







EMI TEST REPORT

Test Report No.:14570738S-B

Customer	AzureWave Technologies, Inc.
Description of EUT	IEEE 802.11 1X1 a/b/g/n Wireless LAN + Bluetooth 5.1 Combo 12 x 12 LGA Module
Model Number of EUT	AW-AM510
FCC ID	TLZ-AM510
Test Regulation	FCC Part 15 Subpart B
Test Result	Complied (Refer to SECTION 3)
Issue Date	March 17, 2023
Remarks	-

Representative test engineer	Approved by
	
Hiromasa Sato Engineer	Toyokazu Imamura Leader
 	
CERTIFICATE 1266.03	
<input type="checkbox"/> The testing in which "Non-accreditation" is displayed is outside the accreditation scopes in UL Japan, Inc. <input checked="" type="checkbox"/> There is no testing item of "Non-accreditation".	

Report Cover Page - Form-ULID-003532 (DCS:13-EM-F0429) Issue# 21.0

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- The opinions and the interpretations to the result of the description in this report are outside scopes where UL Japan, Inc. has been accredited.
- The information provided from the customer for this report is identified in Section 1.
- For test report(s) referred in this report, the latest version (including any revisions) is always referred.

REVISION HISTORY

Original Test Report No.: 14570738S-B

Revision	Test report No.	Date	Revised Contents
- (Original)	14570738S-B	March 17, 2023	-

Reference: Abbreviations (Including words undescribed in this report)

A2LA	The American Association for Laboratory Accreditation	IEEE	Institute of Electrical and Electronics Engineers
AAN	Asymmetric Artificial Network	IF	Intermediate Frequency
AC	Alternating Current	ILAC	International Laboratory Accreditation Conference
AM	Amplitude Modulation	ISED	Innovation, Science and Economic Development Canada
AMN	Artificial Mains Network	ISN	Impedance Stabilization Network
Amp, AMP	Amplifier	ISO	International Organization for Standardization
ANSI	American National Standards Institute	JAB	Japan Accreditation Board
Ant, ANT	Antenna	LAN	Local Area Network
AP	Access Point	LCL	Longitudinal Conversion Loss
ASK	Amplitude Shift Keying	LIMS	Laboratory Information Management System
Atten., ATT	Attenuator	LISN	Line Impedance Stabilization Network
AV	Average	MRA	Mutual Recognition Arrangement
BPSK	Binary Phase-Shift Keying	N/A	Not Applicable
BR	Bluetooth Basic Rate	NIST	National Institute of Standards and Technology
BT	Bluetooth	NS	No signal detect.
BT LE	Bluetooth Low Energy	NSA	Normalized Site Attenuation
BW	BandWidth	OBW	Occupied BandWidth
C.F	Correction Factor	OFDM	Orthogonal Frequency Division Multiplexing
Cal Int	Calibration Interval	PER	Packet Error Rate
CAV	CISPR AV	PK	Peak
CCK	Complementary Code Keying	P _{LT}	long-term flicker severity
CDN	Coupling Decoupling Network	POHC(A)	Partial Odd Harmonic Current
Ch., CH	Channel	Pol., Pola.	Polarization
CISPR	Comite International Special des Perturbations Radioelectriques	PR-ASK	Phase Reversal ASK
Corr.	Correction	P _{ST}	short-term flicker severity
CPE	Customer premise equipment	QAM	Quadrature Amplitude Modulation
CW	Continuous Wave	QP	Quasi-Peak
DBPSK	Differential BPSK	QPSK	Quadrature Phase Shift Keying
DC	Direct Current	r.m.s., RMS	Root Mean Square
DET	Detector	RBW	Resolution BandWidth
D-factor	Distance factor	RE	Radio Equipment
Dmax	maximum absolute voltage change during an observation period	REV	Reverse
DQPSK	Differential QPSK	RF	Radio Frequency
DSSS	Direct Sequence Spread Spectrum	RFID	Radio Frequency Identifier
DUT	Device Under Test	RNSS	Radio Navigation Satellite Service
EDR	Enhanced Data Rate	RSS	Radio Standards Specifications
e.i.r.p., EIRP	Equivalent Isotropically Radiated Power	Rx	Receiving
EM clamp	Electromagnetic clamp	SINAD	Ratio of (Signal + Noise + Distortion) to (Noise + Distortion)
EMC	ElectroMagnetic Compatibility	S/N	Signal to Noise ratio
EMI	ElectroMagnetic Interference	SA, S/A	Spectrum Analyzer
EMS	ElectroMagnetic Susceptibility	SABS	South African Bureau of Standards
EN	European Norm	SANS	South African National Standards
e.r.p., ERP	Effective Radiated Power	SG	Signal Generator
ETSI	European Telecommunications Standards Institute	SVSWR	Site-Voltage Standing Wave Ratio
EU	European Union	THC(A)	Total Harmonic Current
EUT	Equipment Under Test	THD(%)	Total Harmonic Distortion
Fac.	Factor	TR, T/R	Test Receiver
FCC	Federal Communications Commission	Tx	Transmitting
FHSS	Frequency Hopping Spread Spectrum	VBW	Video BandWidth
FM	Frequency Modulation	Vert.	Vertical
Freq.	Frequency	WLAN	Wireless LAN
FSK	Frequency Shift Keying	xDSL	Generic term for all types of DSL technology (DSL: Digital Subscriber Line)
Fund	Fundamental		
FWD	Forward		
GFSK	Gaussian Frequency-Shift Keying		
GNSS	Global Navigation Satellite System		
GPS	Global Positioning System		
Hori.	Horizontal		
ICES	Interference-Causing Equipment Standard		
I/O	Input/Output		
IEC	International Electrotechnical Commission		

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Section 1: Customer information

Company Name	AzureWave Technologies, Inc.
Address	8F., No.94, Baozhong Rd., Xindian Dist., New Taipei City, Taiwan 231
Contact Person	Chehsien Lin

The information provided from the customer is as follows:

- Customer, Description of EUT, Model Number of EUT on the cover page and other relevant pages
 - Operating/Test Mode(s) (Mode(s)) on all the relevant pages
 - Section 1: Customer information
 - Section 2: Equipment under test (EUT) other than the Receipt Date and Test Date
 - Section 4: Operation of EUT during testing
- * The laboratory is exempted from liability of any test results affected from the above information in Section 2 and 4.

Section 2 : Equipment under test (EUT)

2.1 Identification of EUT

Description	IEEE 802.11 1X1 a/b/g/n Wireless LAN + Bluetooth 5.1 Combo 12 x 12 LGA Module
Model Number	AW-AM510
Serial Number	Refer to 4.2.
Condition	Engineering prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Modification	No Modification by the test lab.
Receipt Date	December 26, 2022
Test Date	January 26 to February 4, 2023

2.2 Product description

General Specification

Rating	DC 3.3 V and DC 1.8 V
Clock frequency (ies) in the system	26 MHz

Radio Specification

Bluetooth (BR / EDR / Low Energy)

Equipment Type	Transceiver
Frequency of Operation	2402 MHz to 2480 MHz
Type of Modulation	BT: FHSS (GFSK, $\pi/4$ DQPSK, 8 DPSK) BT LE: GFSK

WLAN (IEEE802.11b/11g/11n-20)

Equipment Type	Transceiver
Frequency of Operation	2412 MHz to 2462 MHz
Type of Modulation	DSSS, OFDM

WLAN (IEEE802.11a/11n-20/11n-40)

Equipment Type	Transceiver	
Frequency of Operation	20 MHz Band:	5180 MHz to 5240 MHz 5260 MHz to 5320 MHz 5500 MHz to 5700 MHz 5745 MHz to 5825 MHz
	40 MHz Band:	5190 MHz to 5230 MHz 5270 MHz to 5310 MHz 5510 MHz to 5670 MHz 5755 MHz to 5795 MHz
Type of Modulation	OFDM	
Antenna Type	Type D (IW416-D): Dipole Antenna Type G (IW416-G): Dipole Antenna	
Antenna Gain	Type D (IW416-D): 1.41 dBi max (include 100 mm antenna cable) Type G (IW416-G): 1.13 dBi max (include 100 mm antenna cable)	

* 2.4 GHz band (Bluetooth, WLAN): Not used.

* 5 GHz band: Receiving only.

*Following channels are not used.

- 20 MHz Bandwidth (5600 MHz - 5640 MHz)

- 40 MHz Bandwidth (5590 MHz - 5630 MHz)

Section 3 : Test specification, procedures and results

3.1 Test specification

Test Specification	FCC Part 15 Subpart B The latest version on the first day of the testing period
Title	FCC 47CFR Part15 Radio Frequency Device Subpart B Unintentional Radiators

3.2 Procedures & results

Item	Test procedure	Limits	Worst margin	Result	Remarks
Conducted emission	ANSI C 63.4:2014 /C 63.4a:2017 7. AC powerline conducted emission measurements IEEE 187:2003	FCC 15.107 (a)	11.6 dB Freq.: 1.31152 MHz Detector: Average Phase: N Mode: Rx 11n-20 5180 MHz	Complied a)	-
Radiated emission	ANSI C 63.4:2014 /C 63.4a:2017 8. Radiated emission measurements IEEE 187:2003	FCC 15.109 (a)	12.9 dB Freq.: 2999.994 MHz Detector: Average Polarization: Horizontal Mode: Rx 11n-20 5240 MHz	Complied b)	*1)
Antenna power conduction for receiver	ANSI C 63.4:2014	FCC 15.111 (a)	-	N/A	*2)

Note: UL Japan's EMI work procedure: Work Instructions-ULID-003591

- a) Refer to Appendix 1 (data of Conducted emission)
b) Refer to Appendix 1 (data of Radiated emission)

*1) Measurements have been performed up to 30 GHz since the highest frequency of internal source of the EUT is 5825 MHz.

*2) The test is not applicable since the EUT does not operate in the frequency range 30 MHz to 960 MHz and the antenna was connected and tested in the Radiated emission test.

3.3 Deviation from standard

Item	Normative references of FCC Subpart A Section 15.31	Actually applied
Conducted emission Radiated emission	ANSI C 63.4:2014	ANSI C 63.4:2014/C 63.4a:2017

Other than above, no addition, exclusion nor deviation has been made from the standard.

3.4 Uncertainty

Measurement uncertainty is not taken into account when stating conformity with a specified requirement.
Note: When margins obtained from test results are less than the measurement uncertainty, the test results may exceed the limit.

The following uncertainties have been calculated to provide a confidence level of 95 % using a coverage factor $k = 2$.

Item	Frequency range	Calculated Uncertainty (\pm)
Conducted emission (AC Mains) AMN/LISN	150 kHz to 30 MHz	3.1 dB
Radiated emission (Measurement distance: 3 m)	30 MHz to 200 MHz	4.8 dB
	200 MHz to 1 GHz	6.1 dB
	1 GHz to 6 GHz	4.7 dB
	6 GHz to 10 GHz	5.3 dB
Radiated emission (Measurement distance: 1 m)	10 GHz to 18 GHz	5.6 dB
	18 GHz to 40 GHz	5.8 dB

3.5 Test location

UL Japan, Inc. Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 Japan

Telephone number : +81-463-50-6400

A2LA Certificate Number : 1266.03

(FCC Test firm registration number: 626366, ISED lab company number: 2973D / CAB identifier: JP0001)

Test room	Width x Depth x Height (m)	Test room	Width x Depth x Height (m)
No.1 Semi-anechoic chamber	20.6 x 11.3 x 7.65 Maximum measurement distance: 10 m	No.1 Shielded room	6.8 x 4.1 x 2.7
No.2 Semi-anechoic chamber	20.6 x 11.3 x 7.65 Maximum measurement distance: 10 m	No.2 Shielded room	6.8 x 4.1 x 2.7
No.3 Semi-anechoic chamber	12.7 x 7.7 x 5.35 Maximum measurement distance: 5 m	No.3 Shielded room	6.3 x 4.7 x 2.7
No.4 Semi-anechoic chamber	8.1 x 5.1 x 3.55	No.4 Shielded room	4.4 x 4.7 x 2.7
		No.5 Shielded room	7.8 x 6.4 x 2.7
		No.6 Shielded room	7.8 x 6.4 x 2.7
		No.7 Shielded room	2.76 x 3.76 x 2.4
		No.8 Shielded room	3.45 x 5.5 x 2.4
		No.1 Measurement room	2.55 x 4.1 x 2.5

3.6 Test setup, test data & test instruments

Refer to Appendix 1 to 3.

Section 4 : Operation of EUT during testing

4.1 Operating modes

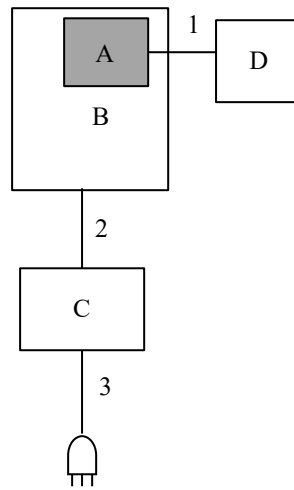
The EUT exercise program used during testing was designed to exercise the various system components in a manner similar to typical use.

Test Item	Operating mode(s)
Conducted Emission,	Rx 11n-20 5180 MHz
Radiated Spurious Emission (Below 1 GHz)	Rx 11n-20 5180 MHz
	Rx 11n-20 5500 MHz
	Rx 11n-20 5745 MHz
	Rx 11n-40 5190 MHz
	Rx 11n-40 5510 MHz
	Rx 11n-40 5755 MHz
Radiated Spurious Emission (Above 1 GHz)	Rx 11n-20 5180 MHz
	Rx 11n-20 5240 MHz
	Rx 11n-20 5320 MHz
	Rx 11n-20 5500 MHz
	Rx 11n-20 5580 MHz
	Rx 11n-20 5700 MHz
	Rx 11n-20 5745 MHz
	Rx 11n-20 5875 MHz
	Rx 11n-20 5825 MHz
	Rx 11n-40 5190 MHz
	Rx 11n-40 5270 MHz
	Rx 11n-40 5230 MHz
	Rx 11n-40 5310 MHz
	Rx 11n-40 5510 MHz
	Rx 11n-40 5550 MHz
	Rx 11n-40 5670 MHz
	Rx 11n-40 5755 MHz
	Rx 11n-40 5795 MHz

Software	IW416 RF Test Version 1.0
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Justification	The system was configured in typical fashion (as a customer would normally use it) for testing.
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4.2 Configuration and peripherals



AC 120 V / 60 Hz or AC 240 V / 60 Hz

* Cabling and setup(s) were taken into consideration and test data was taken under worst case conditions. As a result of comparing AC 120 V and AC 240 V at pre-check, conducted emission test was performed with the worst voltage as representative.

Description of EUT and Support equipment

No.	Item	Model number	Serial number	Manufacturer	Remarks
A	IEEE 802.11 1X1 a/b/g/n Wireless LAN + Bluetooth 5.1 Combo 12 x 12 LGA Module	AW-AM510	E8:FB:1C:CD:BF:FB	AzureWave	EUT
B	AE-C EVT	AE-C EVT	No.013	Sony	-
C	AC Adapter	AC-M1215WW	M2220096354	Sony	-
D	Antenna	IW416-D	001	Sony	EUT

List of cables used

No.	Cable	Length (m)	Shield-Cable	Shield-Connector	Remarks
1	Signal	0.1	Unshielded	Unshielded	-
2	DC	0.6	Unshielded	Unshielded	-
3	AC	1.0	Unshielded	Unshielded	-

Section 5 : Conducted emission

5.1 Test conditions

Frequency range	0.15 MHz to 30 MHz
EUT position	Table top

5.2 Test configuration

The EUT was placed on a platform of nominal size, 1.0 m by 1.5 m, raised 0.8 m above the conducting ground plane. The rear of tabletop was located 40 cm to the vertical conducting plane. The rear of EUT, including peripherals was aligned and was flushed with rear of tabletop. All other surfaces of tabletop were at least 80 cm from any other grounded conducting surface. The EUT was located 0.8 m from Line Impedance Stabilization Network (LISN). Each EUT current-carrying power lead, except the ground (safety) lead, was individually connected through a LISN to the input power source. Photographs of the set up are shown in Appendix 3.

5.3 Test procedure

The emission had been measured with the EUT in the shielded room. An overview sweep with peak detection has been performed. The measurements had been performed with a quasi-peak detector and if required, with a CISPR average detector (CAV).

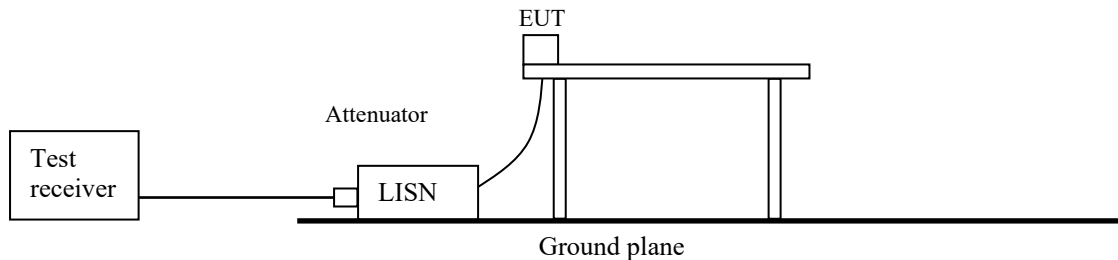
The conducted emission measurements were made with the following detector function.

Detector Type	QP / CAV
IF Bandwidth	9 kHz / 9 kHz

5.4 Results

Summary of the test results : Pass

Figure 1. Test Setup



Section 6 : Radiated emission

6.1 Test conditions

Frequency range	30 MHz to 30 GHz
EUT position	Table top

6.2 Test configuration

The EUT was placed on a platform of nominal size, 1.0 m by 1.5 m, raised 0.8 m above the conducting ground plane. The table is made of expanded polystyrol and expanded polypropylene and the table top is covered with polycarbonate. That has very low permittivity. The rear of EUT was aligned and flushed with rear of tabletop. Photographs of the set up are shown in Appendix 3

6.3 Test procedure

The Radiated Electric Field Strength intensity has been measured in a Semi-Anechoic Chamber with a ground plane at a distance of 3 m*.

* Measuring distance

The boundary of the EUT is defined by an imaginary circular periphery.

The measuring antenna height was varied between 1 m and 4 m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

The measurements were performed for both vertical and horizontal antenna polarization.

Test antenna was aimed at the emission source for receiving the maximum signal and always kept. (above 1 GHz)

The radiated emission measurements were made with the following detector function.

	30 MHz to 1000 MHz (Test receiver)	1 GHz to 30 GHz (Spectrum analyzer)	
Detector Type	QP	AV *1)	PK
IF Bandwidth	120 kHz	RBW 1 MHz/ VBW 10 Hz	RBW 1 MHz/ VBW 3 MHz

*1) When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

The noise levels were confirmed at each position of X, Y and Z axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

6.4 Results

Summary of the test results : Pass

Figure 2. Antenna angle

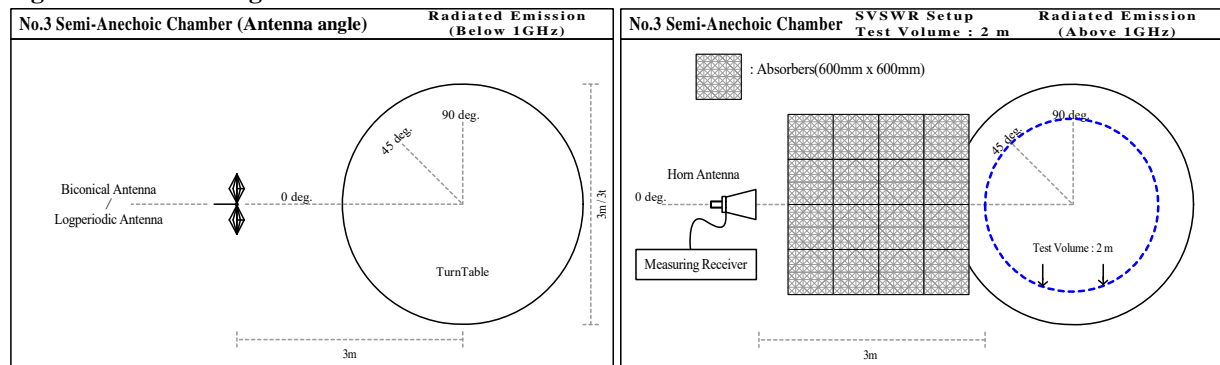
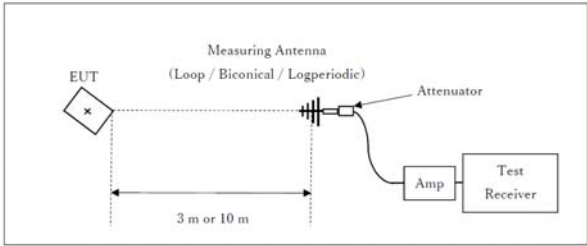


Figure 3. Test Setup

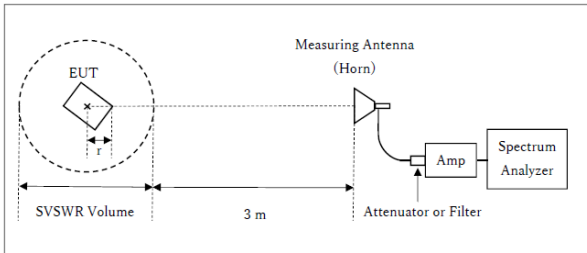
Below 1 GHz



× : Center of turn table

Test Distance: 3 m

1 GHz - 10 GHz

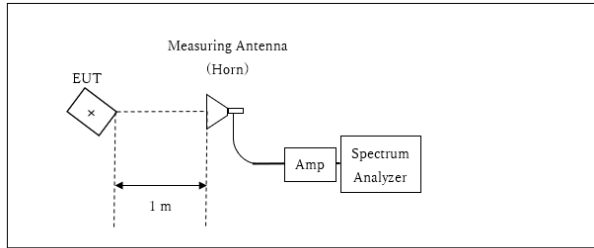


r : Radius of an outer periphery of EUT
 × : Center of turn table

Distance Factor: $20 \times \log(3.89 \text{ m}^*/3.0 \text{ m}) = 2.26 \text{ dB}$
 * Test Distance: $(3 + \text{SVSWR Volume} / 2) - r = 3.89 \text{ m}$

SVSWR Volume: 2 m
 (SVSWR Volume has been calibrated based on CISPR 16-1-4.)
 $r = 0.11 \text{ m}$

10 GHz - 30 GHz



× : Center of turn table

Distance Factor: $20 \times \log(1.0 \text{ m}^* / 3.0 \text{ m}) = -9.54 \text{ dB}$
 *Test Distance: 1 m

Distance Factor is based on FCC Subpart A Section 15.31 (f).

