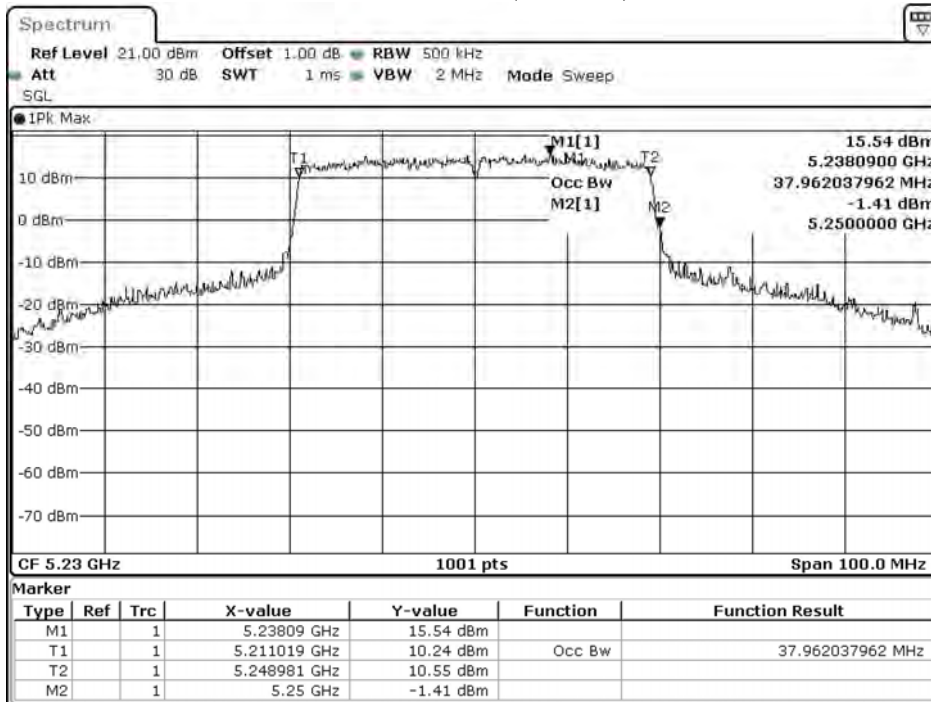
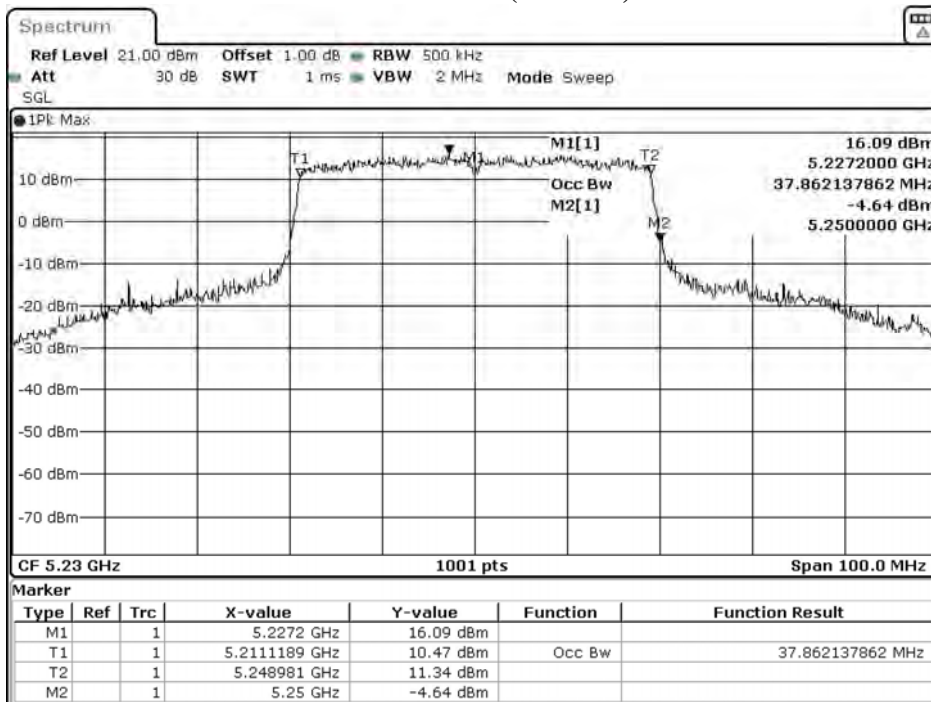


Channel 46: (Chain C)



Date: 3.JUL.2020 14:25:43

Channel 46: (Chain D)

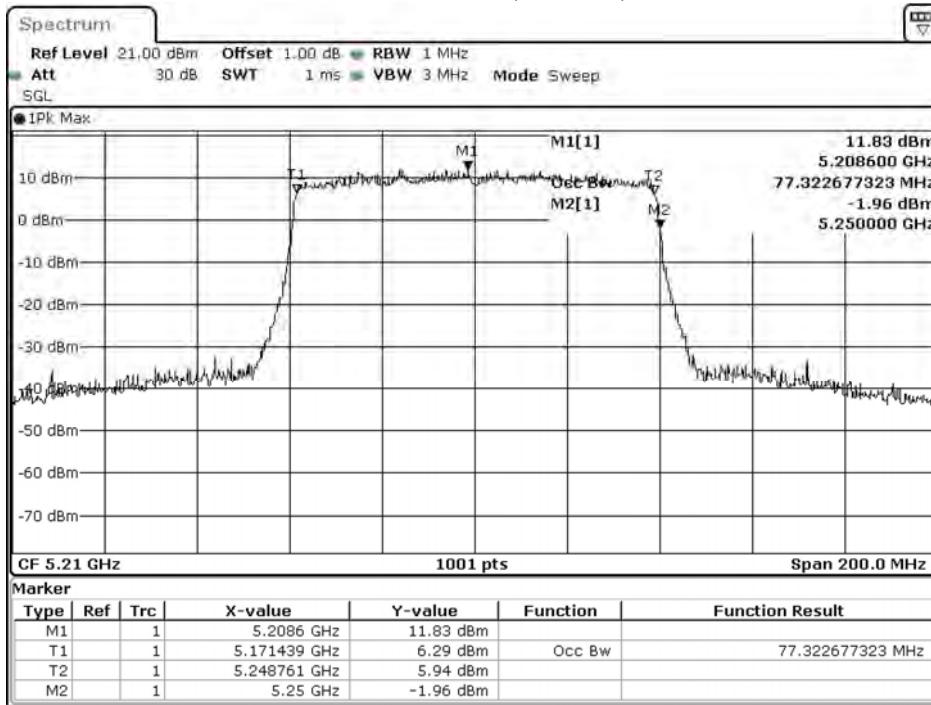


Date: 4.JUL.2020 02:23:37

Product : LV55
Test Item : Band Edge Data
Test Mode : Mode 9: Transmit (802.11ax-80MBW-CDD) (5210MHz) (RU Config-Full)
Test Date : 2020/07/03

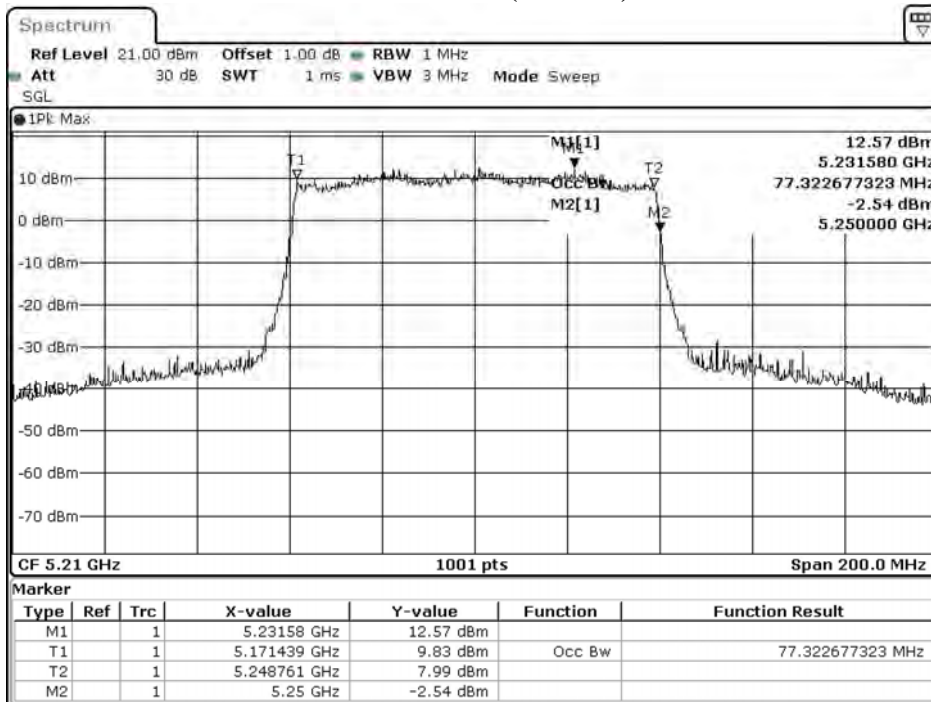
Chain	Test Frequency (MHz)	Measurement Level (MHz)	Limit (MHz)	Result
Chain A	5210	5248.761	<5250	PASS
Chain B	5210	5248.761	<5250	PASS
Chain C	5210	5248.761	<5250	PASS
Chain D	5210	5248.761	<5250	PASS

Channel 42: (Chain A)



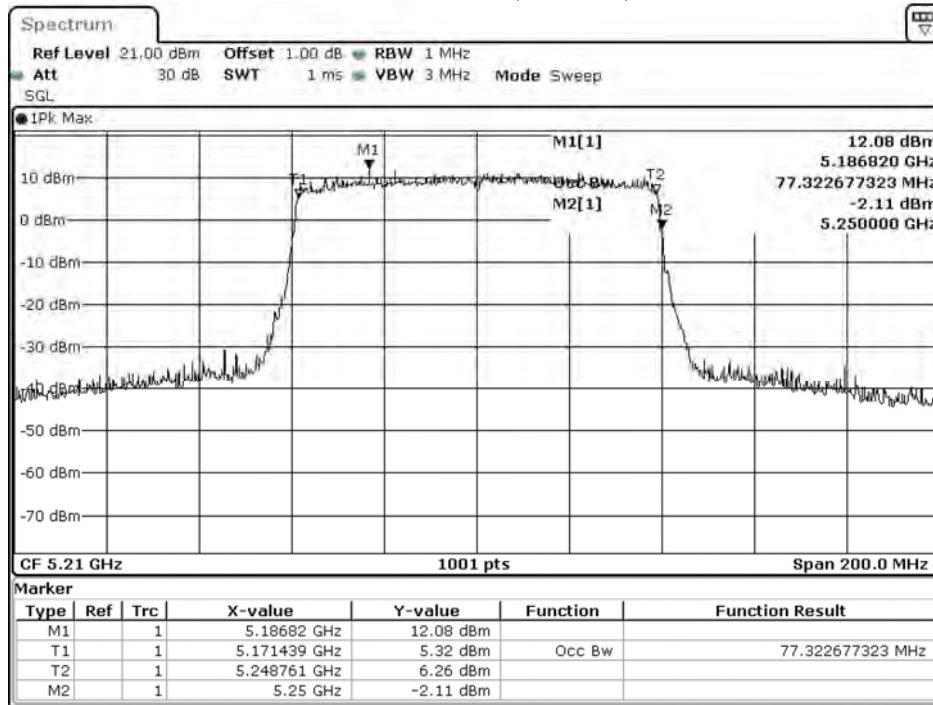
Date: 3.JUL.2020 22:57:56

Channel 42: (Chain B)



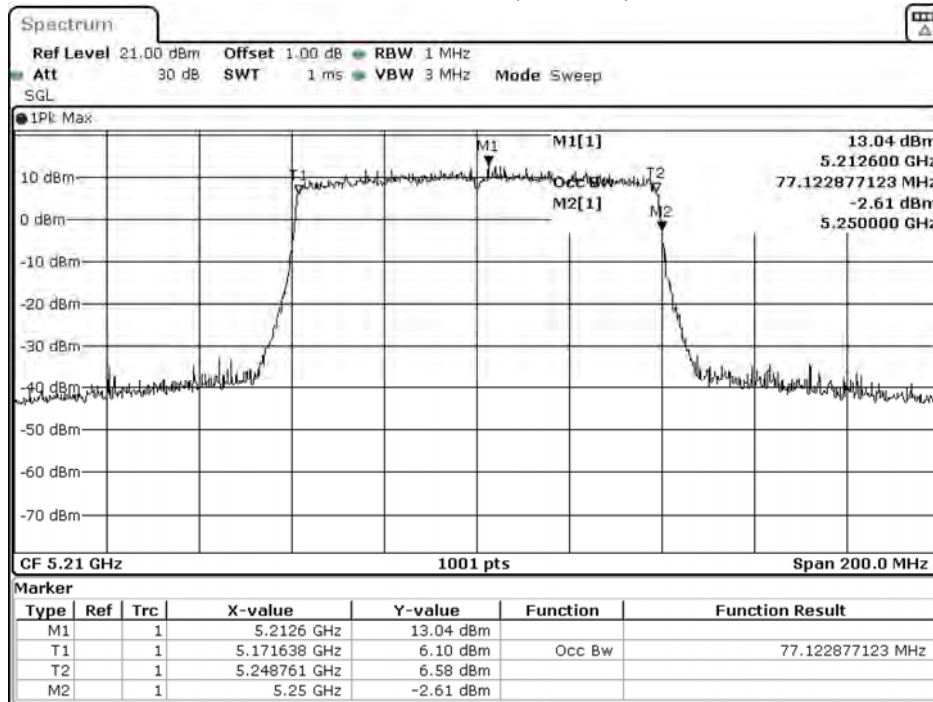
Date: 3.JUL.2020 23:00:59

Channel 42: (Chain C)



Date: 3.JUL.2020 15:03:24

Channel 42: (Chain D)

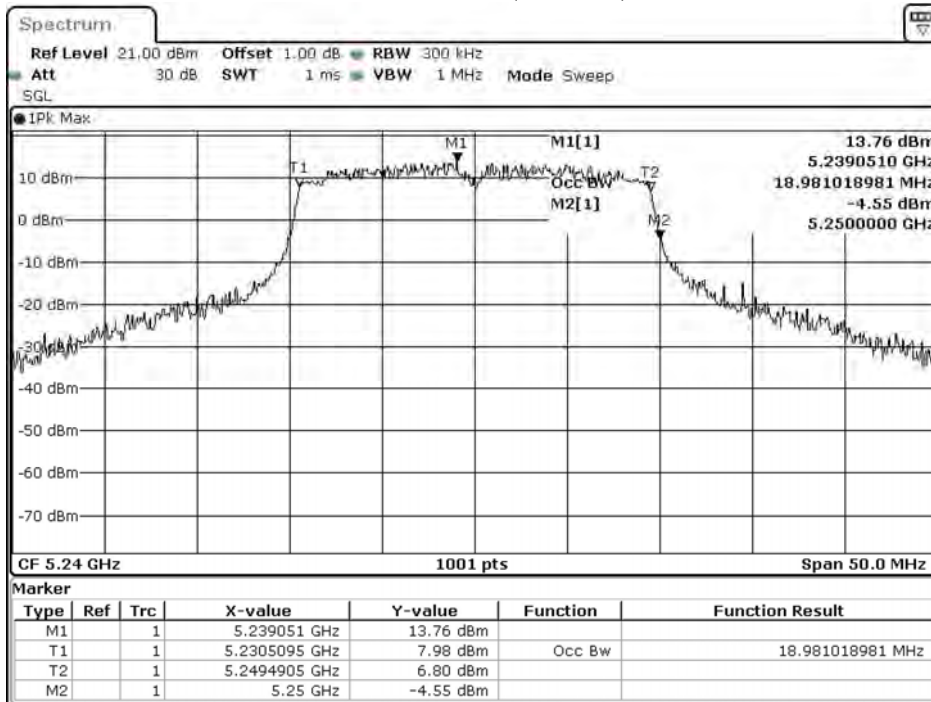


Date: 4.JUL.2020 03:01:17

Product : LV55
Test Item : Band Edge Data
Test Mode : Mode 15: Transmit (802.11ax-20MBW-Beamforming) (5240MHz)
Test Date : 2020/07/04

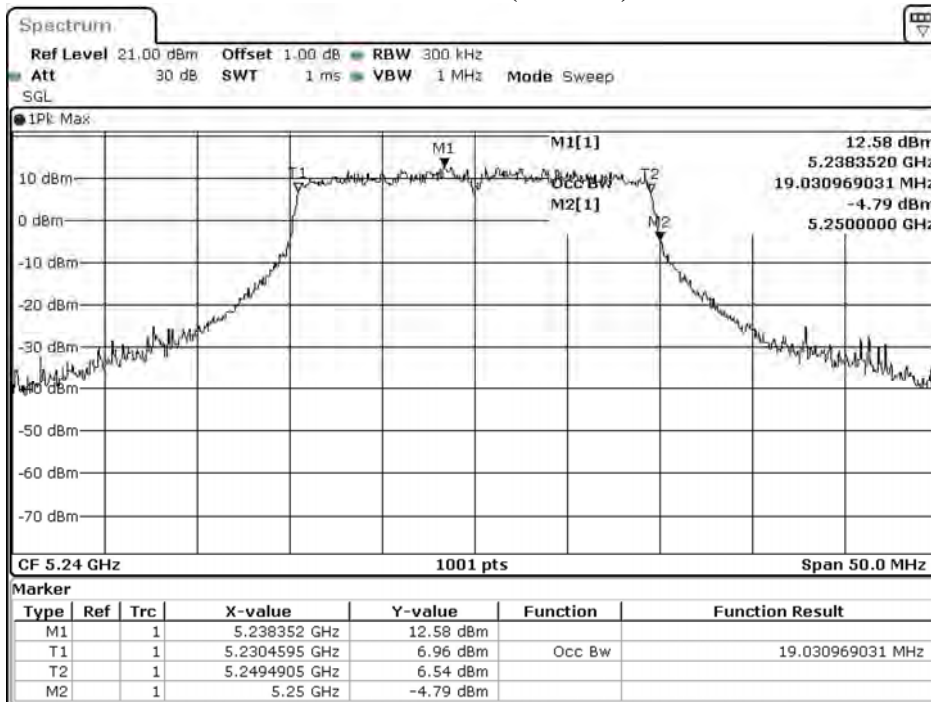
Chain	Test Frequency (MHz)	Measurement Level (MHz)	Limit (MHz)	Result
Chain A	5240	5249.49	<5250	PASS
Chain B	5240	5249.49	<5250	PASS
Chain C	5240	5249.49	<5250	PASS
Chain D	5240	5249.54	<5250	PASS

Channel 48: (Chain A)



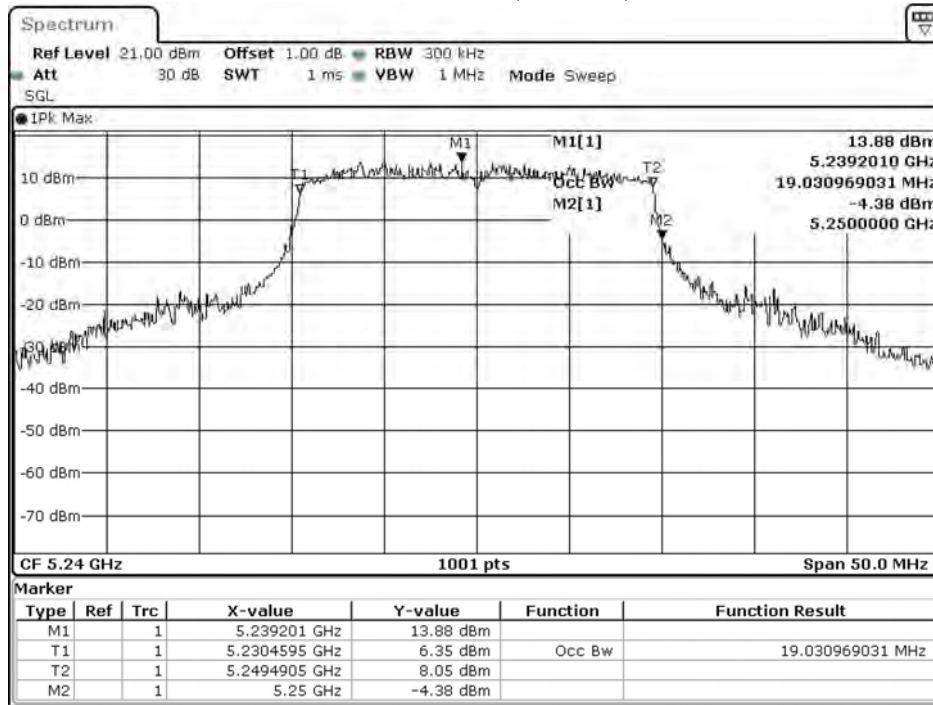
Date: 4.JUL.2020 20:48:57

Channel 48: (Chain B)



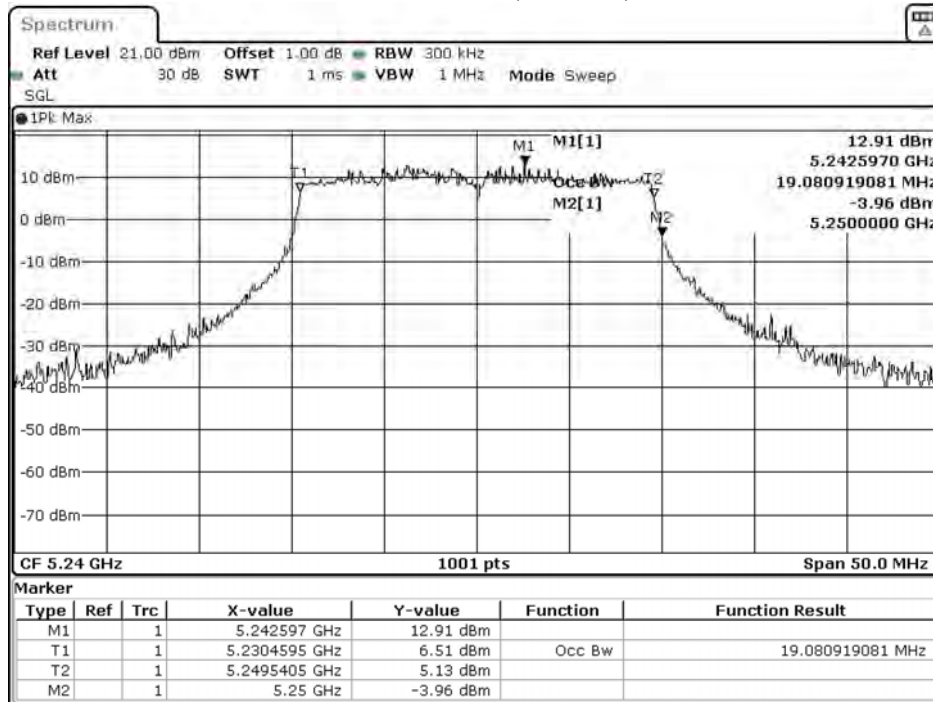
Date: 4.JUL.2020 20:52:01

Channel 48: (Chain C)



