

TEST REPORT

Report Number. : R15165141-E1

Applicant : The Chamberlain Group, Inc.
300 Windsor Dr
Oak Brook, IL, 60523

Model : E943LA

FCC ID : HBW9835-4

EUT Description : Remote-Control Transmitter

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C: 2024

Date Of Issue:
2024-08-23

Prepared by:
UL LLC
12 Laboratory Dr.
Research Triangle Park, NC 27709 U.S.A.
TEL: (919) 549-1400



REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	2024-06-07	Initial Issue	Noah Bennett
V2	2024-06-27	TCB Feedback Round 1: -Corrected References in section 3 -Updated section 6.2 to E-Field -Updated test data in section 9	Noah Bennett
V3	2024-08-23	Updated Duty Cycle Correction Factor	Noah Bennett

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: The Chamberlain Group, Inc.
300 Windsor Dr
Oak Brook, IL, 60523

EUT DESCRIPTION: Remote-Control Transmitter

MODEL: E943LA

SERIAL NUMBER: Non-Serialized

SAMPLE RECEIPT DATE: 2024-03-21; 2024-05-20

DATE TESTED: 2024-05-13 Thru 2024-06-26

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
47 CFR Part 15 Subpart C: 2024	Refer to Section 2

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by a2La, NIST, or any agency of the U.S. government.

Approved & Released
For UL LLC By:

Prepared By:



Mike Antola
Staff Engineer
Consumer Technology Division
UL LLC

Noah Bennett
Engineering Project Associate
Consumer Technology Division
UL LLC

2. TEST RESULTS SUMMARY

This report contains data provided by the applicant which can impact the validity of results. UL LLC is only responsible for the validity of results after the integration of the data provided by the customer. The following is information provided by the client:

1. Antenna Gain and Type (section 6.3)
2. Channel List (see section 6.1)
3. Operational Duty Cycle (see section 8)

FCC Clause	Requirement	Result	Comment
15.231 (c)	20dB and 99% OBW	Complies	None.
15.35 (c)	Duty Cycle and Periodic Operations		
15.231 (a) (1)	Transmission Time		
15.231 (a)(3)	Supervisory Transmissions	Not Performed	EUT is not a security or safety device.
15.231 (b), 15.205 (a), 15.209 (a) (b)	Radiated Emissions	Complies	None.
15.207 (a)	AC Mains Conducted Emissions	Not Performed.	EUT is battery operated only.

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15C, and ANSI C63.10-2020.

3.1. MEASUREMENT METHOD

Duty Cycle: ANSI C63.10 Section 7.5

General Radiated Spurious Emissions: ANSI C63.10 Sections 6.3 thru 6.6

Radiated emissions restricted frequency bands: ANSI C63.10 Subclause 6.10.5, 7.6.3

Occupied Bandwidth tests: ANSI C63.10 Subclause 6.9

Fundamental emission output power: ANSI C63.10 Subclause 11.9.1

Transmission Time: ANSI C63.10 Subclause 7.4

4. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, certification # 0751.06, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
<input type="checkbox"/>	Building: 12 Laboratory Dr RTP, NC 27709, U.S.A	US0067	2180C	825374
<input checked="" type="checkbox"/>	Building: 2800 Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A		27265	

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

5.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	U _{Lab}
Radio Frequency (Spectrum Analyzer)	141.2 Hz
Occupied Channel Bandwidth	1.22%
RF output power, conducted	1.3 dB (PK) 0.45 dB (AV)
Power Spectral Density, conducted	2.47 dB
Unwanted Emissions, conducted	1.94 dB
All emissions, radiated	6.01 dB
Conducted Emissions (0.150-30MHz) - LISN	3.40 dB
Temperature	0.57°C
Humidity	3.39%
DC Supply voltages	1.70%

Uncertainty figures are valid to a confidence level of 95%.

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

$$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$$

6. EQUIPMENT UNDER TEST

6.1. EUT DESCRIPTION

The EUT is a remote-control transmitter that utilizes an OOK modulation scheme and operates in the 433MHz range. The EUT supports the following frequencies:

Channel	Frequency (MHz)
Low	433.3
Mid	433.92
High	434.54

6.2. MAXIMUM FIELD STRENGTH

The Maximum Field Strength as measured is as follows:

Frequency (MHz)	Max Measured E-Field Strength (dBuV/m) @ 3m	Max Measured E-Field Strength (V/m) @ 3m
434.54	72.77	.0042

6.3. DESCRIPTION OF AVAILABLE ANTENNAS

Chain	Designation in Documentation	Type	Frequency Range (MHz)	Maximum Gain (dB)
0	Standard LA Visor	PCB Antenna	433.3 – 434.54	-20dB

6.4. SOFTWARE AND FIRMWARE

FW Version: 126A0576
HW version: 001D9835-4

6.5. WORST-CASE CONFIGURATION AND MODE

The fundamentals of the EUT was investigated in three orthogonal orientations X,Y,and Z. It was determined that Y orientation was the worst-case orientation; therefore, all final radiated testing was performed with the EUT in Y orientation.

The EUT is battery powered only.

Note: The manufacturer configured the EUT for testing by programming it to cycle through all 3 supported channels when the EUT transmits. Each channel transmitted for a sufficiently long enough time to measure any emissions before it stepped to the next channel for the duration of Tx Spurious Emissions tests. Since this is how the EUT is intended to operate in normal conditions, we can consider all 3 channels to be in a (3)-1Tx mode. Therefore, only 1 Tx Spurious Emissions test for each frequency range was needed.

Note: The manufacturer declared a worst-case duty cycle of 15.90%, which yields a duty cycle correction factor of: $20 \cdot \log(0.1590) = -15.97\text{dB}$.

6.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

None.

I/O CABLES

None.

TEST SETUP

The EUT was set to transmit at max power, across all supported channels during testing.

SETUP DIAGRAM

See R15165141-EP1 For Setup Diagrams and Setup Photos.

7. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment Used - Wireless Conducted Attenuators, Cables, and Couplers

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
	Cables				
80868	SMA Cable	Huber + Suhner	104PEA	2024-04-04	2025-04-04

Test Equipment Used - Wireless Conducted Measurement Equipment

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
	Common Equipment				
	Conducted Room 1				
179892	Environmental Meter	Fisher Scientific	15-077-963	2023-07-26	2024-06-31
SOFTEMI	Antenna Port Software	UL	Version 2024.02.03	NA	NA
72823	Spectrum Analyzer	Agilent Technologies	E4446A	2023-06-27	2024-06-30

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 2)

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	0.009-30MHz				
135144	Active Loop Antenna	ETS-Lindgren	6502	2024-01-24	2025-01-24
	30-1000 MHz				
159203	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2024-03-05	2026-03-05
	1-18 GHz				
86408	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2023-06-19	2025-06-30
	Gain-Loss Chains				
91975	Gain-loss string: 0.009-30MHz	Various	Various	2023-06-06	2024-06-30
91978	Gain-loss string: 25-1000MHz	Various	Various	2023-06-06	2024-06-30
91977	Gain-loss string: 1-18GHz	Various	Various	2023-06-06	2024-06-30
	Receiver & Software				
197954	Spectrum Analyzer	Rohde & Schwarz	ESW44	2024-03-05	2025-03-05
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
200540	Environmental Meter	Fisher Scientific	15-077-963	2023-07-19	2025-07-19
198917	1GHz high-pass filter, 2W, Fhigh =18GHz	Micro-Tronics	HPM18129-02	2024-03-01	2025-03-01

8. ANTENNA PORT TEST RESULTS

Note: Tests in section 8 were performed via radiated measurements.

