RADIO TEST REPORT

Test Report No.: 14337821S-A-R2

Customer	**Panasonic Automotive Systems Co., Ltd.**
Description of EUT	**AV Control Unit for In-Vehicle Infotainment**
Model Number of EUT	**AM2201**
FCC ID	**ACJ932AM2201**
Test Regulation	**FCC Part 15 Subpart E**
Test Result	**Complied (Refer to SECTION 3)**
Issue Date	**December 9, 2022**
Remarks	**WLAN (5 GHz band) part**

Representative test engineer	Approved by
Shiro Kobayashi Engineer	Shinichi Takano Engineer

CERTIFICATE 1266.03

☐ The testing in which "Non-accreditation" is displayed is outside the accreditation scopes in UL Japan, Inc.
☒ There is no testing item of "Non-accreditation".

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REVISION HISTORY

Original Test Report No.: 14337821S-A

This report is a revised version of 14337821S-A-R1. 14337821S-A-R1 is replaced with this report.

Revision	Test Report No.	Date	Page Revised Contents
- (Original)	14337821S-A	July 27, 2022	-
1	14337821S-A-R1	August 17, 2022	P.6 Radio Specification Modulation of WLAN 5 G Deletion of DSSS
2	14337821S-A-R2	December 9, 2022	P.15 Antenna Terminal Conducted Tests Addition of Comment: "*5) Maximum Power Spectral Density was measured with using the gate function."

Reference: Abbreviations (Including words undescribed in this report)

A2LA	The American Association for Laboratory Accreditation	IEC	International Electrotechnical Commission
AC	Alternating Current	IEEE	Institute of Electrical and Electronics Engineers
AFH	Adaptive Frequency Hopping	IF	Intermediate Frequency
AM	Amplitude Modulation	ILAC	International Laboratory Accreditation Conference
Amp, AMP	Amplifier	ISED	Innovation, Science and Economic Development Canada
ANSI	American National Standards Institute	ISO	International Organization for Standardization
Ant, ANT	Antenna	JAB	Japan Accreditation Board
AP	Access Point	LAN	Local Area Network
ASK	Amplitude Shift Keying	LIMS	Laboratory Information Management System
Atten., ATT	Attenuator	MCS	Modulation and Coding Scheme
AV	Average	MIMO	Multi Input Multi Output
BPSK	Binary Phase-Shift Keying	MRA	Mutual Recognition Arrangement
BR	Bluetooth Basic Rate	N/A	Not Applicable
BT	Bluetooth	NIST	National Institute of Standards and Technology
BT LE	Bluetooth Low Energy	NS	No signal detect.
BW	BandWidth	NSA	Normalized Site Attenuation
Cal Int	Calibration Interval	NVLAP	National Voluntary Laboratory Accreditation Program
CDD	Cyclic Delay Diversity	OBW	Occupied Band Width
CCK	Complementary Code Keying	OFDM	Orthogonal Frequency Division Multiplexing
Ch., CH	Channel	P/M	Power meter
CISPR	Comite International Special des Perturbations Radioelectriques	PCB	Printed Circuit Board
CW	Continuous Wave	PER	Packet Error Rate
DBPSK	Differential BPSK	PHY	Physical Layer
DC	Direct Current	PK	Peak
D-factor	Distance factor	PN	Pseudo random Noise
DFS	Dynamic Frequency Selection	PRBS	Pseudo-Random Bit Sequence
DQPSK	Differential QPSK	PSD	Power Spectral Density
DSSS	Direct Sequence Spread Spectrum	QAM	Quadrature Amplitude Modulation
EDR	Enhanced Data Rate	QP	Quasi-Peak
EIRP, e.i.r.p.	Equivalent Isotropically Radiated Power	QPSK	Quadri-Phase Shift Keying
EMC	ElectroMagnetic Compatibility	RBW	Resolution Band Width
EMI	ElectroMagnetic Interference	RDS	Radio Data System
EN	European Norm	RE	Radio Equipment
ERP, e.r.p.	Effective Radiated Power	RF	Radio Frequency
EU	European Union	RMS	Root Mean Square
EUT	Equipment Under Test	RSS	Radio Standards Specifications
Fac.	Factor	Rx	Receiving
FCC	Federal Communications Commission	SA, S/A	Spectrum Analyzer
FHSS	Frequency Hopping Spread Spectrum	SDM	SDM: Space Division Multiplexing
FM	Frequency Modulation	SG	Signal Generator
Freq.	Frequency	SISO	Single Input Single Output
FSK	Frequency Shift Keying	SS	Spatial Stream
GFSK	Gaussian Frequency-Shift Keying	SVSWR	Site-Voltage Standing Wave Ratio
G.I.	Guard Interval	TR	Test Receiver
GNSS	Global Navigation Satellite System	Tx	Transmitting
GPS	Global Positioning System	VBW	Video BandWidth
Hori.	Horizontal	Vert.	Vertical
ICES	Interference-Causing Equipment Standard	WLAN	Wireless LAN

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SECTION 1: Customer Information

Company Name	Panasonic Automotive Systems Co., Ltd. *1)
Address	4261, Ikonobe-cho, Tsuzuki-ku, Yokohama-shi, Kanagawa-ken 224-8520, Japan
Telephone Number	+81-70-3179-1127
Contact Person	Yoshinori Nagatani

*1) The Grantee name in the FCC application is “Panasonic Corporation of North America”.

The information provided from the customer is as follows;
- Customer, Description of EUT, Model Number of EUT, FCC ID on the cover 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	AV Control Unit for In-Vehicle Infotainment
Model Number	AM2201
Serial Number	Refer to SECTION 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	May 19, 2022
Test Date	June 7 to 23, 2022

2.2 Product Description

General Specification

Rating	DC 13.2 V
Operating temperature	-30 deg. C to +60 deg. C

Radio Specification

Bluetooth (BR / EDR)

Equipment Type	Transceiver
Frequency of Operation	2402 MHz to 2480 MHz
Type of Modulation	FHSS (GFSK, π/4 DQPSK, 8 DPSK)
Antenna Type	Pattern antenna
Antenna Gain	2 dBi

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

Equipment Type	Transceiver
Frequency of Operation	2412 MHz to 2462 MHz
Type of Modulation	DSSS, OFDM
Antenna Type	Pattern antenna
Antenna Gain	2 dBi

WLAN (IEEE802.11a/11n-20/11ac-20/11n-40/11ac-40/11ac-80)

Equipment Type	Transceiver
Frequency of Operation	5745 MHz to 5825 MHz
Type of Modulation	OFDM
Antenna Type	Pattern antenna
Antenna Gain	1st: 5 dBi, 2nd: 5 dBi

SECTION 3: Test specification, Procedures & Results

3.1 Test Specification

Test Specification	FCC Part 15 Subpart E FCC Part 15 final revised on April 1, 2022 and effective May 2, 2022
Title	FCC 47 CFR Part 15 Radio Frequency Device Subpart E Unlicensed National Information Infrastructure Devices Section 15.407 General technical requirements

3.2 Procedures and Results

Item	Test Procedure	Specification	Worst Margin	Results	Remarks
Conducted Emission	**FCC:** ANSI C63.10-2013	**FCC:** 15.407 (b) (6) / 15.207	-	N/A	*1)
	ISED: RSS-Gen 8.8	**ISED:** RSS-Gen 8.8			
26 dB Emission Bandwidth	**FCC:** KDB Publication Number 789033	**FCC:** 15.407 (a) (1) (2) (3)	See data	N/A	*2)
	ISED: -	**ISED:** -			
Maximum Conducted Output Power	**FCC:** KDB Publication Number 789033	**FCC:** 15.407 (a) (1) (2) (3)		Complied a)	Conducted
	ISED: -	**ISED:** RSS-247 6.2.1.1 6.2.2.1 6.2.3.1 6.2.4.1			
Maximum Power Spectral Density	**FCC:** KDB Publication Number 789033	**FCC :** 15.407 (a) (1) (2) (3)		Complied b)	Conducted
	ISED: -	**ISED:** RSS-247 6.2.1.1 6.2.2.1 6.2.3.1 6.2.4.1			
Spurious Emission Restricted Band Edge	**FCC:** ANSI C63.10-2013 KDB Publication Number 789033	**FCC:** 15.407 (b), 15.205 and 15.209	1.8 dB 7700.000 MHz, AV, Hori. Mode: Tx 11ac-80 SDM, 5775 MHz	Complied# c) / d)	Conducted (< 30 MHz) / Radiated (> 30 MHz) *3)
	ISED: -	**ISED:** RSS-247 6.2.1.2 6.2.2.2 6.2.3.2 6.2.4.2			
6 dB Emission Bandwidth	**FCC:** ANSI C63.10-2013	**FCC:** 15.407 (e)	See data	Complied e)	Conducted
	ISED: -	**ISED:** RSS-247 6.2.4.1			

Note: UL Japan, Inc.'s EMI Work Procedures: Work Instructions-ULID-003591 and Work Instructions-ULID-003593.
* In case any questions arise about test procedure, ANSI C63.10: 2013 is also referred.

*1) The test is not applicable since the EUT does not have AC Mains.
*2) The test is not applicable since the EUT support only U-NII-3 band.
*3) Radiated test was selected over 30 MHz based on FCC 15.407 (b) and KDB 789033 D02 G.3.b).

a) Refer to APPENDIX 1 (data of Maximum Conducted Output Power)
b) Refer to APPENDIX 1 (data of Maximum Power Spectral Density)
c) Refer to APPENDIX 1 (data of Radiated Spurious Emission)
d) Refer to APPENDIX 1 (data of Conducted Spurious Emission)
e) Refer to APPENDIX 1 (data of 6 dB Emission Bandwidth and 99 % Occupied Bandwidth)

Symbols:
Complied The data of this test item has enough margin, more than the measurement uncertainty.
Complied# The data of this test item meets the limits unless the measurement uncertainty is taken into consideration.

FCC Part 15.31 (e)

The equipment provides the wireless transmitter with stable power supply.
Instead of a new battery, DC power supply was used for the test. That does not affect the test result, therefore the EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

The equipment and its antenna comply with the requirement since the antenna is built in the equipment and it cannot be replaced by end users. Therefore, the equipment complies with the antenna requirement of Section 15.203.

3.3 Addition to Standard

Item	Test Procedure	Specification	Worst Margin	Results	Remarks
99 % Occupied Band Width	**ISED:** RSS-Gen 6.7	**ISED:** -	N/A	- a)	Conducted
a) Refer to APPENDIX 1 (data of 6 dB Emission Bandwidth and 99 % Occupied Bandwidth)					

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

3.4 Uncertainty

There is no applicable rule of uncertainty in this applied standard. Therefore, the following results are derived depending on whether or not laboratory uncertainty is applied.

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

Item	Frequency range	Uncertainty (+/-)			
		No. 1 SAC / SR	No. 2 SAC / SR	No. 3 SAC / SR	No. 4,5,6,8 SR
Conducted emission (AC Mains) LISN	150 kHz to 30 MHz	2.9 dB	2.9 dB	3.0 dB	2.9 dB
Radiated emission (Measurement distance: 3 m)	9 kHz to 30 MHz	3.2 dB	3.1 dB	3.1 dB	-
	30 MHz to 200 MHz	4.6 dB	4.6 dB	4.6 dB	-
	200 MHz to 1 GHz	6.0 dB	6.1 dB	6.1 dB	-
	1 GHz to 6 GHz	4.7 dB	4.7 dB	4.7 dB	-
	6 GHz to 18 GHz	5.2 dB	5.3 dB	5.3 dB	-
	18 GHz to 40 GHz	5.4 dB	5.5 dB	5.5 dB	-
Radiated emission (Measurement distance: 1 m)	1 GHz to 18 GHz	5.6 dB	5.6 dB	5.6 dB	-
	18 GHz to 40 GHz	5.8 dB	5.8 dB	5.8 dB	-

SAC=Semi-Anechoic Chamber

SR= Shielded Room is applied besides radiated emission

Antenna terminal test	Uncertainty (+/-)
Power Measurement above 1 GHz (Average Detector) SPM-06	1.2 dB
Power Measurement above 1 GHz (Peak Detector) SPM-06	2.0 dB
Power Measurement above 1 GHz (Average Detector) SPM-07	1.2 dB
Power Measurement above 1 GHz (Peak Detector) SPM-07	1.3 dB
Power Measurement above 1 GHz (Average Detector) SPM-13	1.3 dB
Power Measurement above 1 GHz (Peak Detector) SPM-13	1.3 dB
Spurious emission (Conducted) below 1 GHz	0.93 dB
Conducted emissions Power Density Measurement 1 GHz to 3 GHz	0.92 dB
Conducted emissions Power Density Measurement 3 GHz to 18 GHz	2.3 dB
Spurious emission (Conducted) 18 GHz to 26.5 GHz	2.3 dB
Spurious emission (Conducted) 26.5 GHz to 40 GHz	2.3 dB
Bandwidth Measurement	0.012 %
Duty cycle and Time Measurement	0.27 %
Temperature_SCH-01	0.93 deg. C.
Humidity_SCH-01	4.1 %
Temperature_SCH-02	2.0 deg. C.
Humidity_SCH-02	6.6 %
Voltage	0.97 %

3.5 Test Location

UL Japan, Inc. Shonan EMC Lab.
1-22-3, Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 Japan
Telephone: +81 463 50 6400
A2LA Certificate Number: 1266.03
(FCC test firm registration number: 626366, ISED lab company number: 2973D / CAB identifier: JP0001)

Test site	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Maximum measurement distance
No.1 Semi-anechoic chamber	2973D-1	20.6 x 11.3 x 7.65	20.6 x 11.3	10 m
No.2 Semi-anechoic chamber	2973D-2	20.6 x 11.3 x 7.65	20.6 x 11.3	10 m
No.3 Semi-anechoic chamber	2973D-3	12.7 x 7.7 x 5.35	12.7 x 7.7	5 m
No.4 Semi-anechoic chamber	-	8.1 x 5.1 x 3.55	8.1 x 5.1	-
No.1 Shielded room	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
No.2 Shielded room	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
No.3 Shielded room	-	6.3 x 4.7 x 2.7	6.3 x 4.7	-
No.4 Shielded room	-	4.4 x 4.7 x 2.7	4.4 x 4.7	-
No.5 Shielded room	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
No.6 Shielded room	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
No.8 Shielded room	-	3.45 x 5.5 x 2.4	3.45 x 5.5	-
No.1 Measurement room	-	2.55 x 4.1 x 2.5	-	-

3.6 Test Data, Test Instruments, and Test Set Up

Refer to APPENDIX.

SECTION 4: Operation of EUT during testing

4.1 Operating Mode(s)

Test operating mode was determined as follows according to "Section 1 of 6 802.11 a/b/g/n testing - Managing Complex Regulatory Approvals -" of TCB Council Workshop October 2009 and also was judged the necessity of 802.11ac mode by the pre-test.

Mode	Remarks*
IEEE 802.11a SISO (11a SISO)	24 Mbps, PN9
IEEE 802.11n SISO 20 MHz BW (11n-20 SISO)	MCS 3, Long G.I., PN9
IEEE 802.11ac SISO 20 MHz BW (11ac-20 SISO)	MCS 3, Long G.I., PN9
IEEE 802.11a CDD (11a CDD)	54 Mbps, PN9
IEEE 802.11n CDD 20 MHz BW (11n-20 CDD)	MCS 4, Long G.I., PN9
IEEE 802.11ac CDD 20 MHz BW (11ac-20 CDD)	MCS 6, 1SS, Long G.I., PN9
IEEE 802.11n SDM 20 MHz BW (11n-20 SDM)	MCS 12, Long G.I., PN9
IEEE 802.11ac SDM 20 MHz BW (11ac-20 SDM)	MCS 4, 2SS, Long G.I., PN9
IEEE 802.11n SISO 40 MHz BW (11n-40 SISO)	MCS 6, Long G.I., PN9
IEEE 802.11ac SISO 40 MHz BW (11ac-40 SISO)	MCS 5, Long G.I., PN9
IEEE 802.11n CDD 40 MHz BW (11n-40 CDD)	MCS 5, Long G.I., PN9
IEEE 802.11ac CDD 40 MHz BW (11ac-40 CDD)	MCS 4, 1SS, Long G.I., PN9
IEEE 802.11n SDM 40 MHz BW (11n-40 SDM)	MCS 12, Long G.I., PN9
IEEE 802.11ac SDM 40 MHz BW (11ac-40 SDM)	MCS 6, 2SS, Long G.I., PN9
IEEE 802.11ac SISO 80 MHz BW (11ac-80 SISO)	MCS 7, Long G.I., PN9
IEEE 802.11ac CDD 80 MHz BW (11ac-80 CDD)	MCS 3, 1SS, Long G.I., PN9
IEEE 802.11ac SDM 80 MHz BW (11ac-80 SDM)	MCS 6, 2SS, Long G.I., PN9
*The worst condition and antenna were determined based on the test result of Maximum Conducted Output Power.	

*Power of the EUT was set by the software as follows;
Power Setting: Fixed
Software: SI ver. 07851
(Date: 2022.05 9, Storage location: EUT memory)

*This setting of software is the worst case.
Any conditions under the normal use do not exceed the condition of setting.
In addition, end users cannot change the settings of the output power of the product.

*The Details of Operation Mode(s)

Test Item	Operating Mode	Tested Antenna	Tested Frequency U-NII-3 Band
Maximum Conducted Output Power, Maximum Power Spectral Density	Tx 11a SISO Tx 11n-20 SISO Tx 11ac-20 SISO	2nd *2)	5745 MHz 5785 MHz 5825 MHz
	Tx 11a CDD Tx 11n-20 CDD/SDM Tx 11ac-20 CDD/SDM	1st + 2nd	5745 MHz 5785 MHz 5825 MHz
	Tx 11n-40 SISO Tx 11ac-40 SISO	2nd *2)	5755 MHz 5795 MHz
	Tx 11n-40 CDD/SDM Tx 11ac-40 CDD/SDM	1st + 2nd	5755 MHz 5795 MHz
	Tx 11ac-80 SISO	2nd *2)	5775 MHz
	Tx 11ac-80 CDD/SDM	1st + 2nd	5775 MHz
99 % Occupied Bandwidth, 6 dB Bandwidth	Tx 11a SISO/CDD Tx 11n-20 SISO/CDD/SDM Tx 11ac-20 SISO/CDD/SDM	2nd *2)	5745 MHz 5785 MHz 5825 MHz
	Tx 11n-40 SISO/CDD/SDM Tx 11ac-40 SISO/CDD/SDM	2nd *2)	5755 MHz 5795 MHz
	Tx 11ac-80 SISO/CDD/SDM	2nd *2)	5775 MHz
Radiated Spurious Emission (Below 1 GHz) *1)	Tx 11ac-40 CDD, Tx 11ac-40 CDD with DH5 2441 MHz	1st + 2nd	5755 MHz
Radiated Spurious Emission (Above 1 GHz)	Tx 11n-20 SDM, Tx 11n-20 SDM with DH5 2441 MHz	1st + 2nd	5745 MHz 5785 MHz 5825 MHz
	Tx 11ac-40 CDD, Tx 11ac-40 CDD with DH5 2441 MHz	1st + 2nd	5755 MHz 5795 MHz
	Tx 11ac-80 SDM Tx 11ac-80 SDM with DH5 2441 MHz	1st + 2nd	5775 MHz
Conducted Spurious Emission *1)	Tx 11ac-40 CDD	2nd *2)	5755 MHz

*1) The mode was tested as a representative, because it had the highest power at antenna terminal test.
*2) The test was performed with the antenna that had higher power as a representative.

4.2 Configuration and Peripherals

This page has been submitted for separate exhibit (refer to APPENDIX 4).

SECTION 5: Radiated Spurious Emission and Band Edge Compliance

Test Procedure

< Below 1GHz >
EUT was placed on a urethane platform of nominal size, 2.0 m by 1.0 m, raised 0.8 m above the conducting ground plane. The Radiated Electric Field Strength has been measured in a Semi Anechoic Chamber with a ground plane.

< Above 1GHz >
EUT was placed on a urethane platform of nominal size, 0.5 m by 0.5 m, raised 1.5 m above the conducting ground plane.
The Radiated Electric Field Strength has been measured in a Semi Anechoic Chamber with absorbent materials lined on a ground plane.

The height of the measuring antenna 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 strength.
Test antenna was aimed at the EUT for receiving the maximum signal and always kept within the illumination area of the 3 dB beamwidth of the antenna.
The measurements were performed for both vertical and horizontal antenna polarization with the Test Receiver, or the Spectrum Analyzer.
The measurements were made with the following detector function of the test receiver and the Spectrum analyzer (in linear mode).
The test was made with the detector (RBW/VBW) in the following table.
When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

< Below 1GHz >

The result also satisfied with the general limits specified in section 15.209 (a).

< Above 1GHz >

Inside of restricted bands (Section 15.205):

Apply to limit in the Section 15.209 (a).

Outside of the restricted bands:

Apply to limit 68.2 dBuV/m, 3 m (-27 dBm e.i.r.p.*) in the Section 15.407 (b) (1) (2) (3).

For U-NII-3 Bandedge
-27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge in the section 15.407(b)(4)(i).

Restricted band edge:

Apply to limit in the Section 15.209 (a).
Since this limit is severer than the limit of the inside of restricted bands.

*Electric field strength to e.i.r.p. conversion:

$$E = \frac{1000000\sqrt{30P}}{3} \quad \text{(uV/m)} \qquad :P \text{ is the e.i.r.p. (Watts)}$$

Test Antennas are used as below;

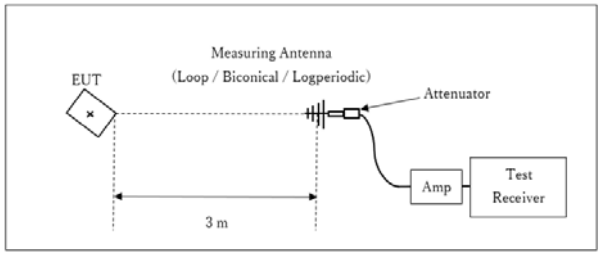
Frequency	30 MHz to 200 MHz	200 MHz to 1 GHz	Above 1 GHz
Antenna Type	Biconical	Logperiodic	Horn

Frequency	Below 1 GHz	Above 1 GHz	
Instrument Used	Test Receiver	Spectrum Analyzer	
Detector	QP	Peak	Average
IF Bandwidth	BW: 120 kHz	RBW: 1 MHz VBW: 3 MHz	Method VB RBW: 1 MHz VBW: 1/T MHz (T: Burst length, refer to Appendix) Detector: Peak Trace mode: Max hold

*1) The test method was also referred to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 "Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E".

Figure 2: Test Setup

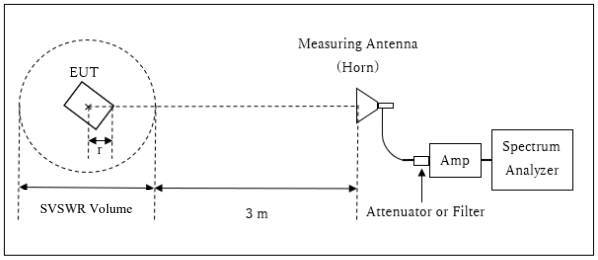
Below 1 GHz



× : Center of turn table

Test Distance: 3 m

1 GHz to 10 GHz

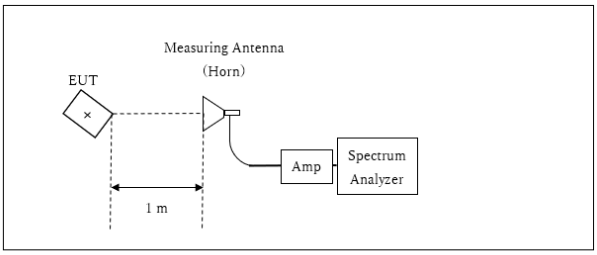


r : Radius of an outer periphery of EUT
× : Center of turn table

Distance Factor: 20 x log (3.89 m / 3.0 m) = 2.26 dB
* Test Distance: (3 + SVSWR Volume /2) - r = 3.89 m

SVSWR Volume : 2.0 m
(SVSWR Volume has been calibrated based on CISPR 16-1-4.)
r = 0.11 m

10 GHz to 40 GHz



× : Center of turn table

Distance Factor: 20 x log (1.0 m / 3.0 m) = -9.54 dB
*Test Distance: 1 m

- The carrier level and noise levels were confirmed at each position of 0 deg. and 28 deg. angles of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

(Wireless LAN transmitting tests)

	Below 1 GHz	1 GHz - 10 GHz	10 GHz - 18 GHz	18 GHz – 26.5 GHz	26.5 GHz - 40 GHz
Horizontal	0 deg.	0 deg.	0 deg.	0 deg.	0 deg.
Vertical	0 deg.	28 deg.	0 deg.	0 deg.	0 deg.

(Bluetooth and wireless LAN transmitting co-location tests)

	Below 1 GHz	1 GHz - 10 GHz	10 GHz - 18 GHz	18 GHz – 26.5 GHz	26.5 GHz - 40 GHz
Horizontal	0 deg.	0 deg.	0 deg.	0 deg.	0 deg.
Vertical	0 deg.	28 deg.	0 deg.	0 deg.	0 deg.

The test results and limit are rounded off to one decimal place, so some differences might be observed.

Measurement Range : **30 MHz to 40 GHz**
Test Data : **APPENDIX**
Test Result : **Pass**

SECTION 6: Antenna Terminal Conducted Tests

Test Procedure

The tests were made with below setting connected to the antenna port.

Test	Span	RBW	VBW	Sweep time	Detector	Trace	Instrument used and Test method
99 % Occupied Bandwidth *1)	Enough width to display emission skirts	1 % to 5 % of OBW	≥ 3 RBW	Auto	Peak	Max Hold	Spectrum Analyzer
6 dB Bandwidth	Enough to capture the emission	100 kHz	300 kHz	Auto	Peak	Max Hold	Spectrum Analyzer
Maximum Conducted Output Power	-	-	-	Auto	Average	-	Power Meter (Sensor: 160 MHz BW) (Method PM-G)
Maximum Power Spectral Density	Encompass the entire EBW	100 kHz *2)	≥ 3 RBW	Auto	RMS Power Averaging (100 times)	Clear Write	Spectrum Analyzer *5)
Conducted Spurious Emission*3) *4)	9 kHz to 150 kHz 150 kHz to 30 MHz	200 Hz 10 kHz	620 Hz 30 kHz	Auto	Peak	Max Hold	Spectrum Analyzer

* The test method was also referred to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 "Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E".

*1) Peak hold was applied as Worst-case measurement.
*2) KDB 789033 D02 says that RBW is set to be 500 kHz for 5.725 GHz to 5.850 GHz, but it is not possible with spectrum analyzer, so RBW Correction Factor (10 log (500 kHz / 100 kHz)) was added to the test result.
*3) In the frequency range below 30 MHz, RBW was narrowed to separate the noise contents. Then, wide-band noise near the limit was checked separately, however the noise was not detected as shown in the chart. (9 kHz to 150 kHz: RBW = 200 Hz, 150 kHz to 30 MHz: RBW = 10 kHz)
*4) The limits in CFR 47, Part 15, Subpart C, paragraph 15.209(a), are identical to those in RSS-Gen section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377 Ohmes. For example, the measurement at frequency 9 kHz resulted in a level of 45.5 dBuV/m, which is equivalent to 45.5 – 51.5 = -6.0 dBuA/m, which has the same margin, 3 dB, to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit.
*5) Maximum Power Spectral Density was measured with using the gate function.

The test results and limit are rounded off to two decimals place, so some differences might be observed.
The equipment and cables were not used for factor 0 dB of the data sheets.

Test Data : APPENDIX
Test Result : Pass

APPENDIX 1: Test Data

6 dB Emission Bandwidth and 99 % Occupied Bandwidth

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 21, 2022
Temperature / Humidity	25 deg. C / 42 % RH
Engineer	Kenichi Adachi
Mode	Tx

11a SISO

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5745	16.581	17121.7
	5785	16.500	17104.7
	5825	16.498	17049.6

11n-20 SISO

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5745	17.752	18165.0
	5785	17.703	18150.2
	5825	17.729	18161.6

11ac-20 SISO

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5745	17.800	18189.6
	5785	17.723	18169.3
	5825	17.774	18237.9

11a CDD

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5745	16.531	17151.9
	5785	16.517	17076.9
	5825	16.505	17132.6

11n-20 CDD

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5745	17.726	18254.5
	5785	17.743	18220.8
	5825	17.627	18304.6

6 dB Emission Bandwidth and 99 % Occupied Bandwidth

Test place	Shonan EMC Lab. No.5 Shielded Room	
Date	June 21, 2022	June 22, 2022
Temperature / Humidity	25 deg. C / 42 % RH	26 deg. C / 49 % RH
Engineer	Kenichi Adachi	Miku Ikudome
Mode	Tx	

11n-20 SDM

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5745	17.735	18188.5
	5785	17.734	18275.9
	5825	17.761	18194.0

11ac-20 CDD

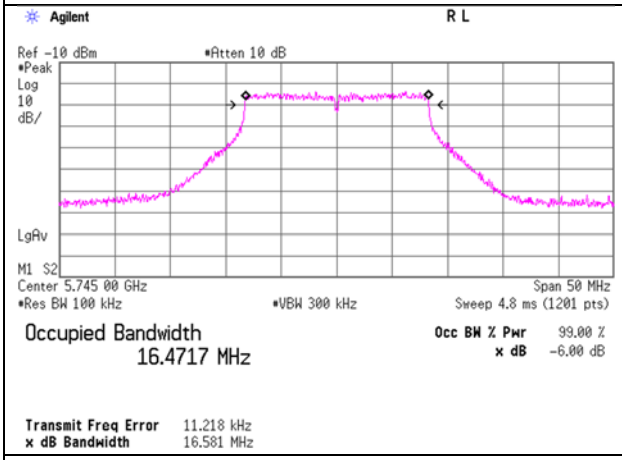
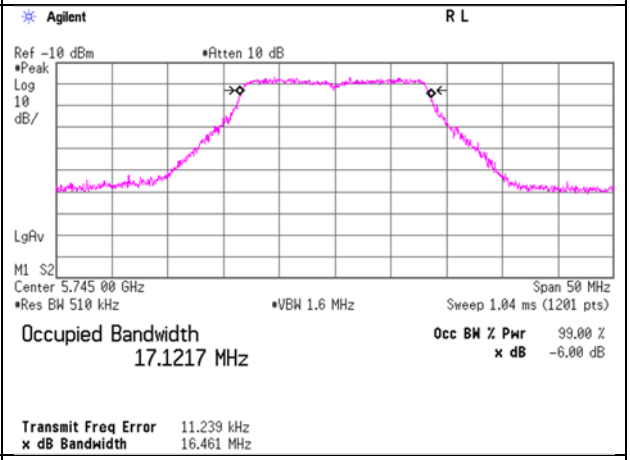
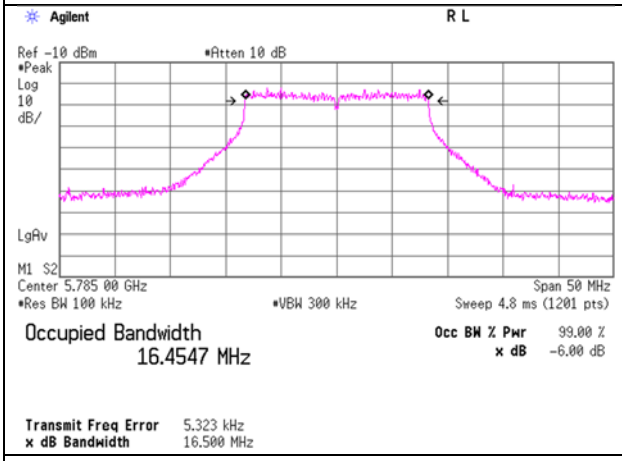
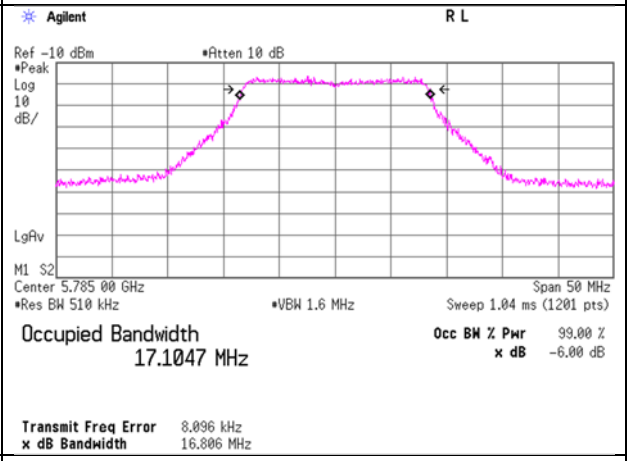
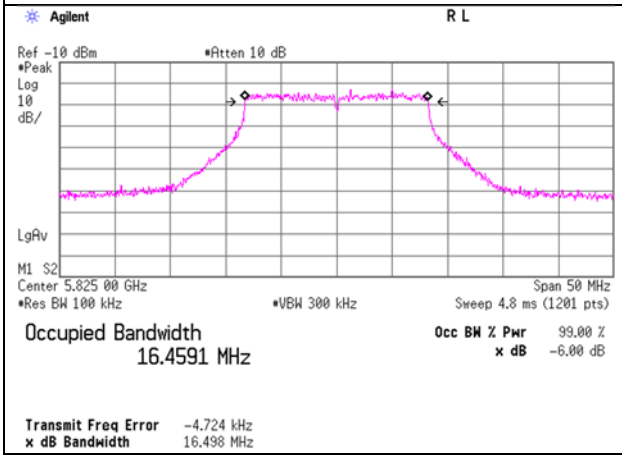
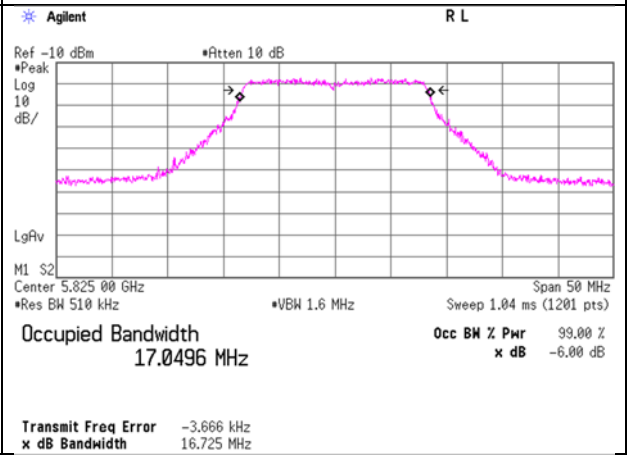
Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5745	17.727	18215.5
	5785	17.716	18225.4
	5825	17.719	18193.7