Date: 4.JUL.2020 12:54:25

Channel 48: (Chain D)



Date: 5.JUL.2020 00:52:18

Product : LV55
Test Item : Band Edge Data
Test Mode : Mode 16: Transmit (802.11ax-40MBW-Beamforming) (5230MHz)
Test Date : 2020/07/06

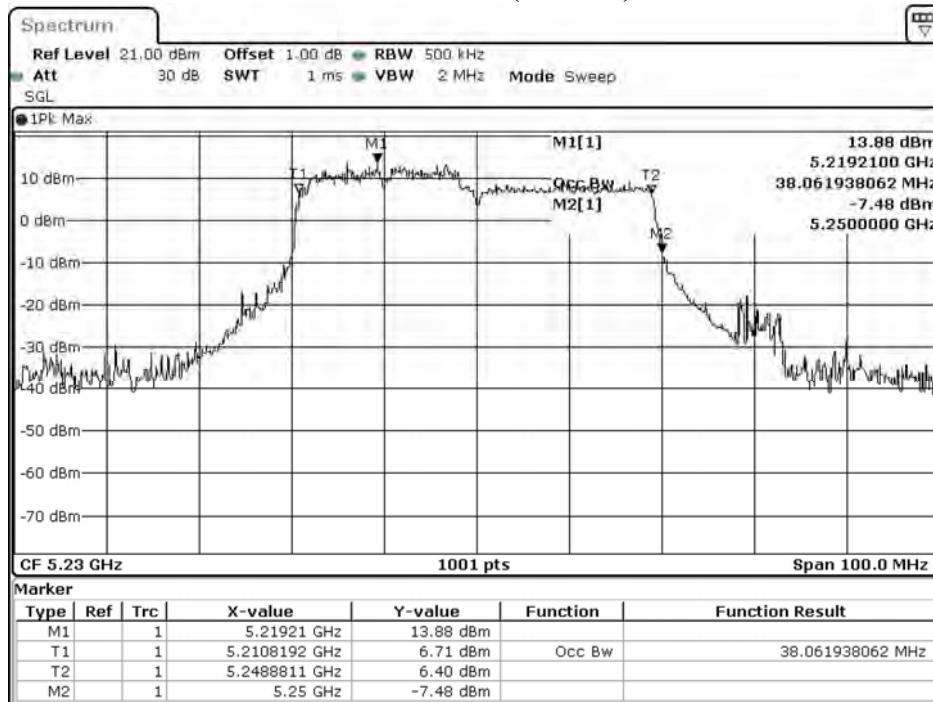
Chain	Test Frequency (MHz)	Measurement Level (MHz)	Limit (MHz)	Result
Chain A	5230	5248.881	<5250	PASS
Chain B	5230	5248.881	<5250	PASS
Chain C	5230	5248.881	<5250	PASS
Chain D	5230	5248.881	<5250	PASS

Channel 46: (Chain A)



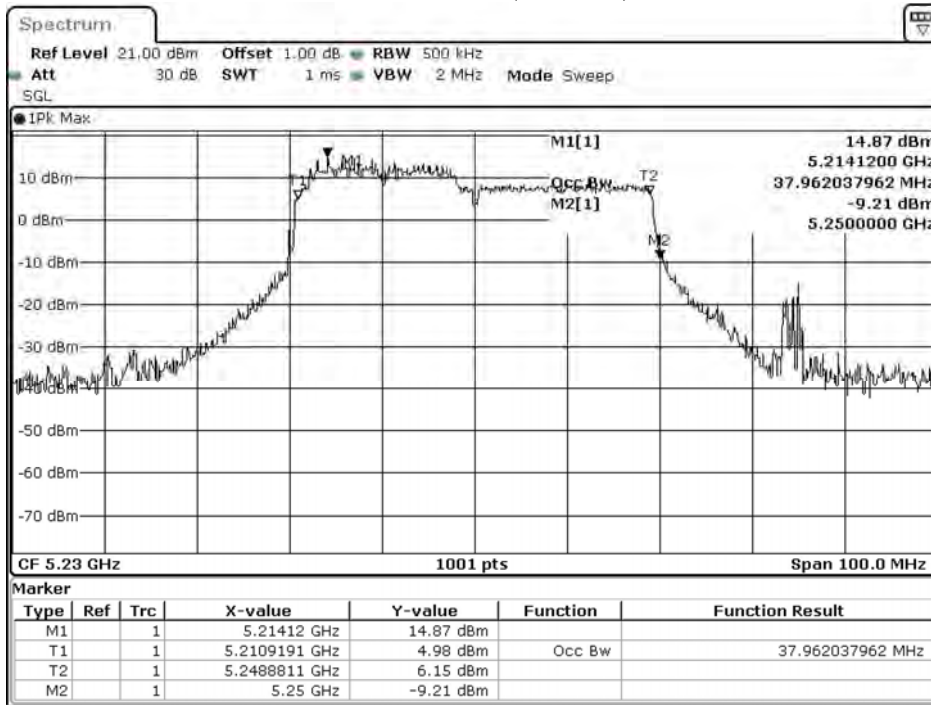
Date: 6.JUL.2020 15:59:10

Channel 46: (Chain B)



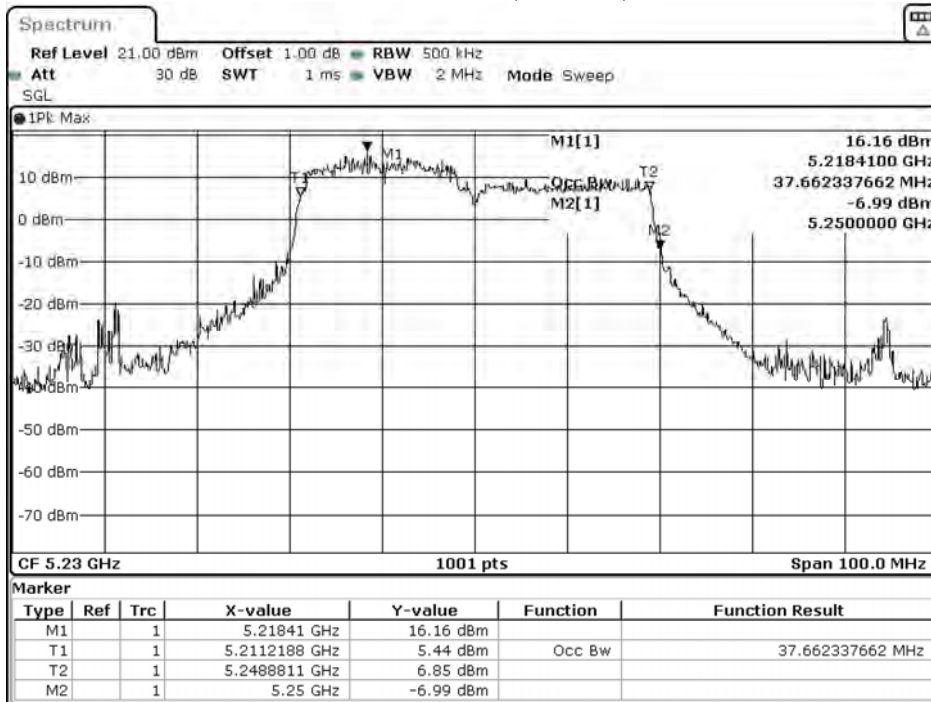
Date: 6.JUL.2020 16:02:13

Channel 46: (Chain C)



Date: 6 JUL 2020 08:04:38

Channel 46: (Chain D)

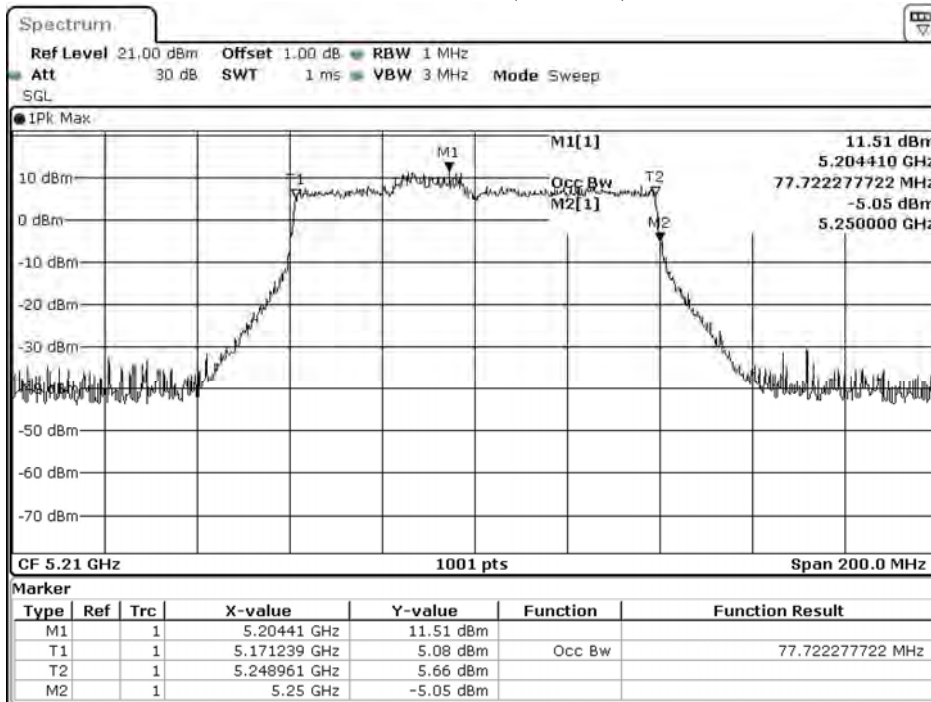


Date: 6 JUL 2020 20:02:32

Product : LV55
Test Item : Band Edge Data
Test Mode : Mode 17: Transmit (802.11ax-80MBW-Beamforming) (5210MHz)
Test Date : 2020/07/05

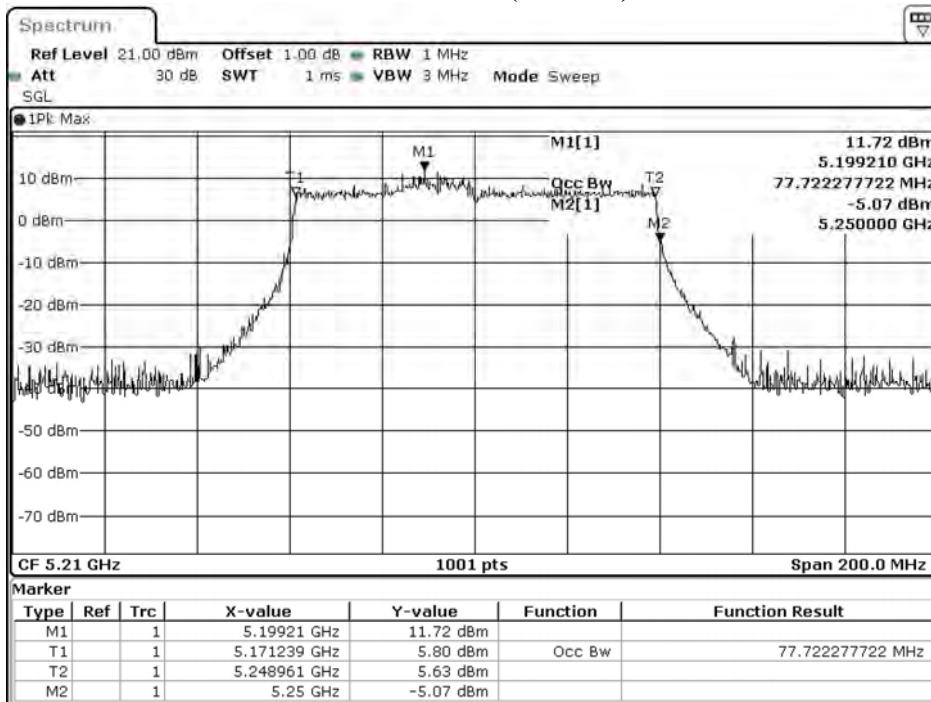
Chain	Test Frequency (MHz)	Measurement Level (MHz)	Limit (MHz)	Result
Chain A	5210	5248.961	<5250	PASS
Chain B	5210	5248.961	<5250	PASS
Chain C	5210	5248.961	<5250	PASS
Chain D	5210	5248.961	<5250	PASS

Channel 42: (Chain A)



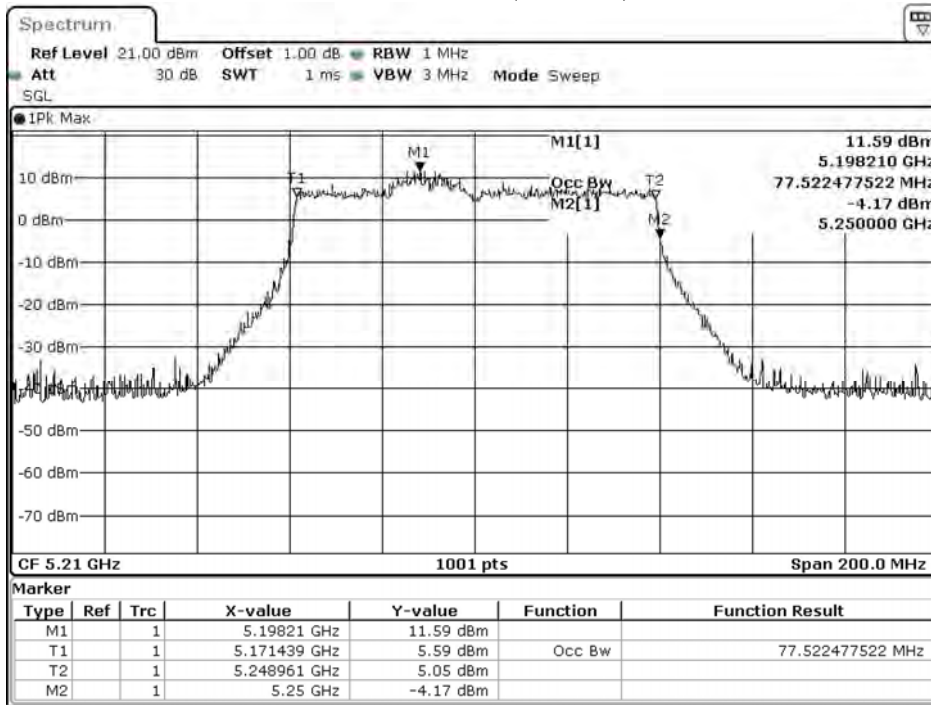
Date: 5.JUL.2020 19:02:16

Channel 42: (Chain B)



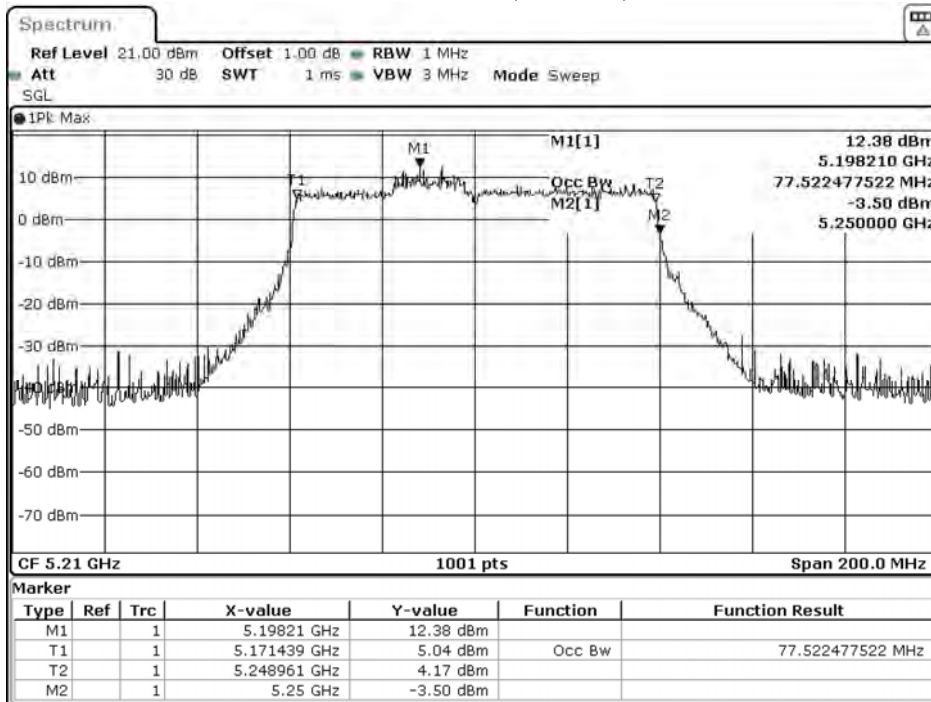
Date: 5.JUL.2020 19:05:20

Channel 42: (Chain C)



Date: 5.JUL.2020 11:07:44

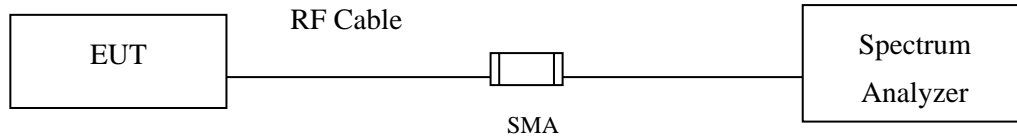
Channel 42: (Chain D)



Date: 5.JUL.2020 23:05:38

7. Occupied Bandwidth

7.1. Test Setup



7.2. Limits

For the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

7.3. Test Procedure

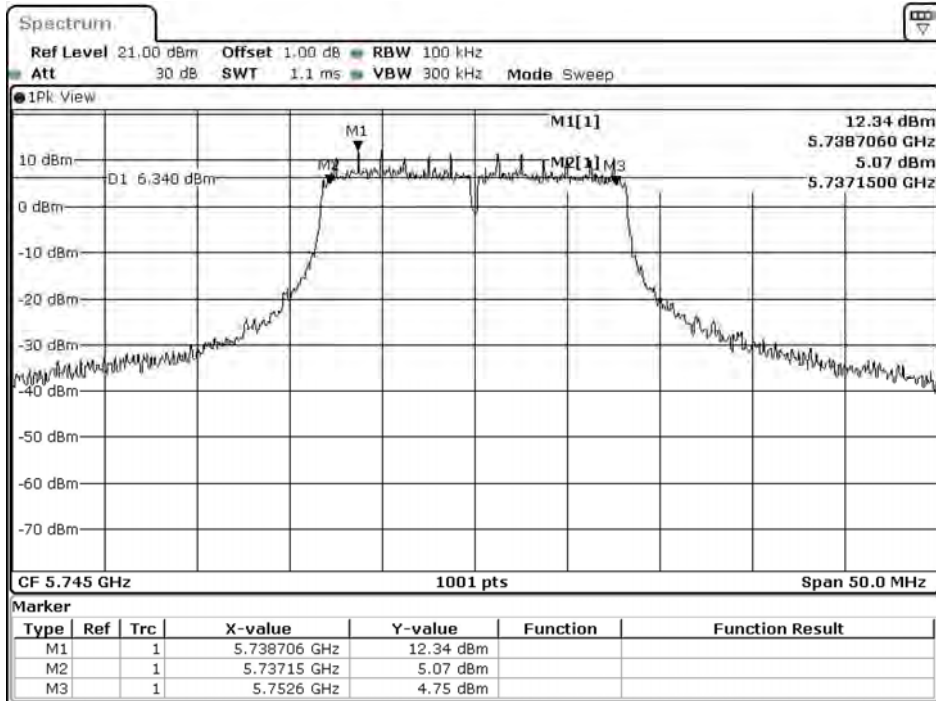
The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

7.4. Test Result of Occupied Bandwidth

Product : LV55
Test Item : Occupied Bandwidth Data
Test Mode : Mode 1: Transmit (802.11a-CDD)
Test Date : 2020/07/03

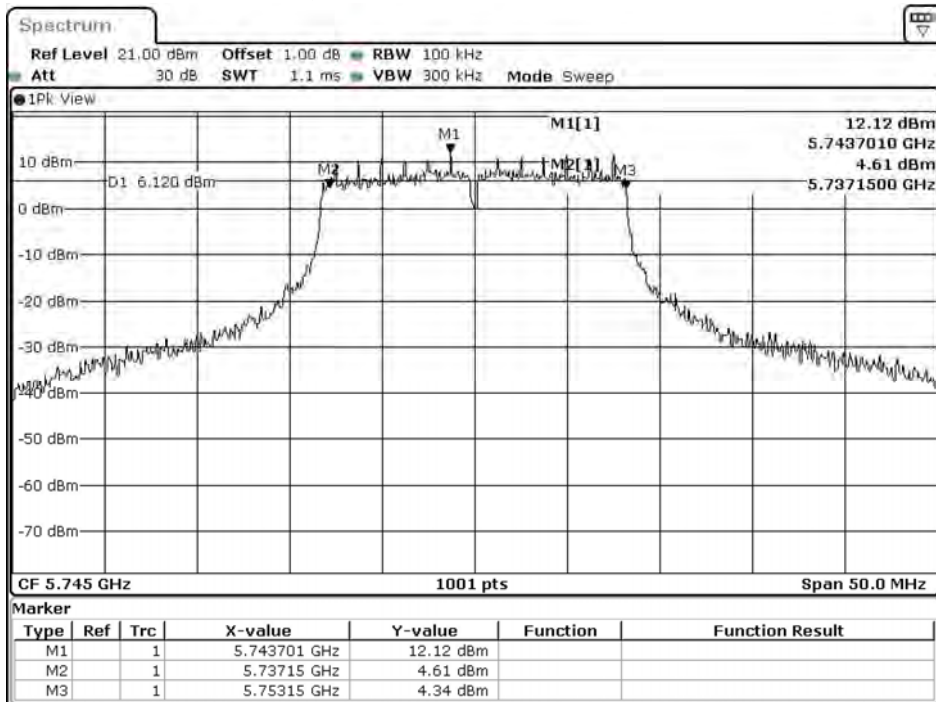
Channel No.	Chain	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	A	5745	15450	>500	Pass
157	A	5785	15650	>500	Pass
165	A	5825	15650	>500	Pass
149	B	5745	16000	>500	Pass
157	B	5785	16350	>500	Pass
165	B	5825	16400	>500	Pass
149	C	5745	15800	>500	Pass
157	C	5785	16000	>500	Pass
165	C	5825	15800	>500	Pass
149	D	5745	16000	>500	Pass
157	D	5785	16400	>500	Pass
165	D	5825	16350	>500	Pass

Figure Channel 149: (Chain A)



