FCC Test Report

Product Name	LV55
Model No	LVSKIHP
FCC ID.	NKR-LVSK-IHP

Applicant	Wistron NeWeb Corporation
Address	20 Park Avenue II, Hsinchu Science Park, Hsinchu 308, Taiwan

Date of Receipt	May 29, 2020
Issued Date	Jul. 07, 2020
Report No.	2050962R-E3032110126
Report Version	V1.0

Testing Laboratory
3023

Test Report

Issued Date: Jul. 07, 2020
Report No.: 2050962R-E3032110126

Product Name	LV55
Applicant	Wistron NeWeb Corporation
Address	20 Park Avenue II, Hsinchu Science Park, Hsinchu 308, Taiwan
Manufacturer	Wistron NeWeb Corporation
Model No.	LVSKIHP
FCC ID.	NKR-LVSK-IHP
EUT Adapter Rated Voltage	AC 100-240V / 50-60Hz
EUT Adapter Test Voltage	AC 120V / 60Hz
Trade Name	WNC
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E ANSI C63.4: 2014, ANSI C63.10: 2013 KDB Publication 789033
Test Result	Complied

Documented By : Jinn Chen

(Senior Adm. Specialist / Jinn Chen)

Tested By : Ivan Chuang

(Senior Engineer / Ivan Chuang)

Approved By :

(Director / Vincent Lin)

Revision History

Report No.	Version	Description	Issued Date
2050962R-E3032110126	V1.0	Initial issue of report.	2020-07-07

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Attachment 1: EUT Test Photographs
Attachment 2: EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	LV55
Trade Name	WNC
Model No.	LVSKIHP
FCC ID.	NKR-LVSK-IHP
Frequency Range	802.11a/n/ac/ax-20MHz: 5180-5240MHz, 5745-5825MHz 802.11n/ac/ax-40MHz: 5190-5230, 5755-5795MHz 802.11ac/ax-80MHz: 5210MHz, 5775MHz
Number of Channels	802.11a/n/ax-20MHz: 9, 802.11n/ax-40MHz: 4, 802.11ac/ax-80MHz: 2
Data Rate	802.11a: 6 - 54Mbps 802.11n: up to 600Mbps 802.11ac: up to 1733.2Mbps 802.11ax: up to 2402Mbps
Type of Modulation	802.11a/n/ax: OFDM, BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Channel Control	Auto
Antenna type	Dipole Antenna
Antenna Gain	Refer to the table “Antenna List”
Power Adapter	MFR: Delta, M/N: ADP-120VH D Input: AC 100-240V~2.5A, 50-60Hz Output: 20V, 6A Cable Out: Non-shielded, 3.0m Power Cord: Non-shielded, 2.0m
Hardware Version	0.0.2
Software Version	0.23.11.1dbg

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Directioal Gain
1.	WNC	95XKAC15.GDNVZ	Dipole antenna	5.22dBi for 5150~5250 GHz 5.15dBi for 5725~5850 GHz
2.	WNC	95XKAC15.GDOVZ	Dipole antenna	
3.	WNC	95XKAC15.GDPVZ	Dipole antenna	
4.	WNC	95XKAC15.GDQVZ	Dipole antenna	

Note: The antenna of EUT is conform to FCC 15.203.

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

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 36:	5180 MHz	Channel 40:	5200 MHz	Channel 44:	5220 MHz	Channel 48:	5240 MHz
Channel 149:	5745 MHz	Channel 153:	5765 MHz	Channel 157:	5785 MHz	Channel 161:	5805 MHz
Channel 165:	5825 MHz						

802.11n/ac/ax -40MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 38:	5190 MHz	Channel 46:	5230 MHz	Channel 151:	5755 MHz	Channel 159:	5795 MHz

802.11ac/ax-80MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency
Channel 42:	5210 MHz	Channel 155:	5775 MHz

Note:

1. This device is a LV55 with built-in WLAN(802.11a/b/g/n/ac/ax) transceiver, this report for 5GHz WLAN.
2. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance of 802.11a/n/ac transmitter with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.

Test Mode	Mode 1: Transmit (802.11a-CDD) Mode 2: Transmit (802.11n-20MBW-CDD) Mode 3: Transmit (802.11n-40MBW-CDD) Mode 4: Transmit (802.11ac-20MBW-CDD) Mode 5: Transmit (802.11ac-40MBW-CDD) Mode 6: Transmit (802.11ac-80MBW-CDD) Mode 7: Transmit (802.11ax-20MBW-CDD) Mode 8: Transmit (802.11ax-40MBW-CDD) Mode 9: Transmit (802.11ax-80MBW-CDD) Mode 10: Transmit (802.11n-20MBW-Beamforming) Mode 11: Transmit (802.11n-40MBW-Beamforming) Mode 12: Transmit (802.11ac-20MBW-Beamforming) Mode 13: Transmit (802.11ac-40MBW-Beamforming) Mode 14: Transmit (802.11ac-80MBW-Beamforming) Mode 15: Transmit (802.11ax-20MBW-Beamforming) Mode 16: Transmit (802.11ax-40MBW-Beamforming) Mode 17: Transmit (802.11ax-80MBW-Beamforming) Mode 18: Transmit (CDD) Mode 19: Transmit (Beamforming)

Note:1.There are 4 modes for Beamforming measuring item, "Nss=1" , "Nss=2" , "Nss=3" and "Nss=4". The worst measuring result is in "Nss=1" mode.

2.RU Config-edge Mode:20M for 26/0+26/8,40M for 106/53+106/56, 80M for 242/61+242/64

3.RU Config-center Mode:20M for 52/38+52/39,40M for 106/54+106/55,
80M for 106/54+242/62+242/63+106/59

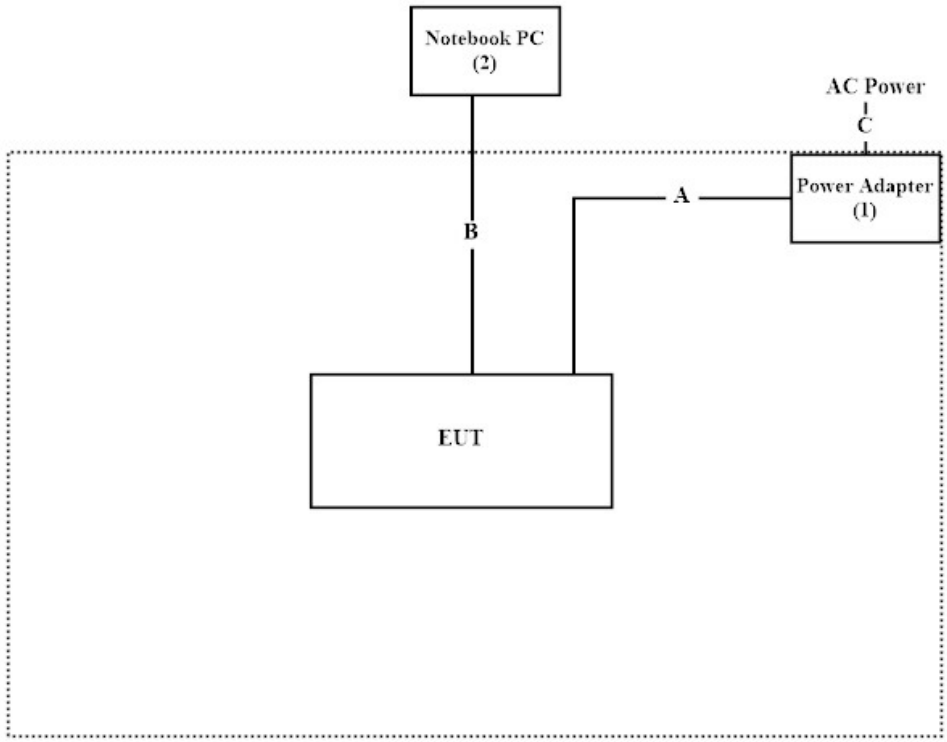
1.3. Tested System Datails

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	Delta	ADP-120VH D	N/A	N/A
2	Notebook PC	DELL	Latitude 5501	9V4JL13	N/A

Signal Cable Type		Signal cable Description
A	Power Cable	Non-shielded, 3m
B	LAN Cable	Non-shielded, 2m
C	Power Cable	Non-shielded, 1.8m

1.4. Configuration of tested System



1.5. EUT Exercise Software

1. Setup the EUT as shown in Section 1.4.
2. Execute software “QSPR v5.0-00163” 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.

1.6. Test Facility

Ambient conditions in the laboratory:

Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	10~40 °C	24.2 °C
	Humidity (%RH)	10~90 %	55.8 %
Radiated Emission	Temperature (°C)	10~40 °C	23.8 °C
	Humidity (%RH)	10~90 %	67.8 %
Conductive	Temperature (°C)	10~40 °C	23 °C
	Humidity (%RH)	10~90 %	56 %

USA : FCC Registration Number: TW0023

Canada : IC Registration Number: 25880

Site Description : Accredited by TAF
Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd
Address : No.159, Sec. 2, Wenhua 1st Rd., Linkou Dist.,
New Taipei City 24457, Taiwan, R.O.C.
Phone number : 886-2-2602-7968
Fax number : 866-2-2602-3286
Email address : info.tw@dekra.com
Website : http://www.dekra.com.tw

1.7. List of Test Equipment

For Conduction measurements /ASR1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	EMI Test Receiver	R&S	ESR7	101601	2020.05.28	2021.05.27
X	Two-Line V-Network	R&S	ENV216	101306	2020.03.25	2021.03.24
X	Two-Line V-Network	R&S	ENV216	101307	2020.04.17	2021.04.16
X	Coaxial Cable	Quietek	RG400_BNC	RF001	2020.05.24	2021.05.23

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 : DEKRA Testing System V1.2

For Conducted measurements /ASR4

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Spectrum Analyzer	R&S	FSV30	103464	2020.02.11	2021.02.10
X	Power Meter	Anritsu	ML2496A	1548003	2019.12.17	2020.12.16
X	Power Sensor	Anritsu	MA2411B	1531024	2019.12.17	2020.12.16
X	Power Sensor	Anritsu	MA2411B	1531025	2019.12.17	2020.12.16

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 : DEKRA Conduction Test System V9.0.5

For Radiated measurements /ACB1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Loop Antenna	TESEQ	HLA6121	49611	2020.03.16	2021.03.15
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-953	2020.01.03	2021.01.02
X	Horn Antenna	ETS-Lindgren	3117	00203800	2019.12.12	2020.12.11
X	Horn Antenna	ETS-Lindgren	3117	00203761	2019.10.31	2020.10.30
X	Horn Antenna	Com-Power	AH-840	101088	2019.08.29	2020.08.28
X	Pre-Amplifier	EMCI	EMC001330	980301	2020.06.04	2021.06.03
X	Pre-Amplifier	EMCI	EMC051835SE	980313	2019.09.17	2020.09.16
X	Pre-Amplifier	EMCI	EMC05820SE	980308	2019.09.02	2020.09.01
X	Pre-Amplifier	EMCI	EMC184045SE	980314	2020.06.10	2021.06.09
	Filter	MICRO TRONICS	BRM50702	G251	2019.09.03	2020.09.02
X	Filter	MICRO TRONICS	BRM50716	G188	2019.09.03	2020.09.02
X	EMI Test Receiver	R&S	ESR7	101602	2019.12.16	2020.12.15
X	Spectrum Analyzer	R&S	FSV40	101148	2020.03.16	2021.03.15
X	Coaxial Cable	SUHNER	SUCOFLEX 106	RF002	2019.07.03	2020.07.02
X	Mircoflex Cable	HUBER SUHNER	SUCOFLEX 102	MY3381/2	2020.06.10	2021.06.09

Note:
1. Loop Antenna is calibrated every two year, the other 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 : DEKRA Testing System V1.2

1.8. Uncertainty

Uncertainties have been calculated according to the DEKRA internal document, and is described in each test chapter of this report.

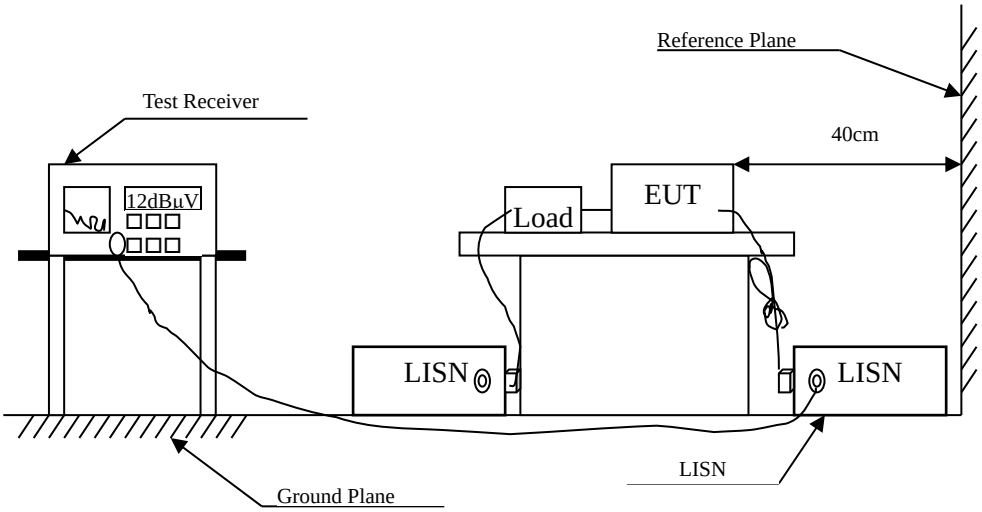
The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

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	±3.42 dB	
Maximun conducted output power	Power Meter ±0.91 dB	Spectrum Analyzer ±2.53 dB
Peak Power Spectral Density	±2.53 dB	
Radiated Emission	Under 1GHz ±4.06 dB	Above 1GHz ±3.73 dB
Band Edge	Under 1GHz ±4.06 dB	Above 1GHz ±3.73 dB
Occupied Bandwidth	±682.83 Hz	
Duty Cycle	±2.31 ms	

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBµV) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks : In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

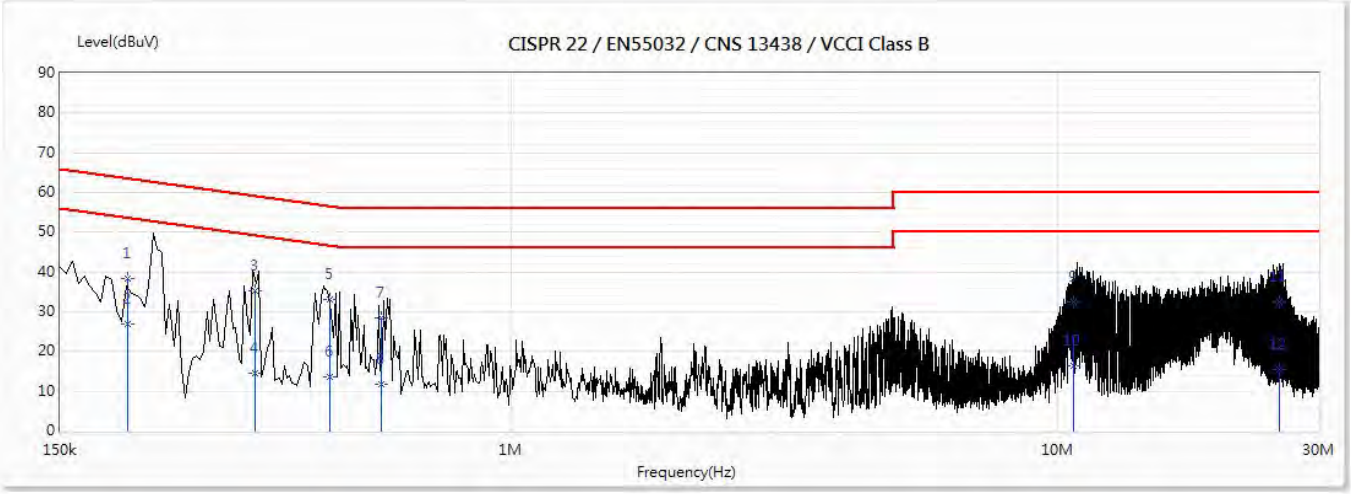
The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4:2014 on conducted measurement.

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

2.4. Test Result of Conducted Emission

Product : LV55
Test Item : Conducted Emission Test
Power Line : L 1
Test Mode : Mode 9: Transmit (802.11ax-80MBW-CDD) (5210MHz) (RU Config-Full)
Test Date : 2020/07/04

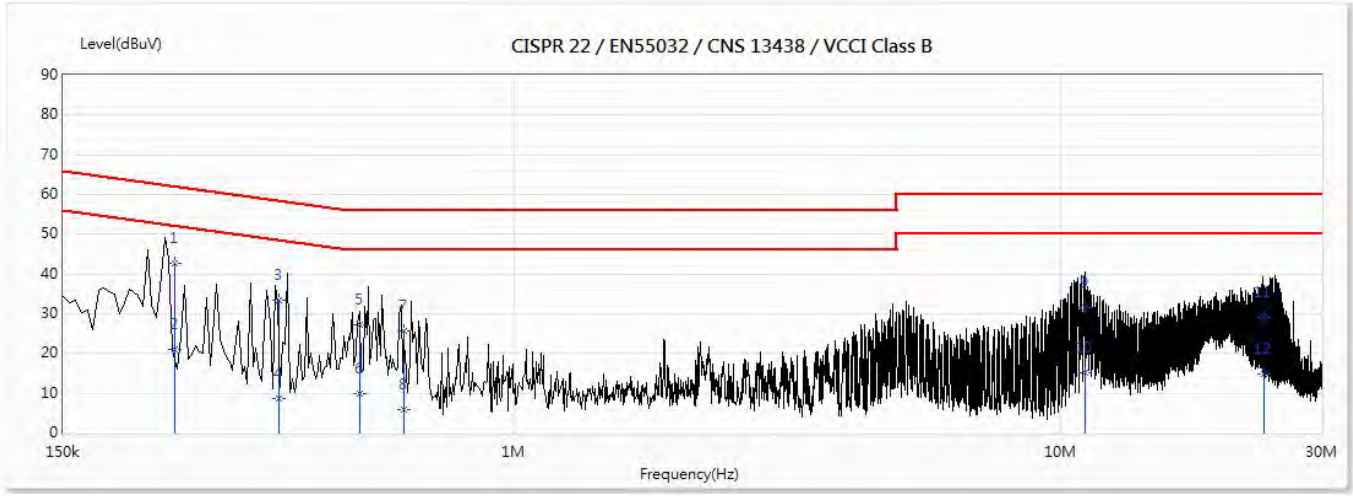


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.2	38.47	63.63	-25.15	28.84	9.63	QP
2	0.2	26.86	53.63	-26.77	17.23	9.63	AV
3	0.341	35.19	59.18	-23.99	25.55	9.64	QP
4	0.341	14.68	49.18	-34.49	5.04	9.64	AV
*5	0.466	32.94	56.58	-23.64	23.29	9.65	QP
6	0.466	13.54	46.58	-33.04	3.89	9.65	AV
7	0.581	28.47	56.00	-27.53	18.81	9.65	QP
8	0.581	11.61	46.00	-34.39	1.96	9.65	AV
9	10.676	32.51	60.00	-27.49	22.62	9.89	QP
10	10.676	16.49	50.00	-33.51	6.61	9.89	AV
11	25.445	32.35	60.00	-27.65	22.39	9.96	QP
12	25.445	15.33	50.00	-34.67	5.37	9.96	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : LV55
Test Item : Conducted Emission Test
Power Line : N
Test Mode : Mode 9: Transmit (802.11ax-80MBW-CDD) (5210MHz) (RU Config-Full)
Test Date : 2020/07/04

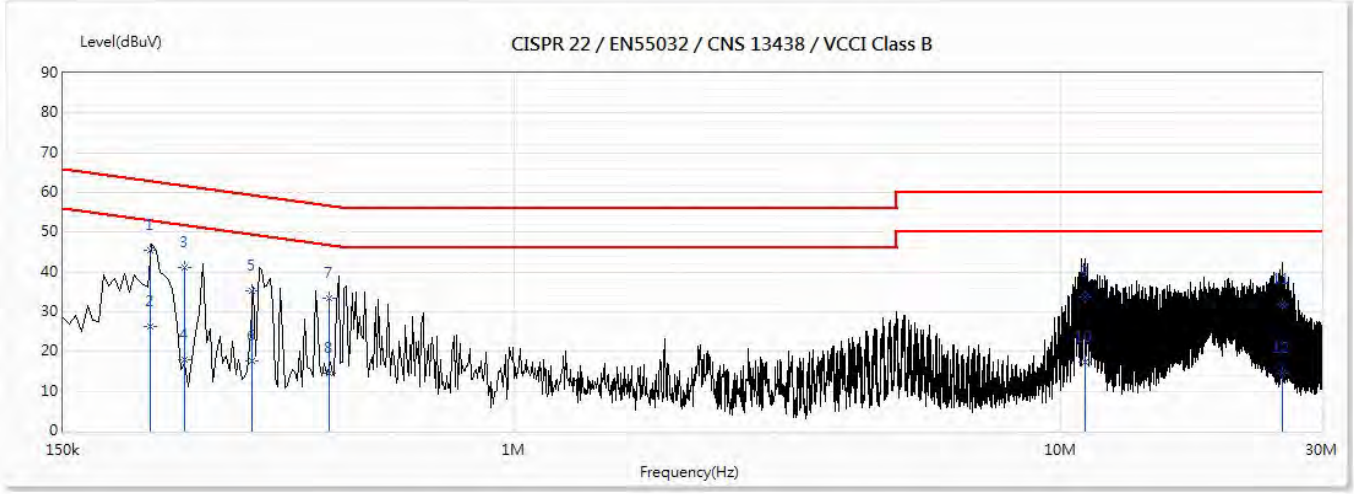


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.24	42.65	62.09	-19.44	33.00	9.66	QP
2	0.24	21.05	52.09	-31.04	11.40	9.66	AV
3	0.372	33.46	58.46	-25.00	23.81	9.65	QP
4	0.372	8.67	48.46	-39.79	-0.98	9.65	AV
5	0.522	27.36	56.00	-28.64	17.70	9.66	QP
6	0.522	9.85	46.00	-36.15	0.19	9.66	AV
7	0.628	25.75	56.00	-30.25	16.09	9.66	QP
8	0.628	5.93	46.00	-40.07	-3.73	9.66	AV
9	11.075	31.66	60.00	-28.34	21.74	9.92	QP
10	11.075	15.21	50.00	-34.79	5.29	9.92	AV
11	23.484	29.04	60.00	-30.96	18.97	10.07	QP
12	23.484	14.83	50.00	-35.17	4.76	10.07	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : LV55
Test Item : Conducted Emission Test
Power Line : L 1
Test Mode : Mode 9: Transmit (802.11ax-80MBW-CDD) (5775MHz) (RU Config-Full)
Test Date : 2020/07/04

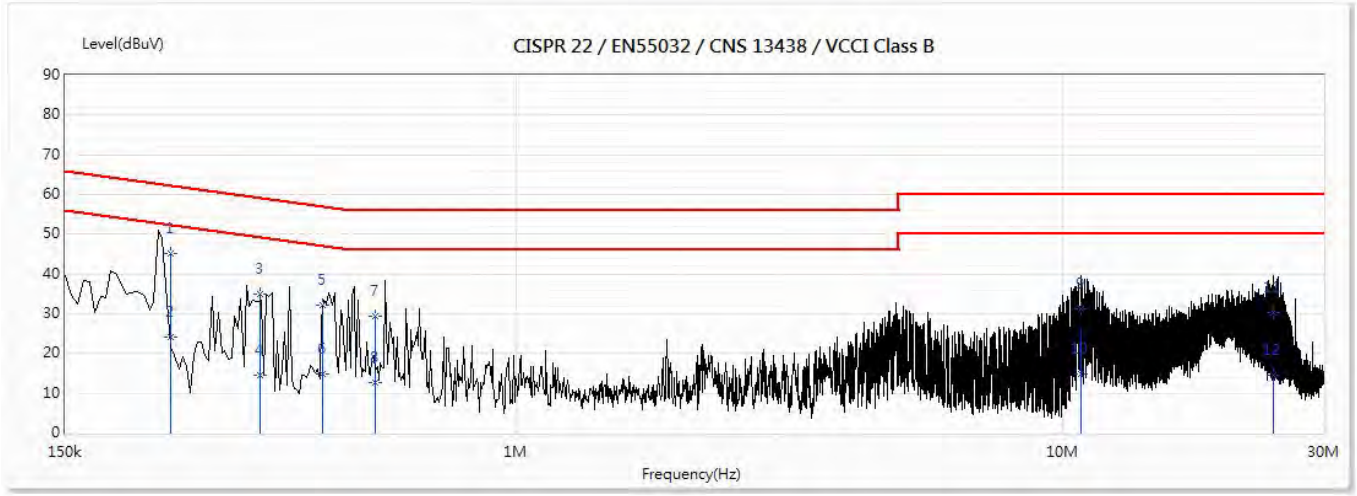


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.216	45.39	62.96	-17.56	35.76	9.63	QP
2	0.216	26.27	52.96	-26.68	16.64	9.63	AV
3	0.25	41.05	61.75	-20.70	31.42	9.64	QP
4	0.25	17.82	51.75	-33.93	8.19	9.64	AV
5	0.333	35.24	59.38	-24.14	25.60	9.64	QP
6	0.333	17.77	49.38	-31.62	8.12	9.64	AV
7	0.46	33.46	56.70	-23.24	23.81	9.65	QP
8	0.46	14.42	46.70	-32.28	4.77	9.65	AV
9	11.104	33.74	60.00	-26.26	23.85	9.89	QP
10	11.104	17.47	50.00	-32.53	7.58	9.89	AV
11	25.46	31.90	60.00	-28.10	21.94	9.96	QP
12	25.46	14.68	50.00	-35.32	4.72	9.96	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : LV55
Test Item : Conducted Emission Test
Power Line : N
Test Mode : Mode 9: Transmit (802.11ax-80MBW-CDD) (5775MHz) (RU Config-Full)
Test Date : 2020/07/04

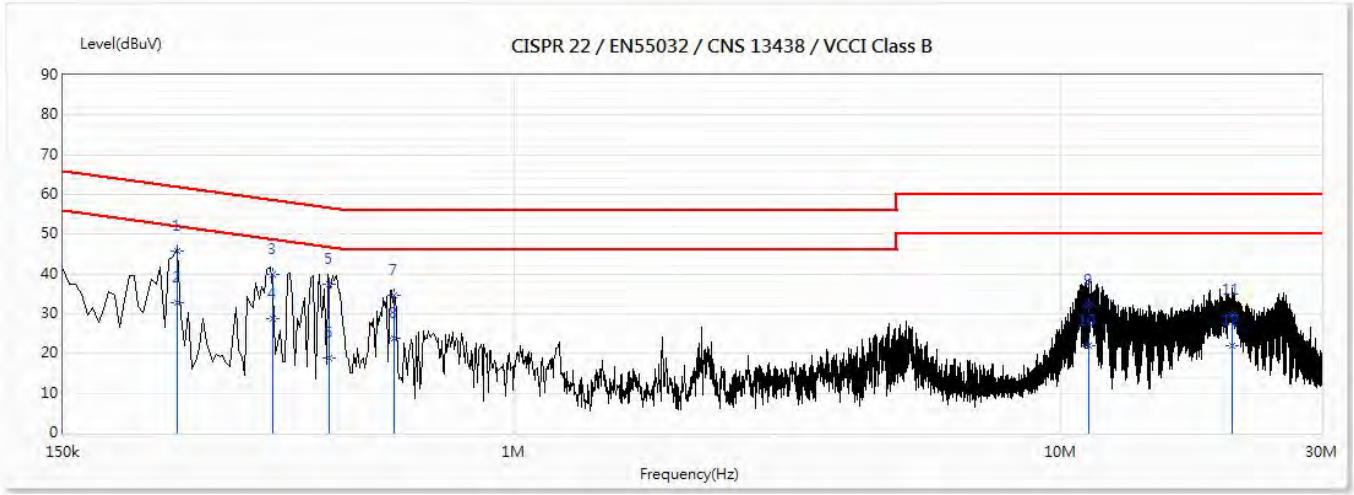


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.234	45.13	62.30	-17.17	35.48	9.65	QP
2	0.234	24.16	52.30	-28.14	14.51	9.65	AV
3	0.341	35.07	59.19	-24.12	25.41	9.65	QP
4	0.341	14.57	49.19	-34.62	4.92	9.65	AV
5	0.443	32.29	57.00	-24.71	22.63	9.66	QP
6	0.443	14.83	47.00	-32.18	5.17	9.66	AV
7	0.553	29.24	56.00	-26.76	19.58	9.66	QP
8	0.553	12.53	46.00	-33.47	2.86	9.66	AV
9	10.797	31.35	60.00	-28.65	21.43	9.91	QP
10	10.797	14.96	50.00	-35.04	5.04	9.91	AV
11	24.272	30.28	60.00	-29.72	20.21	10.08	QP
12	24.272	14.45	50.00	-35.55	4.38	10.08	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : LV55
Test Item : Conducted Emission Test
Power Line : L 1
Test Mode : Mode 17: Transmit (802.11ax-80MBW-Beamforming)(5210MHz)
Test Date : 2020/07/04

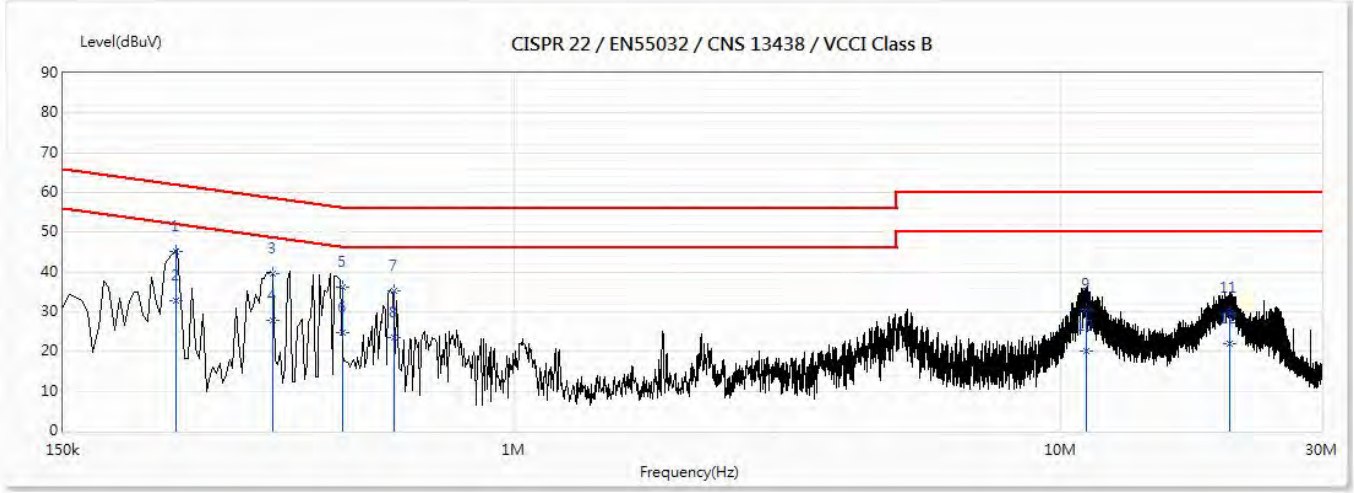


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.242	45.70	62.02	-16.32	36.07	9.64	QP
2	0.242	32.85	52.02	-19.17	23.22	9.64	AV
3	0.362	39.99	58.68	-18.70	30.34	9.64	QP
4	0.362	28.68	48.68	-20.00	19.04	9.64	AV
5	0.46	37.39	56.69	-19.30	27.74	9.65	QP
6	0.46	18.84	46.69	-27.85	9.19	9.65	AV
7	0.603	34.75	56.00	-21.25	25.09	9.65	QP
8	0.603	23.73	46.00	-22.27	14.07	9.65	AV
9	11.252	32.15	60.00	-27.85	22.26	9.90	QP
10	11.252	21.94	50.00	-28.06	12.05	9.90	AV
11	20.557	29.76	60.00	-30.24	19.79	9.97	QP
12	20.557	21.82	50.00	-28.18	11.85	9.97	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : LV55
Test Item : Conducted Emission Test
Power Line : N
Test Mode : Mode 17: Transmit (802.11ax-80MBW-Beamforming)(5210MHz)
Test Date : 2020/07/04

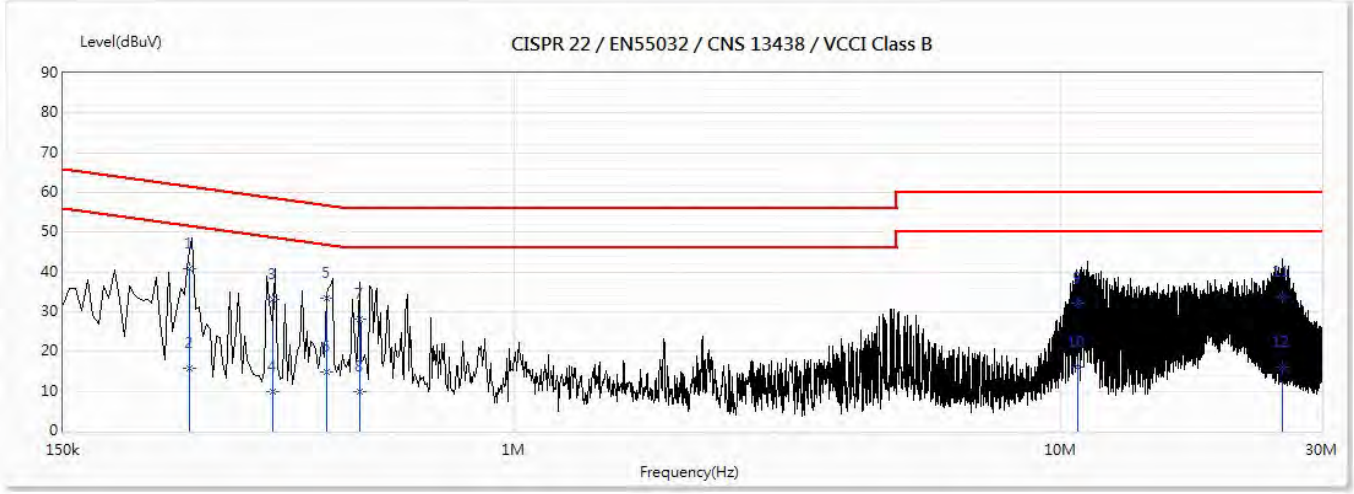


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.241	45.29	62.05	-16.76	35.63	9.66	QP
2	0.241	32.81	52.05	-19.24	23.15	9.66	AV
3	0.363	39.72	58.66	-18.93	30.07	9.65	QP
4	0.363	27.95	48.66	-20.71	18.29	9.65	AV
5	0.486	36.10	56.24	-20.14	26.44	9.66	QP
6	0.486	24.64	46.24	-21.60	14.98	9.66	AV
7	0.605	35.14	56.00	-20.86	25.48	9.66	QP
8	0.605	23.60	46.00	-22.40	13.94	9.66	AV
9	11.169	30.61	60.00	-29.39	20.69	9.92	QP
10	11.169	20.12	50.00	-29.88	10.20	9.92	AV
11	20.412	29.68	60.00	-30.32	19.63	10.05	QP
12	20.412	21.82	50.00	-28.18	11.77	10.05	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product	:	LV55
Test Item	:	Conducted Emission Test
Power Line	:	L 1
Test Mode	:	Mode 17: Transmit (802.11ax-80MBW-Beamforming) (5775MHz)
Test Date	:	2020/07/04

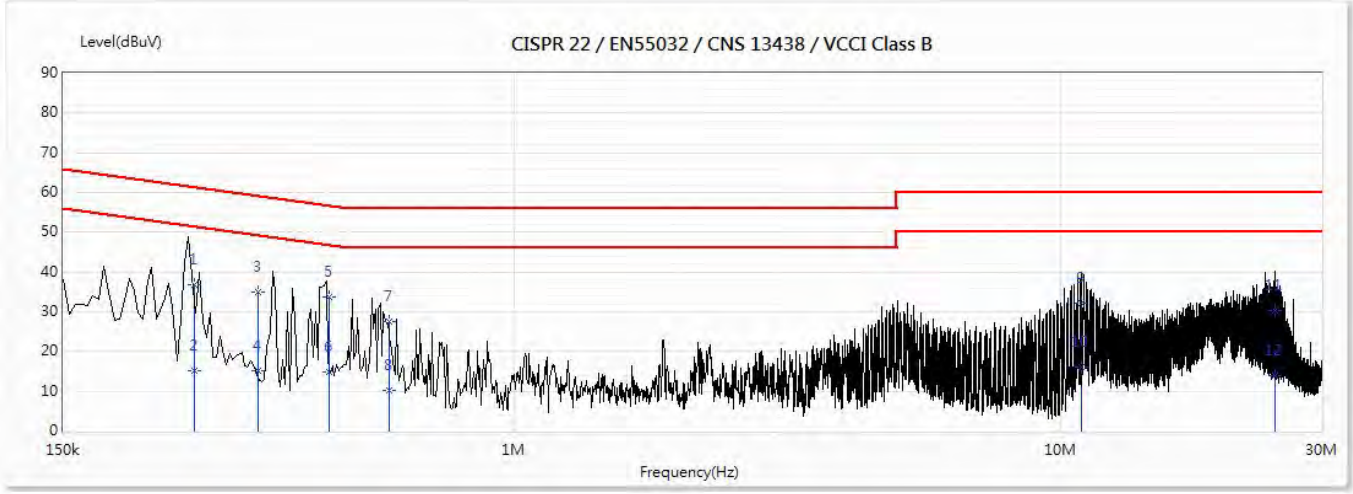


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.255	40.70	61.59	-20.90	31.06	9.64	QP
2	0.255	15.79	51.59	-35.80	6.16	9.64	AV
3	0.363	33.11	58.66	-25.55	23.46	9.64	QP
4	0.363	9.90	48.66	-38.76	0.26	9.64	AV
5	0.454	33.29	56.80	-23.50	23.65	9.65	QP
6	0.454	14.88	46.80	-31.92	5.23	9.65	AV
7	0.523	28.20	56.00	-27.80	18.55	9.65	QP
8	0.523	9.89	46.00	-36.11	0.24	9.65	AV
9	10.721	32.22	60.00	-27.78	22.33	9.89	QP
10	10.721	16.13	50.00	-33.87	6.24	9.89	AV
11	25.416	33.61	60.00	-26.39	23.65	9.96	QP
12	25.416	16.02	50.00	-33.98	6.06	9.96	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : LV55
Test Item : Conducted Emission Test
Power Line : N
Test Mode : Mode 17: Transmit (802.11ax-80MBW-Beamforming) (5775MHz)
Test Date : 2020/07/04



No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.261	36.65	61.41	-24.76	27.00	9.66	QP
2	0.261	15.30	51.41	-36.11	5.65	9.66	AV
3	0.341	34.85	59.19	-24.34	25.19	9.65	QP
4	0.341	15.04	49.19	-34.15	5.39	9.65	AV
*5	0.46	33.75	56.69	-22.94	24.09	9.66	QP
6	0.46	15.00	46.69	-31.69	5.34	9.66	AV
7	0.591	27.67	56.00	-28.33	18.01	9.66	QP
8	0.591	10.10	46.00	-35.90	0.44	9.66	AV
9	10.923	32.29	60.00	-27.71	22.38	9.91	QP
10	10.923	16.09	50.00	-33.91	6.18	9.91	AV
11	24.706	30.41	60.00	-29.59	20.34	10.08	QP
12	24.706	13.78	50.00	-36.22	3.71	10.08	AV

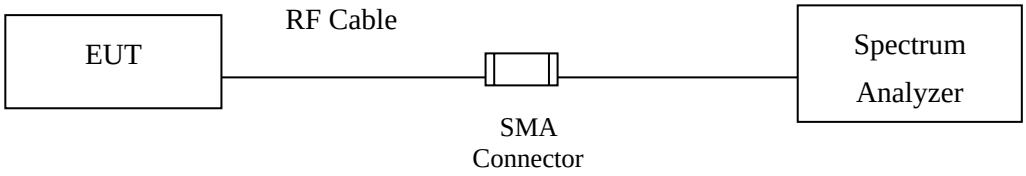
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3. Maximun conducted output power

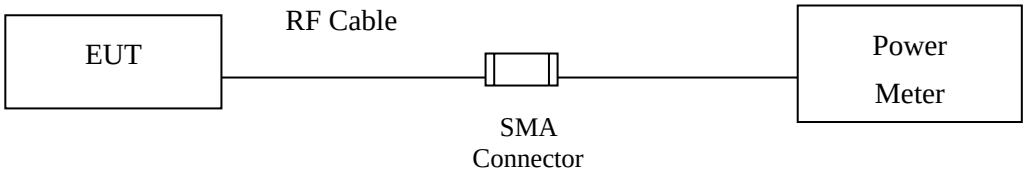
3.1. Test Setup

Occupied Bandwidth

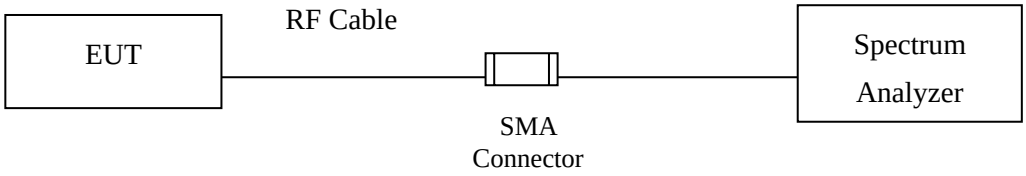


Conduction Power Measurement

Conduction Power Measurement (for 802.11an)



Conduction Power Measurement (for 802.11ac)



3.2. Limits

For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

3.3. Test Procedure

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 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.

3.4. Test Result of Maximum conducted output power

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 1: Transmit (802.11a-CDD)
Test Date : 2020/07/07

Chain A

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
36	5180	19.83	--	--	--	--	--	--	--
44	5220	21.86	21.8	21.76	21.69	21.63	21.57	21.51	21.45
48	5240	21.89	--	--	--	--	--	--	--
149	5745	21.49	--	--	--	--	--	--	--
157	5785	21.91	21.88	21.84	21.8	21.73	21.68	21.63	21.57
165	5825	21.87	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
36	5180	19.11	--	--	--	--	--	--	--
44	5220	21.35	21.29	21.24	21.18	21.13	21.06	21.01	20.95
48	5240	21.35	--	--	--	--	--	--	--
149	5745	21.65	--	--	--	--	--	--	--
157	5785	21.85	21.78	21.74	21.7	21.65	21.61	21.54	21.48
165	5825	21.92	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
36	5180	19.36	--	--	--	--	--	--	--
44	5220	21.77	21.71	21.67	21.6	21.54	21.51	21.48	21.44
48	5240	22.03	--	--	--	--	--	--	--
149	5745	21.32	--	--	--	--	--	--	--
157	5785	21.26	21.22	21.17	21.12	21.07	21.01	20.94	20.91
165	5825	21.31	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
36	5180	19.52	--	--	--	--	--	--	--
44	5220	21.52	21.47	21.43	21.37	21.3	21.25	21.21	21.17
48	5240	21.56	--	--	--	--	--	--	--
149	5745	21.86	--	--	--	--	--	--	--
157	5785	21.66	21.6	21.55	21.49	21.46	21.43	21.39	21.35
165	5825	21.41	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
36	5180	--	19.83	19.11	19.36	19.52	25.48	30	--
44	5220	--	21.86	21.35	21.77	21.52	27.65	30	--
48	5240	--	21.89	21.35	22.03	21.56	27.74	30	--
149	5745	--	21.49	21.65	21.32	21.86	27.61	30	--
157	5785	--	21.91	21.85	21.26	21.66	27.70	30	--
165	5825	--	21.87	21.92	21.31	21.41	27.66	30	--

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 2: Transmit (802.11n-20MBW-CDD)
Test Date : 2020/07/07

Chain A

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
36	5180	21.22	--	--	--	--	--	--	--
44	5220	21.43	21.37	21.34	21.27	21.22	21.16	21.12	21.05
48	5240	21.49	--	--	--	--	--	--	--
149	5745	21.25	--	--	--	--	--	--	--
157	5785	21.31	21.25	21.20	21.16	21.12	21.06	21.01	20.98
165	5825	21.78	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
36	5180	20.89	--	--	--	--	--	--	--
44	5220	20.82	20.79	20.74	20.68	20.62	20.58	20.54	20.50
48	5240	20.86	--	--	--	--	--	--	--
149	5745	21.72	--	--	--	--	--	--	--
157	5785	21.11	21.05	21.02	20.96	20.92	20.88	20.83	20.79
165	5825	21.76	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
36	5180	21.23	--	--	--	--	--	--	--
44	5220	20.86	20.82	20.79	20.73	20.68	20.63	20.58	20.51
48	5240	21.92	--	--	--	--	--	--	--
149	5745	20.87	--	--	--	--	--	--	--
157	5785	20.89	20.83	20.77	20.72	20.66	20.62	20.56	20.51
165	5825	21.05	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
36	5180	21.43	--	--	--	--	--	--	--
44	5220	21.02	20.98	20.92	20.88	20.82	20.77	20.72	20.66
48	5240	21.49	--	--	--	--	--	--	--
149	5745	21.25	--	--	--	--	--	--	--
157	5785	21.32	21.25	21.19	21.15	21.11	21.06	21.02	20.98
165	5825	21.08	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
36	5180	--	21.22	20.89	21.23	21.43	27.22	30	--
44	5220	--	21.43	20.82	20.86	21.02	27.06	30	--
48	5240	--	21.49	20.86	21.92	21.49	27.48	30	--
149	5745	--	21.25	21.72	20.87	21.25	27.30	30	--
157	5785	--	21.31	21.11	20.89	21.32	27.18	30	--
165	5825	--	21.78	21.76	21.05	21.08	27.45	30	--

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 3: Transmit (802.11n-40MBW-CDD)
Test Date : 2020/07/07

Chain A

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)							
		0	1	2	3	4	5	6	7
		Measurement Level (dBm)							
38	5190	19.72	--	--	--	--	--	--	--
46	5230	21.46	21.39	21.33	21.27	21.22	21.19	21.14	21.10
151	5755	21.56	--	--	--	--	--	--	--
159	5795	21.28	21.24	21.18	21.13	21.06	21.01	20.98	20.92

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)							
		0	1	2	3	4	5	6	7
		Measurement Level (dBm)							
38	5190	19.02	--	--	--	--	--	--	--
46	5230	20.56	20.50	20.45	20.40	20.35	20.30	20.25	20.21
151	5755	21.59	--	--	--	--	--	--	--
159	5795	21.63	21.58	21.52	21.48	21.41	21.37	21.31	21.24

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)							
		0	1	2	3	4	5	6	7
		Measurement Level (dBm)							
38	5190	19.33	--	--	--	--	--	--	--
46	5230	21.53	21.50	21.46	21.42	21.36	21.32	21.28	21.24
151	5755	20.93	--	--	--	--	--	--	--
159	5795	20.89	20.85	20.82	20.78	20.71	20.65	20.61	20.57

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)							
		0	1	2	3	4	5	6	7
		Measurement Level (dBm)							
38	5190	19.43	--	--	--	--	--	--	--
46	5230	21.52	21.46	21.43	21.36	21.32	21.27	21.20	21.15
151	5755	20.86	--	--	--	--	--	--	--
159	5795	20.96	20.91	20.88	20.83	20.8	20.73	20.67	20.63

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
38	5190	--	19.72	19.02	19.33	19.43	25.40	30	--
46	5230	--	21.46	20.56	21.53	21.52	27.31	30	--
151	5755	--	21.56	21.59	20.93	20.86	27.27	30	--
159	5795	--	21.28	21.63	20.89	20.96	27.22	30	--

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 4: Transmit (802.11ac-20MBW-CDD)
Test Date : 2020/07/07

Chain A

Cable loss=1.5dB		Maximum conducted output power									
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
		Measurement Level (dBm)									
36	5180	21.22	--	--	--	--	--	--	--	--	
44	5220	21.32	21.28	21.21	21.14	21.09	21.04	21.00	20.94	20.90	20.85
48	5240	21.28	--	--	--	--	--	--	--	--	
149	5745	21.35	--	--	--	--	--	--	--	--	
157	5785	21.42	21.35	21.28	21.23	21.19	21.16	21.09	21.04	21.00	20.95
165	5825	21.86	--	--	--	--	--	--	--	--	

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power									
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
		Measurement Level (dBm)									
36	5180	20.83	--	--	--	--	--	--	--	--	
44	5220	20.76	20.7	20.65	20.62	20.57	20.52	20.46	20.43	20.37	20.33
48	5240	20.89	--	--	--	--	--	--	--	--	
149	5745	21.66	--	--	--	--	--	--	--	--	
157	5785	21.23	21.18	21.13	21.08	21.02	20.99	20.94	20.89	20.84	20.79
165	5825	22.14	--	--	--	--	--	--	--	--	

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power									
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
		Measurement Level (dBm)									
36	5180	21.42	--	--	--	--	--	--	--	--	
44	5220	21.05	21	20.96	20.91	20.84	20.79	20.72	20.67	20.63	20.58
48	5240	21.79	--	--	--	--	--	--	--	--	
149	5745	20.86	--	--	--	--	--	--	--	--	
157	5785	20.89	20.84	20.79	20.75	20.70	20.67	20.60	20.56	20.51	20.47
165	5825	20.96	--	--	--	--	--	--	--	--	

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power									
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
		Measurement Level (dBm)									
36	5180	21.42	--	--	--	--	--	--	--	--	
44	5220	20.84	20.78	20.74	20.70	20.67	20.61	20.57	20.54	20.48	20.44
48	5240	21.62	--	--	--	--	--	--	--	--	
149	5745	21.08	--	--	--	--	--	--	--	--	
157	5785	20.28	20.23	20.17	20.10	20.04	19.97	19.94	19.88	19.82	19.76
165	5825	21.18	--	--	--	--	--	--	--	--	

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
36	5180	--	21.22	20.83	21.42	21.42	27.25	30	--	Pass
44	5220	--	21.32	20.76	21.05	20.84	27.02	30	--	Pass
48	5240	--	21.28	20.89	21.79	21.62	27.43	30	--	Pass
149	5745	--	21.35	21.66	20.86	21.08	27.27	30	--	Pass
157	5785	--	21.42	21.23	20.89	20.28	27.00	30	--	Pass
165	5825	--	21.86	22.14	20.96	21.18	27.58	30	--	Pass

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 5: Transmit (802.11ac-40MBW-CDD)
Test Date : 2020/07/07

Chain A

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
38	5190	19.28	--	--	--	--	--	--	--	--	--
46	5230	21.32	21.29	21.24	21.18	21.12	21.06	21.00	20.93	20.89	20.84
151	5755	21.42	--	--	--	--	--	--	--	--	--
159	5795	21.22	21.16	21.13	21.07	21.03	20.97	20.91	20.85	20.82	20.78

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
38	5190	19.02	--	--	--	--	--	--	--	--	--
46	5230	20.55	20.52	20.48	20.45	20.39	20.32	20.29	20.25	20.18	20.14
151	5755	21.63	--	--	--	--	--	--	--	--	--
159	5795	21.61	21.55	21.51	21.46	21.39	21.33	21.29	21.24	21.21	21.17

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
38	5190	19.39	--	--	--	--	--	--	--	--	--
46	5230	21.58	21.52	21.48	21.41	21.35	21.30	21.25	21.20	21.13	21.08
151	5755	20.89	--	--	--	--	--	--	--	--	--
159	5795	20.83	20.78	20.71	20.68	20.61	20.55	20.52	20.49	20.42	20.38

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
38	5190	19.69	--	--	--	--	--	--	--	--	--
46	5230	21.74	21.71	21.64	21.59	21.55	21.51	21.46	21.42	21.37	21.32
151	5755	20.86	--	--	--	--	--	--	--	--	--
159	5795	20.89	20.82	20.77	20.73	20.68	20.64	20.60	20.54	20.48	20.44

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
38	5190	--	19.28	19.02	19.39	19.69	25.37	30	--	Pass
46	5230	--	21.32	20.55	21.58	21.74	27.34	30	--	Pass
151	5755	--	21.42	21.63	20.89	20.86	27.23	30	--	Pass
159	5795	--	21.22	21.61	20.83	20.89	27.17	30	--	Pass

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 6: Transmit (802.11ac-80MBW-CDD)
Test Date : 2020/07/07

Chain A

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
42	5210	19.69	19.63	19.57	19.52	19.47	19.41	19.35	19.31	19.24	19.18
155	5775	20.98	20.94	20.9	20.87	20.83	20.8	20.76	20.71	20.65	20.6

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
42	5210	18.89	18.83	18.78	18.73	18.69	18.66	18.62	18.57	18.51	18.47
155	5775	20.85	20.78	20.71	20.68	20.61	20.57	20.51	20.44	20.39	20.33

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
42	5210	19.55	19.49	19.42	19.38	19.35	19.31	19.28	19.21	19.15	19.12
155	5775	21.26	21.2	21.16	21.12	21.06	21.01	20.94	20.89	20.84	20.78

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
42	5210	19.68	19.65	19.6	19.55	19.51	19.47	19.42	19.38	19.35	19.29
155	5775	21.11	21.05	21	20.94	20.88	20.85	20.81	20.78	20.74	20.68

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
42	5210	--	19.69	18.89	19.55	19.68	25.4853	19.69	--	Pass
155	5775	--	20.98	20.85	21.26	21.11	27.0733	20.98	--	Pass

Note:
1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 7: Transmit (802.11ax-20MBW-CDD) (RU Config-Full)
Test Date : 2020/07/06

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	21.56	--	--	--	--	--	--	--	--	--	--	--
44	5220	21.66	21.62	21.57	21.54	21.49	21.46	21.39	21.36	21.30	21.24	21.17	21.13
48	5240	21.69	--	--	--	--	--	--	--	--	--	--	--
149	5745	21.66	--	--	--	--	--	--	--	--	--	--	--
157	5785	21.67	21.61	21.56	21.49	21.43	21.39	21.34	21.29	21.24	21.18	21.13	21.10
165	5825	22.01	--	--	--	--	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	21.09	--	--	--	--	--	--	--	--	--	--	--
44	5220	20.96	20.9	20.86	20.80	20.74	20.70	20.66	20.62	20.57	20.51	20.46	20.43
48	5240	21.24	--	--	--	--	--	--	--	--	--	--	--
149	5745	21.97	--	--	--	--	--	--	--	--	--	--	--
157	5785	21.58	21.52	21.46	21.43	21.38	21.33	21.29	21.24	21.20	21.15	21.11	21.07
165	5825	22.05	--	--	--	--	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	21.65	--	--	--	--	--	--	--	--	--	--	--
44	5220	21.21	21.16	21.12	21.06	21.00	20.96	20.91	20.88	20.84	20.80	20.74	20.71
48	5240	22.14	--	--	--	--	--	--	--	--	--	--	--
149	5745	21.26	--	--	--	--	--	--	--	--	--	--	--
157	5785	21.27	21.23	21.19	21.16	21.11	21.07	21.02	20.97	20.90	20.83	20.77	20.73
165	5825	21.34	--	--	--	--	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	21.74	--	--	--	--	--	--	--	--	--	--	--
44	5220	21.22	21.19	21.13	21.06	21.00	20.95	20.88	20.85	20.79	20.73	20.69	20.64
48	5240	21.83	--	--	--	--	--	--	--	--	--	--	--
149	5745	21.52	--	--	--	--	--	--	--	--	--	--	--
157	5785	21.64	21.61	21.56	21.50	21.44	21.39	21.35	21.29	21.25	21.20	21.14	21.11
165	5825	21.45	--	--	--	--	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
36	5180	--	21.56	21.09	21.65	21.74	27.54	30	--
44	5220	--	21.66	20.96	21.21	21.22	27.29	30	--
48	5240	--	21.69	21.24	22.14	21.83	27.76	30	--
149	5745	--	21.66	21.97	21.26	21.52	27.63	30	--
157	5785	--	21.67	21.58	21.27	21.64	27.56	30	--
165	5825	--	22.01	22.05	21.34	21.45	27.74	30	--

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 8: Transmit (802.11ax-40MBW-CDD) (RU Config-Full)
Test Date : 2020/07/06

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	19.85	--	--	--	--	--	--	--	--	--	--	--
46	5230	21.89	21.78	21.73	21.67	21.62	21.56	21.49	21.45	21.39	21.32	21.28	21.24
151	5755	21.73	--	--	--	--	--	--	--	--	--	--	--
159	5795	21.69	21.64	21.57	21.50	21.45	21.42	21.35	21.32	21.26	21.21	21.14	21.08

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	19.23	--	--	--	--	--	--	--	--	--	--	--
46	5230	21.32	21.29	21.25	21.19	21.14	21.10	21.04	20.99	20.95	20.88	20.82	20.79
151	5755	21.98	--	--	--	--	--	--	--	--	--	--	--
159	5795	21.89	21.83	21.79	21.75	21.71	21.68	21.62	21.59	21.52	21.46	21.42	21.38

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	19.76	--	--	--	--	--	--	--	--	--	--	--
46	5230	21.88	21.82	21.75	21.69	21.62	21.58	21.53	21.49	21.42	21.36	21.33	21.28
151	5755	21.28	--	--	--	--	--	--	--	--	--	--	--
159	5795	21.29	21.25	21.2	21.15	21.11	21.07	21.03	20.97	20.92	20.87	20.83	20.80

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	19.82	--	--	--	--	--	--	--	--	--	--	--
46	5230	21.91	21.87	21.84	21.80	21.74	21.69	21.63	21.57	21.54	21.48	21.42	21.38
151	5755	21.27	--	--	--	--	--	--	--	--	--	--	--
159	5795	21.27	21.24	21.19	21.14	21.09	21.03	20.96	20.90	20.86	20.83	20.76	20.71

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
38	5190	--	19.85	19.23	19.76	19.82	25.69	30	--
46	5230	--	21.89	21.32	21.88	21.91	27.78	30	--
151	5755	--	21.73	21.98	21.28	21.27	27.60	30	--
159	5795	--	21.69	21.89	21.29	21.27	27.56	30	--

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 9: Transmit (802.11ax-80MBW-CDD) (RU Config-Full)
Test Date : 2020/07/06

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	19.85	19.81	19.77	19.71	19.65	19.58	19.55	19.5	19.44	19.4	19.37	19.32
155	5775	21.02	20.99	20.94	20.87	20.83	20.77	20.71	20.67	20.61	20.54	20.51	20.46

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	19.23	19.17	19.13	19.08	19.04	18.98	18.92	18.87	18.83	18.77	18.71	18.66
155	5775	20.98	20.93	20.9	20.84	20.78	20.71	20.68	20.65	20.59	20.54	20.49	20.43

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	19.76	19.69	19.63	19.59	19.52	19.47	19.43	19.36	19.33	19.27	19.24	19.2
155	5775	21.41	21.38	21.32	21.27	21.23	21.17	21.1	21.04	20.98	20.91	20.86	20.81

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	19.82	19.76	19.7	19.63	19.6	19.55	19.51	19.46	19.4	19.33	19.27	19.22
155	5775	21.53	21.5	21.45	21.41	21.38	21.33	21.27	21.21	21.17	21.11	21.04	20.98

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
42	5210	--	19.85	19.23	19.76	19.82	25.6928	30	--	Pass
155	5775	--	21.02	20.98	21.41	21.53	27.2622	30	--	Pass

Note:
1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 7: Transmit (802.11ax-20MBW-CDD) (RU Config-center mode)
Test Date : 2020/07/06

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	13.82	13.78	13.73	13.7	13.66	13.6	13.54	13.49	13.46	13.42	13.36	13.31
149	5745	18.23	--	--	--	--	--	--	--	--	--	--	--
165	5825	18.47	18.42	18.37	18.31	18.26	18.22	18.18	18.12	18.06	18	17.96	17.91

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	13.62	13.55	13.51	13.45	13.39	13.33	13.26	13.21	13.15	13.08	13.04	12.98
149	5745	18.16	--	--	--	--	--	--	--	--	--	--	--
165	5825	18.11	18.08	18.03	17.98	17.94	17.9	17.86	17.83	17.76	17.73	17.68	17.63

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	13.55	13.5	13.44	13.37	13.33	13.27	13.23	13.16	13.1	13.07	13.01	12.94
149	5745	19.42	--	--	--	--	--	--	--	--	--	--	--
165	5825	19.76	19.71	19.66	19.6	19.56	19.53	19.49	19.43	19.37	19.31	19.26	19.21

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	13.92	13.85	13.81	13.77	13.71	13.67	13.63	13.56	13.53	13.48	13.42	13.36
149	5745	19.05	--	--	--	--	--	--	--	--	--	--	--
165	5825	19.85	19.79	19.76	19.72	19.66	19.6	19.56	19.51	19.48	19.43	19.37	19.31

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
36	5180	--	13.82	13.62	13.55	13.92	19.75	30	--
149	5745	--	18.23	18.16	19.42	19.05	24.77	30	--
165	5825	--	18.47	18.11	19.76	19.85	25.14	30	--

Note:
1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 8: Transmit (802.11ax-40MBW-CDD) (RU Config-center mode)
Test Date : 2020/07/06

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	14.37	14.31	14.26	14.22	14.16	14.13	14.06	14	13.97	13.93	13.87	13.82
151	5755	18.05	--	--	--	--	--	--	--	--	--	--	--
159	5795	19.23	19.2	19.15	19.10	19.05	18.99	18.94	18.90	18.86	18.81	18.76	18.71

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	14.44	14.4	14.36	14.32	14.27	14.23	14.16	14.1	14.06	14.02	13.97	13.94
151	5755	18.11	--	--	--	--	--	--	--	--	--	--	--
159	5795	19.17	19.12	19.05	18.98	18.93	18.86	18.82	18.76	18.70	18.65	18.62	18.58

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	14.46	14.42	14.38	14.34	14.28	14.24	14.17	14.1	14.07	14.02	13.95	13.91
151	5755	19.22	--	--	--	--	--	--	--	--	--	--	--
159	5795	20.46	20.42	20.38	20.34	20.30	20.25	20.21	20.16	20.10	20.06	20.01	19.95

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	14.72	14.68	14.64	14.58	14.54	14.48	14.42	14.37	14.32	14.29	14.26	14.2
151	5755	19.11	--	--	--	--	--	--	--	--	--	--	--
159	5795	20.41	20.37	20.3	20.24	20.20	20.14	20.08	20.04	19.98	19.93	19.90	19.85

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
38	5190	--	14.37	14.44	14.46	14.72	20.52	30	--
151	5755	--	18.05	18.11	19.22	19.11	24.68	30	--
159	5795	--	19.23	19.17	20.46	20.41	25.88	30	--

Note:
1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 9: Transmit (802.11ax-80MBW-CDD) (RU Config-center mode)
Test Date : 2020/07/06

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	14.93	14.89	14.83	14.77	14.73	14.68	14.63	14.6	14.57	14.51	14.46	14.4
155	5775	14.77	14.71	14.67	14.64	14.59	14.53	14.5	14.45	14.42	14.36	14.29	14.24

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	15.01	14.96	14.92	14.88	14.82	14.78	14.74	14.69	14.65	14.59	14.56	14.52
155	5775	14.41	14.34	14.29	14.23	14.19	14.14	14.11	14.07	14.01	13.95	13.88	13.82

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	14.65	14.59	14.53	14.47	14.42	14.37	14.31	14.24	14.17	14.12	14.06	13.99
155	5775	15.62	15.55	15.49	15.45	15.41	15.35	15.31	15.27	15.22	15.16	15.1	15.03

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	15.22	15.16	15.1	15.04	14.98	14.92	14.89	14.83	14.79	14.74	14.67	14.61
155	5775	15.36	15.29	15.26	15.19	15.16	15.12	15.07	15.02	14.98	14.93	14.89	14.83

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
42	5210	--	14.93	15.01	14.65	15.22	20.97	30	--	Pass
155	5775	--	14.77	14.41	15.62	15.36	21.08	30	--	Pass

Note:
1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 7: Transmit (802.11ax-20MBW-CDD) (RU Config-edges mode)
Test Date : 2020/07/06

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	13.77	13.71	13.67	13.62	13.56	13.5	13.44	13.38	13.34	13.3	13.24	13.19
149	5745	18.62	--	--	--	--	--	--	--	--	--	--	--
165	5825	18.58	18.53	18.5	18.45	18.41	18.37	18.33	18.29	18.24	18.19	18.12	18.08

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	13.82	13.75	13.72	13.66	13.61	13.54	13.5	13.43	13.36	13.3	13.26	13.21
149	5745	18.55	--	--	--	--	--	--	--	--	--	--	--
165	5825	18.06	18	17.94	17.9	17.85	17.78	17.71	17.68	17.64	17.58	17.53	17.49