11ac-20 SDM

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5745	17.748	18275.1
	5785	17.700	18172.6
	5825	17.726	18284.7

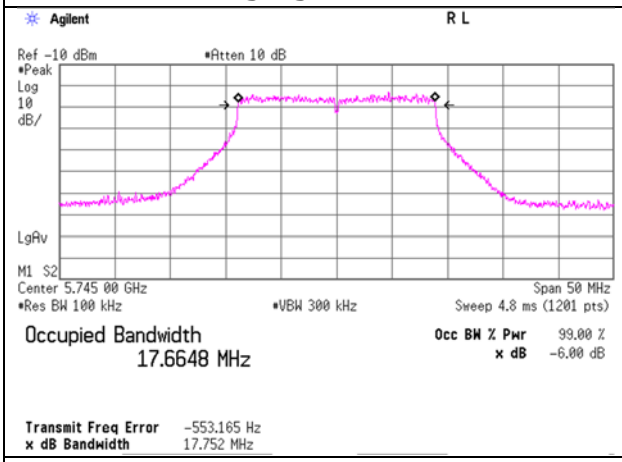
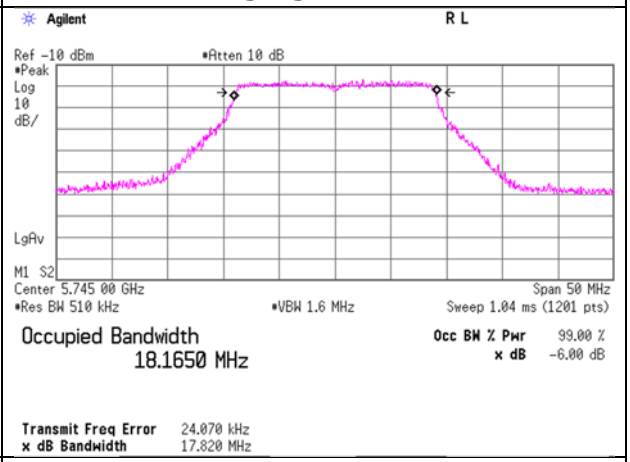
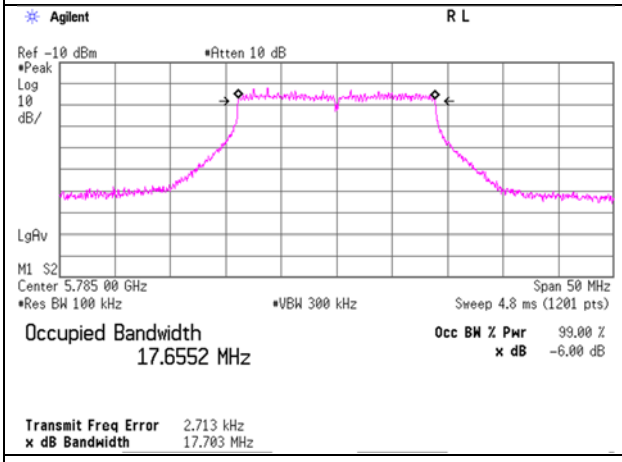
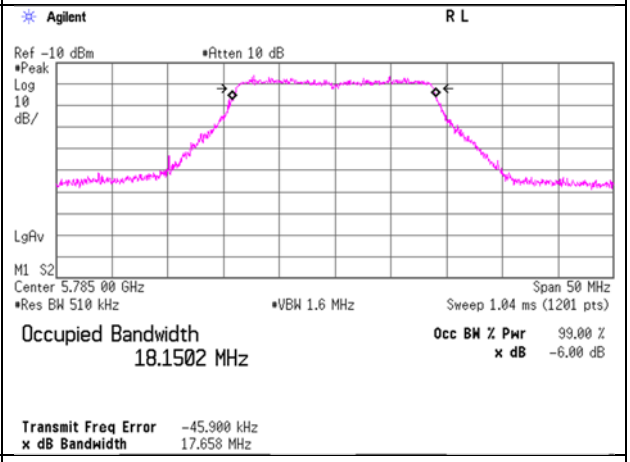
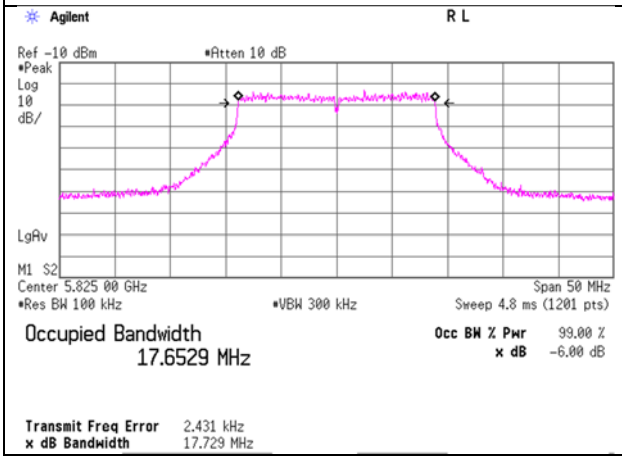
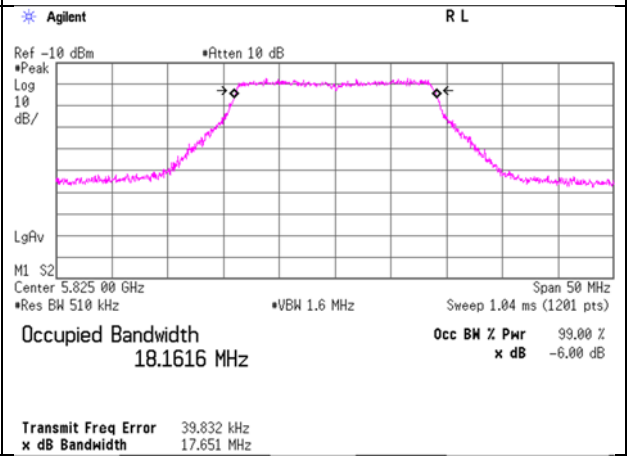
6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11a SISO, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5745 MHz	**5745 MHz**
	
5785 MHz	**5785 MHz**
	
5825 MHz	**5825 MHz**
	

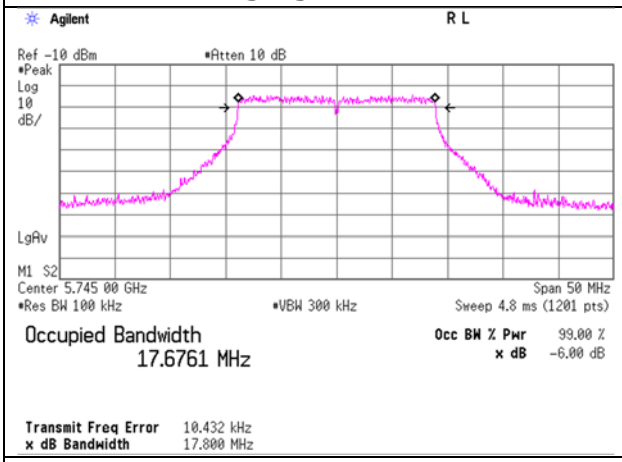
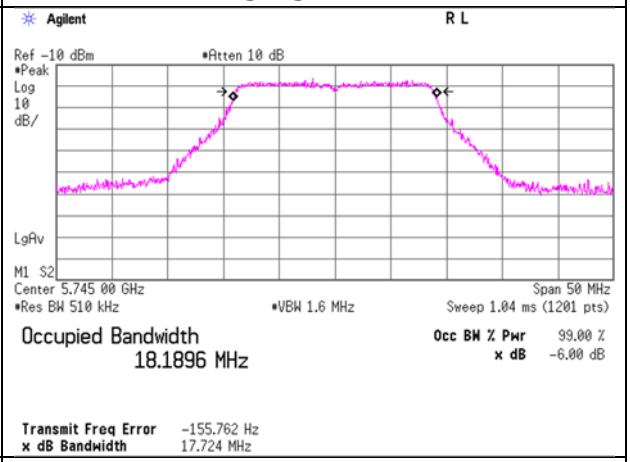
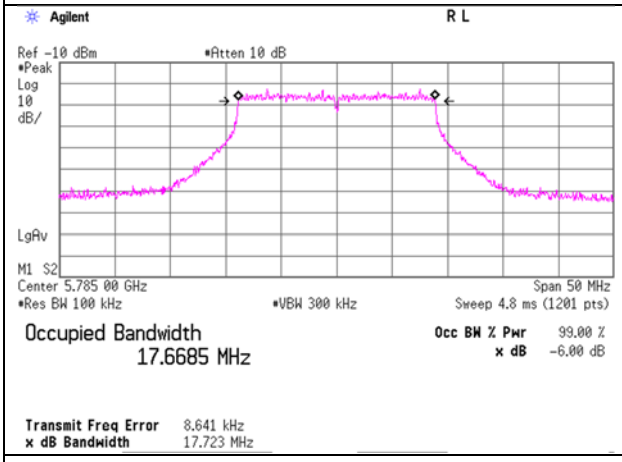
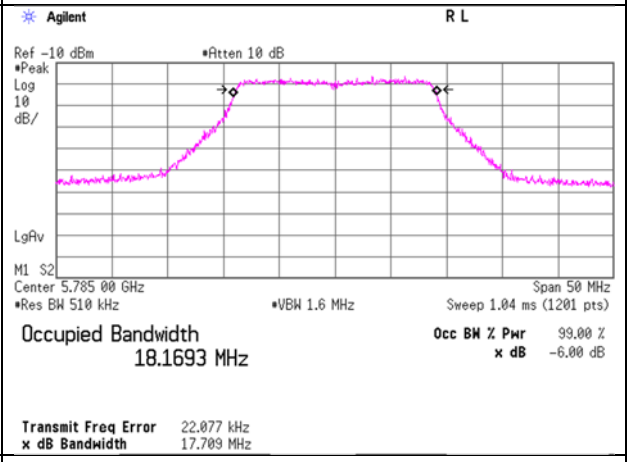
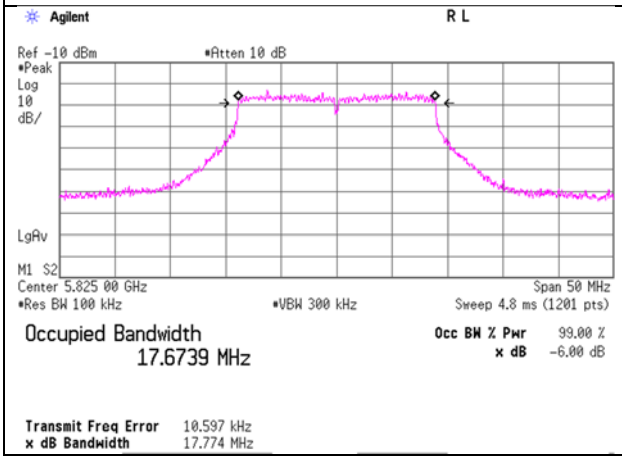
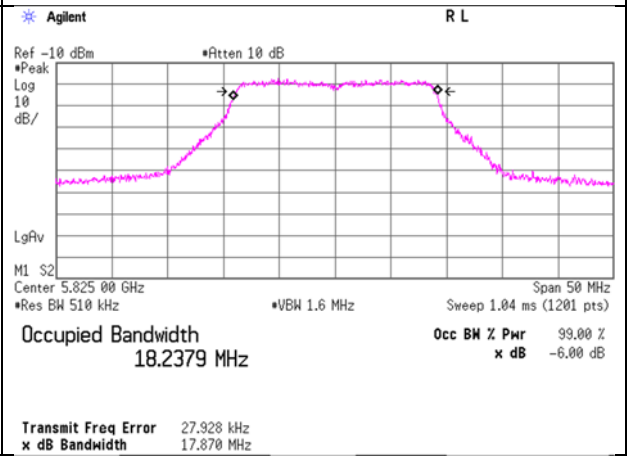
6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11n-20 SISO, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5745 MHz	**5745 MHz**
	
5785 MHz	**5785 MHz**
	
5825 MHz	**5825 MHz**
	

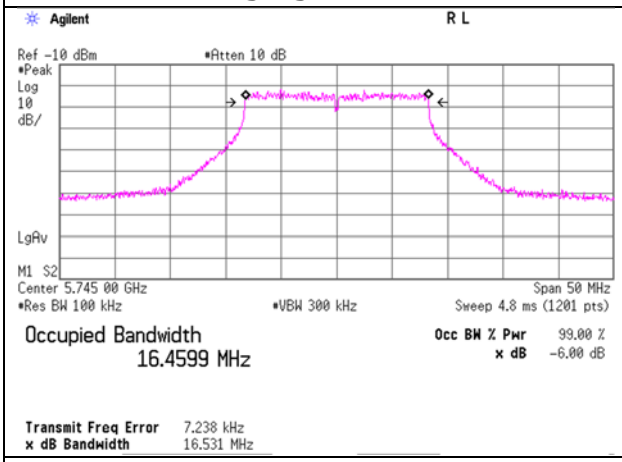
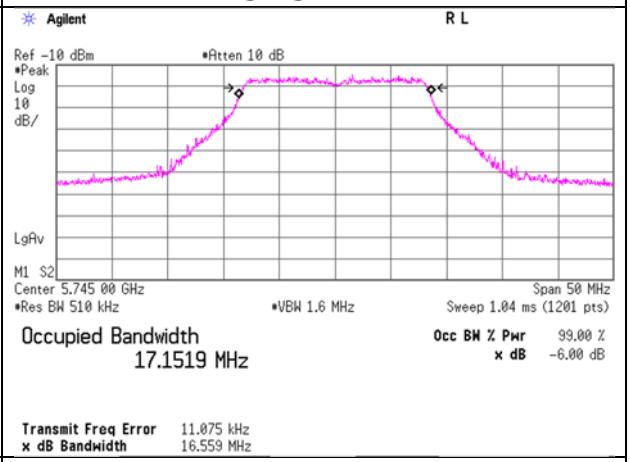
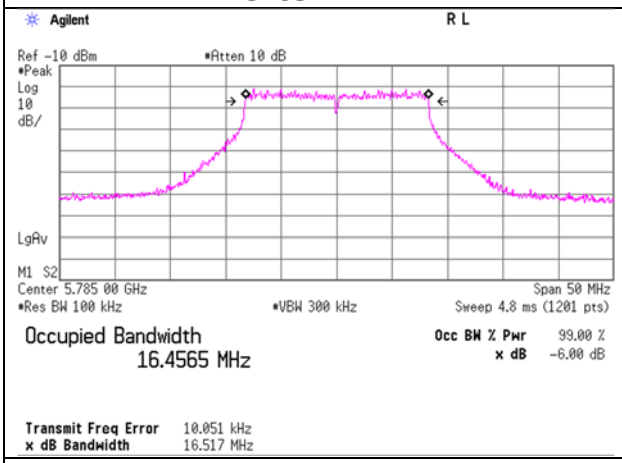
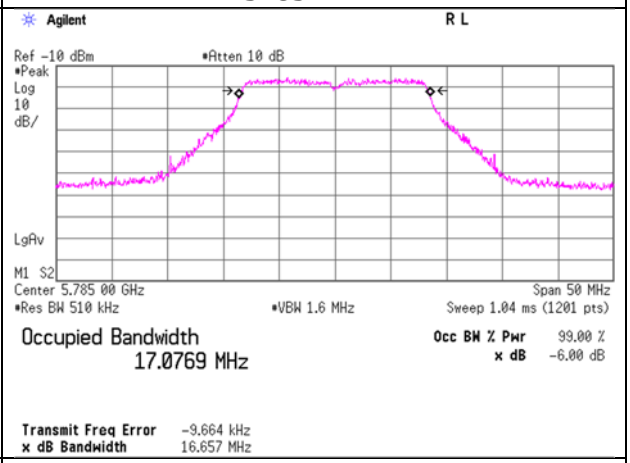
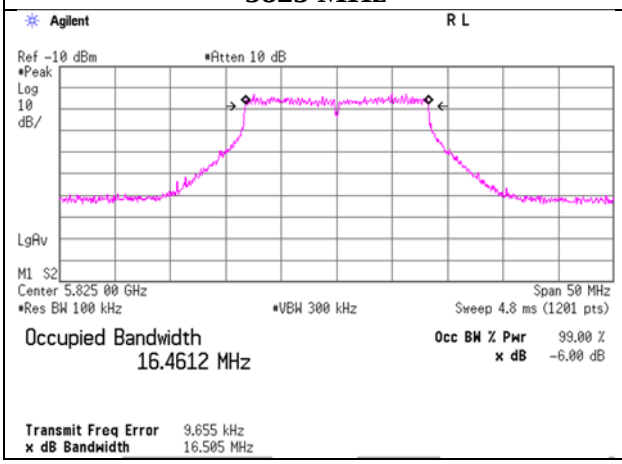
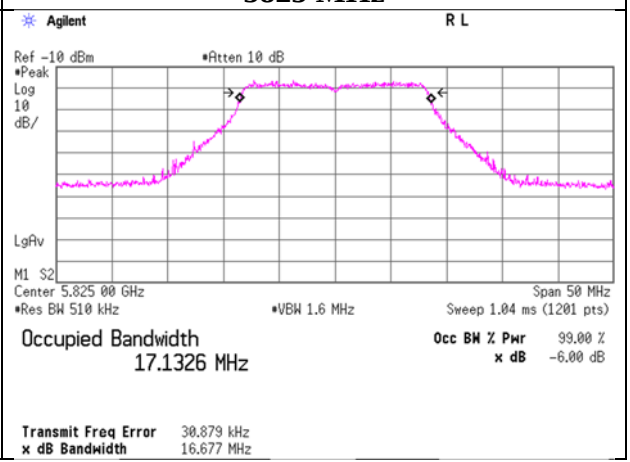
6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-20 SISO, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5745 MHz	5745 MHz
	
5785 MHz	5785 MHz
	
5825 MHz	5825 MHz
	

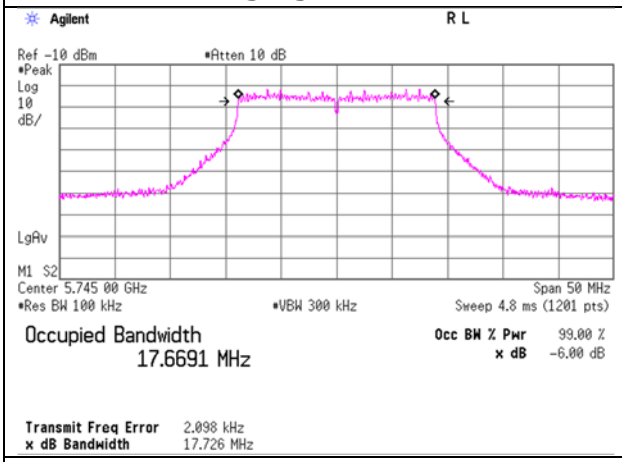
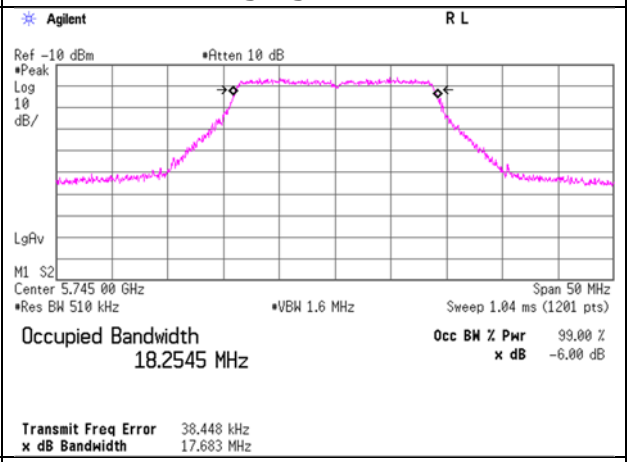
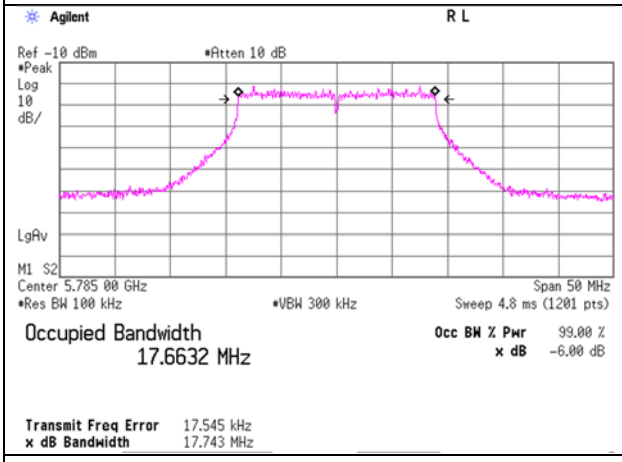
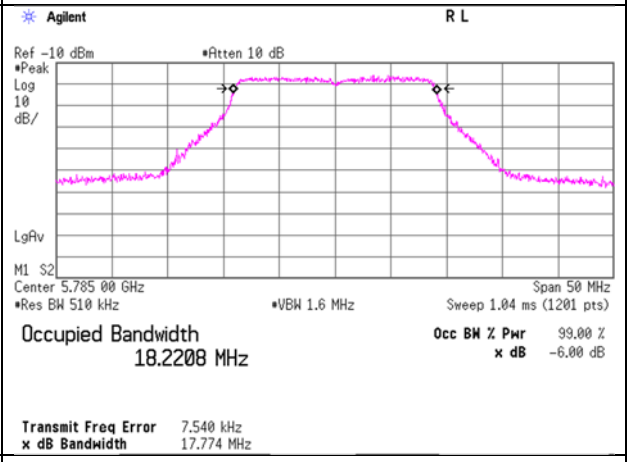
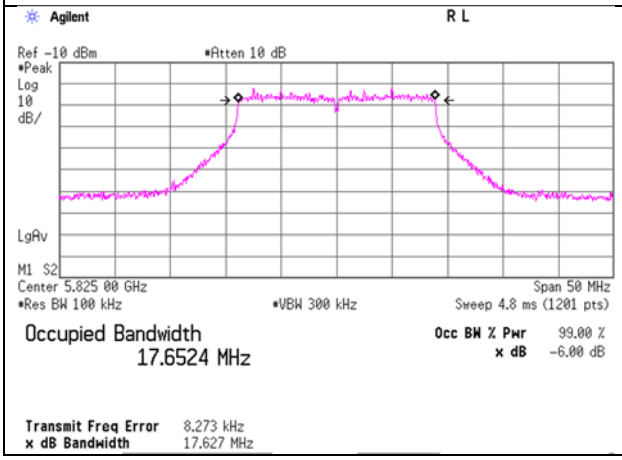
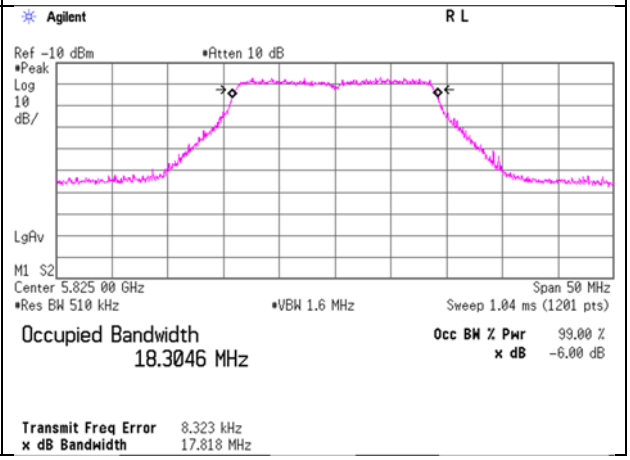
6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11a CDD, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5745 MHz	**5745 MHz**
	
5785 MHz	**5785 MHz**
	
5825 MHz	**5825 MHz**
	

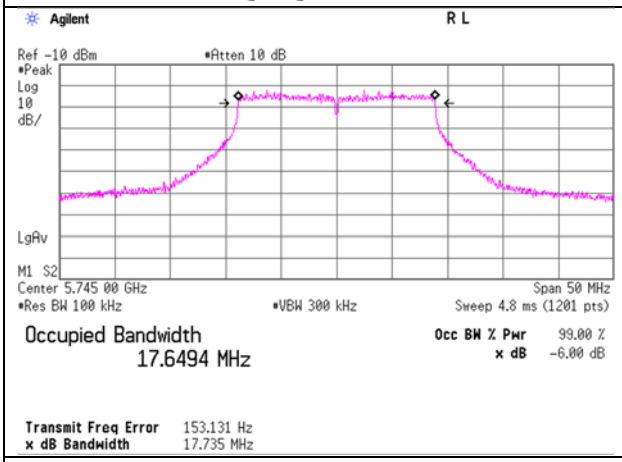
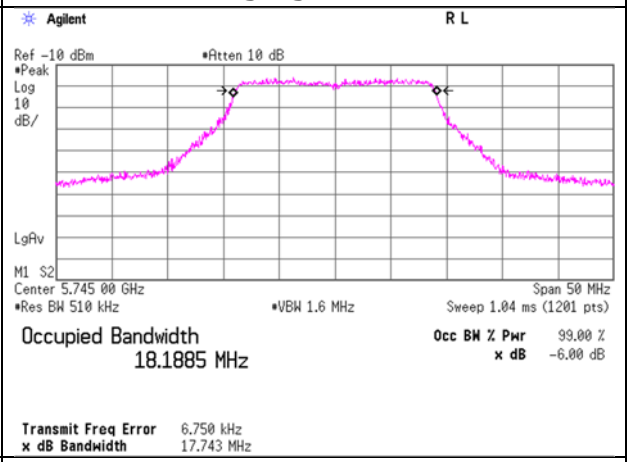
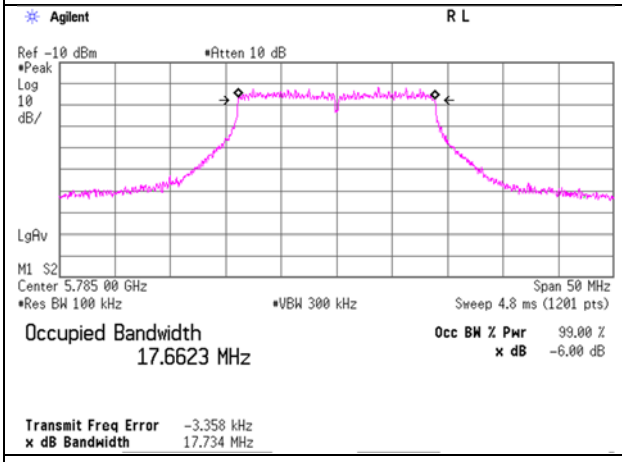
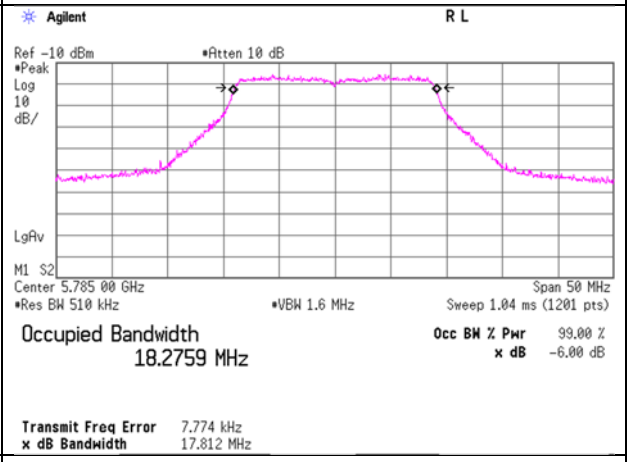
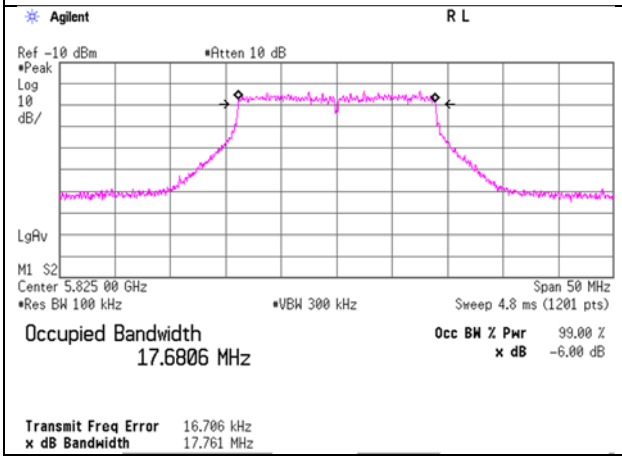
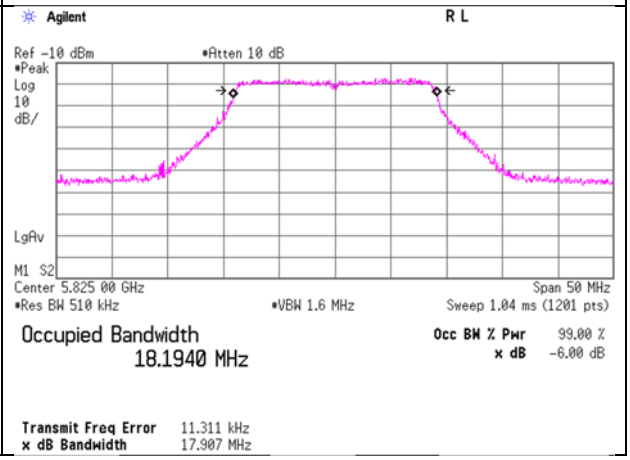
6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11n-20 CDD, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5745 MHz	**5745 MHz**
	
