

FCC Test Report

Product Name	RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
Model No.	GRAXE66
FCC ID	I4L-GRAXE66

Applicant	Micro-Star Int'l Co., Ltd.
Address	No.69, Lide St., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)

Date of Receipt	Jan. 11, 2022
Issued Date	Jul. 19, 2022
Report No.	2210313R-RFUSWL6V01-A
Report Version	V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

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The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Test Report

Issued Date : Jul. 19, 2022

Report No. : 2210313R-RFUSWL6V01-A



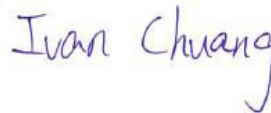
Product Name	RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
Applicant	Micro-Star Int'l Co., Ltd.
Address	No.69, Lide St., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)
Manufacturer	LEADER ELECTRONICS INC.
Model No.	GRAXE66
FCC ID	I4L-GRAXE66
EUT Rated Voltage	AC 100-240V, 50/60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	msi
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E ANSI C63.4: 2014, ANSI C63.10: 2013
Test Result	Complied

Documented By :



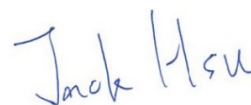
(Senior Project Specialist / Joanne Lin)

Tested By :



(Senior Engineer / Ivan Chuang)

Approved By :



(Senior Engineer / Jack Hsu)

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Revision History

Report No.	Version	Description	Issued Date
2210313R-RFUSWL6V01-A	V1.0	Initial issue of report.	Jul. 19, 2022

1. General Information

1.1. EUT Description

Product Name	RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
Trade Name	msi
FCC ID	I4L-GRAXE66
Model No.	GRAXE66
Frequency Range	802.11a/ax-20MHz: 6115-7095MHz, 802.11ax-40MHz: 5965-7085MHz 802.11ax-80MHz: 5985-7025MHz, 802.11ax-160MHz: 6025-6985Hz
Number of Channels	802.11a/ax-20MHz: 50CH, 802.11ax-40MHz: 25CH 802.11ax-80MHz: 12CH, 802.11ax-160MHz: 6CH
Data Rate	802.11a: 6 - 54Mbps, 802.11ax: up to 4804MHz
Type of Modulation	OFDM, BPSK, QPSK, 16QAM, 64QAM OFDMA, BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Channel Control	Auto
Antenna type	Dipole Antenna
Antenna Gain	Refer to the table "Antenna List"
LAN Cable	Non-shielded, 1m
Power Adapter	MFR: CWT, M/N: 2AEJ042FC Input: AC 100-240V~50/60Hz, 1.3A Output: 12.0V=3.5A, 42.0W Cable Out: Non-shielded, 1.5m

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	WIESON	ARY121-0350-003-00	Dipole Antenna	2.32dBi for 5925-6425MHz 1.80dBi for 6425-6525MHz 1.60dBi for 6525-6875MHz 2.17dBi for 6875-7125MHz
2	WIESON	ARY121-0350-004-00	Dipole Antenna	2.94dBi for 5925-6425MHz 3.10dBi for 6425-6525MHz 2.48dBi for 6525-6875MHz 3.46dBi for 6875-7125MHz
3	WIESON	ARY121-0350-001-00	Dipole Antenna	2.60dBi for 5925-6425MHz 2.37dBi for 6425-6525MHz 1.86dBi for 6525-6875MHz 2.94dBi for 6875-7125MHz
4	WIESON	ARY121-0350-002-00	Dipole Antenna	2.95dBi for 5925-6425MHz 2.89dBi for 6425-6525MHz 1.92dBi for 6525-6875MHz 2.92dBi for 6875-7125MHz

802.11a/ax-20MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 33:	6115 MHz	Channel 37:	6135 MHz	Channel 41:	6155 MHz	Channel 45:	6175 MHz
Channel 49:	6195 MHz	Channel 53:	6215 MHz	Channel 57:	6235 MHz	Channel 61:	6255 MHz
Channel 65:	6275 MHz	Channel 69:	6295 MHz	Channel 73:	6315 MHz	Channel 77:	6335 MHz
Channel 81:	6355 MHz	Channel 85:	6375 MHz	Channel 89:	6395 MHz	Channel 93:	6415 MHz
Channel 97:	6435 MHz	Channel 101:	6455 MHz	Channel 105:	6475 MHz	Channel 109:	6495 MHz
Channel 113:	6515 MHz	Channel 117:	6535 MHz	Channel 121:	6555 MHz	Channel 125:	6575 MHz
Channel 129:	6595 MHz	Channel 133:	6615 MHz	Channel 137:	6635 MHz	Channel 141:	6655 MHz
Channel 145:	6675 MHz	Channel 149:	6695 MHz	Channel 153:	6715 MHz	Channel 157:	6735 MHz
Channel 161:	6755 MHz	Channel 165:	6775 MHz	Channel 169:	6795 MHz	Channel 173:	6815 MHz
Channel 177:	6835 MHz	Channel 181:	6855 MHz	Channel 185:	6875 MHz	Channel 189:	6895 MHz
Channel 193:	6915 MHz	Channel 197:	6935 MHz	Channel 201:	6955 MHz	Channel 205:	6975 MHz
Channel 209:	6995 MHz	Channel 213:	7015 MHz	Channel 217:	7035 MHz	Channel 221:	7055 MHz
Channel 225:	7075 MHz	Channel 229:	7095 MHz				

802.11ax (40MHz) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 35:	6125 MHz	Channel 43:	6165 MHz	Channel 51:	6205 MHz	Channel 59:	6245 MHz
Channel 67:	6285 MHz	Channel 75:	6325 MHz	Channel 83:	6365 MHz	Channel 91:	6405 MHz
Channel 99:	6445 MHz	Channel 107:	6485 MHz	Channel 115:	6525 MHz	Channel 123:	6565 MHz
Channel 131:	6605 MHz	Channel 139:	6645 MHz	Channel 147:	6685 MHz	Channel 155:	6725 MHz
Channel 163:	6765 MHz	Channel 171:	6805 MHz	Channel 179:	6845 MHz	Channel 187:	6885 MHz
Channel 195:	6925 MHz	Channel 203:	6965 MHz	Channel 211:	7005 MHz	Channel 219:	7045 MHz
Channel 227:	7085 MHz						

802.11ax (80MHz) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 39:	6145 MHz	Channel 55:	6225 MHz	Channel 71:	6305 MHz	Channel 87:	6385 MHz
Channel 103:	6465 MHz	Channel 119:	6545 MHz	Channel 135:	6625 MHz	Channel 151:	6705 MHz
Channel 167:	6785 MHz	Channel 183:	6865 MHz	Channel 199:	6945 MHz	Channel 215:	7025 MHz

802.11ax (160MHz) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 47:	6185 MHz	Channel 79:	6345 MHz	Channel 111:	6505 MHz	Channel 143:	6665 MHz
Channel 175:	6825 MHz	Channel 207:	6985 MHz				

Note:

1. This device is a RadiX AXE6600 WiFi 6E Tri-Band Gaming Router with built-in WLAN(802.11a/b/g/n/ac/ax) transceiver, this report for WLAN 6GHz.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Lowest data rates are tested in each mode. Only worst case is shown in the report.
(802.11a is 6Mbps 、802.11ax-20BW/40BW/80BW/160BW is MCS0)
4. The CDD mode and Beamforming mode are presented in the power output test item. For other test items, CDD mode is the worst case for the final test and shown in this report.
5. The spectrum plot against conducted item only shows the worst case.
6. This device does not support partial RU function.
7. These tests were conducted on a sample for the purpose of demonstrating compliance of 802.11a/ax transmitter with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.

Test Mode	Mode 1: Transmit (802.11a-CDD)
	Mode 2: Transmit (802.11ax-20BW-CDD)
	Mode 3: Transmit (802.11ax-40BW-CDD)
	Mode 4: Transmit (802.11ax-80BW-CDD)
	Mode 5: Transmit (802.11ax-160BW-CDD)
	Mode 6: Transmit (802.11ax-20BW-Beamforming)
	Mode 7: Transmit (802.11ax-40BW-Beamforming)
	Mode 8: Transmit (802.11ax-80BW-Beamforming)
	Mode 9: Transmit (802.11ax-160BW-Beamforming)

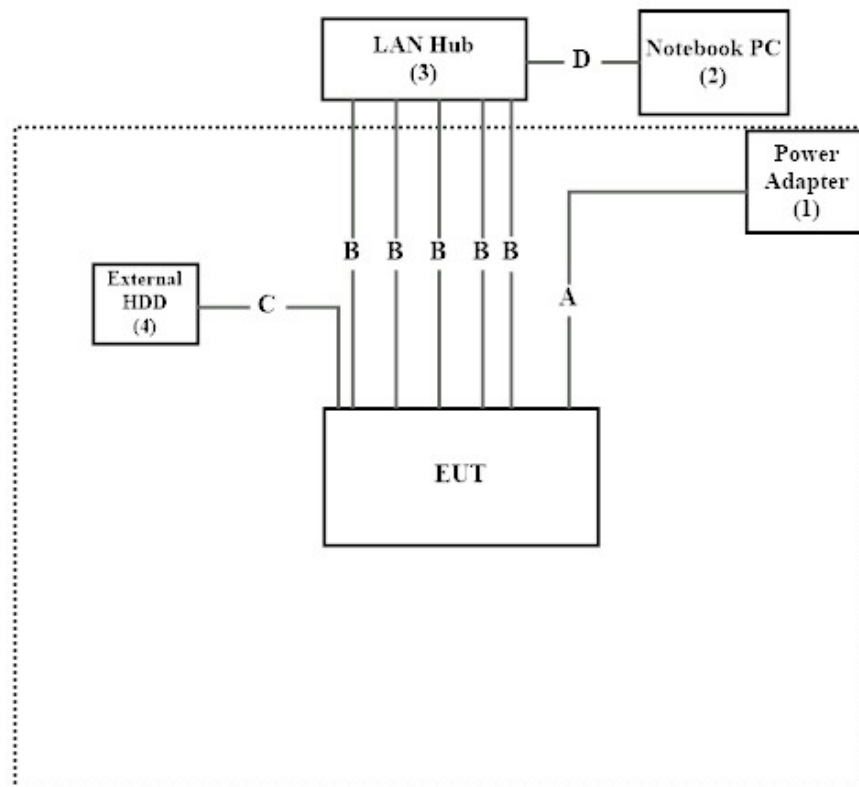
1.2. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	Power Cord
1 Power Adapter	CWT	2AEJ042FC	N/A	N/A
2 Notebook PC	DELL	P62G	CY9FJC2	N/A
3 LAN Hub	TP-LINK	TL-SG108	2161597000471	Non-Shielded, 1.5m
4 External HDD	Transcend	TS1TSJ25H3B	F21786-0103	N/A

Signal Cable Type	Signal cable Description
A Power Cable	Non-shielded, 1.5m
B LAN Cable	Non-shielded, 3m
C USB Cable	Shielded, 1m
D LAN Cable	Non-shielded, 3m

1.3. Configuration of tested System



1.4. EUT Exercise Software

1. Setup the EUT as shown in Section 1.3.
2. Execute software "QRCT Version 4.0.00192.0" on the Notebook PC.
3. Configure the test mode, the test channel, and the data rate.
4. Press "OK" to start the continuous Transmit.
5. Verify that the EUT works properly.

1.5. Test Facility

Ambient conditions in the laboratory:

Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	10~40 °C	25.8 °C
	Humidity (%RH)	10~90 %	50.9 %
Radiated Emission	Temperature (°C)	10~40 °C	24.1 °C
	Humidity (%RH)	10~90 %	63.8 %
Conductive	Temperature (°C)	10~40 °C	25.0 °C
	Humidity (%RH)	10~90 %	55.8 %

USA : FCC Registration Number: TW0033

Canada : CAB Identifier Number: TW3023 / Company Number: 26930

Site Description : Accredited by TAF
Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd
Address : No. 5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan
Performed Location : No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan, R.O.C.
Phone number : +886-3-275-7255
Fax number : +866-3-327-8031
Email address : info.tw@dekra.com
Website : <http://www.dekra.com.tw>

1.6. List of Test Equipment

For Conduction measurements / HY-SR01

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	EMI Test Receiver	R&S	ESR7	101601	2021.06.19	2022.06.18
X	Two-Line V-Network	R&S	ENV216	101306	2022.05.23	2023.05.22
X	Two-Line V-Network	R&S	ENV216	10147	2021.08.13	2022.08.12
X	Coaxial Cable	SUHNER	RG400 BNC	RF001	2022.05.24	2023.05.23

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : E3 210616 dekra V9.

For Conducted measurements / HY-SR02

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	Spectrum Analyzer	R&S	FSV30	103466	2021.12.27	2022.12.26
X	Peak Power Analyzer	KEYSIGHT	8900B	MY51000539	2022.05.27	2023.05.26
X	Power Sensor	KEYSIGHT	N1923A	MY59240002	2022.05.19	2023.05.18
X	Power Sensor	KEYSIGHT	N1923A	MY59240003	2022.05.19	2023.05.18
X	Spectrum Analyzer (PXA)	Keysight	N9030B(AT0-74915)	MY56320509	2021.08.06	2022.08.05
X	Spectrum Analyzer	Keysight	N9010B	MY59071415	2021.11.03	2022.11.02
X	Vector Signal Generator	R&S	SMBV100A	261757	2021.12.24	2022.12.23

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : RF Conducted Test Tools R3 V3.0.1.19.