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	13.73	13.66	13.6	13.55	13.49	13.45	13.4	13.35	13.29	13.25	13.2	13.13
149	5745	19.46	--	--	--	--	--	--	--	--	--	--	--
165	5825	19.63	19.58	19.54	19.5	19.47	19.42	19.37	19.3	19.24	19.21	19.17	19.14

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	13.98	13.95	13.9	13.86	13.82	13.75	13.72	13.67	13.61	13.55	13.51	13.47
149	5745	19.85	--	--	--	--	--	--	--	--	--	--	--
165	5825	19.74	19.69	19.63	19.58	19.54	19.49	19.42	19.36	19.33	19.28	19.22	19.16

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
36	5180	--	13.77	13.82	13.73	13.98	19.85	30	--
149	5745	--	18.62	18.55	19.46	19.85	25.18	30	--
165	5825	--	18.58	18.06	19.63	19.74	25.08	30	--

Note:
1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 8: Transmit (802.11ax-40MBW-CDD) (RU Config-edges mode)
Test Date : 2020/07/06

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	14.47	14.41	14.35	14.3	14.26	14.22	14.19	14.13	14.07	14.01	13.97	13.94
151	5755	18.12	--	--	--	--	--	--	--	--	--	--	--
159	5795	19.19	19.14	19.09	19.03	18.98	18.92	18.88	18.85	18.79	18.75	18.72	18.67

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	14.62	14.59	14.53	14.47	14.42	14.36	14.33	14.29	14.24	14.18	14.13	14.09
151	5755	18.03	--	--	--	--	--	--	--	--	--	--	--
159	5795	19.06	19	18.94	18.87	18.83	18.80	18.75	18.70	18.63	18.60	18.54	18.48

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	14.41	14.38	14.31	14.25	14.18	14.13	14.08	14.01	13.95	13.9	13.85	13.81
151	5755	18.74	--	--	--	--	--	--	--	--	--	--	--
159	5795	20.16	20.09	20.03	20.00	19.95	19.91	19.84	19.80	19.74	19.70	19.67	19.60

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	14.87	14.84	14.77	14.73	14.68	14.62	14.56	14.51	14.47	14.44	14.39	14.35
151	5755	18.97	--	--	--	--	--	--	--	--	--	--	--
159	5795	20.34	20.27	20.24	20.20	20.15	20.11	20.06	20.01	19.95	19.90	19.86	19.82

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
38	5190	--	14.47	14.62	14.41	14.87	20.62	30	--
151	5755	--	18.12	18.03	18.74	18.97	24.50	30	--
159	5795	--	19.19	19.06	20.16	20.34	25.75	30	--

Note:
1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 9: Transmit (802.11ax-80MBW-CDD) (RU Config-edges mode)
Test Date : 2020/07/06

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	14.68	14.63	14.56	14.52	14.48	14.43	14.4	14.33	14.29	14.23	14.18	14.12
155	5775	13.52	13.46	13.4	13.36	13.3	13.25	13.21	13.14	13.07	13.02	12.98	12.94

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (VHT index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	14.86	14.8	14.74	14.7	14.64	14.58	14.52	14.48	14.43	14.37	14.31	14.27
155	5775	13.94	13.91	13.84	13.79	13.75	13.71	13.65	13.61	13.55	13.49	13.42	13.38

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	14.75	14.72	14.66	14.59	14.56	14.5	14.44	14.41	14.36	14.31	14.27	14.21
155	5775	14.08	14.03	13.99	13.94	13.89	13.84	13.79	13.74	13.67	13.6	13.57	13.54

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	15.02	14.97	14.92	14.87	14.83	14.79	14.74	14.69	14.64	14.6	14.53	14.48
155	5775	14.68	14.64	14.59	14.55	14.51	14.46	14.43	14.37	14.34	14.27	14.22	14.17

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
42	5210	--	14.68	14.86	14.75	15.02	20.85	30	--	Pass
155	5775	--	13.52	13.94	14.08	14.68	20.09	30	--	Pass

Note:
1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 10: Transmit (802.11n-20MBW-Beamforming)
Test Date : 2020/07/08

Chain A

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
36	5180	21.36	--	--	--	--	--	--	--
44	5220	21.25	21.22	21.15	21.11	21.05	21.00	20.94	20.87
48	5240	21.24	--	--	--	--	--	--	--
149	5745	21.26	--	--	--	--	--	--	--
157	5785	21.39	21.36	21.32	21.28	21.24	21.21	21.15	21.11
165	5825	21.69	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
36	5180	20.87	--	--	--	--	--	--	--
44	5220	20.69	20.63	20.58	20.53	20.47	20.44	20.40	20.37
48	5240	21.02	--	--	--	--	--	--	--
149	5745	21.52	--	--	--	--	--	--	--
157	5785	21.17	21.11	21.06	21.03	20.96	20.90	20.87	20.82
165	5825	21.74	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
36	5180	21.39	--	--	--	--	--	--	--
44	5220	21.01	20.98	20.92	20.86	20.81	20.75	20.68	20.64
48	5240	21.97	--	--	--	--	--	--	--
149	5745	21.09	--	--	--	--	--	--	--
157	5785	21.08	21.03	21.00	20.95	20.89	20.84	20.81	20.74
165	5825	21.18	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (Mbps)							
		6	9	12	18	24	36	48	54
		Measurement Level (dBm)							
36	5180	21.21	--	--	--	--	--	--	--
44	5220	21.03	20.96	20.89	20.84	20.79	20.75	20.69	20.64
48	5240	21.55	--	--	--	--	--	--	--
149	5745	21.29	--	--	--	--	--	--	--
157	5785	21.28	21.24	21.18	21.11	21.05	20.99	20.94	20.91
165	5825	21.19	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
36	5180	--	21.36	20.87	21.39	21.21	27.23	30	--
44	5220	--	21.25	20.69	21.01	21.03	27.02	30	--
48	5240	--	21.24	21.02	21.97	21.55	27.48	30	--
149	5745	--	21.26	21.52	21.09	21.29	27.31	30	--
157	5785	--	21.39	21.17	21.08	21.28	27.25	30	--
165	5825	--	21.69	21.74	21.18	21.19	27.48	30	--

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 11: Transmit (802.11n-40MBW-Beamforming)
Test Date : 2020/07/08

Chain A

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)							
		0	1	2	3	4	5	6	7
		Measurement Level (dBm)							
38	5190	19.52	--	--	--	--	--	--	--
46	5230	21.53	21.46	21.43	21.36	21.32	21.27	21.22	21.16
151	5755	21.36	--	--	--	--	--	--	--
159	5795	21.49	21.45	21.40	21.36	21.30	21.25	21.19	21.12

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)							
		0	1	2	3	4	5	6	7
		Measurement Level (dBm)							
38	5190	19.02	--	--	--	--	--	--	--
46	5230	21.11	21.08	21.04	20.98	20.94	20.89	20.83	20.78
151	5755	21.74	--	--	--	--	--	--	--
159	5795	21.64	21.57	21.53	21.50	21.46	21.39	21.35	21.31

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)							
		0	1	2	3	4	5	6	7
		Measurement Level (dBm)							
38	5190	19.54	--	--	--	--	--	--	--
46	5230	21.53	21.49	21.43	21.38	21.32	21.28	21.22	21.18
151	5755	21.02	--	--	--	--	--	--	--
159	5795	21.03	20.98	20.95	20.92	20.87	20.81	20.74	20.71

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power							
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)							
		0	1	2	3	4	5	6	7
		Measurement Level (dBm)							
38	5190	19.43	--	--	--	--	--	--	--
46	5230	21.47	21.41	21.36	21.32	21.27	21.24	21.19	21.13
151	5755	21.09	--	--	--	--	--	--	--
159	5795	21.08	21.04	20.97	20.9	20.87	20.83	20.78	20.74

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
38	5190	--	19.52	19.02	19.54	19.43	25.40	30	--
46	5230	--	21.53	21.11	21.53	21.47	27.43	30	--
151	5755	--	21.36	21.74	21.02	21.09	27.33	30	--
159	5795	--	21.49	21.64	21.03	21.08	27.34	30	--

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 12: Transmit (802.11ac-20MBW-Beamforming)
Test Date : 2020/07/08

Chain A

Cable loss=1.5dB		Maximum conducted output power									
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
		Measurement Level (dBm)									
36	5180	21.04	--	--	--	--	--	--	--	--	--
44	5220	21.29	21.25	21.2	21.15	21.09	21.04	21.00	20.97	20.93	20.90
48	5240	21.18	--	--	--	--	--	--	--	--	--
149	5745	21.12	--	--	--	--	--	--	--	--	--
157	5785	21.41	21.34	21.29	21.23	21.17	21.11	21.05	20.99	20.93	20.89
165	5825	21.79	--	--	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power									
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
		Measurement Level (dBm)									
36	5180	20.53	--	--	--	--	--	--	--	--	--
44	5220	20.53	20.47	20.43	20.37	20.32	20.25	20.22	20.15	20.12	20.08
48	5240	20.69	--	--	--	--	--	--	--	--	--
149	5745	21.73	--	--	--	--	--	--	--	--	--
157	5785	21.07	21.04	20.98	20.92	20.85	20.81	20.77	20.71	20.68	20.62
165	5825	21.68	--	--	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power									
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
		Measurement Level (dBm)									
36	5180	21.25	--	--	--	--	--	--	--	--	--
44	5220	20.64	20.6	20.55	20.52	20.46	20.43	20.37	20.33	20.28	20.24
48	5240	21.98	--	--	--	--	--	--	--	--	--
149	5745	21.01	--	--	--	--	--	--	--	--	--
157	5785	20.72	20.66	20.63	20.57	20.52	20.46	20.42	20.36	20.33	20.27
165	5825	21.03	--	--	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power									
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
		Measurement Level (dBm)									
36	5180	21.46	--	--	--	--	--	--	--	--	--
44	5220	20.6	20.57	20.51	20.47	20.41	20.38	20.32	20.27	20.20	20.15
48	5240	21.44	--	--	--	--	--	--	--	--	--
149	5745	20.92	--	--	--	--	--	--	--	--	--
157	5785	21.08	21.03	20.97	20.91	20.87	20.82	20.79	20.75	20.72	20.68
165	5825	20.9	--	--	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
36	5180	--	21.04	20.53	21.25	21.46	27.10	30	--	Pass
44	5220	--	21.29	20.53	20.64	20.6	26.80	30	--	Pass
48	5240	--	21.18	20.69	21.98	21.44	27.37	30	--	Pass
149	5745	--	21.12	21.73	21.01	20.92	27.23	30	--	Pass
157	5785	--	21.41	21.07	20.72	21.08	27.10	30	--	Pass
165	5825	--	21.79	21.68	21.03	20.9	27.39	30	--	Pass

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 13: Transmit (802.11ac-40MBW-Beamforming)
Test Date : 2020/07/08

Chain A

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
38	5190	19.4	--	--	--	--	--	--	--	--	--
46	5230	21.5	21.46	21.43	21.39	21.33	21.29	21.22	21.17	21.14	21.10
151	5755	21.33	--	--	--	--	--	--	--	--	--
159	5795	21.19	21.15	21.09	21.05	20.98	20.93	20.87	20.82	20.76	20.70

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
38	5190	18.85	--	--	--	--	--	--	--	--	--
46	5230	20.96	20.91	20.85	20.80	20.76	20.72	20.65	20.61	20.56	20.50
151	5755	21.58	--	--	--	--	--	--	--	--	--
159	5795	21.52	21.49	21.44	21.39	21.33	21.28	21.23	21.19	21.13	21.09

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
38	5190	19.23	--	--	--	--	--	--	--	--	--
46	5230	21.55	21.5	21.43	21.40	21.36	21.29	21.26	21.19	21.13	21.10
151	5755	20.78	--	--	--	--	--	--	--	--	--
159	5795	20.81	20.78	20.73	20.69	20.66	20.63	20.57	20.53	20.48	20.44

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
38	5190	19.44	--	--	--	--	--	--	--	--	--
46	5230	21.4	21.35	21.31	21.27	21.23	21.18	21.12	21.09	21.04	21.00
151	5755	20.92	--	--	--	--	--	--	--	--	--
159	5795	20.95	20.9	20.84	20.78	20.71	20.64	20.59	20.52	20.48	20.44

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
38	5190	--	19.4	18.85	19.23	19.44	25.26	30	--	Pass
46	5230	--	21.5	20.96	21.55	21.4	27.38	30	--	Pass
151	5755	--	21.33	21.58	20.78	20.92	27.18	30	--	Pass
159	5795	--	21.19	21.52	20.81	20.95	27.15	30	--	Pass

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 14: Transmit (802.11ac-80MBW-Beamforming)
Test Date : 2020/07/08

Chain A

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
42	5210	19.34	19.3	19.26	19.21	19.14	19.11	19.07	19.03	18.97	18.91
155	5775	19.54	19.51	19.44	19.39	19.33	19.3	19.26	19.2	19.16	19.11

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
42	5210	18.78	18.72	18.68	18.65	18.62	18.56	18.53	18.5	18.44	18.38
155	5775	19.67	19.61	19.57	19.5	19.44	19.41	19.35	19.31	19.28	19.22

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
42	5210	19.44	19.4	19.33	19.28	19.22	19.17	19.13	19.09	19.03	18.96
155	5775	20.1	20.06	20	19.96	19.92	19.88	19.85	19.8	19.75	19.71

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power									
Channel No	Frequency (MHz)	For different Data Rate (MCS index)									
		0	1	2	3	4	5	6	7	8	9
42	5210	19.55	19.51	19.47	19.44	19.39	19.34	19.29	19.25	19.21	19.18
155	5775	20	19.93	19.88	19.84	19.79	19.75	19.72	19.68	19.63	19.59

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Maximum conducted output power Measurement

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
42	5210	--	19.34	18.78	19.44	19.55	25.308	30	--	Pass
155	5775	--	19.54	19.67	20.1	20	25.8542	30	--	Pass

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 15: Transmit (802.11ax-20MBW-Beamforming)
Test Date : 2020/07/08

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	21.43	--	--	--	--	--	--	--	--	--	--	--
149	5745	21.54	21.48	21.45	21.41	21.37	21.33	21.27	21.23	21.16	21.12	21.06	21.01
165	5825	21.57	--	--	--	--	--	--	--	--	--	--	--
36	5180	21.54	--	--	--	--	--	--	--	--	--	--	--
149	5745	21.55	21.51	21.47	21.44	21.38	21.35	21.30	21.24	21.19	21.16	21.13	21.09
165	5825	21.89	--	--	--	--	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	20.97	--	--	--	--	--	--	--	--	--	--	--
149	5745	20.82	20.77	20.73	20.66	20.62	20.56	20.50	20.45	20.41	20.35	20.32	20.26
165	5825	21.12	--	--	--	--	--	--	--	--	--	--	--
36	5180	21.85	--	--	--	--	--	--	--	--	--	--	--
149	5745	21.45	21.41	21.37	21.30	21.26	21.20	21.14	21.08	21.02	20.95	20.90	20.83
165	5825	21.92	--	--	--	--	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	21.52	--	--	--	--	--	--	--	--	--	--	--
149	5745	21.08	21.03	20.97	20.93	20.86	20.81	20.76	20.71	20.66	20.61	20.56	20.53
165	5825	22.01	--	--	--	--	--	--	--	--	--	--	--
36	5180	21.14	--	--	--	--	--	--	--	--	--	--	--
149	5745	21.15	21.12	21.08	21.04	20.99	20.93	20.86	20.80	20.73	20.70	20.64	20.60
165	5825	21.22	--	--	--	--	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
36	5180	21.62	--	--	--	--	--	--	--	--	--	--	--
149	5745	21.1	21.04	20.98	20.92	20.88	20.83	20.77	20.71	20.64	20.60	20.56	20.51
165	5825	21.7	--	--	--	--	--	--	--	--	--	--	--
36	5180	21.4	--	--	--	--	--	--	--	--	--	--	--
149	5745	21.52	21.46	21.42	21.37	21.31	21.25	21.18	21.14	21.09	21.05	20.99	20.94
165	5825	21.32	--	--	--	--	--	--	--	--	--	--	--

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
36	5180	--	21.43	20.97	21.52	21.62	27.413	30	--
44	5220	--	21.54	20.82	21.08	21.1	27.163	30	--
48	5240	--	21.57	21.12	22.01	21.7	27.632	30	--
149	5745	--	21.54	21.85	21.14	21.4	27.511	30	--
157	5785	--	21.55	21.45	21.15	21.52	27.441	30	--
165	5825	--	21.89	21.92	21.22	21.32	27.62	30	--

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 16: Transmit (802.11ax-40MBW-Beamforming)
Test Date : 2020/07/08

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	19.72	--	--	--	--	--	--	--	--	--	--	--
46	5230	21.77	21.72	21.69	21.64	21.58	21.52	21.46	21.40	21.37	21.33	21.27	21.22
151	5755	21.61	--	--	--	--	--	--	--	--	--	--	--
159	5795	21.57	21.53	21.47	21.41	21.37	21.32	21.28	21.24	21.20	21.13	21.09	21.04

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	19.11	--	--	--	--	--	--	--	--	--	--	--
46	5230	21.2	21.16	21.1	21.03	21.00	20.96	20.90	20.87	20.80	20.75	20.70	20.67
151	5755	21.86	--	--	--	--	--	--	--	--	--	--	--
159	5795	21.77	21.71	21.64	21.59	21.55	21.50	21.44	21.37	21.32	21.26	21.22	21.19

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	19.64	--	--	--	--	--	--	--	--	--	--	--
46	5230	21.76	21.71	21.64	21.58	21.52	21.47	21.43	21.37	21.33	21.27	21.23	21.17
151	5755	21.16	--	--	--	--	--	--	--	--	--	--	--
159	5795	21.17	21.12	21.06	21.01	20.94	20.88	20.84	20.80	20.76	20.70	20.65	20.60

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No.	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
38	5190	19.7	--	--	--	--	--	--	--	--	--	--	--
46	5230	21.78	21.71	21.64	21.59	21.52	21.47	21.41	21.35	21.29	21.26	21.22	21.19
151	5755	21.15	--	--	--	--	--	--	--	--	--	--	--
159	5795	21.15	21.1	21.06	21.00	20.94	20.88	20.81	20.76	20.71	20.65	20.61	20.58

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Maximum conducted output power Measurement:

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit	
								(dBm)	dBm+10log(BW)
38	5190	--	19.72	19.11	19.64	19.7	25.57	30	--
46	5230	--	21.77	21.2	21.76	21.78	27.655	30	--
151	5755	--	21.61	21.86	21.16	21.15	27.476	30	--
159	5795	--	21.57	21.77	21.17	21.15	27.444	30	--

Note:

1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

Product : LV55
Test Item : Maximum conducted output power
Test Mode : Mode 17: Transmit (802.11ax-80MBW-Beamforming)
Test Date : 2020/07/08

Chain A

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	19.72	19.68	19.63	19.56	19.5	19.47	19.4	19.36	19.33	19.28	19.24	19.2
155	5775	19.93	19.89	19.85	19.79	19.76	19.7	19.67	19.61	19.55	19.5	19.46	19.43

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain B

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	19.1	19.03	18.98	18.93	18.86	18.81	18.75	18.7	18.65	18.59	18.54	18.48
155	5775	19.99	19.92	19.89	19.84	19.81	19.77	19.72	19.67	19.64	19.58	19.52	19.46

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain C

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	19.64	19.57	19.53	19.49	19.44	19.4	19.37	19.33	19.3	19.23	19.18	19.14
155	5775	20.52	20.46	20.42	20.37	20.33	20.29	20.24	20.19	20.14	20.07	20.03	19.99

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

Chain D

Cable loss=1.5dB		Maximum conducted output power											
Channel No	Frequency (MHz)	For different Data Rate (MCS index)											
		0	1	2	3	4	5	6	7	8	9	10	11
42	5210	19.7	19.66	19.63	19.59	19.53	19.49	19.44	19.4	19.34	19.28	19.21	19.15
155	5775	20.2	20.16	20.1	20.03	19.97	19.93	19.89	19.83	19.8	19.76	19.71	19.65

Note: Maximum conducted output power Value =Reading value on Spectrum Analyzer + cable loss

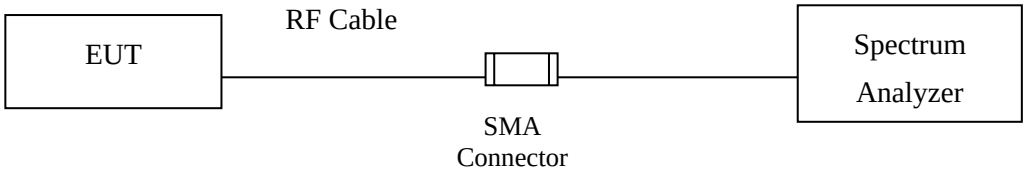
Maximum conducted output power Measurement

Channel No	Frequency Range (MHz)	26dB Bandwidth (MHz)	Chain A Power (dBm)	Chain B Power (dBm)	Chain C Power (dBm)	Chain D Power (dBm)	Output Power (dBm)	Output Power Limit		Result
								(dBm)	dBm+10log(BW)	
42	5210	--	19.72	19.1	19.64	19.7	25.568	30	--	Pass
155	5775	--	19.93	19.99	20.52	20.2	26.187	30	--	Pass

Note:
1. Output Power Value (dBm) = 10*LOG (Chain A(mW)+ Chain B(mW)+ Chain C(mW)+ Chain D(mW))
2. 26dB Bandwidth is the bandwidth of chain A or B or C or D whichever is less bandwidth, output power limitation is more stringent.

4. Peak Power Spectral Density

4.1. Test Setup



4.2. Limits

For the band 5.15-5.25 GHz,
(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.+

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

4.3. Test Procedure

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

The Peak Power Spectral Density using KDB 789033 section F) procedure, Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer.

SA-1 method is selected to run the test.

For the band 5.725-5.85 GHz, Scale the observed power level to an equivalent value in 500 kHz by adjusting (increase) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log (500 kHz/100 kHz) = 6.98 dB.

4.4. Test Result of Peak Power Spectral Density

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 1: Transmit (802.11a-CDD)
Test Date : 2020/07/03

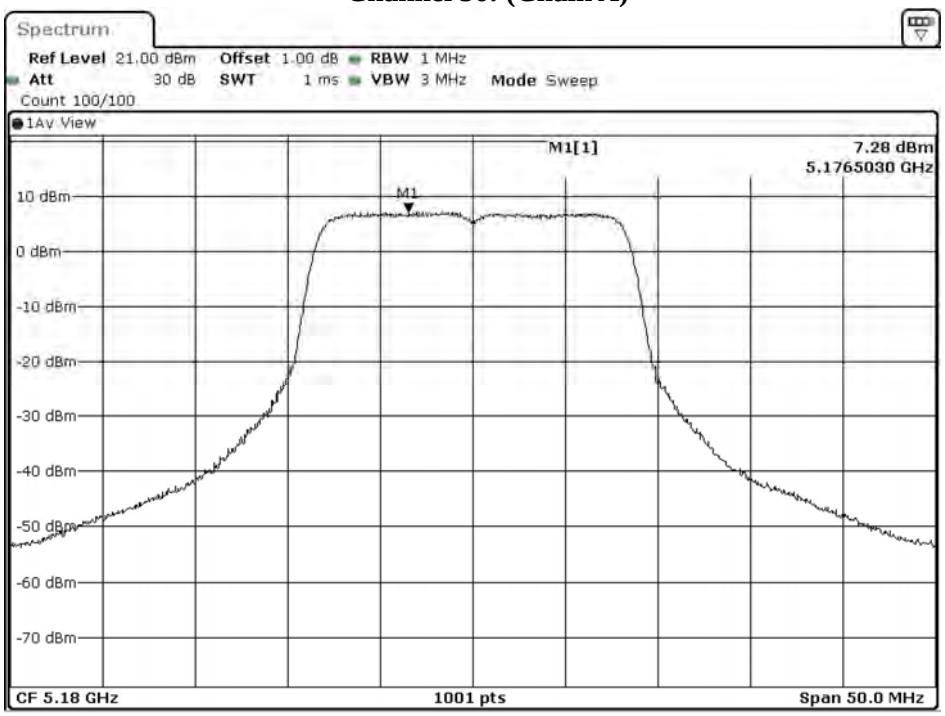
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/MHz)	Total PPSD (dBm/MHz)	Required Limit (dBm/MHz)	Result
36	5180	A	7.28	13.30	17	Pass
		B	7.10	13.12		Pass
		C	7.21	13.23		Pass
		D	7.52	13.54		Pass
44	5220	A	10.44	16.46	17	Pass
		B	10.17	16.19		Pass
		C	10.15	16.17		Pass
		D	10.65	16.67		Pass
48	5240	A	10.43	16.45	17	Pass
		B	10.23	16.25		Pass
		C	10.27	16.29		Pass
		D	10.68	16.70		Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
149	5745	A	2.29	6.98	15.29	30	Pass
		B	2.19	6.98	15.19		Pass
		C	1.90	6.98	14.90		Pass
		D	1.88	6.98	14.88		Pass
157	5785	A	2.33	6.98	15.33	30	Pass
		B	2.10	6.98	15.10		Pass
		C	2.07	6.98	15.07		Pass
		D	2.31	6.98	15.31		Pass
165	5825	A	1.24	6.98	14.24	30	Pass
		B	1.51	6.98	14.51		Pass
		C	1.15	6.98	14.15		Pass
		D	1.75	6.98	14.75		Pass

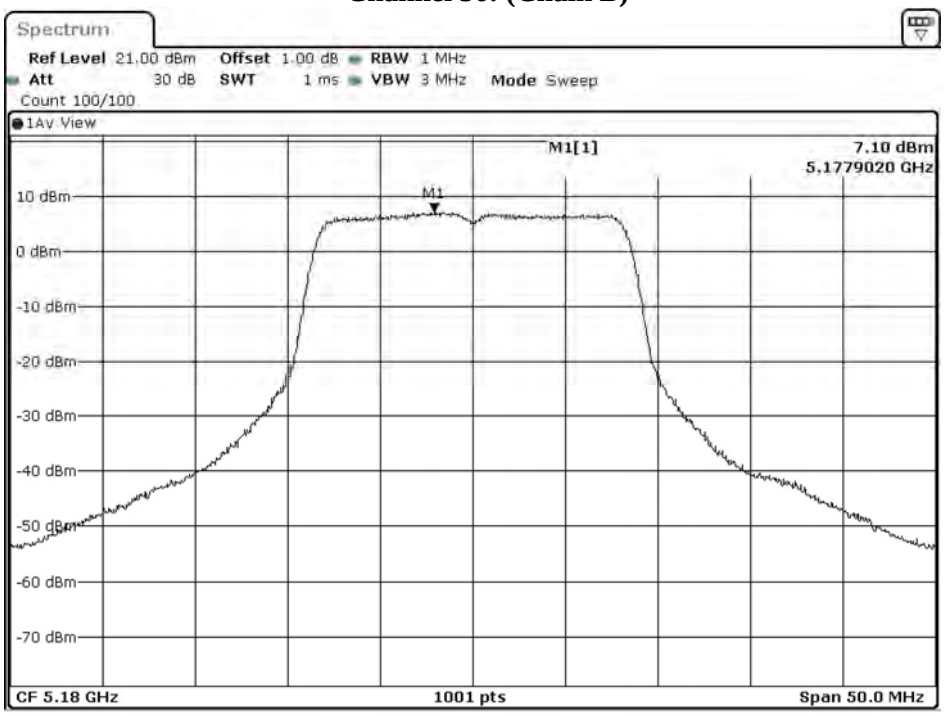
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 36: (Chain A)



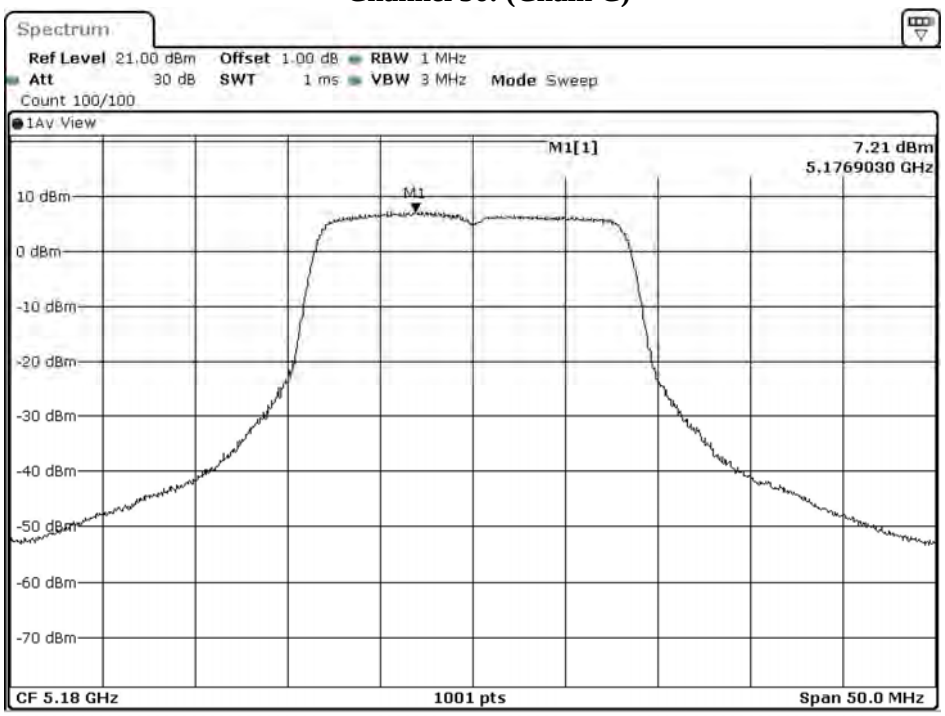
Date: 3.JUL.2020 20:02:27

Channel 36: (Chain B)



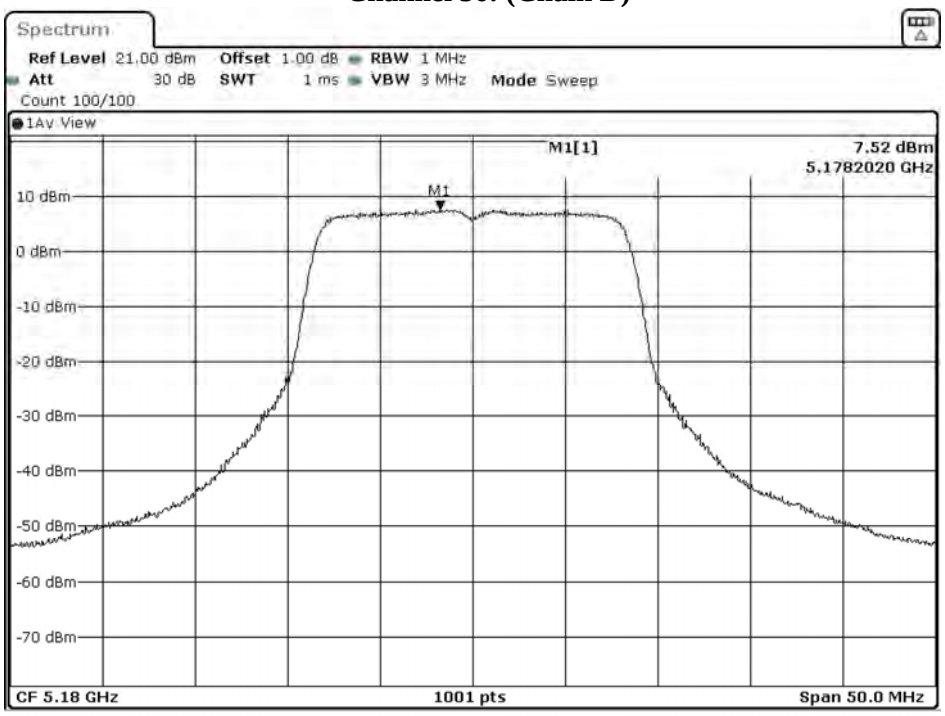
Date: 3.JUL.2020 20:05:30

Channel 36: (Chain C)



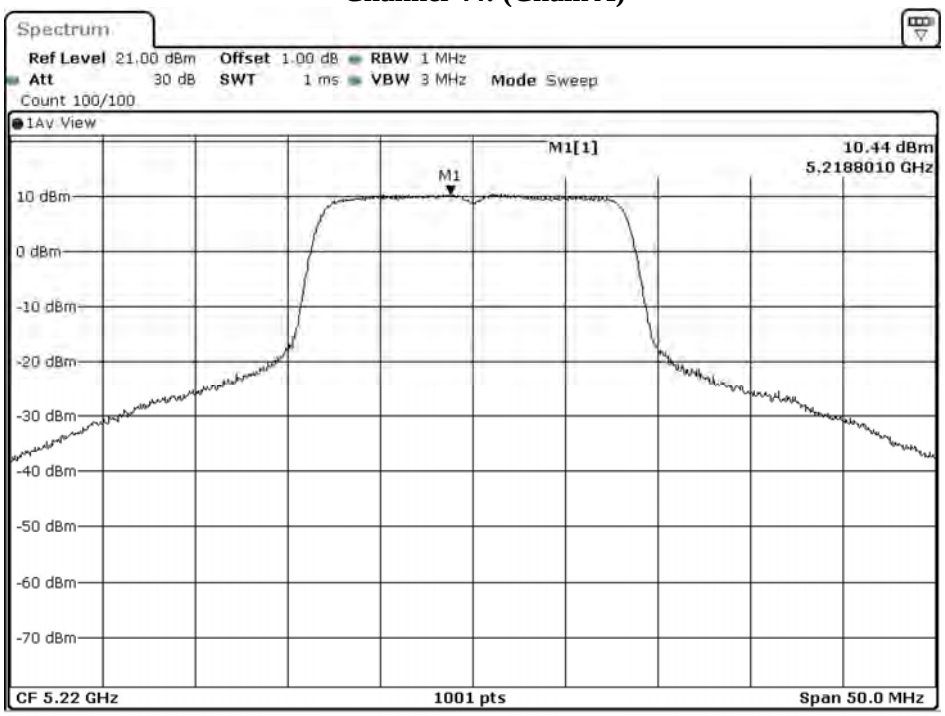
Date: 3.JUL.2020 12:07:54

Channel 36: (Chain D)



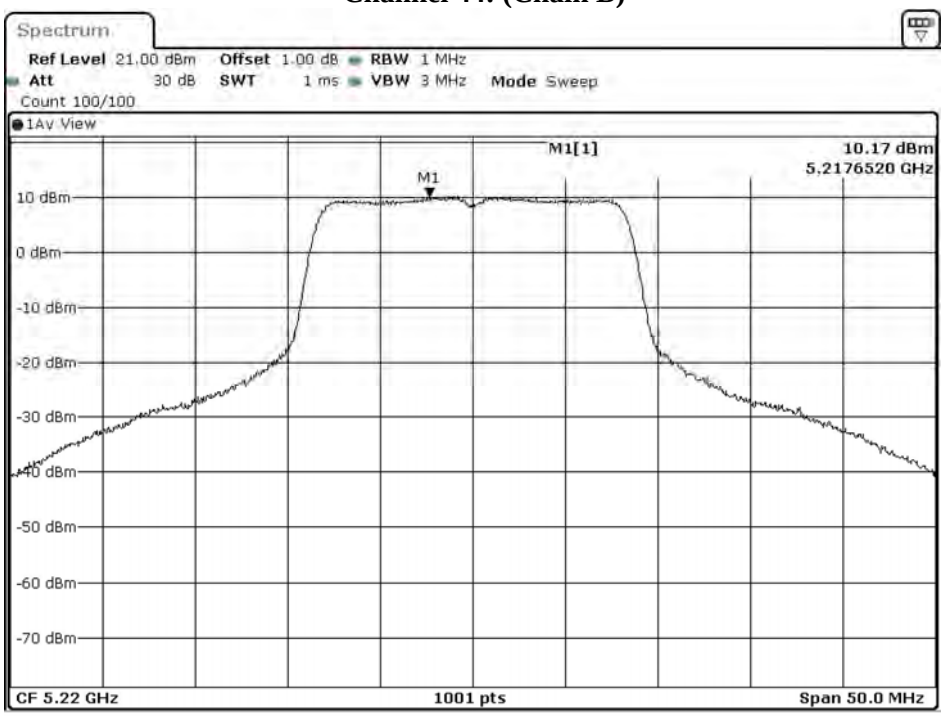
Date: 4.JUL.2020 00:05:45

Channel 44: (Chain A)



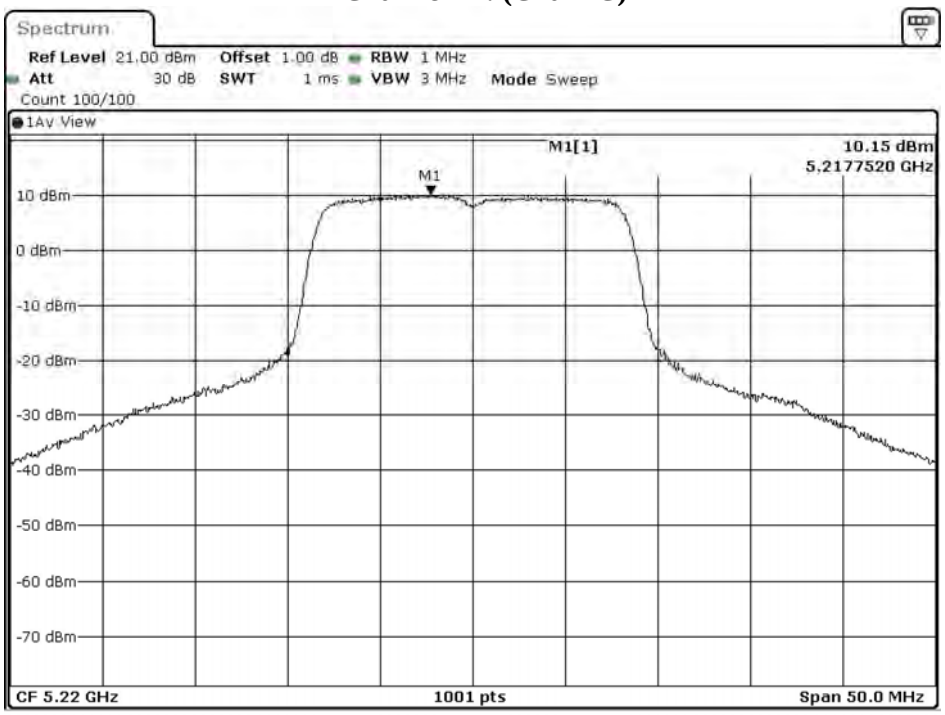
Date: 3.JUL.2020 21:56:39

Channel 44: (Chain B)



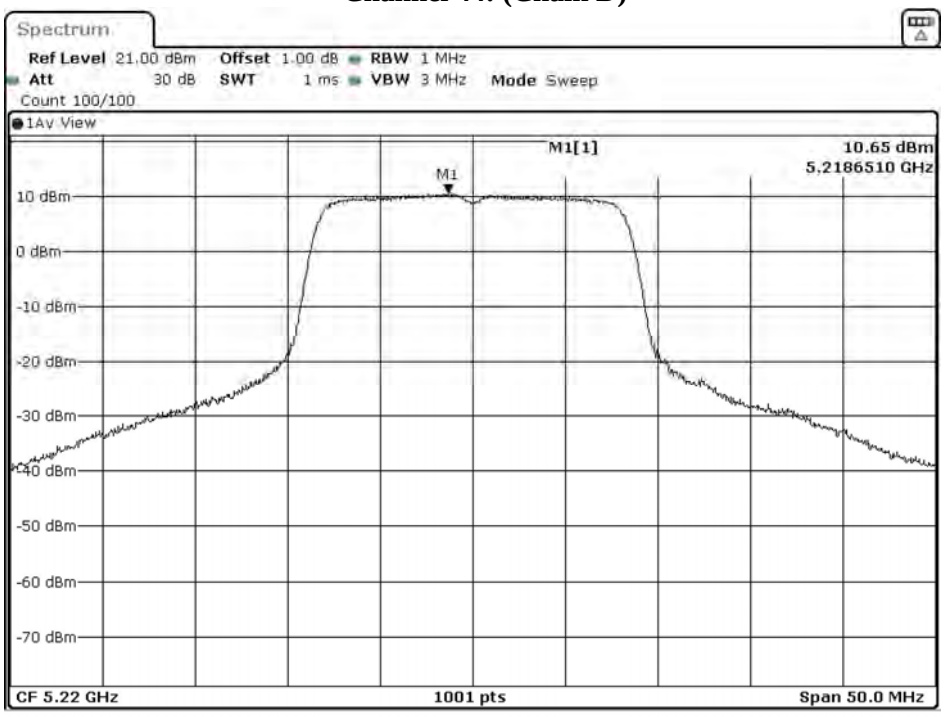
Date: 3.JUL.2020 21:59:42

Channel 44: (Chain C)



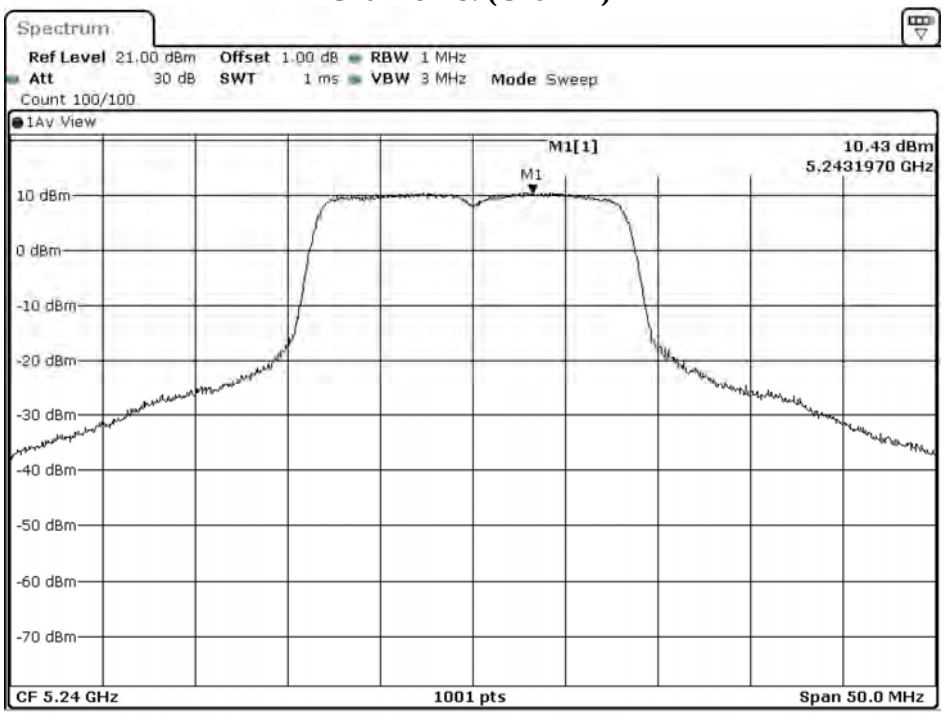
Date: 3.JUL.2020 14:02:06

Channel 44: (Chain D)



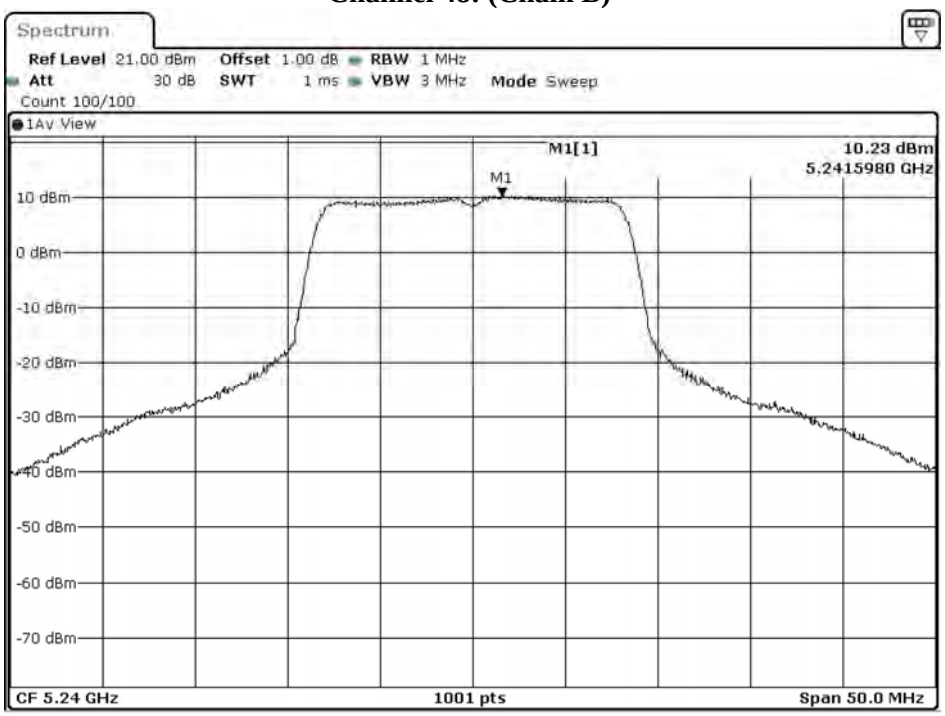
Date: 4.JUL.2020 01:59:57

Channel 48: (Chain A)



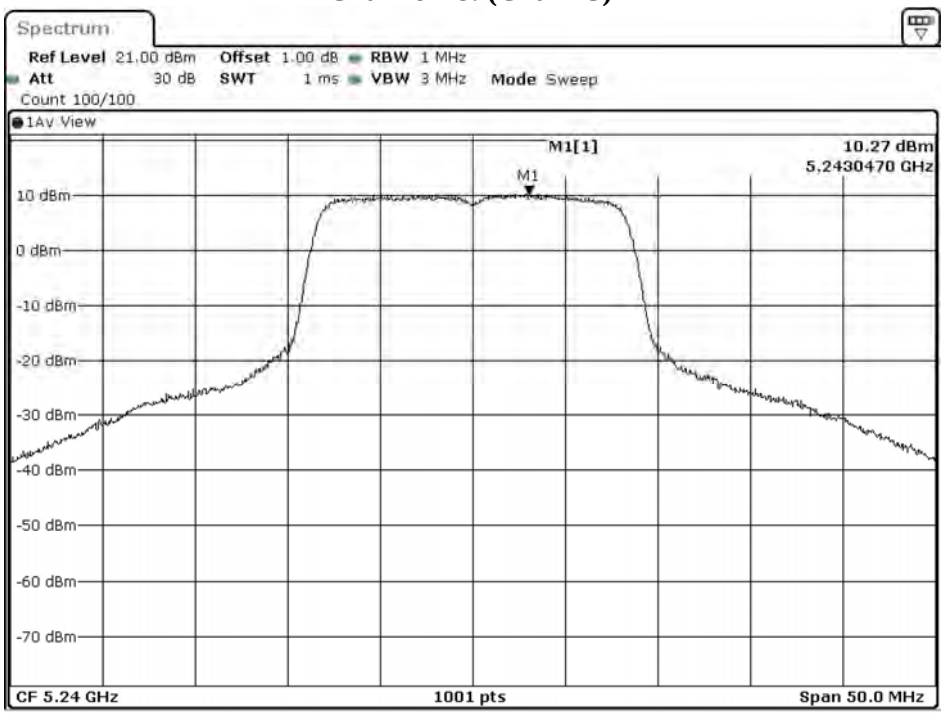
Date: 3.JUL.2020 22:00:49

Channel 48: (Chain B)



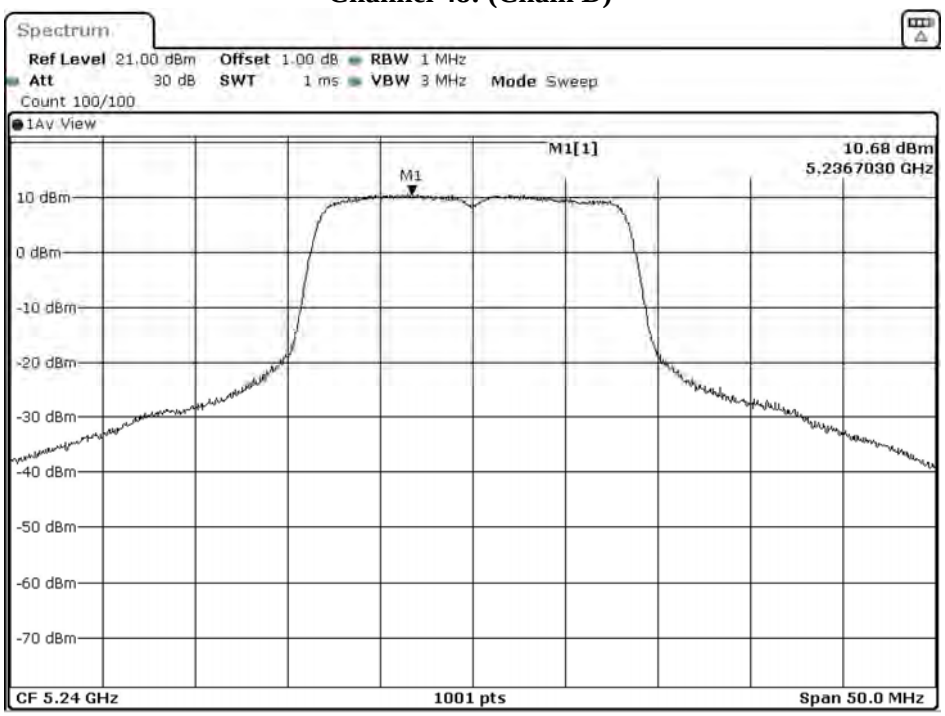
Date: 3.JUL.2020 22:03:52

Channel 48: (Chain C)



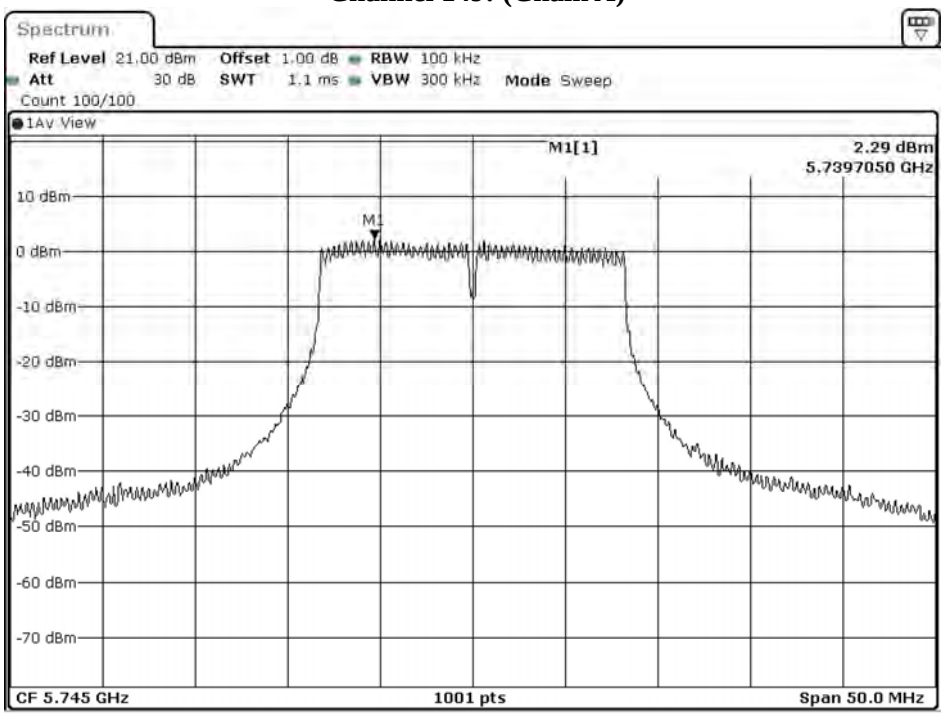
Date: 3.JUL.2020 14:06:16

Channel 48: (Chain D)



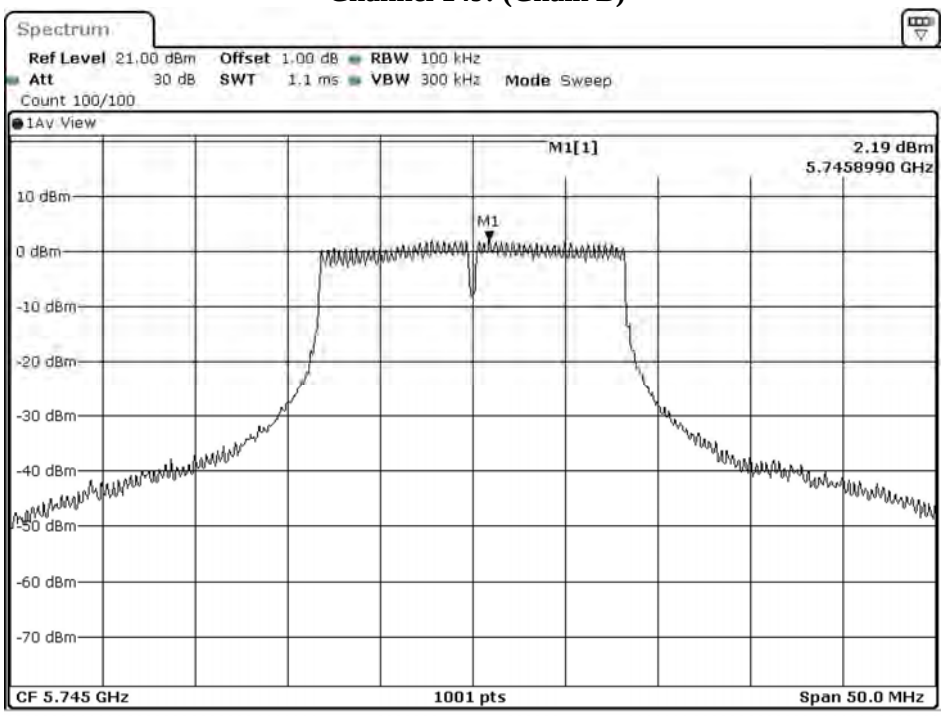
Date: 4.JUL.2020 02:04:07

Channel 149: (Chain A)



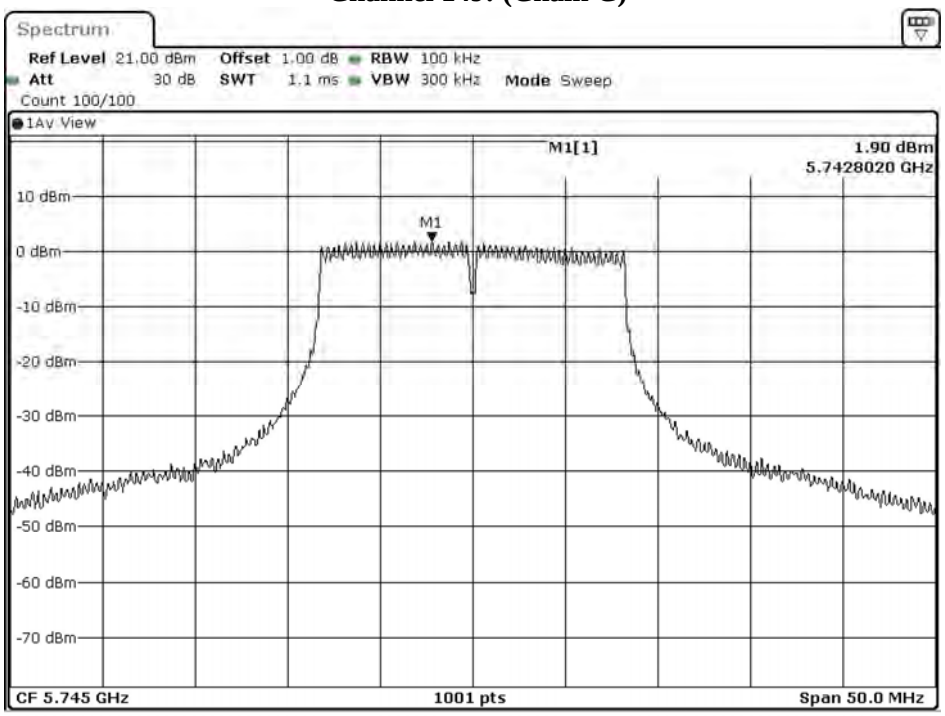
Date: 3.JUL.2020 22:25:35

Channel 149: (Chain B)



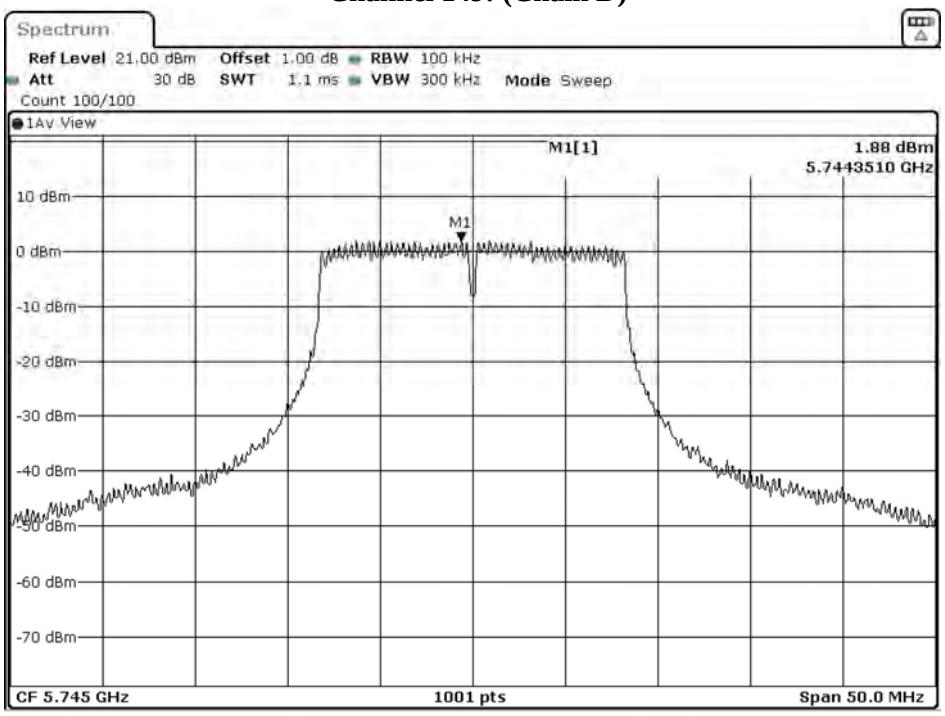
Date: 3.JUL.2020 22:28:38

Channel 149: (Chain C)



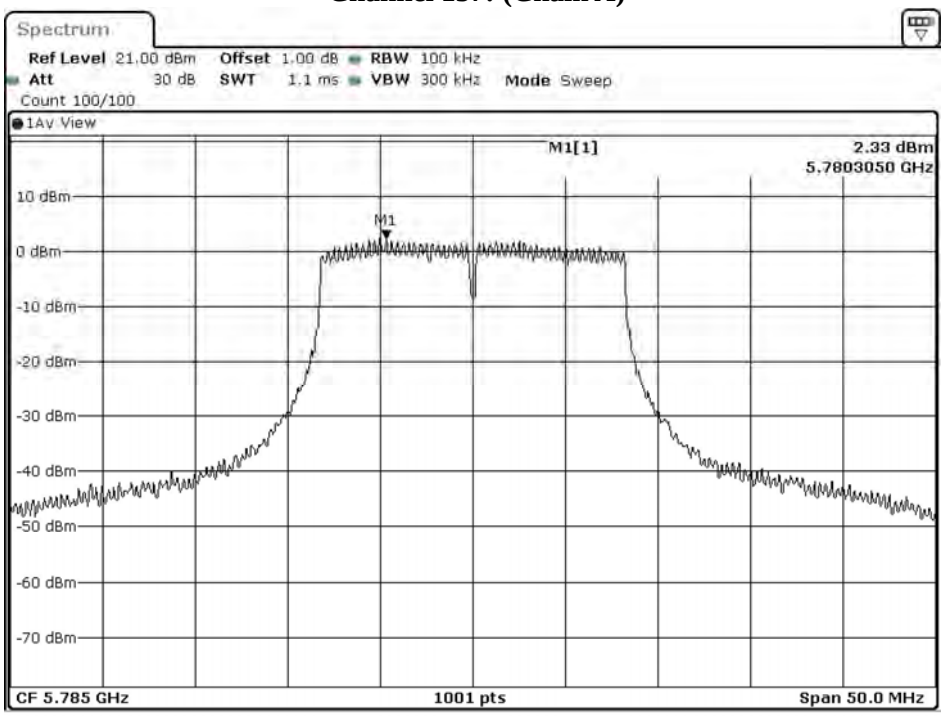
Date: 3.JUL.2020 14:31:02

Channel 149: (Chain D)



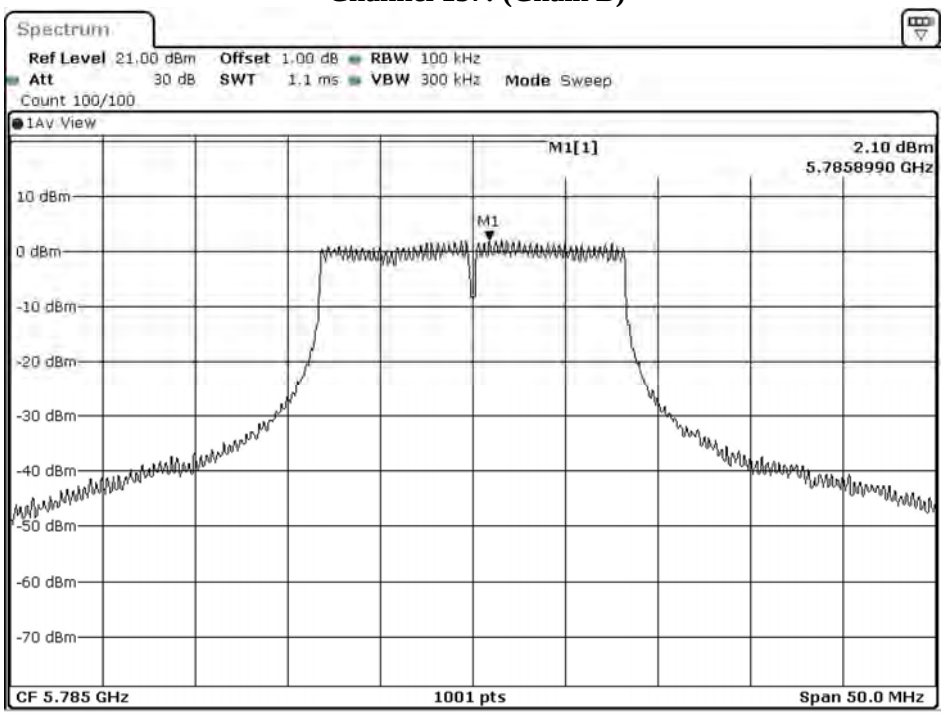
Date: 4.JUL.2020 02:28:53

Channel 157: (Chain A)



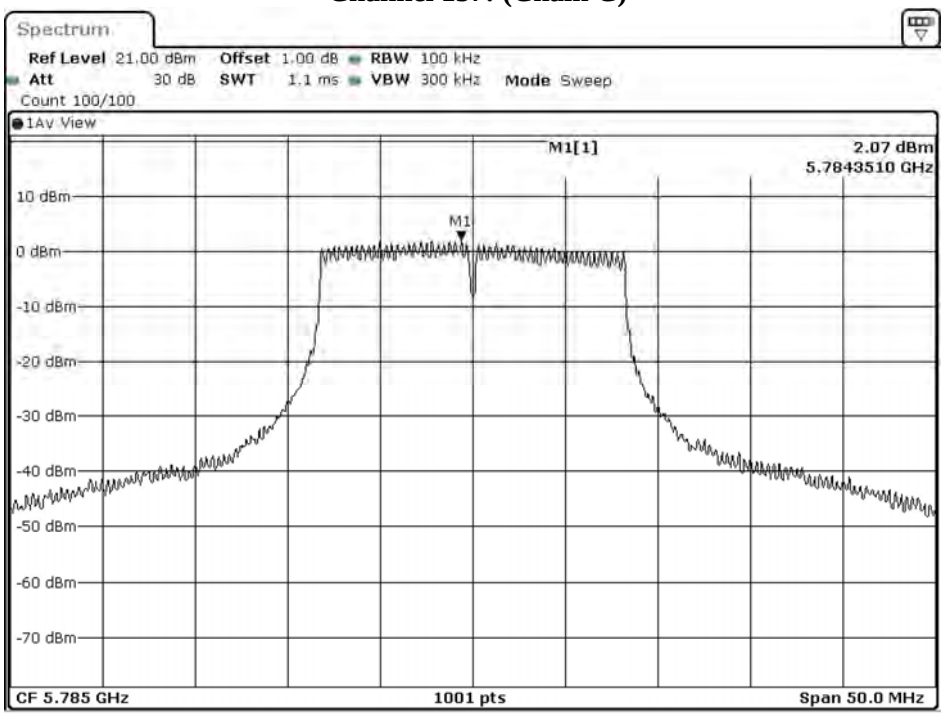
Date: 3.JUL.2020 22:28:54

Channel 157: (Chain B)