5785 MHz	**5785 MHz**
	
5825 MHz	**5825 MHz**
	

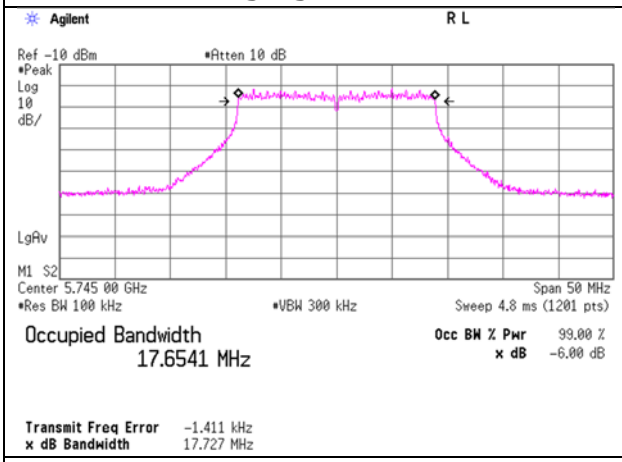
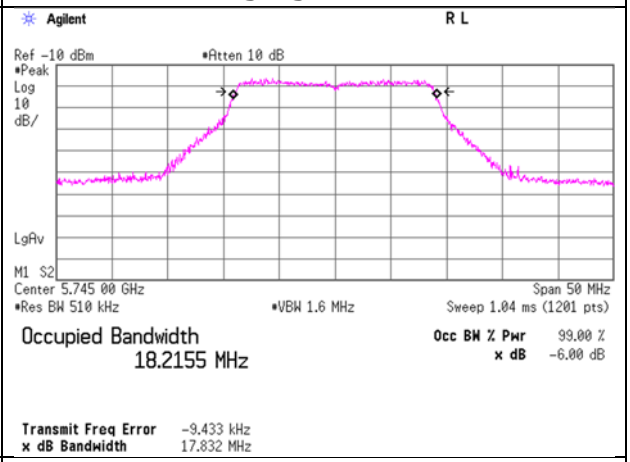
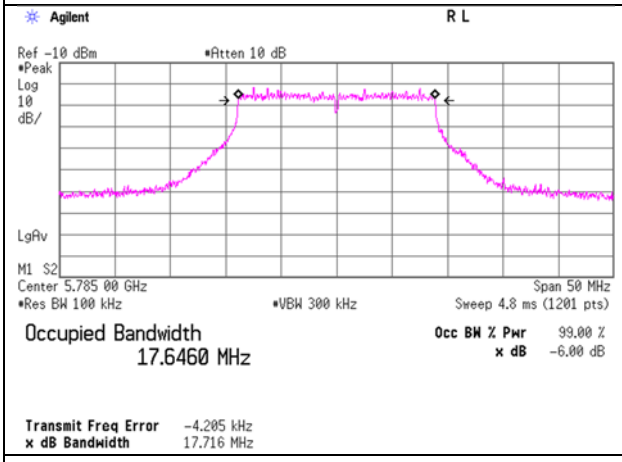
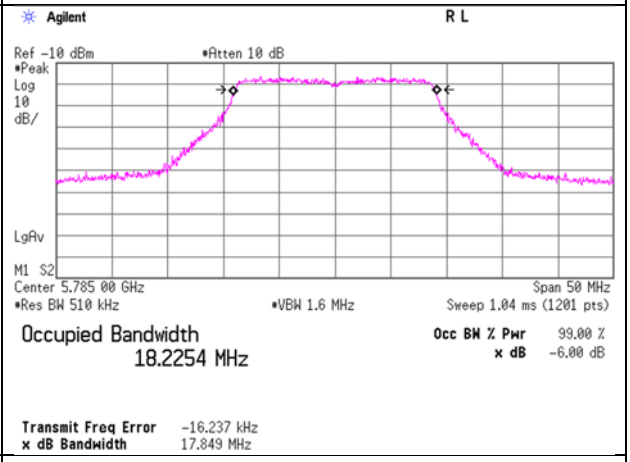
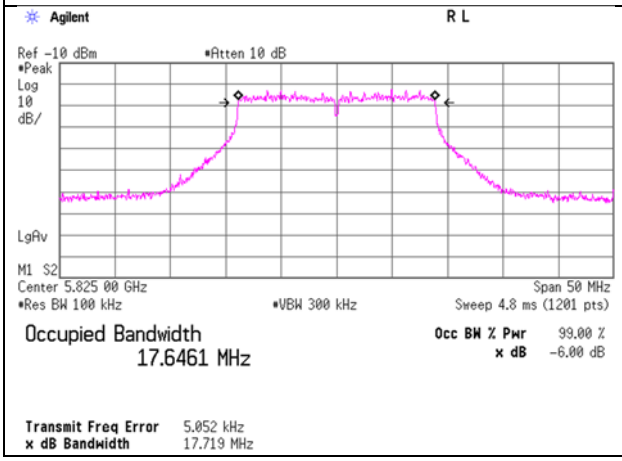
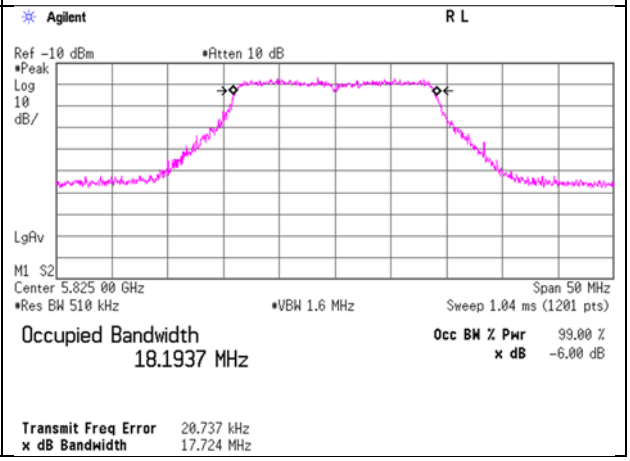
6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11n-20 SDM, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5745 MHz	**5745 MHz**
	
5785 MHz	**5785 MHz**
	
5825 MHz	**5825 MHz**
	

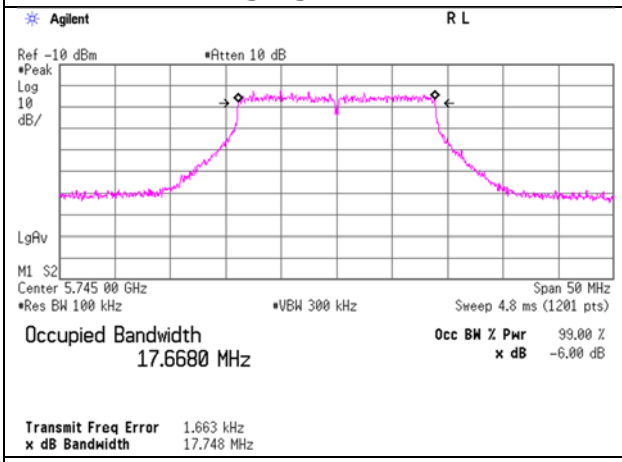
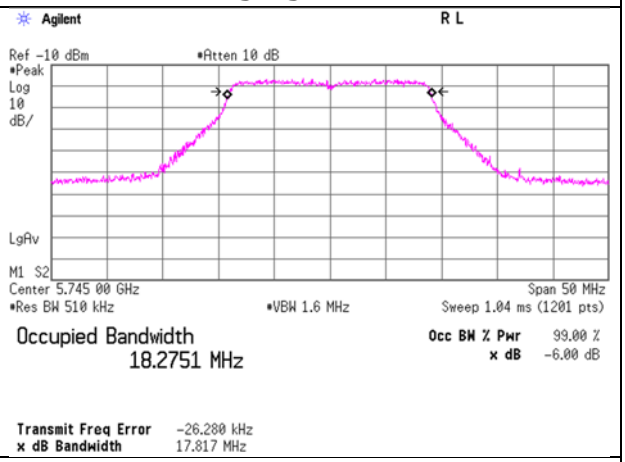
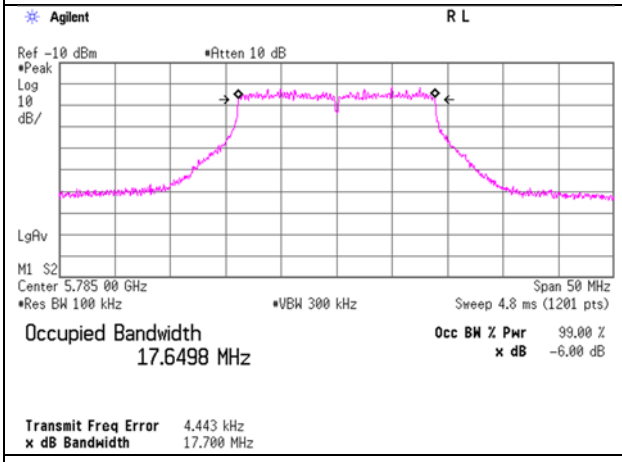
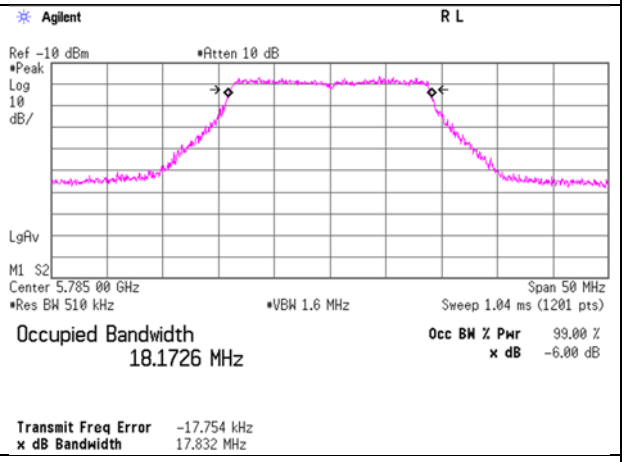
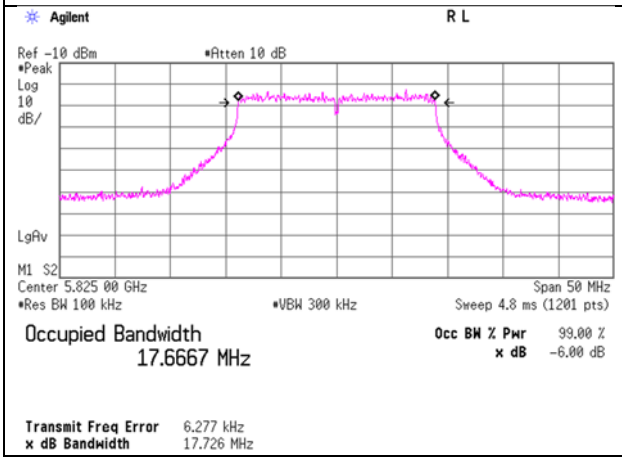
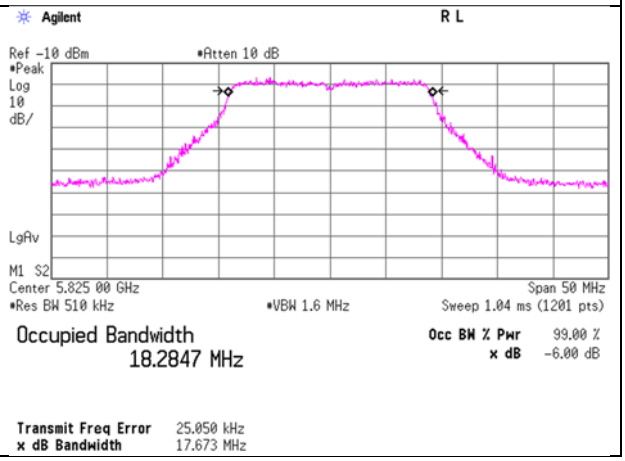
6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-20 CDD, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5745 MHz	**5745 MHz**
	
5785 MHz	**5785 MHz**
	
5825 MHz	**5825 MHz**
	

6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-20 SDM, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5745 MHz	**5745 MHz**
	
5785 MHz	**5785 MHz**
	
5825 MHz	**5825 MHz**
	

6 dB Emission Bandwidth and 99 % Occupied Bandwidth

Test place	Shonan EMC Lab. No.5 Shielded Room	
Date	June 21, 2022	June 22, 2022
Temperature / Humidity	25 deg. C / 42 % RH	26 deg. C / 49 % RH
Engineer	Kenichi Adachi	Miku Ikudome
Mode	Tx	

11n-40 SISO

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5755	36.513	36996.0
	5795	36.531	36878.8

11ac-40 SISO

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5755	36.533	36880.4
	5795	36.522	36742.8

11n-40 CDD

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5755	36.510	37100.9
	5795	36.393	36888.2

11n-40 SDM

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5755	36.474	37044.0
	5795	36.527	36781.2

11ac-40 CDD

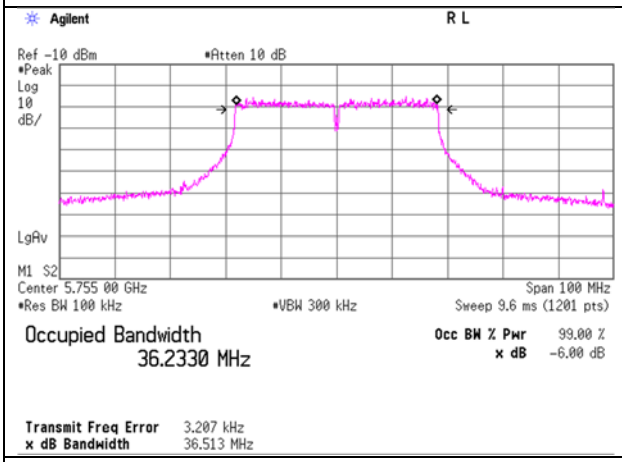
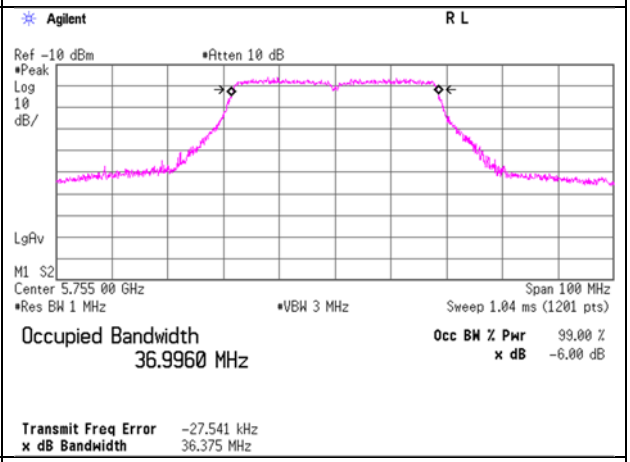
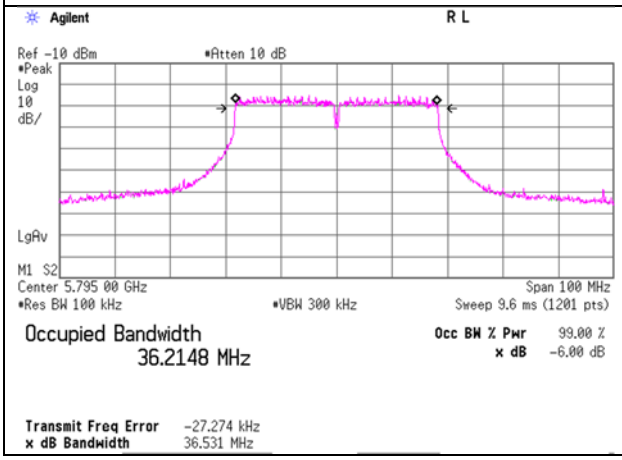
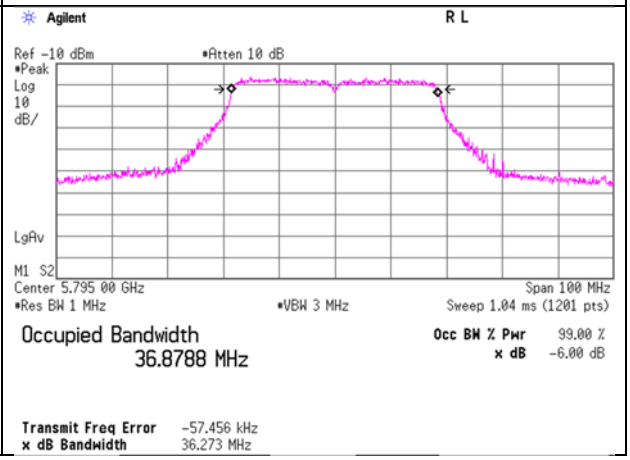
Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5755	36.514	37023.7
	5795	36.394	36892.0

11ac-40 SDM

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5755	36.455	36994.0
	5795	36.494	36866.7

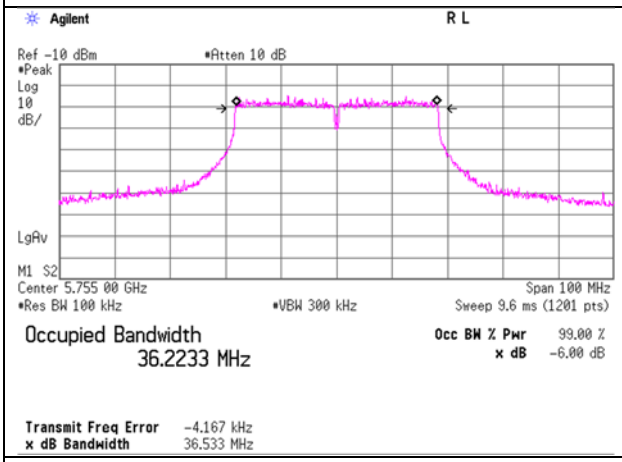
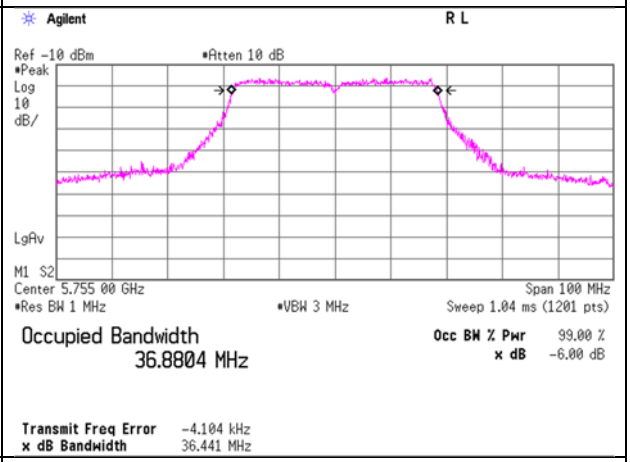
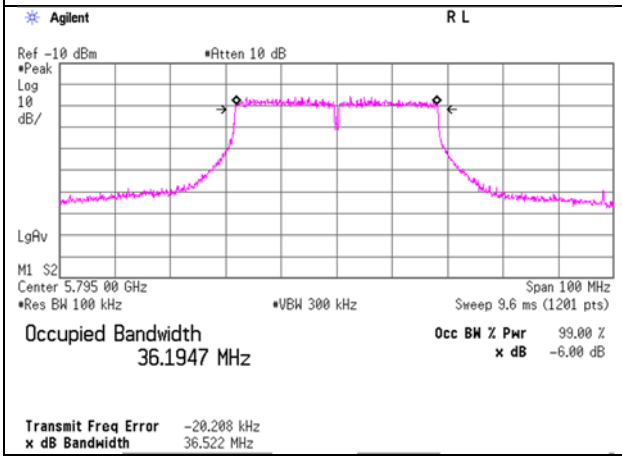
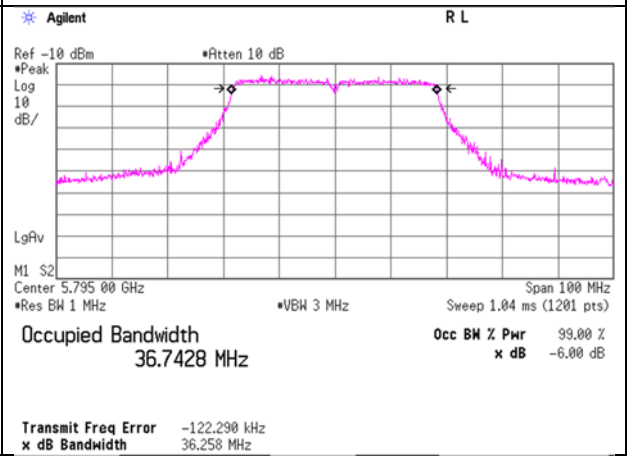
6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11n-40 SISO, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5755 MHz	5755 MHz
	
5795 MHz	5795 MHz
	

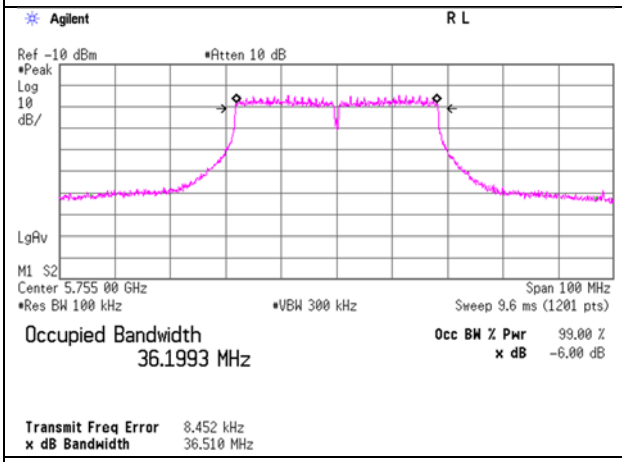
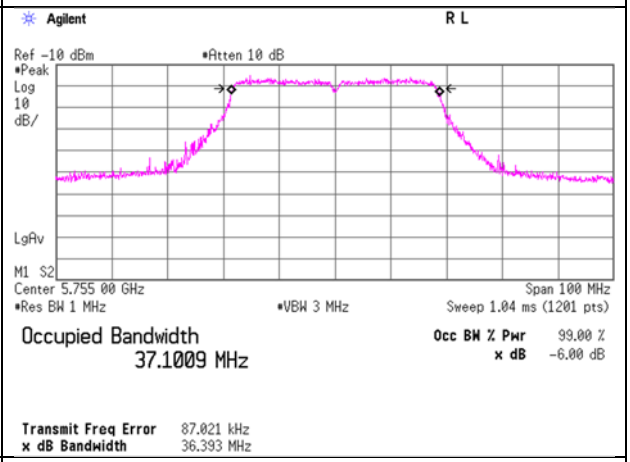
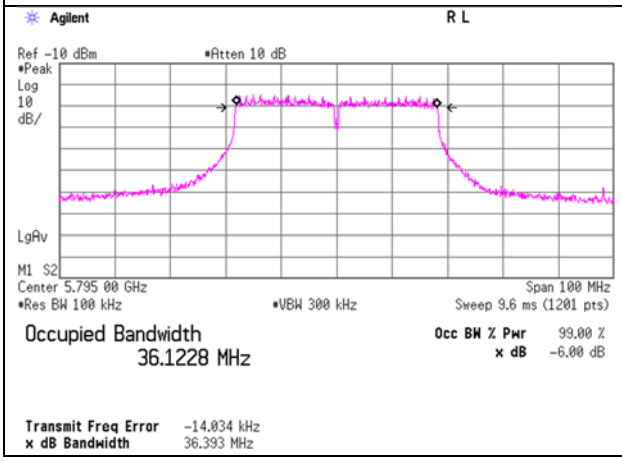
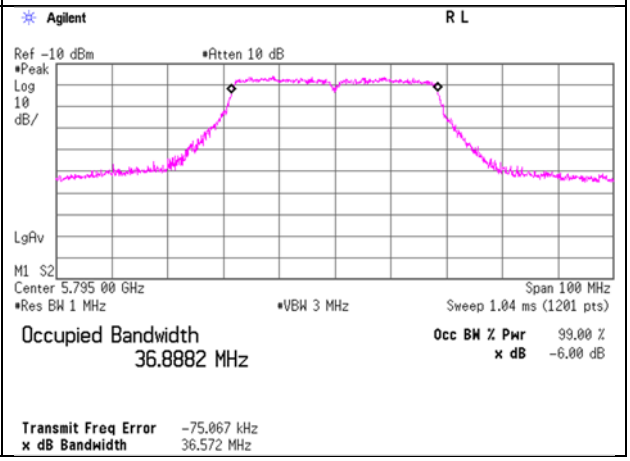
6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-40 SISO, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5755 MHz	5755 MHz
	
5795 MHz	5795 MHz
	

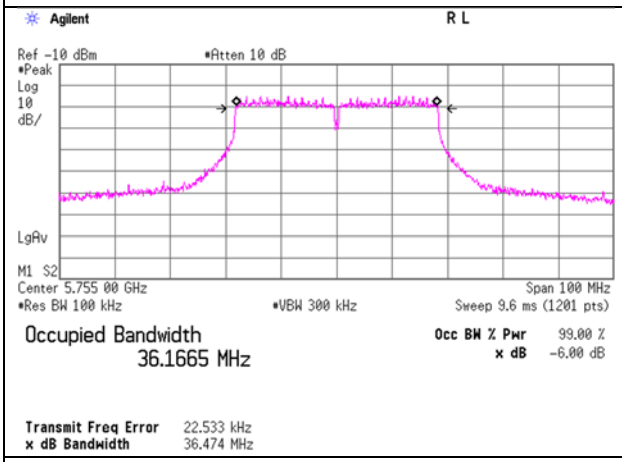
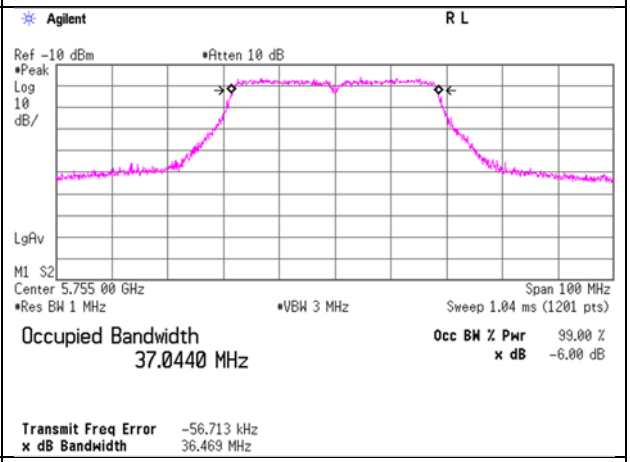
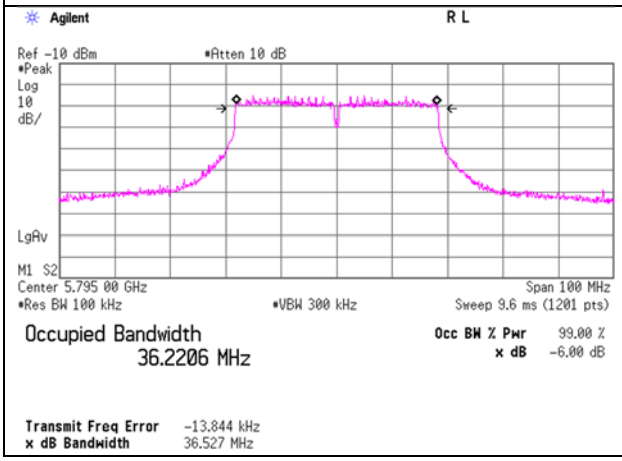
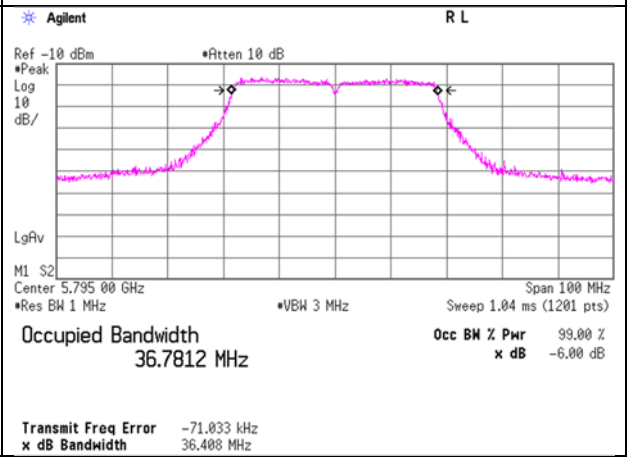
6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11n-40 CDD, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5755 MHz	5755 MHz
	
5795 MHz	5795 MHz
	

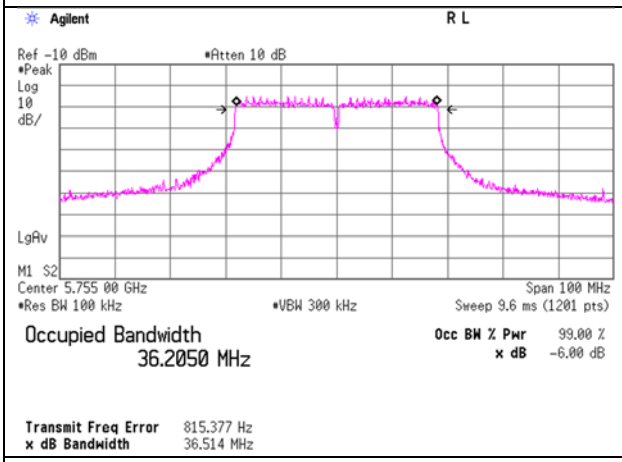
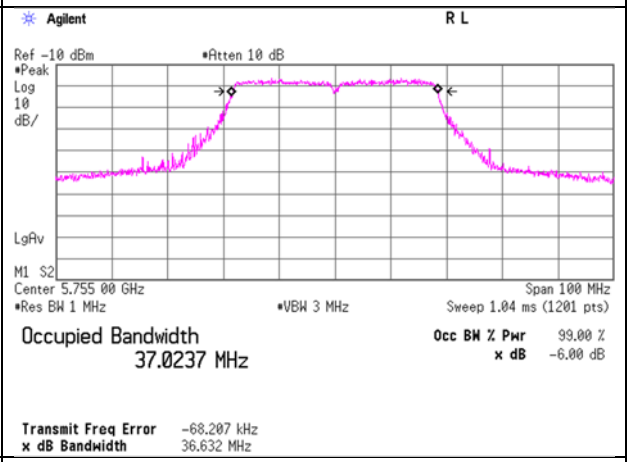
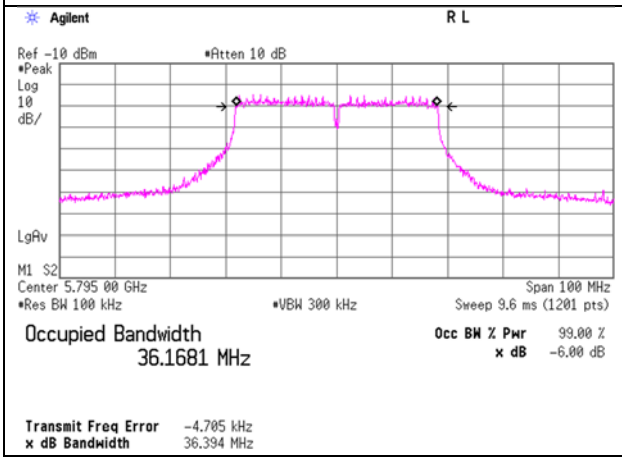
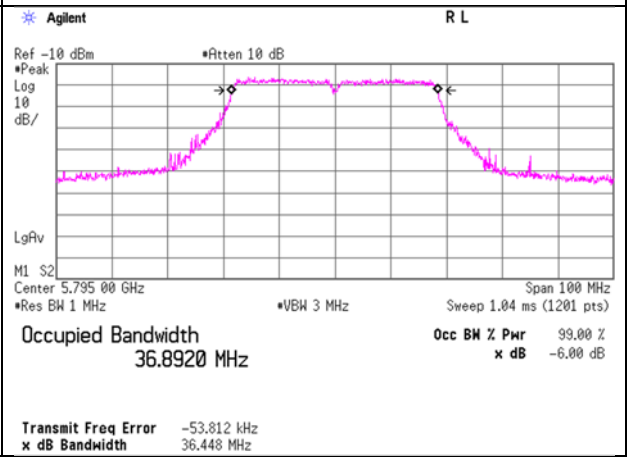
6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11n-40 SDM, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5755 MHz	5755 MHz
	
5795 MHz	5795 MHz
	

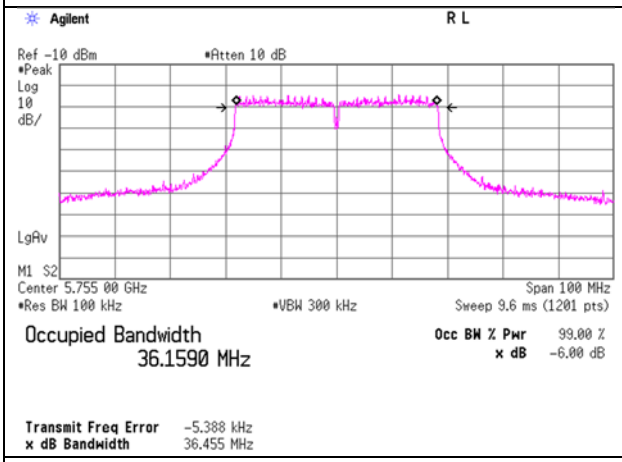
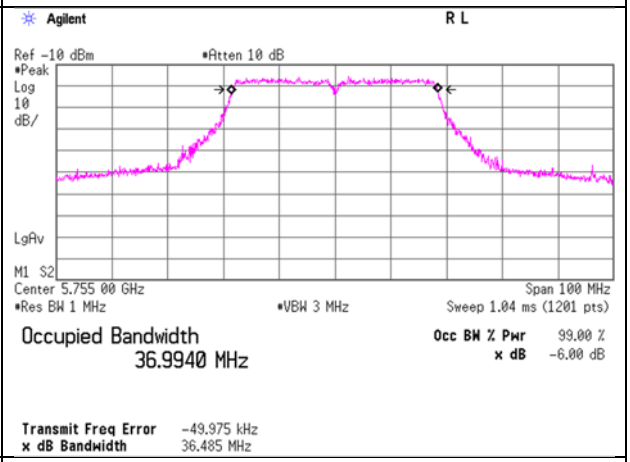
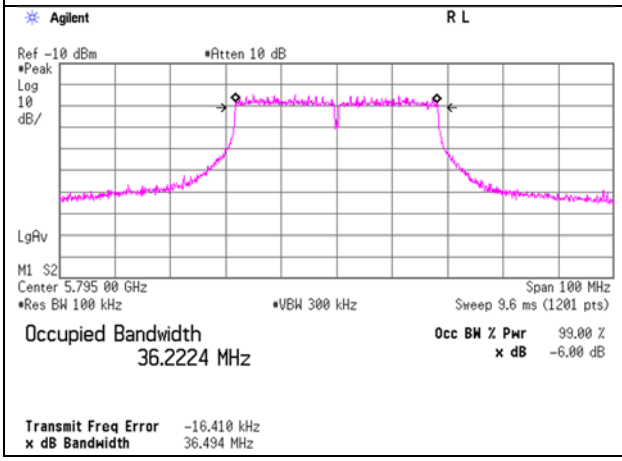
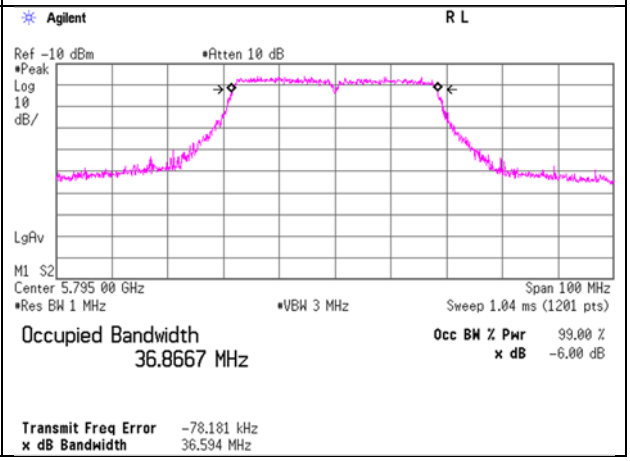
6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-40 CDD, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5755 MHz	5755 MHz
	
