



FCC/IC Test Report

For:
Lucid USA, Inc.

Host Model: P11-K2B100
Module Model: JODY-W354-00A

Product Description:
(Center Console Controller) CCCv2

FCC ID: 2AXZJ-K2B100
IC: 27970-K2B100

Applied Rules and Standards:
47 CFR Part 15.407 (UNII-1) & 5 GHz (UNII-3)
RSS-247 Issue 2 (DTSS) & (LE-LAN), and RSS-Gen Issue 5

REPORT #: EMC_LUCID_011_22001_15_407_Rev1

DATE: 2023-06-02



A2LA Accredited

IC recognized #
3462B

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1 Assessment

The following device was evaluated against the applicable criteria specified in FCC rules Parts 15.407 of Title 47 of the Code of Federal Regulations and the relevant ISED Canada standard RSS-247.

No deviations were ascertained.

Company	Description	Host Model #	Module Model #
Lucid USA, Inc.	(Center Console Controller) CCCv2	P11-K2B100	JODY-W354-00A

Responsible for Testing Laboratory:

2023-06-02	Compliance	Arndt Stoecker (Director of Regulatory Services)	
Date	Section	Name	Signature

Responsible for the Report:

2023-06-02	Compliance	Art Thammanavarat (Senior EMC Engineer)	
Date	Section	Name	Signature

The test results of this test report relate exclusively to the test item specified in Section 3.

CETECOM Inc. USA does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of CETECOM Inc. USA.

2 Administrative Data

2.1 Identification of the Testing Laboratory Issuing the EMC Test Report

Company Name:	CETECOM Inc.
Department:	Compliance
Street Address:	411 Dixon Landing Road
City/Zip Code	Milpitas, CA 95035
Country	USA
Telephone:	+1 (408) 586 6200
Fax:	+1 (408) 586 6299
EMC Lab Manager:	Arndt Stoecker
Responsible Project Leader:	Akanksha Baskaran

2.2 Identification of the Client

Client Firm/Name:	Lucid USA, Inc.
Street Address:	7373 Gateway Blvd
City/Zip Code	Newark, California, 94560
Country	USA

2.3 Identification of the Manufacturer

Manufacturer's Name:	Same as Client
Manufacturers Address:	
City/Zip Code	
Country	

3 Equipment Under Test (EUT)

3.1 EUT Specifications

Host Model No	P11-K2B100	
HW Version	02	
SW Version	23W4	
Contains FCC ID :	2AXZJ-K2B100	
Contains IC:	27970-K2B100	
Product Description	(Center Console Controller) CCCv2	
Radio Module	<u>Wi-Fi & Bluetooth Modules</u> Model Name : Ublox Model Number : JODY-W354-00A <u>Wireless Technologies</u> Wi-Fi 5GHz : 802.11 a/g/n/ac Bluetooth : BDR/DER, BLE	
Frequency Range, # of channels	Frequency Range (MHz)	Channel Number
	5150-5250*	36-48 [4]
	5250-5350*	52-64 [4]
	5470-5725*	100-140 [11]
	5725-5850	149-165 [5]
Modes of Operation	WiFi 802.11a/b/g/n/ac	
Antenna Gain as declared	5 dBi	
Max. Peak Output Power	5GHz WLAN UNII-1 : +18.12dBm 5GHz WLAN UNII-3 : +18.33dBm	
Rated Operating Voltage Range	9V to 16V DC	
Operating Temperature Range	-40 °C to 85 °C	
Other Radios in the device	Bluetooth BDR/EDR: GFSK	
Sample Revision	<input checked="" type="checkbox"/> Production Unit; <input type="checkbox"/> Pre-Production	

* **Note:** Frequency bands 5180-5240MHz, 5260-5320, 5600-5650, 5660-5725 are not supported in (Center Console Controller) CCCv2 disabled for use in Canada by firmware program that controls country code during manufacturing and cannot be altered by an end user or service technician.

3.2 EUT Sample details

EUT #	Host Model #	HW Version	SW Version	Notes/Comments
1	P11-K2B100	02	23W4	N/A

3.3 Support Equipment (SE) details

SE #	Type	Model	Manufacturer	Serial Number
1	Media Converter	100/1000Base-T1	Technica Engineering	1402240122420140
2	Center Console Monitor	P11-NAT6ST-01	LUCID	2213800007
3	Dash Monitor	P11-NASBST-07	LUCID	2218900006
4	USB Drive – 32GB	CRUZER 32 GB	San DISK	SDCZ36-032G
5	Video Camera	P11-G160WW-C	Continental	RVS231LD10-0001
6	Dual A2B Audio Generator	A2BFRTX2	Flexmedia XM	0090
7	Gigabit Ethernet Fiber Media Converter	ET91000SFP2	Startech.com	2821010161

3.4 Test Sample Configuration

EUT Set-up #	Combination of AE used for test set up	Comments
1	EUT#1+(SE#1+2+3+4+5+6+7)	Powered by 12 VDC Car battery

3.5 Mode of Operation details

Mode of Operation	Description
Wi-Fi	The radio of the EUT was configured to a fixed channel transmission in Wi-Fi mode with highest possible duty cycle using confidential test software and scripts (per meta-ublox-modules-2019-11-04 document) provided by the applicant.
Wi-Fi + BT	The radio of the EUT was configured to a fixed channel simultaneous transmission in Wi-Fi, BDR mode with highest possible duty cycle using confidential test software and scripts (per meta-ublox-modules-2019-11-04 document) provided by the applicant.

3.6 Justification for Worst Case Mode of Operation

During the testing process, the EUT was tested with transmitter sets on mid channels, and highest power in 802.11a mode. For radiated measurements, all data in this report shows the worst case between horizontal and vertical antenna polarizations.

4 Subject of Investigation

The objective of the measurements done by CETECOM Inc. was to assess the performance of the EUT according to the relevant requirements specified in FCC rules Part 15.407 of Title 47 of the Code of Federal Regulations and Radio Standard Specification RSS-247 of ISED Canada.

This test report is to support a request for new equipment authorization under the FCC ID: 2AXZJ-K2B100. The device was also evaluated operating in co-transmission mode, and found compliant with the above requirement.

5 Measurement Results Summary

Test Specification	Test Case	Temperature and Voltage Conditions	Mode	Pass	NA	NP	Result
§15.407(e)	Emission Bandwidth	Nominal	802.11a/ac	<input type="checkbox"/>	<input type="checkbox"/>	■	See Note 2
§15.407(a)	Power Spectral Density	Nominal	802.11a/ac	<input type="checkbox"/>	<input type="checkbox"/>	■	See Note 2
§15.407(a)	Maximum Output Power	Nominal	802.11a/ac	■	<input type="checkbox"/>	<input type="checkbox"/>	Complies
§15.407; 15.205	Band Edge Compliance	Nominal	802.11a/ac	<input type="checkbox"/>	<input type="checkbox"/>	■	See Note 2
§15.407(b); §15.209; 15.205	Radiated TX Spurious Emissions	Nominal	802.11a/ac + BDR	■	<input type="checkbox"/>	<input type="checkbox"/>	Complies
§15.207(a)	AC Conducted Emissions	Nominal	802.11a/ac	<input type="checkbox"/>	■	<input type="checkbox"/>	See Note 3

Note 1: NA= Not Applicable

Note 2: The measurements from modular test report # MDE_UBLOX_2220_FCCa by 7layers GmbH will be leveraged

Note 3: This device does not connect to AC mains network

6 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus, with 95% confidence interval (in dB delta to result), based on a coverage factor $k=2$.