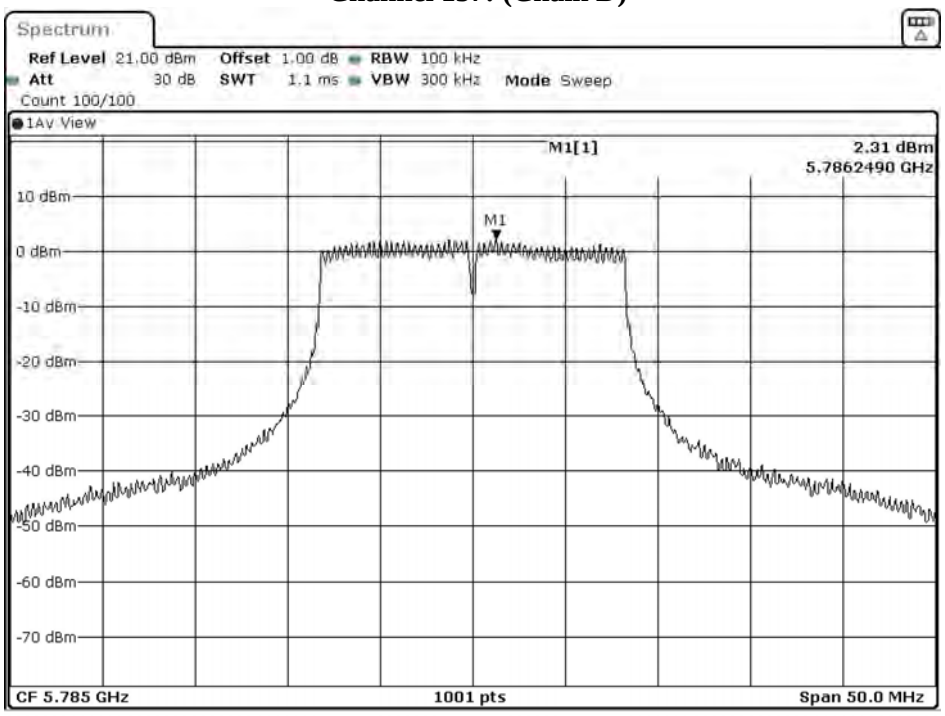
Date: 3.JUL.2020 22:31:57

Channel 157: (Chain C)



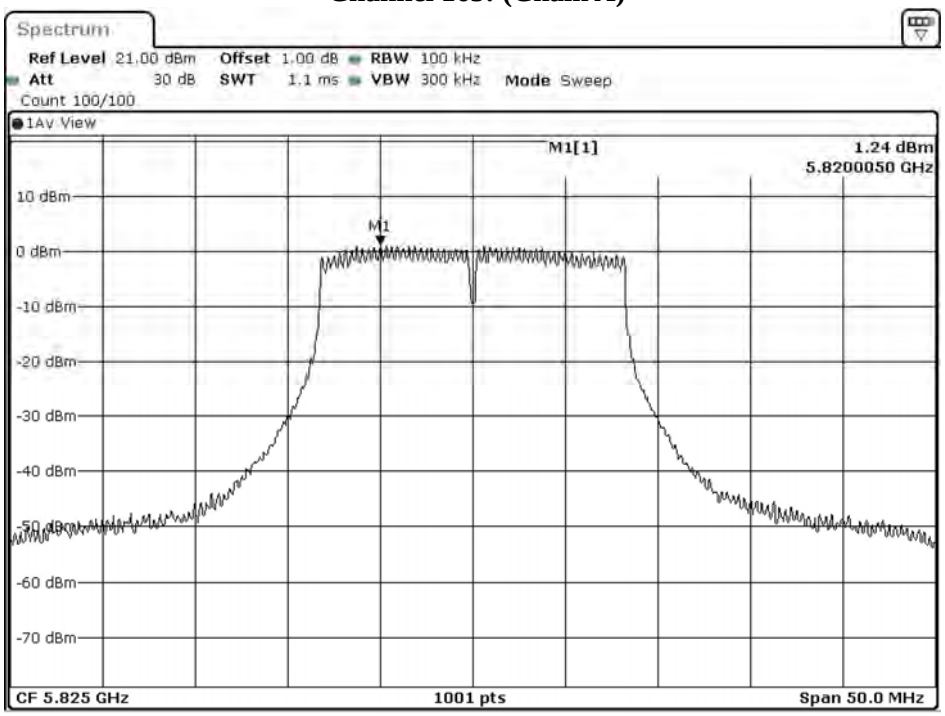
Date: 3.JUL.2020 14:34:22

Channel 157: (Chain D)



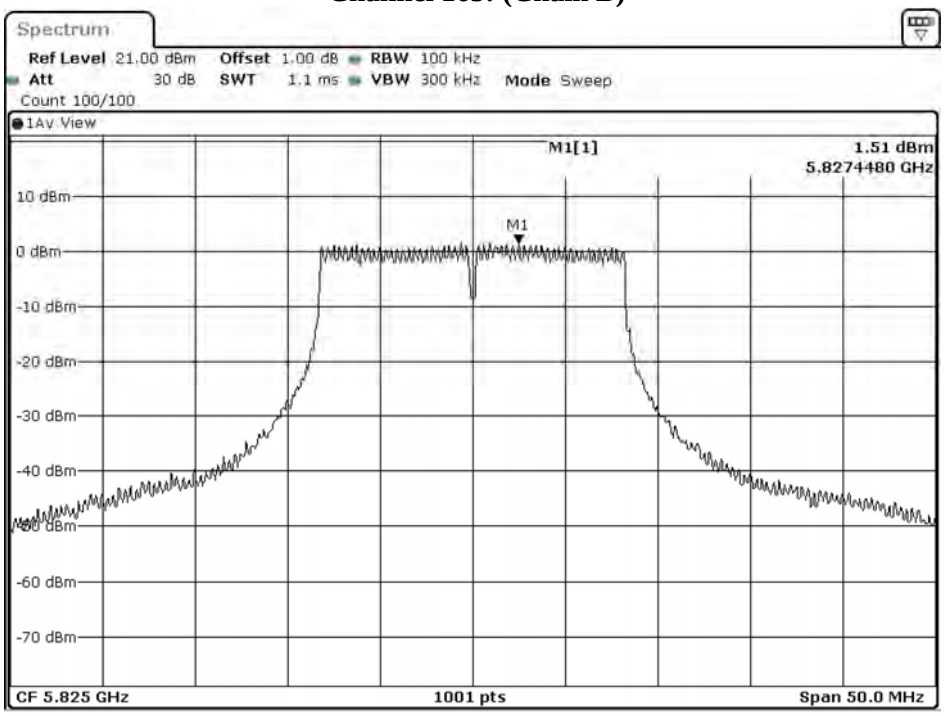
Date: 4.JUL.2020 02:32:13

Channel 165: (Chain A)



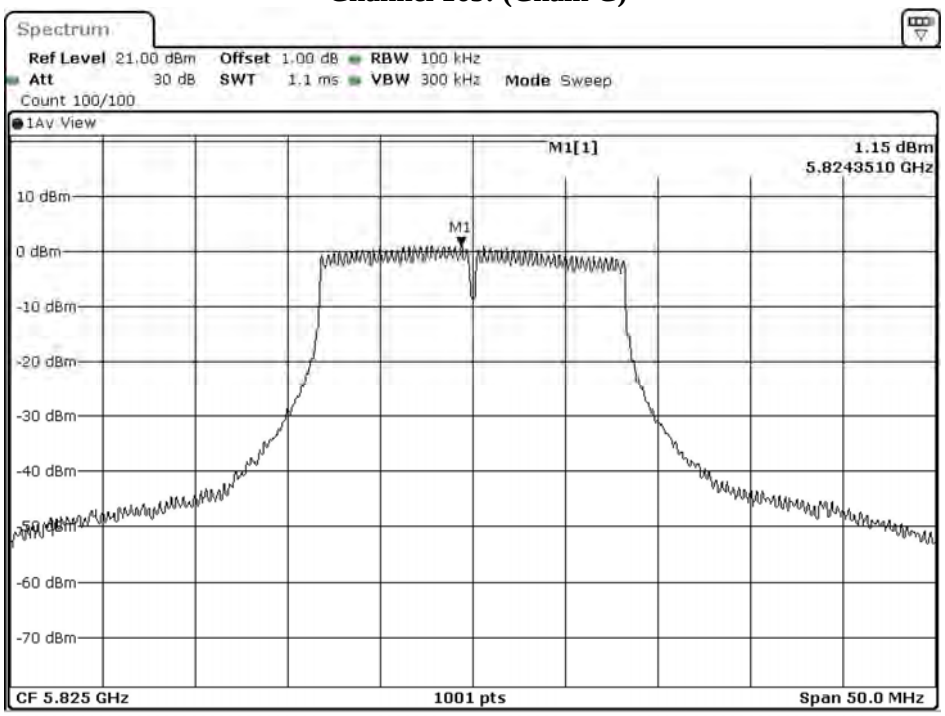
Date: 3.JUL.2020 22:31:48

Channel 165: (Chain B)



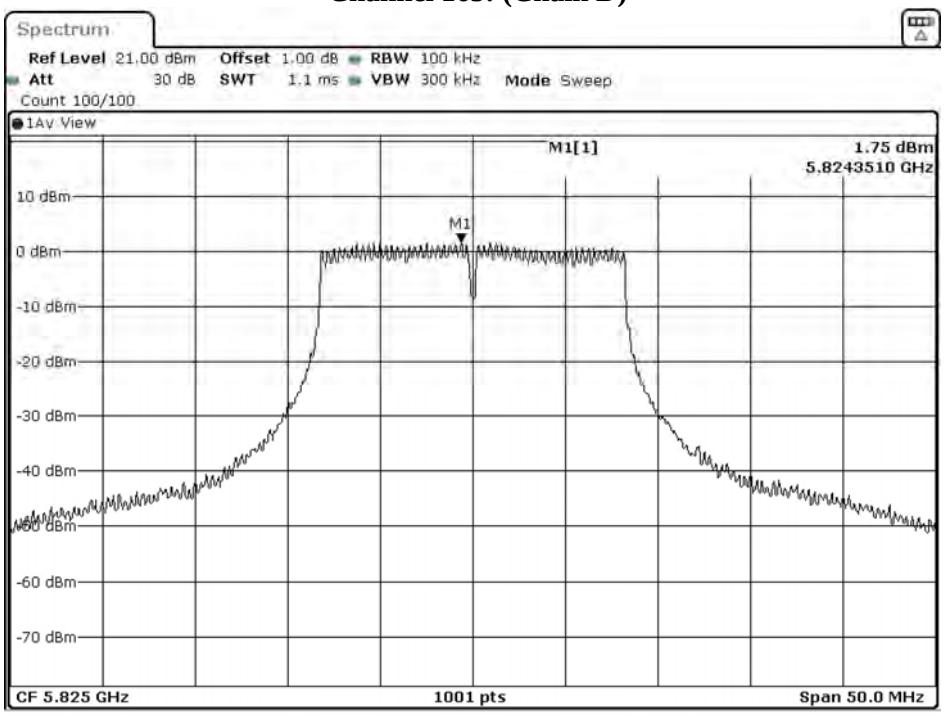
Date: 3.JUL.2020 22:34:52

Channel 165: (Chain C)



Date: 3.JUL.2020 14:37:16

Channel 165: (Chain D)



Date: 4.JUL.2020 02:35:07

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 7: Transmit (802.11ax-20MBW-CDD) (RU Config-Full)
Test Date : 2020/07/03

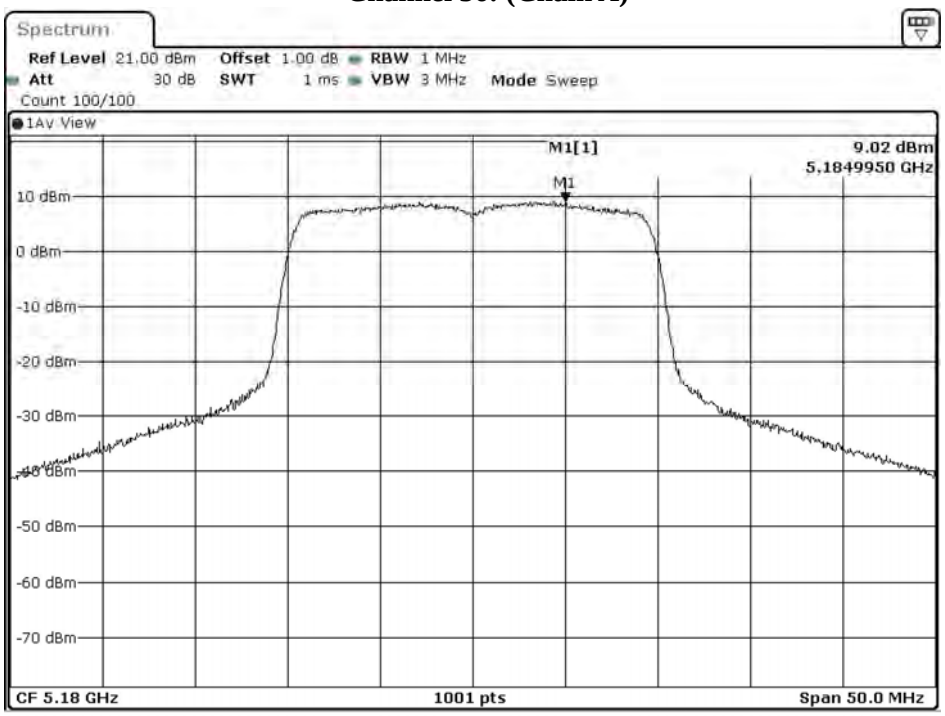
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/MHz)	Total PPSD (dBm/MHz)	Required Limit (dBm/MHz)	Result
36	5180	A	9.020	15.04	17	Pass
		B	8.870	14.89		Pass
		C	8.310	14.33		Pass
		D	9.240	15.26		Pass
44	5220	A	10.310	16.33	17	Pass
		B	10.220	16.24		Pass
		C	9.520	15.54		Pass
		D	10.480	16.50		Pass
48	5240	A	10.180	16.20	17	Pass
		B	10.020	16.04		Pass
		C	10.030	16.05		Pass
		D	10.290	16.31		Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
149	5745	A	0.430	6.990	13.440	30	Pass
		B	1.140	6.990	14.150		Pass
		C	0.660	6.990	13.670		Pass
		D	0.880	6.990	13.890		Pass
157	5785	A	0.630	6.990	13.640	30	Pass
		B	0.740	6.990	13.750		Pass
		C	0.690	6.990	13.700		Pass
		D	0.930	6.990	13.940		Pass
165	5825	A	0.380	6.990	13.390	30	Pass
		B	0.330	6.990	13.340		Pass
		C	0.340	6.990	13.350		Pass
		D	1.000	6.990	14.010		Pass

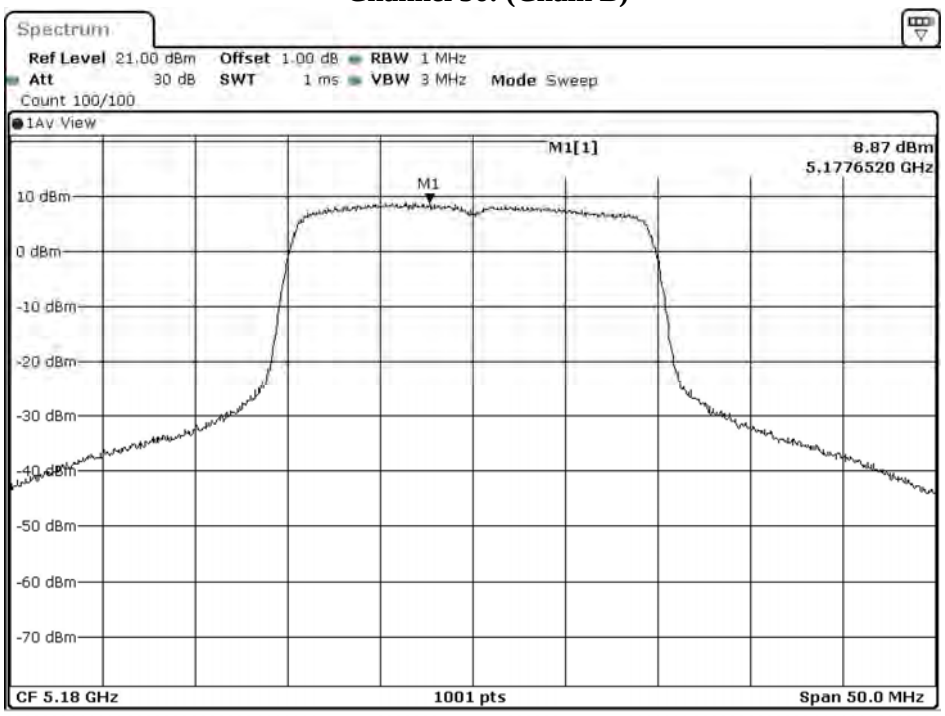
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 36: (Chain A)



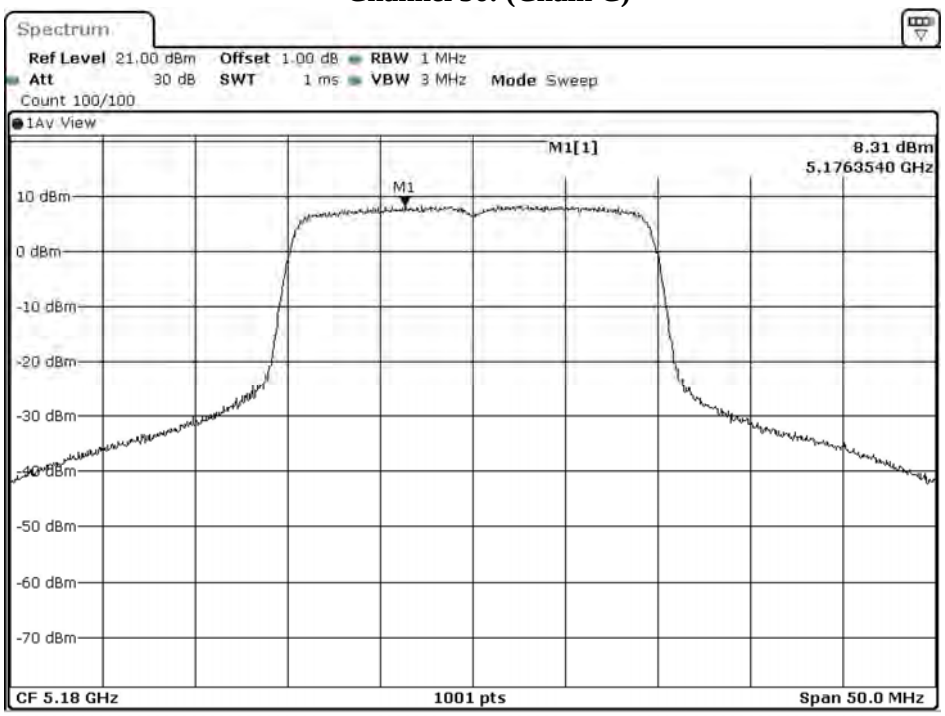
Date: 3.JUL.2020 22:04:09

Channel 36: (Chain B)



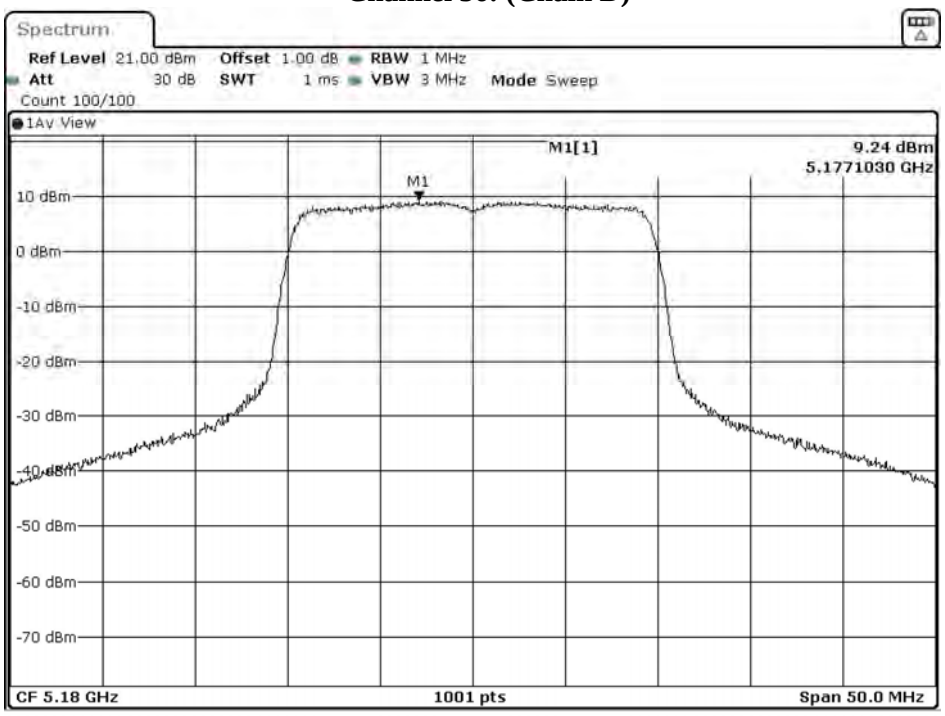
Date: 3.JUL.2020 22:07:13

Channel 36: (Chain C)



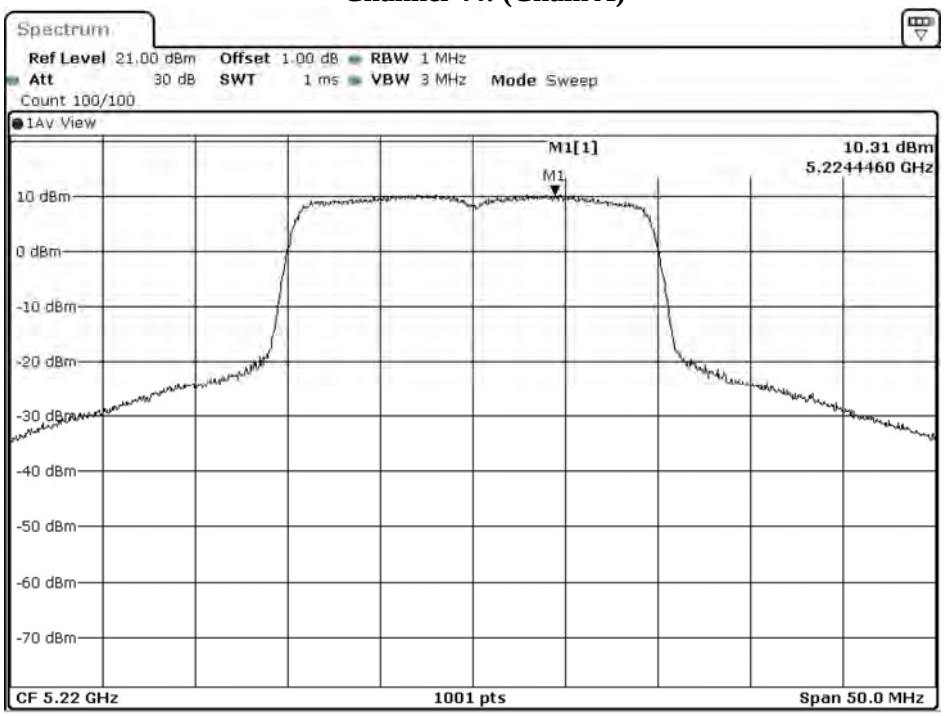
Date: 3.JUL.2020 14:09:37

Channel 36: (Chain D)



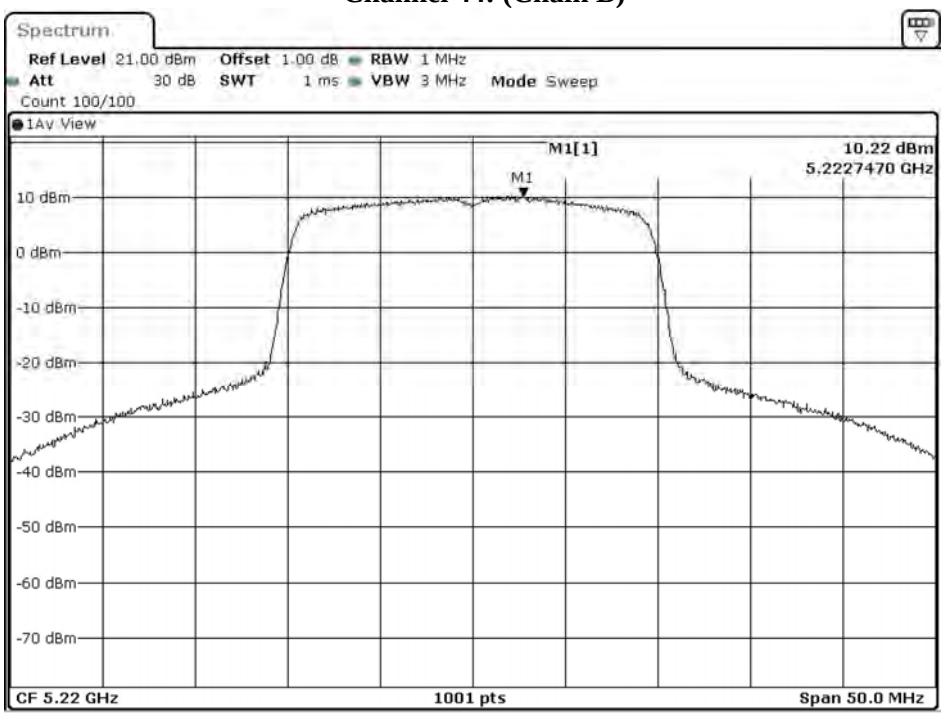
Date: 4.JUL.2020 02:07:28

Channel 44: (Chain A)



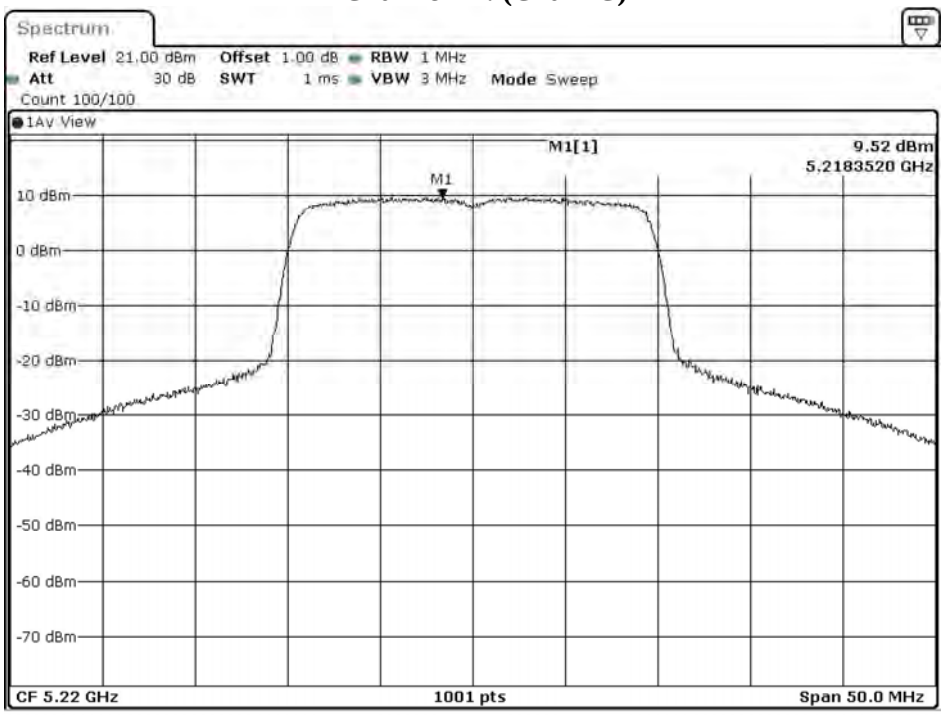
Date: 3.JUL.2020 22:06:58

Channel 44: (Chain B)



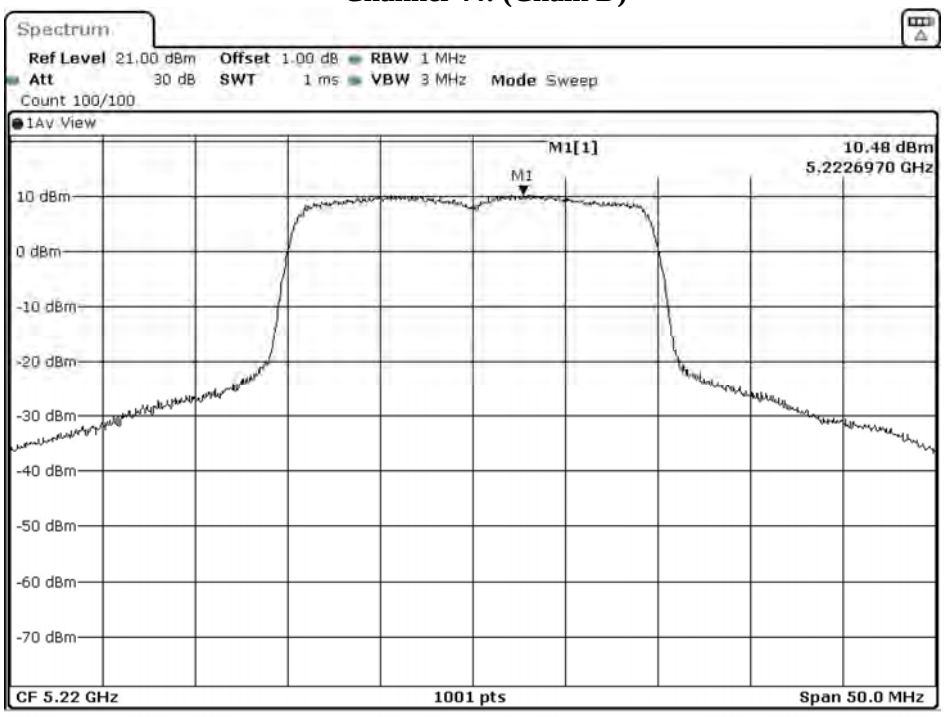
Date: 3.JUL.2020 22:10:01

Channel 44: (Chain C)



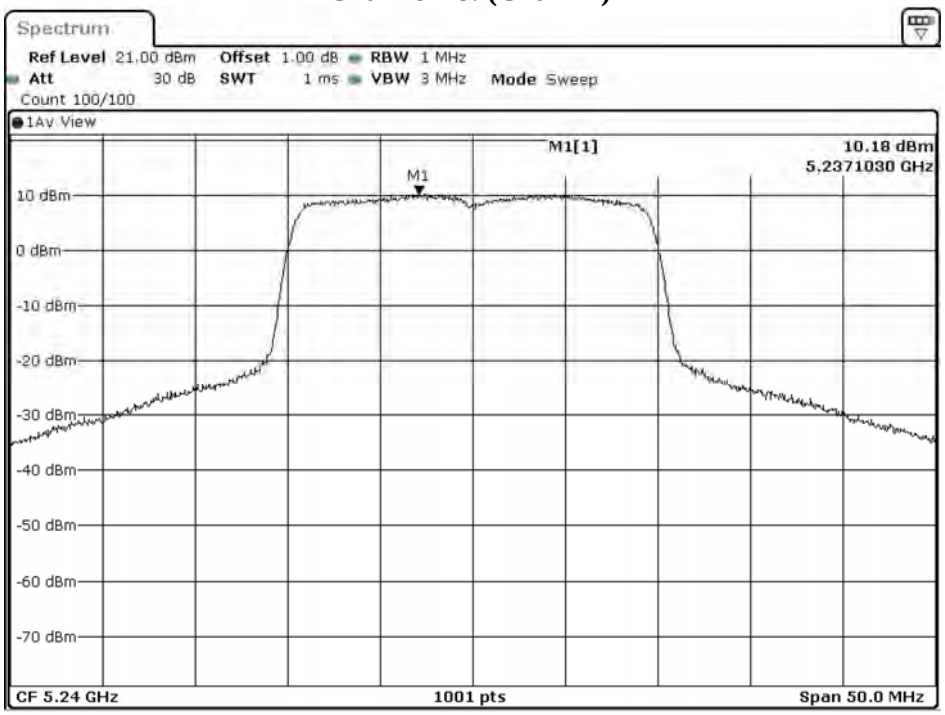
Date: 3.JUL.2020 14:12:25

Channel 44: (Chain D)



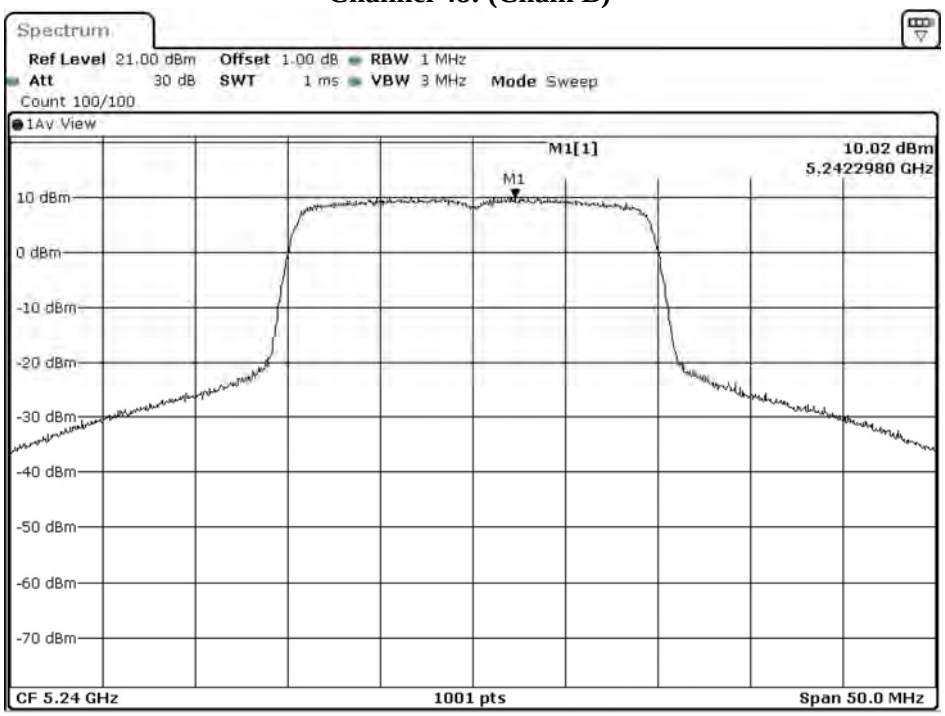
Date: 4.JUL.2020 02:10:16

Channel 48: (Chain A)



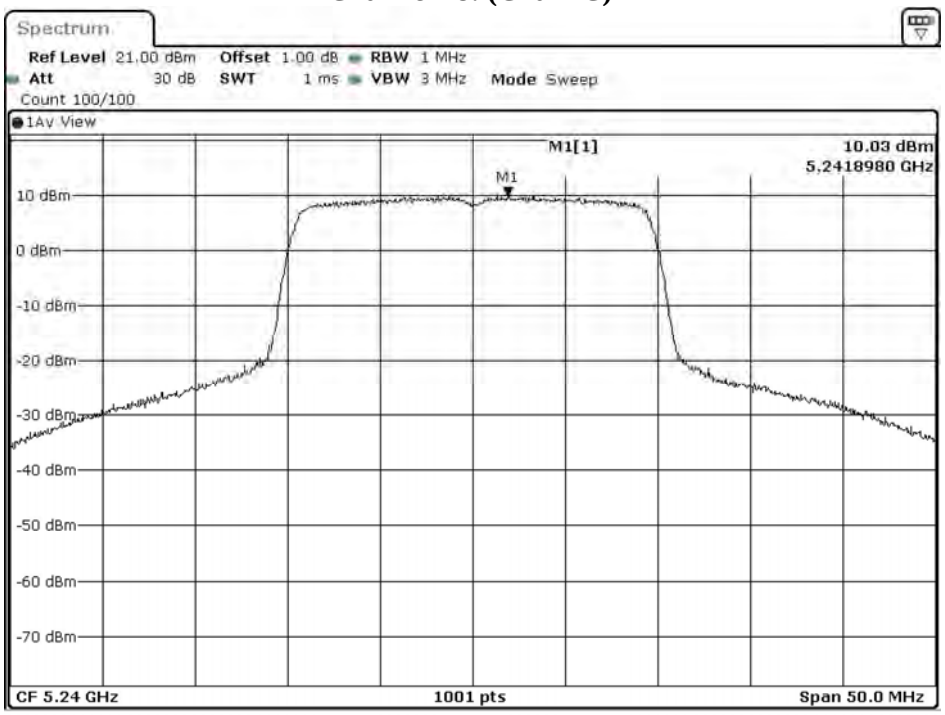
Date: 3.JUL.2020 22:15:25

Channel 48: (Chain B)



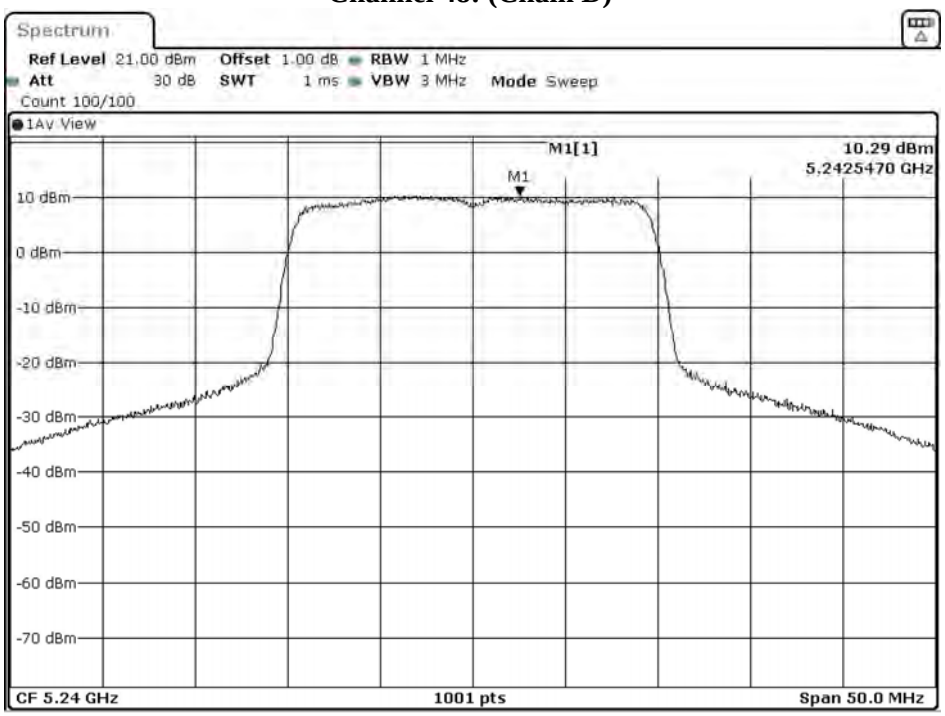
Date: 3.JUL.2020 22:18:29

Channel 48: (Chain C)



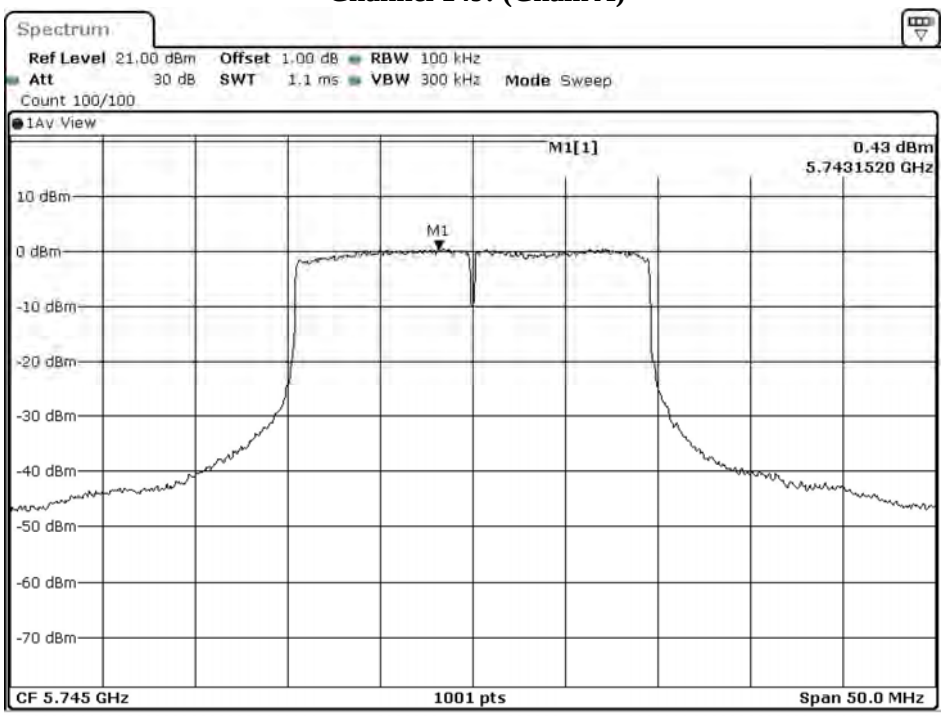
Date: 3.JUL.2020 14:20:53

Channel 48: (Chain D)



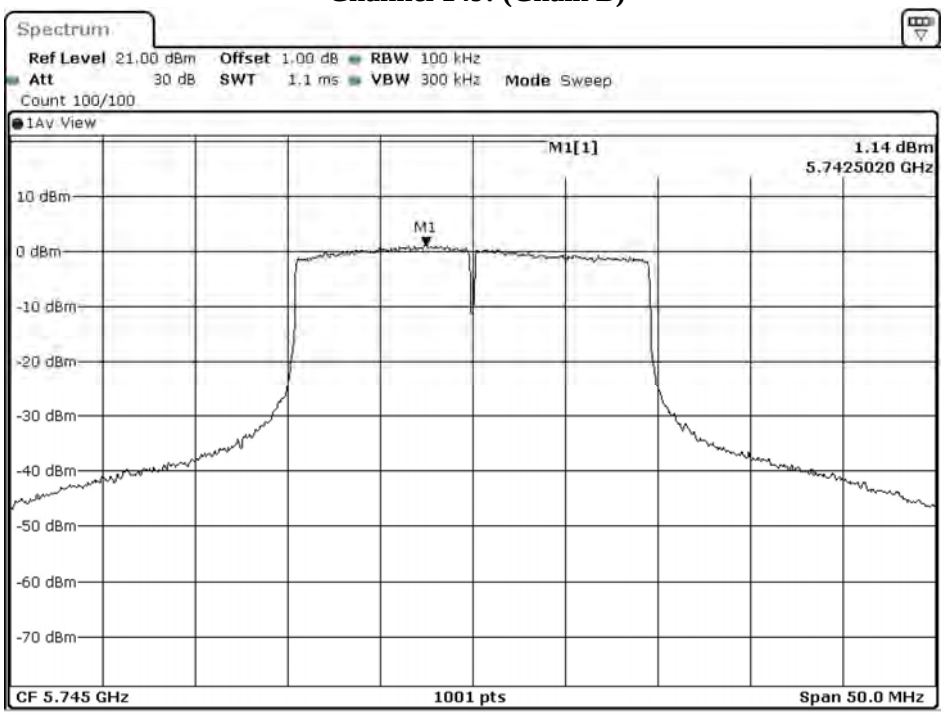
Date: 4.JUL.2020 02:18:44

Channel 149: (Chain A)



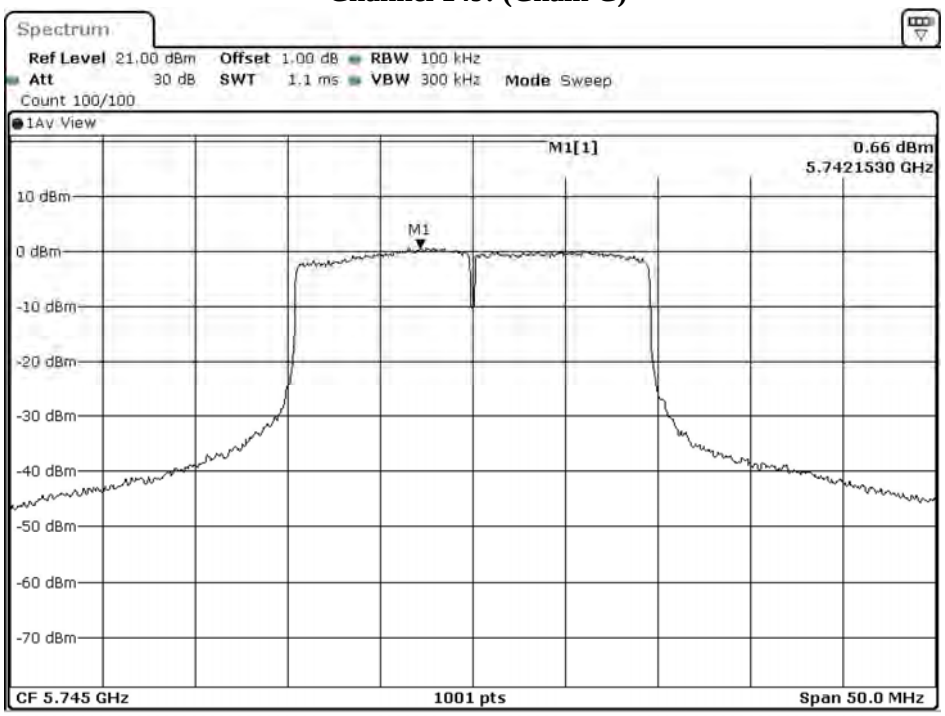
Date: 3.JUL.2020 22:37:45

Channel 149: (Chain B)



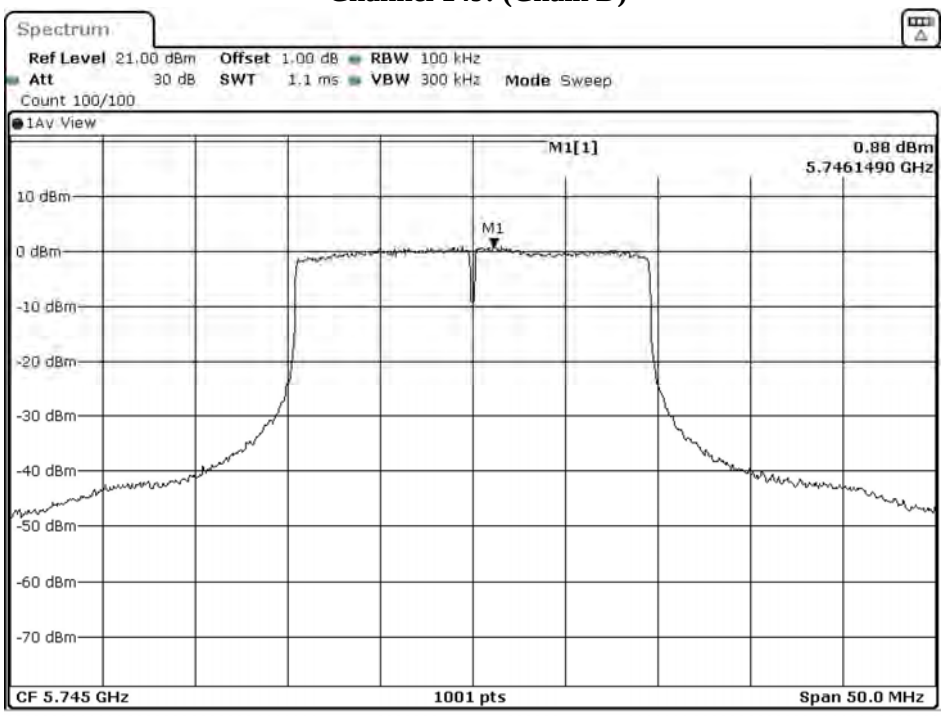
Date: 3.JUL.2020 22:40:48

Channel 149: (Chain C)



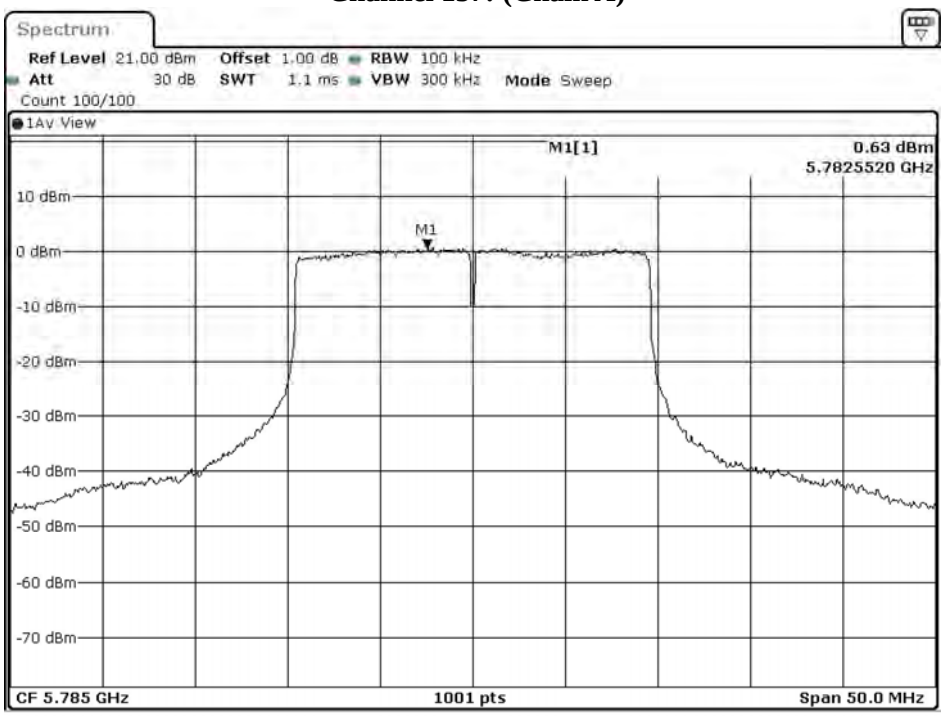
Date: 3.JUL.2020 14:43:12

Channel 149: (Chain D)



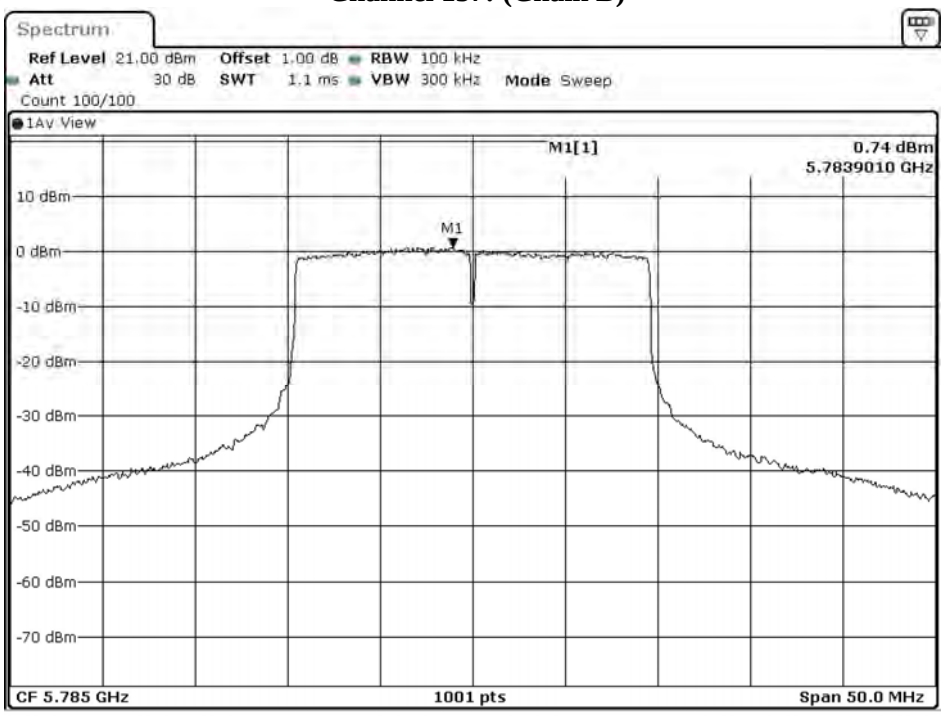
Date: 4.JUL.2020 02:41:03

Channel 157: (Chain A)



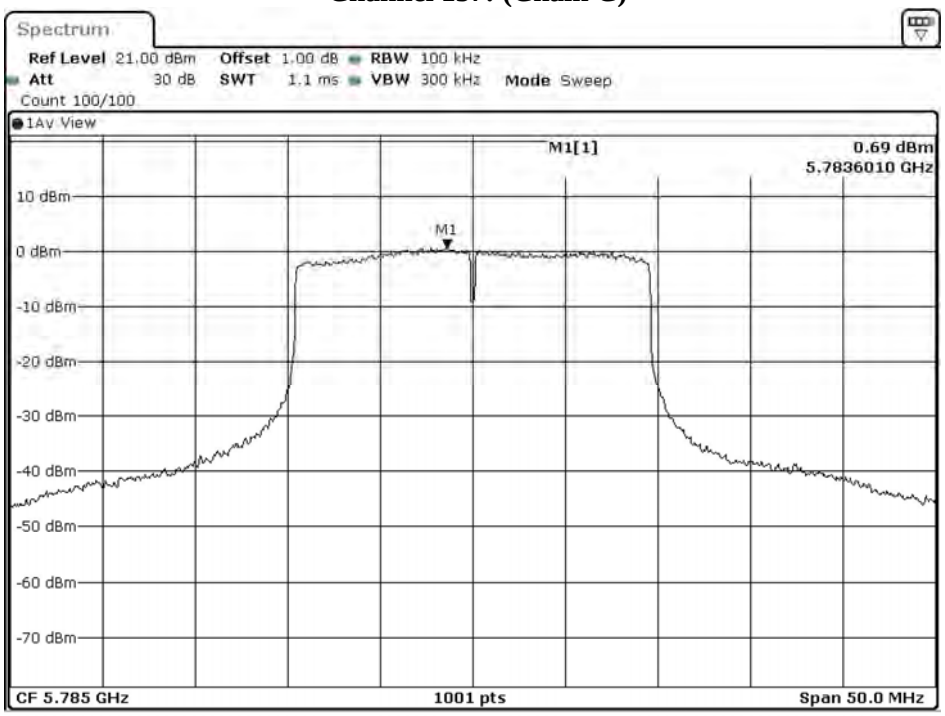
Date: 3.JUL.2020 22:40:21

Channel 157: (Chain B)



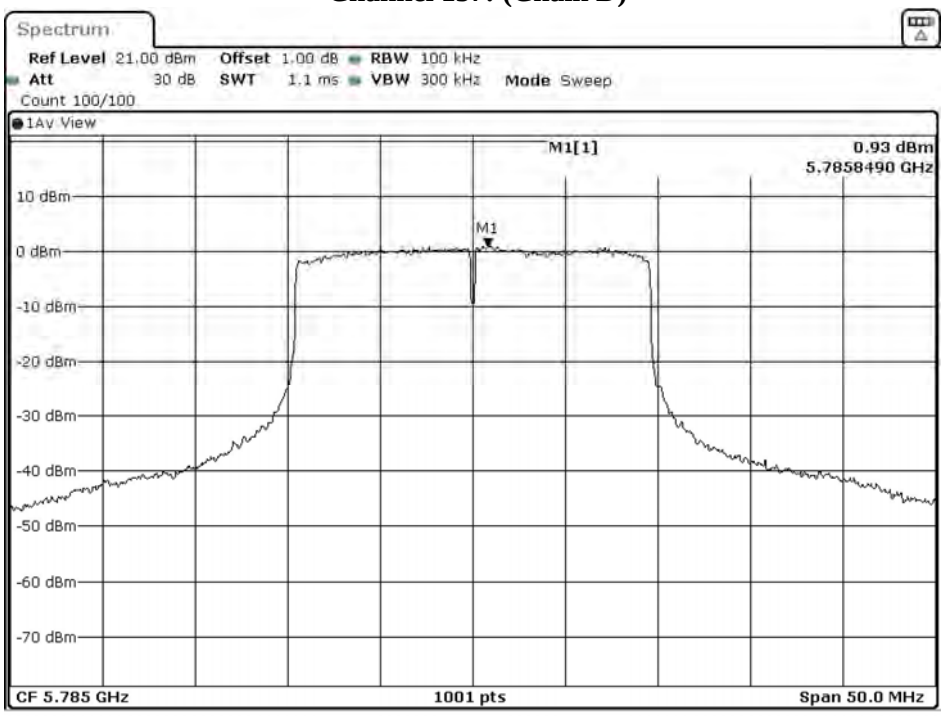
Date: 3.JUL.2020 22:43:24

Channel 157: (Chain C)



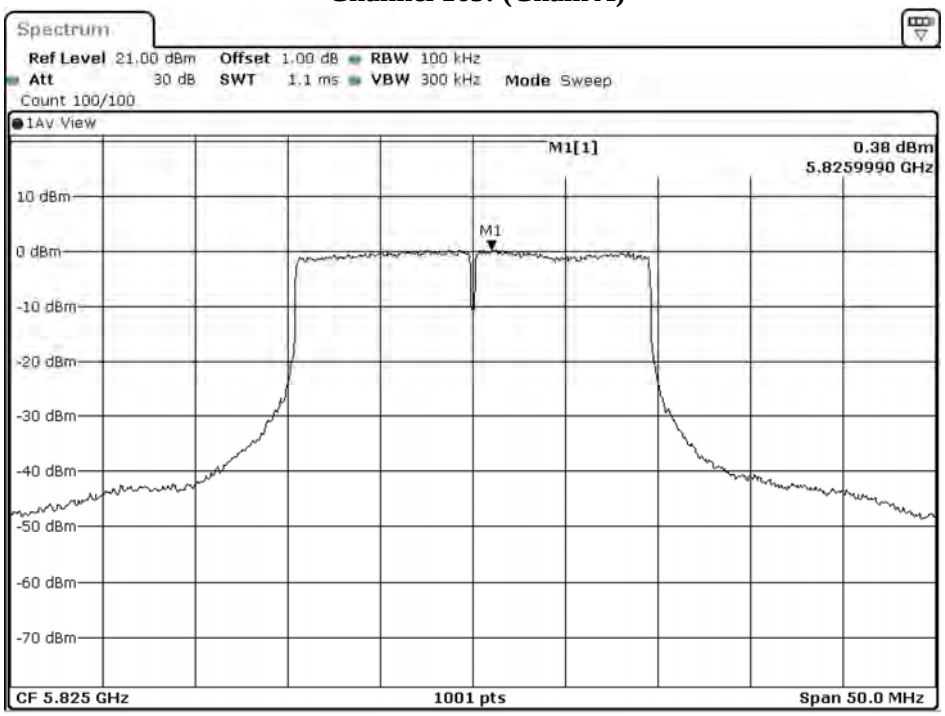
Date: 3.JUL.2020 14:45:48

Channel 157: (Chain D)



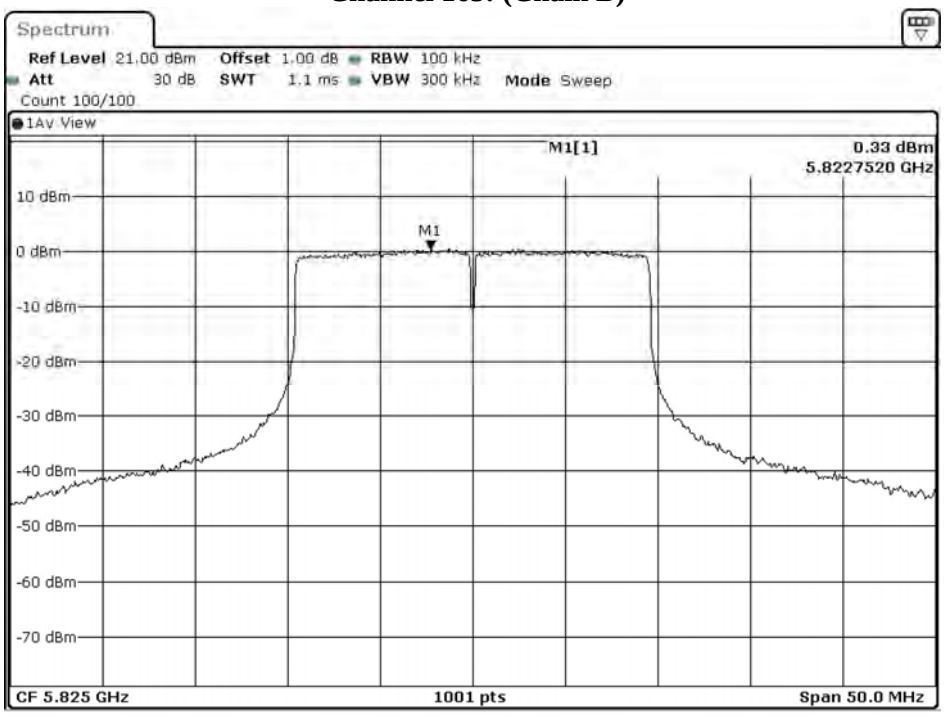
Date: 4.JUL.2020 02:43:39

Channel 165: (Chain A)



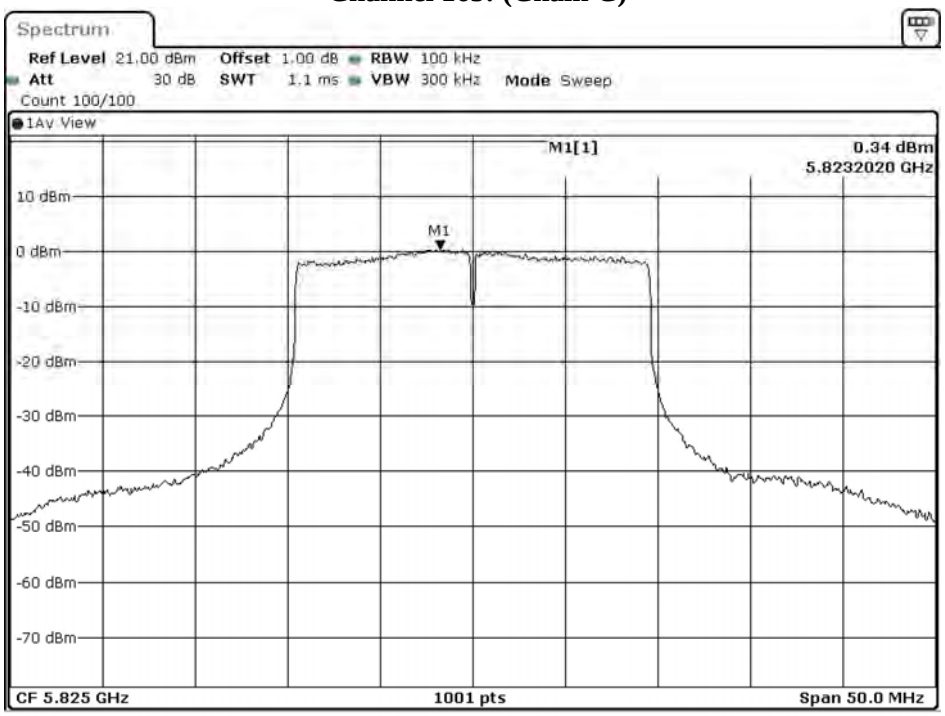
Date: 3.JUL.2020 22:42:53

Channel 165: (Chain B)



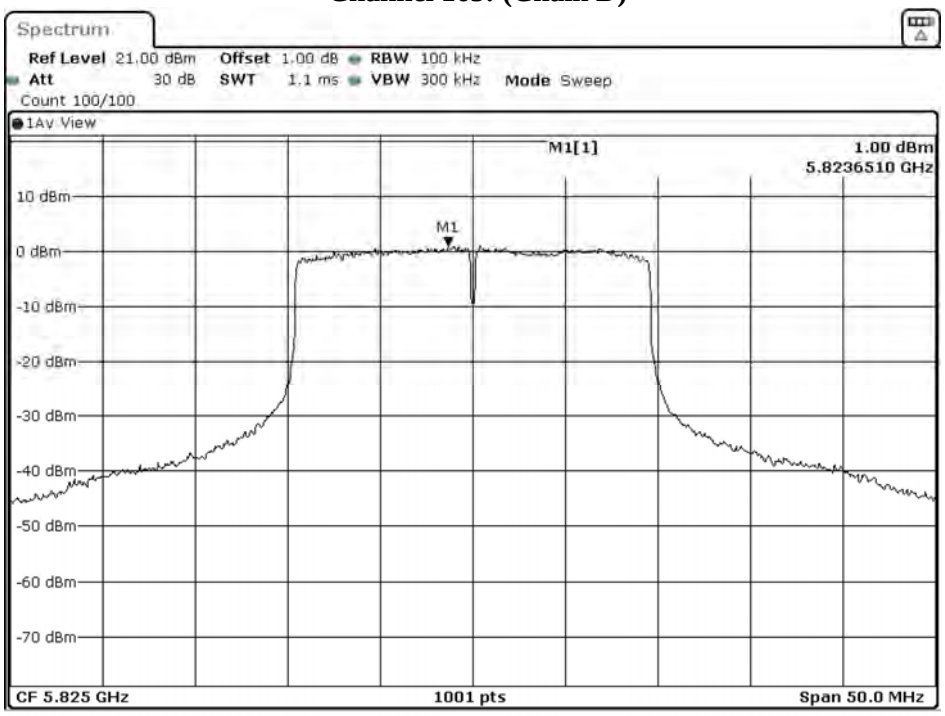
Date: 3.JUL.2020 22:45:56

Channel 165: (Chain C)