8.1. 20 dB

LIMITS

FCC §15.231 (c)
The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

TEST PROCEDURE

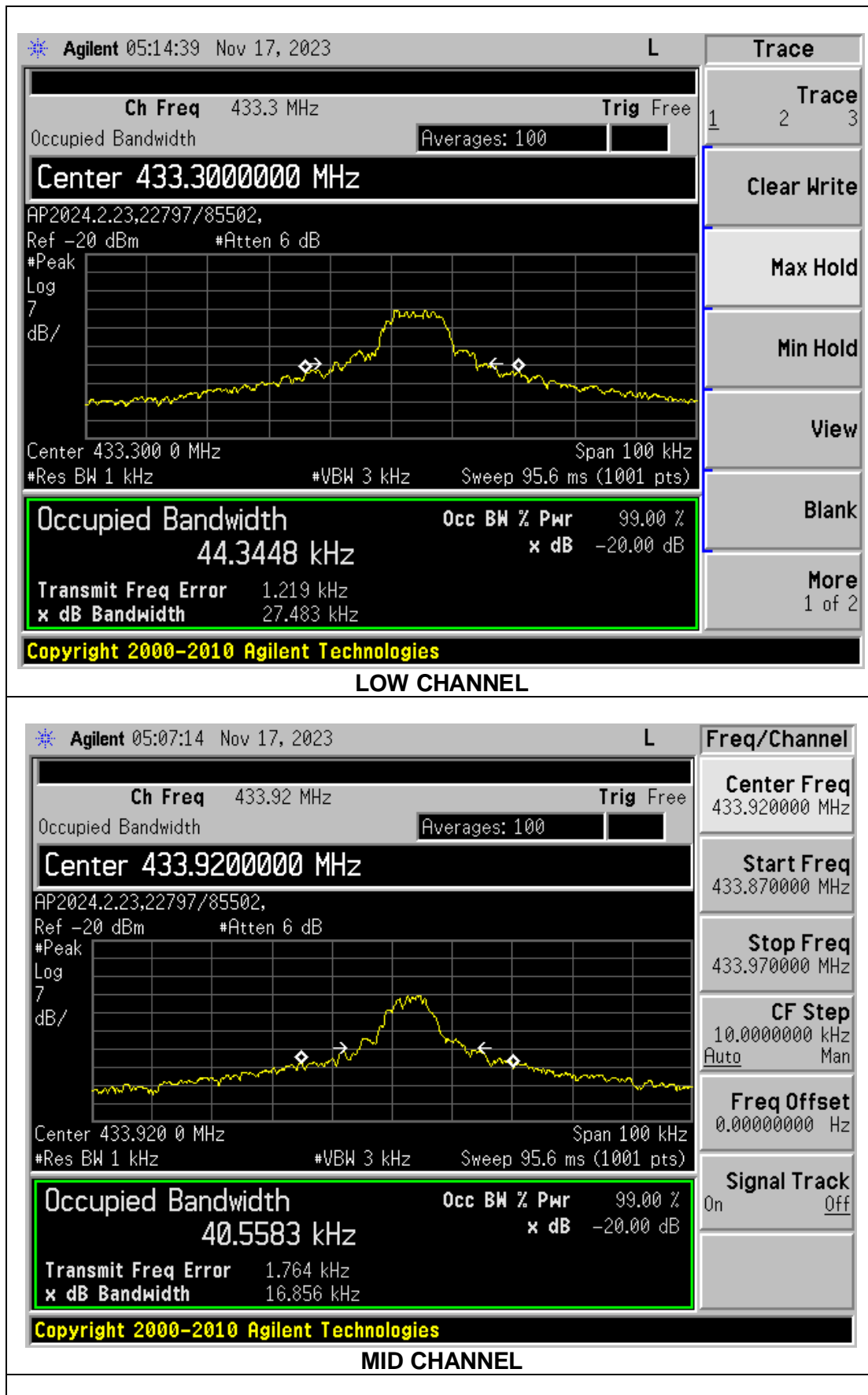
ANSI C63.10

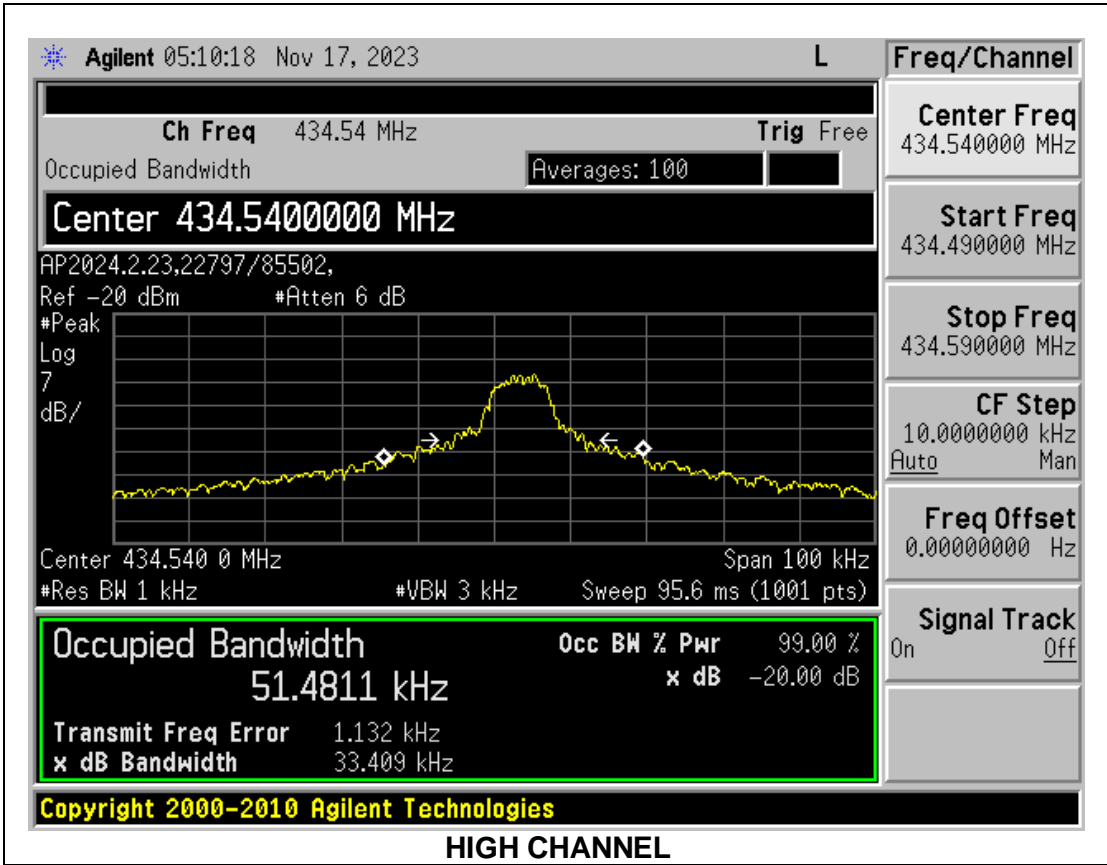
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

8.1.1. RESULTS

20dB BANDWIDTH

Frequency (MHz)	20dB Bandwidth (kHz)	Limit (kHz)	Margin (kHz)
433.3	27.483	1083.25	-1055.77
433.92	16.856	1084.8	-1067.94
434.54	33.409	1086.35	-1052.94





Test Date: 2024-05-14
Tested By: 22797/85502

8.2. DUTY CYCLE AND PERIODIC OPERATIONS

LIMITS

FCC §15.35 (c)

The measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to Supplier's Declaration of Conformity.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer or radiated field strength.

