

RADIO TEST REPORT

Test Report No. 16247275H-C-R1

Customer	Murata Manufacturing Co., Ltd.
Description of EUT	Communication module
Model Number of EUT	LBEE5XV2EA
FCC ID	VPYLB2EA003
Test Regulation	FCC Part 15 Subpart E
Test Result	Complied
Issue Date	August 18, 2026
Remarks	WLAN (5 GHz band) part Except for DFS test

Representative Test EngineerTakafumi Noguchi
Engineer**Approved By**Takumi Shimada
Engineer

CERTIFICATE 5107.02

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- ☒ There is no testing item of "Non-accreditation".

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- For any test report referred in this report, the latest version (including any revisions) is always referred to.
- If the latest version is a revision, it replaces the previous version. See the table below for revisions and versions.

REVISION HISTORY

Revision	Test Report No.	Date	Page Revised Contents
- (Original)	16247275H-C	June 24, 2026	-
1	16247275H-C-R1	August 18, 2026	Section 2.1 -Modified test date March 15 to May 20, 2026 → March 15 to August 17, 2026 Section 4.1 *The Details of Operation Mode(s) -Modified explanatory note *3) *3) Spurious emissions testing was conducted only with full bandwidth RU allocation, since preliminary testing indicated that the full bandwidth RU allocation emitted higher spurious emissions than partial bandwidth RU allocation. → *3) Except for the 11ax-40 242-tone and 11ax-80 484-tone configurations, spurious emissions testing for partial-bandwidth RU allocation was conducted only at the band edge, since preliminary testing indicated that the full bandwidth RU allocation emitted higher spurious emissions than partial bandwidth RU allocation. Appendix 1 Maximum Conducted Output Power (Reference data) -Remove ANT 1 data. Radiated Spurious Emission -Added test data (10 GHz to 40 GHz) for IEEE 802.11ax-40 242-tone, 11ax-80 484-tone.

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	MRA	Mutual Recognition Arrangement
BPSK	Binary Phase-Shift Keying	N/A	Not Applicable
BR	Bluetooth Basic Rate	NIST	National Institute of Standards and Technology
BT	Bluetooth	NS	No signal detect.
BT LE	Bluetooth Low Energy	NSA	Normalized Site Attenuation
BW	BandWidth	NVLAP	National Voluntary Laboratory Accreditation Program
Cal Int	Calibration Interval	OBW	Occupied Band Width
CCK	Complementary Code Keying	OFDM	Orthogonal Frequency Division Multiplexing
Ch., CH	Channel	OFDMA	Orthogonal Frequency Division Multiple Access
CISPR	Comite International Special des Perturbations Radioelectriques	P/M	Power meter
CW	Continuous Wave	PCB	Printed Circuit Board
DBPSK	Differential BPSK	PER	Packet Error Rate
DC	Direct Current	PHY	Physical Layer
D-factor	Distance factor	PK	Peak
DFS	Dynamic Frequency Selection	PN	Pseudo random Noise
DQPSK	Differential QPSK	PP	Preamble Puncturing
DSSS	Direct Sequence Spread Spectrum	PRBS	Pseudo-Random Bit Sequence
EDR	Enhanced Data Rate	PSD	Power Spectral Density
EIRP, e.i.r.p.	Equivalent Isotropically Radiated Power	QAM	Quadrature Amplitude Modulation
EMC	ElectroMagnetic Compatibility	QP	Quasi-Peak
EMI	ElectroMagnetic Interference	QPSK	Quadri-Phase Shift Keying
EN	European Norm	RBW	Resolution Band Width
ERP, e.r.p.	Effective Radiated Power	RDS	Radio Data System
EU	European Union	RE	Radio Equipment
EUT	Equipment Under Test	RF	Radio Frequency
Fac.	Factor	RMS	Root Mean Square
FCC	Federal Communications Commission	RSS	Radio Standards Specifications
FHSS	Frequency Hopping Spread Spectrum	Rx	Receiving
FM	Frequency Modulation	SA, S/A	Spectrum Analyzer
Freq.	Frequency	SG	Signal Generator
FSK	Frequency Shift Keying	SVSWR	Site-Voltage Standing Wave Ratio
GFSK	Gaussian Frequency-Shift Keying	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	Murata Manufacturing Co., Ltd.
Address	1-10-1 Higashikotari, Nagaokakyo-shi, Kyoto 617-8555 Japan
Telephone Number	+81-50-1737-2801
Contact Person	Kenji Hayashikoshi

The information provided by 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

SECTION 2: Equipment Under Test (EUT)

2.1 Identification of EUT

Description	Communication module
Model Number	LBEE5XV2EA
Serial Number	Refer to SECTION 4.2
Condition	Production prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Modification	No Modification by the test lab
Receipt Date	March 9, 2026
Test Date	March 15 to August 17, 2026

2.2 Product Description

General Specification

Rating	Typ. DC 3.3 V (DC 3.0 V to DC 4.8 V) for RF, Typ. DC 1.8 V (DC 1.71 V to DC 1.89 V) for IO (interface)
Operating temperature	-40 deg. C to 85 deg. C

Radio Specification

This report contains data provided by the customer which can impact the validity of results. UL Japan, Inc. is only responsible for the validity of results after the integration of the data provided by the customer. The data provided by the customer is marked "a)" in the table below.

Bluetooth (BR/EDR/Low Energy)

Equipment Type	Transceiver
Frequency of Operation	2402 MHz to 2480 MHz
Type of Modulation	BT: FHSS (GFSK, $\pi/4$ DQPSK, 8 DPSK) BT LE: GFSK
Antenna Gain ^{a)}	Cable length 30 mm: 0.0 dBi Cable length 300 mm: -1.8 dBi

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

Equipment Type	Transceiver
Frequency of Operation	20 MHz Band: 2412 MHz to 2462 MHz
Type of Modulation	DSSS, OFDM OFDMA (IEEE802.11ax Only)
Antenna Gain ^{a)}	Cable length 30 mm: 0.0 dBi Cable length 300 mm: -1.8 dBi
Directional Gain ^{a)} *1)	3.01 dBi

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

Equipment Type	Transceiver	
Frequency of Operation	20 MHz Band	5180 MHz to 5240 MHz 5260 MHz to 5320 MHz 5500 MHz to 5700 MHz 5745 MHz to 5825 MHz
	40 MHz Band	5190 MHz to 5230 MHz 5270 MHz to 5310 MHz 5510 MHz to 5670 MHz 5755 MHz to 5795 MHz
	80 MHz Band	5210 MHz 5290 MHz 5530 MHz to 5610 MHz 5775 MHz
Type of Modulation	OFDM	
	OFDMA (IEEE802.11ax Only)	20 MHz: 26/52/106/242-tone RU
		40 MHz: 26/52/106/242/484-tone RU 80 MHz: 26/52/106/242/484/996-tone RU
Antenna Gain ^{a)}	Cable length 30 mm: 1.5 dBi Cable length 300 mm: -2.2 dBi	
Directional Gain ^{a)} *1)	4.51 dBi	

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

Equipment Type	Transceiver	
Frequency of Operation	20 MHz Band:	5955 MHz to 7095 MHz
	40 MHz Band:	5965 MHz to 7085 MHz
	80 MHz Band:	5985 MHz to 7025 MHz
Type of Modulation	OFDM	
	OFDMA (IEEE802.11ax Only)	20 MHz: 26/52/106/242-tone RU
		40 MHz: 26/52/106/242/484-tone RU 80 MHz: 26/52/106/242/484/996-tone RU
Antenna Gain ^{a)}	Cable length 30 mm: 2.0 dBi Cable length 300 mm: -2.2 dBi	
Directional Gain ^{a)} *1)	5.01 dBi	
6 GHz Contention Based Protocol Incumbent avoidance	Channel puncturing: Not supported	
	Bandwidth reduction: Not supported	

* WLAN and Bluetooth do not transmit simultaneously.

*1) Directional antenna gain = $10 \log \left(\left(10^{\frac{Gain(ANT0)}{20}} + 10^{\frac{Gain(ANT1)}{20}} \right)^2 / 2 \right)$

SECTION 3: Test Summary

3.1 Test Specification

Test Specification	FCC Part 15 Subpart E The latest version on the first day of the testing period
Title	FCC 47 CFR Part 15 Radio Frequency Device Subpart E Unlicensed National Information Infrastructure Devices Section 15.407 General technical requirements

3.2 Reference Standards

ANSI/USEMCSC C63.2-2023
ANSI C63.4-2014+C63.4a-2017
ANSI C63.10-2020
ANSI/USEMCSC C63.10/Cor 1-2023
ANSI/USEMCSC C63.10a-2024 (incl. Errata)
ANSI C63.5-2017
ANSI C63.25.1-2018
KDB 789033 D02 v02r01

3.3 Summary of Test Results

Item	Specification	Results	Remarks
Conducted Emission	FCC: Section 15.407 (b)(9) / 15.207 ISED: RSS-Gen section 8.8	Complied	-
26 dB Emission Bandwidth	FCC: Section 15.407 (a) (1)(2)(3) ISED: -	Complied	Conducted
Maximum Conducted Output Power	FCC: Section 15.407 (a) (1)(2)(3) ISED: RSS-247 section 7.3	Complied	Conducted
Maximum Power Spectral Density	FCC: Section 15.407 (a) (1)(2)(3) ISED: RSS-247 section 7.3	Complied	Conducted
Spurious Emission Restricted Band Edge	FCC: Section 15.407 (b), 15.205 and 15.209 ISED: RSS-247 section 7.3	Complied	Conducted (below 30 MHz) / Radiated (above 30 MHz) *1)
6 dB Emission Bandwidth	FCC: Section 15.407 (e) ISED: RSS-247 section 7.3	Complied	Conducted
Note: UL Japan, Inc.'s EMI Work Procedures: Work Instructions-ULID-003591 and Work Instructions-ULID-003593.			
*1) Radiated test was selected over 30 MHz based on FCC 15.407 (b) and KDB 789033 D02 G.3.b).			

FCC Part 15.31 (e)

The RF Module has its own regulator.
The RF Module is constantly provided voltage through the regulator regardless of input voltage.
Therefore, this EUT complies with the requirement.

FCC Part 15.203/212 Antenna requirement

The EUT has a unique coupling/antenna connector (U.FL).
Therefore, the equipment complies with the requirement of 15.203/212.

3.4 Addition to Standard

No addition, exclusion nor deviation has been made from the standard.

3.5 Uncertainty

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

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

Conducted emission

Item	Frequency range	Unit	Calculated Uncertainty (+/-)
AMN (LISN)	0.15 MHz to 30 MHz	dB	3.4

Radiated emission

Radiated emission				
Measurement distance	Frequency range		Unit	Calculated Uncertainty (+/-)
3 m	9 kHz to 30 MHz		dB	4.8
10 m			dB	4.7
3 m	30 MHz to 200 MHz	Horizontal	dB	5.0
		Vertical	dB	5.0
	200 MHz to 1000 MHz	Horizontal	dB	5.2
		Vertical	dB	6.2
10 m	30 MHz to 200 MHz	Horizontal	dB	5.5
		Vertical	dB	5.4
	200 MHz to 1000 MHz	Horizontal	dB	5.5
		Vertical	dB	5.5
3 m	1 GHz to 6 GHz		dB	5.1
	6 GHz to 18 GHz		dB	5.5
1 m	6 GHz to 18 GHz		dB	5.5
	18 GHz to 26.5 GHz		dB	5.7
	26.5 GHz to 40 GHz		dB	4.8
0.5 m	18 GHz to 40 GHz		dB	5.8

Antenna Terminal Conducted

Item	Unit	Calculated Uncertainty (+/-)
Antenna terminated conducted emission / Power density / Burst power	dB	3.50
Adjacent channel power (ACP)	dB	2.32
Bandwidth (OBW)	%	0.96
Time readout (time span upto 100 msec)	%	0.11
Time readout (time span upto 1000 msec)	%	0.11
Time readout (time span upto 60 sec)	%	0.02
Power measurement (Power meter < 8GHz)	dB	1.43
Power measurement (Call box < 6 GHz)	dB	1.89
Frequency readout (Frequency counter)	Ratio	6.7.E-07
Frequency readout (Spectrum analyzer frequency readout function)	Ratio	2.1.E-06
Temperature (constant temperature bath)	deg.C	0.69
Humidity (constant temperature bath)	%RH	2.98
Modulation characteristics	%	6.93
Frequency for mobile	Ratio	8.0.E-08
Contention-based protocol	dB	2.97

3.6 Test Location

UL Japan, Inc. Ise EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 Japan

Telephone: +81-596-24-8999

A2LA Certificate Number: 5107.02 / FCC Test Firm Registration Number: 884919

ISED Lab Company Number: 2973C / CAB identifier: JP0002

Test site	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms	Maximum measurement distance
No.1 semi-anechoic chamber (SAC1)	19.2 x 11.2 x 7.7	7.0 x 6.0	No.1 Power source room	10 m
No.2 semi-anechoic chamber (SAC2)	7.5 x 5.8 x 5.2	4.0 x 4.0	-	3 m
No.3 semi-anechoic chamber (SAC3)	12.0 x 8.5 x 5.9	6.8 x 5.75	No.3 Preparation room (PR3)	3 m
No.3 shielded room (SR3)	4.0 x 6.0 x 2.7	N/A	-	-
No.4 semi-anechoic chamber (SAC4)	12.0 x 8.5 x 5.9	6.8 x 5.75	No.4 Preparation room (PR4)	3 m
No.4 shielded room (SR4)	4.0 x 6.0 x 2.7	N/A	-	-
No.5 semi-anechoic chamber (SAC5)	6.0 x 6.0 x 3.9	6.0 x 6.0	-	-
No.5 measurement room (MR5)	6.4 x 6.4 x 3.0	6.4 x 6.4	-	-
No.6 shielded room (SR6)	4.0 x 4.5 x 2.7	4.0 x 4.5	-	-
No.6 measurement room (MR6)	4.75 x 5.4 x 3.0	4.75 x 4.15	-	-
No.7 shielded room (SR7)	4.7 x 7.5 x 2.7	4.7 x 7.5	-	-
No.8 measurement room (MR8)	3.1 x 5.0 x 2.7	3.1 x 5.0	-	-
No.9 measurement room (MR9)	8.8 x 4.6 x 2.8	2.4 x 2.4	-	-
No.10 shielded room (SR10)	3.8 x 2.8 x 2.8	3.8 x 2.8	-	-
No.11 measurement room (MR11)	4.0 x 3.4 x 2.5	N/A	-	-
No.12 measurement room (MR12)	2.6 x 3.4 x 2.5	N/A	-	-
Large Chamber	16.9 x 22.1 x 10.17	16.9 x 22.1	-	10 m
Small Chamber	5.3 x 6.69 x 3.59	5.3 x 6.69	-	-

* Size of vertical conducting plane (for Conducted Emission test): 2.0 x 2.0 m for No.1, No.2, No.3, No.4, and No.5 semi-anechoic chambers and No.3 and No.4 shielded rooms.

3.7 Test Data, Test Instruments, and Test Set Up

Refer to APPENDIX.

SECTION 4: Operation of EUT during testing

4.1 Operating Mode(s)

Mode	Remarks*
IEEE 802.11a CDD (11a)	54 Mbps, PN9
IEEE 802.11n CDD 20 MHz BW (11n-20)	MCS 7, PN9
IEEE 802.11ac CDD 20 MHz BW (11ac-20)	MCS 7, PN9
IEEE 802.11ax CDD 20 MHz BW (11ax-20)	MCS 9, PN9
IEEE 802.11n CDD 40 MHz BW (11n-40)	MCS 6, PN9
IEEE 802.11ac CDD 40 MHz BW (11ac-40)	MCS 7, PN9
IEEE 802.11ax CDD 40 MHz BW (11ax-40)	MCS 6, PN9
IEEE 802.11ac CDD 80 MHz BW (11ac-80)	MCS 6, PN9
IEEE 802.11ax CDD 80 MHz BW (11ax-80)	MCS 5, PN9
*The worst antenna and condition was determined based on the test result of Maximum Conducted Output Power.	
*Power of the EUT was set by the software as follows; Power Setting: Refer to Power setting column of Test Data for Maximum Conducted Output Power. Software: Software name: Transmitter Mode Version: 18.53.469.31 (Date: 2026.01.13, Storage location: Driven by connected PC)	
*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.	
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.	

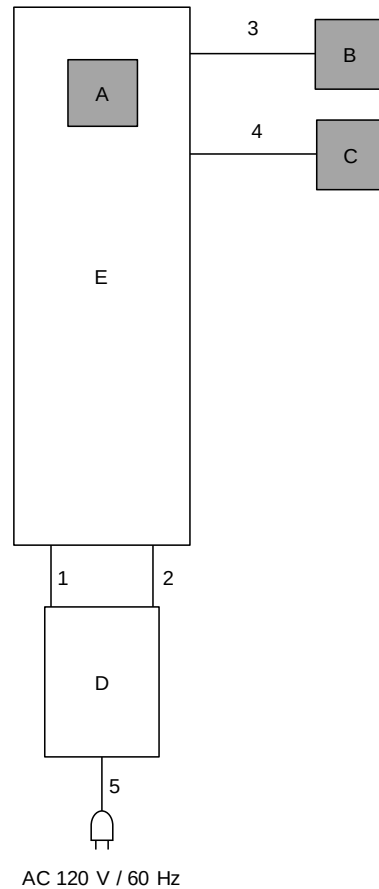
*The Details of Operation Mode(s)

Test Item	Operating Mode	Tested Antenna	Tested Frequency			
			Lower Band	Middle Band	Additional Band	Upper Band
Conducted emission, Radiated Spurious Emission (Below 1 GHz)	Tx 11ac-20(OFDM) *1)	Antenna 0 + 1	5220 MHz	-	-	-
26 dB Emission Bandwidth and 99 % Occupied Bandwidth	Tx 11a Tx 11ac-20 *5) Tx 11ax-20(OFDM) Tx 11ax-20(OFDMA)	Antenna 0 *2)	5180 MHz 5220 MHz 5240 MHz	5260 MHz 5300 MHz 5320 MHz	5500 MHz 5600 MHz 5700 MHz	5745 MHz 5785 MHz 5825 MHz
	Tx 11ac-40 *5) Tx 11ax-40(OFDM) Tx 11ax-40(OFDMA)		5190 MHz 5230 MHz	5270 MHz 5310 MHz	5510 MHz 5590 MHz 5670 MHz	5755 MHz 5795 MHz
	Tx 11ac-80 Tx 11ax-80(OFDM) Tx 11ax-80(OFDMA)		5210 MHz	5290 MHz	5530 MHz 5610 MHz	5775 MHz
Maximum Conducted Output Power, Maximum Power Spectral Density	Tx 11a Tx 11ac-20 *5) Tx 11ax-20(OFDM) Tx 11ax-20(OFDMA)	Antenna 0 Antenna 1 Antenna 0 + 1	5180 MHz 5220 MHz 5240 MHz	5260 MHz 5300 MHz 5320 MHz	5500 MHz 5600 MHz 5700 MHz	5745 MHz 5785 MHz 5825 MHz
	Tx 11ac-40 *5) Tx 11ax-40(OFDM) Tx 11ax-40(OFDMA)		5190 MHz 5230 MHz	5270 MHz 5310 MHz	5510 MHz 5590 MHz 5670 MHz	5755 MHz 5795 MHz
	Tx 11ac-80 Tx 11ax-80(OFDM) Tx 11ax-80(OFDMA)		5210 MHz	5290 MHz	5530 MHz 5610 MHz	5775 MHz
6 dB Bandwidth	Tx 11a Tx 11ac-20 *5) Tx 11ax-20(OFDM) Tx 11ax-20(OFDMA)	Antenna 0 *2)	-	-	-	5745 MHz 5785 MHz 5825 MHz
	Tx 11ac-40 *5) Tx 11ax-40(OFDM) Tx 11ax-40(OFDMA)		-	-	-	5755 MHz 5795 MHz
	Tx 11ac-80 Tx 11ax-80(OFDM) Tx 11ax-80(OFDMA)		-	-	-	5775 MHz
Radiated Spurious Emission (Above 1 GHz)	Tx 11a Tx 11ac-20 *5) Tx 11ax-20(OFDM) Tx 11ax-20(OFDMA) *3)	Antenna 0 + 1	5180 MHz 5220 MHz *4)	5260 MHz 5320 MHz	5500 MHz 5600 MHz 5700 MHz	5745 MHz 5785 MHz 5825 MHz
	Tx 11ac-40 *5) Tx 11ax-40(OFDM) Tx 11ax-40(OFDMA) *3)	Antenna 0 + 1	5190 MHz	5270 MHz 5310 MHz	5510 MHz 5590 MHz 5670 MHz	5755 MHz 5795 MHz
	Tx 11ac-80 Tx 11ax-80(OFDM) Tx 11ax-80(OFDMA) *3)	Antenna 0 + 1	5210 MHz	5290 MHz	5530 MHz 5610 MHz	5775 MHz
Conducted Spurious Emission	Tx 11ac-20 *1)	Antenna 0 *2)	5220 MHz	-	-	-

*1) The mode was tested as a representative, because it had the highest power at antenna terminal test.
*2) After the comparison between Antenna 0 and Antenna 1, the test was performed with Antenna 0 as a representative, as it was the worst case.
*3) Except for the 11ax-40 242-tone and 11ax-80 484-tone configurations, spurious emissions testing for partial-bandwidth RU allocation was conducted only at the band edge, since preliminary testing indicated that the full bandwidth RU allocation emitted higher spurious emissions than partial bandwidth RU allocation.
*4) Only 11ac-20 was tested because it had the highest power at antenna terminal test.
*5) Since each mode of 11n/11ac has the same modulation method and no differences in transmission specifications, the test was performed using the mode with the highest output power.

4.2 Configuration and Peripherals

Conducted Emission test



* Cabling and setup(s) were taken into consideration and test data was taken under worse case conditions.

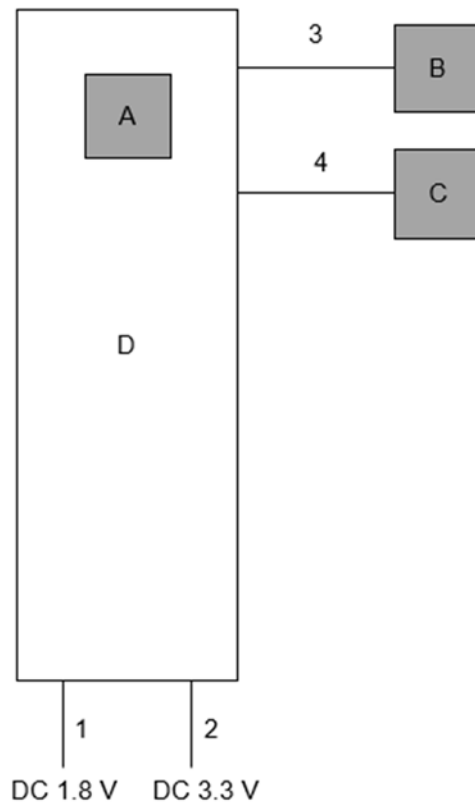
Description of EUT and Support Equipment

No.	Item	Model number	Serial Number	Manufacturer	Remarks
A	Communication module	LBEE5XV2EA	No.21	Murata Manufacturing Co., Ltd.	EUT
B	Antenna	1KT-001	No.21-0	Murata Manufacturing Co., Ltd.	EUT
C	Antenna	1KT-001	No.21-1	Murata Manufacturing Co., Ltd.	EUT
D	DC Power Supply	PW16-5ADP	17116437	NIKKE TECHNO SYSTEM CO., LTD	-
E	Jig Board	P2ML12609	No.21	Murata Manufacturing Co., Ltd.	-

List of Cables Used

No.	Name	Length (m)	Shield		Remarks
			Cable	Connector	
1	DC Cable	2.00	Unshielded	Unshielded	-
2	DC Cable	2.00	Unshielded	Unshielded	-
3	Antenna Cable	0.03	Shielded	Shielded	-
4	Antenna Cable	0.03	Shielded	Shielded	-
5	AC Cable	2.50	Unshielded	Unshielded	-

Radiated Emission test



* Cabling and setup(s) were taken into consideration and test data was taken under worse case conditions.

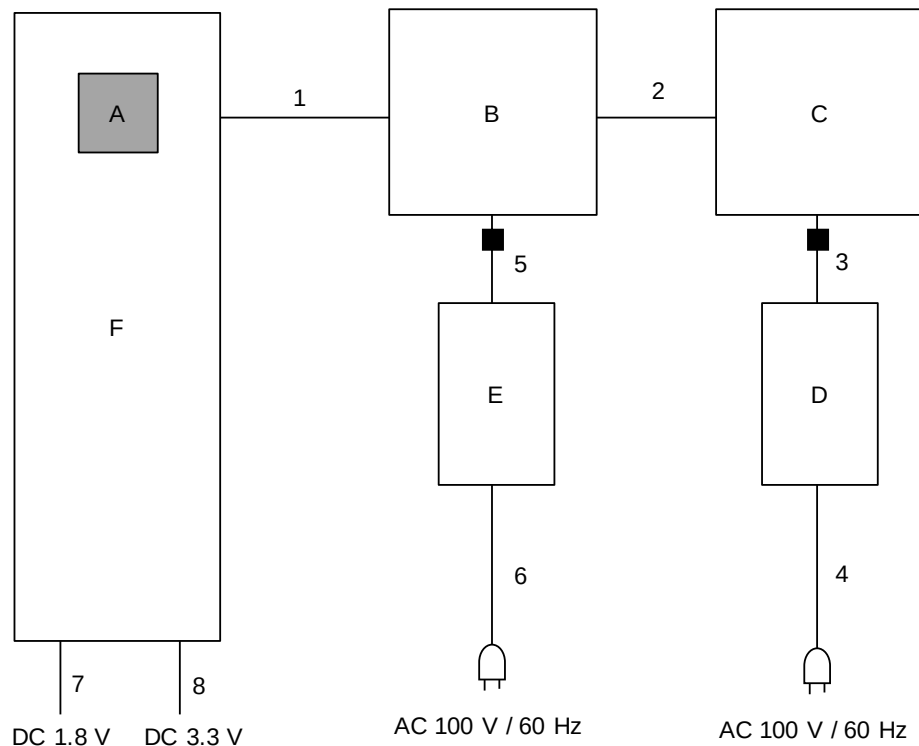
Description of EUT and Support Equipment

No.	Item	Model number	Serial Number	Manufacturer	Remarks
A	Communication module	LBEE5XV2EA	No.21	Murata Manufacturing Co., Ltd.	EUT
B	Antenna	1KT-001	No.21-0	Murata Manufacturing Co., Ltd.	EUT
C	Antenna	1KT-001	No.21-1	Murata Manufacturing Co., Ltd.	EUT
D	Jig Board	P2ML12609	No.21	Murata Manufacturing Co., Ltd.	-

List of Cables Used

No.	Name	Length (m)	Shield		Remarks
			Cable	Connector	
1	DC Cable	2.10	Unshielded	Unshielded	-
2	DC Cable	1.60	Unshielded	Unshielded	-
3	Antenna Cable	0.03	Shielded	Shielded	-
4	Antenna Cable	0.03	Shielded	Shielded	-

Antenna Terminal Conducted test



■ : Standard Ferrite Core

* Cabling and setup(s) were taken into consideration and test data was taken under worse case conditions.

