



**Technical Report to the FCC  
Gentex Corporation**

**Model: UAHLCD  
FCC ID: NZLUAHLCD  
ISED: 4112A-UAHLCD**

**3/1/21**

A report concerning approval for Gentex Corporation model UAHLCD  
Please issue grant immediately upon review.

Measurements Made by:

Measurements Reviewed by:

Bolay Pannell  
Senior EMC Test Engineer  
Gentex Corporation

Dan Brasier  
Corporate Labs Development Engineer  
Gentex Corporation

Report Prepared, Approved, and Submitted by:

Brian Miller  
Corporate Labs Group Leader – Wireless Regulatory  
Gentex Corporation

## Test Report Revision

REV Number	Date	Author	Description
1.0	2/23/21	Brian Miller	Initial Release.
2.0	3/1/21	Brian Miller	This is an amendment to the FCC Report Form for Part 15 Class B Emissions.pdf report for EMC2020-06997 dated 2/24/21. Alterations were made on 3/1/21 to correct a typo on page 3 and to include peak measurements above 1GHz..

Results relate only to the items tested as received.

Compliance has been evaluated based on the Lab Manual section 7.6.2. The decision rule used regarding measurement uncertainty was to determine results solely on whether the measured values met the defined acceptance criteria without factoring in measurement uncertainty values.

Lab Project ID#: EMC2020-06997

Test ID: Test-062671, Test-062668

Model: UAHLCD

FCC Report Form for Part 15 Class B Emissions

Date: 3/1/21

Revision: 10/29/2020 Approved By: Nick Dipisa

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## **1. General Information**

### **1.1. Product Description**

The Gentex Corporation HomeLink with Bluetooth Low Energy OEM device that is installed into the automobile rearview mirror. The installation is provided by trained technicians during the course of the manufacture of the automobile. It is powered by the 12 Volt system of the automobile.

The unit is supplied to the automobile manufacturer without harness. For testing purposes a typical assembly and 2-conductor cable harness were used to power to the unit.

The antenna system is an integral part of the unit. It cannot be altered nor replaced by the user. Service of this system is only available from the Automobile Manufacturer's Dealerships and Gentex Corporation.

### **1.2. Related Grants**

This device will have functionality that is covered under 47 CFR Part 15 and ISED Canada RSS-210 and 247. The device will have FCC ID # of NZLUAHLCD and ISED ID # of 4112A-UAHLCD.

### **1.3. Test Methodology**

Radiated Emissions testing was performed according to ANSI C63.4:2014. The power source for this product is a 12V automotive vehicle battery, thus conducted emissions measurements are not required.

The unit is supplied to the automobile manufacturer without harness. For testing purposes a 2-conductor cable harness was used to interface to the unit.

The DUT was tested in receive mode only.

### **1.4. Test Facility**

The 3-meter semi-anechoic chamber where these measurements were taken is located on the grounds of Gentex Corporation's Corporate Labs, in the city of Zeeland, county of Ottawa, state of Michigan, United States of America.

For radiated measurements above 1 GHz, RF absorbing material is placed between the antenna and EUT in accordance with ANSI C63.4:2014 Section 5.5 and chamber manufacturer's instructions.

Tabletop testing was conducted on a 3m turntable described in the site recertification report. The 3m chamber has been added to our A2LA scope of accreditation on 4/18/2019 and includes accreditation to ANSI C63.4:2014, ANSI C63.10:2013, and C63.26:2015. Our 3m chamber is registered with the ISED under Site# 4112A-2 and FCC under registration number 357351.

Corporate Mailing/Shipping Address

Site Address

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Gentex Corporation  
600 N. Centennial Street  
Zeeland, MI 49464

Gentex Corporation  
380 Riley Street  
Zeeland, MI 49464

## 1.5. Accreditation

The Gentex Corporate EMC Lab is accredited to ISO/IEC 17025 by the American Association for Laboratory Accreditation (A2LA). Our laboratory scope and accreditation certificate #[2529.01](#) are available from their web site [www.a2la.org](http://www.a2la.org). Our scope of accreditation covers ANSI C63.4:2014, ANSI C63.10:2013, ANSI C63.26:2015 and Radiated Emissions at 3m, FCC 47 CFR Part 90, ISED RSS-137.