Radiated measurement

Measurement System	EMC 1	EMC 2
Conducted emissions (mains port)	1.12 dB	0.46 dB
Radiated emissions		
(< 30 MHz)	3.66 dB	3.88 dB
(30 MHz – 1GHz)	3.17 dB	3.34 dB
(1 GHz – 3 GHz)	5.01 dB	4.45 dB
(>3 GHz)	4.0 dB	4.79 dB

RF conducted measurement ± 0.5 dB

According to TR 102 273 a multiplicative propagation of error is assumed for RF measurement systems. For this reason the RMS method is applied to dB values and not to linear values as appropriate for additive propagation of error. Also used: <http://physics.nist.gov/cuu/Uncertainty/typeb.html>. The above calculated uncertainties apply to direct application of the Substitution method. The Substitution method is always used when the EUT comes closer than 3dB to the limit.

6.1 Environmental Conditions During Testing:

The following environmental conditions were maintained during the course of testing:

- Ambient Temperature: 20-25°C
- Relative humidity: 40-60%

6.2 Dates of Testing:

2023-03-10 – 2023-03-16

6.3 Decision Rule:

Cetecom advanced follows ILAC G8:2019 chapter 4.2.1 (Simple Acceptance Rule).

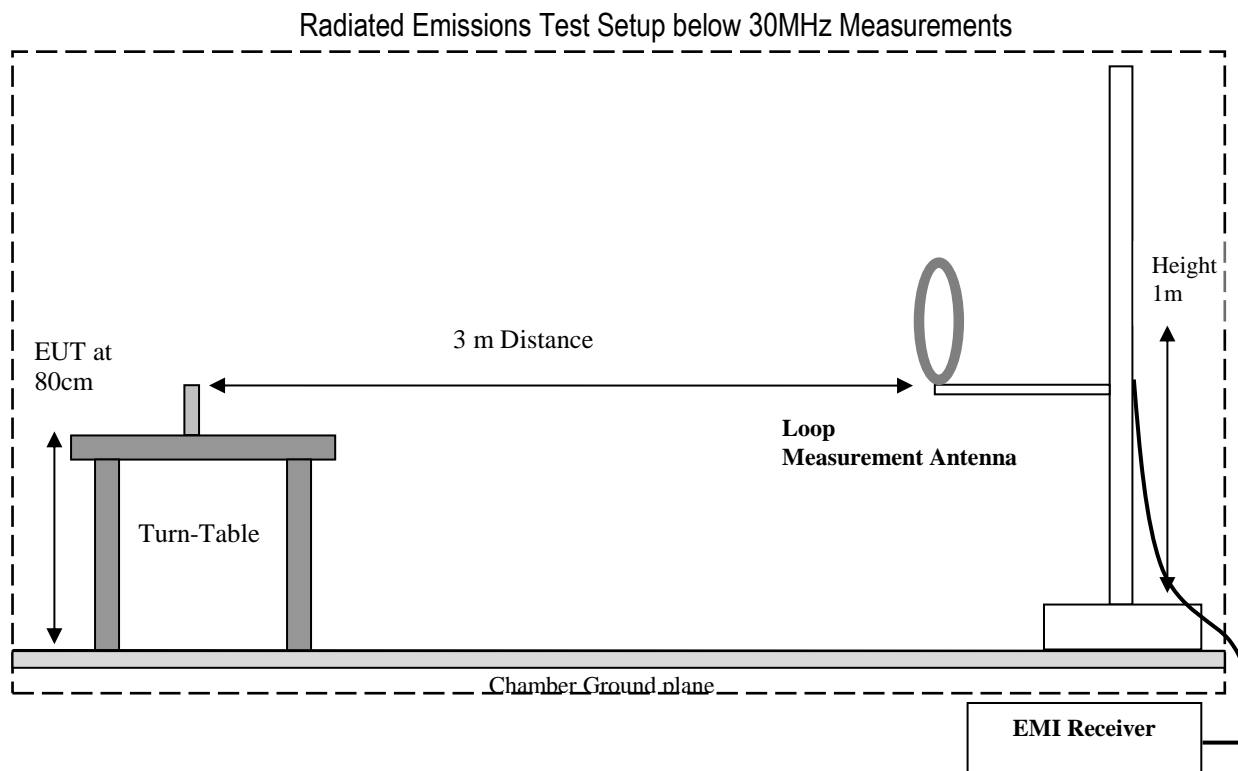
Only the measured values related to their corresponding limits will be used to decide whether the equipment under test meets the requirements of the test standards listed in chapter 3. The measurement uncertainty is mentioned in this test report, See chapter 9, but is not taken into account – neither to the limits nor to the measurement results. Measurement results with a smaller margin to the corresponding limits than the measurement uncertainty have a potential risk of more than 5% that the decision might be wrong.

7 Measurement Procedures

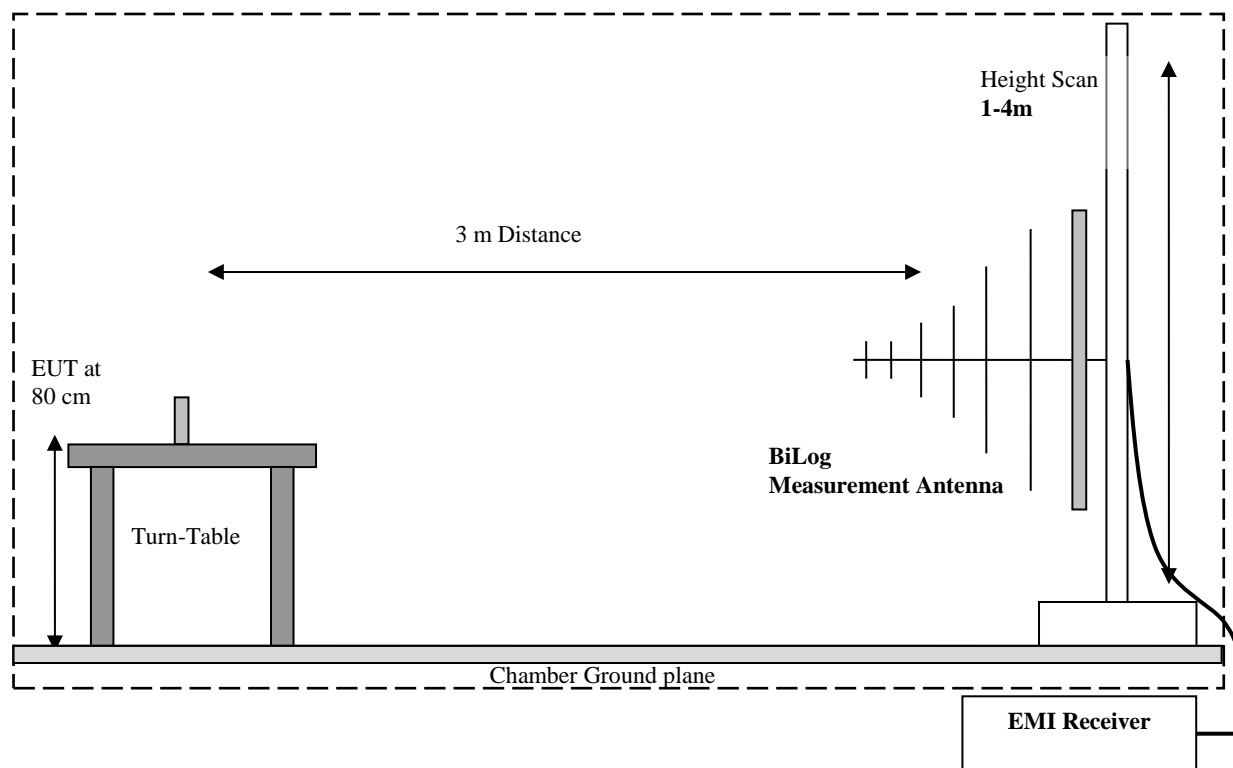
7.1 Radiated Measurement

The radiated measurement is performed according to ANSI C63.10 (2013)

