TEST REPORT

Report Number: 15605547-E6V1

Applicant	:	SAMSUNG ELECTRONICS CO., LTD. 129 SAMSUNG-RO, YEONGTONG-GU SUWON-SI, GYEONGGI-DO, 16677, KOREA
Model	:	SM-X620
FCC ID	:	A3LSMX620
IC	:	649E-SMX620
EUT Description	:	BT/BLE Tablet + DTS/UNII a/b/g/n/ac/ax and Digitizer
Test Standard(s)	:	FCC 47 CFR PART 15 SUBPART E ISED RSS-247 ISSUE 3 ISED RSS-GEN ISSUE 5 + A1 + A2

Date Of Issue:
2025-02-25

Prepared by:
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ACCREDITED
CERT #0751.05

REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	2025-02-25	Initial Issue	---

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.
129 SAMSUNG-RO, YEONGTONG-GU
SUWON-SI, GYEONGGI-DO, 16677, KOREA

EUT DESCRIPTION: BT/BLE Tablet + DTS/UNII a/b/g/n/ac/ax and Digitizer

MODEL: SM-X620

SERIAL NUMBER: Conducted: R32XC0045HM;
Radiated: R32XC0045X8

SAMPLE RECEIPT DATE: 2024-12-13

DATE TESTED: 2024-12-16 to 2025-02-25

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart E	Complies
ISED RSS-247 Issue 3	Complies
ISED RSS-GEN Issue 5 + A1 + A2	Complies

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

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

This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document.

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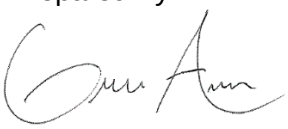

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2. TEST RESULT SUMMARY

This report contains data provided by the customer which can impact the validity of results. UL Verification Services Inc. is only responsible for correctly integrating customer-provided data with measurements performed by.

Below is a list of the data provided by the customer:

1) Antenna gain and type (see section 6.3)
2) Cable Loss (see section 6.3)

FCC Clause	ISED Clause	Requirement	Result	Comment
See Comment		Duty Cycle	Reporting purposes only	Per ANSI C63.10, Section 12.2.
See Comment	RSS-GEN 6.7	26dB BW/99% OBW	Reporting purposes only	Per ANSI C63.10 Sections 6.9.2 and 6.9.3
15.407 (e)	RSS-247 6.2.4.2	6 dB BW	Complies	None.
15.407 (a) (1-3), (h) (1)	RSS-247 6.2	Output Power	Complies	None.
15.407 (a) (1-3, 5)	RSS-247 6.2	PSD	Complies	None.
15.209, 15.205, 15.407 (b)(1-5)	RSS-GEN 8.9, 8.10, RSS-247 6.2	Radiated Emissions	Complies	None.
15.207	RSS-Gen 8.8	AC Mains Conducted Emissions	Complies	None.

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with:

- FCC CFR 47 Part 2
- FCC CFR 47 Part 15E
- FCC KDB 662911 Measurement of Transmitters with Multiple Output, MIMO
- FCC KDB 905462 D02/D03/D06
- FCC KDB 789033 D02 UNII Test Procedures New Rules
- FCC KDB 414788 D01 Radiated Test Site
- FCC KDB 291074 D02 EMC Measurement v01 for 5.9GHz Device (For FCC application)
- ANSI C63.10-2020
- RSS-GEN Issue 5 + A1 + A2
- RSS-247 Issue 3

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4. FACILITIES AND ACCREDITATION

UL Verification Services Inc. is accredited by A2LA, Certificate Number 0751.05, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
☒	Building 1: 47173 Benicia Street, Fremont, CA 94538, USA	US0104	2324A	550739
☐	Building 2: 47266 Benicia Street, Fremont, CA 94538, USA			
☐	Building 3: 843 Auburn Court, Fremont, CA 94538, USA			
☒	Building 4: 47658 Kato Rd, Fremont, CA 94538, USA			
☐	Building 5: 47670 Kato Rd, Fremont, CA 94538, USA			

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5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

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

5.2. DECISION RULES

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

5.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	U_{Lab}
Radio Frequency (Spectrum Analyzer)	141.16 Hz
Occupied Bandwidth	1.22%
Power Spectral Density	2.47 dB
RF Power Measurement Direct Method Using Power Meter	1.3 dB (PK) / 0.45 dB (AV)
Unwanted Emissions, Conducted	1.94 dB
Worst Case Conducted Disturbance, 9kHz to 0.15 MHz	3.78 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 dB
Worst Case Radiated Disturbance, 9kHz to 30 MHz	2.87 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.29 dB
Time Domain Measurements	3.39%
Temperature	0.57˚C
Relative Humidity	3.39%
DC Supply Voltages	0.57%

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

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5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:
Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)
36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:
Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.
36.5 dBuV + 0 dB +10.1 dB+ 0 dB = 46.6 dBuV

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6. EQUIPMENT UNDER TEST

6.1. EUT DESCRIPTION

The EUT is a BT/BLE Tablet + DTS/UNII a/b/g/n/ac/ax and Digitizer.

This report covers ax 5GHz Wifi radio.

6.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

5.2GHz BAND 802.11 ax MODE 2TX

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5.2 GHz band, 2TX CDD			
5180-5240	802.11ax HE20 SU	17.89	61.52
	802.11ax HE20 OFDMA, 242-Tones	13.13	20.56
	802.11ax HE20 OFDMA, 106-Tones	13.44	22.08
	802.11ax HE20 OFDMA, 52-Tones	13.69	23.39
	802.11ax HE20 OFDMA, 26-Tones	13.44	22.08
5190-5230	802.11ax HE40 SU	15.27	33.65
	802.11ax HE40 OFDMA, 484-Tones	12.60	18.20
5210	802.11ax HE80 SU	13.58	22.80
	802.11ax HE80 OFDMA, 996-Tones	11.69	14.76
	802.11ax HE80 OFDMA, 484-Tones	10.72	11.80
	802.11ax HE80 OFDMA, 242-Tones	9.74	9.42
	802.11ax HE80 OFDMA, 106-Tones	9.68	9.29
	802.11ax HE80 OFDMA, 52-Tones	9.69	9.31
	802.11ax HE80 OFDMA, 26-Tones	9.34	8.59

5.3GHz BAND 802.11 ax MODE 2TX

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5.3 GHz band, 2TX CDD			
5260-5320	802.11ax HE20 SU	17.60	57.54
	802.11ax HE20 OFDMA, 242-Tones	13.21	20.94
	802.11ax HE20 OFDMA, 106-Tones	13.08	20.32
	802.11ax HE20 OFDMA, 52-Tones	13.11	20.46
	802.11ax HE20 OFDMA, 26-Tones	13.07	20.28
5270-5310	802.11ax HE40 SU	15.46	35.16
	802.11ax HE40 OFDMA, 484-Tones	12.43	17.50
5290	802.11ax HE80 SU	13.81	24.04
	802.11ax HE80 OFDMA, 996-Tones	11.66	14.66

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5.6GHz BAND 802.11 ax MODE 2TX

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5.6 GHz band, 2TX CDD			
5500-5720	802.11ax HE20 SU	18.50	70.79
	802.11ax HE20 OFDMA, 242-Tones	13.81	24.04
	802.11ax HE20 OFDMA, 106-Tones	13.77	23.82
	802.11ax HE20 OFDMA, 52-Tones	13.89	24.49
	802.11ax HE20 OFDMA, 26-Tones	12.52	17.86
5510-5710	802.11ax HE40 SU	16.86	48.53
	802.11ax HE40 OFDMA, 484-Tones	12.62	18.28
5530-5690	802.11ax HE80 SU	15.36	34.36
	802.11ax HE80 OFDMA, 996-Tones	11.59	14.42

5.8GHz BAND 802.11 ax MODE 2TX

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5.8 GHz band, 2TX CDD			
5745-5825	802.11ax HE20 SU	16.34	43.05
	802.11ax HE20 OFDMA, 242-Tones	13.50	22.39
	802.11ax HE20 OFDMA, 106-Tones	13.98	25.00
	802.11ax HE20 OFDMA, 52-Tones	13.96	24.89
	802.11ax HE20 OFDMA, 26-Tones	13.92	24.66
5755-5795	802.11ax HE40 SU	16.39	43.55
	802.11ax HE40 OFDMA, 484-Tones	12.88	19.41
5775	802.11ax HE80 SU	15.41	34.75
	802.11ax HE80 OFDMA, 996-Tones	11.83	15.24

5.9GHz BAND 802.11 ax MODE 2TX

The transmitter has a maximum EIRP as follows:

Frequency Range (MHz)	Mode	EIRP Output Power (dBm)	EIRP Output Power (mW)
5.9 GHz band, 2TX CDD			
5845-5885	802.11ax HE20 SU	12.70	18.62
	802.11ax HE20, 242-Tones	9.73	9.40
	802.11ax HE20, 106-Tones	9.59	9.10
	802.11ax HE20, 52-Tones	9.80	9.55
	802.11ax HE20, 26-Tones	9.65	9.23
5835-5875	802.11ax HE40 SU	10.83	12.11
	802.11ax HE40, 484-Tones	8.84	7.66
5855	802.11ax HE80 SU	10.46	11.12
	802.11ax HE80, 996-Tones	7.55	5.69

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6.3. DESCRIPTION OF AVAILABLE ANTENNAS AND CABLE LOSS

The antenna(s) gains, type and cable loss, as provided by the manufacturer' are as follows:

Frequency Band (GHz)	Antenna Type	Antenna 1 Gain (dBi)	Antenna 2 Gain (dBi)
5180-5240	Internal	-3.2	-3
5260-5320		-3	-3.4
5500-5720		-3.3	-3.8
5745-5825		-3.9	-3.8
5845-5885		-4.5	-3.6

Cable Losses provided below.

Frequency (GHz)		Insertion Loss				
		#1	#2	#3	#4	#5
1	0.80	-0.350	-0.380	-0.375	-0.368	-0.347
2	0.90	-0.379	-0.408	-0.405	-0.397	-0.376
3	1.70	-0.527	-0.560	-0.555	-0.549	-0.529
4	1.80	-0.560	-0.591	-0.585	-0.587	-0.563
5	1.90	-0.570	-0.627	-0.594	-0.598	-0.574
6	2.00	-0.593	-0.649	-0.620	-0.628	-0.599
7	2.10	-0.620	-0.676	-0.646	-0.653	-0.624
8	2.50	-0.661	-0.708	-0.681	-0.683	-0.656
9	2.60	-0.730	-0.762	-0.736	-0.741	-0.709
10	2.70	-0.709	-0.764	-0.721	-0.725	-0.694
11	3.40	-0.811	-0.850	-0.830	-0.874	-0.816
12	3.50	-0.901	-0.940	-0.913	-0.958	-0.898
13	3.60	-0.896	-0.932	-0.900	-0.934	-0.887
14	3.70	-0.858	-0.906	-0.865	-0.881	-0.849
15	3.80	-0.775	-0.847	-0.802	-0.809	-0.787
16	3.90	-0.827	-0.889	-0.852	-0.850	-0.382
17	4.70	-0.684	-0.776	-0.726	-0.718	-0.710
18	4.80	-0.859	-0.899	-0.881	-0.921	-0.867
19	4.90	-1.064	-1.052	-1.053	-1.135	-1.046
20	5.00	-1.222	-1.180	-1.152	-1.254	-1.166
21	5.10	-1.129	-1.111	-1.037	-1.115	-1.067
22	5.50	-1.139	-1.291	-1.292	-1.294	-1.190
23	5.60	-1.106	-1.271	-1.238	-1.238	-1.153
24	5.70	-1.036	-1.182	-1.137	-1.146	-1.076
25	6.00	-1.002	-1.065	-1.047	-1.067	-1.016
26	6.50	-1.007	-1.073	-1.033	-1.035	-1.017
27	7.00	-1.311	-1.353	-1.389	-1.486	-1.349
28	7.25	-1.325	-1.303	-1.347	-1.437	-1.337
29	7.50	-1.147	-1.222	-1.226	-1.206	-1.209

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6.4. WORST-CASE CONFIGURATION AND MODE

Radiated emissions below 1GHz, above 18GHz, and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

For all modes, tests were performed with the EUT set at the 2Tx MIMO mode with power setting equal to SISO modes as the worst-case scenario. MIMO power is representative of SISO power levels.