## 2. Product Labeling

### 2.1. Identifiers

The FCC Identifier assigned is FCC ID: NZLUAHLCD. The ISED certification number is 4112A-UAHLCD. These identifiers will be labeled on the product housing.

The label will be printed on a label, which will be placed on the exterior of the housing and permanently affixed.

Because of the small size of the device and because the installation is inside a portion of the automobile, the following statements will appear in the user's manual. Refer to attachment "Users Manual.pdf" for the entire text of the user's manual.

"The receiver portion of the device complies with FCC rule Part 15. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference,
- (2) This device must accept any interference that may be received including interference that may cause undesired operation.

WARNING: The transmitter has been tested and complies with FCC and ISED rules. Changes or modifications not expressly approved by the party responsible for the compliance could void the user's authority to operate the device."

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 20cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

The term "ISED:" before the certification/registration number only signifies that ISED technical specifications were met.

ISED: 4112A-UAHLCD      FCC ID: NZLUAHLCD

### 2.2. Label Drawing and Location on Product

The label drawing is included in the "Label.pdf" attachment.

A diagram showing the location of the label on the assembly is included in the "Label Location.pdf" attachment.

### 3. Test Configuration

Radiated Emission measurements presented in the report were made in accordance with ANSI C63.4-2014. The EUT was placed on a 1 x 1.5m non-metallic table elevated 80cm above a conducting ground plane for measurements below 1GHz and elevated to 1.5m for measurements above 1GHz. The harness was run straight down from the center of the turntable to a power supply connection sitting at the base of the table. The power supply is located beneath the floor of the chamber.

For radiated measurements above 1 GHz, RF absorbing material is placed between the antenna and EUT in accordance with ANSI C63.4:2014 Section 5.5 and chamber manufacturer's instructions.

### 4. Conducted Emissions Measurements

Conducted Measurements are not required for this product.

### 5. Radiated Emissions Data

**5.1. Date(s) Tested:** 2/21/21 – 2/22/21

**5.2. Test Method Deviations:** None.

**5.3. Temperature and Humidity conditions**

	Measured Value	Unit
Temperature	23.7	°C
Humidity	40.9	%R.H.

### 5.4. Summary of Results

Measurement	Margin	Frequency
Worst case Digital Emission	38.49 dBuV/m	-7.51dB
		276MHz

- **Measurement Uncertainty:** The standard uncertainty of measurement has been determined in accordance with the ISO Guide to the Expression of Uncertainty in Measurements. The estimation of measurement uncertainty reported is the expanded uncertainty for a coverage factor of k=2.26 and confidence interval of approximately 95%.

Expanded Uncertainty  $U_{(k=2.26)}$  is as follows:

- Radiated Emissions – Bicon (30-250 MHz): 4.5 dB
- Radiated Emissions – LPA (250-1000 MHz): 4.2 dB
- Radiated Emissions – DRWG (1-18 GHz): 5.0 dB
- Frequency: 0.15ppm

## 5.5. Test Equipment Setup and Procedure

### 5.5.1. Test Equipment Used

Description	Model #	ID Number	Cal Due
EMCO Biconical Antenna [30-250 MHz]	3110B	H6189	7/16/21
EMCO LPA Antenna [250-1000MHz]	3148	H6192	7/16/21
Com-Power Double Ridged Waveguide [1-18GHz]	AH-118	7182	12/4/21
Rohde & Schwarz EMI Receiver	ESR26	6595	10/12/21
Cables, attenuator and port feed through	various	CF GCL	4/30/21
Miteq Preamplifier	AMF-4D- 0050100-24- 10P	S/N:2053240	12/31/21
3m Chamber SW	N/A	SW30	3/31/21
Miteq Preamplifier	AM-1300	1429993	12/31/21