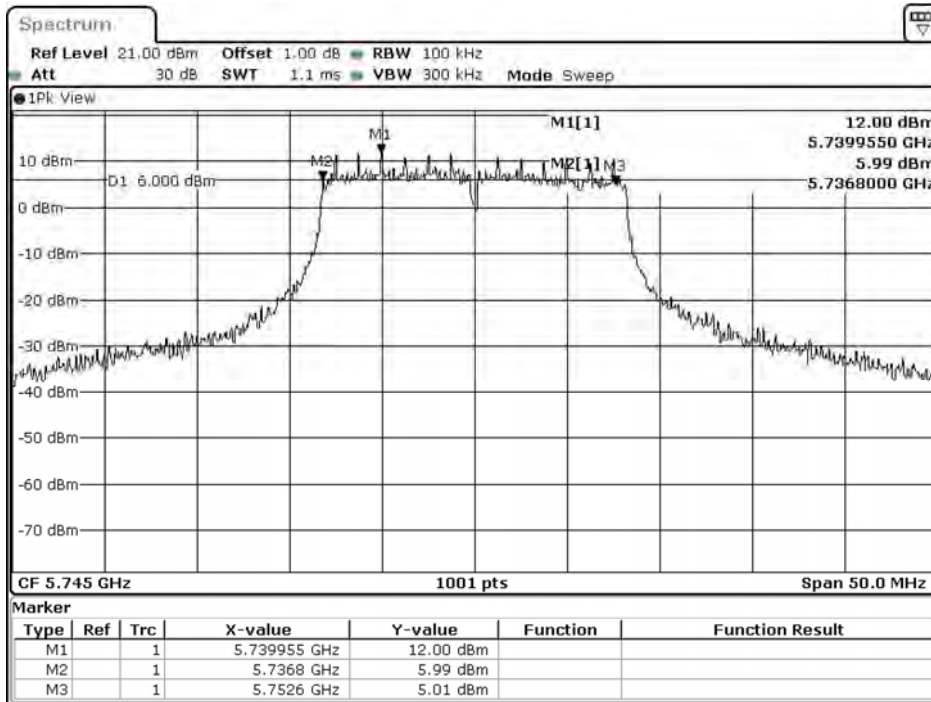
Date: 3.JUL.2020 22:25:07

Figure Channel 149: (Chain B)



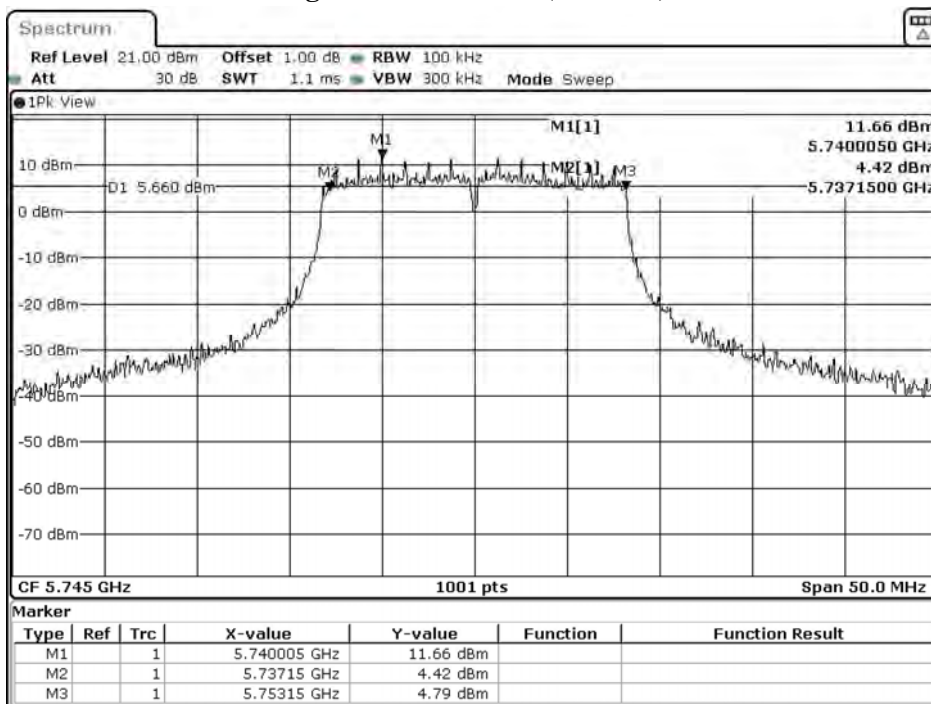
Date: 3.JUL.2020 22:28:10

Figure Channel 149: (Chain C)



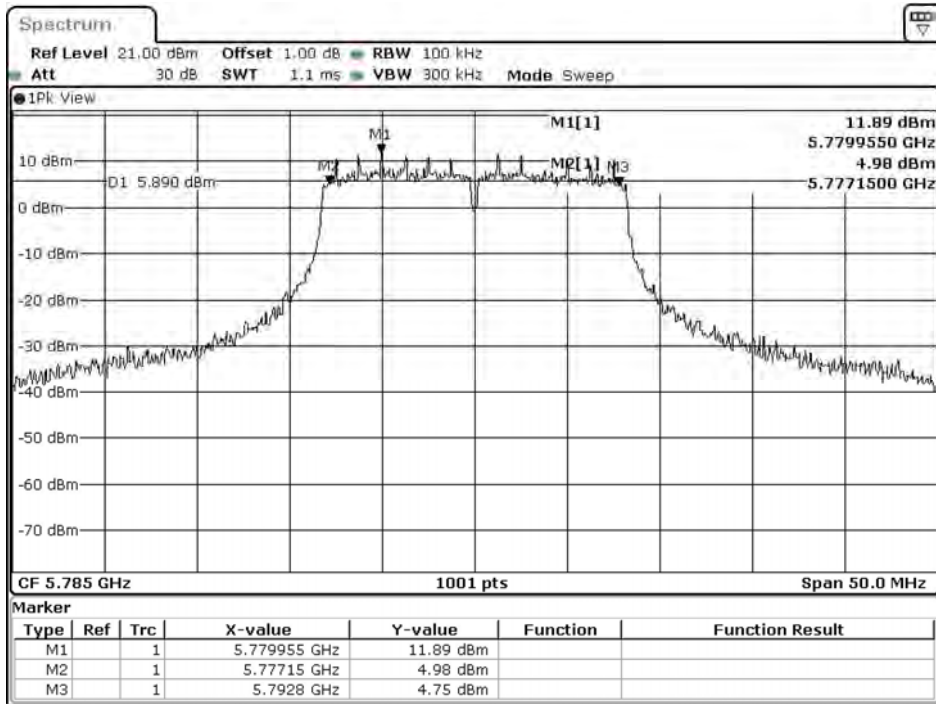
Date: 3.JUL.2020 14:30:34

Figure Channel 149: (Chain D)



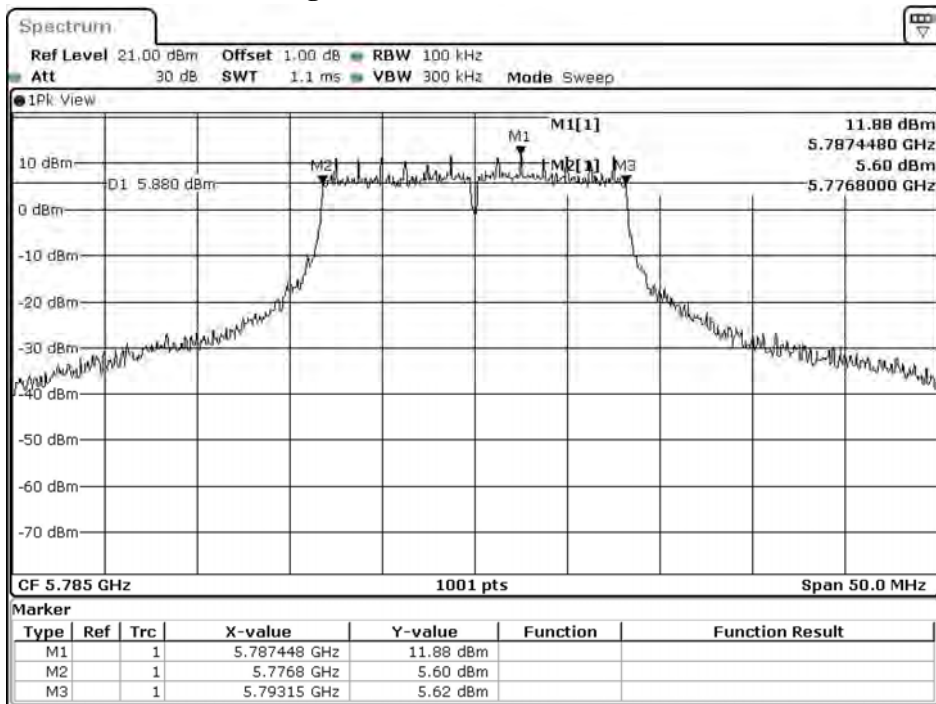
Date: 4.JUL.2020 02:28:25

Figure Channel 157: (Chain A)



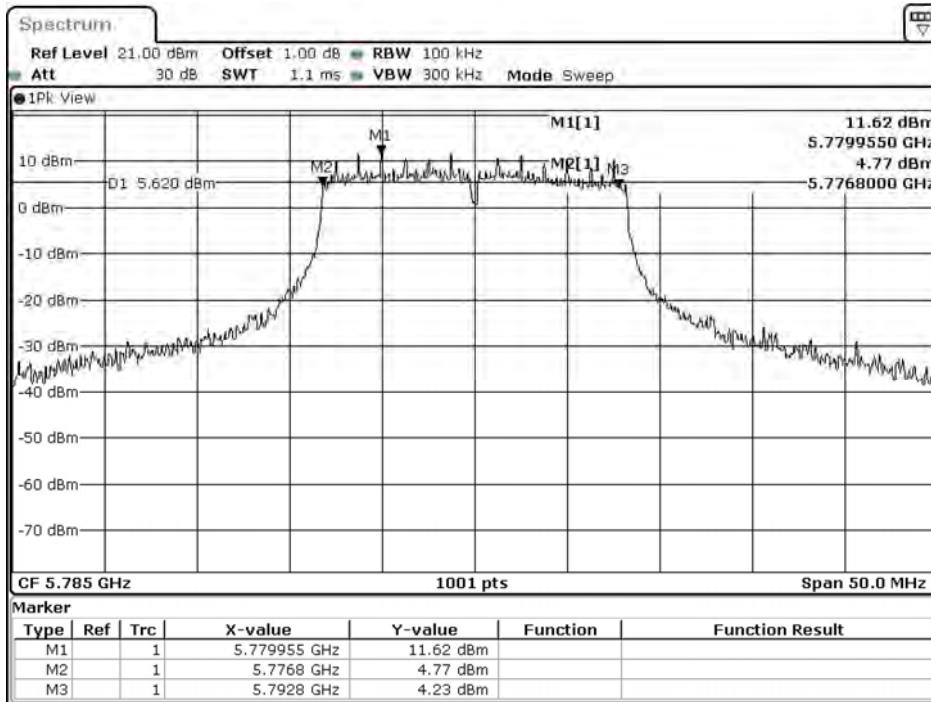
Date: 3.JUL.2020 22:28:26

Figure Channel 157: (Chain B)



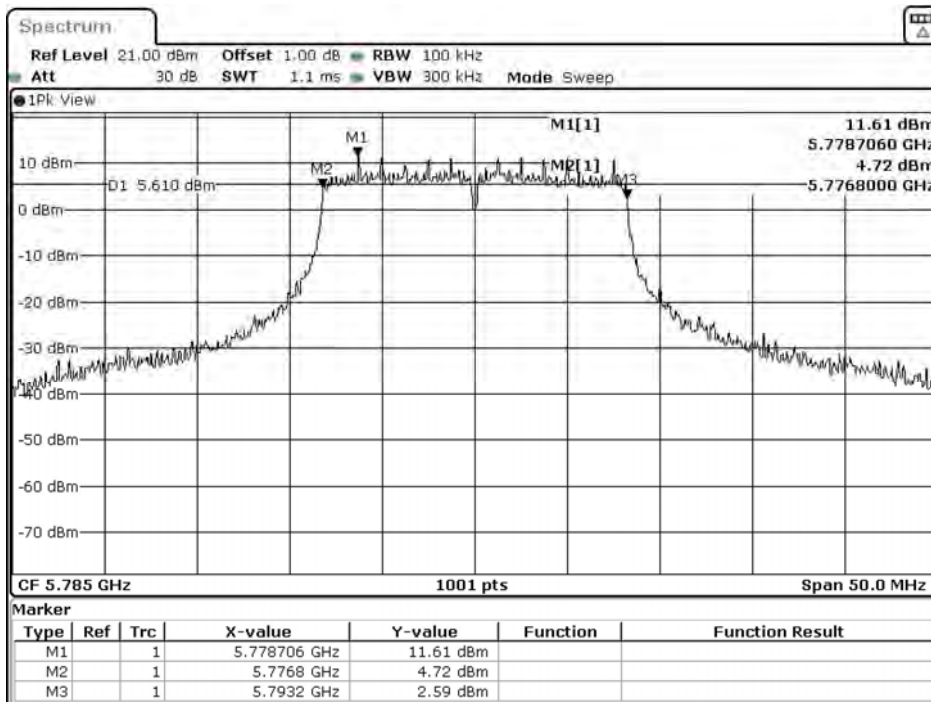
Date: 3.JUL.2020 22:31:29

Figure Channel 157: (Chain C)



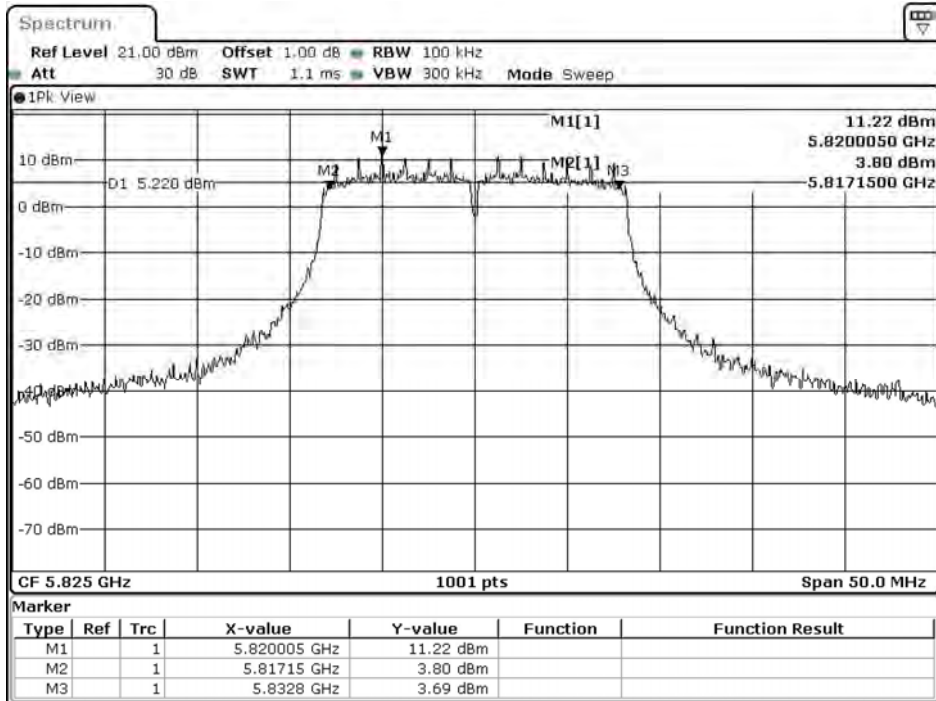
Date: 3.JUL.2020 14:33:53

Figure Channel 157: (Chain D)



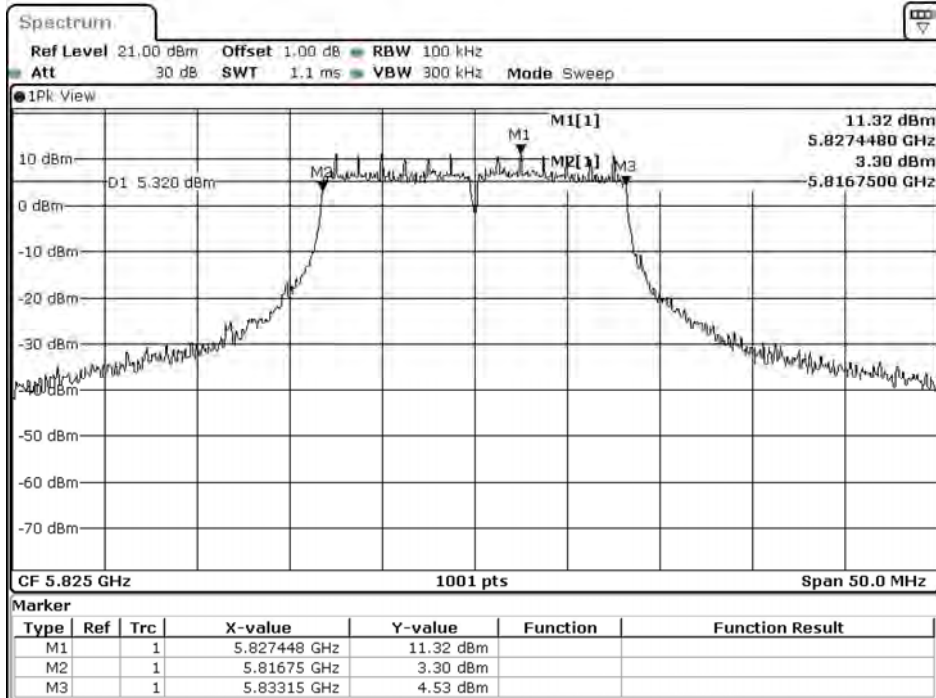
Date: 4.JUL.2020 02:31:44

Figure Channel 165: (Chain A)



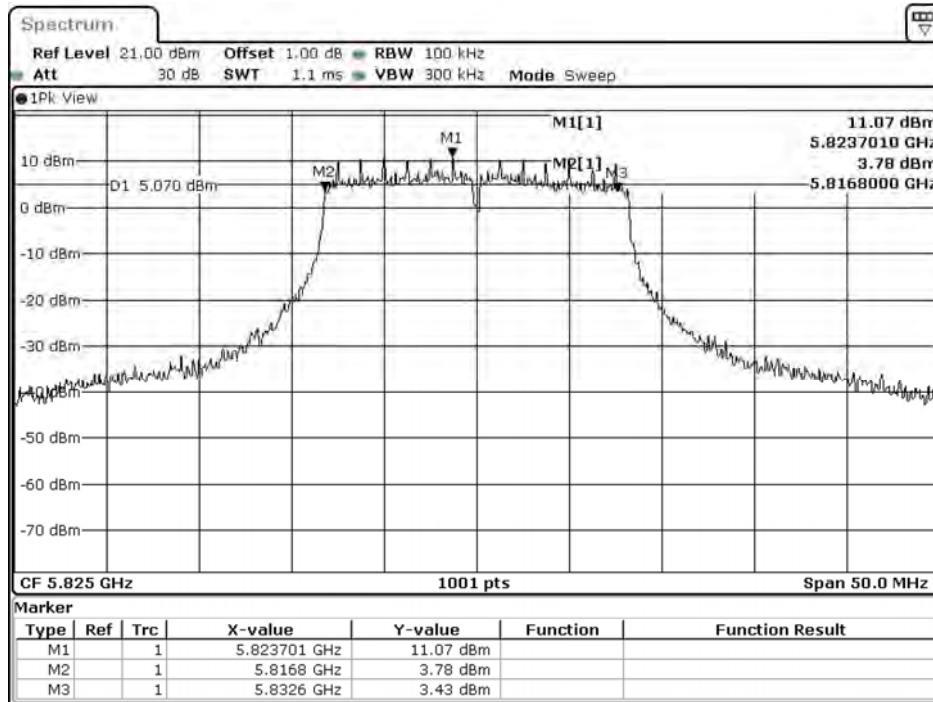
Date: 3.JUL.2020 22:31:20

Figure Channel 165: (Chain B)



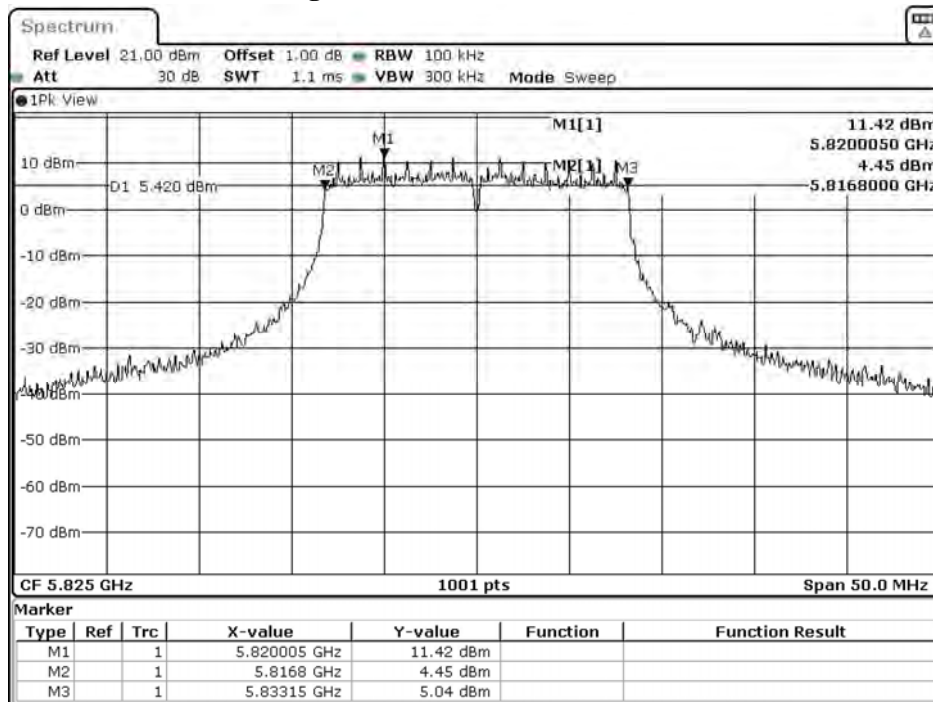
Date: 3.JUL.2020 22:34:23

Figure Channel 165: (Chain C)



Date: 3.JUL.2020 14:36:48

Figure Channel 165: (Chain D)

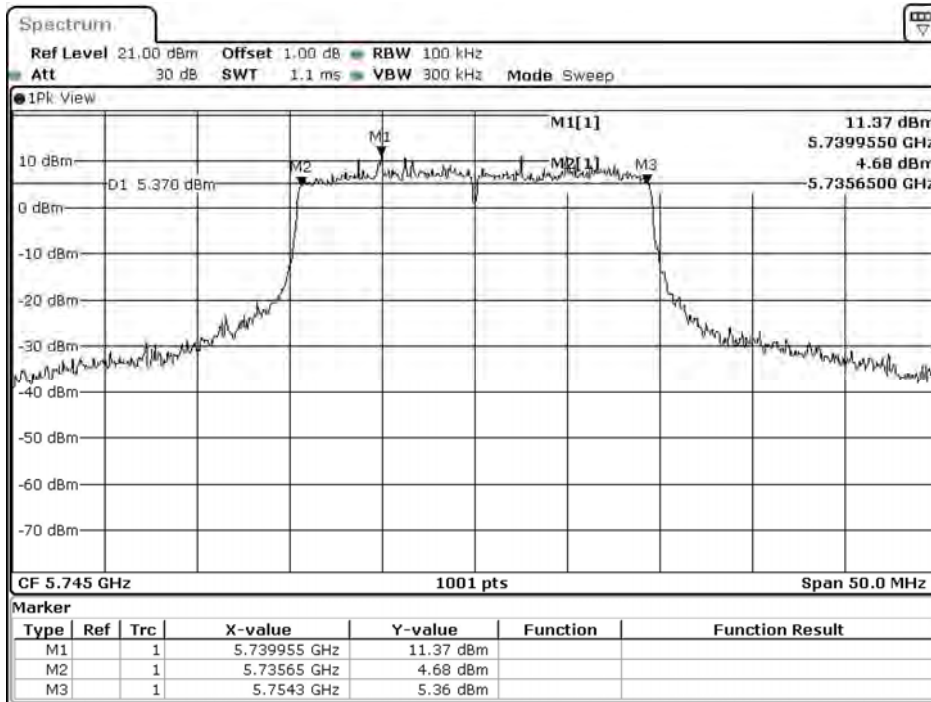


Date: 4.JUL.2020 02:34:39

Product : LV55
Test Item : Occupied Bandwidth Data
Test Mode : Mode 7: Transmit (802.11ax-20MBW-CDD) (RU Config-Full)
Test Date : 2020/07/03

