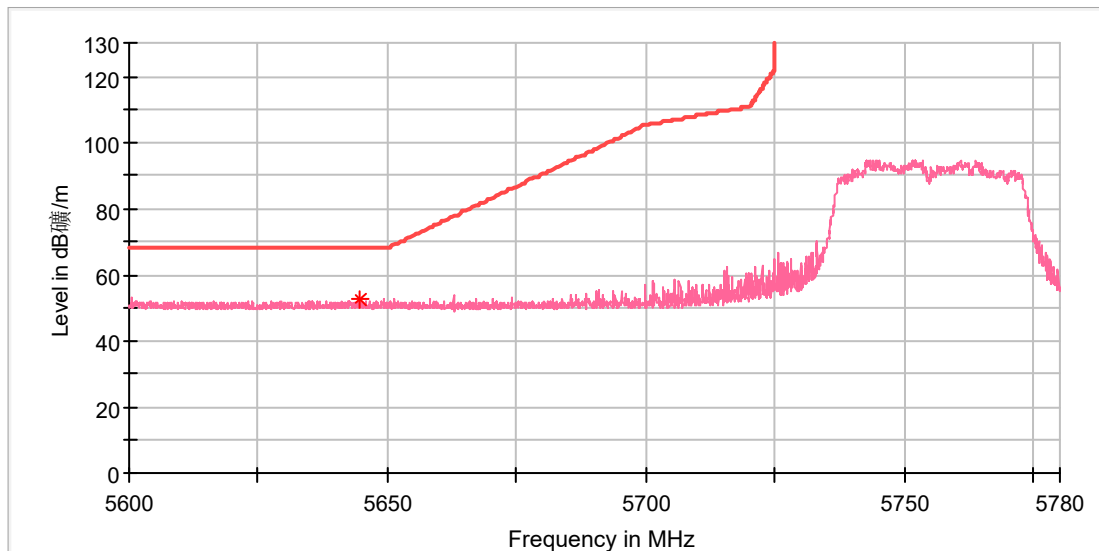
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5632.083333	52.82	68.20	15.38	150.0	H	290.0	13.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11n40_Ch151
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

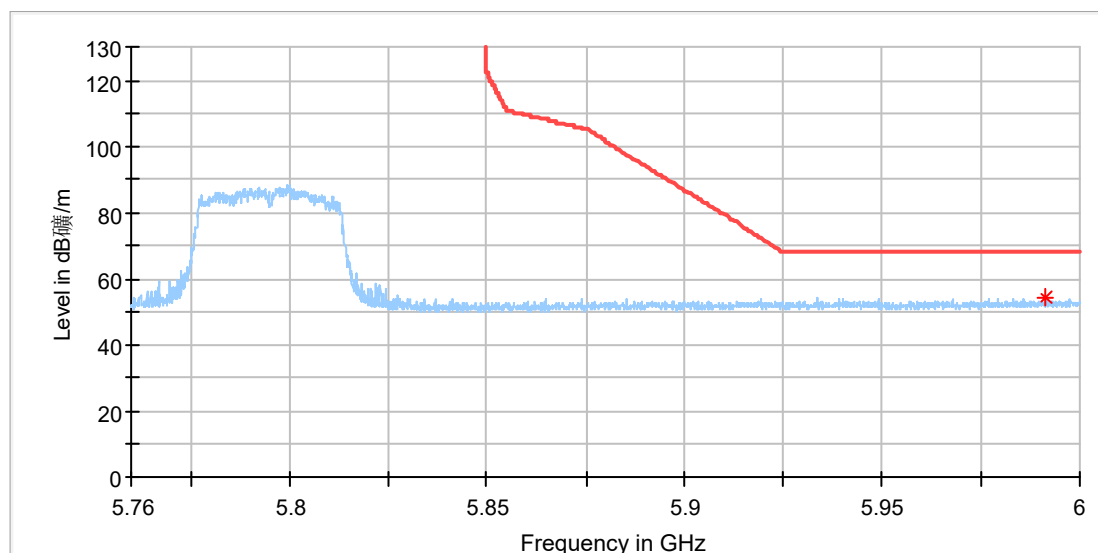
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5644.672222	52.53	68.20	15.67	150.0	V	339.0	13.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11n40_Ch159
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