DATA OF CONDUCTED EMISSION TEST

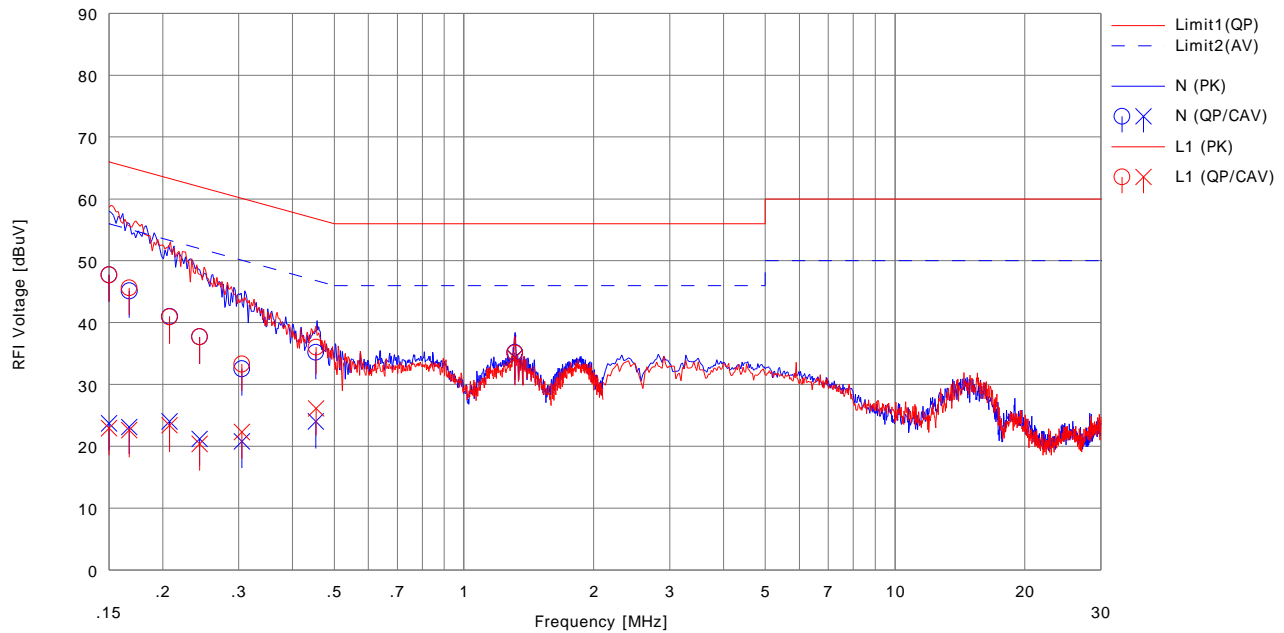
UL Japan, Inc. Shonan EMC Lab. No.3 Shielded Room
Date : 2023/01/27

Company : AzureWave Technologies, Inc.
Kind of EUT : Refer to Section 4.2
Model No. : AW-AM510
Serial No. : Refer to Section 4.2
Remarks : -

Mode : Rx 11n-20 5180 MHz
Order No. : 14570738
Power : AC 240 V / 60 Hz
Temp./Humi. : 23 deg.C / 30 %RH

Limit : FCC_Part 15 Subpart B(15.107)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		C.Fac [dB]	Results		Limit		Margin		Phase	Comment
		<QP>	<CAV>		<QP>	<CAV>	<QP>	<AV>	<QP>	<AV>		
		[dBuV]	[dBuV]		[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
1	0.15000	35.30	11.30	12.41	47.71	23.71	66.00	56.00	18.2	32.2	N	
2	0.16740	32.70	10.70	12.42	45.12	23.12	65.09	55.09	19.9	31.9	N	
3	0.20752	28.60	11.60	12.41	41.01	24.01	63.30	53.30	22.2	29.2	N	
4	0.24345	25.30	8.80	12.40	37.70	21.20	61.98	51.98	24.2	30.7	N	
5	0.30511	20.10	8.40	12.42	32.52	20.82	60.10	50.10	27.5	29.2	N	
6	0.45330	22.80	11.60	12.41	35.21	24.01	56.81	46.81	21.6	22.8	N	
7	1.31152	22.70	21.90	12.47	35.17	34.37	56.00	46.00	20.8	11.6	N	
8	0.15000	35.30	10.50	12.43	47.73	22.93	66.00	56.00	18.2	33.0	L1	
9	0.16728	33.20	10.20	12.42	45.62	22.62	65.09	55.09	19.4	32.4	L1	
10	0.20732	28.50	11.00	12.42	40.92	23.42	63.31	53.31	22.3	29.8	L1	
11	0.24358	25.30	8.00	12.41	37.71	20.41	61.97	51.97	24.2	31.5	L1	
12	0.30525	20.90	9.90	12.42	33.32	22.32	60.10	50.10	26.7	27.7	L1	
13	0.45375	23.60	13.70	12.43	36.03	26.13	56.81	46.81	20.7	20.6	L1	
14	1.31153	22.60	21.80	12.48	35.08	34.28	56.00	46.00	20.9	11.7	L1	

Calculation: Result [dBuV] = Reading [dBuV] + C.Fac (LISN (AMN) + Cable + ATT) [dB]
LISN (AMN) = SLS-05

DATA OF RADIATED EMISSION TEST

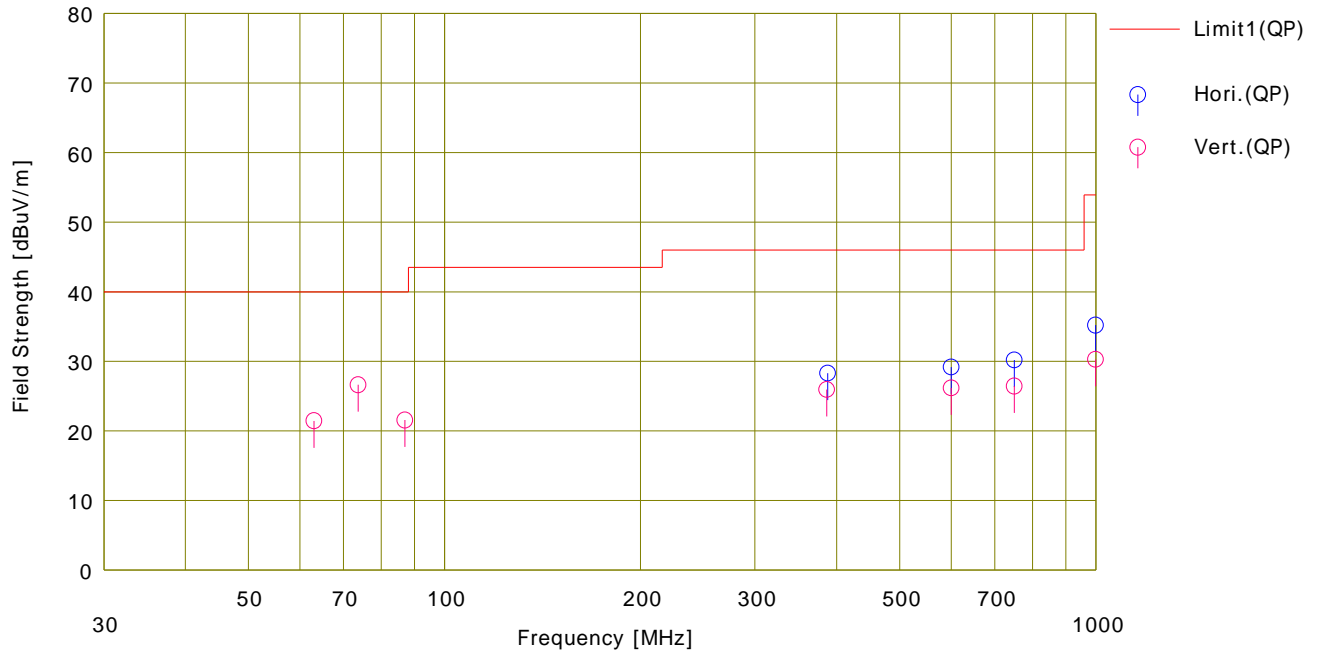
UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/01/31

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : EUT Axis:Z / Antenna Axis:X

Mode : Rx 11n-20 5180 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 22 deg.C / 29 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	S.Fac [dB]	Result	Limit	Margin	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<QP> [dBuV]					<QP> [dBuV/m]	<QP> [dBuV/m]	<QP> [dB]					
1	387.652	35.82	15.35	9.03	31.91	0.00	28.29	46.00	17.7	Hori.	100	189	LP	
2	599.999	31.84	19.33	9.91	31.91	0.00	29.17	46.00	16.8	Hori.	147	358	LP	
3	750.001	31.28	20.15	10.46	31.69	0.00	30.20	46.00	15.8	Hori.	128	224	LP	
4	999.995	31.52	22.46	11.29	30.08	0.00	35.19	53.90	18.7	Hori.	145	359	LP	
5	63.068	39.44	7.64	6.95	32.14	-0.44	21.45	40.00	18.5	Vert.	100	78	BC	
6	73.727	45.28	6.38	7.06	32.14	0.04	26.62	40.00	13.3	Vert.	100	169	BC	
7	86.930	38.44	7.64	7.19	32.13	0.40	21.54	40.00	18.4	Vert.	154	6	BC	
8	386.221	33.52	15.32	9.02	31.91	0.00	25.95	46.00	20.0	Vert.	158	87	LP	
9	599.999	28.85	19.33	9.91	31.91	0.00	26.18	46.00	19.8	Vert.	100	2	LP	
10	750.000	27.51	20.15	10.46	31.69	0.00	26.43	46.00	19.5	Vert.	158	230	LP	
11	999.951	26.60	22.46	11.29	30.08	0.00	30.27	53.90	23.6	Vert.	100	41	LP	

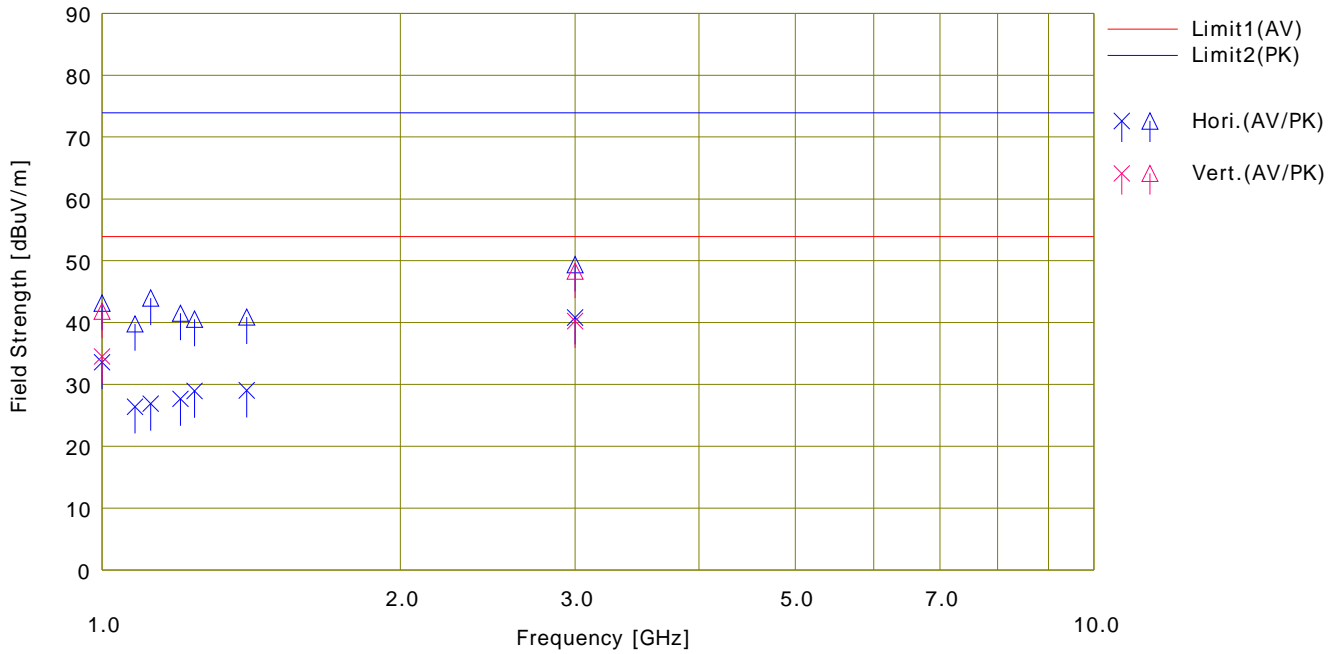
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/02

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-20 5180 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 24 deg.C / 29 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.031	45.38	54.93	24.38	2.69	41.12	2.26	33.59	43.14	53.90	73.90	20.3	30.7	Hori.	312	33	31SH3	
2	1079.990	37.83	51.24	24.66	2.80	41.13	2.26	26.42	39.83	53.90	73.90	27.4	34.0	Hori.	309	357	31SH3	
3	1119.988	38.10	55.18	24.81	2.86	41.13	2.26	26.90	43.98	53.90	73.90	27.0	29.9	Hori.	286	268	31SH3	
4	1199.988	38.46	52.29	25.15	2.95	41.14	2.26	27.68	41.51	53.90	73.90	26.2	32.3	Hori.	311	357	31SH3	
5	1239.988	39.46	51.07	25.38	3.00	41.15	2.26	28.95	40.56	53.90	73.90	24.9	33.3	Hori.	233	8	31SH3	
6	1399.998	39.11	50.95	25.62	3.22	41.17	2.26	29.04	40.88	53.90	73.90	24.8	33.0	Hori.	284	3	31SH3	
7	2999.992	46.73	55.28	28.83	4.90	41.90	2.26	40.82	49.37	53.90	73.90	13.0	24.5	Hori.	167	112	31SH3	
8	1000.131	46.33	53.63	24.38	2.69	41.12	2.26	34.54	41.84	53.90	73.90	19.3	32.0	Vert.	100	359	31SH3	
9	2999.992	46.17	54.22	28.83	4.90	41.90	2.26	40.26	48.31	53.90	73.90	13.6	25.5	Vert.	259	183	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

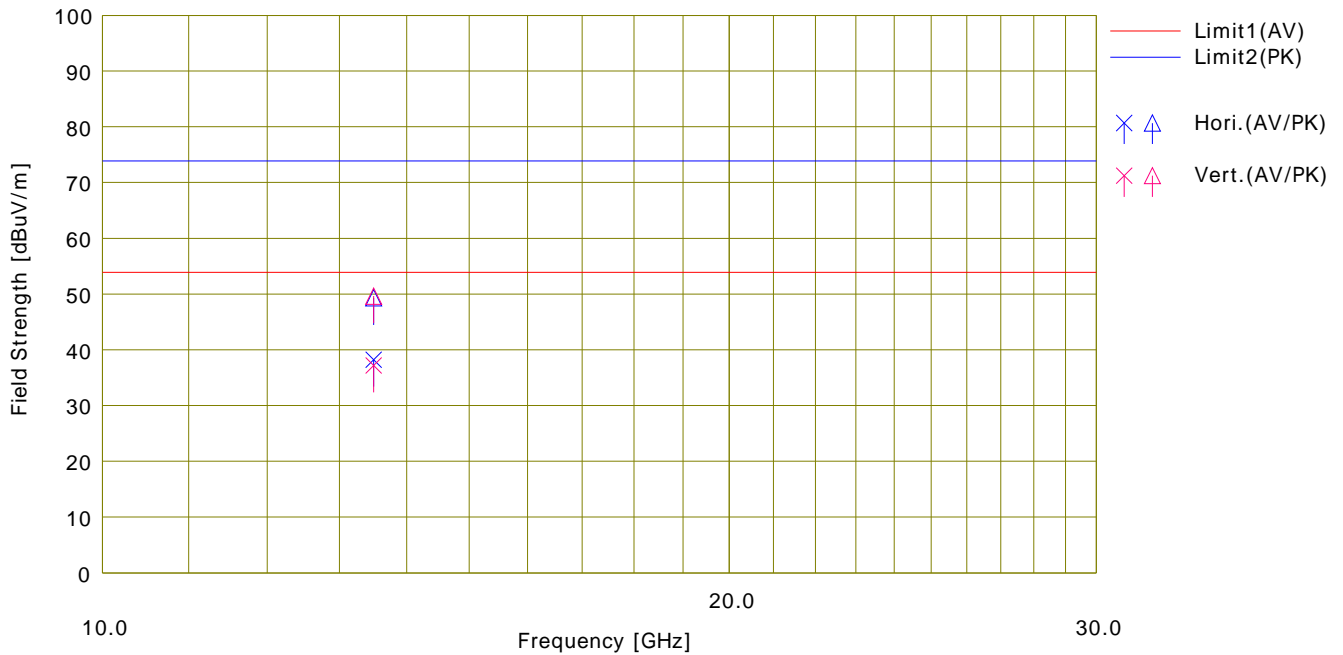
Date : 2023/01/26

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H:X,V:X

Mode : Rx 11n-20 5180 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 21 deg.C / 23 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]					
1	13500.230	40.22	51.33	38.89	10.56	41.91	-9.54	38.22	49.33	53.90	73.90	15.6	24.5	Hori.	103	357	19SH0	
2	13500.110	39.18	51.61	38.89	10.56	41.91	-9.54	37.18	49.61	53.90	73.90	16.7	24.2	Vert.	117	1	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

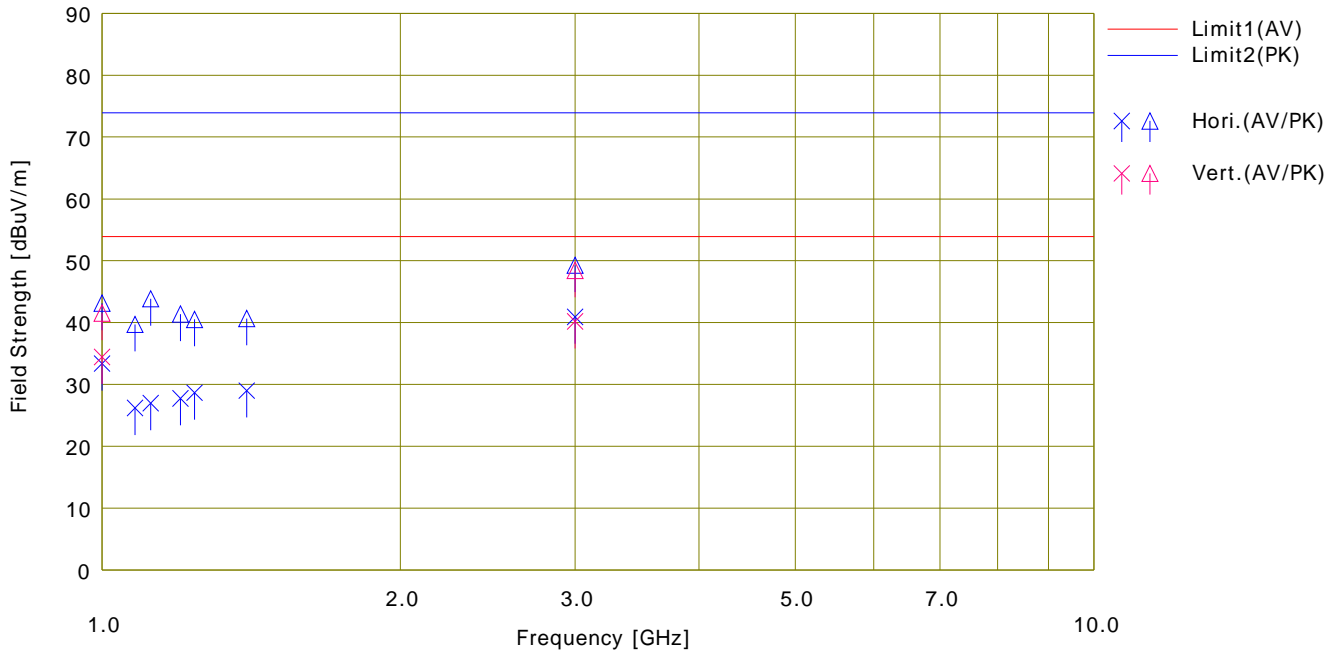
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/02

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-20 5240 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 24 deg.C / 29 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.035	45.16	54.95	24.38	2.69	41.12	2.26	33.37	43.16	53.90	73.90	20.5	30.7	Hori.	313	27	31SH3	
2	1079.992	37.61	51.13	24.66	2.80	41.13	2.26	26.20	39.72	53.90	73.90	27.7	34.1	Hori.	315	358	31SH3	
3	1119.989	38.17	55.04	24.81	2.86	41.13	2.26	26.97	43.84	53.90	73.90	26.9	30.0	Hori.	288	259	31SH3	
4	1199.987	38.55	52.16	25.15	2.95	41.14	2.26	27.77	41.38	53.90	73.90	26.1	32.5	Hori.	308	359	31SH3	
5	1239.989	39.17	51.02	25.38	3.00	41.15	2.26	28.66	40.51	53.90	73.90	25.2	33.3	Hori.	236	2	31SH3	
6	1399.999	39.10	50.73	25.62	3.22	41.17	2.26	29.03	40.66	53.90	73.90	24.8	33.2	Hori.	292	358	31SH3	
7	2999.994	46.83	55.20	28.83	4.90	41.90	2.26	40.92	49.29	53.90	73.90	12.9	24.6	Hori.	163	105	31SH3	
8	1000.154	46.23	53.33	24.38	2.69	41.12	2.26	34.44	41.54	53.90	73.90	19.4	32.3	Vert.	100	358	31SH3	
9	2999.992	46.10	54.35	28.83	4.90	41.90	2.26	40.19	48.44	53.90	73.90	13.7	25.4	Vert.	252	188	31SH3	

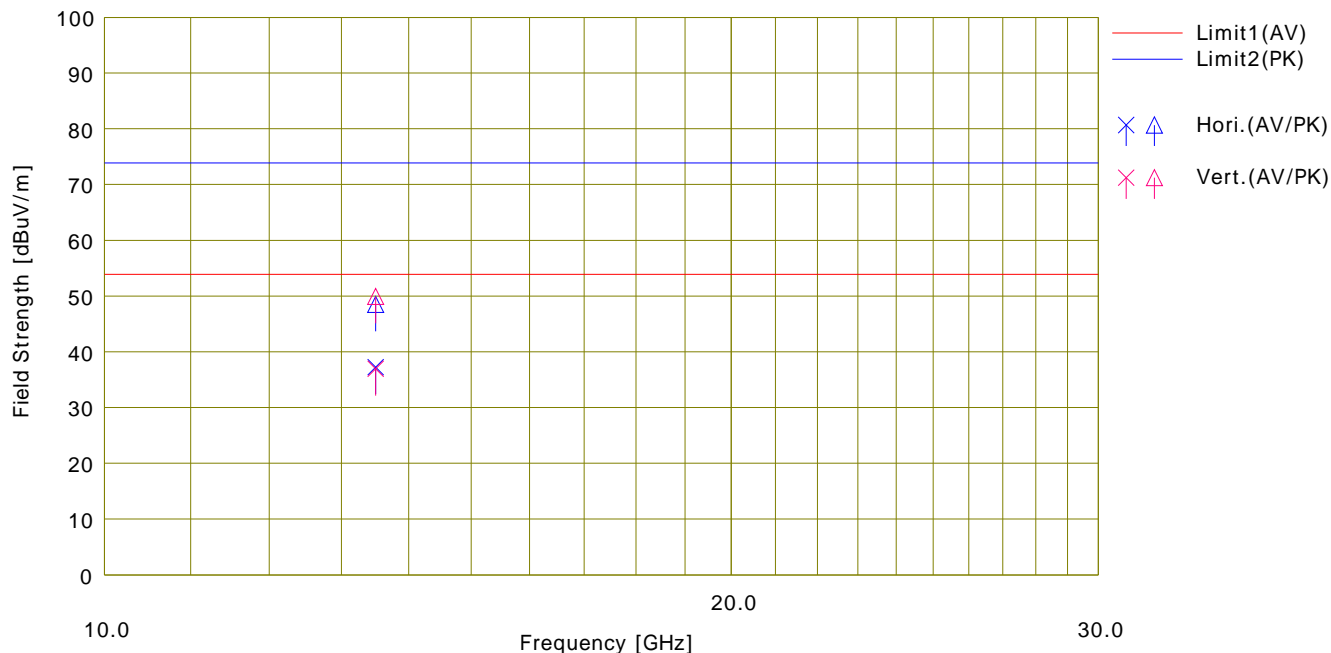
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/01/26

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-20 5240 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 21 deg.C / 23 %RH
Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(worst ant.axis):H;X,V:X	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	13500.000	39.24	50.51	38.89	10.56	41.91	-9.54	37.24	48.51	53.90	73.90	16.6	25.3	Hori.	108	359	19SH0	
2	13499.930	38.94	51.92	38.89	10.56	41.91	-9.54	36.94	49.92	53.90	73.90	16.9	23.9	Vert.	101	358	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