5795 MHz	5795 MHz
	

6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-40 SDM, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5755 MHz	5755 MHz
	
5795 MHz	5795 MHz
	

6 dB Emission Bandwidth and 99 % Occupied Bandwidth

Test place	Shonan EMC Lab. No.5 Shielded Room	
Date	June 21, 2022	June 22, 2022
Temperature / Humidity	25 deg. C / 42 % RH	26 deg. C / 49 % RH
Engineer	Kenichi Adachi	Miku Ikudome
Mode	Tx	

11ac-80 SISO

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5775	76.476	76795.5

11ac-80 CDD

Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5775	76.452	76609.4

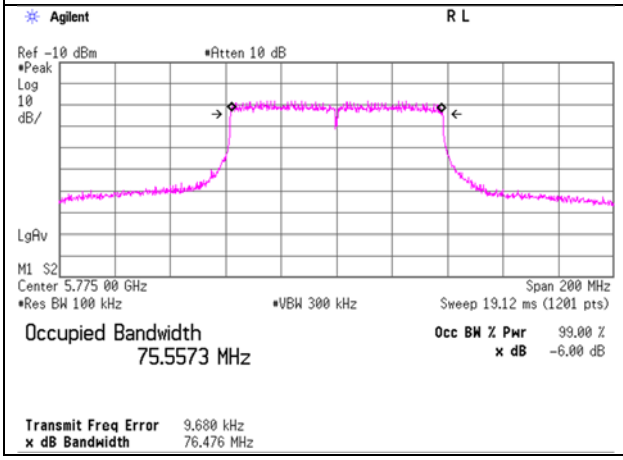
11ac-80 SDM

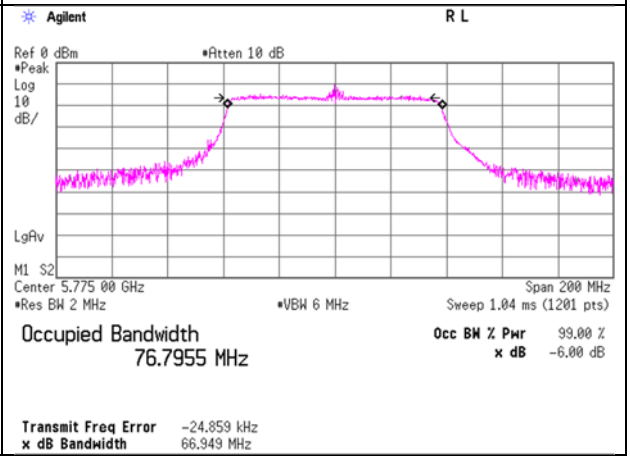
Antenna	Tested Frequency [MHz]	6 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
2nd	5775	76.442	76625.2

6 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-80 SISO, Antenna: 2nd

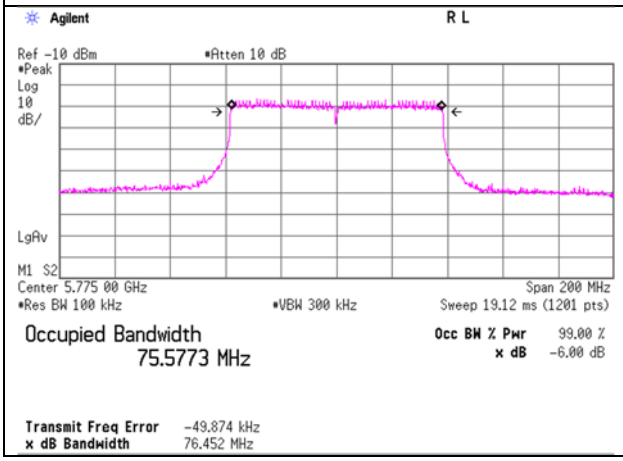
6 dB bandwidth	99 % Occupied bandwidth
5775 MHz	5775 MHz

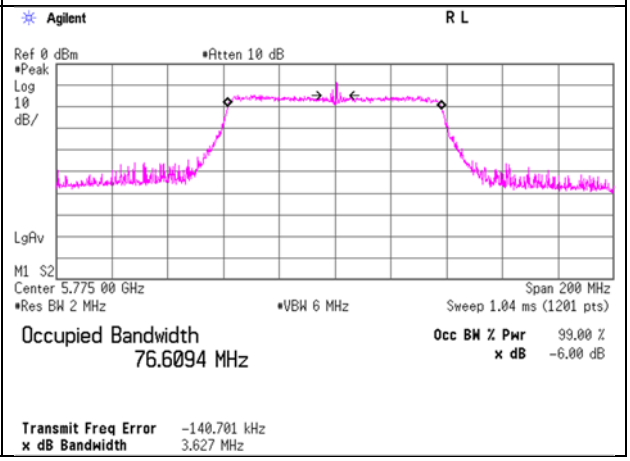




11ac-80 CDD, Antenna: 2nd

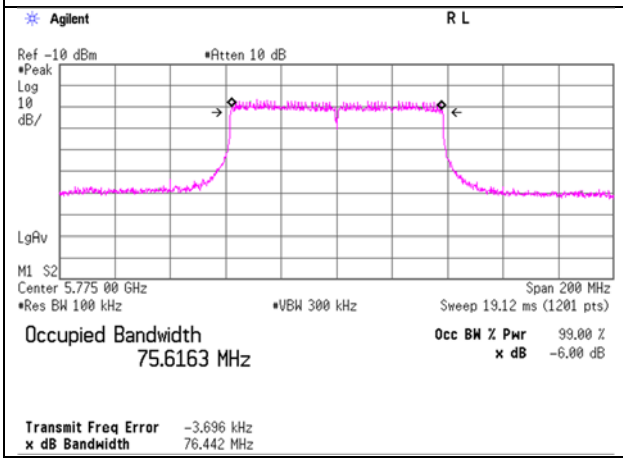
6 dB bandwidth	99 % Occupied bandwidth
5775 MHz	5775 MHz

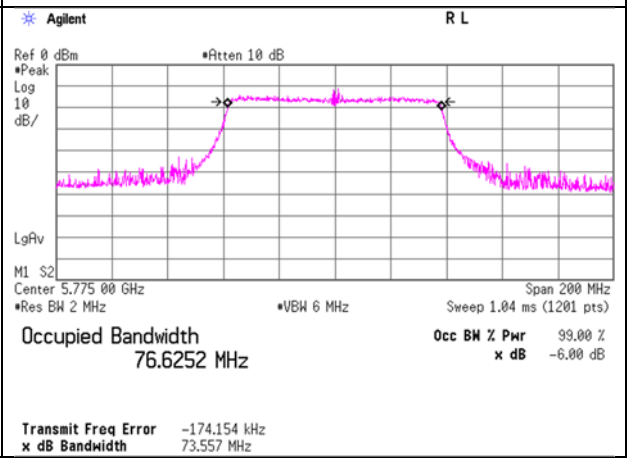




11ac-80 SDM, Antenna: 2nd

6 dB bandwidth	99 % Occupied bandwidth
5775 MHz	5775 MHz





Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 8, 2022
Temperature / Humidity	24 deg. C / 54 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11a SISO

11a SISO, Antenna 2nd

Applied limit: 15.407, access point

Tested Frequency	Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	26 dB EBW (B for FCC)	99% OBW (B for ISED)	Conducted Power Result		Limit	Margin	e.i.r.p. Result		Limit	Margin
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[MHz]	[MHz]	[dBm]	[mW]	[dBm]	[dB]	[dBm]	[mW]	[dBm]	[dB]
5745	-10.63	2.97	9.89	5.0	-	17.122	2.23	1.67	30.00	27.77	7.23	5.28	36.00	28.77
5785	-10.83	2.97	9.90	5.0	-	17.105	2.04	1.60	30.00	27.96	7.04	5.06	36.00	28.96
5825	-10.90	2.98	9.90	5.0	-	17.050	1.98	1.58	30.00	28.02	6.98	4.99	36.00	29.02

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

e.i.r.p. Result = Conducted Power Result + Antenna Gain

Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 8, 2022
Temperature / Humidity	24 deg. C / 54 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11n-20 SISO

11n-20 SISO, Antenna 2nd

Applied limit: 15.407, access point

Tested Frequency	Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	26 dB EBW (B for FCC)	99% OBW (B for ISED)	Conducted Power Result		Limit	Margin	e.i.r.p. Result		Limit	Margin
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[MHz]	[MHz]	[dBm]	[mW]	[dBm]	[dB]	[dBm]	[mW]	[dBm]	[dB]
5745	-10.47	2.97	9.89	5.0	-	18.165	2.39	1.73	30.00	27.61	7.39	5.48	36.00	28.61
5785	-10.84	2.97	9.90	5.0	-	18.150	2.03	1.60	30.00	27.97	7.03	5.05	36.00	28.97
5825	-10.90	2.98	9.90	5.0	-	18.162	1.98	1.58	30.00	28.02	6.98	4.99	36.00	29.02

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

e.i.r.p. Result = Conducted Power Result + Antenna Gain

Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 8, 2022
Temperature / Humidity	24 deg. C / 54 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-20 SISO

11ac-20 SISO, Antenna 2nd

Applied limit: 15.407, access point

Tested Frequency	Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	26 dB EBW (B for FCC)	99% OBW (B for ISED)	Conducted Power Result		Limit	Margin	e.i.r.p. Result		Limit	Margin
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[MHz]	[MHz]	[dBm]	[mW]	[dBm]	[dB]	[dBm]	[mW]	[dBm]	[dB]
5745	-10.43	2.97	9.89	5.0	-	18.190	2.43	1.75	30.00	27.57	7.43	5.53	36.00	28.57
5785	-10.71	2.97	9.90	5.0	-	18.169	2.16	1.64	30.00	27.84	7.16	5.20	36.00	28.84
5825	-10.65	2.98	9.90	5.0	-	18.238	2.23	1.67	30.00	27.77	7.23	5.28	36.00	28.77

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

e.i.r.p. Result = Conducted Power Result + Antenna Gain

Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room	
Date	June 8, 2022	June 9, 2022
Temperature / Humidity	24 deg. C / 54 % RH	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi	Shiro Kobayashi
Mode	Tx 11a CDD	

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested	26 dB	99 %	Conducted power						e.i.r.p.					
Frequency	EBW	OBW	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	(B for FCC)	(B for ISED)	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5745	-	17.152	1.29	1.63	2.91	4.65	30.00	25.35	4.06	5.15	9.22	9.65	36.00	26.35
5785	-	17.077	1.23	1.67	2.91	4.64	30.00	25.36	3.90	5.30	9.20	9.64	36.00	26.36
5825	-	17.133	1.24	1.65	2.89	4.60	30.00	25.40	3.92	5.21	9.13	9.60	36.00	26.40

		Antenna 1st						**Antenna 2nd**					
Tested	Duty	Power	Cable	Atten.	Directional	Result		Power	Cable	Atten.	Directional	Result	
Frequency	Factor	Meter Reading	Loss	Loss	Gain	Cond. Power	e.i.r.p.	Meter Reading	Loss	Loss	Gain	Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5745	-	-11.60	2.71	9.98	5.00	1.09	6.09	-10.74	2.97	9.89	5.00	2.12	7.12
5785	-	-11.78	2.71	9.98	5.00	0.91	5.91	-10.63	2.97	9.90	5.00	2.24	7.24
5825	-	-11.77	2.72	9.98	5.00	0.93	5.93	-10.71	2.98	9.90	5.00	2.17	7.17

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss
e.i.r.p. Result = Conducted Power Result + Directional Gain
Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Directional Gain = G_{ANT} (Antenna Gain) + Array Gain
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} < 4$
N_{ANT} (Number of Transmit Antenna) = 2

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room	
Date	June 8, 2022	June 9, 2022
Temperature / Humidity	24 deg. C / 54 % RH	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi	Shiro Kobayashi
Mode	Tx 11n-20 CDD	

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	26 dB EBW (B for FCC)	99 % OBW (B for ISED)	Conducted power						e.i.r.p.					
			Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
			1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5745	-	18.254	1.29	1.73	3.02	4.79	30.00	25.21	4.06	5.47	9.53	9.79	36.00	26.21
5785	-	18.221	1.21	1.66	2.87	4.58	30.00	25.42	3.82	5.26	9.08	9.58	36.00	26.42
5825	-	18.305	1.22	1.73	2.95	4.69	30.00	25.31	3.86	5.46	9.32	9.69	36.00	26.31

		Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Directional Gain	Result		Power Meter Reading	Cable Loss	Atten. Loss	Directional Gain	Result	
						Cond. Power	e.i.r.p.					Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5745	-	-11.60	2.71	9.98	5.00	1.09	6.09	-10.48	2.97	9.89	5.00	2.38	7.38
5785	-	-11.87	2.71	9.98	5.00	0.82	5.82	-10.66	2.97	9.90	5.00	2.21	7.21
5825	-	-11.83	2.72	9.98	5.00	0.87	5.87	-10.51	2.98	9.90	5.00	2.37	7.37

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss
e.i.r.p. Result = Conducted Power Result + Directional Gain
Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Directional Gain = G_{ANT} (Antenna Gain) + Array Gain
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} < 4$
N_{ANT} (Number of Transmit Antenna) = 2

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-20 CDD

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested	26 dB	99 %	Conducted power						e.i.r.p.					
Frequency	EBW	OBW	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	(B for FCC)	(B for ISED)	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5745	-	18.215	1.24	1.64	2.88	4.60	30.00	25.40	3.94	5.18	9.11	9.60	36.00	26.40
5785	-	18.225	1.24	1.59	2.83	4.52	30.00	25.48	3.93	5.04	8.96	9.52	36.00	26.48
5825	-	18.194	1.20	1.58	2.78	4.44	30.00	25.56	3.80	4.99	8.79	9.44	36.00	26.56

		Antenna 1st						**Antenna 2nd**					
Tested	Duty	Power	Cable	Atten.	Directional	Result		Power	Cable	Atten.	Directional	Result	
Frequency	Factor	Meter Reading	Loss	Loss	Gain	Cond. Power	e.i.r.p.	Meter Reading	Loss	Loss	Gain	Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5745	-	-11.74	2.71	9.98	5.00	0.95	5.95	-10.72	2.97	9.89	5.00	2.14	7.14
5785	-	-11.75	2.71	9.98	5.00	0.94	5.94	-10.85	2.97	9.90	5.00	2.02	7.02
5825	-	-11.90	2.72	9.98	5.00	0.80	5.80	-10.90	2.98	9.90	5.00	1.98	6.98

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss
e.i.r.p. Result = Conducted Power Result + Directional Gain
Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Directional Gain = G_{ANT} (Antenna Gain) + Array Gain
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} < 4$
N_{ANT} (Number of Transmit Antenna) = 2

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11n-20 SDM

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested	26 dB	99 %	Conducted power						e.i.r.p.					
Frequency	EBW	OBW	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	(B for FCC)	(B for ISED)	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5745	-	18.189	1.22	1.66	2.88	4.59	30.00	25.41	3.85	5.26	9.11	9.59	36.00	26.41
5785	-	18.276	1.24	1.90	3.14	4.97	30.00	25.03	3.91	6.01	9.92	9.97	36.00	26.03
5825	-	18.194	1.23	1.69	2.92	4.65	30.00	25.35	3.88	5.35	9.23	9.65	36.00	26.35

		Antenna 1st						**Antenna 2nd**					
Tested	Duty	Power	Cable	Atten.	Directional	Result		Power	Cable	Atten.	Directional	Result	
Frequency	Factor	Meter	Loss	Loss	Gain	Cond.	e.i.r.p.	Meter	Loss	Loss	Gain	Cond.	e.i.r.p.
		Reading				Power		Reading				Power	
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5745	-	-11.84	2.71	9.98	5.00	0.85	5.85	-10.65	2.97	9.89	5.00	2.21	7.21
5785	-	-11.77	2.71	9.98	5.00	0.92	5.92	-10.08	2.97	9.90	5.00	2.79	7.79
5825	-	-11.81	2.72	9.98	5.00	0.89	5.89	-10.60	2.98	9.90	5.00	2.28	7.28

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

e.i.r.p. Result = Conducted Power Result + Directional Gain

Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 2

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-20 SDM

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested	26 dB	99 %	Conducted power						e.i.r.p.					
Frequency	EBW	OBW	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	(B for FCC)	(B for ISED)	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5745	-	18.275	1.24	1.66	2.90	4.63	30.00	25.37	3.92	5.26	9.18	9.63	36.00	26.37
5785	-	18.173	1.22	1.64	2.86	4.56	30.00	25.44	3.85	5.18	9.03	9.56	36.00	26.44
5825	-	18.285	1.19	1.58	2.78	4.44	30.00	25.56	3.78	5.01	8.79	9.44	36.00	26.56

		Antenna 1st						**Antenna 2nd**					
Tested	Duty	Power	Cable	Atten.	Directional	Result		Power	Cable	Atten.	Directional	Result	
Frequency	Factor	Meter Reading	Loss	Loss	Gain	Cond. Power	e.i.r.p.	Meter Reading	Loss	Loss	Gain	Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5745	-	-11.76	2.71	9.98	5.00	0.93	5.93	-10.65	2.97	9.89	5.00	2.21	7.21
5785	-	-11.83	2.71	9.98	5.00	0.86	5.86	-10.73	2.97	9.90	5.00	2.14	7.14
5825	-	-11.93	2.72	9.98	5.00	0.77	5.77	-10.88	2.98	9.90	5.00	2.00	7.00

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

e.i.r.p. Result = Conducted Power Result + Directional Gain

Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 2

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room	
Date	June 8, 2022	June 9, 2022
Temperature / Humidity	24 deg. C / 54 % RH	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi	Shiro Kobayashi
Mode	Tx 11n-40 SISO	

11n-40 SISO, Antenna 2nd

Applied limit: 15.407, access point

Tested Frequency	Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	26 dB EBW (B for FCC)	99% OBW (B for ISED)	Conducted Power Result		Limit	Margin	e.i.r.p. Result		Limit	Margin
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[MHz]	[MHz]	[dBm]	[mW]	[dBm]	[dB]	[dBm]	[mW]	[dBm]	[dB]
5755	-10.48	2.97	9.89	5.0	-	36.996	2.38	1.73	30.00	27.62	7.38	5.47	36.00	28.62
5795	-10.73	2.97	9.90	5.0	-	36.879	2.14	1.64	30.00	27.86	7.14	5.18	36.00	28.86

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

e.i.r.p. Result = Conducted Power Result + Antenna Gain

Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room	
Date	June 8, 2022	June 9, 2022
Temperature / Humidity	24 deg. C / 54 % RH	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi	Shiro Kobayashi
Mode	Tx 11ac-40 SISO	

11ac-40 SISO, Antenna 2nd

Applied limit: 15.407, access point

Tested Frequency	Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	26 dB EBW (B for FCC)	99% OBW (B for ISED)	Conducted Power				e.i.r.p.			
							Result		Limit	Margin	Result		Limit	Margin
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[MHz]	[MHz]	[dBm]	[mW]	[dBm]	[dB]	[dBm]	[mW]	[dBm]	[dB]
5755	-10.59	2.97	9.89	5.0	-	36.880	2.27	1.69	30.00	27.73	7.27	5.33	36.00	28.73
5795	-10.65	2.97	9.90	5.0	-	36.743	2.22	1.67	30.00	27.78	7.22	5.27	36.00	28.78

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

e.i.r.p. Result = Conducted Power Result + Antenna Gain

Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11n-40 CDD

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	26 dB EBW (B for FCC)	99 % OBW (B for ISED)	Conducted power						e.i.r.p.					
			Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
			1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5755	-	37.101	1.27	1.83	3.10	4.92	30.00	25.08	4.03	5.78	9.81	9.92	36.00	26.08
5795	-	36.888	1.23	1.83	3.07	4.86	30.00	25.14	3.90	5.79	9.69	9.86	36.00	26.14

		Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Directional Gain	Result		Power Meter Reading	Cable Loss	Atten. Loss	Directional Gain	Result	
						Cond. Power	e.i.r.p.					Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5755	-	-11.64	2.71	9.98	5.00	1.05	6.05	-10.24	2.97	9.89	5.00	2.62	7.62
5795	-	-11.79	2.72	9.98	5.00	0.91	5.91	-10.24	2.97	9.90	5.00	2.63	7.63

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss
e.i.r.p. Result = Conducted Power Result + Directional Gain
Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Directional Gain = G_{ANT} (Antenna Gain) + Array Gain
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} < 4$
N_{ANT} (Number of Transmit Antenna) = 2

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-40 CDD

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested	26 dB	99 %	Conducted power						e.i.r.p.					
Frequency	EBW	OBW	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	(B for FCC)	(B for ISED)	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5755	-	37.024	1.25	1.92	3.17	5.02	30.00	24.98	3.95	6.08	10.04	10.02	36.00	25.98
5795	-	36.892	1.25	1.87	3.12	4.94	30.00	25.06	3.95	5.92	9.87	9.94	36.00	26.06

		Antenna 1st						**Antenna 2nd**					
Tested	Duty	Power	Cable	Atten.	Directional	Result		Power	Cable	Atten.	Directional	Result	
Frequency	Factor	Meter	Loss	Loss	Gain	Cond.	e.i.r.p.	Meter	Loss	Loss	Gain	Cond.	e.i.r.p.
		Reading				Power		Reading				Power	
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5755	-	-11.72	2.71	9.98	5.00	0.97	5.97	-10.02	2.97	9.89	5.00	2.84	7.84
5795	-	-11.73	2.72	9.98	5.00	0.97	5.97	-10.15	2.97	9.90	5.00	2.72	7.72

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

e.i.r.p. Result = Conducted Power Result + Directional Gain

Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Directional Gain = G_{ANT} (Antenna Gain) + Array Gain

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} < 4$

N_{ANT} (Number of Transmit Antenna) = 2

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11n-40 SDM

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	26 dB EBW (B for FCC)	99 % OBW (B for ISED)	Conducted power						e.i.r.p.					
			Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
			1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5755	-	37.044	1.26	1.87	3.13	4.96	30.00	25.04	3.99	5.92	9.91	9.96	36.00	26.04
5795	-	36.781	1.29	1.88	3.17	5.01	30.00	24.99	4.06	5.96	10.02	10.01	36.00	25.99

		Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Directional Gain	Result		Power Meter Reading	Cable Loss	Atten. Loss	Directional Gain	Result	
						Cond. Power	e.i.r.p.					Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5755	-	-11.68	2.71	9.98	5.00	1.01	6.01	-10.14	2.97	9.89	5.00	2.72	7.72
5795	-	-11.61	2.72	9.98	5.00	1.09	6.09	-10.12	2.97	9.90	5.00	2.75	7.75

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

e.i.r.p. Result = Conducted Power Result + Directional Gain

Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 2

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-40 SDM

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	26 dB EBW	99 % OBW	Conducted power						e.i.r.p.					
			Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	(B for FCC)	(B for ISED)	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5755	-	36.994	1.26	1.80	3.06	4.86	30.00	25.14	3.99	5.70	9.69	9.86	36.00	26.14
5795	-	36.867	1.25	1.84	3.09	4.90	30.00	25.10	3.94	5.82	9.77	9.90	36.00	26.10

		Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Directional Gain	Result		Power Meter Reading	Cable Loss	Atten. Loss	Directional Gain	Result	
						Cond. Power	e.i.r.p.					Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5755	-	-11.68	2.71	9.98	5.00	1.01	6.01	-10.30	2.97	9.89	5.00	2.56	7.56
5795	-	-11.74	2.72	9.98	5.00	0.96	5.96	-10.22	2.97	9.90	5.00	2.65	7.65

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

e.i.r.p. Result = Conducted Power Result + Directional Gain

Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 2

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room	
Date	June 8, 2022	June 9, 2022
Temperature / Humidity	24 deg. C / 54 % RH	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi	Shiro Kobayashi
Mode	Tx 11ac-80 SISO	

11ac-80 SISO, Antenna 2nd

Applied limit: 15.407, access point

Tested Frequency	Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	26 dB EBW (B for FCC)	99% OBW (B for ISED)	Conducted Power Result		Limit	Margin	e.i.r.p. Result		Limit	Margin
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[MHz]	[MHz]	[dBm]	[mW]	[dBm]	[dB]	[dBm]	[mW]	[dBm]	[dB]
5775	-10.55	2.97	9.90	5.0	-	76.796	2.32	1.71	30.00	27.68	7.32	5.40	36.00	28.68

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

e.i.r.p. Result = Conducted Power Result + Antenna Gain

Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-80 CDD

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	26 dB EBW (B for FCC)	99 % OBW (B for ISED)	Conducted power						e.i.r.p.					
			Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
			1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5775	-	76.609	1.24	1.89	3.14	4.96	30.00	25.04	3.94	5.98	9.92	9.96	36.00	26.04

		Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Directional Gain	Result		Power Meter Reading	Cable Loss	Atten. Loss	Directional Gain	Result	
						Cond. Power	e.i.r.p.					Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5775	-	-11.74	2.71	9.98	5.00	0.95	5.95	-10.10	2.97	9.90	5.00	2.77	7.77

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss
e.i.r.p. Result = Conducted Power Result + Directional Gain
Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Directional Gain = G_{ANT} (Antenna Gain) + Array Gain
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} < 4$
N_{ANT} (Number of Transmit Antenna) = 2

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-80 SDM

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	26 dB EBW (B for FCC)	99 % OBW (B for ISED)	Conducted power						e.i.r.p.					
			Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
			1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5775	-	76.625	1.30	1.86	3.16	5.00	30.00	25.00	4.11	5.89	10.00	10.00	36.00	26.00

		Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Directional Gain	Result		Power Meter Reading	Cable Loss	Atten. Loss	Directional Gain	Result	
						Cond. Power	e.i.r.p.					Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5775	-	-11.55	2.71	9.98	5.00	1.14	6.14	-10.17	2.97	9.90	5.00	2.70	7.70

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

e.i.r.p. Result = Conducted Power Result + Directional Gain

Conducted Power Limit (5725 MHz-5850 MHz) = 1 W

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 2

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 8, 2022
Temperature / Humidity	24 deg. C / 54 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11a SISO

5745 MHz

Antenna	Rate Mbps	P/M (AV) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Burst power [dBm]	Remarks
1st	6	-12.03	2.71	9.98	0.66	
	9	-11.70	2.71	9.98	0.99	
	12	-11.81	2.71	9.98	0.88	
	18	-11.82	2.71	9.98	0.87	
	24	-11.55	2.71	9.98	1.14	
	36	-11.46	2.71	9.98	1.23	
	48	-11.55	2.71	9.98	1.14	
	54	-11.47	2.71	9.98	1.22	
2nd	6	-11.18	2.97	9.89	1.68	
	9	-10.94	2.97	9.89	1.92	
	12	-10.90	2.97	9.89	1.96	
	18	-11.00	2.97	9.89	1.86	
	24	-10.63	2.97	9.89	2.23	*
	36	-10.69	2.97	9.89	2.17	
	48	-10.71	2.97	9.89	2.15	
	54	-10.72	2.97	9.89	2.14	

* Worst rate

Sample Calculation:

Burst power = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

All comparison were carried out on same frequency and measurement factors.

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 8, 2022
Temperature / Humidity	24 deg. C / 54 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11n-20 SISO

5745 MHz

Antenna	MCS	P/M (AV) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Burst power [dBm]	Remarks
1st	0 (Long G.I.)	-12.15	2.71	9.98	0.54	
	1 (Long G.I.)	-12.28	2.71	9.98	0.41	
	2 (Long G.I.)	-12.26	2.71	9.98	0.43	
	3 (Long G.I.)	-11.59	2.71	9.98	1.10	
	4 (Long G.I.)	-11.57	2.71	9.98	1.12	
	5 (Long G.I.)	-11.57	2.71	9.98	1.12	
	6 (Long G.I.)	-11.68	2.71	9.98	1.01	
	7 (Long G.I.)	-11.58	2.71	9.98	1.11	
	0 (Short G.I.)	-12.13	2.71	9.98	0.56	
	1 (Short G.I.)	-12.01	2.71	9.98	0.68	
	2 (Short G.I.)	-11.89	2.71	9.98	0.80	
	3 (Short G.I.)	-11.61	2.71	9.98	1.08	
	4 (Short G.I.)	-11.52	2.71	9.98	1.17	
	5 (Short G.I.)	-11.61	2.71	9.98	1.08	
	6 (Short G.I.)	-11.73	2.71	9.98	0.96	
	7 (Short G.I.)	-11.65	2.71	9.98	1.04	
2nd	0 (Long G.I.)	-11.05	2.97	9.89	1.81	
	1 (Long G.I.)	-11.08	2.97	9.89	1.78	
	2 (Long G.I.)	-11.21	2.97	9.89	1.65	
	3 (Long G.I.)	-10.47	2.97	9.89	2.39	*
	4 (Long G.I.)	-10.51	2.97	9.89	2.35	
	5 (Long G.I.)	-10.55	2.97	9.89	2.31	
	6 (Long G.I.)	-10.74	2.97	9.89	2.12	
	7 (Long G.I.)	-10.75	2.97	9.89	2.11	
	0 (Short G.I.)	-11.15	2.97	9.89	1.71	
	1 (Short G.I.)	-11.21	2.97	9.89	1.65	
	2 (Short G.I.)	-11.19	2.97	9.89	1.67	
	3 (Short G.I.)	-10.52	2.97	9.89	2.34	
	4 (Short G.I.)	-10.53	2.97	9.89	2.33	
	5 (Short G.I.)	-10.55	2.97	9.89	2.31	
	6 (Short G.I.)	-10.81	2.97	9.89	2.05	
	7 (Short G.I.)	-10.78	2.97	9.89	2.08	

* Worst rate

Sample Calculation:

Burst power = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

All comparison were carried out on same frequency and measurement factors.

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 8, 2022
Temperature / Humidity	24 deg. C / 54 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-20 SISO

5745 MHz

Antenna	MCS	P/M (AV) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Burst power [dBm]	Remarks
1st	0 (Long G.I.)	-12.27	2.71	9.98	0.42	
	1 (Long G.I.)	-12.30	2.71	9.98	0.39	
	2 (Long G.I.)	-12.21	2.71	9.98	0.48	
	3 (Long G.I.)	-11.61	2.71	9.98	1.08	
	4 (Long G.I.)	-11.54	2.71	9.98	1.15	
	5 (Long G.I.)	-11.44	2.71	9.98	1.25	
	6 (Long G.I.)	-11.67	2.71	9.98	1.02	
	7 (Long G.I.)	-11.60	2.71	9.98	1.09	
	8 (Long G.I.)	-11.60	2.71	9.98	1.09	
	0 (Short G.I.)	-12.18	2.71	9.98	0.51	
	1 (Short G.I.)	-12.31	2.71	9.98	0.38	
	2 (Short G.I.)	-12.29	2.71	9.98	0.40	
	3 (Short G.I.)	-11.56	2.71	9.98	1.13	
	4 (Short G.I.)	-11.59	2.71	9.98	1.10	
	5 (Short G.I.)	-11.56	2.71	9.98	1.13	
	6 (Short G.I.)	-11.62	2.71	9.98	1.07	
	7 (Short G.I.)	-11.45	2.71	9.98	1.24	
	8 (Short G.I.)	-11.57	2.71	9.98	1.12	
2nd	0 (Long G.I.)	-11.21	2.97	9.89	1.65	
	1 (Long G.I.)	-11.10	2.97	9.89	1.76	
	2 (Long G.I.)	-11.22	2.97	9.89	1.64	
	3 (Long G.I.)	-10.43	2.97	9.89	2.43	*
	4 (Long G.I.)	-10.64	2.97	9.89	2.22	
	5 (Long G.I.)	-10.65	2.97	9.89	2.21	
	6 (Long G.I.)	-10.77	2.71	9.98	1.92	
	7 (Long G.I.)	-10.76	2.97	9.89	2.10	
	8 (Long G.I.)	-10.65	2.97	9.89	2.21	
	0 (Short G.I.)	-11.26	2.97	9.89	1.60	
	1 (Short G.I.)	-11.08	2.97	9.89	1.78	
	2 (Short G.I.)	-11.24	2.97	9.89	1.62	
	3 (Short G.I.)	-10.67	2.97	9.89	2.19	
	4 (Short G.I.)	-10.73	2.97	9.89	2.13	
	5 (Short G.I.)	-10.77	2.97	9.89	2.09	
	6 (Short G.I.)	-10.74	2.71	9.98	1.95	
	7 (Short G.I.)	-10.75	2.97	9.89	2.11	
	8 (Short G.I.)	-10.68	2.97	9.89	2.18	

* Worst rate

Sample Calculation:

Burst power = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

All comparison were carried out on same frequency and measurement factors.