Description of EUT and Support Equipment

No.	Item	Model number	Serial Number	Manufacturer	Remarks
A	Communication module	LBEE5XV2EA	No.11	Murata Manufacturing Co., Ltd.	EUT
B	Compact PC	GB-BSi7-6500	No.7	GIGABYTE	-
C	Laptop PC	PR734MAF14BAD7X	YF012366H	TOSHIBA	-
D	AC Adapter	PA3917U-1ACA	201140424000221	TOSHIBA	-
E	AC Adapter	9NA0652107	H4121003524	FSP GROUP INC.	-
F	Jig Board	P2ML12609	No.11	Murata Manufacturing Co., Ltd.	-

List of Cables Used

No.	Name	Length (m)	Shield		Remarks
			Cable	Connector	
1	Signal Cable	0.20	Unshielded	Unshielded	-
2	LAN Cable	3.00	Unshielded	Unshielded	-
3	DC Cable	1.70	Unshielded	Unshielded	-
4	AC Cable	1.00	Unshielded	Unshielded	-
5	DC Cable	1.50	Unshielded	Unshielded	-
6	AC Cable	0.80	Unshielded	Unshielded	-
7	DC Cable	0.65	Unshielded	Unshielded	-
8	DC Cable	0.65	Unshielded	Unshielded	-

SECTION 5: Conducted Emission

Test Procedure and Conditions

EUT was placed on a platform of nominal size, 1.0 m by 1.5 m, raised 0.8 m above the conducting ground plane. The rear of the platform was located 0.4 m to the vertical ground plane. The rear of EUT and its peripherals was aligned and flushed with rear of the platform. All other surfaces of the platform were at least 0.8 m from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN) / Artificial mains Network (AMN) and excess AC cable was bundled in center.

For the tests on EUT with other peripherals (as a whole system)

I/O cables that were connected to the peripherals were bundled in center. They were folded back and forth forming a bundle 30 cm to 40 cm long and were hanged at a 40 cm height to the ground plane. All unused 50 ohm connectors of the LISN (AMN) were resistivity terminated in 50 ohm when not connected to the measuring equipment.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT in a Semi Anechoic Chamber.

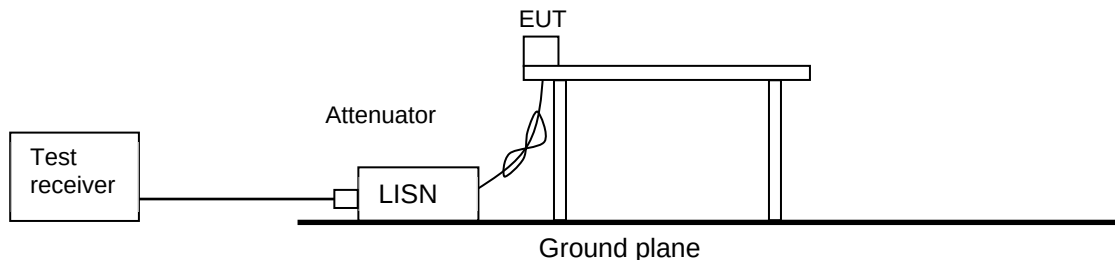
The EUT was connected to a LISN (AMN).

An overview sweep with peak detection has been performed.

Test results are rounded off and limit are rounded down, so some differences might be observed.

Detector	: QP and CISPR Average
Measurement Range	: 0.15 MHz to 30 MHz
Test Data	: APPENDIX
Test Result	: Pass

Figure 1: Test Setup



SECTION 6: Radiated Spurious Emission and Band Edge Compliance

Test Procedure

< Below 1 GHz >

EUT was placed on a platform of nominal size, 1.0 m by 1.5 m, raised 0.8 m above the conducting ground plane. The Radiated Electric Field Strength has been measured in a Semi Anechoic Chamber with a ground plane.

< Above 1 GHz >

EUT was placed on a 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. 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 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.

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 1 GHz >

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

< Above 1 GHz >

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 5.8 GHz band 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:

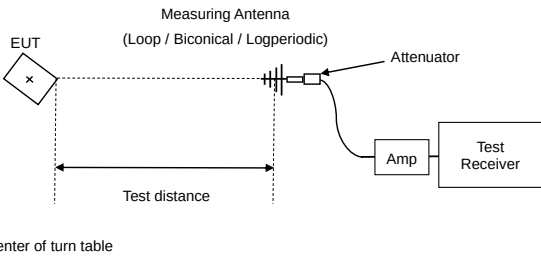
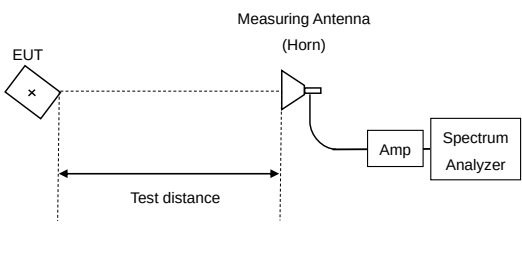
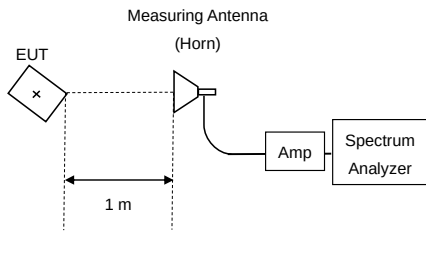
$$E = \frac{1000000\sqrt{30P}}{3} \text{ (uV/m)} \quad : P \text{ is the e.i.r.p. (Watts)}$$

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 AD RBW: 1 MHz VBW: 3 MHz Detector: Power Averaging (RMS) Trace: ≥ 100 traces If duty cycle was less than 98%, a duty factor was added to the results.

Figure 2: Test Setup

Below 1 GHz  × : Center of turn table	Test Distance: 3 m
1 GHz to 18 GHz  × : Center of turn table	Test Distance: 3 m
18 GHz to 40 GHz  × : Center of turn table	Distance Factor: $20 \times \log (1.0 \text{ m} / 3.0 \text{ m}) = -9.5 \text{ dB}$ *Test Distance: 1 m

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

Test results are rounded off and limit are rounded down, so some differences might be observed.

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

SECTION 7: 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
26 dB Bandwidth	Enough to capture the emission	1 % to 5 % of EBW	> RBW	Auto	Peak	Max Hold	Spectrum Analyzer
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: 80 MHz BW) (Method PM-G)
Maximum Power Spectral Density	Encompass the entire EBW	1 MHz or 470 kHz *2)	≥ 3 RBW	Auto	RMS Power Averaging (≥ 100 traces)	Clear Write	Spectrum Analyzer
Conducted Spurious Emission*3) *4)	9 kHz to 150 kHz	200 Hz	620 Hz	Auto	Peak	Max Hold	Spectrum Analyzer
	150 kHz to 30 MHz	10 kHz	30 kHz				

*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 ($10 \log(500 \text{ kHz} / 470 \text{ kHz})$) 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 ohms. For example, the measurement at frequency 9 kHz resulted in a level of 45.5 dBuV/m, which is equivalent to $45.5 - 51.5 = -6.0 \text{ dBuA/m}$, which has the same margin, 3 dB, to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit.

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

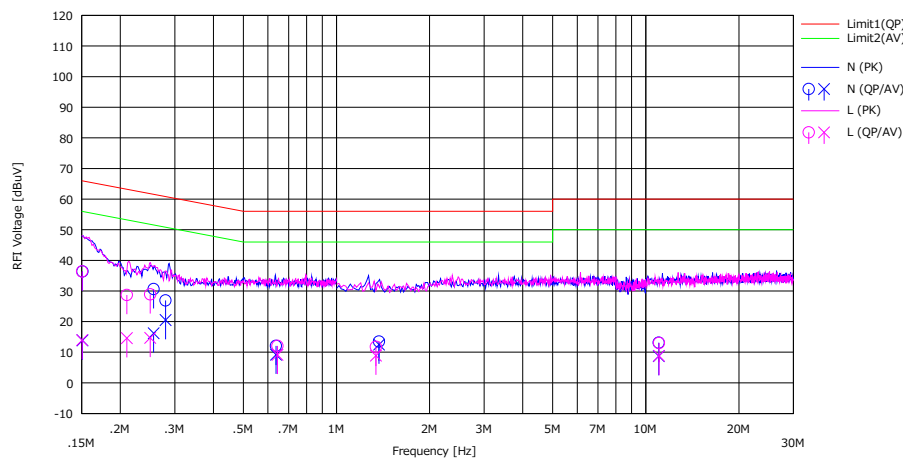
Test Data : APPENDIX
Test Result : Pass

APPENDIX 1: Test Data

Conducted Emission

Mode	Tx 11ac-20 5220 MHz			
Date	Test site	Temperature	Humidity	Engineer
May 20, 2026	SAC2	22 deg. C	66 % RH	Wataru Toriyama

Limit : FCC_Part 15 Subpart E(15.207) / RSS-Gen 8.8



No.	Freq. [MHz]	Reading		LISN	LOSS	Results		Limit		Margin		Phase	Comment
		<QP> [dBuV]	<AV> [dBuV]			<QP> [dBuV]	<AV> [dBuV]	<QP> [dBuV]	<AV> [dBuV]	<QP> [dB]	<AV> [dB]		
1	0.15087	23.20	0.70	0.05	13.14	36.39	13.89	65.95	55.95	29.56	42.06	N	
2	0.25643	17.40	3.00	0.05	13.16	30.61	16.21	61.55	51.55	30.94	35.34	N	
3	0.28005	13.70	7.30	0.05	13.17	26.92	20.52	60.81	50.81	33.89	30.29	N	
4	0.63720	-1.20	-4.10	0.05	13.23	12.08	9.18	56.00	46.00	43.92	36.82	N	
5	1.37280	0.10	-0.90	0.06	13.33	13.49	12.49	56.00	46.00	42.51	33.51	N	
6	11.00920	-1.10	-5.50	0.25	13.97	13.12	8.72	60.00	50.00	46.88	41.28	N	
7	0.15051	23.20	0.80	0.04	13.14	36.38	13.98	65.97	55.97	29.59	41.99	L	
8	0.21000	15.50	1.40	0.04	13.15	28.69	14.59	63.21	53.21	34.52	38.62	L	
9	0.24990	15.70	1.50	0.04	13.16	28.90	14.70	61.76	51.76	32.86	37.06	L	
10	0.64460	-1.20	-4.10	0.04	13.23	12.07	9.17	56.00	46.00	43.93	36.83	L	
11	1.34200	-1.60	-4.50	0.05	13.33	11.78	8.88	56.00	46.00	44.22	37.12	L	
12	11.03170	-1.20	-5.40	0.26	13.97	13.03	8.83	60.00	50.00	46.97	41.17	L	

CHART: WITH FACTOR Peak hold data. CALCULATION : RESULT = READING + C.F (LISN + CABLE + ATT)
Except for the above table: adequate margin data below the limits.

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 23, 2026	MR8	22 deg.C	43 %RH	Yuta Moriya

11a

Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5180	-	16598.3
5220	-	16636.9
5240	-	16659.5
5260	21.101	16639.1
5300	21.082	16660.8
5320	21.151	16602.7
5500	21.112	16627.0
5600	21.266	16630.3
5700	21.127	16636.1
5745	-	16639.9
5785	-	16641.3
5825	-	16623.0

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 24, 2026	MR8	21 deg.C	42 %RH	Takafumi Noguchi

11ac-20

Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5180	-	17844.7
5220	-	17832.9
5240	-	17772.6
5260	21.540	17837.6
5300	21.178	17822.9
5320	21.457	17867.1
5500	21.550	17866.3
5600	21.431	17794.1
5700	21.044	17844.2
5745	-	17814.3
5785	-	17775.6
5825	-	17813.6

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 24, 2026	MR8	21 deg.C	42 %RH	Takafumi Noguchi

11ax-20(OFDM)

Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5180	-	18983.9
5220	-	18987.6
5240	-	19031.2
5260	21.530	19004.8
5300	21.219	19039.9
5320	21.011	18999.7
5500	21.076	19025.6
5600	21.486	18997.0
5700	21.247	19035.4
5745	-	19044.6
5785	-	19006.5
5825	-	18997.1

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 26, 2026	MR8	22 deg.C	52 %RH	Takafumi Noguchi

11ax-20(OFDMA), 26-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5180	0	-	18407.5
5220	4	-	17159.0
5240	8	-	18426.2
5260	0	19.692	18398.3
5300	4	18.165	17156.5
5320	8	19.758	18406.0
5500	0	19.655	18372.4
5600	4	18.115	16974.8
5700	8	19.635	18399.1
5745	0	-	18435.2
5785	4	-	17130.7
5825	8	-	18405.5

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 26, 2026	MR8	22 deg.C	52 %RH	Takafumi Noguchi

11ax-20(OFDMA), 52-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5180	37	-	18225.2
5220	38	-	17158.2
5240	40	-	18303.2
5260	37	19.853	18245.3
5300	38	18.672	17157.3
5320	40	19.921	18286.1
5500	37	19.794	18210.8
5600	38	18.694	17110.6
5700	40	19.891	18267.2
5745	37	-	18252.4
5785	38	-	17138.4
5825	40	-	18268.4

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 26, 2026	MR8	22 deg.C	52 %RH	Takafumi Noguchi

11ax-20(OFDMA), 106-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5180	53	-	18220.6
5220	53	-	18220.3
5240	54	-	18247.2
5260	53	20.284	18235.7
5300	53	20.305	18227.8
5320	54	20.388	18235.7
5500	53	20.172	18212.0
5600	53	20.145	18205.9
5700	54	20.514	18234.9
5745	53	-	18222.9
5785	53	-	18209.6
5825	54	-	18225.6

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 26, 2026	MR8	22 deg.C	52 %RH	Takafumi Noguchi

11ax-20(OFDMA), 242-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5180	61	-	19057.7
5220	61	-	19040.6
5240	61	-	19044.0
5260	61	21.687	19055.7
5300	61	21.846	19050.2
5320	61	21.546	19051.7
5500	61	21.652	19062.7
5600	61	21.792	19060.4
5700	61	21.617	19047.1
5745	61	-	19034.9
5785	61	-	19033.3
5825	61	-	19030.3

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 25, 2026	MR8	23 deg.C	45 %RH	Takafumi Noguchi

11ac-40

Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5190	-	36331.3
5230	-	36275.4
5270	39.699	36312.7
5310	39.410	36281.9
5510	39.562	36299.2
5590	39.591	36355.2
5670	39.501	36260.7
5755	-	36313.5
5795	-	36198.0

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 25, 2026	MR8	23 deg.C	45 %RH	Takafumi Noguchi

11ax-40(OFDM)

Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5190	-	37570.4
5230	-	37566.5
5270	39.688	37544.8
5310	39.708	37612.9
5510	40.069	37540.7
5590	39.838	37547.5
5670	39.609	37495.9
5755	-	37566.9
5795	-	37463.0

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 27, 2026	MR8	21 deg.C	49 %RH	Takafumi Noguchi

11ax-40(OFDMA), 26-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5190	0	-	18093.5
5230	17	-	18958.3
5270	0	20.322	18396.7
5310	17	20.381	19130.3
5510	0	20.401	18456.5
5590	8	23.383	21441.3
5670	17	20.419	19315.5
5755	0	-	18063.1
5795	17	-	18835.5

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 27, 2026	MR8	21 deg.C	49 %RH	Takafumi Noguchi

11ax-40(OFDMA), 52-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5190	37	-	20146.4
5230	44	-	21821.3
5270	37	23.661	21207.9
5310	44	24.625	22205.5
5510	37	23.294	20869.6
5590	40	25.045	21585.5
5670	44	24.704	22593.3
5755	37	-	20402.6
5795	44	-	21483.2

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 27, 2026	MR8	21 deg.C	49 %RH	Takafumi Noguchi

11ax-40(OFDMA), 106-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5190	53	-	17786.8
5230	56	-	18635.9
5270	53	21.040	18077.9
5310	56	22.094	18885.6
5510	53	20.749	18016.8
5590	54	28.010	20552.9
5670	56	23.653	19037.8
5755	53	-	17797.9
5795	56	-	18571.3

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 27, 2026	MR8	21 deg.C	49 %RH	Takafumi Noguchi

11ax-40(OFDMA), 242-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5190	61	-	19883.2
5230	62	-	19905.3
5270	61	34.764	20318.2
5310	62	30.007	20148.1
5510	61	35.320	20238.1
5590	61	34.624	20563.1
5670	62	30.184	20379.9
5755	61	-	19911.0
5795	62	-	19809.0

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 30, 2026	MR8	23 deg.C	51 %RH	Wataru Toriyama

11ax-40(OFDMA), 484-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5190	65	-	37549.9
5230	65	-	37534.5
5270	65	40.245	37515.3
5310	65	40.235	37529.9
5510	65	40.288	37544.0
5590	65	40.423	37544.2
5670	65	40.222	37515.0
5755	65	-	37574.4
5795	65	-	37487.6

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 25, 2026	MR8	23 deg.C	45 %RH	Takafumi Noguchi

11ac-80

Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5210	-	75601.2
5290	81.104	75724.3
5530	81.281	75836.2
5610	81.273	75771.9
5775	-	75822.4

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 25, 2026	MR8	23 deg.C	45 %RH	Takafumi Noguchi

11ax-80(OFDM)

Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5210	-	76878.8
5290	81.160	76879.0
5530	80.987	76813.8
5610	81.102	77050.4
5775	-	76864.8

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 30, 2026	MR8	23 deg.C	51 %RH	Wataru Toriyama
April 17, 2026	MR8	22 deg.C	52 %RH	Takafumi Noguchi

11ax-80(OFDMA), 26-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5210	0	-	24611.0
5290	36	41.124	32904.8
5530	0	41.141	34353.2
5610	36	41.162	30346.0
5775	0	-	22818.6
	36	-	22141.3

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 30, 2026	MR8	23 deg.C	51 %RH	Wataru Toriyama
April 17, 2026	MR8	22 deg.C	52 %RH	Takafumi Noguchi

11ax-80(OFDMA), 52-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5210	37	-	18682.0
5290	52	41.309	25994.6
5530	37	41.578	22538.4
5610	52	41.336	27961.6
5775	37	-	18955.7
	52	-	21964.3

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 30, 2026	MR8	23 deg.C	51 %RH	Wataru Toriyama
April 17, 2026	MR8	22 deg.C	52 %RH	Takafumi Noguchi

11ax-80(OFDMA), 106-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5210	53	-	21571.8
5290	60	41.591	25119.6
5530	53	41.485	27255.3
5610	60	41.600	27919.5
5775	53	-	22344.1
	60	-	22021.1

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 30, 2026	MR8	23 deg.C	51 %RH	Wataru Toriyama
April 17, 2026	MR8	22 deg.C	52 %RH	Takafumi Noguchi

11ax-80(OFDMA), 242-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5210	61	-	24387.6
5290	64	41.729	28392.3
5530	61	41.836	28550.4
5610	64	41.812	29384.5
5775	61	-	25354.0
	64	-	24908.3

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 31, 2026	MR8	22 deg.C	55 %RH	Yuta Moriya

11ax-80(OFDMA), 484-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5210	65	-	38795.2
5290	66	63.097	41178.1
5530	65	60.843	39508.6
5610	66	66.520	41785.9
5775	65	-	39277.8
	66	-	40040.8

26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Mode	Tx
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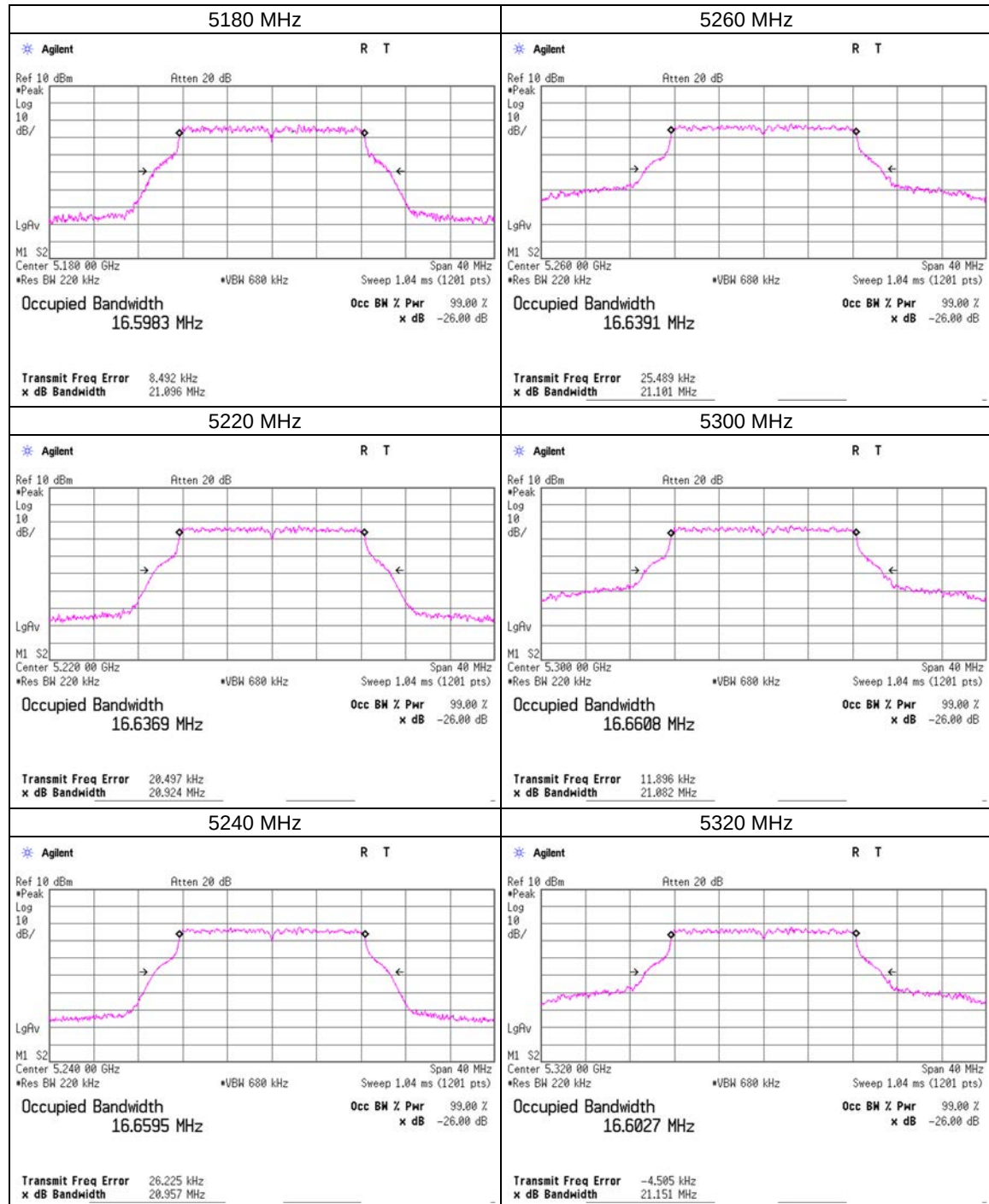
Date	Test Site	Temperature	Humidity	Engineer
March 31, 2026	MR8	22 deg.C	55 %RH	Yuta Moriya

11ax-80(OFDMA), 996-tone RU

Tested Frequency [MHz]	RU Index	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
5210	67	-	76964.9
5290	67	82.164	76970.3
5530	67	81.889	76936.0
5610	67	82.078	76948.6
5775	67	-	76977.6

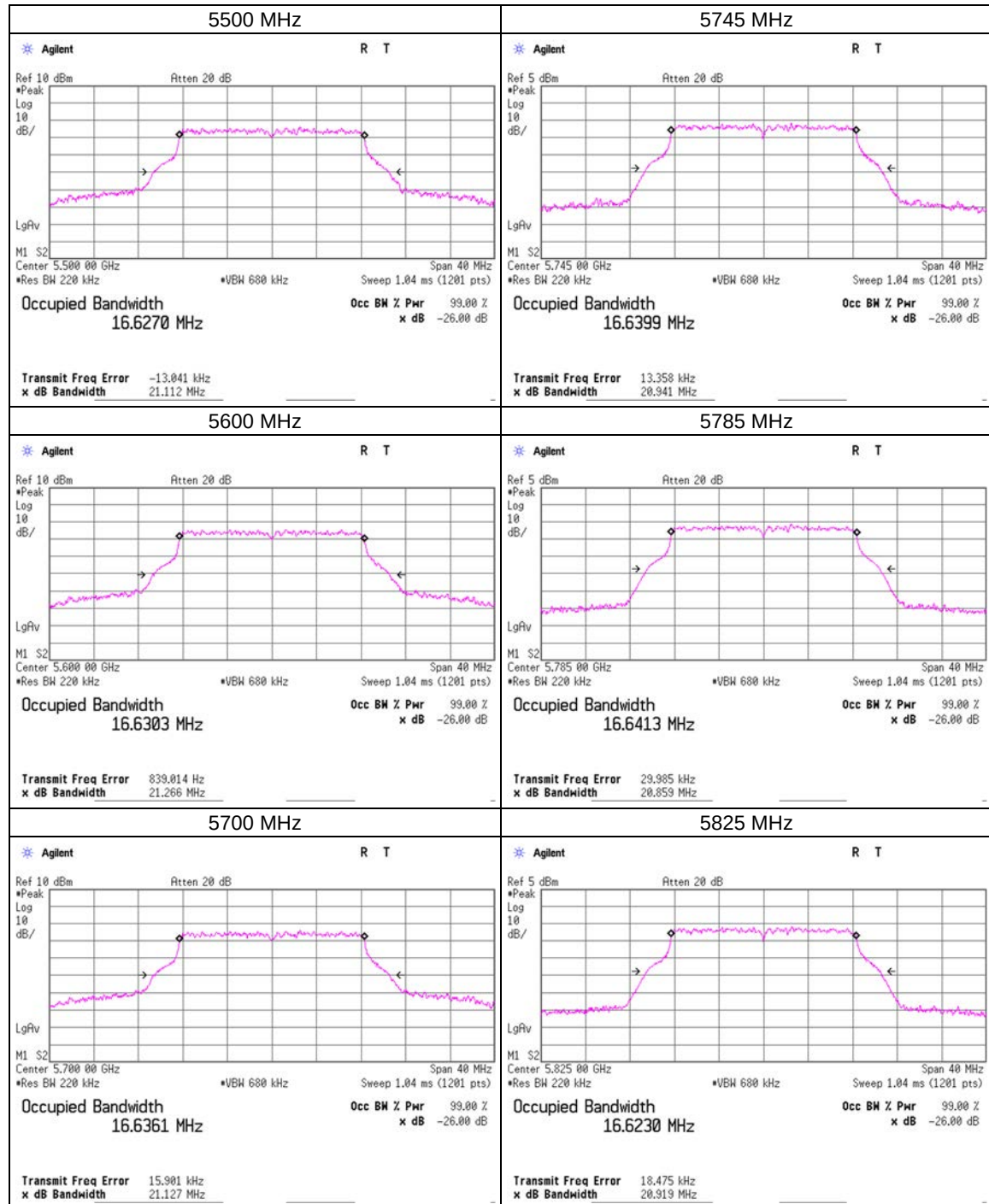
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11a