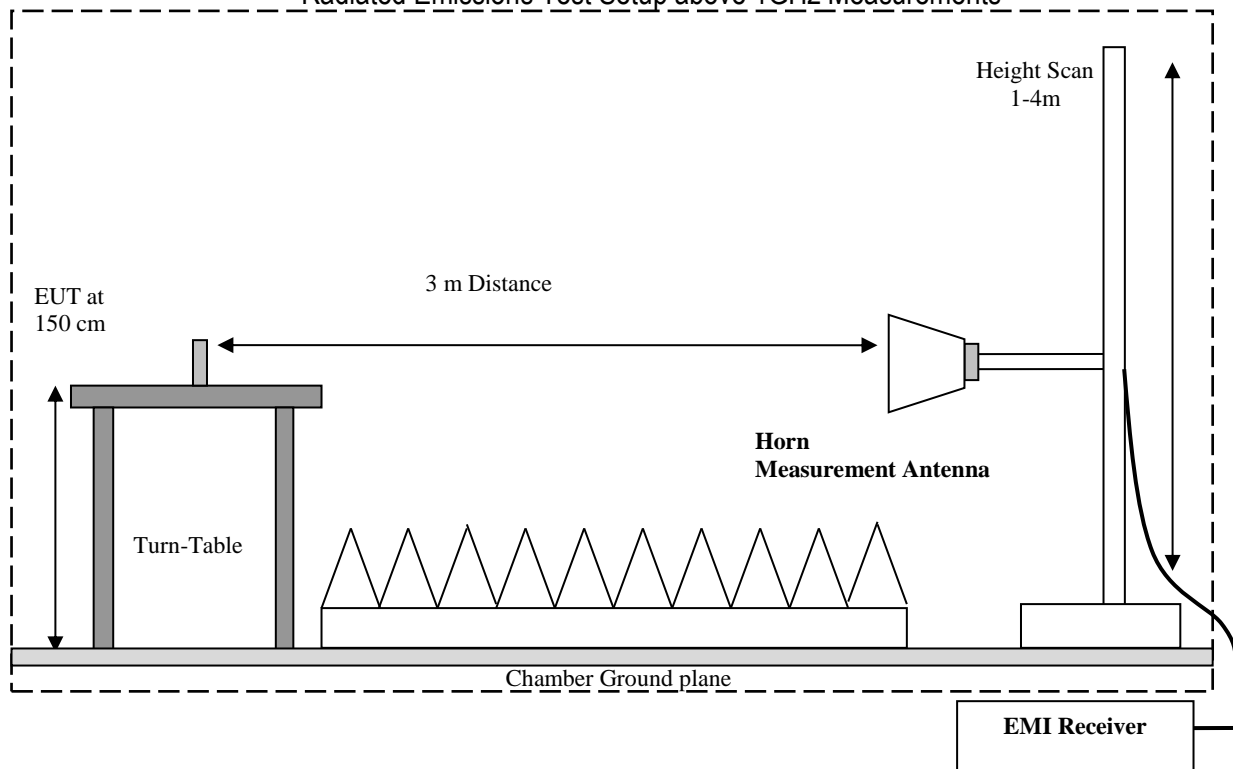
- The exploratory measurement is accomplished by running a matrix of 16 sweeps over the required frequency range with R&S Test-SW EMC32 for 4 positions of the turntable, two orthogonal positions of the EUT and both antenna polarizations. This procedure exceeds the requirement of the above standards to cover the 3 orthogonal axis of the EUT. A max peak detector is utilized during the exploratory measurement. The Test-SW creates an overall maximum trace for all 12 sweeps and saves the settings for each point of this trace. The maximum trace is part of the test report.
- The 10 highest emissions are selected with an automatic algorithm of EMC32 searching for peaks in the noise floor and ensuring that broadband signals are not selected multiple times.
- The maxima are then put through the final measurement and again maximized in a 90deg range of the turntable, fine search in frequency domain and height scan between 1m and 4m.
- The above procedure is repeated for all possible ways of power supply to EUT and for all supported modulations.
- In case there are no emissions above noise floor level only the maximum trace is reported as described above.
- The results are split up into up to 4 frequency ranges due to antenna bandwidth restrictions. A magnetic loop is used from 9 kHz to 30 MHz, a Biconilog antenna is used from 30 MHz to 1 GHz, and two different horn antennas are used to cover frequencies up to 40 GHz.



Radiated Emissions Test Setup 30MHz-1GHz Measurements



Radiated Emissions Test Setup above 1GHz Measurements



7.1.1 Sample Calculations for Field Strength Measurements

Field Strength is calculated from the Spectrum Analyzer/ Receiver readings, taking into account the following parameters:

1. Measured reading in dB μ V
2. Cable Loss between the receiving antenna and SA in dB and
3. Antenna Factor in dB/m

All radiated measurement plots in this report are taken from a test SW that calculates the Field Strength based on the following equation:

$$FS \text{ (dB}\mu\text{V/m)} = \text{Measured Value on SA (dB}\mu\text{V)} + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$$

Example:

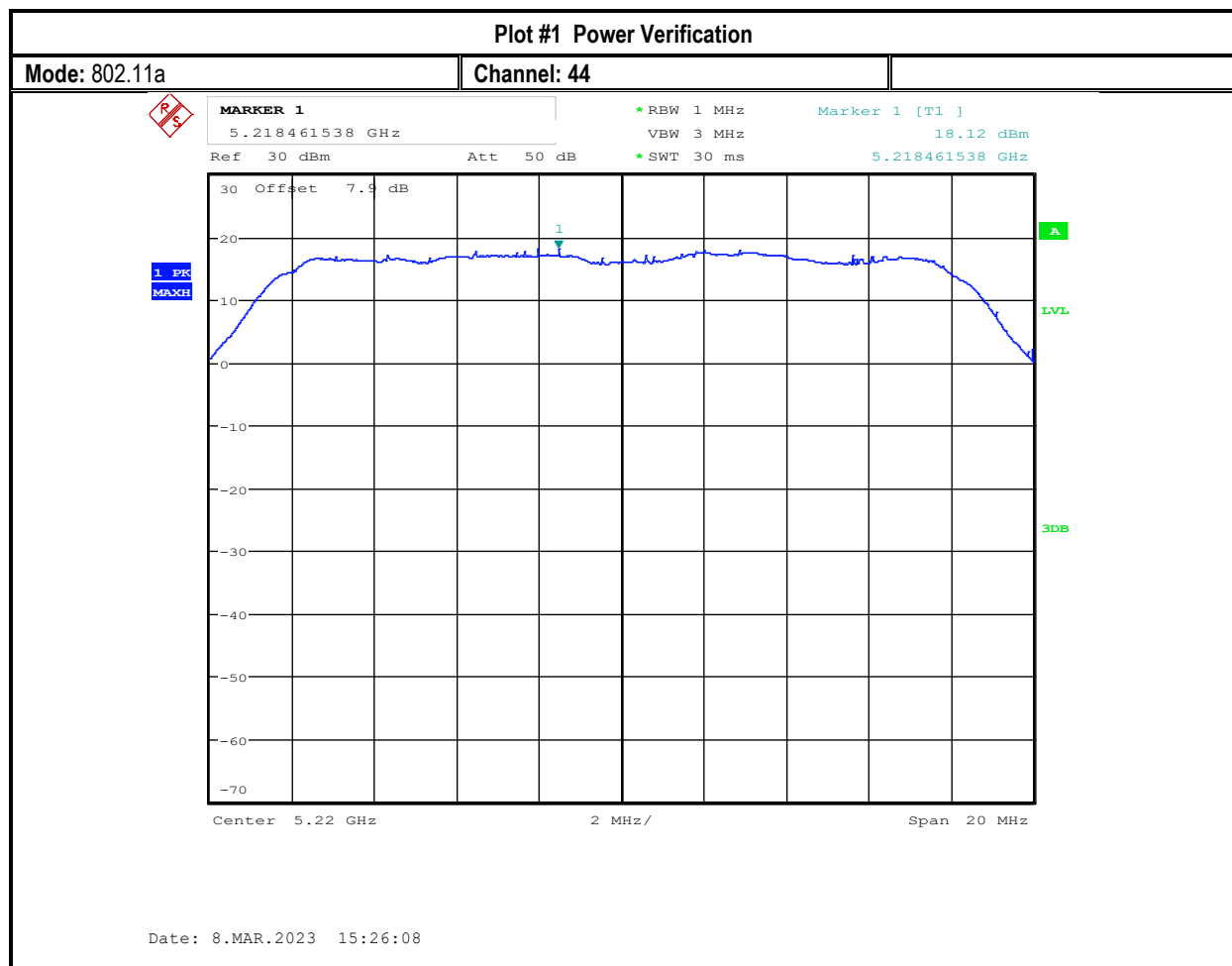
Frequency (MHz)	Measured SA (dB μ V)	Cable Loss (dB)	Antenna Factor Correction (dB)	Field Strength Result (dB μ V/m)
1000	80.5	3.5	14	98.0

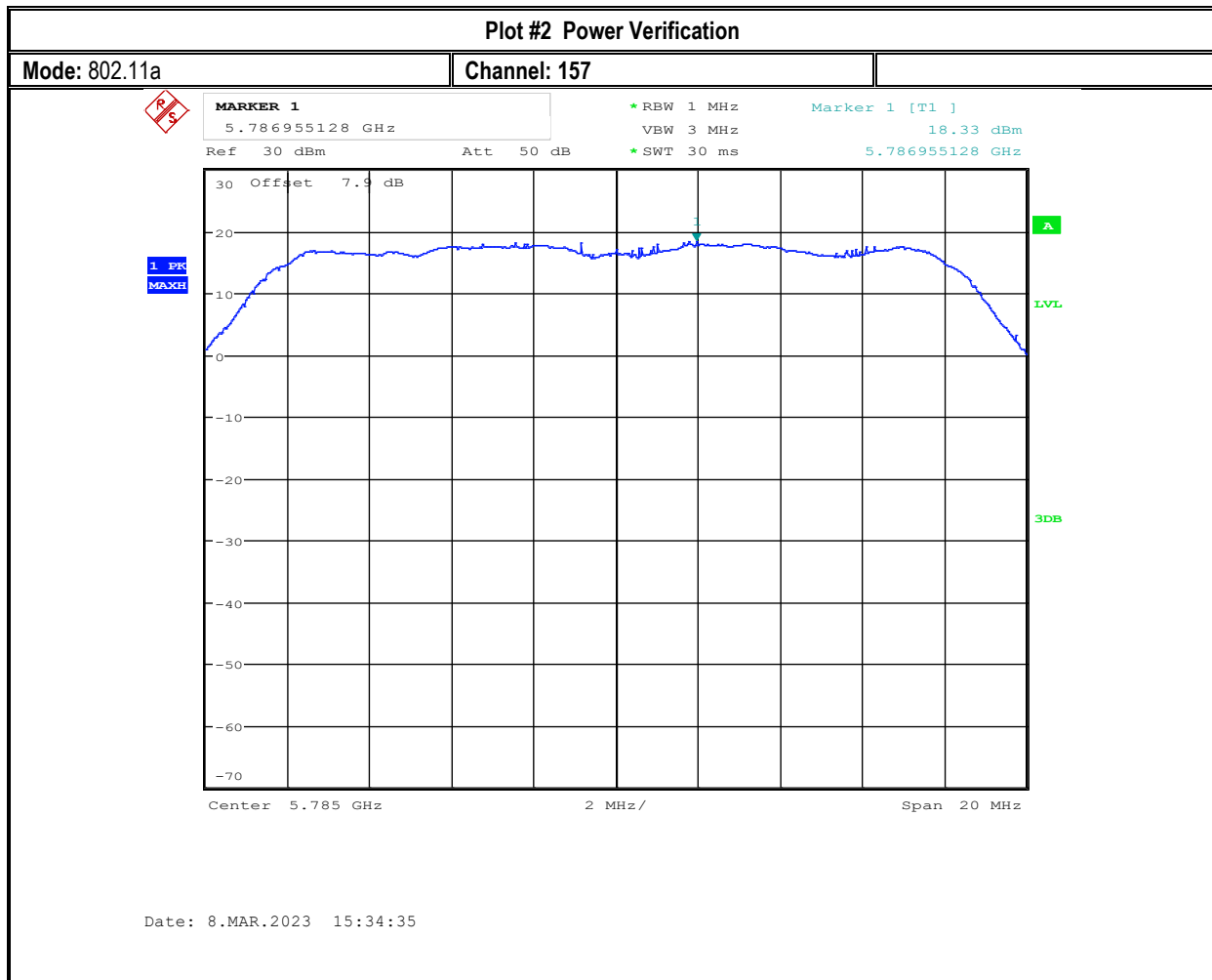
8 Test Result Data

8.1 Conducted Power Verification:

EUT operating mode #1		
Plot #	Channel #	Power Measurement (dBm)
1	44	18.12
2	157	18.33

8.1.1 Measurement Plots:





8.2 Radiated Transmitter Spurious Emissions

8.2.1 Measurement according to ANSI C63.10 (2013)

Spectrum Analyzer Settings:

- Frequency = 9 KHz – 30 MHz
- RBW = 9 KHz
- Detector: Peak
- Frequency = 30 MHz – 1 GHz
- Detector = Peak / Quasi-Peak
- RBW= 120 KHz (<1GHz)
- Frequency > 1 GHz
- Detector = Peak / Average
- RBW = 1 MHz
- Radiated spurious emissions shall be measured for the transmit frequencies, transmit power, and data rate for the lowest, middle and highest channel in each frequency band of operation and for the highest gain antenna for each antenna type, and using the appropriate parameters and test requirements.
- The highest (or worst-case) data rate shall be recorded for each measurement.
- For testing at distance other than the specified in the standard, the limit conversion is calculated by using 40 dB/decade extrapolation factor as follow: Conversion factor (CF) = $40 \log (D/d) = 40 \log (300\text{m} / 3\text{m}) = 80\text{dB}$

8.2.2 Limits:

FCC §15.407

- Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.
- The provisions of §15.205 apply to intentional radiators operating under this section.