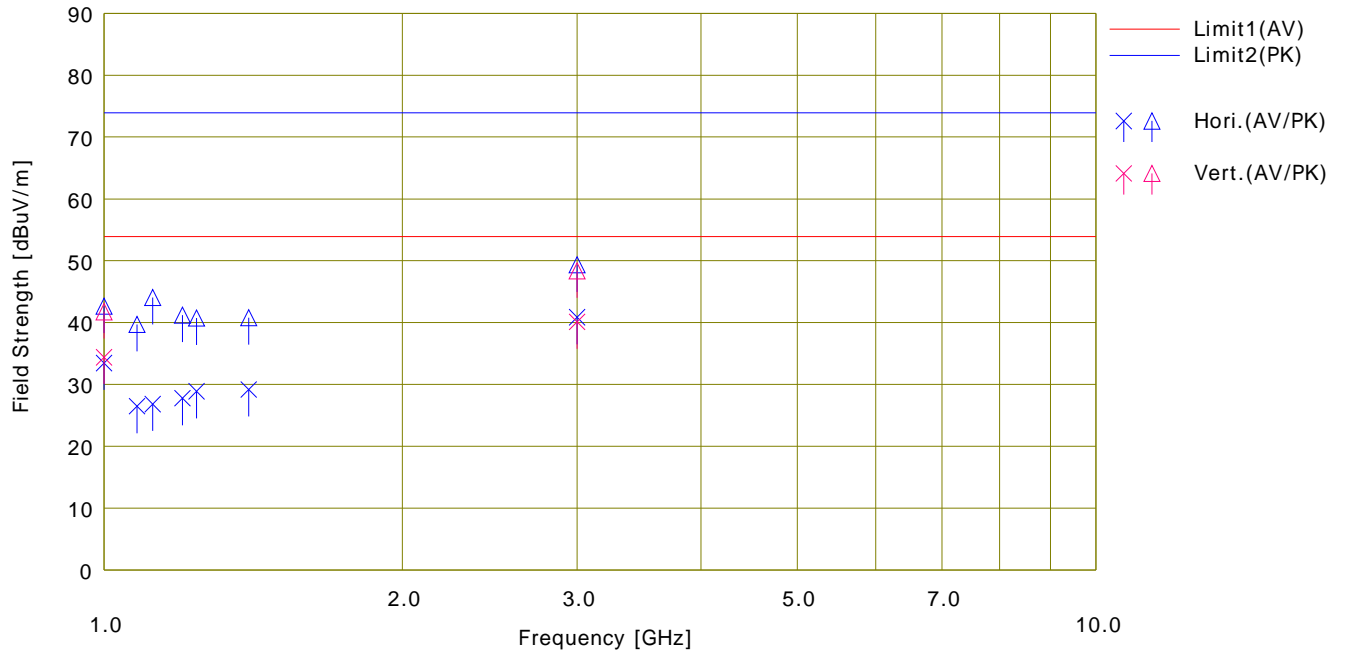
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/02

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-20 5320 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 24 deg.C / 29 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.026	45.26	54.45	24.38	2.69	41.12	2.26	33.47	42.66	53.90	73.90	20.4	31.2	Hori.	311	26	31SH3	
2	1079.991	37.89	51.13	24.66	2.80	41.13	2.26	26.48	39.72	53.90	73.90	27.4	34.1	Hori.	304	359	31SH3	
3	1119.988	38.03	55.27	24.81	2.86	41.13	2.26	26.83	44.07	53.90	73.90	27.0	29.8	Hori.	289	270	31SH3	
4	1199.989	38.57	52.00	25.15	2.95	41.14	2.26	27.79	41.22	53.90	73.90	26.1	32.6	Hori.	310	355	31SH3	
5	1239.987	39.41	51.25	25.38	3.00	41.15	2.26	28.90	40.74	53.90	73.90	25.0	33.1	Hori.	238	13	31SH3	
6	1399.997	39.27	50.86	25.62	3.22	41.17	2.26	29.20	40.79	53.90	73.90	24.7	33.1	Hori.	275	6	31SH3	
7	2999.995	46.77	55.27	28.83	4.90	41.90	2.26	40.86	49.36	53.90	73.90	13.0	24.5	Hori.	173	119	31SH3	
8	1000.141	46.18	53.55	24.38	2.69	41.12	2.26	34.39	41.76	53.90	73.90	19.5	32.1	Vert.	100	359	31SH3	
9	2999.993	46.04	54.27	28.83	4.90	41.90	2.26	40.13	48.36	53.90	73.90	13.7	25.5	Vert.	263	180	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

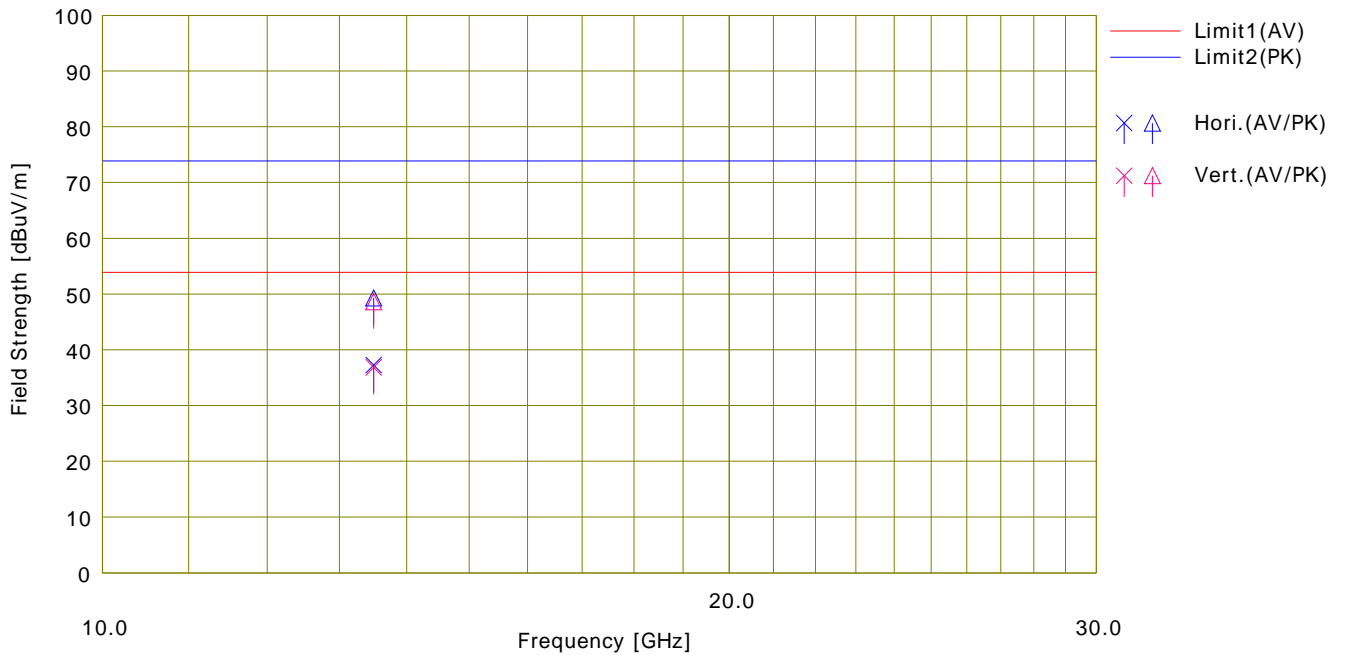
Date : 2023/01/26

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H:X,V:X

Mode : Rx 11n-20 5320 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 21 deg.C / 23 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV> [dBuV]	<PK> [dBuV]					<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dB]	<PK> [dB]					
		1	13499.990					39.29	51.31	38.89	10.56	41.91	-9.54					
2	13499.920	38.88	50.65	38.89	10.56	41.91	-9.54	36.88	48.65	53.90	73.90	17.0	25.2	Vert.	100	353	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

DATA OF RADIATED EMISSION TEST

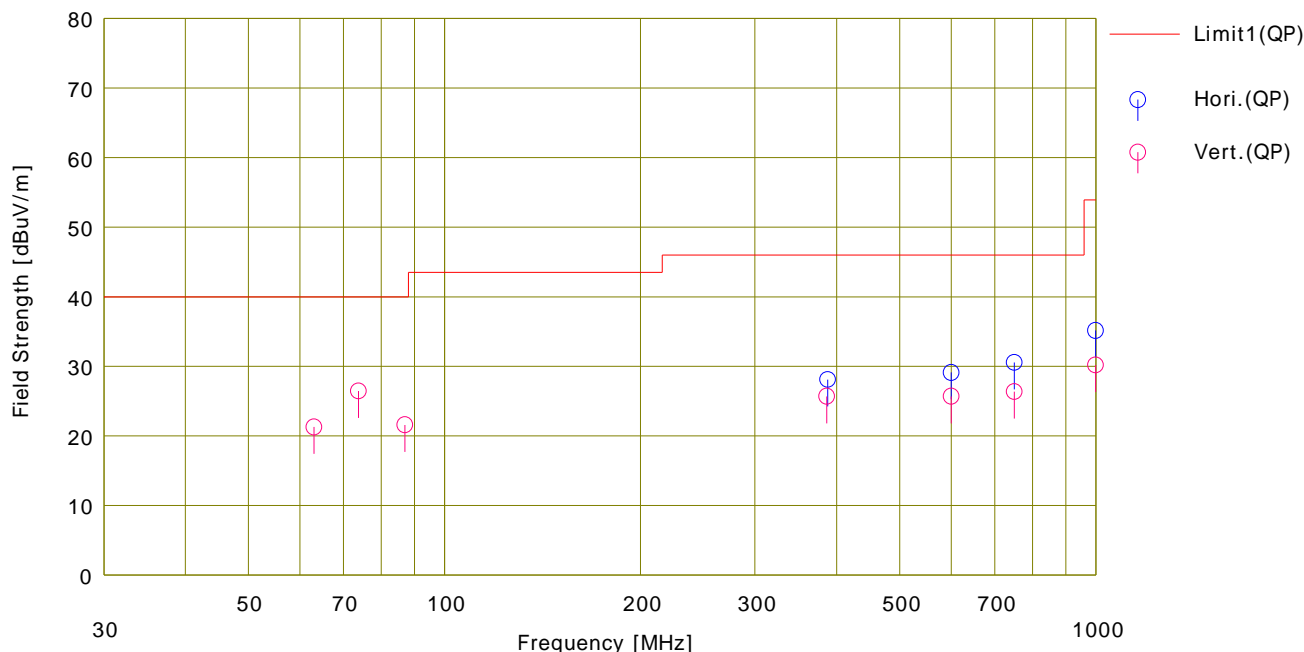
UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/01/31

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : EUT Axis:Z / Antenna Axis:X

Mode : Rx 11n-20 5500 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 22 deg.C / 29 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	S.Fac [dB]	Result	Limit	Margin	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<QP> [dBuV]					<QP> [dBuV/m]	<QP> [dBuV/m]	<QP> [dB]					
1	387.677	35.63	15.35	9.03	31.91	0.00	28.10	46.00	17.9	Hori.	100	192	LP	
2	599.998	31.77	19.33	9.91	31.91	0.00	29.10	46.00	16.9	Hori.	146	357	LP	
3	750.000	31.63	20.15	10.46	31.69	0.00	30.55	46.00	15.4	Hori.	133	228	LP	
4	999.992	31.48	22.46	11.29	30.08	0.00	35.15	53.90	18.7	Hori.	146	359	LP	
5	63.051	39.26	7.64	6.95	32.14	-0.44	21.27	40.00	18.7	Vert.	100	83	BC	
6	73.788	45.10	6.38	7.06	32.14	0.05	26.45	40.00	13.5	Vert.	100	166	BC	
7	86.962	38.48	7.64	7.19	32.13	0.40	21.58	40.00	18.4	Vert.	155	2	BC	
8	386.261	33.26	15.32	9.02	31.91	0.00	25.69	46.00	20.3	Vert.	152	75	LP	
9	599.999	28.36	19.33	9.91	31.91	0.00	25.69	46.00	20.3	Vert.	100	358	LP	
10	750.001	27.44	20.15	10.46	31.69	0.00	26.36	46.00	19.6	Vert.	154	246	LP	
11	999.979	26.52	22.46	11.29	30.08	0.00	30.19	53.90	23.7	Vert.	100	47	LP	

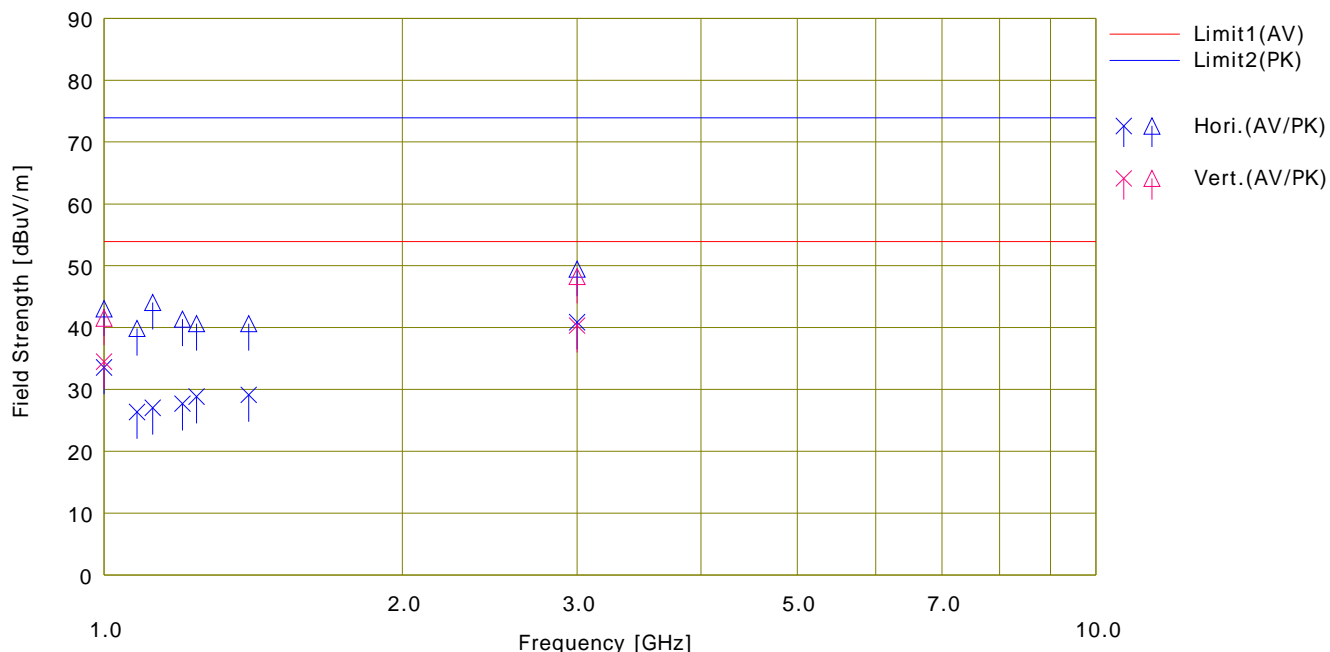
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/02

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-20 5500 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 24 deg.C / 29 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.057	45.36	54.84	24.38	2.69	41.12	2.26	33.57	43.05	53.90	73.90	20.3	30.8	Hori.	313	31	31SH3	
2	1079.991	37.77	51.28	24.66	2.80	41.13	2.26	26.36	39.87	53.90	73.90	27.5	34.0	Hori.	303	358	31SH3	
3	1119.988	38.25	55.27	24.81	2.86	41.13	2.26	27.05	44.07	53.90	73.90	26.8	29.8	Hori.	281	264	31SH3	
4	1199.988	38.52	52.15	25.15	2.95	41.14	2.26	27.74	41.37	53.90	73.90	26.1	32.5	Hori.	314	354	31SH3	
5	1239.987	39.36	51.13	25.38	3.00	41.15	2.26	28.85	40.62	53.90	73.90	25.0	33.2	Hori.	241	12	31SH3	
6	1399.997	39.21	50.71	25.62	3.22	41.17	2.26	29.14	40.64	53.90	73.90	24.7	33.2	Hori.	273	4	31SH3	
7	2999.995	46.77	55.36	28.83	4.90	41.90	2.26	40.86	49.45	53.90	73.90	13.0	24.4	Hori.	165	113	31SH3	
8	1000.142	46.28	53.33	24.38	2.69	41.12	2.26	34.49	41.54	53.90	73.90	19.4	32.3	Vert.	100	357	31SH3	
9	2999.993	46.26	54.18	28.83	4.90	41.90	2.26	40.35	48.27	53.90	73.90	13.5	25.6	Vert.	244	184	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

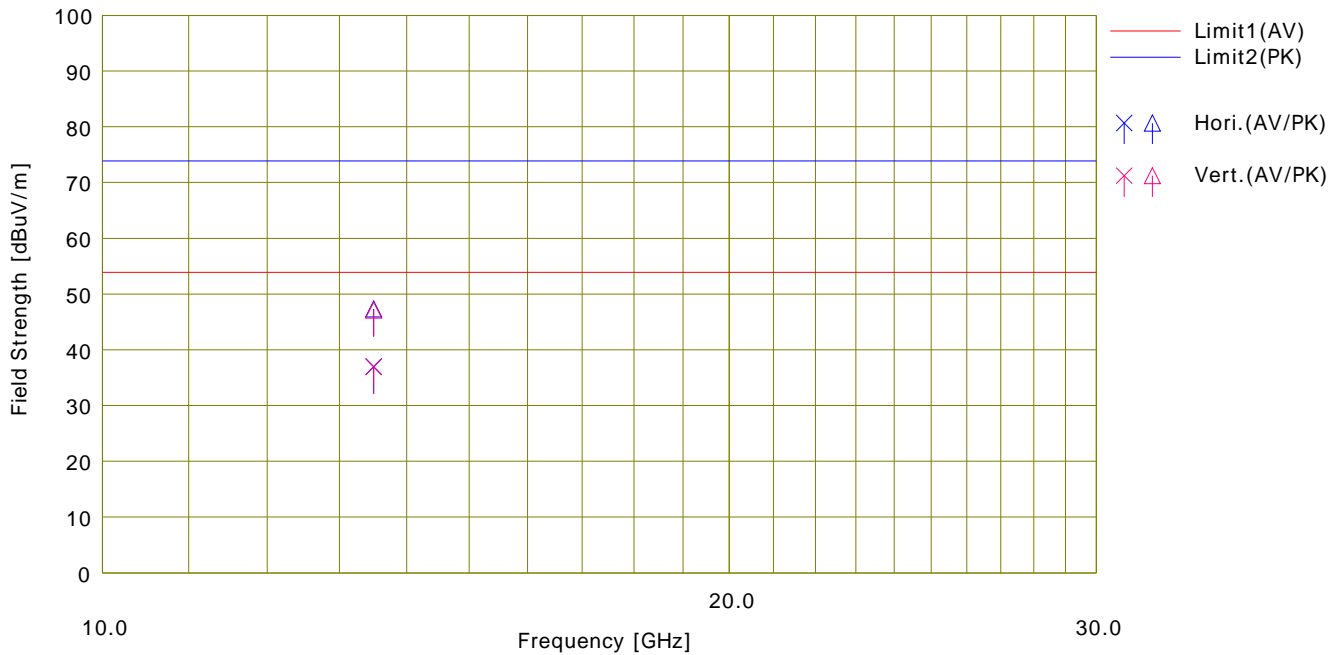
Date : 2023/01/26

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H:X,V:X

Mode : Rx 11n-20 5500 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 21 deg.C / 23 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV> [dBuV]	<PK> [dBuV]					<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dB]	<PK> [dB]					
		1	13499.870					38.97	49.35	38.89	10.56	41.91	-9.54					
2	13500.020	38.92	49.12	38.89	10.56	41.91	-9.54	36.92	47.12	53.90	73.90	16.9	26.7	Vert.	106	355	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

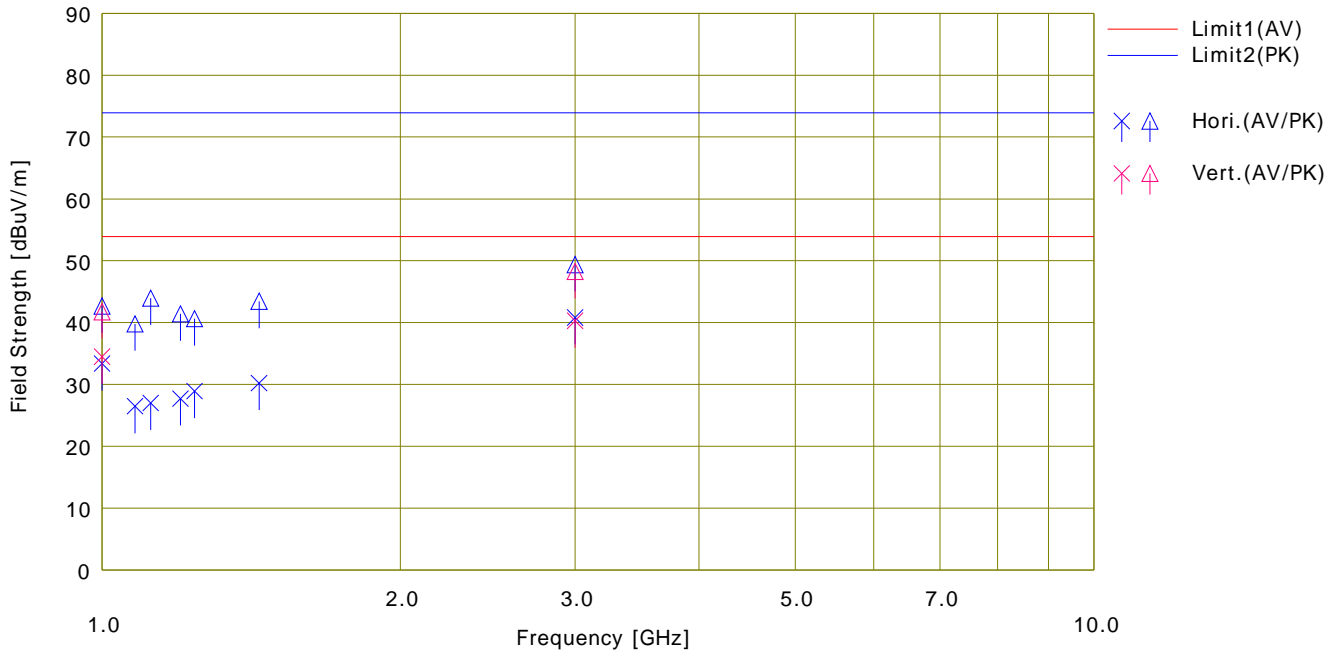
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/03

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-20 5580 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 24 deg.C / 29 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.038	45.17	54.48	24.38	2.69	41.12	2.26	33.38	42.69	53.90	73.90	20.5	31.2	Hori.	318	36	31SH3	
2	1079.992	37.88	51.22	24.66	2.80	41.13	2.26	26.47	39.81	53.90	73.90	27.4	34.0	Hori.	313	351	31SH3	
3	1119.989	38.23	55.16	24.81	2.86	41.13	2.26	27.03	43.96	53.90	73.90	26.8	29.9	Hori.	284	259	31SH3	
4	1199.988	38.50	52.18	25.15	2.95	41.14	2.26	27.72	41.40	53.90	73.90	26.1	32.5	Hori.	306	358	31SH3	
5	1239.987	39.44	51.15	25.38	3.00	41.15	2.26	28.93	40.64	53.90	73.90	24.9	33.2	Hori.	242	4	31SH3	
6	1440.208	40.38	53.61	25.48	3.27	41.17	2.26	30.22	43.45	53.90	73.90	23.6	30.4	Hori.	294	17	31SH3	
7	2999.992	46.73	55.28	28.83	4.90	41.90	2.26	40.82	49.37	53.90	73.90	13.0	24.5	Hori.	167	112	31SH3	
8	1000.133	46.28	53.55	24.38	2.69	41.12	2.26	34.49	41.76	53.90	73.90	19.4	32.1	Vert.	100	358	31SH3	
9	2999.995	46.21	54.15	28.83	4.90	41.90	2.26	40.30	48.24	53.90	73.90	13.6	25.6	Vert.	255	176	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