For Radiated measurements / HY-CB01

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	Loop Antenna	AMETEK	HLA6121	56736	2022.05.14	2023.05.13
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-675	2021.08.10	2022.08.09
X	Horn Antenna	ETS-Lindgren	3117	00201259	2021.11.09	2022.11.08
X	Horn Antenna	Com-Power	AH-1840	101101	2021.11.30	2022.11.29
X	Pre-Amplifier	SGH	SGH0301	20211007-7	2022.02.22	2023.02.21
X	Pre-Amplifier	EMCI	EMC051835SE	980312	2022.02.22	2023.02.21
X	Pre-Amplifier	EMCI	EMC05820SE	980362	2021.08.24	2022.08.23
X	Pre-Amplifier	EMCI	EMC184045SE	980369	2022.05.12	2023.05.11
	Coaxial Cable	EMCI	EMC102-KM-KM-600	1160314		
	Coaxial Cable	EMCI	EMC102-KM-KM-7000	170242		
X	WIFI 6E Filter	MVE	MFN-5925.6425.S1	A80007N	2022.03.17	2023.03.16
X	WIFI 6E Filter	MVE	MFN-6425.6525.S1	A80008N	2022.03.17	2023.03.16
X	WIFI 6E Filter	MVE	MFN-6525.6875.S1	A80009N	2022.03.17	2023.03.16
X	WIFI 6E Filter	MVE	MFN-6875.7125.S1	A80010N	2022.03.17	2023.03.16
X	EMI Test Receiver	R&S	ESR	102792	2021.12.15	2022.12.14
X	Spectrum Analyzer	R&S	FSV3044	101113	2022.01.25	2023.02.24
X	Coaxial Cable	SUHNER	SUCOFLEX 106	25450/6	2022.03.22	2023.03.21
	Coaxial Cable	SGH	HA800	GD20110222-8		
	Coaxial Cable	SGH	SGH18	2021003-8		
	Coaxial Cable	EMCI	EMC106	151113		

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : E3 210616 dekra V9.

1.7. Uncertainty

Uncertainties have been calculated according to the DEKRA internal document.

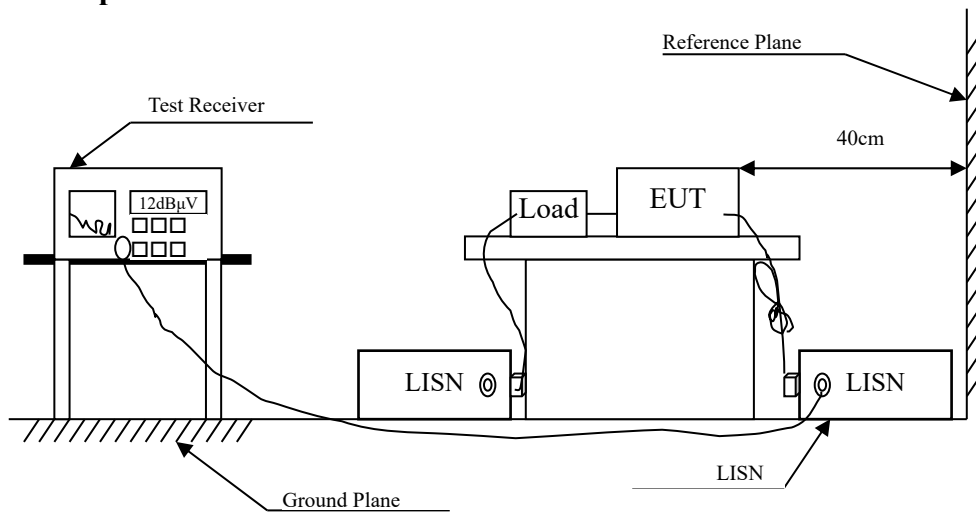
The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Test Item	Uncertainty
Conducted Emission	± 2.1 dB
99% & 26dB Bandwidth	± 637 Hz
Transmit Output	± 1.16 dB
Peak Power Spectrum Density	± 2.11 dB
Radiated Emission	± 3.40 dB below 1GHz
	± 3.46 dB above 1GHz
Band Edge	± 3.46 dB above 1GHz

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC CFR Title 47 Part 15 Subpart C Paragraph 15.207 Limits (dBuV)		
Frequency	QP	AV
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Remark: In the above table, the tighter Limit applies at the band edges.

2.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs.)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

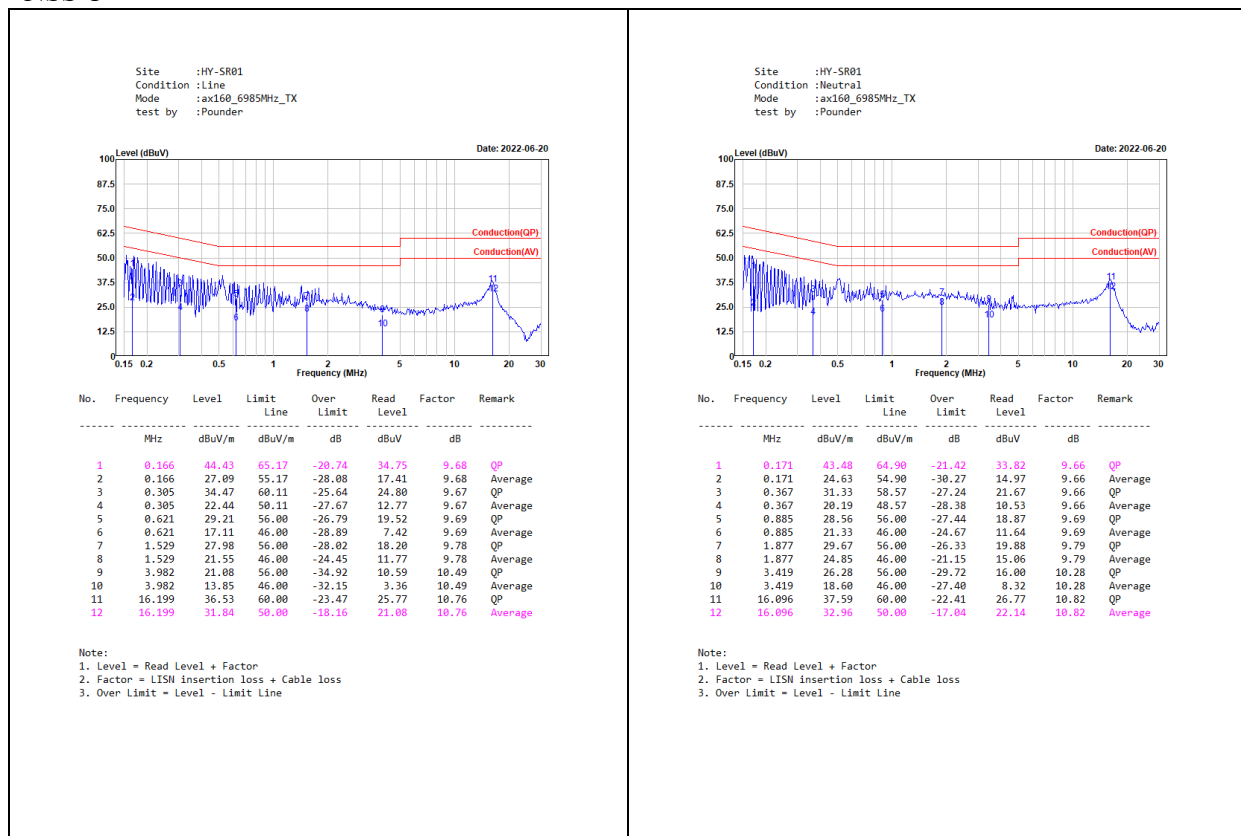
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

2.4. Test Specification

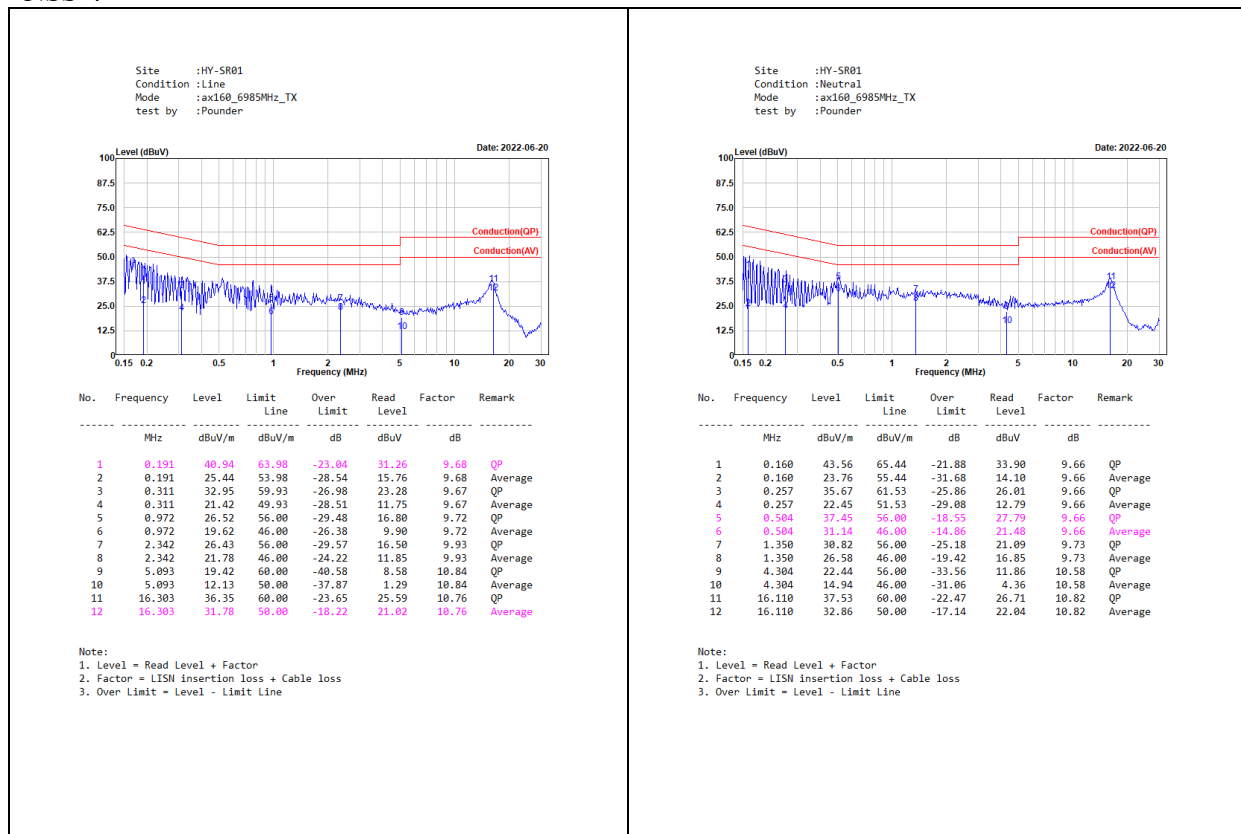
According to FCC CFR Title 47 Part 15 Subpart C Paragraph 15.207.

2.5. Test Result of Conducted Emission

NSS-1



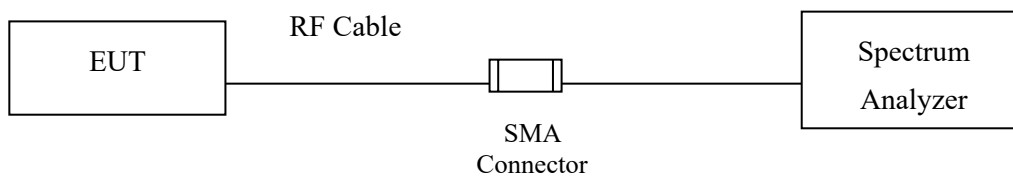
NSS-4



3. 99% & 26dB Bandwidth

3.1. Test Setup

26dB Occupied Bandwidth



3.2. Limits

No Required

3.3. Test Procedure

The EUT was tested according to U-NII test procedure of KDB 789033.D02 V02r01

Set RBW 1% of the emission bandwidth, VBW equal to 3 times the RBW.

3.4. Test Result of 99% & 26dB Bandwidth

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : 99% & 26dB Bandwidth
 Test Mode : Mode 1: Transmit (802.11a-CDD) - NSS-1
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Chain A	Chain B	Chain C	Chain D	Chain A	Chain B	Chain C	Chain D
33	6115	20.94	20.94	20.74	20.82	16.98	16.94	17.62	16.86
61	6255	20.86	20.74	21.10	20.46	16.98	16.94	16.94	16.94
93	6415	20.94	20.90	20.78	20.74	16.94	16.94	16.90	16.90
97	6435	20.98	20.86	21.22	20.70	16.98	16.86	16.98	16.86
105	6475	21.10	20.82	20.78	20.66	17.02	16.90	16.94	16.86
113	6515	20.94	20.90	20.94	20.82	16.90	16.90	16.90	16.86
117	6535	21.06	21.42	20.70	20.82	17.02	16.90	16.90	16.94
149	6695	20.74	20.98	20.90	20.90	17.10	16.94	16.94	16.86
181	6855	21.10	20.90	20.94	20.54	16.98	16.98	17.06	16.86
185	6875	20.54	21.46	20.82	20.78	16.98	16.98	16.94	16.90
189	6895	20.98	20.98	21.10	20.82	16.98	16.98	16.98	16.90
213	7015	20.90	21.26	21.06	21.10	17.02	16.98	16.98	16.94
229	7095	21.22	21.18	20.94	21.06	17.02	16.98	16.98	16.98

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : 99% & 26dB Bandwidth
 Test Mode : Mode 2: Transmit (802.11ax-20BW-CDD) - NSS-1
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Chain A	Chain B	Chain C	Chain D	Chain A	Chain B	Chain C	Chain D
33	6115	22.10	22.34	22.10	22.62	19.22	19.30	19.30	19.26
61	6255	22.22	22.14	22.10	22.18	19.22	19.34	19.26	19.30
93	6415	22.14	22.10	22.50	22.50	19.22	19.26	19.26	19.30
97	6435	22.06	22.06	22.46	22.02	19.18	19.26	19.30	19.26
105	6475	22.34	22.10	22.38	22.58	19.42	19.30	19.26	19.30
113	6515	22.14	22.26	22.02	22.06	19.30	19.26	19.22	19.26
117	6535	22.54	22.86	22.10	22.10	19.26	19.30	19.38	19.26
149	6695	22.58	22.14	22.46	22.26	19.30	19.26	19.26	19.18
181	6855	22.02	22.34	22.42	22.54	19.26	19.22	19.22	19.30
185	6875	21.78	22.26	21.94	22.22	19.34	19.26	19.26	19.26
189	6895	22.30	22.38	22.14	22.50	19.22	19.30	19.30	19.26
213	7015	22.22	22.54	22.58	22.78	19.26	19.26	19.26	19.26
229	7095	22.34	22.66	22.22	22.46	19.30	19.30	19.26	19.26