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 8, 2022
Temperature / Humidity	24 deg. C / 54 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11a CDD

5745 MHz

Rate	Conducted power				Remarks
	Antenna			Result	
	1st	2nd	Sum		
[Mbps]	[mW]	[mW]	[mW]	[dBm]	
6	1.16	1.50	2.65	4.24	
9	1.12	1.53	2.65	4.23	
12	1.18	1.61	2.79	4.45	
18	1.16	1.58	2.74	4.38	
24	1.26	1.64	2.90	4.63	
36	1.22	1.66	2.87	4.58	
48	1.25	1.63	2.88	4.59	
54	1.29	1.63	2.91	4.65	*

*: Worst Rate

		1st				**2nd**			
Rate	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power
[Mbps]	[dB]	[dBm]	[dB]	[dB]	[dBm]	[dBm]	[dB]	[dB]	[dBm]
6	-	-12.06	2.71	9.98	0.63	-11.11	2.97	9.89	1.75
9	-	-12.20	2.71	9.98	0.49	-11.01	2.97	9.89	1.85
12	-	-11.97	2.71	9.98	0.72	-10.80	2.97	9.89	2.06
18	-	-12.04	2.71	9.98	0.65	-10.87	2.97	9.89	1.99
24	-	-11.68	2.71	9.98	1.01	-10.71	2.97	9.89	2.15
36	-	-11.84	2.71	9.98	0.85	-10.67	2.97	9.89	2.19
48	-	-11.73	2.71	9.98	0.96	-10.73	2.97	9.89	2.13
54	-	-11.60	2.71	9.98	1.09	-10.74	2.97	9.89	2.12

Sample Calculation:
Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 8, 2022
Temperature / Humidity	24 deg. C / 54 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11n-20 CDD

5745 MHz

MCS Index	Conducted power				Remarks
	Antenna			Result	
	1st [mW]	2nd [mW]	Sum [mW]	[dBm]	
0 (Long G.I.)	1.08	1.51	2.59	4.14	
1 (Long G.I.)	1.06	1.61	2.68	4.28	
2 (Long G.I.)	1.10	1.51	2.61	4.16	
3 (Long G.I.)	1.25	1.70	2.95	4.70	
4 (Long G.I.)	1.29	1.73	3.02	4.79	*
5 (Long G.I.)	1.27	1.69	2.96	4.72	
6 (Long G.I.)	1.26	1.64	2.90	4.62	
7 (Long G.I.)	1.23	1.64	2.87	4.58	
0 (Short G.I.)	1.09	1.48	2.57	4.10	
1 (Short G.I.)	1.11	1.52	2.64	4.21	
2 (Short G.I.)	1.10	1.43	2.53	4.03	
3 (Short G.I.)	1.29	1.61	2.90	4.62	
4 (Short G.I.)	1.30	1.57	2.87	4.59	
5 (Short G.I.)	1.23	1.61	2.84	4.54	
6 (Short G.I.)	1.22	1.56	2.78	4.44	
7 (Short G.I.)	1.22	1.57	2.79	4.45	

*: Worst Rate

		1st				**2nd**			
MCS Index	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power
	[dB]	[dBm]	[dB]	[dB]	[dBm]	[dBm]	[dB]	[dB]	[dBm]
0 (Long G.I.)	-	-12.36	2.71	9.98	0.33	-11.06	2.97	9.89	1.80
1 (Long G.I.)	-	-12.42	2.71	9.98	0.27	-10.78	2.97	9.89	2.08
2 (Long G.I.)	-	-12.29	2.71	9.98	0.40	-11.07	2.97	9.89	1.79
3 (Long G.I.)	-	-11.73	2.71	9.98	0.96	-10.55	2.97	9.89	2.31
4 (Long G.I.)	-	-11.60	2.71	9.98	1.09	-10.48	2.97	9.89	2.38
5 (Long G.I.)	-	-11.65	2.71	9.98	1.04	-10.57	2.97	9.89	2.29
6 (Long G.I.)	-	-11.70	2.71	9.98	0.99	-10.71	2.97	9.89	2.15
7 (Long G.I.)	-	-11.78	2.71	9.98	0.91	-10.72	2.97	9.89	2.14
0 (Short G.I.)	-	-12.31	2.71	9.98	0.38	-11.16	2.97	9.89	1.70
1 (Short G.I.)	-	-12.23	2.71	9.98	0.46	-11.03	2.97	9.89	1.83
2 (Short G.I.)	-	-12.28	2.71	9.98	0.41	-11.31	2.97	9.89	1.55
3 (Short G.I.)	-	-11.59	2.71	9.98	1.10	-10.80	2.97	9.89	2.06
4 (Short G.I.)	-	-11.55	2.71	9.98	1.14	-10.89	2.97	9.89	1.97
5 (Short G.I.)	-	-11.80	2.71	9.98	0.89	-10.78	2.97	9.89	2.08
6 (Short G.I.)	-	-11.83	2.71	9.98	0.86	-10.92	2.97	9.89	1.94
7 (Short G.I.)	-	-11.82	2.71	9.98	0.87	-10.91	2.97	9.89	1.95

Sample Calculation:
Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-20 CDD

5745 MHz

Rate	Conducted power				Remarks
	Antenna			Result	
	1st	2nd	Sum		
[Mbps]	[mW]	[mW]	[mW]	[dBm]	
0 (1SS, Long G.I.)	1.06	1.42	2.48	3.94	
1 (1SS, Long G.I.)	1.07	1.41	2.48	3.94	
2 (1SS, Long G.I.)	1.09	1.46	2.55	4.07	
3 (1SS, Long G.I.)	1.21	1.62	2.83	4.52	
4 (1SS, Long G.I.)	1.25	1.59	2.84	4.53	
5 (1SS, Long G.I.)	1.24	1.60	2.84	4.53	
6 (1SS, Long G.I.)	1.24	1.64	2.88	4.60	*
7 (1SS, Long G.I.)	1.23	1.58	2.81	4.49	
8 (1SS, Long G.I.)	1.25	1.62	2.87	4.58	
0 (1SS, Short G.I.)	1.05	1.40	2.45	3.90	
1 (1SS, Short G.I.)	1.11	1.45	2.56	4.08	
2 (1SS, Short G.I.)	1.06	1.45	2.51	4.00	
3 (1SS, Short G.I.)	1.20	1.58	2.79	4.45	
4 (1SS, Short G.I.)	1.23	1.57	2.80	4.47	
5 (1SS, Short G.I.)	1.22	1.63	2.85	4.55	
6 (1SS, Short G.I.)	1.21	1.61	2.82	4.50	
7 (1SS, Short G.I.)	1.22	1.60	2.81	4.49	
8 (1SS, Short G.I.)	1.20	1.57	2.77	4.43	

*: Worst Rate

		1st				**2nd**			
MCS Index	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power
	[dB]	[dBm]	[dB]	[dB]	[dBm]	[dBm]	[dB]	[dB]	[dBm]
0 (1SS, Long G.I.)	-	-12.45	2.71	9.98	0.24	-11.34	2.97	9.89	1.52
1 (1SS, Long G.I.)	-	-12.39	2.71	9.98	0.30	-11.38	2.97	9.89	1.48
2 (1SS, Long G.I.)	-	-12.32	2.71	9.98	0.37	-11.21	2.97	9.89	1.65
3 (1SS, Long G.I.)	-	-11.86	2.71	9.98	0.83	-10.76	2.97	9.89	2.10
4 (1SS, Long G.I.)	-	-11.73	2.71	9.98	0.96	-10.84	2.97	9.89	2.02
5 (1SS, Long G.I.)	-	-11.74	2.71	9.98	0.95	-10.83	2.97	9.89	2.03
6 (1SS, Long G.I.)	-	-11.74	2.71	9.98	0.95	-10.72	2.97	9.89	2.14
7 (1SS, Long G.I.)	-	-11.79	2.71	9.98	0.90	-10.87	2.97	9.89	1.99
8 (1SS, Long G.I.)	-	-11.72	2.71	9.98	0.97	-10.77	2.97	9.89	2.09
0 (1SS, Short G.I.)	-	-12.46	2.71	9.98	0.23	-11.40	2.97	9.89	1.46
1 (1SS, Short G.I.)	-	-12.24	2.71	9.98	0.45	-11.25	2.97	9.89	1.61
2 (1SS, Short G.I.)	-	-12.44	2.71	9.98	0.25	-11.24	2.97	9.89	1.62
3 (1SS, Short G.I.)	-	-11.89	2.71	9.98	0.80	-10.86	2.97	9.89	2.00
4 (1SS, Short G.I.)	-	-11.79	2.71	9.98	0.90	-10.91	2.97	9.89	1.95
5 (1SS, Short G.I.)	-	-11.82	2.71	9.98	0.87	-10.74	2.97	9.89	2.12
6 (1SS, Short G.I.)	-	-11.87	2.71	9.98	0.82	-10.79	2.97	9.89	2.07
7 (1SS, Short G.I.)	-	-11.83	2.71	9.98	0.86	-10.83	2.97	9.89	2.03
8 (1SS, Short G.I.)	-	-11.89	2.71	9.98	0.80	-10.90	2.97	9.89	1.96

Sample Calculation:
Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11n-20 SDM

5745 MHz

MCS Index	Conducted power				Remarks
	Antenna			Result	
	1st [mW]	2nd [mW]	Sum [mW]	[dBm]	
8 (Long G.I.)	1.10	1.41	2.51	4.00	
9 (Long G.I.)	1.05	1.38	2.43	3.86	
10 (Long G.I.)	1.07	1.47	2.54	4.05	
11 (Long G.I.)	1.21	1.62	2.83	4.52	
12 (Long G.I.)	1.22	1.66	2.88	4.59	*
13 (Long G.I.)	1.23	1.57	2.80	4.47	
14 (Long G.I.)	1.25	1.60	2.85	4.54	
15 (Long G.I.)	1.20	1.52	2.72	4.35	
8 (Short G.I.)	1.05	1.44	2.49	3.95	
9 (Short G.I.)	1.06	1.44	2.50	3.98	
10 (Short G.I.)	1.07	1.42	2.49	3.96	
11 (Short G.I.)	1.20	1.63	2.83	4.51	
12 (Short G.I.)	1.19	1.67	2.86	4.57	
13 (Short G.I.)	1.20	1.58	2.78	4.44	
14 (Short G.I.)	1.21	1.59	2.81	4.48	
15 (Short G.I.)	1.23	1.53	2.76	4.41	

*: Worst Rate

		1st				**2nd**			
MCS Index	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power
	[dB]	[dBm]	[dB]	[dB]	[dBm]	[dBm]	[dB]	[dB]	[dBm]
8 (Long G.I.)	-	-12.26	2.71	9.98	0.43	-11.38	2.97	9.89	1.48
9 (Long G.I.)	-	-12.46	2.71	9.98	0.23	-11.46	2.97	9.89	1.40
10 (Long G.I.)	-	-12.40	2.71	9.98	0.29	-11.18	2.97	9.89	1.68
11 (Long G.I.)	-	-11.86	2.71	9.98	0.83	-10.77	2.97	9.89	2.09
12 (Long G.I.)	-	-11.84	2.71	9.98	0.85	-10.65	2.97	9.89	2.21
13 (Long G.I.)	-	-11.80	2.71	9.98	0.89	-10.89	2.97	9.89	1.97
14 (Long G.I.)	-	-11.73	2.71	9.98	0.96	-10.82	2.97	9.89	2.04
15 (Long G.I.)	-	-11.91	2.71	9.98	0.78	-11.03	2.97	9.89	1.83
8 (Short G.I.)	-	-12.49	2.71	9.98	0.20	-11.28	2.97	9.89	1.58
9 (Short G.I.)	-	-12.42	2.71	9.98	0.27	-11.28	2.97	9.89	1.58
10 (Short G.I.)	-	-12.40	2.71	9.98	0.29	-11.34	2.97	9.89	1.52
11 (Short G.I.)	-	-11.90	2.71	9.98	0.79	-10.75	2.97	9.89	2.11
12 (Short G.I.)	-	-11.92	2.71	9.98	0.77	-10.64	2.97	9.89	2.22
13 (Short G.I.)	-	-11.89	2.71	9.98	0.80	-10.88	2.97	9.89	1.98
14 (Short G.I.)	-	-11.85	2.71	9.98	0.84	-10.84	2.97	9.89	2.02
15 (Short G.I.)	-	-11.80	2.71	9.98	0.89	-11.01	2.97	9.89	1.85

Sample Calculation:
Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-20 SDM

5745 MHz

Rate	Conducted power				Remarks
	Antenna			Result	
	1st	2nd	Sum		
[Mbps]	[mW]	[mW]	[mW]	[dBm]	
0 (2SS, Long G.I.)	1.08	1.36	2.45	3.88	
1 (2SS, Long G.I.)	1.11	1.42	2.54	4.04	
2 (2SS, Long G.I.)	1.10	1.39	2.49	3.97	
3 (2SS, Long G.I.)	1.22	1.64	2.86	4.57	
4 (2SS, Long G.I.)	1.24	1.66	2.90	4.63	*
5 (2SS, Long G.I.)	1.22	1.58	2.80	4.47	
6 (2SS, Long G.I.)	1.22	1.60	2.82	4.50	
7 (2SS, Long G.I.)	1.19	1.61	2.81	4.48	
8 (2SS, Long G.I.)	1.18	1.66	2.83	4.52	
0 (2SS, Short G.I.)	1.07	1.37	2.44	3.88	
1 (2SS, Short G.I.)	1.07	1.42	2.49	3.96	
2 (2SS, Short G.I.)	1.07	1.40	2.47	3.93	
3 (2SS, Short G.I.)	1.19	1.64	2.83	4.52	
4 (2SS, Short G.I.)	1.21	1.63	2.84	4.53	
5 (2SS, Short G.I.)	1.21	1.56	2.76	4.42	
6 (2SS, Short G.I.)	1.22	1.56	2.78	4.44	
7 (2SS, Short G.I.)	1.22	1.60	2.81	4.49	
8 (2SS, Short G.I.)	1.19	1.59	2.79	4.45	

*: Worst Rate

		1st				**2nd**			
MCS Index	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power
	[dB]	[dBm]	[dB]	[dB]	[dBm]	[dBm]	[dB]	[dB]	[dBm]
0 (2SS, Long G.I.)	-	-12.35	2.71	9.98	0.34	-11.51	2.97	9.89	1.35
1 (2SS, Long G.I.)	-	-12.22	2.71	9.98	0.47	-11.33	2.97	9.89	1.53
2 (2SS, Long G.I.)	-	-12.26	2.71	9.98	0.43	-11.43	2.97	9.89	1.43
3 (2SS, Long G.I.)	-	-11.81	2.71	9.98	0.88	-10.72	2.97	9.89	2.14
4 (2SS, Long G.I.)	-	-11.76	2.71	9.98	0.93	-10.65	2.97	9.89	2.21
5 (2SS, Long G.I.)	-	-11.83	2.71	9.98	0.86	-10.88	2.97	9.89	1.98
6 (2SS, Long G.I.)	-	-11.84	2.71	9.98	0.85	-10.81	2.97	9.89	2.05
7 (2SS, Long G.I.)	-	-11.92	2.71	9.98	0.77	-10.78	2.97	9.89	2.08
8 (2SS, Long G.I.)	-	-11.98	2.71	9.98	0.71	-10.67	2.97	9.89	2.19
0 (2SS, Short G.I.)	-	-12.38	2.71	9.98	0.31	-11.50	2.97	9.89	1.36
1 (2SS, Short G.I.)	-	-12.41	2.71	9.98	0.28	-11.33	2.97	9.89	1.53
2 (2SS, Short G.I.)	-	-12.40	2.71	9.98	0.29	-11.39	2.97	9.89	1.47
3 (2SS, Short G.I.)	-	-11.93	2.71	9.98	0.76	-10.71	2.97	9.89	2.15
4 (2SS, Short G.I.)	-	-11.86	2.71	9.98	0.83	-10.74	2.97	9.89	2.12
5 (2SS, Short G.I.)	-	-11.87	2.71	9.98	0.82	-10.94	2.97	9.89	1.92
6 (2SS, Short G.I.)	-	-11.84	2.71	9.98	0.85	-10.92	2.97	9.89	1.94
7 (2SS, Short G.I.)	-	-11.83	2.71	9.98	0.86	-10.83	2.97	9.89	2.03
8 (2SS, Short G.I.)	-	-11.92	2.71	9.98	0.77	-10.84	2.97	9.89	2.02

Sample Calculation:
Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 8, 2022
Temperature / Humidity	24 deg. C / 54 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11n-40 SISO

5755 MHz

Antenna	MCS	P/M (AV) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Burst power [dBm]	Remarks
1st	0 (Long G.I.)	-11.64	2.71	9.98	1.05	
	1 (Long G.I.)	-11.69	2.71	9.98	1.00	
	2 (Long G.I.)	-11.71	2.71	9.98	0.98	
	3 (Long G.I.)	-11.56	2.71	9.98	1.13	
	4 (Long G.I.)	-11.51	2.71	9.98	1.18	
	5 (Long G.I.)	-11.57	2.71	9.98	1.12	
	6 (Long G.I.)	-11.35	2.71	9.98	1.34	
	7 (Long G.I.)	-11.46	2.71	9.98	1.23	
	0 (Short G.I.)	-11.71	2.71	9.98	0.98	
	1 (Short G.I.)	-11.63	2.71	9.98	1.06	
	2 (Short G.I.)	-11.69	2.71	9.98	1.00	
	3 (Short G.I.)	-11.63	2.71	9.98	1.06	
	4 (Short G.I.)	-11.53	2.71	9.98	1.16	
	5 (Short G.I.)	-11.66	2.71	9.98	1.03	
	6 (Short G.I.)	-11.37	2.71	9.98	1.32	
	7 (Short G.I.)	-11.40	2.71	9.98	1.29	
2nd	0 (Long G.I.)	-10.70	2.97	9.89	2.16	
	1 (Long G.I.)	-10.79	2.97	9.89	2.07	
	2 (Long G.I.)	-10.71	2.97	9.89	2.15	
	3 (Long G.I.)	-10.59	2.97	9.89	2.27	
	4 (Long G.I.)	-10.70	2.97	9.89	2.16	
	5 (Long G.I.)	-10.67	2.97	9.89	2.19	
	6 (Long G.I.)	-10.48	2.97	9.89	2.38	*
	7 (Long G.I.)	-10.78	2.97	9.89	2.08	
	0 (Short G.I.)	-10.76	2.97	9.89	2.10	
	1 (Short G.I.)	-10.78	2.97	9.89	2.08	
	2 (Short G.I.)	-10.73	2.97	9.89	2.13	
	3 (Short G.I.)	-10.64	2.97	9.89	2.22	
	4 (Short G.I.)	-10.71	2.97	9.89	2.15	
	5 (Short G.I.)	-10.67	2.97	9.89	2.19	
	6 (Short G.I.)	-10.67	2.97	9.89	2.19	
	7 (Short G.I.)	-10.65	2.97	9.89	2.21	

* Worst rate

Sample Calculation:

Burst power = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

All comparison were carried out on same frequency and measurement factors.

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 8, 2022
Temperature / Humidity	24 deg. C / 54 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-40 SISO

5755 MHz

Antenna	MCS	P/M (AV) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Burst power [dBm]	Remarks
1st	0 (1SS, Long G.I.)	-11.56	2.71	9.98	1.13	
	1 (1SS, Long G.I.)	-11.57	2.71	9.98	1.12	
	2 (1SS, Long G.I.)	-11.51	2.71	9.98	1.18	
	3 (1SS, Long G.I.)	-11.55	2.71	9.98	1.14	
	4 (1SS, Long G.I.)	-11.55	2.71	9.98	1.14	
	5 (1SS, Long G.I.)	-11.47	2.71	9.98	1.22	
	6 (1SS, Long G.I.)	-11.63	2.71	9.98	1.06	
	7 (1SS, Long G.I.)	-11.60	2.71	9.98	1.09	
	8 (1SS, Long G.I.)	-11.64	2.71	9.98	1.05	
	9 (1SS, Long G.I.)	-11.66	2.71	9.98	1.03	
	0 (1SS, Short G.I.)	-11.60	2.71	9.98	1.09	
	1 (1SS, Short G.I.)	-11.52	2.71	9.98	1.17	
	2 (1SS, Short G.I.)	-11.66	2.71	9.98	1.03	
	3 (1SS, Short G.I.)	-11.52	2.71	9.98	1.17	
	4 (1SS, Short G.I.)	-11.55	2.71	9.98	1.14	
	5 (1SS, Short G.I.)	-11.48	2.71	9.98	1.21	
	6 (1SS, Short G.I.)	-11.50	2.71	9.98	1.19	
	7 (1SS, Short G.I.)	-11.71	2.71	9.98	0.98	
	8 (1SS, Short G.I.)	-11.66	2.71	9.98	1.03	
	9 (1SS, Short G.I.)	-11.63	2.71	9.98	1.06	
2nd	0 (1SS, Long G.I.)	-10.74	2.97	9.89	2.12	
	1 (1SS, Long G.I.)	-10.82	2.97	9.89	2.04	
	2 (1SS, Long G.I.)	-10.78	2.97	9.89	2.08	
	3 (1SS, Long G.I.)	-10.71	2.97	9.89	2.15	
	4 (1SS, Long G.I.)	-10.64	2.97	9.89	2.22	
	5 (1SS, Long G.I.)	-10.59	2.97	9.89	2.27	*
	6 (1SS, Long G.I.)	-10.65	2.97	9.89	2.21	
	7 (1SS, Long G.I.)	-10.64	2.97	9.89	2.22	
	8 (1SS, Long G.I.)	-10.76	2.97	9.89	2.10	
	9 (1SS, Long G.I.)	-10.62	2.97	9.89	2.24	
	0 (1SS, Short G.I.)	-10.63	2.97	9.89	2.23	
	1 (1SS, Short G.I.)	-10.70	2.97	9.89	2.16	
	2 (1SS, Short G.I.)	-10.79	2.97	9.89	2.07	
	3 (1SS, Short G.I.)	-10.61	2.97	9.89	2.25	
	4 (1SS, Short G.I.)	-10.60	2.97	9.89	2.26	
	5 (1SS, Short G.I.)	-10.62	2.97	9.89	2.24	
	6 (1SS, Short G.I.)	-10.68	2.97	9.89	2.18	
	7 (1SS, Short G.I.)	-10.63	2.97	9.89	2.23	
	8 (1SS, Short G.I.)	-10.60	2.97	9.89	2.26	
	9 (1SS, Short G.I.)	-10.66	2.97	9.89	2.20	

* Worst rate

Sample Calculation:

Burst power = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

All comparison were carried out on same frequency and measurement factors.

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11n-40 CDD

5755 MHz

MCS Index	Conducted power				Remarks
	Antenna			Result	
	1st [mW]	2nd [mW]	Sum [mW]	[dBm]	
0 (Long G.I.)	1.22	1.87	3.08	4.89	
1 (Long G.I.)	1.21	1.84	3.04	4.83	
2 (Long G.I.)	1.24	1.84	3.08	4.88	
3 (Long G.I.)	1.25	1.82	3.07	4.87	
4 (Long G.I.)	1.27	1.79	3.06	4.86	
5 (Long G.I.)	1.27	1.83	3.10	4.92	*
6 (Long G.I.)	1.24	1.80	3.04	4.83	
7 (Long G.I.)	1.26	1.75	3.00	4.77	
0 (Short G.I.)	1.22	1.86	3.07	4.88	
1 (Short G.I.)	1.22	1.86	3.08	4.89	
2 (Short G.I.)	1.21	1.83	3.05	4.84	
3 (Short G.I.)	1.27	1.81	3.08	4.89	
4 (Short G.I.)	1.24	1.74	2.98	4.74	
5 (Short G.I.)	1.26	1.81	3.07	4.87	
6 (Short G.I.)	1.23	1.71	2.95	4.69	
7 (Short G.I.)	1.24	1.77	3.00	4.77	

*: Worst Rate

		1st				**2nd**			
MCS Index	Duty Factor [dB]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result Cond. Power [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result Cond. Power [dBm]
0 (Long G.I.)	-	-11.84	2.71	9.98	0.85	-10.15	2.97	9.89	2.71
1 (Long G.I.)	-	-11.87	2.71	9.98	0.82	-10.22	2.97	9.89	2.64
2 (Long G.I.)	-	-11.76	2.71	9.98	0.93	-10.22	2.97	9.89	2.64
3 (Long G.I.)	-	-11.72	2.71	9.98	0.97	-10.26	2.97	9.89	2.60
4 (Long G.I.)	-	-11.64	2.71	9.98	1.05	-10.34	2.97	9.89	2.52
5 (Long G.I.)	-	-11.64	2.71	9.98	1.05	-10.24	2.97	9.89	2.62
6 (Long G.I.)	-	-11.76	2.71	9.98	0.93	-10.30	2.97	9.89	2.56
7 (Long G.I.)	-	-11.70	2.71	9.98	0.99	-10.44	2.97	9.89	2.42
0 (Short G.I.)	-	-11.84	2.71	9.98	0.85	-10.17	2.97	9.89	2.69
1 (Short G.I.)	-	-11.81	2.71	9.98	0.88	-10.17	2.97	9.89	2.69
2 (Short G.I.)	-	-11.85	2.71	9.98	0.84	-10.23	2.97	9.89	2.63
3 (Short G.I.)	-	-11.65	2.71	9.98	1.04	-10.28	2.97	9.89	2.58
4 (Short G.I.)	-	-11.75	2.71	9.98	0.94	-10.46	2.97	9.89	2.40
5 (Short G.I.)	-	-11.67	2.71	9.98	1.02	-10.29	2.97	9.89	2.57
6 (Short G.I.)	-	-11.78	2.71	9.98	0.91	-10.52	2.97	9.89	2.34
7 (Short G.I.)	-	-11.77	2.71	9.98	0.92	-10.39	2.97	9.89	2.47

Sample Calculation:
Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-40 CDD

5755 MHz

Rate	Conducted power				Remarks
	Antenna			Result	
	1st	2nd	Sum		
[Mbps]	[mW]	[mW]	[mW]	[dBm]	
0 (1SS, Long G.I.)	1.17	1.80	2.98	4.74	
1 (1SS, Long G.I.)	1.22	1.83	3.06	4.85	
2 (1SS, Long G.I.)	1.23	1.77	3.00	4.77	
3 (1SS, Long G.I.)	1.24	1.79	3.02	4.80	
4 (1SS, Long G.I.)	1.25	1.92	3.17	5.02	*
5 (1SS, Long G.I.)	1.27	1.83	3.10	4.92	
6 (1SS, Long G.I.)	1.26	1.75	3.02	4.80	
7 (1SS, Long G.I.)	1.26	1.75	3.01	4.79	
8 (1SS, Long G.I.)	1.25	1.77	3.02	4.80	
9 (1SS, Long G.I.)	1.29	1.76	3.05	4.84	
0 (1SS, Short G.I.)	1.20	1.79	2.99	4.75	
1 (1SS, Short G.I.)	1.24	1.85	3.09	4.90	
2 (1SS, Short G.I.)	1.22	1.79	3.01	4.79	
3 (1SS, Short G.I.)	1.28	1.87	3.15	4.98	
4 (1SS, Short G.I.)	1.27	1.88	3.15	4.99	
5 (1SS, Short G.I.)	1.24	1.82	3.06	4.86	
6 (1SS, Short G.I.)	1.26	1.77	3.03	4.81	
7 (1SS, Short G.I.)	1.25	1.76	3.02	4.79	
8 (1SS, Short G.I.)	1.29	1.75	3.04	4.82	
9 (1SS, Short G.I.)	1.29	1.73	3.02	4.80	

*: Worst Rate

		1st				**2nd**			
MCS Index	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power
	[dB]	[dBm]	[dB]	[dB]	[dBm]	[dBm]	[dB]	[dB]	[dBm]
0 (1SS, Long G.I.)	-	-11.99	2.71	9.98	0.70	-10.30	2.97	9.89	2.56
1 (1SS, Long G.I.)	-	-11.81	2.71	9.98	0.88	-10.23	2.97	9.89	2.63
2 (1SS, Long G.I.)	-	-11.80	2.71	9.98	0.89	-10.38	2.97	9.89	2.48
3 (1SS, Long G.I.)	-	-11.77	2.71	9.98	0.92	-10.34	2.97	9.89	2.52
4 (1SS, Long G.I.)	-	-11.72	2.71	9.98	0.97	-10.02	2.97	9.89	2.84
5 (1SS, Long G.I.)	-	-11.65	2.71	9.98	1.04	-10.23	2.97	9.89	2.63
6 (1SS, Long G.I.)	-	-11.67	2.71	9.98	1.02	-10.42	2.97	9.89	2.44
7 (1SS, Long G.I.)	-	-11.70	2.71	9.98	0.99	-10.42	2.97	9.89	2.44
8 (1SS, Long G.I.)	-	-11.73	2.71	9.98	0.96	-10.37	2.97	9.89	2.49
9 (1SS, Long G.I.)	-	-11.58	2.71	9.98	1.11	-10.41	2.97	9.89	2.45
0 (1SS, Short G.I.)	-	-11.91	2.71	9.98	0.78	-10.33	2.97	9.89	2.53
1 (1SS, Short G.I.)	-	-11.74	2.71	9.98	0.95	-10.20	2.97	9.89	2.66
2 (1SS, Short G.I.)	-	-11.83	2.71	9.98	0.86	-10.32	2.97	9.89	2.54
3 (1SS, Short G.I.)	-	-11.62	2.71	9.98	1.07	-10.15	2.97	9.89	2.71
4 (1SS, Short G.I.)	-	-11.64	2.71	9.98	1.05	-10.12	2.97	9.89	2.74
5 (1SS, Short G.I.)	-	-11.76	2.71	9.98	0.93	-10.25	2.97	9.89	2.61
6 (1SS, Short G.I.)	-	-11.70	2.71	9.98	0.99	-10.38	2.97	9.89	2.48
7 (1SS, Short G.I.)	-	-11.71	2.71	9.98	0.98	-10.40	2.97	9.89	2.46
8 (1SS, Short G.I.)	-	-11.60	2.71	9.98	1.09	-10.43	2.97	9.89	2.43
9 (1SS, Short G.I.)	-	-11.60	2.71	9.98	1.09	-10.47	2.97	9.89	2.39

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11n-40 SDM

5755 MHz

MCS Index	Conducted power				Remarks
	Antenna			Result	
	1st [mW]	2nd [mW]	Sum [mW]	[dBm]	
8 (Long G.I.)	1.20	1.83	3.02	4.81	
9 (Long G.I.)	1.19	1.82	3.01	4.79	
10 (Long G.I.)	1.20	1.82	3.02	4.79	
11 (Long G.I.)	1.25	1.82	3.06	4.86	
12 (Long G.I.)	1.26	1.87	3.13	4.96	*
13 (Long G.I.)	1.24	1.78	3.02	4.80	
14 (Long G.I.)	1.28	1.79	3.07	4.87	
15 (Long G.I.)	1.29	1.79	3.08	4.88	
8 (Short G.I.)	1.22	1.83	3.05	4.84	
9 (Short G.I.)	1.23	1.80	3.03	4.82	
10 (Short G.I.)	1.21	1.77	2.98	4.74	
11 (Short G.I.)	1.25	1.82	3.06	4.86	
12 (Short G.I.)	1.23	1.86	3.09	4.90	
13 (Short G.I.)	1.26	1.80	3.06	4.86	
14 (Short G.I.)	1.26	1.80	3.06	4.86	
15 (Short G.I.)	1.26	1.79	3.05	4.85	