Band edge and radiated emissions between 1GHz and 18GHz were performed with the EUT set to transmit at the highest power on low, middle and high channels.

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

Worst-case data rates as provided by the client were:

802.11ax HE20 mode: MCS0
802.11ax HE40 mode: MCS0
802.11ax HE80 mode: MCS0

Plots included in the report are representative of the method and settings parameters used for the test.

6.5. TEST REDUCTIONS CASES

Testing was performed at 802.11ax HE20 26T, 52T, 106T, 242T to cover HE40 26T, 52T,106T and 242T due to HE40 26T, 52T, 106T, and 242T being the same or lower power.

Testing was performed 802.11ax HE20 26T, 52T, 106T, 242T, HE40 484T to cover HE80 26T, 52T, 106T, 242T and 484T due to HE80 26T, 52T, 106T, 242T and 484T being the same or lower power excluding 5.2GHz HE80 where full testing was performed.

For all tones, where applicable, each Low, Mid, High RU allocation is tested to their respective Low, Mid and High channel.

6dB Bandwidth:

- For OFDMA, the narrowest (26T) tone was tested as worst case.

Radiated Spurious Emissions

- The narrowest (26T) and widest SU modes were tested to cover HE20 52T, 106T, 242T, HE40 484T, and HE80 996T due to worst-case PSD and worst-case Power cases.

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6.6. DESCRIPTION OF TEST SETUP

SUPPORT TEST EQUIPMENT						
Description		**Manufacturer**	**Model**	**Serial Number**		**FCC ID/ DoC**
AC Adapter		Samsung	EP-TA800	R37WBAA004BDKA		N/A
S-Pen		Samsung	N/A	N/A		N/A
Keyboard		Samsung	DX625	N/A		N/A
I/O CABLES (RF CONDUCTED TEST)						
Cable No.	**Port**	**# of Identical Ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	SMA Cable	1	SMA	Shielded	1.0	Conducted Switch Box to Spectrum Analyzer
2	Antenna	2	RF	Shielded	0.2	EUT to Coax cable
3	SMA Cable	2	SMA	Shielded	1.0	Coax Cable to Conducted Switch Box
4	USB-C	1	USB-C	Shielded	1	EUT to AC/DC Adapter
I/O CABLES (RF RADIATED and AC LINE CONDUCTED TEST)						
Cable No.	**Port**	**# of Identical Ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	USB-C	1	USB-C	Shielded	1	N/A

TEST SETUP

The EUT is a stand-alone device configured and tested in a worst-case setup.
Worst case is using Y orientation with AC charger attached to the EUT.
Test software exercised the radio card.

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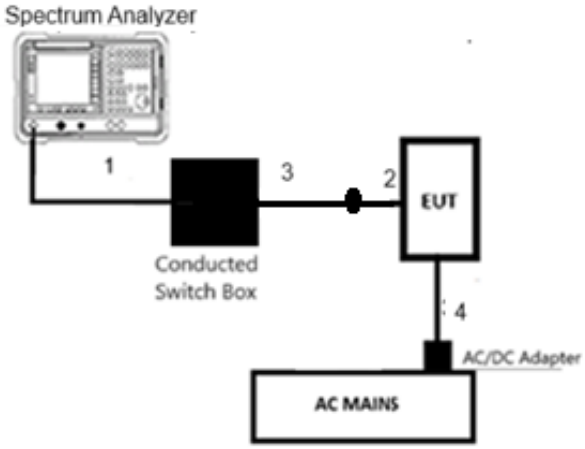
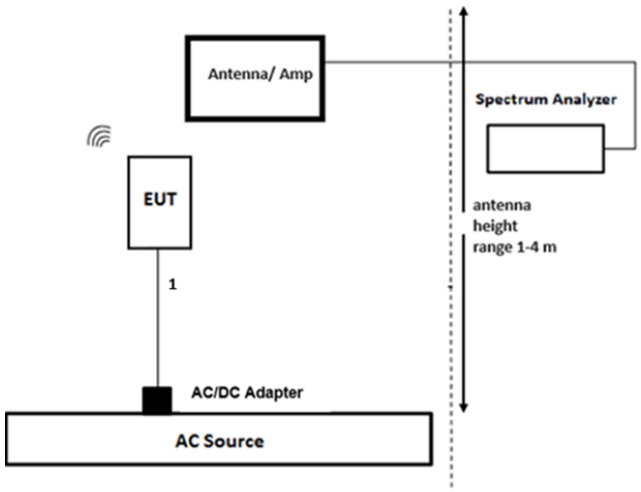
SETUP DIAGRAMS

Conducted Configuration



Radiated Configuration/AC Line



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7. MEASUREMENT METHOD

On Time and Duty Cycle: KDB 789033 D02, Section B.

6 dB Emission BW: KDB 789033 D02, Section C.2

26 dB Emission BW: KDB 789033 D02, Section C.1

99% Occupied BW: KDB 789033 D02, Section D.

Conducted Output Power: KDB 789033 D02, Section E.3.b (Method PM-G)

Power Spectral Density: KDB 789033 D02, Section F

Unwanted emissions in restricted bands: KDB 789033 D02, Sections G.3, G.4, G.5, and G.6.

Unwanted emissions in non-restricted bands: KDB 789033 D02, Sections G.3, G.4, and G.5.

AC Power Line Conducted Emissions: ANSI C63.10, Section 6.2.

Radiated Spurious Emissions Below 30MHz: ANSI C63.10 Section 6.4

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8. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST					
Description	**Manufacturer**	**Model**	**ID Num**	**Cal Due**	**Last Cal**
Antenna, Passive Loop 30Hz - 1MHz	ELECTRO METRICS	EM-6871	219908	2025-05-31	2023-05-31
Antenna, Passive Loop 100KHz - 30MHz	ELECTRO METRICS	EM-6872	219910	2025-05-31	2023-05-31
Antenna, Broadband Hybrid, 30MHz to 1000MHz	Sunol Sciences Corp.	JB1	80293	2025-04-30	2023-04-11
Amplifier,9KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310	170647	2025-03-31	2024-03-25
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	80707	2025-06-30	2024-06-07
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	206808	2025-04-30	2024-04-23
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	222740	2026-09-29	2024-09-20
RF Filter Box, 1-18GHz	UL-FR1	N/A	171875	2025-03-31	2024-03-23
RF Filter Box, 1-18GHz	UL-FR1	SAC 8 port rf box 1	197920	2025-03-31	2024-03-30
RF Filter Box, 1-18GHz	UL-FR1	N/A	171389	2025-03-31	2024-03-15
EMI TEST RECEIVER, with B8 option	Rohde & Schwarz	ESW44	245268	2025-02-28	2024-02-15
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	201497	2025-02-28	2024-02-11
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	169935	2025-02-28	2024-02-11
Antenna, Horn 18 to 26.5GHz	A.R.A.	MWH-1826/B	199658	2025-02-28	2024-02-02
Amplifier 18-26.5GHz, +5Vdc, -54dBm P1dB	AMPLICAL	AMP18G26.5-60	234683	2025-05-31	2024-05-13
Antenna, Horn 26.5 to 40GHz	A.R.A.	MWH-2640/B	199660	2026-02-28	2024-02-02
RF Device, Active, Amplifier	AMPLICAL	AMP26G40-60	224141	2026-02-28	2025-02-17
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A	80396	2025-02-28	2024-02-21
Conducted Switch Box	N/A	CSB	245774	2025-05-31	2024-05-16
Power Meter, P-series single channel	Keysight Technologies Inc	N1921A	90391	2025-06-30	2024-06-17
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1911A	90754	2026-01-31	2025-01-22
AC Line Conducted					
LISN	Fischer Custom Communications, Inc	FCC-LISN-50/250-25-2-01-480V	175765	2026-01-31	2025-01-28
EMI TEST RECEIVER	Rohde & Schwarz	ESR	171646	2025-02-28	2024-02-27
Transient Limiter	TE	TBFL1	207996	2025-09-30	2024-09-24
UL TEST SOFTWARE LIST					
Radiated Software	UL	UL EMC	Ver 2024-08-15, 2023-03, 2023-05-01		
Antenna Port Software	UL	UL RF	Ver 2022-08-16		
AC Line Conducted Software	UL	UL EMC	Rev 9.5, 2023-03		

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9. ANTENNA PORT TEST RESULTS

9.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

KDB 789033 D01 Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time T (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
802.11ax HE20 OFDMA, SU	0.5491	0.6486	0.847	84.66	0.72	1.821
802.11ax HE20 OFDMA, RU size 242T	0.5911	0.6899	0.857	85.67	0.67	1.692
802.11ax HE20 OFDMA, RU size 106T	1.265	1.366	0.926	92.59	0.33	0.791
802.11ax HE20 OFDMA, RU size 52T	2.619	2.748	0.953	95.28	0.21	0.382
802.11ax HE20 OFDMA, RU size 26T	5.136	5.290	0.971	97.08	0.13	0.195
802.11ax HE40 OFDMA, SU	0.3067	0.4054	0.757	75.65	1.21	3.261
802.11ax HE40 OFDMA, RU size 484T	0.333	0.435	0.766	76.55	1.16	3.003
802.11ax HE80 OFDMA, SU	0.1787	0.2779	0.643	64.30	1.92	5.596
802.11ax HE80 OFDMA, RU size 996T	0.1962	0.2964	0.662	66.19	1.79	5.097
802.11ax HE80 OFDMA, RU size 484T	0.333	0.434	0.768	76.80%	1.15	3.001
802.11ax HE80 OFDMA, RU size 242T	0.592	0.693	0.854	85.37%	0.69	1.690
802.11ax HE80 OFDMA, RU size 106T	1.269	1.372	0.925	92.51%	0.34	0.788
802.11ax HE80 OFDMA, RU size 52T	2.609	2.715	0.961	96.10%	0.17	0.383
802.11ax HE80 OFDMA, RU size 26T	5.149	5.249	0.981	98.10%	0.00	0.010

802.11ax HE20 OFDMA, OFDMA MODE: SU

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9.2. 99% BANDWIDTH, 26 dB BANDWIDTH & 6 dB BANDWIDTH

99% BANDWIDTH LIMITS

None; for reporting purposes only.

26dB BANDWIDTH LIMITS

None; for reporting purposes only.