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : 99% & 26dB Bandwidth
 Test Mode : Mode 3: Transmit (802.11ax-40BW-CDD) - NSS-1
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Chain A	Chain B	Chain C	Chain D	Chain A	Chain B	Chain C	Chain D
35	6125	40.44	40.44	40.28	40.52	37.72	37.64	37.72	37.80
59	6245	40.36	40.28	40.36	40.20	37.80	37.72	37.56	37.72
91	6405	40.28	40.28	40.20	40.52	37.72	37.72	37.64	37.64
99	6445	40.20	40.52	40.28	40.20	37.64	37.64	37.72	37.72
107	6485	40.36	40.68	40.12	40.76	37.72	37.72	37.72	37.72
115	6525	40.44	40.44	40.44	40.52	37.72	37.80	37.72	37.56
123	6565	40.36	40.04	40.52	40.12	37.64	37.72	37.80	37.72
155	6725	40.20	40.52	40.04	40.20	37.64	37.72	37.88	37.64
179	6845	40.36	40.44	40.28	40.12	37.72	37.72	37.80	37.64
187	6885	40.52	40.28	40.20	40.28	37.72	37.64	37.80	37.64
195	6925	40.52	40.20	40.28	39.96	37.72	37.72	37.64	37.72
211	7005	40.44	40.52	40.60	40.28	37.64	37.72	37.64	37.80
227	7085	40.60	40.60	40.68	40.44	37.64	37.72	37.64	37.64

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : 99% & 26dB Bandwidth
 Test Mode : Mode 4: Transmit (802.11ax-80BW-CDD) - NSS-1
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Chain A	Chain B	Chain C	Chain D	Chain A	Chain B	Chain C	Chain D
39	6145	82.48	81.84	81.84	82.00	77.36	77.20	77.04	77.04
55	6225	82.16	81.52	81.04	81.84	77.04	77.04	77.20	77.04
87	6385	81.52	82.64	81.84	82.16	77.04	77.20	77.20	77.04
103	6465	82.48	81.84	81.52	81.68	77.04	77.04	77.20	77.04
119	6545	81.52	81.84	81.84	82.48	77.04	77.36	77.20	77.20
135	6625	81.04	81.52	81.04	81.04	77.04	77.20	77.20	77.20
151	6705	81.84	81.36	81.36	81.04	77.04	77.20	77.36	76.88
167	6785	82.16	81.52	82.16	81.36	77.04	77.04	77.36	77.20
183	6865	82.00	81.68	81.68	82.64	77.20	77.20	77.04	77.20
199	6945	80.72	82.32	81.84	80.40	77.20	76.88	77.20	77.04
215	7025	81.52	81.04	80.56	80.72	77.20	77.04	77.20	76.88

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
Test Item : 99% & 26dB Bandwidth
Test Mode : Mode 5: Transmit (802.11ax-160BW-CDD) - NSS-1
Test Date : 2022/06/02

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Chain A	Chain B	Chain C	Chain D	Chain A	Chain B	Chain C	Chain D
47	6185	162.08	162.40	161.76	162.40	154.09	153.77	154.09	154.73
79	6345	164.00	164.32	162.72	163.36	154.09	154.41	154.73	155.04
111	6505	162.72	162.72	162.08	163.36	154.72	154.72	154.08	154.40
143	6665	162.40	162.40	162.08	162.08	154.73	154.09	154.09	154.41
175	6825	162.72	164.00	162.72	164.00	154.40	154.08	154.08	154.72
207	6985	161.76	162.08	161.76	161.44	154.73	153.77	154.41	153.77

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : 99% & 26dB Bandwidth
 Test Mode : Mode 1: Transmit (802.11a-CDD) - NSS-4
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Chain A	Chain B	Chain C	Chain D	Chain A	Chain B	Chain C	Chain D
33	6115	20.94	20.78	20.86	20.90	17.06	16.94	17.02	16.82
61	6255	21.06	21.10	20.90	21.02	16.98	16.98	16.86	16.90
93	6415	20.82	20.94	20.82	20.46	17.02	16.94	17.06	16.94
97	6435	21.10	20.54	21.18	20.50	16.98	16.90	16.86	16.90
105	6475	20.90	20.94	20.90	20.82	17.10	16.86	17.02	16.86
113	6515	20.86	20.74	20.90	20.62	17.02	16.90	17.02	16.86
117	6535	20.98	20.70	20.86	20.70	17.02	16.98	16.86	16.86
149	6695	20.86	20.90	20.90	20.90	17.02	16.94	17.02	16.90
181	6855	21.06	20.62	20.74	20.82	16.94	16.94	16.98	16.82
185(U-NII-7)	6875	10.67	10.47	10.59	10.39	8.59	8.55	8.47	8.47
185(U-NII-8)	6875	10.35	10.39	10.67	10.31	8.47	8.39	8.39	8.39
189	6895	21.18	20.78	20.86	20.46	17.06	16.90	16.82	16.90
213	7015	21.06	21.38	21.02	20.94	17.02	16.98	16.98	16.94
229	7095	21.22	21.50	21.34	21.14	17.02	16.94	16.98	16.94

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : 99% & 26dB Bandwidth
 Test Mode : Mode 2: Transmit (802.11ax-20BW-CDD) - NSS-4
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Chain A	Chain B	Chain C	Chain D	Chain A	Chain B	Chain C	Chain D
33	6115	22.10	22.06	22.14	21.78	19.50	19.26	19.26	19.22
61	6255	22.06	21.98	22.10	22.10	19.26	19.50	19.18	19.26
93	6415	21.94	22.06	22.38	21.98	19.30	19.26	19.22	19.26
97	6435	22.10	22.14	22.22	22.06	19.30	19.26	19.30	19.22
105	6475	22.18	21.70	22.34	21.98	19.26	19.34	19.26	19.42
113	6515	22.06	22.26	21.98	21.62	19.42	19.42	19.26	19.30
117	6535	22.18	22.14	21.78	21.90	19.22	19.26	19.26	19.22
149	6695	22.06	22.30	21.74	21.82	19.18	19.30	19.42	19.34
181	6855	22.38	21.90	21.94	22.02	19.30	19.26	19.38	19.26
185(U-NII-7)	6875	11.15	11.03	11.19	11.07	9.67	9.71	9.71	9.67
185(U-NII-8)	6875	10.63	10.79	10.87	11.03	9.59	9.67	9.63	9.59
189	6895	22.06	22.18	22.10	21.98	19.34	19.34	19.18	19.26
213	7015	22.22	22.50	22.66	22.18	19.30	19.26	19.30	19.26
229	7095	22.42	22.58	22.30	22.10	19.26	19.34	19.30	19.26

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : 99% & 26dB Bandwidth
 Test Mode : Mode 3: Transmit (802.11ax-40BW-CDD) - NSS-4
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Chain A	Chain B	Chain C	Chain D	Chain A	Chain B	Chain C	Chain D
35	6125	40.36	40.12	40.52	40.04	37.72	37.72	37.72	37.64
59	6245	40.20	40.28	40.20	39.96	37.64	37.72	37.72	37.88
91	6405	39.96	40.20	40.20	40.28	37.80	37.56	37.56	37.56
99	6445	40.36	40.44	39.96	40.12	37.72	37.72	37.72	37.80
107	6485	40.52	40.44	40.44	40.28	37.72	37.64	37.64	37.72
115(U-NII-6)	6525	20.46	20.14	20.14	20.22	18.94	18.86	18.86	18.86
115(U-NII-7)	6525	19.98	20.22	19.82	19.90	18.86	18.86	18.86	18.86
123	6565	40.28	40.36	40.28	40.04	37.72	37.72	37.64	37.64
155	6725	40.36	40.12	40.36	40.44	37.72	37.80	37.64	37.64
179	6845	40.12	40.36	40.28	40.04	37.64	37.64	37.72	37.64
187(U-NII-7)	6885	10.22	10.22	10.14	10.30	8.86	8.94	8.94	8.94
187(U-NII-8)	6885	29.98	30.22	29.98	30.14	28.86	28.78	28.86	28.86
195	6925	40.44	40.52	40.52	40.68	37.72	37.64	37.80	37.72
211	7005	40.36	40.36	40.36	40.44	37.72	37.64	37.64	37.72
227	7085	40.52	40.52	40.36	40.36	37.64	37.64	37.64	37.64

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : 99% & 26dB Bandwidth
 Test Mode : Mode 4: Transmit (802.11ax-80BW-CDD) - NSS-4
 Test Date : 2022/06/02

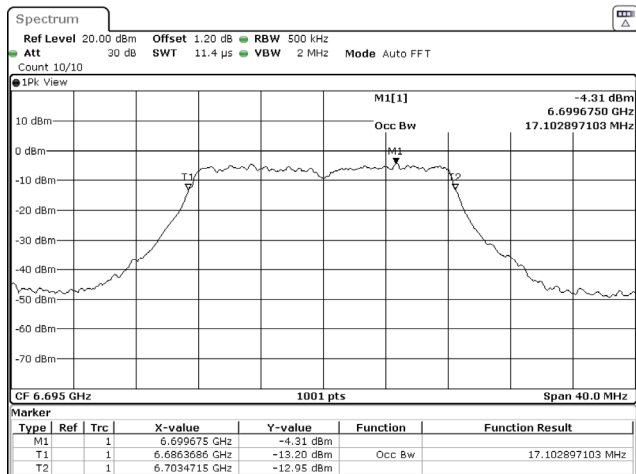
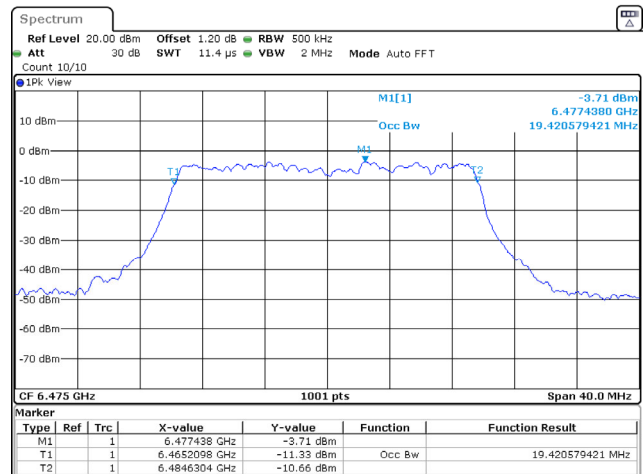
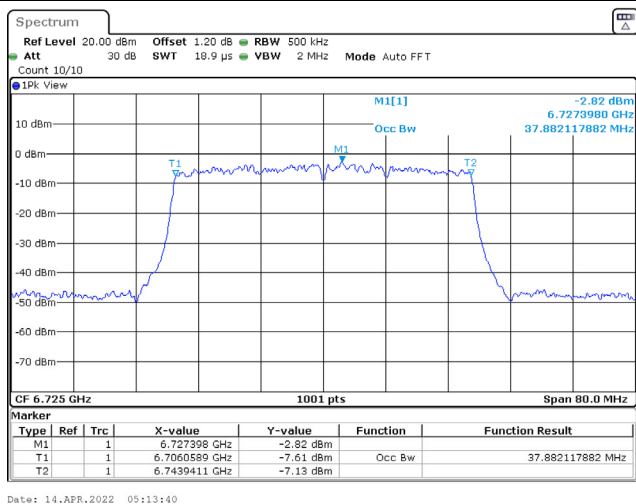
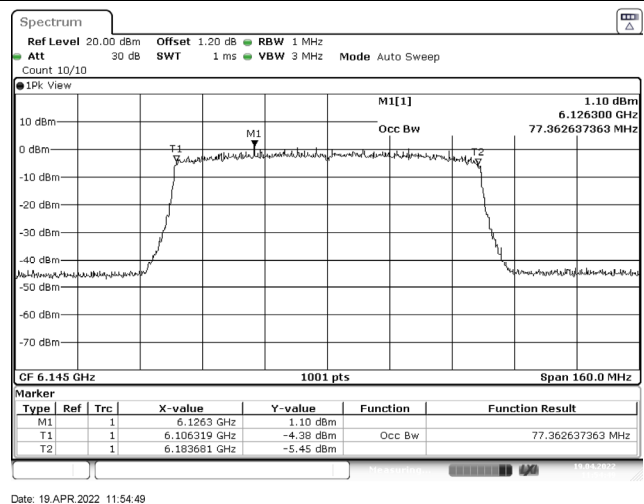
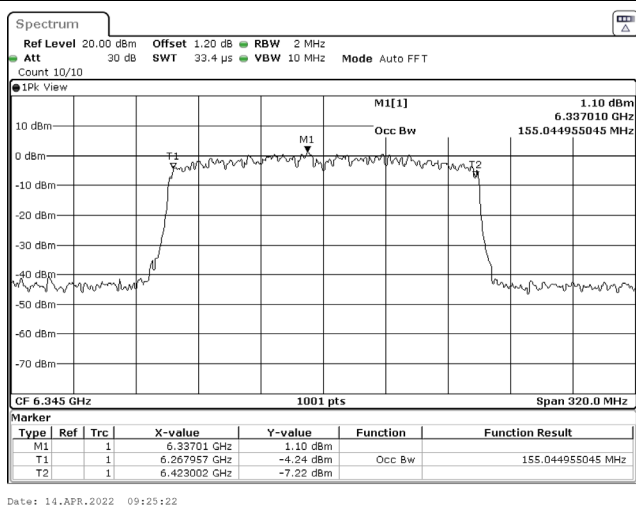
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Chain A	Chain B	Chain C	Chain D	Chain A	Chain B	Chain C	Chain D
39	6145	81.52	82.00	81.36	81.84	77.20	77.04	77.20	77.20
55	6225	82.48	82.32	80.72	81.20	77.04	76.88	76.88	77.04
87	6385	82.16	81.36	81.36	82.00	77.36	77.04	77.36	77.20
103	6465	82.00	81.68	82.16	81.04	77.20	77.04	77.04	77.04
119(U-NII-6)	6545	20.76	20.60	20.92	21.08	18.36	18.36	18.68	18.52
119(U-NII-7)	6545	60.44	60.60	60.76	60.44	58.68	58.52	58.68	58.68
135	6625	81.20	81.36	81.84	81.20	76.88	77.04	77.20	76.72
151	6705	81.68	81.36	82.64	82.00	77.20	77.36	77.04	77.20
167	6785	81.20	82.16	81.04	80.88	77.36	77.20	77.04	77.04
183(U-NII-7)	6865	51.24	51.08	51.24	51.08	48.68	48.52	48.52	48.52
183(U-NII-8)	6865	30.12	30.44	30.44	30.60	28.52	28.36	28.52	28.36
199	6945	81.52	80.24	81.04	81.04	76.88	77.20	76.88	77.04
215	7025	80.72	82.64	80.72	81.20	77.04	77.04	76.88	77.04