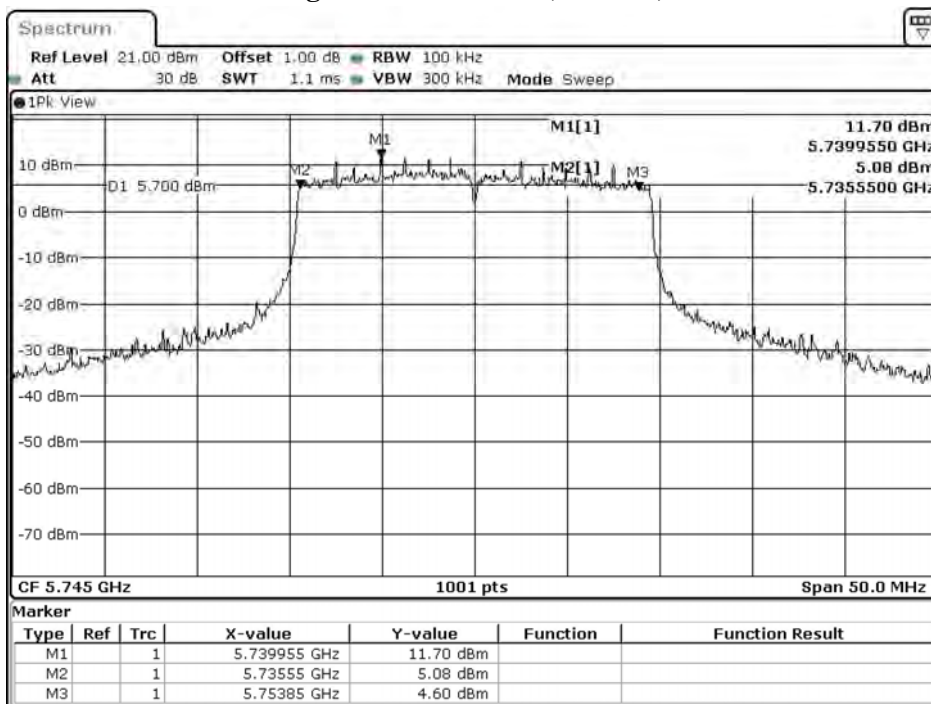
Channel No.	Chain	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	A	5745	18650	>500	Pass
157	A	5785	19050	>500	Pass
165	A	5825	19000	>500	Pass
149	B	5745	18300	>500	Pass
157	B	5785	18500	>500	Pass
165	B	5825	18800	>500	Pass
149	C	5745	18500	>500	Pass
157	C	5785	18050	>500	Pass
165	C	5825	17000	>500	Pass
149	D	5745	18300	>500	Pass
157	D	5785	18950	>500	Pass
165	D	5825	17350	>500	Pass

Figure Channel 149: (Chain A)



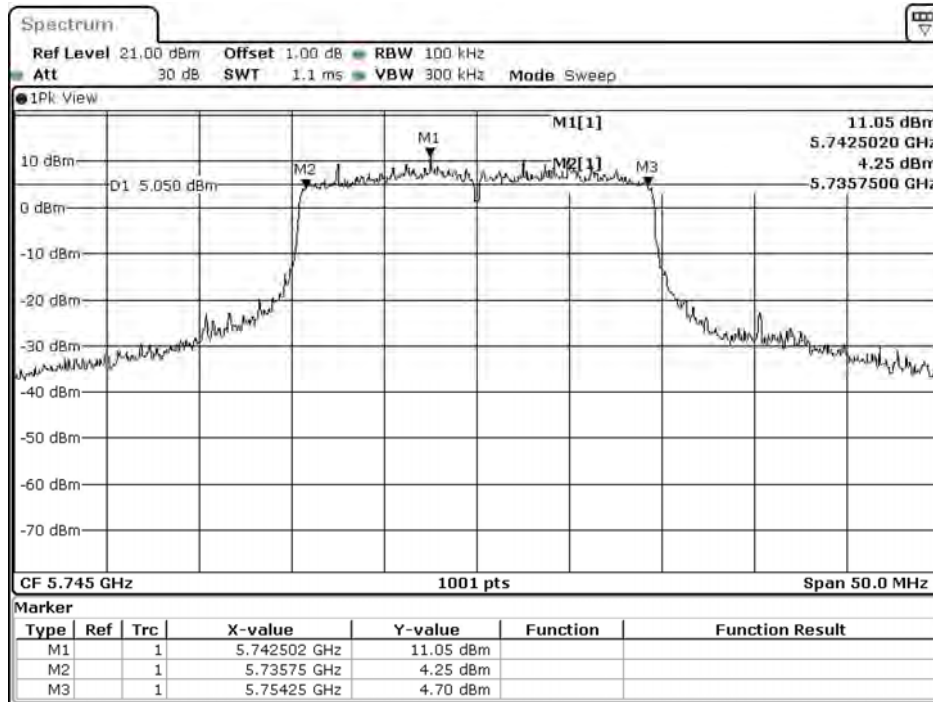
Date: 3.JUL.2020 22:37:16

Figure Channel 149: (Chain B)



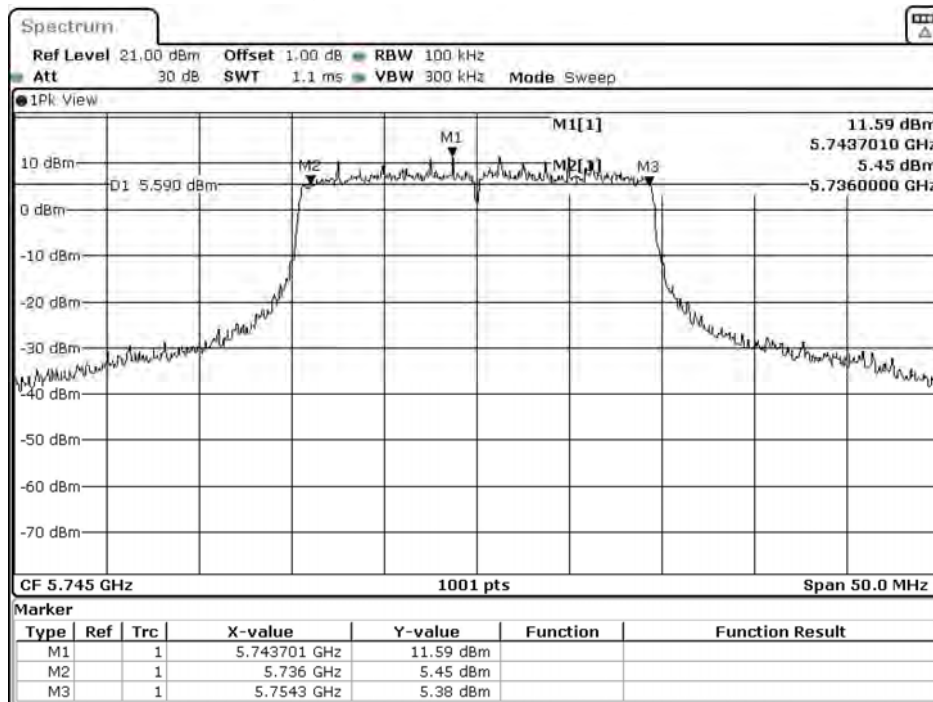
Date: 3.JUL.2020 22:40:20

Figure Channel 149: (Chain C)



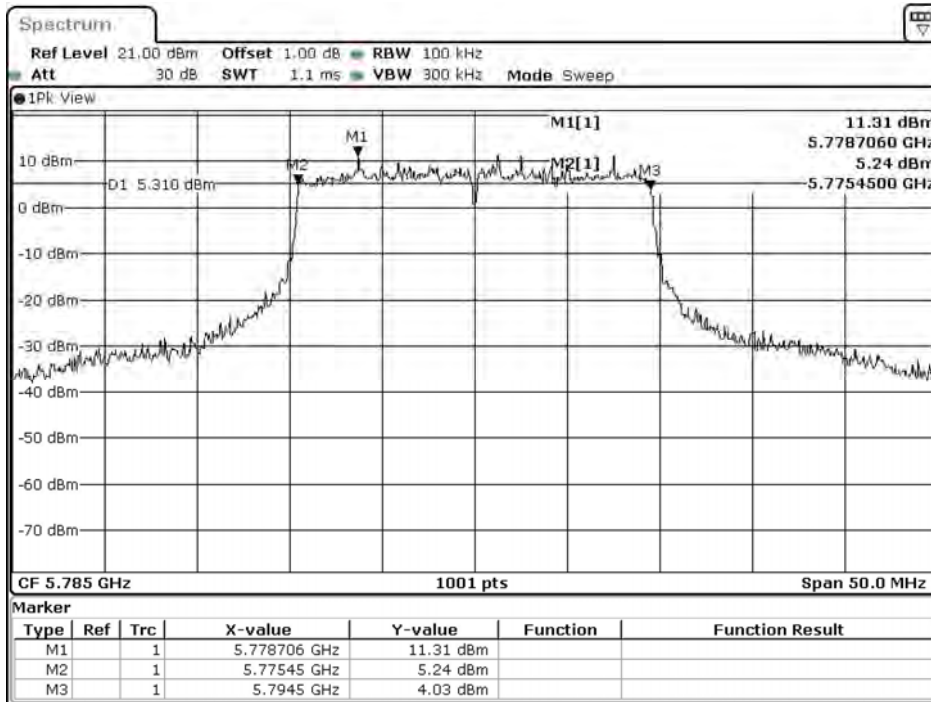
Date: 3.JUL.2020 14:42:44

Figure Channel 149: (Chain D)



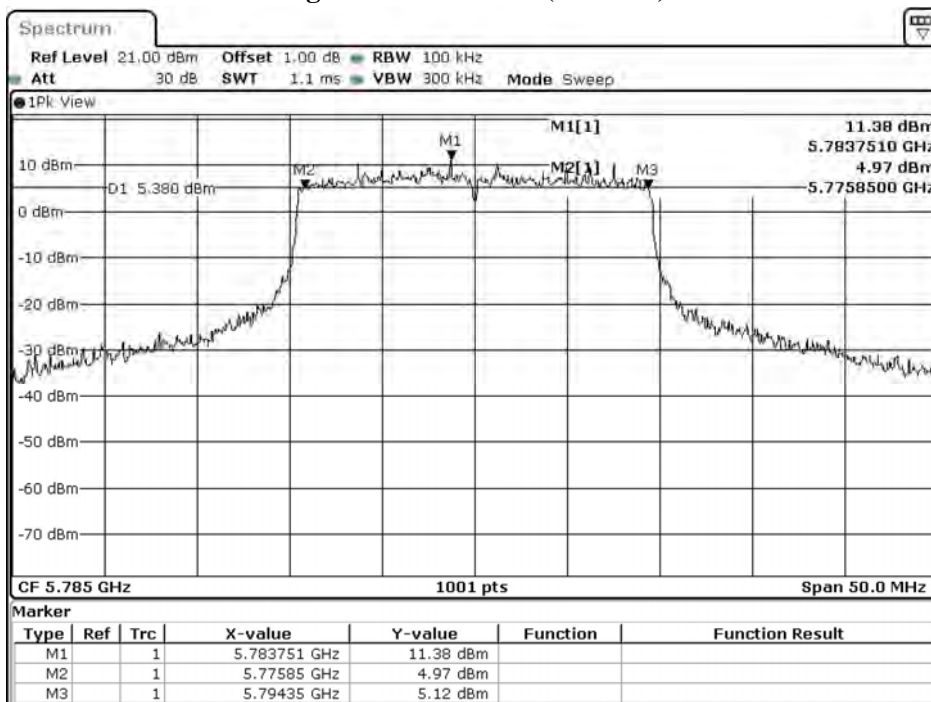
Date: 4.JUL.2020 02:40:35

Figure Channel 157: (Chain A)



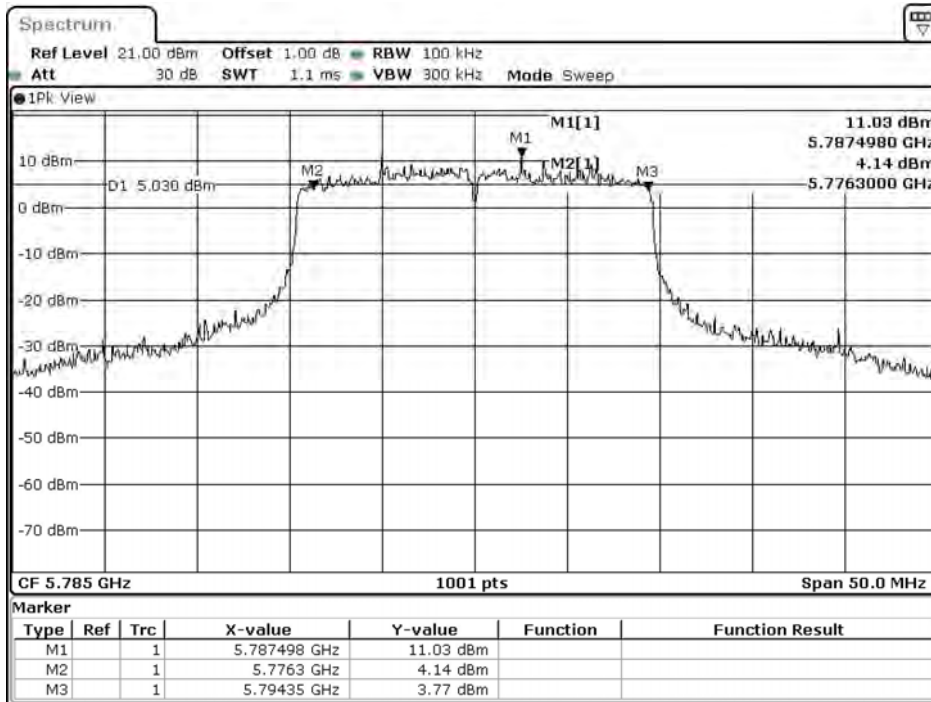
Date: 3.JUL.2020 22:39:53

Figure Channel 157: (Chain B)



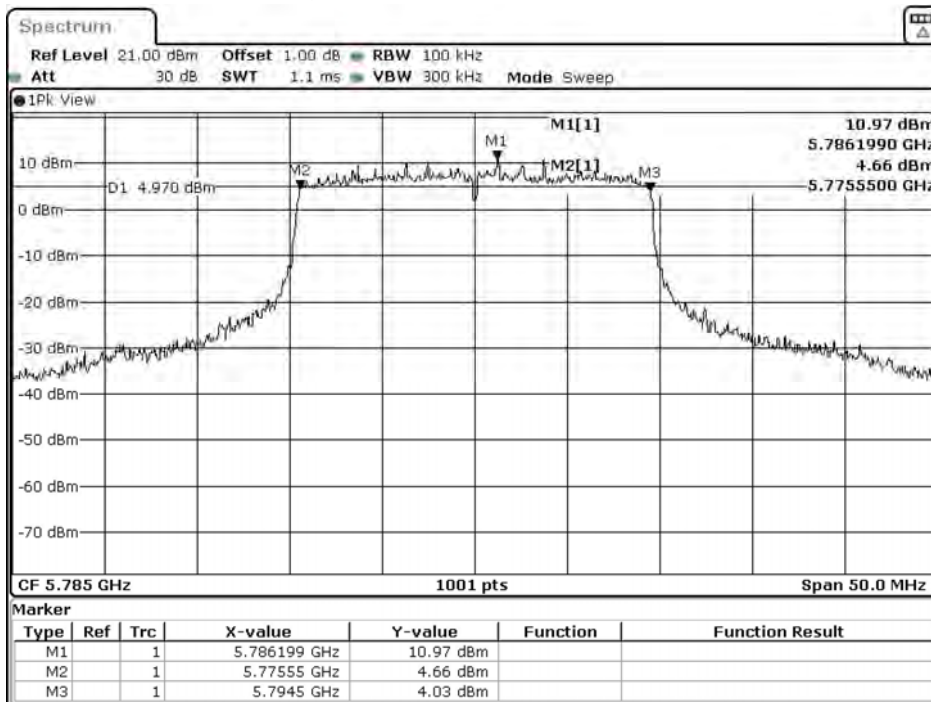
Date: 3.JUL.2020 22:42:56

Figure Channel 157: (Chain C)



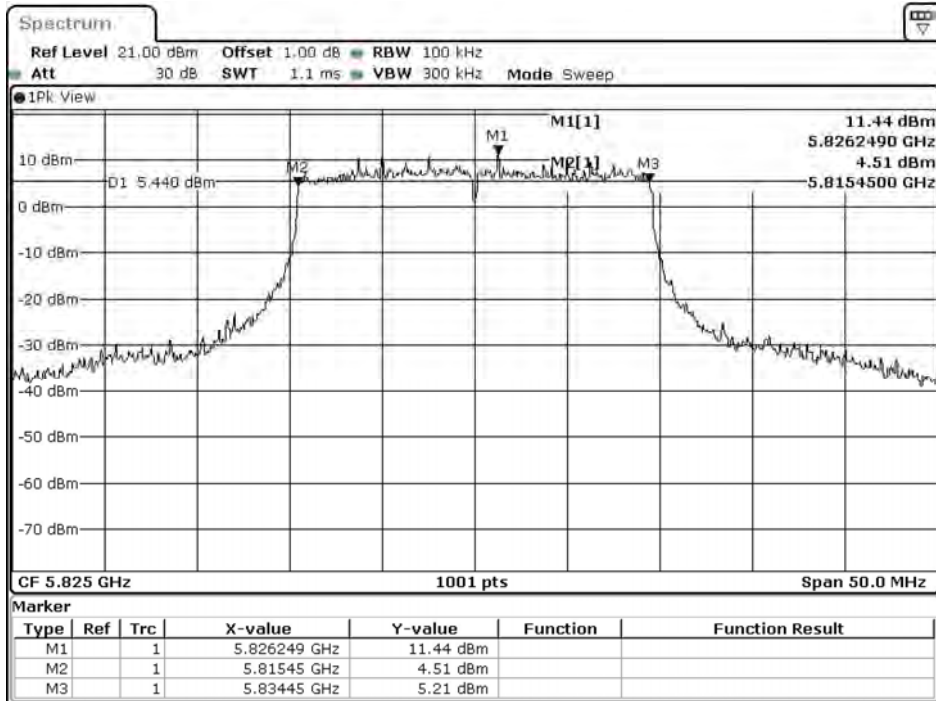
Date: 3.JUL.2020 14:45:20

Figure Channel 157: (Chain D)



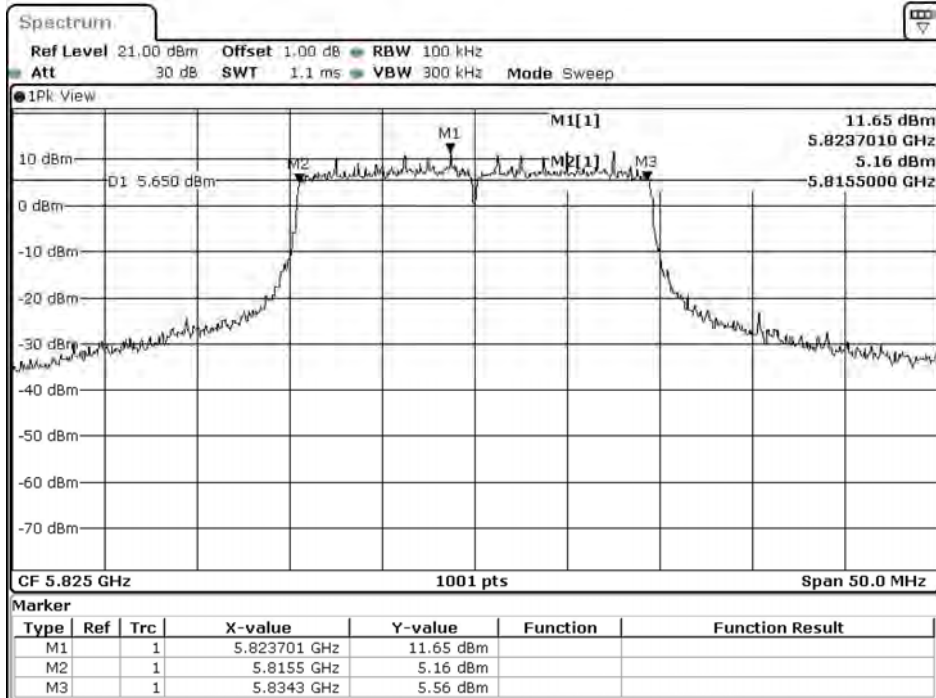
Date: 4.JUL.2020 02:43:11

Figure Channel 165: (Chain A)



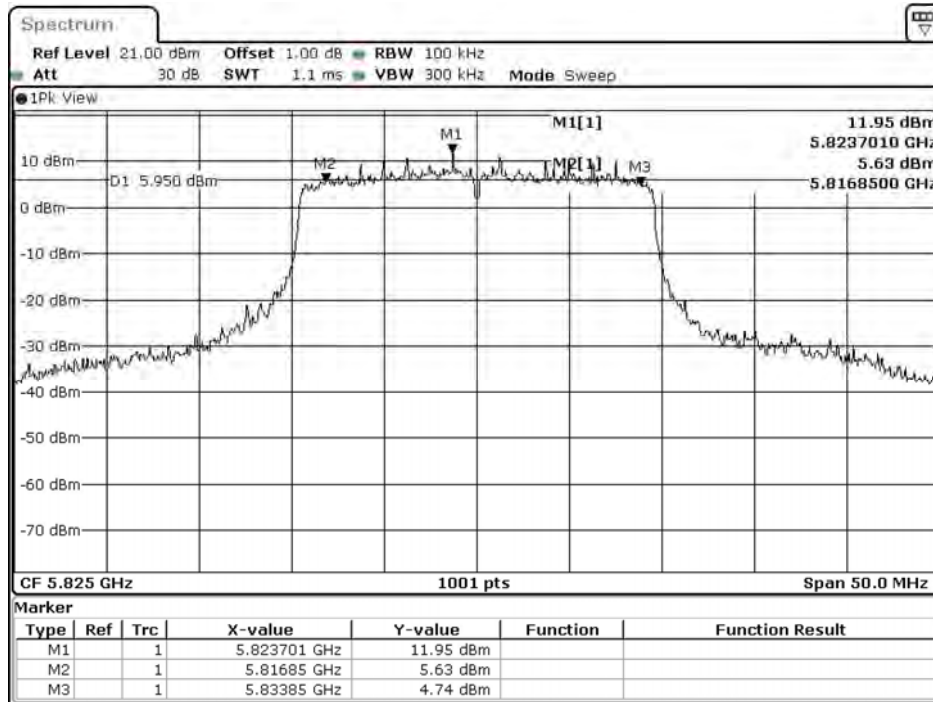
Date: 3.JUL.2020 22:42:24

Figure Channel 165: (Chain B)