Date: 3.JUL.2020 14:48:20

Channel 165: (Chain D)



Date: 4.JUL.2020 02:46:11

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 8: Transmit (802.11ax-40MBW-CDD) (RU Config-Full)
Test Date : 2020/07/03

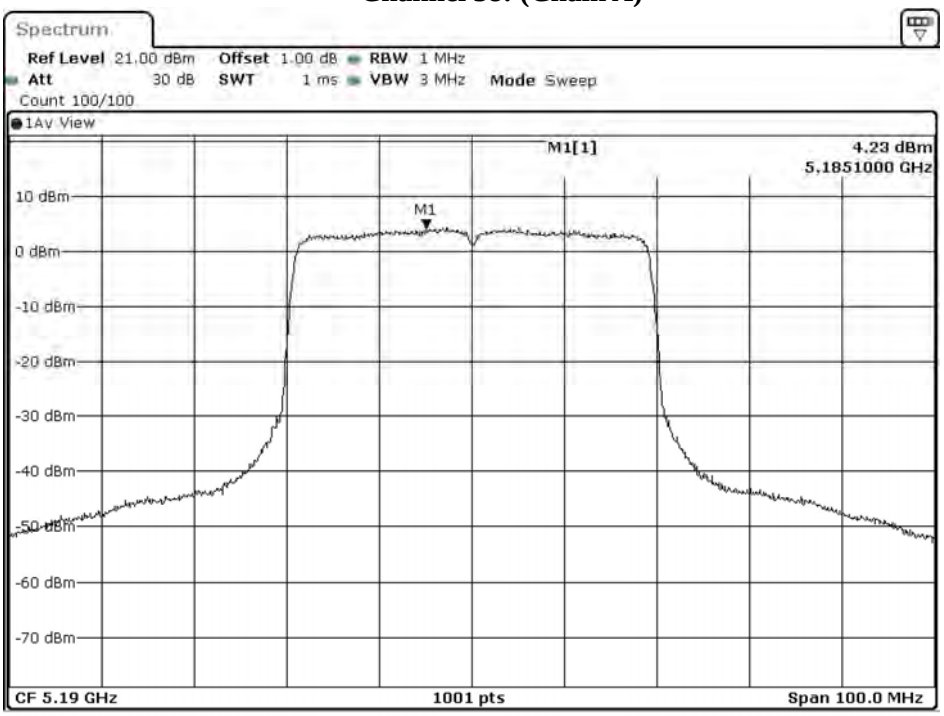
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/MHz)	Total PPSD (dBm/MHz)	Required Limit (dBm/MHz)	Result
38	5190	A	4.230	10.25	17	Pass
		B	4.400	10.42		Pass
		C	3.740	9.76		Pass
		D	4.370	10.39		Pass
46	5230	A	7.810	13.83	17	Pass
		B	7.170	13.19		Pass
		C	7.200	13.22		Pass
		D	7.570	13.59		Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
151	5755	A	-1.470	6.990	11.540	30	Pass
		B	-1.620	6.990	11.390		Pass
		C	-1.890	6.990	11.120		Pass
		D	-1.690	6.990	11.320		Pass
159	5795	A	-1.650	6.990	11.360	30	Pass
		B	-1.700	6.990	11.310		Pass
		C	-1.540	6.990	11.470		Pass
		D	-1.510	6.990	11.500		Pass

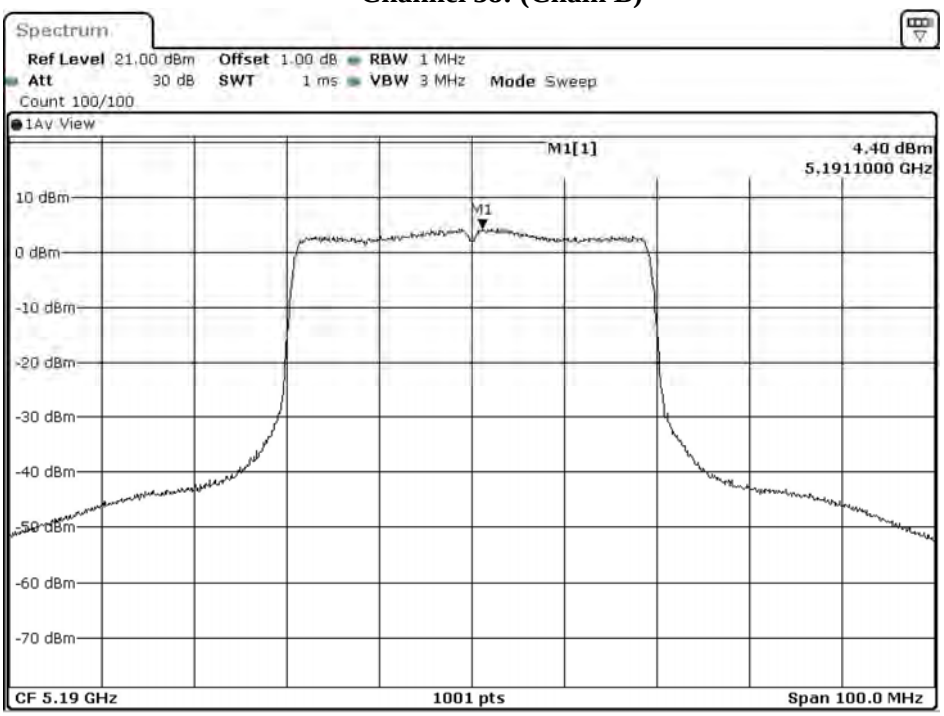
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 38: (Chain A)



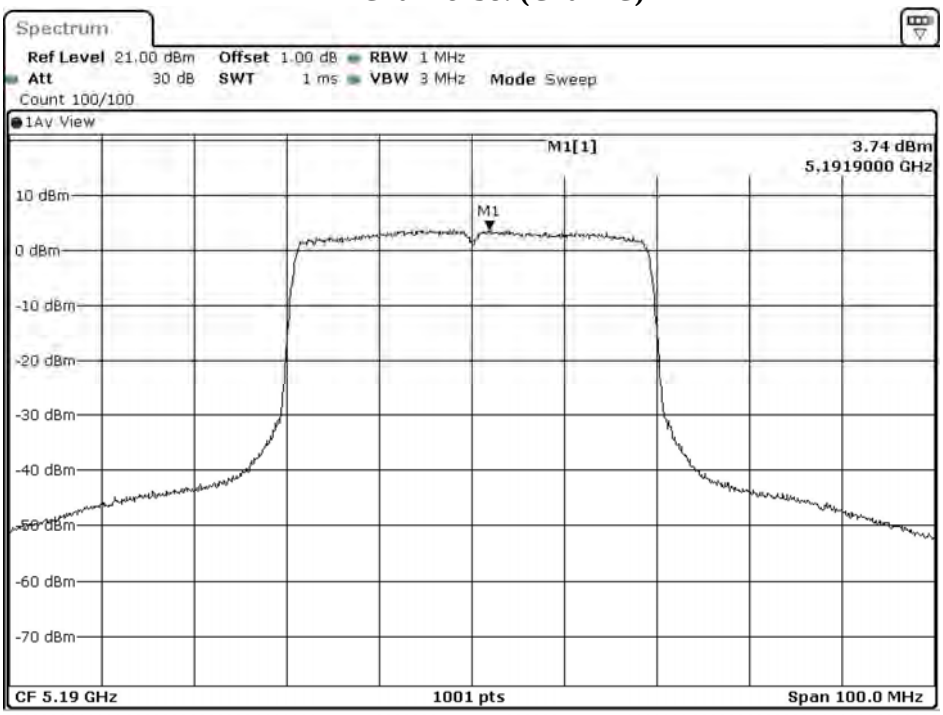
Date: 3.JUL.2020 22:18:31

Channel 38: (Chain B)



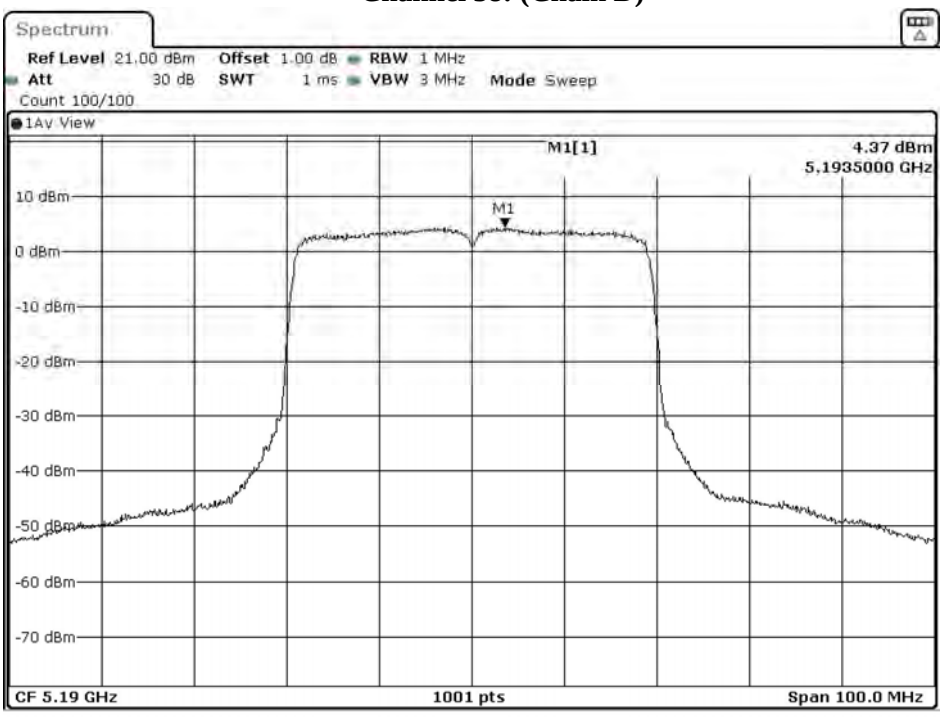
Date: 3.JUL.2020 22:21:35

Channel 38: (Chain C)



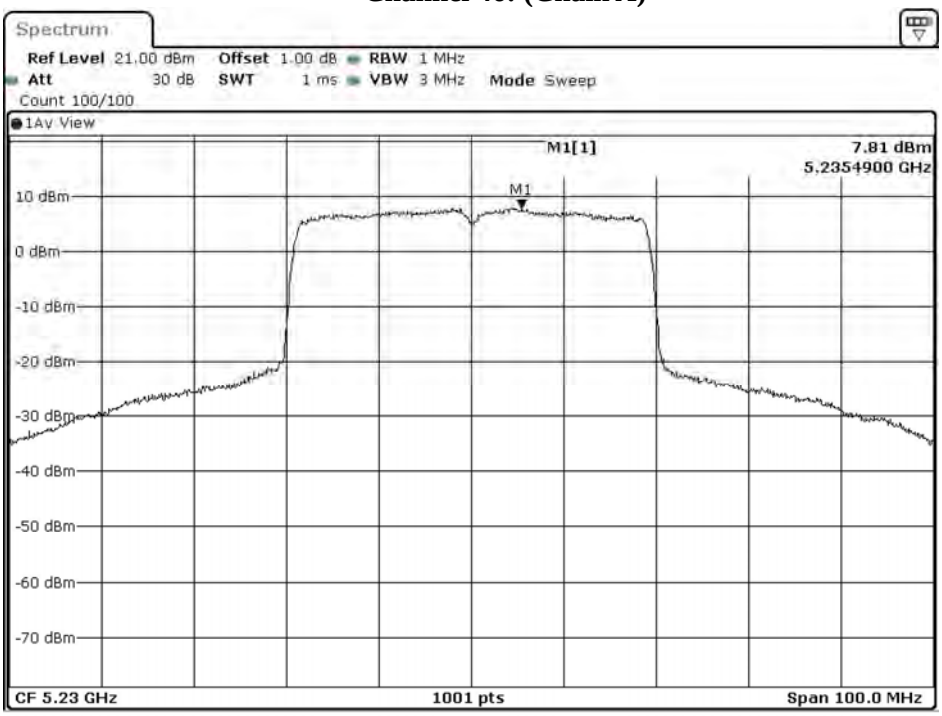
Date: 3.JUL.2020 14:23:59

Channel 38: (Chain D)



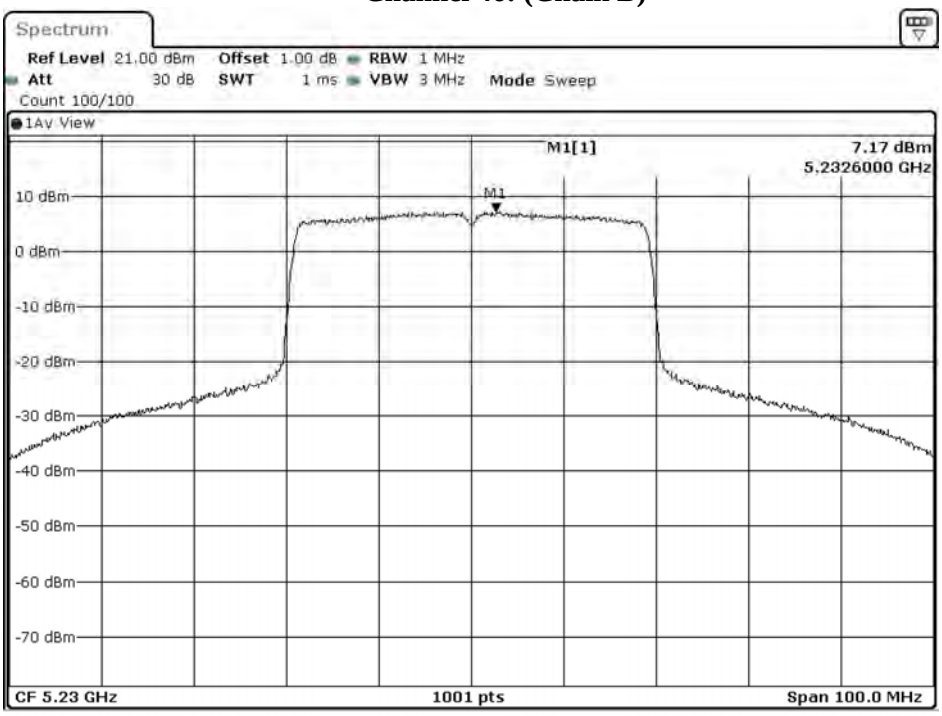
Date: 4.JUL.2020 02:21:50

Channel 46: (Chain A)



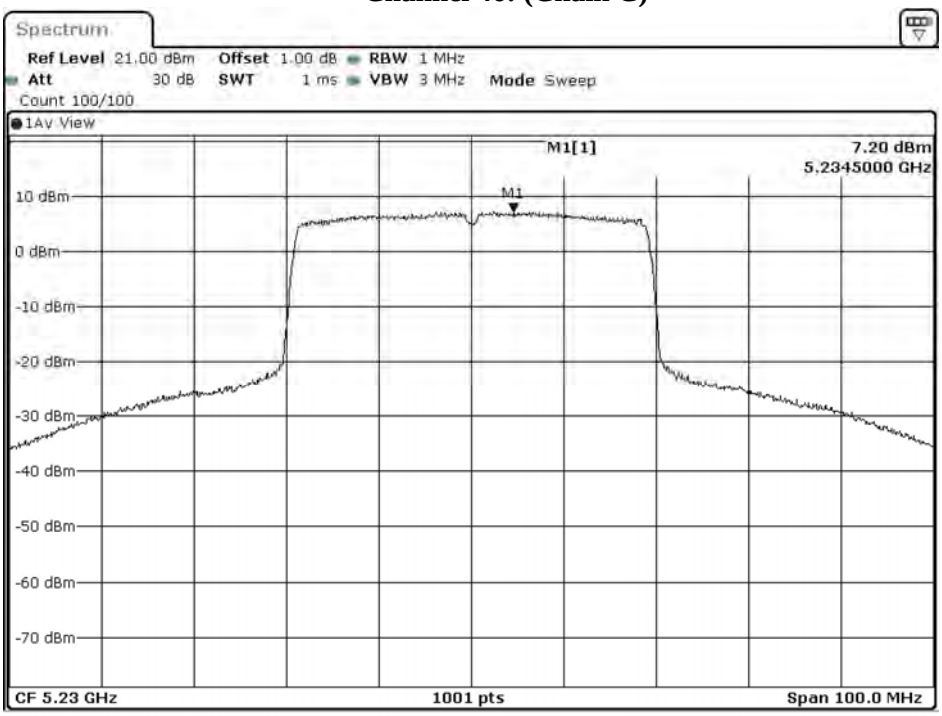
Date: 3.JUL.2020 22:21:57

Channel 46: (Chain B)



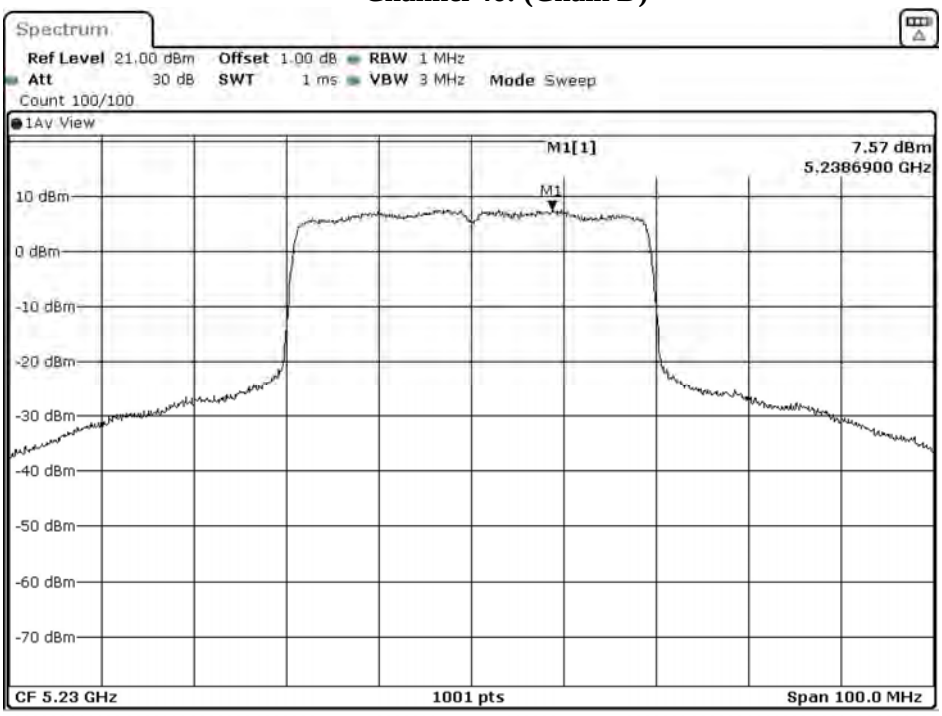
Date: 3.JUL.2020 22:25:01

Channel 46: (Chain C)



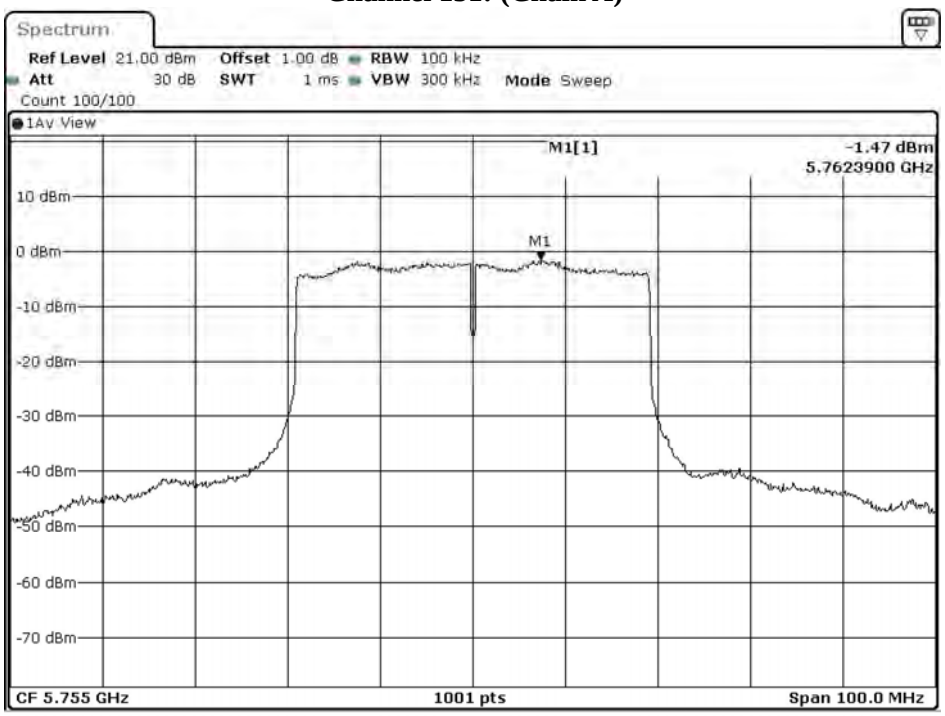
Date: 3.JUL.2020 14:27:25

Channel 46: (Chain D)



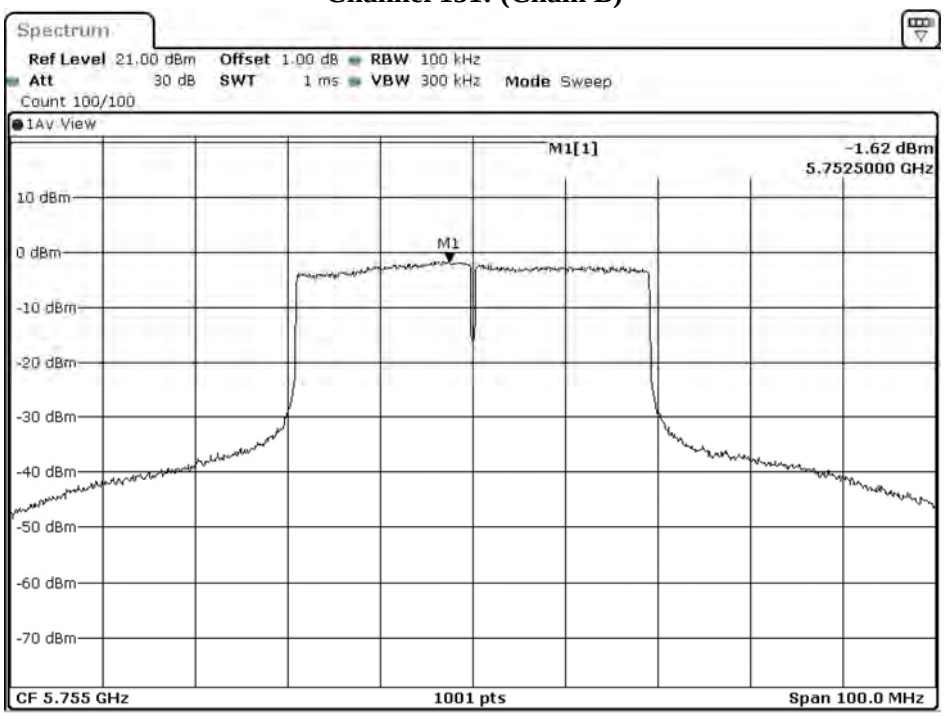
Date: 4.JUL.2020 02:25:16

Channel 151: (Chain A)



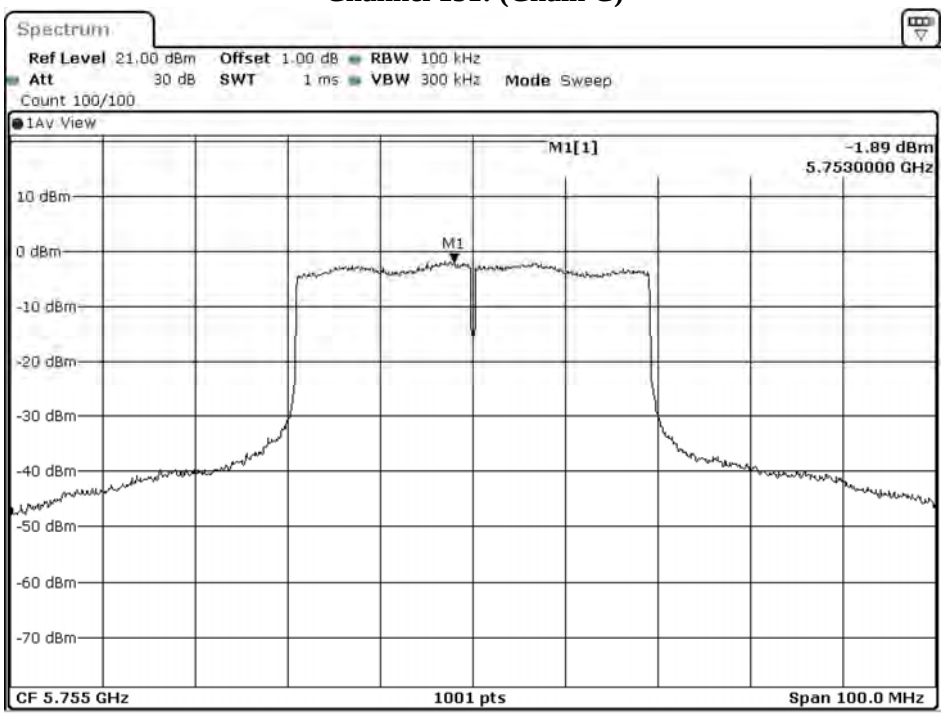
Date: 3.JUL.2020 22:45:48

Channel 151: (Chain B)



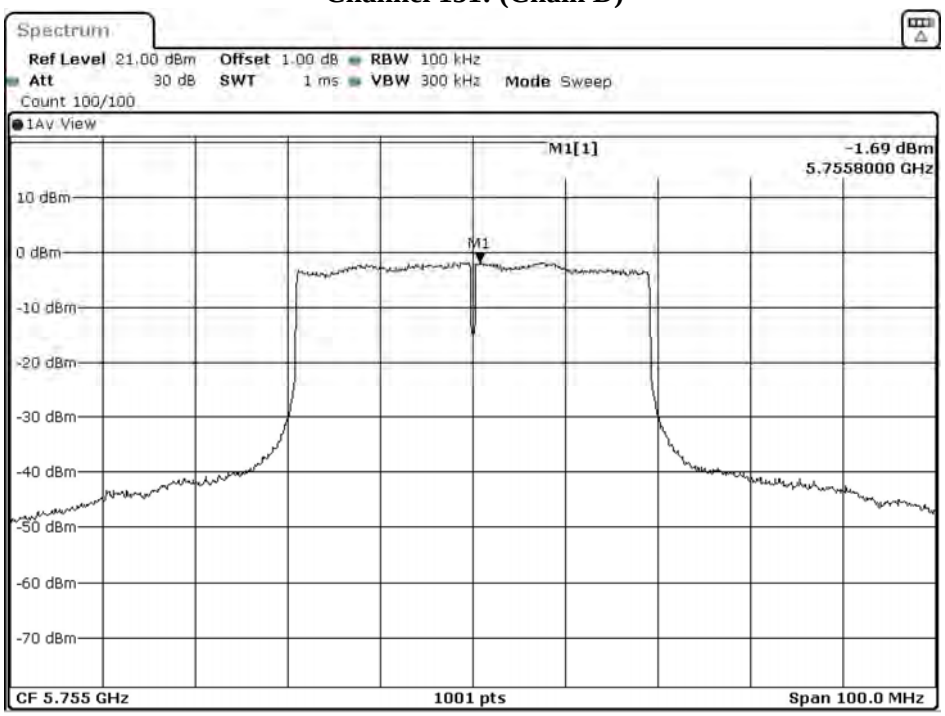
Date: 3.JUL.2020 22:48:52

Channel 151: (Chain C)



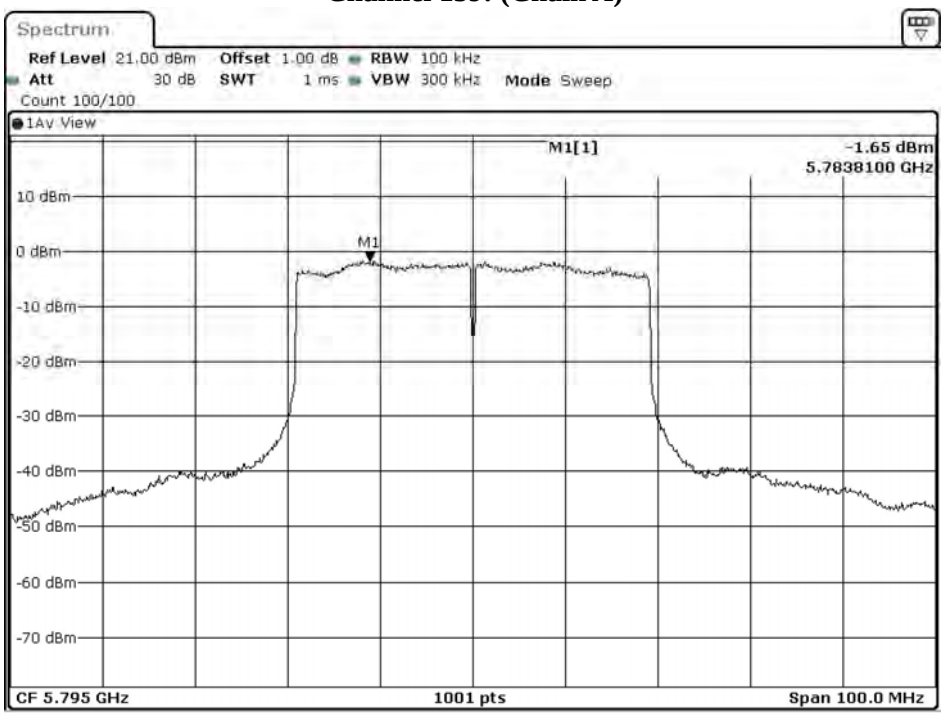
Date: 3.JUL.2020 14:51:16

Channel 151: (Chain D)



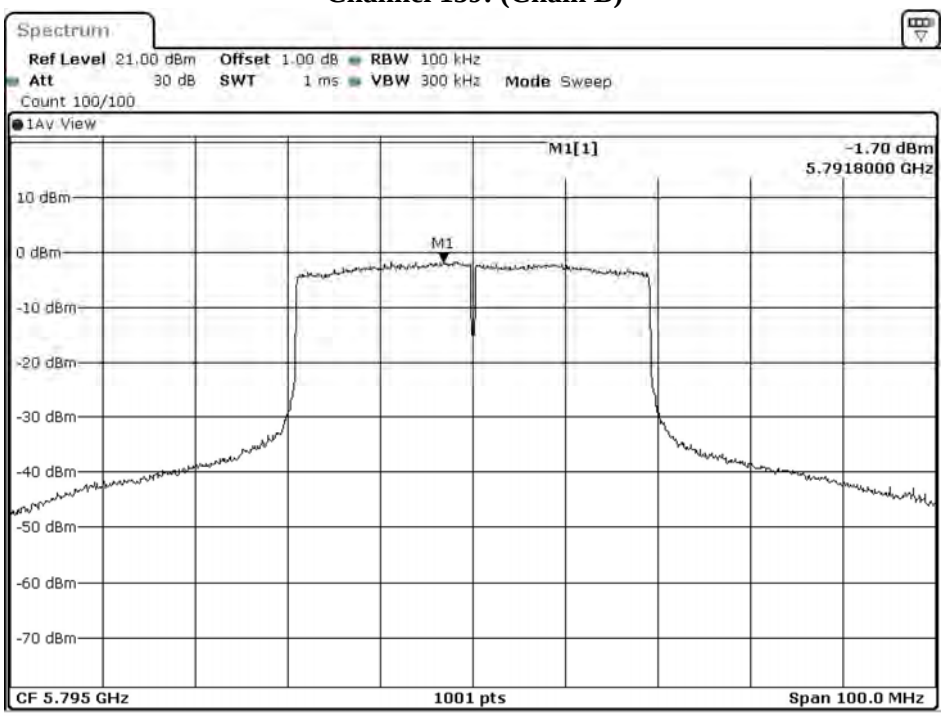
Date: 4.JUL.2020 02:49:07

Channel 159: (Chain A)



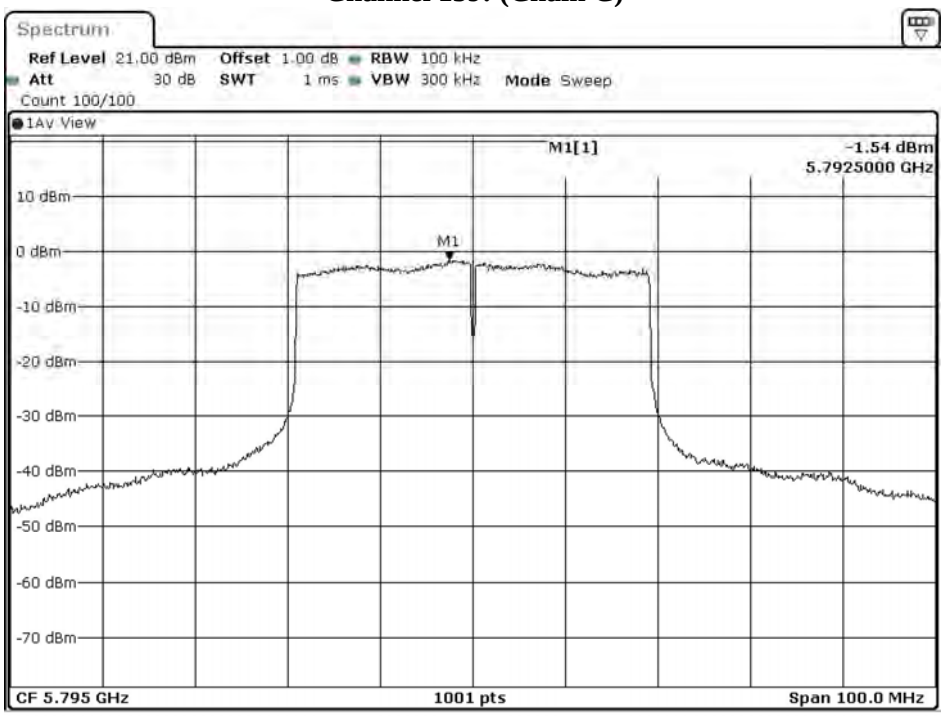
Date: 3.JUL.2020 22:48:43

Channel 159: (Chain B)



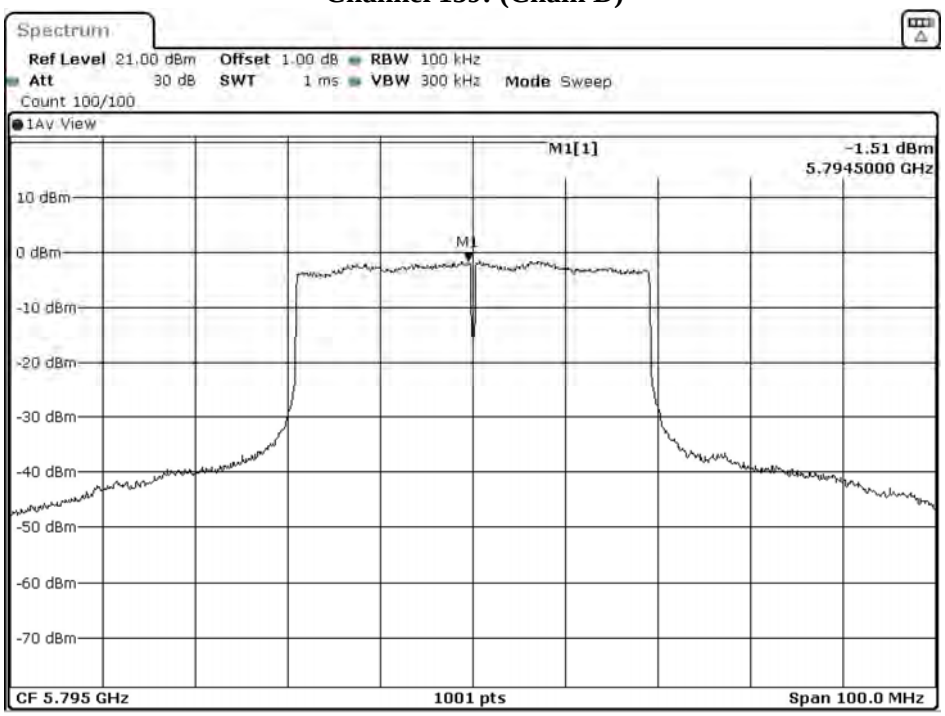
Date: 3.JUL.2020 22:51:46

Channel 159: (Chain C)



Date: 3.JUL.2020 14:54:10

Channel 159: (Chain D)



Date: 4.JUL.2020 02:52:01

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 9: Transmit (802.11ax-80MBW-CDD) (RU Config-Full)
Test Date : 2020/07/03

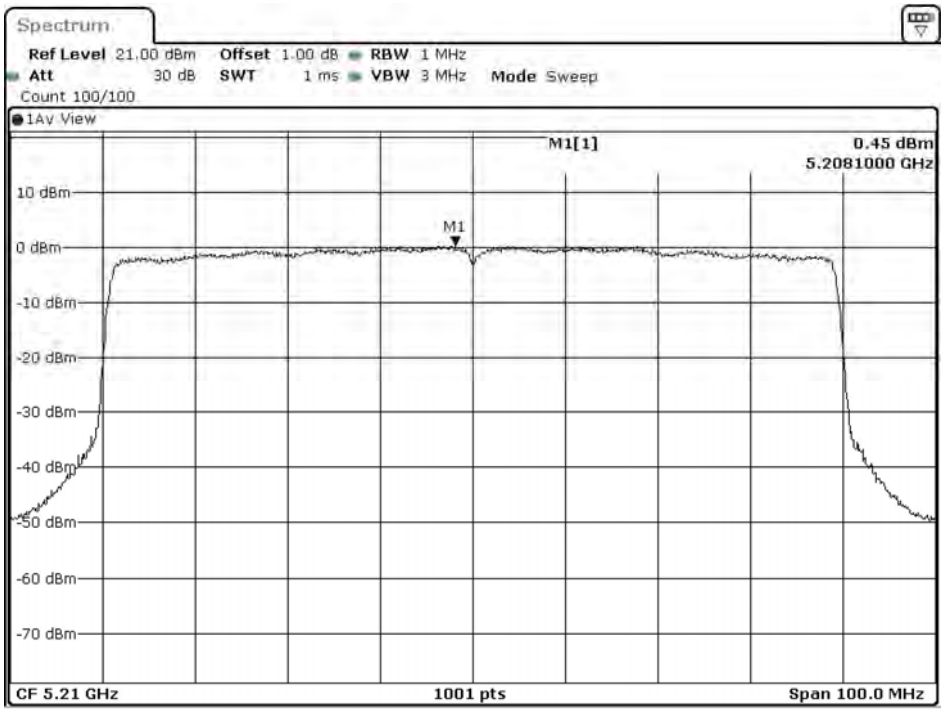
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/1MHz)	BWCF (dB)	Total PPSD (dBm/1MHz)	Required Limit (dBm/1MHz)	Result
42	5210	A	0.450	--	6.47	17	Pass
		B	0.700	--	6.72	17	Pass
		C	-0.060	--	5.96	17	Pass
		D	0.540	--	6.56	17	Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
155	5775	A	-6.570	6.990	6.440	30	Pass
		B	-6.540	6.990	6.470	30	Pass
		C	-6.690	6.990	6.320	30	Pass
		D	-6.690	6.990	6.320	30	Pass

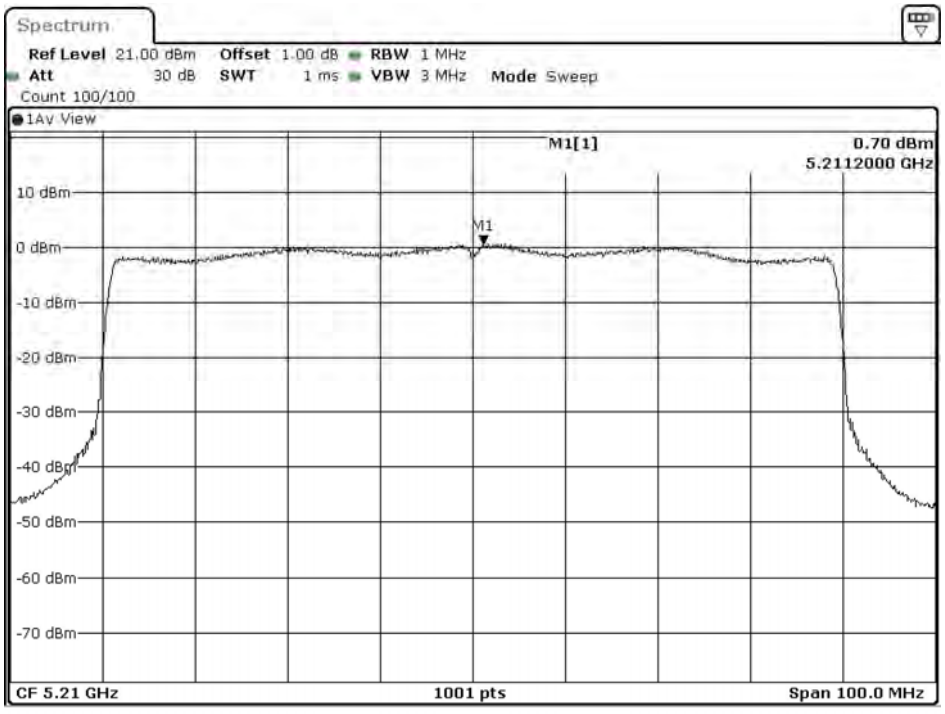
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 42: (Chain A)



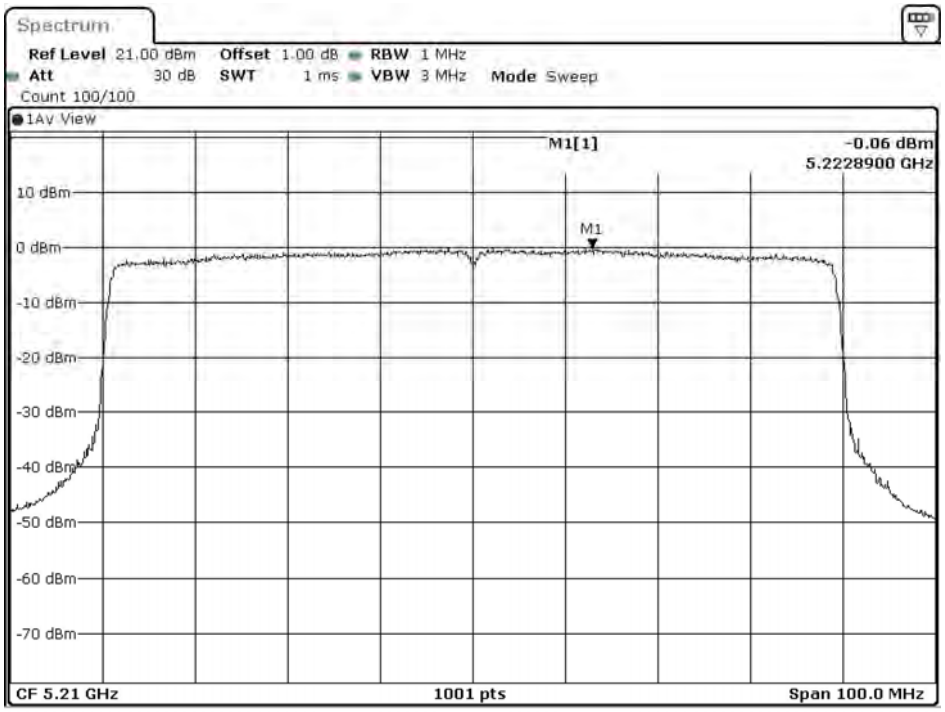
Date: 3.JUL.2020 22:59:38

Channel 42: (Chain B)



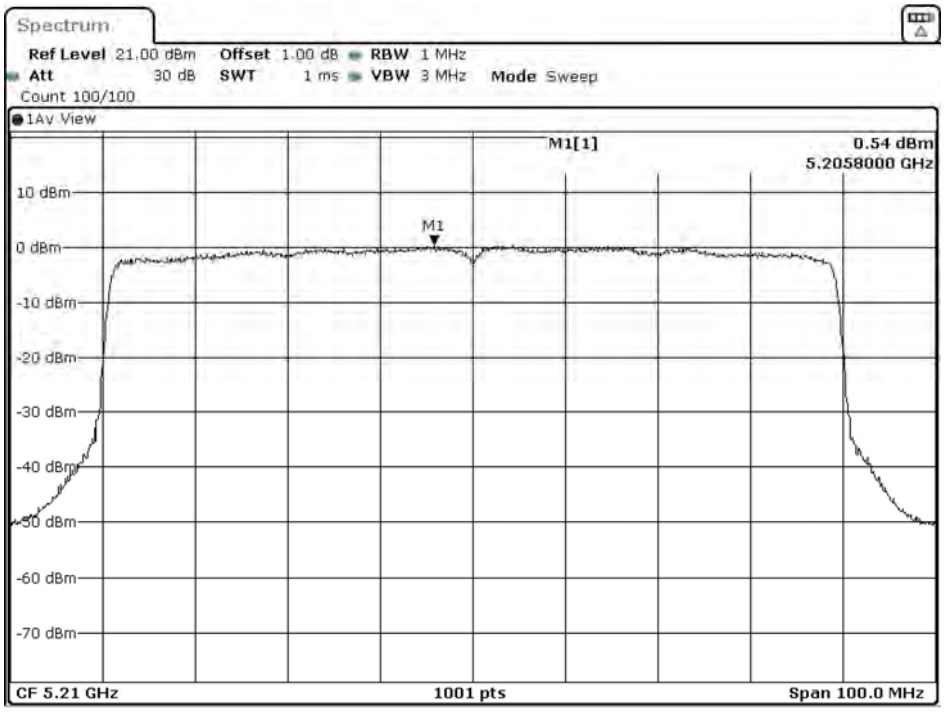
Date: 3.JUL.2020 23:02:41

Channel 42: (Chain C)



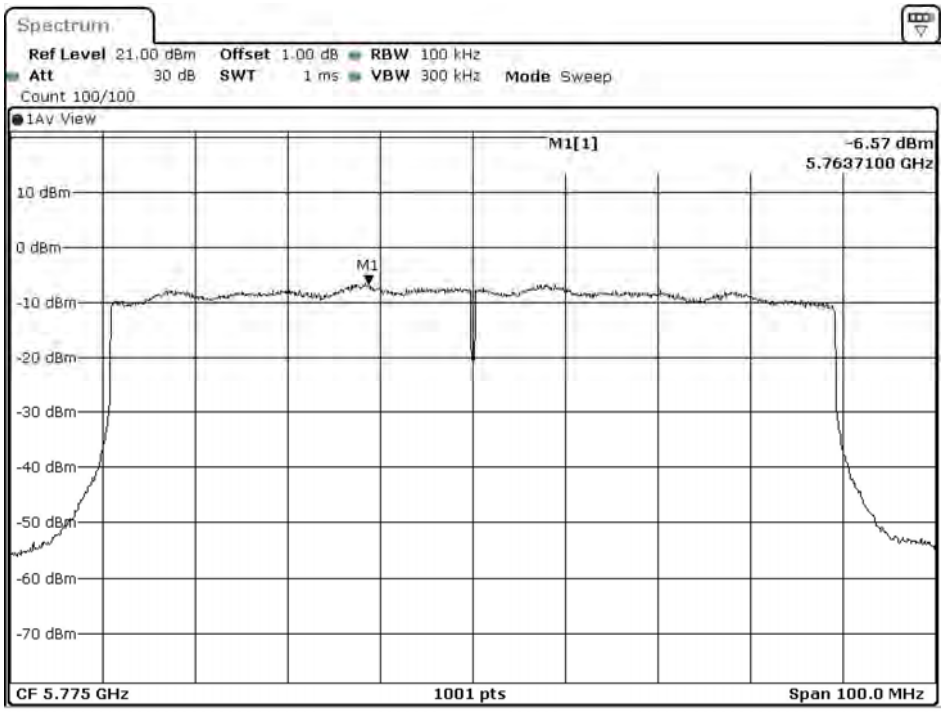
Date: 3.JUL.2020 15:05:05

Channel 42: (Chain D)



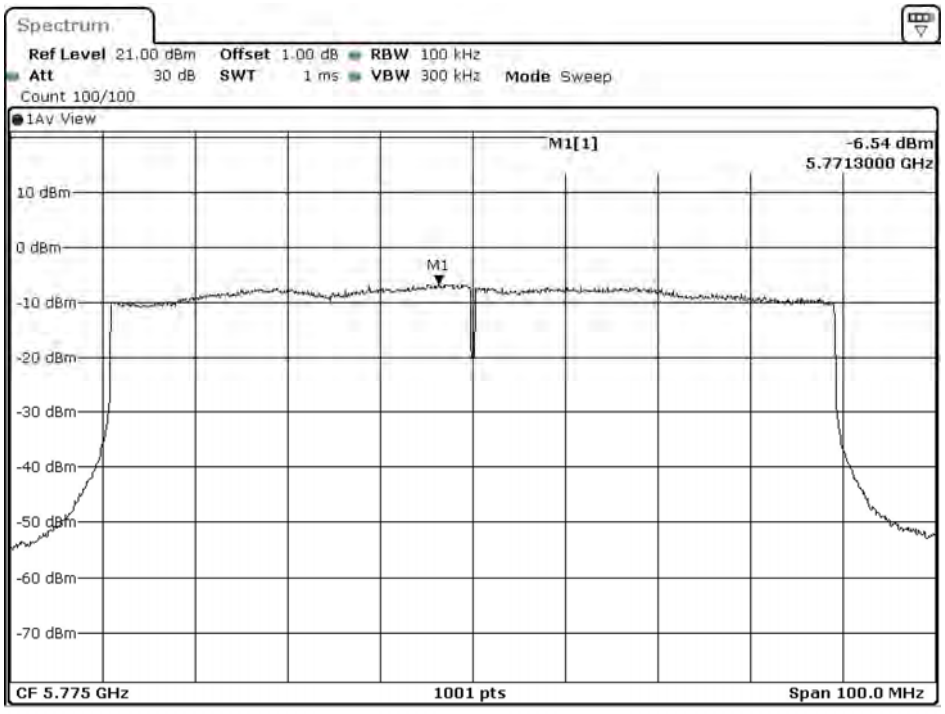
Date: 4.JUL.2020 03:02:56

Channel 155: (Chain A)



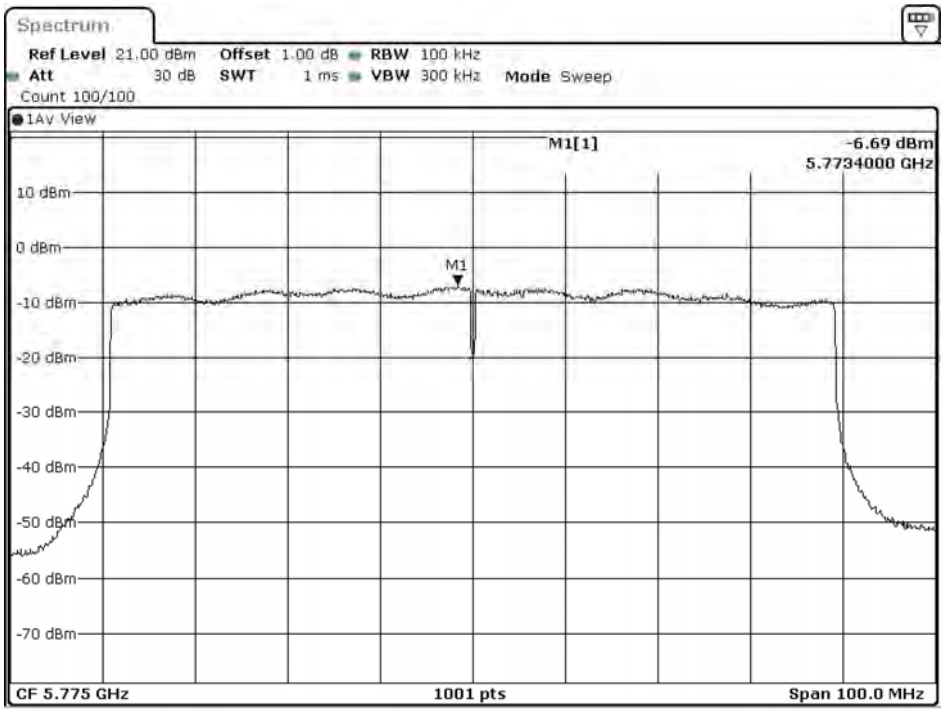
Date: 3.JUL.2020 22:34:48

Channel 155: (Chain B)



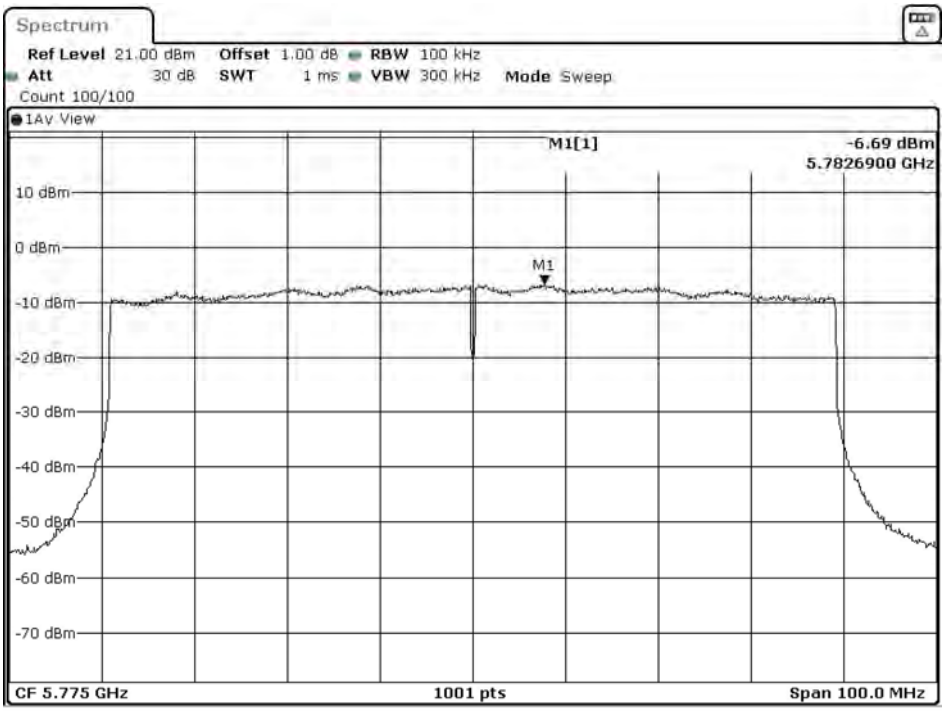
Date: 3.JUL.2020 22:37:52

Channel 155: (Chain C)



Date: 3.JUL.2020 14:40:16

Channel 155: (Chain D)



Date: 4.JUL.2020 02:38:07

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 7: Transmit (802.11ax-20MBW-CDD) (RU Config-center mode)
Test Date : 2020/07/04

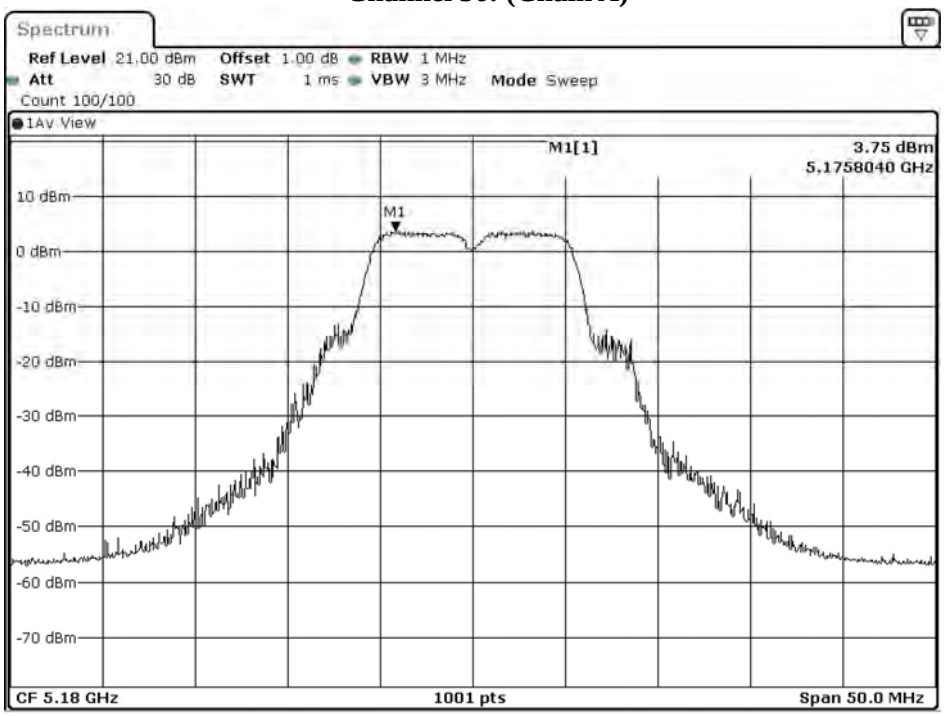
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/MHz)	Total PPSD (dBm/MHz)	Required Limit (dBm/MHz)	Result
36	5180	A	3.750	9.77	17	Pass
		B	3.550	9.57		Pass
		C	3.630	9.65		Pass
		D	4.210	10.23		Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
149	5745	A	-0.270	6.990	12.740	30	Pass
		B	-0.580	6.990	12.430		Pass
		C	-0.440	6.990	12.570		Pass
		D	-0.420	6.990	12.590		Pass
165	5825	A	-0.210	6.990	12.800	30	Pass
		B	0.030	6.990	13.040		Pass
		C	-0.400	6.990	12.610		Pass
		D	-0.150	6.990	12.860		Pass

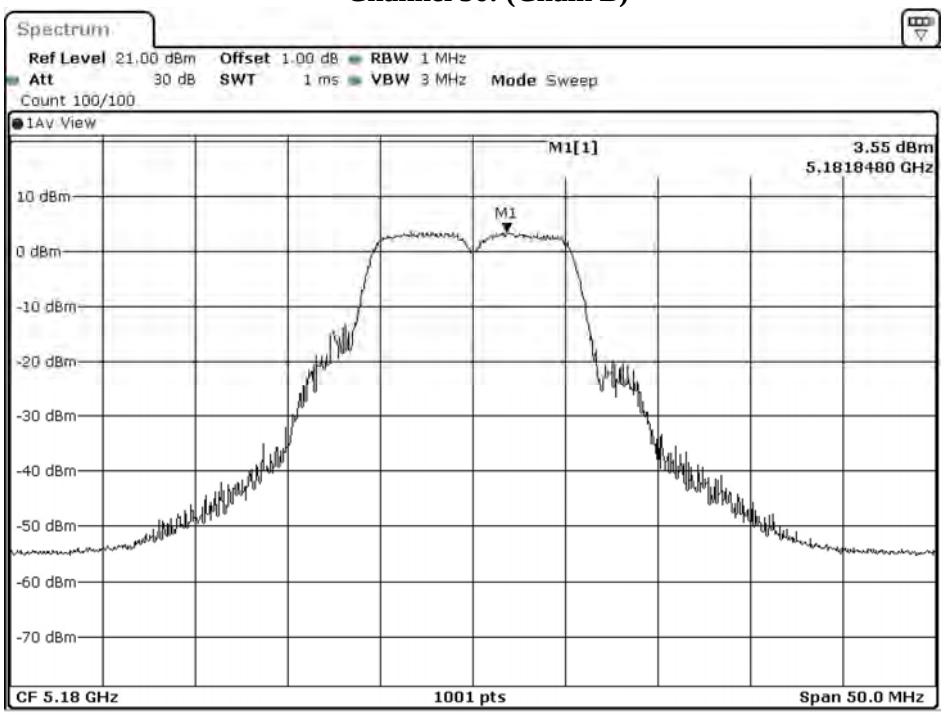
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 36: (Chain A)



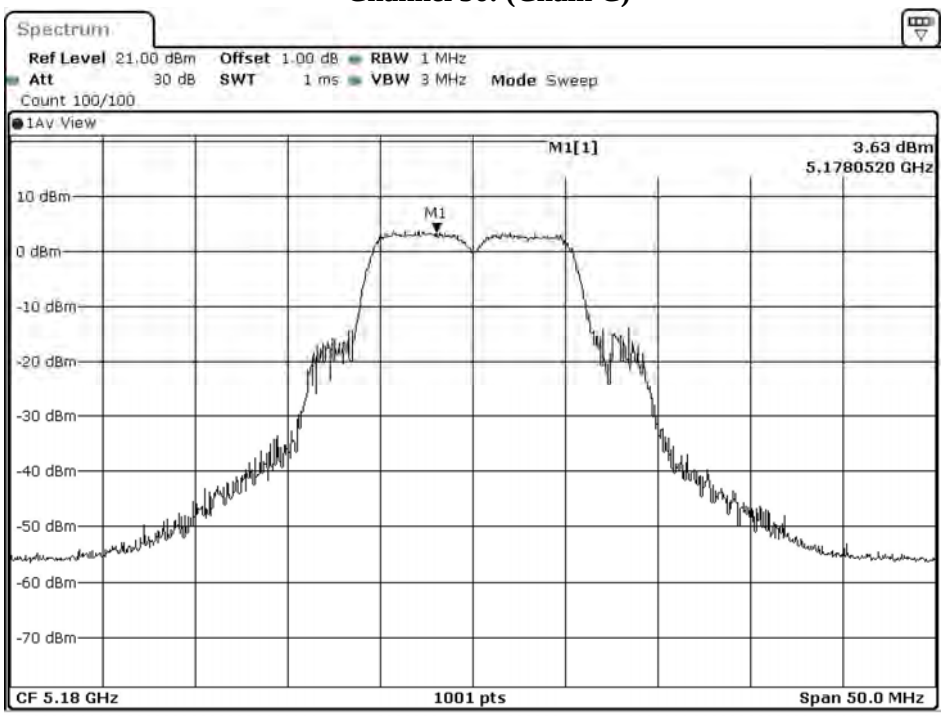
Date: 4.JUL.2020 18:32:38

Channel 36: (Chain B)



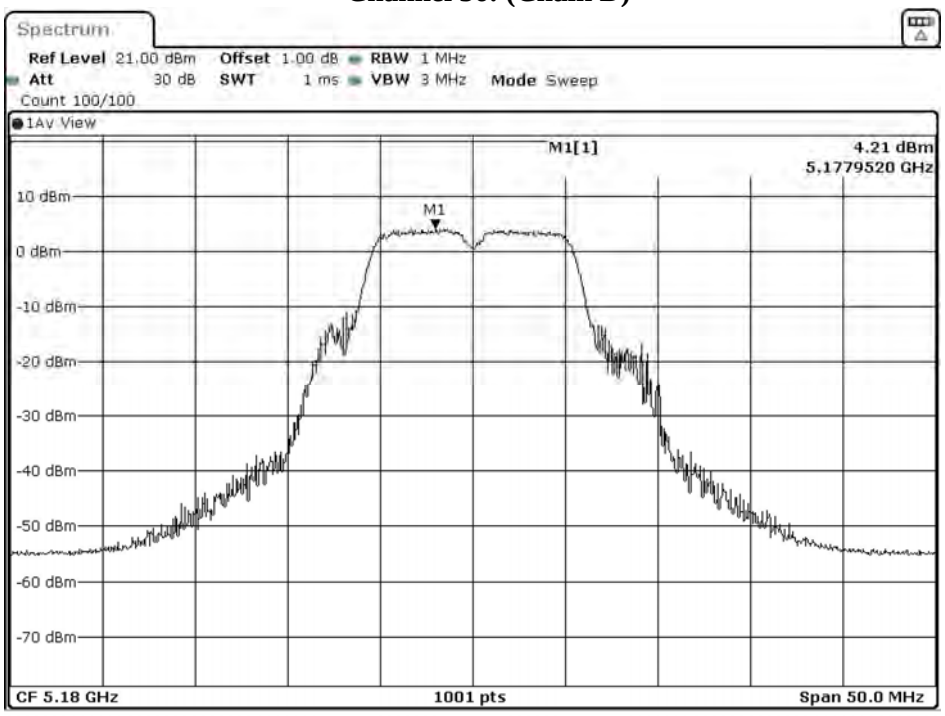
Date: 4.JUL.2020 18:35:42

Channel 36: (Chain C)