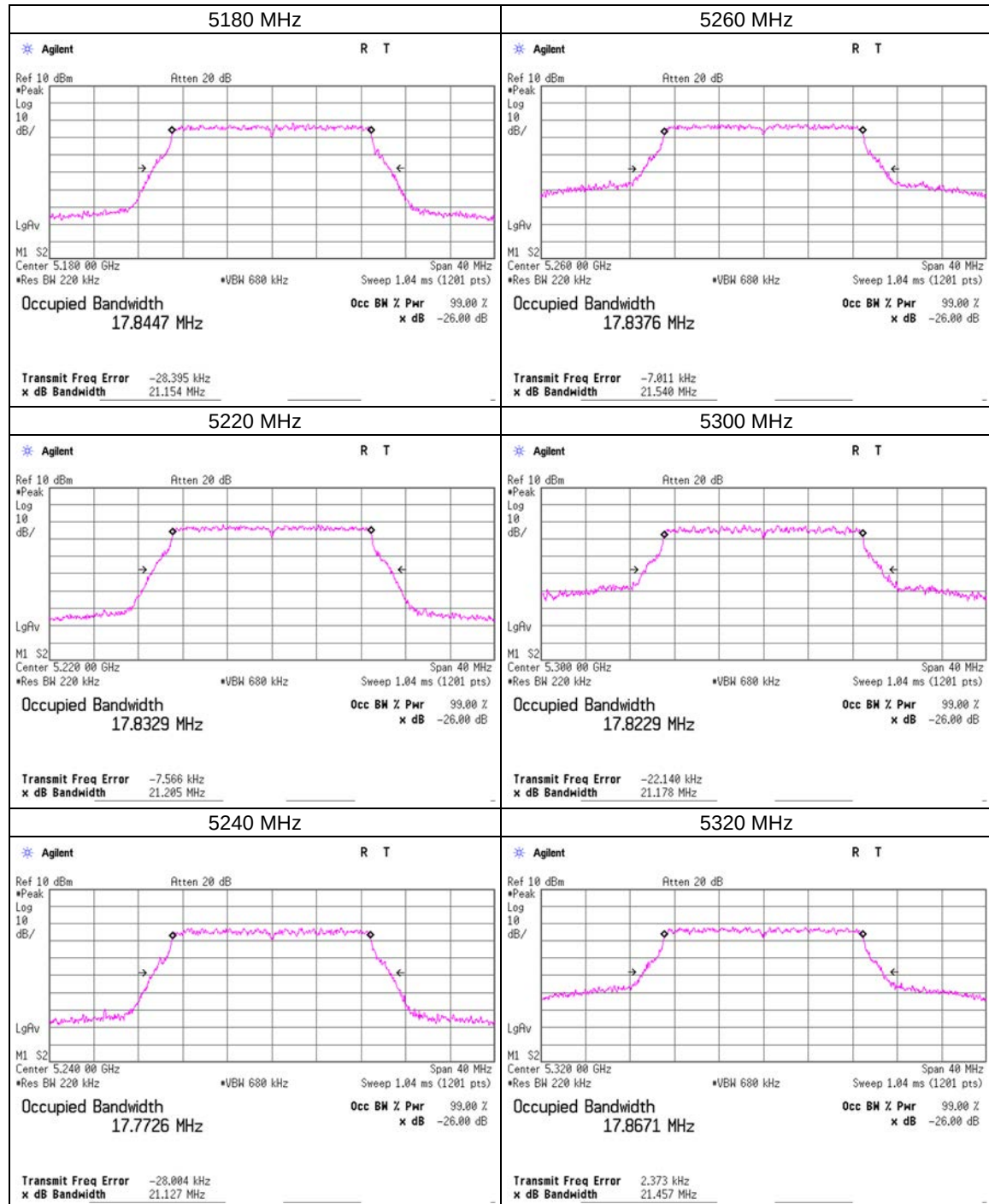
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11a



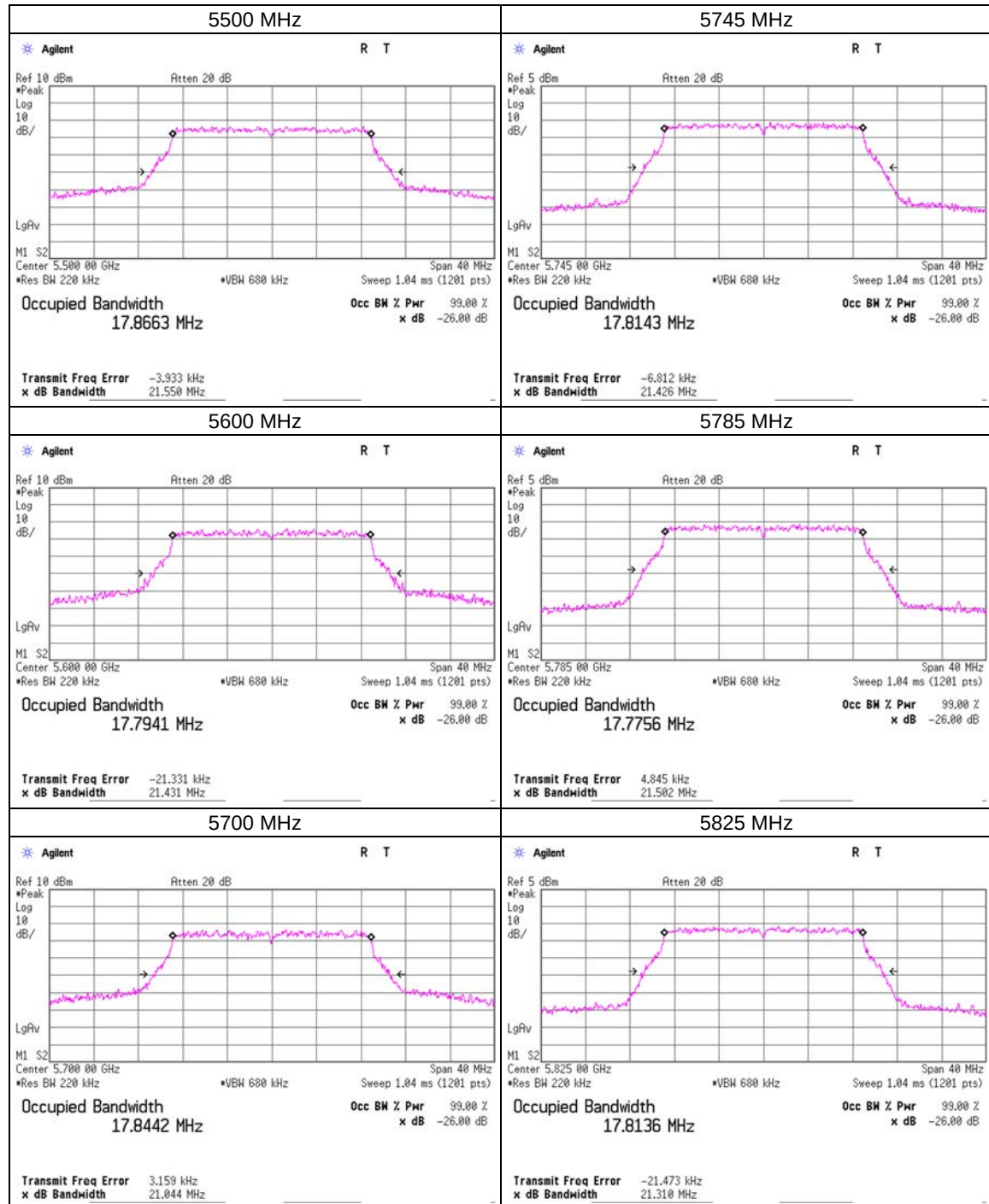
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-20



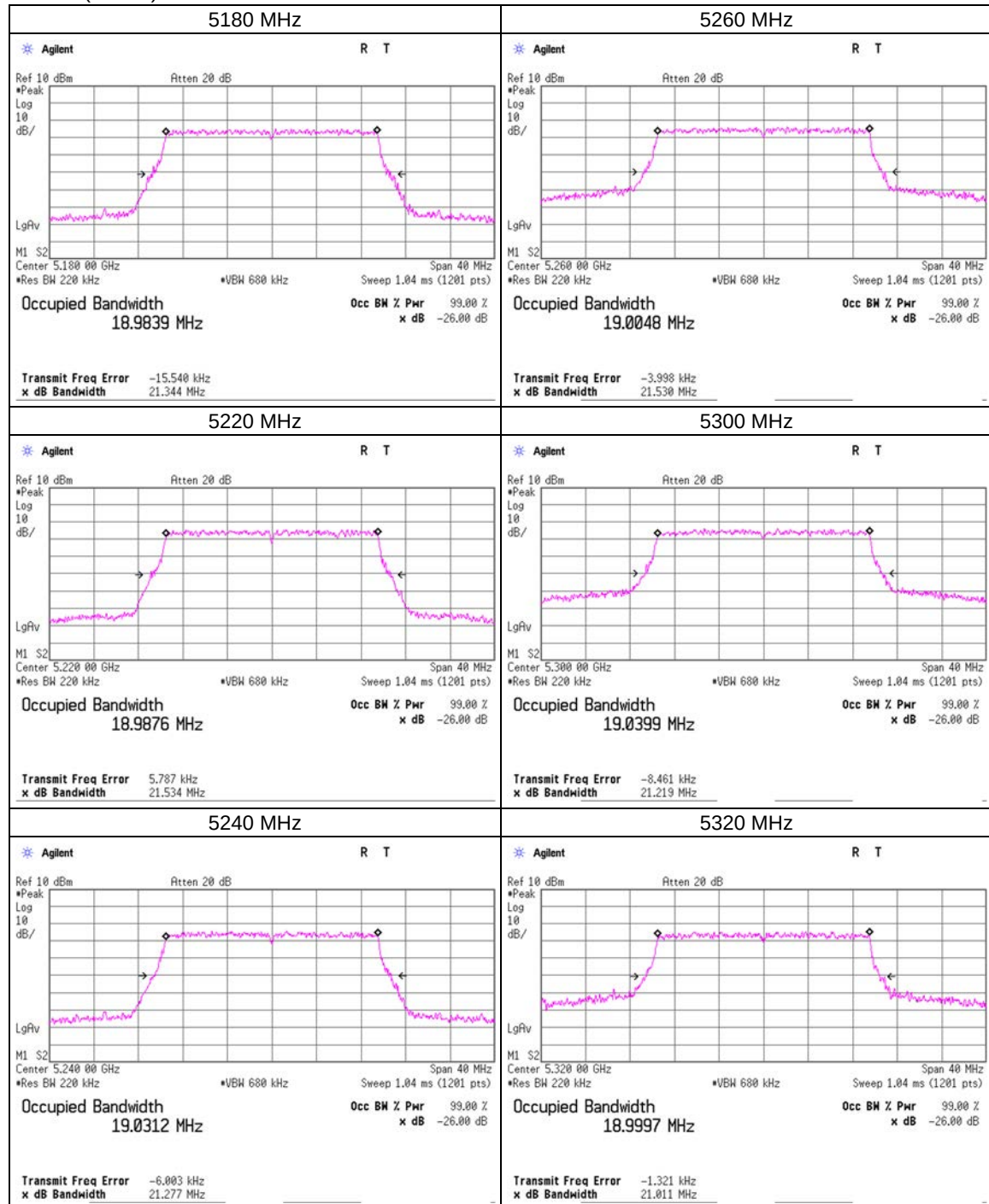
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-20



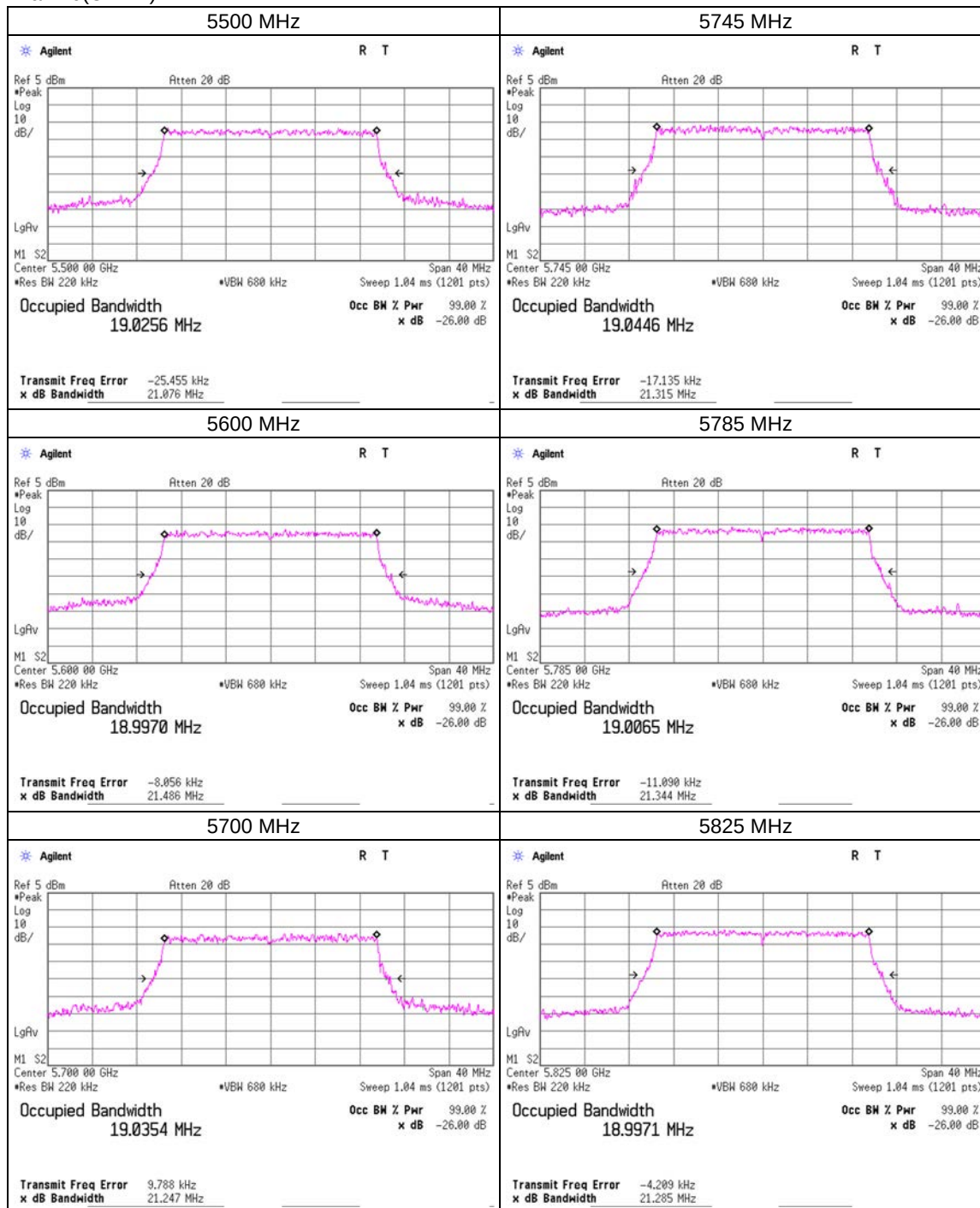
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-20(OFDM)



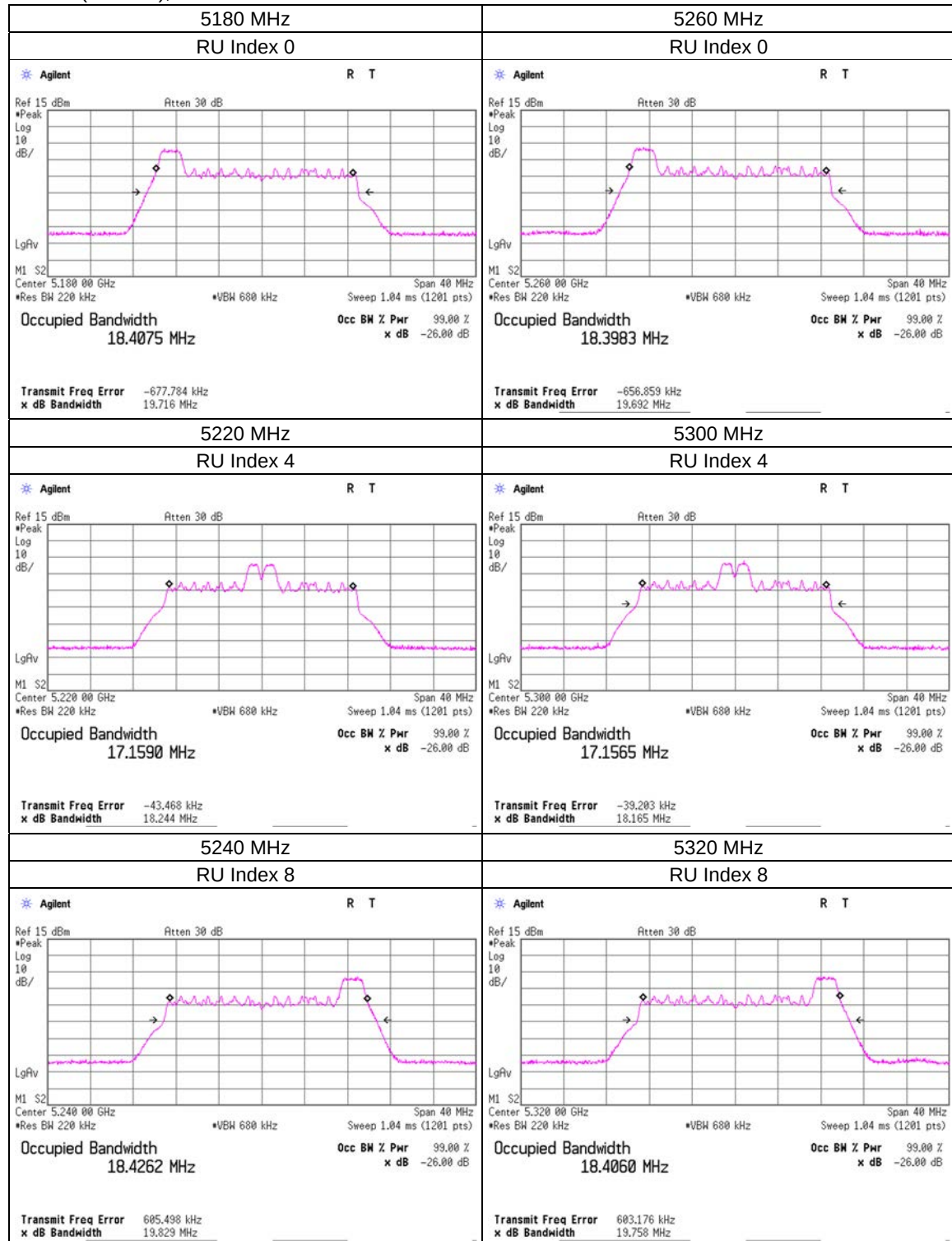
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-20(OFDM)



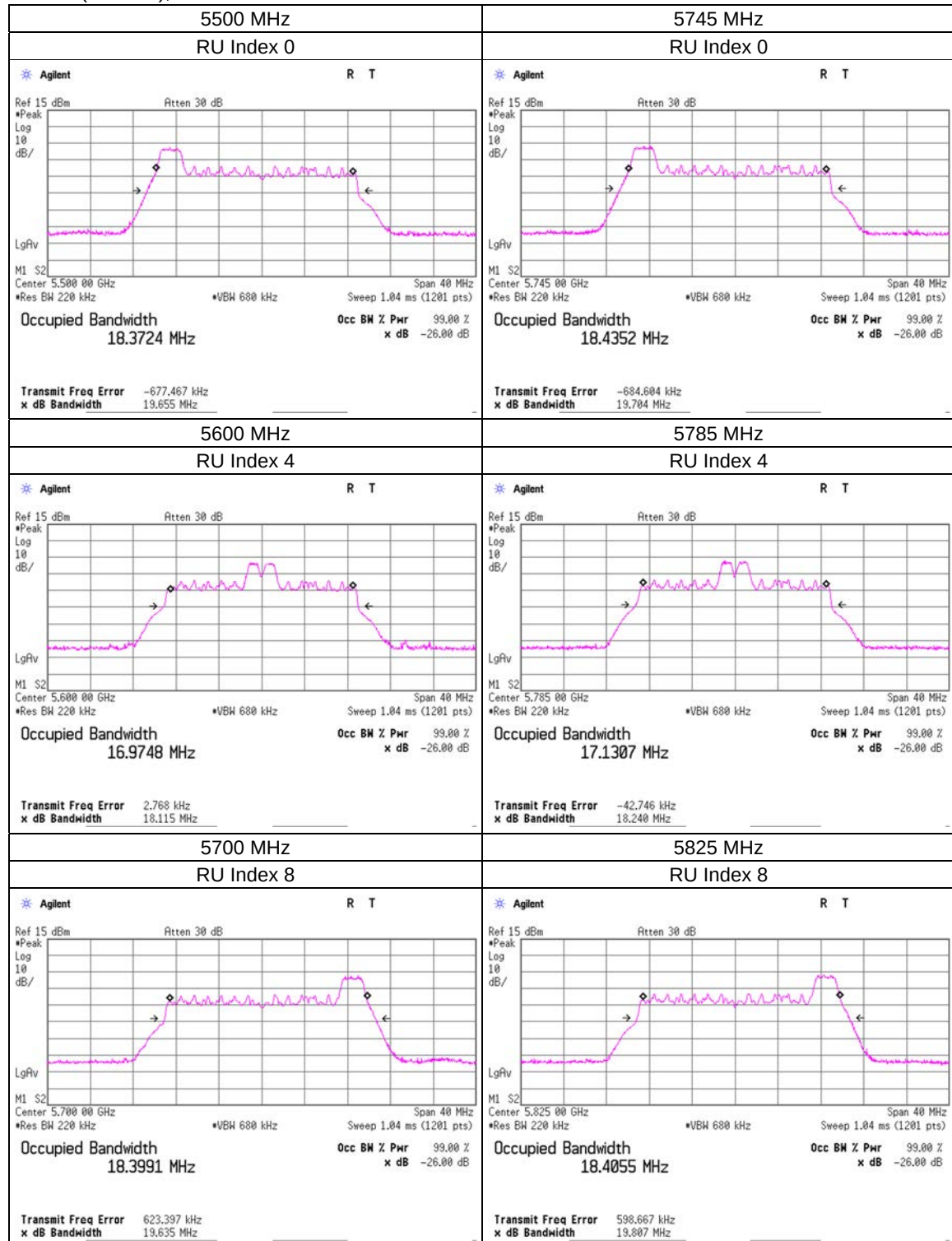
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-20(OFDMA), 26-tone RU



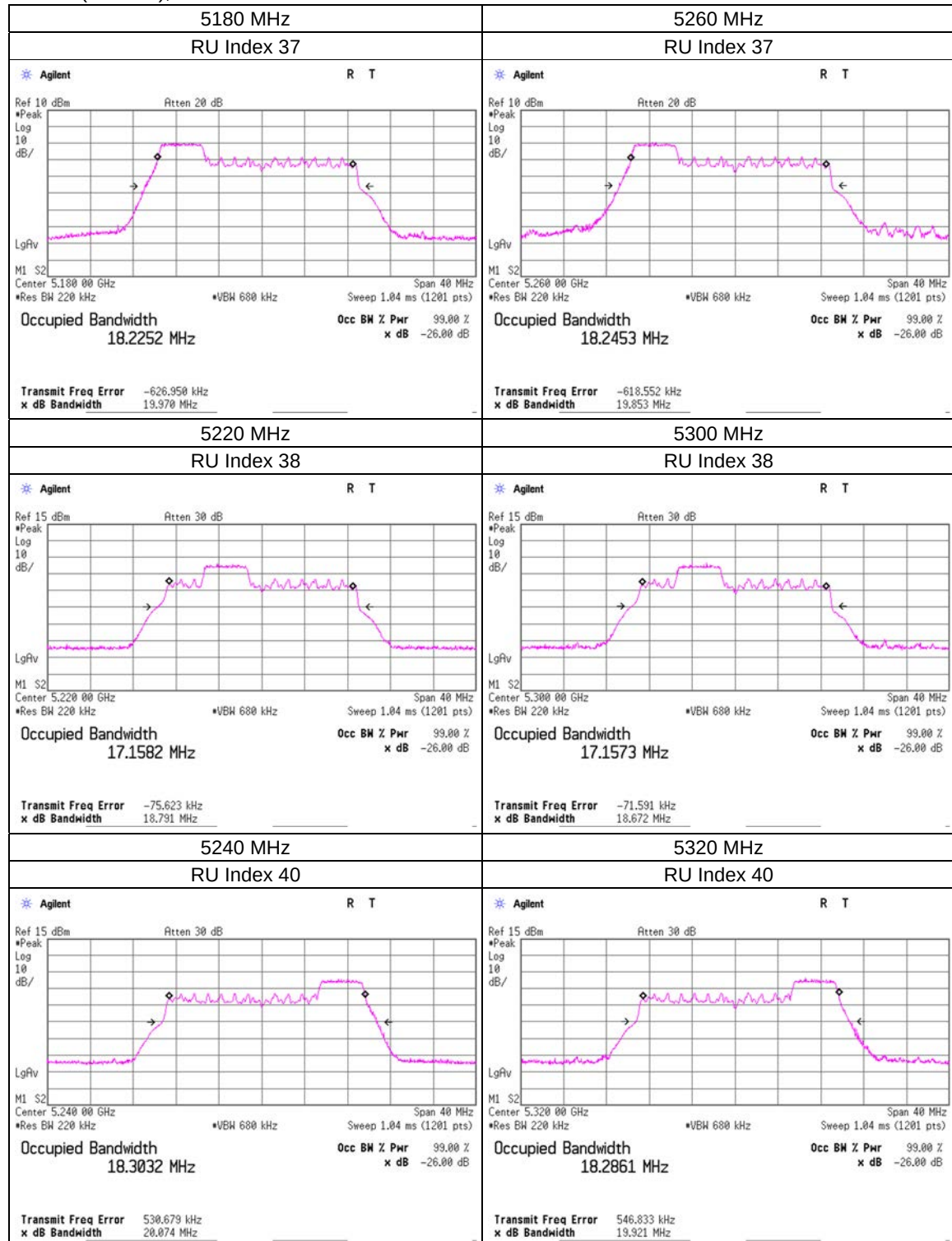
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-20(OFDMA), 26-tone RU



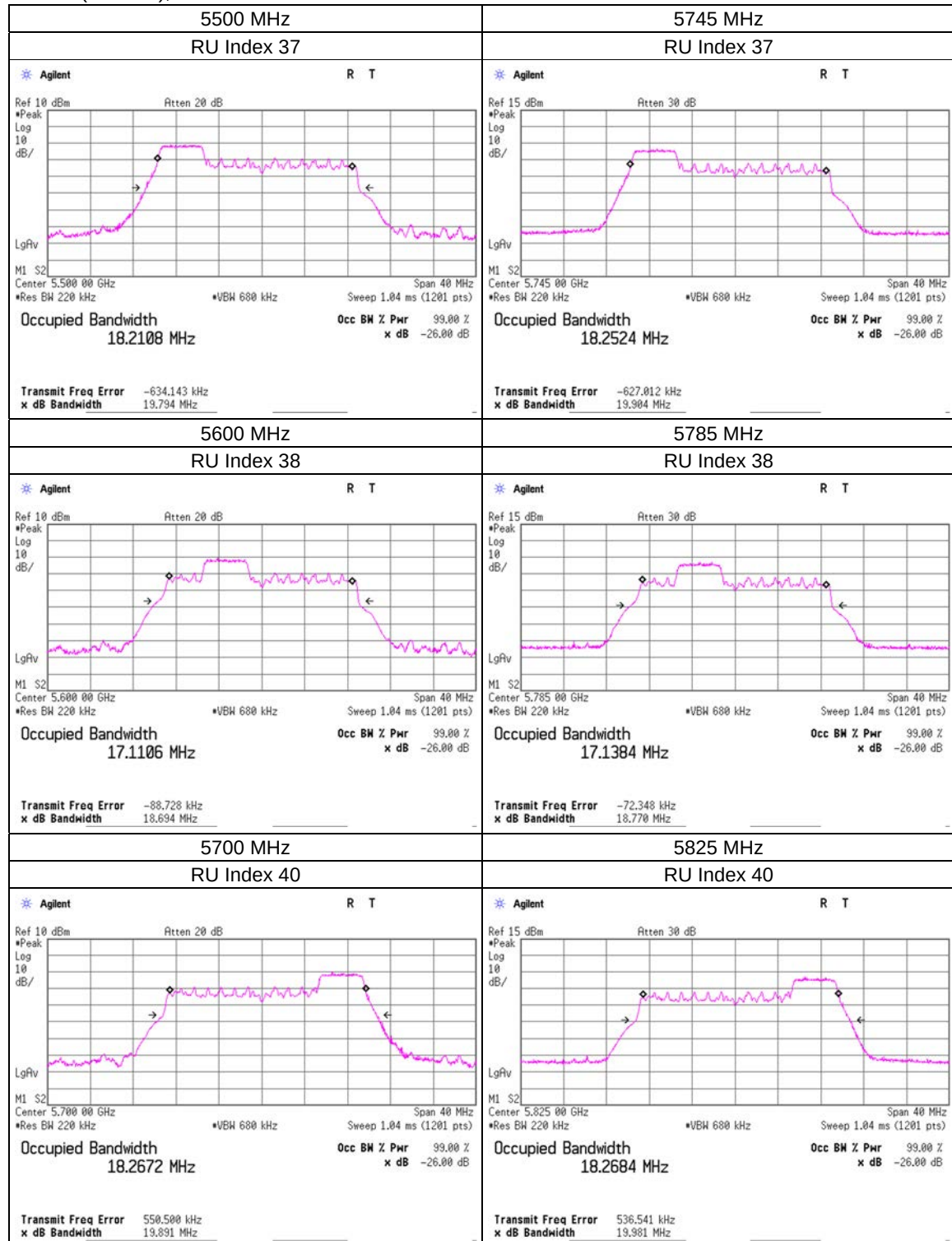
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-20(OFDMA), 52-tone RU