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : 99% & 26dB Bandwidth
 Test Mode : Mode 5: Transmit (802.11ax-160BW-CDD) - NSS-4
 Test Date : 2022/06/02

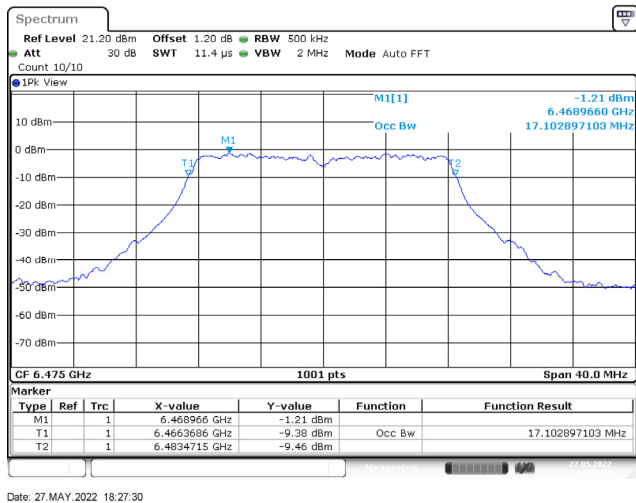
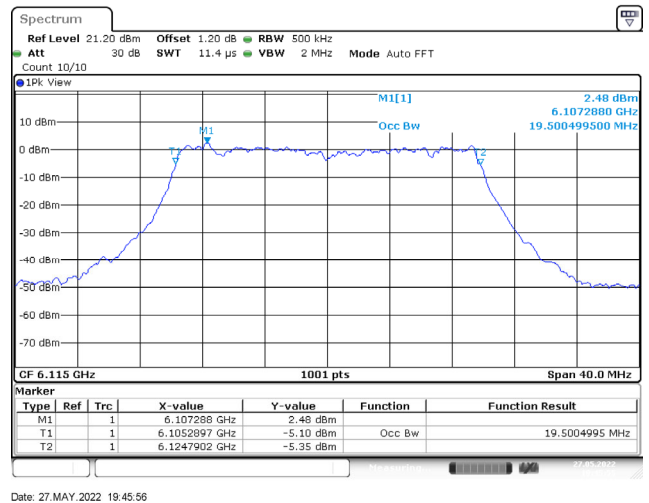
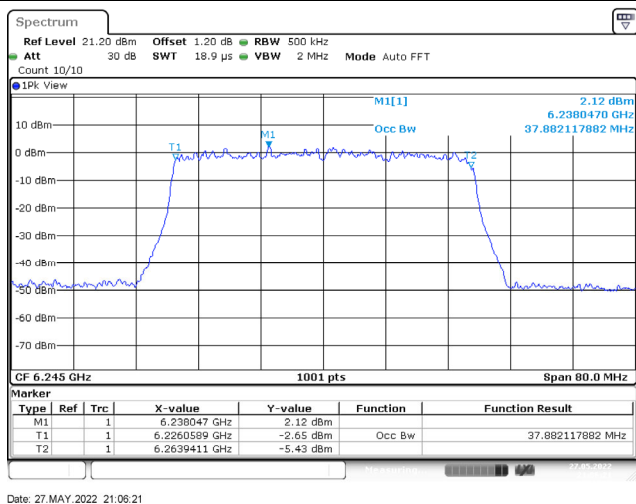
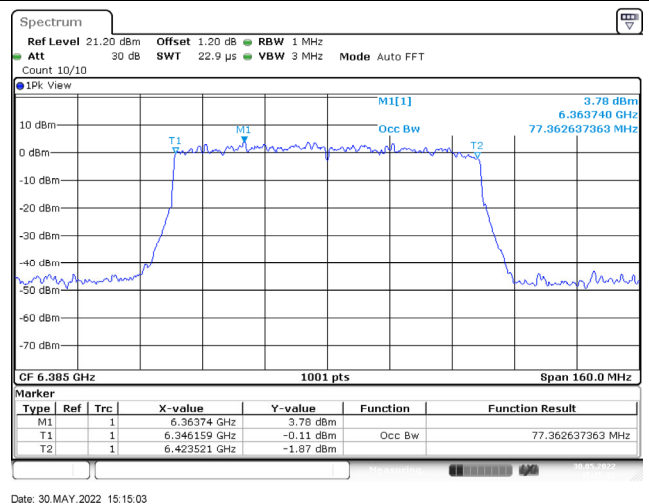
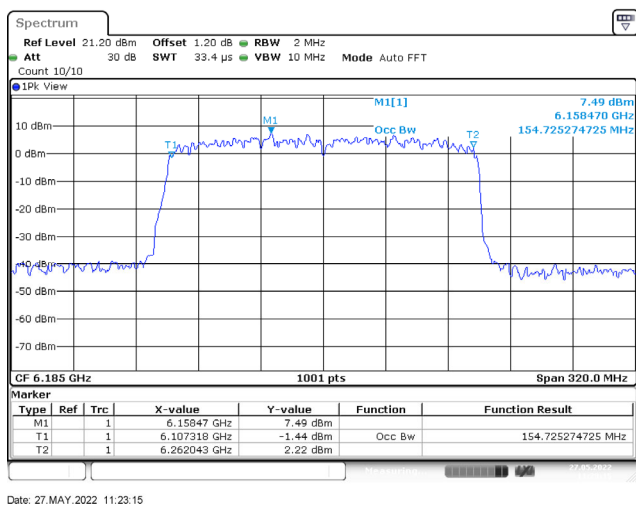
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)				99% Occupied Bandwidth (MHz)			
		Chain A	Chain B	Chain C	Chain D	Chain A	Chain B	Chain C	Chain D
47	6185	163.04	162.08	163.04	162.72	153.77	154.73	154.09	154.09
79	6345	164.32	162.40	161.12	163.04	154.09	154.09	153.77	154.09
111(U-NII-6)	6505	102.80	101.84	101.52	101.20	97.36	97.36	97.04	97.04
111(U-NII-7)	6505	60.56	60.56	60.88	60.88	57.36	57.36	57.04	57.36
143	6665	163.36	162.08	161.76	161.76	154.09	154.73	154.73	153.77
175(U-NII-7)	6825	131.20	131.20	131.52	132.16	128.00	127.36	127.68	127.04
175(U-NII-8)	6825	30.56	31.52	30.88	30.56	27.04	27.68	27.04	27.04
207	6985	163.68	163.68	161.76	161.76	154.09	154.09	154.73	154.41

Result	Pass
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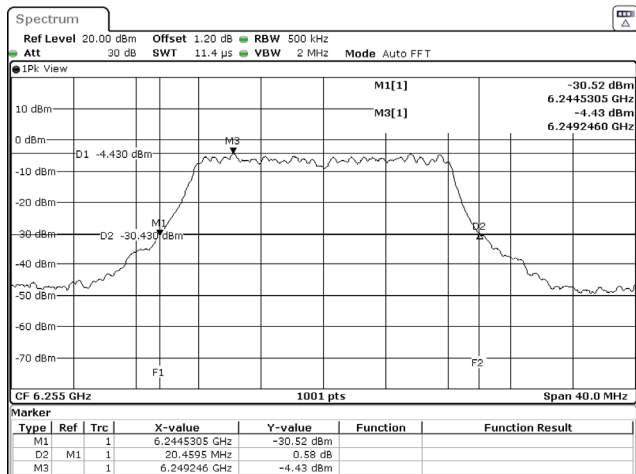
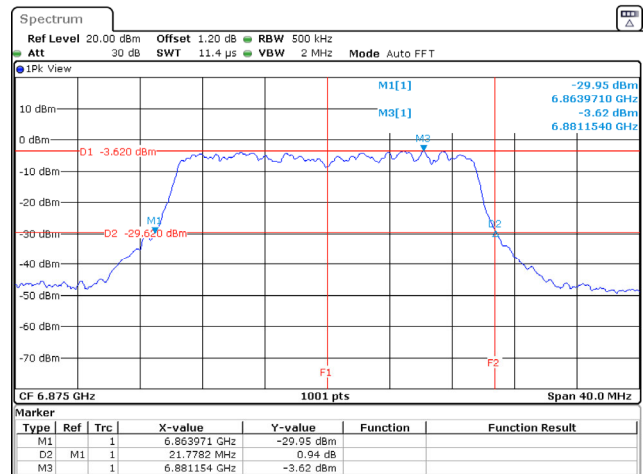
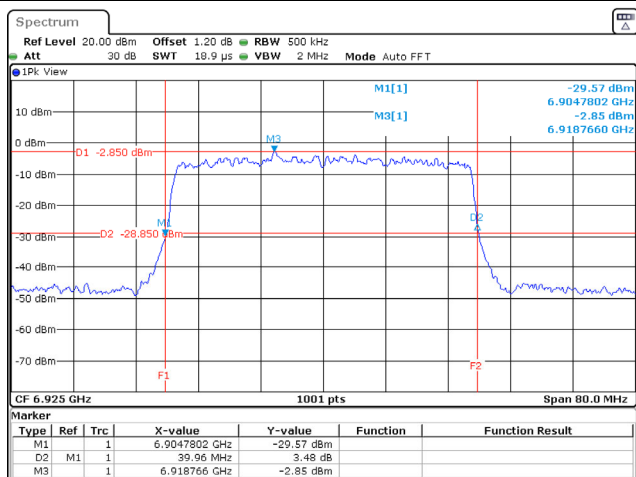
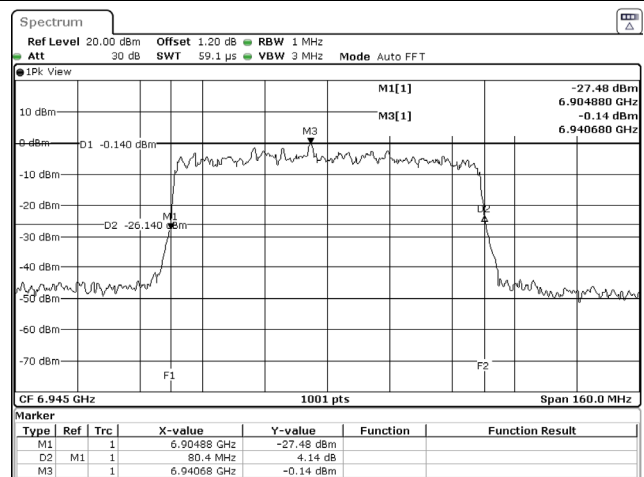
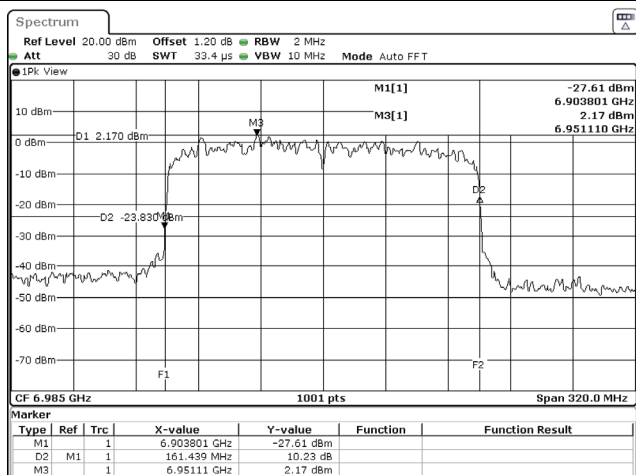
Spectrum plot of worst value (99% Occupied Bandwidth)

802.11a / 6695MHz (U-NII-7) / Chain A
NSS-1802.11ax (20MHz) / 6475MHz (U-NII-6) / Chain A
NSS-1802.11ax (40MHz) / 6725MHz (U-NII-7) / Chain C
NSS-1802.11ax (80MHz) / 6145MHz (U-NII-5) / Chain A
NSS-1802.11ax (160MHz) / 6345MHz (U-NII-5) / Chain D
NSS-1

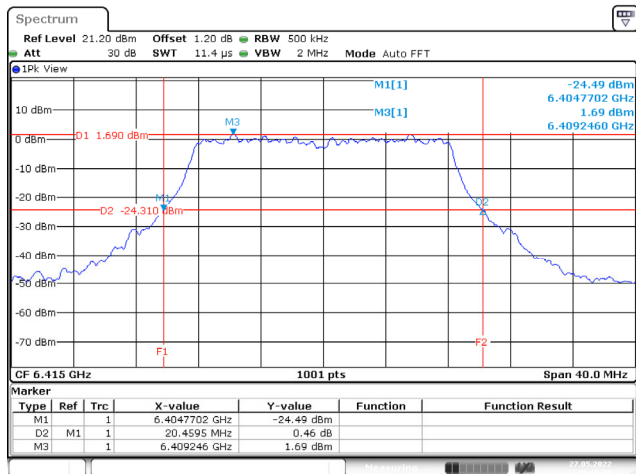
Spectrum plot of worst value (99% Occupied Bandwidth)

802.11a / 6475MHz (U-NII-6) / Chain A
NSS-4802.11ax (20MHz) / 6115MHz (U-NII-5) / Chain A
NSS-4802.11ax (40MHz) / 6245MHz (U-NII-5) / Chain D
NSS-4802.11ax (80MHz) / 6385MHz (U-NII-5) / Chain A
NSS-4802.11ax (160MHz) / 6185MHz (U-NII-5) / Chain B
NSS-4

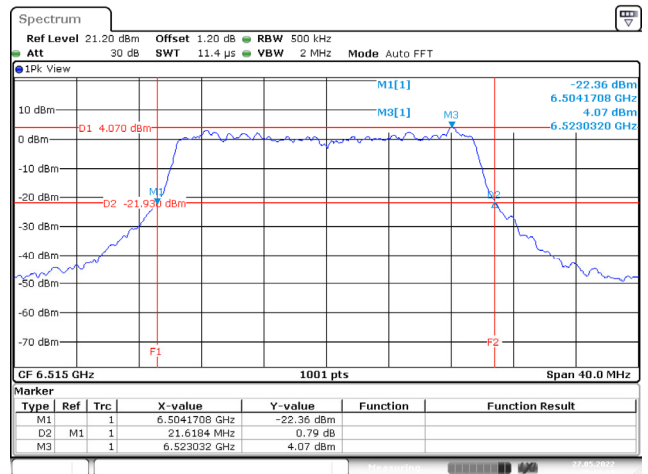
Spectrum plot of worst value (26dB Bandwidth)