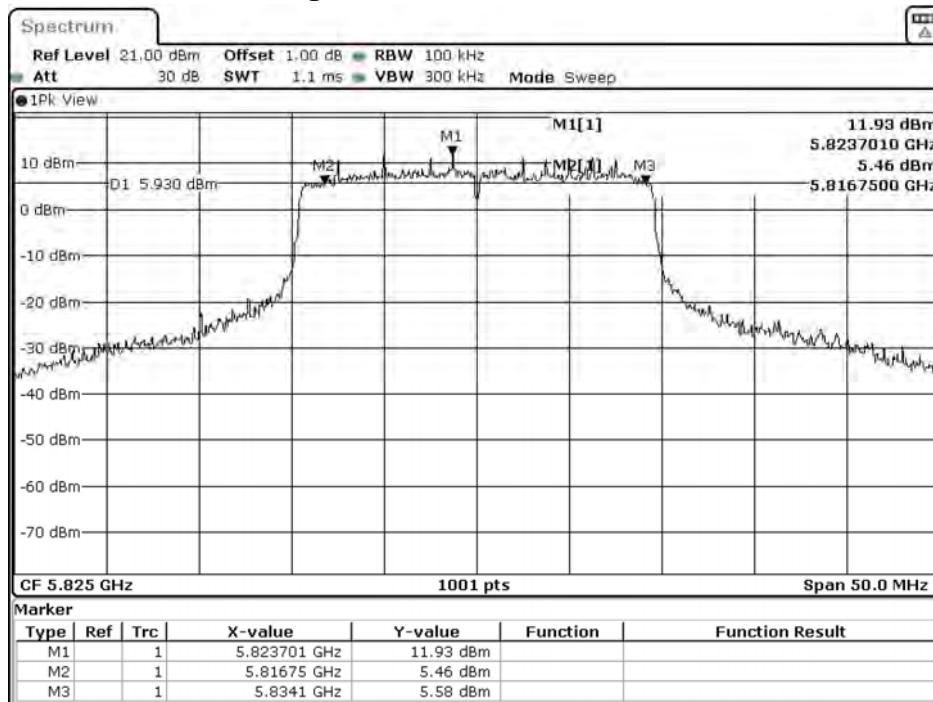
Date: 3.JUL.2020 22:45:28

Figure Channel 165: (Chain C)



Date: 3.JUL.2020 14:47:52

Figure Channel 165: (Chain D)

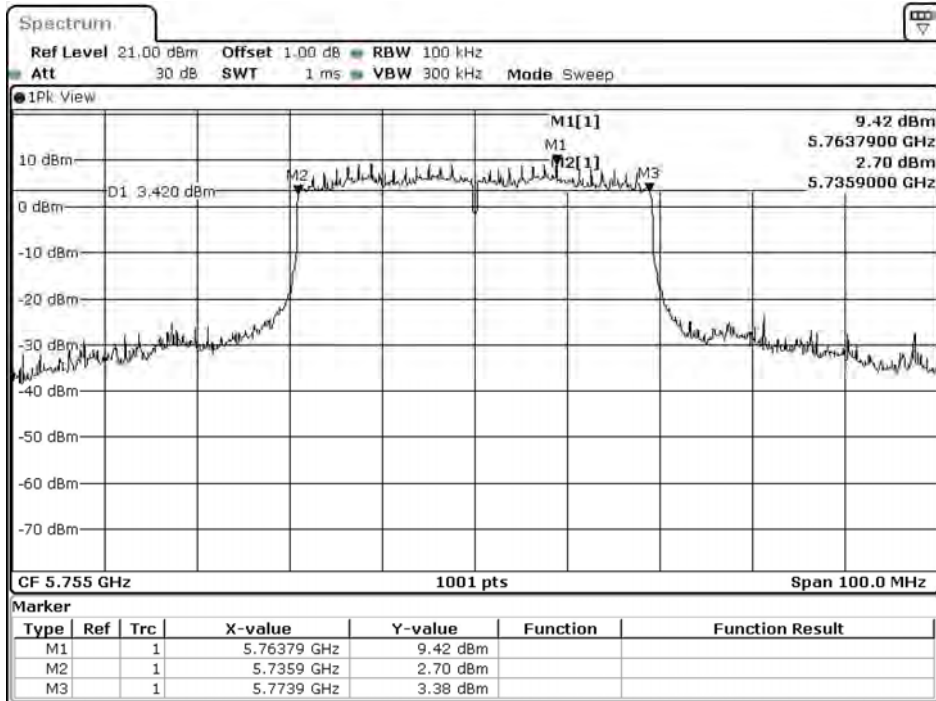


Date: 4.JUL.2020 02:45:43

Product : LV55
Test Item : Occupied Bandwidth Data
Test Mode : Mode 8: Transmit (802.11ax-40MBW-CDD) (RU Config-Full)
Test Date : 2020/07/03

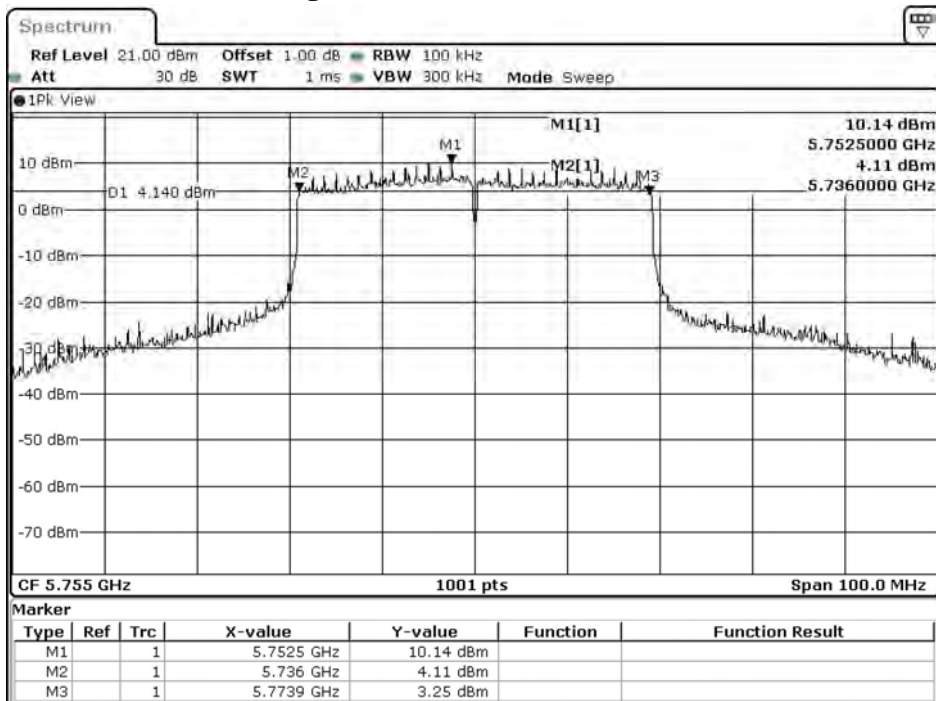
Channel No.	Chain	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	A	5755	38000	>500	Pass
159	A	5795	37900	>500	Pass
151	B	5755	37900	>500	Pass
159	B	5795	37900	>500	Pass
151	C	5755	38200	>500	Pass
159	C	5795	37800	>500	Pass
151	D	5755	38000	>500	Pass
159	D	5795	38100	>500	Pass

Figure Channel 151: (Chain A)



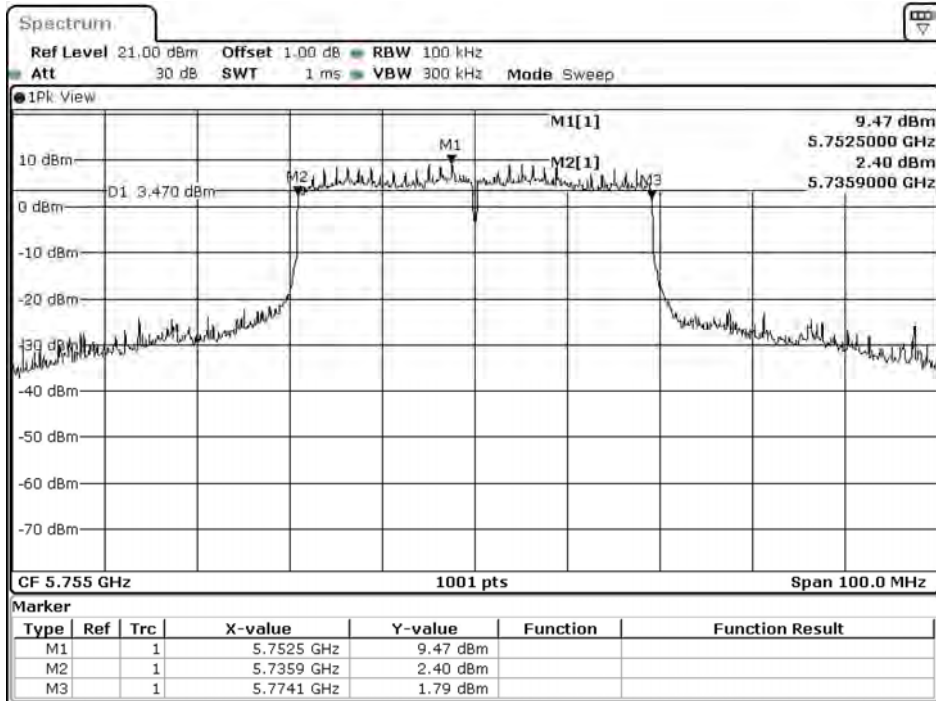
Date: 3.JUL.2020 22:45:20

Figure Channel 151: (Chain B)



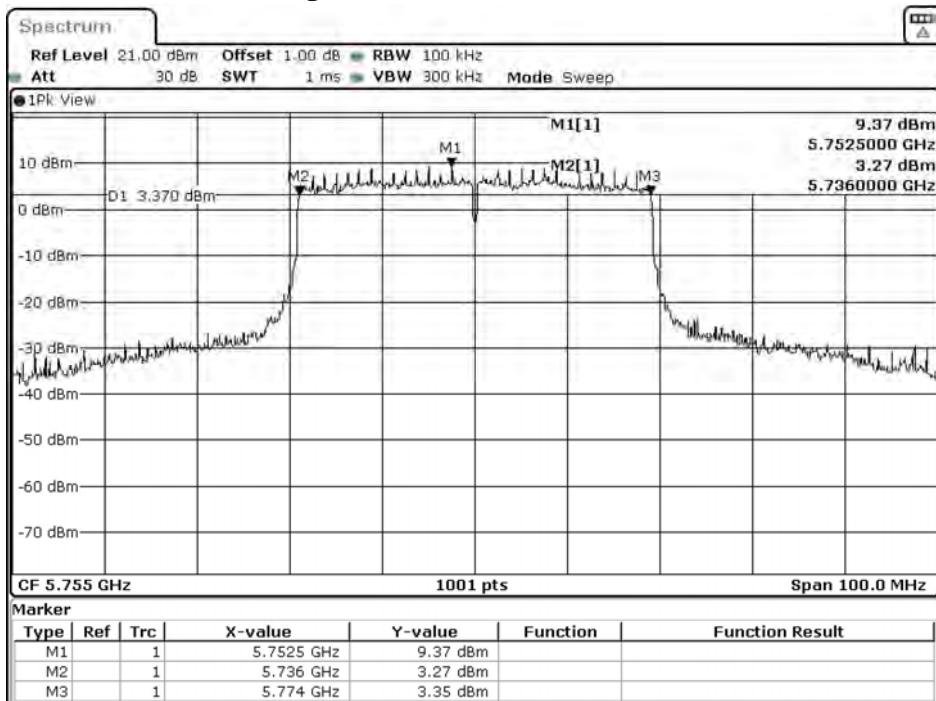
Date: 3.JUL.2020 22:48:23

Figure Channel 151: (Chain C)



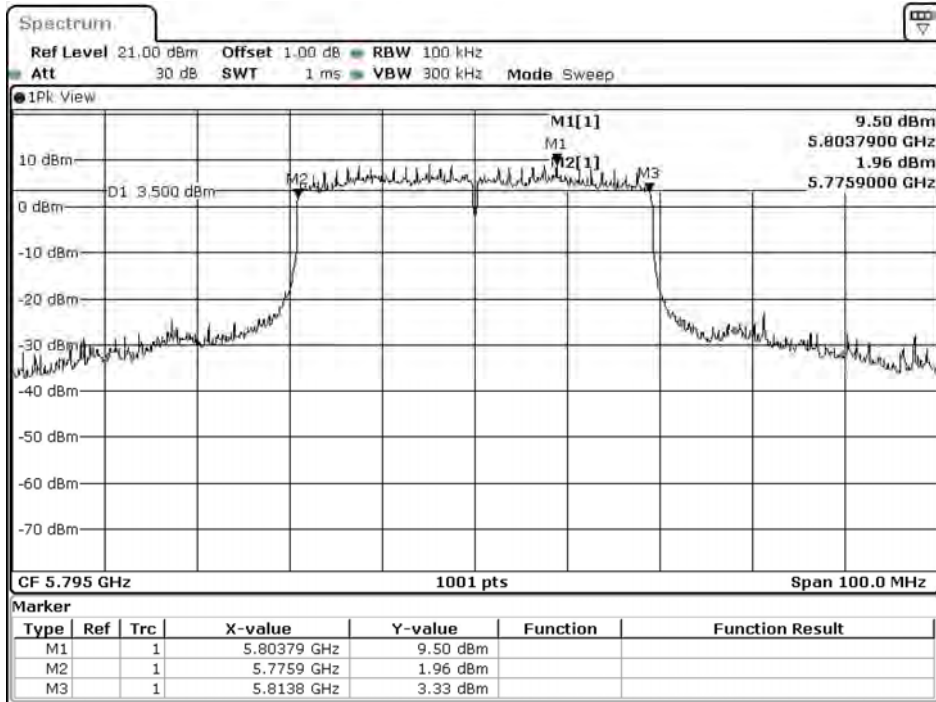
Date: 3.JUL.2020 14:50:48

Figure Channel 151: (Chain D)



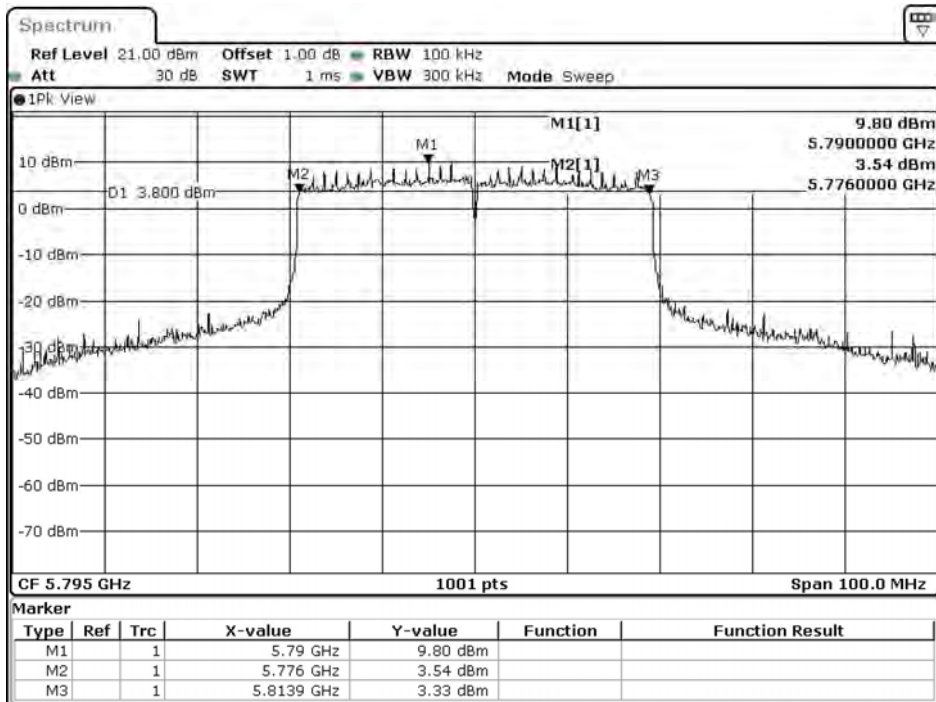
Date: 4.JUL.2020 02:48:39

Figure Channel 159: (Chain A)



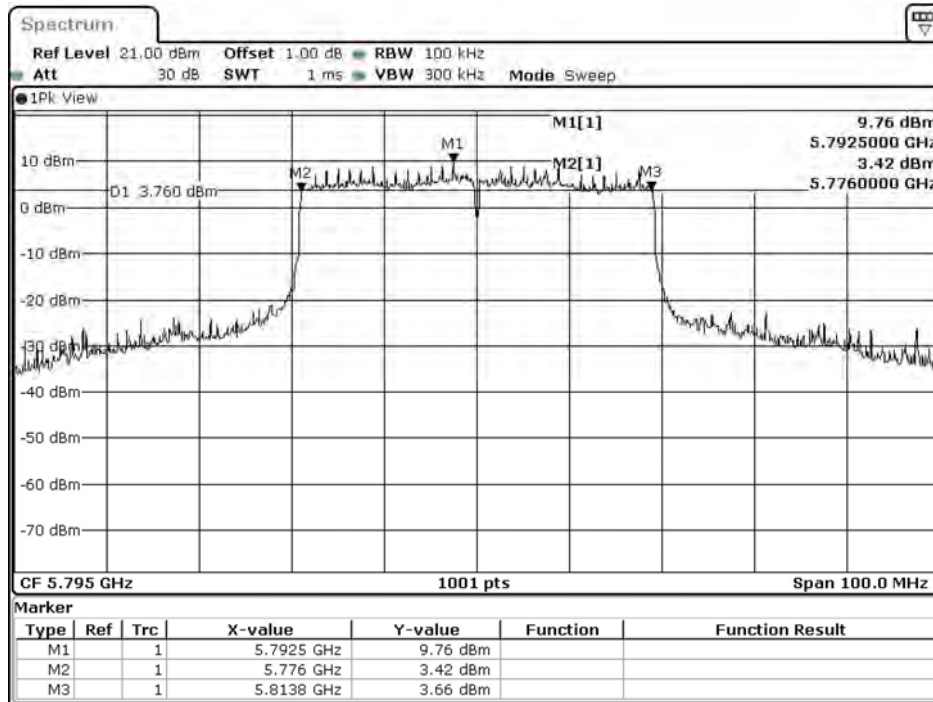
Date: 3.JUL.2020 22:48:14

Figure Channel 159: (Chain B)



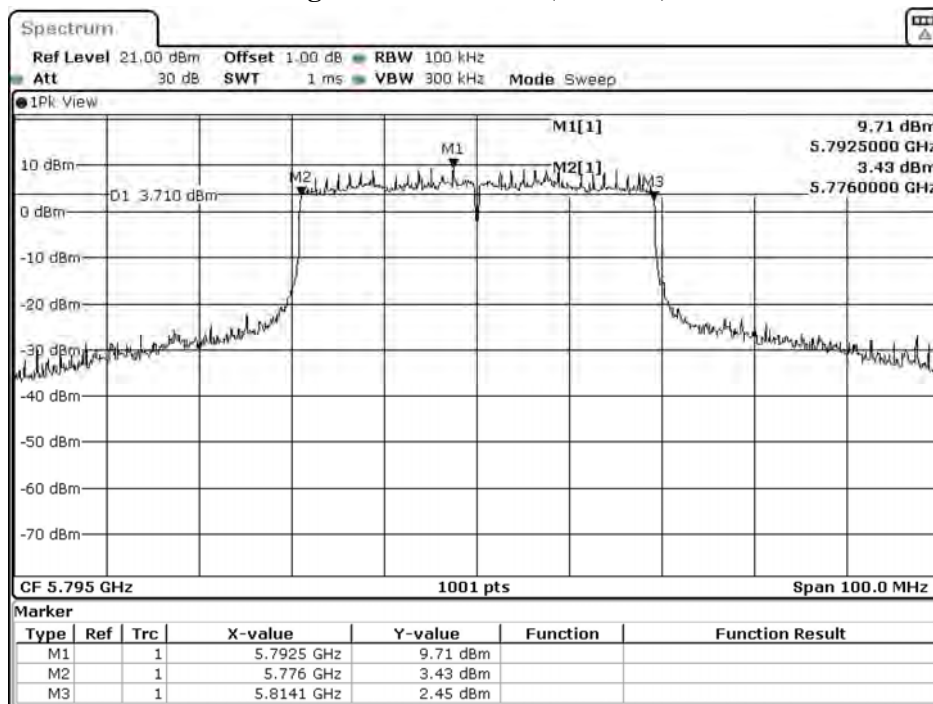
Date: 3.JUL.2020 22:51:18

Figure Channel 159: (Chain C)



Date: 3.JUL.2020 14:53:42

Figure Channel 159: (Chain D)

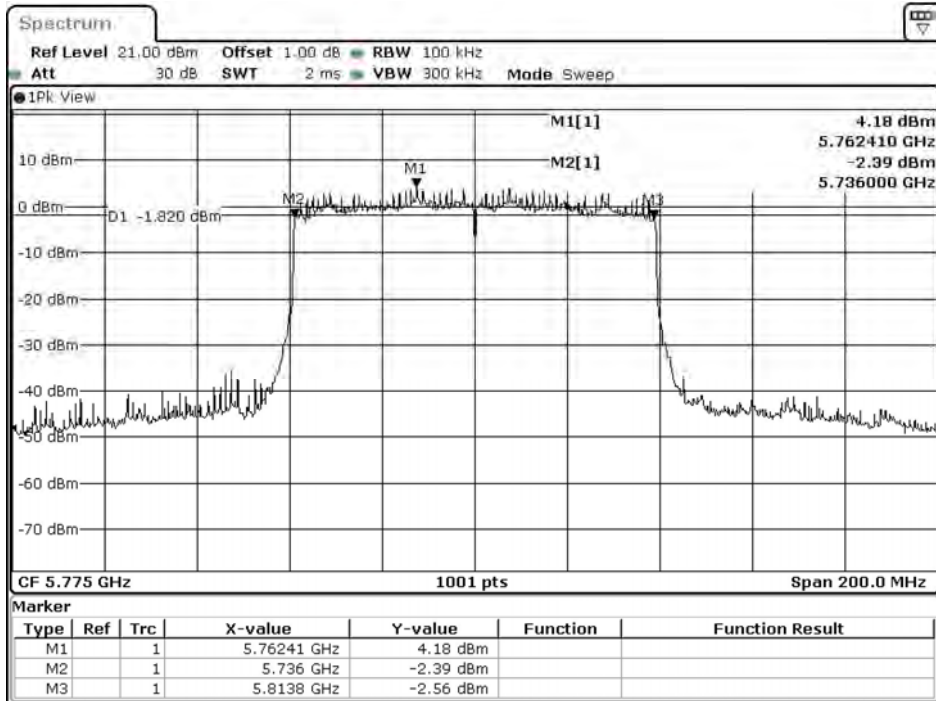


Date: 4.JUL.2020 02:51:33

Product : LV55
Test Item : Occupied Bandwidth Data
Test Mode : Mode 9: Transmit (802.11ax-80MBW-CDD) (RU Config-Full)
Test Date : 2020/07/03