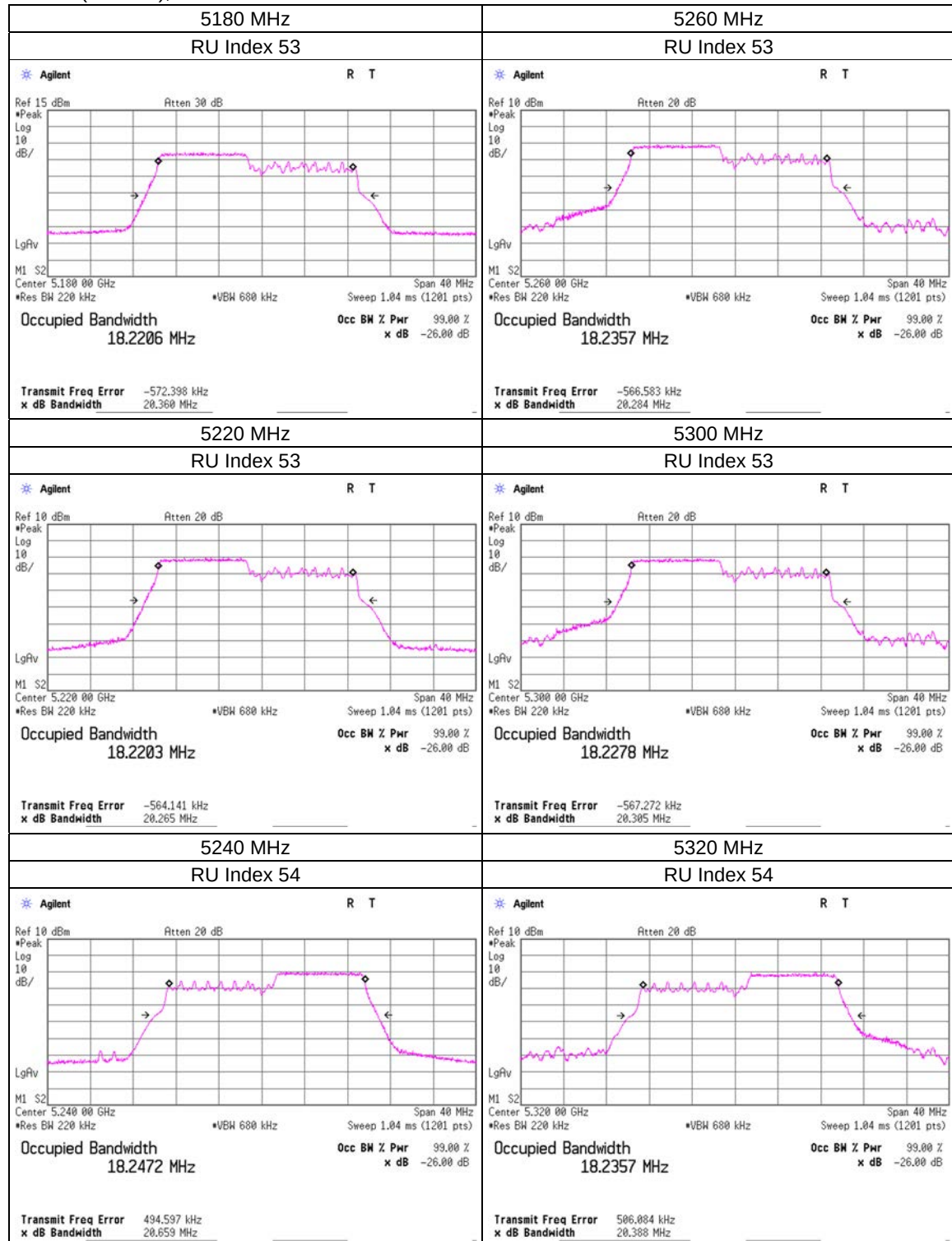
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-20(OFDMA), 52-tone RU



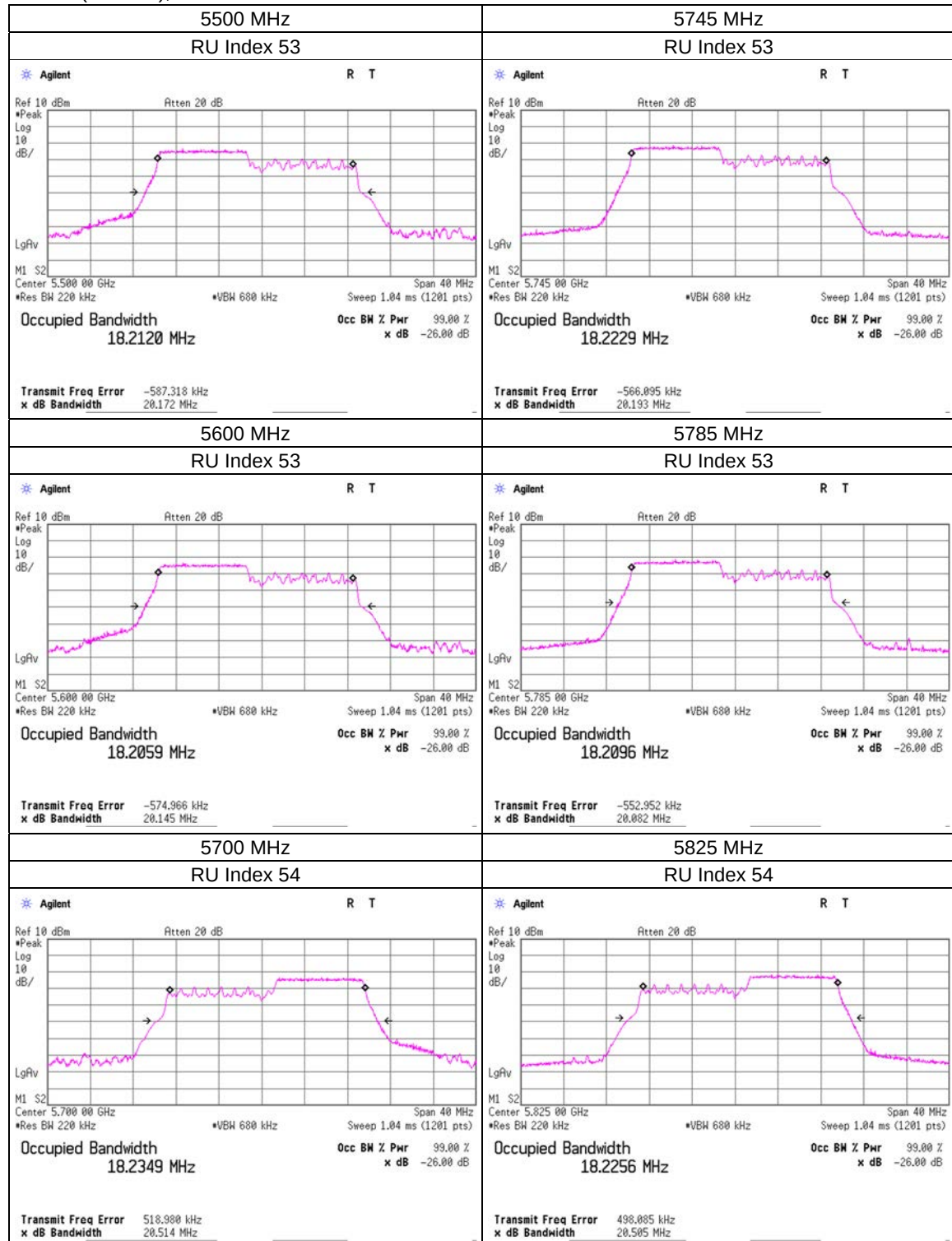
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-20(OFDMA), 106-tone RU



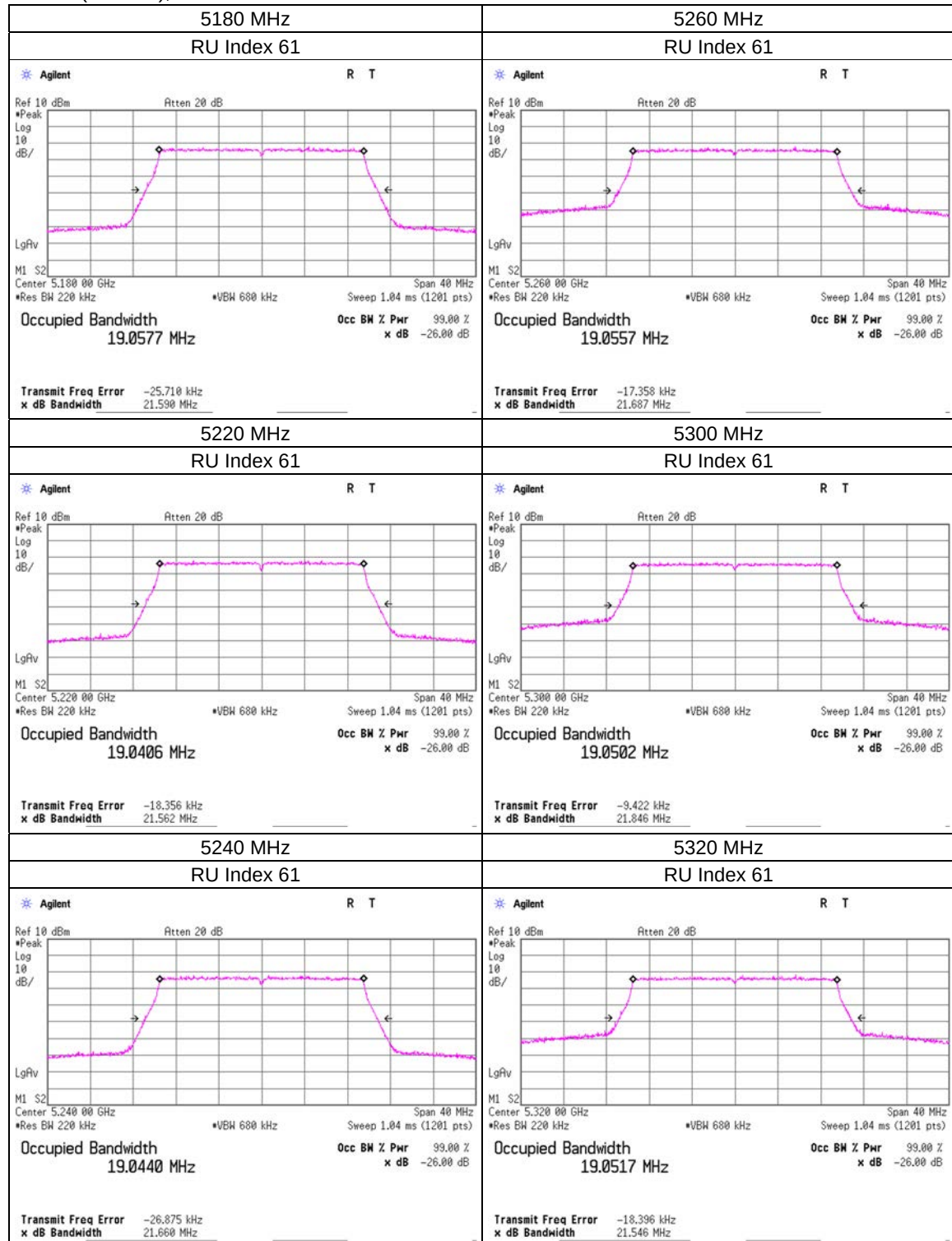
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-20(OFDMA), 106-tone RU



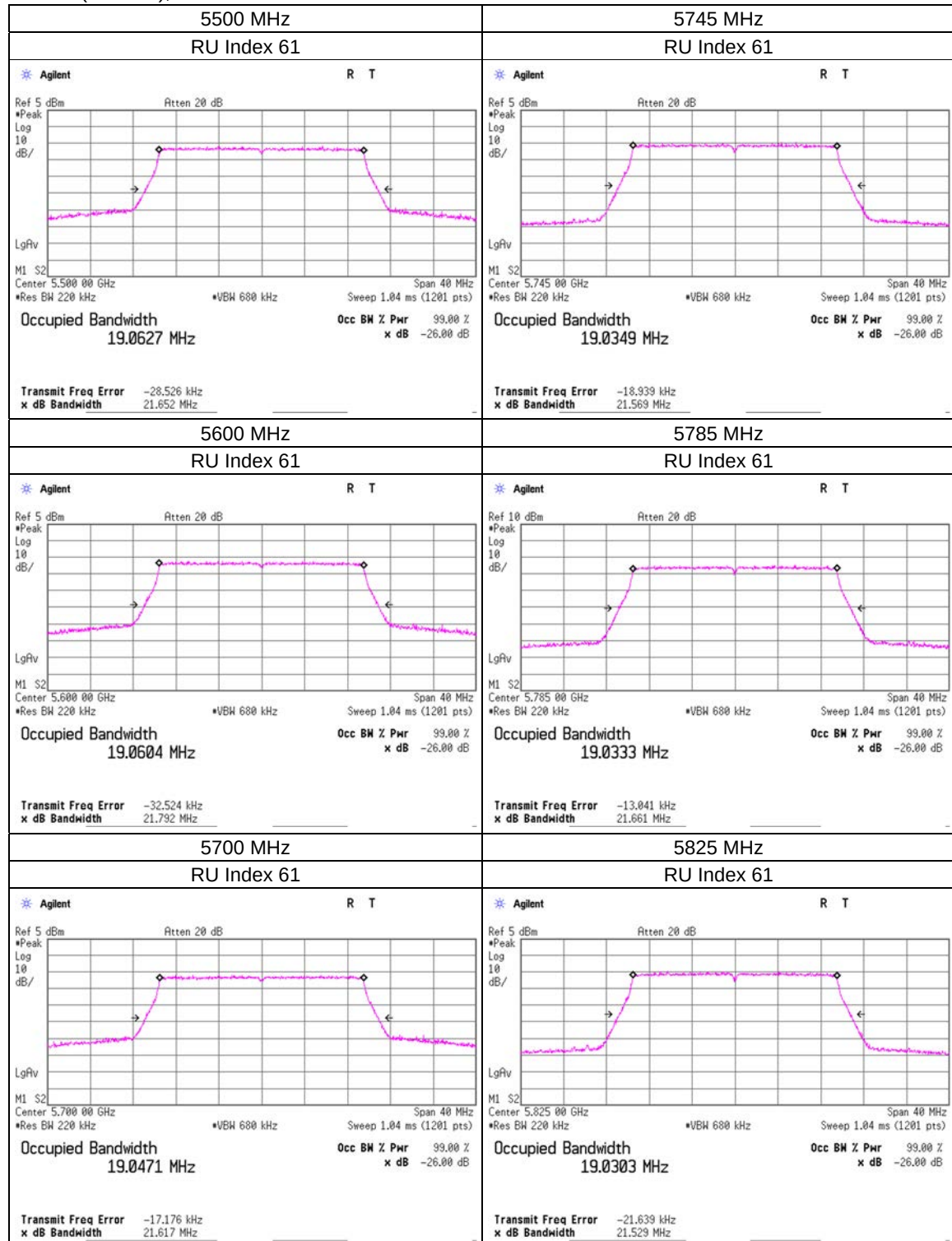
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-20(OFDMA), 242-tone RU



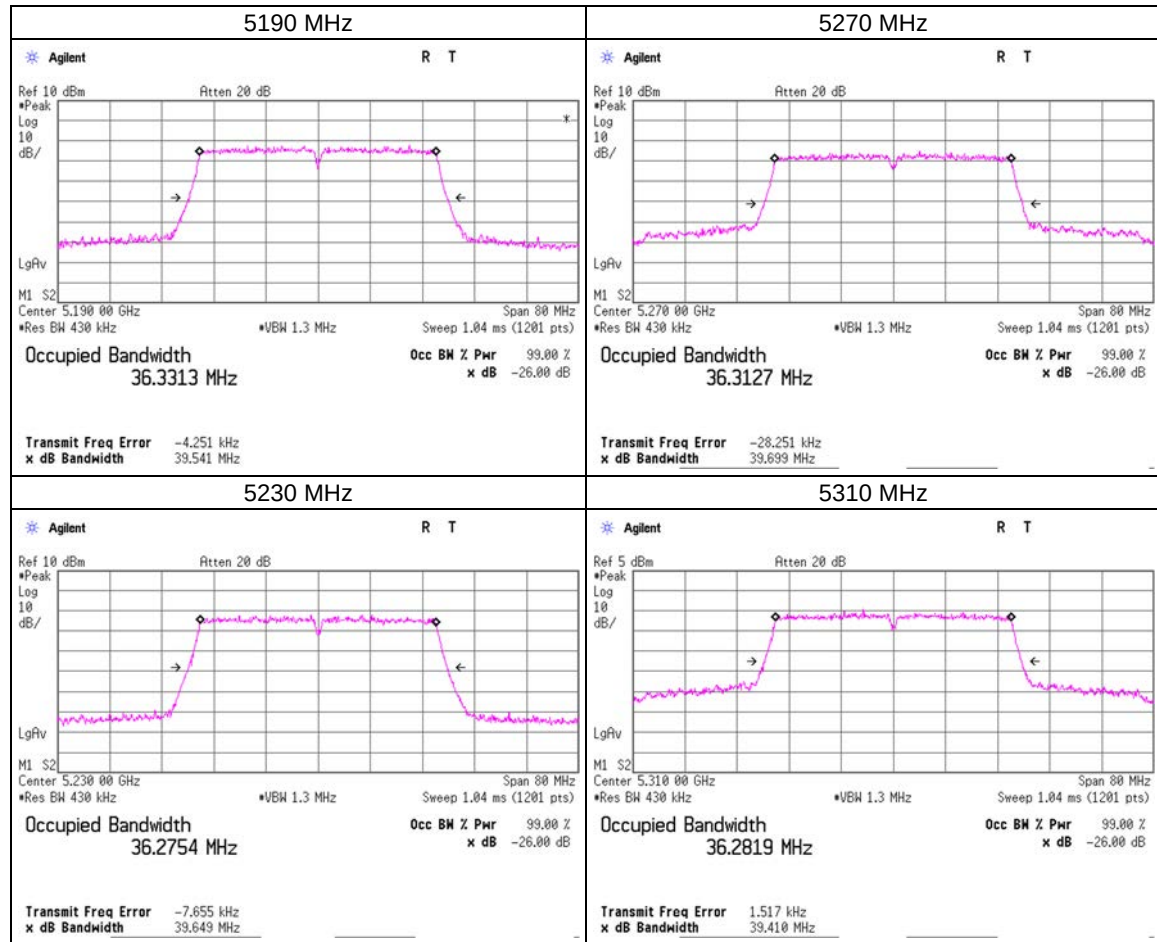
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-20(OFDMA), 242-tone RU



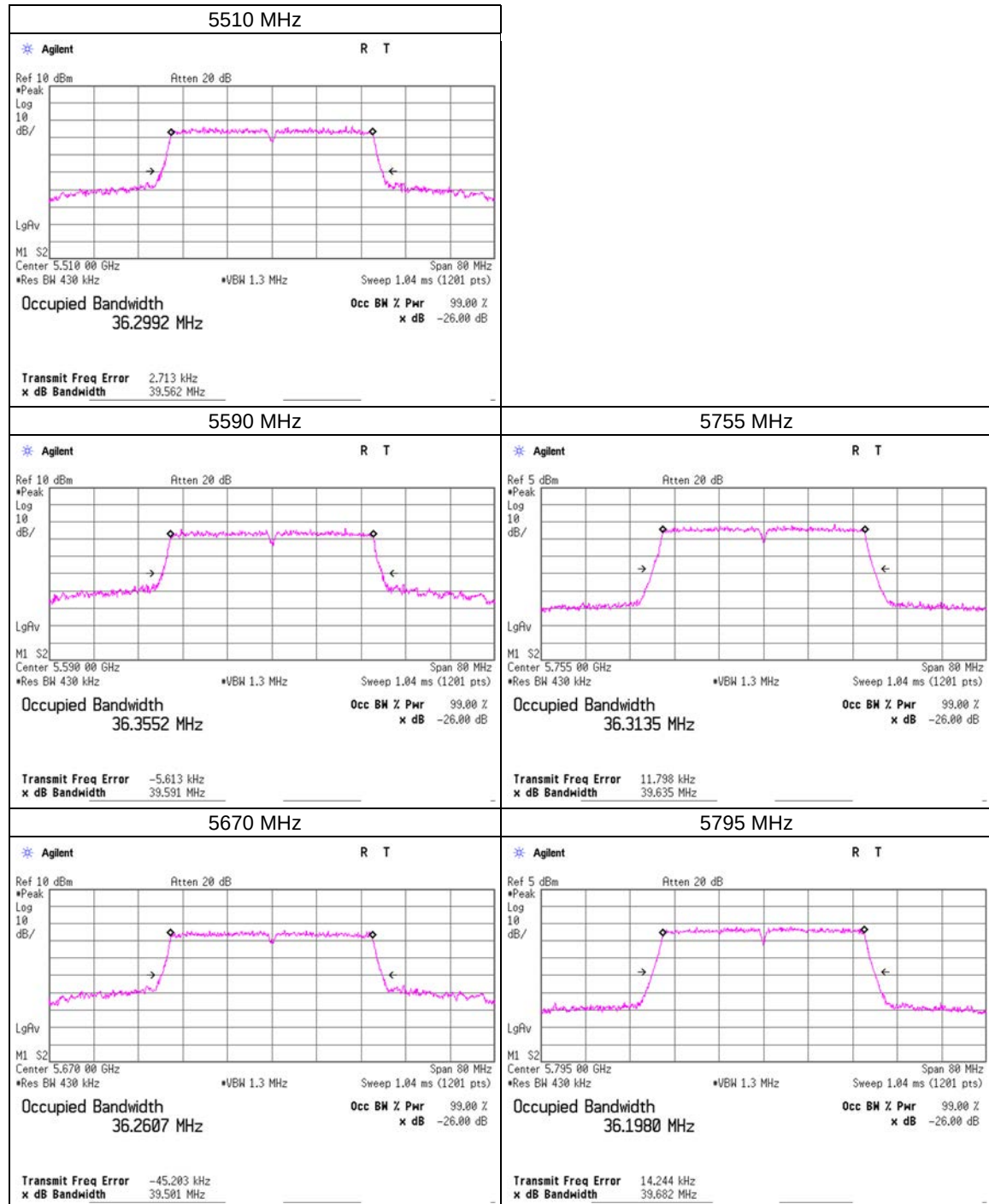
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-40



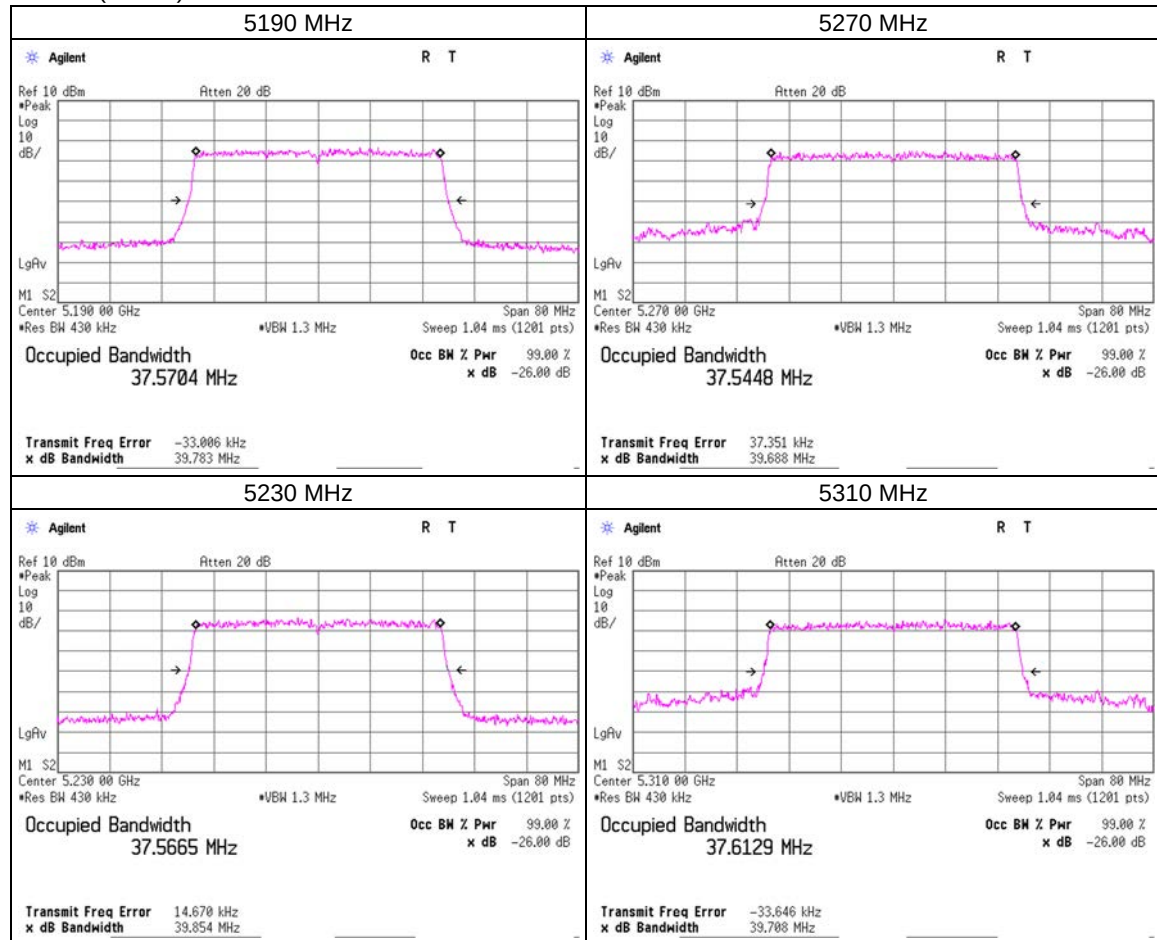
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-40