802.11a / 6255MHz (U-NII-5) / Chain D
NSS-1802.11ax (20MHz) / 6875MHz (U-NII-7) / Chain A
NSS-1802.11ax (40MHz) / 6925MHz (U-NII-8) / Chain D
NSS-1802.11ax (80MHz) / 6945MHz (U-NII-8) / Chain D
NSS-1802.11ax (160MHz) / 6985MHz (U-NII-8) / Chain D
NSS-1

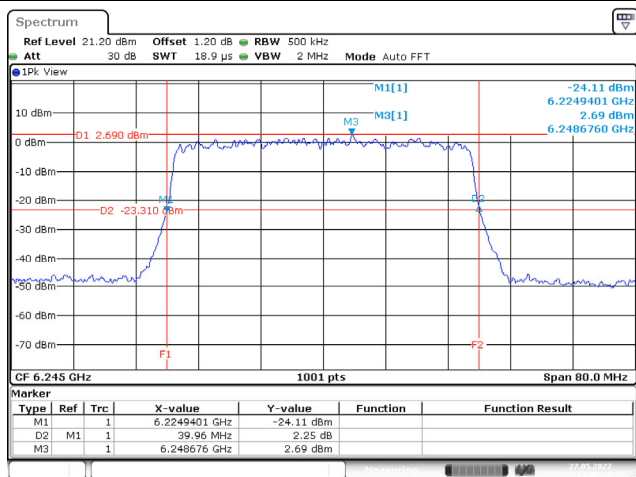
Spectrum plot of worst value (26dB Bandwidth)

802.11a / 6415MHz (U-NII-5) / Chain D
NSS-4

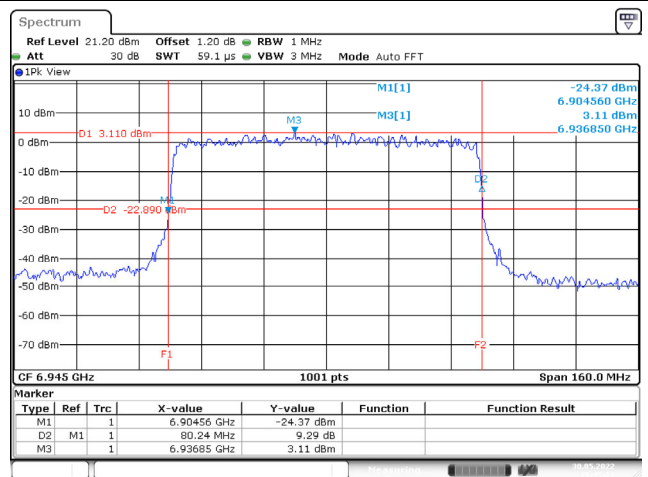
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802.11ax (20MHz) / 6515MHz (U-NII-6) / Chain D
NSS-4

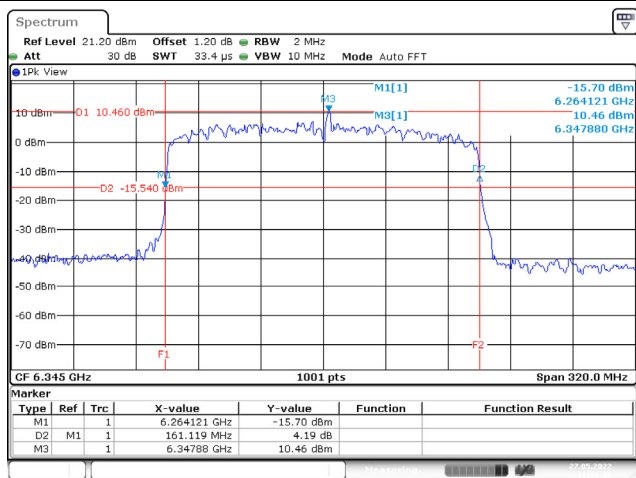
Date: 27.MAY.2022 20:12:18

802.11ax (40MHz) / 6245MHz (U-NII-5) / Chain D
NSS-4

Date: 27.MAY.2022 21:06:13

802.11ax (80MHz) / 6945MHz (U-NII-8) / Chain B
NSS-4

Date: 30.MAY.2022 15:45:20

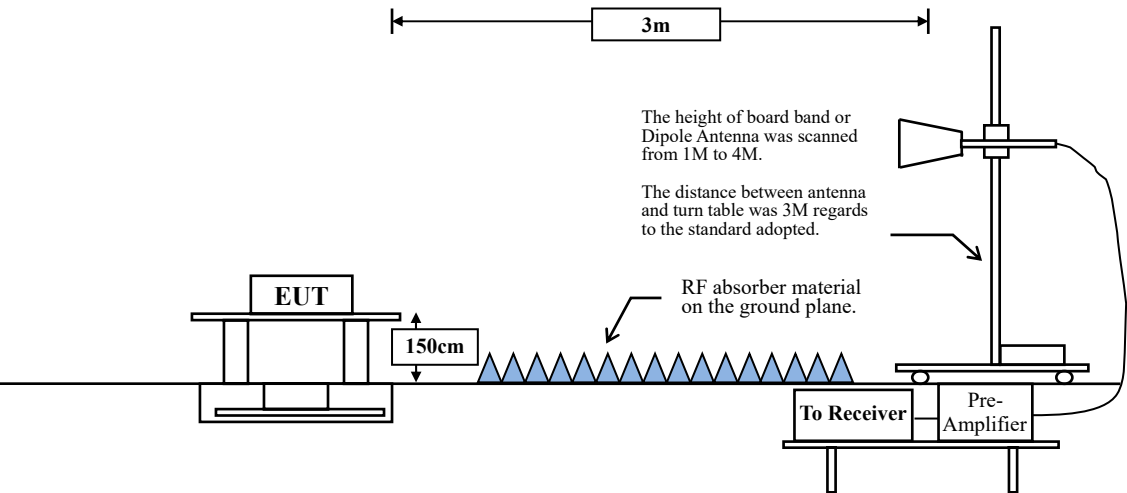
802.11ax (160MHz) / 6345MHz (U-NII-5) / Chain C
NSS-4

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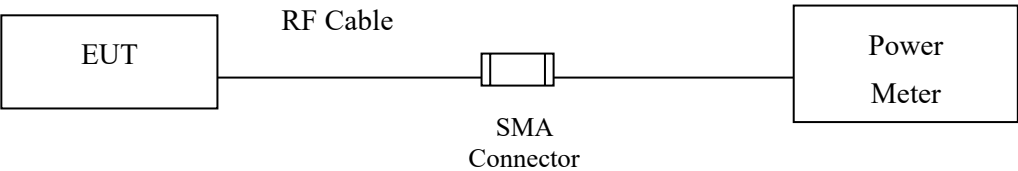
4. Transmit Output

4.1. Test Setup

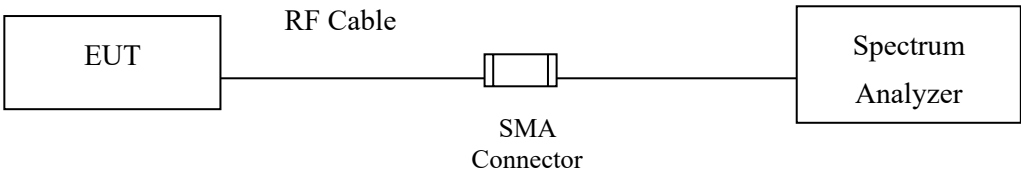
Radiated Power Measurement (for NSS-1)



Conducted Power Measurement (for NSS-4)



Conducted Power Measurement



4.2. Limits

1. For the 5.925~6.425 GHz band:

For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).

For indoor access point : e.i.r.p < 30 dBm.

For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.

For client device control of a standard power access point : e.i.r.p < 30 dBm.

For client device control of an indoor access point : e.i.r.p < 24 dBm.

2. For the 6.425~6.525 GHz band:

For indoor access point : e.i.r.p < 30 dBm.

For client device control of an indoor access point : e.i.r.p < 24 dBm.

3. For the 6.525~6.875 GHz band:

For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).

For indoor access point : e.i.r.p < 30 dBm.

For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.

For client device control of a standard power access point : e.i.r.p < 30 dBm.

For client device control of an indoor access point : e.i.r.p < 24 dBm.

4. For the 6.87~7.125 GHz band:

For indoor access point : e.i.r.p < 30 dBm.

For client device control of an indoor access point : e.i.r.p < 24 dBm.

4.3. Test Procedure

Radiated

1. The EUT was setup to ANSI C63.10: 2013; tested to U-NII test procedure of KDB 789033 D02 v02r01 Method SA-2 for compliance to FCC CFR Title 47 Part 15 Subpart E requirements.
2. The EUT is placed on a turn table which is 1.5 meter above ground and the turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level.
3. Perform a field strength measurement following ANSI C63.10 and record the worse field strength value via spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then convert the measured field strength level to EIRP level.
4. Following ANSI C63.10 and KDB 412172 D01 v01r01,

$$\text{EIRP value (dBm)} = \text{Field strength value (dBuV/m)} + \text{Correction factor (dB) @3m}$$

$$\text{Correction factor (dB) @3m} = 20 \cdot \log(3) - 104.77 = -95.23\text{dB}$$

Conducted

As an alternative to FCC KDB-789033, the EUT maximum conducted output power was measured with an average power meter employing a video bandwidth greater than the 6dB BW of the emission under test. Maximum conducted output power was read directly from the meter across all data rates, and across three channels within each sub-band. Special care was used to make sure that the EUT was transmitting in continuous mode. This method exceeds the Limitations of FCC KDB-789033, and provides more accurate measurements.

802.11an (BW ≤ 40MHz) Maximum conducted output power using KDB 789033 section E)3)b)
 Method PM-G (Measurement using a gated RF average power meter)

Note: the power meter have a video bandwidth that is greater than or equal to the measurement bandwidth, (Anritsu/ MA2411B video bandwidth: 65MHz)

802.11ac (BW=80MHz) Maximum conducted output power using KDB 789033 section E)2)b)
 Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep).

When transmitted signals consist of two or more non-contiguous spectrum segments (e.g., 80+80 MHz mode) or when a single spectrum segment of a transmission crosses the boundary between two adjacent U-NII bands, KDB 644545 D03 section D) procedure is used for measurements.

4.4. Test Result of Transmit Output

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : Transmit Output
 Test Mode : Mode 1: Transmit (802.11a-CDD) - NSS-1
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	Reading Level (dBuV/m)	Path Loss (dB)	Field Strength (dBuV/m)	Duty Factor (dB)	Correction Factor (dB)	EIRP (dBm)	EIRP Limit (dBm)
33	6115	86.49	18.67	105.16	0.49	-95.23	10.42	30
61	6255	87.41	19.02	106.43	0.49	-95.23	11.69	30
93	6415	87.64	19.20	106.84	0.49	-95.23	12.10	30
97	6435	84.71	19.21	103.92	0.49	-95.23	9.18	30
105	6475	87.10	19.11	106.21	0.49	-95.23	11.47	30
113	6515	86.81	19.10	105.91	0.49	-95.23	11.17	30
117	6535	86.93	19.22	106.15	0.49	-95.23	11.41	30
149	6695	85.77	19.41	105.18	0.49	-95.23	10.44	30
181	6855	86.52	19.57	106.09	0.49	-95.23	11.35	30
185	6875	86.60	19.62	106.22	0.49	-95.23	11.48	30
189	6895	85.48	19.69	105.17	0.49	-95.23	10.43	30
213	7015	87.75	19.80	107.55	0.49	-95.23	12.81	30
229	7095	85.71	19.93	105.64	0.49	-95.23	10.90	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : Transmit Output
 Test Mode : Mode 2: Transmit (802.11ax-20BW-CDD) - NSS-1
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	Reading Level (dBuV/m)	Path Loss (dB)	Field Strength (dBuV/m)	Duty Factor (dB)	Correction Factor (dB)	EIRP (dBm)	EIRP Limit (dBm)
33	6115	88.15	18.67	106.82	0.28	-95.23	11.87	30
61	6255	85.83	19.02	104.85	0.28	-95.23	9.90	30
93	6415	86.38	19.21	105.59	0.28	-95.23	10.64	30
97	6435	87.19	19.21	106.40	0.28	-95.23	11.45	30
105	6475	85.81	19.16	104.97	0.28	-95.23	10.02	30
113	6515	86.05	19.16	105.21	0.28	-95.23	10.26	30
117	6535	86.58	19.25	105.83	0.28	-95.23	10.88	30
149	6695	85.50	19.43	104.93	0.28	-95.23	9.98	30
181	6855	85.23	19.61	104.84	0.28	-95.23	9.89	30
185	6875	86.86	19.61	106.47	0.28	-95.23	11.52	30
189	6895	85.93	19.72	105.65	0.28	-95.23	10.70	30
213	7015	85.52	19.82	105.34	0.28	-95.23	10.39	30
229	7095	85.69	19.92	105.61	0.28	-95.23	10.66	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
Test Item : Transmit Output
Test Mode : Mode 3: Transmit (802.11ax-40BW-CDD) - NSS-1
Test Date : 2022/06/02

Channel No.	Frequency (MHz)	Reading Level (dBuV/m)	Path Loss (dB)	Field Strength (dBuV/m)	Duty Factor (dB)	Correction Factor (dB)	EIRP (dBm)	EIRP Limit (dBm)
35	6125	88.70	18.69	107.39	0.36	-95.23	12.52	30
59	6245	89.01	18.83	107.84	0.36	-95.23	12.97	30
91	6405	89.33	19.20	108.53	0.36	-95.23	13.66	30
99	6445	88.44	19.21	107.65	0.36	-95.23	12.78	30
107	6485	89.85	19.14	108.99	0.36	-95.23	14.12	30
115	6525	90.06	19.15	109.21	0.36	-95.23	14.34	30
123	6565	90.50	19.29	109.79	0.36	-95.23	14.92	30
155	6725	88.36	19.53	107.89	0.36	-95.23	13.02	30
179	6845	89.29	19.59	108.88	0.36	-95.23	14.01	30
185	6885	88.47	19.64	108.11	0.36	-95.23	13.24	30
195	6925	88.91	19.71	108.62	0.36	-95.23	13.75	30
211	7005	89.07	19.82	108.89	0.36	-95.23	14.02	30
227	7085	88.39	19.92	108.31	0.36	-95.23	13.44	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
Test Item : Transmit Output
Test Mode : Mode 4: Transmit (802.11ax-80BW-CDD) - NSS-1
Test Date : 2022/06/02