#### EMI Receiver Settings Emissions:

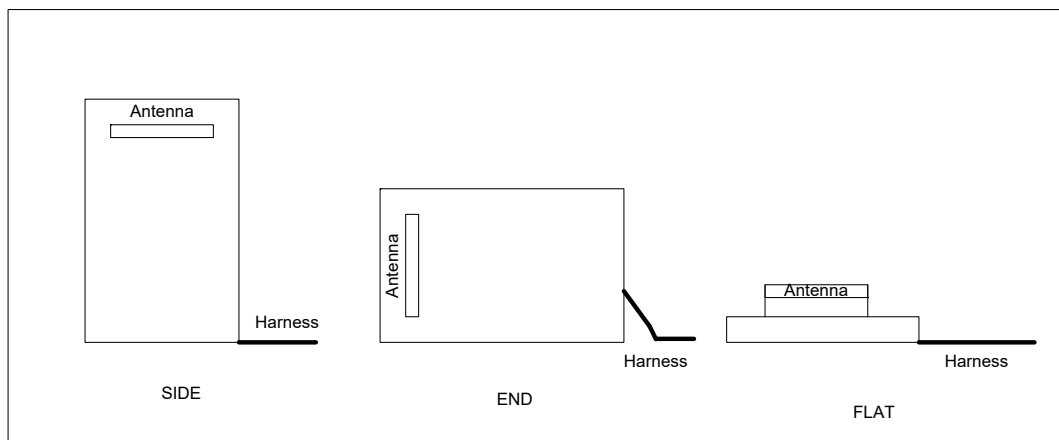
Detector Function: Quasi-Peak  
 Resolution Bandwidth: 120 kHz (below 1GHz)  
 1MHz (above 1GHz)

#### EMI Receiver (in Spectrum Analyzer mode) Settings Occupied Bandwidth:

Detector: Quasi-Peak  
 Resolution Bandwidth: 1 MHz (to determine peak level)  
 10 kHz (to determine occupied bandwidth)  
 Video Bandwidth: 3 MHz (to determine peak level)  
 30 kHz (to determine occupied bandwidth)

For the testing, the EUT was placed at the center of a non-conducting table 80cm above the ground plane pursuant to ANSI C63.4:2014 for stand-alone equipment. The 2-conductor harness was run straight down from the center of the turntable to a power supply sitting at the base of the table.

Equipment is placed in one of the three orthogonal orientations, End, Side, and Flat where applicable. These orientations are described below in Figure 6.2.1.



**Figure 6.2.1 EUT Orthogonal Orientations**

While in the prescribed orientation, the vertical antenna positioner sweeps in elevation from 1 to 4m in height until the operator finds the peak. The 3m turntable is then rotated through 360 degrees until a peak is found. The table is stopped at the peak location and the peak in elevation re-verified. Procedure is repeated for applicable orientations/measurement antenna polarizations.

## 6. Class B Emissions

The transmitter spurious radiation emissions were measured in a 3m semi-anechoic chamber. The design utilizes permanently attached antenna system and offers no provision antenna replacement. The DUT was placed on a turntable elevated as required above the ground plane at a distance of 3 meters from the measurement antenna. The turntable was rotated through 360 degrees to locate the position registering the maximum amplitude emission. The frequency spectrum was then searched for spurious emissions generated from the transmitter. Raising and lowering the measurement antenna and rotating the turntable to maximize the emission. For measuring emissions, a Biconical Antenna for 30-300 MHz, Log Antenna for 300-1000 MHz, and Double Ridge Wave Guide Horn for 1-5 GHz. Emissions were measured in dBuV/m at 3 meters.

Data was taken per 47CFR Part 2.1051 and applicable parts of 47CFR Part 15B. The DUT demonstrated compliance with the specifications of Paragraphs 47CFR 2.1051, 2.1057.