For The RBW is set to 300 kHz and the VBW is set to 300 kHz. The sweep time is coupled and the span is set to 0 Hz. The number of pulses is measured and calculated in a 100 ms scan.

For Pulse Width measurements, the RBW and VBW were set to their highest values as supported by the test equipment, i.e RBW is 8MHz, and VBW is 50MHz. The Sweep time was set to 5ms, and the span is set to 0 Hz. The pulse width was then measured over 1 period.

CALCULATION

Average Reading = Peak Reading (dBuV/m) + 20log (Duty Cycle), Where Duty Cycle is
(# of long pulses * long pulse width) + (# of short pulses * short pulse width) / 100 or T

RESULTS

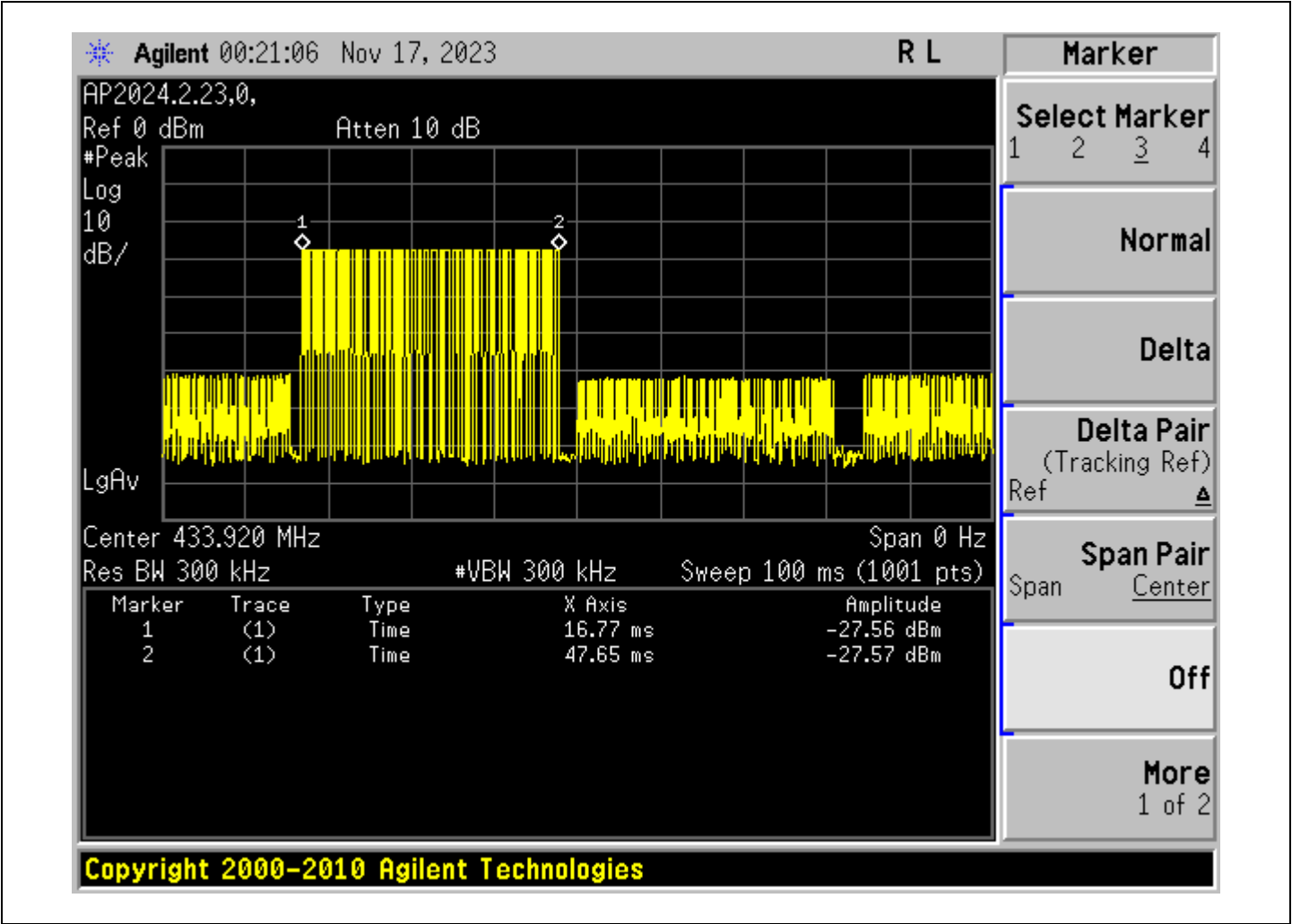
One Period (ms)	Long Pulse Width (ms)	# of Long Pulses	Short Width (ms)	# of Short Pulses	Duty Cycle	20*Log Duty Cycle (dB)
100	0.495	9	0.25	44	15.24%	-16.34

Tested by: 22797/85502

Test date: 2024-05-13

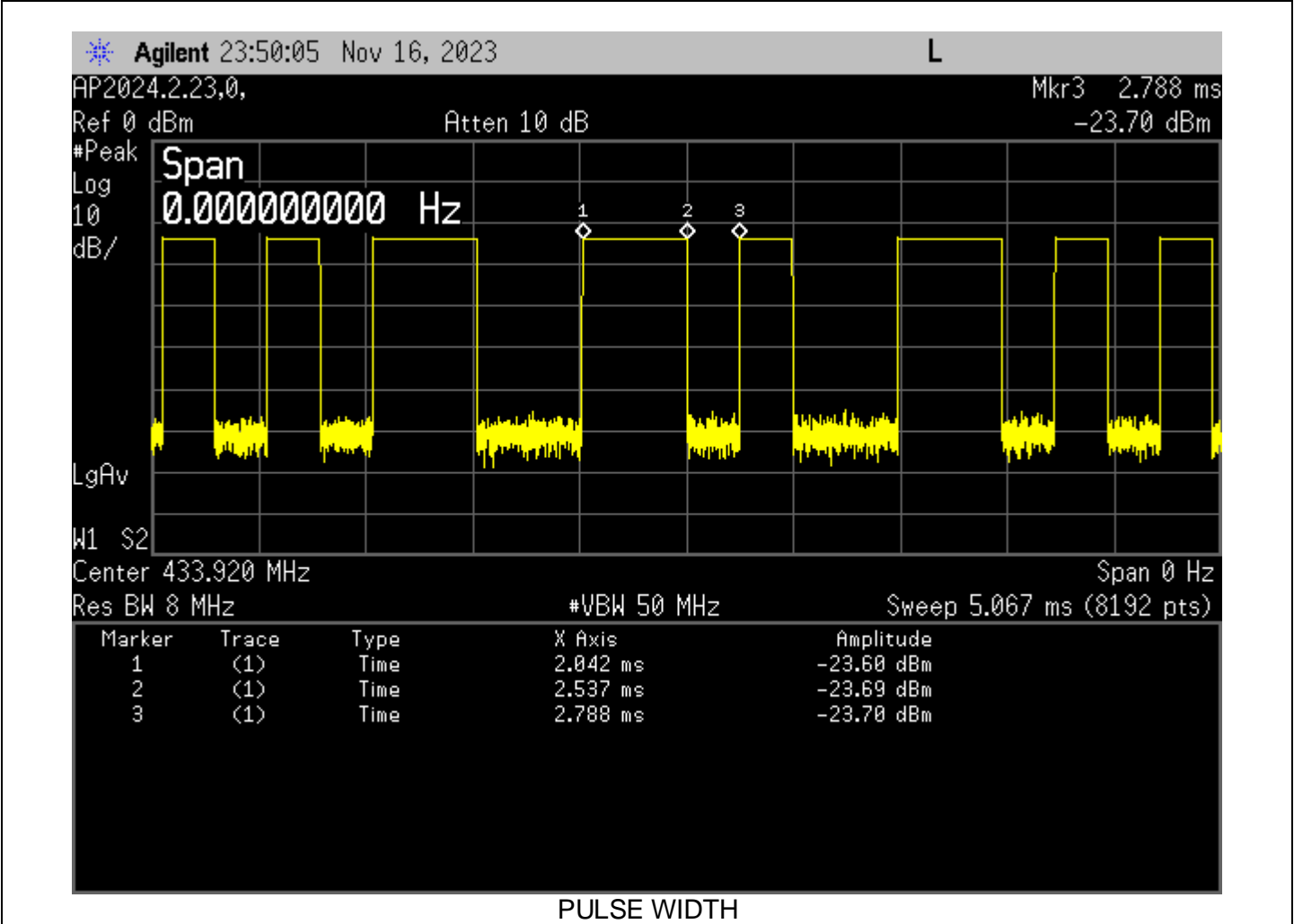
Note: The manufacturer declared a worst-case duty cycle of 15.90%, which yields a duty cycle correction factor of:
 $20 \cdot \log(0.1590) = -15.97\text{dB}$.