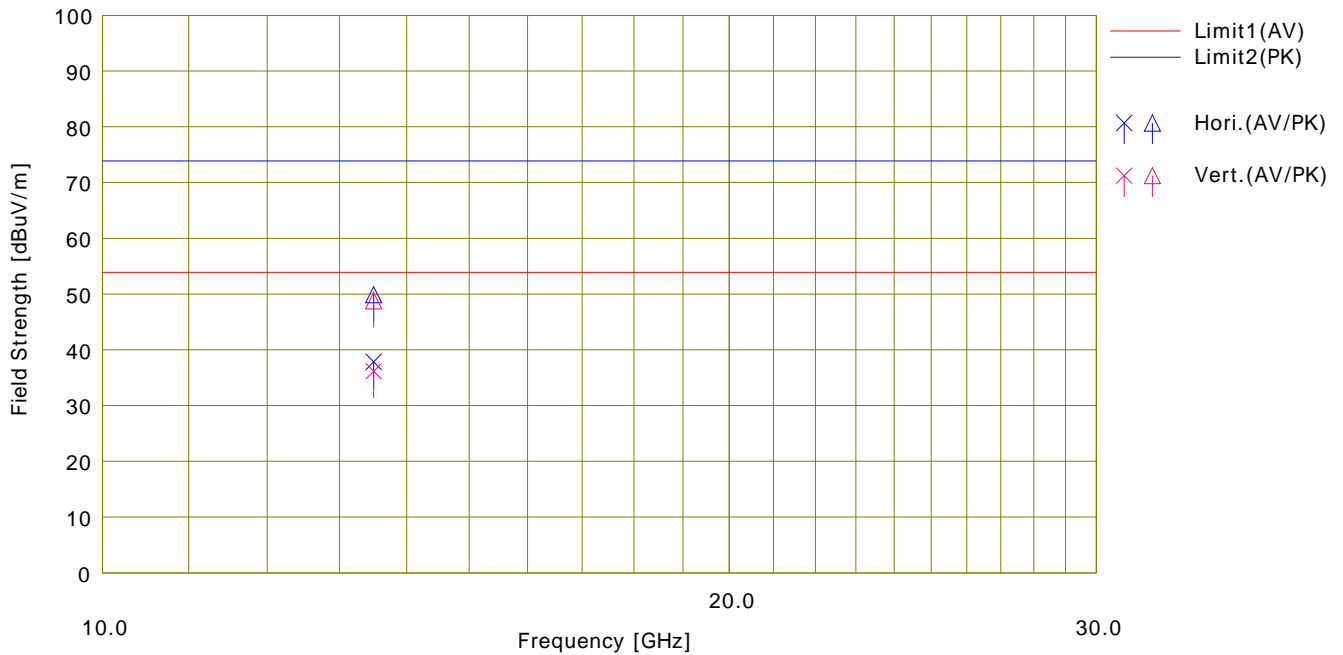
Date : 2023/01/26

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H:X,V:X

Mode : Rx 11n-20 5580 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 21 deg.C / 23 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>							
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]							
1	13500.270	39.83	51.87	38.89	10.56	41.91	-9.54	37.83	49.87	53.90	73.90	16.0	24.0	Hori.	108	76	19SH0	
2	13499.960	38.14	50.79	38.89	10.56	41.91	-9.54	36.14	48.79	53.90	73.90	17.7	25.1	Vert.	108	23	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

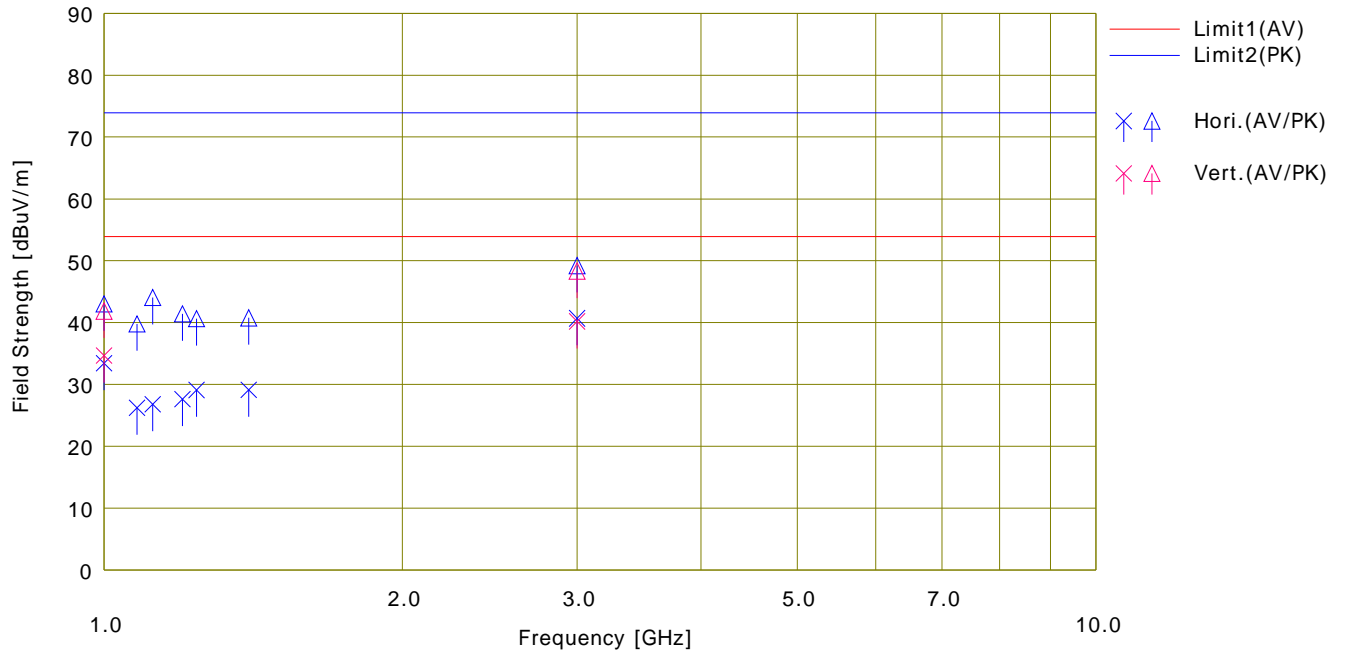
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/02

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-20 5700 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 24 deg.C / 29 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.033	45.20	54.81	24.38	2.69	41.12	2.26	33.41	43.02	53.90	73.90	20.4	30.8	Hori.	304	25	31SH3	
2	1079.991	37.63	51.22	24.66	2.80	41.13	2.26	26.22	39.81	53.90	73.90	27.6	34.0	Hori.	307	359	31SH3	
3	1119.988	38.00	55.27	24.81	2.86	41.13	2.26	26.80	44.07	53.90	73.90	27.1	29.8	Hori.	291	274	31SH3	
4	1199.988	38.41	52.18	25.15	2.95	41.14	2.26	27.63	41.40	53.90	73.90	26.2	32.5	Hori.	305	359	31SH3	
5	1239.986	39.63	51.13	25.38	3.00	41.15	2.26	29.12	40.62	53.90	73.90	24.7	33.2	Hori.	243	4	31SH3	
6	1399.997	39.20	50.84	25.62	3.22	41.17	2.26	29.13	40.77	53.90	73.90	24.7	33.1	Hori.	283	3	31SH3	
7	2999.995	46.63	55.14	28.83	4.90	41.90	2.26	40.72	49.23	53.90	73.90	13.1	24.6	Hori.	166	110	31SH3	
8	1000.133	46.48	53.65	24.38	2.69	41.12	2.26	34.69	41.86	53.90	73.90	19.2	32.0	Vert.	100	357	31SH3	
9	2999.992	46.11	54.23	28.83	4.90	41.90	2.26	40.20	48.32	53.90	73.90	13.7	25.5	Vert.	267	182	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

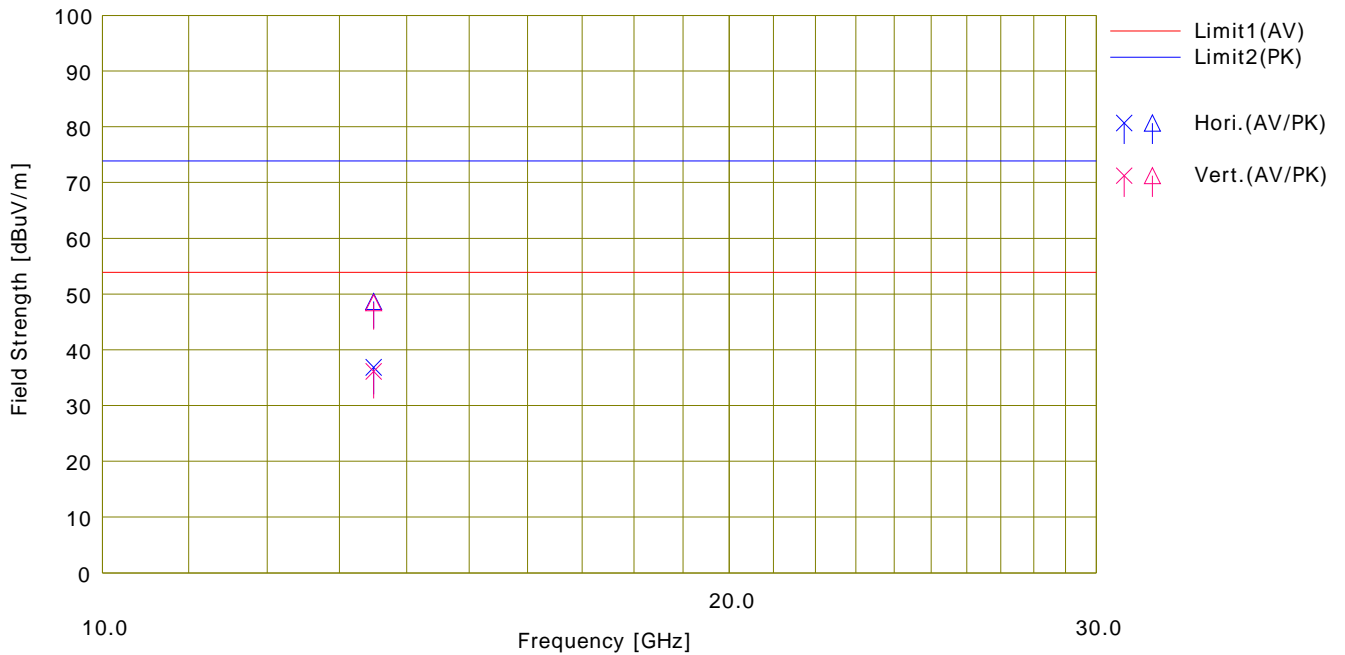
Date : 2023/01/26

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H:X,V:X

Mode : Rx 11n-20 5700 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 21 deg.C / 23 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV> [dBuV]	<PK> [dBuV]					<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dB]	<PK> [dB]					
		1	13500.040					38.86	50.67	38.89	10.56	41.91	-9.54					
2	13499.850	38.11	50.44	38.89	10.56	41.91	-9.54	36.11	48.44	53.90	73.90	17.7	25.4	Vert.	111	25	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

DATA OF RADIATED EMISSION TEST

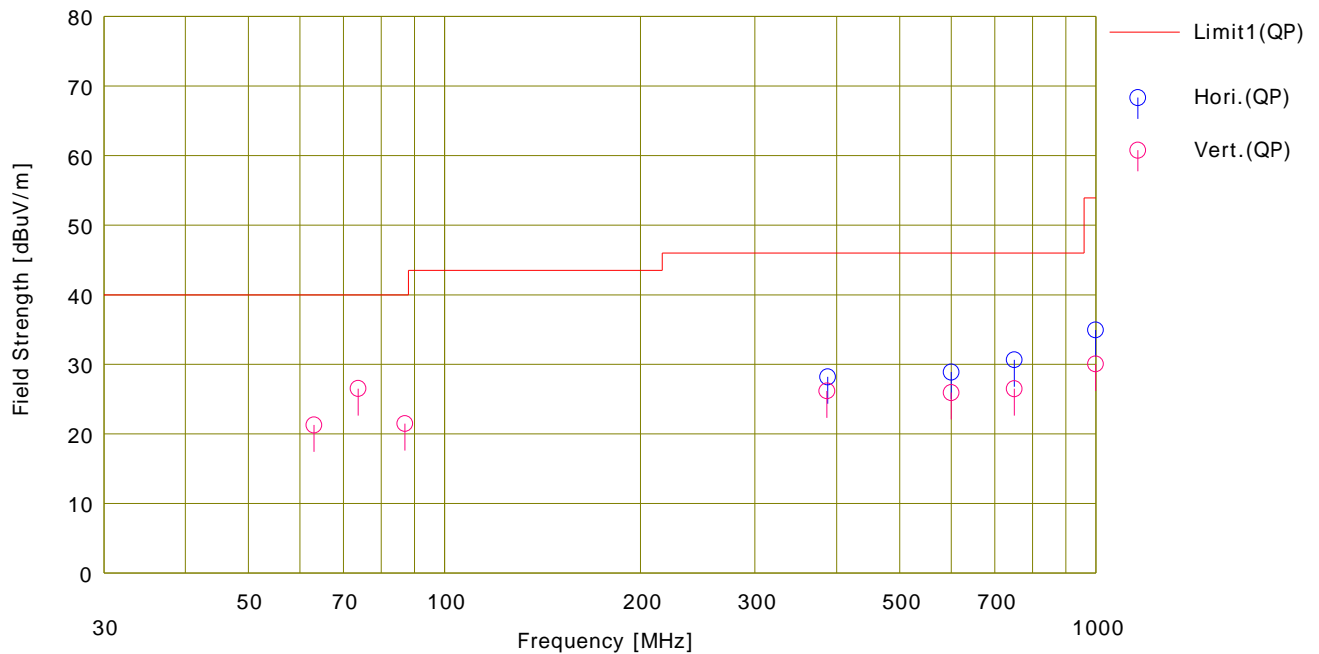
UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/01/31

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : EUT Axis:Z / Antenna Axis:X

Mode : Rx 11n-20 5745 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 22 deg.C / 29 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	S.Fac [dB]	Result	Limit	Margin	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<QP> [dBuV]					<QP> [dBuV/m]	<QP> [dBuV/m]	<QP> [dB]					
1	387.666	35.70	15.35	9.03	31.91	0.00	28.17	46.00	17.8	Hori.	100	183	LP	
2	600.000	31.54	19.33	9.91	31.91	0.00	28.87	46.00	17.1	Hori.	149	359	LP	
3	750.003	31.71	20.15	10.46	31.69	0.00	30.63	46.00	15.3	Hori.	132	221	LP	
4	999.998	31.26	22.46	11.29	30.08	0.00	34.93	53.90	18.9	Hori.	144	357	LP	
5	63.074	39.27	7.64	6.95	32.14	-0.44	21.28	40.00	18.7	Vert.	100	76	BC	
6	73.751	45.18	6.38	7.06	32.14	0.04	26.52	40.00	13.4	Vert.	100	169	BC	
7	86.992	38.38	7.65	7.19	32.13	0.40	21.49	40.00	18.5	Vert.	156	2	BC	
8	386.549	33.73	15.33	9.02	31.91	0.00	26.17	46.00	19.8	Vert.	158	88	LP	
9	599.999	28.61	19.33	9.91	31.91	0.00	25.94	46.00	20.0	Vert.	100	1	LP	
10	750.001	27.55	20.15	10.46	31.69	0.00	26.47	46.00	19.5	Vert.	158	224	LP	
11	999.982	26.37	22.46	11.29	30.08	0.00	30.04	53.90	23.8	Vert.	100	51	LP	

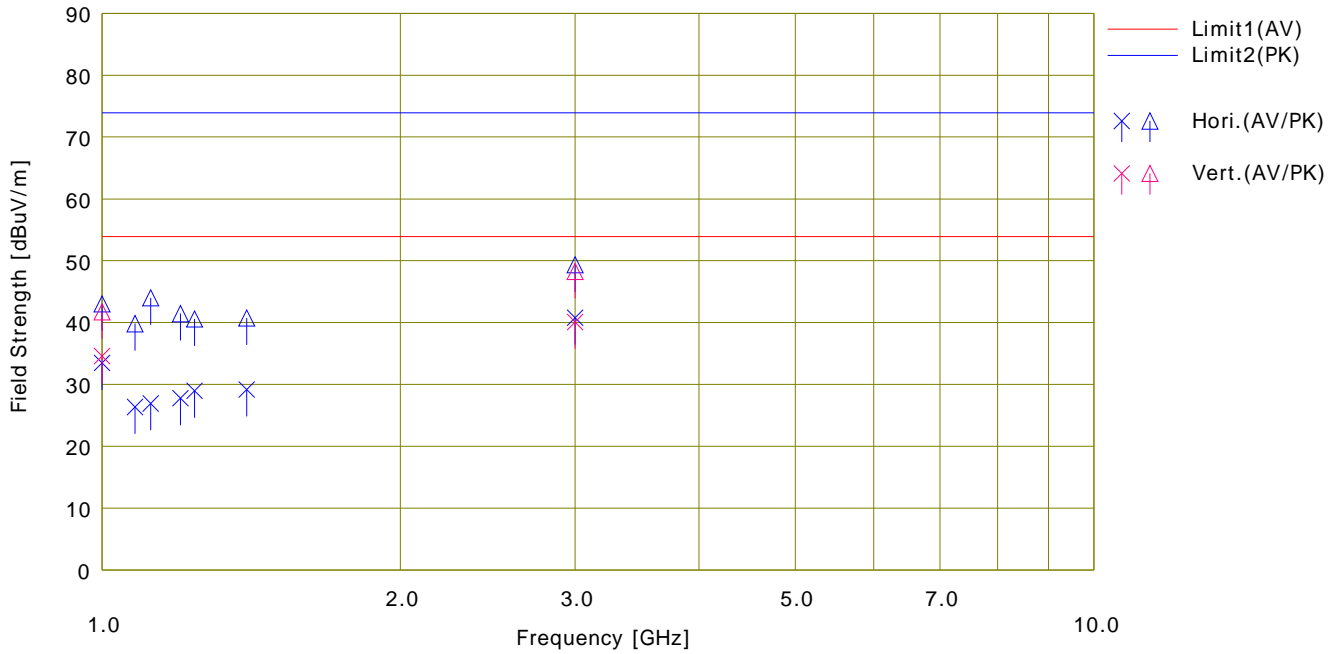
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/02

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-20 5745 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 24 deg.C / 29 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.037	45.27	54.81	24.38	2.69	41.12	2.26	33.48	43.02	53.90	73.90	20.4	30.8	Hori.	313	31	31SH3	
2	1079.991	37.77	51.26	24.66	2.80	41.13	2.26	26.36	39.85	53.90	73.90	27.5	34.0	Hori.	317	357	31SH3	
3	1119.987	38.14	55.19	24.81	2.86	41.13	2.26	26.94	43.99	53.90	73.90	26.9	29.9	Hori.	288	264	31SH3	
4	1199.985	38.57	52.24	25.15	2.95	41.14	2.26	27.79	41.46	53.90	73.90	26.1	32.4	Hori.	305	358	31SH3	
5	1239.989	39.48	51.09	25.38	3.00	41.15	2.26	28.97	40.58	53.90	73.90	24.9	33.3	Hori.	241	6	31SH3	
6	1399.999	39.25	50.83	25.62	3.22	41.17	2.26	29.18	40.76	53.90	73.90	24.7	33.1	Hori.	287	5	31SH3	
7	2999.998	46.71	55.26	28.83	4.90	41.90	2.26	40.80	49.35	53.90	73.90	13.1	24.5	Hori.	165	111	31SH3	
8	1000.134	46.39	53.53	24.38	2.69	41.12	2.26	34.60	41.74	53.90	73.90	19.3	32.1	Vert.	100	357	31SH3	
9	2999.991	46.02	54.17	28.83	4.90	41.90	2.26	40.11	48.26	53.90	73.90	13.7	25.6	Vert.	264	189	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

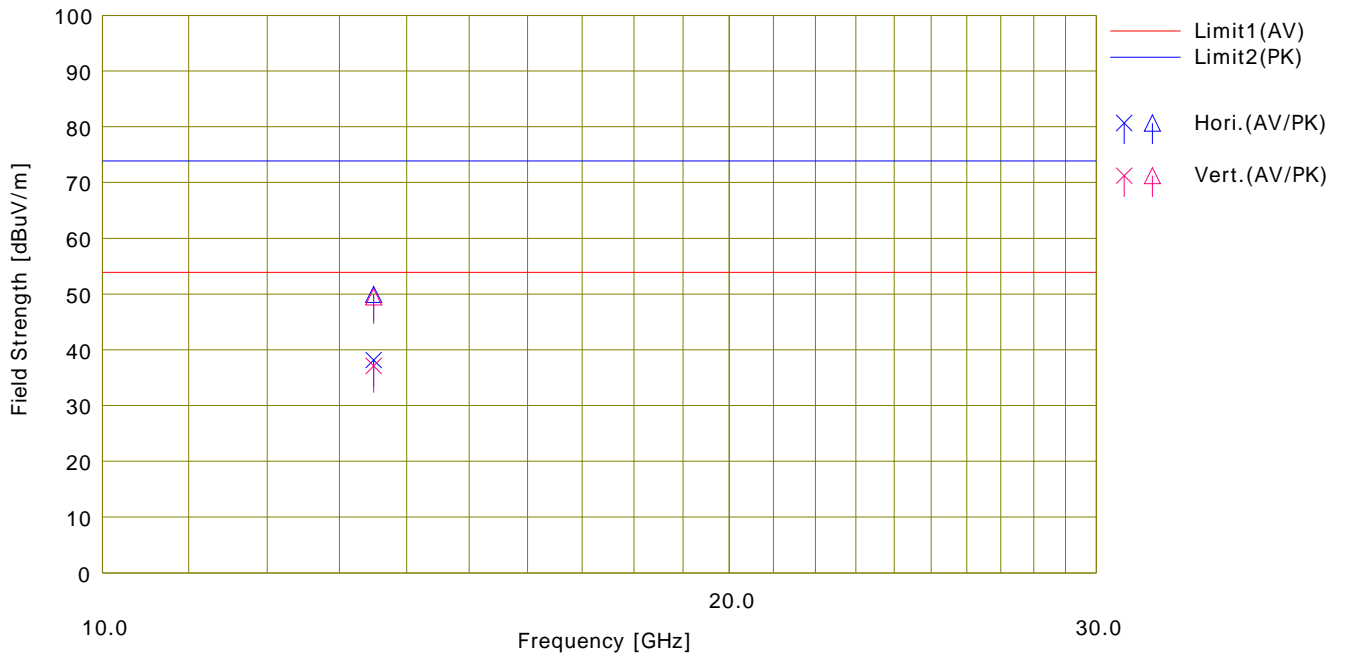
Date : 2023/01/26

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H:X,V:X

Mode : Rx 11n-20 5745 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 21 deg.C / 23 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV> [dBuV]	<PK> [dBuV]					<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dB]	<PK> [dB]					
		1	13500.010					40.16	51.93	38.89	10.56	41.91	-9.54					
2	13499.830	39.10	51.49	38.89	10.56	41.91	-9.54	37.10	49.49	53.90	73.90	16.8	24.4	Vert.	102	356	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