# GENTEX CORPORATION

Test Mode	Detector	Frequency (MHz)		Orientation	Antenna Polarization	Receive Frequency (MHz)	Peak Frequency (MHz)	Peak Emission (dBuV/m)	Limit (dBuV/m)	Margin	
		Start	Stop								
RX	Quasi-Peak	30	300	End	Horizontal	288	276	38.44	46	-7.56	
RX	Quasi-Peak	30	300	End	Vertical		276	38.34	46	-7.66	
RX	Quasi-Peak	30	300	Flat	Horizontal		276.1	38.42	46	-7.58	
RX	Quasi-Peak	30	300	Flat	Vertical		276	39.27	46	-6.73	
RX	Quasi-Peak	30	300	Side	Horizontal		276.09	39.27	46	-6.73	
RX	Quasi-Peak	30	300	Side	Vertical		276	39.3	46	-6.7	
RX	Quasi-Peak	30	300	End	Horizontal	365	276	38.5	46	-7.5	
RX	Quasi-Peak	30	300	End	Vertical		276	38.32	46	-7.68	
RX	Quasi-Peak	30	300	Flat	Horizontal		276.18	39.27	46	-6.73	
RX	Quasi-Peak	30	300	Flat	Vertical		276.06	39.3	46	-6.7	
RX	Quasi-Peak	30	300	Side	Horizontal		276	38.39	46	-7.61	
RX	Quasi-Peak	30	300	Side	Vertical		276.18	38.41	46	-7.59	
RX	Quasi-Peak	30	300	End	Horizontal	430	276	38.42	46	-7.58	
RX	Quasi-Peak	30	300	End	Vertical		276	38.44	46	-7.56	
RX	Quasi-Peak	30	300	Flat	Horizontal		276.06	39.3	46	-6.7	
RX	Quasi-Peak	30	300	Flat	Vertical		276	39.28	46	-6.72	
RX	Quasi-Peak	30	300	Side	Horizontal		276.06	38.45	46	-7.55	
RX	Quasi-Peak	30	300	Side	Vertical		276.09	38.4	46	-7.6	
RX	Quasi-Peak	300	1000	End	Horizontal	288	783.6	30.49	46	-15.51	
RX	Quasi-Peak	300	1000	End	Vertical		783.36	35.17	46	-10.83	
RX	Quasi-Peak	300	1000	Flat	Horizontal		800	25.73	46	-20.27	
RX	Quasi-Peak	300	1000	Flat	Vertical		800	25.73	46	-20.27	
RX	Quasi-Peak	300	1000	Side	Horizontal		800	25.75	46	-20.25	
RX	Quasi-Peak	300	1000	Side	Vertical		800.07	25.77	46	-20.23	
RX	Quasi-Peak	300	1000	End	Horizontal	365	800.07	25.76	46	-20.24	
RX	Quasi-Peak	300	1000	End	Vertical		800.08	25.75	46	-20.25	
RX	Quasi-Peak	300	1000	Flat	Horizontal		800.08	25.79	46	-20.21	
RX	Quasi-Peak	300	1000	Flat	Vertical		800.07	25.76	46	-20.24	
RX	Quasi-Peak	300	1000	Side	Horizontal		800.07	25.78	46	-20.22	
RX	Quasi-Peak	300	1000	Side	Vertical		624.99	31.38	46	-14.62	
RX	Quasi-Peak	300	1000	End	Horizontal	430	800.08	26.08	46	-19.92	
RX	Quasi-Peak	300	1000	End	Vertical		624.99	31.06	46	-14.94	
RX	Quasi-Peak	300	1000	Flat	Horizontal		624.99	31.58	46	-14.42	
RX	Quasi-Peak	300	1000	Flat	Vertical		828.39	27.835	46	-18.165	