FCC §15.209

- 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 of emission (MHz)	Field strength (μV/m)	Measurement Distance (m)	Field strength @ 3m (dBμV/m)
0.009–0.490	$2400/F(\text{kHz}) / \text{-----}$	300	-
0.490–1.705	$24000/F(\text{kHz}) / \text{-----}$	30	-
1.705–30.0	$30 / (29.5)$	30	-
30–88	100	3	40 dBμV/m
88–216	150	3	43.5 dBμV/m
216–960	200	3	46 dBμV/m
Above 960	500	3	54 dBμV/m

FCC §15.205

- 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
10.495-0.505	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	Above 38.6
13.36-13.41			

- Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

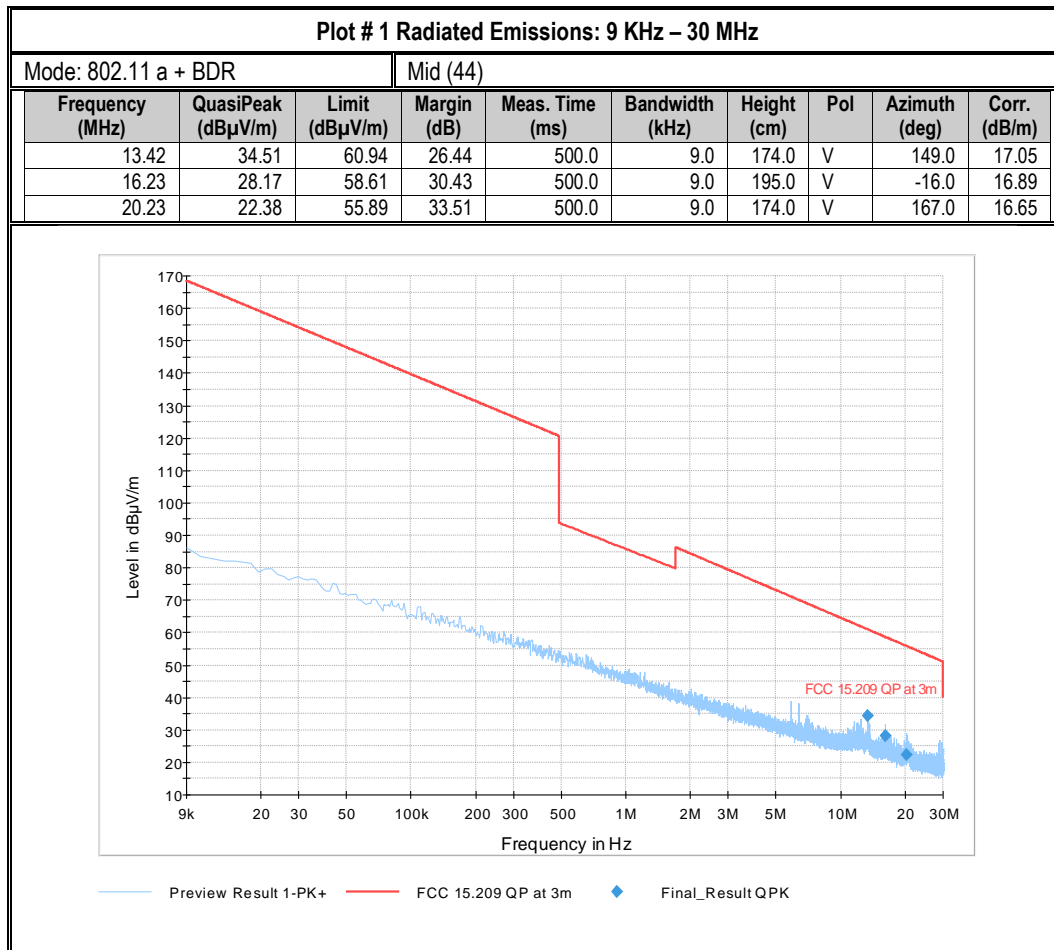
8.2.3 Test conditions and setup:

Ambient Temperature	EUT Set-Up #	EUT operating mode	Power Input
20.9° C	1	802.11a	12 VDC

8.2.4 Measurement result:

Plot #	EUT Operating Mode	Channel #	Scan Frequency	Limit	Result
1-5	Wi-Fi + BDR	Mid (44)	9 kHz – 40 GHz	See section 8.1.2	Pass
6-10	Wi-Fi + BDR	Mid (157)	9 kHz – 40 GHz	See section 8.1.2	Pass

8.2.5 WAP Measurement Plots:

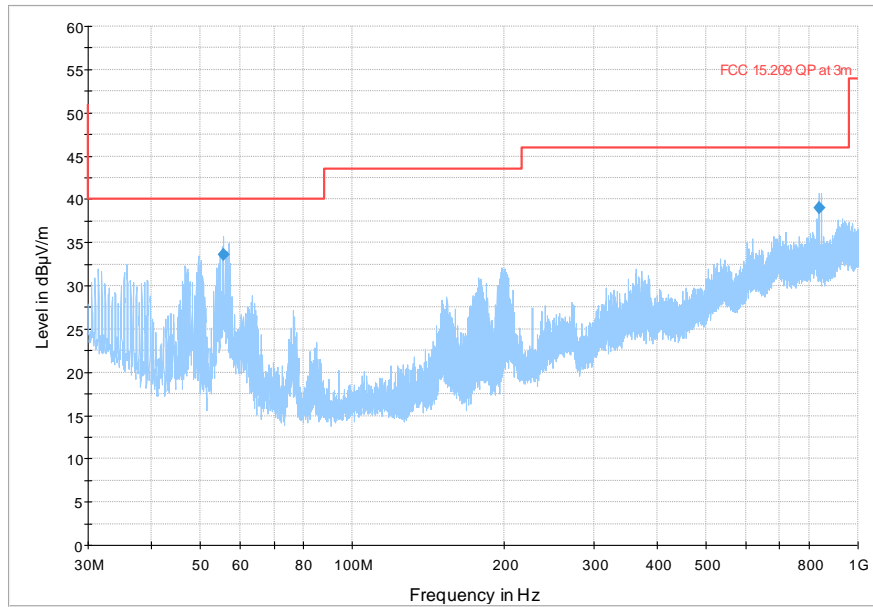


Plot # 2 Radiated Emissions: 30 MHz – 1GHz

Mode: 802.11 a + BDR

Mid (44)

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
55.67	33.64	40.00	6.36	500.0	120.0	163.0	V	73.0	13.91
837.95	38.98	46.02	7.04	500.0	120.0	206.0	V	61.0	30.89