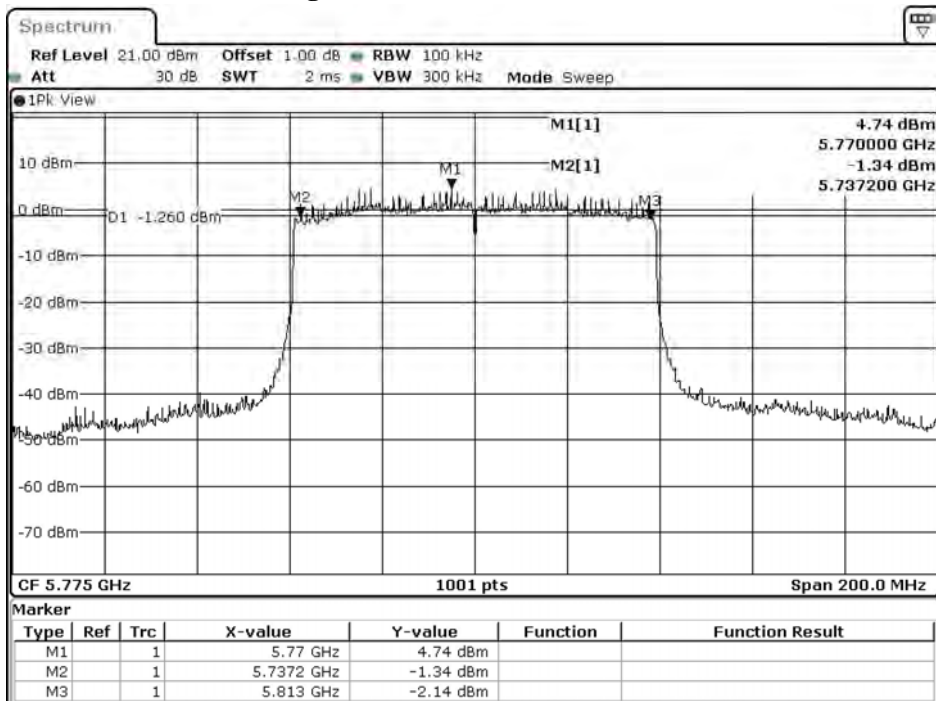
Channel No.	Chain	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
155	A	5775	77800	>500	Pass
155	B	5775	75800	>500	Pass
155	C	5775	75600	>500	Pass
155	D	5775	78000	>500	Pass

Figure Channel 155: (Chain A)



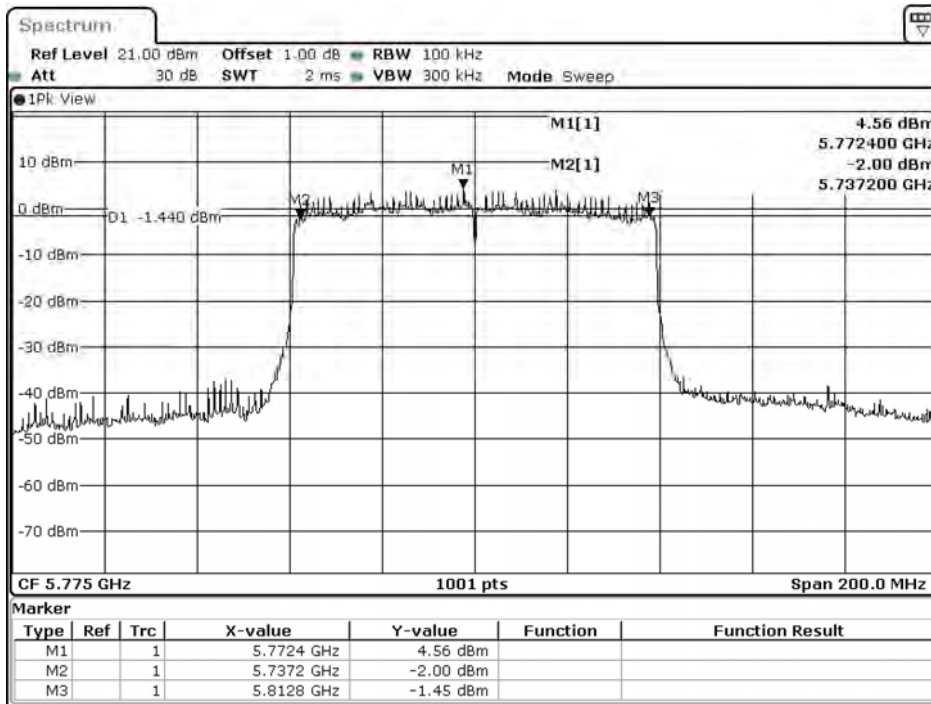
Date: 3.JUL.2020 22:34:20

Figure Channel 155: (Chain B)



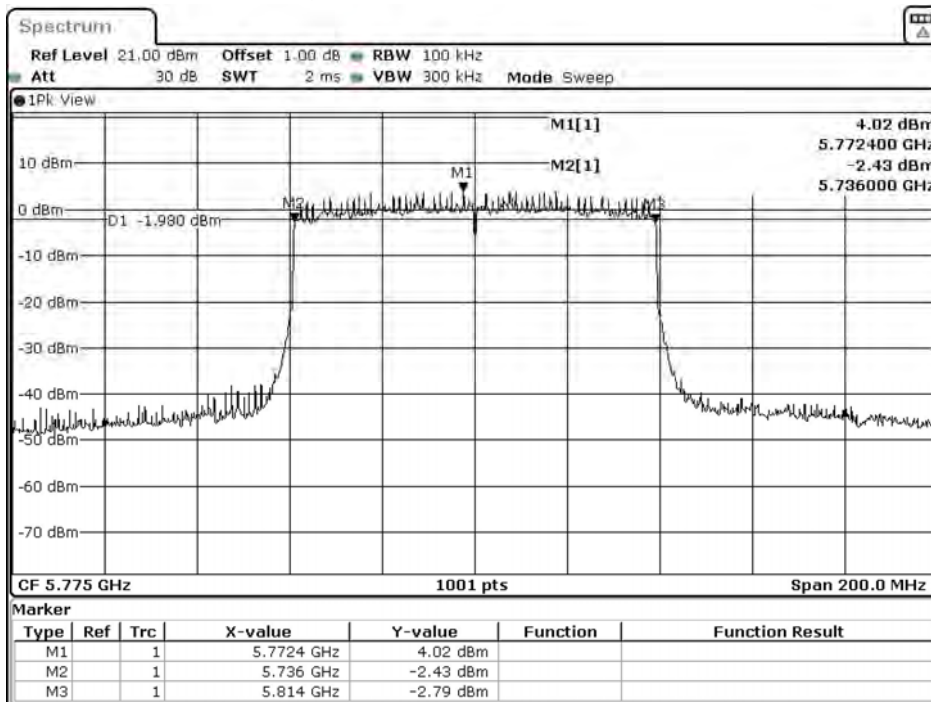
Date: 3.JUL.2020 22:37:23

Figure Channel 155: (Chain C)



Date: 3.JUL.2020 14:39:48

Figure Channel 155: (Chain D)

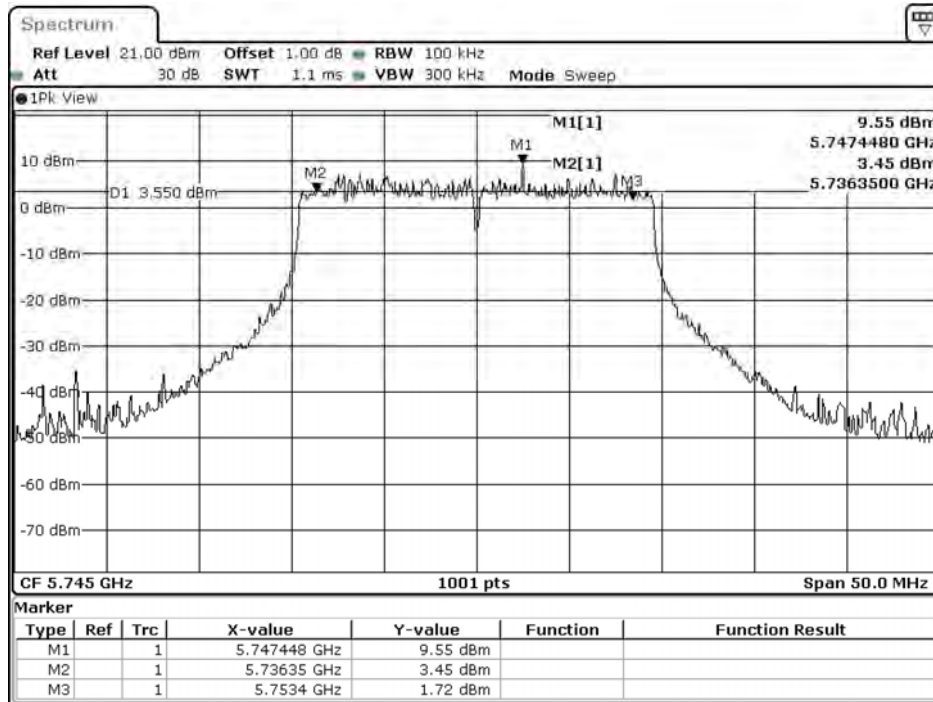


Date: 4.JUL.2020 02:37:39

Product : LV55
Test Item : Occupied Bandwidth Data
Test Mode : Mode 15: Transmit (802.11ax-20MBW-Beamforming)
Test Date : 2020/07/04

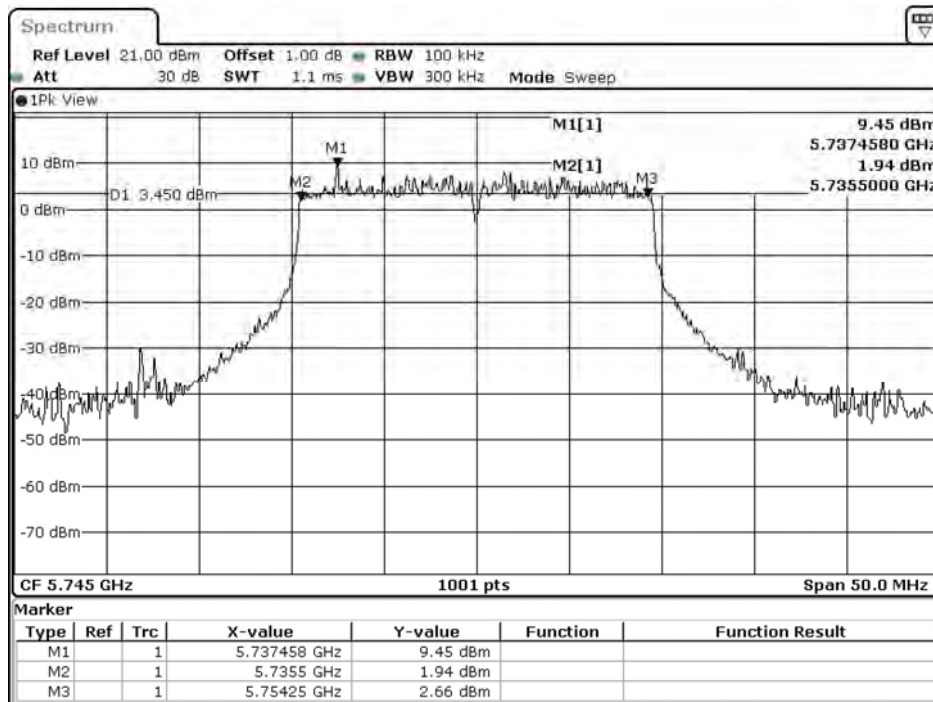
Channel No.	Chain	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	A	5745	17050	>500	Pass
157	A	5785	15150	>500	Pass
165	A	5825	19200	>500	Pass
149	B	5745	18740	>500	Pass
157	B	5785	19150	>500	Pass
165	B	5825	19200	>500	Pass
149	C	5745	17150	>500	Pass
157	C	5785	16400	>500	Pass
165	C	5825	19150	>500	Pass
149	D	5745	18800	>500	Pass
157	D	5785	18850	>500	Pass
165	D	5825	19150	>500	Pass

Figure Channel 149: (Chain A)



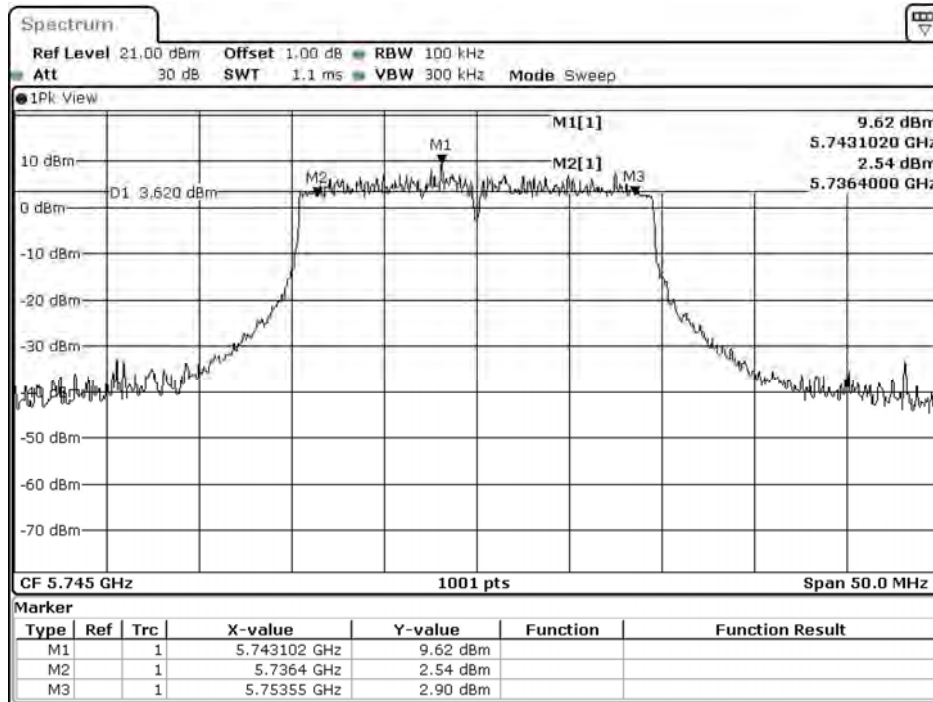
Date: 4.JUL.2020 20:58:21

Figure Channel 149: (Chain B)



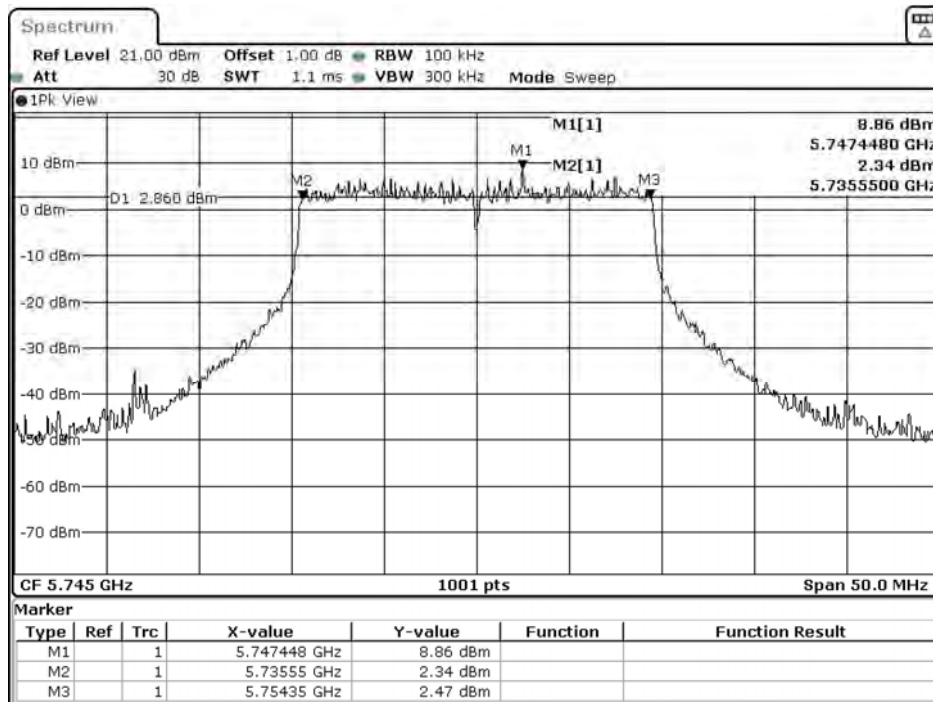
Date: 4.JUL.2020 21:01:25

Figure Channel 149: (Chain C)



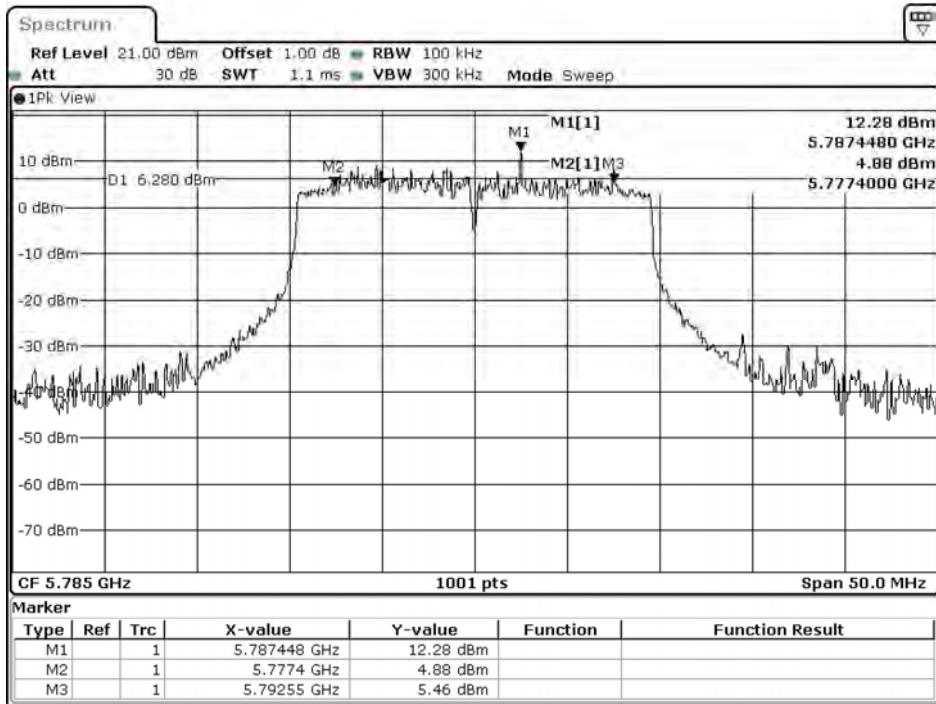
Date: 4.JUL.2020 13:03:48

Figure Channel 149: (Chain D)



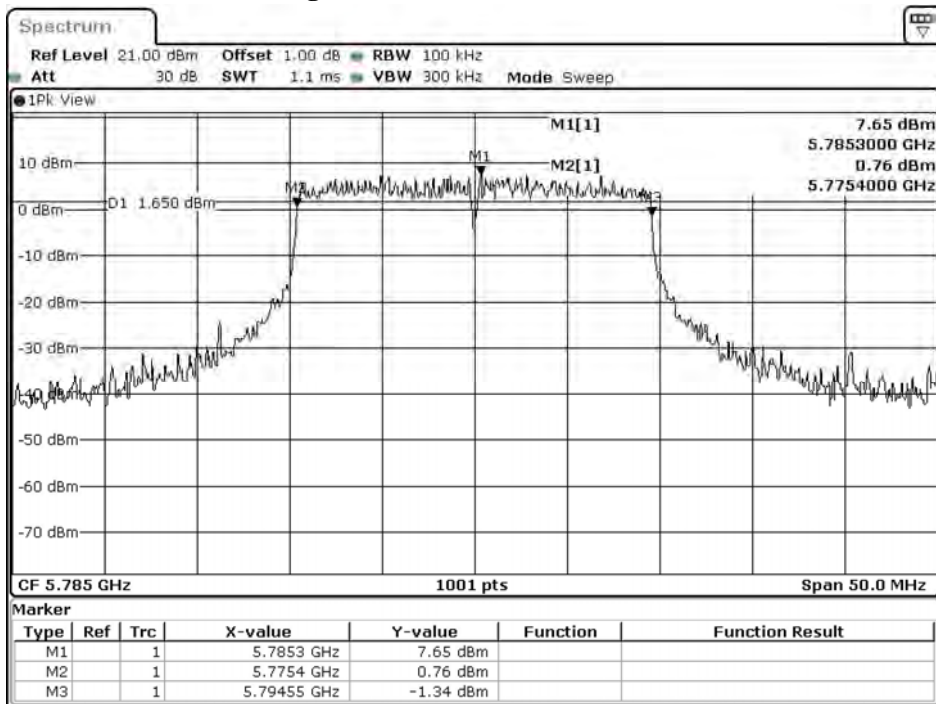
Date: 5.JUL.2020 01:01:39

Figure Channel 157: (Chain A)