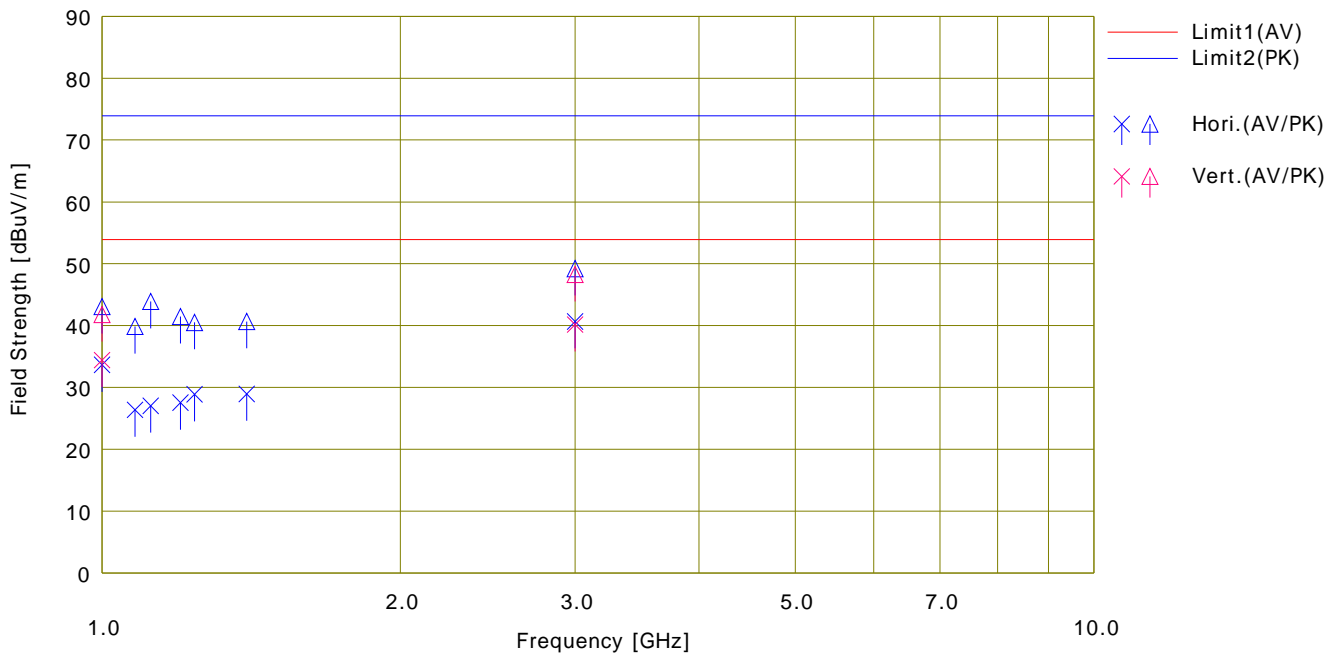
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/02

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-20 5785 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 24 deg.C / 29 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.030	45.44	54.86	24.38	2.69	41.12	2.26	33.65	43.07	53.90	73.90	20.2	30.8	Hori.	305	32	31SH3	
2	1079.994	37.81	51.28	24.66	2.80	41.13	2.26	26.40	39.87	53.90	73.90	27.5	34.0	Hori.	302	358	31SH3	
3	1119.987	38.24	55.10	24.81	2.86	41.13	2.26	27.04	43.90	53.90	73.90	26.8	30.0	Hori.	285	261	31SH3	
4	1199.989	38.33	52.26	25.15	2.95	41.14	2.26	27.55	41.48	53.90	73.90	26.3	32.4	Hori.	324	358	31SH3	
5	1239.989	39.40	51.03	25.38	3.00	41.15	2.26	28.89	40.52	53.90	73.90	25.0	33.3	Hori.	230	2	31SH3	
6	1399.996	39.02	50.75	25.62	3.22	41.17	2.26	28.95	40.68	53.90	73.90	24.9	33.2	Hori.	288	6	31SH3	
7	2999.997	46.57	55.14	28.83	4.90	41.90	2.26	40.66	49.23	53.90	73.90	13.2	24.6	Hori.	166	116	31SH3	
8	1000.142	46.21	53.57	24.38	2.69	41.12	2.26	34.42	41.78	53.90	73.90	19.4	32.1	Vert.	100	357	31SH3	
9	2999.993	46.08	54.18	28.83	4.90	41.90	2.26	40.17	48.27	53.90	73.90	13.7	25.6	Vert.	256	183	31SH3	

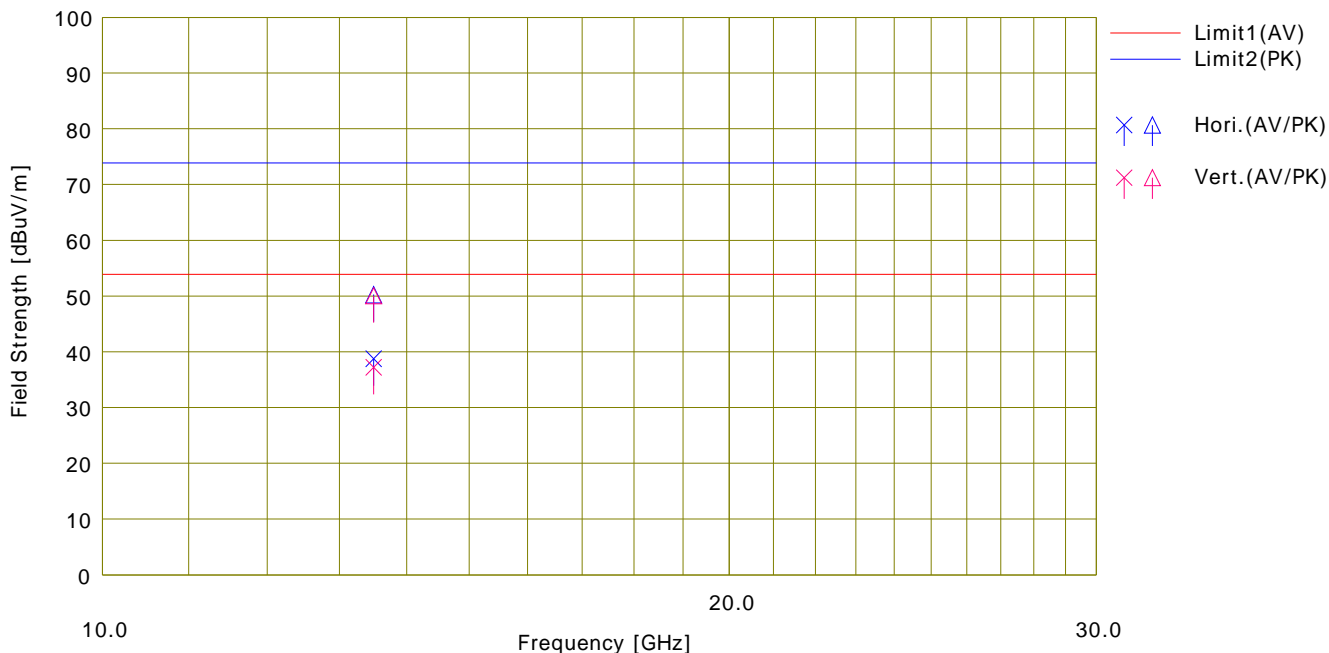
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/01/26

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-20 5785 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 21 deg.C / 23 %RH
Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H;X,V:X	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	13500.200	40.75	52.24	38.89	10.56	41.91	-9.54	38.75	50.24	53.90	73.90	15.1	23.6	Hori.	103	64	19SH0	
2	13499.860	39.20	52.04	38.89	10.56	41.91	-9.54	37.20	50.04	53.90	73.90	16.7	23.8	Vert.	106	355	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

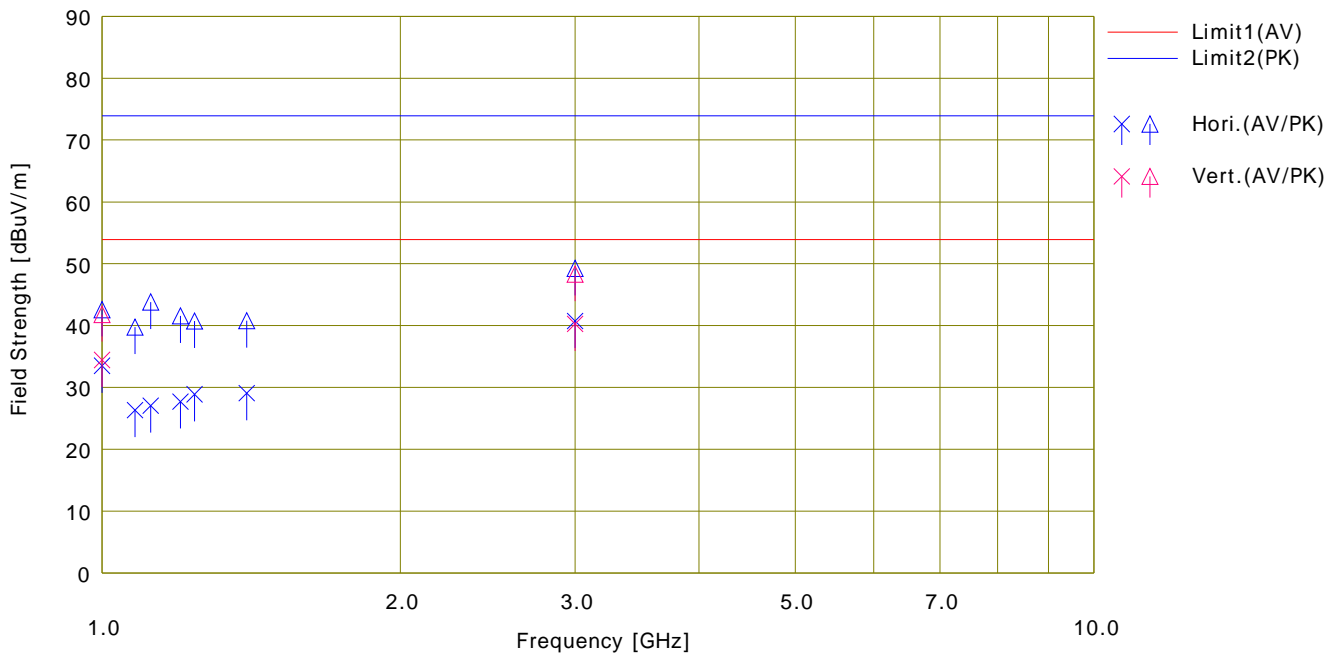
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/02

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-20 5825 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 24 deg.C / 29 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.033	45.30	54.37	24.38	2.69	41.12	2.26	33.51	42.58	53.90	73.90	20.3	31.3	Hori.	300	39	31SH3	
2	1079.994	37.74	51.16	24.66	2.80	41.13	2.26	26.33	39.75	53.90	73.90	27.5	34.1	Hori.	314	359	31SH3	
3	1119.987	38.26	55.03	24.81	2.86	41.13	2.26	27.06	43.83	53.90	73.90	26.8	30.0	Hori.	276	271	31SH3	
4	1199.987	38.49	52.34	25.15	2.95	41.14	2.26	27.71	41.56	53.90	73.90	26.1	32.3	Hori.	307	355	31SH3	
5	1239.989	39.40	51.25	25.38	3.00	41.15	2.26	28.89	40.74	53.90	73.90	25.0	33.1	Hori.	237	13	31SH3	
6	1399.995	39.13	50.88	25.62	3.22	41.17	2.26	29.06	40.81	53.90	73.90	24.8	33.0	Hori.	288	3	31SH3	
7	2999.992	46.66	55.17	28.83	4.90	41.90	2.26	40.75	49.26	53.90	73.90	13.1	24.6	Hori.	161	110	31SH3	
8	1000.138	46.23	53.60	24.38	2.69	41.12	2.26	34.44	41.81	53.90	73.90	19.4	32.0	Vert.	100	358	31SH3	
9	2999.994	46.19	54.21	28.83	4.90	41.90	2.26	40.28	48.30	53.90	73.90	13.6	25.6	Vert.	265	182	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

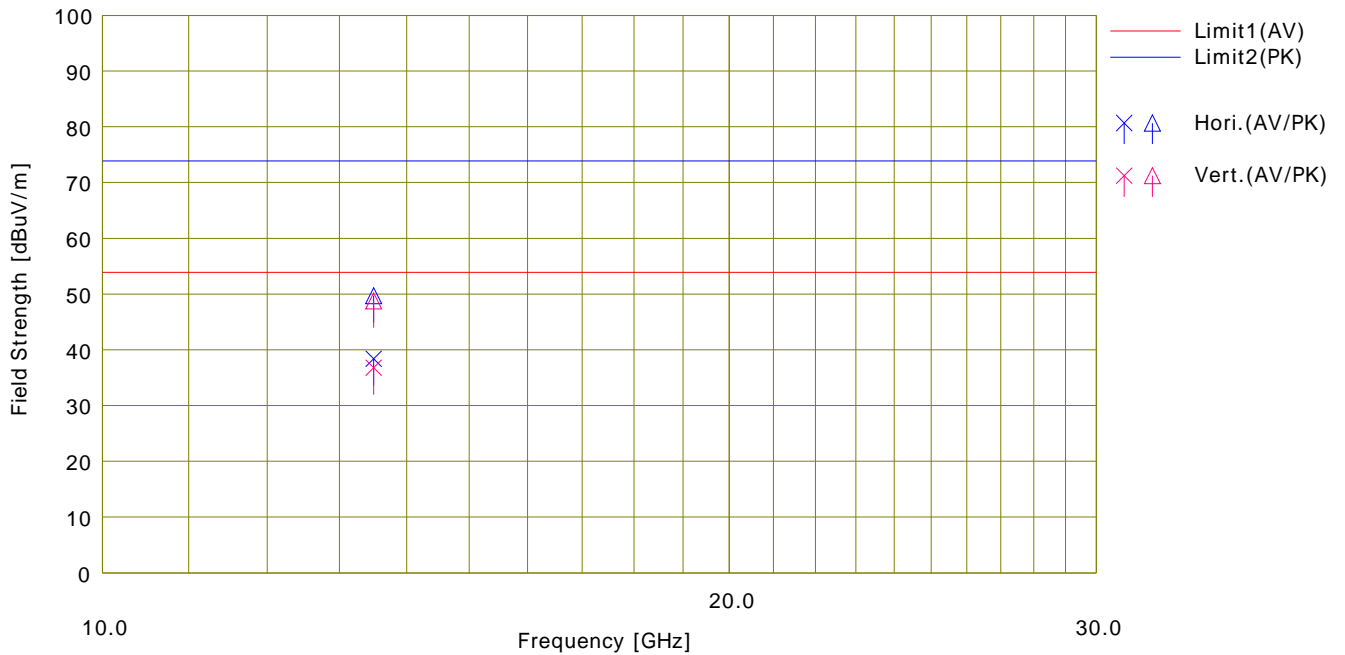
Date : 2023/01/26

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H;X,V:X

Mode : Rx 11n-20 5825 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 21 deg.C / 23 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]					
1	13500.250	40.38	51.69	38.89	10.56	41.91	-9.54	38.38	49.69	53.90	73.90	15.5	24.2	Hori.	103	67	19SH0	
2	13499.870	38.77	50.76	38.89	10.56	41.91	-9.54	36.77	48.76	53.90	73.90	17.1	25.1	Vert.	106	354	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

DATA OF RADIATED EMISSION TEST

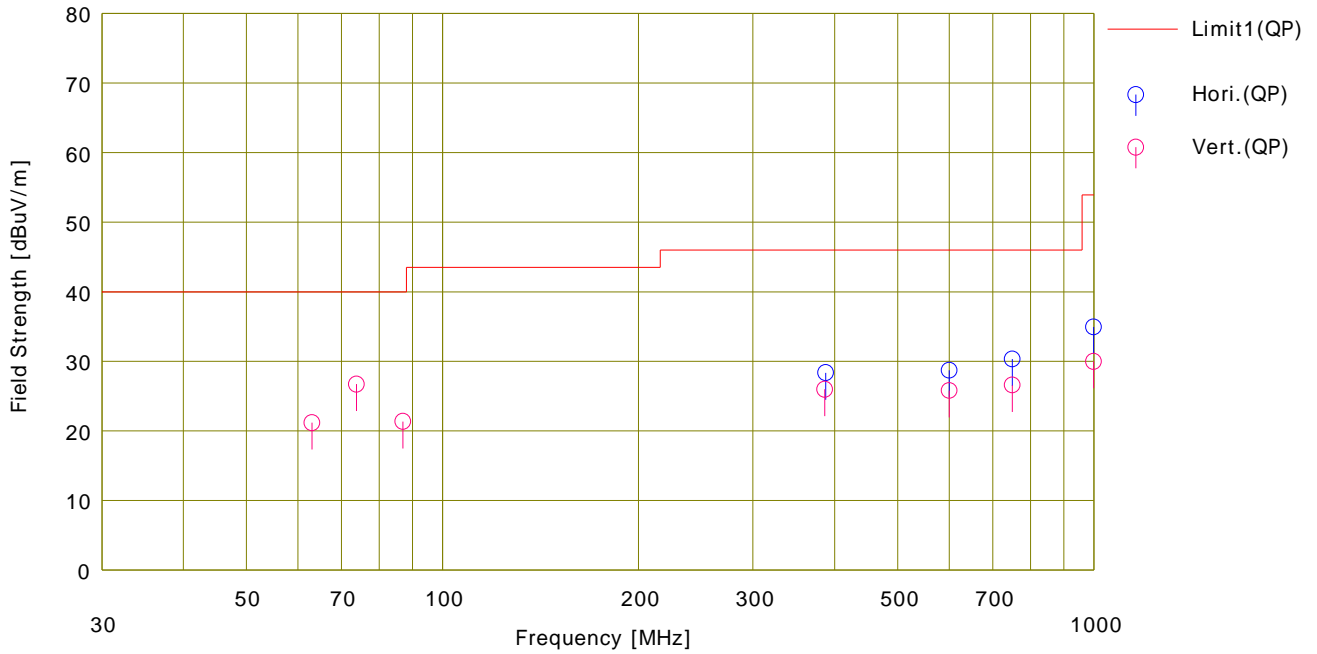
UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/01/31

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : EUT Axis:Z / Antenna Axis:X

Mode : Rx 11n-40 5190 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 22 deg.C / 29 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	S.Fac [dB]	Result	Limit	Margin	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<QP> [dBuV]					<QP> [dBuV/m]	<QP> [dB]						
1	387.710	35.88	15.35	9.03	31.91	0.00	28.35	46.00	17.6	Hori.	100	175	LP	
2	600.000	31.37	19.33	9.91	31.91	0.00	28.70	46.00	17.3	Hori.	143	354	LP	
3	750.000	31.40	20.15	10.46	31.69	0.00	30.32	46.00	15.6	Hori.	135	236	LP	
4	999.993	31.26	22.46	11.29	30.08	0.00	34.93	53.90	18.9	Hori.	147	358	LP	
5	63.051	39.17	7.64	6.95	32.14	-0.44	21.18	40.00	18.8	Vert.	100	63	BC	
6	73.815	45.36	6.38	7.06	32.14	0.05	26.71	40.00	13.2	Vert.	100	177	BC	
7	86.922	38.26	7.63	7.19	32.13	0.40	21.35	40.00	18.6	Vert.	152	3	BC	
8	386.275	33.55	15.32	9.02	31.91	0.00	25.98	46.00	20.0	Vert.	156	82	LP	
9	600.000	28.46	19.33	9.91	31.91	0.00	25.79	46.00	20.2	Vert.	100	357	LP	
10	750.000	27.67	20.15	10.46	31.69	0.00	26.59	46.00	19.4	Vert.	159	224	LP	
11	999.979	26.31	22.46	11.29	30.08	0.00	29.98	53.90	23.9	Vert.	100	52	LP	

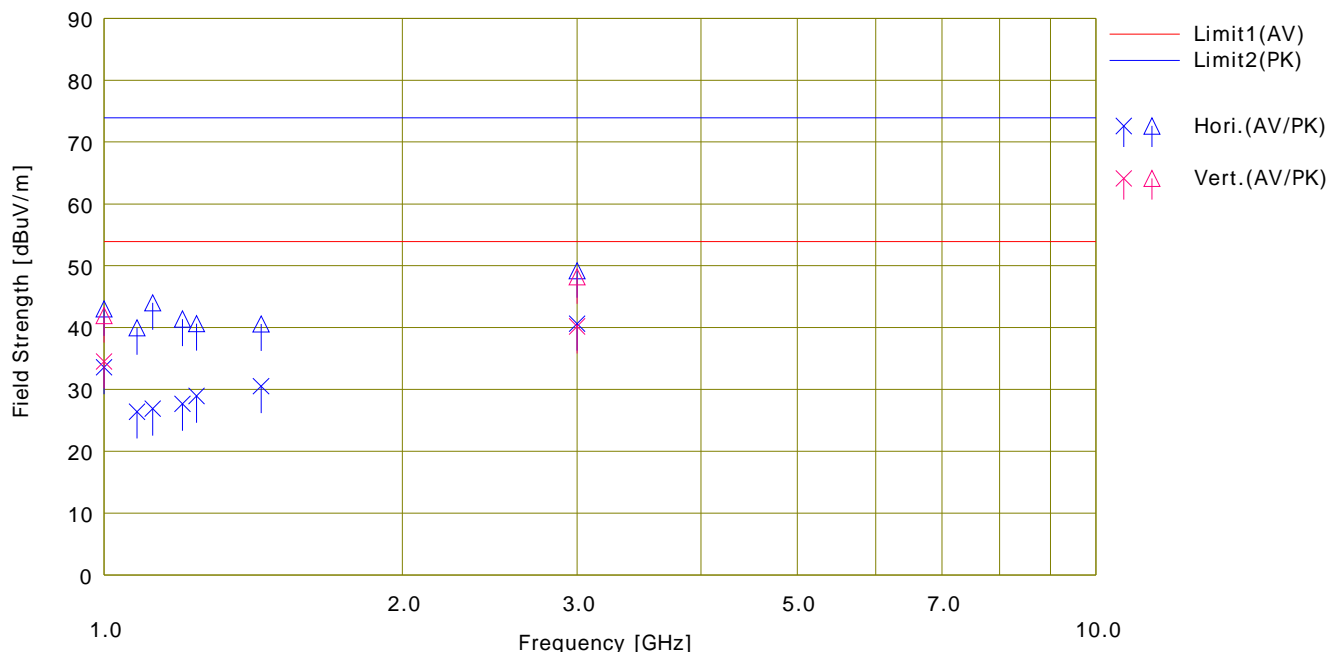
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/03

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-40 5190 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 25 deg.C / 30 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.030	45.38	54.81	24.38	2.69	41.12	2.26	33.59	43.02	53.90	73.90	20.3	30.8	Hori.	304	27	31SH3	
2	1079.992	37.83	51.36	24.66	2.80	41.13	2.26	26.42	39.95	53.90	73.90	27.4	33.9	Hori.	311	358	31SH3	
3	1119.984	38.10	55.20	24.81	2.86	41.13	2.26	26.90	44.00	53.90	73.90	27.0	29.9	Hori.	276	259	31SH3	
4	1199.988	38.46	52.17	25.15	2.95	41.14	2.26	27.68	41.39	53.90	73.90	26.2	32.5	Hori.	305	354	31SH3	
5	1239.989	39.46	51.15	25.38	3.00	41.15	2.26	28.95	40.64	53.90	73.90	24.9	33.2	Hori.	244	5	31SH3	
6	1440.207	40.71	50.74	25.48	3.27	41.17	2.26	30.55	40.58	53.90	73.90	23.3	33.3	Hori.	169	7	31SH3	
7	2999.992	46.53	55.10	28.83	4.90	41.90	2.26	40.62	49.19	53.90	73.90	13.2	24.7	Hori.	163	118	31SH3	
8	1000.131	46.29	53.72	24.38	2.69	41.12	2.26	34.50	41.93	53.90	73.90	19.4	31.9	Vert.	100	358	31SH3	
9	2999.992	46.11	54.14	28.83	4.90	41.90	2.26	40.20	48.23	53.90	73.90	13.7	25.6	Vert.	255	178	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