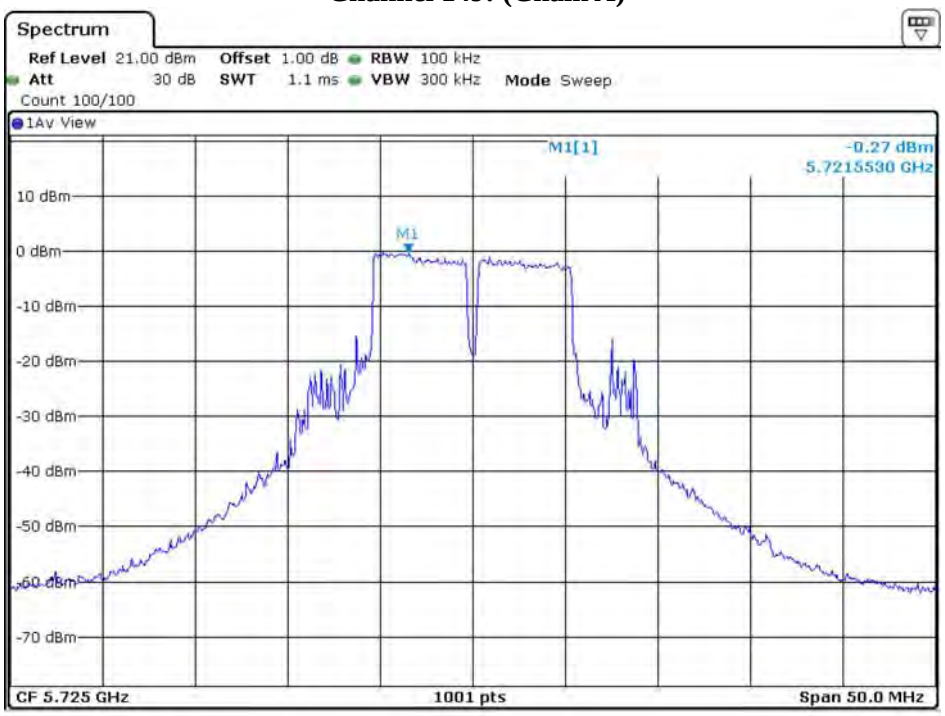
Date: 4.JUL.2020 10:38:07

Channel 36: (Chain D)



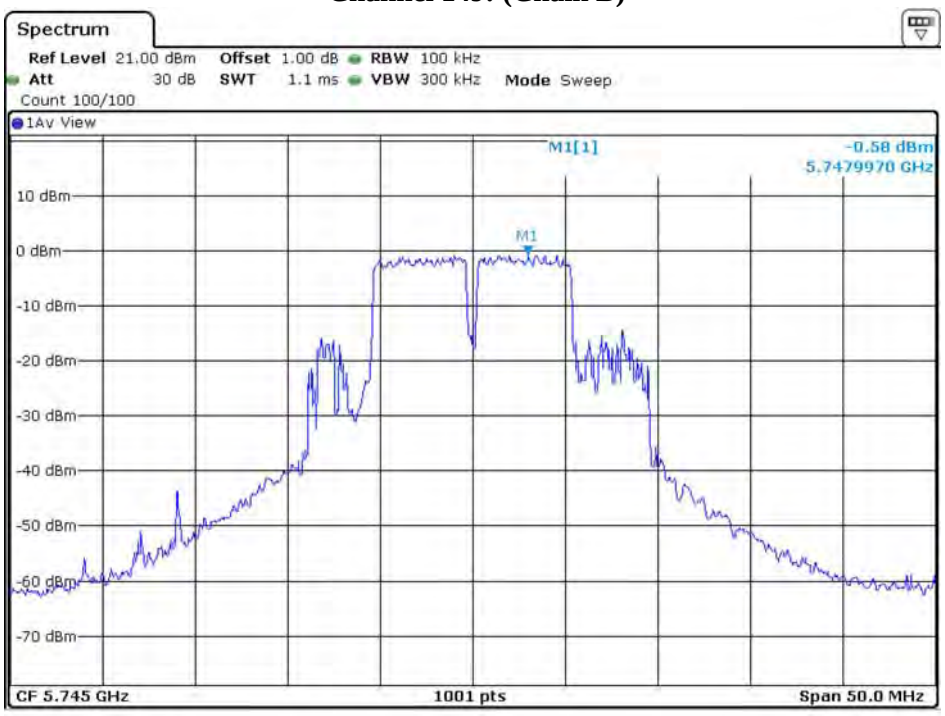
Date: 4.JUL.2020 22:35:59

Channel 149: (Chain A)



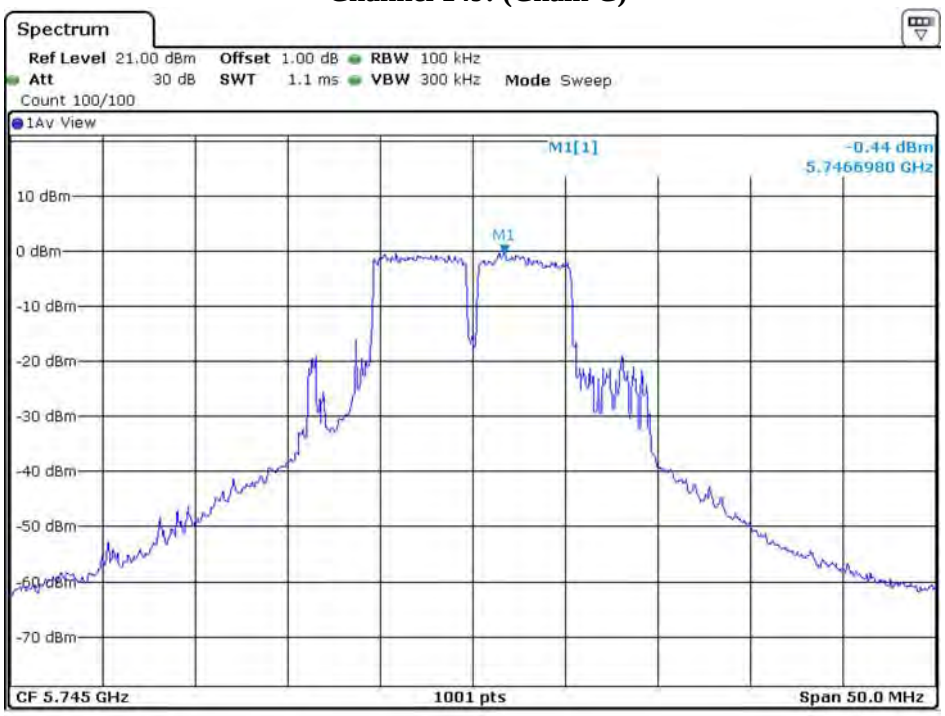
Date: 5.JUL.2020 17:35:58

Channel 149: (Chain B)



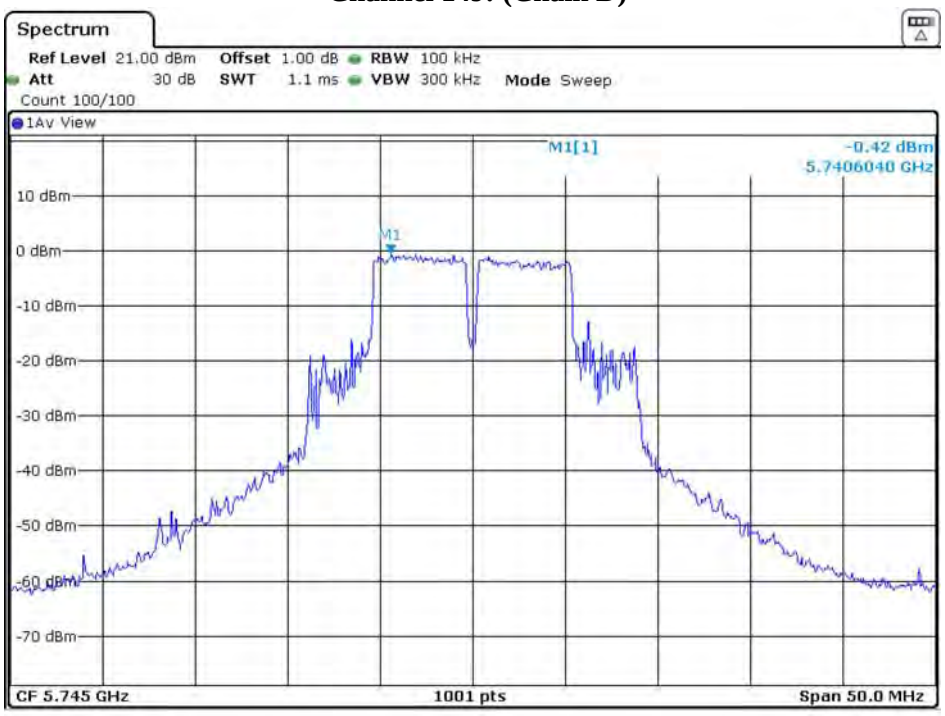
Date: 5.JUL.2020 17:26:04

Channel 149: (Chain C)



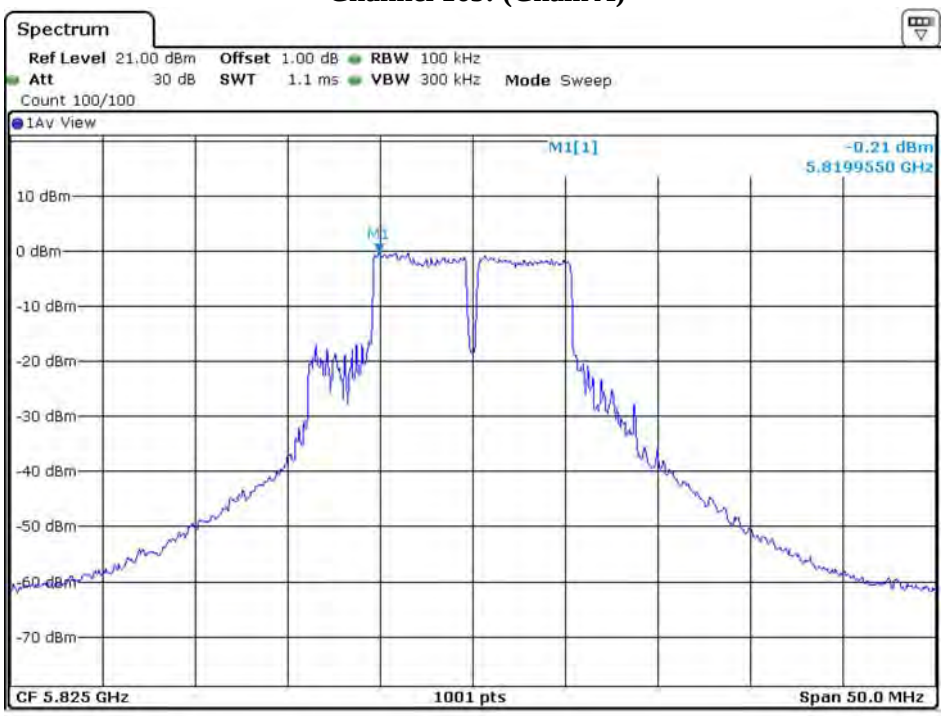
Date: 5.JUL.2020 09:28:41

Channel 149: (Chain D)



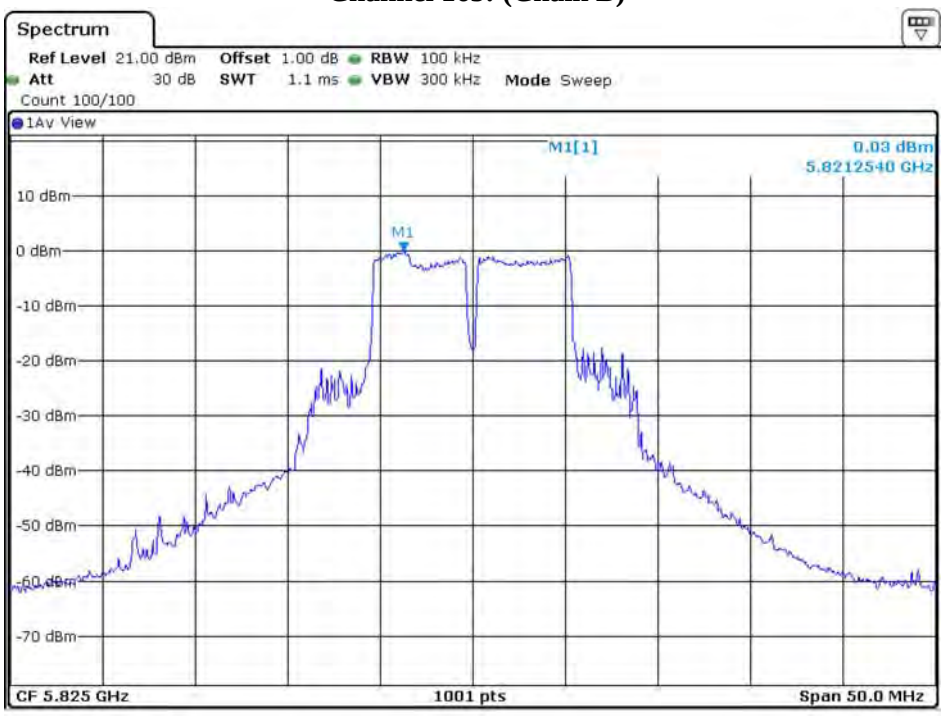
Date: 5.JUL.2020 21:26:48

Channel 165: (Chain A)



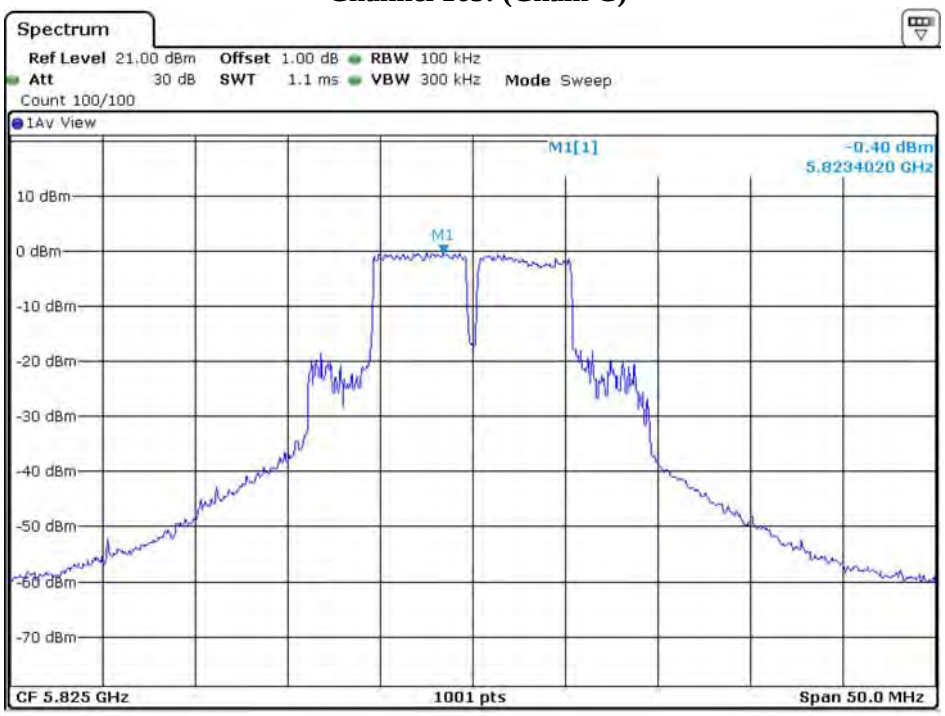
Date: 5.JUL.2020 17:31:54

Channel 165: (Chain B)



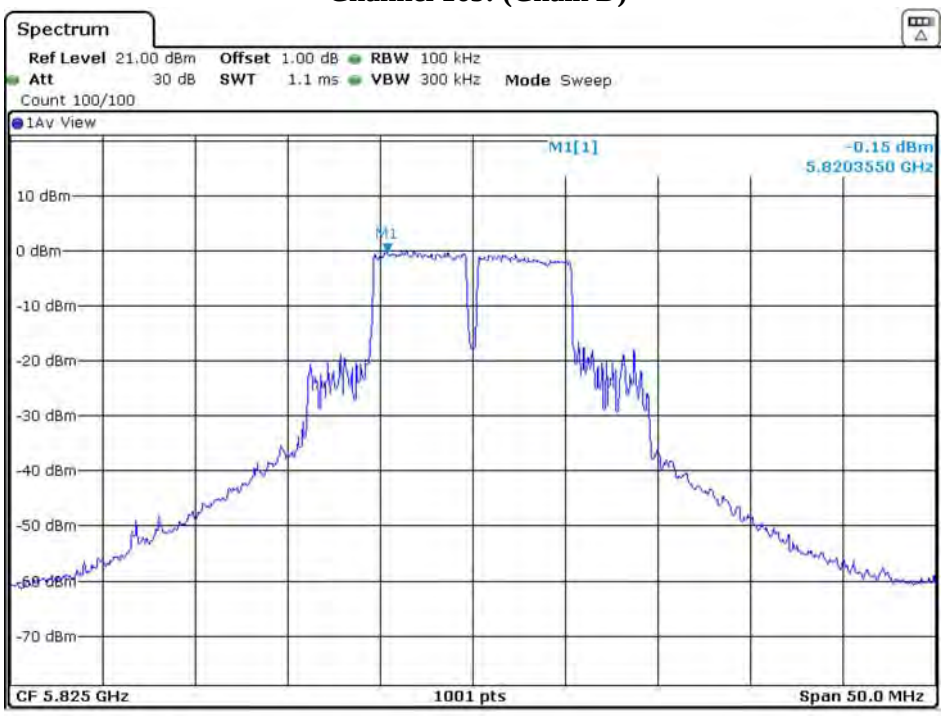
Date: 5.JUL.2020 17:29:27

Channel 165: (Chain C)



Date: 5.JUL.2020 09:31:37

Channel 165: (Chain D)



Date: 5.JUL.2020 21:29:09

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 8: Transmit (802.11ax-40MBW-CDD) (RU Config-center mode)
Test Date : 2020/07/04

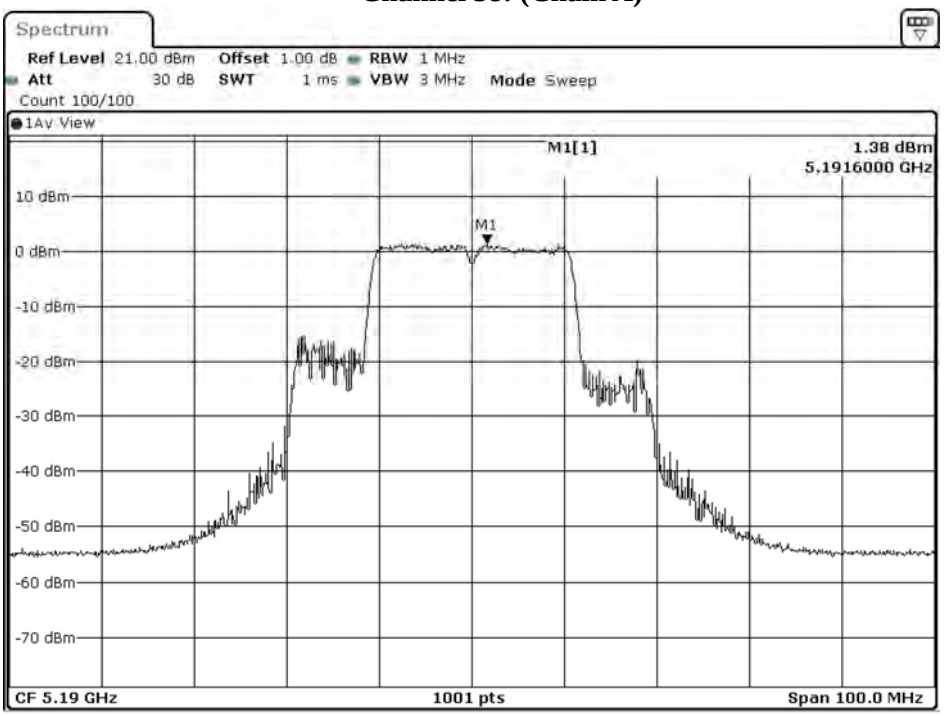
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/MHz)	Total PPSD (dBm/MHz)	Required Limit (dBm/MHz)	Result
38	5190	A	1.380	7.4	17	Pass
		B	1.480	7.5		Pass
		C	1.530	7.55		Pass
		D	1.620	7.64		Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
151	5755	A	-2.930	6.990	10.080	30	Pass
		B	-2.920	6.990	10.090		Pass
		C	-3.190	6.990	9.820		Pass
		D	-3.610	6.990	9.400		Pass
159	5795	A	-1.920	6.990	11.090	30	Pass
		B	-1.980	6.990	11.030		Pass
		C	-1.950	6.990	11.060		Pass
		D	-2.470	6.990	10.540		Pass

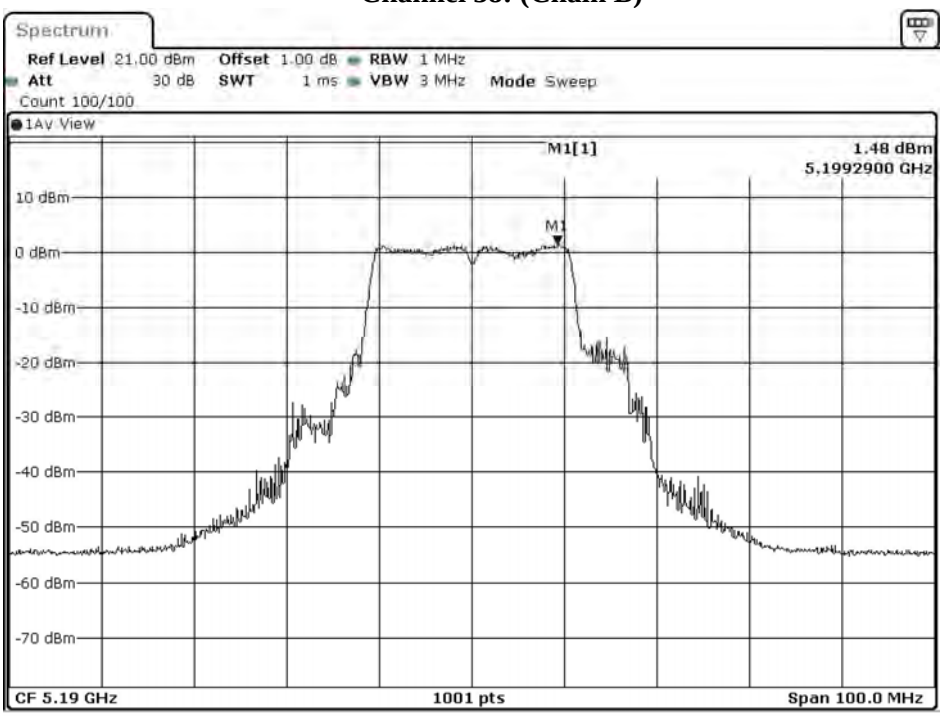
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 38: (Chain A)



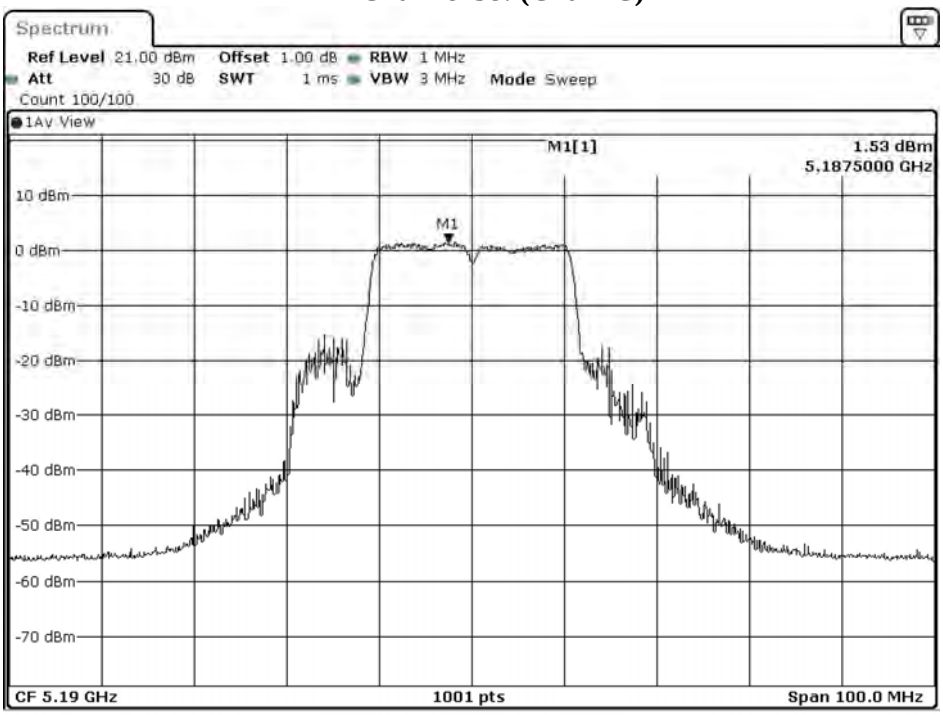
Date: 4.JUL.2020 19:06:02

Channel 38: (Chain B)



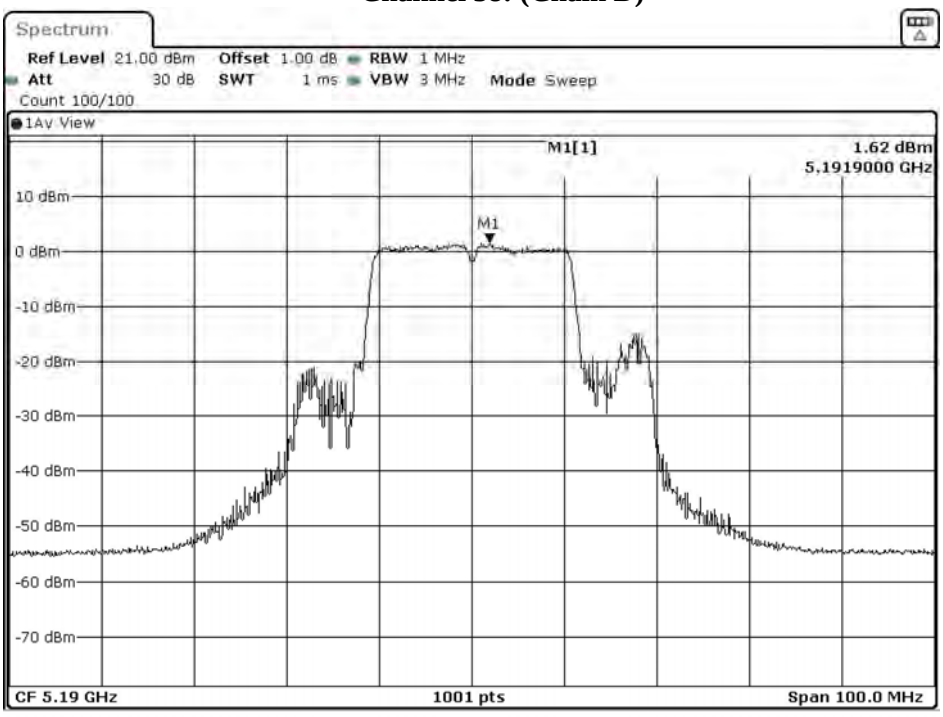
Date: 4.JUL.2020 19:09:06

Channel 38: (Chain C)



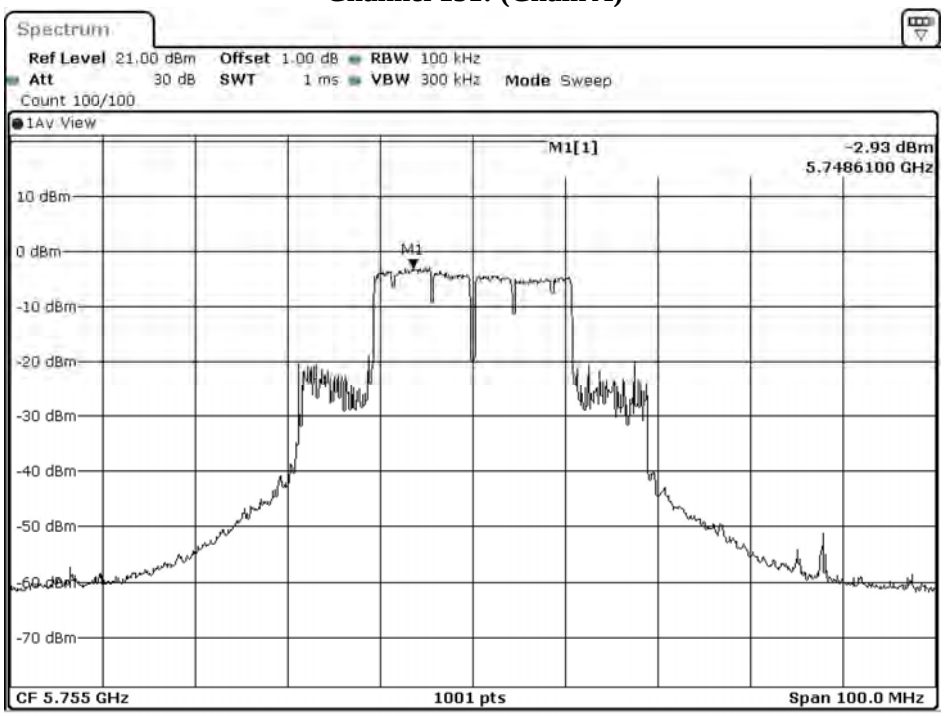
Date: 4.JUL.2020 11:11:30

Channel 38: (Chain D)



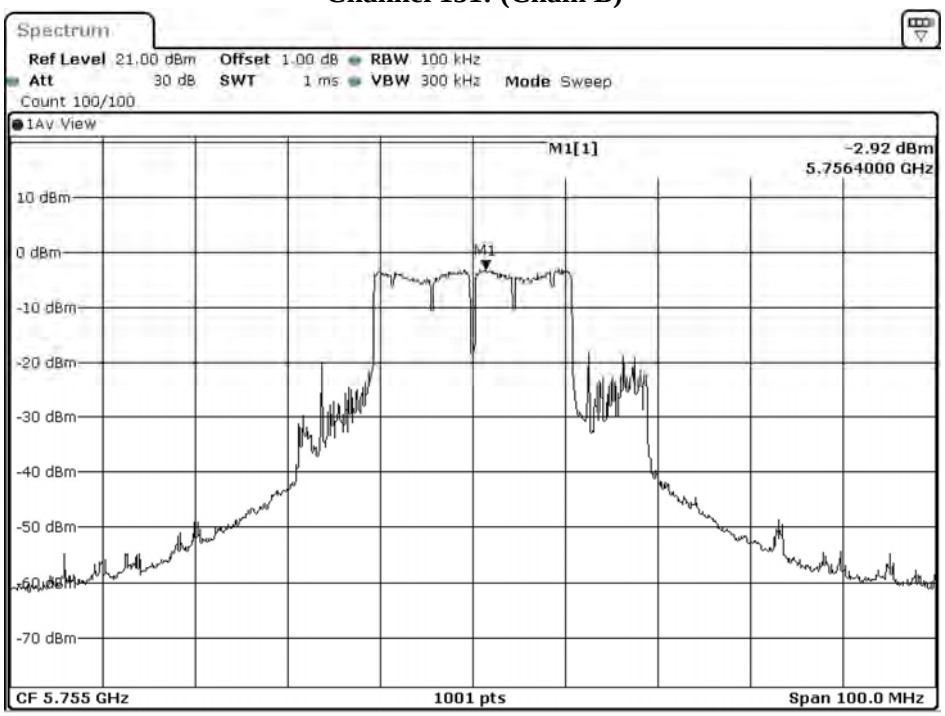
Date: 4.JUL.2020 23:09:22

Channel 151: (Chain A)



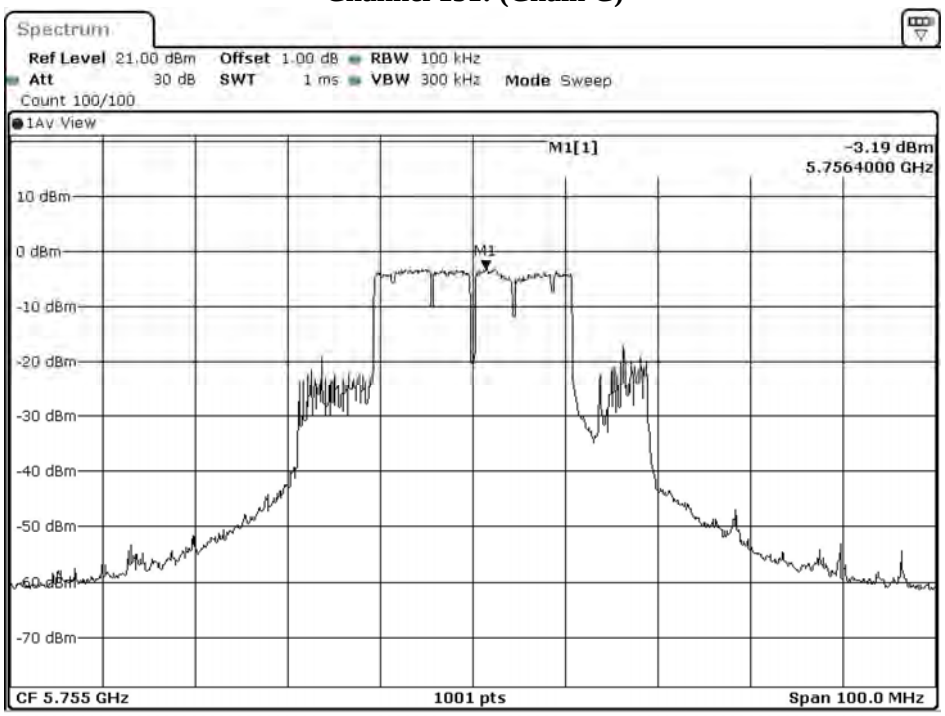
Date: 4.JUL.2020 19:10:13

Channel 151: (Chain B)



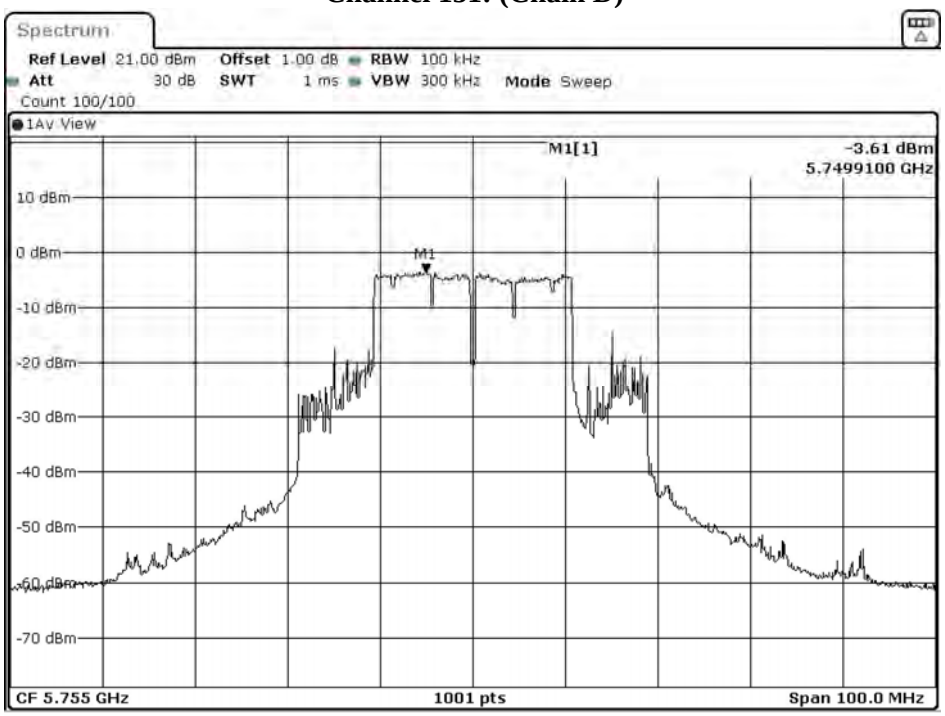
Date: 4.JUL.2020 19:13:17

Channel 151: (Chain C)



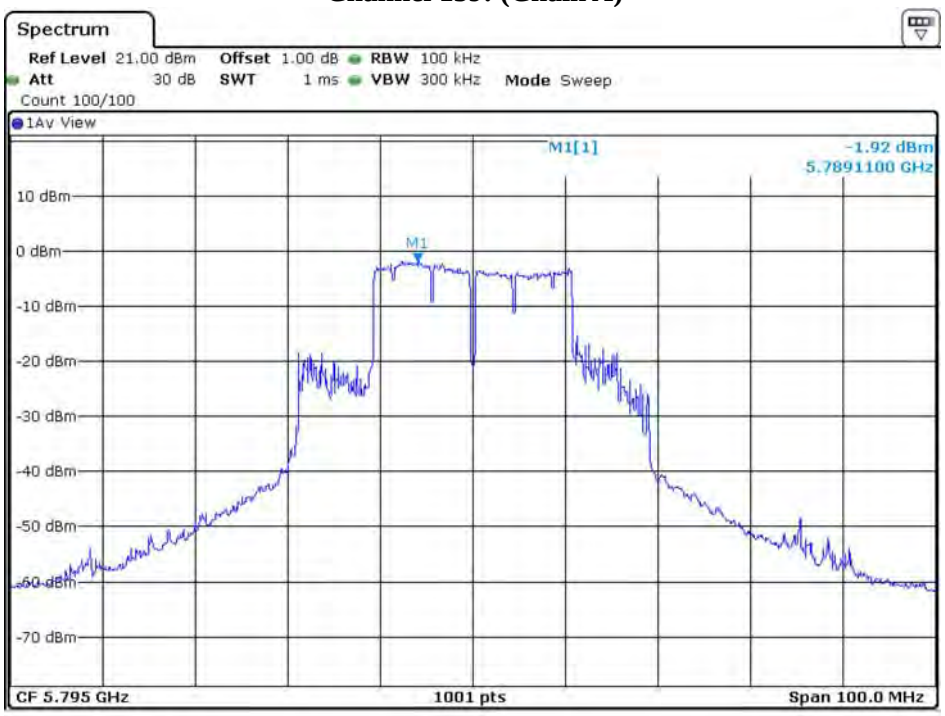
Date: 4.JUL.2020 11:15:42

Channel 151: (Chain D)



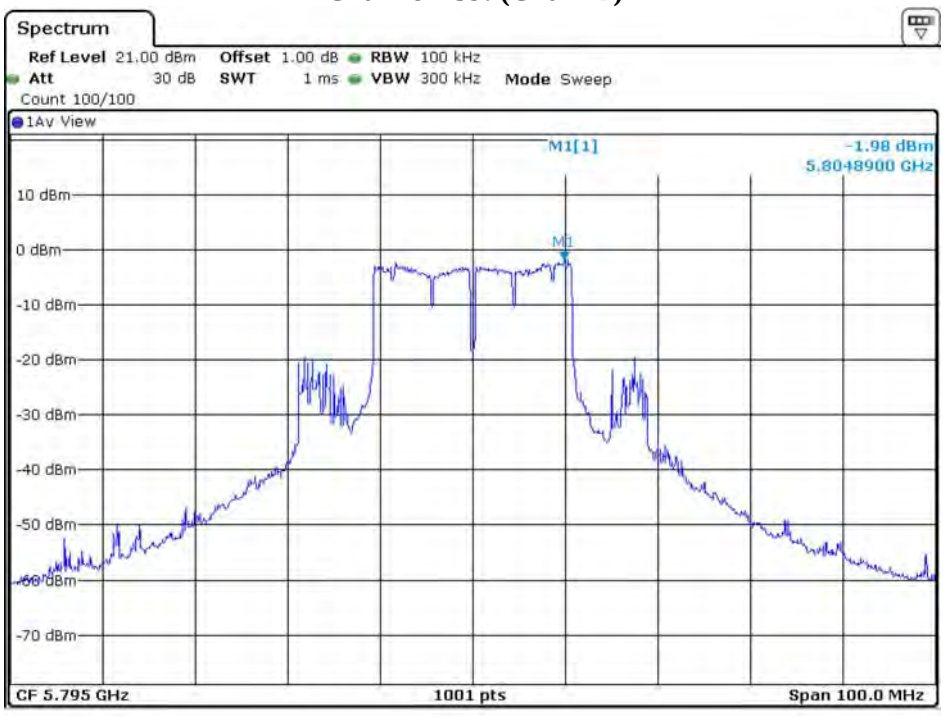
Date: 4.JUL.2020 23:13:34

Channel 159: (Chain A)



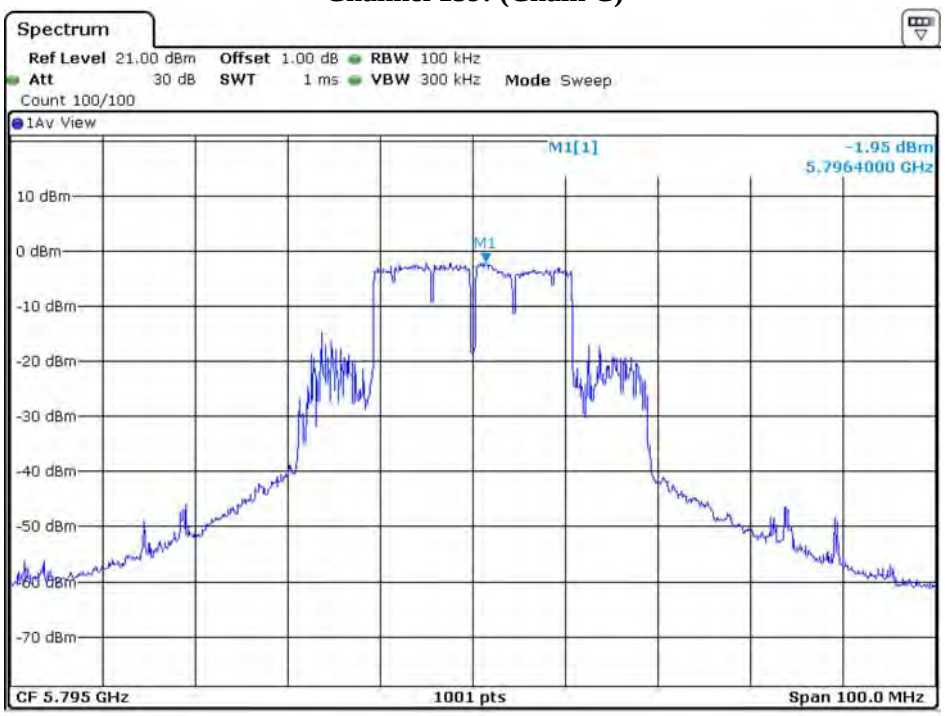
Date: 5.JUL.2020 17:09:19

Channel 159: (Chain B)



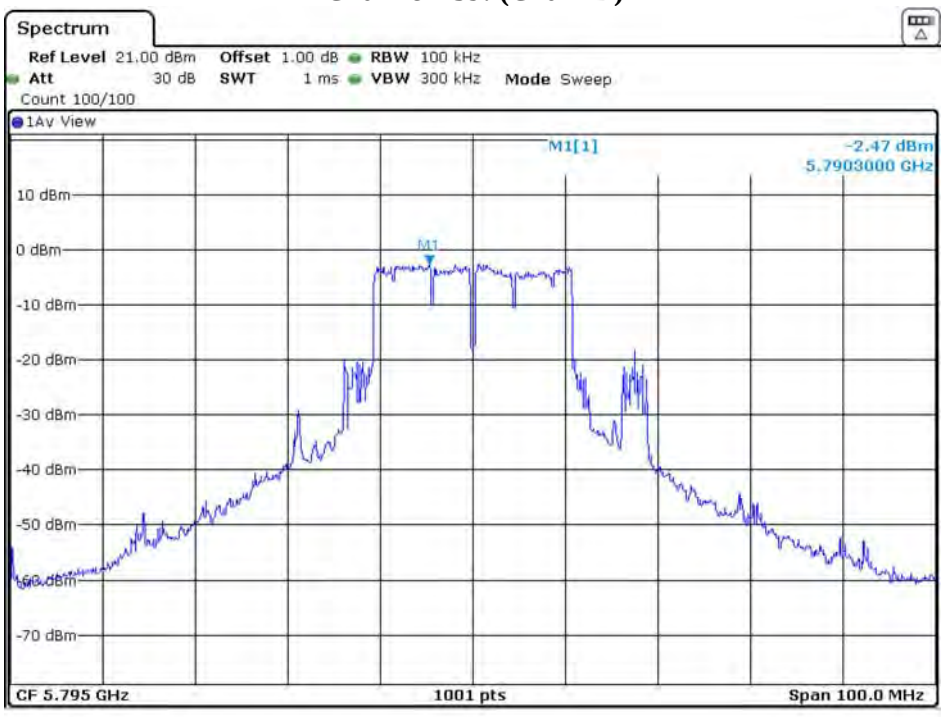
Date: 5.JUL.2020 17:12:48

Channel 159: (Chain C)



Date: 5.JUL.2020 09:15:28

Channel 159: (Chain D)



Date: 5.JUL.2020 21:13:33

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 9: Transmit (802.11ax-80MBW-CDD) (RU Config-center mode)
Test Date : 2020/07/04

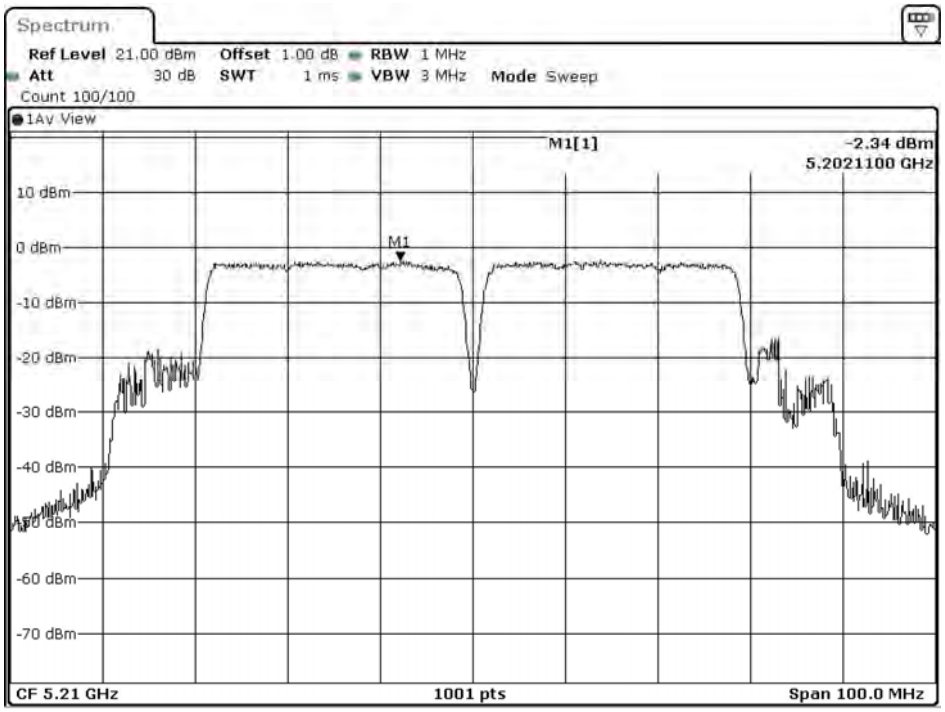
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/1MHz)	BWCF (dB)	Total PPSD (dBm/1MHz)	Required Limit (dBm/1MHz)	Result
42	5210	A	-2.340	--	3.68	17	Pass
		B	-1.910	--	4.11	17	Pass
		C	-2.570	--	3.45	17	Pass
		D	-2.370	--	3.65	17	Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
155	5775	A	-10.270	6.990	2.740	30	Pass
		B	-10.270	6.990	2.740	30	Pass
		C	-10.530	6.990	2.480	30	Pass
		D	-11.240	6.990	1.770	30	Pass

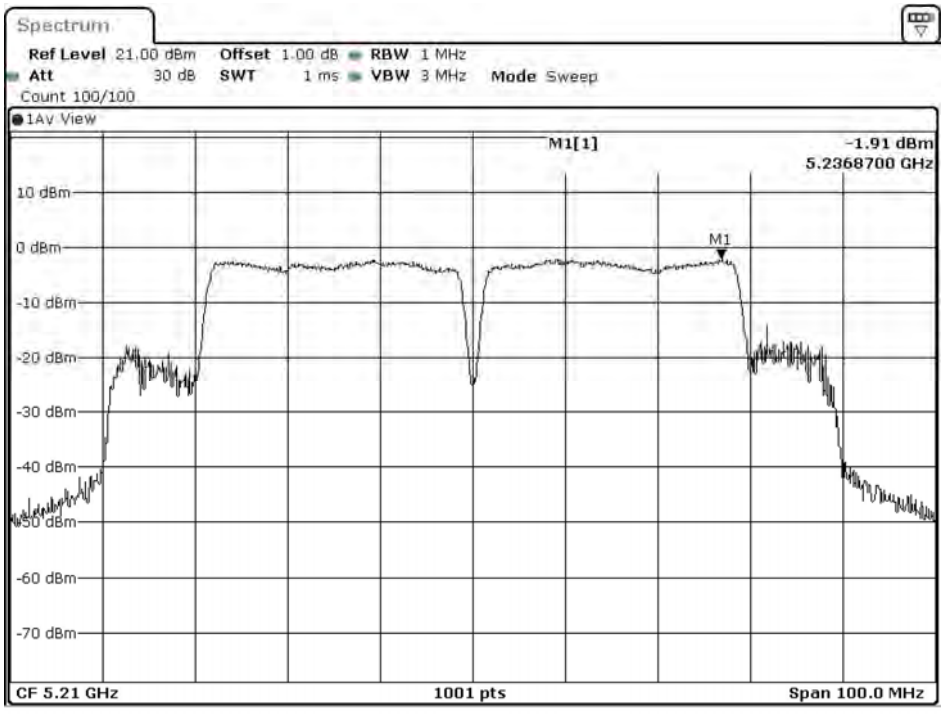
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 42: (Chain A)



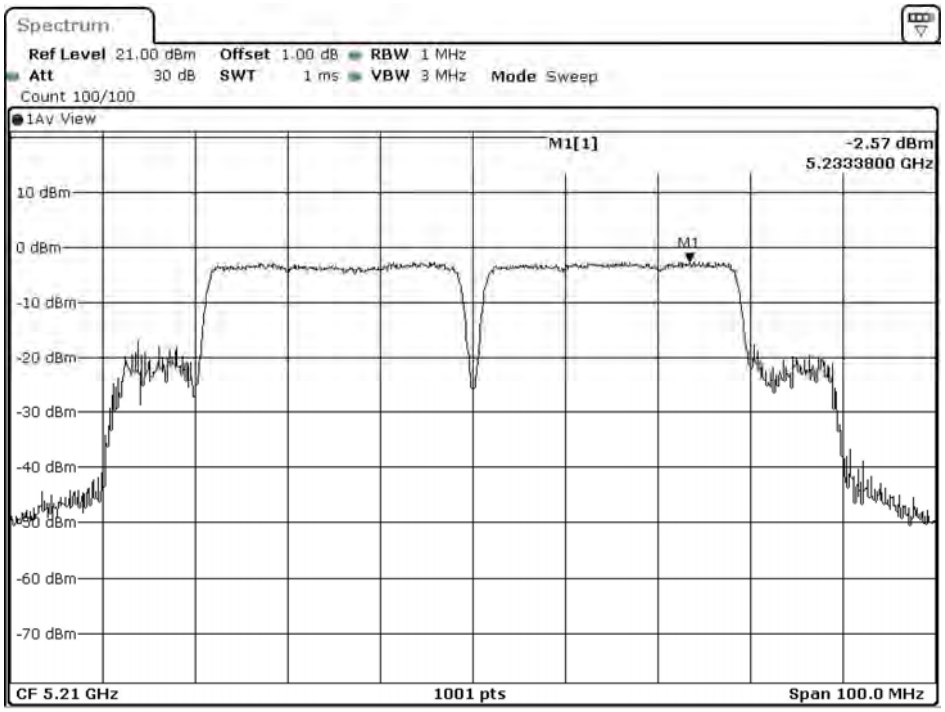
Date: 4.JUL.2020 19:25:20

Channel 42: (Chain B)



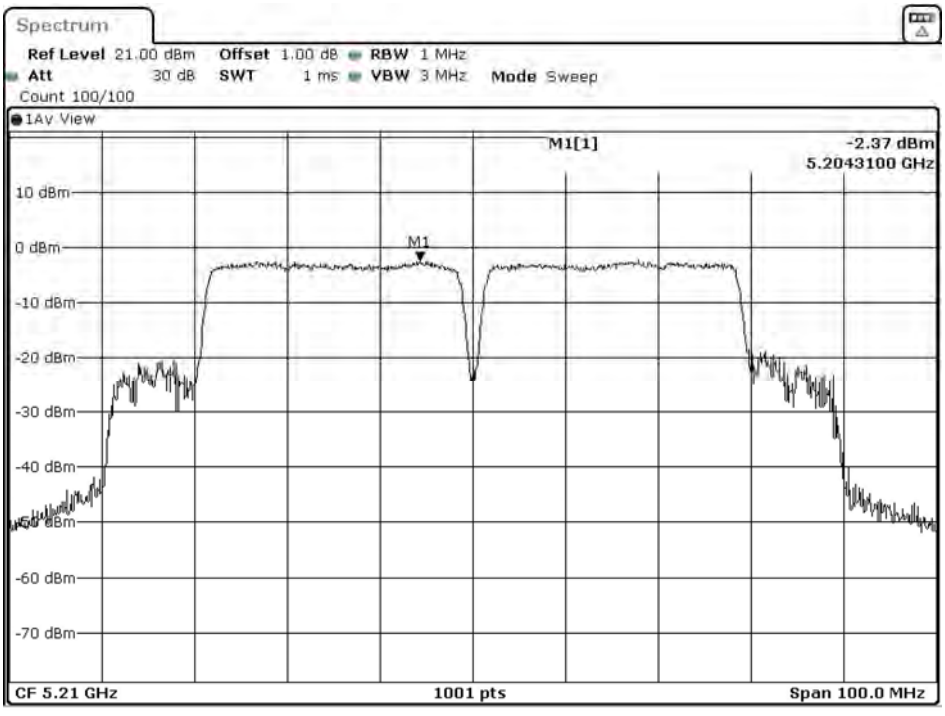
Date: 4.JUL.2020 19:28:24

Channel 42: (Chain C)



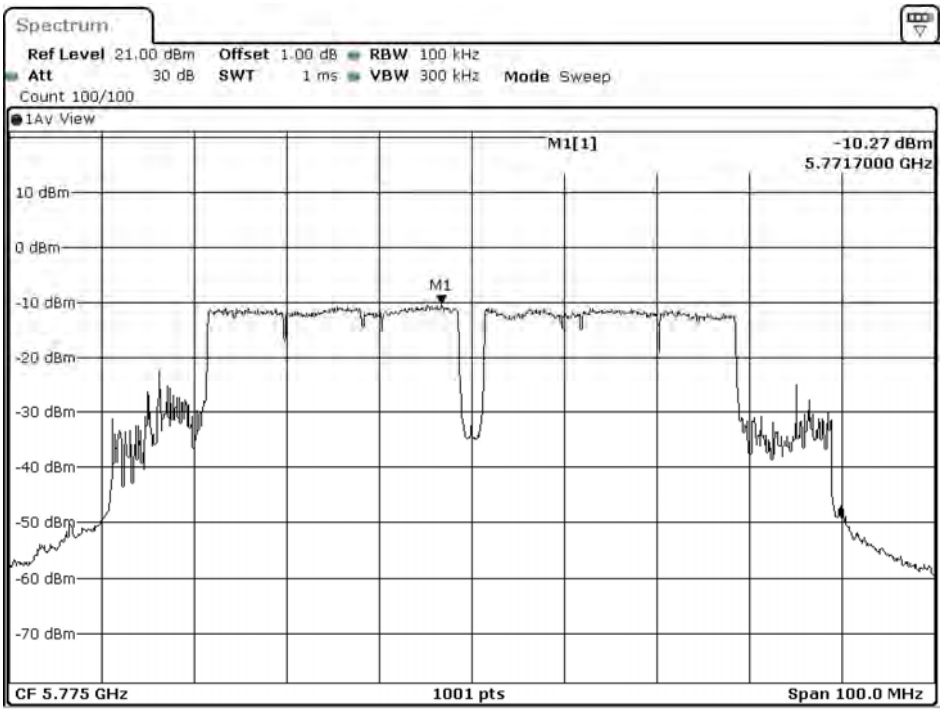
Date: 4.JUL.2020 11:30:48

Channel 42: (Chain D)



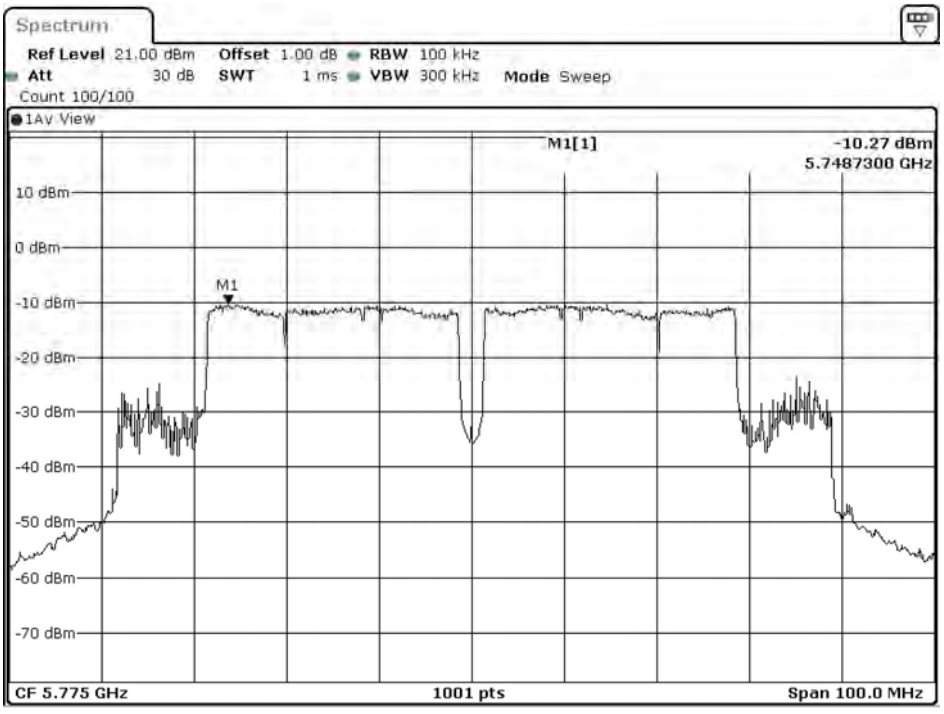
Date: 4.JUL.2020 23:28:41

Channel 155: (Chain A)



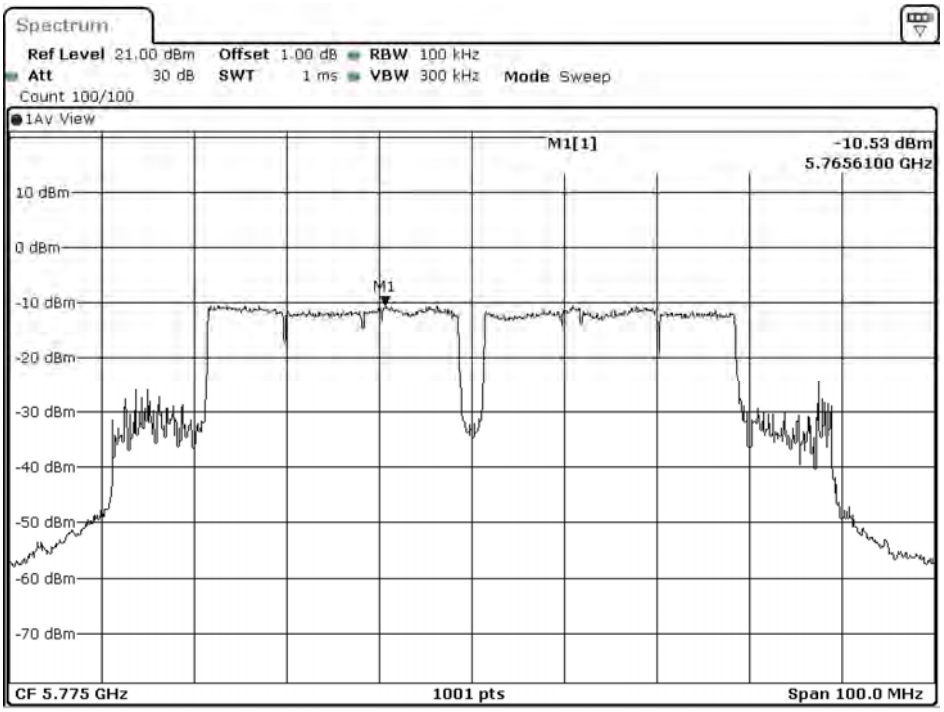
Date: 4.JUL.2020 19:28:15

Channel 155: (Chain B)



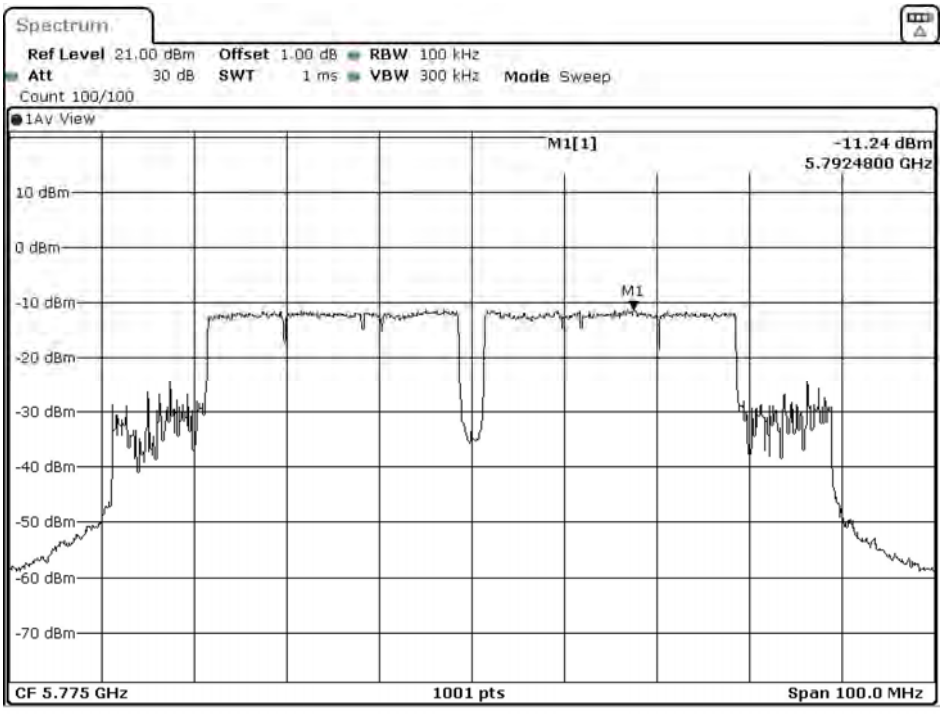
Date: 4.JUL.2020 19:31:19

Channel 155: (Chain C)



Date: 4.JUL.2020 11:33:43

Channel 155: (Chain D)



Date: 4.JUL.2020 23:31:33

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 7: Transmit (802.11ax-20MBW-CDD) (RU Config-edges mode)
Test Date : 2020/07/04