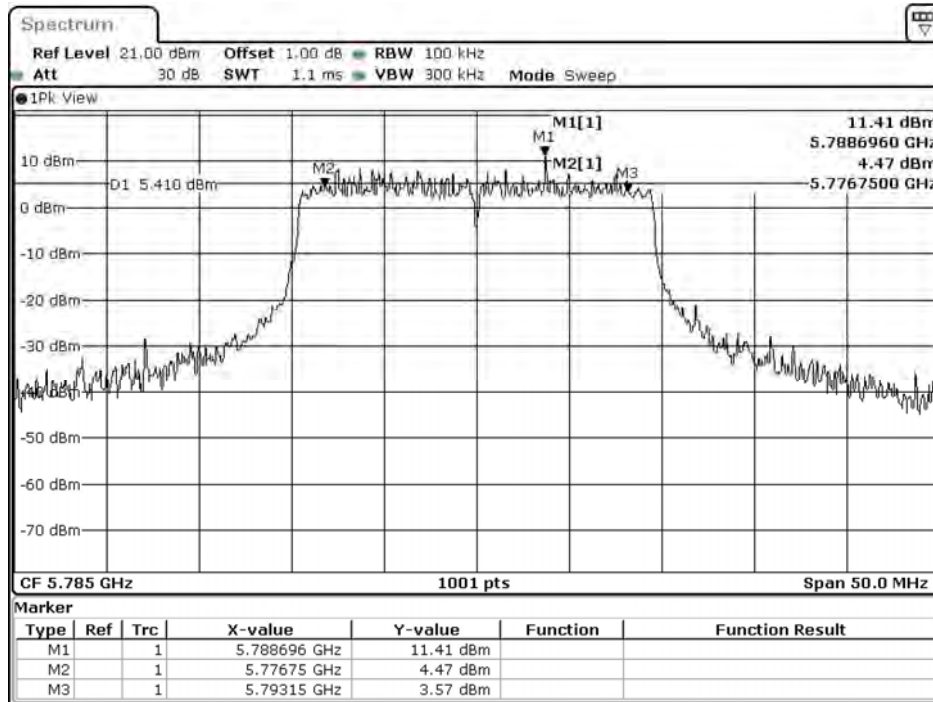
Date: 4.JUL.2020 21:03:01

Figure Channel 157: (Chain B)



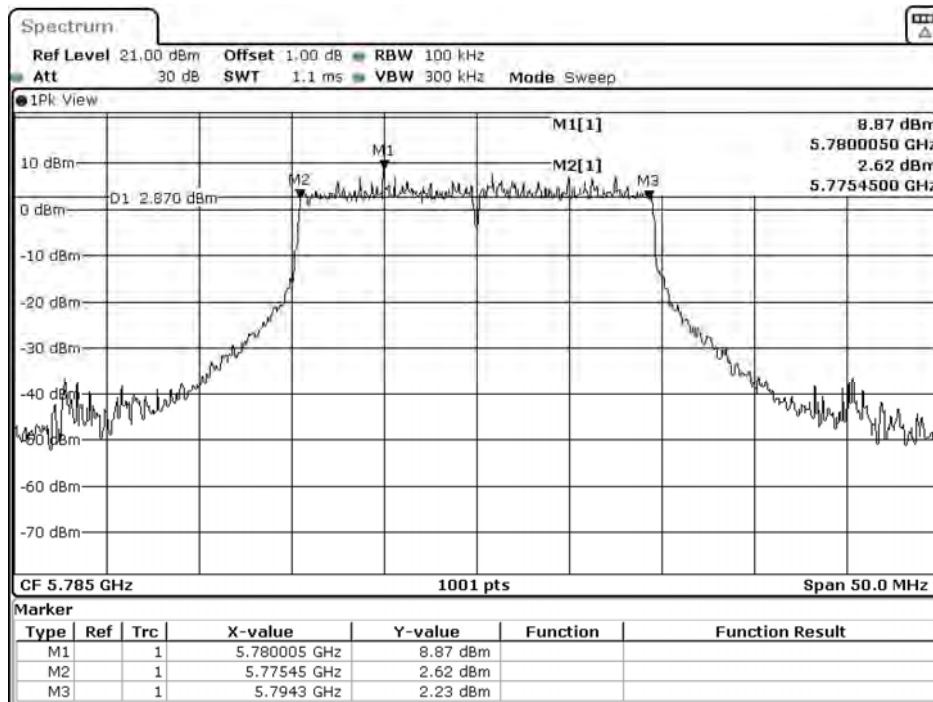
Date: 4.JUL.2020 21:06:05

Figure Channel 157: (Chain C)



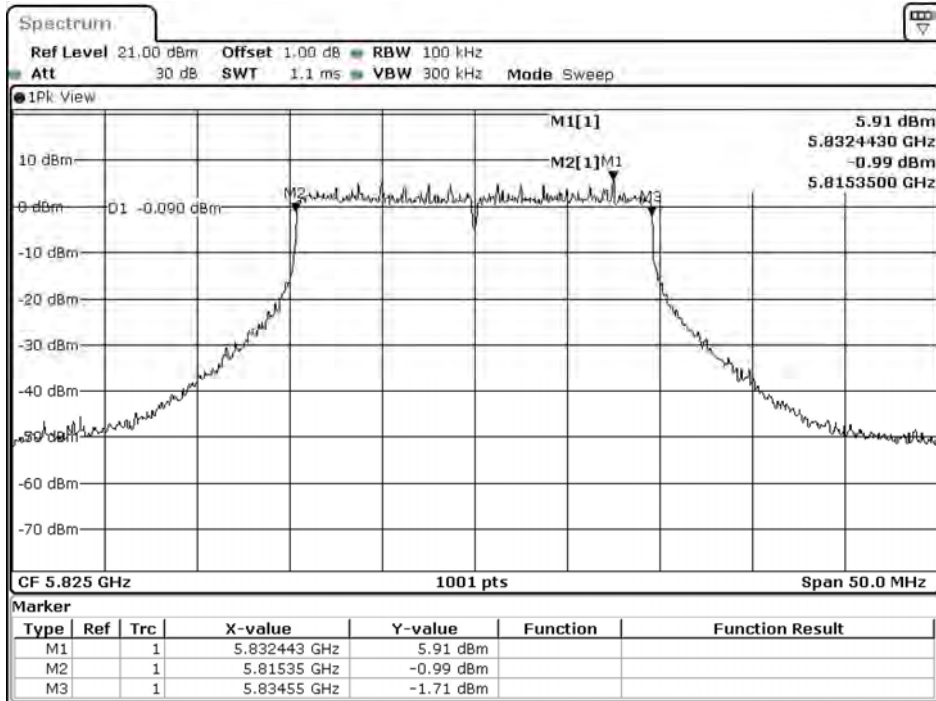
Date: 4.JUL.2020 13:08:28

Figure Channel 157: (Chain D)



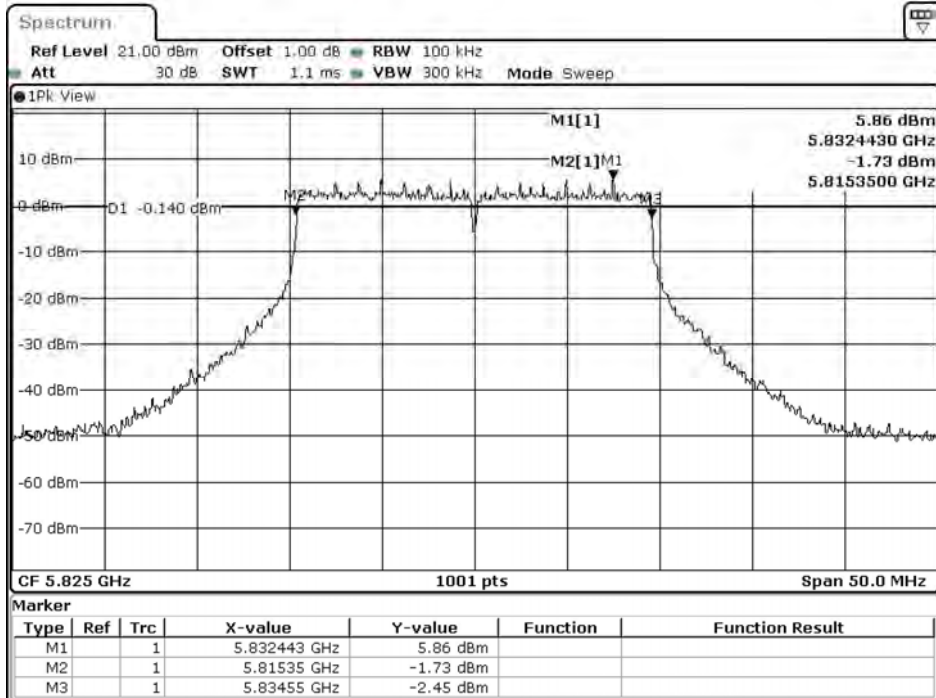
Date: 5.JUL.2020 01:06:19

Figure Channel 165: (Chain A)



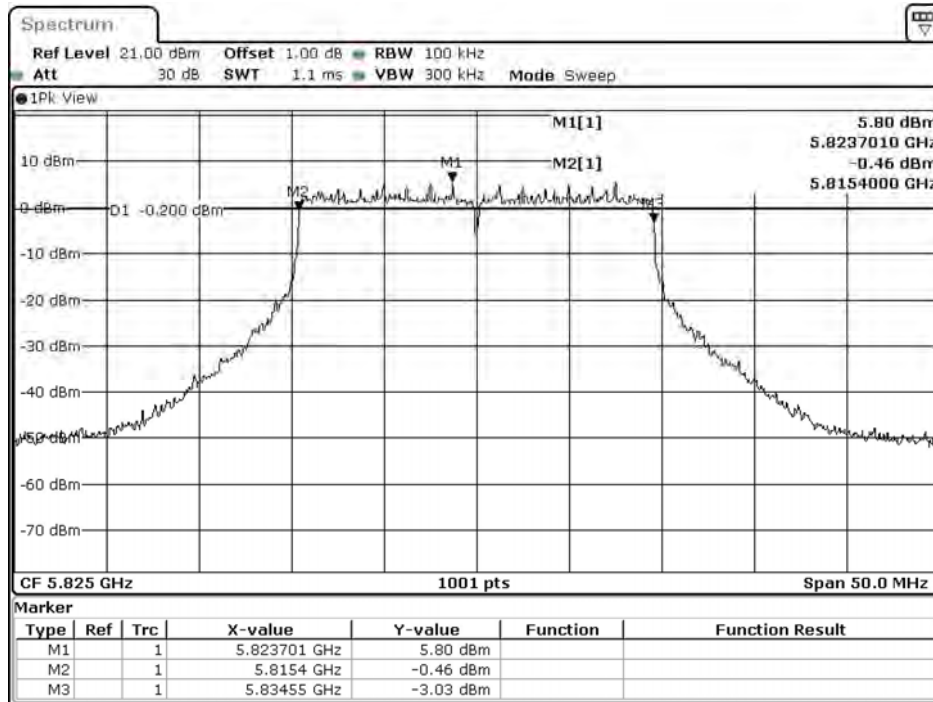
Date: 4.JUL.2020 21:05:51

Figure Channel 165: (Chain B)



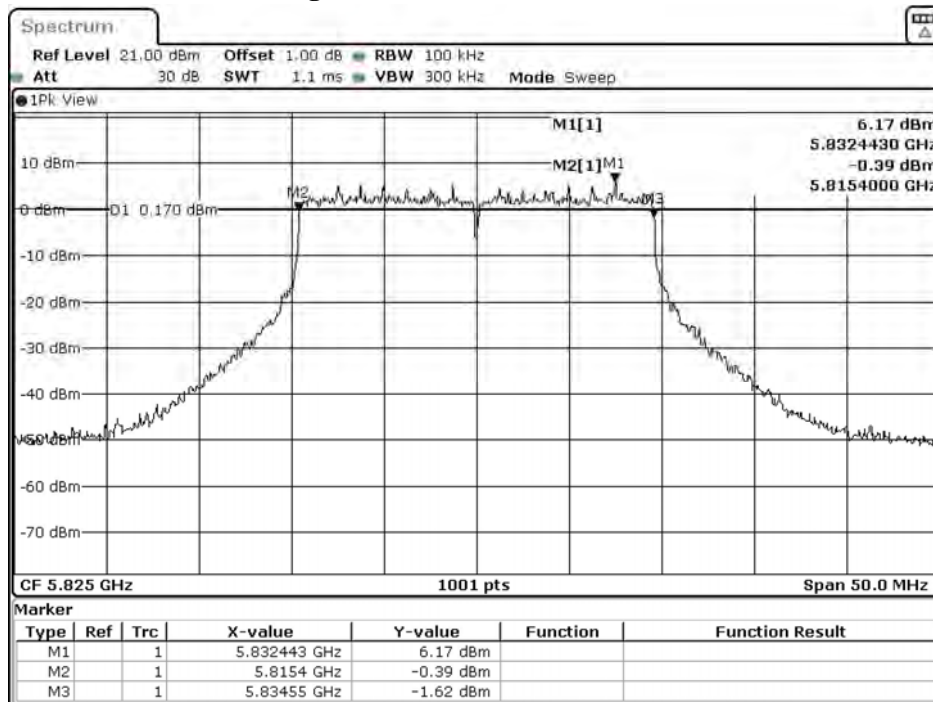
Date: 4.JUL.2020 21:08:55

Figure Channel 165: (Chain C)



Date: 4.JUL.2020 13:11:18

Figure Channel 165: (Chain D)

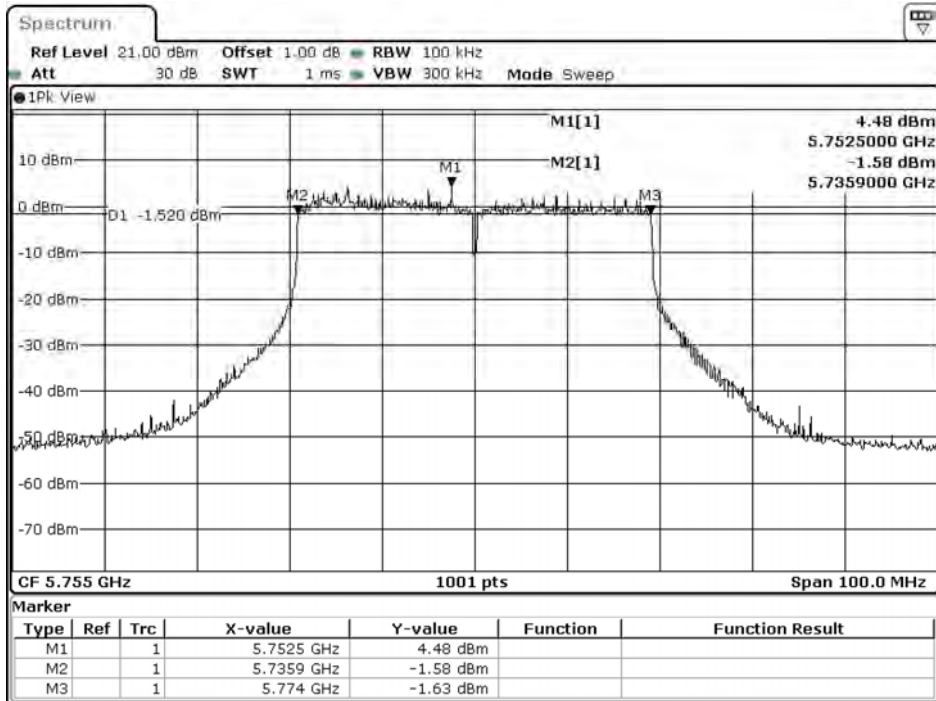


Date: 5.JUL.2020 01:09:09

Product : LV55
Test Item : Occupied Bandwidth Data
Test Mode : Mode 16: Transmit (802.11ax-40MBW-Beamforming)
Test Date : 2020/07/05

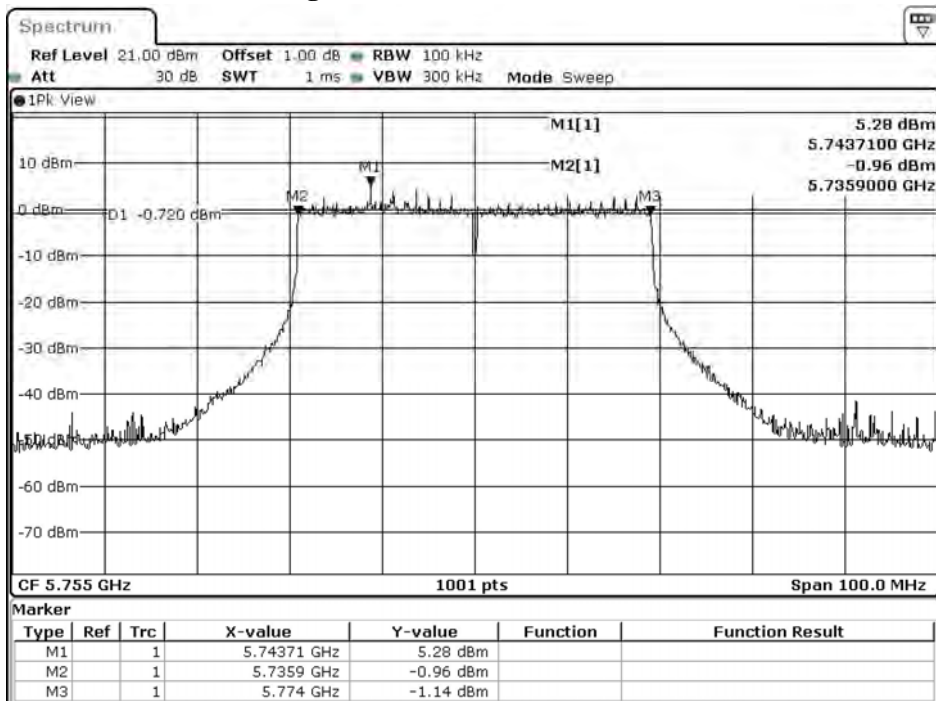
Channel No.	Chain	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	A	5755	38100	>500	Pass
159	A	5795	36000	>500	Pass
151	B	5755	38100	>500	Pass
159	B	5795	38300	>500	Pass
151	C	5755	36600	>500	Pass
159	C	5795	37900	>500	Pass
151	D	5755	38300	>500	Pass
159	D	5795	38200	>500	Pass

Figure Channel 151: (Chain A)



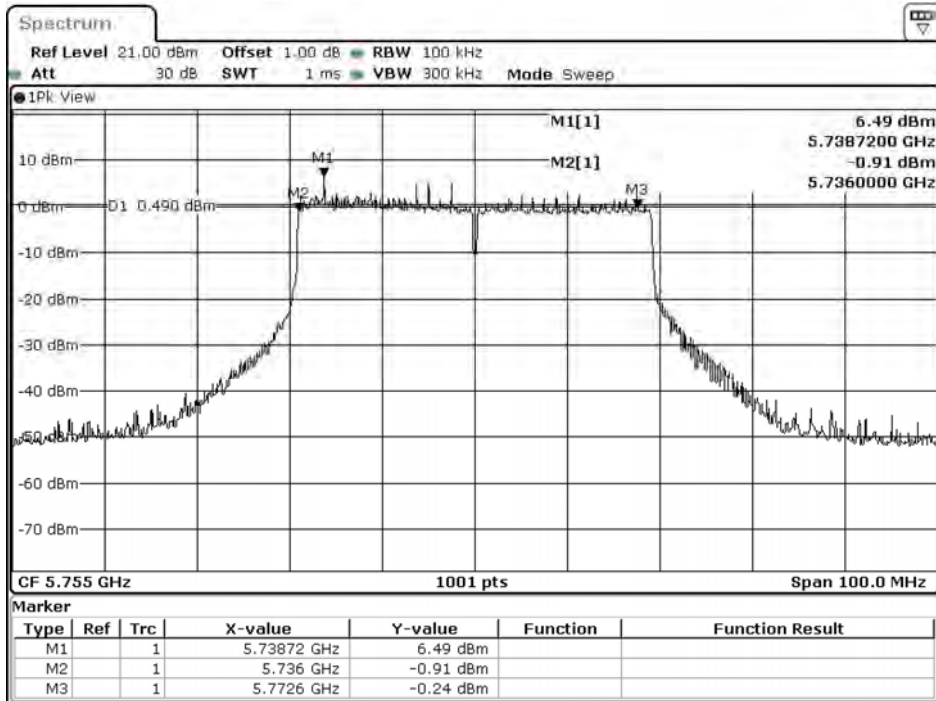
Date: 5 JUL 2020 19:52:45

Figure Channel 151: (Chain B)



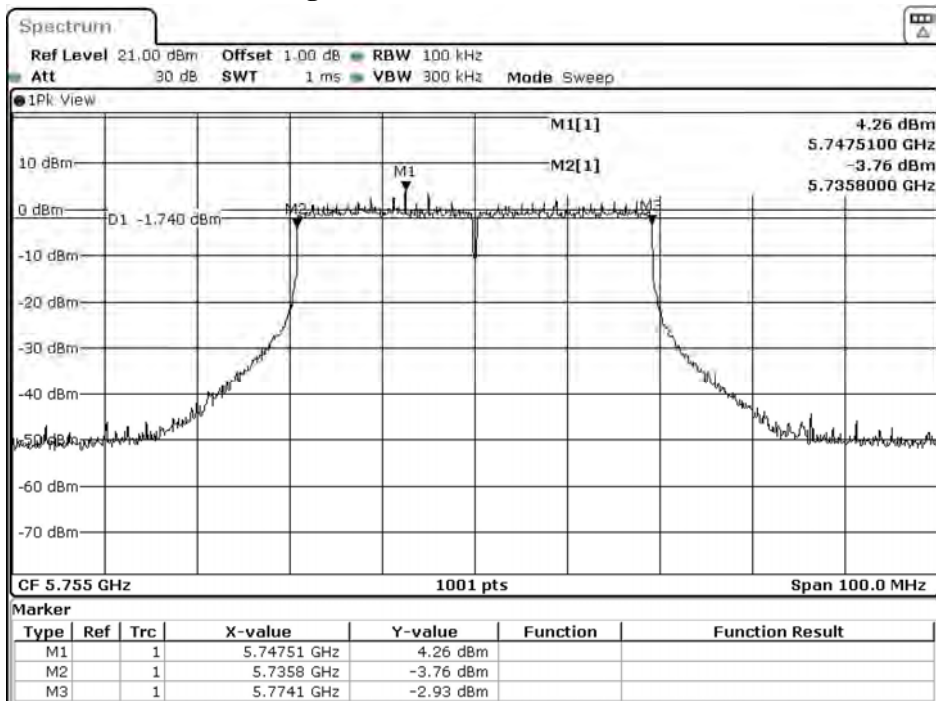
Date: 5 JUL 2020 19:55:48

Figure Channel 151: (Chain C)



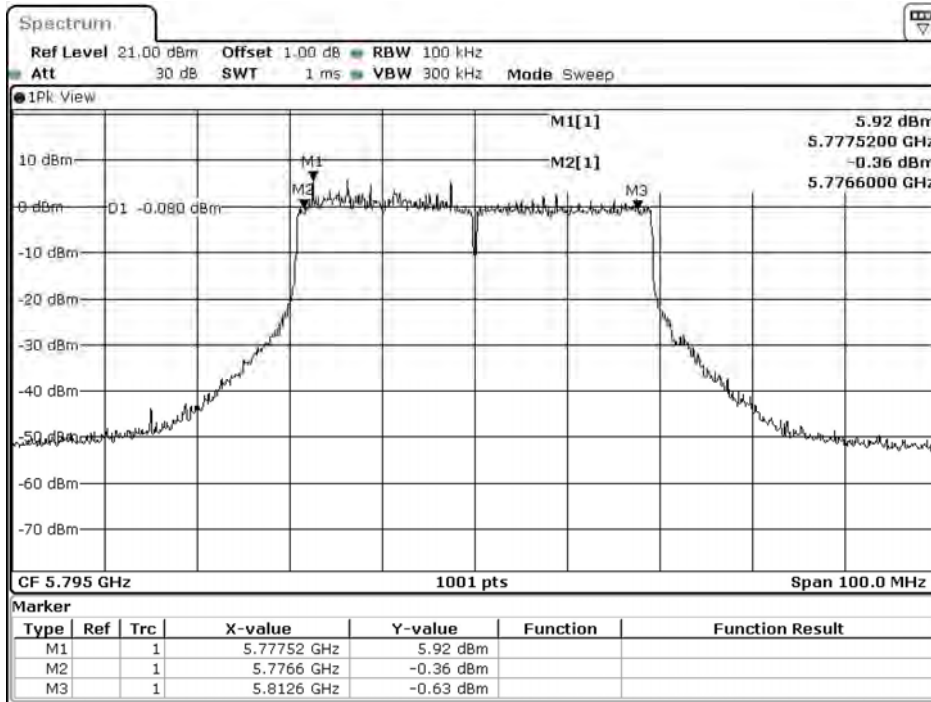
Date: 5.JUL.2020 11:58:11

Figure Channel 151: (Chain D)