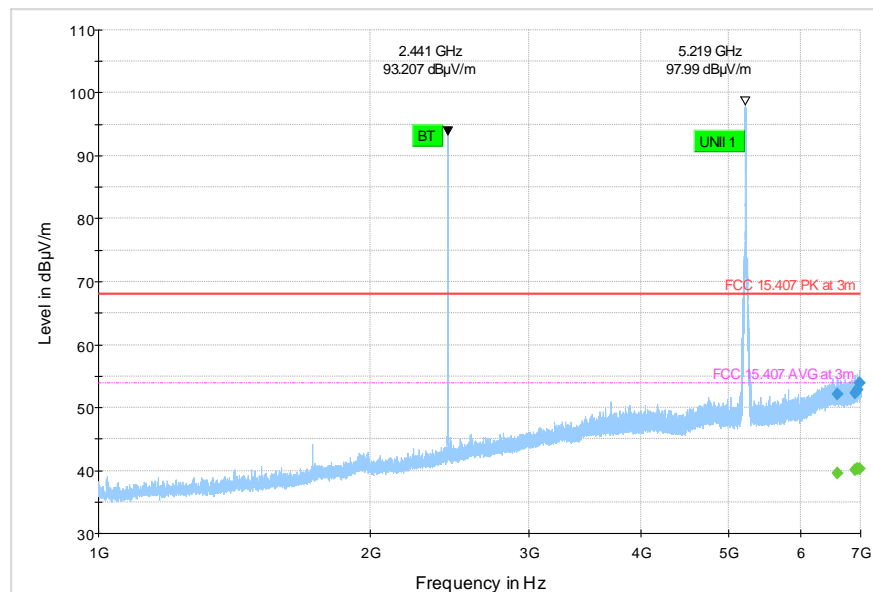
Preview Result 1-PK+ FCC 15.209 QP at 3m Final_Result QPK

Plot # 3 Radiated Emissions: 1 - 7 GHz

Mode: 802.11 a + BDR

Mid (44)

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
6599.75	52.16	---	68.00	15.84	500.0	1000.0	186.0	V	185.0	18.69
6599.75	---	39.64	53.98	14.34	500.0	1000.0	186.0	V	185.0	18.69
6895.60	52.23	---	68.00	15.77	500.0	1000.0	220.0	H	297.0	19.71
6895.60	---	40.13	53.98	13.85	500.0	1000.0	220.0	H	297.0	19.71
6931.10	52.87	---	68.00	15.13	500.0	1000.0	209.0	H	83.0	19.86
6931.10	---	40.31	53.98	13.67	500.0	1000.0	209.0	H	83.0	19.86
6988.65	53.90	---	68.00	14.10	500.0	1000.0	175.0	H	45.0	19.93
6988.65	---	40.35	53.98	13.63	500.0	1000.0	175.0	H	45.0	19.93



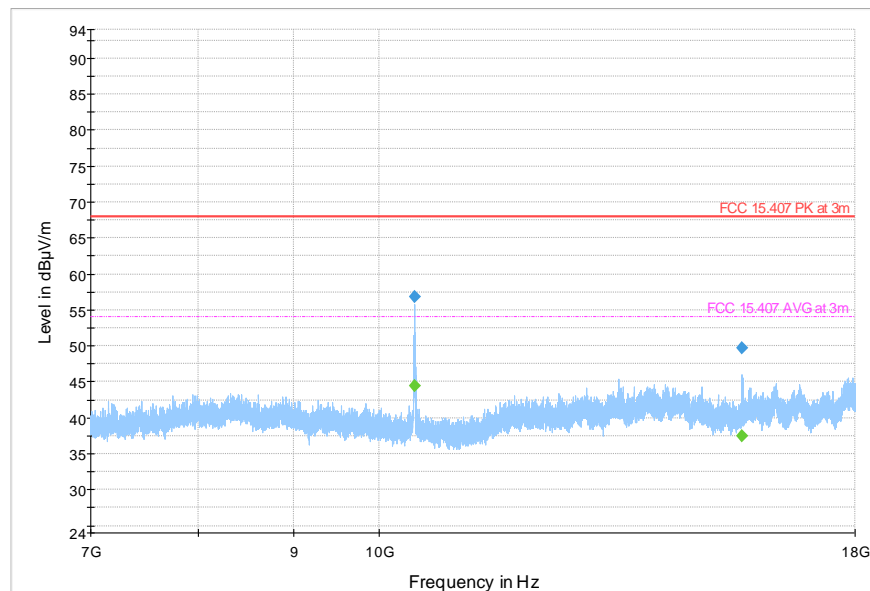
◆ Preview Result 1-PK+ Final_Result PK+ ◆ FCC 15.407 PK at 3m Final_Result CAV ◆ FCC 15.407 AVG at 3m

Plot # 4 Radiated Emissions: 7 - 18 GHz

Mode: 802.11 a + BDR

Mid (44)

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
10440.80	56.91	---	68.00	11.09	500.0	1000.0	237.0	V	20.0	0.14
10440.80	---	44.48	53.98	9.50	500.0	1000.0	237.0	V	20.0	0.14
15659.57	49.74	---	68.00	18.26	500.0	1000.0	150.0	H	71.0	5.18
15659.57	---	37.47	53.98	16.51	500.0	1000.0	150.0	H	71.0	5.18



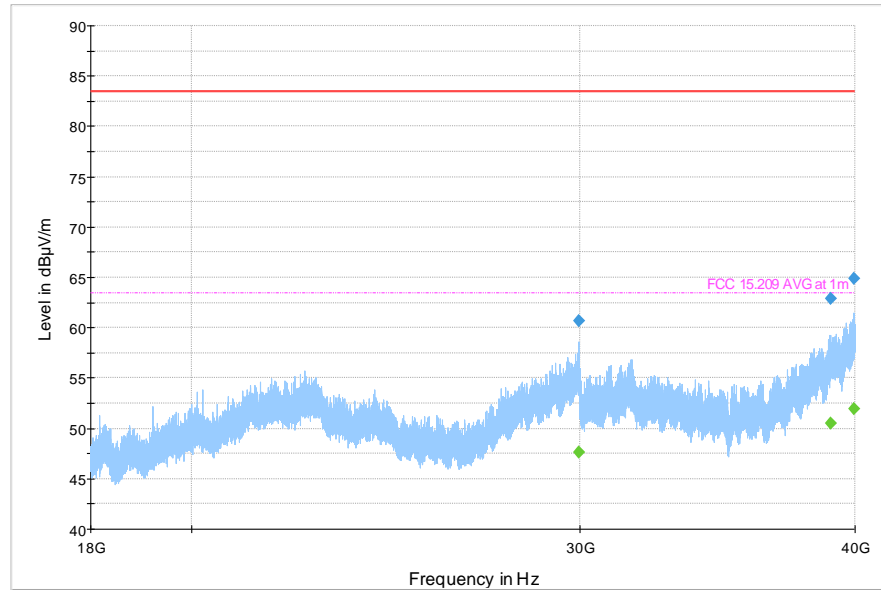
◆ Preview Result 1-PK+ Final_Result PK+ ◆ FCC 15.407 PK at 3m Final_Result CAV ◆ FCC 15.407 AVG at 3m

Plot # 5 Radiated Emissions: 18 - 40 GHz

Mode: 802.11 a + BDR

Mid (44)

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
29968.88	---	47.63	63.50	15.87	500.0	1000.0	150.0	H	152.0	22.97
29968.88	60.65	---	83.50	22.85	500.0	1000.0	150.0	H	152.0	22.97
38973.44	62.95	---	83.50	20.55	500.0	1000.0	150.0	V	158.0	23.50
38973.44	---	50.48	63.50	13.02	500.0	1000.0	150.0	V	158.0	23.50
39955.94	64.84	---	83.50	18.66	500.0	1000.0	150.0	H	318.0	24.80
39955.94	---	51.99	63.50	11.51	500.0	1000.0	150.0	H	318.0	24.80