6 dB BANDWIDTH LIMITS

FCC §15.407 (e)

RSS-247 6.2.4.1

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

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9.2.1. 5.2 GHz BAND

Band (GHz)	No. of Tx	Mode	Channel	Freq (MHz)	Tones	RU Index	99% Bandwidth (MHz)		26dB Bandwidth (MHz)	
							Ant1	Ant2	Ant1	Ant2
5.2	2	11ax HE20	36	5180	SU		19.004	18.969	23.36	23.32
			40	5200			18.928	18.985	24.20	23.72
			48	5240			18.948	19.003	23.48	23.72
			36	5180	242T	61	19.059	18.954	24.20	22.92
			40	5200			**19.073**	19.055	23.88	23.08
			48	5240			19.050	19.021	23.56	23.20
			36	5180	106T	53	18.077	18.062	21.92	21.60
			40	5200			18.198	18.057	21.88	21.44
			48	5240		54	18.245	18.188	21.56	21.96
			36	5180	52T	37	18.246	18.055	21.52	20.60
			40	5200		38	16.813	16.756	18.76	18.56
			48	5240		40	18.355	18.117	20.96	20.64
			36	5180	26T	0	18.641	18.507	20.80	20.52
			40	5200		4	16.780	16.583	18.44	18.36
			48	5240		8	18.700	18.567	20.92	20.72
		11ax HE40	38	5190	SU		37.816	37.966	42.96	43.44
			46	5230			37.931	**38.014**	43.44	43.36
			38	5190	484T	65	37.986	37.838	46.48	44.80
			46	5230			37.879	37.889	45.12	45.04
		11ax HE80	42	5210	SU		77.362	77.410	85.60	86.88
			42	5210	996T	67	**77.852**	77.608	85.60	86.88
			42	5210	484T	65	37.997	38.018	44.16	44.48
			42	5210		66	37.981	38.054	44.16	44.64
			42	5210	242T	61	19.026	19.040	24.48	23.68
			42	5210		62	37.179	36.141	42.72	41.44
			42	5210		64	19.144	18.893	25.60	24.16
			42	5210	106T	53	17.743	17.656	21.44	20.32
			42	5210		56	17.459	17.079	22.24	21.92
			42	5210		60	17.792	17.786	21.12	21.28
			42	5210	52T	37	17.922	17.822	20.96	20.80
			42	5210		44	17.827	17.665	21.44	21.60
			42	5210		52	17.922	17.953	20.80	20.64
			42	5210	26T	0	18.307	18.015	20.80	20.64
			42	5210		8	36.180	35.452	38.24	38.40
			42	5210		36	17.521	18.206	20.80	20.48

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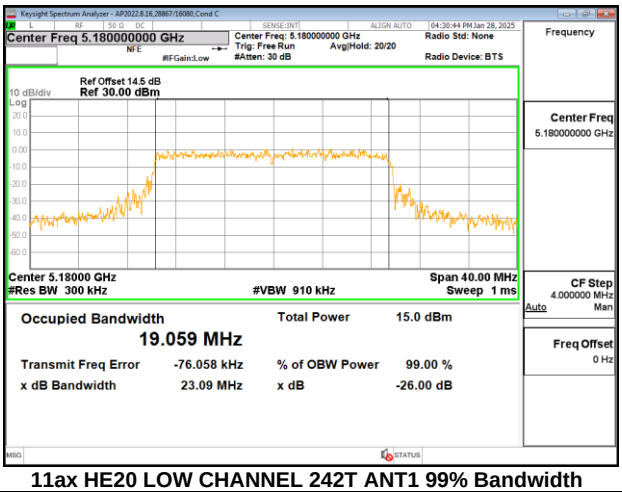
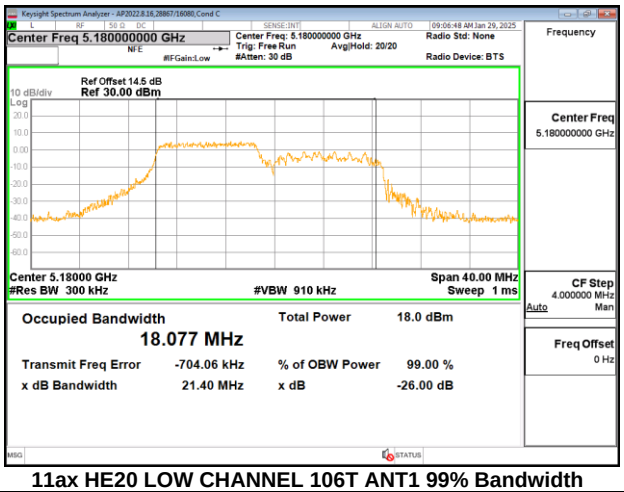
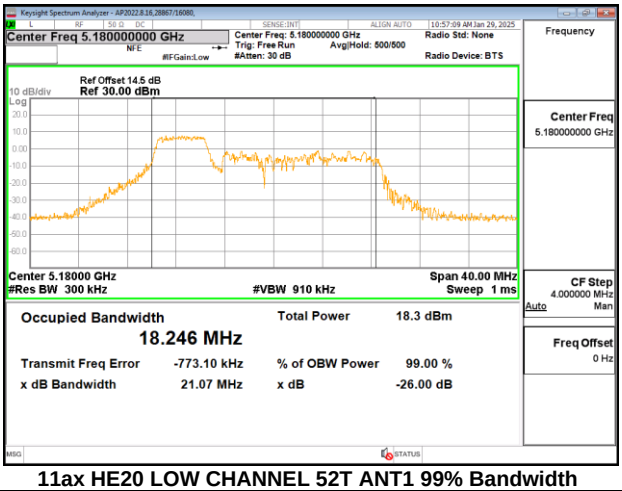
99% Bandwidth



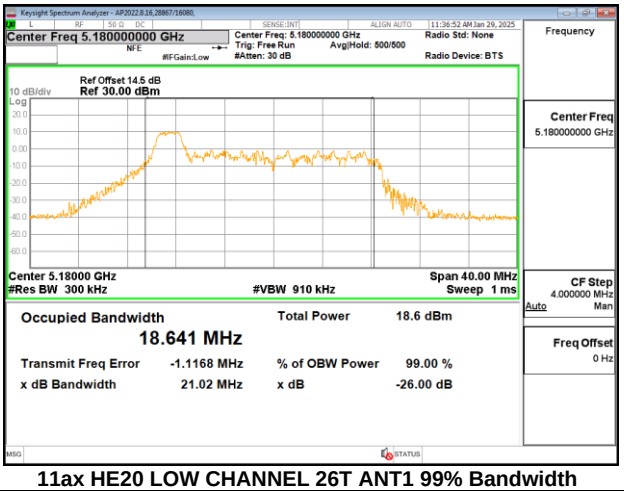
11ax HE20 LOW CHANNEL 242T ANT1 99% Bandwidth



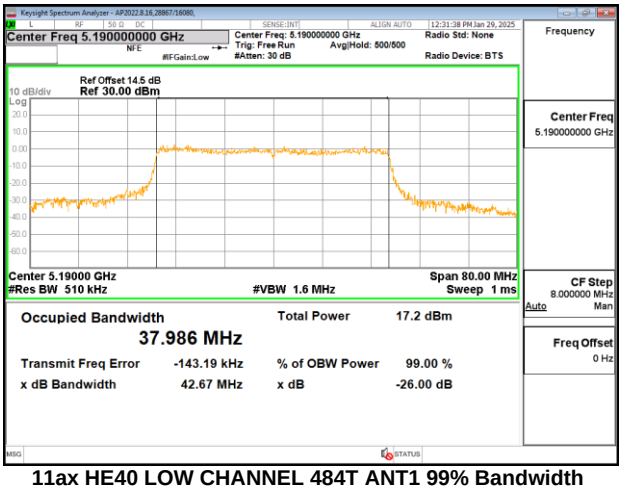
11ax HE20 LOW CHANNEL 106T ANT1 99% Bandwidth



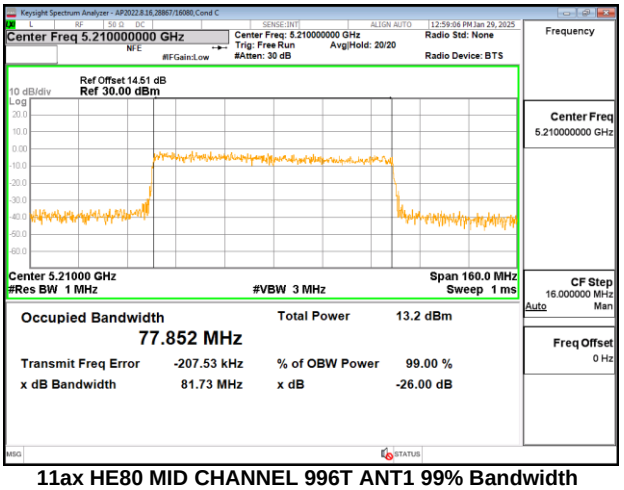
11ax HE20 LOW CHANNEL 52T ANT1 99% Bandwidth



11ax HE20 LOW CHANNEL 26T ANT1 99% Bandwidth



11ax HE40 LOW CHANNEL 484T ANT1 99% Bandwidth



11ax HE80 MID CHANNEL 996T ANT1 99% Bandwidth

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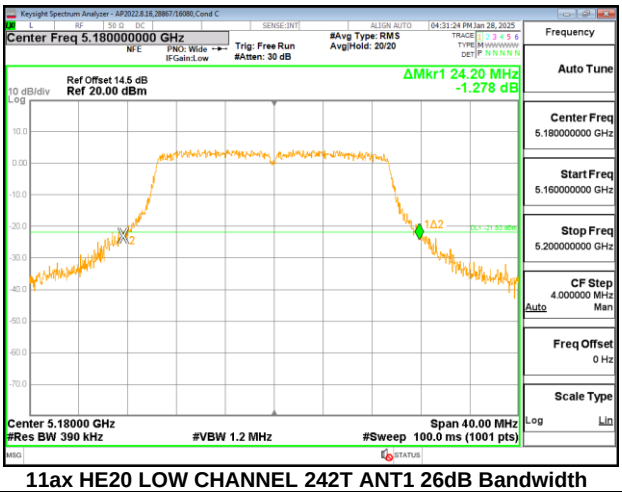
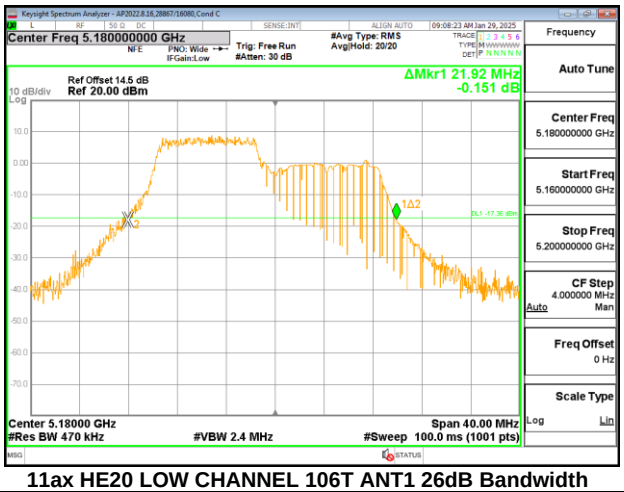
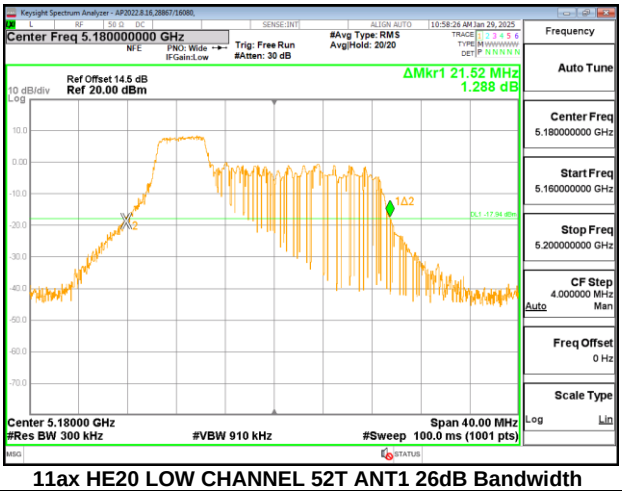
26dB Bandwidth