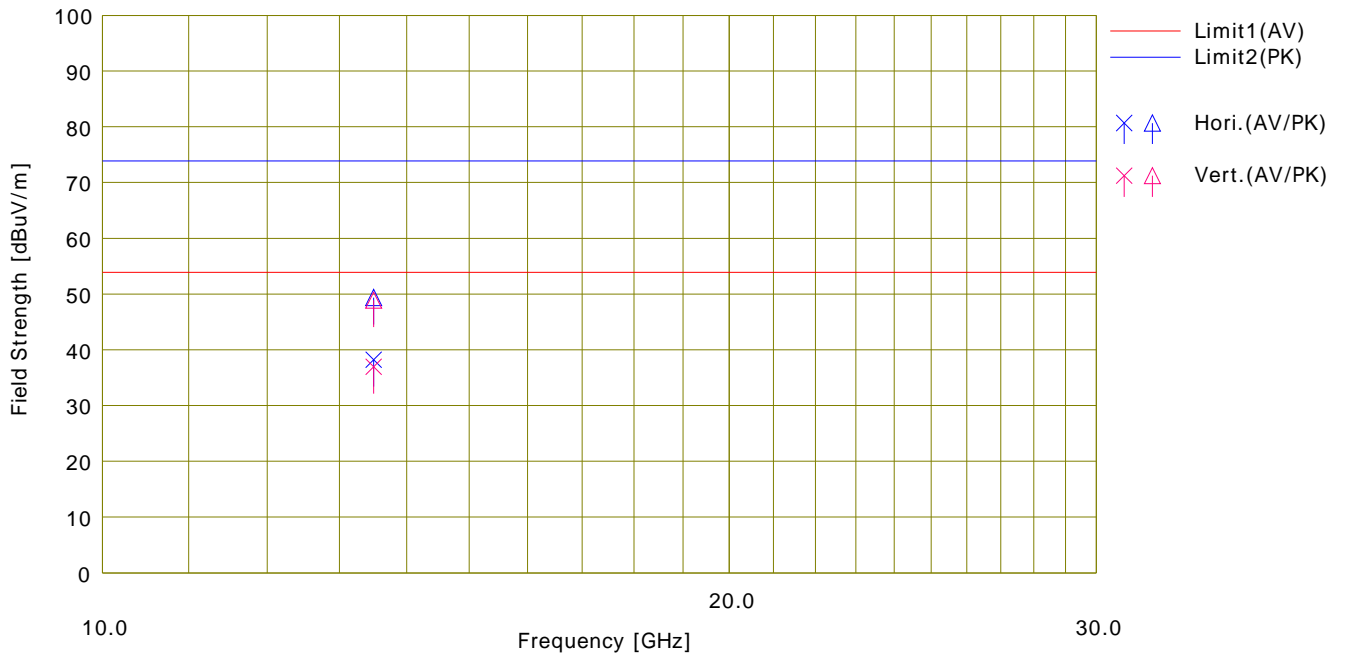
Date : 2023/02/04

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H:X,V:X

Mode : Rx 11n-40 5190 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 25 deg.C / 30 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>							
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]							
1	13499.910	40.23	51.37	38.89	10.56	41.91	-9.54	38.23	49.37	53.90	73.90	15.6	24.5	Hori.	102	65	19SH0	
2	13499.790	38.95	50.88	38.89	10.56	41.91	-9.54	36.95	48.88	53.90	73.90	16.9	25.0	Vert.	107	355	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

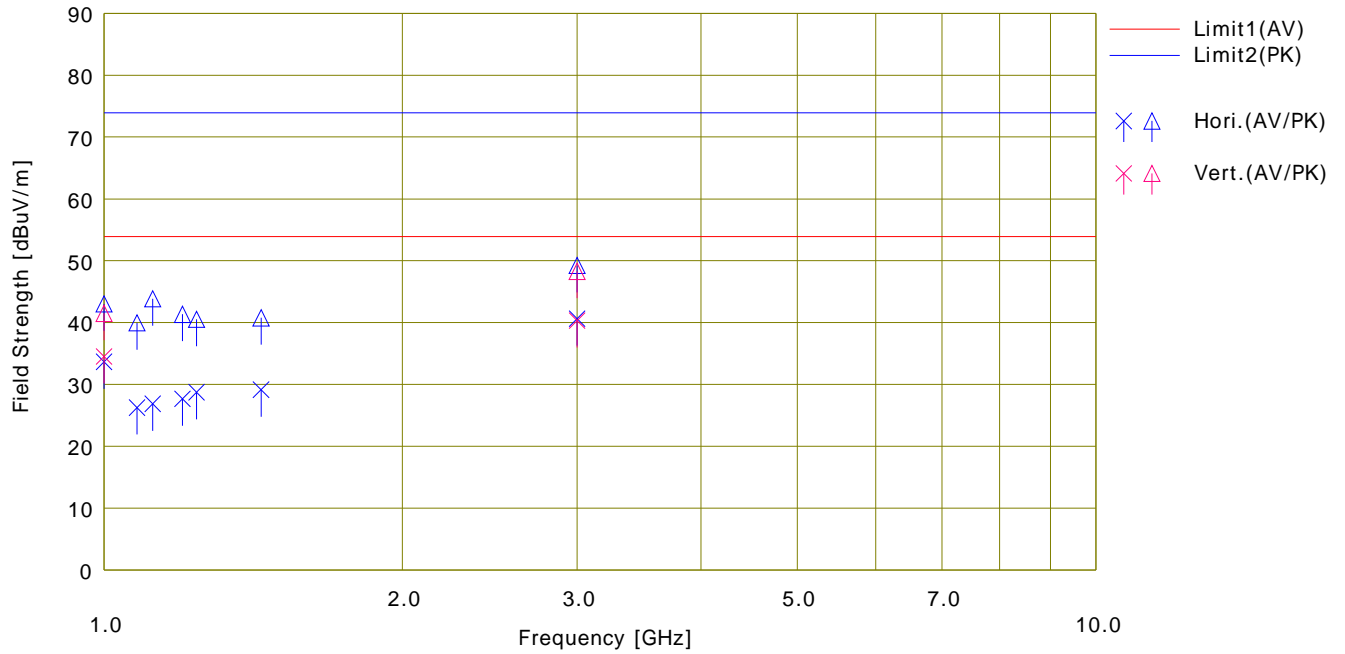
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/03

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-40 5270 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 25 deg.C / 30 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.033	45.44	54.81	24.38	2.69	41.12	2.26	33.65	43.02	53.90	73.90	20.2	30.8	Hori.	306	27	31SH3	
2	1079.994	37.68	51.37	24.66	2.80	41.13	2.26	26.27	39.96	53.90	73.90	27.6	33.9	Hori.	314	355	31SH3	
3	1119.985	38.08	55.05	24.81	2.86	41.13	2.26	26.88	43.85	53.90	73.90	27.0	30.0	Hori.	288	257	31SH3	
4	1199.988	38.47	52.13	25.15	2.95	41.14	2.26	27.69	41.35	53.90	73.90	26.2	32.5	Hori.	303	359	31SH3	
5	1239.989	39.26	51.05	25.38	3.00	41.15	2.26	28.75	40.54	53.90	73.90	25.1	33.3	Hori.	238	5	31SH3	
6	1440.208	39.31	50.94	25.48	3.27	41.17	2.26	29.15	40.78	53.90	73.90	24.7	33.1	Hori.	289	12	31SH3	
7	2999.997	46.54	55.16	28.83	4.90	41.90	2.26	40.63	49.25	53.90	73.90	13.2	24.6	Hori.	163	118	31SH3	
8	1000.139	46.30	53.28	24.38	2.69	41.12	2.26	34.51	41.49	53.90	73.90	19.3	32.4	Vert.	100	358	31SH3	
9	2999.991	46.23	54.19	28.83	4.90	41.90	2.26	40.32	48.28	53.90	73.90	13.5	25.6	Vert.	255	189	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

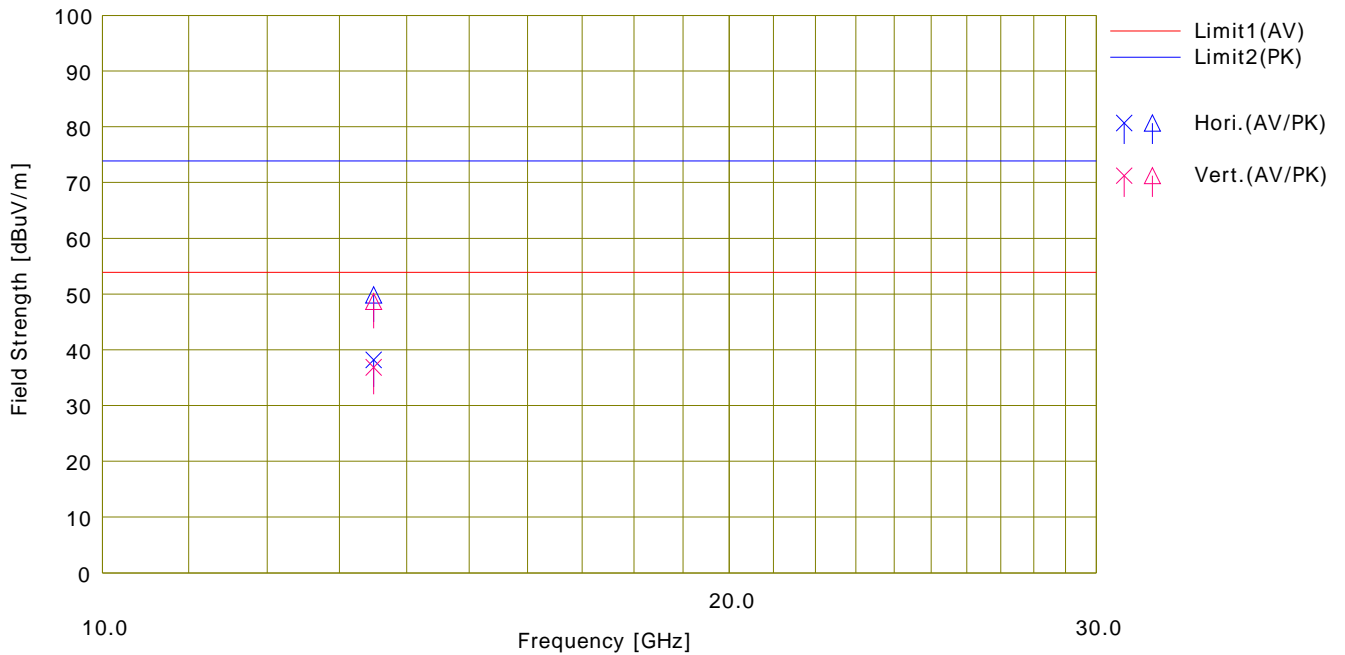
Date : 2023/02/04

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H:X,V:X

Mode : Rx 11n-40 5270 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 25 deg.C / 30 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV> [dBuV]	<PK> [dBuV]					<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dB]	<PK> [dB]					
		1	13499.710					40.21	51.83	38.89	10.56	41.91	-9.54					
2	13500.010	38.86	50.68	38.89	10.56	41.91	-9.54	36.86	48.68	53.90	73.90	17.0	25.2	Vert.	102	354	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

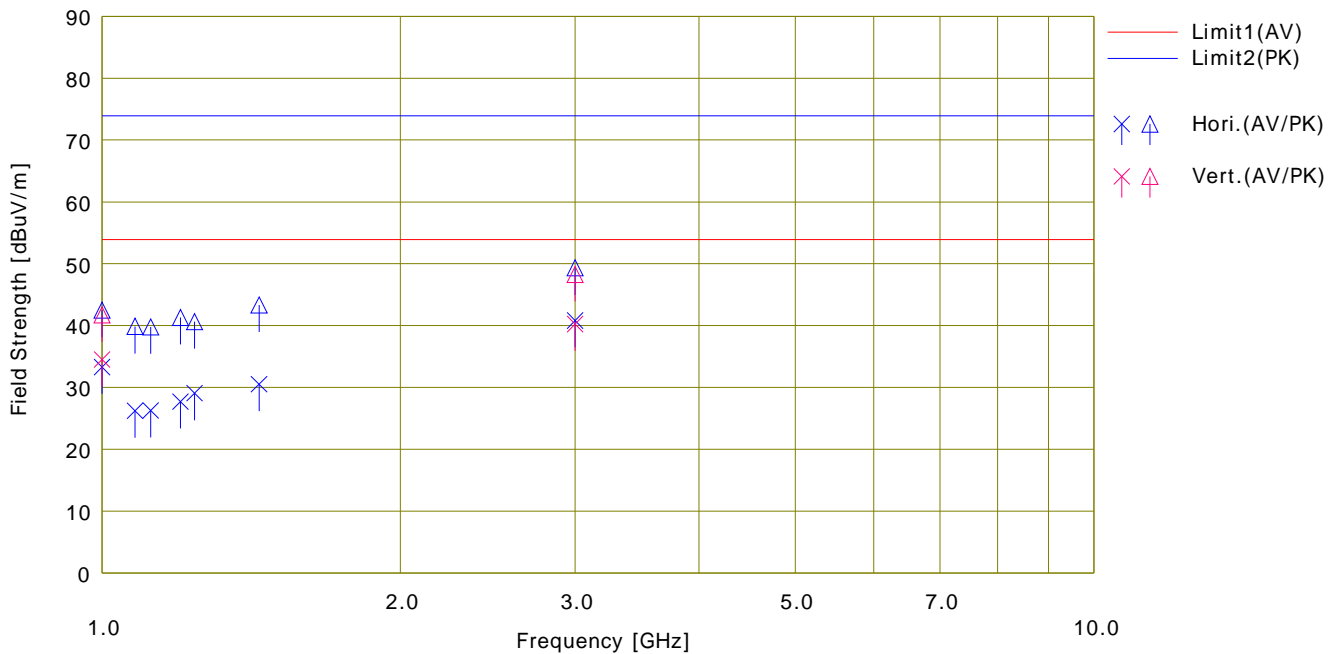
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/03

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-40 5310 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 25 deg.C / 30 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>							
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]							
1	1000.033	45.10	54.28	24.38	2.69	41.12	2.26	33.31	42.49	53.90	73.90	20.5	31.4	Hori.	308	29	31SH3	
2	1079.993	37.63	51.30	24.66	2.80	41.13	2.26	26.22	39.89	53.90	73.90	27.6	34.0	Hori.	311	358	31SH3	
3	1119.987	37.49	51.03	24.81	2.86	41.13	2.26	26.29	39.83	53.90	73.90	27.6	34.0	Hori.	287	263	31SH3	
4	1199.988	38.51	52.10	25.15	2.95	41.14	2.26	27.73	41.32	53.90	73.90	26.1	32.5	Hori.	305	357	31SH3	
5	1239.985	39.57	51.14	25.38	3.00	41.15	2.26	29.06	40.63	53.90	73.90	24.8	33.2	Hori.	244	8	31SH3	
6	1440.207	40.71	53.48	25.48	3.27	41.17	2.26	30.55	43.32	53.90	73.90	23.3	30.5	Hori.	293	25	31SH3	
7	2999.991	46.73	55.27	28.83	4.90	41.90	2.26	40.82	49.36	53.90	73.90	13.0	24.5	Hori.	166	105	31SH3	
8	1000.137	46.33	53.51	24.38	2.69	41.12	2.26	34.54	41.72	53.90	73.90	19.3	32.1	Vert.	100	358	31SH3	
9	2999.995	46.17	54.18	28.83	4.90	41.90	2.26	40.26	48.27	53.90	73.90	13.6	25.6	Vert.	257	178	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

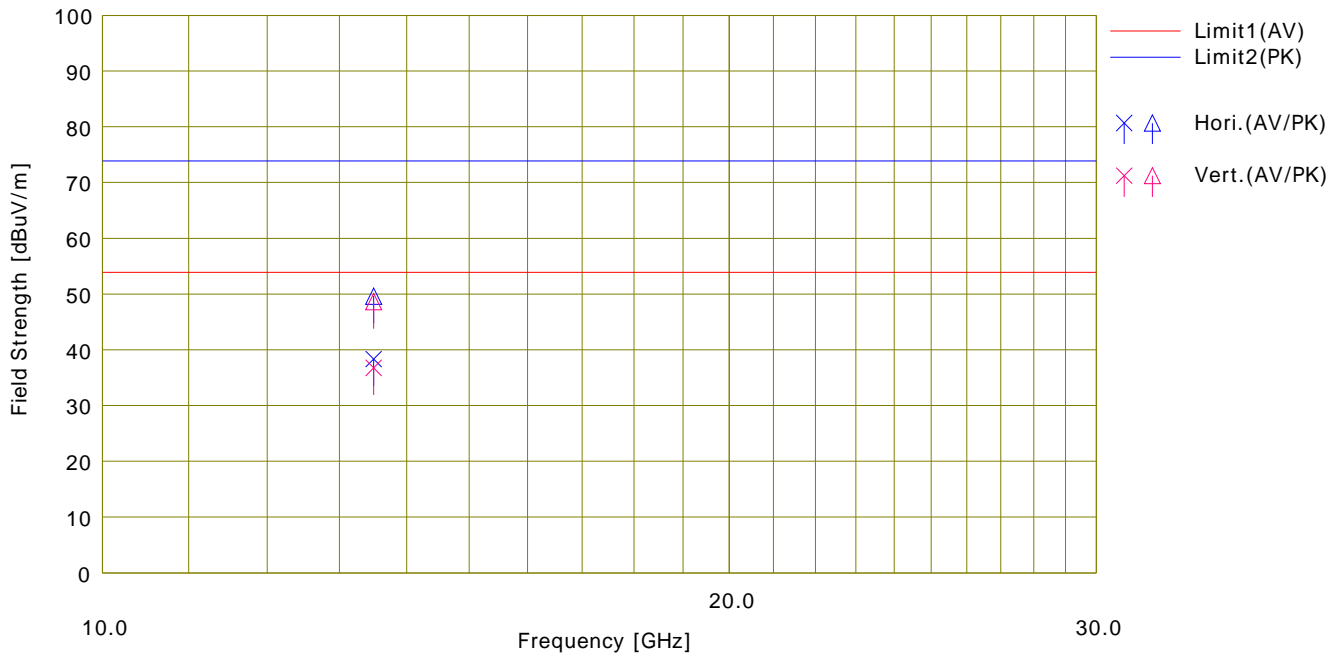
Date : 2023/02/04

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H;X,V:X

Mode : Rx 11n-40 5310 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 25 deg.C / 30 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	13499.940	40.32	51.61	38.89	10.56	41.91	-9.54	38.32	49.61	53.90	73.90	15.5	24.2	Hori.	105	69	19SH0	
2	13500.010	38.75	50.63	38.89	10.56	41.91	-9.54	36.75	48.63	53.90	73.90	17.1	25.2	Vert.	103	357	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

DATA OF RADIATED EMISSION TEST

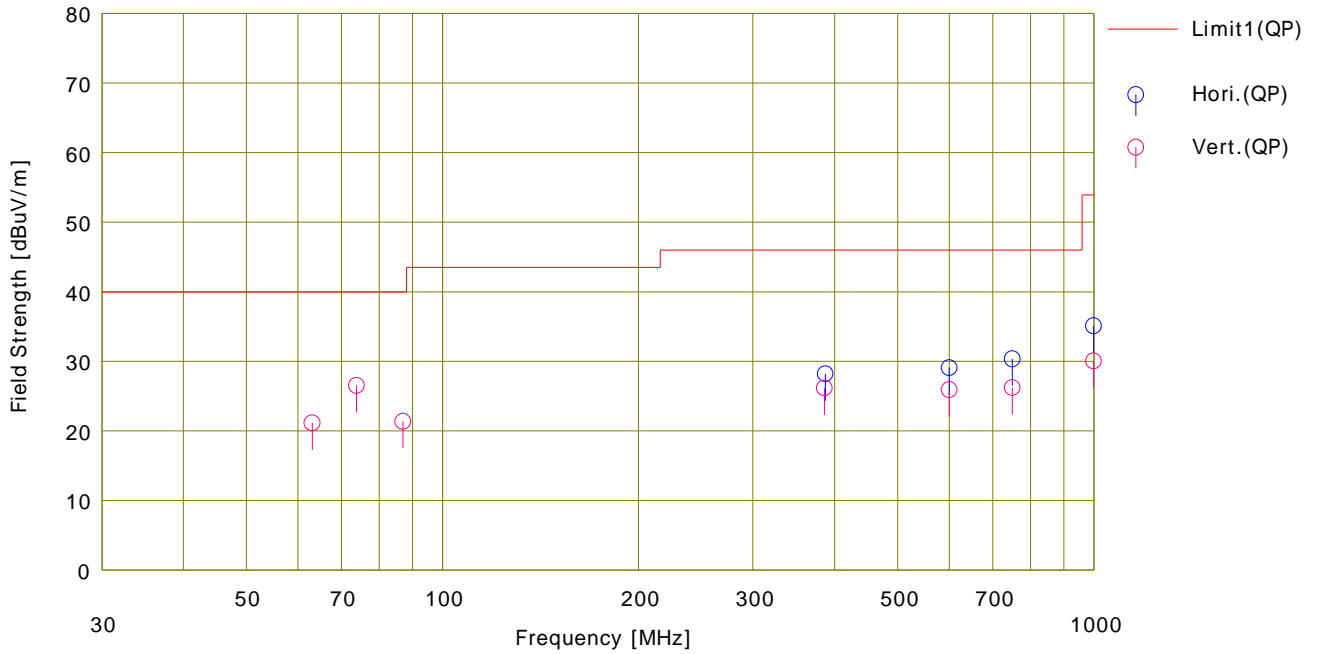
UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/01/31

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : EUT Axis:Z / Antenna Axis:X

Mode : Rx 11n-40 5510 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 22 deg.C / 29 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	S.Fac [dB]	Result	Limit	Margin	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<QP> [dBuV]					<QP> [dBuV/m]	<QP> [dBuV/m]	<QP> [dB]					
1	387.210	35.75	15.34	9.02	31.91	0.00	28.20	46.00	17.8	Hori.	100	176	LP	
2	599.998	31.73	19.33	9.91	31.91	0.00	29.06	46.00	16.9	Hori.	149	1	LP	
3	749.998	31.43	20.15	10.46	31.69	0.00	30.35	46.00	15.6	Hori.	131	243	LP	
4	999.958	31.42	22.46	11.29	30.08	0.00	35.09	53.90	18.8	Hori.	146	355	LP	
5	63.115	39.15	7.63	6.95	32.14	-0.44	21.15	40.00	18.8	Vert.	100	69	BC	
6	73.784	45.18	6.38	7.06	32.14	0.05	26.53	40.00	13.4	Vert.	100	174	BC	
7	86.993	38.26	7.65	7.19	32.13	0.40	21.37	40.00	18.6	Vert.	155	6	BC	
8	386.170	33.73	15.32	9.02	31.91	0.00	26.16	46.00	19.8	Vert.	152	113	LP	
9	600.000	28.59	19.33	9.91	31.91	0.00	25.92	46.00	20.0	Vert.	100	359	LP	
10	750.002	27.31	20.15	10.46	31.69	0.00	26.23	46.00	19.7	Vert.	155	233	LP	
11	999.916	26.37	22.46	11.29	30.08	0.00	30.04	53.90	23.8	Vert.	100	1	LP	