8.2.1. TRANSMISSION IN A 100ms WINDOW



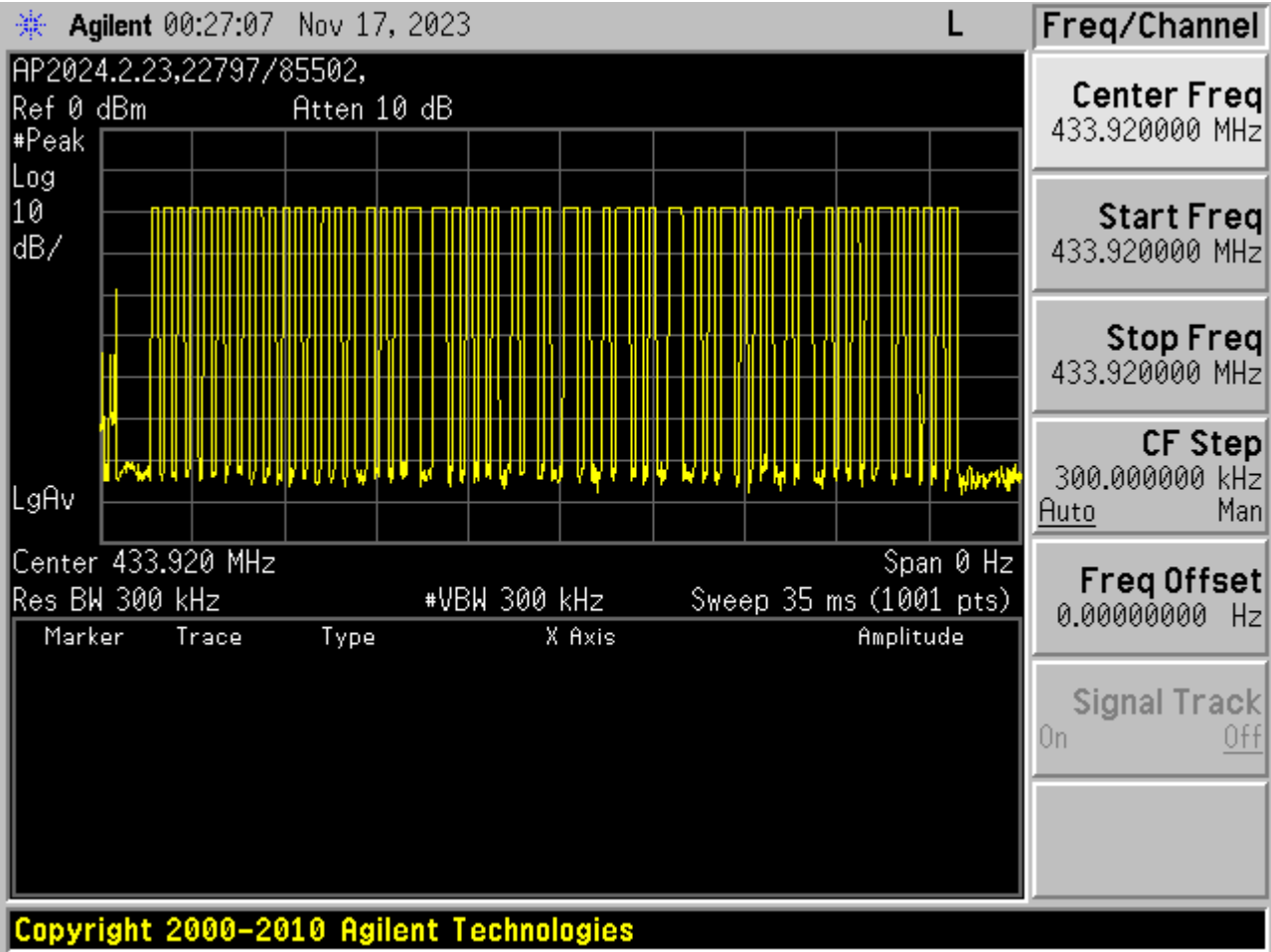
8.2.2. LONG PULSE WIDTH

Marker 2 (ms)	Marker 1 (ms)	Long Pulse Width (ms)
2.537	2.042	0.495



8.2.3. NUMBER OF PULSES

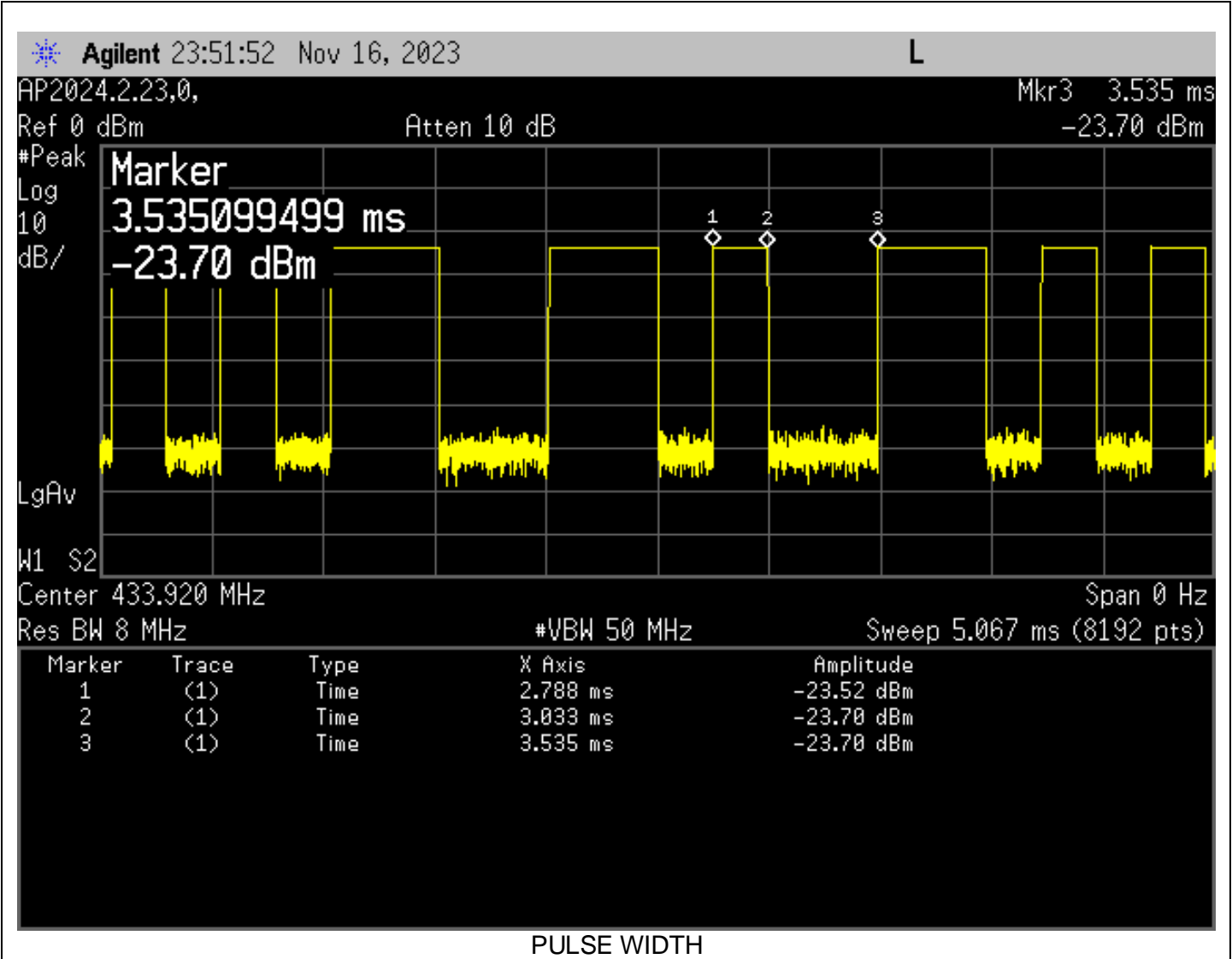
Number of Short Pulses over 100ms	Number of Long Pulses over 100ms
44	9



NUMBER OF SHORT AND LONG PULSES

8.2.4. SHORT PULSE WIDTH

Marker 2 (ms)	Marker 1 (ms)	Short Pulse Width (ms)
3.033	2.788	0.245



8.3. TRANSMISSION TIME

LIMITS

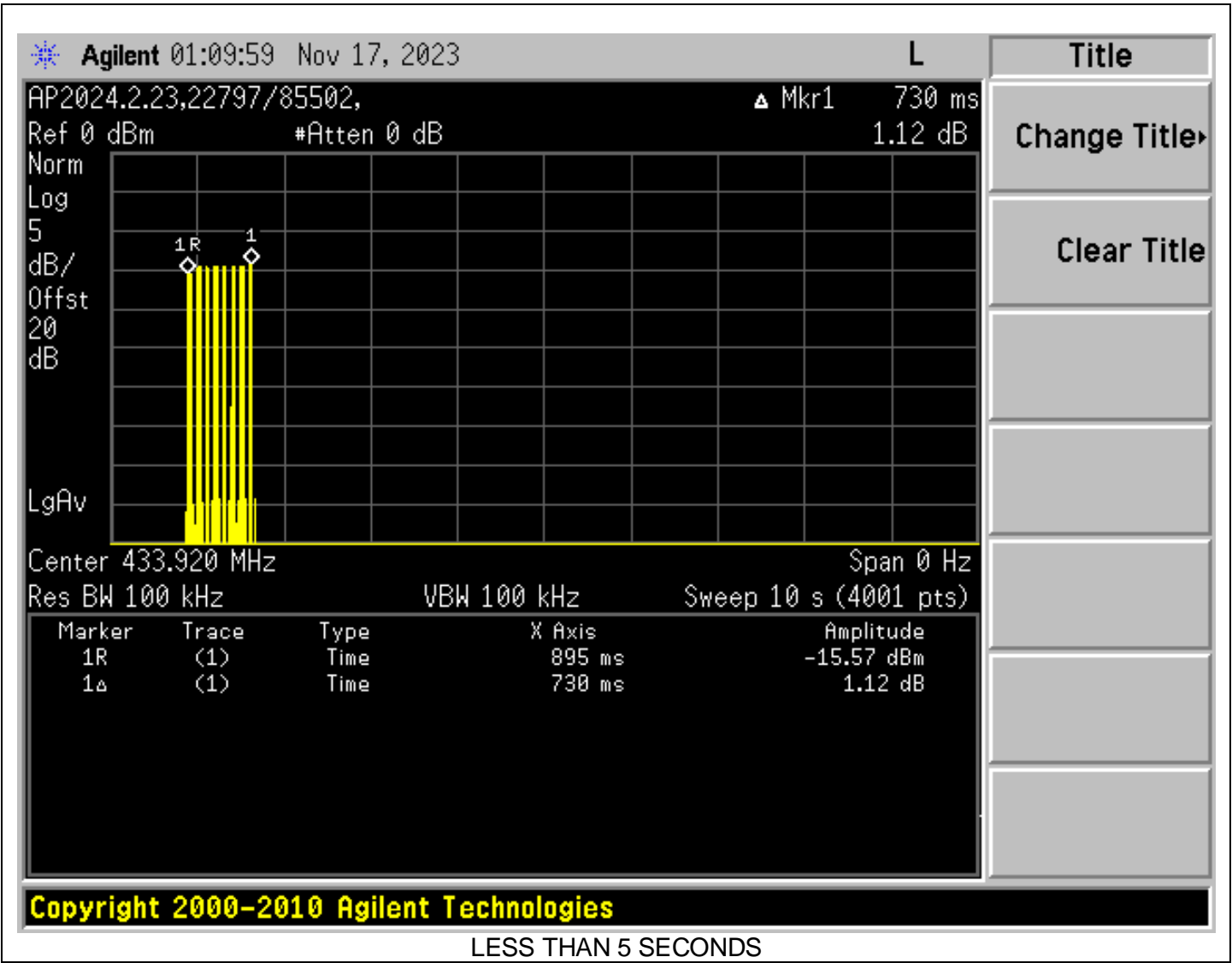
FCC §15.231 (a) (1)
A transmitter activated automatically shall cease transmission within 5 seconds after activation.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer or radiated field strength. The RBW is set to 100 kHz and the VBW is set to 100 kHz. The sweep time is set to 10 seconds and the span is set to 0 Hz.

RESULTS

No non-compliance noted:



9. RADIATED EMISSION TEST RESULTS

9.1. TX RADIATED SPURIOUS EMISSION

LIMITS

FCC §15.231 (b)

In addition to the provisions of § 15.205, the field strength of emissions from Intentional radiators operated under this section shall not exceed the following:

Fundamental frequency (MHz)	Field strength of fundamental (microvolts/meter)	Field strength of spurious emissions (microvolts/meter)
40.66-40.70	2,250	225
70-130	1,250	125
130-174	¹ 1,250 to 3,750	¹ 125 to 375
174-260	3,750	375
260-470	¹ 3,750 to 12,500	¹ 375 to 1,250
Above 470	12,500	1,250
¹ Linear interpolation.		