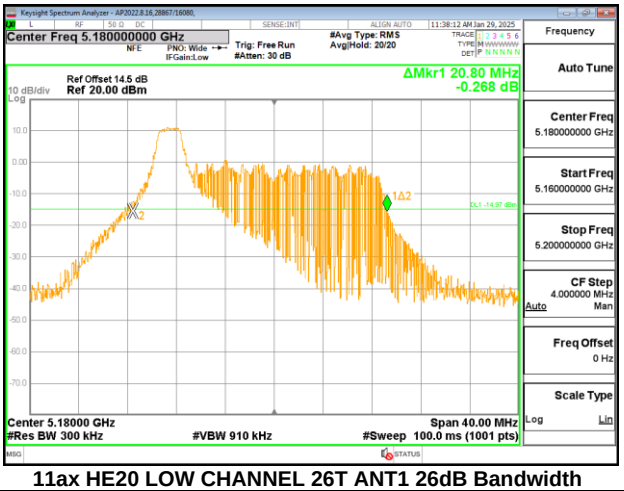
11ax HE20 LOW CHANNEL 242T ANT1 26dB Bandwidth



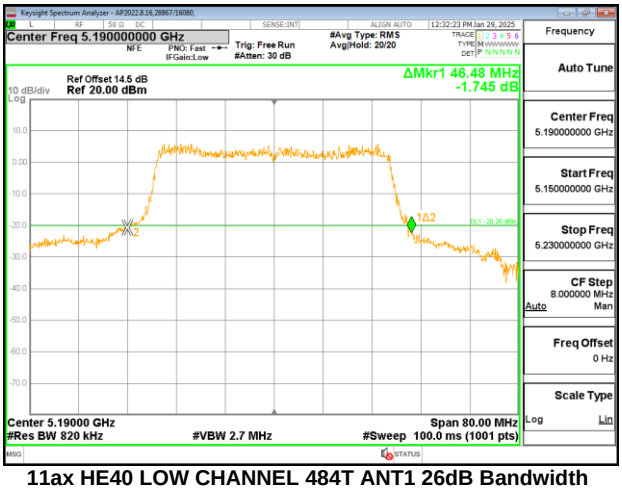
11ax HE20 LOW CHANNEL 106T ANT1 26dB Bandwidth



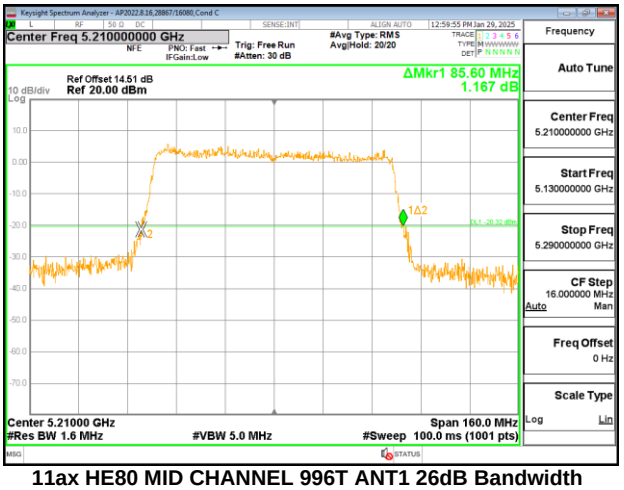
11ax HE20 LOW CHANNEL 52T ANT1 26dB Bandwidth



11ax HE20 LOW CHANNEL 26T ANT1 26dB Bandwidth



11ax HE40 LOW CHANNEL 484T ANT1 26dB Bandwidth



11ax HE80 MID CHANNEL 996T ANT1 26dB Bandwidth

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9.2.2. 5.3 GHz BAND

Band (GHz)	No. of Tx	Mode	Channel	Freq (MHz)	Tones	RU Index	99% Bandwidth (MHz)		26dB Bandwidth (MHz)	
							Ant1	Ant2	Ant1	Ant2
5.3	2	11ax HE20	52	5260	SU		19.007	19.057	24.92	23.16
			60	5300			19.025	19.035	24.76	23.24
			64	5320			19.038	19.002	24.12	23.72
			52	5260	242T	61	**19.137**	19.032	24.52	23.48
			60	5300			19.051	19.038	24.36	23.44
			64	5320			19.046	19.005	25.08	23.76
			52	5260	106T	53	18.111	18.107	22.44	21.72
			60	5300			18.118	17.950	22.32	21.52
			64	5320		54	18.247	18.152	21.48	21.76
			52	5260	52T	37	18.179	18.080	21.56	20.84
			60	5300		38	16.715	16.641	18.60	18.48
			64	5320		40	18.148	18.139	21.16	21.04
			52	5260	26T	0	18.671	18.285	21.28	20.68
			60	5300		4	16.052	15.944	18.52	18.44
			64	5320		8	18.362	18.092	21.12	21.92
		11ax HE40	54	5270	SU		38.003	37.932	44.08	43.36
			62	5310			37.958	37.912	43.92	42.88
			54	5270	484T	65	**38.021**	37.949	46.08	43.36
			62	5310			37.956	37.940	43.92	44.32
		11ax HE80	58	5290	SU		**77.646**	77.584	87.52	87.84
			58	5290	996T	67	77.594	77.613	87.04	87.52

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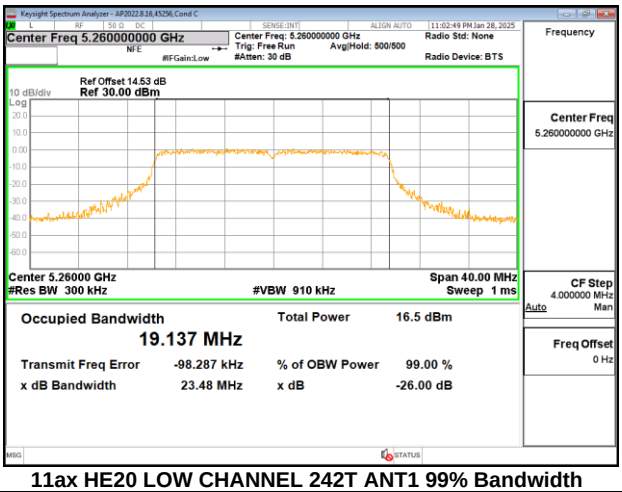
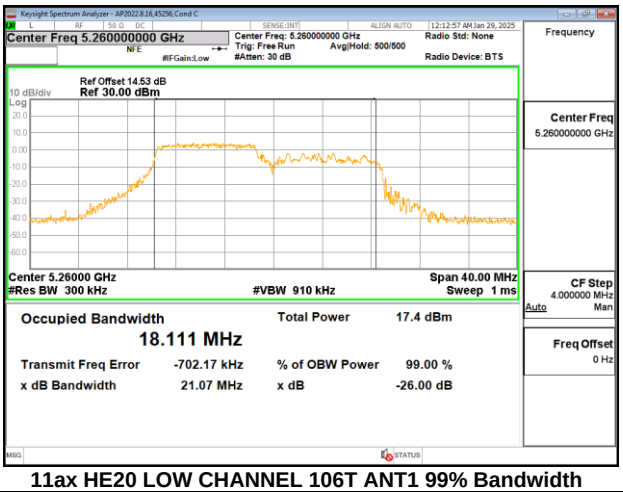
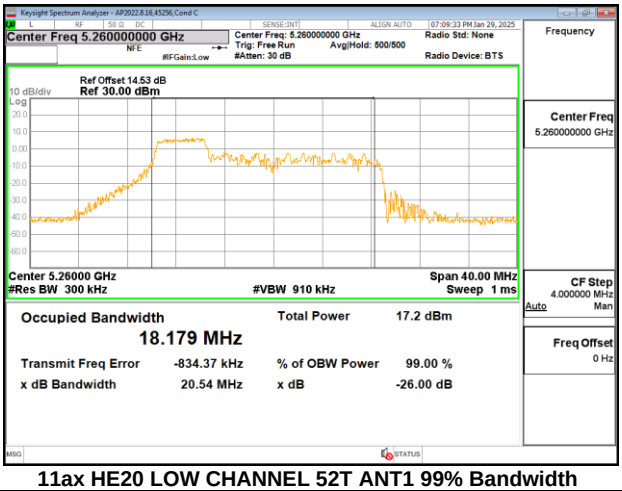
99% Bandwidth



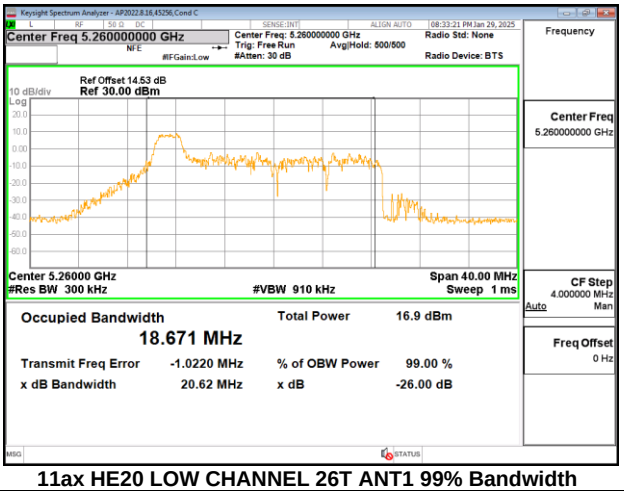
11ax HE20 LOW CHANNEL 242T ANT1 99% Bandwidth



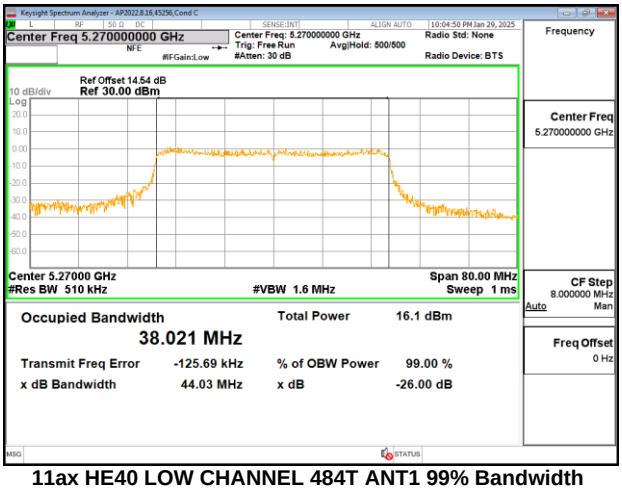
11ax HE20 LOW CHANNEL 106T ANT1 99% Bandwidth



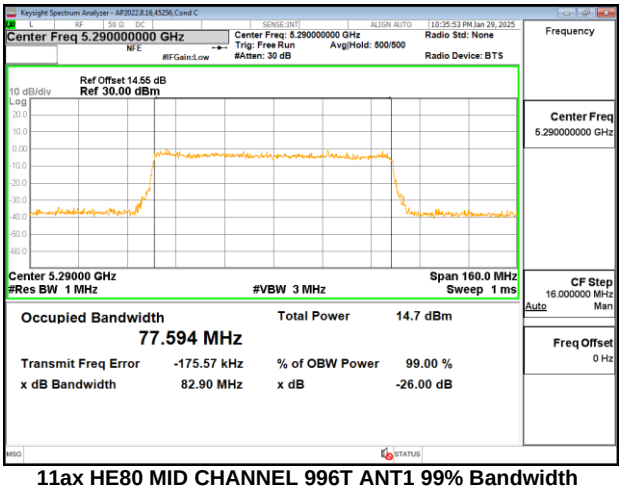
11ax HE20 LOW CHANNEL 52T ANT1 99% Bandwidth