RX	Quasi-Peak	300	1000	Side	Horizontal		827.82	30.54	46	-15.46	
RX	Quasi-Peak	300	1000	Side	Vertical		831.9	29.4	46	-16.6	
RX	Peak	1000	5000	End	Horizontal	288	4850.75	44.4	74	-29.6	
RX	Average	1000	5000	End	Horizontal		2400.25	29.09	54	-24.91	
RX	Peak	1000	5000	End	Vertical		2000	42.17	74	-31.83	
RX	Average	1000	5000	End	Vertical		2400.25	29.21	54	-24.79	
RX	Peak	1000	5000	Flat	Horizontal		2000.25	42.54	74	-31.46	
RX	Average	1000	5000	Flat	Horizontal		4799.5	30.74	54	-23.26	
RX	Peak	1000	5000	Flat	Vertical		4268.5	44.34	74	-29.66	
RX	Average	1000	5000	Flat	Vertical		4800	30.7	54	-23.3	
RX	Peak	1000	5000	Side	Horizontal		4754.5	44.63	74	-29.37	
RX	Average	1000	5000	Side	Horizontal		2400.25	28.9	54	-25.1	
RX	Peak	1000	5000	Side	Vertical		4785.5	44.85	74	-29.15	
RX	Average	1000	5000	Side	Vertical		2400.25	28.89	54	-25.11	
RX	Peak	1000	5000	End	Horizontal		365	4315.75	44.508	74	-29.492
RX	Average	1000	5000	End	Horizontal			4825	30.67	54	-23.33
RX	Peak	1000	5000	End	Vertical			4861.5	44.4	74	-29.6
RX	Average	1000	5000	End	Vertical			4799.5	30.72	54	-23.28
RX	Peak	1000	5000	Flat	Horizontal			4826.5	44.6	74	-29.4
RX	Average	1000	5000	Flat	Horizontal			4799	30.73	54	-23.27
RX	Peak	1000	5000	Flat	Vertical			4749.5	45.389	74	-28.611
RX	Average	1000	5000	Flat	Vertical			4825	30.69	54	-23.31
RX	Peak	1000	5000	Side	Horizontal			4799.5	30.61	74	-43.39
RX	Average	1000	5000	Side	Horizontal			2400.25	29.03	54	-24.97
RX	Peak	1000	5000	Side	Vertical			4786.5	44.56	74	-29.44
RX	Average	1000	5000	Side	Vertical			2400.25	28.88	54	-25.12
RX	Peak	1000	5000	End	Horizontal	430	4821	44.26	74	-29.74	
RX	Average	1000	5000	End	Horizontal		4289	30.3	54	-23.7	
RX	Peak	1000	5000	End	Vertical		4850.75	44.39	74	-29.61	
RX	Average	1000	5000	End	Vertical		4289.5	30.28	54	-23.72	
RX	Peak	1000	5000	Flat	Horizontal		4710.75	44.27	74	-29.73	
RX	Average	1000	5000	Flat	Horizontal		4799.75	30.73	54	-23.27	
RX	Peak	1000	5000	Flat	Vertical		4776.75	44.63	74	-29.37	
RX	Average	1000	5000	Flat	Vertical		4799.75	30.73	54	-23.27	
RX	Peak	1000	5000	Side	Horizontal		4859.25	43.12	74	-30.88	
RX	Average	1000	5000	Side	Horizontal		2400.25	29.17	54	-24.83	
RX	Peak	1000	5000	Side	Vertical		4852.5	44.387	74	-29.613	
RX	Average	1000	5000	Side	Vertical		2400.25	29.13	54	-24.87	