Channel No.	Frequency (MHz)	Reading Level (dBuV/m)	Path Loss (dB)	Field Strength (dBuV/m)	Duty Factor (dB)	Correction Factor (dB)	EIRP (dBm)	EIRP Limit (dBm)
39	6145	92.17	18.84	111.01	0.36	-95.23	16.14	30
55	6225	92.31	18.83	111.14	0.36	-95.23	16.27	30
87	6385	92.34	19.21	111.55	0.36	-95.23	16.68	30
103	6465	93.44	19.20	112.64	0.36	-95.23	17.77	30
119	6545	91.28	19.29	110.57	0.36	-95.23	15.70	30
135	6625	91.99	19.35	111.34	0.36	-95.23	16.47	30
151	6705	92.51	19.43	111.94	0.36	-95.23	17.07	30
167	6785	91.90	19.73	111.63	0.36	-95.23	16.76	30
183	6865	91.78	19.58	111.36	0.36	-95.23	16.49	30
199	6945	91.41	19.71	111.12	0.36	-95.23	16.25	30
215	7025	92.00	19.78	111.78	0.36	-95.23	16.91	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
Test Item : Transmit Output
Test Mode : Mode 5: Transmit (802.11ax-160BW-CDD) - NSS-1
Test Date : 2022/06/02

Channel No.	Frequency (MHz)	Reading Level (dBuV/m)	Path Loss (dB)	Field Strength (dBuV/m)	Duty Factor (dB)	Correction Factor (dB)	EIRP (dBm)	EIRP Limit (dBm)
47	6185	93.65	18.83	112.48	0.41	-95.23	17.66	30
79	6345	94.37	19.11	113.48	0.41	-95.23	18.66	30
111	6505	94.05	19.2	113.25	0.41	-95.23	18.43	30
143	6665	94.21	19.34	113.55	0.41	-95.23	18.73	30
175	6825	93.08	19.59	112.67	0.41	-95.23	17.85	30
207	6985	93.46	19.69	113.15	0.41	-95.23	18.33	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
Test Item : Transmit Output
Test Mode : Mode 6: Transmit (802.11ax-20BW-Beamforming) - NSS-1
Test Date : 2022/06/02

Channel No.	Frequency (MHz)	EIRP (dBm)	EIRP Limit (dBm)	Result
33	6115	11.87	30	Pass
61	6255	9.90	30	Pass
93	6415	10.64	30	Pass
97	6435	11.45	30	Pass
105	6475	10.02	30	Pass
113	6515	10.26	30	Pass
117	6535	10.88	30	Pass
149	6695	9.98	30	Pass
181	6855	9.89	30	Pass
185	6875	11.52	30	Pass
189	6895	10.70	30	Pass
213	7015	10.39	30	Pass
229	7095	10.66	30	Pass

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
Test Item : Transmit Output
Test Mode : Mode 7: Transmit (802.11ax-40BW-Beamforming) - NSS-1
Test Date : 2022/06/02

Channel No.	Frequency (MHz)	EIRP (dBm)	EIRP Limit (dBm)	Result
35	6125	12.52	30	Pass
59	6245	12.97	30	Pass
91	6405	13.66	30	Pass
99	6445	12.78	30	Pass
107	6485	14.12	30	Pass
115	6525	14.34	30	Pass
123	6565	14.92	30	Pass
155	6725	13.02	30	Pass
179	6845	14.01	30	Pass
185	6885	13.24	30	Pass
195	6925	13.75	30	Pass
211	7005	14.02	30	Pass
227	7085	13.44	30	Pass

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
Test Item : Transmit Output
Test Mode : Mode 8: Transmit (802.11ax-80BW-Beamforming) - NSS-1
Test Date : 2022/06/02

Channel No.	Frequency (MHz)	EIRP (dBm)	EIRP Limit (dBm)	Result
39	6145	16.14	30	Pass
55	6225	16.27	30	Pass
87	6385	16.68	30	Pass
103	6465	17.77	30	Pass
119	6545	15.70	30	Pass
135	6625	16.47	30	Pass
151	6705	17.07	30	Pass
167	6785	16.76	30	Pass
183	6865	16.49	30	Pass
199	6945	16.25	30	Pass
215	7025	16.91	30	Pass

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
Test Item : Transmit Output
Test Mode : Mode 9: Transmit (802.11ax-160BW-Beamforming) - NSS-1
Test Date : 2022/06/02

Channel No.	Frequency (MHz)	EIRP (dBm)	EIRP Limit (dBm)	Result
47	6185	17.66	30	Pass
79	6345	18.66	30	Pass
111	6505	18.43	30	Pass
143	6665	18.73	30	Pass
175	6825	17.85	30	Pass
207	6985	18.33	30	Pass

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : Transmit Output
 Test Mode : Mode 1: Transmit (802.11a-CDD) - NSS-4
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Total Output Power (dBm)	Duty factor (dB)	Max Ant. Gain (dBi)	EIRP Output Power (dBm)	EIRP Limit (dBm)
33	6115	7.26	7.58	8.11	7.15	13.56	--	2.95	16.51	30
61	6255	7.33	7.46	8.06	7.09	13.52	--	2.95	16.47	30
93	6415	6.53	6.67	6.97	6.24	12.63	--	2.95	15.58	30
97	6435	6.83	7.19	7.47	6.65	13.07	--	3.10	16.17	30
105	6475	6.55	7.12	7.34	6.59	12.93	--	3.10	16.03	30
113	6515	6.98	7.97	7.83	6.47	13.38	--	3.10	16.48	30
117	6535	7.55	8.41	8.37	7.03	13.90	--	2.48	16.38	30
149	6695	7.32	7.81	7.85	6.13	13.35	--	2.48	15.83	30
181	6855	7.26	7.19	7.70	6.49	13.20	--	2.48	15.68	30
185(U-NII-7)	6875	3.85	3.73	4.48	3.65	9.96	0.49	2.48	12.93	30
185(U-NII-8)	6875	3.79	3.82	4.44	3.75	9.98	0.49	3.46	13.93	30
189	6895	6.72	7.03	7.44	6.39	12.93	--	3.46	16.39	30
213	7015	6.82	7.21	7.43	6.15	12.95	--	3.46	16.41	30
229	7095	6.17	6.66	6.61	6.09	12.41	--	3.46	15.87	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : Transmit Output
 Test Mode : Mode 2: Transmit (802.11ax-20BW-CDD) - NSS-4
 Test Date : 2022/06/02

802.11ax (20MHz) - NSS-4

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Total Output Power (dBm)	Duty factor (dB)	Max Ant. Gain (dBi)	EIRP Output Power (dBm)	EIRP Limit (dBm)
33	6115	7.84	8.04	8.81	7.13	14.02	--	2.95	16.97	30
61	6255	7.94	8.03	8.69	7.27	14.03	--	2.95	16.98	30
93	6415	7.79	8.03	8.36	7.52	13.96	--	2.95	16.91	30
97	6435	7.44	7.81	8.03	7.35	13.69	--	3.10	16.79	30
105	6475	7.59	8.19	8.42	7.98	14.08	--	3.10	17.18	30
113	6515	8.09	9.02	8.87	7.78	14.49	--	3.10	17.59	30
117	6535	8.15	9.04	8.96	7.93	14.57	--	2.48	17.05	30
149	6695	8.49	8.78	8.91	7.99	14.58	--	2.48	17.06	30
181	6855	9.07	9.11	9.42	8.46	15.05	--	2.48	17.53	30
185(U-NII-7)	6875	4.68	4.79	5.48	4.17	10.83	0.28	2.48	13.58	30
185(U-NII-8)	6875	4.79	4.89	5.48	4.07	10.86	0.28	3.46	14.60	30
189	6895	7.46	7.65	7.97	6.98	13.55	--	3.46	17.01	30
213	7015	7.49	7.83	8.05	6.79	13.59	--	3.46	17.05	30
229	7095	8.11	8.42	8.45	7.97	14.26	--	3.46	17.72	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : Transmit Output
 Test Mode : Mode 3: Transmit (802.11ax-40BW-CDD) - NSS-4
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Total Output Power (dBm)	Duty factor (dB)	Max Ant. Gain (dBi)	EIRP Output Power (dBm)	EIRP Limit (dBm)
35	6125	10.06	10.42	11.15	10.66	16.61	--	2.95	19.56	30
59	6245	10.17	10.28	10.87	10.35	16.45	--	2.95	19.40	30
91	6405	9.52	10.02	10.23	10.04	15.98	--	2.95	18.93	30
99	6445	10.46	10.97	10.95	10.89	16.84	--	3.10	19.94	30
107	6485	10.52	11.25	10.96	11.17	17.00	--	3.10	20.10	30
115(U-NII-6)	6525	7.12	7.82	7.82	7.89	13.69	0.36	3.10	17.15	30
115(U-NII-7)	6525	7.32	8.00	8.06	7.89	13.85	0.36	2.48	16.69	30
123	6565	10.56	11.34	11.41	11.43	17.22	--	2.48	19.70	30
155	6725	10.41	10.66	10.54	10.35	16.51	--	2.48	18.99	30
179	6845	10.91	11.05	11.21	11.16	17.10	--	2.48	19.58	30
185(U-NII-7)	6885	3.55	3.79	3.56	3.42	9.60	0.36	2.48	12.44	30
185(U-NII-8)	6885	9.12	9.40	9.27	9.02	15.23	0.36	3.46	19.04	30
195	6925	10.01	10.26	10.47	10.21	16.26	--	3.46	19.72	30
211	7005	9.89	10.02	10.13	9.94	16.02	--	3.46	19.48	30
227	7085	9.92	10.27	9.97	10.27	16.13	--	3.46	19.59	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : Transmit Output
 Test Mode : Mode 4: Transmit (802.11ax-80BW-CDD) - NSS-4
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Total Output Power (dBm)	Duty factor (dB)	Max Ant. Gain (dBi)	EIRP Output Power (dBm)	EIRP Limit (dBm)
39	6145	13.37	13.52	14.32	13.71	19.77	--	2.95	22.72	30
55	6225	13.36	13.34	13.92	13.66	19.60	--	2.95	22.55	30
87	6385	12.75	13.28	13.41	13.34	19.22	--	2.95	22.17	30
103	6465	13.11	13.85	13.56	14.25	19.73	--	3.10	22.83	30
119(U-NII-6)	6545	5.89	7.30	6.91	7.42	12.94	0.36	3.10	16.40	30
119(U-NII-7)	6545	11.83	13.22	13.01	13.46	18.94	0.36	2.48	21.78	30
135	6625	13.28	13.89	14.12	13.98	19.85	--	2.48	22.33	30
151	6705	13.33	13.91	13.97	13.72	19.76	--	2.48	22.24	30
167	6785	13.81	14.23	14.33	14.21	20.17	--	2.48	22.65	30
183(U-NII-7)	6865	11.13	11.87	11.71	11.71	17.63	0.36	2.48	20.47	30
183(U-NII-8)	6865	8.51	9.30	9.25	8.87	15.01	0.36	3.46	18.83	30
199	6945	12.78	13.16	13.14	12.79	18.99	--	3.46	22.45	30
215	7025	12.63	13.31	13.31	13.19	19.14	--	3.46	22.60	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : Transmit Output
 Test Mode : Mode 5: Transmit (802.11ax-160BW-CDD) - NSS-4
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Total Output Power (dBm)	Duty factor (dB)	Max Ant. Gain (dBi)	EIRP Output Power (dBm)	EIRP Limit (dBm)
47	6185	15.53	15.55	16.37	15.59	21.80	--	2.95	24.75	30
79	6345	15.61	15.24	15.83	15.32	21.53	--	2.95	24.48	30
111(U-NII-6)	6505	13.83	13.67	14.44	14.01	20.02	0.41	3.10	23.53	30
111(U-NII-7)	6505	11.56	11.61	12.22	11.8	17.83	0.41	2.48	20.71	30
143	6665	16.11	16.67	17.09	16.13	22.54	--	2.48	25.02	30
175(U-NII-7)	6825	15.91	15.72	16.64	16.09	22.12	0.41	2.48	25.01	30
175(U-NII-8)	6825	7.99	7.72	8.61	7.74	14.05	0.41	3.46	17.92	30
207	6985	15.43	15.38	16.21	15.44	21.65	--	3.46	25.11	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : Transmit Output
 Test Mode : Mode 6: Transmit (802.11ax-20BW-Beamforming) - NSS-4
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Total Output Power (dBm)	Duty factor (dB)	Max Ant. Gain (dBi)	EIRP Output Power (dBm)	EIRP Limit (dBm)
33	6115	1.82	2.02	2.79	1.11	8.00	--	8.97	16.97	30
61	6255	1.92	2.01	2.67	1.25	8.01	--	8.97	16.98	30
93	6415	1.77	2.01	2.34	1.50	7.94	--	8.97	16.91	30
97	6435	1.42	1.79	2.01	1.33	7.67	--	9.12	16.79	30
105	6475	1.57	2.17	2.40	1.96	8.06	--	9.12	17.18	30
113	6515	2.07	3.00	2.85	1.76	8.47	--	9.12	17.59	30
117	6535	2.13	3.02	2.94	1.91	8.55	--	8.50	17.05	30
149	6695	2.47	2.76	2.89	1.97	8.56	--	8.50	17.06	30
181	6855	3.05	3.09	3.40	2.44	9.03	--	8.50	17.53	30
185(U-NII-7)	6875	-1.34	-1.23	-0.54	-1.85	4.81	0.28	8.50	13.58	30
185(U-NII-8)	6875	-1.23	-1.13	-0.54	-1.95	4.84	0.28	9.48	14.60	30
189	6895	1.44	1.63	1.95	0.96	7.53	--	9.48	17.01	30
213	7015	1.47	1.81	2.03	0.77	7.57	--	9.48	17.05	30
229	7095	2.09	2.40	2.43	1.95	8.24	--	9.48	17.72	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : Transmit Output
 Test Mode : Mode 7: Transmit (802.11ax-40BW-Beamforming) - NSS-4
 Test Date : 2022/06/02

Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Total Output Power (dBm)	Duty factor (dB)	Max Ant. Gain (dBi)	EIRP Output Power (dBm)	EIRP Limit (dBm)
35	6125	4.04	4.40	5.13	4.64	10.59	--	8.97	19.56	30
59	6245	4.15	4.26	4.85	4.33	10.43	--	8.97	19.40	30
91	6405	3.50	4.00	4.21	4.02	9.96	--	8.97	18.93	30
99	6445	4.44	4.95	4.93	4.87	10.82	--	9.12	19.94	30
107	6485	4.50	5.23	4.94	5.15	10.98	--	9.12	20.10	30
115(U-NII-6)	6525	1.10	1.80	1.80	1.87	7.67	0.36	9.12	17.15	30
115(U-NII-7)	6525	1.30	1.98	2.04	1.87	7.83	0.36	8.50	16.69	30
123	6565	4.54	5.32	5.39	5.41	11.20	--	8.50	19.70	30
155	6725	4.39	4.64	4.52	4.33	10.49	--	8.50	18.99	30
179	6845	4.89	5.03	5.19	5.14	11.08	--	8.50	19.58	30
185(U-NII-7)	6885	-2.47	-2.23	-2.46	-2.60	3.58	0.36	8.50	12.44	30
185(U-NII-8)	6885	3.10	3.38	3.25	3.00	9.21	0.36	9.48	19.04	30
195	6925	3.99	4.24	4.45	4.19	10.24	--	9.48	19.72	30
211	7005	3.87	4.00	4.11	3.92	10.00	--	9.48	19.48	30
227	7085	3.90	4.25	3.95	4.25	10.11	--	9.48	19.59	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : Transmit Output
 Test Mode : Mode 8: Transmit (802.11ax-80BW-Beamforming) - NSS-4
 Test Date : 2022/06/02

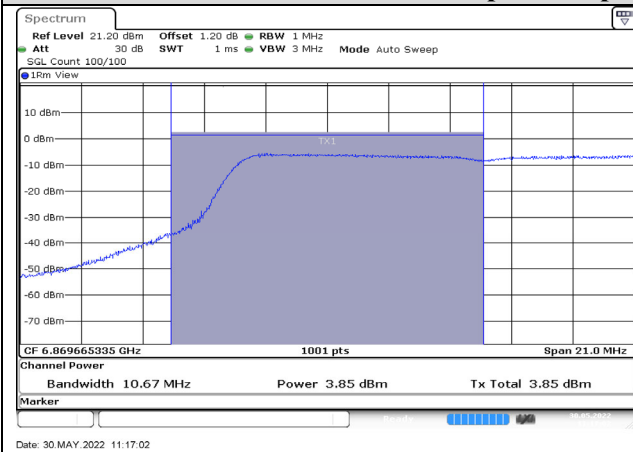
Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Total Output Power (dBm)	Duty factor (dB)	Max Ant. Gain (dBi)	EIRP Output Power (dBm)	EIRP Limit (dBm)
39	6145	7.35	7.50	8.30	7.69	13.75	--	8.97	22.72	30
55	6225	7.34	7.32	7.90	7.64	13.58	--	8.97	22.55	30
87	6385	6.73	7.26	7.39	7.32	13.20	--	8.97	22.17	30
103	6465	7.09	7.83	7.54	8.23	13.71	--	9.12	22.83	30
119(U-NII-6)	6545	-0.13	1.28	0.89	1.40	6.92	0.36	9.12	16.40	30
119(U-NII-7)	6545	5.81	7.20	6.99	7.44	12.92	0.36	8.50	21.78	30
135	6625	7.26	7.87	8.10	7.96	13.83	--	8.50	22.33	30
151	6705	7.31	7.89	7.95	7.70	13.74	--	8.50	22.24	30
167	6785	7.79	8.21	8.31	8.19	14.15	--	8.50	22.65	30
183(U-NII-7)	6865	5.11	5.85	5.69	5.69	11.61	0.36	8.50	20.47	30
183(U-NII-8)	6865	2.49	3.28	3.23	2.85	8.99	0.36	9.48	18.83	30
199	6945	6.76	7.14	7.12	6.77	12.97	--	9.48	22.45	30
215	7025	6.61	7.29	7.29	7.17	13.12	--	9.48	22.60	30

Product : RadiX AXE6600 WiFi 6E Tri-Band Gaming Router
 Test Item : Transmit Output
 Test Mode : Mode 9: Transmit (802.11ax-160BW-Beamforming) - NSS-4
 Test Date : 2022/06/02

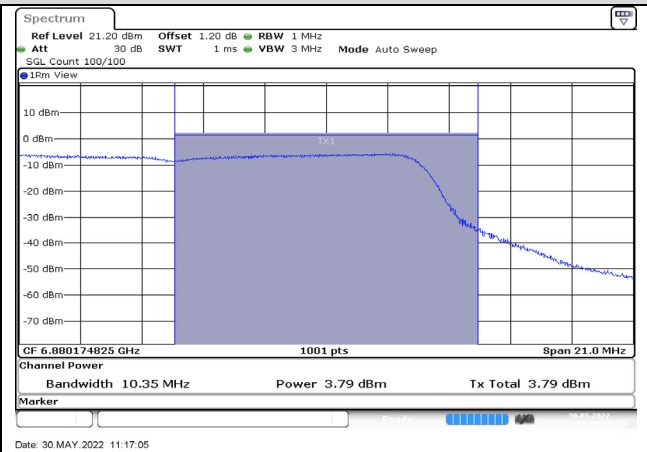
Channel No.	Frequency (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Total Output Power (dBm)	Duty factor (dB)	Max Ant. Gain (dBi)	EIRP Output Power (dBm)	EIRP Limit (dBm)
47	6185	9.51	9.53	10.35	9.57	15.78	--	8.97	24.75	30
79	6345	9.59	9.22	9.81	9.3	15.51	--	8.97	24.48	30
111(U-NII-6)	6505	7.81	7.65	8.42	7.99	14.00	0.41	9.12	23.53	30
111(U-NII-7)	6505	5.54	5.59	6.2	5.78	11.81	0.41	8.50	20.71	30
143	6665	10.09	10.65	11.07	10.11	16.52	--	8.50	25.02	30
175(U-NII-7)	6825	9.89	9.7	10.62	10.07	16.10	0.41	8.50	25.01	30
175(U-NII-8)	6825	1.97	1.7	2.59	1.72	8.03	0.41	9.48	17.92	30
207	6985	9.41	9.36	10.19	9.42	15.63	--	9.48	25.11	30

Result	Pass
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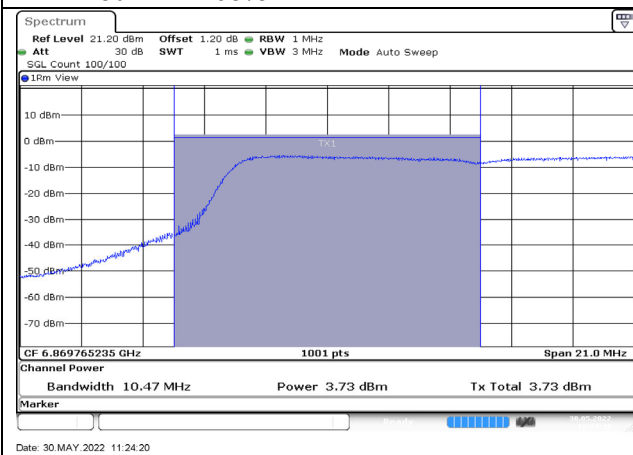
Spectrum plot of worst value