*: Worst Rate

		1st				**2nd**			
MCS Index	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power
	[dB]	[dBm]	[dB]	[dB]	[dBm]	[dBm]	[dB]	[dB]	[dBm]
8 (Long G.I.)	-	-11.91	2.71	9.98	0.78	-10.24	2.97	9.89	2.62
9 (Long G.I.)	-	-11.92	2.71	9.98	0.77	-10.26	2.97	9.89	2.60
10 (Long G.I.)	-	-11.90	2.71	9.98	0.79	-10.27	2.97	9.89	2.59
11 (Long G.I.)	-	-11.73	2.71	9.98	0.96	-10.27	2.97	9.89	2.59
12 (Long G.I.)	-	-11.68	2.71	9.98	1.01	-10.14	2.97	9.89	2.72
13 (Long G.I.)	-	-11.75	2.71	9.98	0.94	-10.36	2.97	9.89	2.50
14 (Long G.I.)	-	-11.63	2.71	9.98	1.06	-10.32	2.97	9.89	2.54
15 (Long G.I.)	-	-11.60	2.71	9.98	1.09	-10.33	2.97	9.89	2.53
8 (Short G.I.)	-	-11.83	2.71	9.98	0.86	-10.24	2.97	9.89	2.62
9 (Short G.I.)	-	-11.78	2.71	9.98	0.91	-10.31	2.97	9.89	2.55
10 (Short G.I.)	-	-11.88	2.71	9.98	0.81	-10.38	2.97	9.89	2.48
11 (Short G.I.)	-	-11.73	2.71	9.98	0.96	-10.27	2.97	9.89	2.59
12 (Short G.I.)	-	-11.79	2.71	9.98	0.90	-10.16	2.97	9.89	2.70
13 (Short G.I.)	-	-11.69	2.71	9.98	1.00	-10.30	2.97	9.89	2.56
14 (Short G.I.)	-	-11.68	2.71	9.98	1.01	-10.31	2.97	9.89	2.55
15 (Short G.I.)	-	-11.68	2.71	9.98	1.01	-10.33	2.97	9.89	2.53

Sample Calculation:
Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-40 SDM

5755 MHz

Rate	Conducted power				Remarks
	Antenna			Result	
	1st	2nd	Sum		
[Mbps]	[mW]	[mW]	[mW]	[dBm]	
0 (2SS, Long G.I.)	1.20	1.75	2.95	4.70	
1 (2SS, Long G.I.)	1.22	1.82	3.04	4.82	
2 (2SS, Long G.I.)	1.22	1.81	3.03	4.81	
3 (2SS, Long G.I.)	1.23	1.81	3.04	4.83	
4 (2SS, Long G.I.)	1.25	1.79	3.04	4.83	
5 (2SS, Long G.I.)	1.27	1.74	3.02	4.79	
6 (2SS, Long G.I.)	1.26	1.80	3.06	4.86	*
7 (2SS, Long G.I.)	1.26	1.79	3.05	4.85	
8 (2SS, Long G.I.)	1.23	1.77	3.00	4.77	
9 (2SS, Long G.I.)	1.24	1.77	3.01	4.79	
0 (2SS, Short G.I.)	1.20	1.73	2.93	4.66	
1 (2SS, Short G.I.)	1.21	1.77	2.98	4.74	
2 (2SS, Short G.I.)	1.23	1.80	3.03	4.81	
3 (2SS, Short G.I.)	1.24	1.79	3.03	4.82	
4 (2SS, Short G.I.)	1.24	1.81	3.05	4.84	
5 (2SS, Short G.I.)	1.29	1.74	3.03	4.81	
6 (2SS, Short G.I.)	1.24	1.78	3.02	4.80	
7 (2SS, Short G.I.)	1.22	1.83	3.04	4.83	
8 (2SS, Short G.I.)	1.29	1.75	3.04	4.82	
9 (2SS, Short G.I.)	1.28	1.77	3.05	4.84	

*: Worst Rate

		1st				**2nd**			
MCS Index	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power
	[dB]	[dBm]	[dB]	[dB]	[dBm]	[dBm]	[dB]	[dB]	[dBm]
0 (2SS, Long G.I.)	-	-11.90	2.71	9.98	0.79	-10.42	2.97	9.89	2.44
1 (2SS, Long G.I.)	-	-11.82	2.71	9.98	0.87	-10.27	2.97	9.89	2.59
2 (2SS, Long G.I.)	-	-11.83	2.71	9.98	0.86	-10.28	2.97	9.89	2.58
3 (2SS, Long G.I.)	-	-11.79	2.71	9.98	0.90	-10.29	2.97	9.89	2.57
4 (2SS, Long G.I.)	-	-11.72	2.71	9.98	0.97	-10.33	2.97	9.89	2.53
5 (2SS, Long G.I.)	-	-11.64	2.71	9.98	1.05	-10.45	2.97	9.89	2.41
6 (2SS, Long G.I.)	-	-11.68	2.71	9.98	1.01	-10.30	2.97	9.89	2.56
7 (2SS, Long G.I.)	-	-11.69	2.71	9.98	1.00	-10.32	2.97	9.89	2.54
8 (2SS, Long G.I.)	-	-11.80	2.71	9.98	0.89	-10.38	2.97	9.89	2.48
9 (2SS, Long G.I.)	-	-11.74	2.71	9.98	0.95	-10.38	2.97	9.89	2.48
0 (2SS, Short G.I.)	-	-11.91	2.71	9.98	0.78	-10.48	2.97	9.89	2.38
1 (2SS, Short G.I.)	-	-11.85	2.71	9.98	0.84	-10.39	2.97	9.89	2.47
2 (2SS, Short G.I.)	-	-11.79	2.71	9.98	0.90	-10.31	2.97	9.89	2.55
3 (2SS, Short G.I.)	-	-11.77	2.71	9.98	0.92	-10.32	2.97	9.89	2.54
4 (2SS, Short G.I.)	-	-11.75	2.71	9.98	0.94	-10.29	2.97	9.89	2.57
5 (2SS, Short G.I.)	-	-11.59	2.71	9.98	1.10	-10.46	2.97	9.89	2.40
6 (2SS, Short G.I.)	-	-11.74	2.71	9.98	0.95	-10.36	2.97	9.89	2.50
7 (2SS, Short G.I.)	-	-11.84	2.71	9.98	0.85	-10.24	2.97	9.89	2.62
8 (2SS, Short G.I.)	-	-11.60	2.71	9.98	1.09	-10.43	2.97	9.89	2.43
9 (2SS, Short G.I.)	-	-11.62	2.71	9.98	1.07	-10.39	2.97	9.89	2.47

Sample Calculation:
Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 8, 2022
Temperature / Humidity	24 deg. C / 54 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-80 SISO

5775 MHz

Antenna	MCS	P/M (AV) Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Burst power [dBm]	Remarks
1st	0 (1SS, Long G.I.)	-11.83	2.71	9.98	0.86	
	1 (1SS, Long G.I.)	-11.68	2.71	9.98	1.01	
	2 (1SS, Long G.I.)	-11.75	2.71	9.98	0.94	
	3 (1SS, Long G.I.)	-11.59	2.71	9.98	1.10	
	4 (1SS, Long G.I.)	-11.50	2.71	9.98	1.19	
	5 (1SS, Long G.I.)	-11.46	2.71	9.98	1.23	
	6 (1SS, Long G.I.)	-11.33	2.71	9.98	1.36	
	7 (1SS, Long G.I.)	-11.50	2.71	9.98	1.19	
	8 (1SS, Long G.I.)	-11.50	2.71	9.98	1.19	
	9 (1SS, Long G.I.)	-11.53	2.71	9.98	1.16	
	0 (1SS, Short G.I.)	-11.91	2.71	9.98	0.78	
	1 (1SS, Short G.I.)	-11.83	2.71	9.98	0.86	
	2 (1SS, Short G.I.)	-11.48	2.71	9.98	1.21	
	3 (1SS, Short G.I.)	-11.55	2.71	9.98	1.14	
	4 (1SS, Short G.I.)	-11.57	2.71	9.98	1.12	
	5 (1SS, Short G.I.)	-11.53	2.71	9.98	1.16	
	6 (1SS, Short G.I.)	-11.49	2.71	9.98	1.20	
	7 (1SS, Short G.I.)	-11.55	2.71	9.98	1.14	
	8 (1SS, Short G.I.)	-11.58	2.71	9.98	1.11	
	9 (1SS, Short G.I.)	-11.53	2.71	9.98	1.16	
2nd	0 (1SS, Long G.I.)	-11.08	2.97	9.90	1.79	
	1 (1SS, Long G.I.)	-10.97	2.97	9.90	1.90	
	2 (1SS, Long G.I.)	-10.94	2.97	9.90	1.93	
	3 (1SS, Long G.I.)	-10.87	2.97	9.90	2.00	
	4 (1SS, Long G.I.)	-10.80	2.97	9.90	2.07	
	5 (1SS, Long G.I.)	-10.56	2.97	9.90	2.31	
	6 (1SS, Long G.I.)	-10.64	2.97	9.90	2.23	
	7 (1SS, Long G.I.)	-10.55	2.97	9.90	2.32	*
	8 (1SS, Long G.I.)	-10.74	2.97	9.90	2.13	
	9 (1SS, Long G.I.)	-10.65	2.97	9.90	2.22	
	0 (1SS, Short G.I.)	-11.10	2.97	9.89	1.76	
	1 (1SS, Short G.I.)	-11.06	2.97	9.89	1.80	
	2 (1SS, Short G.I.)	-10.90	2.97	9.89	1.96	
	3 (1SS, Short G.I.)	-10.77	2.97	9.89	2.09	
	4 (1SS, Short G.I.)	-10.80	2.97	9.89	2.06	
	5 (1SS, Short G.I.)	-10.59	2.97	9.89	2.27	
	6 (1SS, Short G.I.)	-10.83	2.97	9.89	2.03	
	7 (1SS, Short G.I.)	-10.76	2.97	9.89	2.10	
	8 (1SS, Short G.I.)	-10.79	2.97	9.89	2.07	
	9 (1SS, Short G.I.)	-10.69	2.97	9.89	2.17	

* Worst rate

Sample Calculation:

Burst power = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

All comparison were carried out on same frequency and measurement factors.

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-80 CDD

5775 MHz

Rate	Conducted power				Remarks
	Antenna			Result	
	1st	2nd	Sum		
[Mbps]	[mW]	[mW]	[mW]	[dBm]	
0 (1SS, Long G.I.)	1.19	1.82	3.02	4.80	
1 (1SS, Long G.I.)	1.19	1.79	2.98	4.75	
2 (1SS, Long G.I.)	1.18	1.85	3.03	4.81	
3 (1SS, Long G.I.)	1.24	1.89	3.14	4.96	*
4 (1SS, Long G.I.)	1.26	1.84	3.09	4.90	
5 (1SS, Long G.I.)	1.25	1.82	3.07	4.87	
6 (1SS, Long G.I.)	1.24	1.79	3.03	4.82	
7 (1SS, Long G.I.)	1.24	1.80	3.04	4.84	
8 (1SS, Long G.I.)	1.25	1.77	3.02	4.79	
9 (1SS, Long G.I.)	1.31	1.74	3.05	4.84	
0 (1SS, Short G.I.)	1.17	1.82	2.98	4.75	
1 (1SS, Short G.I.)	1.16	1.87	3.03	4.81	
2 (1SS, Short G.I.)	1.24	1.78	3.02	4.80	
3 (1SS, Short G.I.)	1.25	1.83	3.08	4.89	
4 (1SS, Short G.I.)	1.23	1.85	3.08	4.89	
5 (1SS, Short G.I.)	1.26	1.85	3.11	4.93	
6 (1SS, Short G.I.)	1.27	1.79	3.05	4.85	
7 (1SS, Short G.I.)	1.30	1.75	3.04	4.83	
8 (1SS, Short G.I.)	1.26	1.73	2.99	4.75	
9 (1SS, Short G.I.)	1.32	1.78	3.10	4.91	

*: Worst Rate

		1st				**2nd**			
MCS Index	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power
	[dB]	[dBm]	[dB]	[dB]	[dBm]	[dBm]	[dB]	[dB]	[dBm]
0 (1SS, Long G.I.)	-	-11.92	2.71	9.98	0.77	-10.26	2.97	9.90	2.61
1 (1SS, Long G.I.)	-	-11.94	2.71	9.98	0.75	-10.33	2.97	9.90	2.54
2 (1SS, Long G.I.)	-	-11.98	2.71	9.98	0.71	-10.20	2.97	9.90	2.67
3 (1SS, Long G.I.)	-	-11.74	2.71	9.98	0.95	-10.10	2.97	9.90	2.77
4 (1SS, Long G.I.)	-	-11.70	2.71	9.98	0.99	-10.23	2.97	9.90	2.64
5 (1SS, Long G.I.)	-	-11.72	2.71	9.98	0.97	-10.28	2.97	9.90	2.59
6 (1SS, Long G.I.)	-	-11.75	2.71	9.98	0.94	-10.34	2.97	9.90	2.53
7 (1SS, Long G.I.)	-	-11.75	2.71	9.98	0.94	-10.31	2.97	9.90	2.56
8 (1SS, Long G.I.)	-	-11.72	2.71	9.98	0.97	-10.40	2.97	9.90	2.47
9 (1SS, Long G.I.)	-	-11.52	2.71	9.98	1.17	-10.47	2.97	9.90	2.40
0 (1SS, Short G.I.)	-	-12.02	2.71	9.98	0.67	-10.28	2.97	9.90	2.59
1 (1SS, Short G.I.)	-	-12.06	2.71	9.98	0.63	-10.15	2.97	9.90	2.72
2 (1SS, Short G.I.)	-	-11.77	2.71	9.98	0.92	-10.36	2.97	9.90	2.51
3 (1SS, Short G.I.)	-	-11.72	2.71	9.98	0.97	-10.24	2.97	9.90	2.63
4 (1SS, Short G.I.)	-	-11.79	2.71	9.98	0.90	-10.19	2.97	9.90	2.68
5 (1SS, Short G.I.)	-	-11.68	2.71	9.98	1.01	-10.20	2.97	9.90	2.67
6 (1SS, Short G.I.)	-	-11.66	2.71	9.98	1.03	-10.35	2.97	9.90	2.52
7 (1SS, Short G.I.)	-	-11.56	2.71	9.98	1.13	-10.45	2.97	9.90	2.42
8 (1SS, Short G.I.)	-	-11.68	2.71	9.98	1.01	-10.50	2.97	9.90	2.37
9 (1SS, Short G.I.)	-	-11.49	2.71	9.98	1.20	-10.36	2.97	9.90	2.51

Sample Calculation:
Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

Maximum Conducted Output Power

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 9, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Shiro Kobayashi
Mode	Tx 11ac-80 SDM

5775 MHz

Rate	Conducted power				Remarks
	Antenna			Result	
	1st	2nd	Sum		
[Mbps]	[mW]	[mW]	[mW]	[dBm]	
0 (2SS, Long G.I.)	1.21	1.85	3.05	4.85	
1 (2SS, Long G.I.)	1.26	1.79	3.06	4.86	
2 (2SS, Long G.I.)	1.18	1.90	3.08	4.88	
3 (2SS, Long G.I.)	1.20	1.85	3.05	4.84	
4 (2SS, Long G.I.)	1.26	1.79	3.05	4.84	
5 (2SS, Long G.I.)	1.28	1.76	3.03	4.82	
6 (2SS, Long G.I.)	1.30	1.86	3.16	5.00	*
7 (2SS, Long G.I.)	1.33	1.83	3.16	4.99	
8 (2SS, Long G.I.)	1.24	1.75	2.98	4.74	
9 (2SS, Long G.I.)	1.28	1.84	3.11	4.93	
0 (2SS, Short G.I.)	1.15	1.82	2.97	4.73	
1 (2SS, Short G.I.)	1.16	1.83	2.99	4.76	
2 (2SS, Short G.I.)	1.18	1.86	3.05	4.84	
3 (2SS, Short G.I.)	1.23	1.88	3.12	4.94	
4 (2SS, Short G.I.)	1.25	1.82	3.07	4.88	
5 (2SS, Short G.I.)	1.25	1.77	3.02	4.81	
6 (2SS, Short G.I.)	1.26	1.88	3.15	4.98	
7 (2SS, Short G.I.)	1.29	1.77	3.06	4.85	
8 (2SS, Short G.I.)	1.27	1.76	3.03	4.81	
9 (2SS, Short G.I.)	1.32	1.73	3.05	4.84	

*: Worst Rate

		1st				**2nd**			
MCS Index	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power	Power Meter Reading	Cable Loss	Atten. Loss	Result Cond. Power
	[dB]	[dBm]	[dB]	[dB]	[dBm]	[dBm]	[dB]	[dB]	[dBm]
0 (2SS, Long G.I.)	-	-11.87	2.71	9.98	0.82	-10.21	2.97	9.90	2.66
1 (2SS, Long G.I.)	-	-11.67	2.71	9.98	1.02	-10.33	2.97	9.90	2.54
2 (2SS, Long G.I.)	-	-11.98	2.71	9.98	0.71	-10.08	2.97	9.90	2.79
3 (2SS, Long G.I.)	-	-11.89	2.71	9.98	0.80	-10.21	2.97	9.90	2.66
4 (2SS, Long G.I.)	-	-11.70	2.71	9.98	0.99	-10.33	2.97	9.90	2.54
5 (2SS, Long G.I.)	-	-11.63	2.71	9.98	1.06	-10.42	2.97	9.90	2.45
6 (2SS, Long G.I.)	-	-11.55	2.71	9.98	1.14	-10.17	2.97	9.90	2.70
7 (2SS, Long G.I.)	-	-11.45	2.71	9.98	1.24	-10.25	2.97	9.90	2.62
8 (2SS, Long G.I.)	-	-11.77	2.71	9.98	0.92	-10.45	2.97	9.90	2.42
9 (2SS, Long G.I.)	-	-11.63	2.71	9.98	1.06	-10.23	2.97	9.90	2.64
0 (2SS, Short G.I.)	-	-12.07	2.71	9.98	0.62	-10.27	2.97	9.90	2.60
1 (2SS, Short G.I.)	-	-12.04	2.71	9.98	0.65	-10.25	2.97	9.90	2.62
2 (2SS, Short G.I.)	-	-11.96	2.71	9.98	0.73	-10.17	2.97	9.90	2.70
3 (2SS, Short G.I.)	-	-11.78	2.71	9.98	0.91	-10.12	2.97	9.90	2.75
4 (2SS, Short G.I.)	-	-11.72	2.71	9.98	0.97	-10.26	2.97	9.90	2.61
5 (2SS, Short G.I.)	-	-11.72	2.71	9.98	0.97	-10.38	2.97	9.90	2.49
6 (2SS, Short G.I.)	-	-11.68	2.71	9.98	1.01	-10.12	2.97	9.90	2.75
7 (2SS, Short G.I.)	-	-11.58	2.71	9.98	1.11	-10.40	2.97	9.90	2.47
8 (2SS, Short G.I.)	-	-11.66	2.71	9.98	1.03	-10.41	2.97	9.90	2.46
9 (2SS, Short G.I.)	-	-11.50	2.71	9.98	1.19	-10.49	2.97	9.90	2.38

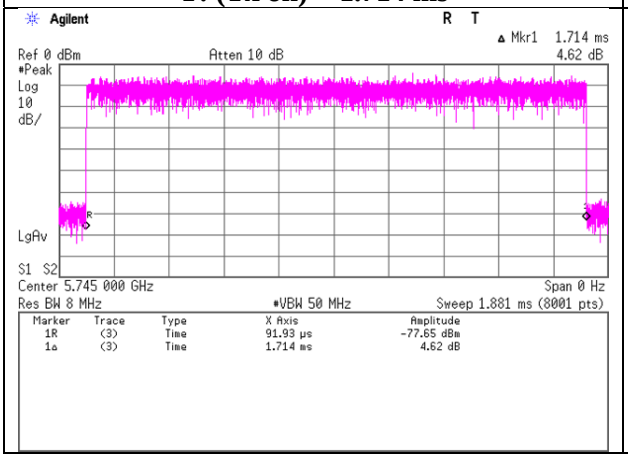
Sample Calculation:
Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss

Burst rate confirmation

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 23, 2022
Temperature / Humidity	26 deg. C / 47 % RH
Engineer	Miku Ikudome
Mode	Tx

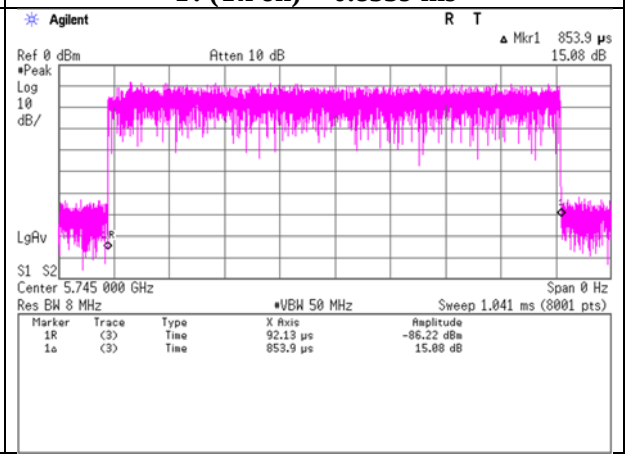
11n-20 SDM, MCS 4

VBW: 1/T = 584 Hz<620 Hz
T: (Tx on) = 1.714 ms



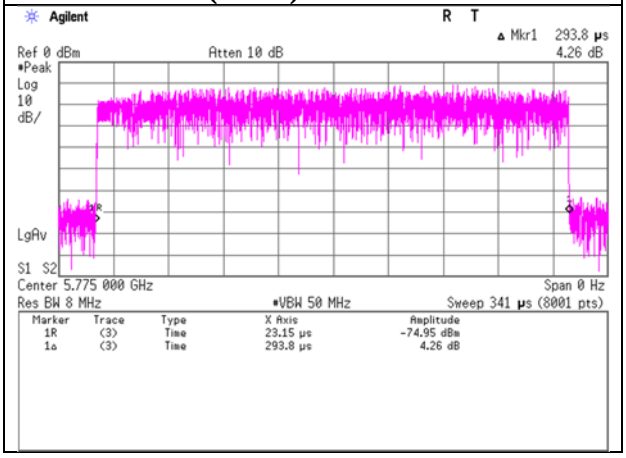
11ac-40 CDD, MCS 4

VBW: 1/T = 1172 Hz<1200 Hz
T: (Tx on) = 0.8539 ms



11ac-80 SDM, MCS 6

VBW: 1/T = 3404 Hz<3600 Hz
T: (Tx on) = 0.2938 ms



Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 21, 2022
Temperature / Humidity	25 deg. C / 42 % RH
Engineer	Kenichi Adachi
Mode	Tx 11a SISO

Antenna 2nd Applied limit: 15.407, access point

Tested Frequency [MHz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	RBW Correction Factor [dB]	PSD (Conducted) Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]	PSD (e.i.r.p.) Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]
5745	-30.90	2.97	9.89	-	5.0	6.99	-11.05	30.00	41.05	-6.05	36.00	42.05
5785	-30.43	2.97	9.90	-	5.0	6.99	-10.57	30.00	40.57	-5.57	36.00	41.57
5825	-30.93	2.98	9.90	-	5.0	6.99	-11.06	30.00	41.06	-6.06	36.00	42.06

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 21, 2022
Temperature / Humidity	25 deg. C / 42 % RH
Engineer	Kenichi Adachi
Mode	Tx 11a CDD

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5745	0.06	0.11	0.17	-7.76	27.98	35.74	0.39	0.67	1.06	0.26	36.00	35.74
5785	0.06	0.10	0.16	-8.04	27.98	36.02	0.38	0.61	0.99	-0.02	36.00	36.02
5825	0.05	0.07	0.12	-9.08	27.98	37.06	0.33	0.45	0.78	-1.06	36.00	37.06

			Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5745	-	6.99	-31.83	2.71	9.98	8.02	-12.15	-4.13	-29.58	2.97	9.89	8.02	-9.73	-1.71
5785	-	6.99	-31.88	2.71	9.98	8.02	-12.20	-4.18	-30.01	2.97	9.90	8.02	-10.15	-2.13
5825	-	6.99	-32.48	2.72	9.98	8.02	-12.79	-4.77	-31.36	2.98	9.90	8.02	-11.49	-3.47

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Directional Gain

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 1

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 21, 2022
Temperature / Humidity	25 deg. C / 42 % RH
Engineer	Kenichi Adachi
Mode	Tx 11n-20 SISO

Antenna 2nd Applied limit: 15.407, access point

Tested Frequency [MHz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	RBW Correction Factor [dB]	PSD (Conducted) Result [dBm /MHz]	PSD (Conducted) Limit [dBm /MHz]	PSD (Conducted) Margin [dB]	PSD (e.i.r.p.) Result [dBm /MHz]	PSD (e.i.r.p.) Limit [dBm /MHz]	PSD (e.i.r.p.) Margin [dB]
5745	-31.22	2.97	9.89	-	5.0	6.99	-11.37	30.00	41.37	-6.37	36.00	42.37
5785	-31.25	2.97	9.90	-	5.0	6.99	-11.39	30.00	41.39	-6.39	36.00	42.39
5825	-31.66	2.98	9.90	-	5.0	6.99	-11.79	30.00	41.79	-6.79	36.00	42.79

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 21, 2022
Temperature / Humidity	25 deg. C / 42 % RH
Engineer	Kenichi Adachi
Mode	Tx 11n-20 CDD

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5745	0.05	0.08	0.14	-8.65	27.98	36.63	0.34	0.52	0.87	-0.63	36.00	36.63
5785	0.06	0.09	0.15	-8.35	27.98	36.33	0.35	0.58	0.93	-0.33	36.00	36.33
5825	0.05	0.09	0.14	-8.68	27.98	36.66	0.32	0.54	0.86	-0.66	36.00	36.66

			Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5745	-	6.99	-32.38	2.71	9.98	8.02	-12.70	-4.68	-30.67	2.97	9.89	8.02	-10.82	-2.80
5785	-	6.99	-32.25	2.71	9.98	8.02	-12.57	-4.55	-30.27	2.97	9.90	8.02	-10.41	-2.39
5825	-	6.99	-32.69	2.72	9.98	8.02	-13.00	-4.98	-30.55	2.98	9.90	8.02	-10.68	-2.66

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Directional Gain

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 1

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 21, 2022
Temperature / Humidity	25 deg. C / 42 % RH
Engineer	Kenichi Adachi
Mode	Tx 11n-20 SDM

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5745	0.05	0.09	0.14	-8.63	30.00	38.63	0.16	0.27	0.43	-3.63	36.00	39.63
5785	0.06	0.09	0.14	-8.50	30.00	38.50	0.18	0.27	0.45	-3.50	36.00	39.50
5825	0.05	0.06	0.11	-9.43	30.00	39.43	0.16	0.20	0.36	-4.43	36.00	40.43

			Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5745	-	6.99	-32.61	2.71	9.98	5.00	-12.93	-7.93	-30.49	2.97	9.89	5.00	-10.64	-5.64
5785	-	6.99	-32.23	2.71	9.98	5.00	-12.55	-7.55	-30.54	2.97	9.90	5.00	-10.68	-5.68
5825	-	6.99	-32.57	2.72	9.98	5.00	-12.88	-7.88	-31.91	2.98	9.90	5.00	-12.04	-7.04

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Directional Gain

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 2

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-20 SISO

Antenna 2nd Applied limit: 15.407, access point

Tested Frequency [MHz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	RBW Correction Factor [dB]	PSD (Conducted) Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]	PSD (e.i.r.p.) Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]
5745	-31.26	2.97	9.89	-	5.0	6.99	-11.41	30.00	41.41	-6.41	36.00	42.41
5785	-31.15	2.97	9.90	-	5.0	6.99	-11.29	30.00	41.29	-6.29	36.00	42.29
5825	-31.52	2.98	9.90	-	5.0	6.99	-11.65	30.00	41.65	-6.65	36.00	42.65

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-20 CDD

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5745	0.05	0.07	0.13	-8.97	27.98	36.95	0.34	0.46	0.80	-0.95	36.00	36.95
5785	0.06	0.08	0.14	-8.61	27.98	36.59	0.37	0.51	0.87	-0.59	36.00	36.59
5825	0.05	0.08	0.13	-8.89	27.98	36.87	0.32	0.50	0.82	-0.87	36.00	36.87

			Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5745	-	6.99	-32.35	2.71	9.98	8.02	-12.67	-4.65	-31.23	2.97	9.89	8.02	-11.38	-3.36
5785	-	6.99	-32.05	2.71	9.98	8.02	-12.37	-4.35	-30.84	2.97	9.90	8.02	-10.98	-2.96
5825	-	6.99	-32.67	2.72	9.98	8.02	-12.98	-4.96	-30.90	2.98	9.90	8.02	-11.03	-3.01

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Directional Gain

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 1

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-20 SDM

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5745	0.06	0.07	0.13	-8.81	30.00	38.81	0.18	0.24	0.42	-3.81	36.00	39.81
5785	0.06	0.08	0.14	-8.65	30.00	38.65	0.18	0.25	0.43	-3.65	36.00	39.65
5825	0.05	0.07	0.12	-9.33	30.00	39.33	0.15	0.22	0.37	-4.33	36.00	40.33

			Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5745	-	6.99	-32.13	2.71	9.98	5.00	-12.45	-7.45	-31.12	2.97	9.89	5.00	-11.27	-6.27
5785	-	6.99	-32.18	2.71	9.98	5.00	-12.50	-7.50	-30.82	2.97	9.90	5.00	-10.96	-5.96
5825	-	6.99	-32.87	2.72	9.98	5.00	-13.18	-8.18	-31.51	2.98	9.90	5.00	-11.64	-6.64

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Directional Gain

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 2

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11n-40 SISO

Antenna 2nd Applied limit: 15.407, access point

Tested Frequency [MHz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	RBW Correction Factor [dB]	PSD (Conducted) Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]	PSD (e.i.r.p.) Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]
5755	-34.54	2.97	9.89	-	5.0	6.99	-14.69	30.00	44.69	-9.69	36.00	45.69
5795	-34.30	2.97	9.90	-	5.0	6.99	-14.44	30.00	44.44	-9.44	36.00	45.44

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11n-40 CDD

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5755	0.03	0.03	0.06	-12.22	27.98	40.20	0.16	0.22	0.38	-4.20	36.00	40.20
5795	0.03	0.04	0.07	-11.80	27.98	39.78	0.18	0.24	0.42	-3.78	36.00	39.78

			Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5755	-	6.99	-35.68	2.71	9.98	8.02	-16.00	-7.98	-34.42	2.97	9.89	8.02	-14.57	-6.55
5795	-	6.99	-35.24	2.72	9.98	8.02	-15.55	-7.53	-34.03	2.97	9.90	8.02	-14.17	-6.15

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Directional Gain

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 1

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11n-40 SDM

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5755	0.02	0.03	0.06	-12.47	30.00	42.47	0.07	0.11	0.18	-7.47	36.00	43.47
5795	0.02	0.04	0.06	-12.19	30.00	42.19	0.08	0.11	0.19	-7.19	36.00	43.19

			Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5755	-	6.99	-36.17	2.71	9.98	5.00	-16.49	-11.49	-34.51	2.97	9.89	5.00	-14.66	-9.66
5795	-	6.99	-35.82	2.72	9.98	5.00	-16.13	-11.13	-34.29	2.97	9.90	5.00	-14.43	-9.43

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Directional Gain

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 2

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-40 SISO

Antenna 2nd Applied limit: 15.407, access point

Tested Frequency [MHz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	RBW Correction Factor [dB]	PSD (Conducted) Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]	PSD (e.i.r.p.) Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]
5755	-34.20	2.97	9.89	-	5.0	6.99	-14.35	30.00	44.35	-9.35	36.00	45.35
5795	-34.35	2.97	9.90	-	5.0	6.99	-14.49	30.00	44.49	-9.49	36.00	45.49

Sample Calculation:

PSD: Power Spectral Density
The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.
RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)
PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor
PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-40 CDD

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5755	0.02	0.03	0.06	-12.35	27.98	40.33	0.15	0.22	0.37	-4.33	36.00	40.33
5795	0.03	0.04	0.06	-12.02	27.98	40.00	0.17	0.23	0.40	-4.00	36.00	40.00

			Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5755	-	6.99	-35.86	2.71	9.98	8.02	-16.18	-8.16	-34.52	2.97	9.89	8.02	-14.67	-6.65
5795	-	6.99	-35.49	2.72	9.98	8.02	-15.80	-7.78	-34.23	2.97	9.90	8.02	-14.37	-6.35

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Directional Gain

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 1

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-40 SDM

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5755	0.02	0.04	0.06	-11.98	30.00	41.98	0.07	0.13	0.20	-6.98	36.00	42.98
5795	0.03	0.04	0.07	-11.69	30.00	41.69	0.09	0.12	0.21	-6.69	36.00	42.69

			Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5755	-	6.99	-35.93	2.71	9.98	5.00	-16.25	-11.25	-33.86	2.97	9.89	5.00	-14.01	-9.01
5795	-	6.99	-35.00	2.72	9.98	5.00	-15.31	-10.31	-34.03	2.97	9.90	5.00	-14.17	-9.17