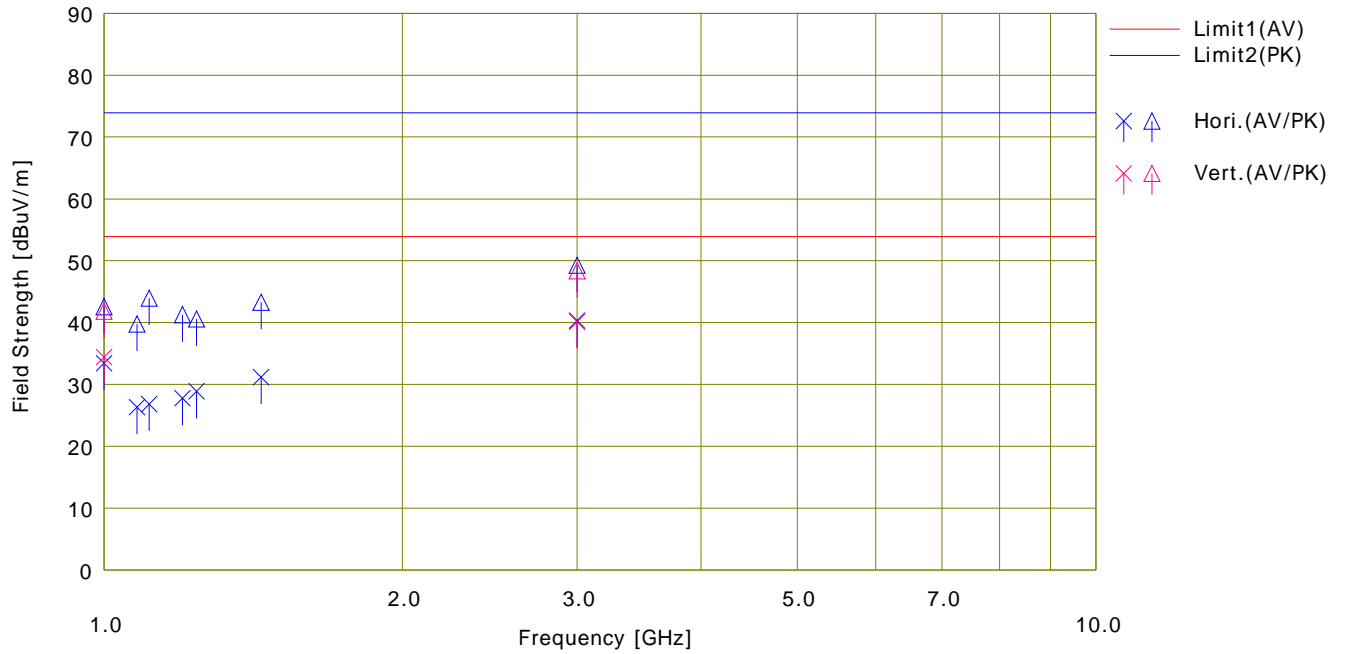
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/03

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-40 5510 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 25 deg.C / 30 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.031	45.20	54.37	24.38	2.69	41.12	2.26	33.41	42.58	53.90	73.90	20.4	31.3	Hori.	314	27	31SH3	
2	1079.988	37.75	51.18	24.66	2.80	41.13	2.26	26.34	39.77	53.90	73.90	27.5	34.1	Hori.	308	358	31SH3	
3	1110.985	38.10	55.23	24.76	2.84	41.13	2.26	26.83	43.96	53.90	73.90	27.0	29.9	Hori.	284	264	31SH3	
4	1199.988	38.57	52.06	25.15	2.95	41.14	2.26	27.79	41.28	53.90	73.90	26.1	32.6	Hori.	305	357	31SH3	
5	1239.987	39.41	51.09	25.38	3.00	41.15	2.26	28.90	40.58	53.90	73.90	25.0	33.3	Hori.	247	4	31SH3	
6	1440.205	41.35	53.44	25.48	3.27	41.17	2.26	31.19	43.28	53.90	73.90	22.7	30.6	Hori.	299	12	31SH3	
7	2999.992	46.24	55.23	28.83	4.90	41.90	2.26	40.33	49.32	53.90	73.90	13.5	24.5	Hori.	167	112	31SH3	
8	1000.133	46.22	53.66	24.38	2.69	41.12	2.26	34.43	41.87	53.90	73.90	19.4	32.0	Vert.	100	357	31SH3	
9	2999.991	46.05	54.27	28.83	4.90	41.90	2.26	40.14	48.36	53.90	73.90	13.7	25.5	Vert.	254	182	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

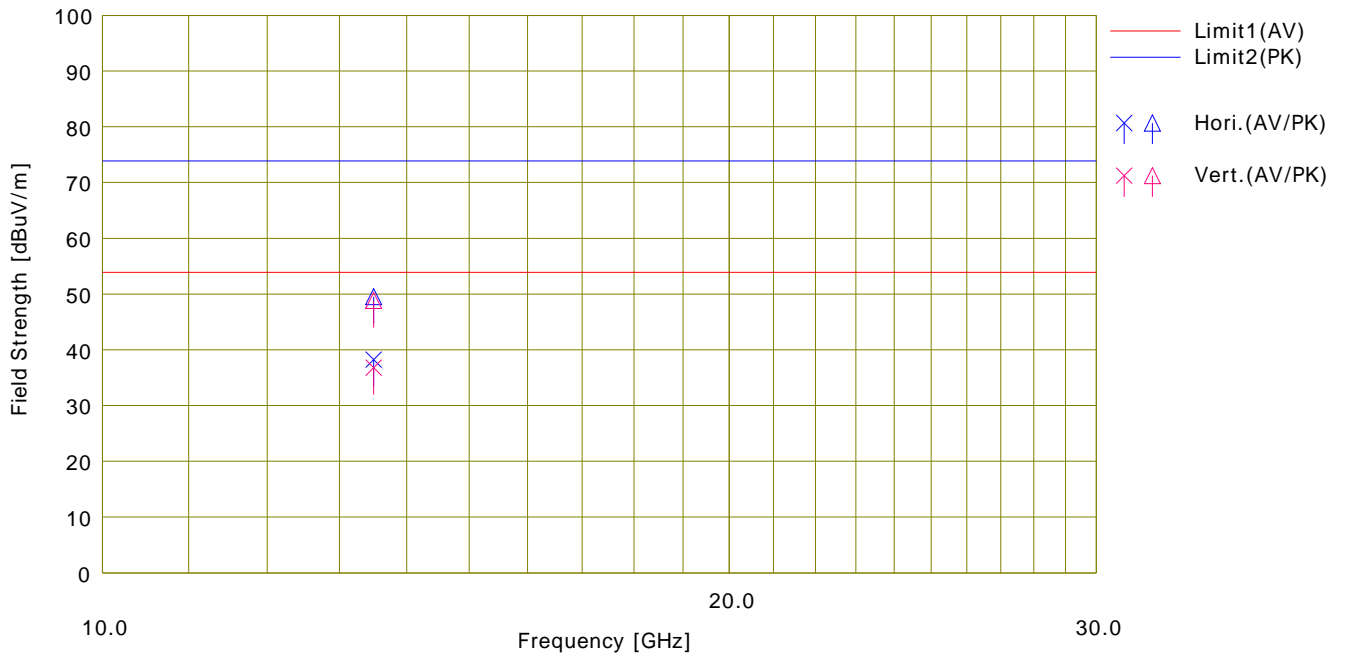
Date : 2023/02/04

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H:X,V:X

Mode : Rx 11n-40 5510 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 25 deg.C / 30 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV> [dBuV]	<PK> [dBuV]					<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dB]	<PK> [dB]					
		1	13500.180					40.27	51.52	38.89	10.56	41.91	-9.54					
2	13500.330	38.83	50.84	38.89	10.56	41.91	-9.54	36.83	48.84	53.90	73.90	17.0	25.0	Vert.	102	357	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

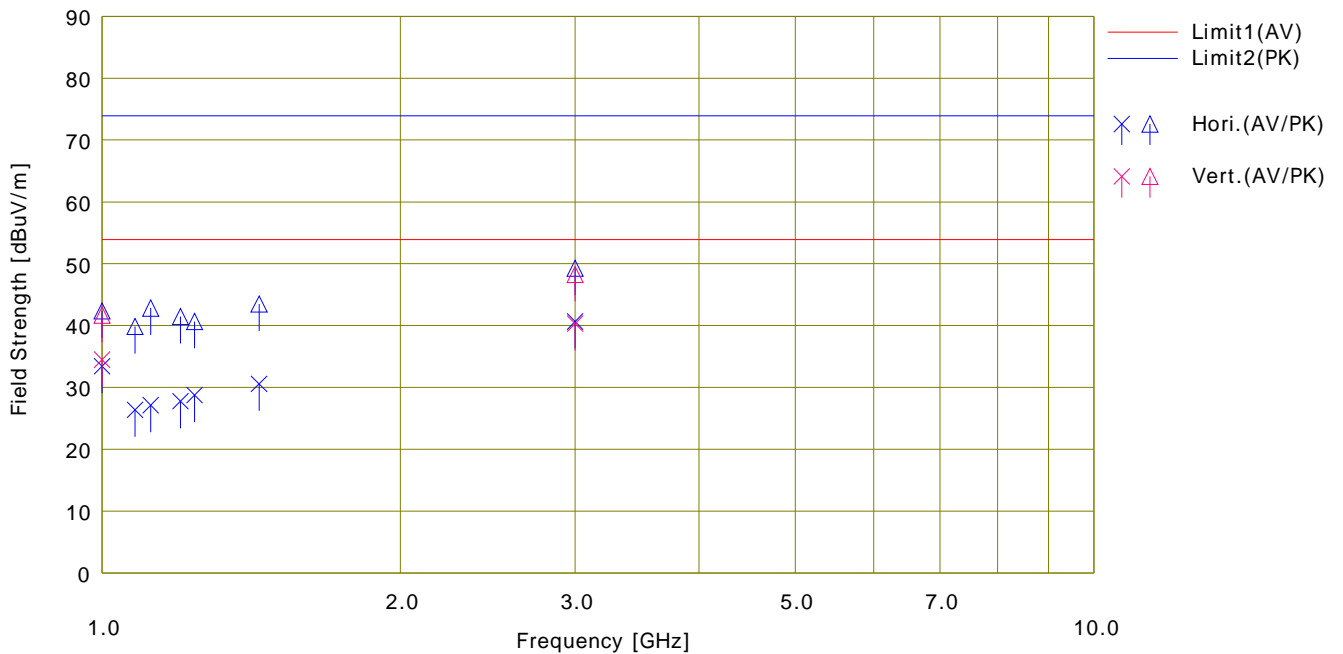
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/03

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-40 5550 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 25 deg.C / 30 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]					
1	1000.032	45.24	54.21	24.38	2.69	41.12	2.26	33.45	42.42	53.90	73.90	20.4	31.4	Hori.	314	32	31SH3	
2	1079.994	37.81	51.27	24.66	2.80	41.13	2.26	26.40	39.86	53.90	73.90	27.5	34.0	Hori.	305	358	31SH3	
3	1119.985	38.33	54.05	24.81	2.86	41.13	2.26	27.13	42.85	53.90	73.90	26.7	31.0	Hori.	276	264	31SH3	
4	1199.987	38.57	52.25	25.15	2.95	41.14	2.26	27.79	41.47	53.90	73.90	26.1	32.4	Hori.	300	359	31SH3	
5	1239.988	39.28	51.21	25.38	3.00	41.15	2.26	28.77	40.70	53.90	73.90	25.1	33.2	Hori.	244	7	31SH3	
6	1440.205	40.76	53.65	25.48	3.27	41.17	2.26	30.60	43.49	53.90	73.90	23.3	30.4	Hori.	293	10	31SH3	
7	2999.992	46.57	55.20	28.83	4.90	41.90	2.26	40.66	49.29	53.90	73.90	13.2	24.6	Hori.	165	110	31SH3	
8	1000.134	46.27	53.48	24.38	2.69	41.12	2.26	34.48	41.69	53.90	73.90	19.4	32.2	Vert.	100	357	31SH3	
9	2999.997	46.25	54.16	28.83	4.90	41.90	2.26	40.34	48.25	53.90	73.90	13.5	25.6	Vert.	265	181	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

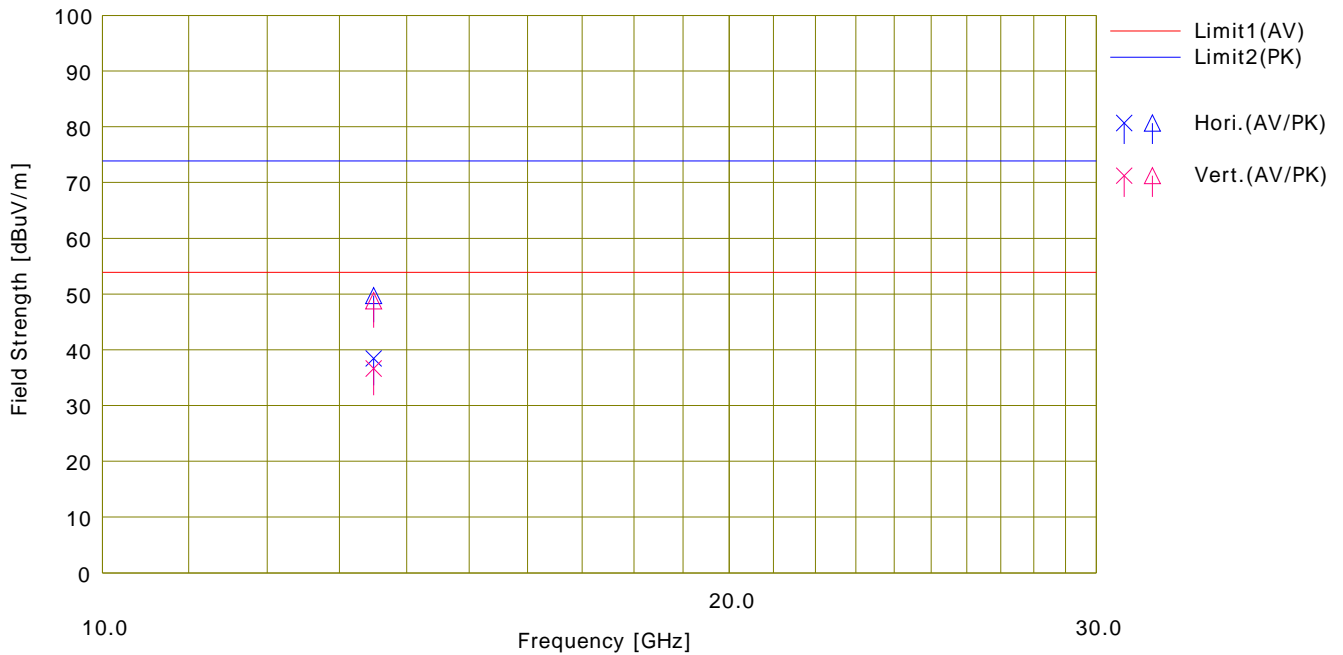
Date : 2023/02/04

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H:X,V:X

Mode : Rx 11n-40 5550 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 25 deg.C / 30 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV> [dBuV]	<PK> [dBuV]					<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dB]	<PK> [dB]					
		1	13499.470					40.43	51.77	38.89	10.56	41.91	-9.54					
2	13500.040	38.65	50.81	38.89	10.56	41.91	-9.54	36.65	48.81	53.90	73.90	17.2	25.0	Vert.	104	355	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

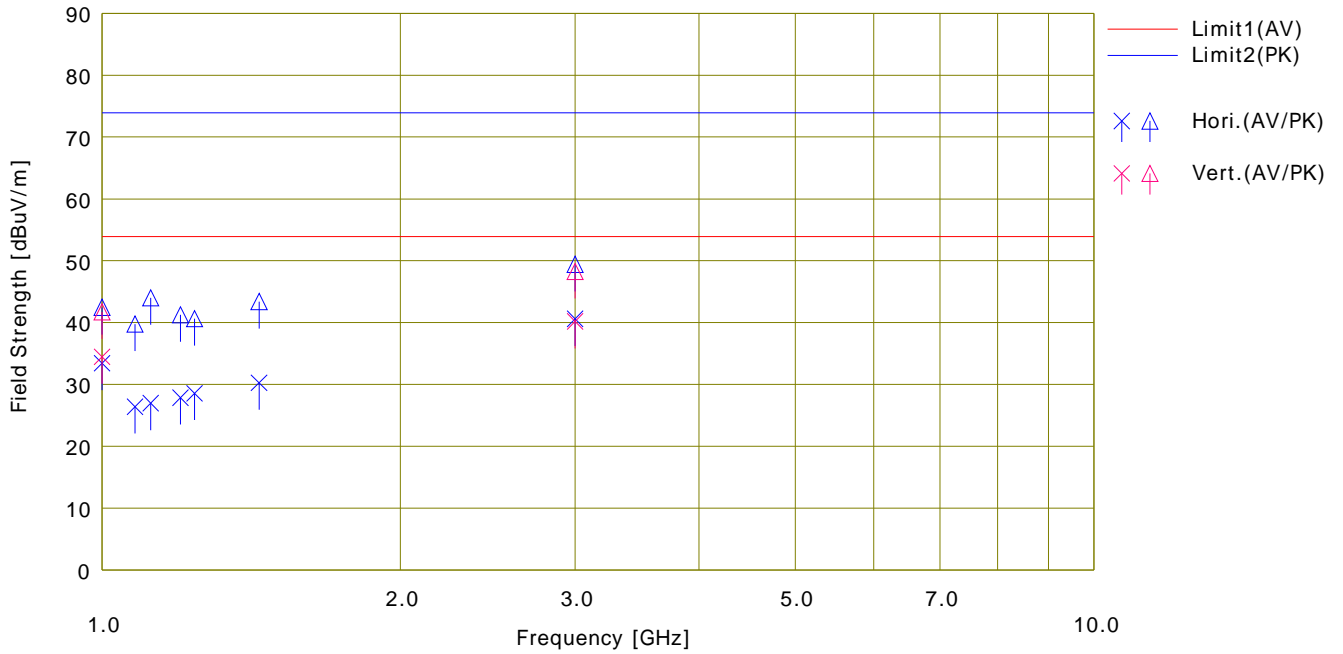
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/03

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-40 5670 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 25 deg.C / 30 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.038	45.24	54.27	24.38	2.69	41.12	2.26	33.45	42.48	53.90	73.90	20.4	31.4	Hori.	304	30	31SH3	
2	1079.993	37.82	51.18	24.66	2.80	41.13	2.26	26.41	39.77	53.90	73.90	27.4	34.1	Hori.	313	357	31SH3	
3	1119.987	38.17	55.20	24.81	2.86	41.13	2.26	26.97	44.00	53.90	73.90	26.9	29.9	Hori.	284	255	31SH3	
4	1199.985	38.64	52.04	25.15	2.95	41.14	2.26	27.86	41.26	53.90	73.90	26.0	32.6	Hori.	305	358	31SH3	
5	1239.986	39.10	51.13	25.38	3.00	41.15	2.26	28.59	40.62	53.90	73.90	25.3	33.2	Hori.	244	4	31SH3	
6	1440.205	40.43	53.57	25.48	3.27	41.17	2.26	30.27	43.41	53.90	73.90	23.6	30.4	Hori.	299	15	31SH3	
7	2999.993	46.51	55.33	28.83	4.90	41.90	2.26	40.60	49.42	53.90	73.90	13.3	24.4	Hori.	163	119	31SH3	
8	1000.130	46.25	53.53	24.38	2.69	41.12	2.26	34.46	41.74	53.90	73.90	19.4	32.1	Vert.	100	357	31SH3	
9	2999.996	46.10	54.17	28.83	4.90	41.90	2.26	40.19	48.26	53.90	73.90	13.7	25.6	Vert.	264	185	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

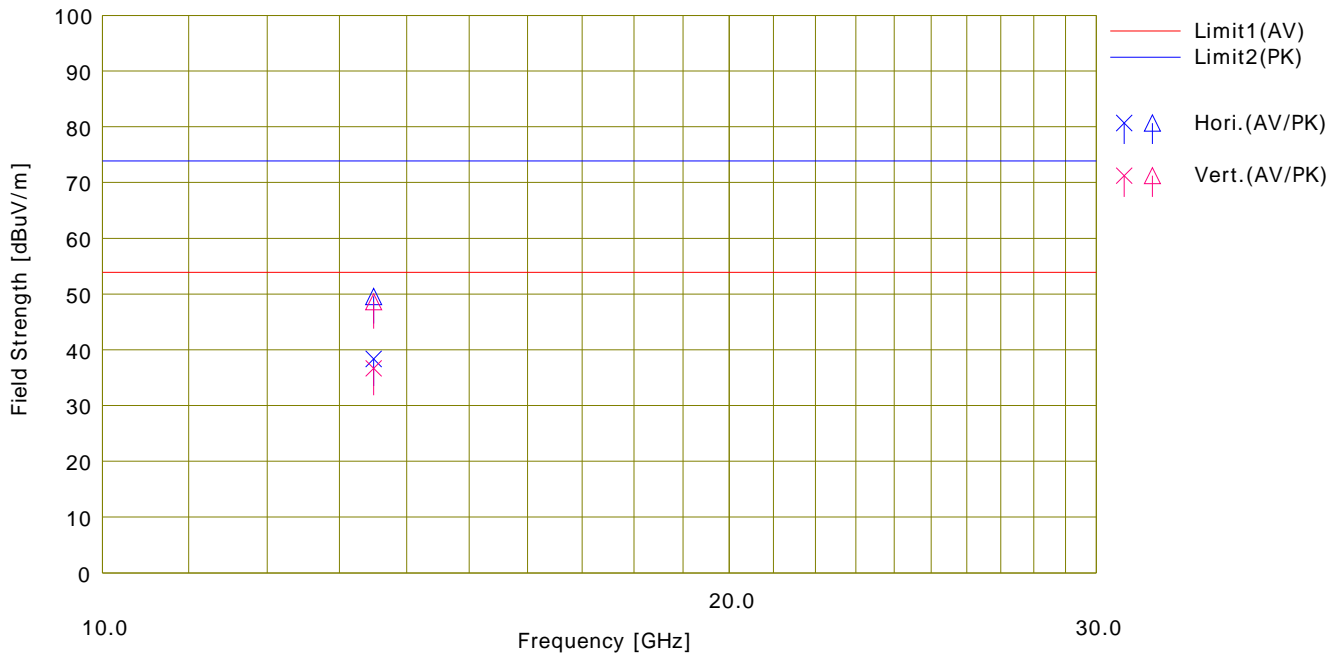
Date : 2023/02/04

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H:X,V:X

Mode : Rx 11n-40 5670 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 25 deg.C / 30 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV> [dBuV]	<PK> [dBuV]					<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dB]	<PK> [dB]					
		1	13499.790					40.34	51.57	38.89	10.56	41.91	-9.54					
2	13499.630	38.68	50.59	38.89	10.56	41.91	-9.54	36.68	48.59	53.90	73.90	17.2	25.3	Vert.	105	353	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

DATA OF RADIATED EMISSION TEST

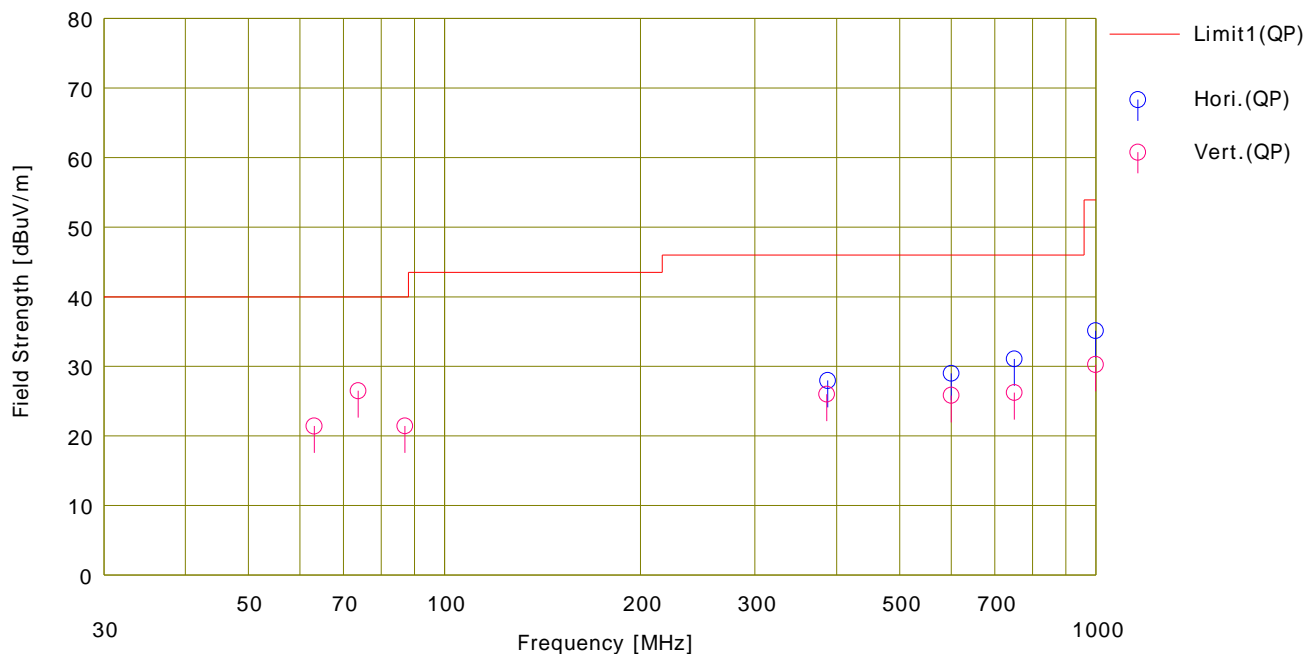
UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/01/31