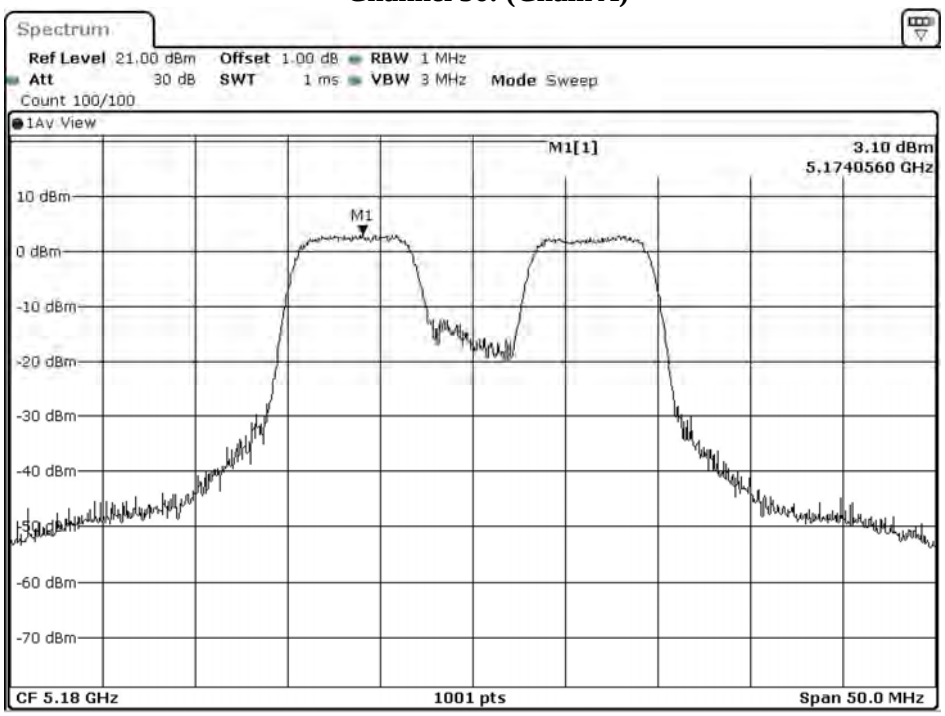
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/MHz)	Total PPSD (dBm/MHz)	Required Limit (dBm/MHz)	Result
36	5180	A	3.100	9.12	17	Pass
		B	3.210	9.23		Pass
		C	2.860	8.88		Pass
		D	3.120	9.14		Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
149	5745	A	-0.310	6.990	12.700	30	Pass
		B	-0.560	6.990	12.450		Pass
		C	-0.370	6.990	12.640		Pass
		D	-0.470	6.990	12.540		Pass
165	5825	A	-0.750	6.990	12.260	30	Pass
		B	-0.340	6.990	12.670		Pass
		C	-0.740	6.990	12.270		Pass
		D	-0.760	6.990	12.250		Pass

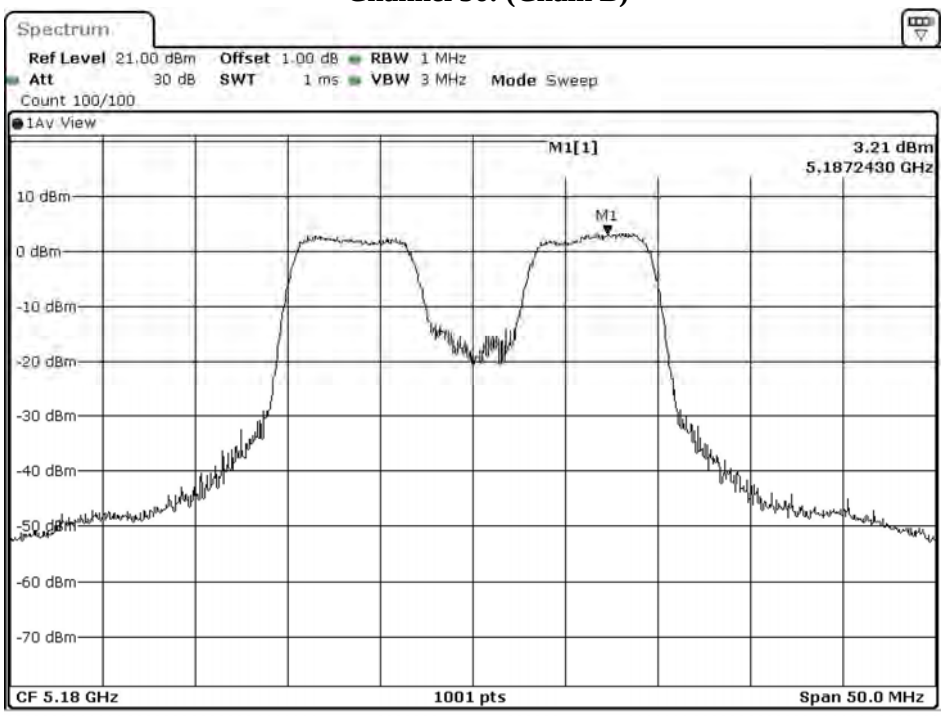
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 36: (Chain A)



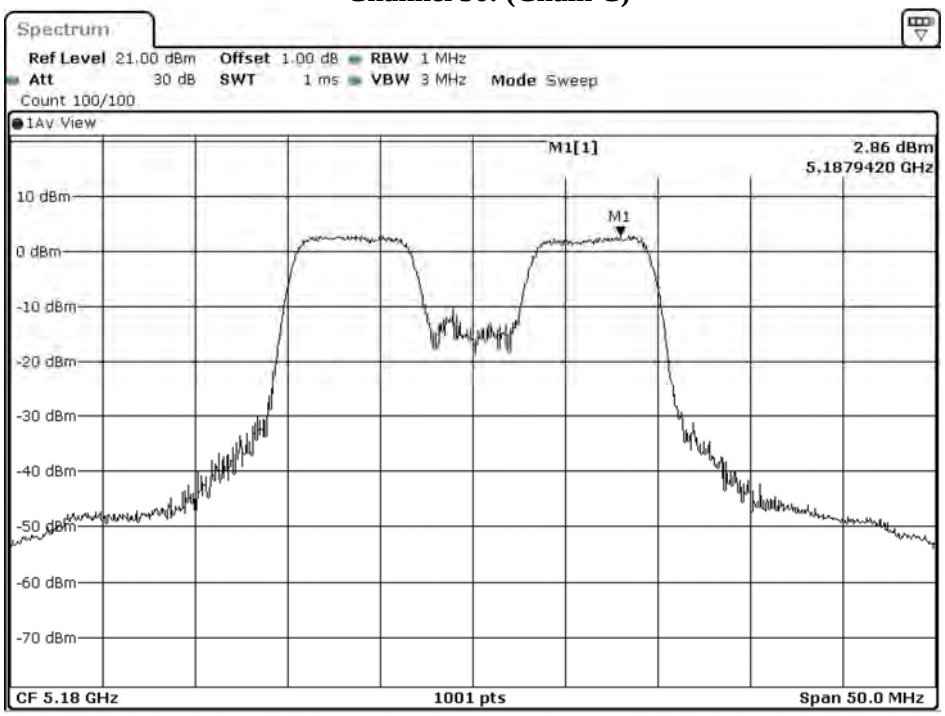
Date: 4.JUL.2020 18:25:13

Channel 36: (Chain B)



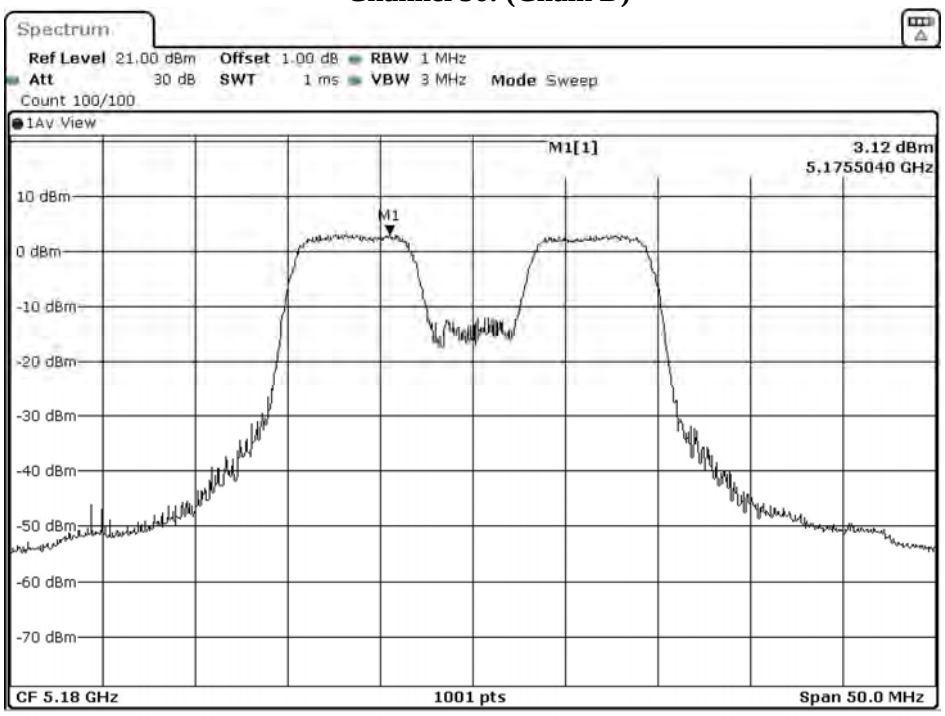
Date: 4.JUL.2020 18:28:17

Channel 36: (Chain C)



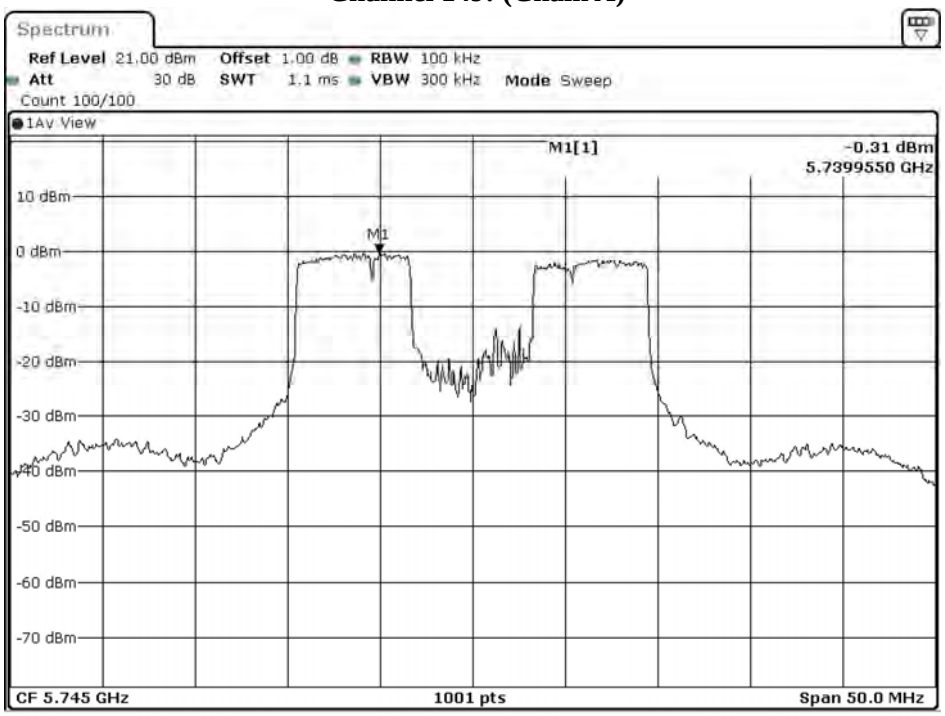
Date: 4.JUL.2020 10:30:41

Channel 36: (Chain D)



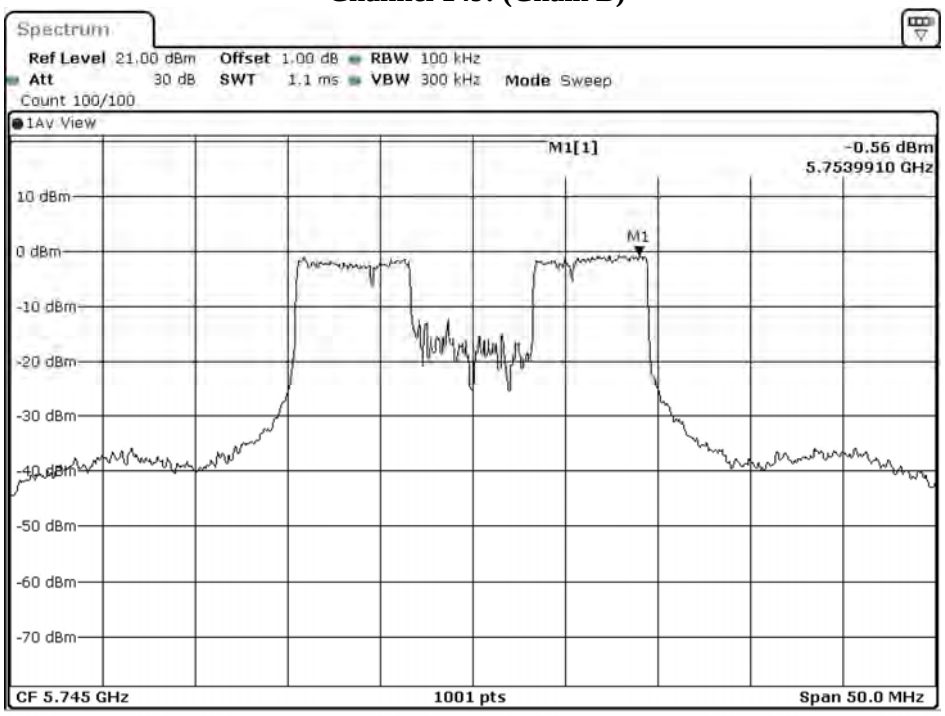
Date: 4.JUL.2020 22:28:34

Channel 149: (Chain A)



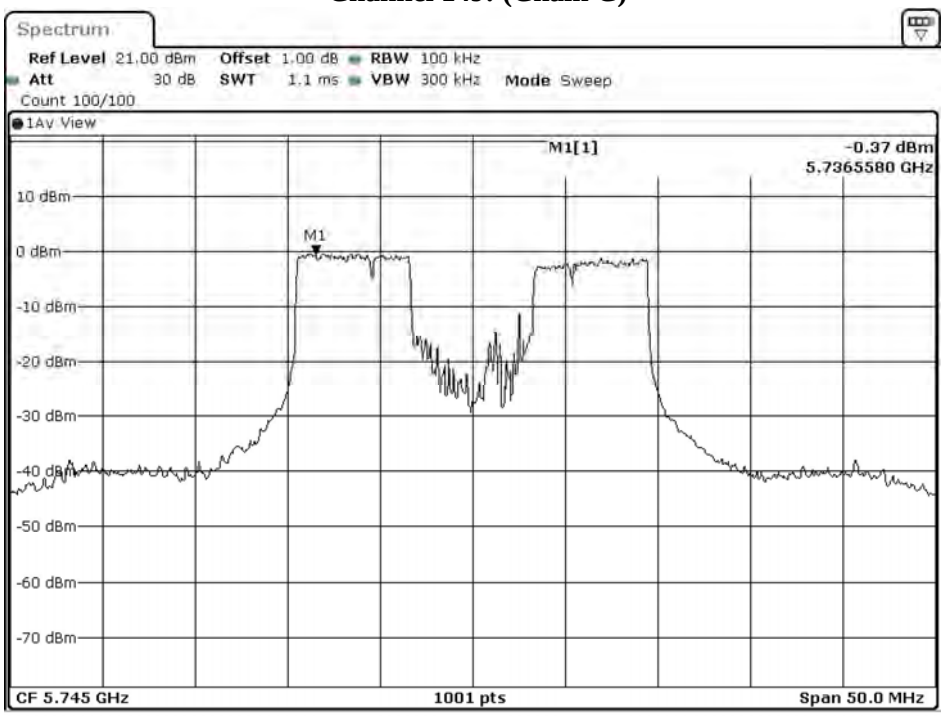
Date: 4.JUL.2020 18:28:52

Channel 149: (Chain B)



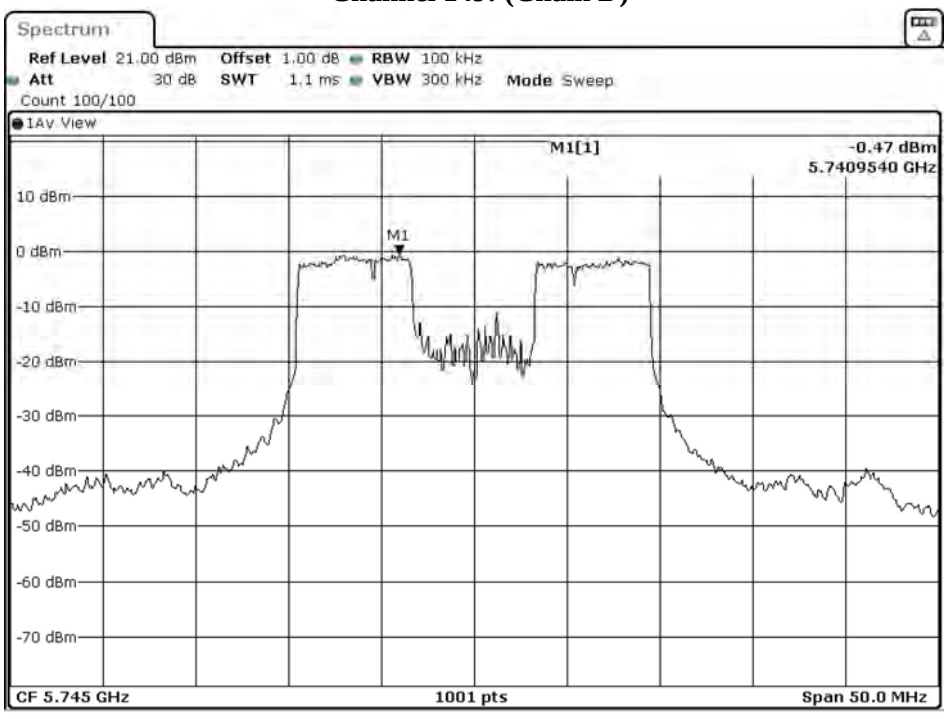
Date: 4.JUL.2020 18:31:56

Channel 149: (Chain C)



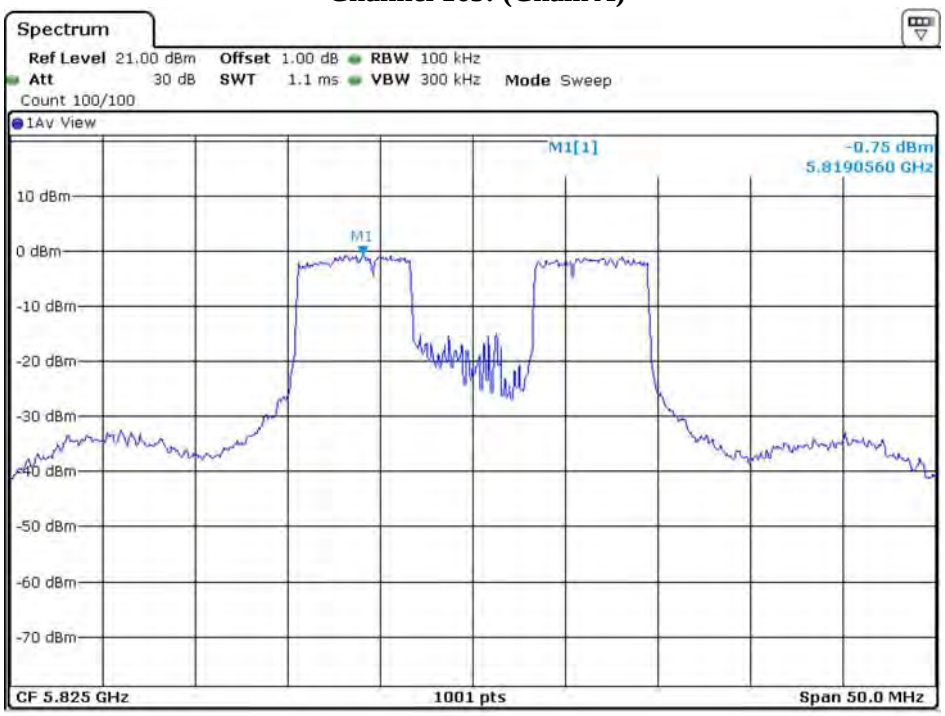
Date: 4.JUL.2020 10:34:21

Channel 149: (Chain D)



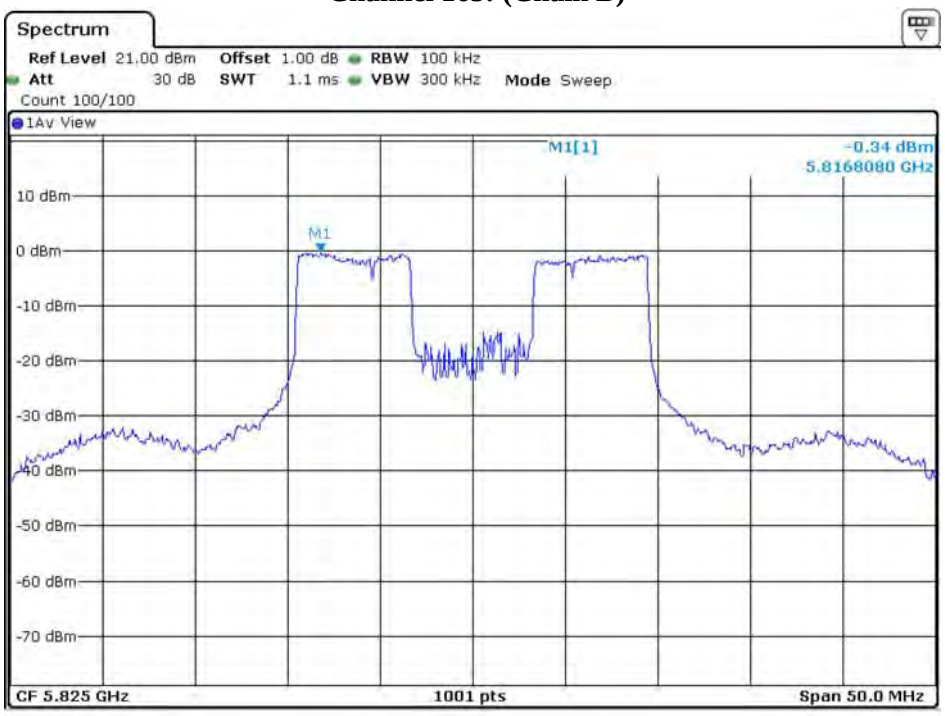
Date: 4.JUL.2020 22:32:13

Channel 165: (Chain A)



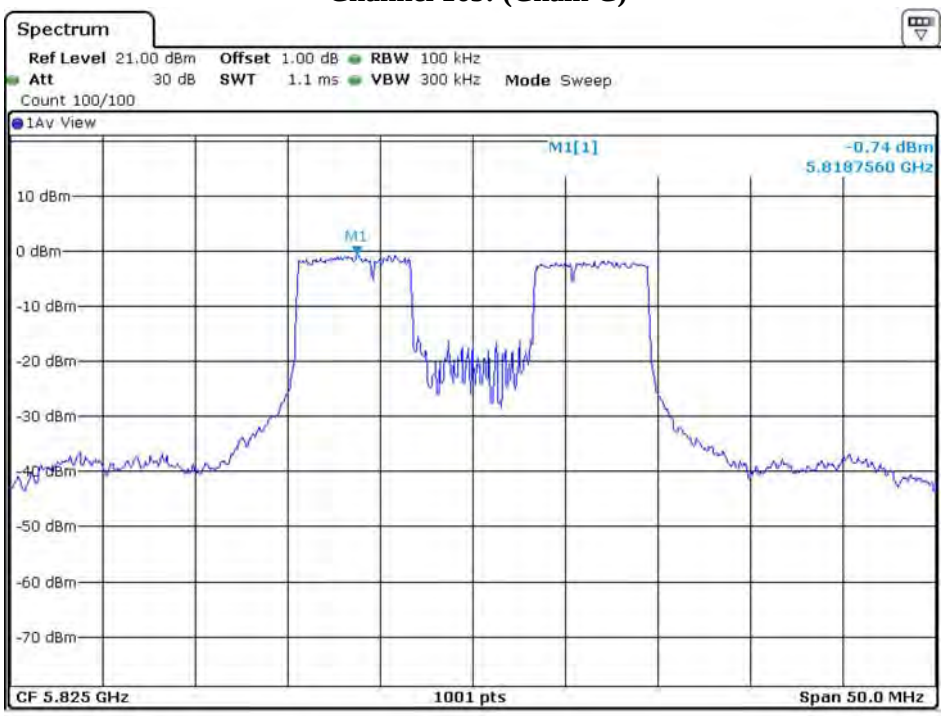
Date: 5.JUL.2020 16:37:19

Channel 165: (Chain B)



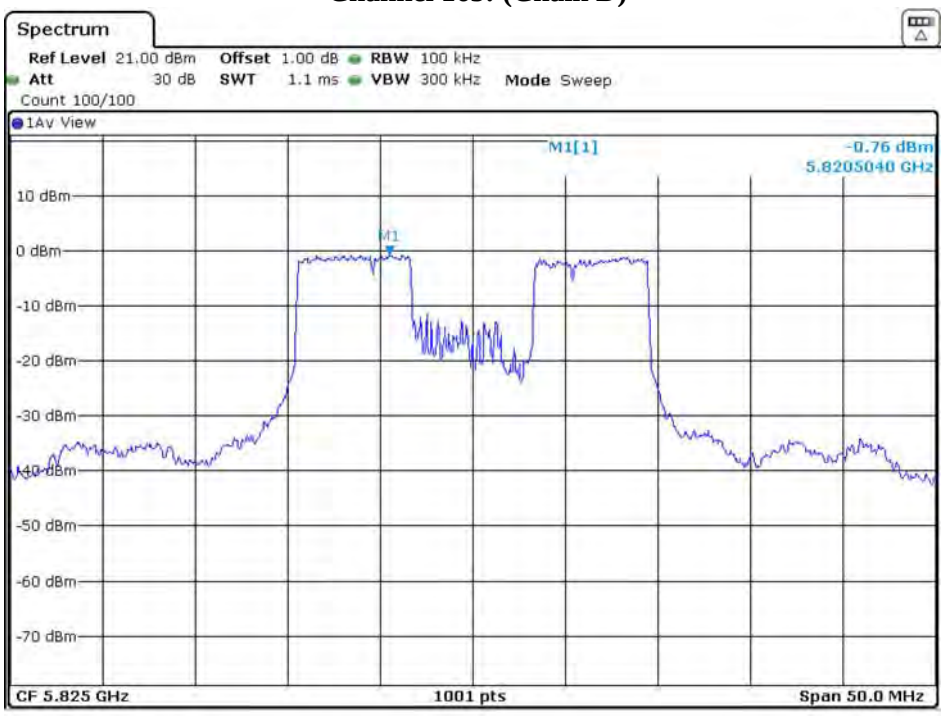
Date: 5.JUL.2020 16:42:26

Channel 165: (Chain C)



Date: 5.JUL.2020 08:43:51

Channel 165: (Chain D)



Date: 5.JUL.2020 20:42:07

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 8: Transmit (802.11ax-40MBW-CDD) (RU Config-edges mode)
Test Date : 2020/07/04

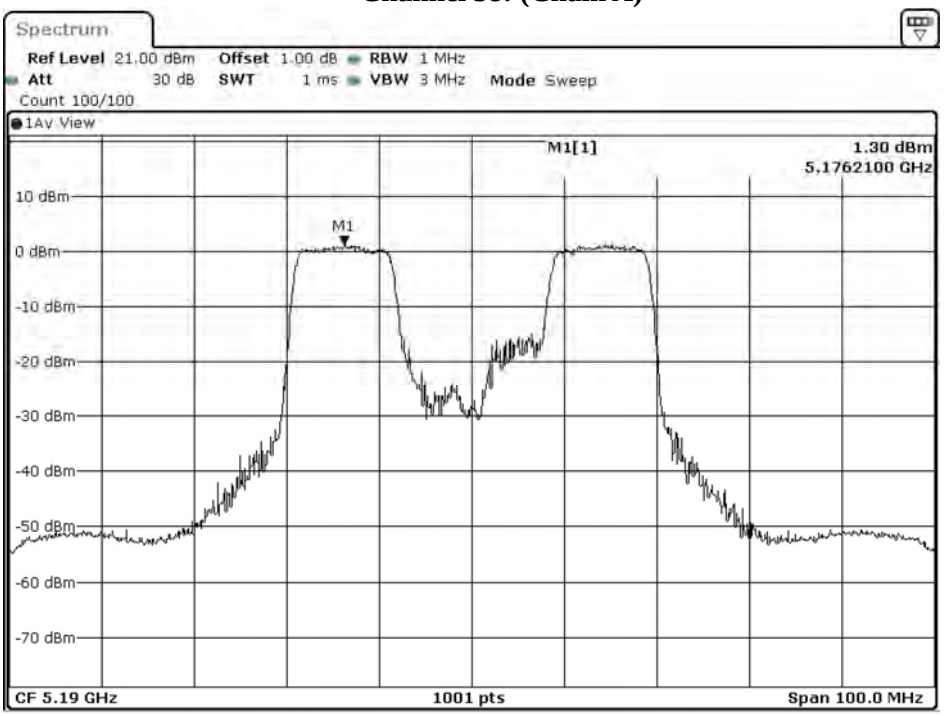
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/MHz)	Total PPSD (dBm/MHz)	Required Limit (dBm/MHz)	Result
38	5190	A	1.300	7.32	17	Pass
		B	1.430	7.45		Pass
		C	1.300	7.32		Pass
		D	1.550	7.57		Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
151	5755	A	-3.120	6.990	9.890	30	Pass
		B	-3.140	6.990	9.870		Pass
		C	-3.310	6.990	9.700		Pass
		D	-3.270	6.990	9.740		Pass
159	5795	A	-1.860	6.990	11.150	30	Pass
		B	-1.970	6.990	11.040		Pass
		C	-1.880	6.990	11.130		Pass
		D	-1.830	6.990	11.180		Pass

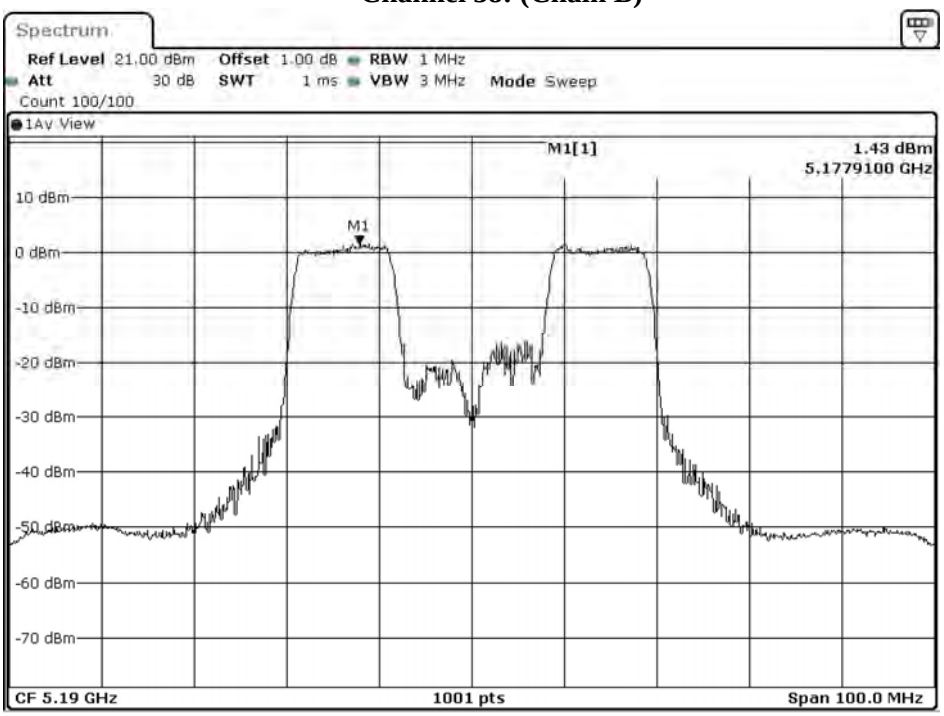
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 38: (Chain A)



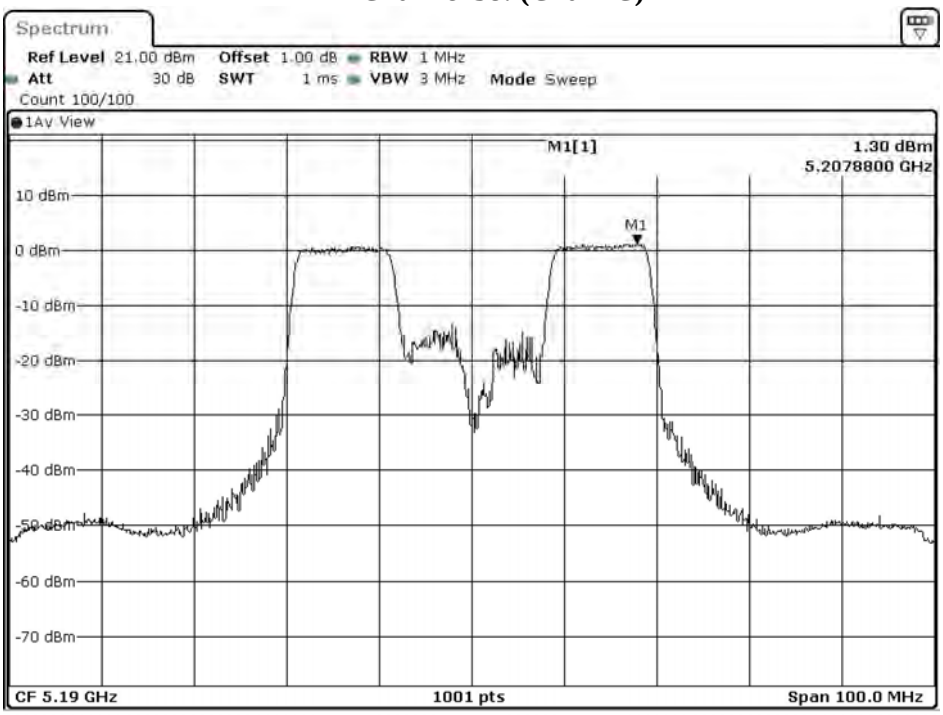
Date: 4.JUL.2020 18:51:46

Channel 38: (Chain B)



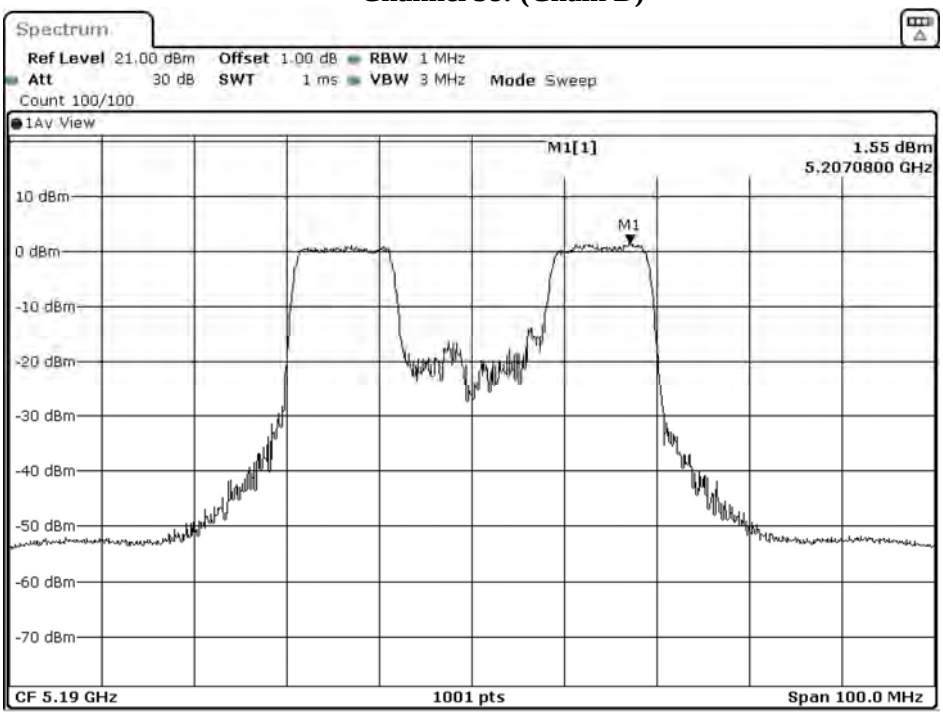
Date: 4.JUL.2020 18:54:50

Channel 38: (Chain C)



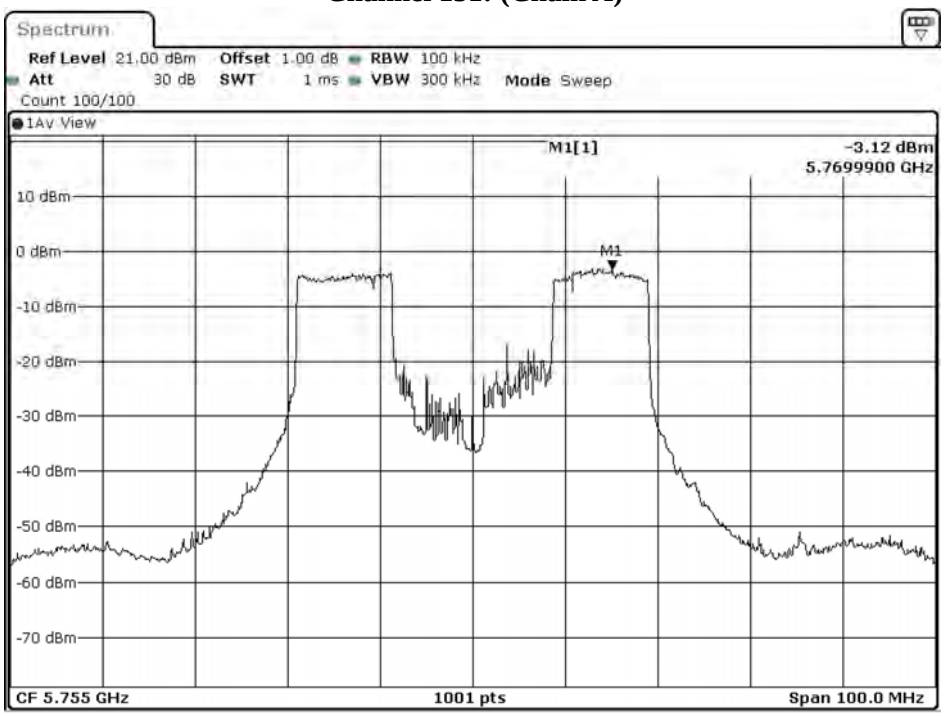
Date: 4.JUL.2020 10:57:15

Channel 38: (Chain D)



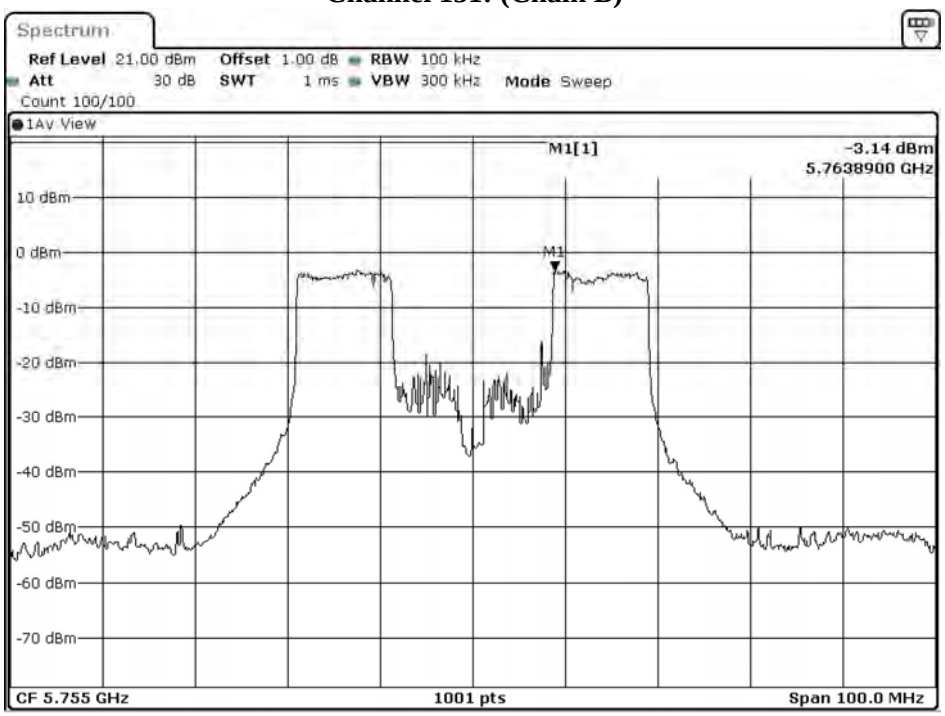
Date: 4.JUL.2020 22:55:07

Channel 151: (Chain A)



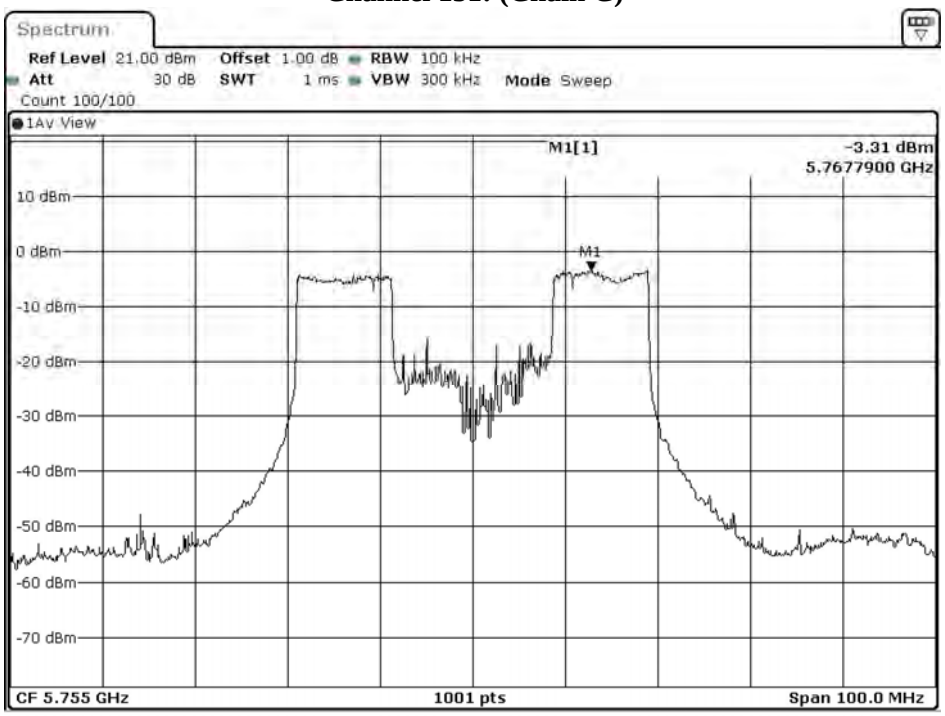
Date: 4.JUL.2020 18:55:40

Channel 151: (Chain B)



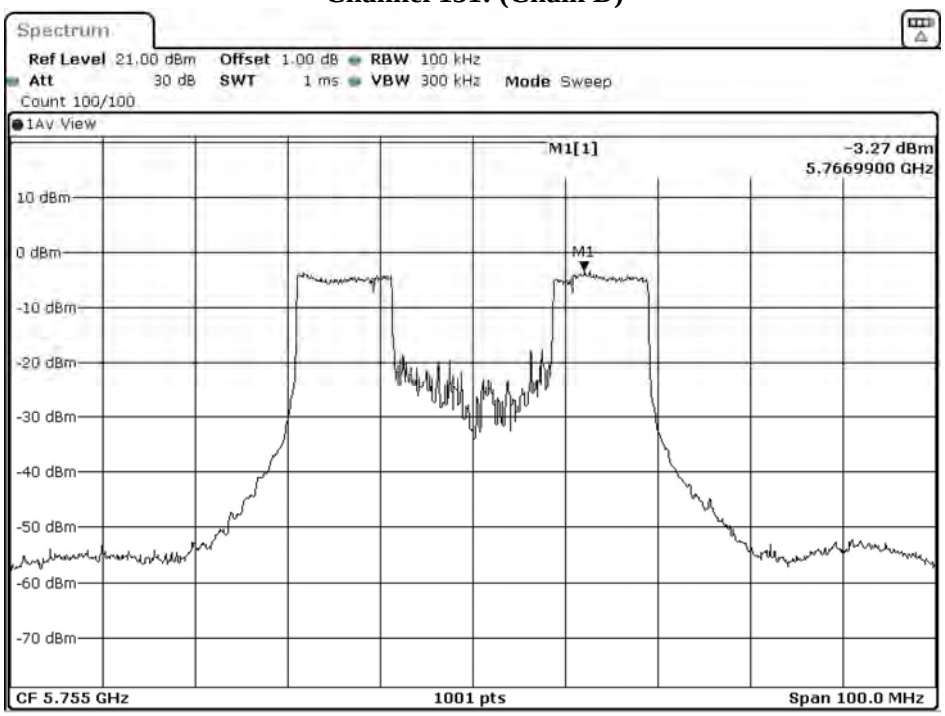
Date: 4.JUL.2020 18:58:44

Channel 151: (Chain C)



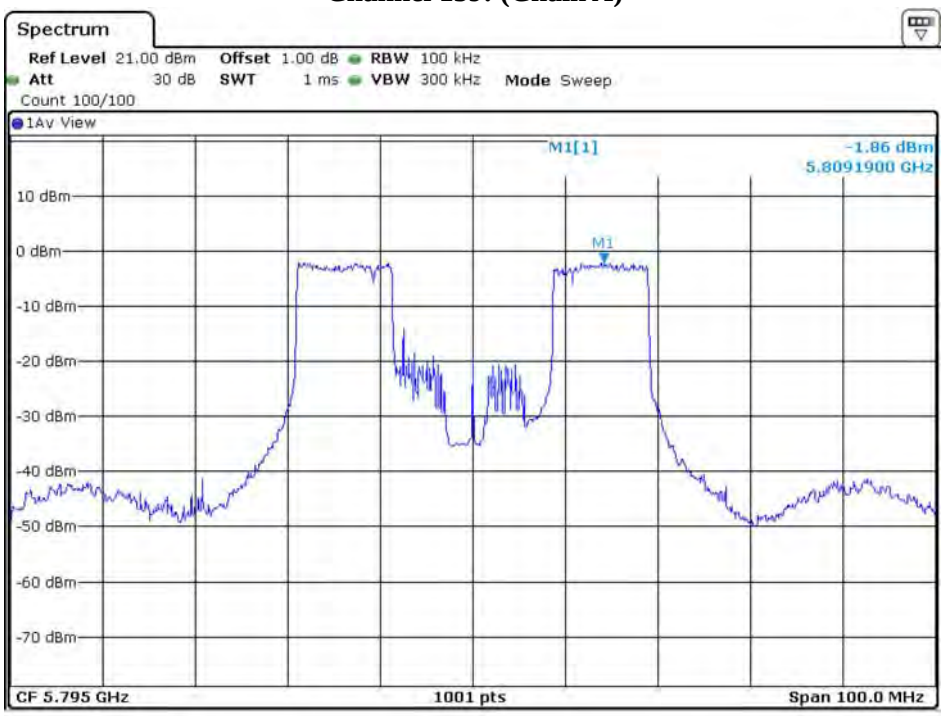
Date: 4.JUL.2020 11:01:08

Channel 151: (Chain D)



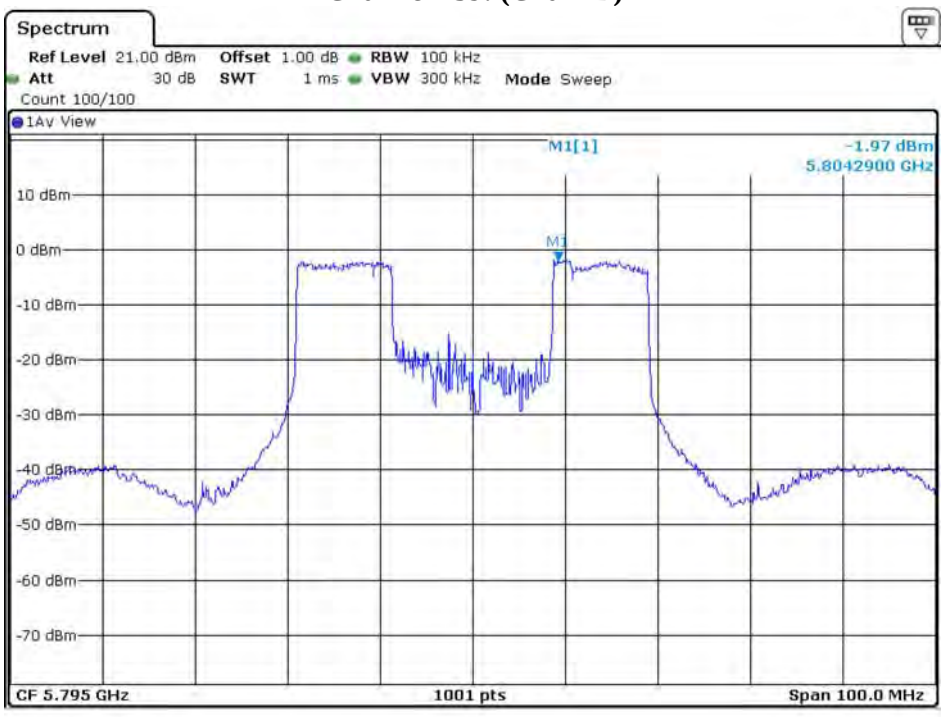
Date: 4.JUL.2020 22:59:01

Channel 159: (Chain A)



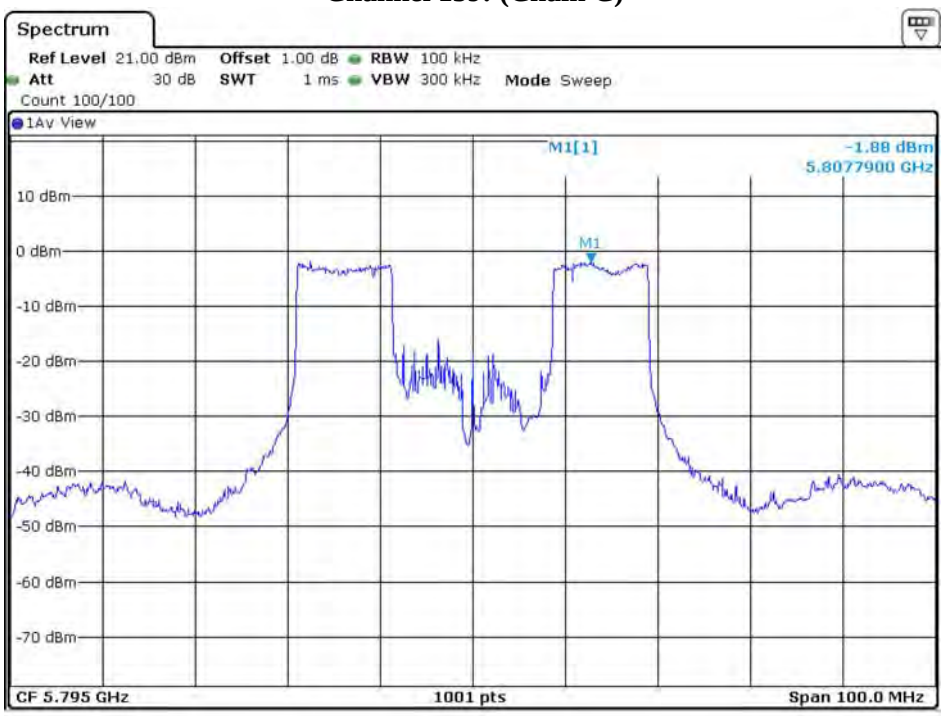
Date: 5.JUL.2020 17:02:00

Channel 159: (Chain B)



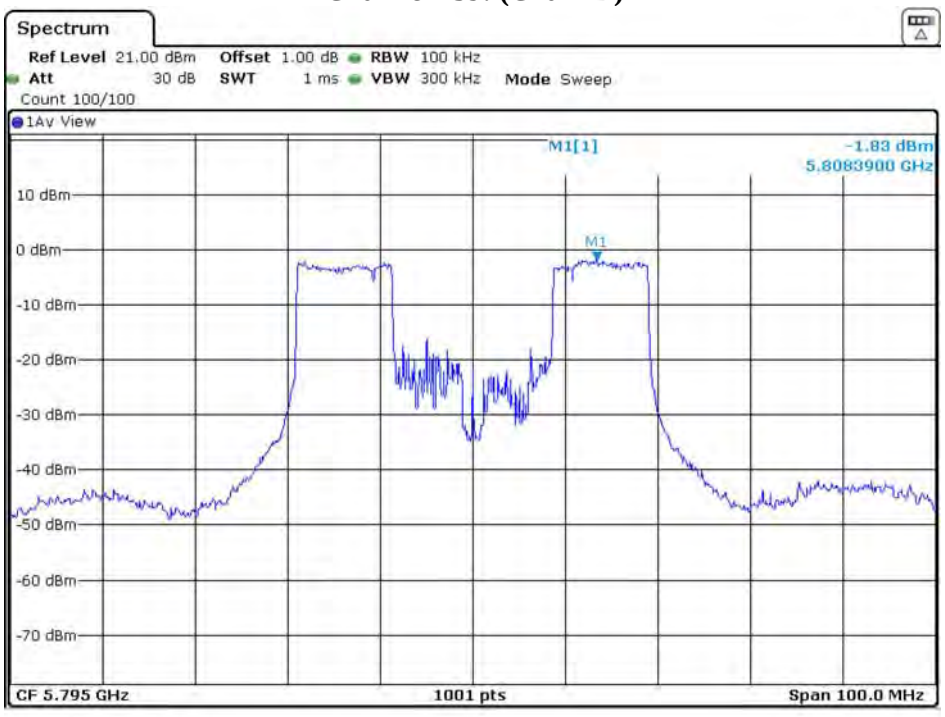
Date: 5.JUL.2020 17:05:26

Channel 159: (Chain C)



Date: 5.JUL.2020 09:08:01

Channel 159: (Chain D)



Date: 5.JUL.2020 21:06:07

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 9: Transmit (802.11ax-80MBW-CDD) (RU Config-edges mode)
Test Date : 2020/07/04

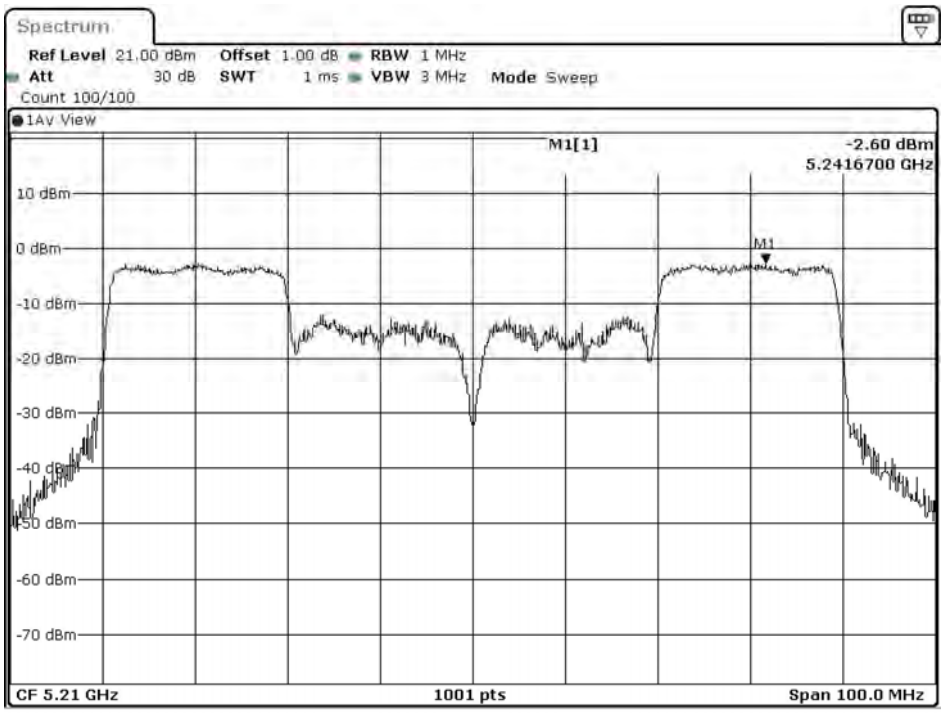
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/1MHz)	BWCF (dB)	Total PPSD (dBm/1MHz)	Required Limit (dBm1MHz)	Result
42	5210	A	-2.600	--	3.42	17	Pass
		B	-2.160	--	3.86	17	Pass
		C	-2.700	--	3.32	17	Pass
		D	-2.440	--	3.58	17	Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
155	5775	A	-10.490	6.990	2.520	30	Pass
		B	-10.650	6.990	2.360	30	Pass
		C	-10.010	6.990	3.000	30	Pass
		D	-11.010	6.990	2.000	30	Pass

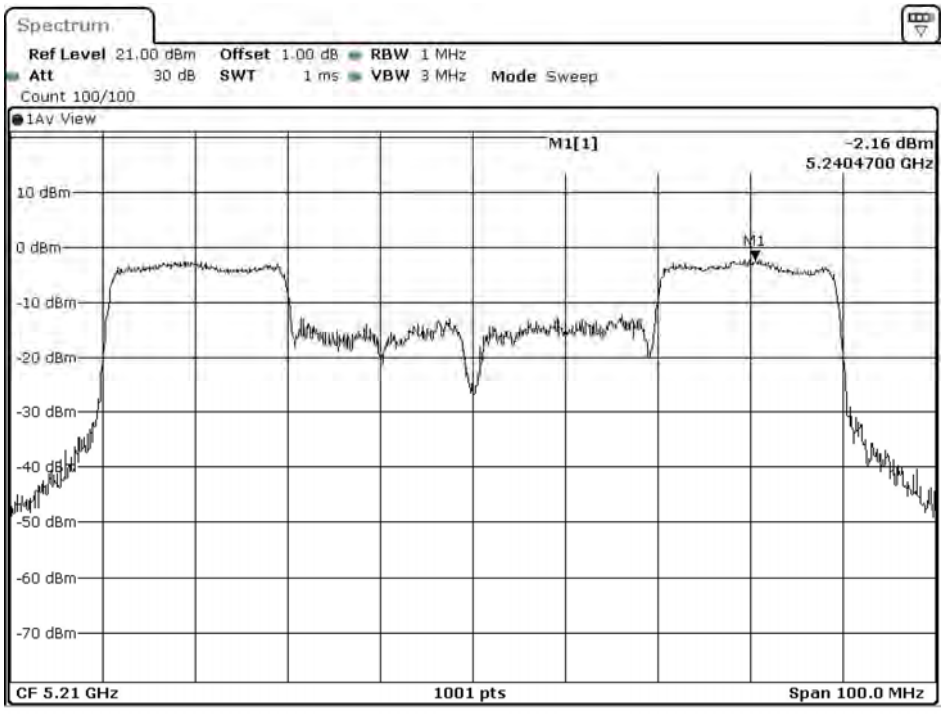
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 42: (Chain A)



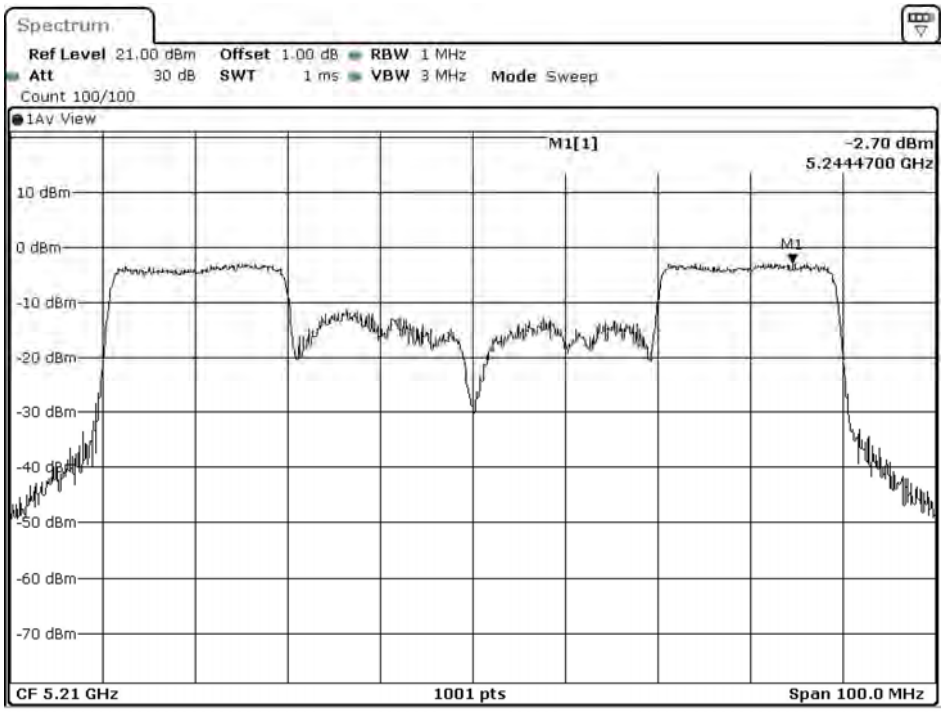
Date: 4.JUL.2020 19:18:37

Channel 42: (Chain B)



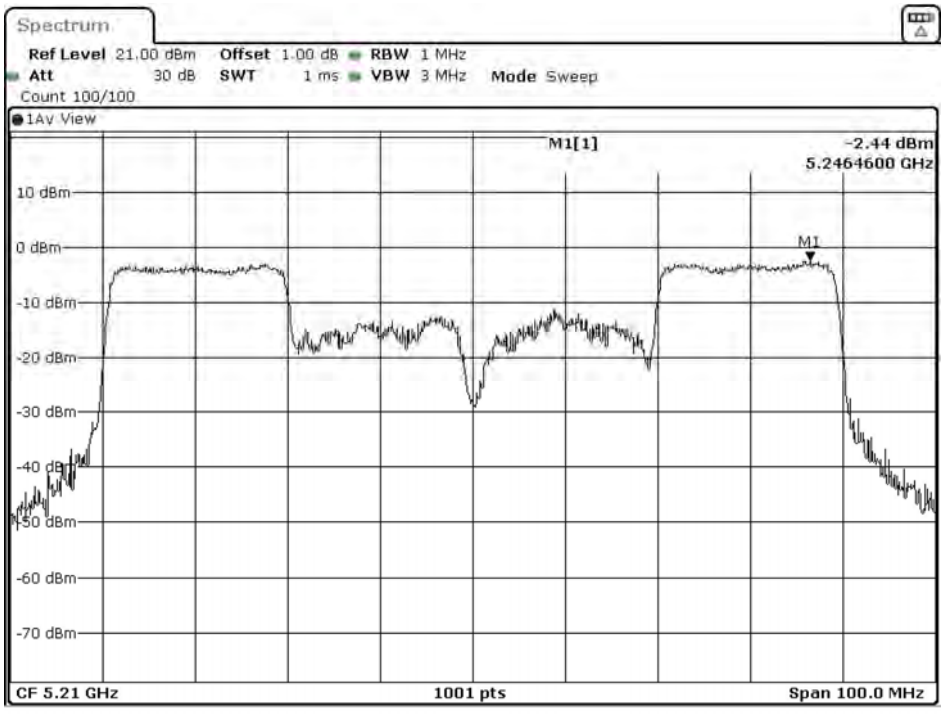
Date: 4.JUL.2020 19:21:40

Channel 42: (Chain C)