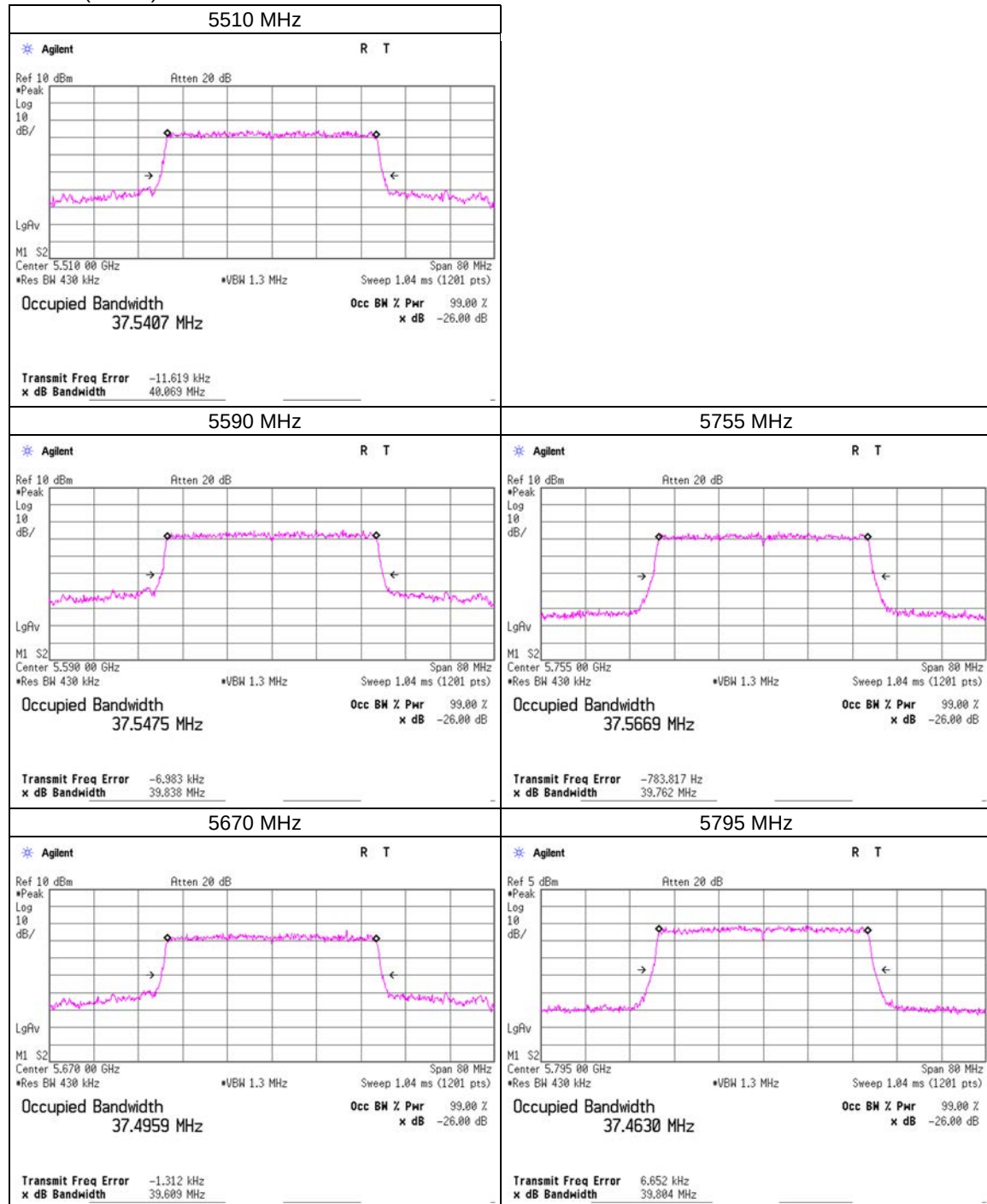
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-40(OFDM)



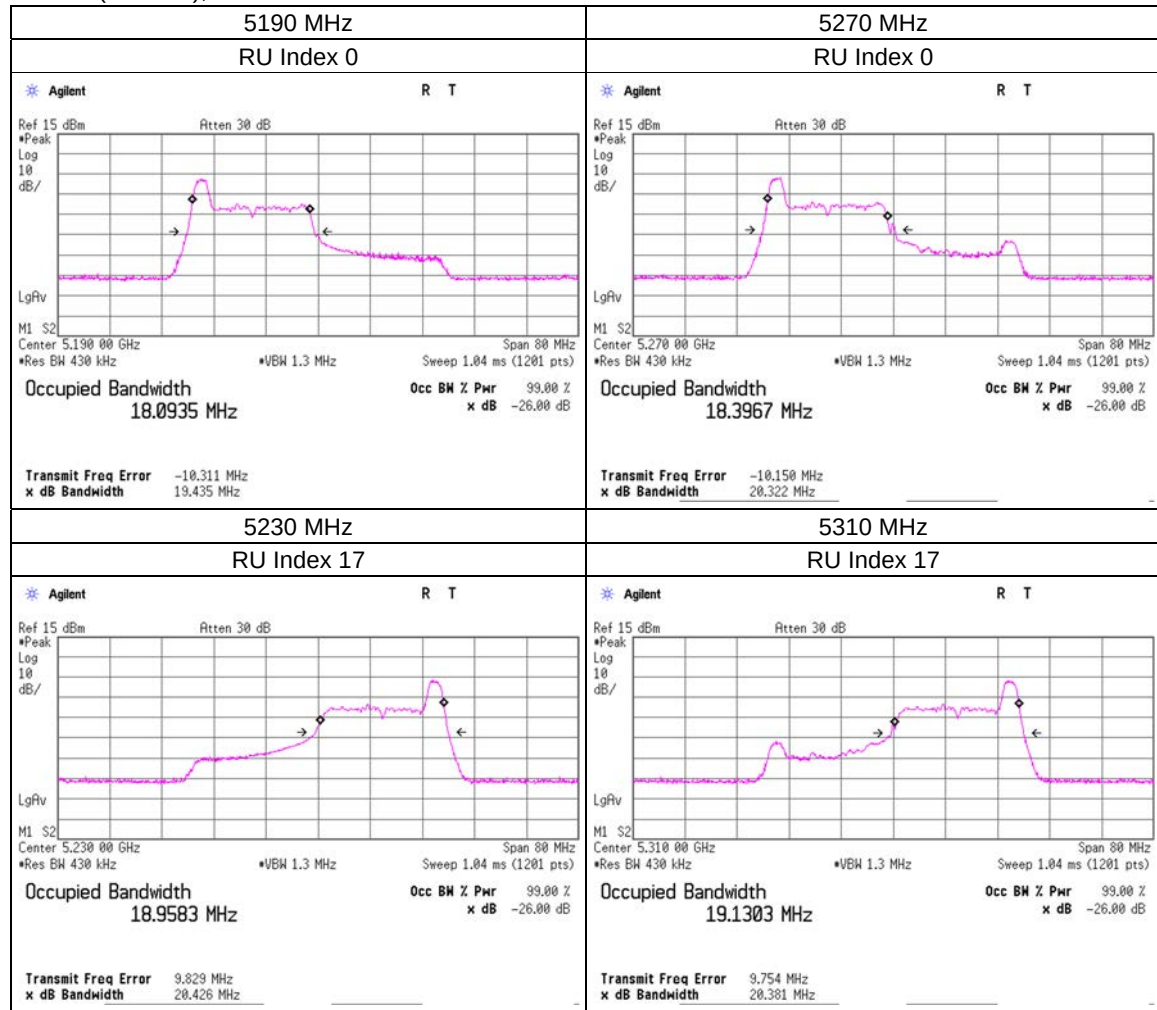
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-40(OFDM)



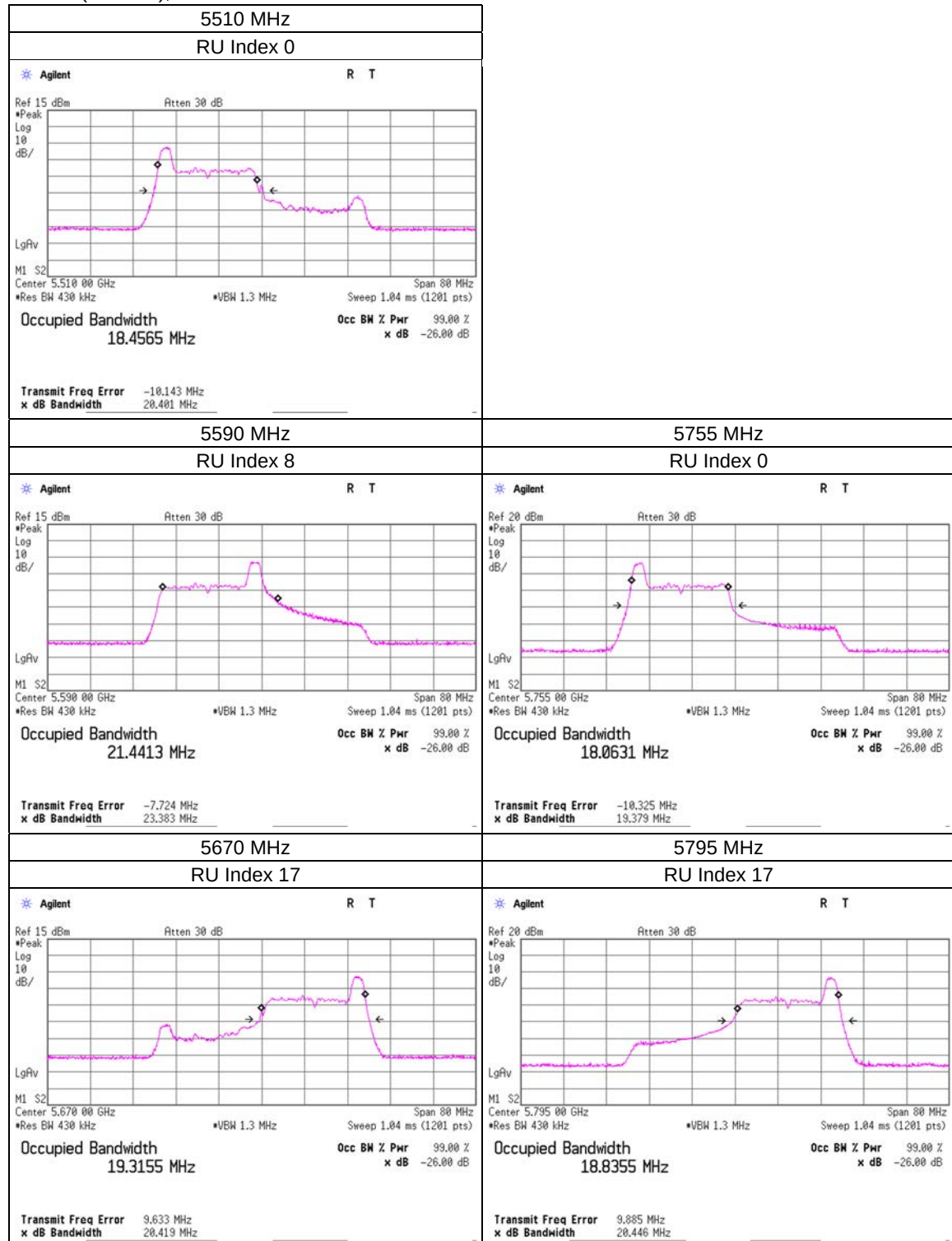
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-40(OFDMA), 26-tone RU



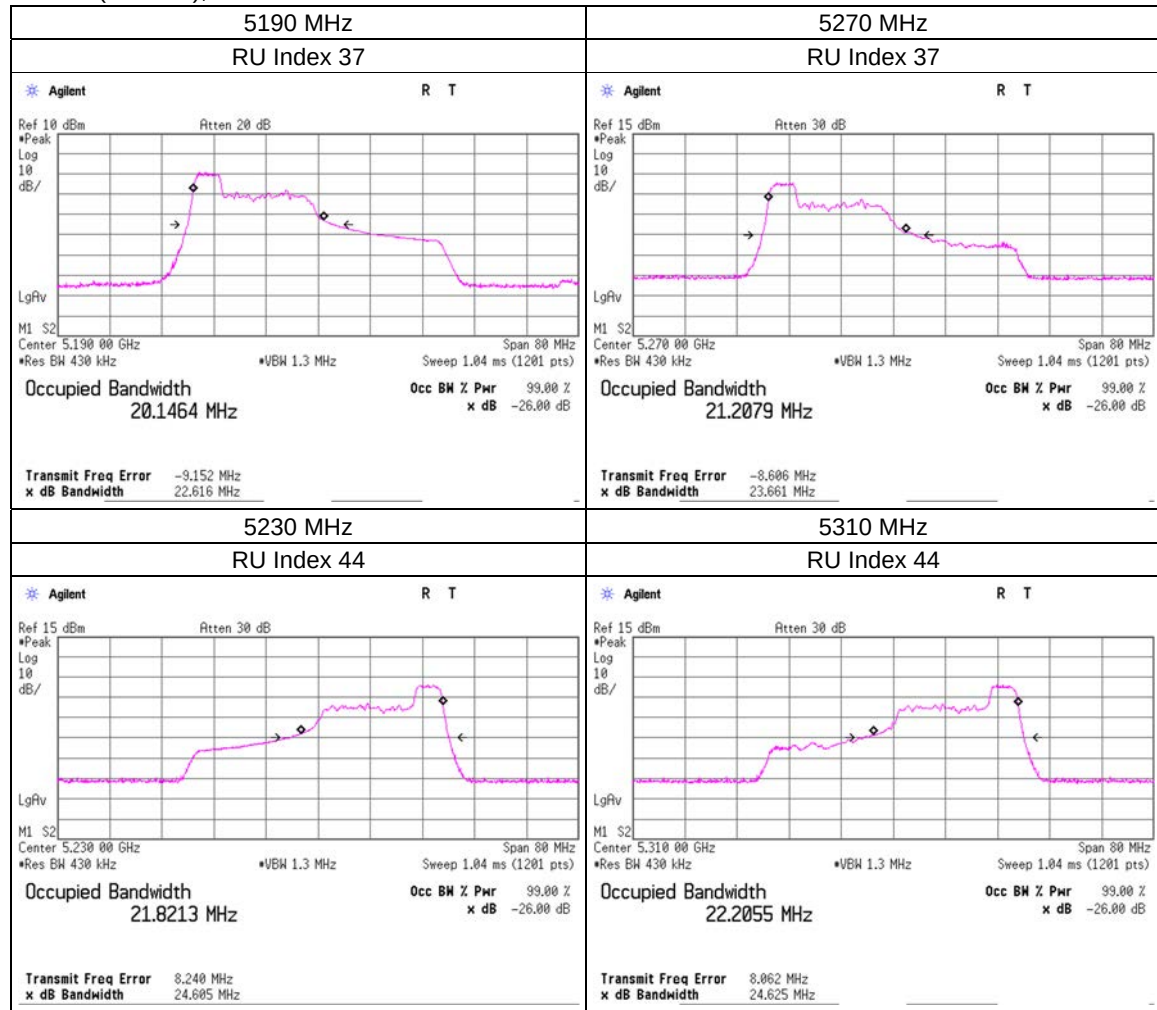
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-40(OFDMA), 26-tone RU



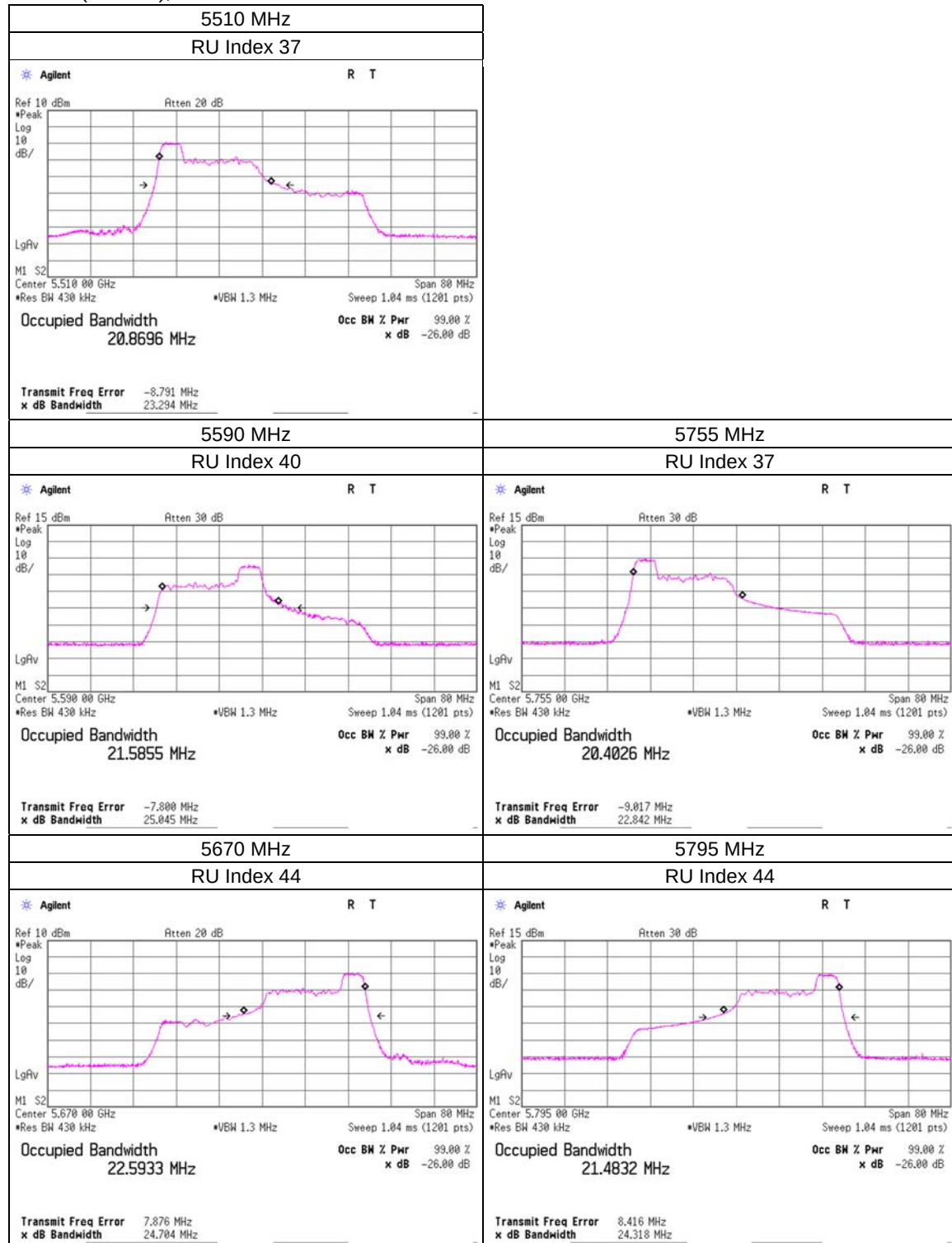
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-40(OFDMA), 52-tone RU



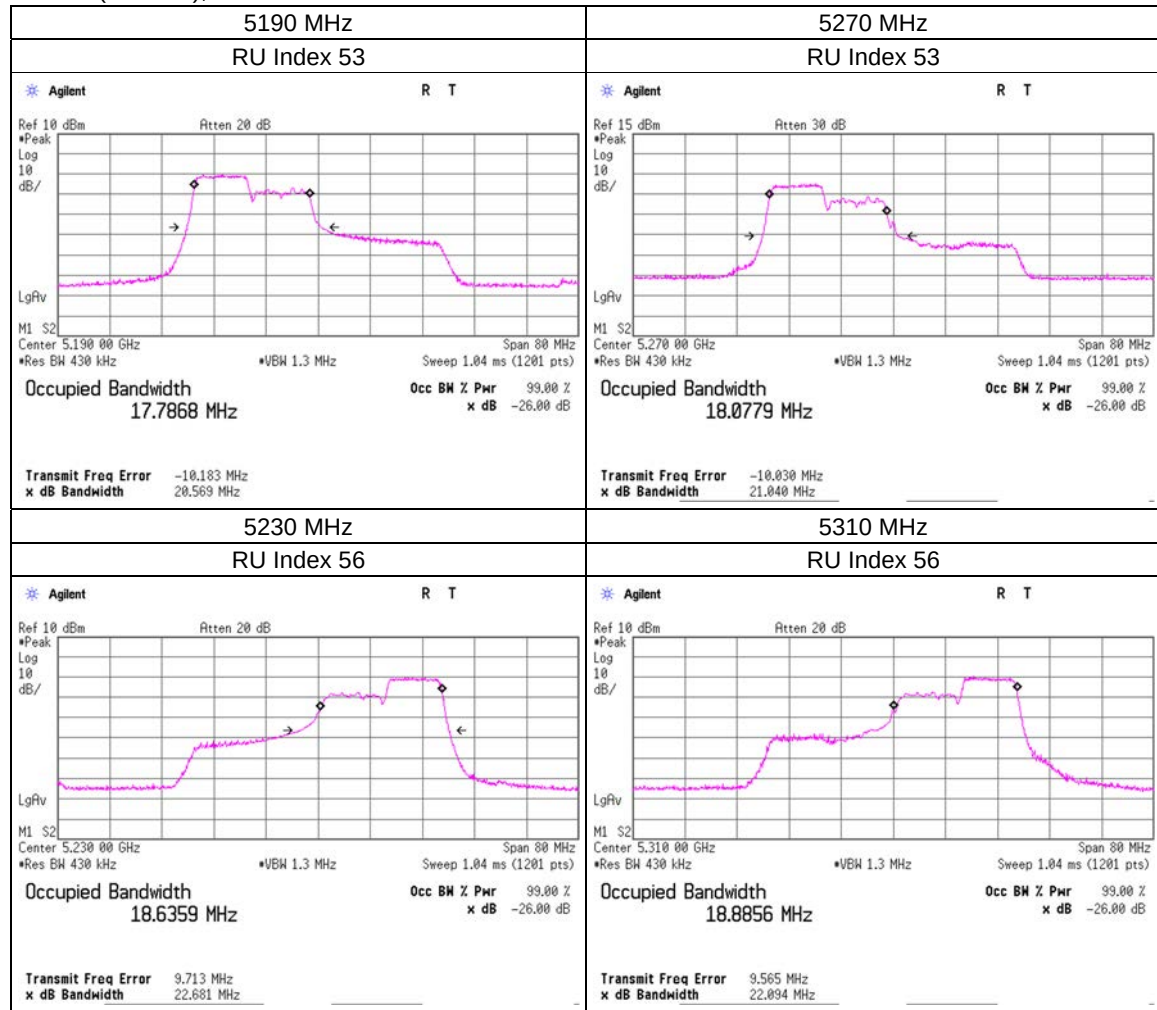
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-40(OFDMA), 52-tone RU



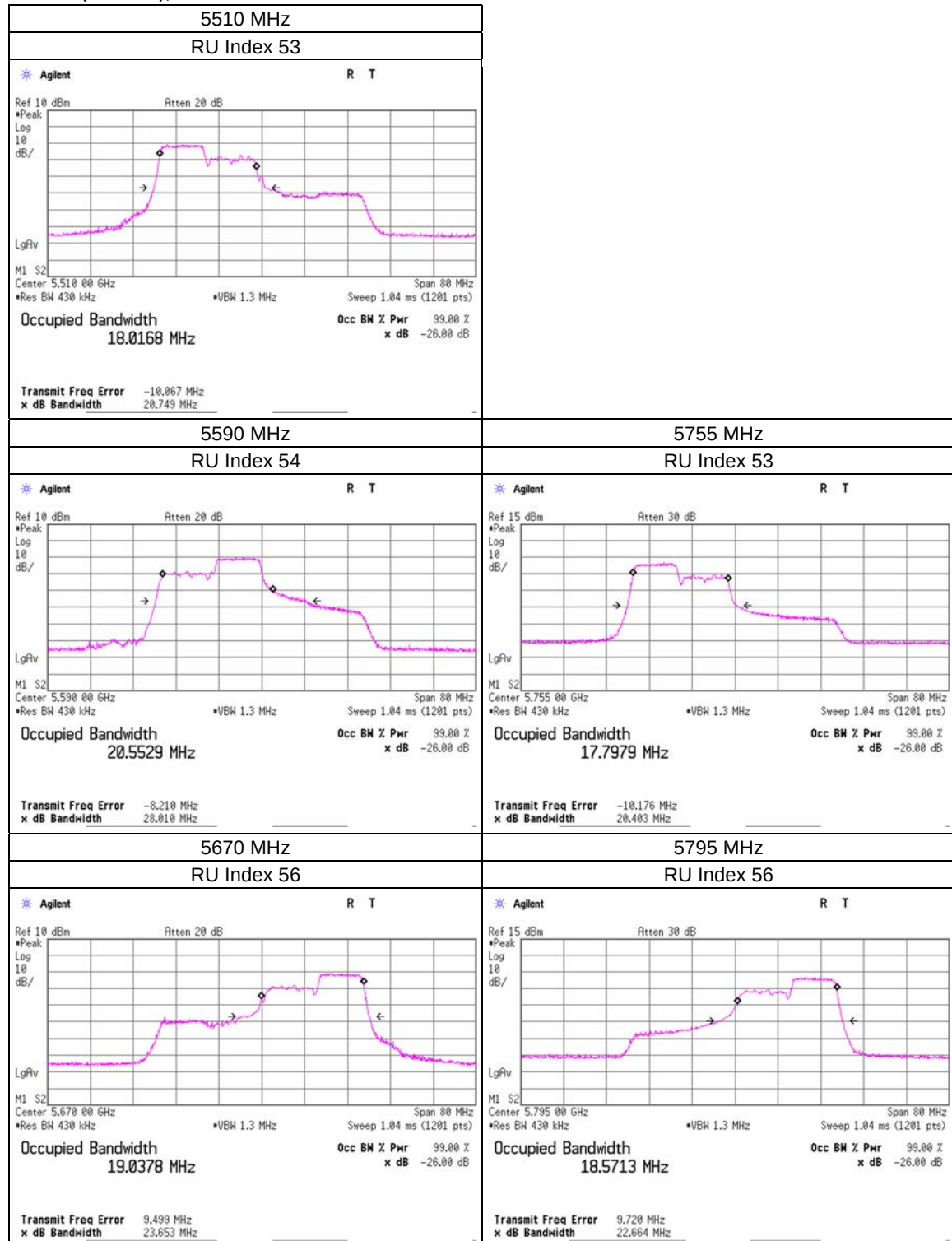
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-40(OFDMA), 106-tone RU