FCC §15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	-2
13.36-13.41			
¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.			
² Above 38.6			

FCC §15.209 (a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100 **	3
88-216	150 **	3
216-960	200 **	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.

FCC §15.209 (b) In the emission table above, the tighter limit applies at the band edges.

FCC §15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

RESULTS

9.1.1. FUNDAMENTAL MEASUREMENTS

Project Number: 15165141

Client: Chamberlain

Test Location: Chamber 2

Mode: Fundamental Measurements

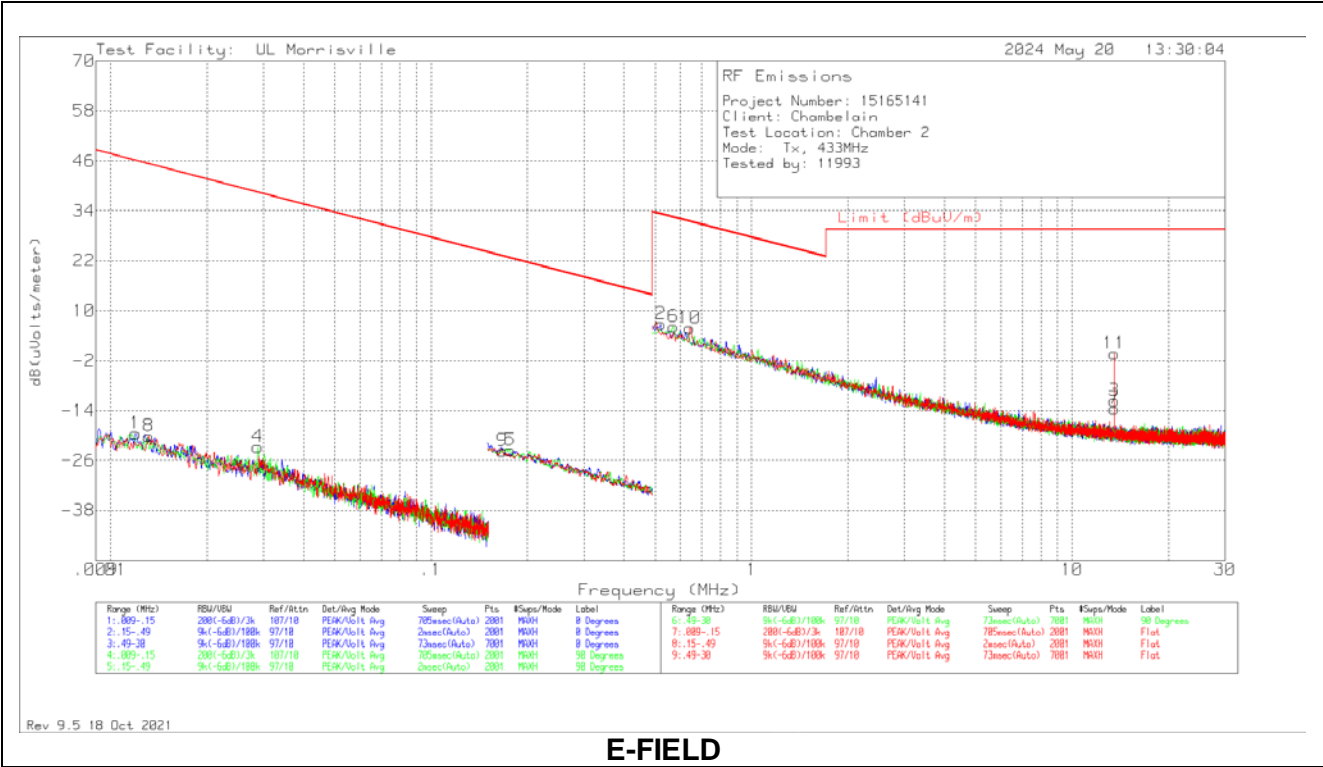
Tested by: 11993

Date: 2024-05-21

Frequency (MHz)	Meter Reading (dBuV)	Det	159203 (dB/m)	Gain/Loss (dB)	DCCF	Corrected Reading (dBuV/m)	15.231(b) Limit (dBuV/m)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
433.3MHz												
433.3174	93.99	Pk	23.1	-28.6	0	88.49	-	100.81	-12.32	57	113	V
433.3174	93.99	Pk	23.1	-28.6	-15.97	72.52	80.81	-	-8.66	57	113	V
433.319	87.75	Pk	23.1	-28.6	0	82.25	-	100.81	-18.56	144	336	H
433.319	87.75	Pk	23.1	-28.6	-15.97	66.28	80.81	-	-14.9	144	336	H
433.92												
433.9344	94.23	Pk	23.1	-28.6	0	88.73	-	100.83	-12.1	56	121	V
433.9344	94.23	Pk	23.1	-28.6	-15.97	72.76	80.83	-	-8.44	56	121	V
433.9368	87.91	Pk	23.1	-28.6	0	82.41	-	100.83	-18.42	141	337	H
433.9368	87.91	Pk	23.1	-28.6	-15.97	66.44	80.83	-	-14.76	141	337	H
434.54												
434.555	88.04	Pk	23.1	-28.6	0	82.54	-	100.85	-18.31	139	337	H
434.555	88.04	Pk	23.1	-28.6	-15.97	66.57	80.85	-	-14.65	139	337	H
434.556	94.24	Pk	23.1	-28.6	0	88.74	-	100.85	-12.11	50	122	V
434.556	94.24	Pk	23.1	-28.6	-15.97	72.77	80.85	-	-8.45	50	122	V