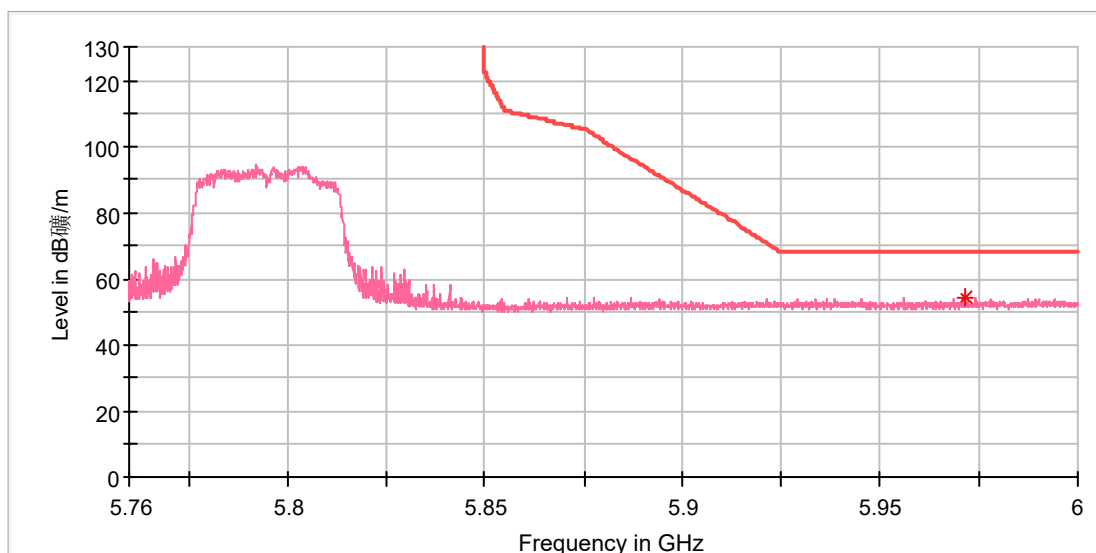
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5991.215278	54.31	68.20	13.89	150.0	H	202.0	15.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11n40_Ch159
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5971.659722	54.40	68.20	13.80	150.0	V	234.0	14.9

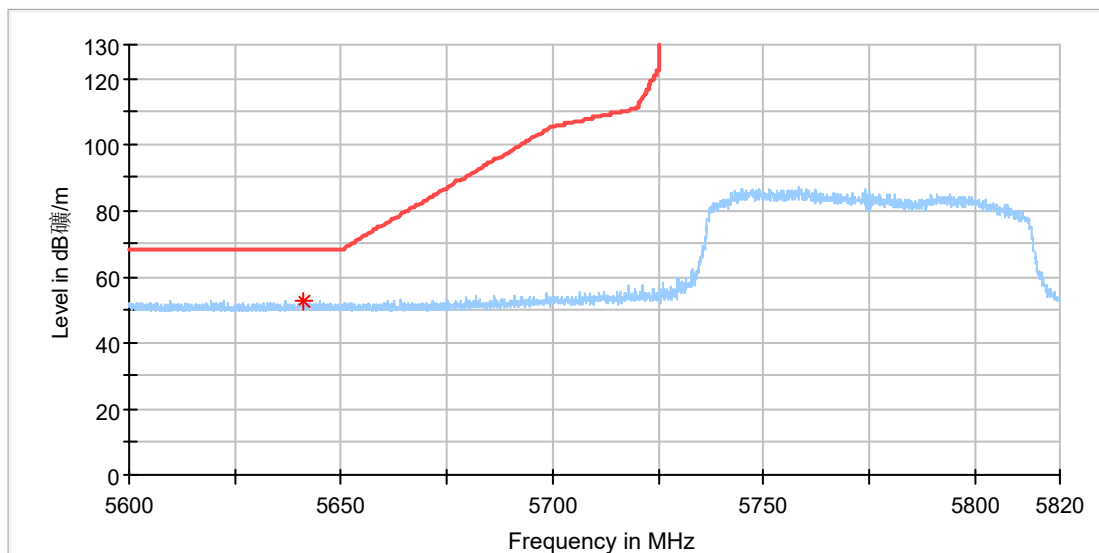
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Wi-Fi 802.11 ac(VHT80) mode

EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11ac80_Ch155
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

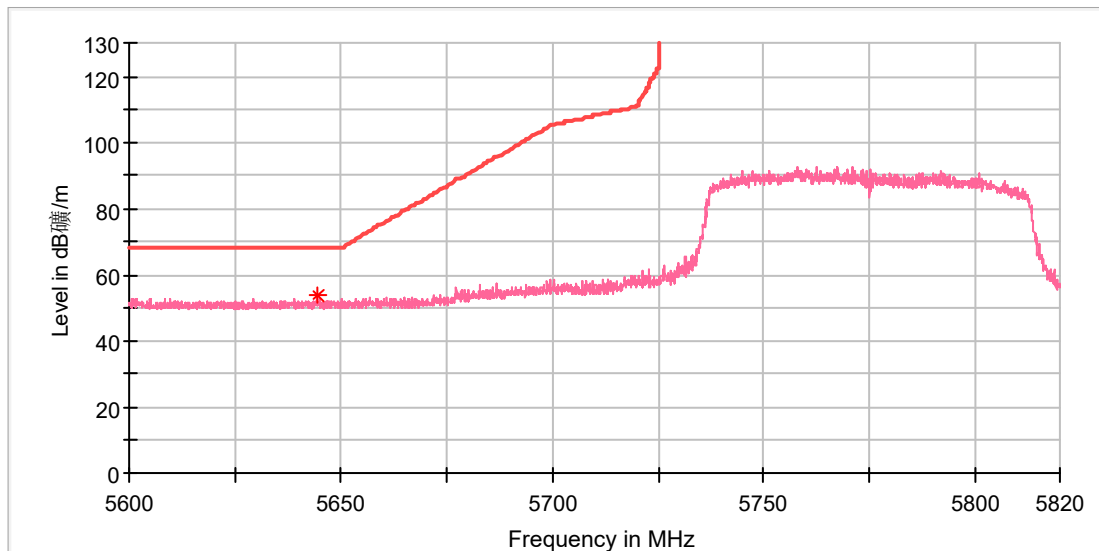
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5641.250000	52.82	68.20	15.38	150.0	H	242.0	13.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11ac80_Ch155
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