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Directional Gain

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 2

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-80 SISO

Antenna 2nd Applied limit: 15.407, access point

Tested Frequency [MHz]	PSD Reading [dBm /MHz]	Cable Loss [dB]	Atten. Loss [dB]	Duty Factor [dB]	Antenna Gain [dBi]	RBW Correction Factor [dB]	PSD (Conducted) Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]	PSD (e.i.r.p.) Result [dBm /MHz]	Limit [dBm /MHz]	Margin [dB]
5775.0	-37.64	2.97	9.90	-	5.0	6.99	-17.78	30.0	47.8	-12.8	36.0	48.8

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-80 CDD

Antenna 1st + 2nd Applied limit: 15.407, access point

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5775	0.01	0.02	0.03	-15.26	27.98	43.24	0.08	0.11	0.19	-7.24	36.00	43.24

			Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5775	-	6.99	-38.76	2.71	9.98	8.02	-19.08	-11.06	-37.44	2.97	9.90	8.02	-17.58	-9.56

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Directional Gain

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

N_{SS} (Number of independent spatial streams of data) = 1

Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-80 SDM

Antenna 1st + 2nd

Applied limit: 15.407, access point

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin
	1st	2nd	Sum				1st	2nd	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5775	0.01	0.02	0.03	-15.25	30.00	45.25	0.04	0.05	0.09	-10.25	36.00	46.25

			Antenna 1st						**Antenna 2nd**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Directional Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5775	-	6.99	-38.41	2.71	9.98	5.00	-18.73	-13.73	-37.70	2.97	9.90	5.00	-17.84	-12.84

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Directional Gain

Directional Gain = G_{ANT} (Antenna Gain) + 10 log(N_{ANT}/N_{SS})

N_{ANT} (Number of Transmit Antenna) = 2

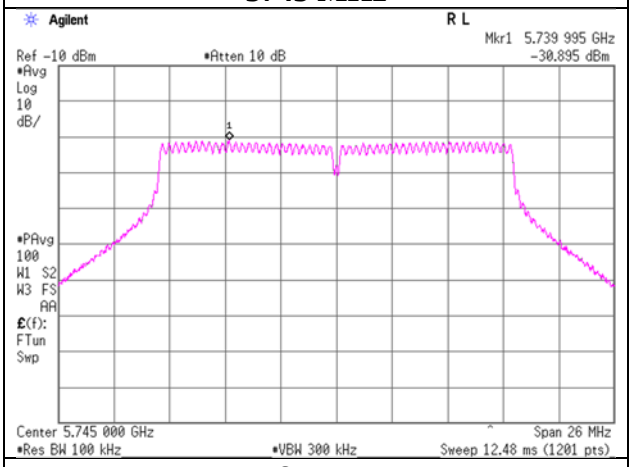
N_{SS} (Number of independent spatial streams of data) = 2

Maximum Power Spectral Density

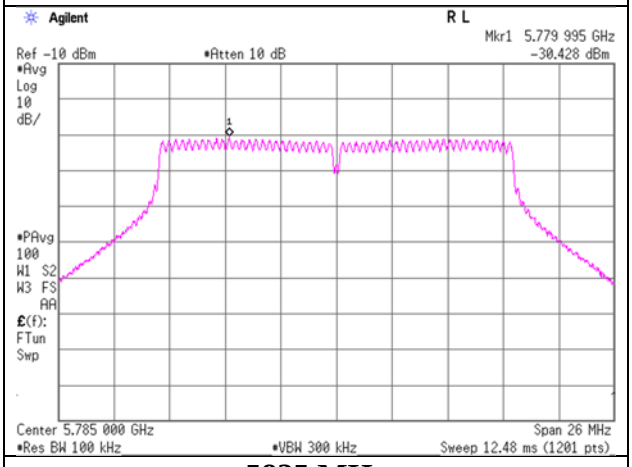
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 21, 2022
Temperature / Humidity	25 deg. C / 42 % RH
Engineer	Kenichi Adachi
Mode	Tx 11a SISO

11a, SISO, Antenna 2nd

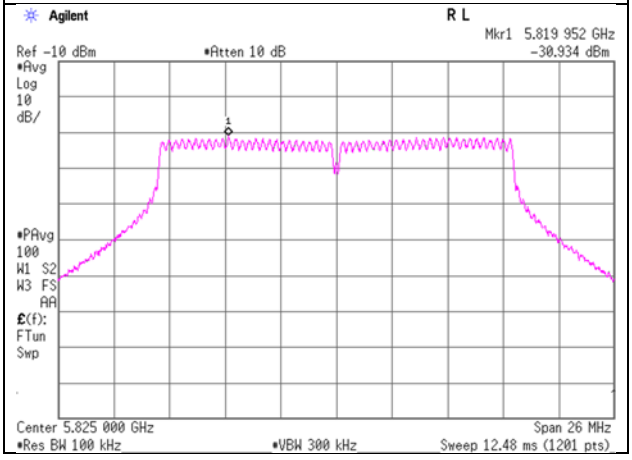
5745 MHz



5785 MHz



5825 MHz

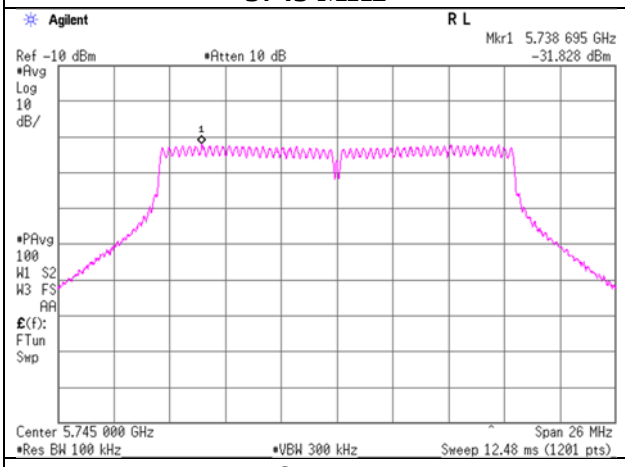


Maximum Power Spectral Density

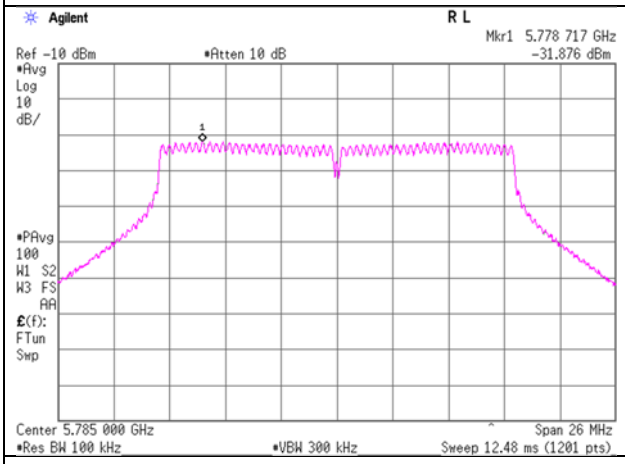
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 21, 2022
Temperature / Humidity	25 deg. C / 42 % RH
Engineer	Kenichi Adachi
Mode	Tx 11a CDD

11a CDD, Antenna 1st

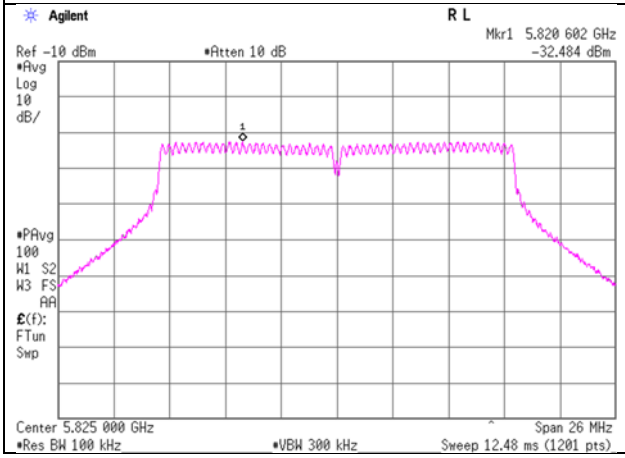
5745 MHz



5785 MHz

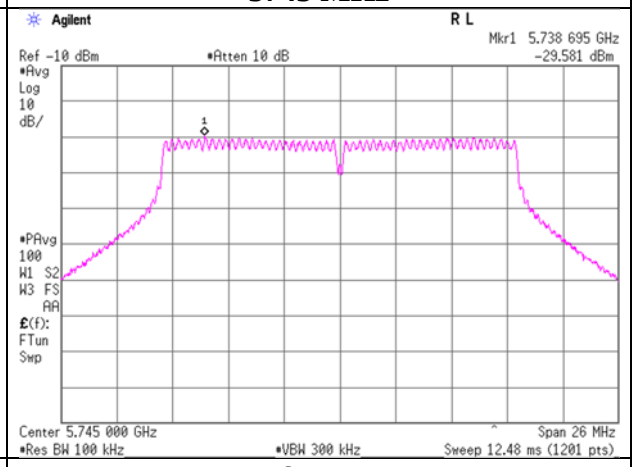


5825 MHz

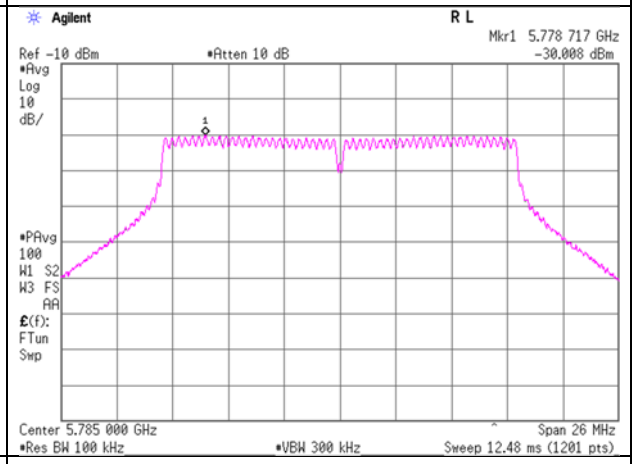


11a CDD, Antenna 2nd

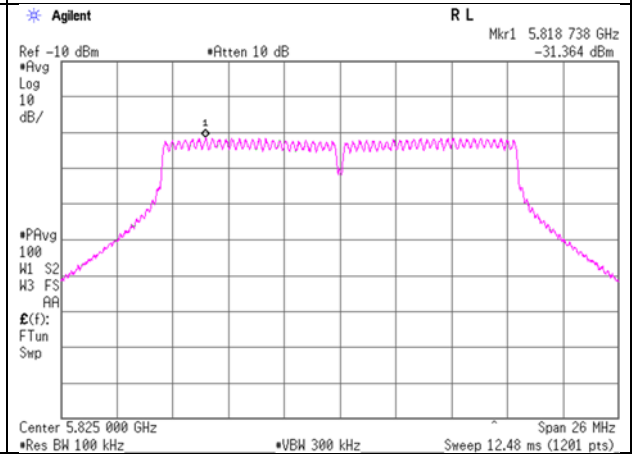
5745 MHz



5785 MHz



5825 MHz

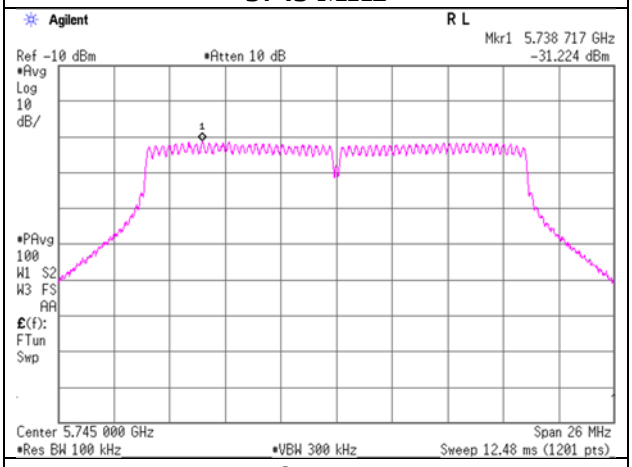


Maximum Power Spectral Density

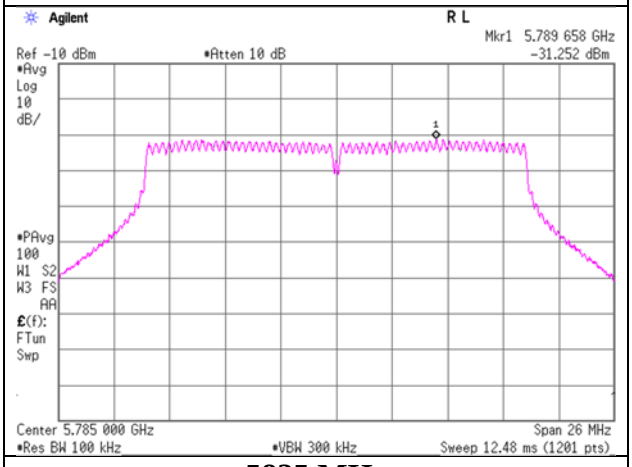
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 21, 2022
Temperature / Humidity	25 deg. C / 42 % RH
Engineer	Kenichi Adachi
Mode	Tx 11n-20 SISO

11n-20 SISO, Antenna 2nd

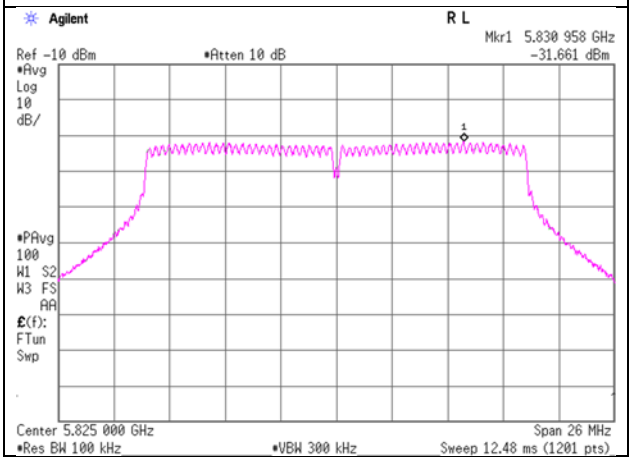
5745 MHz



5785 MHz



5825 MHz

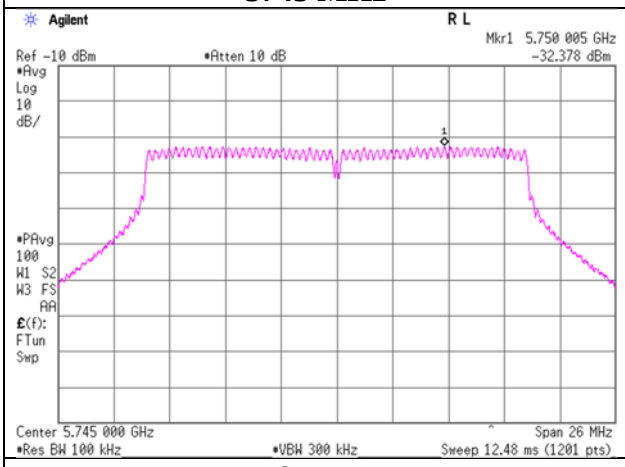


Maximum Power Spectral Density

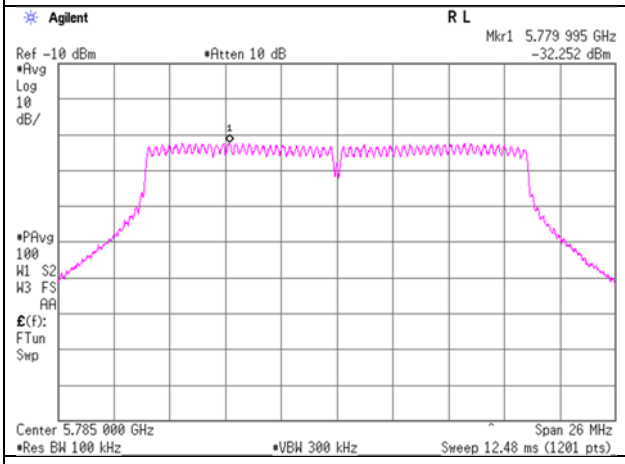
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 21, 2022
Temperature / Humidity	25 deg. C / 42 % RH
Engineer	Kenichi Adachi
Mode	Tx 11n-20 CDD

11n-20 CDD, Antenna 1st

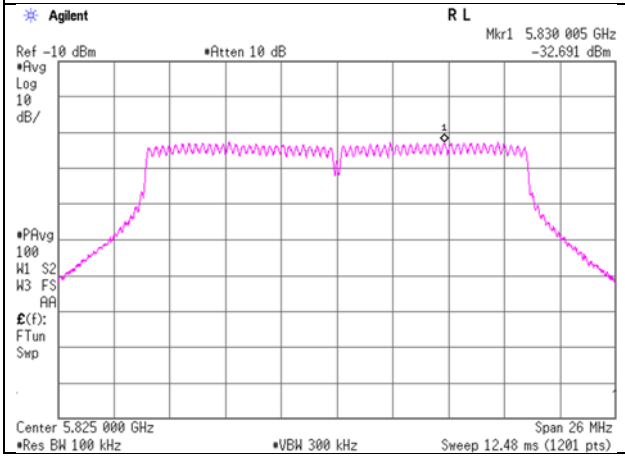
5745 MHz



5785 MHz

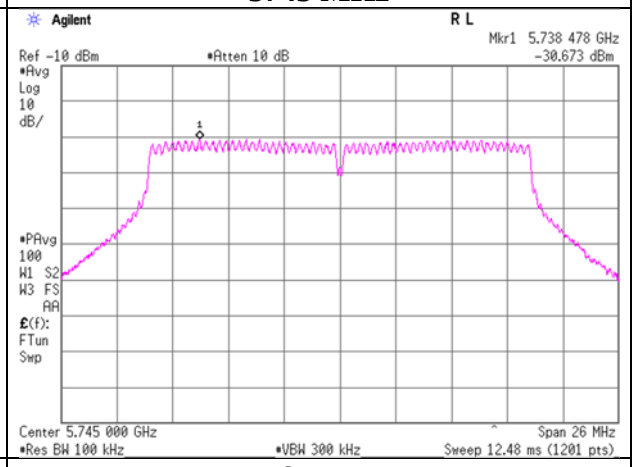


5825 MHz

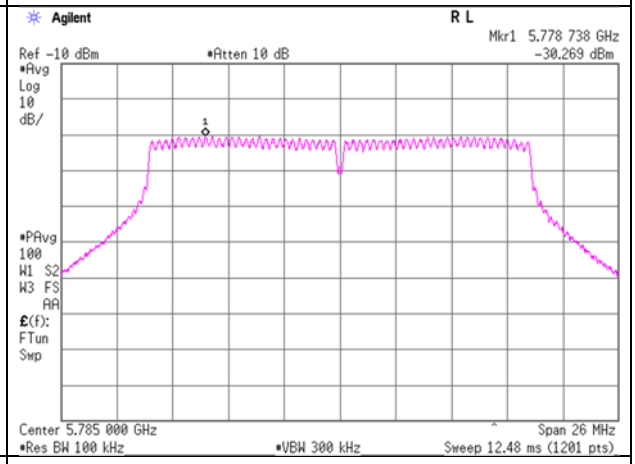


11n-20 CDD, Antenna 2nd

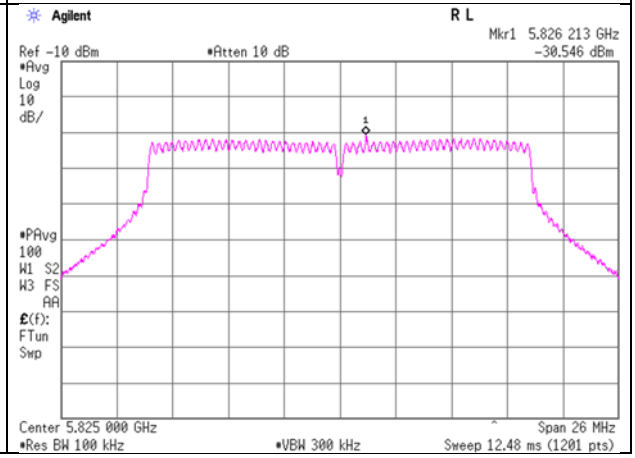
5745 MHz



5785 MHz



5825 MHz

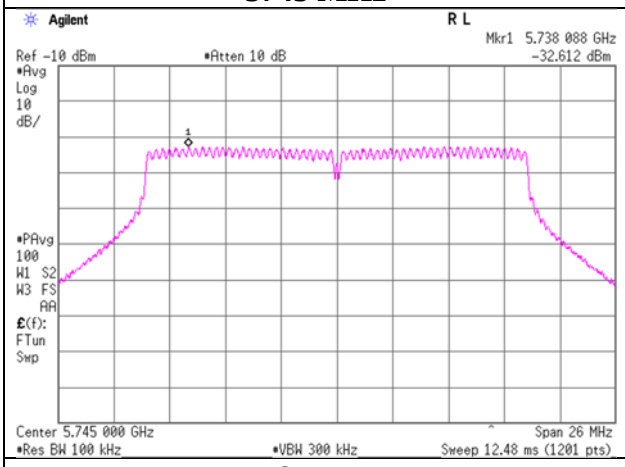


Maximum Power Spectral Density

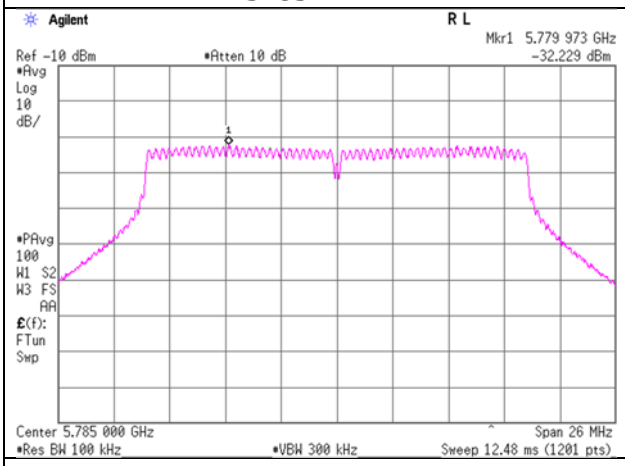
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 21, 2022
Temperature / Humidity	25 deg. C / 42 % RH
Engineer	Kenichi Adachi
Mode	Tx 11n-20 SDM

11n-20 SDM, Antenna 1st

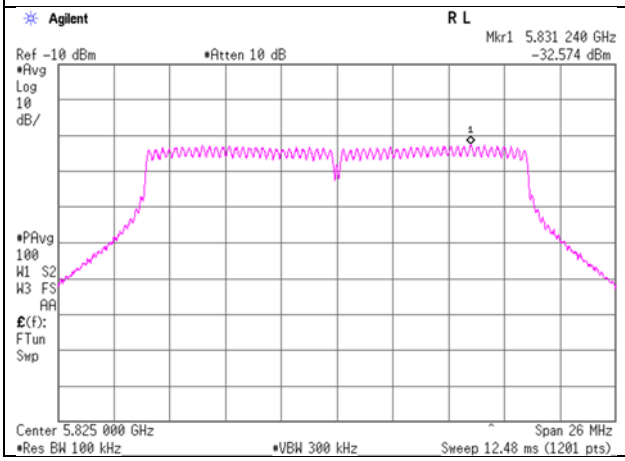
5745 MHz



5785 MHz

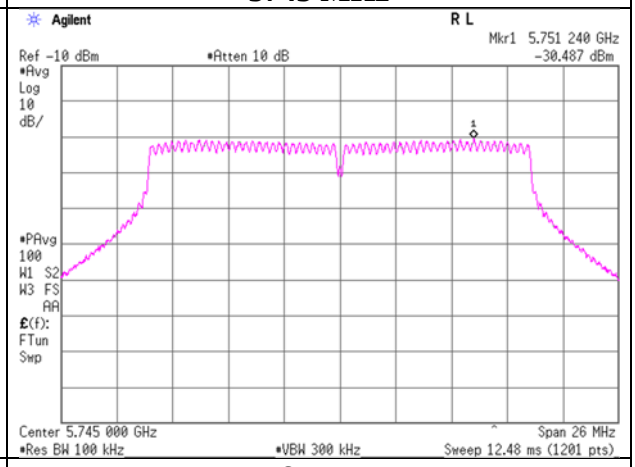


5825 MHz

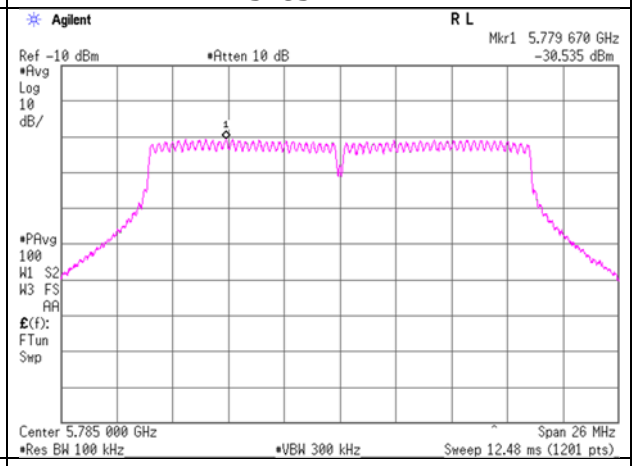


11n-20 SDM, Antenna 2nd

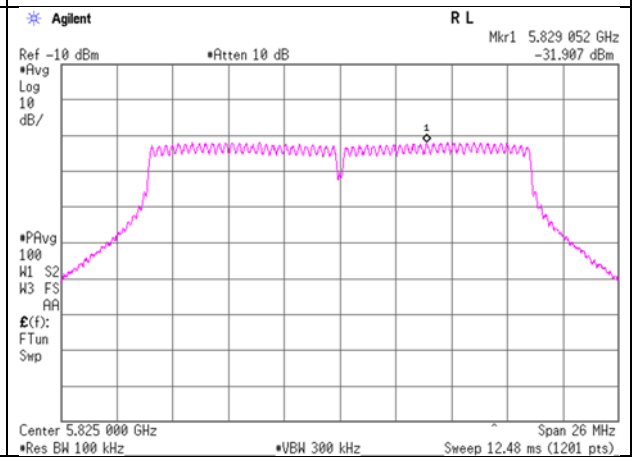
5745 MHz



5785 MHz



5825 MHz

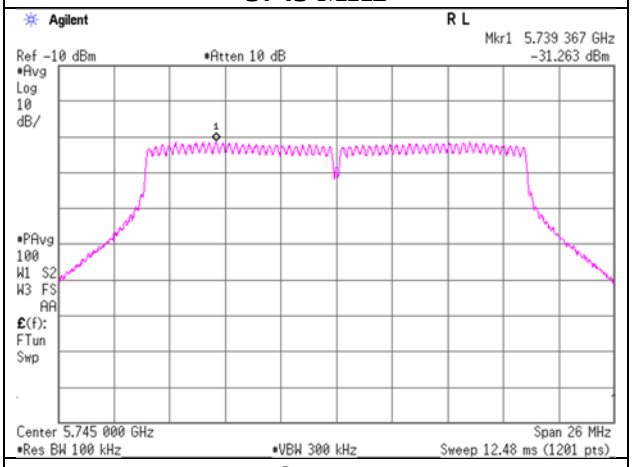


Maximum Power Spectral Density

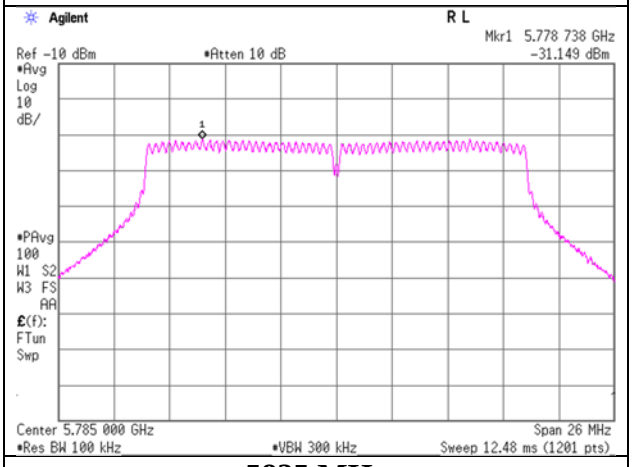
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-20 SISO

11ac-20 SISO, Antenna 2nd

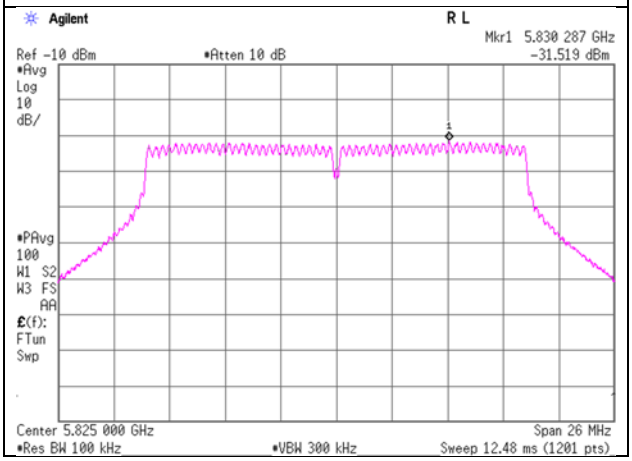
5745 MHz



5785 MHz



5825 MHz

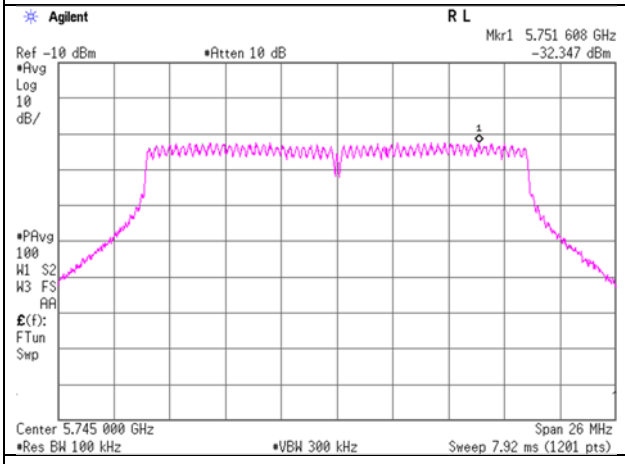


Maximum Power Spectral Density

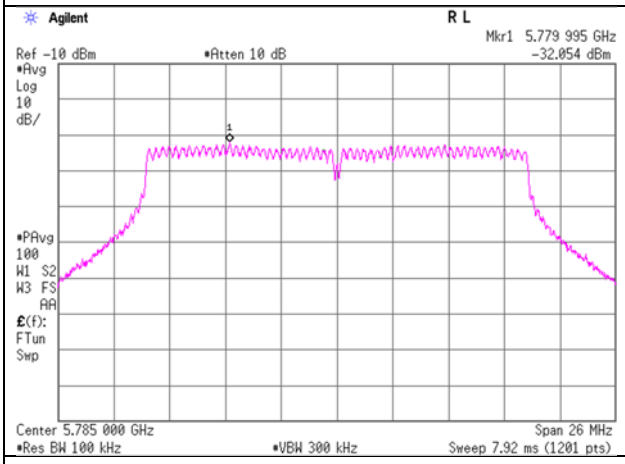
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-20 CDD