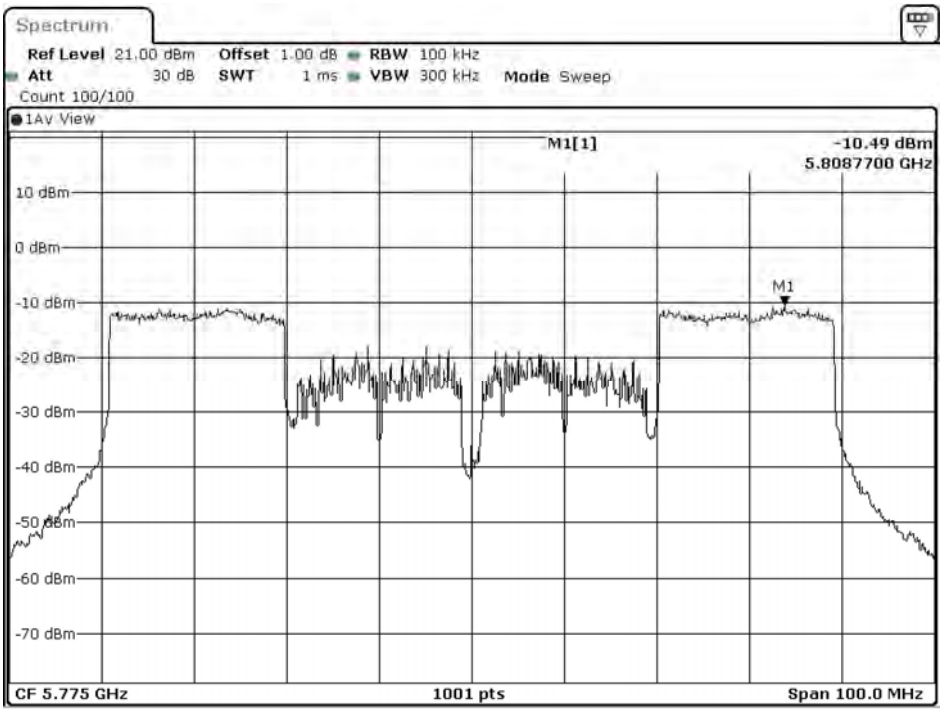
Date: 4.JUL.2020 11:24:05

Channel 42: (Chain D)



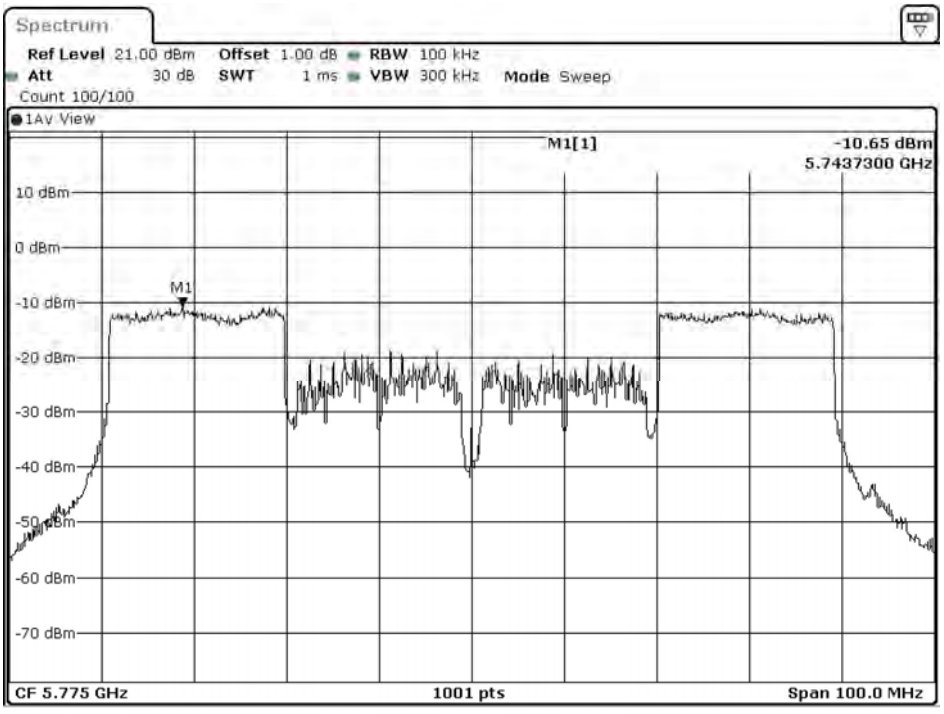
Date: 4.JUL.2020 23:21:58

Channel 155: (Chain A)



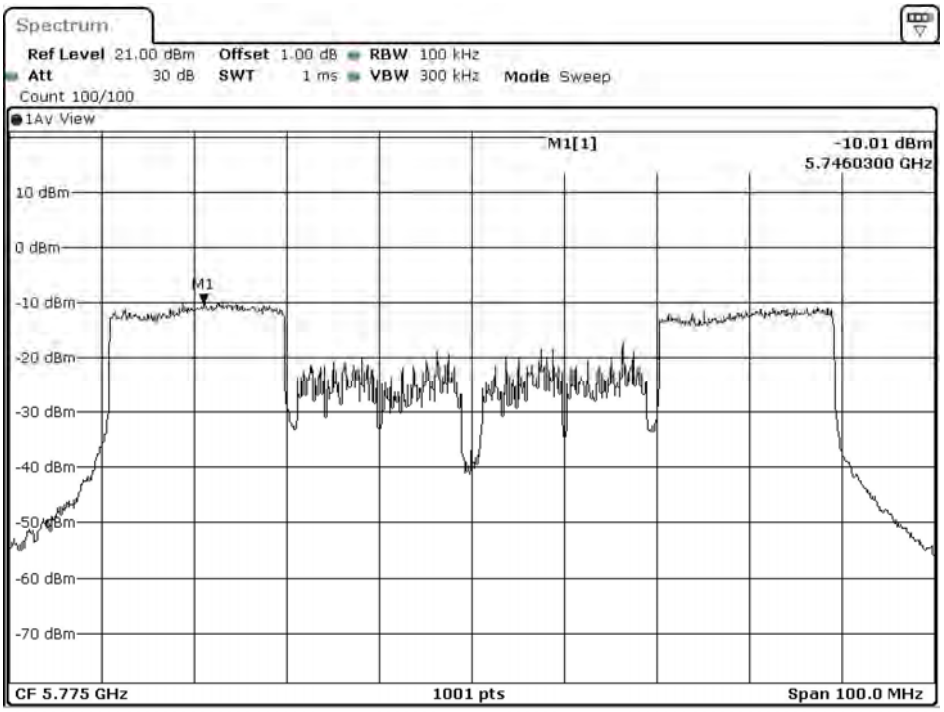
Date: 4.JUL.2020 19:21:50

Channel 155: (Chain B)



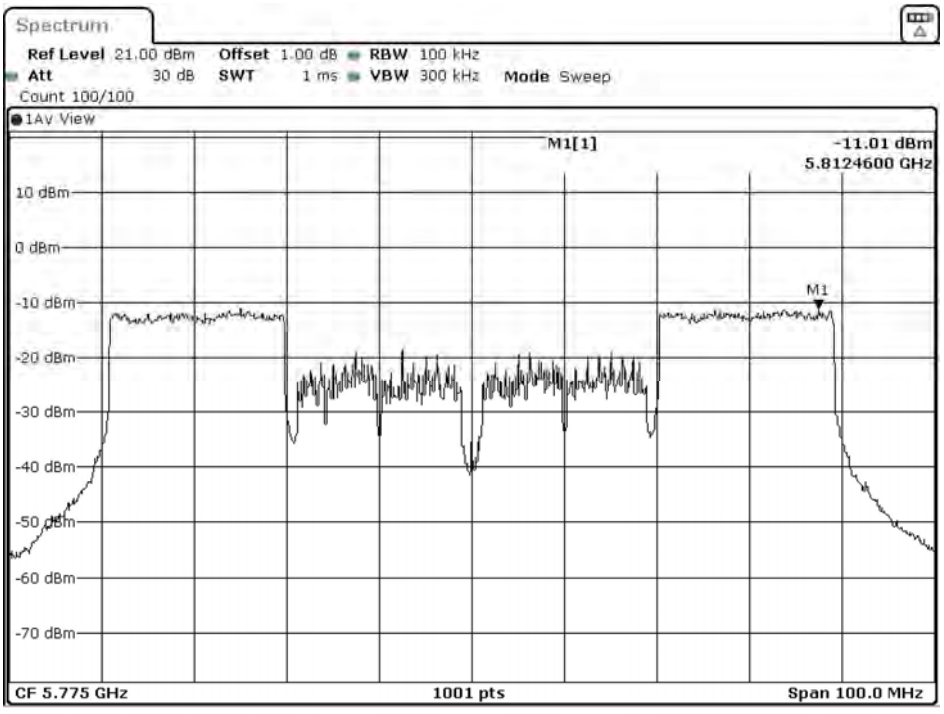
Date: 4.JUL.2020 19:24:54

Channel 155: (Chain C)



Date: 4.JUL.2020 11:27:19

Channel 155: (Chain D)



Date: 4.JUL.2020 23:25:11

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 15: Transmit (802.11ax-20MBW-Beamforming)
Test Date : 2020/07/04

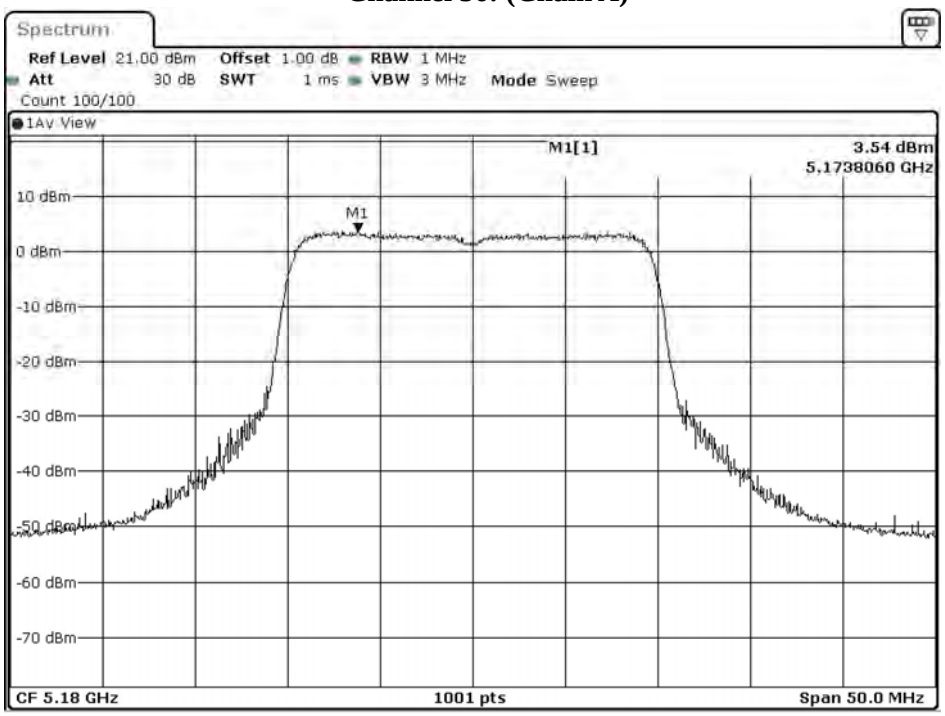
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/MHz)	Total PPSD (dBm/MHz)	Required Limit (dBm/MHz)	Result
36	5180	A	3.540	9.56	17	Pass
		B	3.040	9.06		Pass
		C	3.810	9.83		Pass
		D	3.380	9.4		Pass
44	5220	A	3.900	9.92	17	Pass
		B	3.630	9.65		Pass
		C	4.400	10.42		Pass
		D	3.690	9.71		Pass
48	5240	A	3.980	10	17	Pass
		B	3.920	9.94		Pass
		C	4.260	10.28		Pass
		D	4.160	10.18		Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
149	5745	A	-4.320	6.990	8.690	30	Pass
		B	-4.570	6.990	8.440		Pass
		C	-4.610	6.990	8.400		Pass
		D	-5.140	6.990	7.870		Pass
157	5785	A	-3.730	6.990	9.280	30	Pass
		B	-4.950	6.990	8.060		Pass
		C	-4.470	6.990	8.540		Pass
		D	-4.020	6.990	8.990		Pass
165	5825	A	-6.320	6.990	6.690	30	Pass
		B	-5.850	6.990	7.160		Pass
		C	-6.650	6.990	6.360		Pass
		D	-6.040	6.990	6.970		Pass

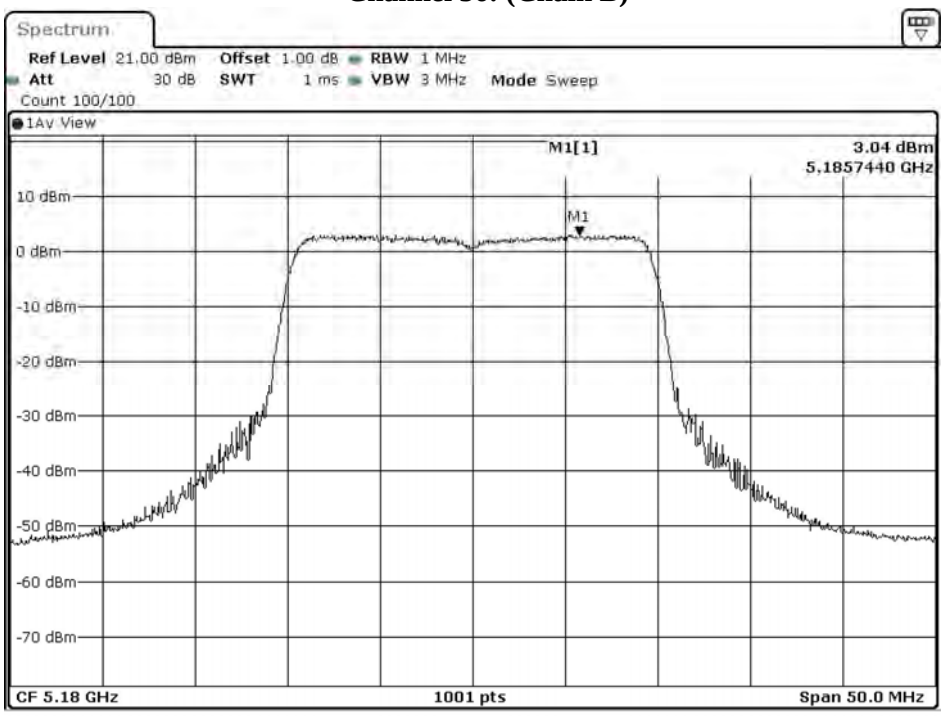
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 36: (Chain A)



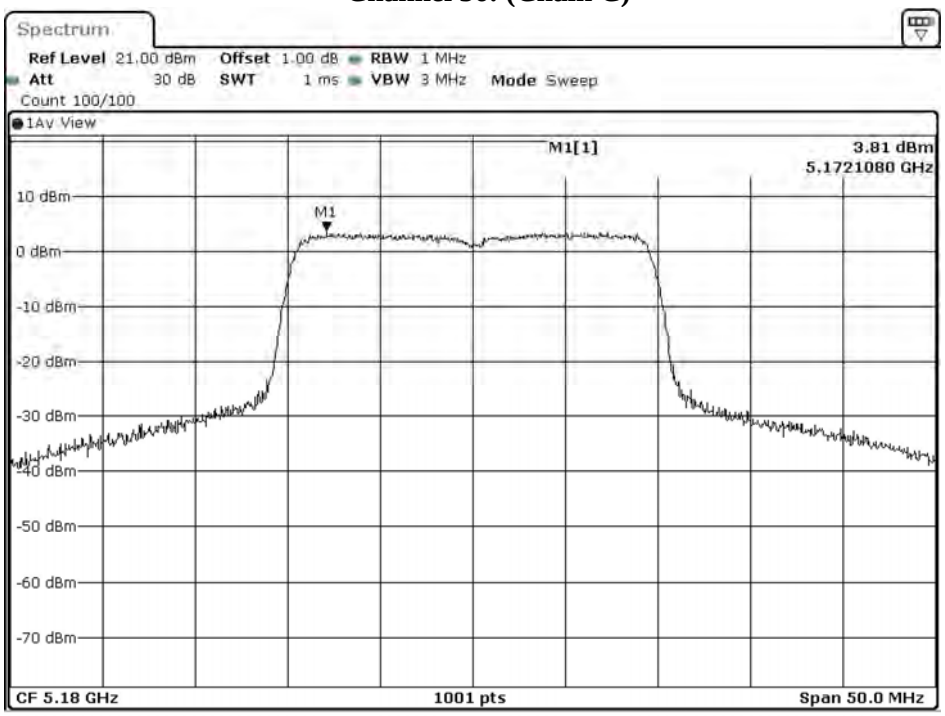
Date: 4.JUL.2020 20:43:40

Channel 36: (Chain B)



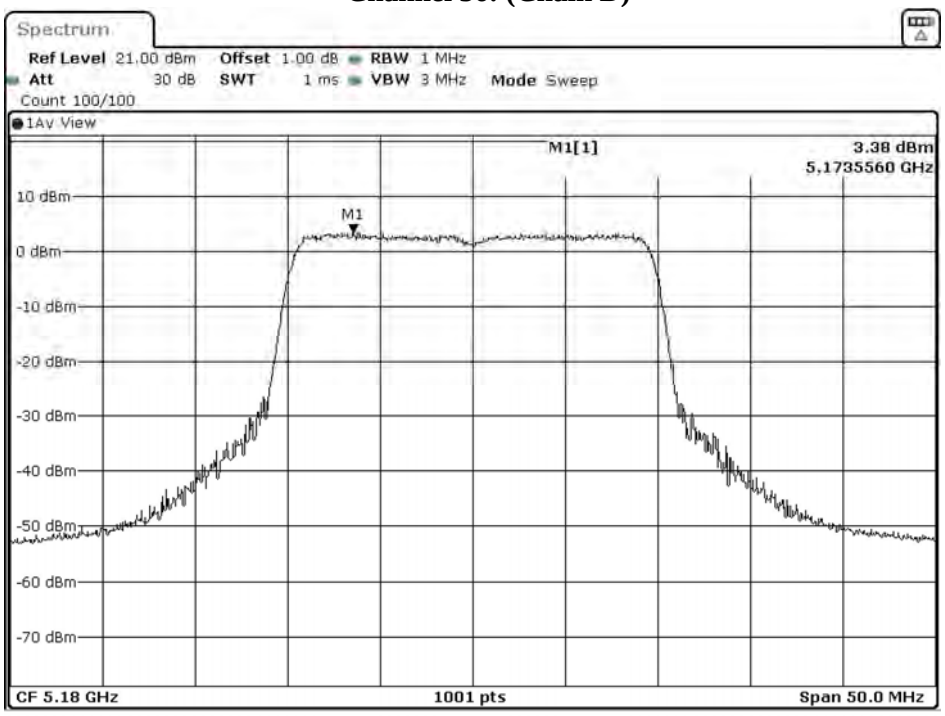
Date: 4.JUL.2020 20:46:44

Channel 36: (Chain C)



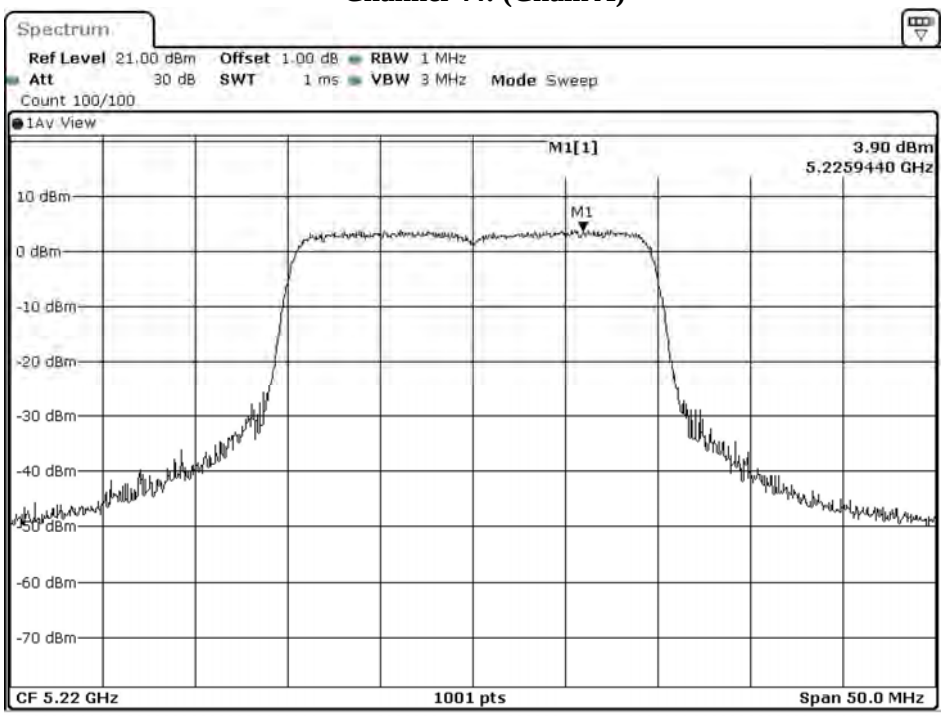
Date: 4.JUL.2020 12:49:07

Channel 36: (Chain D)



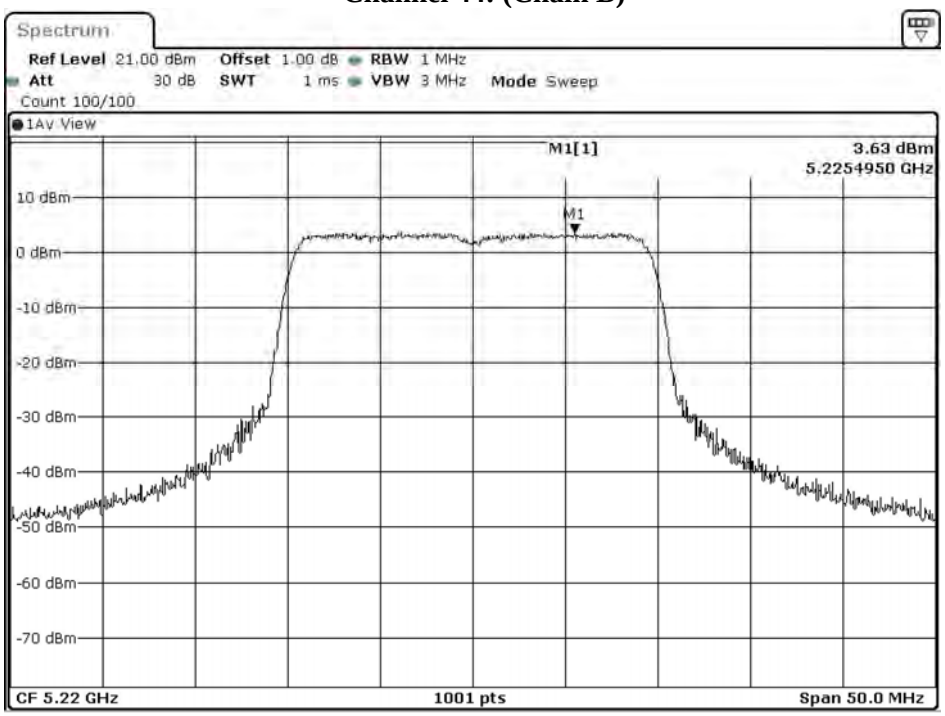
Date: 5.JUL.2020 00:46:58

Channel 44: (Chain A)



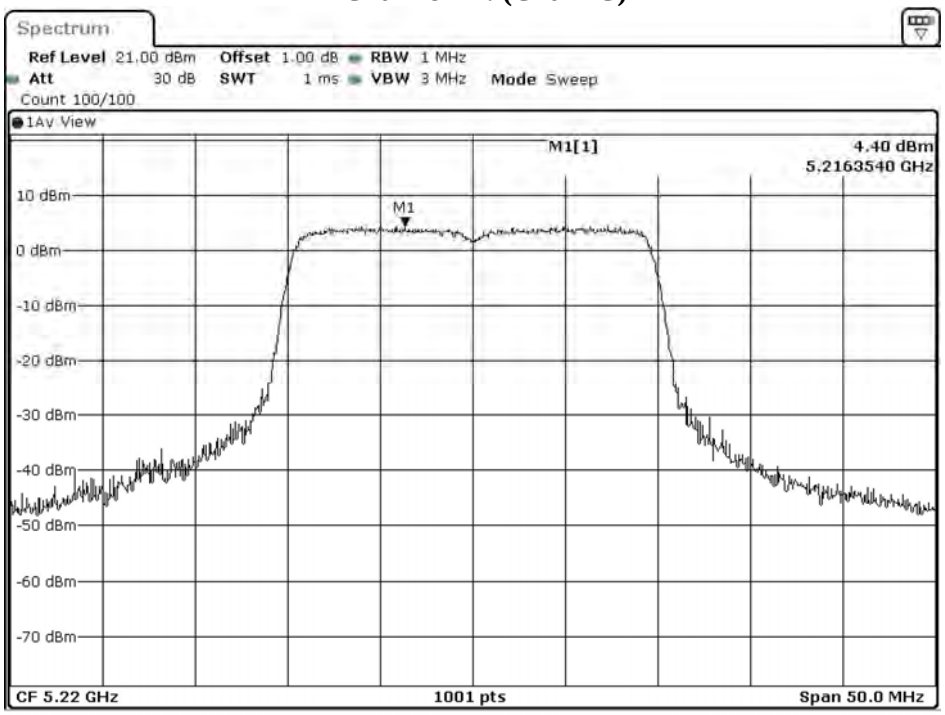
Date: 4.JUL.2020 20:47:04

Channel 44: (Chain B)



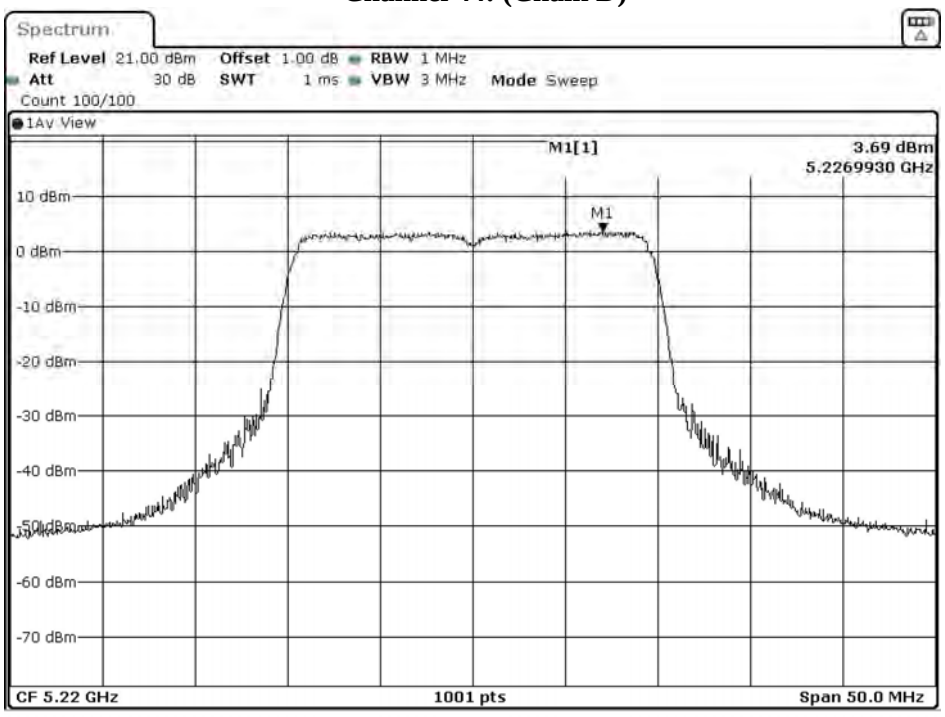
Date: 4.JUL.2020 20:50:07

Channel 44: (Chain C)



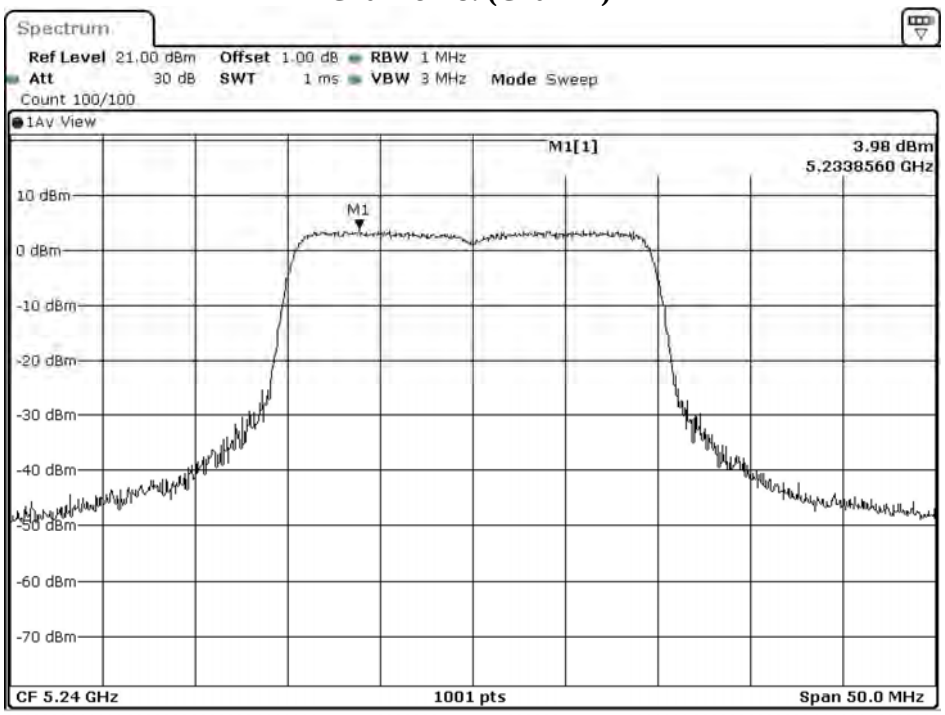
Date: 4.JUL.2020 12:52:31

Channel 44: (Chain D)



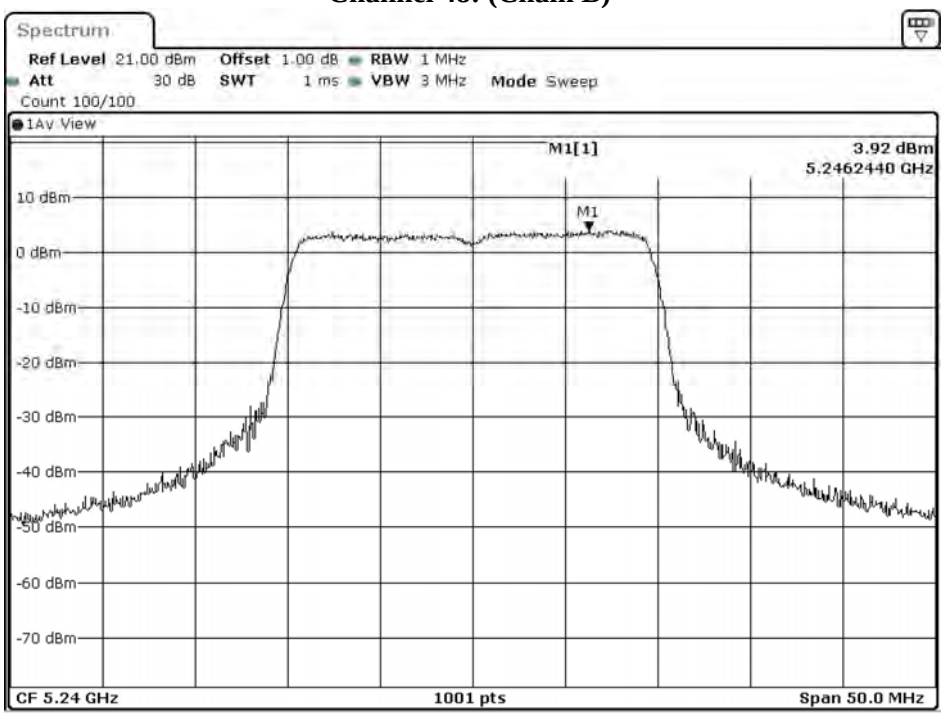
Date: 5.JUL.2020 00:50:21

Channel 48: (Chain A)



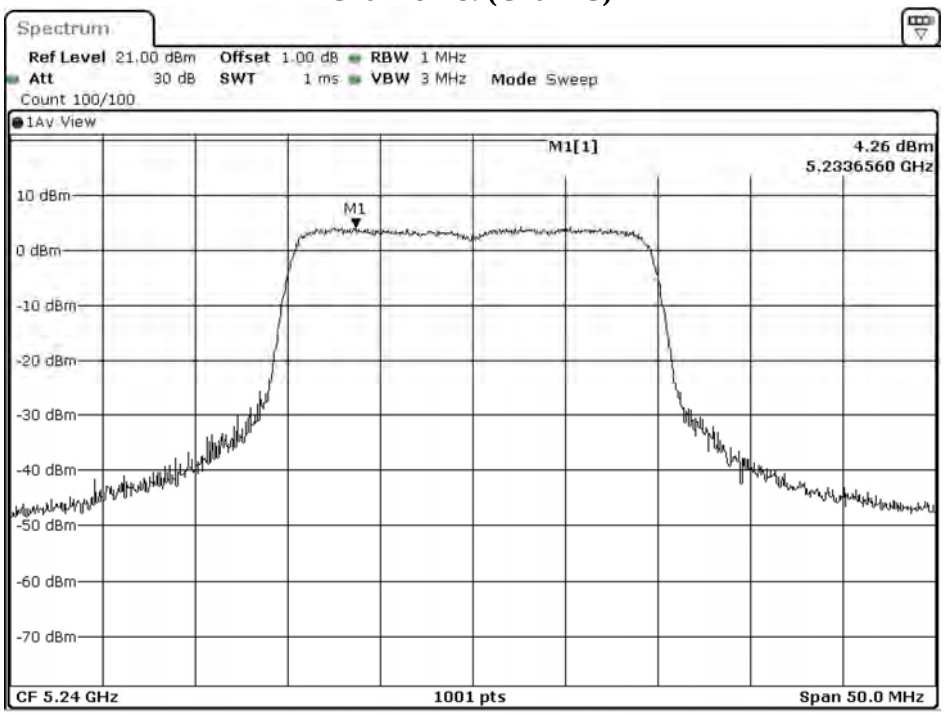
Date: 4.JUL.2020 20:50:40

Channel 48: (Chain B)



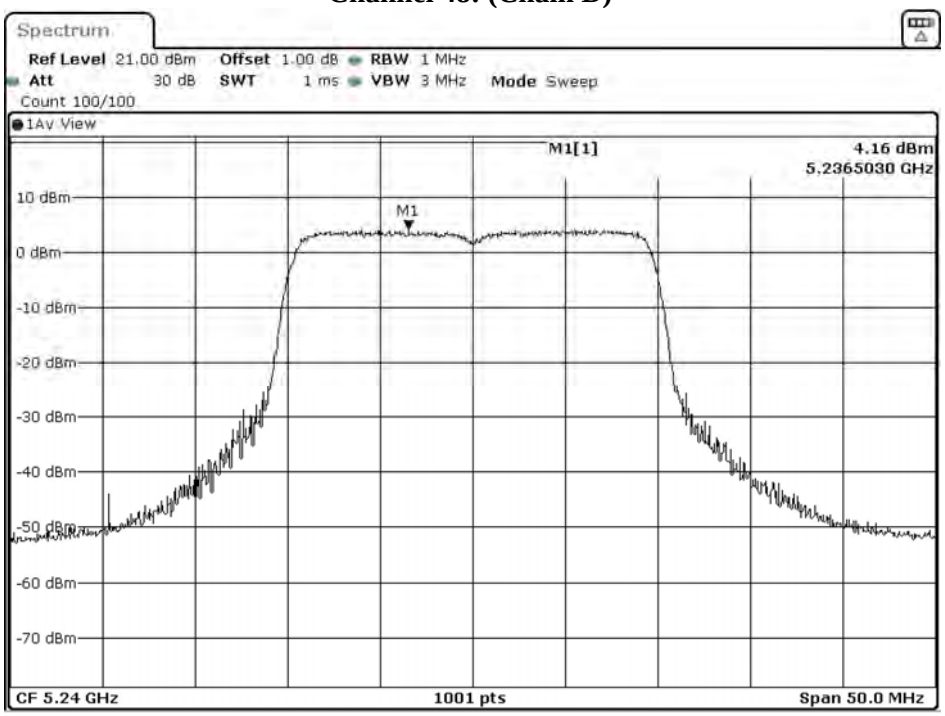
Date: 4.JUL.2020 20:53:44

Channel 48: (Chain C)



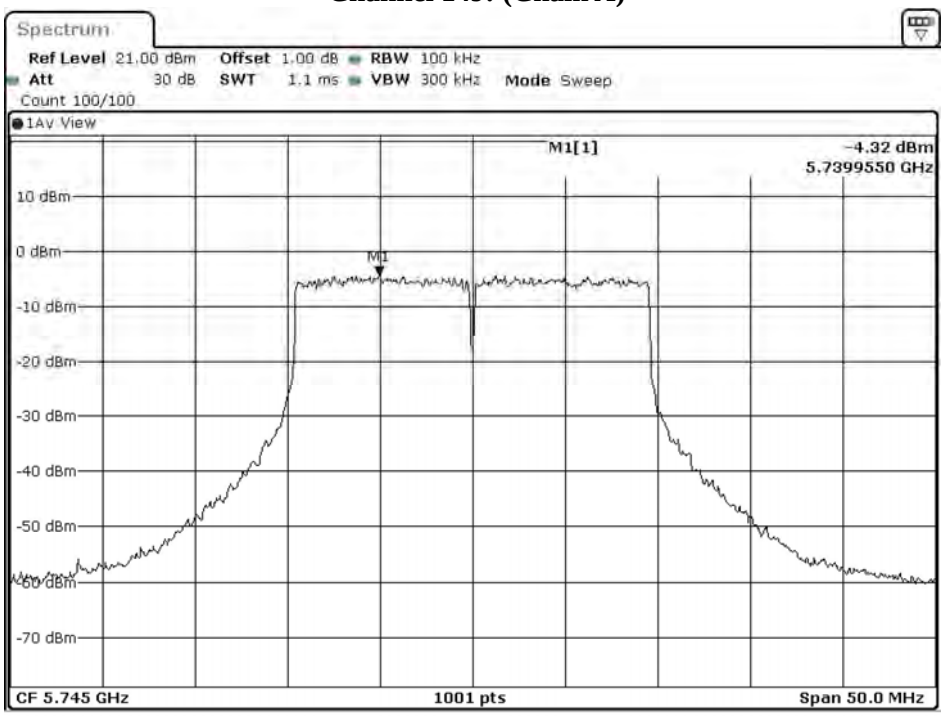
Date: 4.JUL.2020 12:56:07

Channel 48: (Chain D)



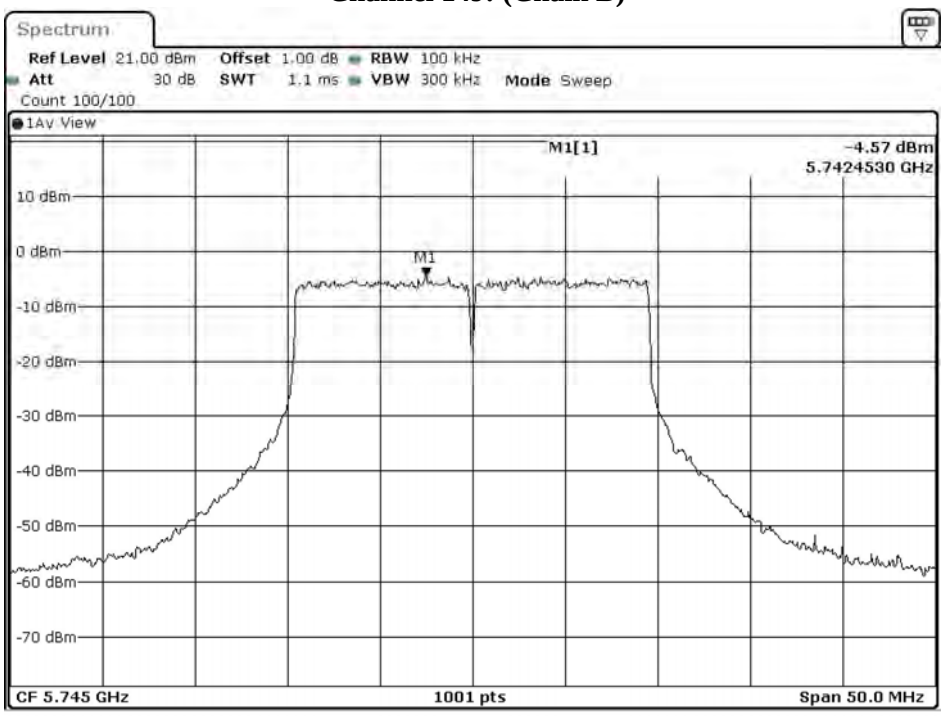
Date: 5.JUL.2020 00:53:58

Channel 149: (Chain A)



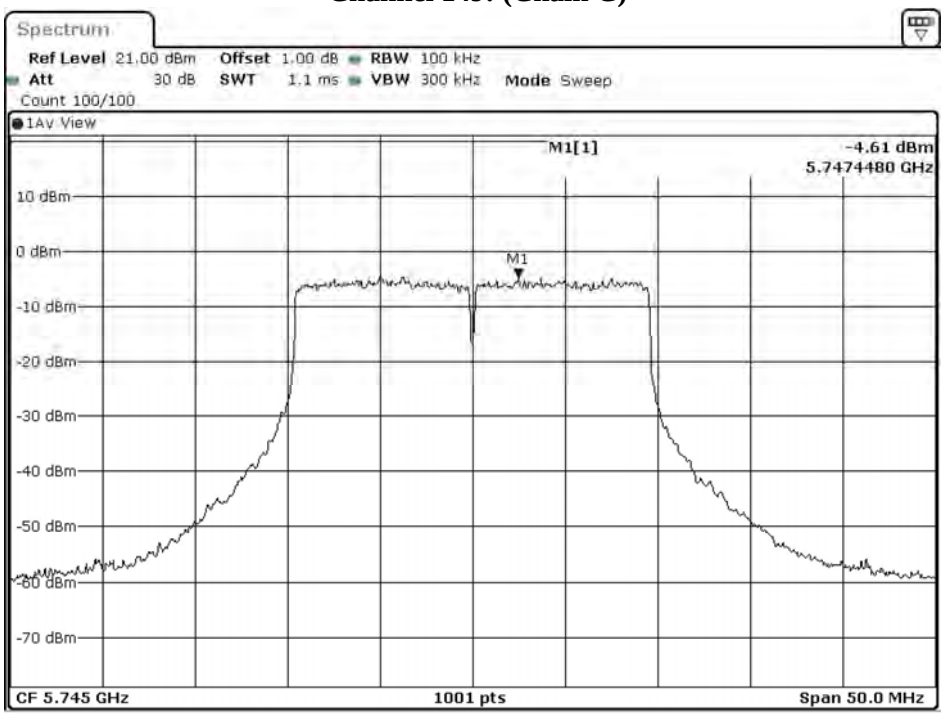
Date: 4.JUL.2020 20:58:49

Channel 149: (Chain B)



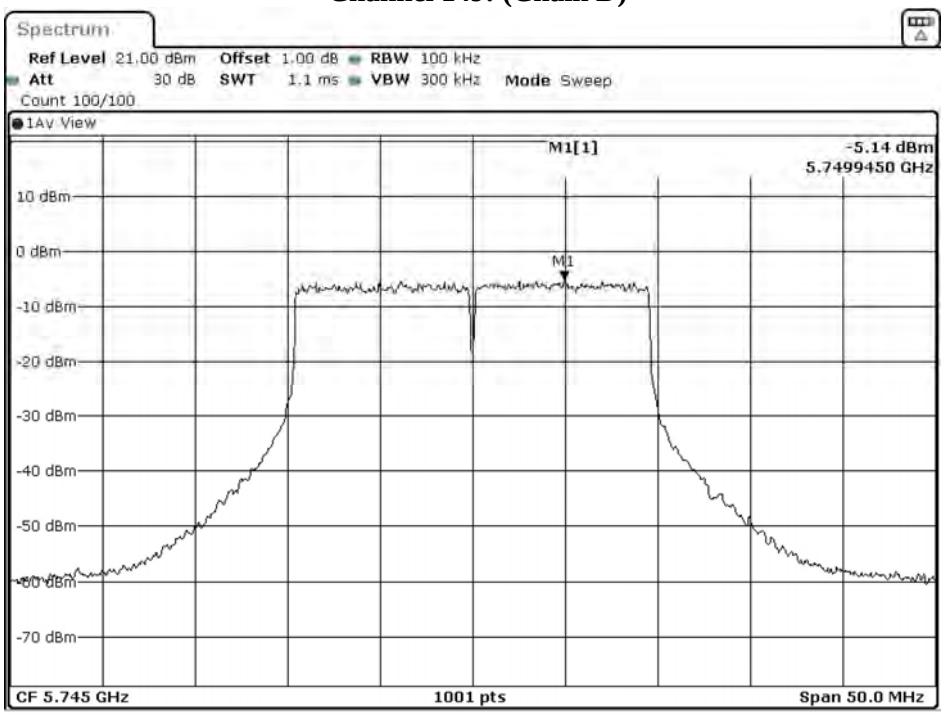
Date: 4.JUL.2020 21:01:53

Channel 149: (Chain C)



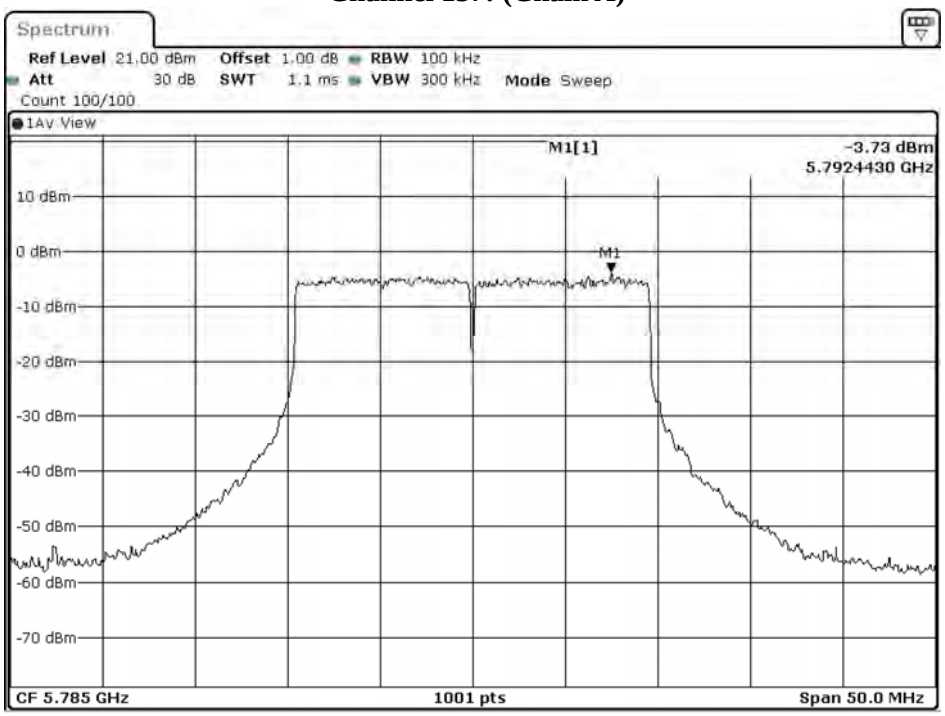
Date: 4.JUL.2020 13:04:16

Channel 149: (Chain D)



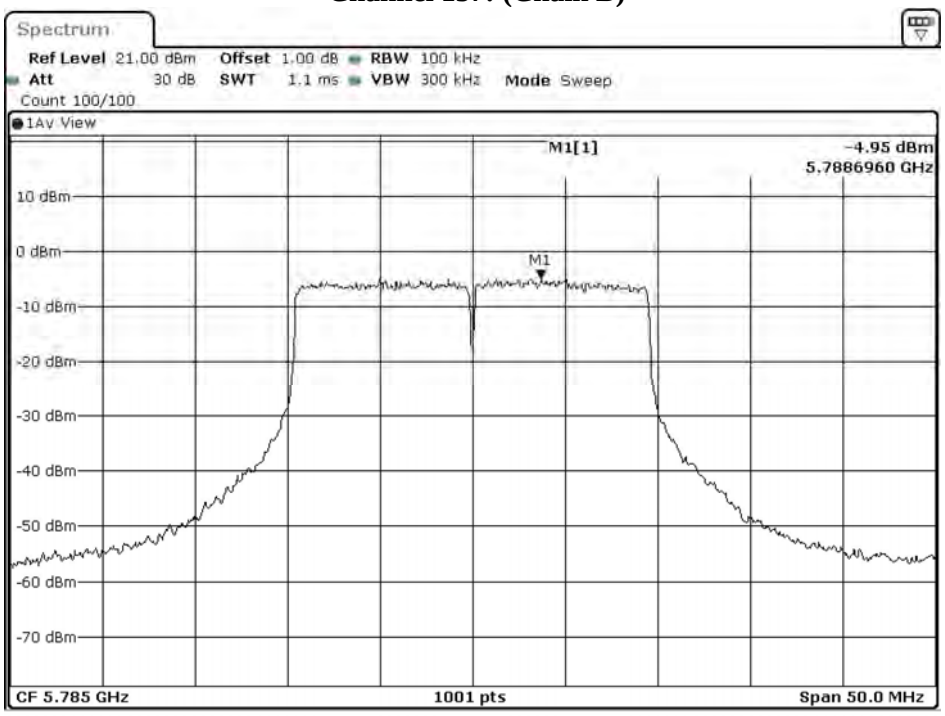
Date: 5.JUL.2020 01:02:07

Channel 157: (Chain A)



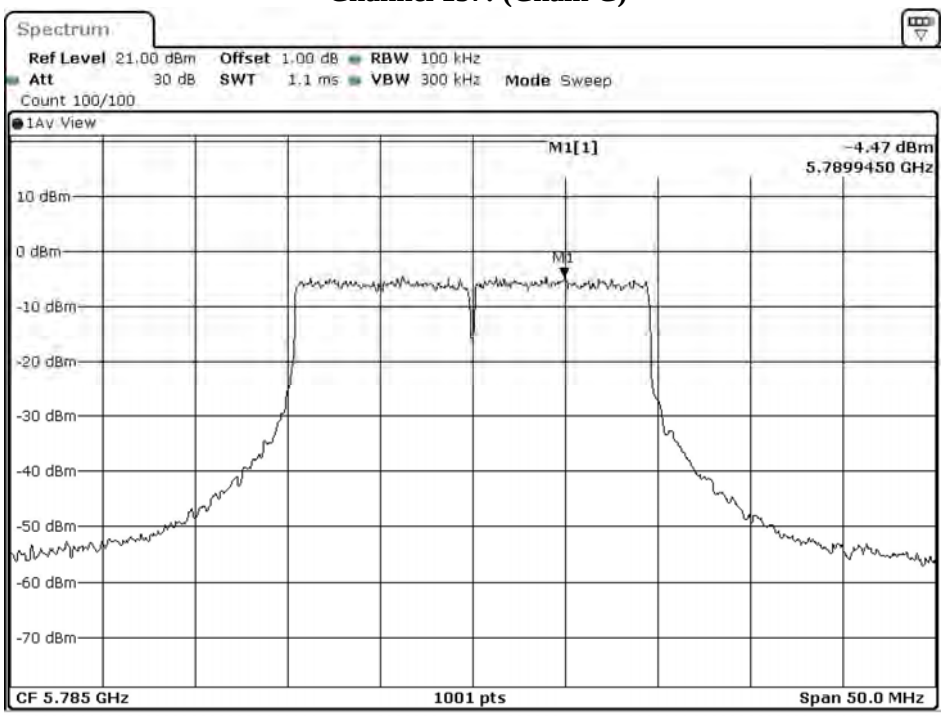
Date: 4.JUL.2020 21:03:29

Channel 157: (Chain B)



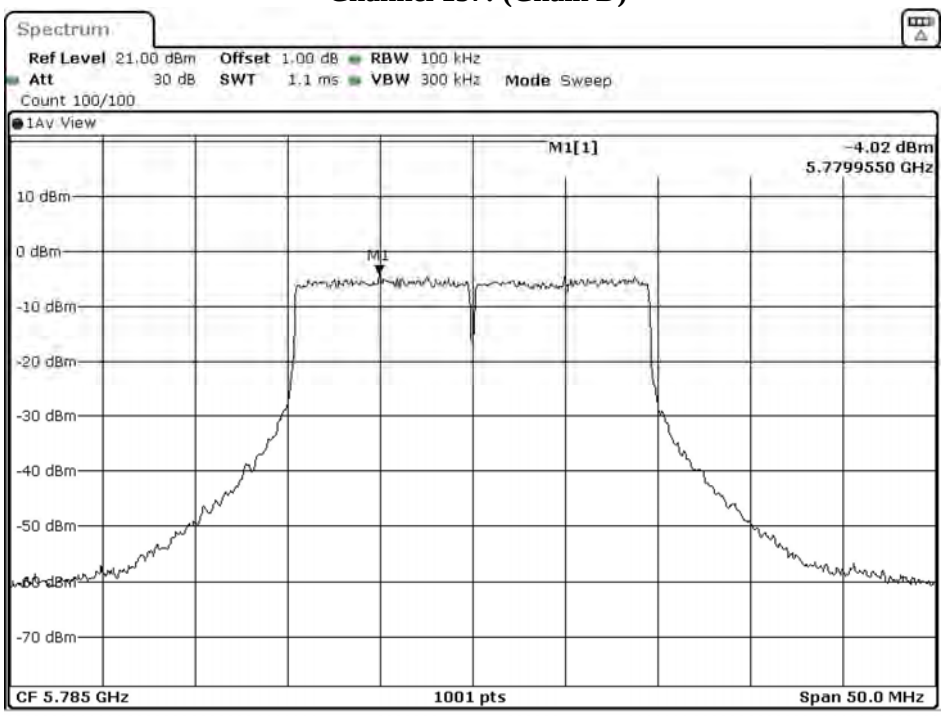
Date: 4.JUL.2020 21:06:33

Channel 157: (Chain C)



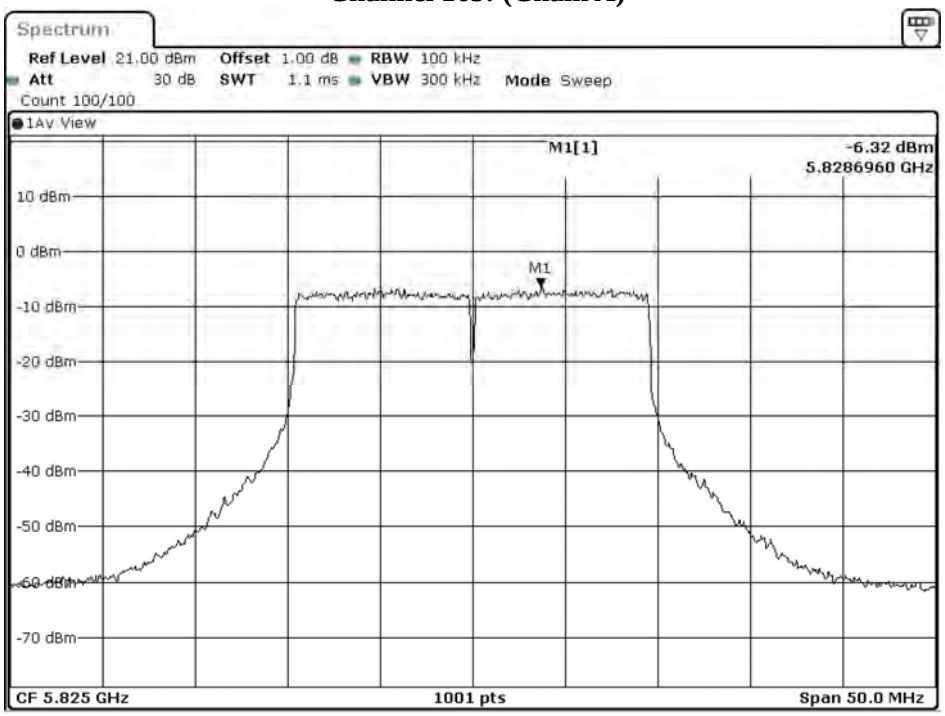
Date: 4.JUL.2020 13:08:56

Channel 157: (Chain D)



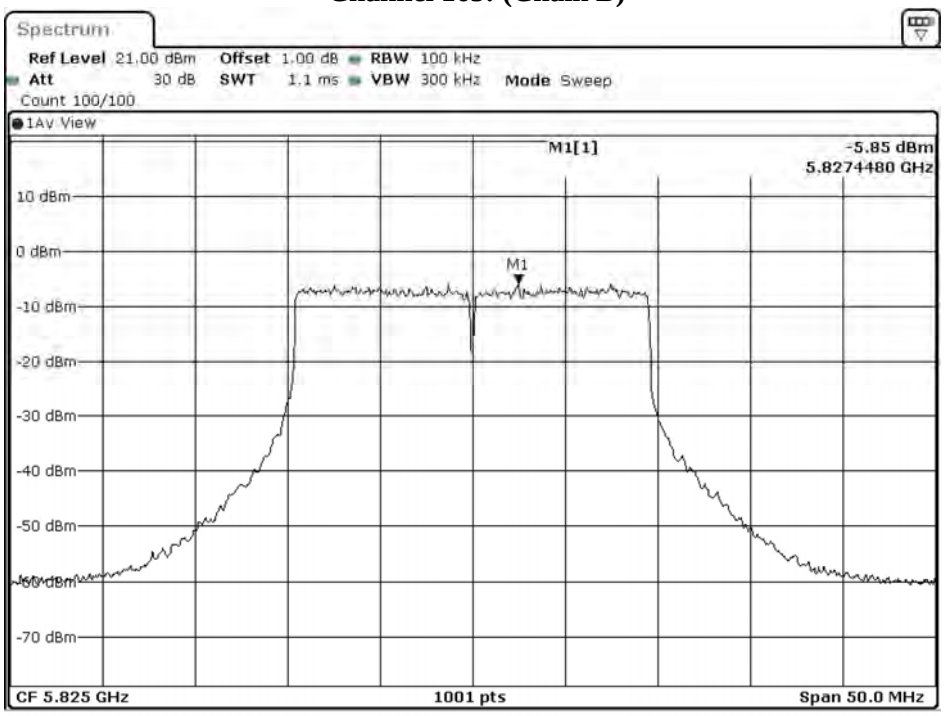
Date: 5.JUL.2020 01:06:47

Channel 165: (Chain A)



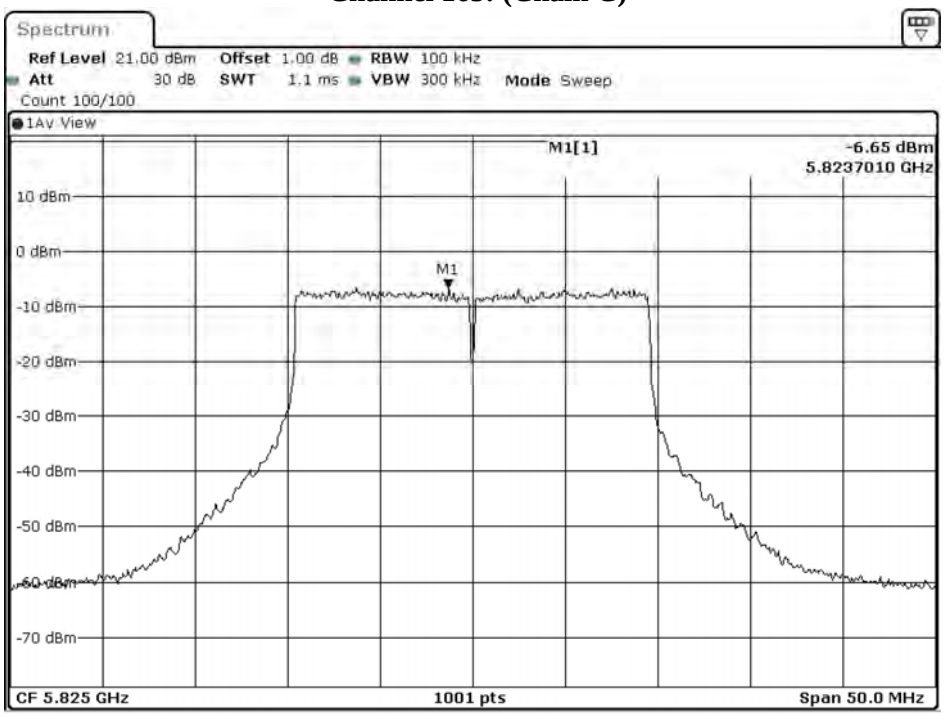
Date: 4.JUL.2020 21:06:19

Channel 165: (Chain B)



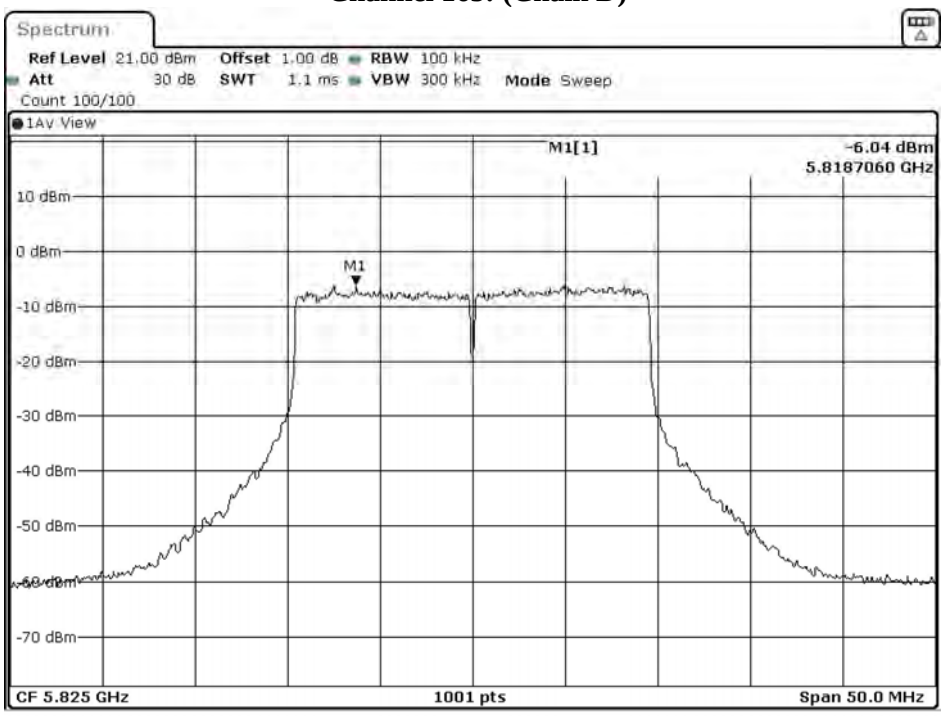
Date: 4.JUL.2020 21:09:23

Channel 165: (Chain C)



Date: 4.JUL.2020 13:11:47

Channel 165: (Chain D)



Date: 5.JUL.2020 01:09:37

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 16: Transmit (802.11ax-40MBW-Beamforming)
Test Date : 2020/07/05

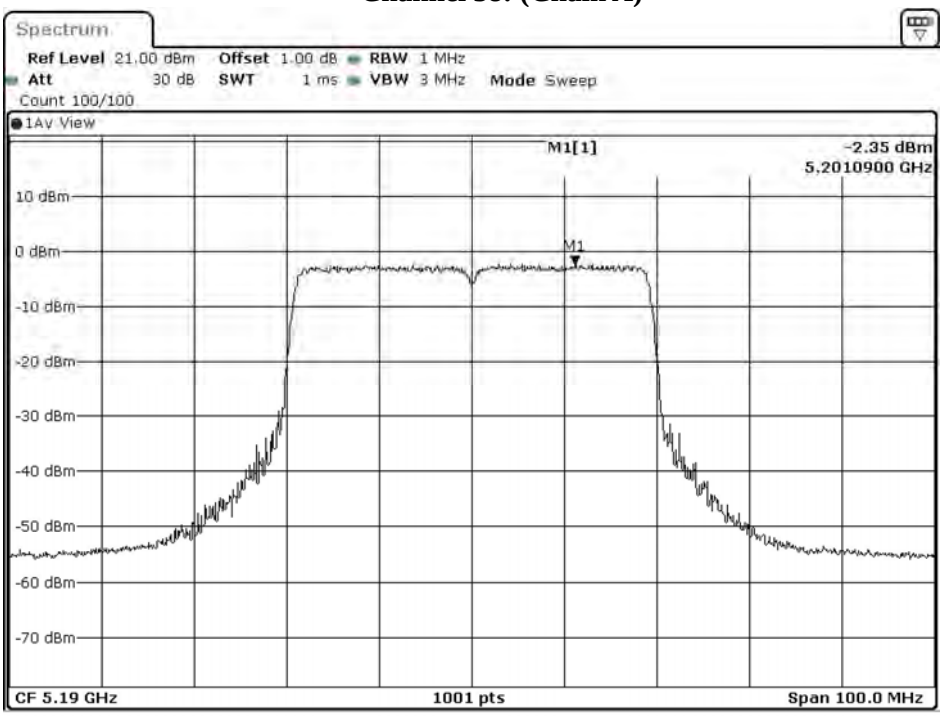
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/MHz)	Total PPSD (dBm/MHz)	Required Limit (dBm/MHz)	Result
38	5190	A	-2.350	3.67	17	Pass
		B	-2.190	3.83		Pass
		C	-1.960	4.06		Pass
		D	-2.450	3.57		Pass
46	5230	A	-0.910	5.11	17	Pass
		B	-0.930	5.09		Pass
		C	-0.420	5.6		Pass
		D	-0.750	5.27		Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
151	5755	A	-10.170	6.990	2.840	30	Pass
		B	-10.330	6.990	2.680		Pass
		C	-9.910	6.990	3.100		Pass
		D	-10.710	6.990	2.300		Pass
159	5795	A	-9.240	6.990	3.770	30	Pass
		B	-10.170	6.990	2.840		Pass
		C	-9.330	6.990	3.680		Pass
		D	-10.540	6.990	2.470		Pass