Lab Project ID#: EMC2020-06997

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Test Mode	Detector	Frequency (MHz)		Orientation	Antenna Polarization	Receive Frequency (MHz)	Peak Frequency (MHz)	Peak Emission (dBuV/m)	Limit (dBuV/m)	Margin
		Start	Stop							
RX	Quasi-Peak	30	300	End	Horizontal	902.25	276.09	38.44	46	-7.56
RX	Quasi-Peak	30	300	End	Vertical		276	38.4	46	-7.6
RX	Quasi-Peak	30	300	Flat	Horizontal		276	38.42	46	-7.58
RX	Quasi-Peak	30	300	Flat	Vertical		276.24	38.47	46	-7.53
RX	Quasi-Peak	30	300	Side	Horizontal		276	38.4	46	-7.6
RX	Quasi-Peak	30	300	Side	Vertical		276	38.4	46	-7.6
RX	Quasi-Peak	30	300	End	Horizontal	914.75	276	38.43	46	-7.57
RX	Quasi-Peak	30	300	End	Vertical		276.03	38.39	46	-7.61
RX	Quasi-Peak	30	300	Flat	Horizontal		276.09	38.45	46	-7.55
RX	Quasi-Peak	30	300	Flat	Vertical		276	38.46	46	-7.54
RX	Quasi-Peak	30	300	Side	Horizontal		276.1	38.44	46	-7.56
RX	Quasi-Peak	30	300	Side	Vertical		276.18	38.44	46	-7.56
RX	Quasi-Peak	30	300	End	Horizontal	926.75	276.21	38.39	46	-7.61
RX	Quasi-Peak	30	300	End	Vertical		276	38.41	46	-7.59
RX	Quasi-Peak	30	300	Flat	Horizontal		276.06	38.42	46	-7.58
RX	Quasi-Peak	30	300	Flat	Vertical		276	38.43	46	-7.57
RX	Quasi-Peak	30	300	Side	Horizontal		276	38.42	46	-7.58
RX	Quasi-Peak	30	300	Side	Vertical		276.12	38.46	46	-7.54
RX	Quasi-Peak	300	1000	End	Horizontal	902.25	838.74	37.34	46	-8.66
RX	Quasi-Peak	300	1000	End	Vertical		800.07	25.72	46	-20.28
RX	Quasi-Peak	300	1000	Flat	Horizontal		800.07	25.773	46	-20.227
RX	Quasi-Peak	300	1000	Flat	Vertical		786.06	32.881	46	-13.119
RX	Quasi-Peak	300	1000	Side	Horizontal		800.07	24.95	46	-21.05
RX	Quasi-Peak	300	1000	Side	Vertical		779.2	28.03	46	-17.97
RX	Quasi-Peak	300	1000	End	Horizontal	914.75	782.22	25.78	46	-20.22
RX	Quasi-Peak	300	1000	End	Vertical		800.05	25.8	46	-20.2
RX	Quasi-Peak	300	1000	Flat	Horizontal		800.07	26.8	46	-19.2
RX	Quasi-Peak	300	1000	Flat	Vertical		800.07	26.84	46	-19.16
RX	Quasi-Peak	300	1000	Side	Horizontal		800.077	26.06	46	-19.94
RX	Quasi-Peak	300	1000	Side	Vertical		800.07	26.03	46	-19.97
RX	Quasi-Peak	300	1000	End	Horizontal	926.75	800.07	26.03	46	-19.97
RX	Quasi-Peak	300	1000	End	Vertical		800.07	26	46	-20
RX	Quasi-Peak	300	1000	Flat	Horizontal		625	31.24	46	-14.76
RX	Quasi-Peak	300	1000	Flat	Vertical		625	31.16	46	-14.84
RX	Quasi-Peak	300	1000	Side	Horizontal		625	31.176	46	-14.824
RX	Quasi-Peak	300	1000	Side	Vertical		800.07	24.78	46	-21.22
RX	Peak	1000	5000	End	Horizontal	902.25	2801	44.83	74	-29.17
RX	Average	1000	5000	End	Horizontal		2400.25	29.05	54	-24.95
RX	Peak	1000	5000	End	Vertical		4800.5	44.79	74	-29.21
RX	Average	1000	5000	End	Vertical		2400.25	29.02	54	-24.98
RX	Peak	1000	5000	Flat	Horizontal		4854.5	43.52	74	-30.48
RX	Average	1000	5000	Flat	Horizontal		1600.25	30.88	54	-23.12
RX	Peak	1000	5000	Flat	Vertical		4673.25	43.18	74	-30.82
RX	Average	1000	5000	Flat	Vertical		1600.25	31.04	54	-22.96
RX	Peak	1000	5000	Side	Horizontal		4786	43.29	74	-30.71
RX	Average	1000	5000	Side	Horizontal		2400.25	29.08	54	-24.92
RX	Peak	1000	5000	Side	Vertical		4697.5	43.65	74	-30.35
RX	Average	1000	5000	Side	Vertical		2400.25	29.189	54	-24.811
RX	Peak	1000	5000	End	Horizontal		4833.25	43.2	74	-30.8
RX	Average	1000	5000	End	Horizontal		2400.25	28.98	54	-25.02
RX	Peak	1000	5000	End	Vertical		4732	42.89	74	-31.11
RX	Average	1000	5000	End	Vertical		2400.25	29.05	54	-24.95
RX	Peak	1000	5000	Flat	Horizontal		4875.25	42.93	74	-31.07
RX	Average	1000	5000	Flat	Horizontal		1600.25	30.894	54	-23.106
RX	Peak	1000	5000	Flat	Vertical		4293.75	43.3	74	-30.7
RX	Average	1000	5000	Flat	Vertical		1600.25	30.92	54	-23.08
RX	Peak	1000	5000	Side	Horizontal		4787.5	43.68	74	-30.32
RX	Average	1000	5000	Side	Horizontal		2400.25	28.84	54	-25.16
RX	Peak	1000	5000	Side	Vertical		4418	43.49	74	-30.51
RX	Average	1000	5000	Side	Vertical		2400.25	28.92	54	-25.08
RX	Peak	1000	5000	End	Horizontal	4864.25	43.17	74	-30.83	
RX	Average	1000	5000	End	Horizontal	1600.25	28.576	54	-25.424	
RX	Peak	1000	5000	End	Vertical	4781.25	43.58	74	-30.42	
RX	Average	1000	5000	End	Vertical	4799.5	30.761	54	-23.239	
RX	Peak	1000	5000	Flat	Horizontal	4803	43.97	74	-30.03	
RX	Average	1000	5000	Flat	Horizontal	1600	30.94	54	-23.06	
RX	Peak	1000	5000	Flat	Vertical	4731.75	43.06	74	-30.94	
RX	Average	1000	5000	Flat	Vertical	2400.25	29.24	54	-24.76	
RX	Peak	1000	5000	Side	Horizontal	4420.25	43.5	74	-30.5	
RX	Average	1000	5000	Side	Horizontal	2400.25	28.87	54	-25.13	
RX	Peak	1000	5000	Side	Vertical	4802	43.95	74	-30.05	
RX	Average	1000	5000	Side	Vertical	2400.25	28.94	54	-25.06	