Pk - Peak detector

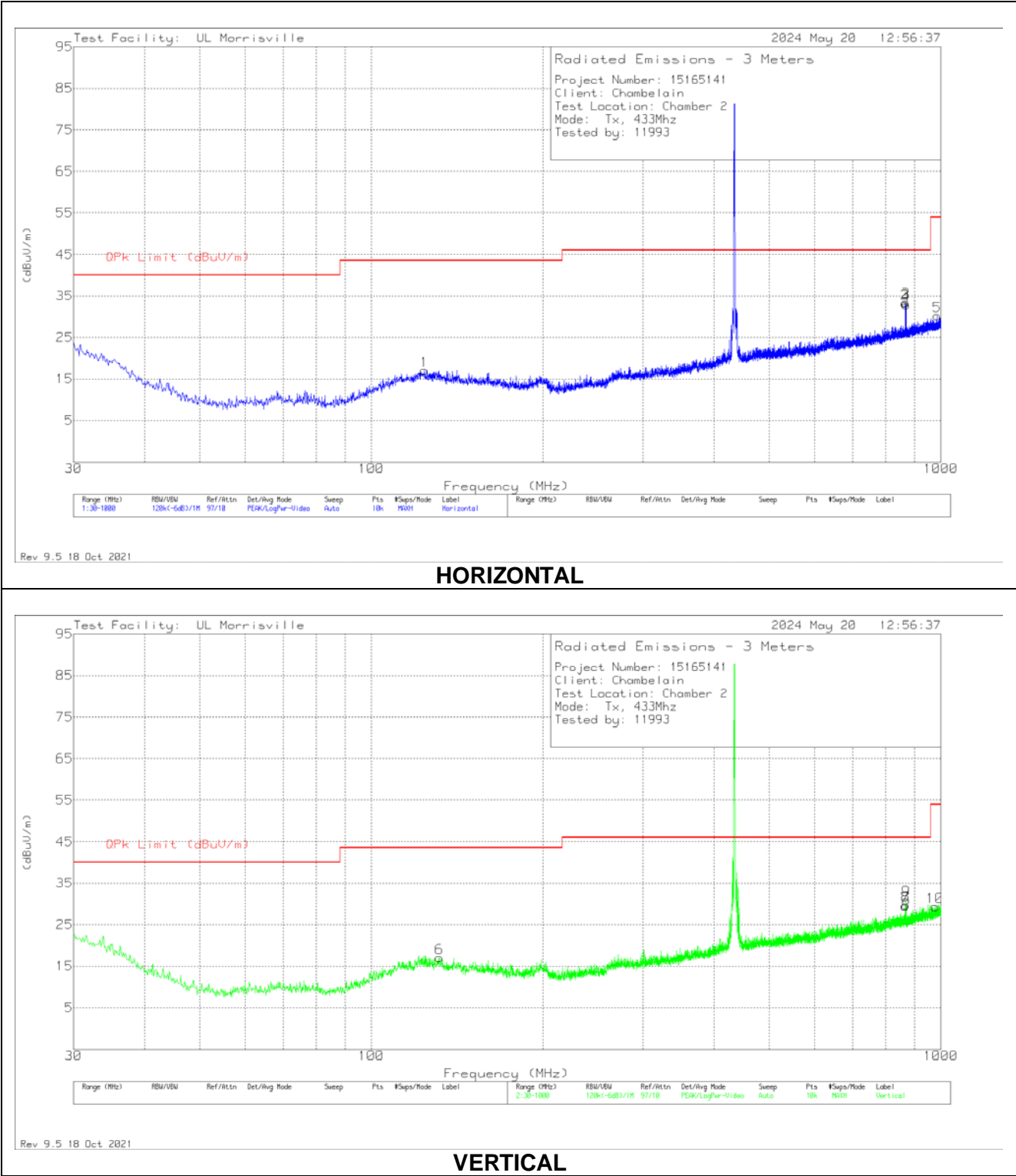
9.1.2. HARMONICS AND TX SPURIOUS EMISSIONS BELOW 30MHZ



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	135144 (dBuV/m)	Gain/Loss (dB)	Dist. Corr. Factor (dB)	Corrected Reading dB(uVolts/meter)	Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Loop Angle
1	.01198	42.76	Pk	17.6	.1	-80	-19.54	46.03	-65.57	0-360	100	0 degs
8	.01319	42.74	Pk	17	.1	-80	-20.16	45.2	-65.36	0-360	100	Flat
4	.02881	43.61	Pk	13.6	.1	-80	-22.69	38.41	-61.1	0-360	100	90 degs
9	.16683	45.08	Pk	11.1	.1	-80	-23.72	23.16	-46.88	0-360	100	Flat
5	.17686	45.22	Pk	11.1	.1	-80	-23.58	22.65	-46.23	0-360	100	90 degs
2	.51951	35.55	Pk	11.1	.1	-40	6.75	33.29	-26.54	0-360	100	0 degs
6	.5701	34.88	Pk	11.1	.1	-40	6.08	32.48	-26.4	0-360	100	90 degs
10	.64178	34.48	Pk	11.2	.1	-40	5.78	31.46	-25.68	0-360	100	Flat
3	13.5596	17.14	Pk	10.7	.6	-40	-11.56	29.54	-41.1	0-360	100	0 degs
7	13.5596	15.22	Pk	10.7	.6	-40	-13.48	29.54	-43.02	0-360	100	90 degs
11	13.5596	28.33	Pk	10.7	.6	-40	-.37	29.54	-29.91	0-360	100	Flat