11ac-20 CDD, Antenna 1st

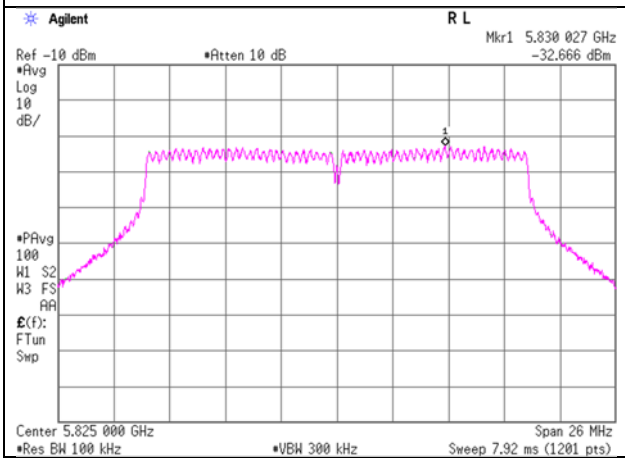
5745 MHz



5785 MHz

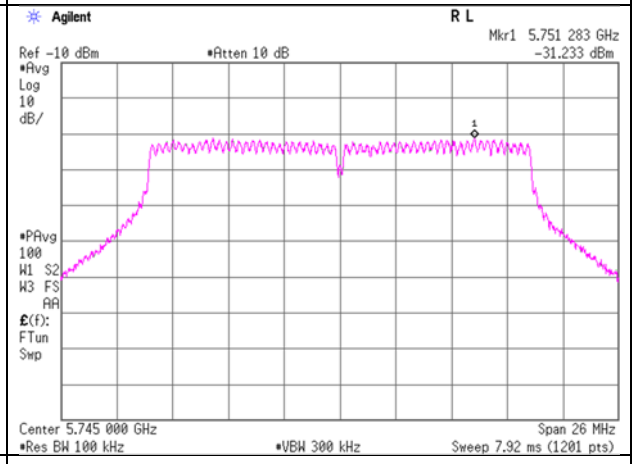


5825 MHz

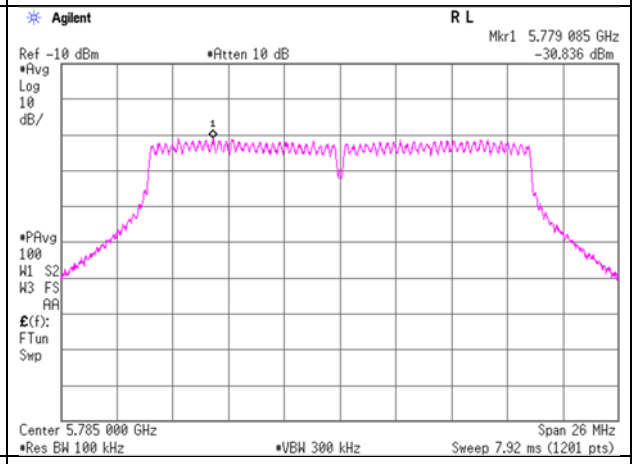


11ac-20 CDD, Antenna 2nd

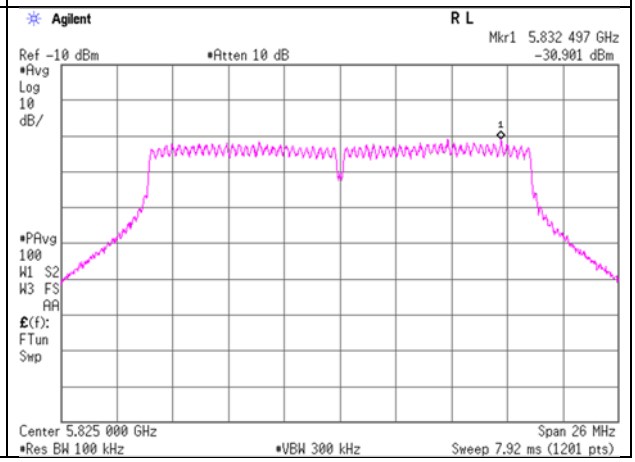
5745 MHz



5785 MHz



5825 MHz

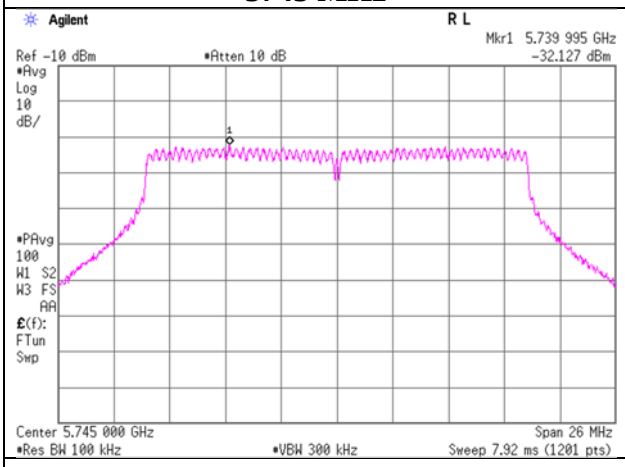


Maximum Power Spectral Density

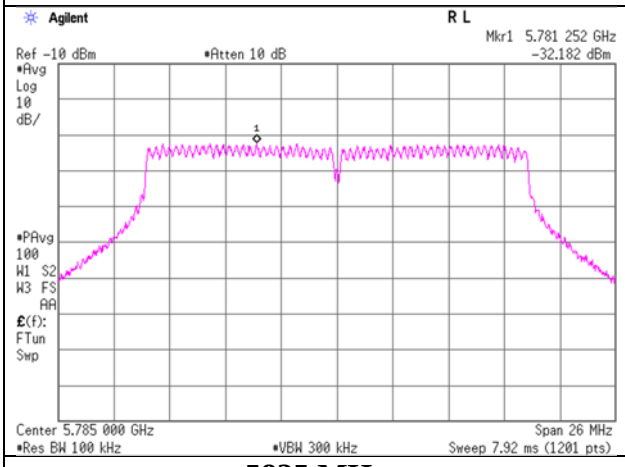
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-20 SDM

11ac-20 SDM, Antenna 1st

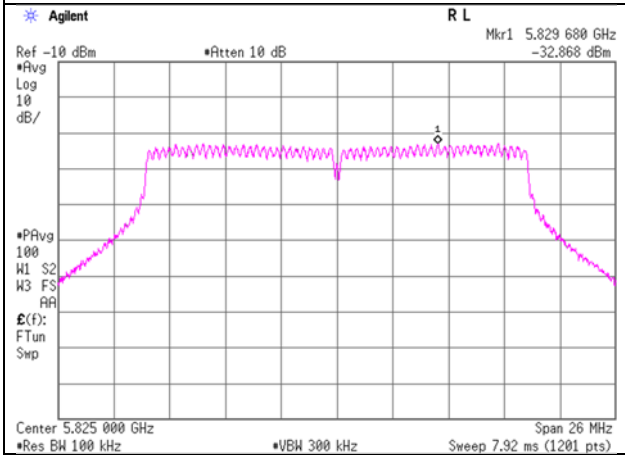
5745 MHz



5785 MHz

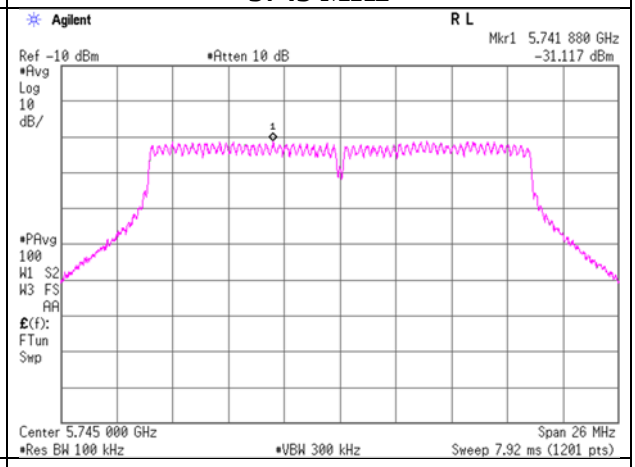


5825 MHz

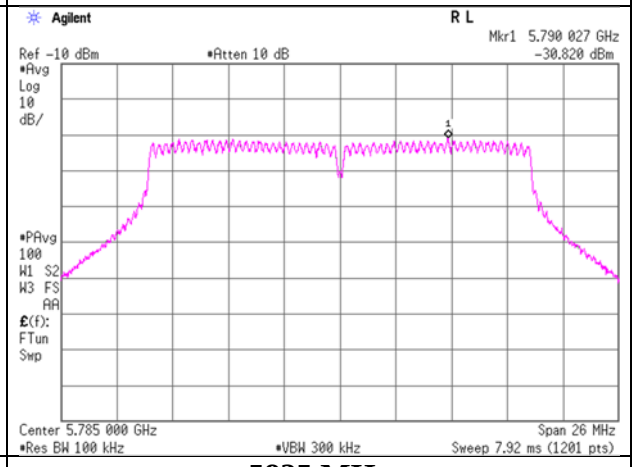


11ac-20 SDM, Antenna 2nd

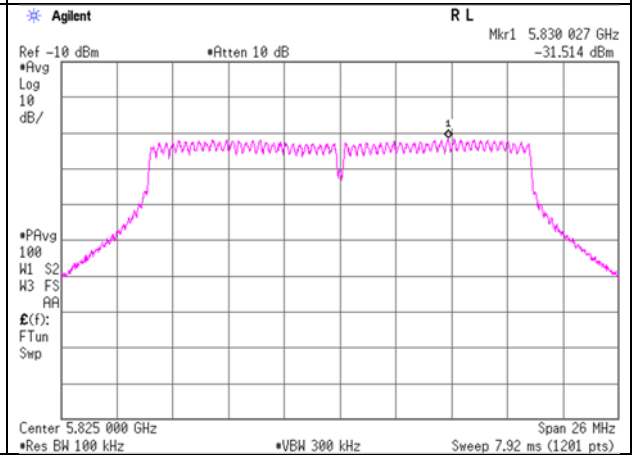
5745 MHz



5785 MHz



5825 MHz

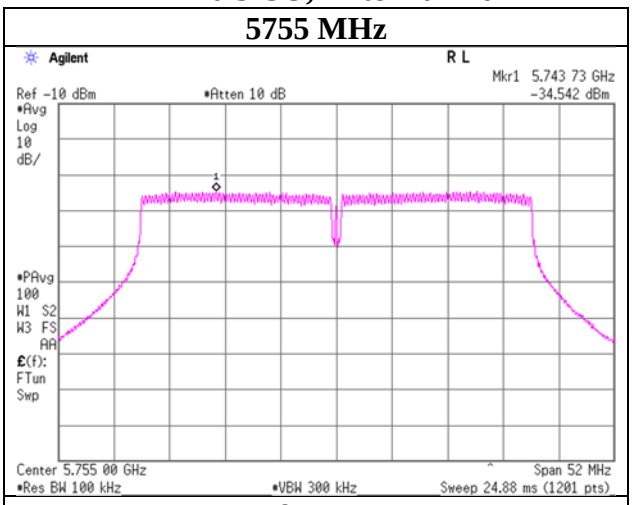


Maximum Power Spectral Density

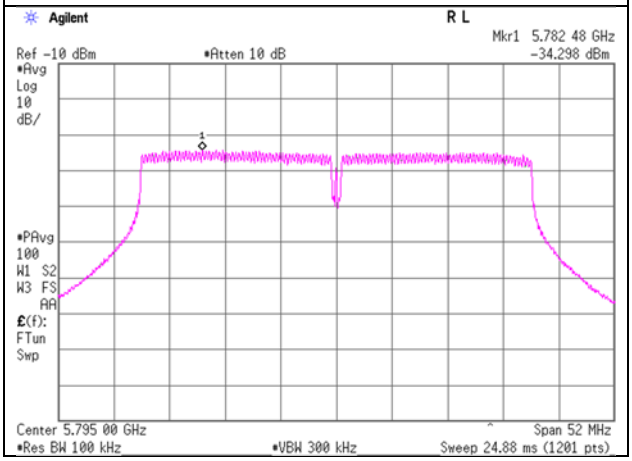
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11n-40 SISO

11n-40 SISO, Antenna 2nd

5755 MHz



5795 MHz

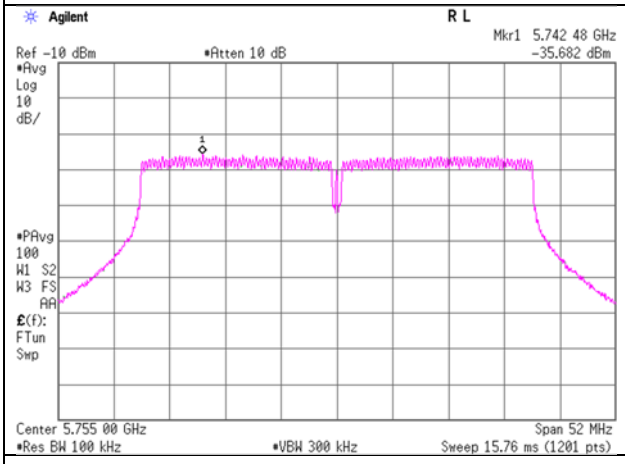


Maximum Power Spectral Density

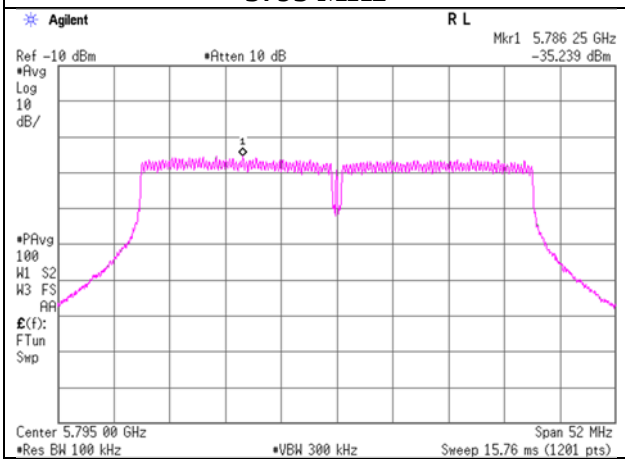
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11n-40 CDD

11n-40 CDD, Antenna 1st

5755 MHz

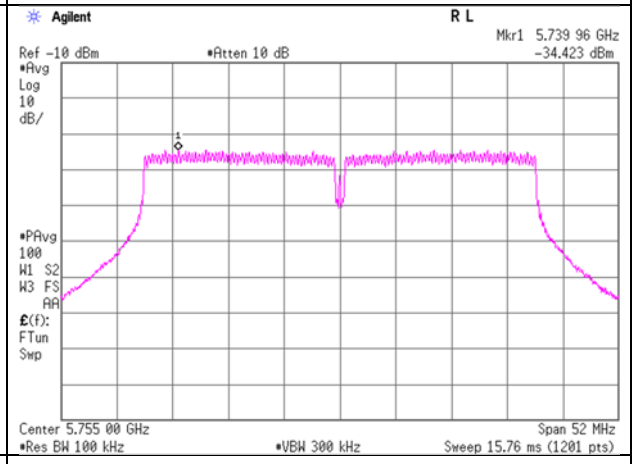


5795 MHz

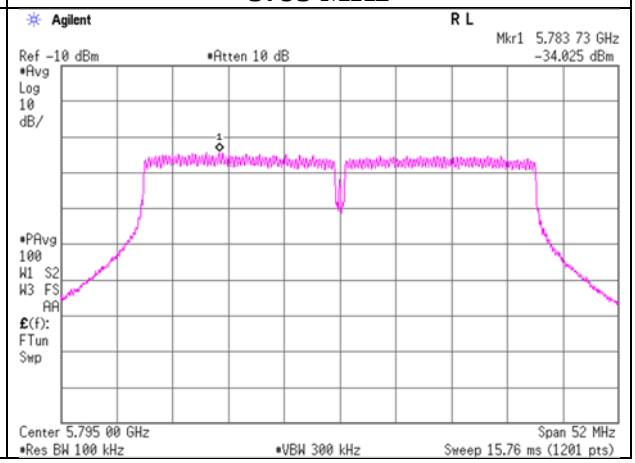


11n-40 CDD, Antenna 2nd

5755 MHz



5795 MHz

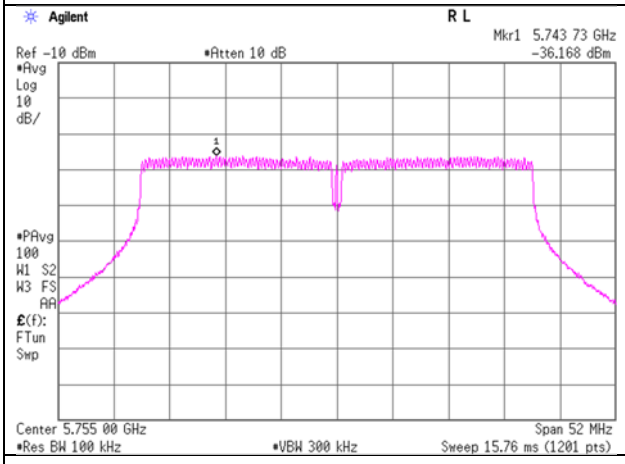


Maximum Power Spectral Density

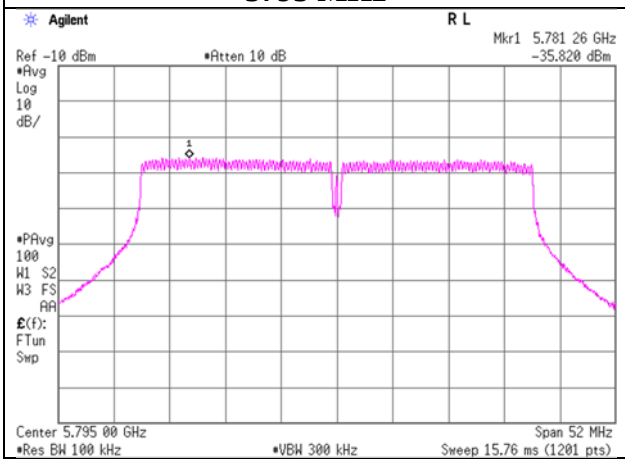
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11n-40 SDM

11n-40 SDM, Antenna 1st

5755 MHz

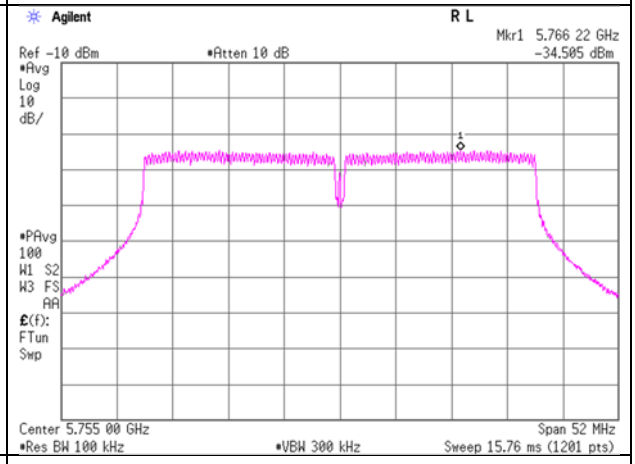


5795 MHz

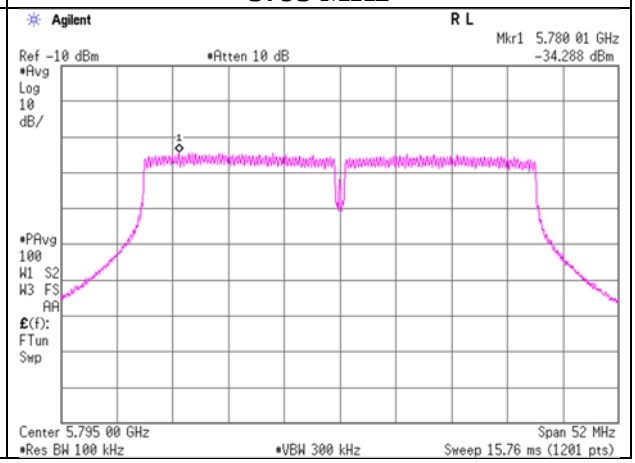


11n-40 SDM, Antenna 2nd

5755 MHz



5795 MHz

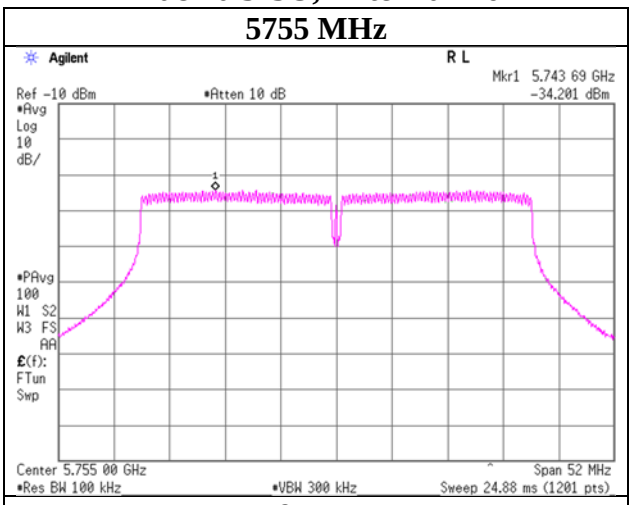


Maximum Power Spectral Density

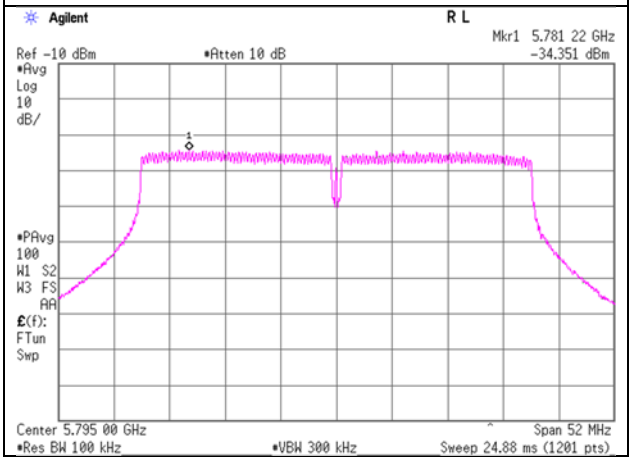
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-40 SISO

11ac-40 SISO, Antenna 2nd

5755 MHz



5795 MHz

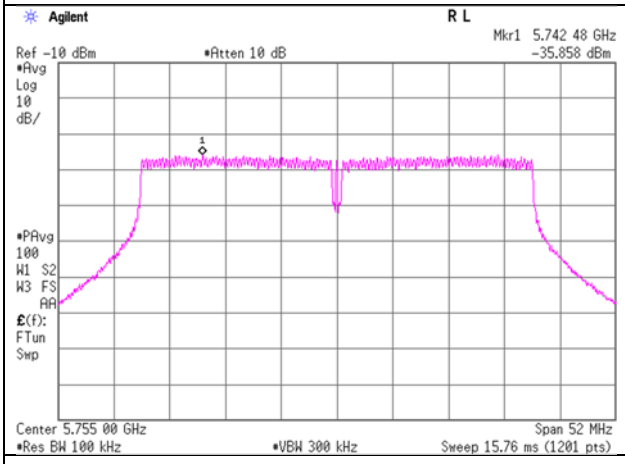


Maximum Power Spectral Density

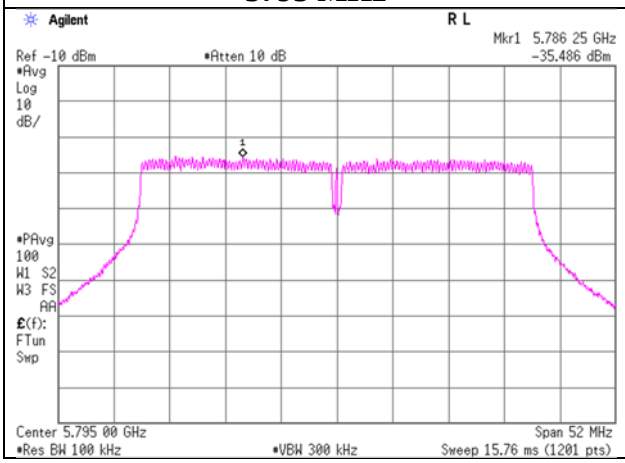
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-40 CDD

11ac-40 CDD, Antenna 1st

5755 MHz

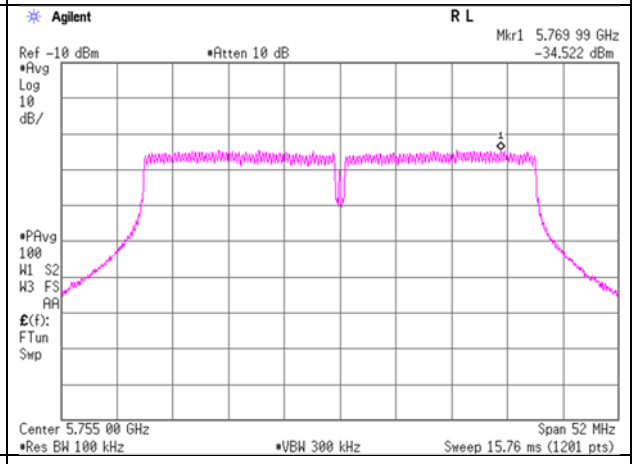


5795 MHz

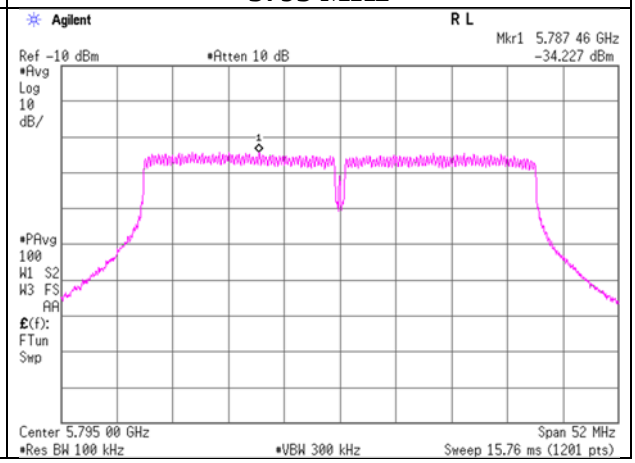


11ac-40 CDD, Antenna 2nd

5755 MHz



5795 MHz

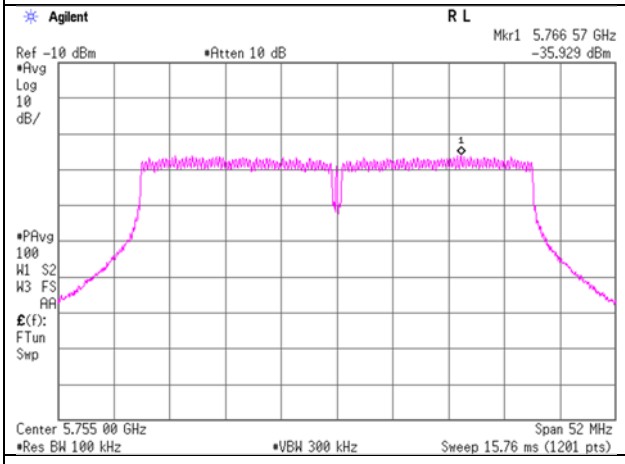


Maximum Power Spectral Density

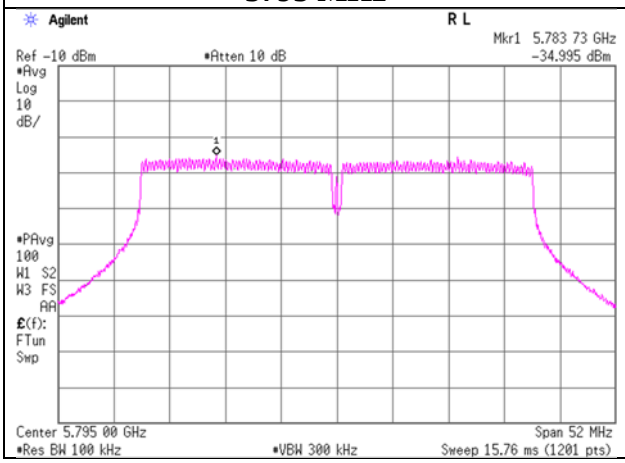
Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-40 SDM

11ac-40 SDM, Antenna 1st

5755 MHz

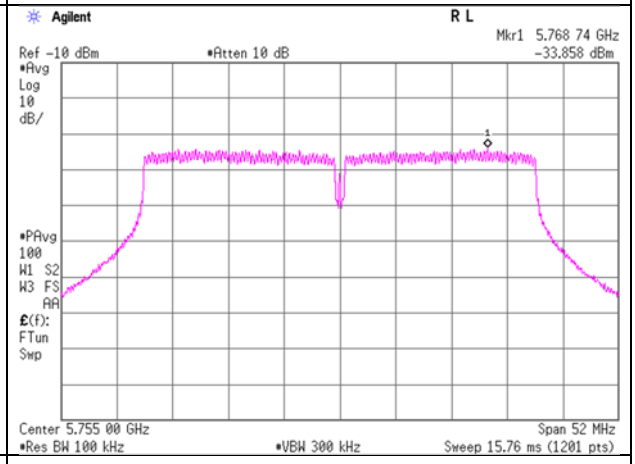


5795 MHz

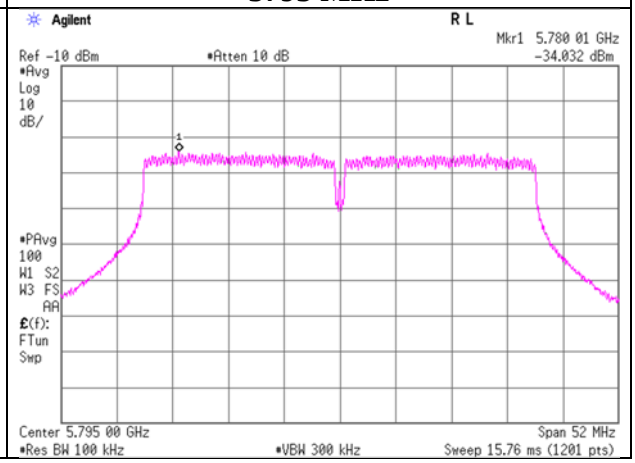


11ac-40 SDM, Antenna 2nd

5755 MHz



5795 MHz

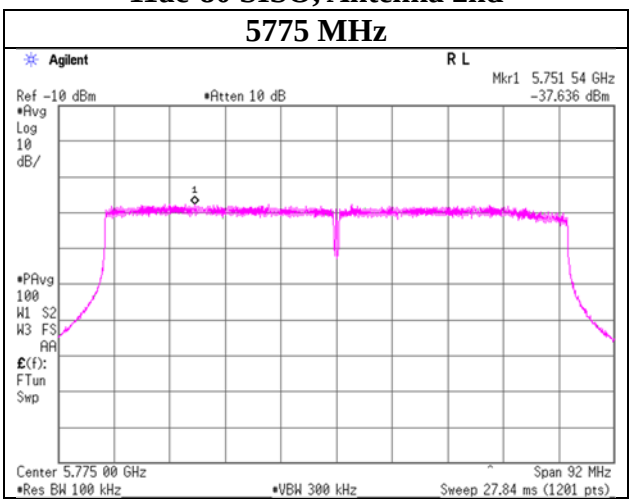


Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-80 SISO

11ac-80 SISO, Antenna 2nd

5775 MHz

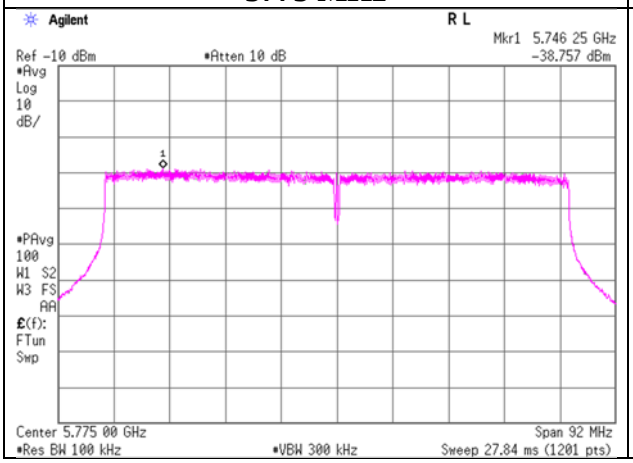


Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-80 CDD

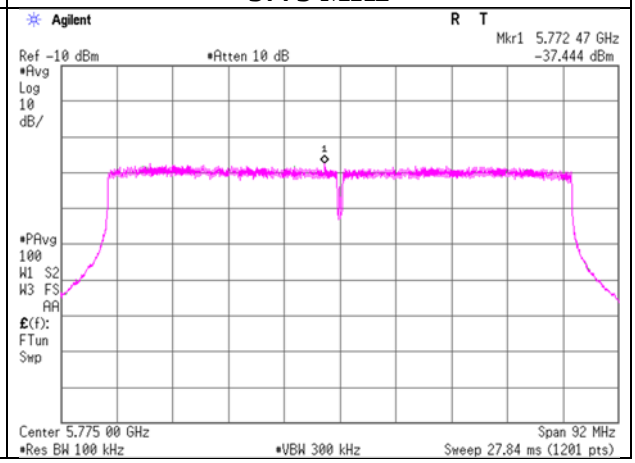
11ac-80 CDD, Antenna 1st

5775 MHz



11ac-80 CDD, Antenna 2nd

5775 MHz

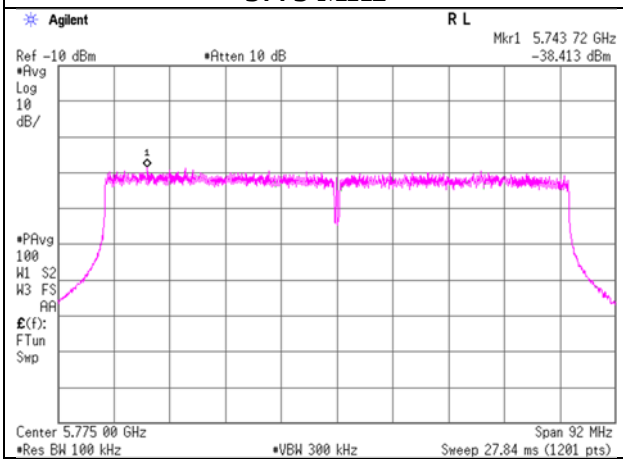


Maximum Power Spectral Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	June 22, 2022
Temperature / Humidity	26 deg. C / 49 % RH
Engineer	Miku Ikudome
Mode	Tx 11ac-80 SDM

11ac-80 SDM. Antenna 1st

5775 MHz



11ac-80 SDM, Antenna 2nd

5775 MHz