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : EUT Axis:Z / Antenna Axis:X

Mode : Rx 11n-40 5755 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 22 deg.C / 29 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	S.Fac [dB]	Result	Limit	Margin	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<QP> [dBuV]					<QP> [dBuV/m]	<QP> [dBuV/m]	<QP> [dB]					
1	387.710	35.47	15.35	9.03	31.91	0.00	27.94	46.00	18.0	Hori.	100	194	LP	
2	599.997	31.66	19.33	9.91	31.91	0.00	28.99	46.00	17.0	Hori.	148	359	LP	
3	750.003	32.15	20.15	10.46	31.69	0.00	31.07	46.00	14.9	Hori.	125	217	LP	
4	999.992	31.43	22.46	11.29	30.08	0.00	35.10	53.90	18.8	Hori.	143	359	LP	
5	63.112	39.40	7.63	6.95	32.14	-0.44	21.40	40.00	18.6	Vert.	100	81	BC	
6	73.731	45.13	6.38	7.06	32.14	0.04	26.47	40.00	13.5	Vert.	100	177	BC	
7	86.994	38.31	7.65	7.19	32.13	0.40	21.42	40.00	18.5	Vert.	153	3	BC	
8	386.218	33.57	15.32	9.02	31.91	0.00	26.00	46.00	20.0	Vert.	151	92	LP	
9	599.999	28.49	19.33	9.91	31.91	0.00	25.82	46.00	20.1	Vert.	100	357	LP	
10	750.001	27.31	20.15	10.46	31.69	0.00	26.23	46.00	19.7	Vert.	155	248	LP	
11	999.938	26.57	22.46	11.29	30.08	0.00	30.24	53.90	23.6	Vert.	100	53	LP	

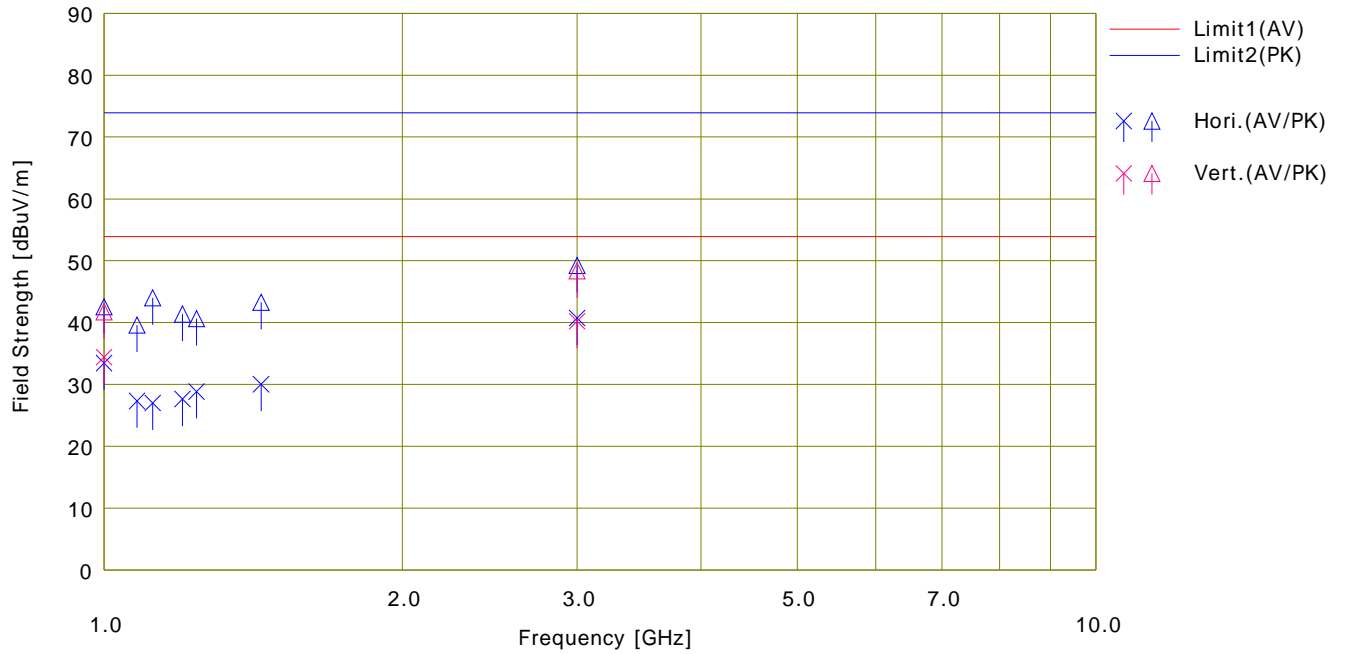
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/03

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-40 5755 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 25 deg.C / 30 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.033	45.26	54.35	24.38	2.69	41.12	2.26	33.47	42.56	53.90	73.90	20.4	31.3	Hori.	306	29	31SH3	
2	1079.995	38.75	51.02	24.66	2.80	41.13	2.26	27.34	39.61	53.90	73.90	26.5	34.2	Hori.	305	355	31SH3	
3	1119.987	38.22	55.23	24.81	2.86	41.13	2.26	27.02	44.03	53.90	73.90	26.8	29.8	Hori.	288	267	31SH3	
4	1199.987	38.43	52.16	25.15	2.95	41.14	2.26	27.65	41.38	53.90	73.90	26.2	32.5	Hori.	307	356	31SH3	
5	1239.863	39.37	51.14	25.38	3.00	41.15	2.26	28.86	40.63	53.90	73.90	25.0	33.2	Hori.	253	5	31SH3	
6	1440.202	40.21	53.43	25.48	3.27	41.17	2.26	30.05	43.27	53.90	73.90	23.8	30.6	Hori.	294	11	31SH3	
7	2999.993	46.66	55.15	28.83	4.90	41.90	2.26	40.75	49.24	53.90	73.90	13.1	24.6	Hori.	164	108	31SH3	
8	1000.134	46.21	53.55	24.38	2.69	41.12	2.26	34.42	41.76	53.90	73.90	19.4	32.1	Vert.	100	356	31SH3	
9	2999.991	46.15	54.29	28.83	4.90	41.90	2.26	40.24	48.38	53.90	73.90	13.6	25.5	Vert.	254	187	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

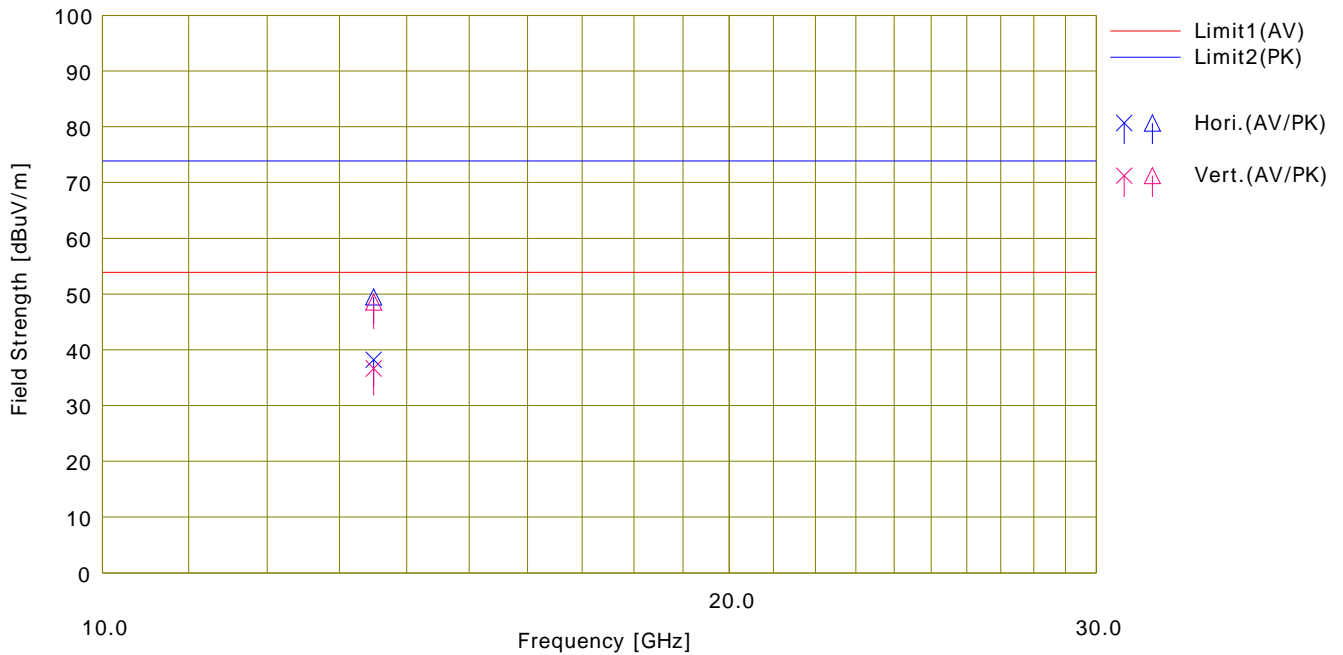
Date : 2023/02/04

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H;X,V:X

Mode : Rx 11n-40 5755 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 25 deg.C / 30 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	13499.980	40.22	51.47	38.89	10.56	41.91	-9.54	38.22	49.47	53.90	73.90	15.6	24.4	Hori.	103	62	19SH0	
2	13500.230	38.65	50.54	38.89	10.56	41.91	-9.54	36.65	48.54	53.90	73.90	17.2	25.3	Vert.	104	356	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

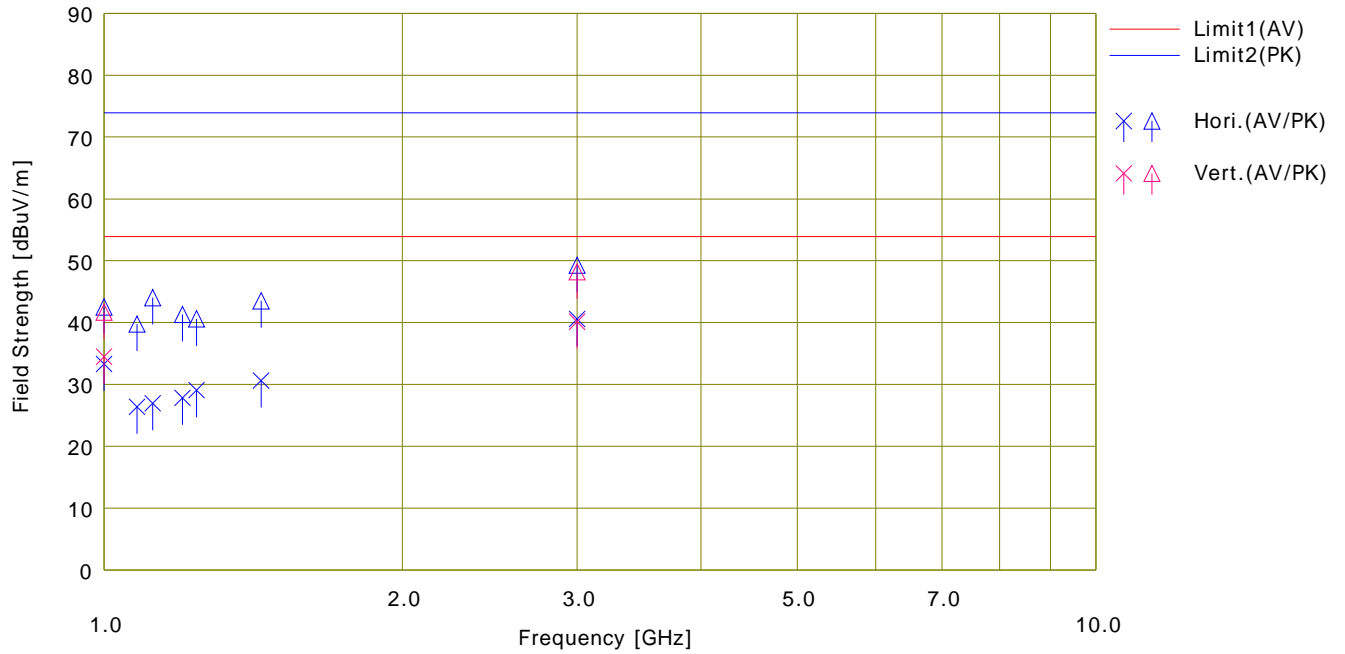
DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2023/02/03

Company : AzureWave Technologies, Inc.	Mode : Rx 11n-40 5795 MHz
Kind of EUT : Refer to Section 4.2	Order No. : 14570738
Model No. : AW-AM510	Power : AC 120 V / 60 Hz
Serial No. : Refer to Section 4.2	Temp./Humi. : 25 deg.C / 30 %RH
Remarks : EUT Axis:Hori = Y, Vert=Z / Antenna Axis:X Test Distance=389 cm	

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]	[dB]	[dB]					
1	1000.031	45.13	54.32	24.38	2.69	41.12	2.26	33.34	42.53	53.90	73.90	20.5	31.3	Hori.	314	36	31SH3	
2	1079.992	37.79	51.17	24.66	2.80	41.13	2.26	26.38	39.76	53.90	73.90	27.5	34.1	Hori.	306	355	31SH3	
3	1119.988	38.16	55.24	24.81	2.86	41.13	2.26	26.96	44.04	53.90	73.90	26.9	29.8	Hori.	281	264	31SH3	
4	1199.986	38.63	52.10	25.15	2.95	41.14	2.26	27.85	41.32	53.90	73.90	26.0	32.5	Hori.	303	355	31SH3	
5	1239.985	39.58	51.11	25.38	3.00	41.15	2.26	29.07	40.60	53.90	73.90	24.8	33.3	Hori.	238	3	31SH3	
6	1440.204	40.79	53.68	25.48	3.27	41.17	2.26	30.63	43.52	53.90	73.90	23.2	30.3	Hori.	296	16	31SH3	
7	2999.994	46.49	55.20	28.83	4.90	41.90	2.26	40.58	49.29	53.90	73.90	13.3	24.6	Hori.	161	107	31SH3	
8	1000.130	46.28	53.47	24.38	2.69	41.12	2.26	34.49	41.68	53.90	73.90	19.4	32.2	Vert.	100	357	31SH3	
9	2999.991	46.06	54.10	28.83	4.90	41.90	2.26	40.15	48.19	53.90	73.90	13.7	25.7	Vert.	254	176	31SH3	

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber

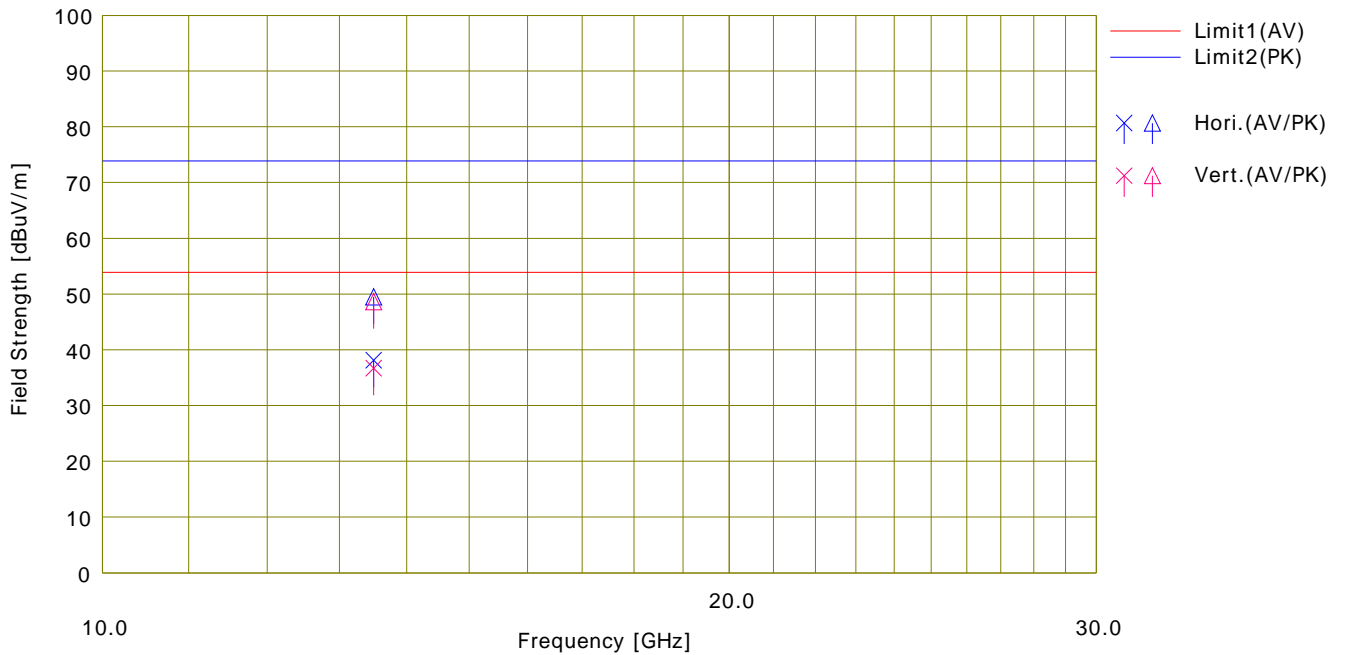
Date : 2023/02/04

Company : AzureWave Technologies, Inc.
 Kind of EUT : Refer to Section 4.2
 Model No. : AW-AM510
 Serial No. : Refer to Section 4.2
 Remarks : Test Distance=100 cm, EUT Axis (module):H:Z,V:Y,(antenna):H;X,V:X

Mode : Rx 11n-40 5795 MHz
 Order No. : 14570738
 Power : AC 120 V / 60 Hz
 Temp./Humi. : 25 deg.C / 30 %RH

Limit : FCC_Part 15 Subpart B(15.109)_Class B

Engineer : Hiromasa Sato



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	D.Fac [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV>	<PK>					<AV>	<PK>	<AV>	<PK>							
		[dBuV]	[dBuV]					[dBuV/m]	[dBuV/m]	[dB]	[dB]							
1	13499.940	40.13	51.49	38.89	10.56	41.91	-9.54	38.13	49.49	53.90	73.90	15.7	24.4	Hori.	104	66	19SH0	
2	13500.030	38.70	50.64	38.89	10.56	41.91	-9.54	36.70	48.64	53.90	73.90	17.2	25.2	Vert.	105	358	19SH0	

Calculation: Result[dBuV/m]=Reading[dBuV]+Ant.Fac[dB/m]+Loss(Cable)[dB]+D.Fac[dB]-Gain(AMP)[dB]
 Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna **SH*: Horn Antenna

APPENDIX 3

Test Instruments

EMI test equipment

Test Name	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Calibration Interval (Month)
CE	SAT3-10	144960	Attenuator	JFW	50HF-003N	-	2022/08/23	12
CE	SCC-C9/C10/SRSE-03	145036	Coaxial Cable&RF Selector	Suhner/Suhner/TOYO	RG223U/141PE/NS4906	-/0901-271(RF Selector)	2022/04/20	12
CE	SLS-05	145542	LISN	Rohde & Schwarz	ENV216	100516	2022/02/24	12
CE	SOS-06	146294	Humidity Indicator	A&D Company	AD-5681	4062118	-	-
CE	STM-05	145762	Terminator	TME	CT-01 BP	-	2022/12/16	12
CE	STR-07	146209	Test Receiver	Rohde & Schwarz	ESU26	100484	2022/09/14	12
CE,RE	COTS-SEMI-5	170932	EMI Software	TSJ (Techno Science Japan)	TEPTO-DV3(RE,CE,ME,PE)	-	-	-
CE,RE	KJM-02	146432	Measure	TAJIMA	GL19-55	-	-	-
CE,RE	STS-03	146210	Digital Hitester	HIOKI E.E. CORPORATION	3805-50	80997823	2022/09/20	12
RE	SAEC-03(NSA)	145565	Semi-Anechoic Chamber	TDK	SAEC-03(NSA)	3	2022/04/15	12
RE	SAEC-03(SVSWR)	145566	Semi-Anechoic Chamber	TDK	SAEC-03(SVSWR)	3	2022/05/18	12
RE	SAF-03	145126	Pre Amplifier	SONOMA	310N	290213	2023/02/09	12
RE	SAF-06	145005	Pre Amplifier	Toyo Corporation	TPA0118-36	1440491	2023/02/02	12
RE	SAF-08	145007	Pre Amplifier	Toyo Corporation	HAP18-26W	19	2022/03/03	12
RE	SAF-10	145129	Pre Amplifier	Toyo Corporation	HAP26-40W	10	2022/03/03	12
RE	SAT6-13	167094	Attenuator	JFW	50HF-006N	-	2023/02/09	12
RE	SBA-03	145023	Biconical Antenna	Schwarzbeck Mess-Elektronik OHG	BBA9106	91032666	2022/05/14	12
RE	SCC-C1/C2/C3/C4/C5/C10/SRSE-03	145171	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/NS4906	-/0901-271(RF Selector)	2022/04/20	12
RE	SCC-G15	145176	Coaxial Cable	Suhner	SUCOFLEX 102	32703/2	2022/03/03	12
RE	SCC-G43	156380	Coaxial Cable	Huber+Suhner	SUCOFLEX_104_E	SN MY 13406/4E	2022/05/20	12
RE	SCC-G44	168300	Coaxial Cable	Huber+Suhner	SUCOFLEX 104	800375/4A	2022/11/10	12
RE	SCC-G57	179540	Coaxial Cable	Huber+Suhner	SUCOFLEX 102	802815/2	2022/05/12	12
RE	SCC-G70	200010	Coaxial Cable	Huber+Suhner	SUCOFLEX 104	575618/4	2022/07/22	12
RE	SHA-04	145512	Horn Antenna	ETS-Lindgren	3160-09	00094868	2022/06/06	12
RE	SHA-06	145514	Horn Antenna	ETS-Lindgren	3160-10	00092383	2022/06/06	12
RE	SHA-10	194685	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA 9120 C	711	2022/03/16	12
RE	SLA-07	145529	Logperiodic Antenna	Schwarzbeck Mess-Elektronik OHG	VUSLP9111B	196	2022/05/14	12
RE	SOS-23	191840	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2022/08/08	12
RE	STR-08	150463	Test Receiver	Rohde & Schwarz	ESW44	101581	2022/03/02	12
RE	STR-09	213530	Test Receiver	Rohde & Schwarz	ESW44	103068	2023/01/12	12

*Hyphens for Last Calibration Date and Cal Int (month) are instruments that Calibration is not required (e.g. software), or instruments checked in advance before use.

The expiration date of the calibration is the end of the expired month.

As for some calibrations performed after the tested dates , those test equipment have been controlled by means of an unbroken chains of calibrations.

All equipment is calibrated with valid calibrations . Each measurement data is traceable to the national or international standards

Test Item :

CE: Conducted emission,

RE: Radiated emission