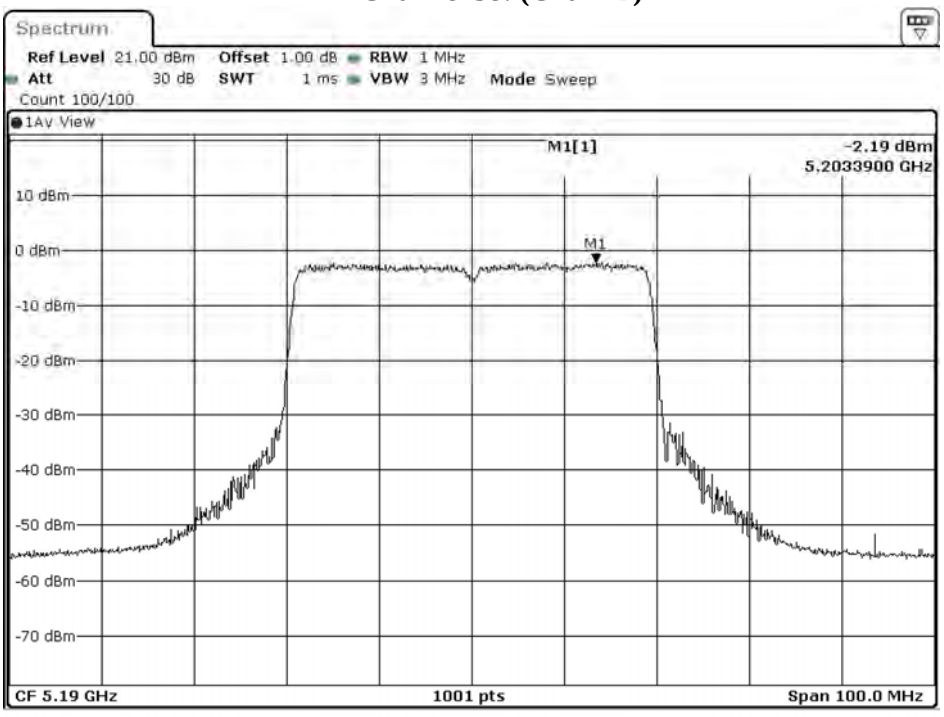
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 38: (Chain A)



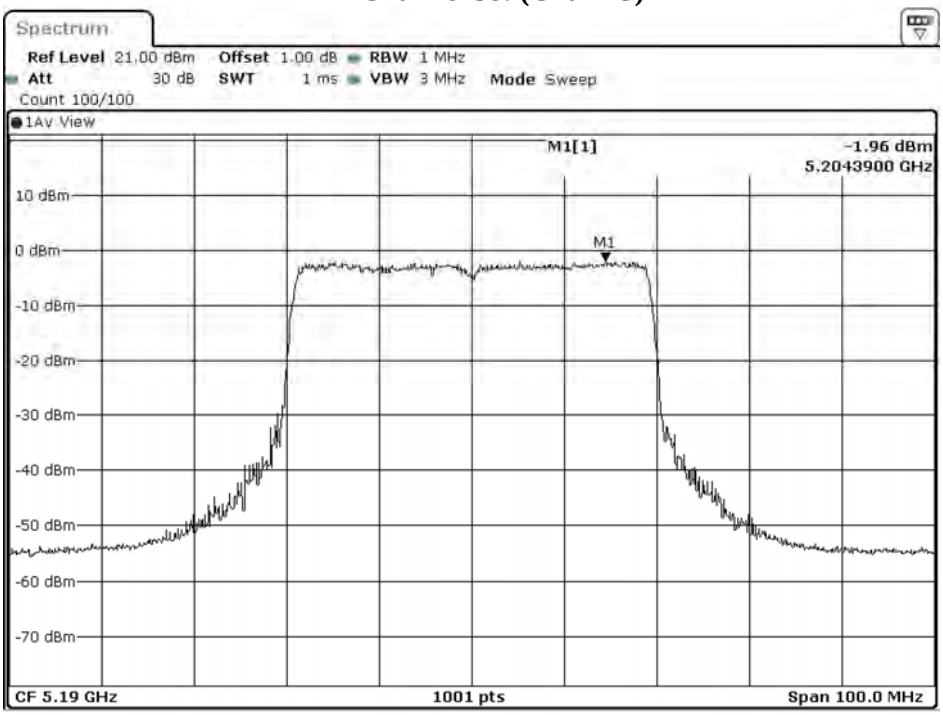
Date: 5.JUL.2020 19:40:00

Channel 38: (Chain B)



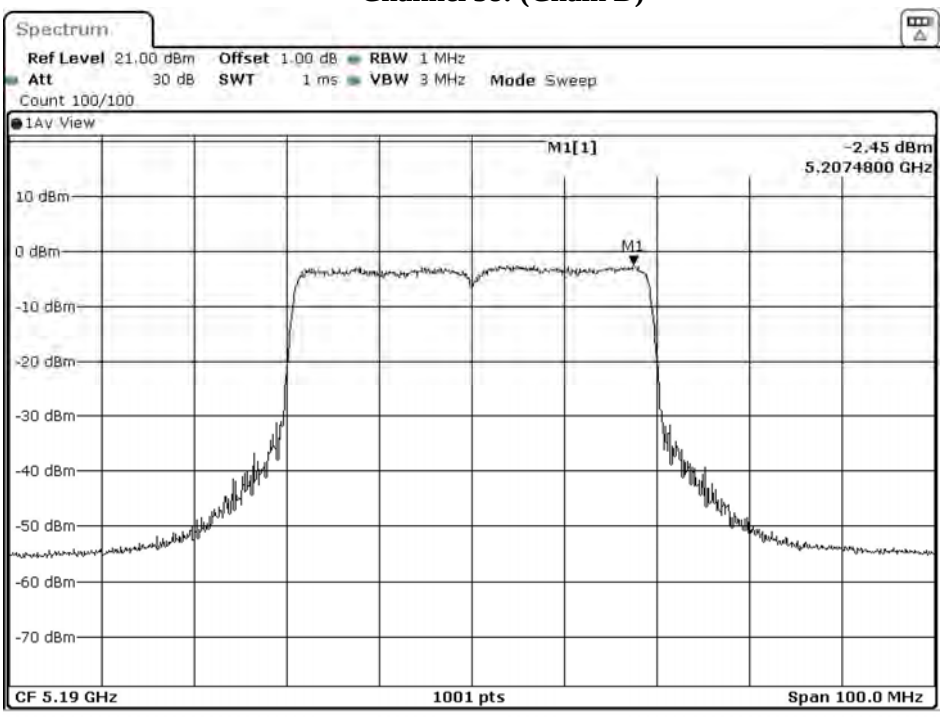
Date: 5.JUL.2020 19:43:04

Channel 38: (Chain C)



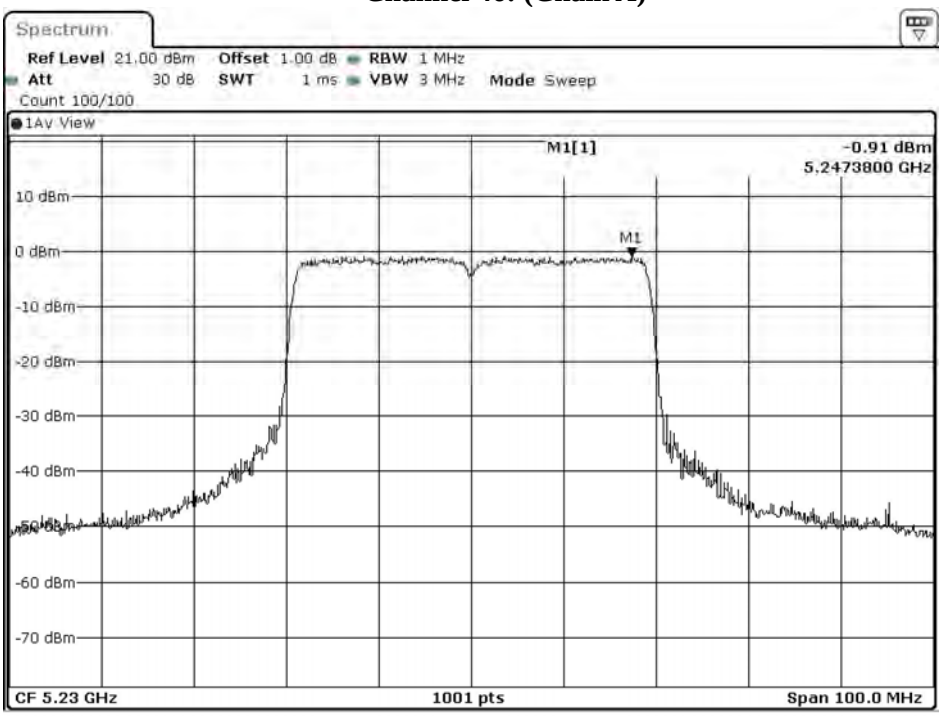
Date: 5.JUL.2020 11:45:28

Channel 38: (Chain D)



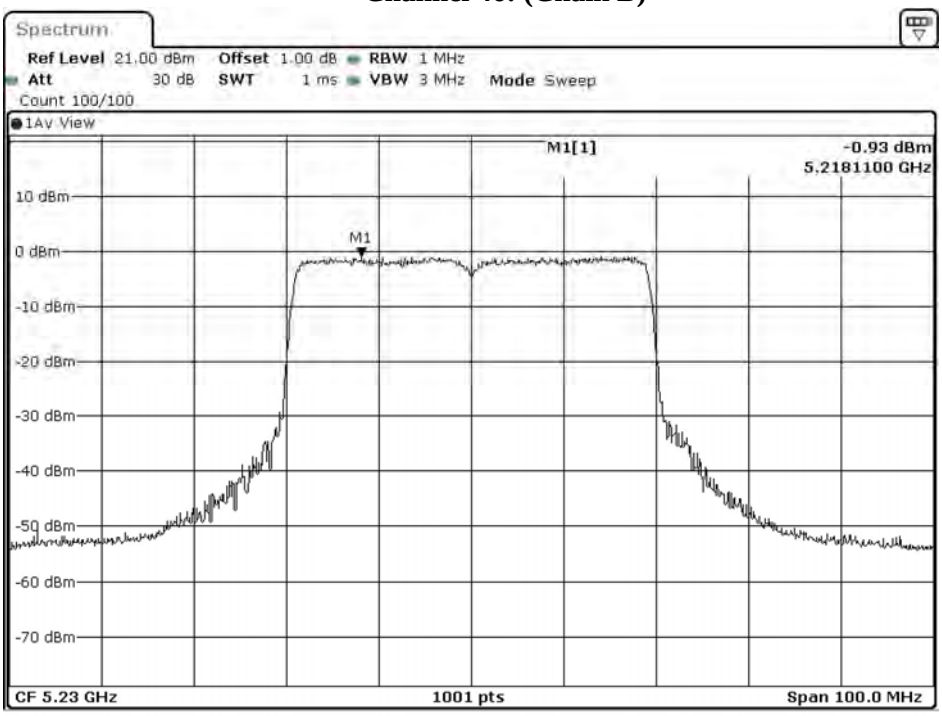
Date: 5.JUL.2020 23:43:19

Channel 46: (Chain A)



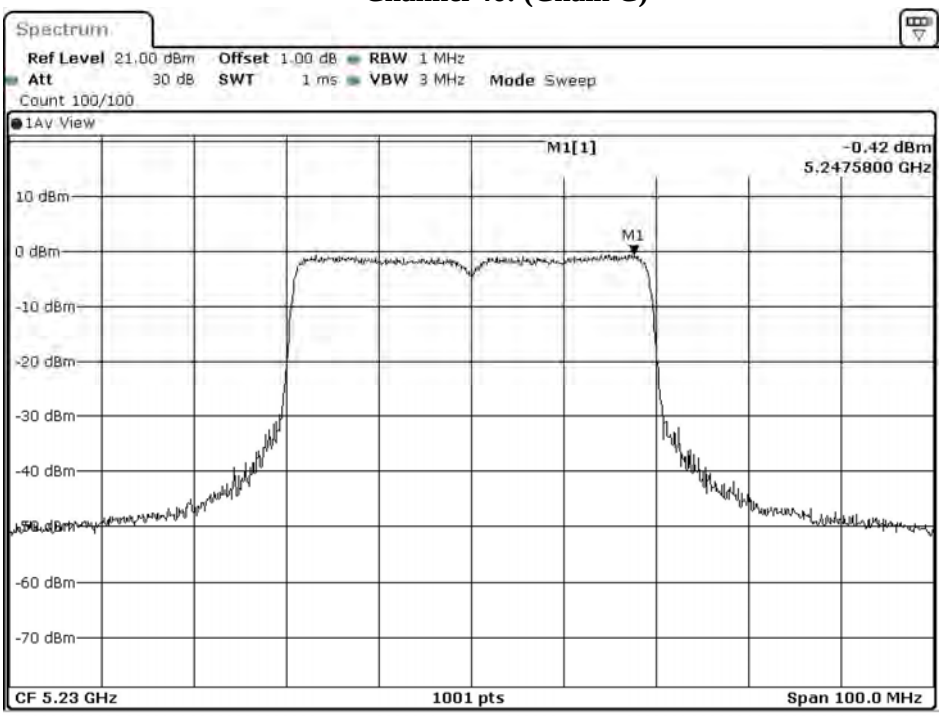
Date: 6.JUL.2020 16:00:52

Channel 46: (Chain B)



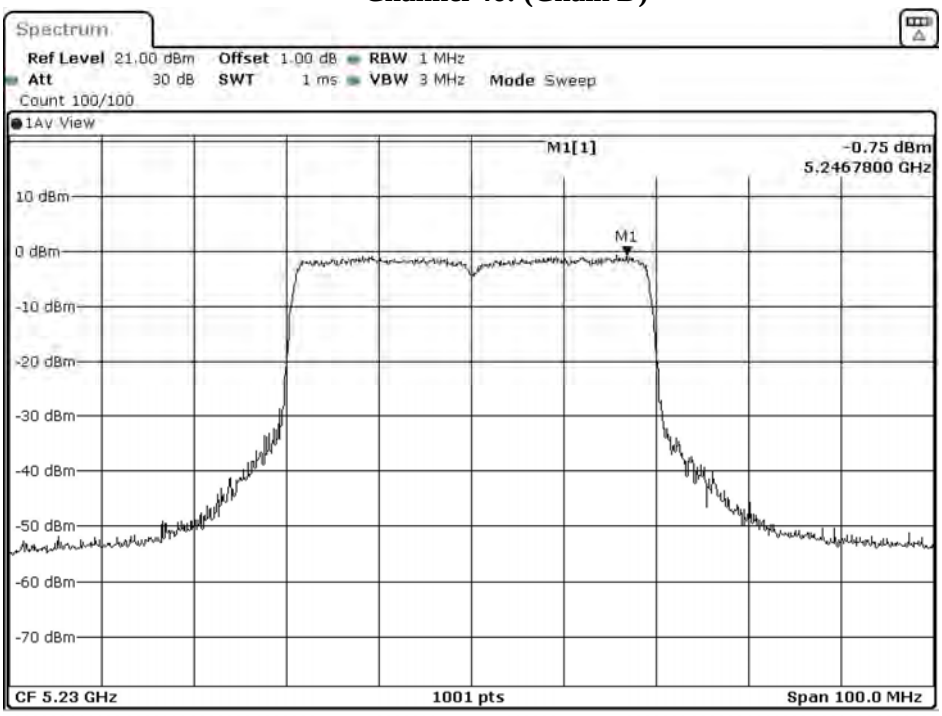
Date: 6.JUL.2020 16:03:56

Channel 46: (Chain C)



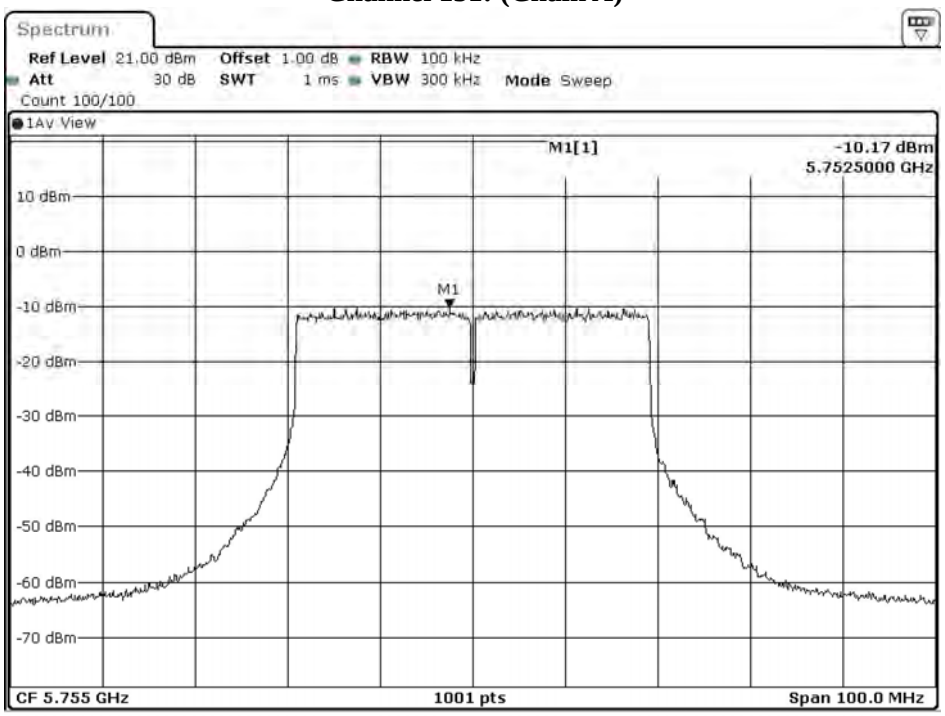
Date: 6.JUL.2020 08:06:20

Channel 46: (Chain D)



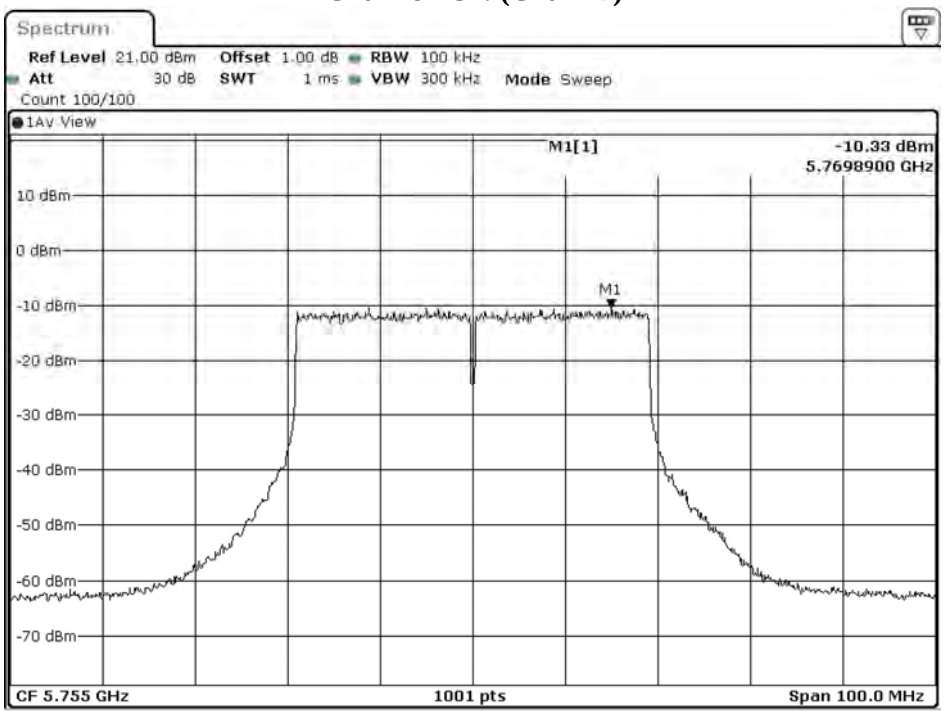
Date: 6.JUL.2020 20:04:11

Channel 151: (Chain A)



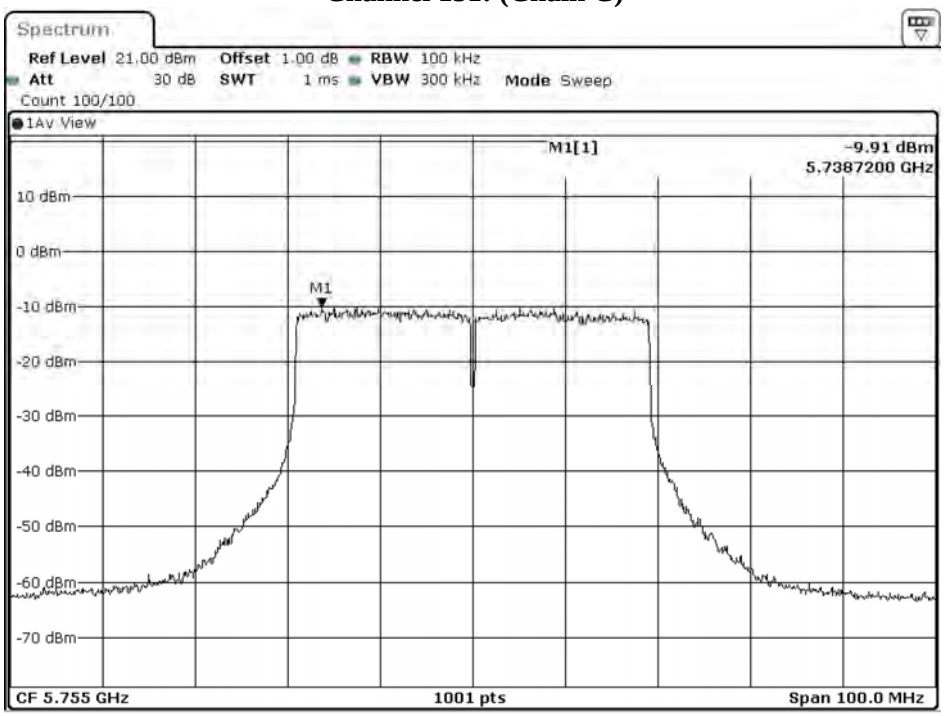
Date: 5.JUL.2020 19:53:13

Channel 151: (Chain B)



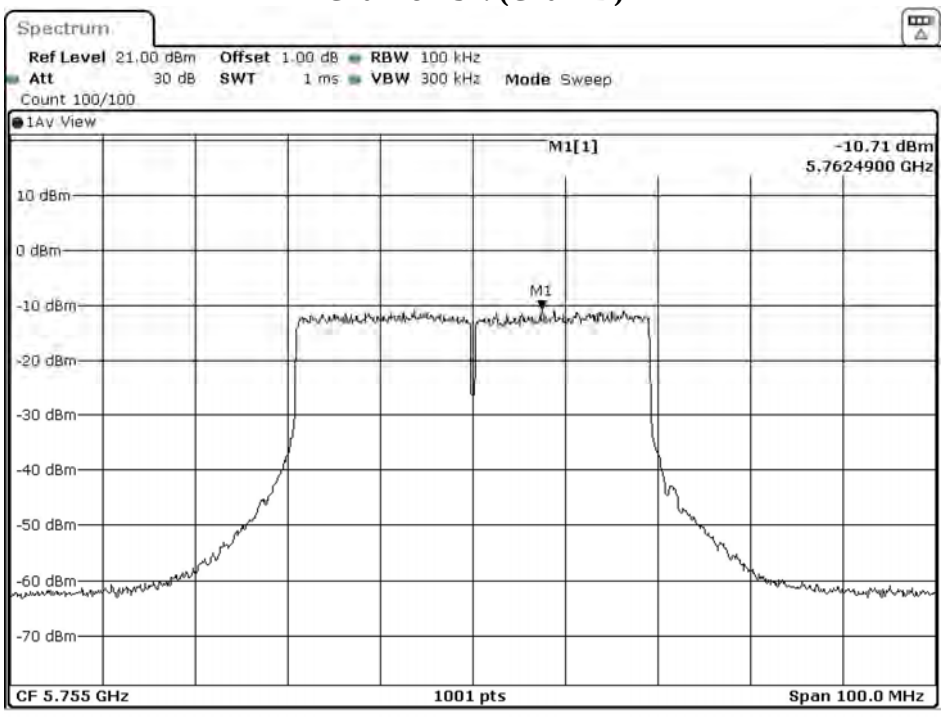
Date: 5.JUL.2020 19:56:16

Channel 151: (Chain C)



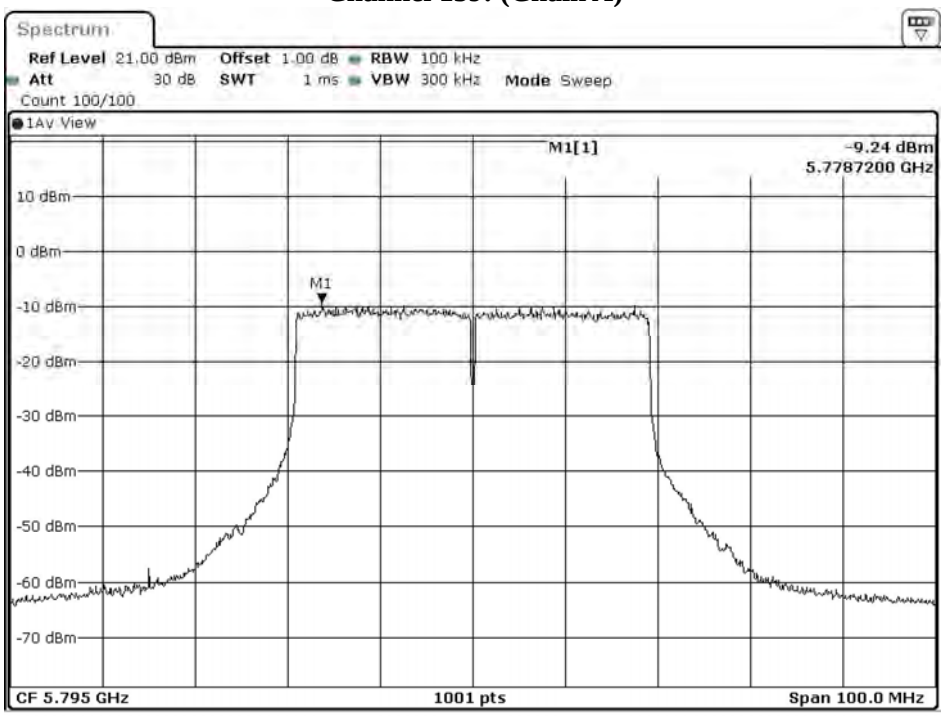
Date: 5.JUL.2020 11:58:40

Channel 151: (Chain D)



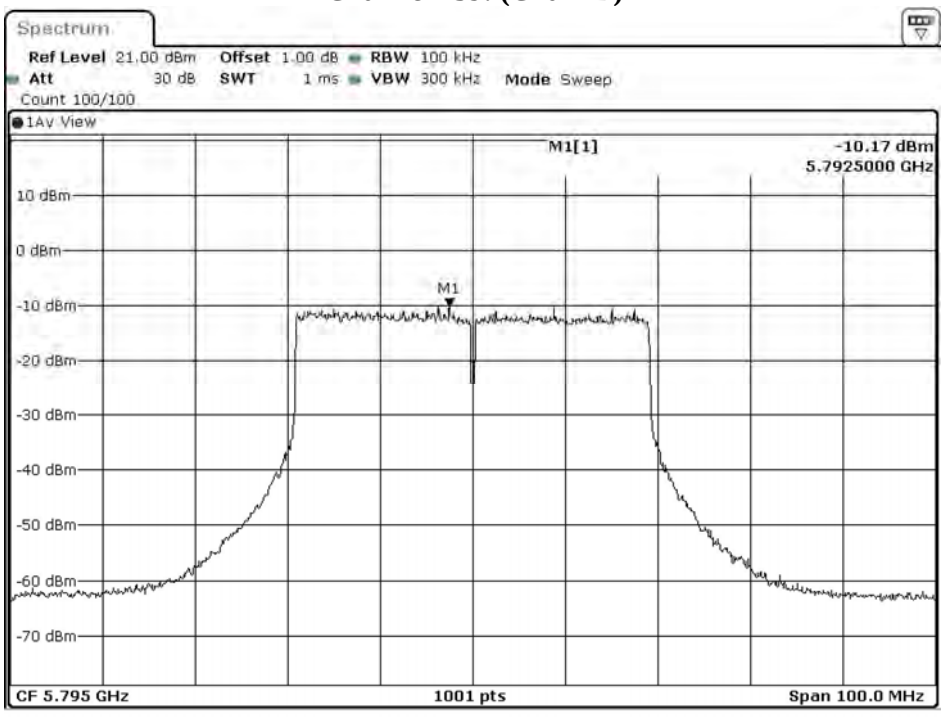
Date: 5.JUL.2020 23:56:31

Channel 159: (Chain A)



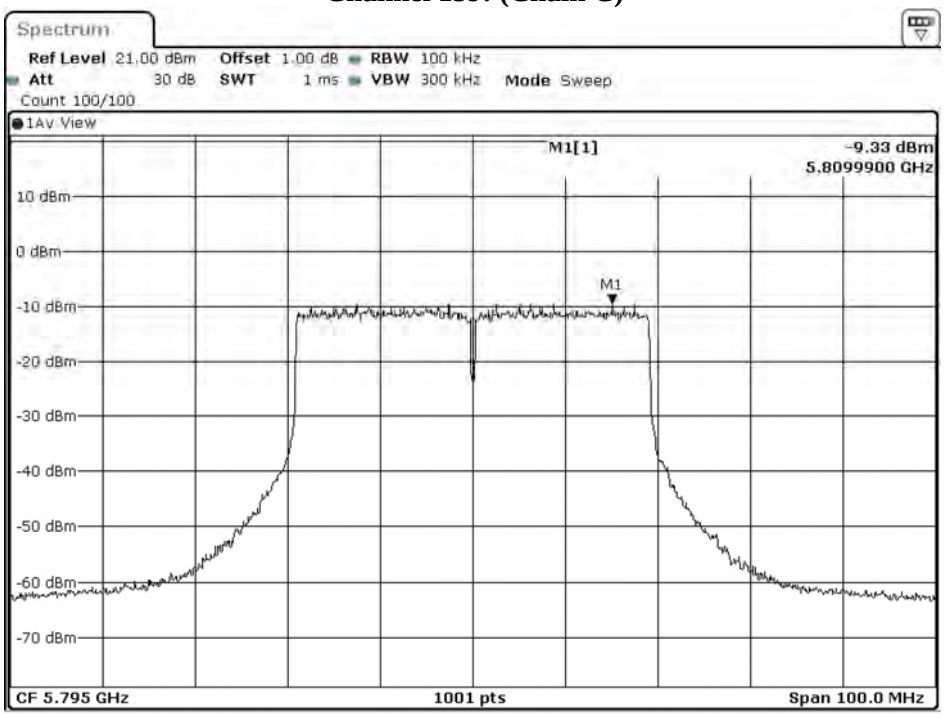
Date: 5.JUL.2020 19:56:07

Channel 159: (Chain B)



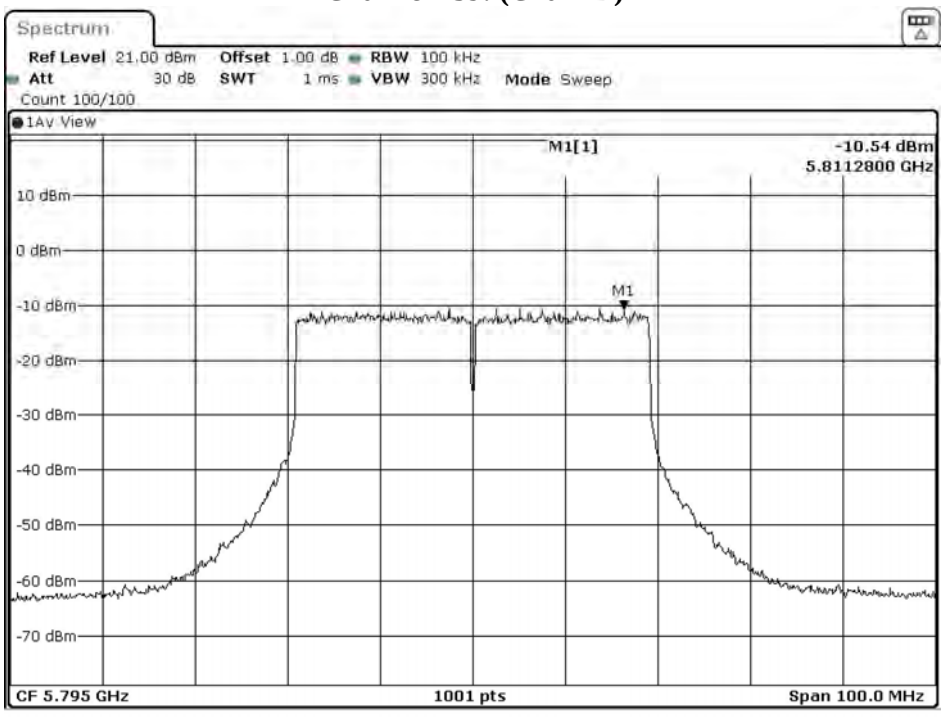
Date: 5.JUL.2020 19:59:10

Channel 159: (Chain C)



Date: 5.JUL.2020 12:01:34

Channel 159: (Chain D)



Date: 5.JUL.2020 23:59:25

Product : LV55
Test Item : Peak Power Spectral Density
Test Mode : Mode 17: Transmit (802.11ax-80MBW-Beamforming)
Test Date : 2020/07/05

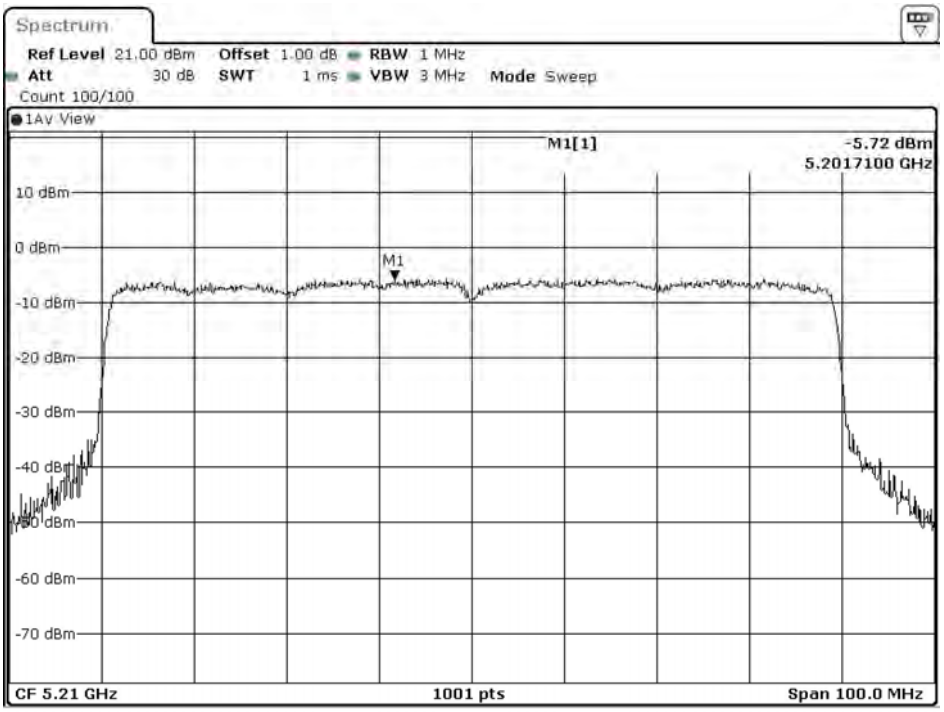
Channel Number	Frequency (MHz)	Chain	PPSD (dBm/1MHz)	BWCF (dB)	Total PPSD (dBm/1MHz)	Required Limit (dBm/1MHz)	Result
42	5210	A	-5.720	--	0.3	17	Pass
		B	-6.050	--	-0.03	17	Pass
		C	-5.440	--	0.58	17	Pass
		D	-5.650	--	0.37	17	Pass

Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel Number	Frequency (MHz)	Chain	PPSD (dBm/500kHz)	BWCF (dB)	Total PPSD (dBm/500kHz)	Required Limit (dBm/500kHz)	Result
155	5775	A	-12.910	6.990	0.100	30	Pass
		B	-13.320	6.990	-0.310	30	Pass
		C	-13.190	6.990	-0.180	30	Pass
		D	-13.870	6.990	-0.860	30	Pass

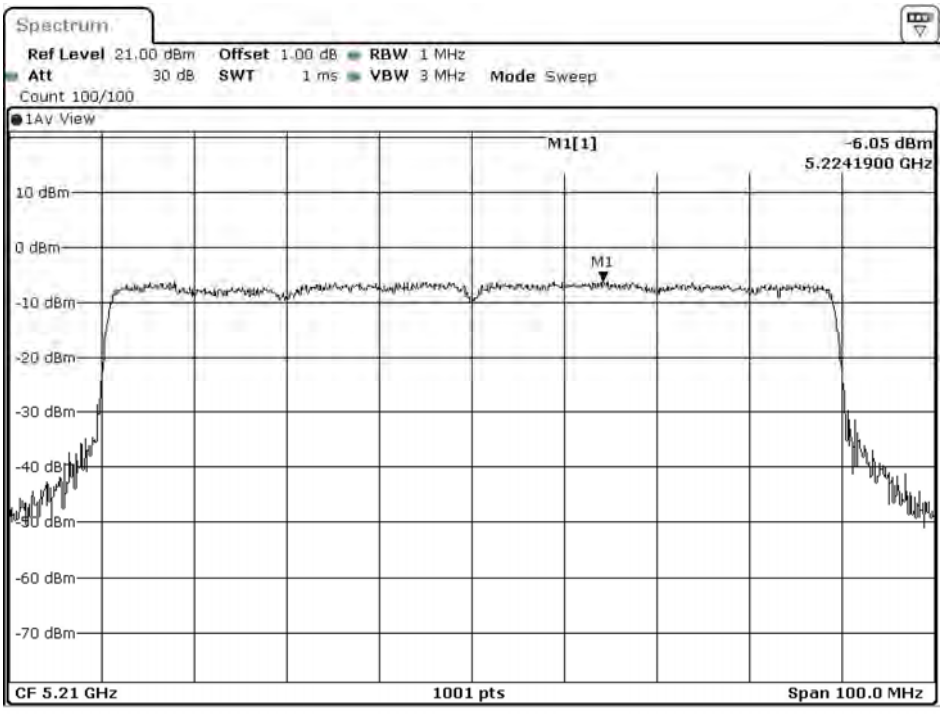
Note: The quantity 10*log 4 (four antennas) is added to the spectrum peak value according to document 662911 D01.

Channel 42: (Chain A)



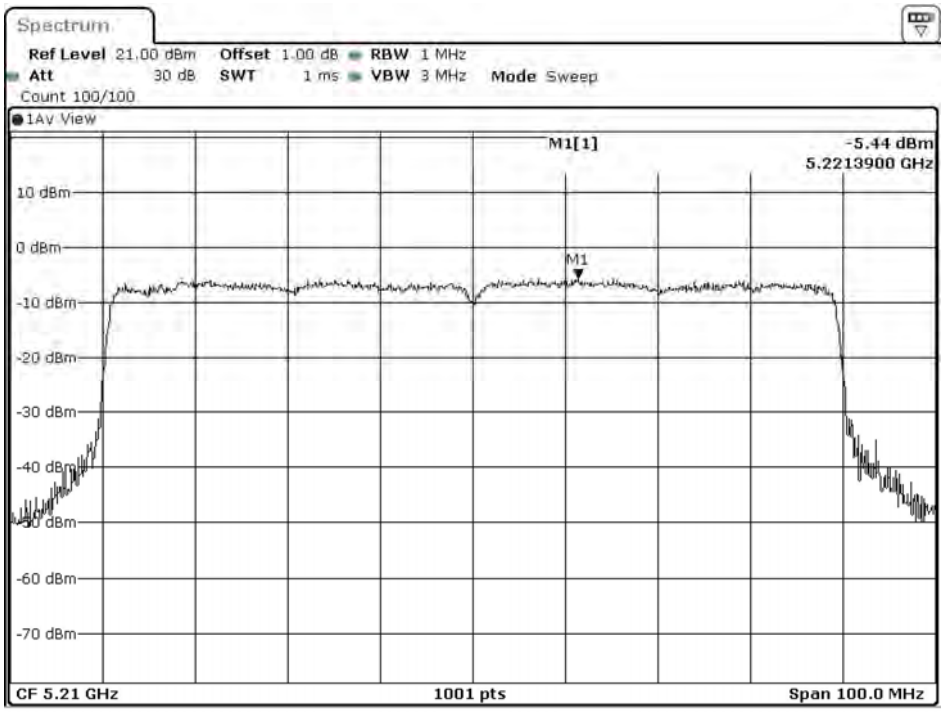
Date: 5.JUL.2020 19:03:59

Channel 42: (Chain B)



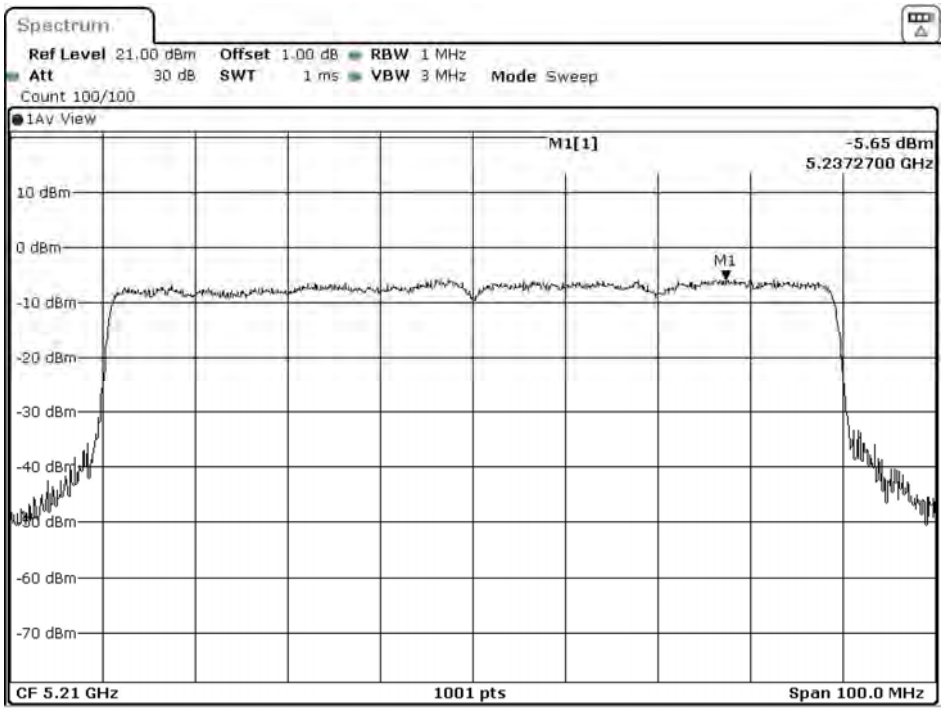
Date: 5.JUL.2020 19:07:03

Channel 42: (Chain C)



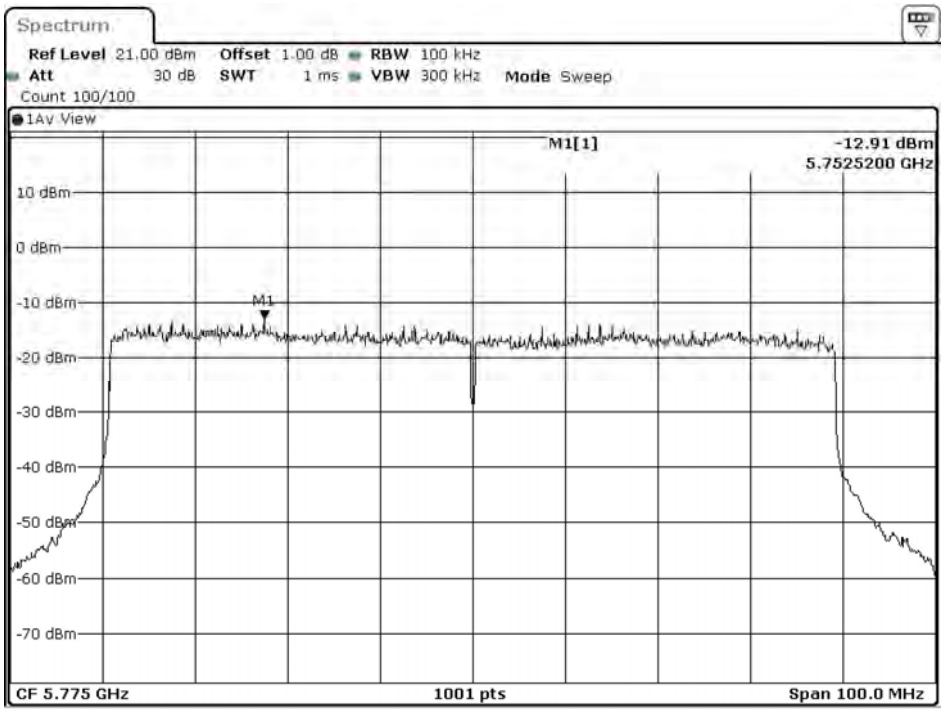
Date: 5.JUL.2020 11:09:26

Channel 42: (Chain D)



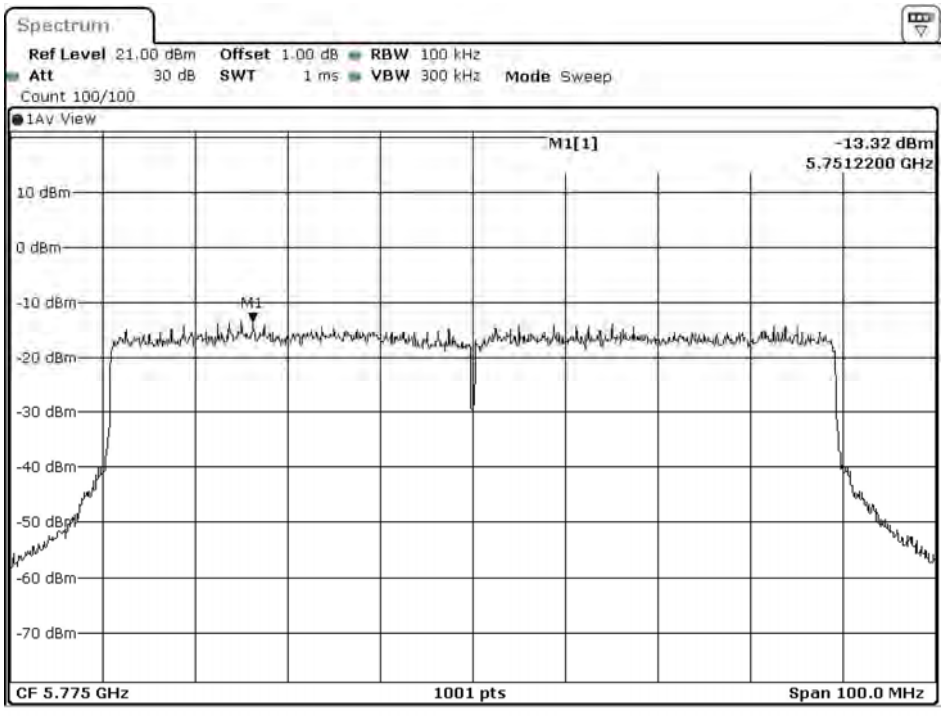
Date: 5.JUL.2020 23:07:17

Channel 155: (Chain A)



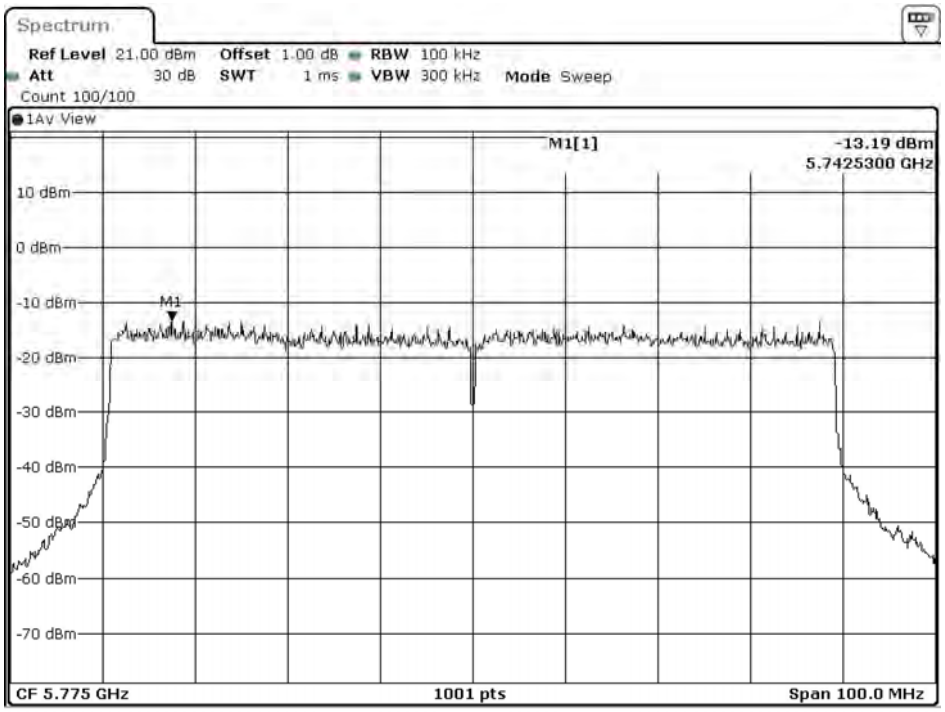
Date: 5.JUL.2020 19:49:06

Channel 155: (Chain B)



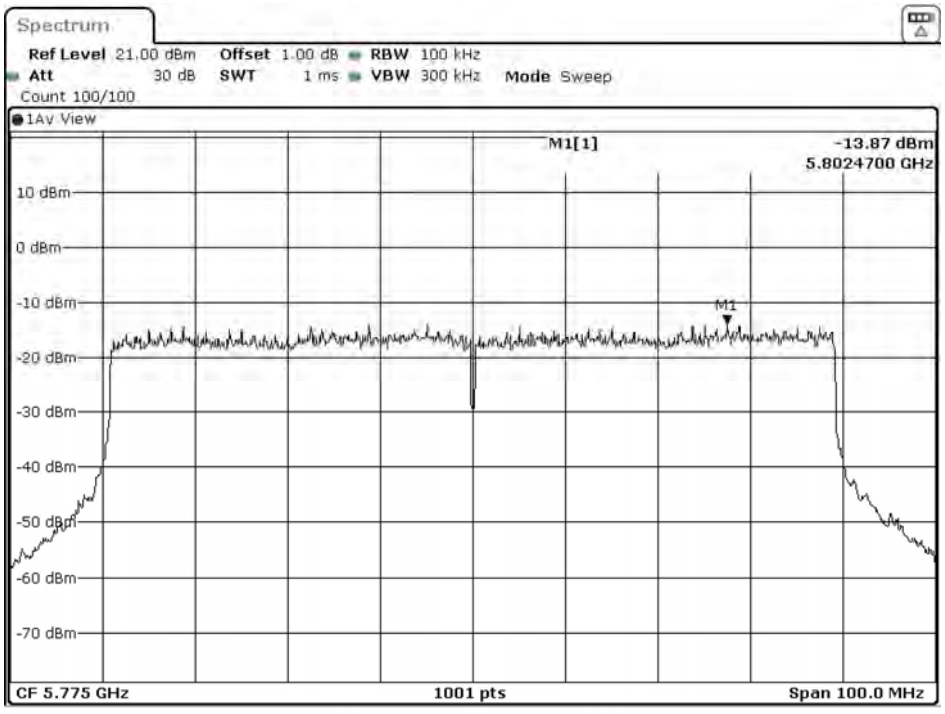
Date: 5.JUL.2020 19:52:10

Channel 155: (Chain C)



Date: 5.JUL.2020 11:54:34

Channel 155: (Chain D)

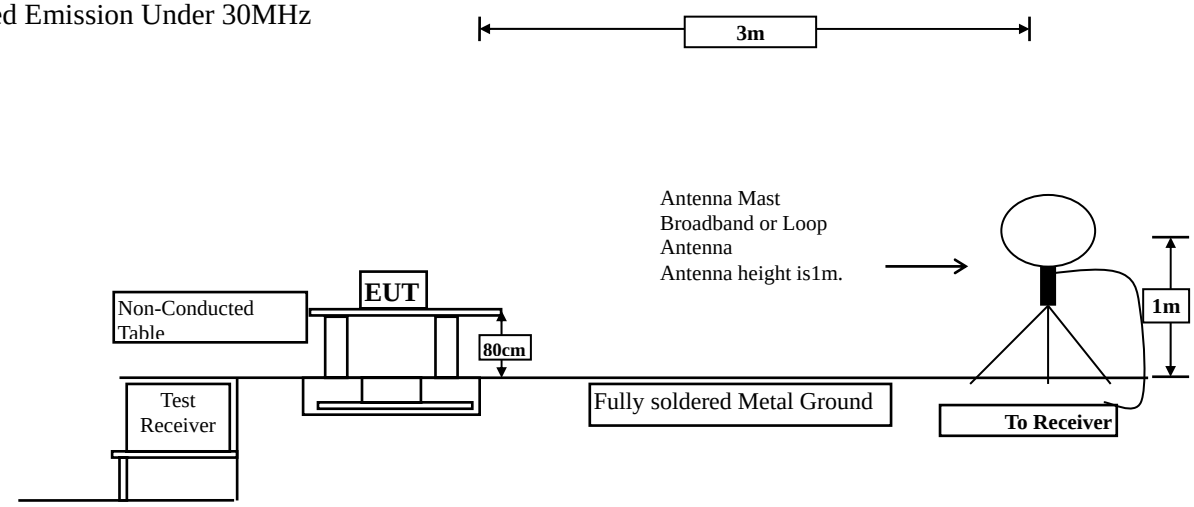


Date: 5.JUL.2020 23:52:25

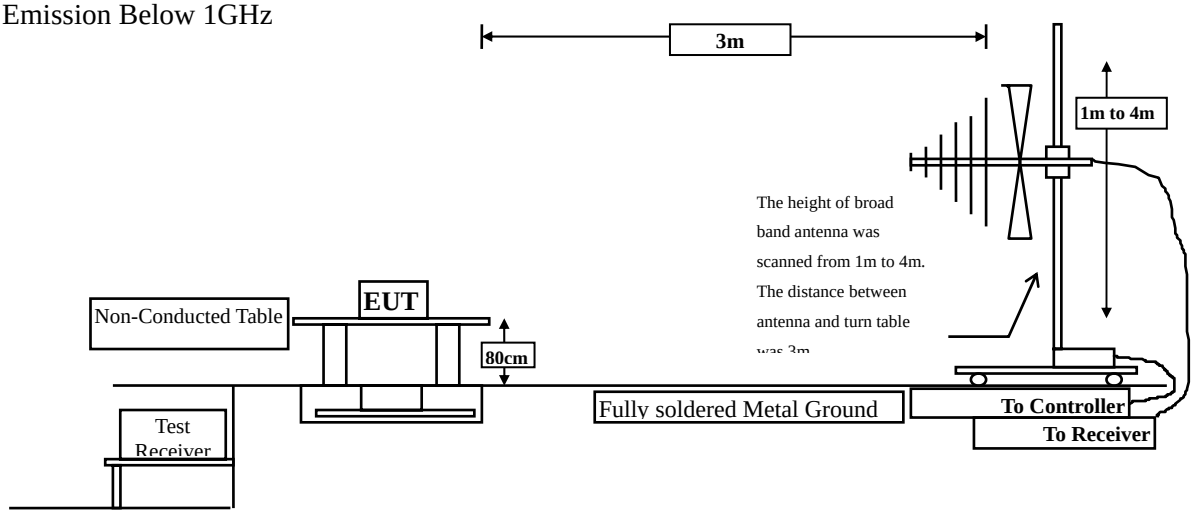
5. Radiated Emission

5.1. Test Setup

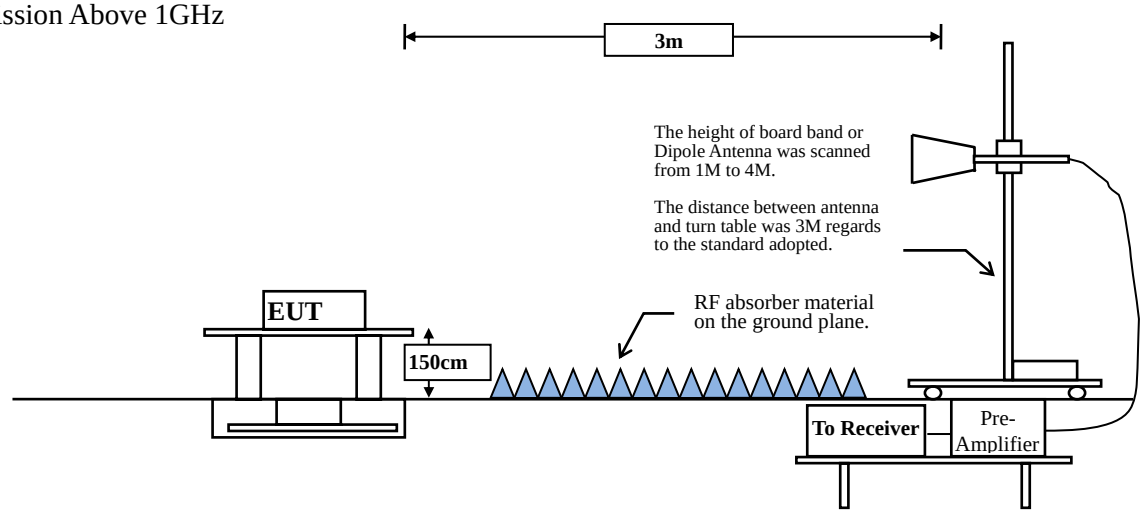
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



5.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits		
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remarks: E field strength (dBμV/m) = 20 log E field strength (uV/m)

5.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground,when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

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. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The measurement frequency range form 9kHz - 10th Harmonic of fundamental was investigated.

RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW ≥ 3MHz.

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1MHz.

VBW = 10Hz, when duty cycle ≥ 98 %

VBW ≥ 1/T, when duty cycle < 98 %

(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

CDD Mode:

5GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11a	94.79	1.4492	690	1k
802.11ax20 (RU Config-Full)	96.47	5.5507	180	200
802.11ax40 (RU Config-Full)	95.49	5.5217	181	200
802.11ax80 (RU Config-Full)	96.95	5.5217	181	200
802.11ax20 (RU Config-edges mode)	90.35	3.3913	295	300
802.11ax40 (RU Config-edges mode)	86.57	3.3623	297	300
802.11ax80 (RU Config-edges mode)	52.31	0.4260	2347	3000

Beamforming Mode:

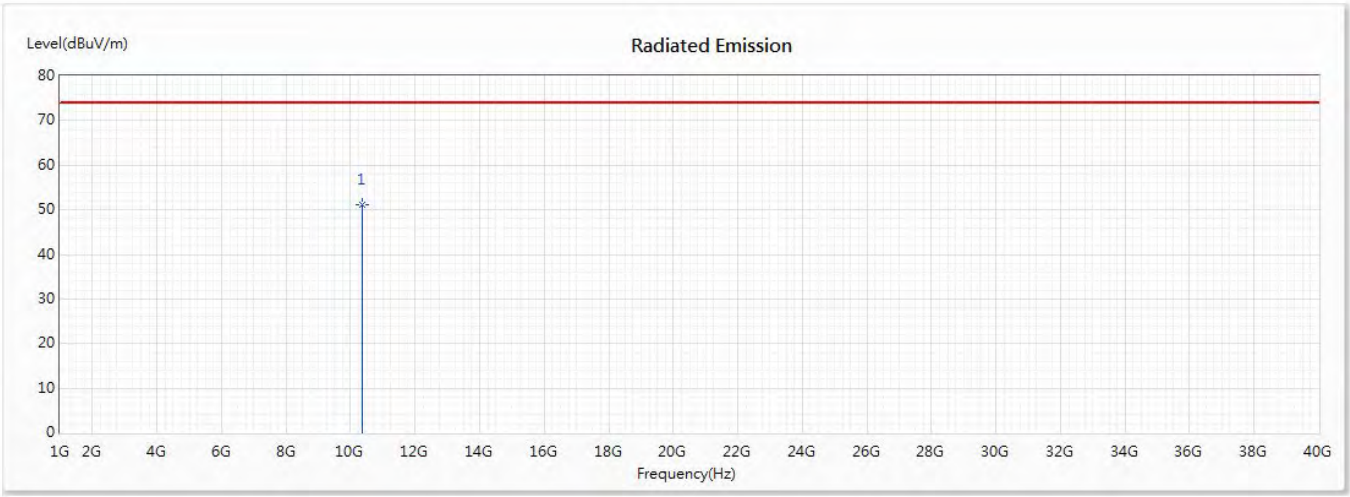
5GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11ax20	67.81	2.0145	496	500
802.11ax40	67.15	1.3333	750	1000
802.11ax80	59.52	1.8116	552	1000

Note: Duty Cycle Refer to Section 8

5.4. Test Result of Radiated Emission

Product : LV55
Test Item : Harmonic Radiated Emission Data
Test Mode : Mode 1: Transmit (802.11a-CDD) (5180MHz)+LTE Band 2 Link+BLE
Test Date : 2020/06/22

Horizontal



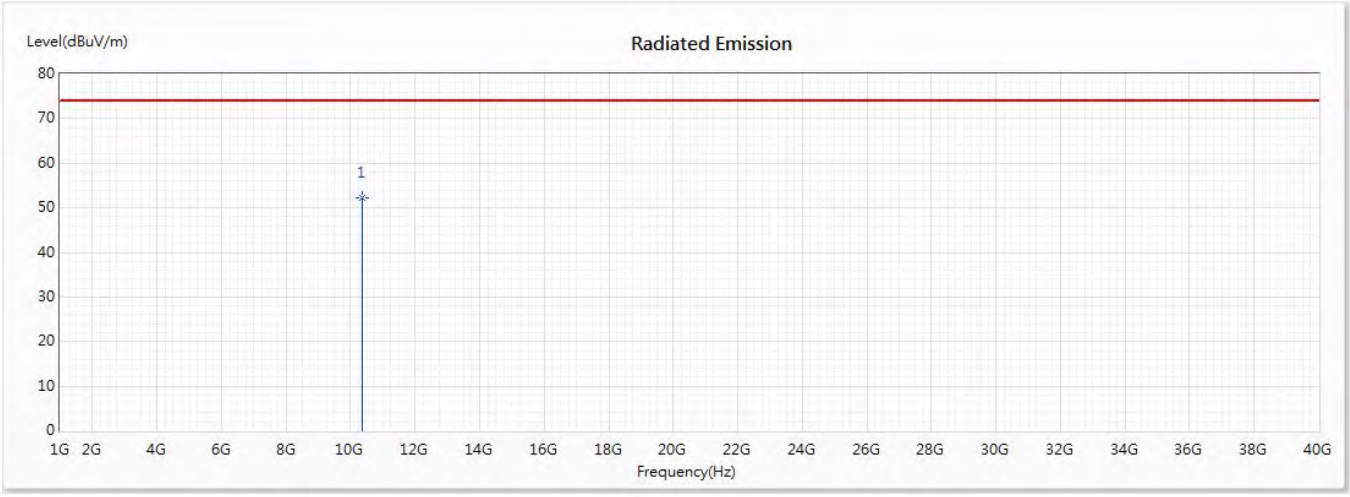
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
* 1	10360	51.15	74.00	-22.85	45.66	5.49	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : LV55
Test Item : Harmonic Radiated Emission Data
Test Mode : Mode 1: Transmit (802.11a-CDD) (5180MHz)+LTE Band 2 Link+BLE
Test Date : 2020/06/22

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB/m)	Detector Type
* 1	10360	52.22	74.00	-21.78	46.73	5.49	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.