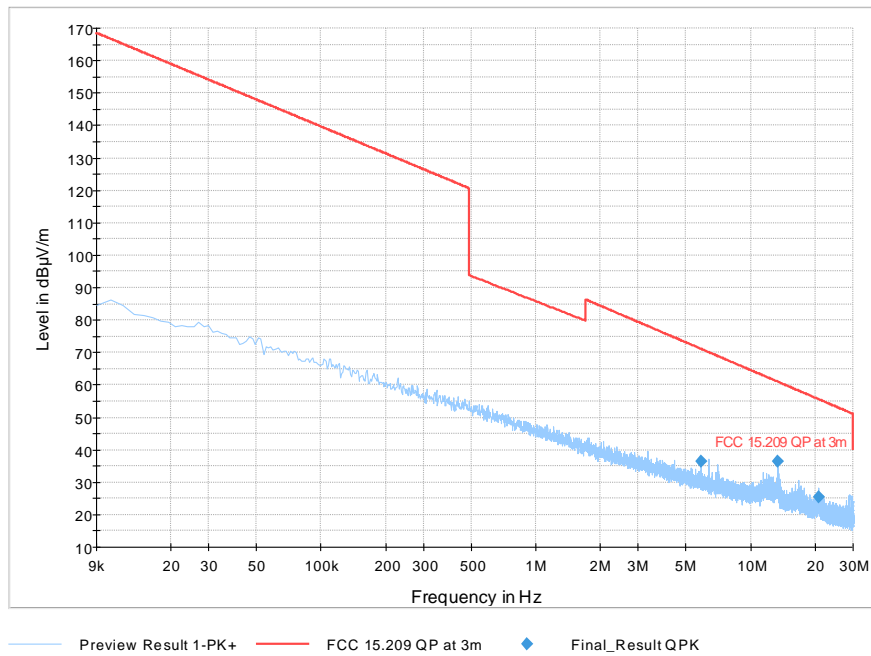
Preview Result 1-PK+ Final_Result PK+ FCC 15.209 PK at 1m Final_Result CAV FCC 15.209 AVG at 1m

Plot # 6 Radiated Emissions: 9 KHz – 30 MHz

Mode: 802.11 a + BDR

Mid (157)

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
5.90	36.31	71.06	34.75	500.0	9.0	198.0	V	186.0	17.87
13.36	36.38	61.00	24.62	500.0	9.0	185.0	V	340.0	17.06
20.81	25.52	55.54	30.02	500.0	9.0	150.0	V	-45.0	16.60

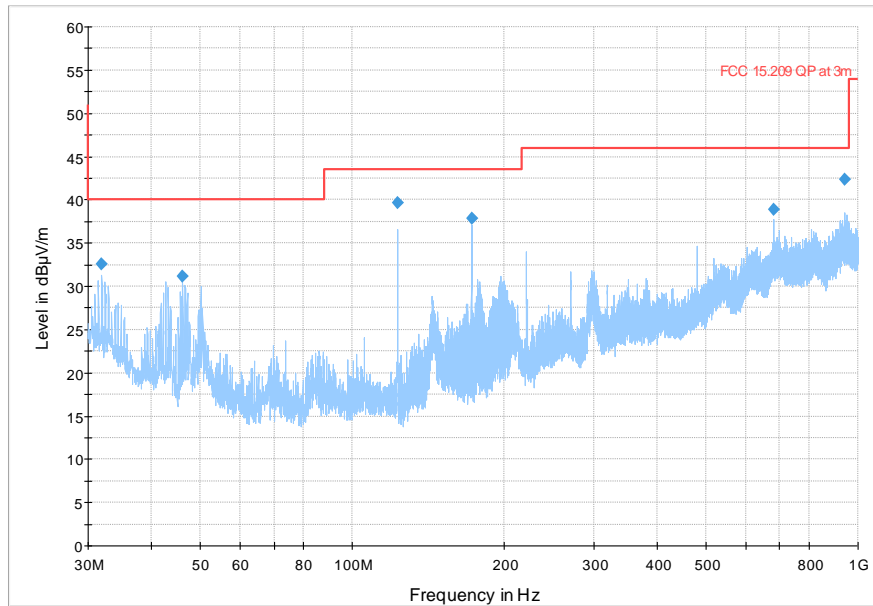


Plot # 7 Radiated Emissions: 30 MHz – 1GHz

Mode: 802.11 a + BDR

Mid (157)

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.94	32.62	40.00	7.38	500.0	120.0	150.0	V	45.0	21.04
46.17	31.10	40.00	8.90	500.0	120.0	149.0	V	80.0	14.12
122.86	39.63	43.50	3.87	500.0	120.0	186.0	V	-44.0	15.34
172.01	37.85	43.50	5.65	500.0	120.0	239.0	V	80.0	17.96
681.13	38.84	46.02	7.18	500.0	120.0	251.0	V	358.0	30.86
943.42	42.38	46.02	3.64	500.0	120.0	315.0	H	166.0	33.81



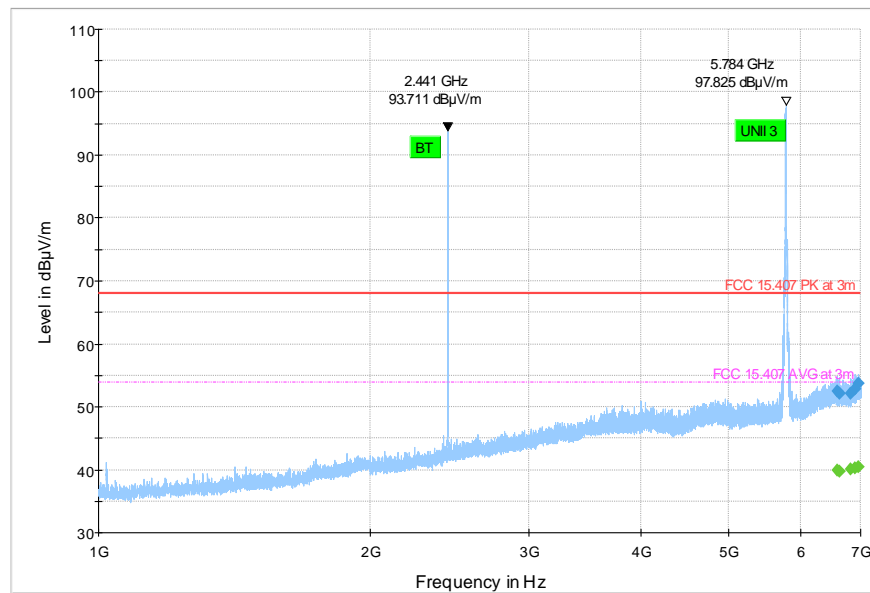
Preview Result 1-PK+ FCC 15.209 QP at 3m Final_Result QPK

Plot # 8 Radiated Emissions: 1 - 7 GHz

Mode: 802.11 a + BDR

Mid (157)

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
6594.45	52.44	---	68.00	15.56	500.0	1000.0	304.0	H	104.0	19.10
6594.45	---	39.90	53.98	14.08	500.0	1000.0	304.0	H	104.0	19.10
6640.40	---	39.70	53.98	14.28	500.0	1000.0	287.0	H	355.0	19.08
6640.40	52.21	---	68.00	15.79	500.0	1000.0	287.0	H	355.0	19.08
6826.25	52.19	---	68.00	15.81	500.0	1000.0	219.0	H	267.0	19.46
6826.25	---	40.11	53.98	13.86	500.0	1000.0	219.0	H	267.0	19.46
6910.85	52.91	---	68.00	15.09	500.0	1000.0	315.0	H	111.0	19.78
6910.85	---	40.21	53.98	13.77	500.0	1000.0	315.0	H	111.0	19.78
6966.00	53.74	---	68.00	14.26	500.0	1000.0	175.0	H	38.0	19.92
6966.00	---	40.35	53.98	13.62	500.0	1000.0	175.0	H	38.0	19.92