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Test Mode	Detector	Frequency (MHz)		Orientation	Antenna Polarization	Receive Frequency (MHz)	Peak Frequency (MHz)	Peak Emission (dBuV/m)	Limit (dBuV/m)	Margin	
		Start	Stop								
RX	Quasi-Peak	30	300	End	Horizontal	2402	276.06	38.46	46	-7.54	
RX	Quasi-Peak	30	300	End	Vertical		276	38.44	46	-7.56	
RX	Quasi-Peak	30	300	Flat	Horizontal		276	38.39	46	-7.61	
RX	Quasi-Peak	30	300	Flat	Vertical		276.09	38.3	46	-7.7	
RX	Quasi-Peak	30	300	Side	Horizontal		276.1	38.44	46	-7.56	
RX	Quasi-Peak	30	300	Side	Vertical		276.3	38.49	46	-7.51	
RX	Quasi-Peak	30	300	End	Horizontal	2440	276.15	38.43	46	-7.57	
RX	Quasi-Peak	30	300	End	Vertical		276	38.44	46	-7.56	
RX	Quasi-Peak	30	300	Flat	Horizontal		276	38.44	46	-7.56	
RX	Quasi-Peak	30	300	Flat	Vertical		276	38.45	46	-7.55	
RX	Quasi-Peak	30	300	Side	Horizontal		276	38.45	46	-7.55	
RX	Quasi-Peak	30	300	Side	Vertical		276	38.41	46	-7.59	
RX	Quasi-Peak	30	300	End	Horizontal	2480	276.06	38.4	46	-7.6	
RX	Quasi-Peak	30	300	End	Vertical		276.15	38.37	46	-7.63	
RX	Quasi-Peak	30	300	Flat	Horizontal		276.12	38.42	46	-7.58	
RX	Quasi-Peak	30	300	Flat	Vertical		276	38.44	46	-7.56	
RX	Quasi-Peak	30	300	Side	Horizontal		276.06	38.4	46	-7.6	
RX	Quasi-Peak	30	300	Side	Vertical		276.18	38.431	46	-7.569	
RX	Quasi-Peak	300	1000	End	Horizontal	2402	800.07	25.59	46	-20.41	
RX	Quasi-Peak	300	1000	End	Vertical		800.07	25.62	46	-20.38	
RX	Quasi-Peak	300	1000	Flat	Horizontal		800.07	26.81	46	-19.19	
RX	Quasi-Peak	300	1000	Flat	Vertical		800.07	26.8	46	-19.2	
RX	Quasi-Peak	300	1000	Side	Horizontal		800.07	26.01	46	-19.99	
RX	Quasi-Peak	300	1000	Side	Vertical		800.07	25.99	46	-20.01	
RX	Quasi-Peak	300	1000	End	Horizontal	2440	800.07	26.25	46	-19.75	
RX	Quasi-Peak	300	1000	End	Vertical		800.07	27.03	46	-18.97	
RX	Quasi-Peak	300	1000	Flat	Horizontal		800.07	27.01	46	-18.99	
RX	Quasi-Peak	300	1000	Flat	Vertical		800.07	27.05	46	-18.95	
RX	Quasi-Peak	300	1000	Side	Horizontal		800.7	27.03	46	-18.97	
RX	Quasi-Peak	300	1000	Side	Vertical		837.48	31.22	46	-14.78	
RX	Quasi-Peak	300	1000	End	Horizontal	2480	800.07	27.02	46	-18.98	
RX	Quasi-Peak	300	1000	End	Vertical		800.07	25.58	46	-20.42	
RX	Quasi-Peak	300	1000	Flat	Horizontal		800.07	25.55	46	-20.45	
RX	Quasi-Peak	300	1000	Flat	Vertical		832.1	27.36	46	-18.64	
RX	Quasi-Peak	300	1000	Side	Horizontal		800.07	25.55	46	-20.45	
RX	Quasi-Peak	300	1000	Side	Vertical		842.7	31.78	46	-14.22	