11ax HE20 LOW CHANNEL 26T ANT1 99% Bandwidth



11ax HE40 LOW CHANNEL 484T ANT1 99% Bandwidth



11ax HE80 MID CHANNEL 996T ANT1 99% Bandwidth

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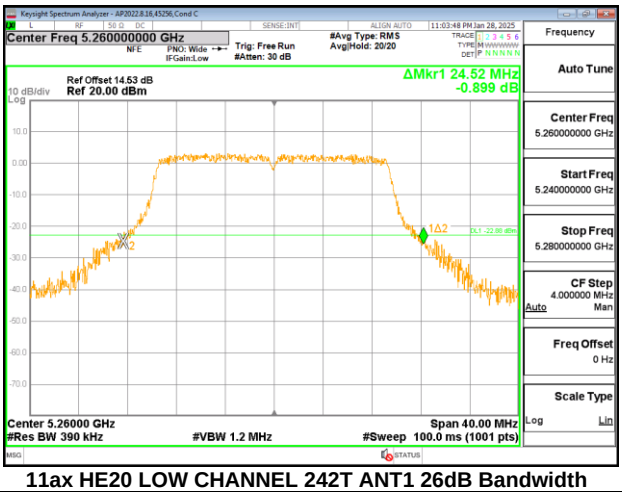
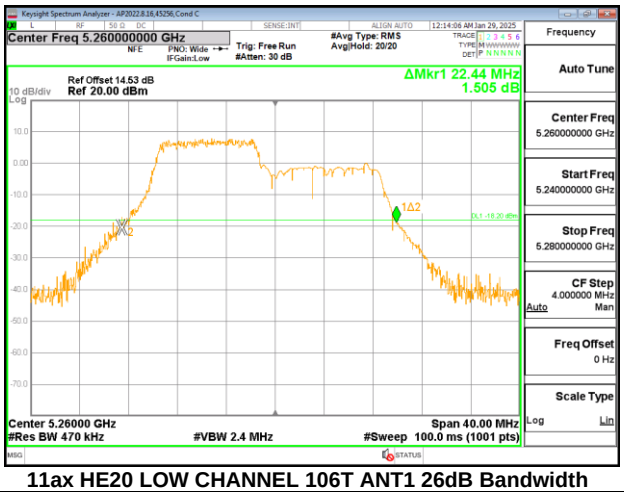
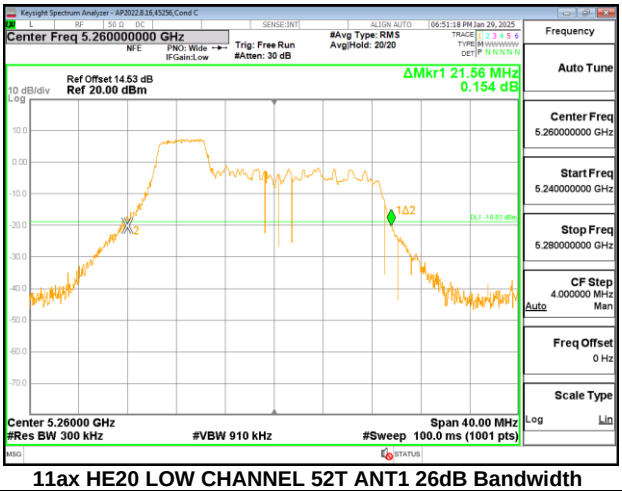
26dB Bandwidth



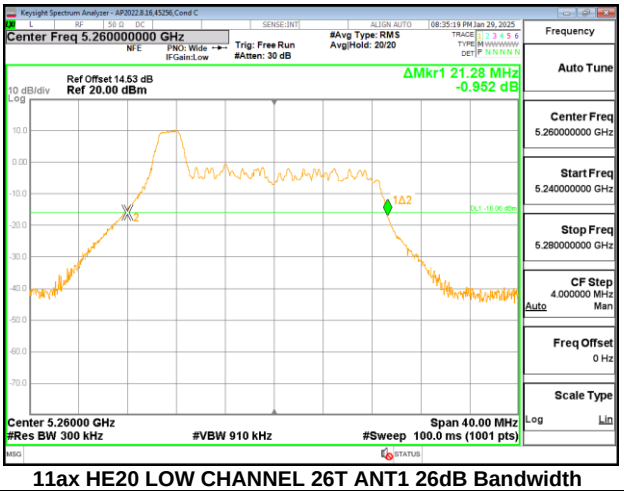
11ax HE20 LOW CHANNEL 242T ANT1 26dB Bandwidth



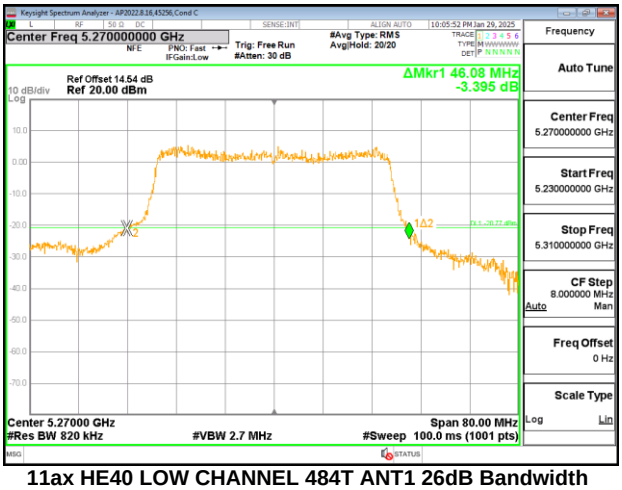
11ax HE20 LOW CHANNEL 106T ANT1 26dB Bandwidth



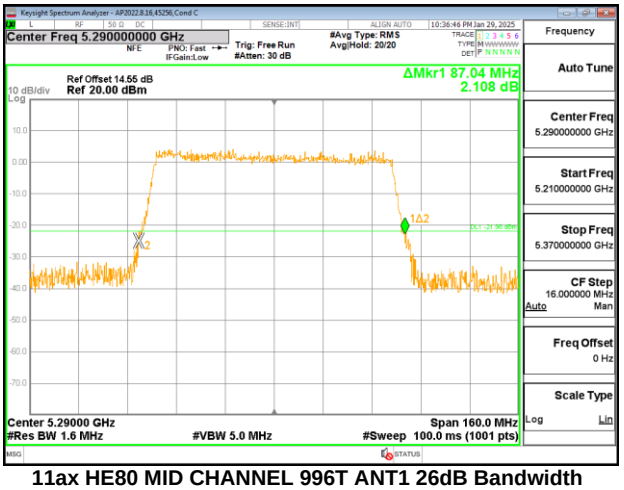
11ax HE20 LOW CHANNEL 52T ANT1 26dB Bandwidth



11ax HE20 LOW CHANNEL 26T ANT1 26dB Bandwidth



11ax HE40 LOW CHANNEL 484T ANT1 26dB Bandwidth



11ax HE80 MID CHANNEL 996T ANT1 26dB Bandwidth

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9.2.3. 5.6 GHz BAND

Band (GHz)	No. of Tx	Mode	Channel	Freq (MHz)	Tones	RU Index	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6dB Bandwidth (MHz)		6dB Minimum Limit (MHz)
							Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
5.6	2	11ax HE20	100	5500	SU		19.047	19.028	24.64	22.76			
			116	5580			19.045	19.034	24.72	23.24			
			140	5700			19.037	19.075	24.60	23.36			
			144	5720			19.027	**19.113**	24.68	23.68	4.408	4.376	0.5
			100	5500	242T	61	19.019	19.039	24.04	23.56			
			116	5580			19.062	19.044	24.76	23.72			
			140	5700			19.035	19.040	24.04	23.80			
			144	5720			19.050	19.029	24.52	23.80	4.380	4.440	0.5
			100	5500	106T	53	18.181	18.073	22.00	21.56			
			116	5580			18.157	18.063	22.20	21.44			
			140	5700		54	18.272	18.195	21.68	22.16			
			144	5720			17.996	17.926	21.88	21.88	4.512	4.484	0.5
			100	5500	52T	37	18.164	18.221	21.56	21.08			
			116	5580		38	16.576	16.490	18.80	18.56			
			140	5700		40	18.207	18.272	20.92	21.20			
			144	5720			18.304	18.070	20.96	20.92	4.384	4.388	0.5
			100	5500	26T	0	18.750	18.549	21.36	20.84			
			116	5580		4	16.242	15.954	18.56	18.32			
			140	5700		8	18.657	18.550	21.00	21.08			
			144	5720			18.732	18.358	21.32	20.88	1.992	2.040	0.5
		11ax HE40	102	5510	SU		37.920	37.930	44.08	43.12			
			110	5550			38.041	37.914	44.24	42.88			
			134	5670			38.012	37.998	44.56	43.12			
			142	5710			37.931	37.946	44.48	43.04	3.656	3.720	0.5
			102	5510	484T	65	37.942	38.001	45.12	43.04			
			110	5550			37.959	38.030	43.76	44.00			
			134	5670			**38.081**	38.017	45.36	45.92			
			142	5710			37.998	38.037	44.32	46.00	3.992	3.928	0.5
		11ax HE80	106	5530	SU		**77.760**	77.584	86.56	87.04			
			122	5610			77.614	77.592	86.40	87.68			
			138	5690			77.552	77.594	86.56	89.12	3.736	3.976	0.5
			106	5530	996T	67	77.635	77.643	87.36	86.72			
			122	5610			77.703	77.660	88.16	87.04			
			138	5690			77.568	77.528	87.04	86.72	3.992	3.976	0.5

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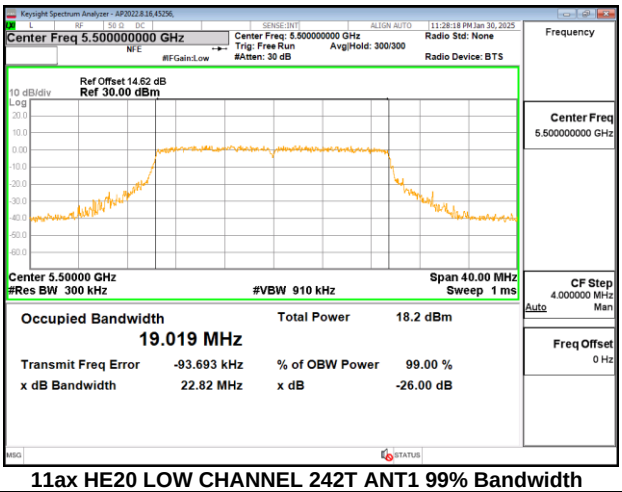
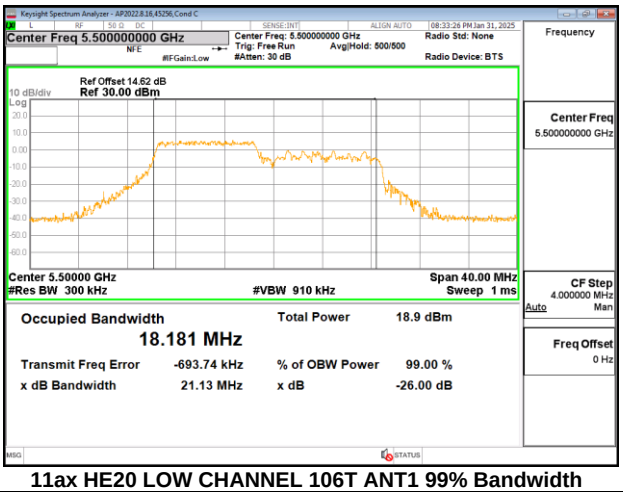
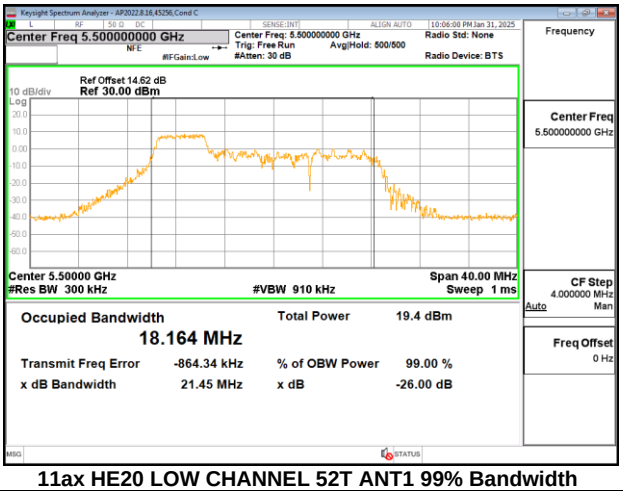
99% Bandwidth