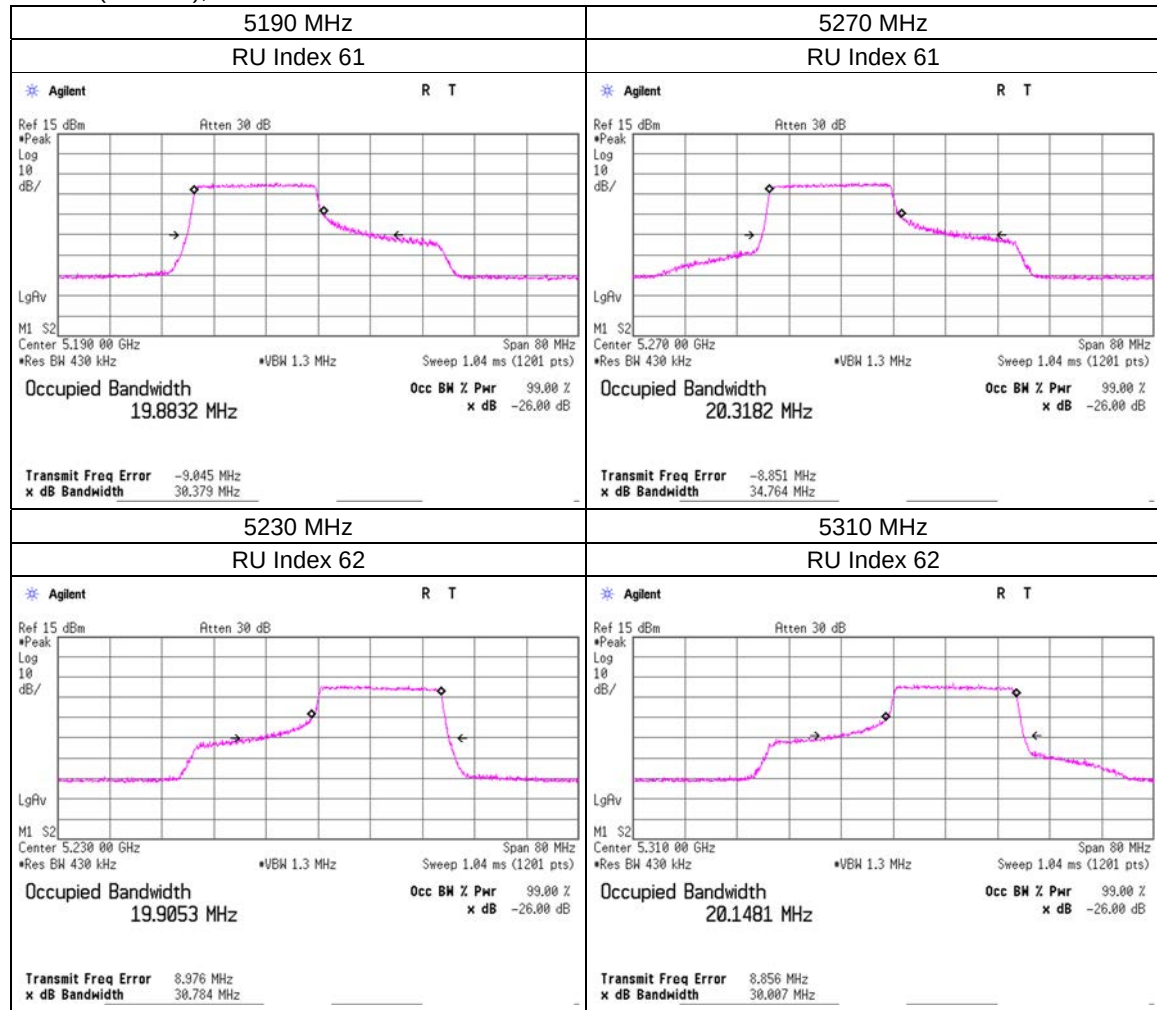
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-40(OFDMA), 106-tone RU



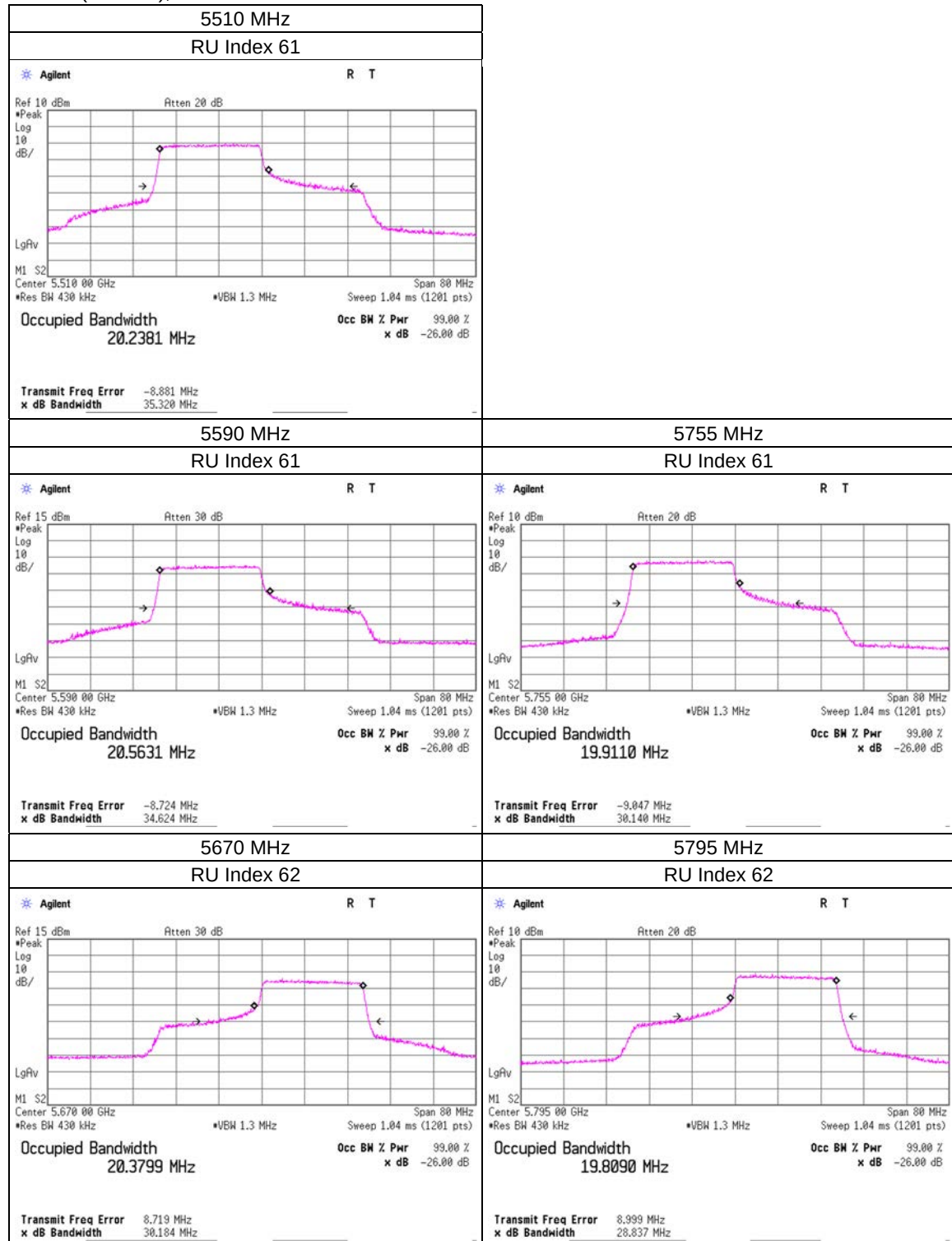
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-40(OFDMA), 242-tone RU



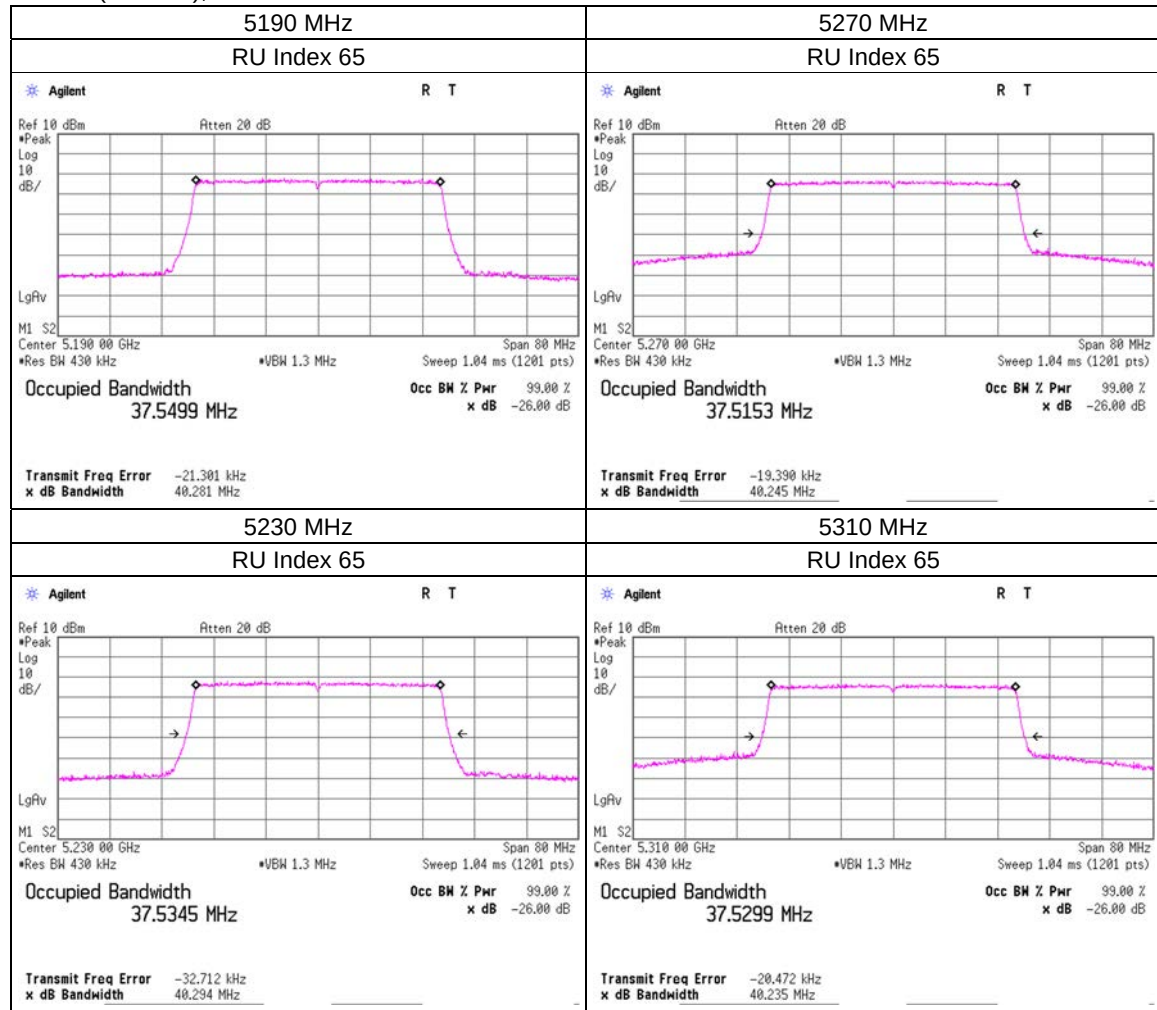
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-40(OFDMA), 242-tone RU



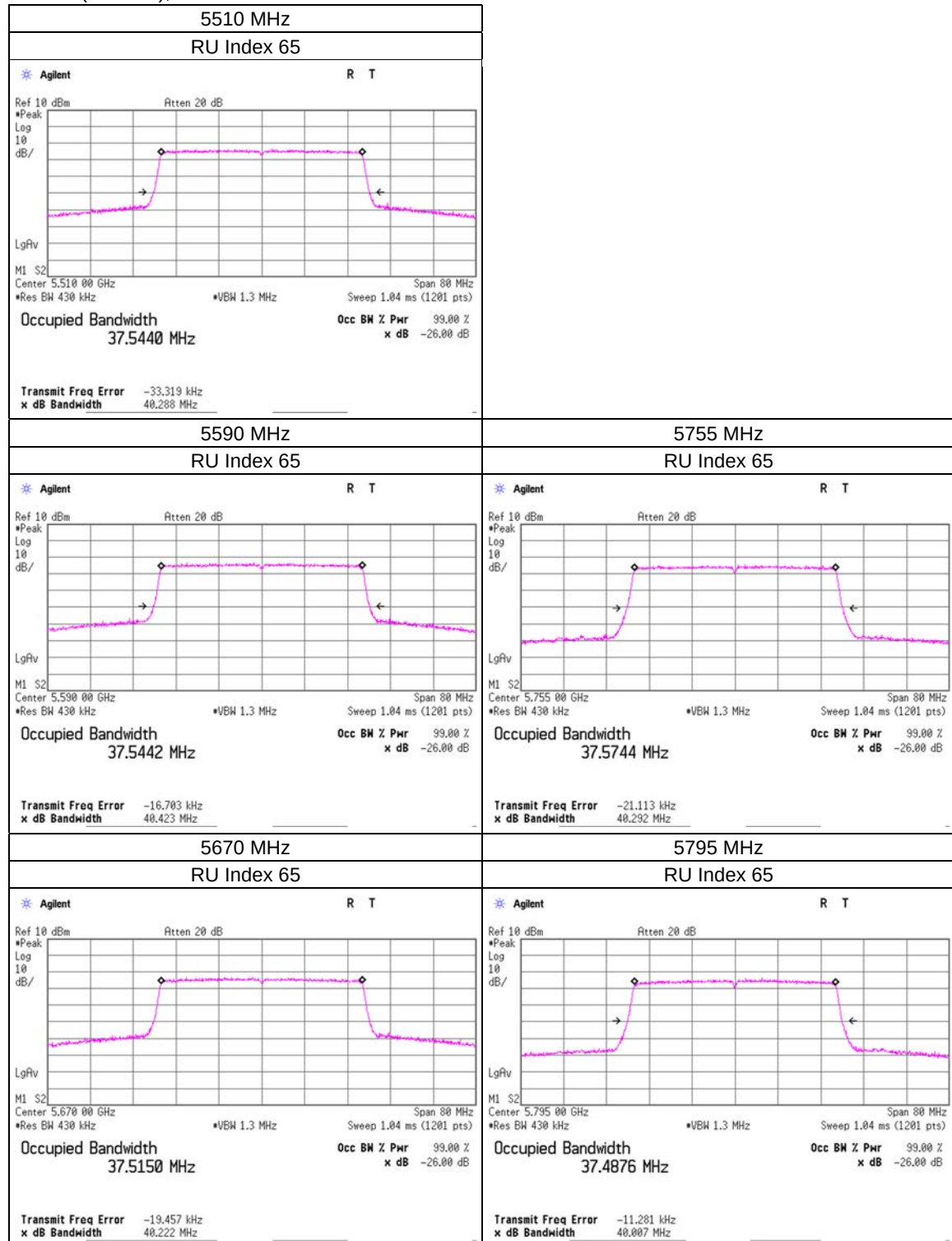
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-40(OFDMA), 484-tone RU



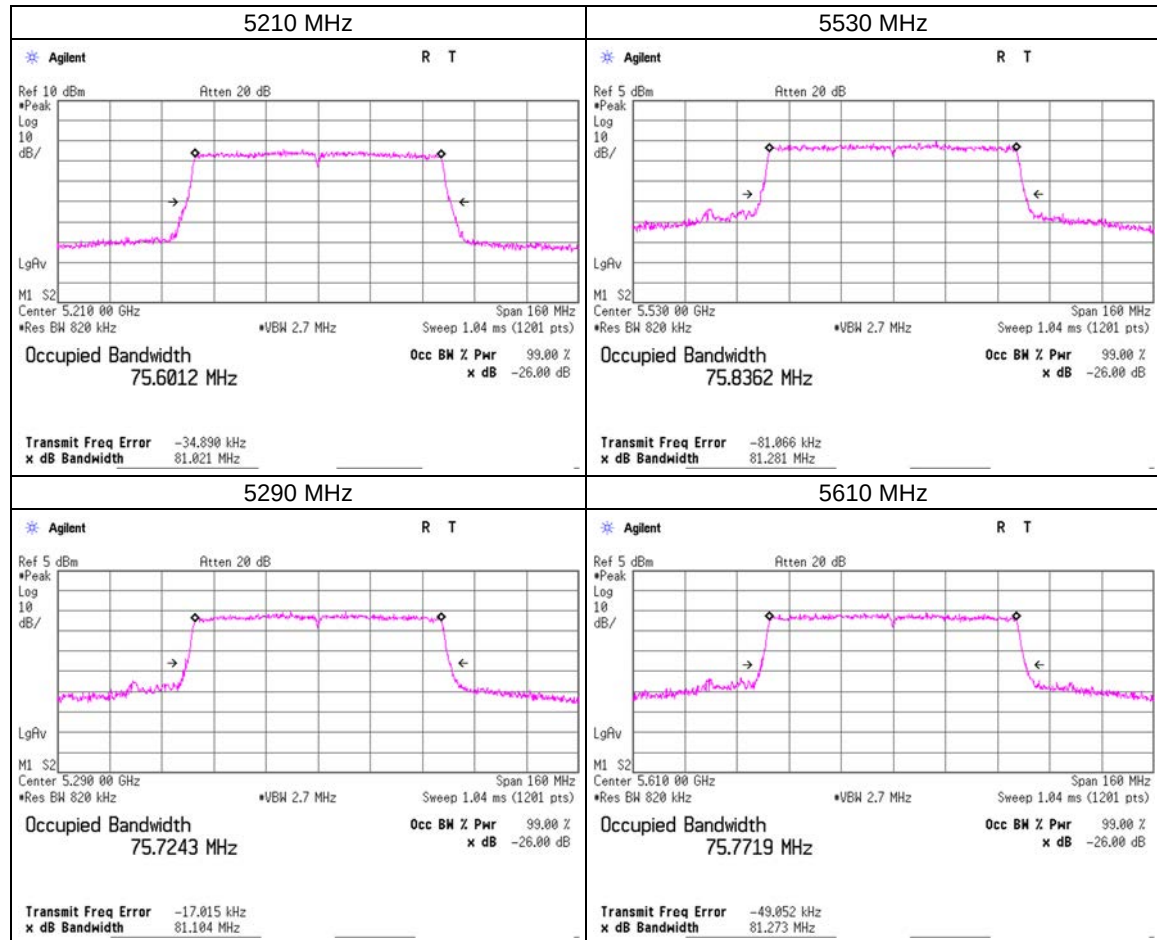
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-40(OFDMA), 484-tone RU



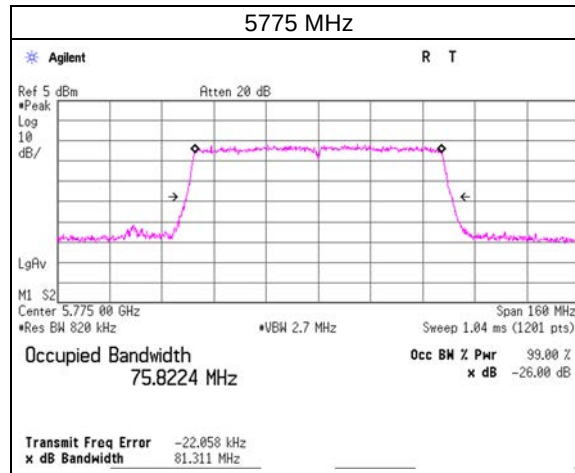
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-80



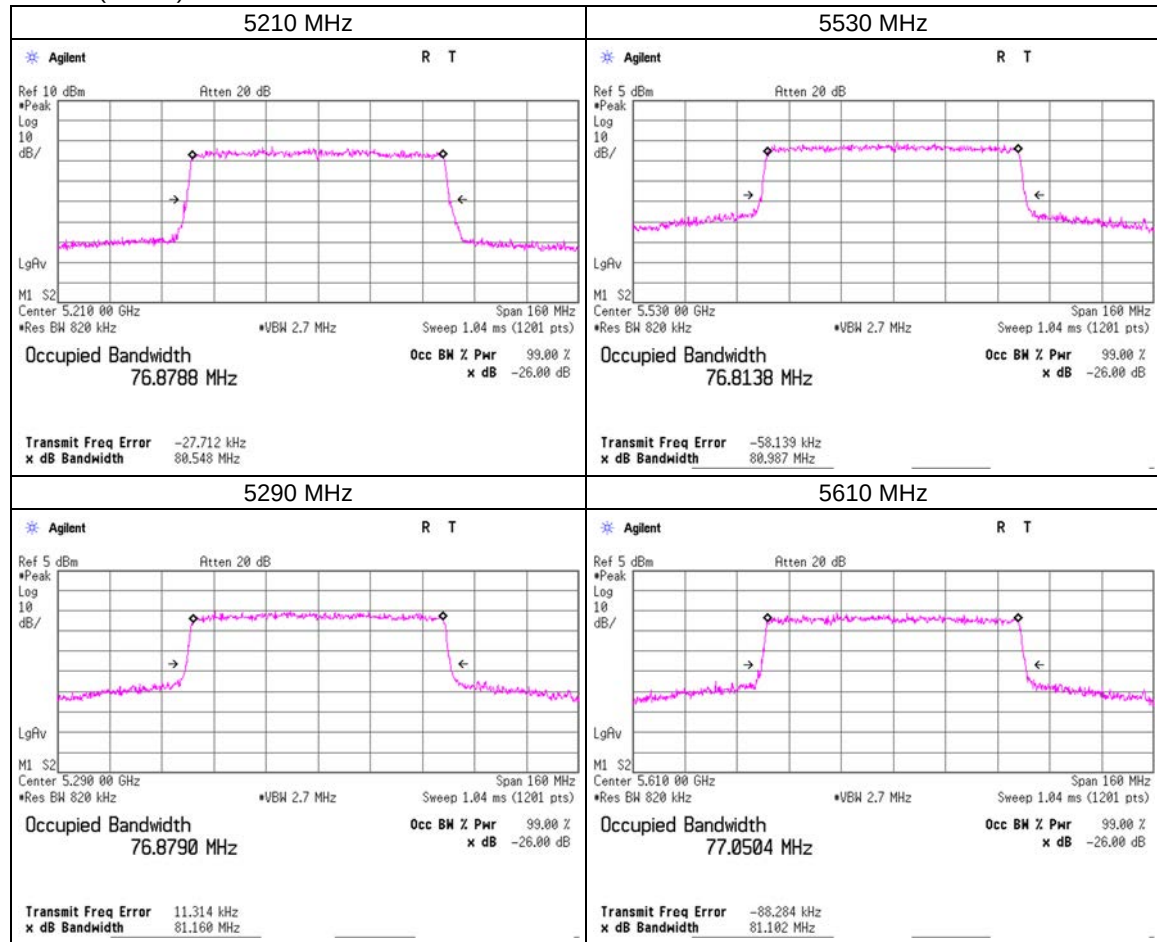
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ac-80



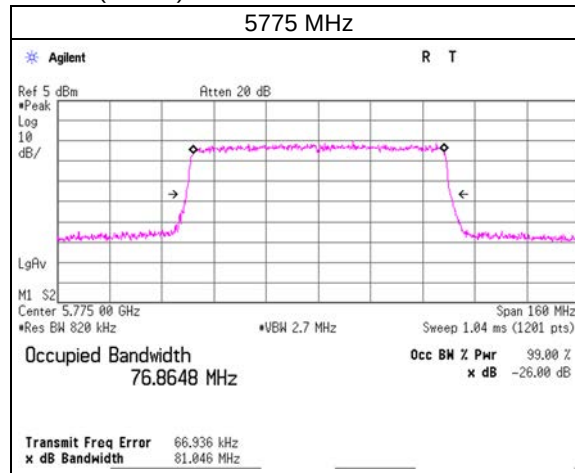
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDM)



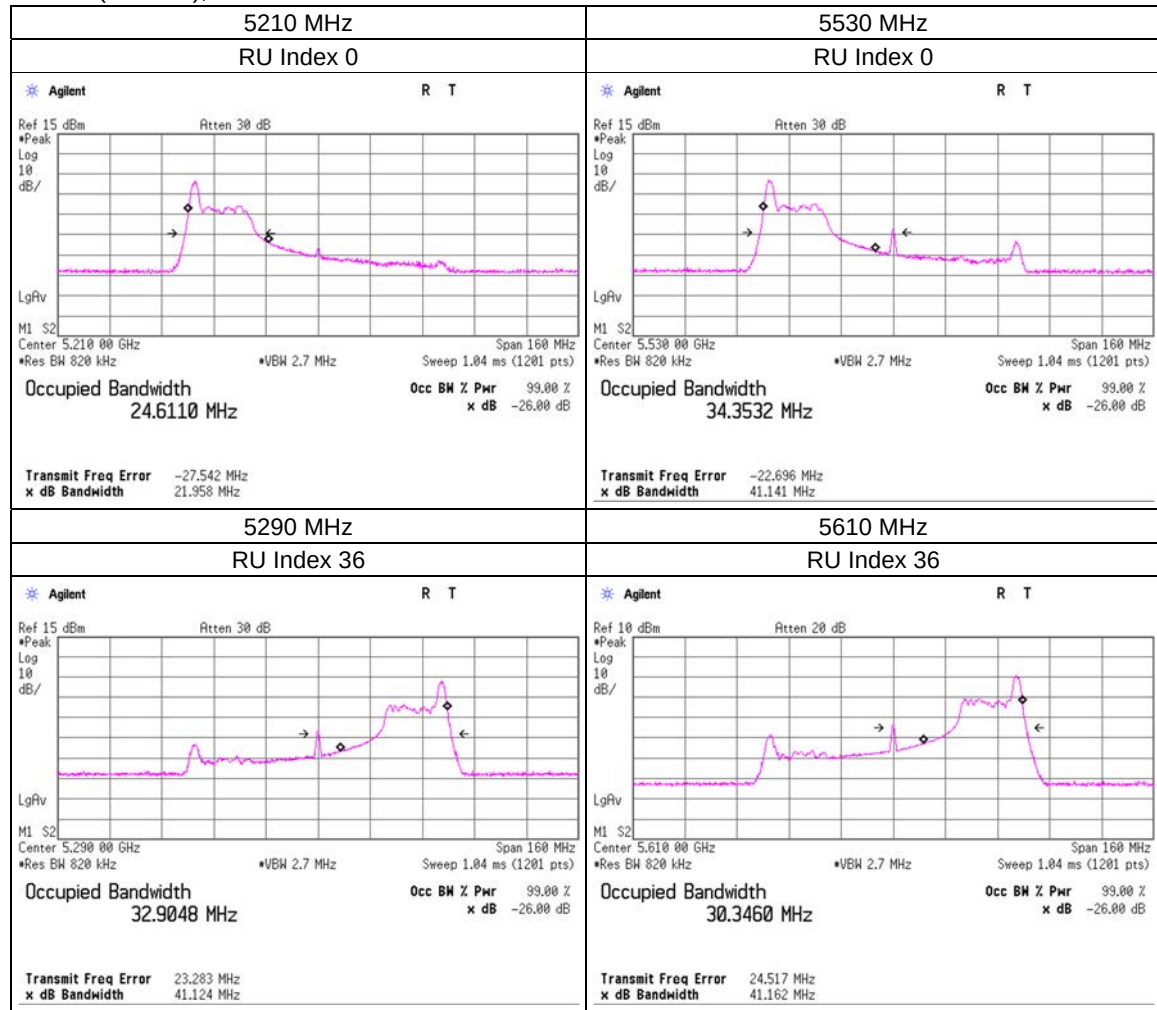
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDM)



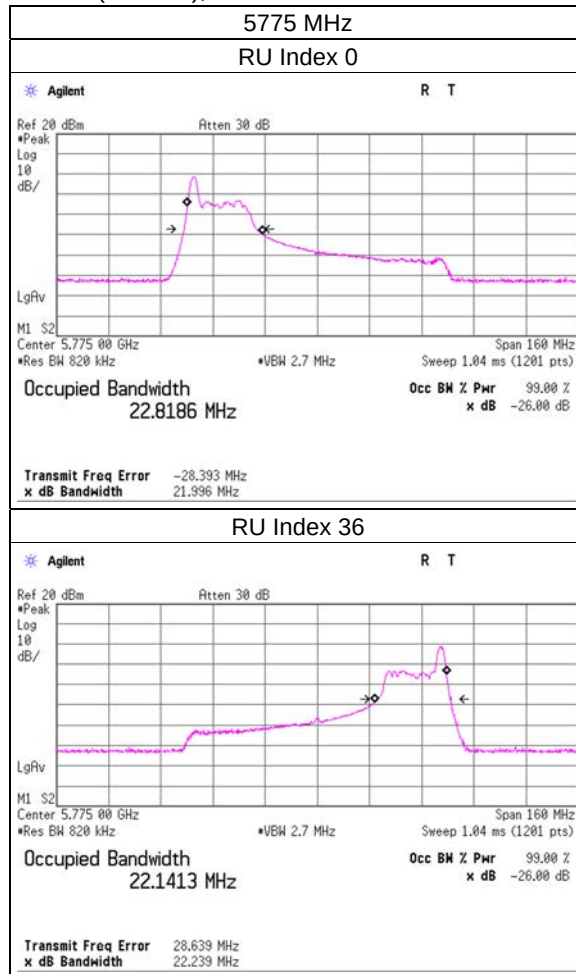
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDMA), 26-tone RU