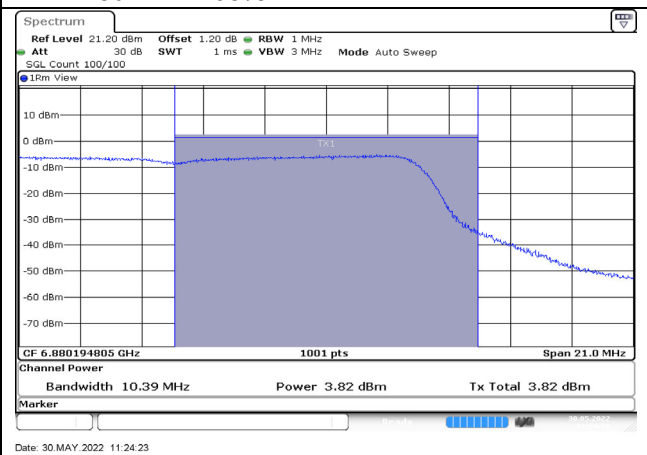
802.11a / 6875MHz / Chain A / NSS-4



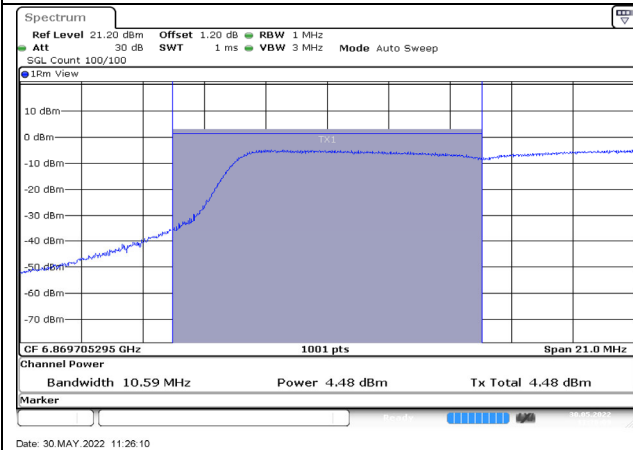
802.11a / 6875MHz / Chain A / NSS-4



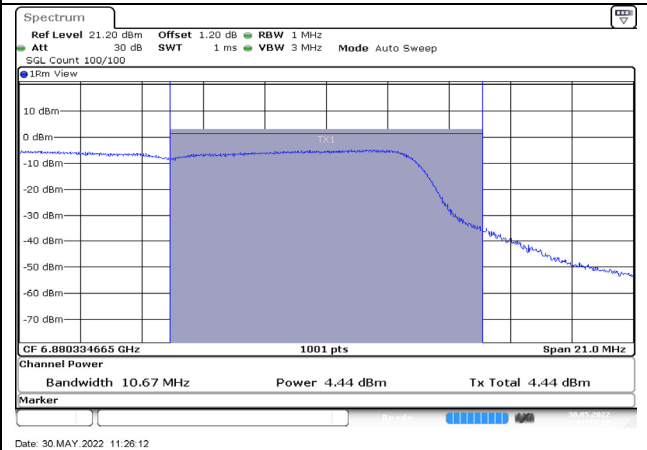
802.11a / 6875MHz / Chain B / NSS-4



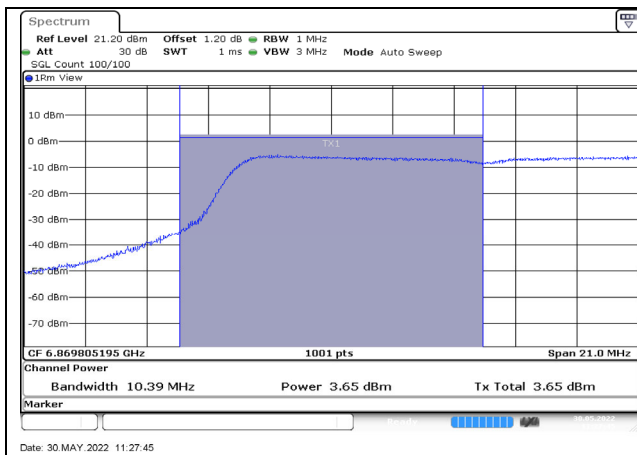
802.11a / 6875MHz / Chain B / NSS-4



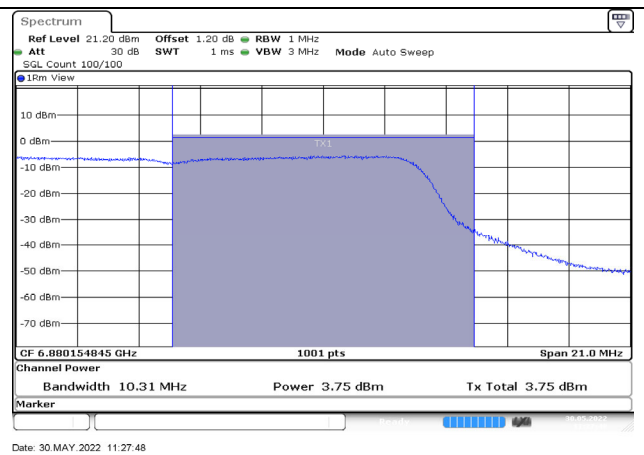
802.11a / 6875MHz / Chain C / NSS-4



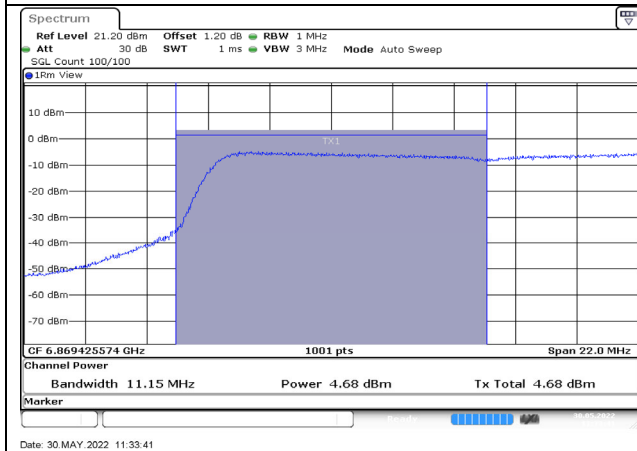
802.11a / 6875MHz / Chain C / NSS-4



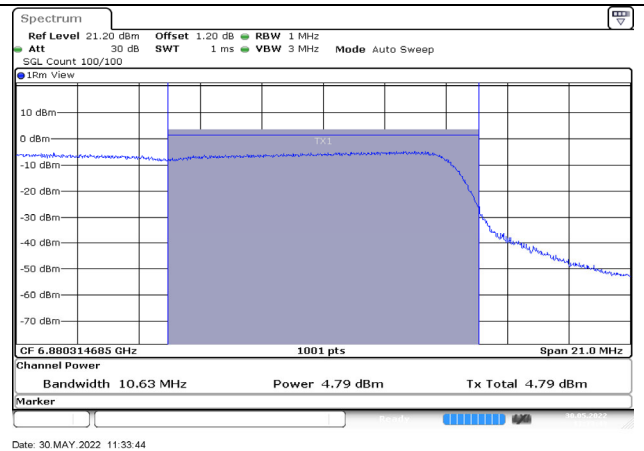
802.11a / 6875MHz / Chain D / NSS-4



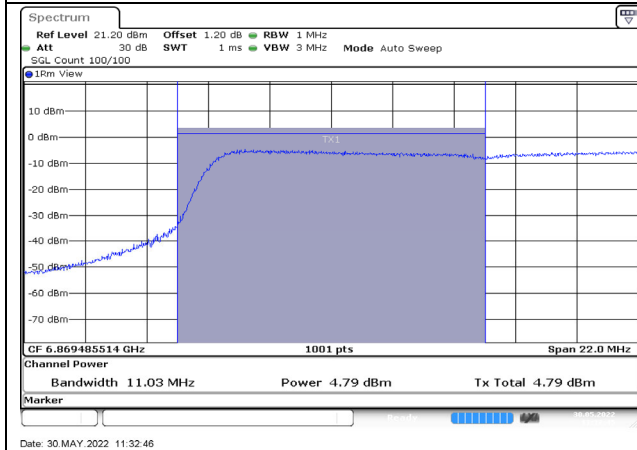
802.11a / 6875MHz / Chain D / NSS-4



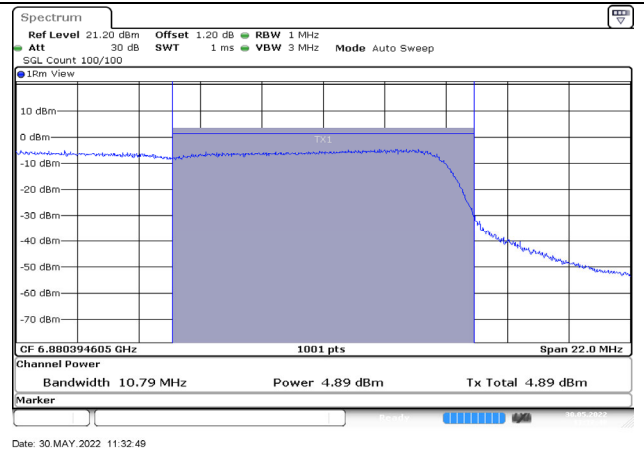
802.11ax20 / 6875MHz / Chain A / NSS-4



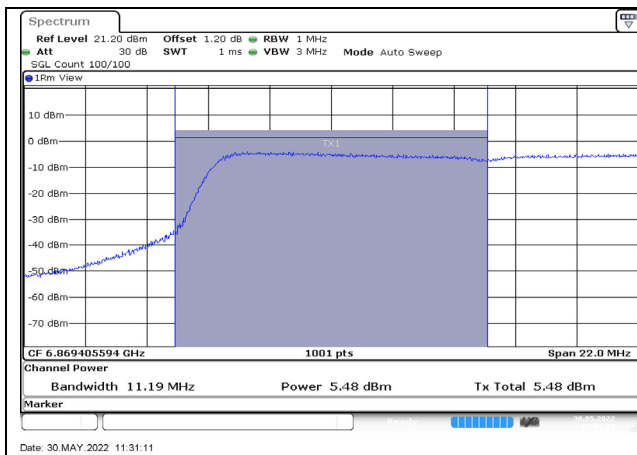
802.11ax20 / 6875MHz / Chain A / NSS-4



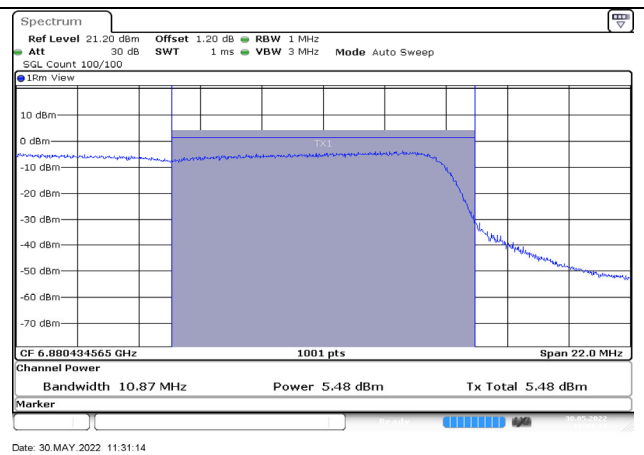
802.11ax20 / 6875MHz / Chain B / NSS-4



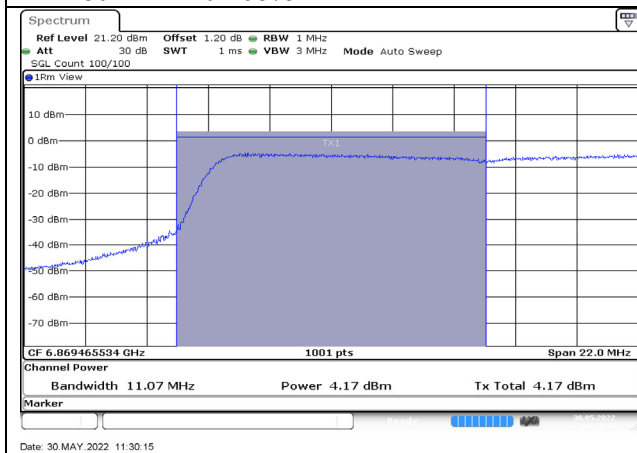
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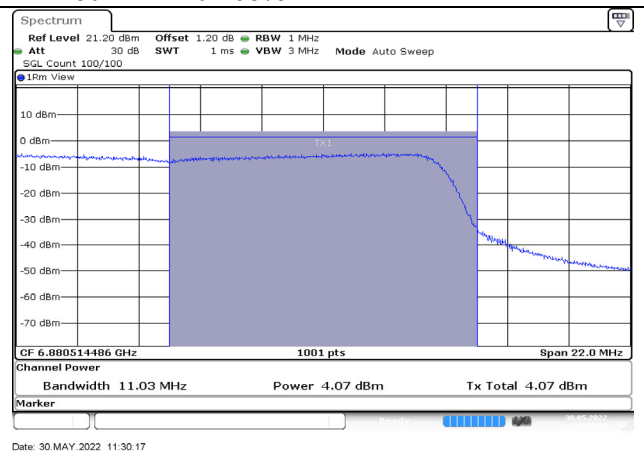
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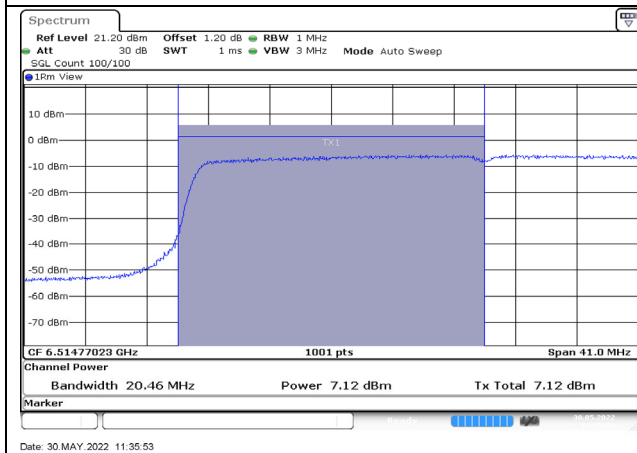
802.11ax20 / 6875MHz / Chain C / NSS-4



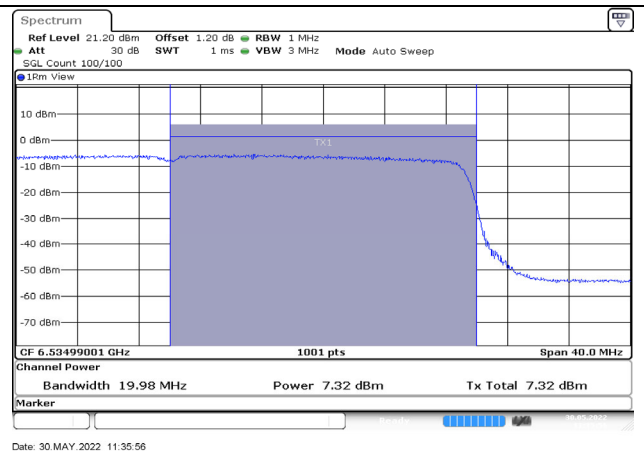
802.11ax20 / 6875MHz / Chain D / NSS-4



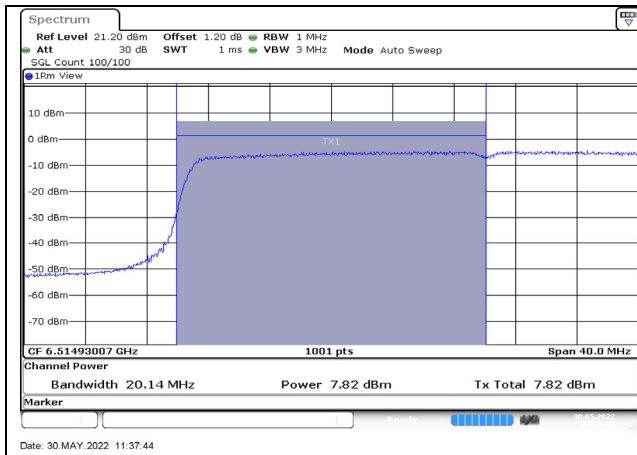
802.11ax20 / 6875MHz / Chain D / NSS-4



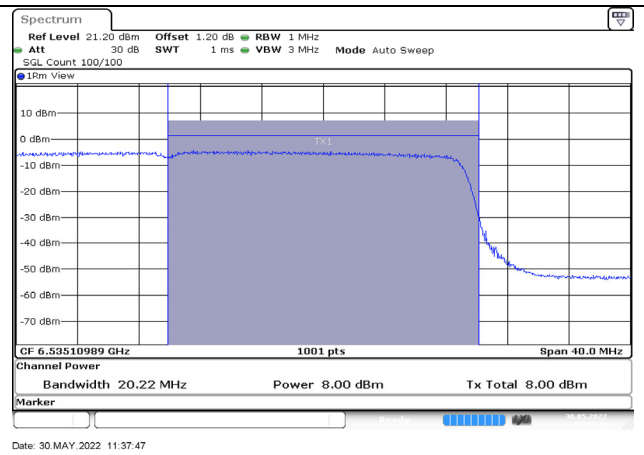
802.11ax40 / 6525MHz / Chain A / NSS-4



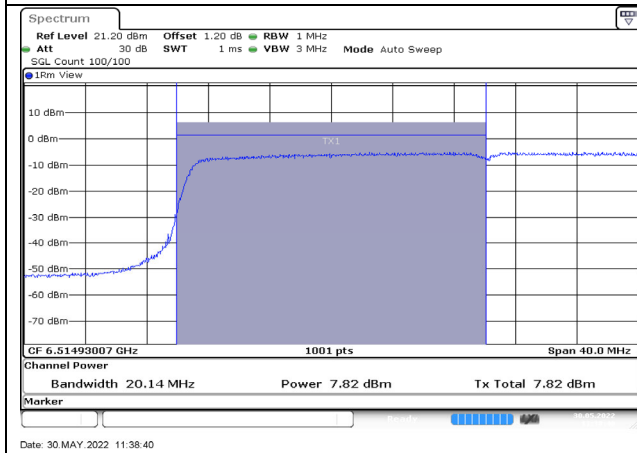
802.11ax40 / 6525MHz / Chain A / NSS-4



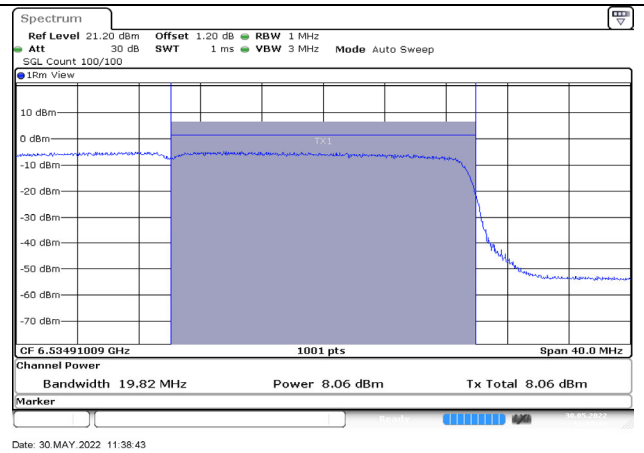
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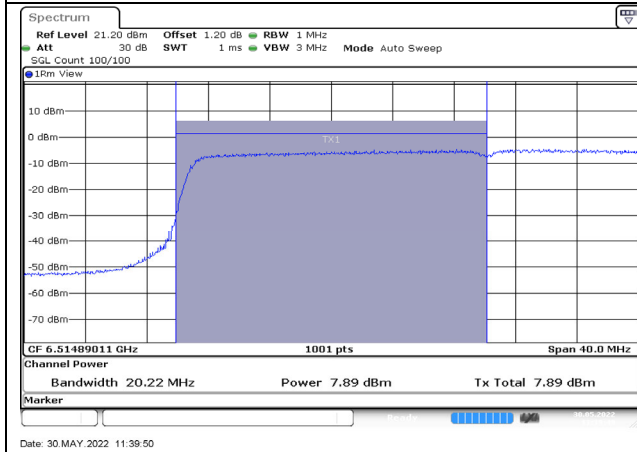
802.11ax40 / 6525MHz / Chain B / NSS-4



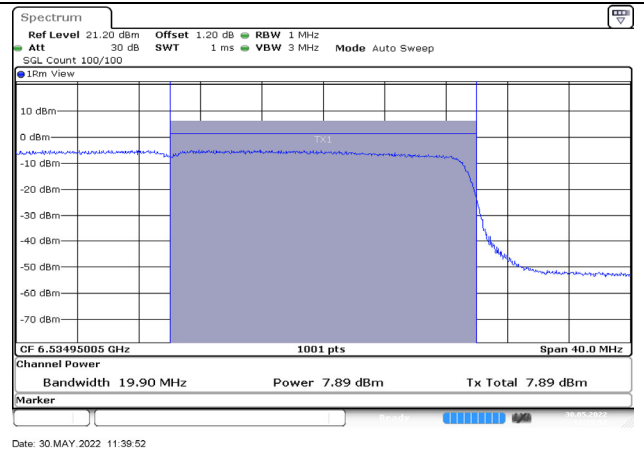
802.11ax40 / 6525MHz / Chain C / NSS-4



802.11ax40 / 6525MHz / Chain C / NSS-4



802.11ax40 / 6525MHz / Chain D / NSS-4



802.11ax40 / 6525MHz / Chain D / NSS-4