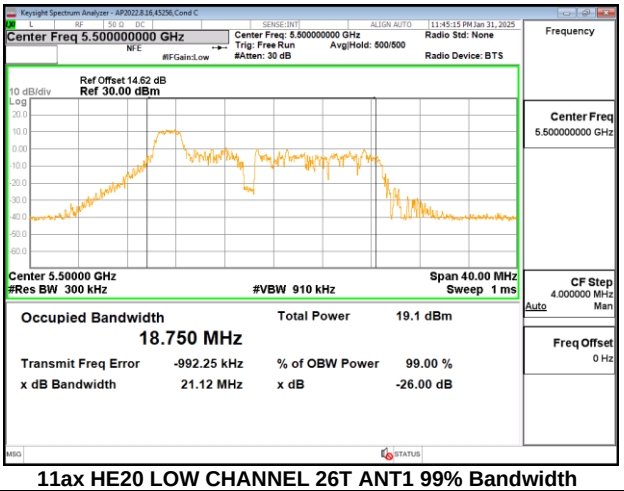
11ax HE20 LOW CHANNEL 242T ANT1 99% Bandwidth



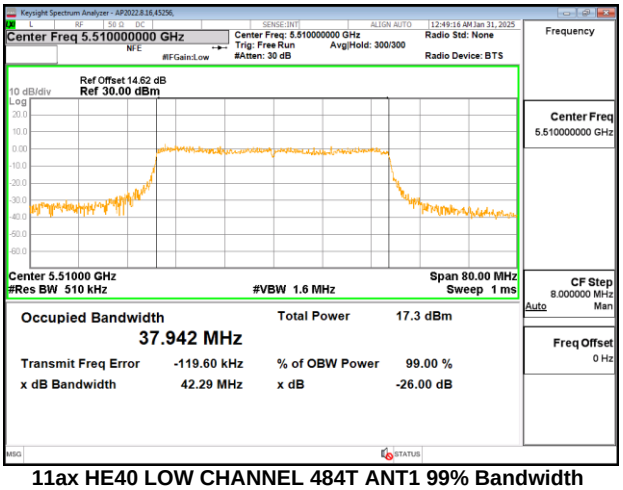
11ax HE20 LOW CHANNEL 106T ANT1 99% Bandwidth



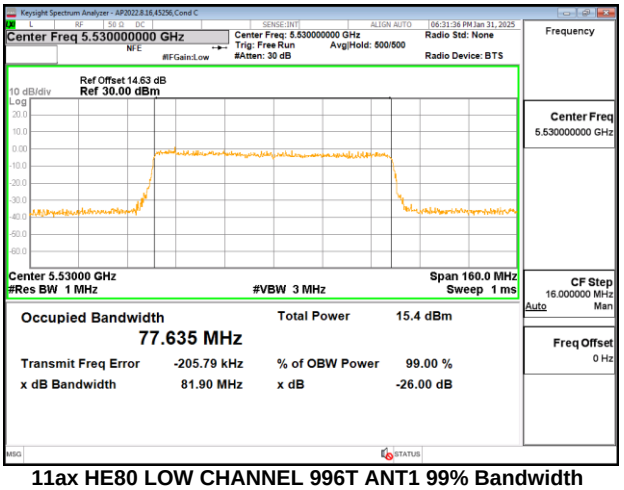
11ax HE20 LOW CHANNEL 52T ANT1 99% Bandwidth



11ax HE20 LOW CHANNEL 26T ANT1 99% Bandwidth



11ax HE40 LOW CHANNEL 484T ANT1 99% Bandwidth



11ax HE80 LOW CHANNEL 996T ANT1 99% Bandwidth

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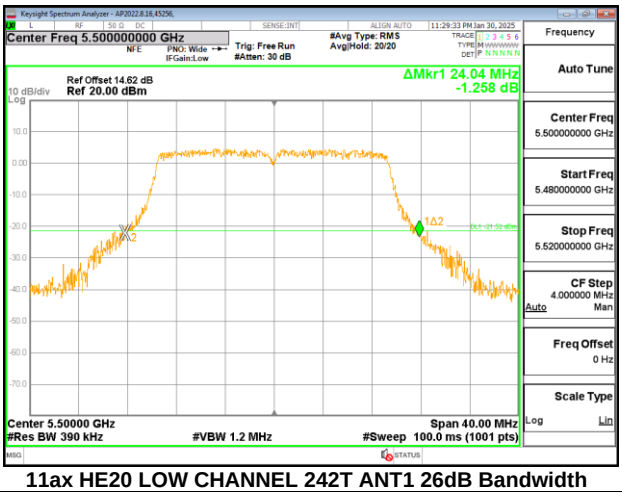
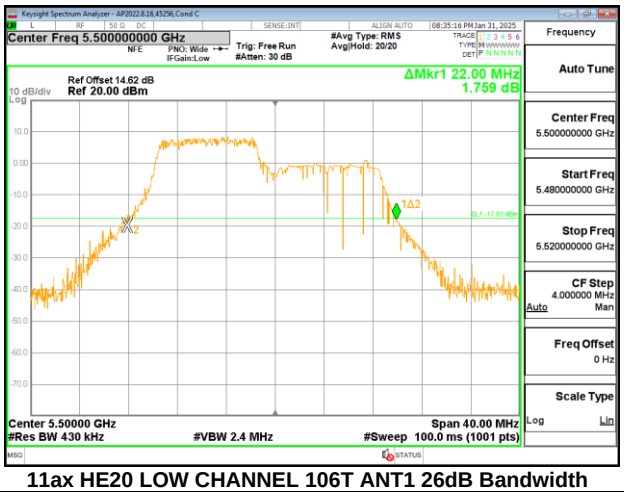
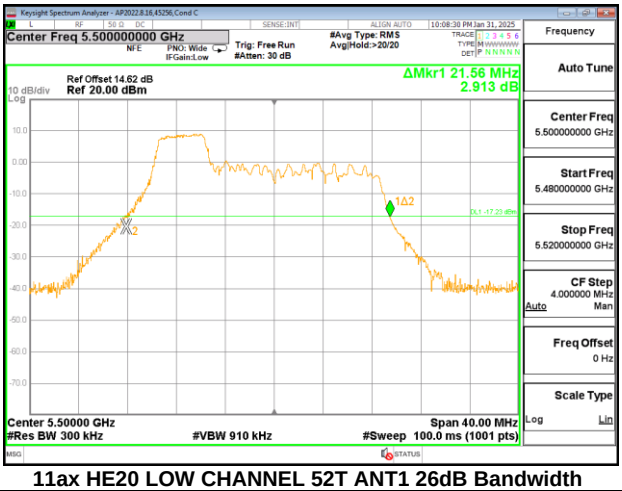
26dB Bandwidth



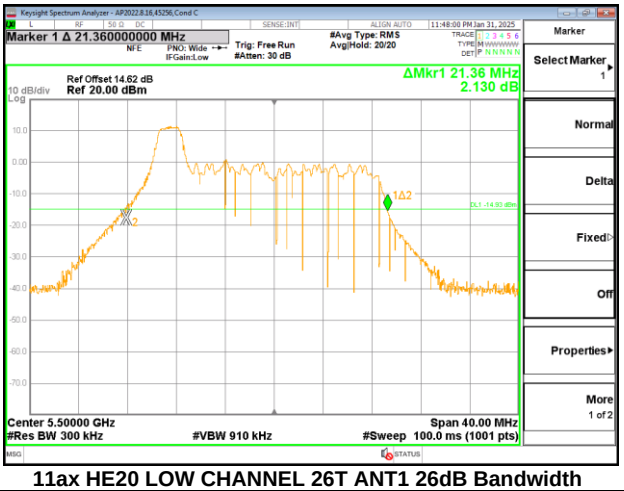
11ax HE20 LOW CHANNEL 242T ANT1 26dB Bandwidth



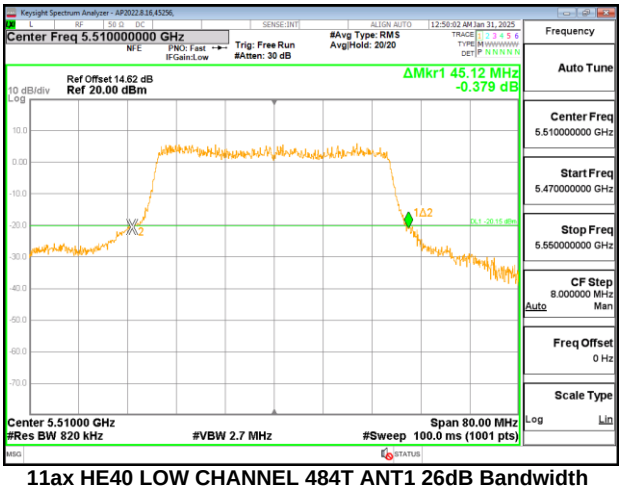
11ax HE20 LOW CHANNEL 106T ANT1 26dB Bandwidth



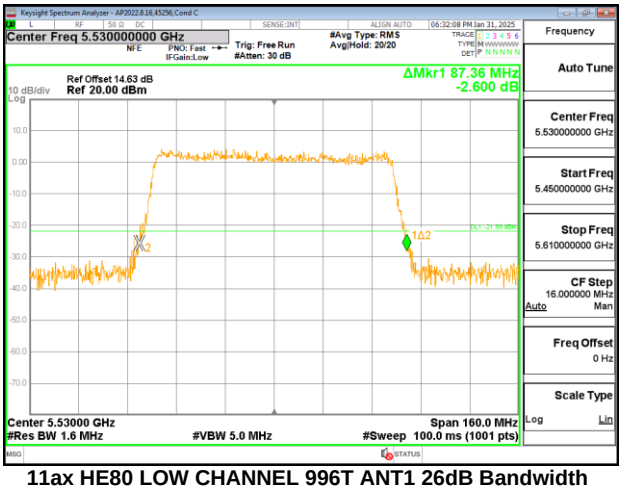
11ax HE20 LOW CHANNEL 52T ANT1 26dB Bandwidth