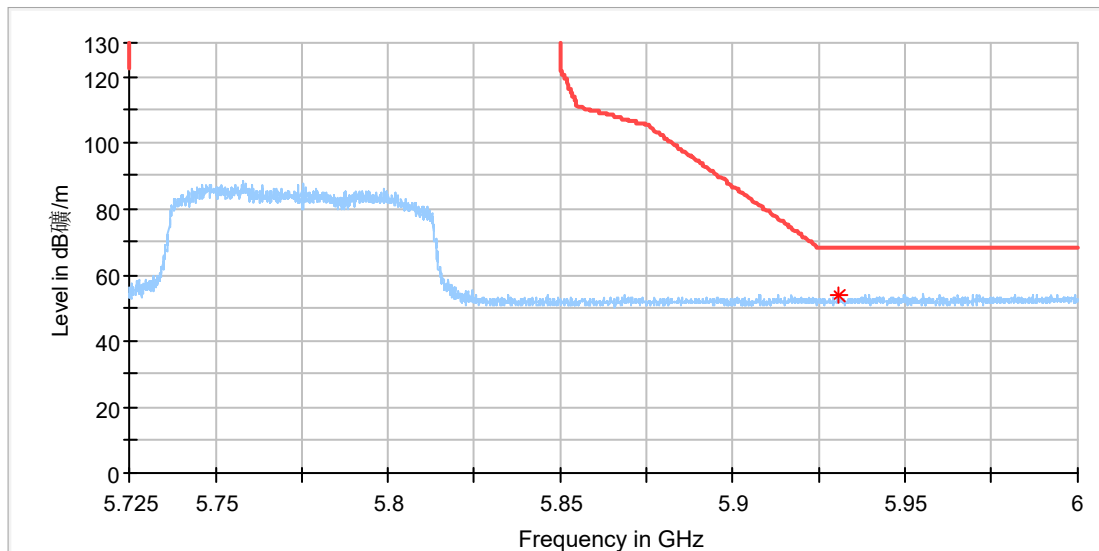
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5644.366667	53.61	68.20	14.59	150.0	V	305.0	13.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11ac80_Ch155
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

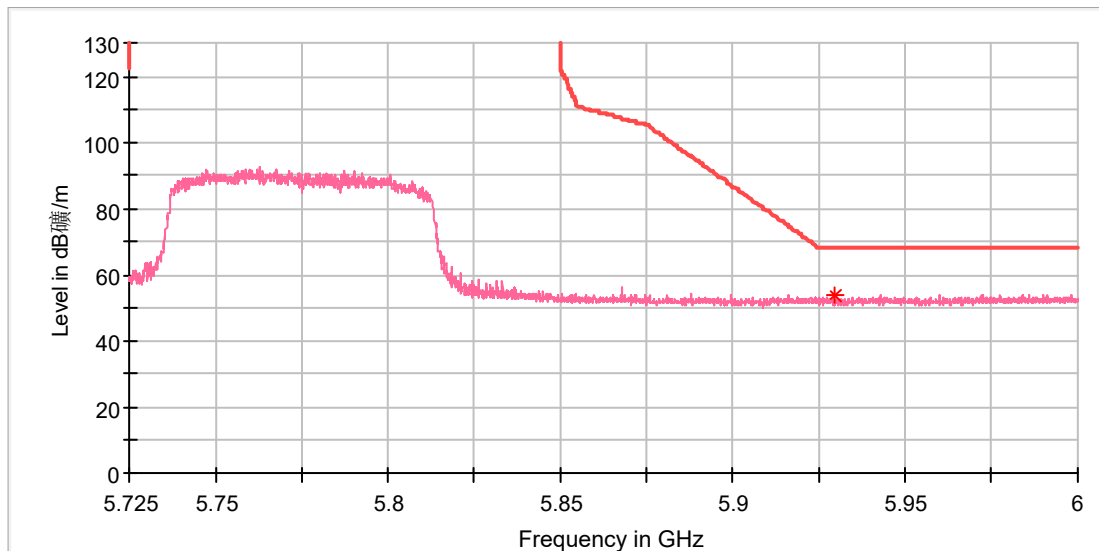
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5930.868056	53.58	68.20	14.62	150.0	H	237.0	14.7

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name:	ECU-Display Head Unit
Model:	DHU-NA-006
Test Mode:	WIFI 5G_11ac80_Ch155
Order No/Sample No:	168445729/A003572346-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.407
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5929.416667	53.95	68.20	14.25	150.0	V	255.0	14.7

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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