RX	Peak	1000	5000	End	Horizontal	2402	4448.75	43.03	74	-30.97	
RX	Average	1000	5000	End	Horizontal		1600.25	30.98	54	-23.02	
RX	Peak	1000	5000	End	Vertical		4305.25	42.85	74	-31.15	
RX	Average	1000	5000	End	Vertical		1600.25	30.97	54	-23.03	
RX	Peak	1000	5000	Flat	Horizontal		4825	43.11	74	-30.89	
RX	Average	1000	5000	Flat	Horizontal		1600.25	28.9	54	-25.1	
RX	Peak	1000	5000	Flat	Vertical		4746.5	43.07	74	-30.93	
RX	Average	1000	5000	Flat	Vertical		4800	30.71	54	-23.29	
RX	Peak	1000	5000	Side	Horizontal		4748.5	42.95	74	-31.05	
RX	Average	1000	5000	Side	Horizontal		4799.5	30.72	54	-23.28	
RX	Peak	1000	5000	Side	Vertical		4837.75	43.42	74	-30.58	
RX	Average	1000	5000	Side	Vertical		4800	30.69	54	-23.31	
RX	Peak	1000	5000	End	Horizontal		2440	4839	42.96	74	-31.04
RX	Average	1000	5000	End	Horizontal			4800	30.72	54	-23.28
RX	Peak	1000	5000	End	Vertical			4763.5	43.22	74	-30.78
RX	Average	1000	5000	End	Vertical			1600	28.99	54	-25.01
RX	Peak	1000	5000	Flat	Horizontal			4788	43.39	74	-30.61
RX	Average	1000	5000	Flat	Horizontal			1600	28.95	54	-25.05
RX	Peak	1000	5000	Flat	Vertical			4240.25	43.14	74	-30.86
RX	Average	1000	5000	Flat	Vertical			1600.25	29.019	54	-24.981
RX	Peak	1000	5000	Side	Horizontal			4779.5	43.7	74	-30.3
RX	Average	1000	5000	Side	Horizontal			1600.25	29.04	54	-24.96
RX	Peak	1000	5000	Side	Vertical			4826.5	43.05	74	-30.95
RX	Average	1000	5000	Side	Vertical			1600	28.96	54	-25.04
RX	Peak	1000	5000	End	Horizontal	2480	4858.25	43.29	74	-30.71	
RX	Average	1000	5000	End	Horizontal		2400	28.51	54	-25.49	
RX	Peak	1000	5000	End	Vertical		4422.75	43.06	74	-30.94	
RX	Average	1000	5000	End	Vertical		1600.25	31.43	54	-22.57	
RX	Peak	1000	5000	Flat	Horizontal		4757	43.31	74	-30.69	
RX	Average	1000	5000	Flat	Horizontal		1600.25	31.39	54	-22.61	
RX	Peak	1000	5000	Flat	Vertical		4769	44.1	74	-29.9	
RX	Average	1000	5000	Flat	Vertical		2400.25	28.75	54	-25.25	
RX	Peak	1000	5000	Side	Horizontal		4851	43.55	74	-30.45	
RX	Average	1000	5000	Side	Horizontal		1600.25	31.49	54	-22.51	
RX	Peak	1000	5000	Side	Vertical		4772	43.73	74	-30.27	
RX	Average	1000	5000	Side	Vertical		2400.25	28.77	54	-25.23	

Lab Project ID#: EMC2020-06997

Test ID: Test-062671, Test-062668

Model: UAHLCD

FCC Report Form for Part 15 Class B Emissions

Date: 3/1/21

Revision: 10/29/2020 Approved By: Nick Dipisa

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