11ax HE20 LOW CHANNEL 26T ANT1 26dB Bandwidth



11ax HE40 LOW CHANNEL 484T ANT1 26dB Bandwidth



11ax HE80 LOW CHANNEL 996T ANT1 26dB Bandwidth

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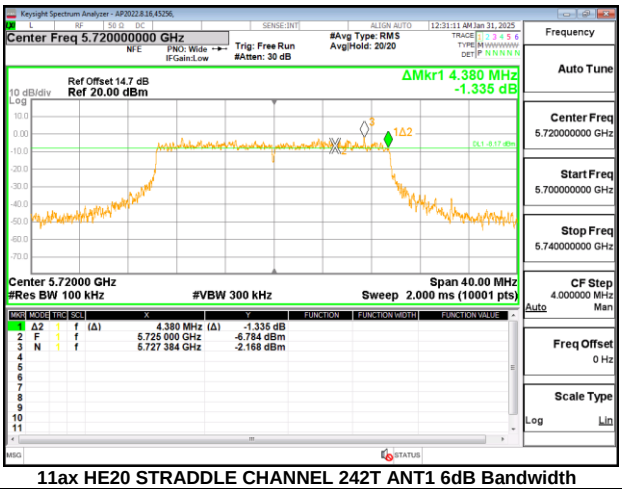
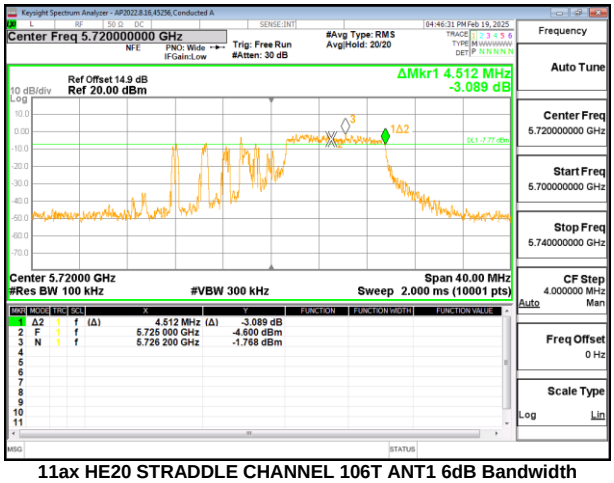
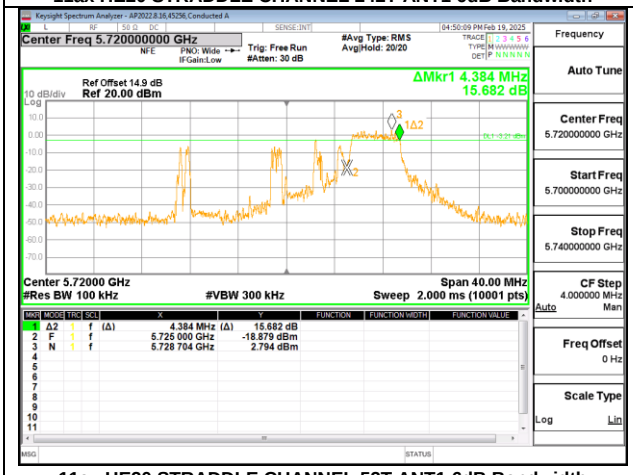
6dB Bandwidth



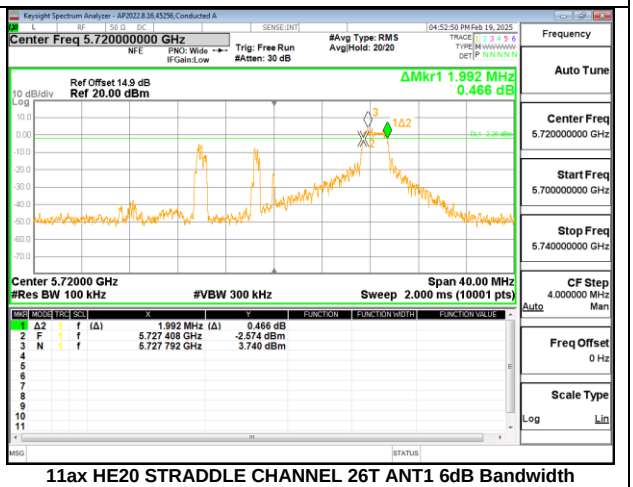
11ax HE20 STRADDLE CHANNEL 242T ANT1 6dB Bandwidth



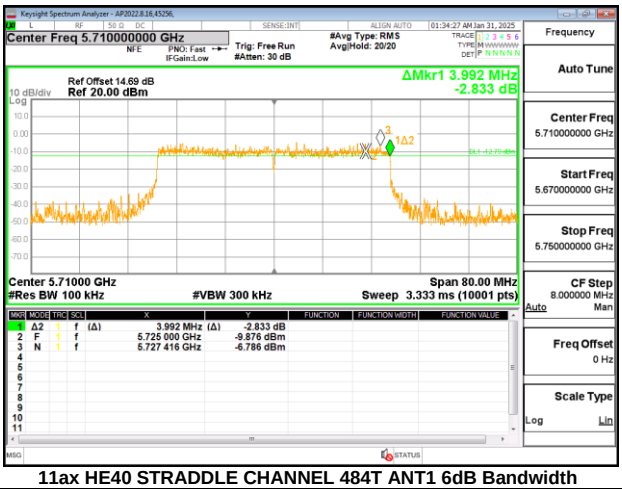
11ax HE20 STRADDLE CHANNEL 106T ANT1 6dB Bandwidth



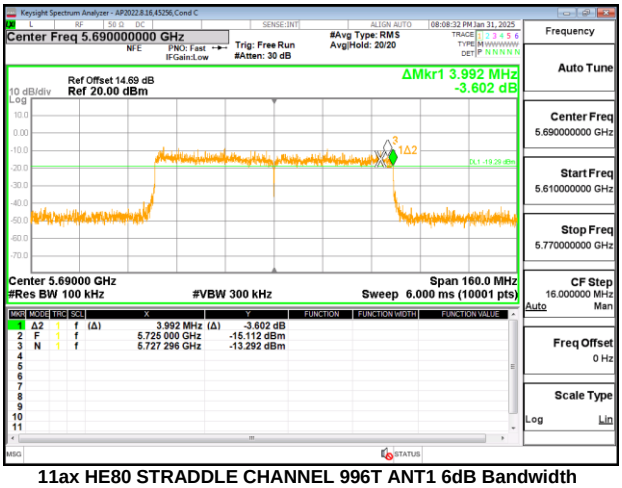
11ax HE20 STRADDLE CHANNEL 52T ANT1 6dB Bandwidth



11ax HE20 STRADDLE CHANNEL 26T ANT1 6dB Bandwidth



11ax HE40 STRADDLE CHANNEL 484T ANT1 6dB Bandwidth



11ax HE80 STRADDLE CHANNEL 996T ANT1 6dB Bandwidth

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9.2.4. 5.8 GHz BAND

Band (GHz)	No. of Tx	Mode	Channel	Freq (MHz)	Tones	RU Index	99% Bandwidth (MHz)		6dB Bandwidth (MHz)		6dB Minimum Limit (MHz)
							Ant1	Ant2	Ant1	Ant2	
5.8	2	11ax HE20	149	5745	SU		18.969	18.997	18.960	18.764	0.5
			157	5785			18.985	18.996	18.836	18.960	0.5
			165	5825			18.991	19.020	18.808	18.664	0.5
		11ax HE20	149	5745	242T	61	19.010	18.945	19.016	18.876	0.5
			157	5785			18.975	19.038	18.828	18.960	0.5
			165	5825			**19.039**	18.909	18.972	18.712	0.5
			149	5745	106T	53	18.173	18.973	8.260	8.268	0.5
			157	5785			17.999	18.002	8.276	8.280	0.5
			165	5825		54	18.194	18.063	8.176	8.296	0.5
			149	5745	52T	37	18.308	18.106	4.048	4.020	0.5
			157	5785		38	16.729	16.822	3.972	4.060	0.5
			165	5825		40	18.223	18.224	4.060	4.068	0.5
			149	5745	26T	0	18.632	18.418	1.916	1.964	0.5
			157	5785		4	16.849	16.604	2.544	2.612	0.5
			165	5825		8	18.618	18.425	1.984	2.000	0.5
		11ax HE40	151	5755	SU		37.948	37.957	37.952	37.840	0.5
			159	5795			37.826	37.839	37.944	37.632	0.5
			151	5755	484T	65	37.883	37.985	37.704	37.560	0.5
			159	5795			37.937	**38.039**	37.776	37.784	0.5
		11ax HE80	155	5775	SU		77.547	77.570	76.432	77.904	0.5
			155	5775	996T	67	77.412	**77.722**	76.736	77.728	0.5

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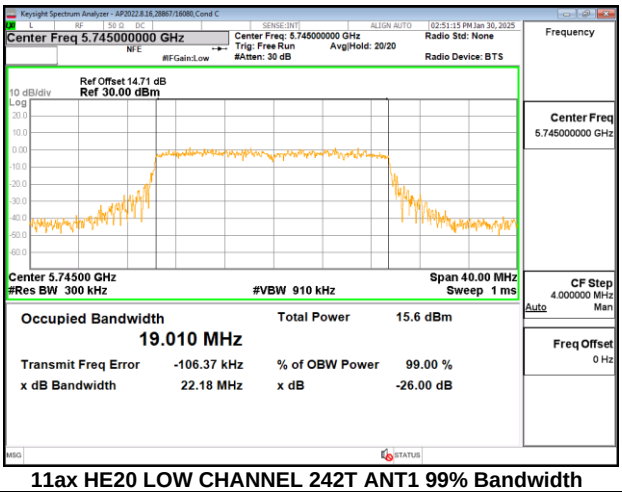
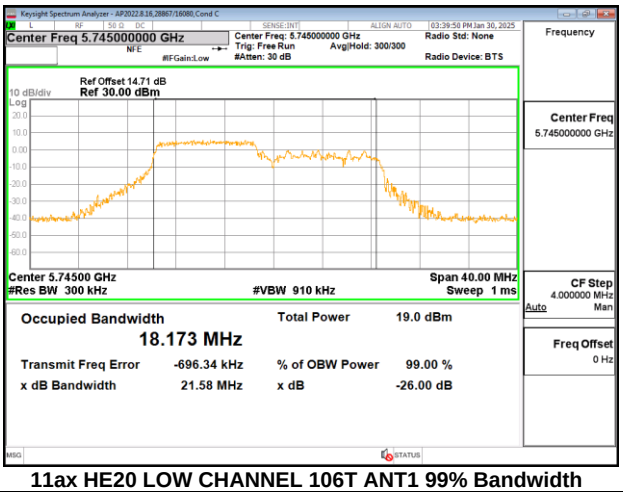
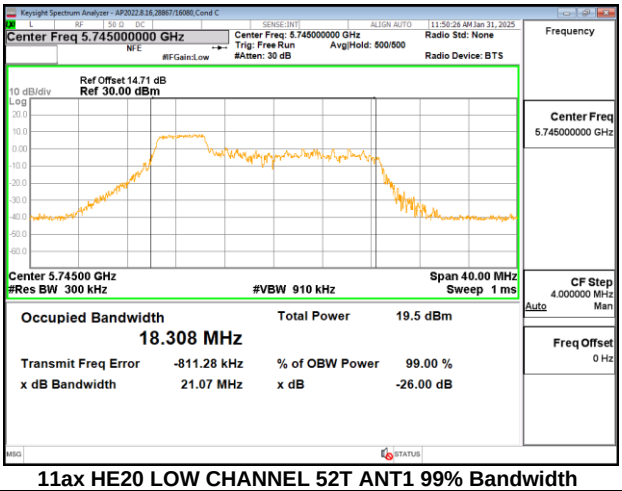
99% Bandwidth



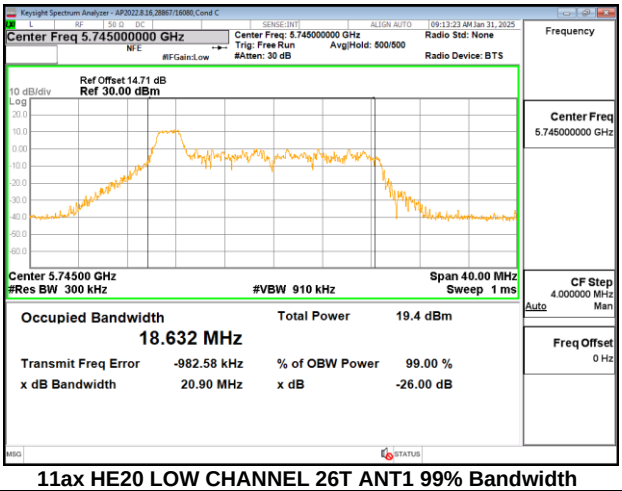
11ax HE20 LOW CHANNEL 242T ANT1 99% Bandwidth