Pk - Peak detector

9.1.3. HARMONICS AND TX SPURIOUS EMISSIONS BELOW 1GHz



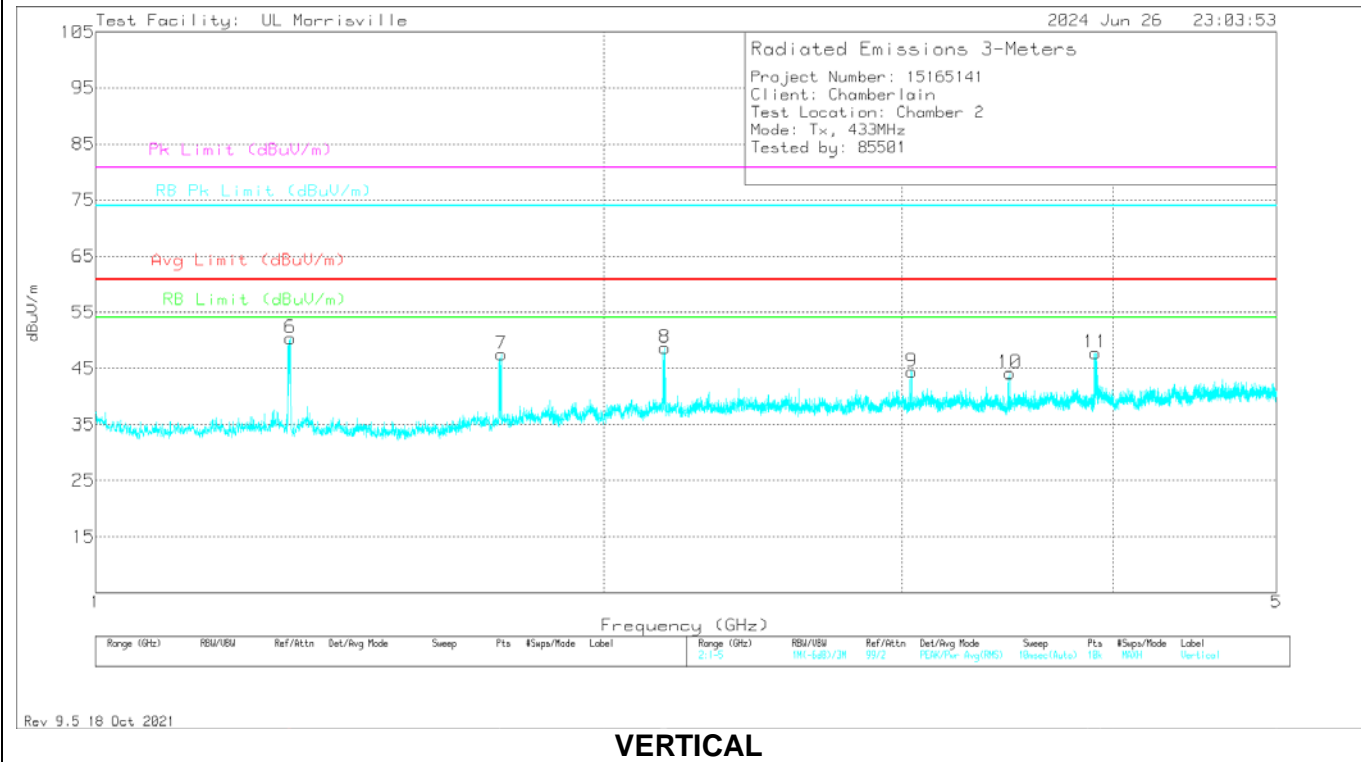
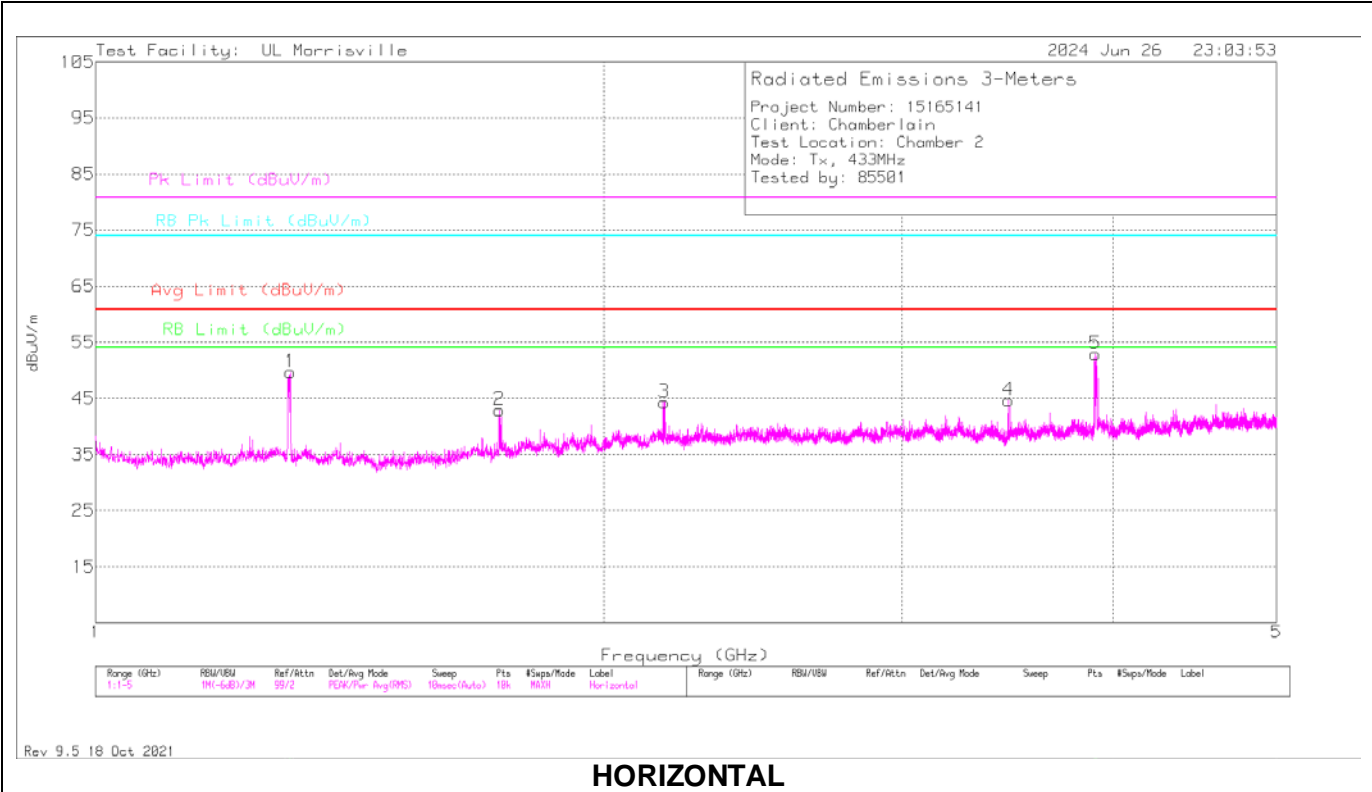
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	159203 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 123.896	27.33	Pk	20.3	-30.6	17.03	43.52	-26.49	0-360	299	H
2	** 866.722	31.15	Pk	28.5	-26.5	33.15	46.02	-12.87	0-360	101	H
3	** 867.886	31.61	Pk	28.5	-26.6	33.51	46.02	-12.51	0-360	101	H
4	** 869.147	30.93	Pk	28.5	-26.6	32.83	46.02	-13.19	0-360	101	H
5	* ** 984.771	25.48	Pk	29.8	-25.1	30.18	53.97	-23.79	0-360	299	H
6	* ** 131.559	27.71	Pk	20.1	-30.7	17.11	43.52	-26.41	0-360	101	V
7	** 866.722	27.46	Pk	28.5	-26.5	29.46	46.02	-16.56	0-360	101	V
8	** 867.886	27.8	Pk	28.5	-26.6	29.7	46.02	-16.32	0-360	101	V
9	** 869.147	29.06	Pk	28.5	-26.6	30.96	46.02	-15.06	0-360	101	V
10	* ** 977.399	24.9	Pk	29.7	-25.3	29.3	53.97	-24.67	0-360	299	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

9.1.4. HARMONICS AND TX SPURIOUS EMISSIONS ABOVE 1GHz



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	86408 (dB/m)	Gain/Loss (dB)	Filter (dB)	Corrected Reading dBuV/m	15.231(b) Limit (dBuV/m)	Margin (dB)	Pk Limit (dBuV/m)	PK Margin (dB)	RB Avg Limit (dBuV/m)	Margin (dB)	RB Pk Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.30364	56.24	PK2	29.4	-34.5	.6	51.74	-	-	80.81	-29.07	-	-	74	-22.26	229	119	H
	* 1.30187	39.9	ADV	29.4	-34.5	.6	35.4	60.81	-25.41	-	-	54	-18.6	-	-	229	119	H
2	1.7332	46.65	Pk	29.9	-34	.4	42.95	60.81	-17.86	80.81	-37.86	-	-	-	-	0-360	101	H
3	2.17	45.34	Pk	32	-33.5	.5	44.34	60.81	-16.47	80.81	-36.47	-	-	-	-	0-360	199	H
5	* 3.90516	50.06	PK2	33.4	-31.8	.3	51.96	-	-	80.81	-28.85	-	-	74	-22.04	183	305	H
	* 3.90529	36.56	ADV	33.4	-31.8	.3	38.46	60.81	-22.35	-	-	54	-15.54	-	-	183	305	H
6	* 1.30357	60.51	PK2	29.4	-34.5	.6	56.01	-	-	80.81	-24.8	-	-	74	-17.99	48	131	V
	* 1.30172	44.91	ADV	29.4	-34.5	.6	40.41	60.81	-20.4	-	-	54	-13.59	-	-	48	131	V
7	1.7384	51.05	Pk	30	-33.9	.4	47.55	60.81	-13.26	80.81	-33.26	-	-	-	-	0-360	199	V
11	* 3.9056	45.94	Pk	33.4	-31.8	.3	47.84	60.81	-12.97	80.81	-32.97	54	-6.16	74	-26.16	0-360	199	V
8	2.1728	49.67	Pk	32	-33.5	.5	48.67	60.81	-12.14	80.81	-32.14	-	-	-	-	0-360	199	V
9	3.042	43.85	Pk	32.9	-32.7	.4	44.45	60.81	-16.36	80.81	-36.36	-	-	-	-	0-360	101	V
4	3.4716	44.05	Pk	32.7	-32.3	.2	44.65	60.81	-16.16	80.81	-36.16	-	-	-	-	0-360	199	H
10	3.4764	43.55	Pk	32.7	-32.2	.1	44.15	60.81	-16.66	80.81	-36.66	-	-	-	-	0-360	101	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK2 - Maximum Peak

ADV - Linear Voltage Average

10. SETUP PHOTOS

See R15165151-EP1 for Setup Photos.

END OF TEST REPORT