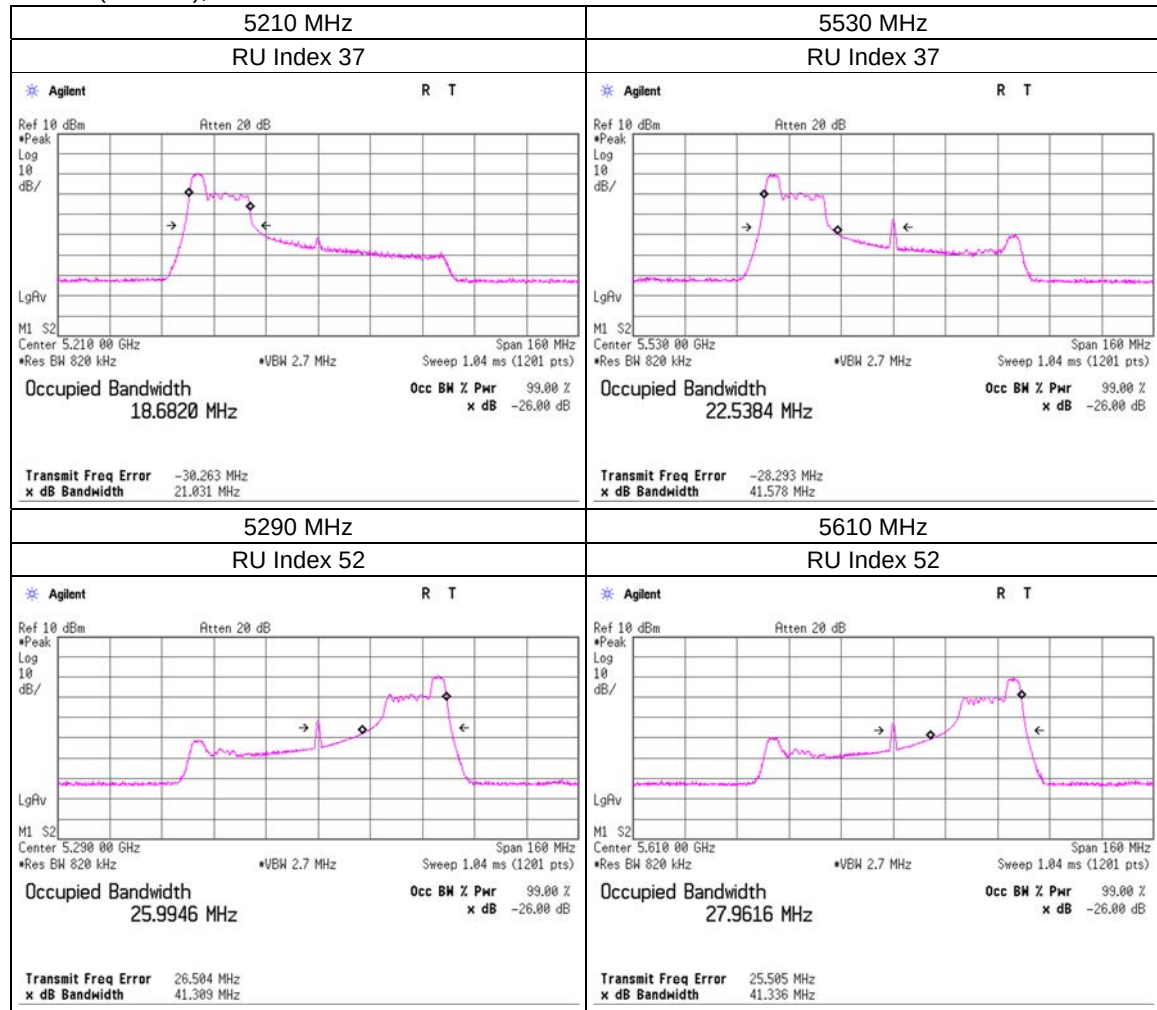
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDMA), 26-tone RU



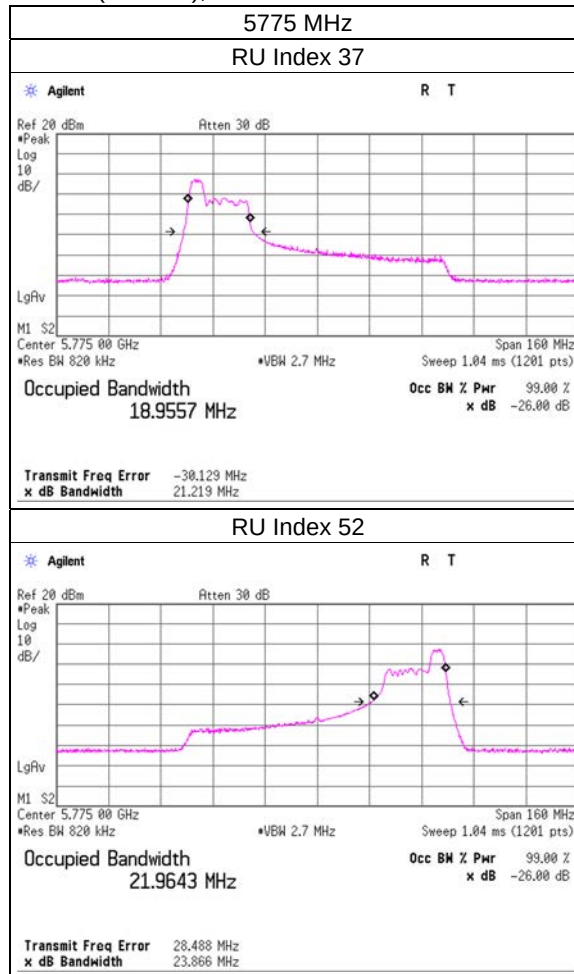
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDMA), 52-tone RU



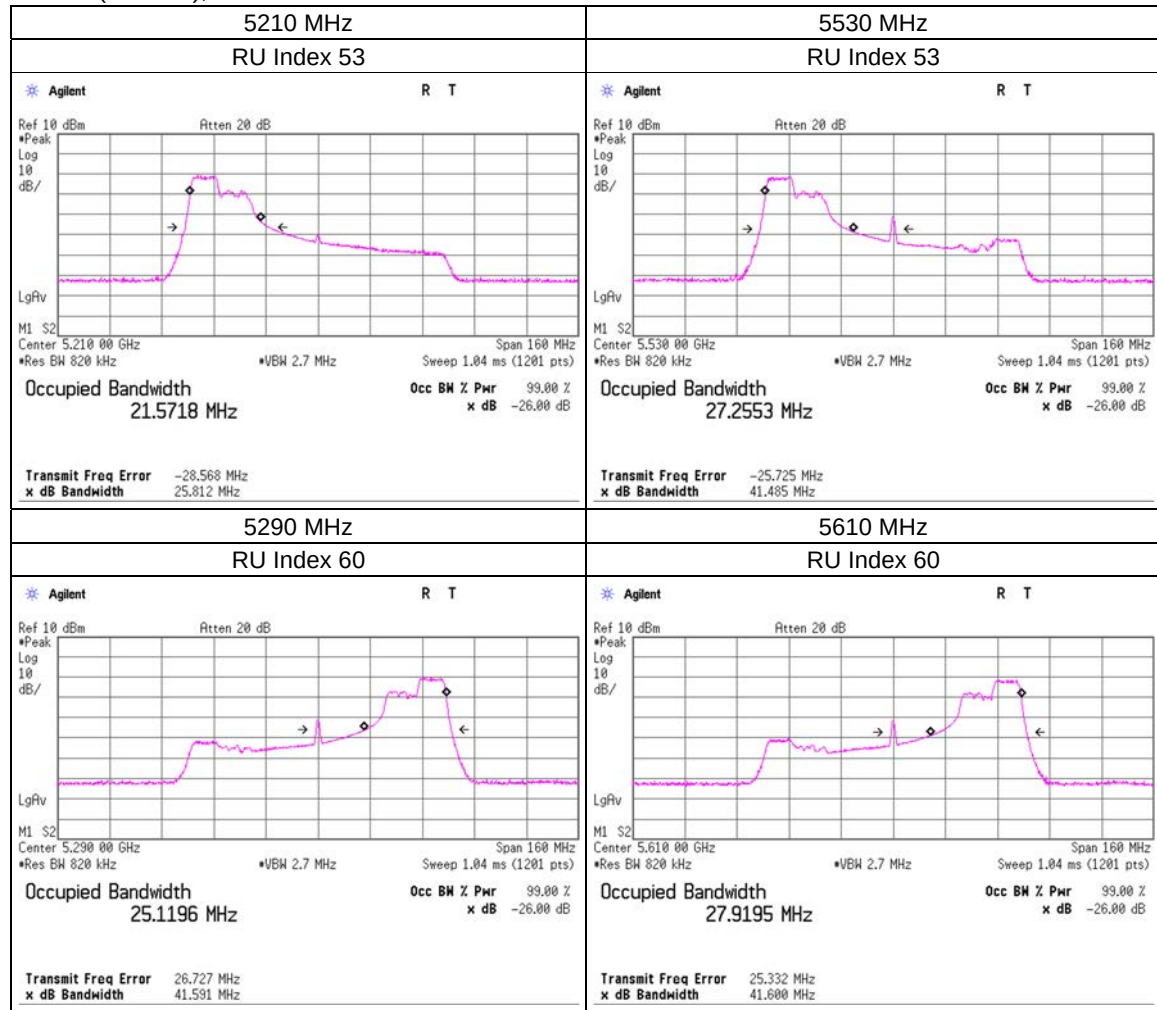
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDMA), 52-tone RU



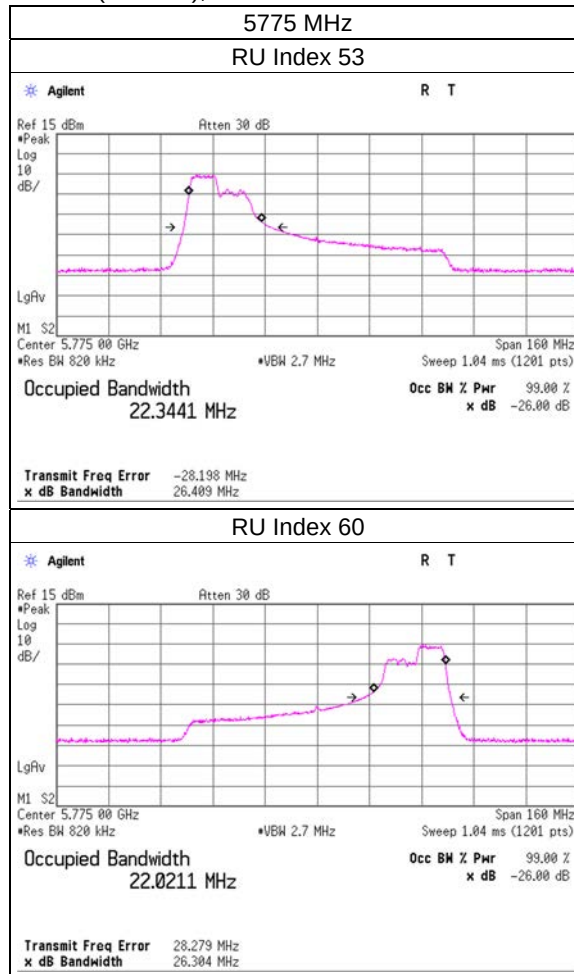
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDMA), 106-tone RU



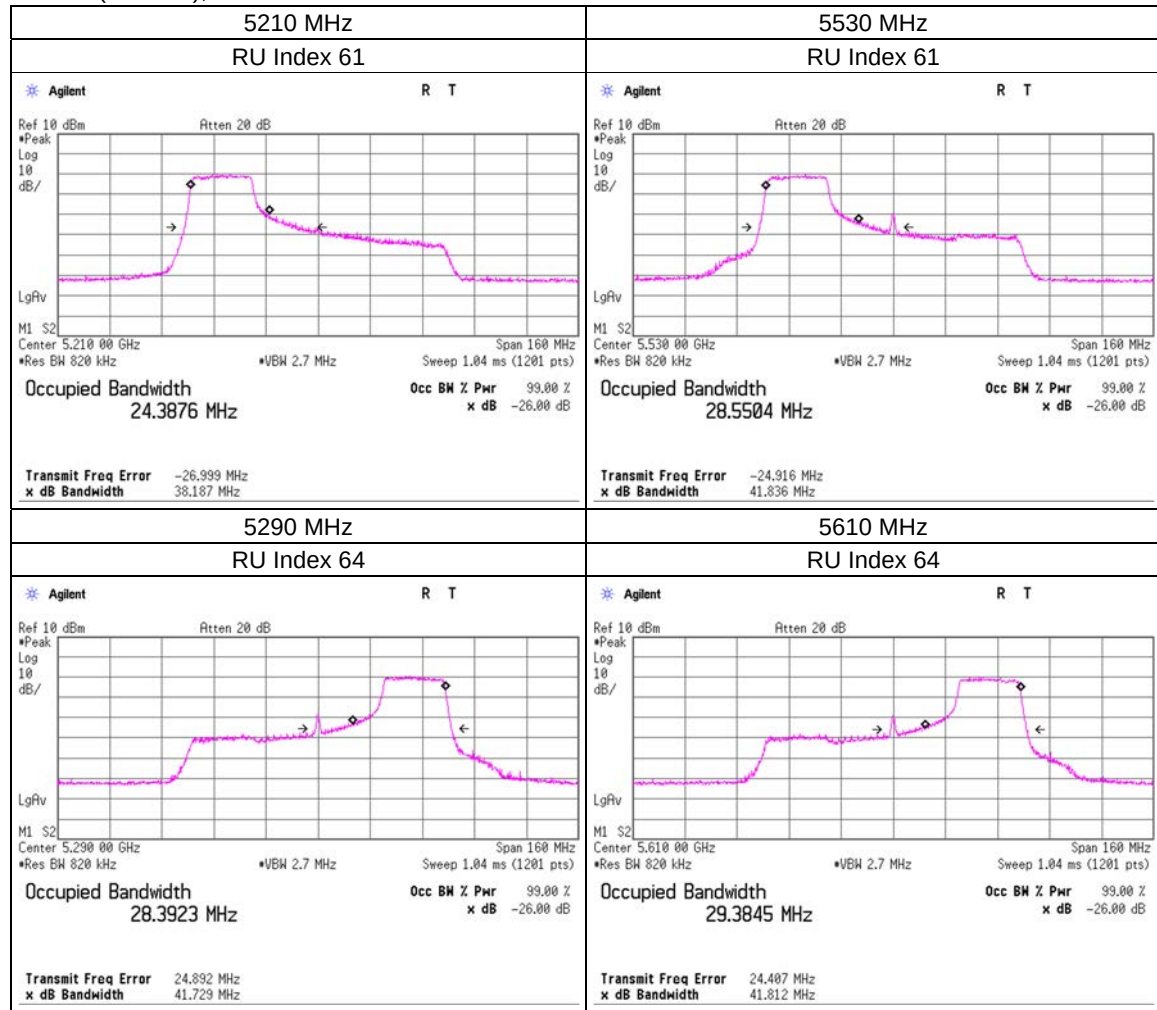
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDMA), 106-tone RU



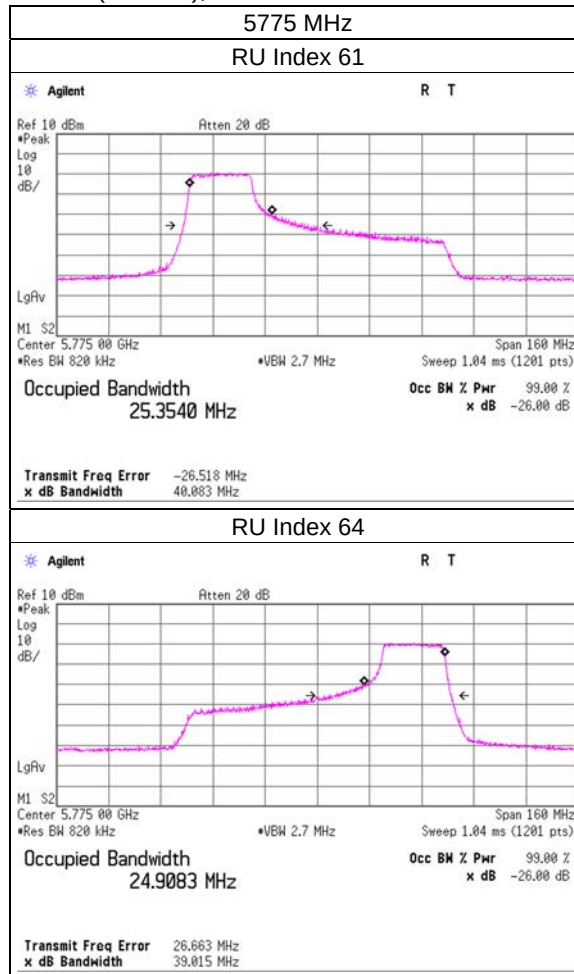
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDMA), 242-tone RU



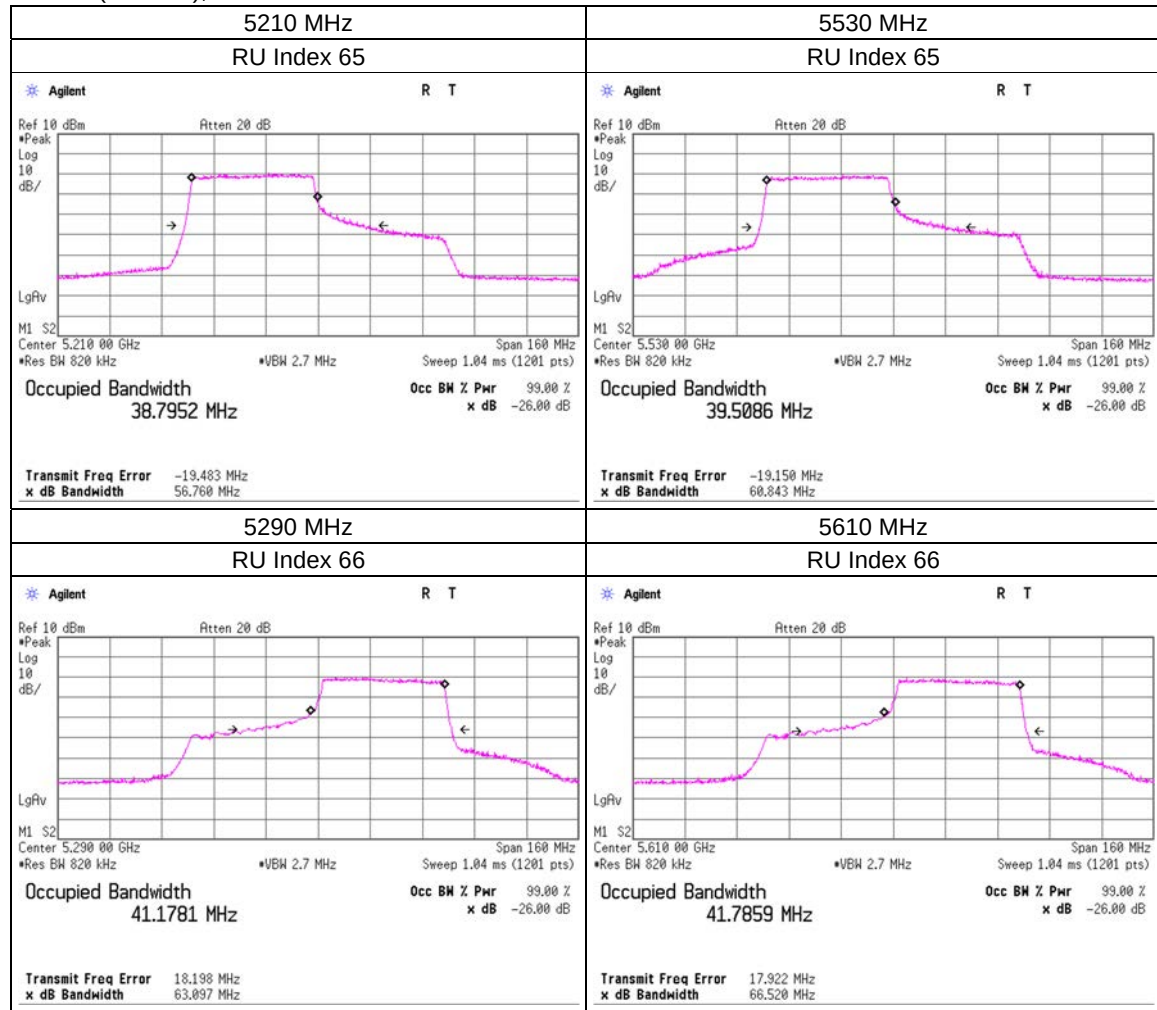
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDMA), 242-tone RU



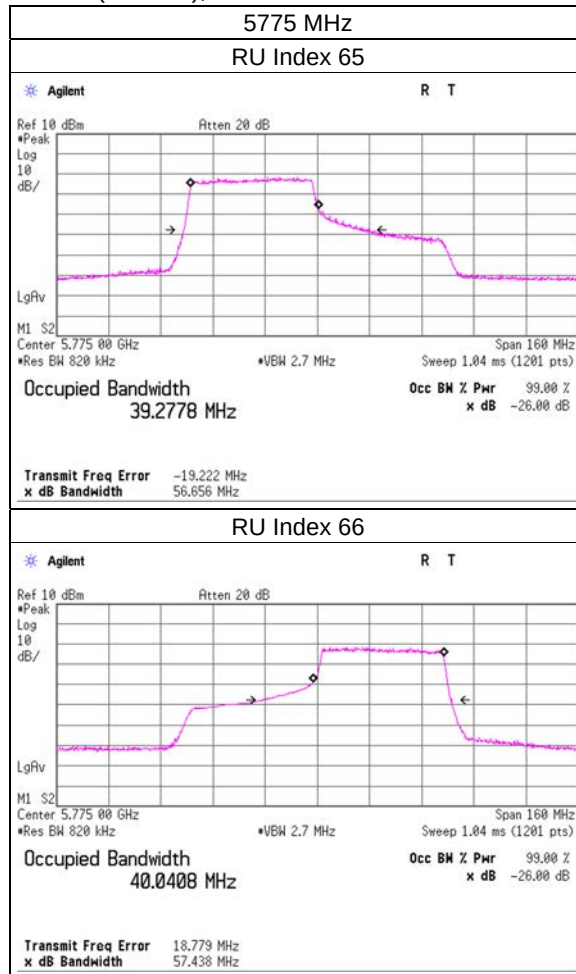
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDMA), 484-tone RU



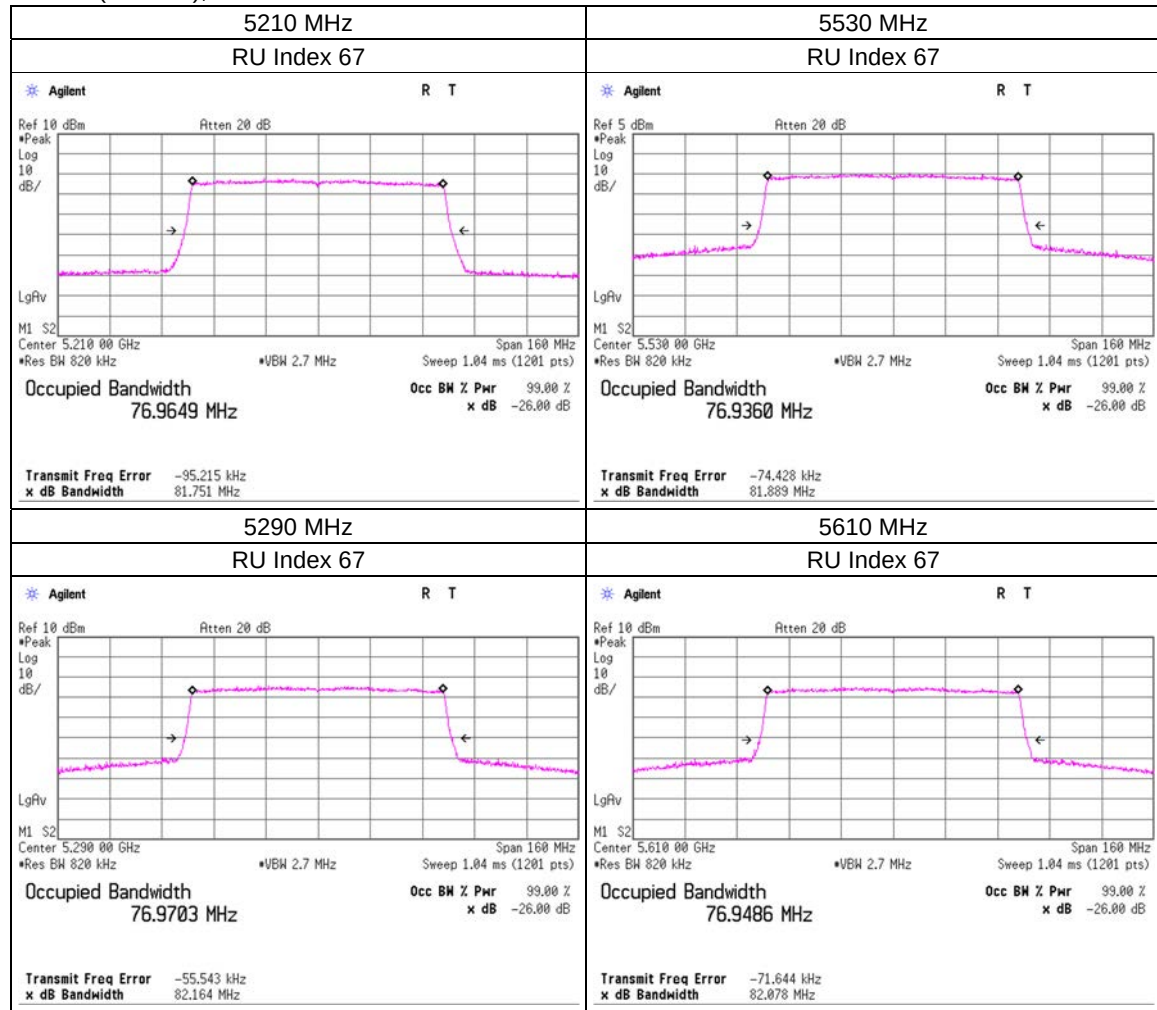
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDMA), 484-tone RU



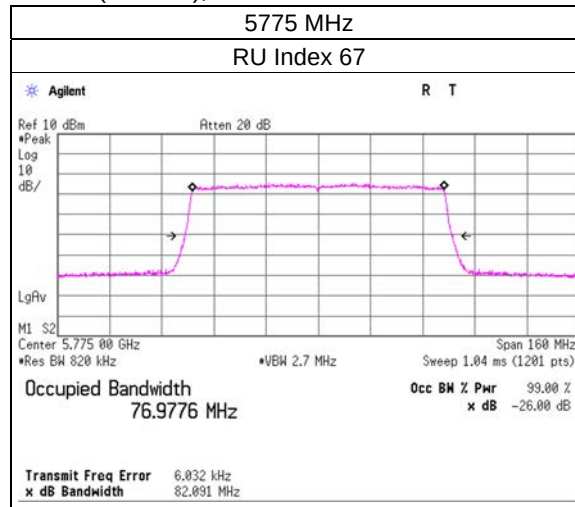
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDMA), 996-tone RU