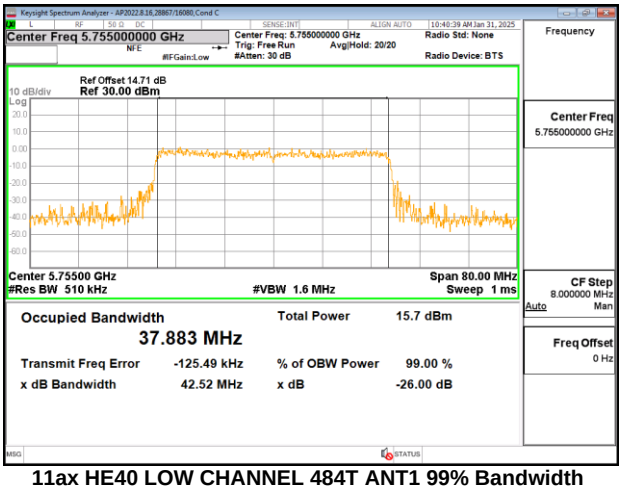
11ax HE20 LOW CHANNEL 106T ANT1 99% Bandwidth



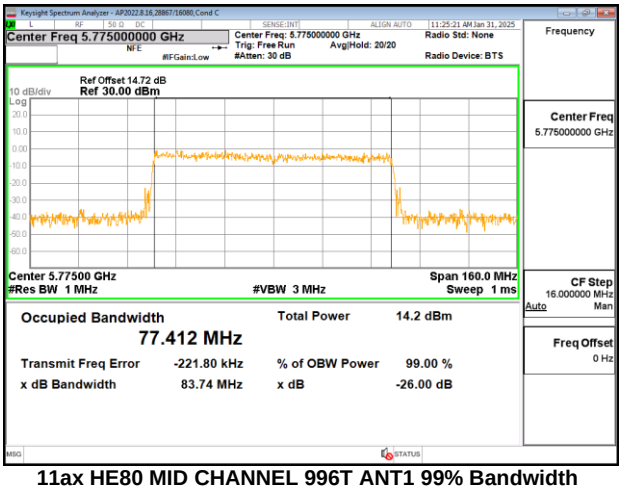
11ax HE20 LOW CHANNEL 52T ANT1 99% Bandwidth



11ax HE20 LOW CHANNEL 26T ANT1 99% Bandwidth



11ax HE40 LOW CHANNEL 484T ANT1 99% Bandwidth



11ax HE80 MID CHANNEL 996T ANT1 99% Bandwidth

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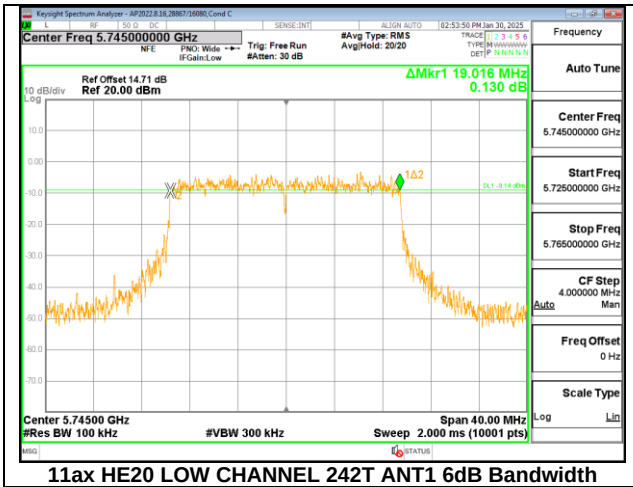
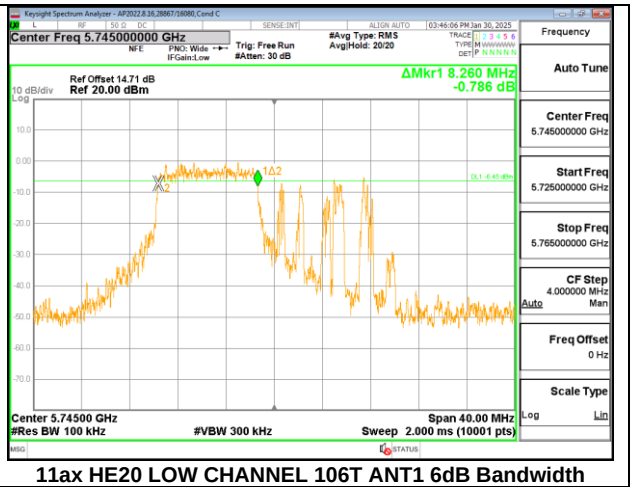
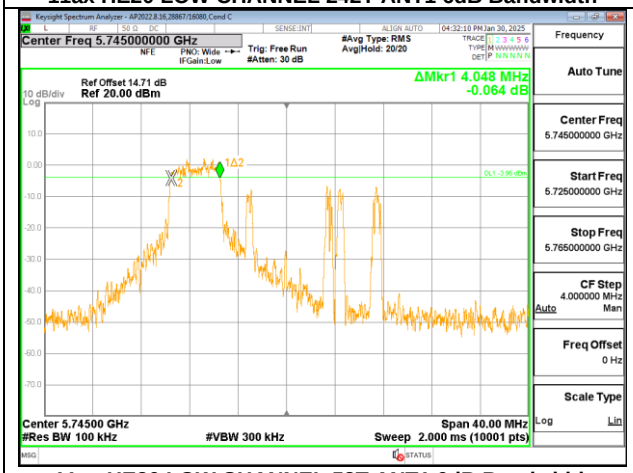
6dB Bandwidth



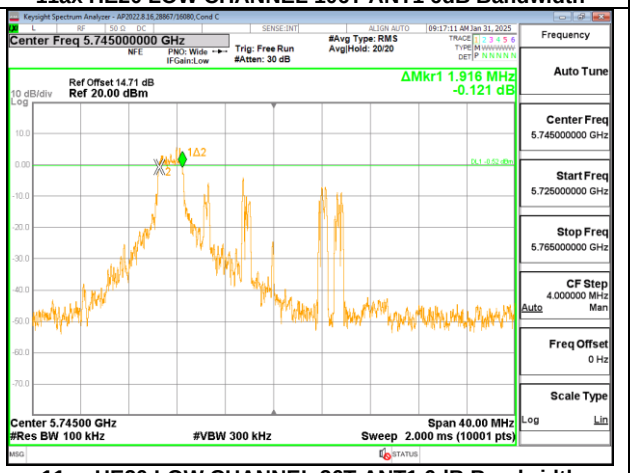
11ax HE20 LOW CHANNEL 242T ANT1 6dB Bandwidth



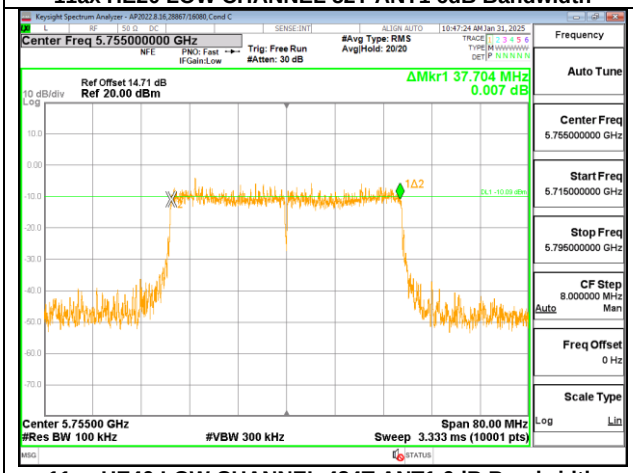
11ax HE20 LOW CHANNEL 106T ANT1 6dB Bandwidth



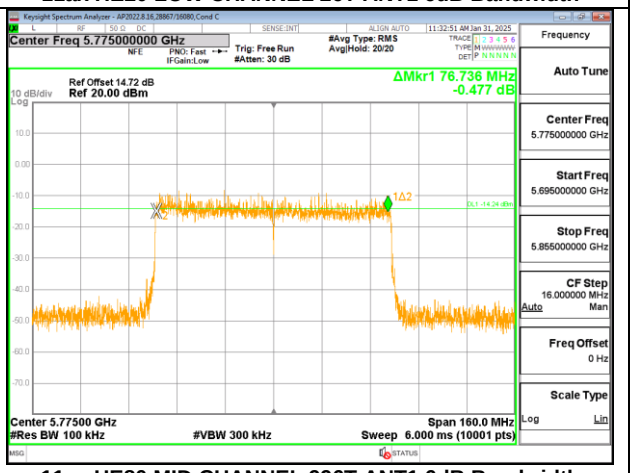
11ax HE20 LOW CHANNEL 52T ANT1 6dB Bandwidth



11ax HE20 LOW CHANNEL 26T ANT1 6dB Bandwidth



11ax HE40 LOW CHANNEL 484T ANT1 6dB Bandwidth



11ax HE80 MID CHANNEL 996T ANT1 6dB Bandwidth

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9.2.5. 5.9 GHz BAND

Band (GHz)	No. of Tx	Mode	Channel	Freq (MHz)	Tones	RU Index	99% Bandwidth		26dB Bandwidth		6dB Bandwidth		6dB Minimum Limit (MHz)
							Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
5.9	2	11ax HE20	169	5845	SU		19.011	19.032	24.40	23.36	18.804	19.040	0.5
			173	5865			17.908	17.794	24.16	22.76	18.680	18.588	0.5
			177	5885			**19.057**	19.034	25.00	23.48	17.576	17.348	0.5
		11ax HE20	169	5845	242T	61	19.050	19.003	24.40	22.72	18.312	18.627	0.5
			173	5865			19.046	19.038	24.16	22.96	19.024	18.760	0.5
			177	5885			19.056	19.017	23.96	22.84	18.772	18.836	0.5
			169	5845	106T	53	18.164	18.124	22.08	21.92	8.236	8.004	0.5
			173	5865			18.160	17.909	22.00	21.40	7.988	8.132	0.5
			177	5885		54	18.215	18.162	21.48	22.04	8.204	8.364	0.5
			169	5845	52T	37	17.848	18.206	21.48	20.92	4.000	4.052	0.5
			173	5865		38	16.669	16.613	18.76	18.52	4.032	4.078	0.5
			177	5885		40	17.991	18.087	21.12	20.96	3.972	4.004	0.5
			169	5845	26T	0	18.620	18.333	21.16	20.84	2.004	2.004	0.5
			173	5865		4	16.579	16.508	18.44	18.32	2.564	2.536	0.5
			177	5885		8	18.655	17.958	20.88	20.64	2.000	2.012	0.5
		11ax HE40	167	5835	SU		37.955	37.958	44.48	42.72	37.784	37.696	0.5
			175	5875			37.968	37.893	44.00	43.28	37.864	38.016	0.5
		11ax HE40	167	5835	484T	65	37.988	38.003	44.08	45.44	37.336	37.920	0.5
			175	5875			**38.070**	37.986	45.44	44.56	37.648	37.752	0.5
		11ax HE80	171	5855	SU		77.664	77.624	87.52	86.88	77.408	77.232	0.5
			171	5855	996T	67	77.651	**77.733**	86.40	87.20	75.616	76.864	0.5

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