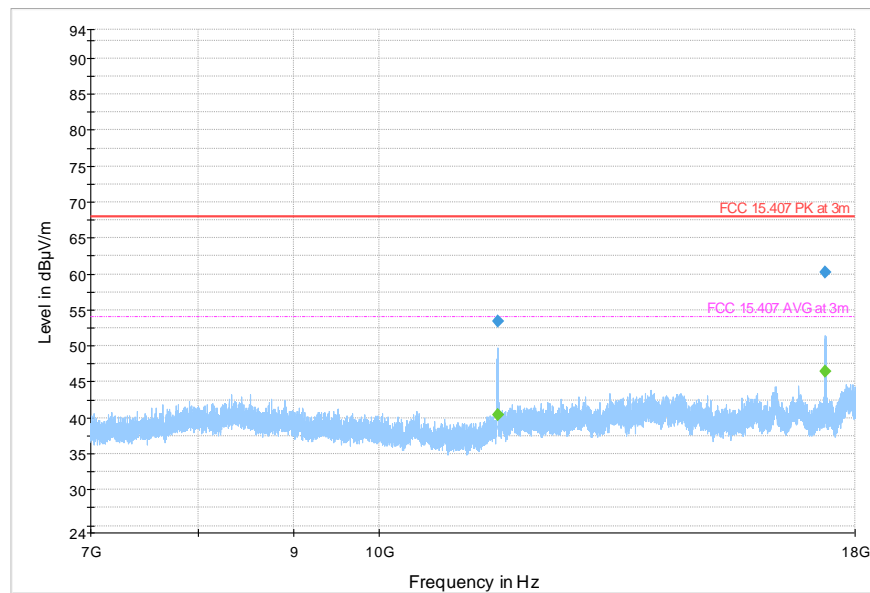
◆ Preview Result 1-PK+ Final_Result PK+ ◆ FCC 15.407 PK at 3m Final_Result CAV ◆ FCC 15.407 AVG at 3m

Plot # 9 Radiated Emissions: 7 - 18 GHz

Mode: 802.11 a + BDR

Mid (157)

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11572.33	---	40.39	53.98	13.59	500.0	1000.0	174.0	H	345.0	0.75
11572.33	53.37	---	68.00	14.63	500.0	1000.0	174.0	H	345.0	0.75
17355.77	---	46.43	53.98	7.55	500.0	1000.0	150.0	V	79.0	8.47
17355.77	60.28	---	68.00	7.72	500.0	1000.0	150.0	V	79.0	8.47



◆ Preview Result 1-PK+ Final_Result PK+ ◆ FCC 15.407 PK at 3m Final_Result CAV

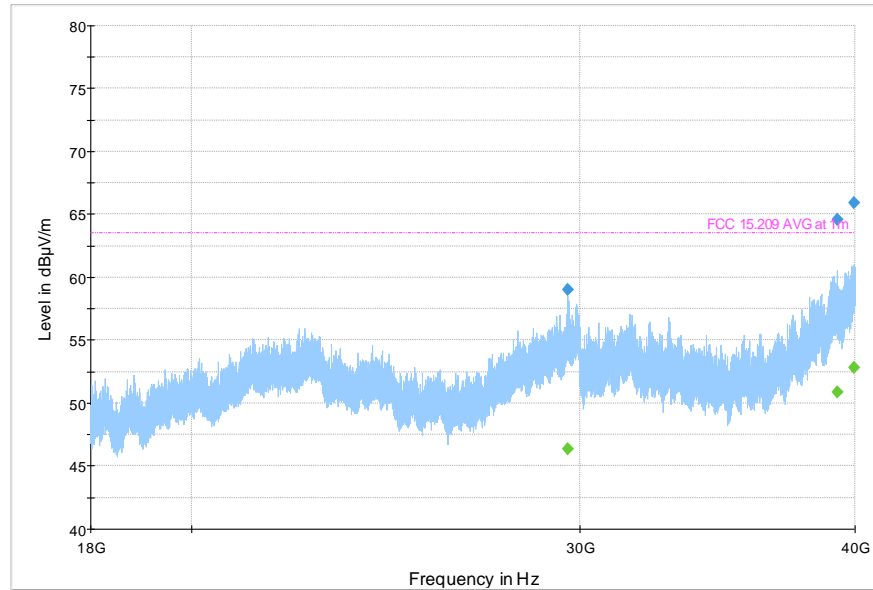
◆ FCC 15.407 AVG at 3m

Plot # 10 Radiated Emissions: 18 - 40 GHz

Mode: 802.11 a + BDR

Mid (157)

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
29613.00	---	46.39	63.50	17.11	500.0	1000.0	150.0	H	31.0	21.54
29613.00	59.06	---	83.50	24.44	500.0	1000.0	150.0	H	31.0	21.54
39269.38	---	50.92	63.50	12.58	500.0	1000.0	150.0	H	84.0	24.21
39269.38	64.59	---	83.50	18.91	500.0	1000.0	150.0	H	84.0	24.21
39970.63	---	52.80	63.50	10.70	500.0	1000.0	150.0	V	280.0	24.85
39970.63	65.91	---	83.50	17.59	500.0	1000.0	150.0	V	280.0	24.85



Preview Result 1-PK+ Final_Result PK+ FCC 15.209 PK at 1m Final_Result CAV FCC 15.209 AVG at 1m

9 Test setup photos

Setup photos are included in supporting file name: "EMC_LUCID_011_22001_Setup_Photos.pdf"

10 Test Equipment And Ancillaries Used For Testing

Equipment Type	Manufacturer	Model	Serial #	Calibration Cycle	Last Calibration Date
ACTIVE LOOP ANTENNA	ETS LINDGREN	6507	00161344	3 YEARS	10/30/2020
BILOG ANTENNA	ETS.LINDGREN	3142E	00166067	3 YEARS	10/21/2021
HORN ANTENNA	EMCO	3115	00035111	3 YEARS	09/30/2021
HORN ANTENNA	ETS.LINDGREN	3117	00215984	3 YEARS	01/31/2021
HORN ANTENNA	ETS.LINDGREN	3116	00070497	3 YEARS	11/23/2020
TEST RECEIVER	R&S	ESU40	100251	3 YEARS	09/13/2021
DIGITAL THERMOMETER	CONTROL COMPANY	36934-164	181230565	3 YEARS	10/20/2021
V-Network LISN	R&S	ESH3-Z6	836.5016.52	3 YEARS	08/10/2020

Note: Equipment used meets the measurement uncertainty requirements as required per applicable standards for 95% confidence levels.
Calibration due dates, unless defined

11 History

Date	Report Name	Changes to report	Report prepared by
2023-04-17	EMC_LUCID_011-22001_15_407	Initial Version	Art Thammanavarat
2023-06-02	EMC_LUCID_011_22001_15_407_Rev1	Section 6: Updated Uncertainty statement and added Decision Rule. Section 3.1 Updated Typo in Max. Peak Output Power Section 8.1.4: Removed Power Level.	Art Thammanavarat

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