26 dB Emission Bandwidth and 99 % Occupied Bandwidth

11ax-80(OFDMA), 996-tone RU



6 dB Bandwidth

Mode	Tx
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Date	Test Site	Temperature	Humidity	Engineer
March 23, 2026	MR8	22 deg.C	43 %RH	Yuta Moriya

11a

Tested Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
5745	16.528	> 0.500
5785	16.515	> 0.500
5825	16.496	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 24, 2026	MR8	21 deg.C	42 %RH	Takafumi Noguchi

11ac-20

Tested Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
5745	17.697	> 0.500
5785	17.735	> 0.500
5825	17.691	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 24, 2026	MR8	21 deg.C	42 %RH	Takafumi Noguchi

11ax-20(OFDM)

Tested Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
5745	19.063	> 0.500
5785	19.055	> 0.500
5825	19.031	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 26, 2026	MR8	22 deg.C	52 %RH	Takafumi Noguchi

11ax-20(OFDMA), 26-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5745	0	2.066	> 0.500
5785	4	2.632	> 0.500
5825	8	2.052	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 26, 2026	MR8	22 deg.C	52 %RH	Takafumi Noguchi

11ax-20(OFDMA), 52-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5745	37	4.064	> 0.500
5785	38	4.069	> 0.500
5825	40	4.093	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 26, 2026	MR8	22 deg.C	52 %RH	Takafumi Noguchi

11ax-20(OFDMA), 106-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5745	53	8.378	> 0.500
5785	53	8.349	> 0.500
5825	54	8.373	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 26, 2026	MR8	22 deg.C	52 %RH	Takafumi Noguchi

11ax-20(OFDMA), 242-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5745	61	19.140	> 0.500
5785	61	19.111	> 0.500
5825	61	19.125	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 25, 2026	MR8	23 deg.C	45 %RH	Takafumi Noguchi

11ac-40

Tested Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
5755	36.489	> 0.500
5795	36.468	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 25, 2026	MR8	23 deg.C	45 %RH	Takafumi Noguchi

11ax-40(OFDM)

Tested Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
5755	37.463	> 0.500
5795	36.872	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 27, 2026	MR8	21 deg.C	49 %RH	Takafumi Noguchi

11ax-40(OFDMA), 26-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5755	0	2.019	> 0.500
5795	17	2.005	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 27, 2026	MR8	21 deg.C	49 %RH	Takafumi Noguchi

11ax-40(OFDMA), 52-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5755	37	4.033	> 0.500
5795	44	4.053	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 27, 2026	MR8	21 deg.C	49 %RH	Takafumi Noguchi

11ax-40(OFDMA), 106-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5755	53	8.279	> 0.500
5795	56	8.254	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 27, 2026	MR8	21 deg.C	49 %RH	Takafumi Noguchi

11ax-40(OFDMA), 242-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5755	61	18.818	> 0.500
5795	62	18.733	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 30, 2026	MR8	23 deg.C	51 %RH	Wataru Toriyama

11ax-40(OFDMA), 484-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5755	65	37.996	> 0.500
5795	65	37.957	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 25, 2026	MR8	23 deg.C	45 %RH	Takafumi Noguchi

11ac-80

Tested Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
5775	76.116	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 25, 2026	MR8	23 deg.C	45 %RH	Takafumi Noguchi

11ax-80(OFDM)

Tested Frequency [MHz]	6 dB Bandwidth [MHz]	Limit [MHz]
5775	76.570	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 30, 2026	MR8	23 deg.C	51 %RH	Wataru Toriyama

11ax-80(OFDMA), 26-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5775	0	2.031	> 0.500
	36	2.039	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 30, 2026	MR8	23 deg.C	51 %RH	Wataru Toriyama

11ax-80(OFDMA), 52-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5775	37	4.031	> 0.500
	52	4.076	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 30, 2026	MR8	23 deg.C	51 %RH	Wataru Toriyama

11ax-80(OFDMA), 106-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5775	53	8.266	> 0.500
	60	8.254	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 30, 2026	MR8	23 deg.C	51 %RH	Wataru Toriyama

11ax-80(OFDMA), 242-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5775	61	18.857	> 0.500
	64	18.860	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

Date	Test Site	Temperature	Humidity	Engineer
March 31, 2026	MR8	22 deg.C	55 %RH	Yuta Moriya

11ax-80(OFDMA), 484-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5775	65	37.741	> 0.500
	66	37.798	> 0.500

6 dB Bandwidth

Mode	Tx
------	----

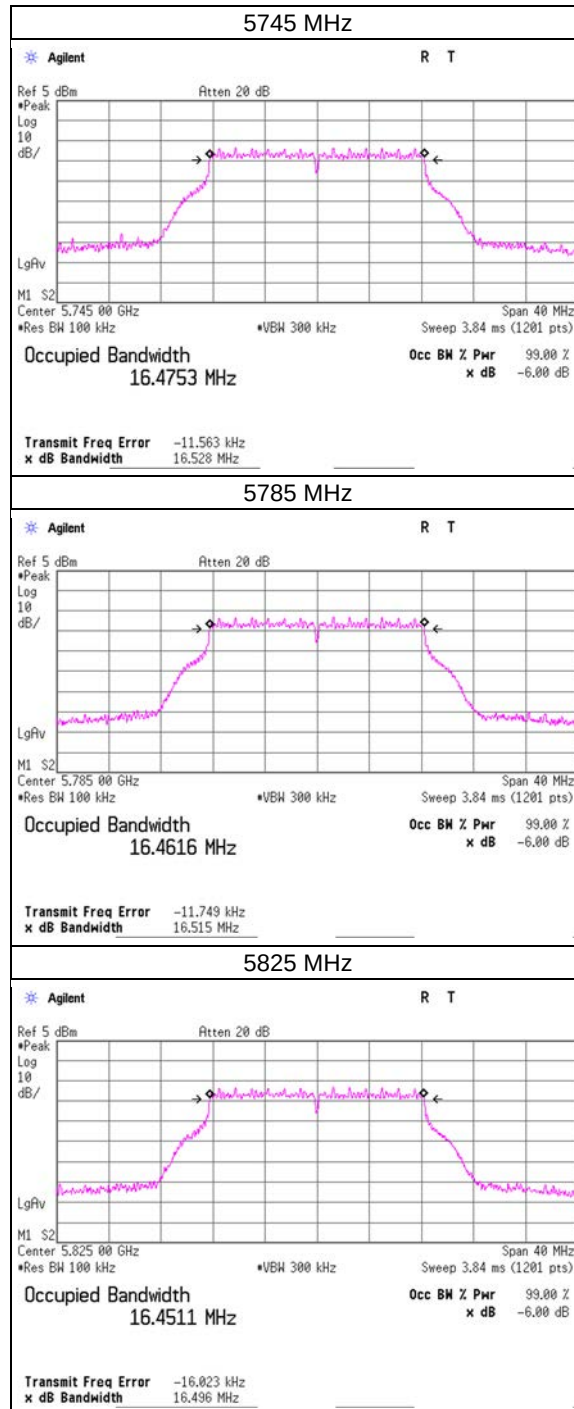
Date	Test Site	Temperature	Humidity	Engineer
March 31, 2026	MR8	22 deg.C	55 %RH	Yuta Moriya

11ax-80(OFDMA), 996-tone RU

Tested Frequency [MHz]	RU Index	6 dB Bandwidth [MHz]	Limit [MHz]
5775	67	77.988	> 0.500

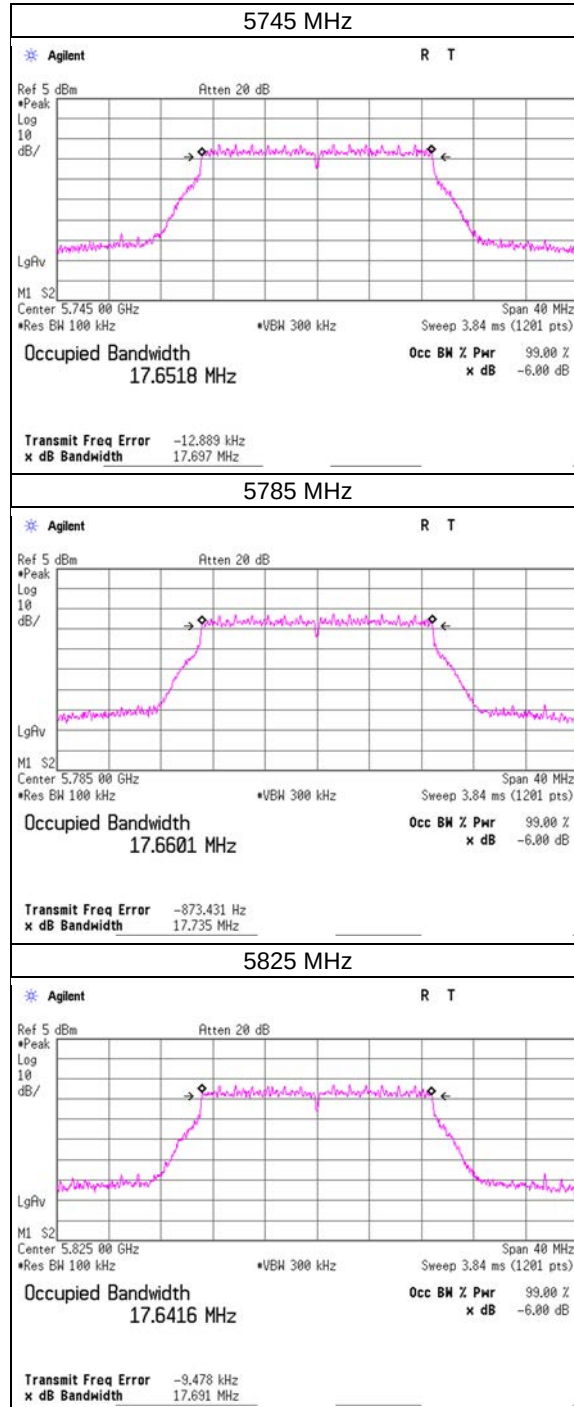
6 dB Bandwidth

11a



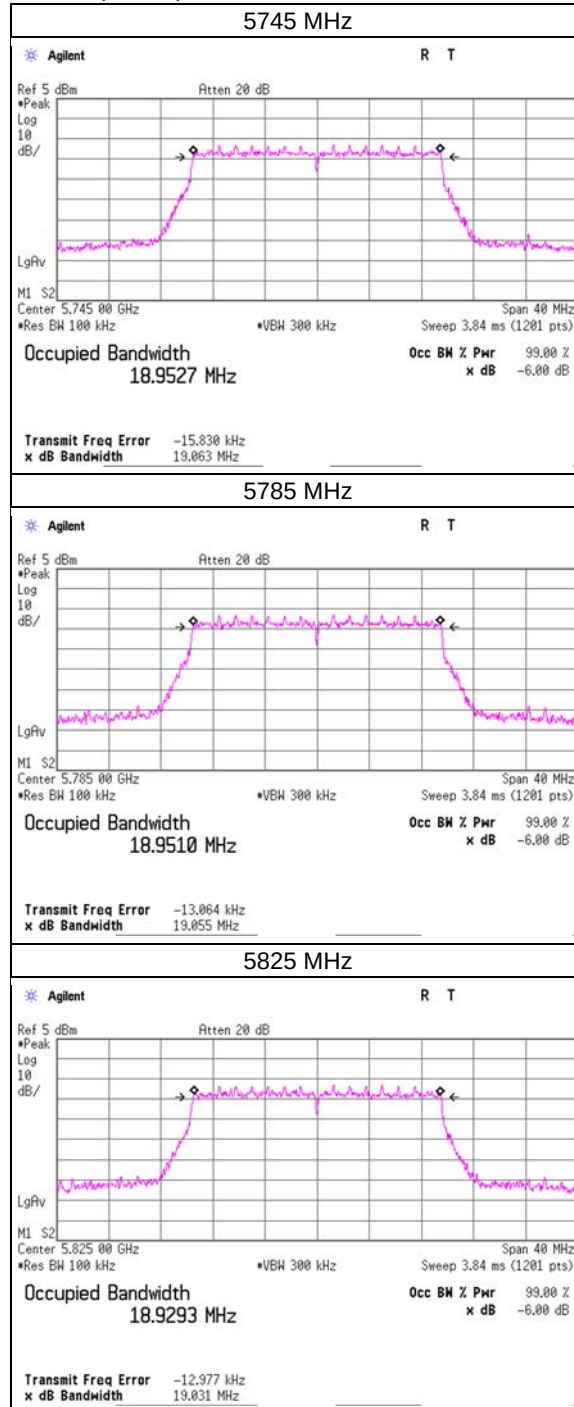
6 dB Bandwidth

11ac-20



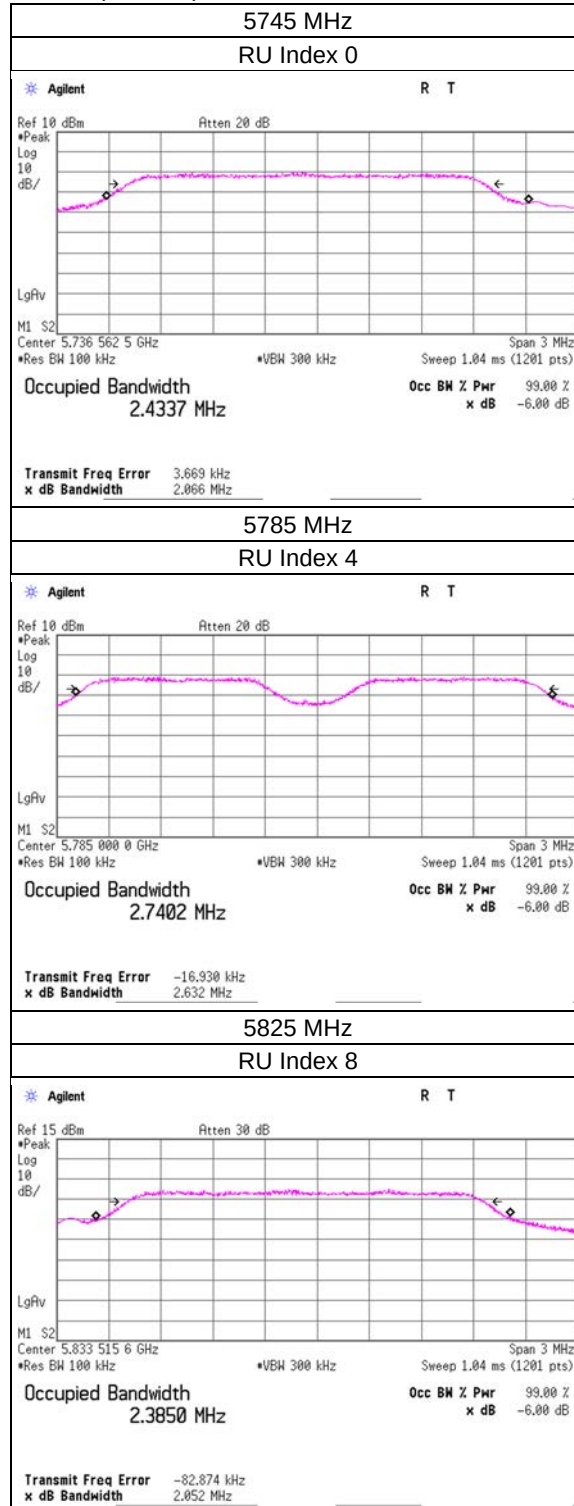
6 dB Bandwidth

11ax-20(OFDM)



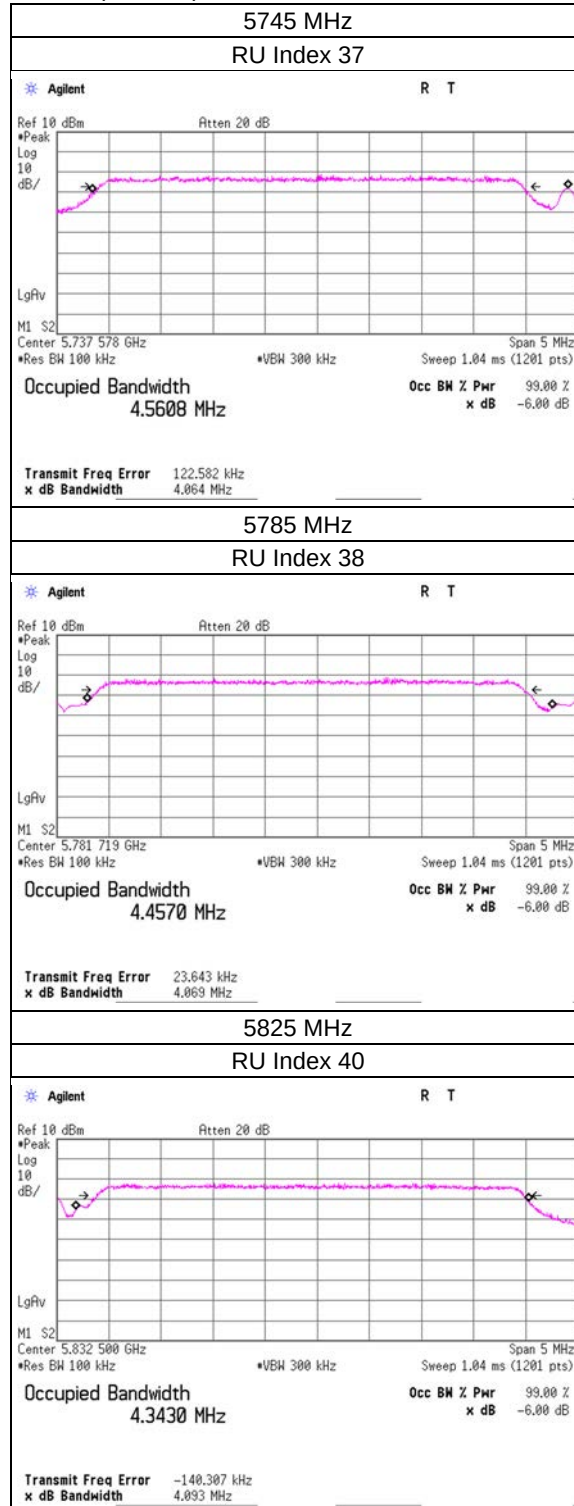
6 dB Bandwidth

11ax-20(OFDMA), 26-tone RU



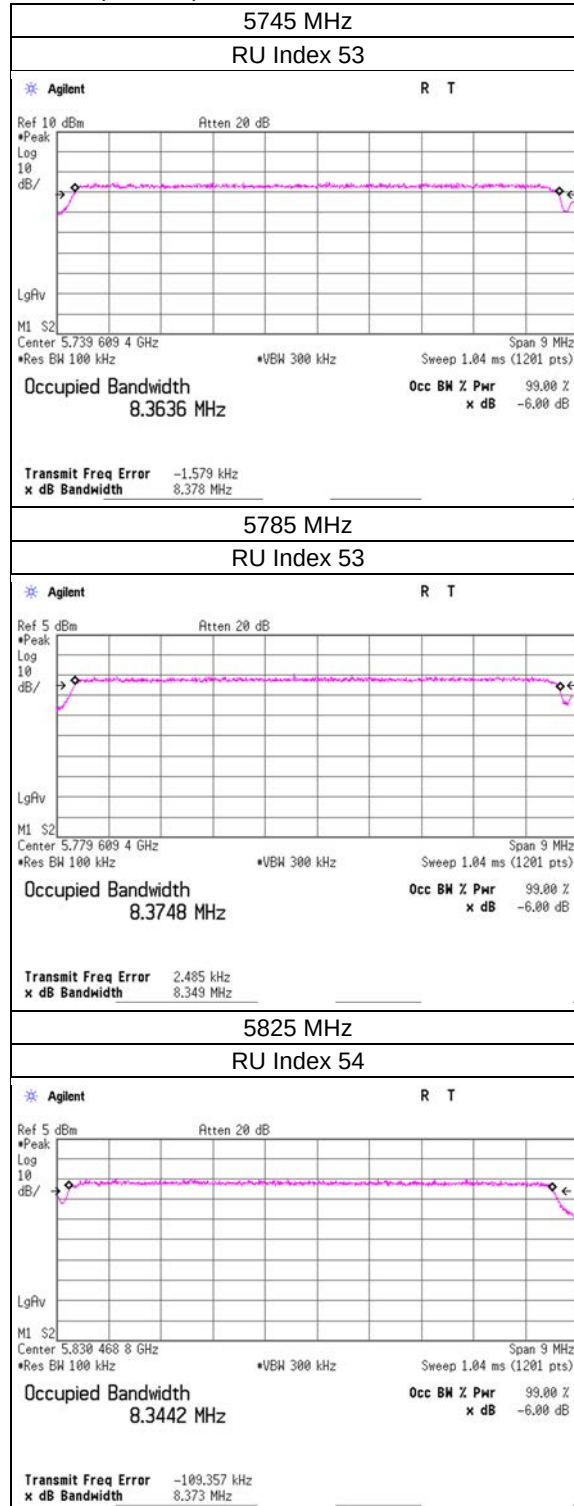
6 dB Bandwidth

11ax-20(OFDMA), 52-tone RU



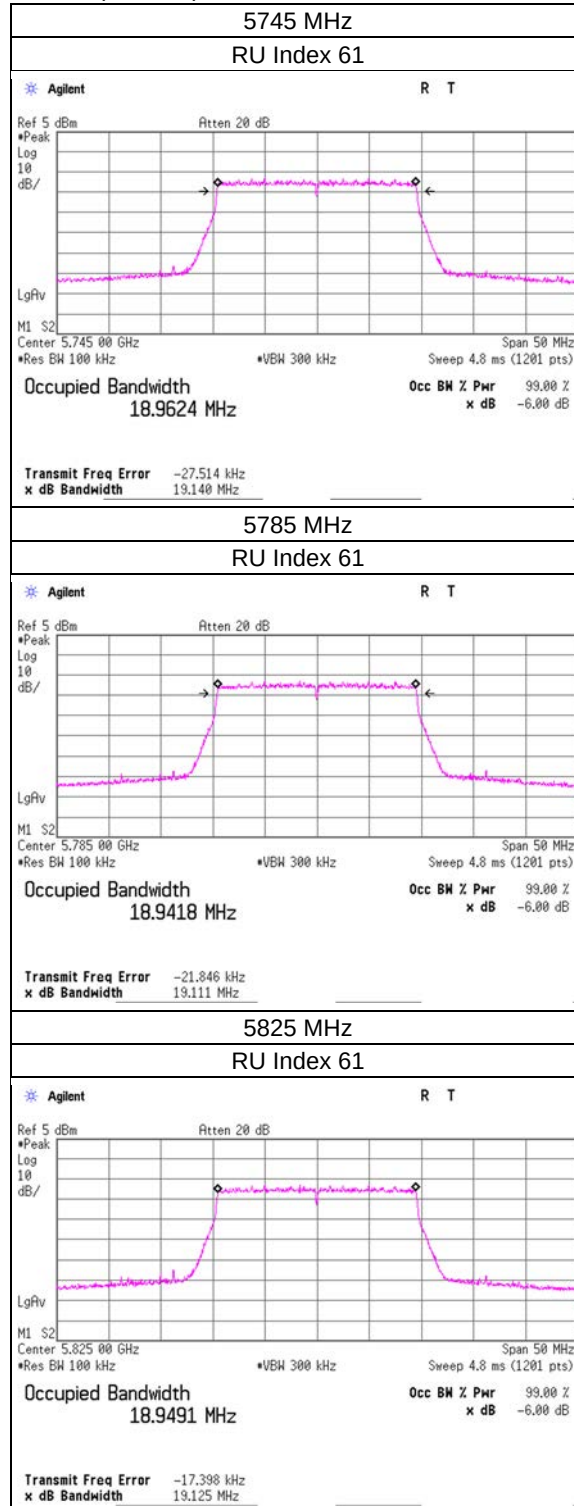
6 dB Bandwidth

11ax-20(OFDMA), 106-tone RU



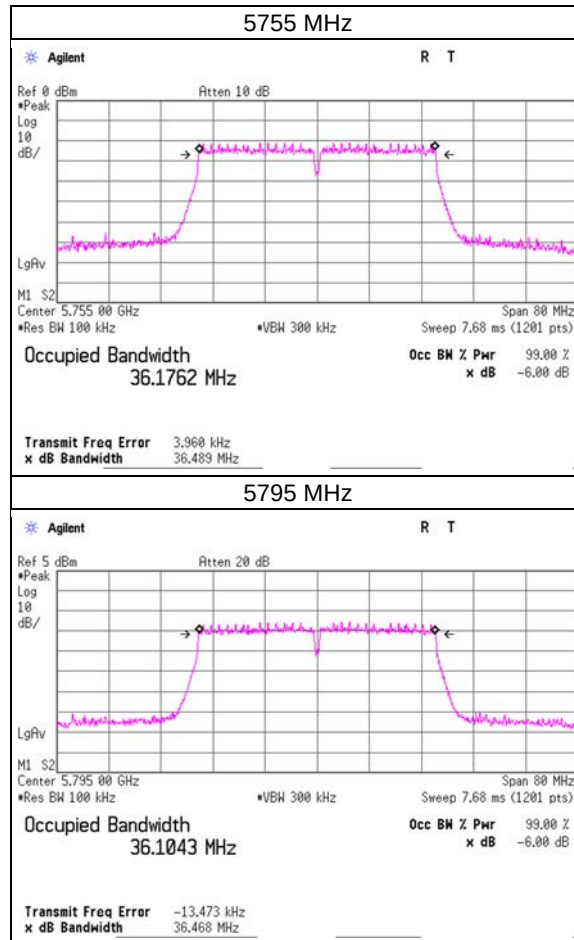
6 dB Bandwidth

11ax-20(OFDMA), 242-tone RU



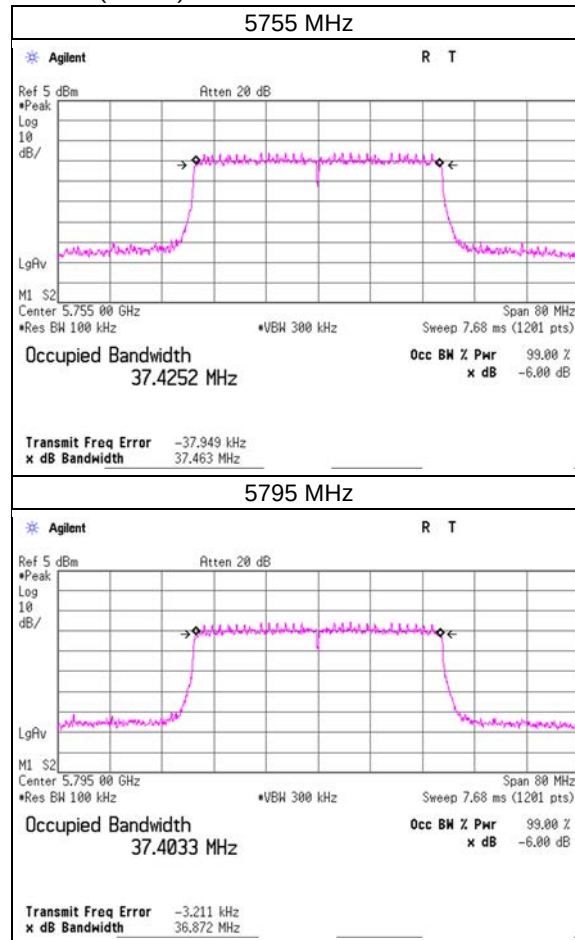
6 dB Bandwidth

11ac-40



6 dB Bandwidth

11ax-40(OFDM)



6 dB Bandwidth

11ax-40(OFDMA), 26-tone RU