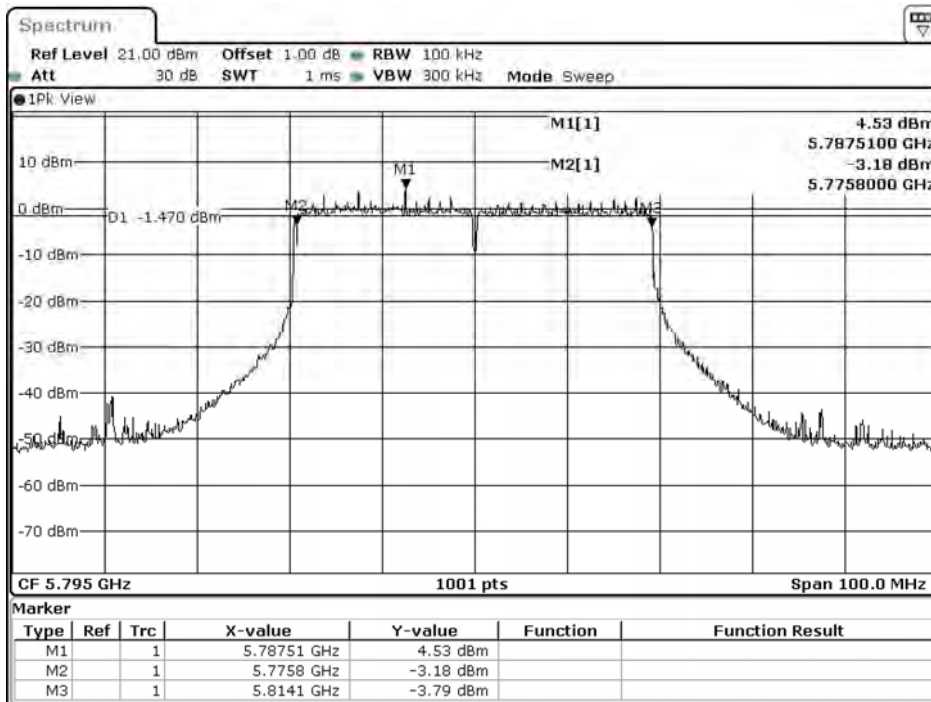
Date: 5.JUL.2020 23:56:03

Figure Channel 159: (Chain A)



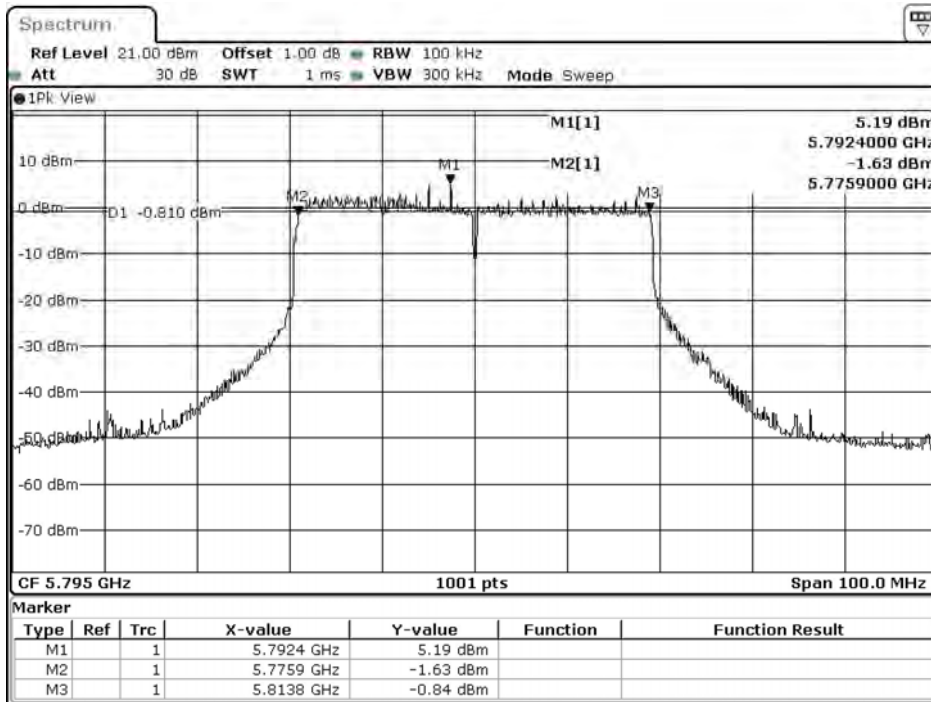
Date: 5.JUL.2020 19:55:38

Figure Channel 159: (Chain B)



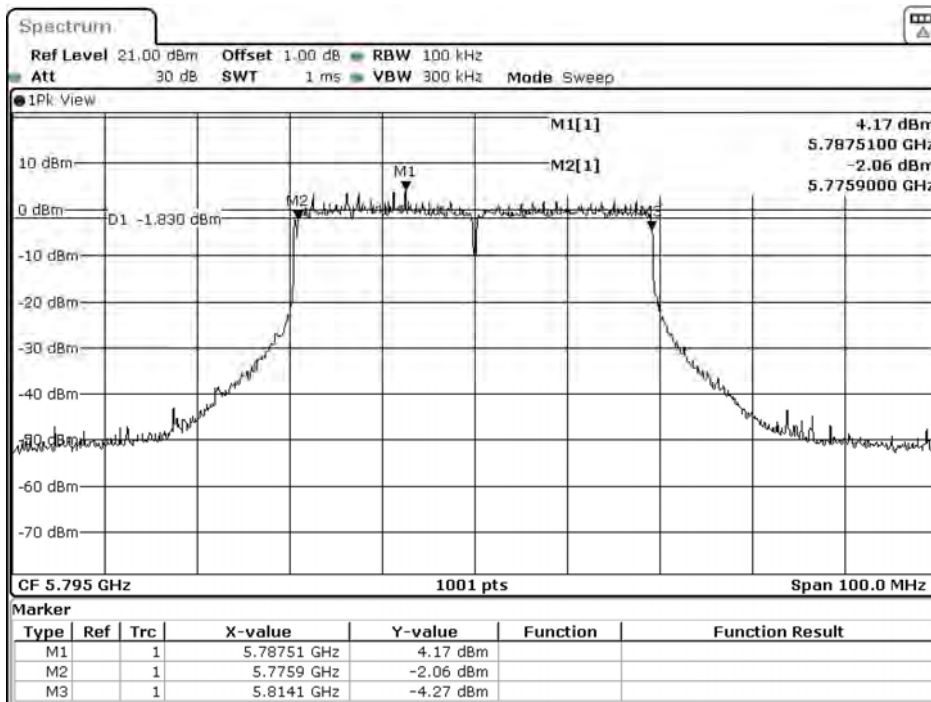
Date: 5.JUL.2020 19:58:42

Figure Channel 159: (Chain C)



Date: 5.JUL.2020 12:01:06

Figure Channel 159: (Chain D)

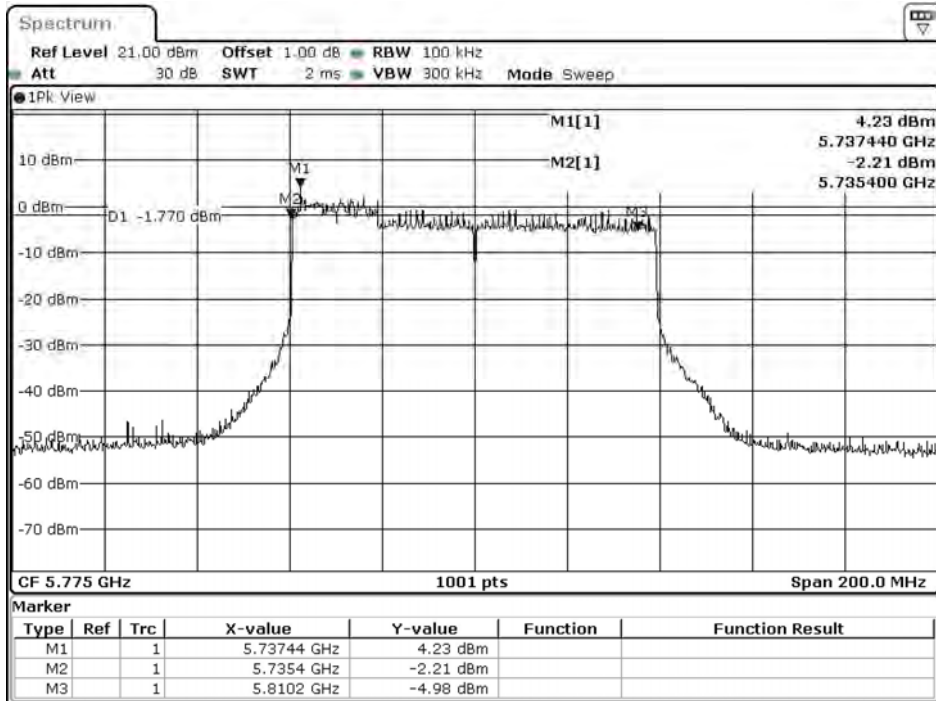


Date: 5.JUL.2020 23:58:57

Product : LV55
Test Item : Occupied Bandwidth Data
Test Mode : Mode 17: Transmit (802.11ax-80MBW-Beamforming)
Test Date : 2020/07/05

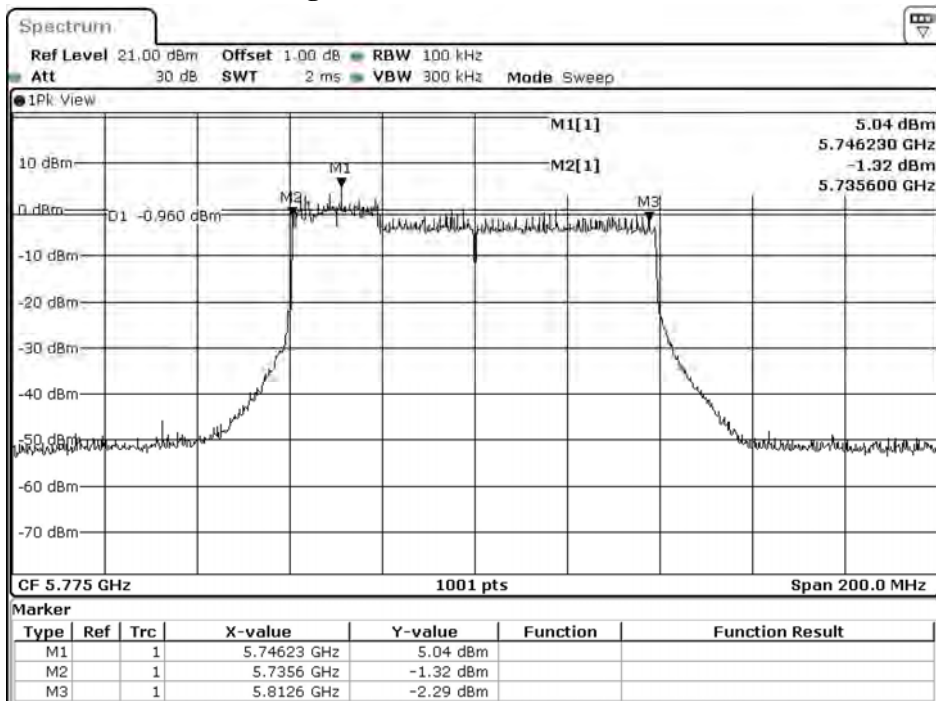
Channel No.	Chain	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
155	A	5775	74800	>500	Pass
155	B	5775	77000	>500	Pass
155	C	5775	15400	>500	Pass
155	D	5775	77000	>500	Pass

Figure Channel 155: (Chain A)



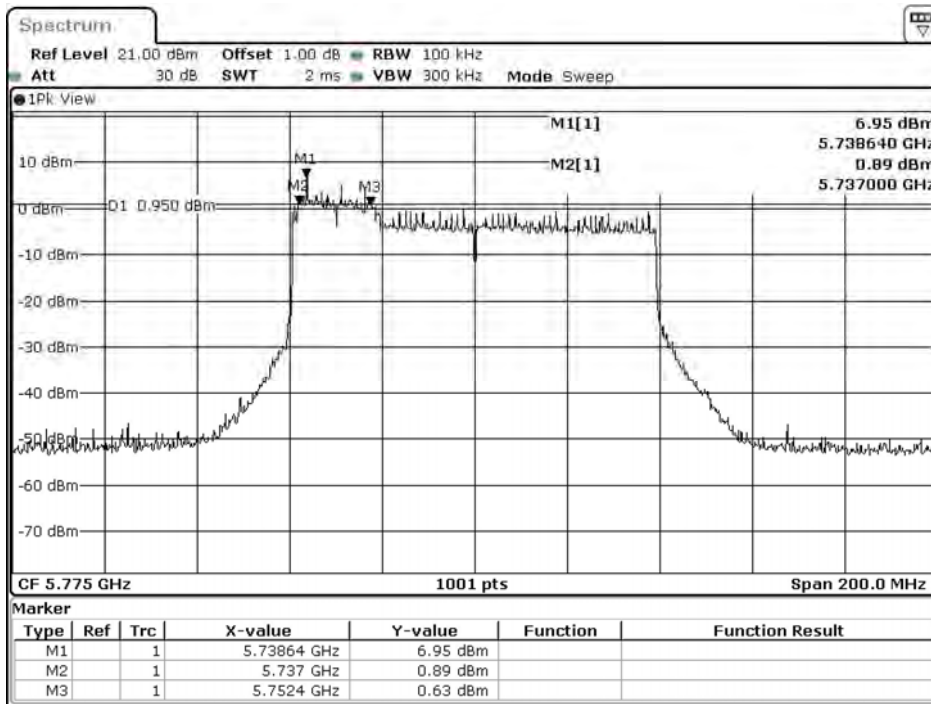
Date: 5.JUL.2020 19:48:38

Figure Channel 155: (Chain B)



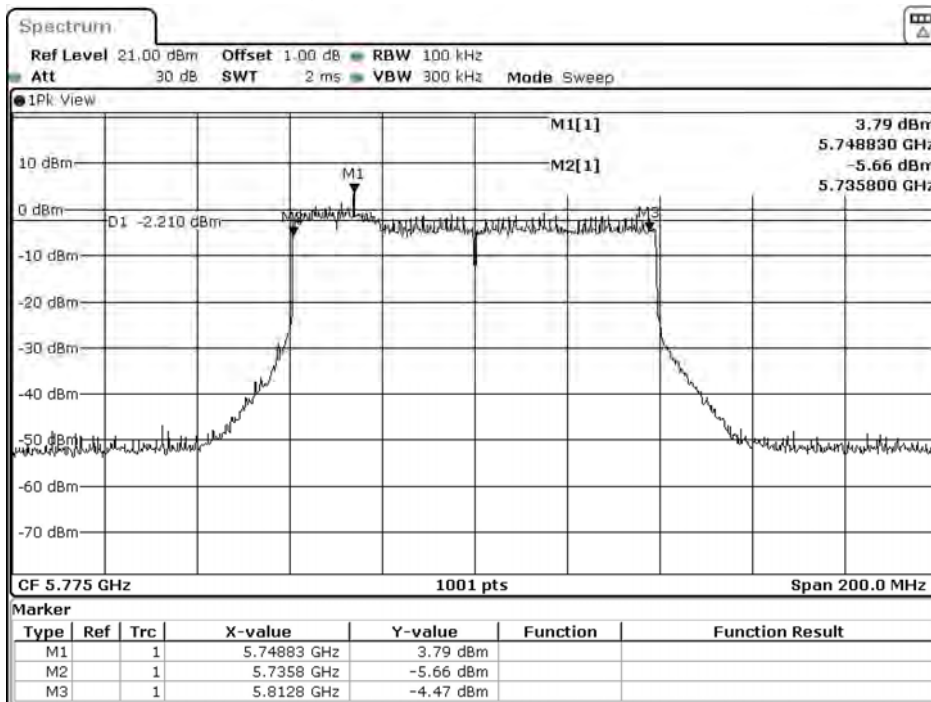
Date: 5.JUL.2020 19:51:42

Figure Channel 155: (Chain C)



Date: 5.JUL.2020 11:54:05

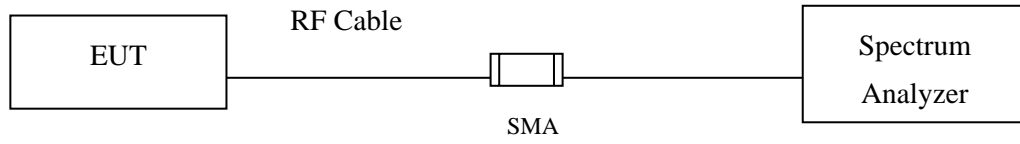
Figure Channel 155: (Chain D)



Date: 5.JUL.2020 23:51:57

8. Duty Cycle

8.1. Test Setup



8.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to U-NII test procedure of KDB789033 for compliance to FCC 47CFR 15.407 requirements.

8.3. Test Result of Duty Cycle

Product : LV55
 Test Item : Duty Cycle
 Test Mode : Mode 18: Transmit (CDD)

Duty Cycle Formula:

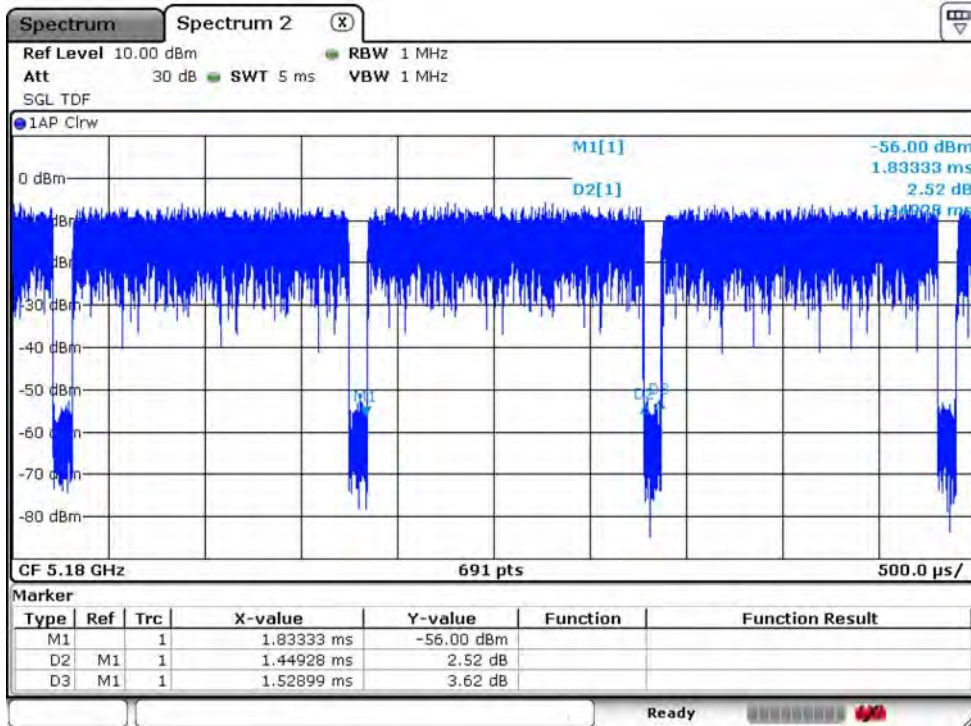
Duty Cycle = Ton / (Ton + Toff)

Duty Factor = 10 Log (1/Duty Cycle)

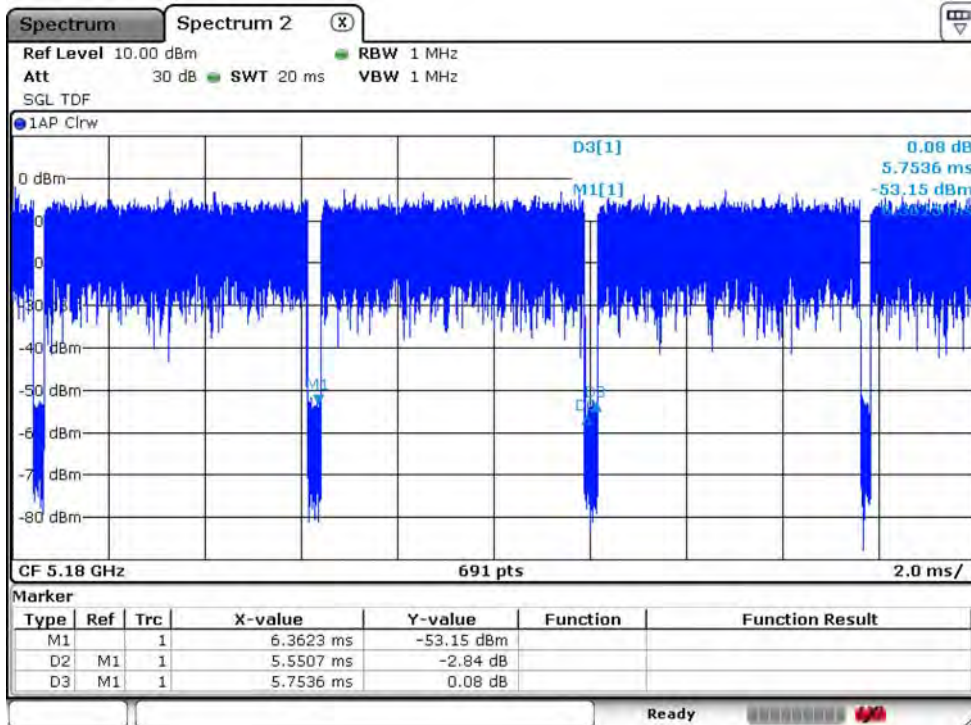
Results:

5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11 a	1.4492	1.5289	94.79	0.23
802.11ax20 (RU Config-Full)	5.5507	5.7536	96.47	0.16
802.11ax40 (RU Config-Full)	5.5217	5.7826	95.49	0.20
802.11ax80 (RU Config-Full)	5.5217	5.6957	96.95	0.13
802.11ax20 (RU Config-edges mode)	3.3913	3.7536	90.35	0.44
802.11ax40 (RU Config-edges mode)	3.3623	3.8841	86.57	0.63
802.11ax80 (RU Config-edges mode)	0.4260	0.8144	52.31	2.81

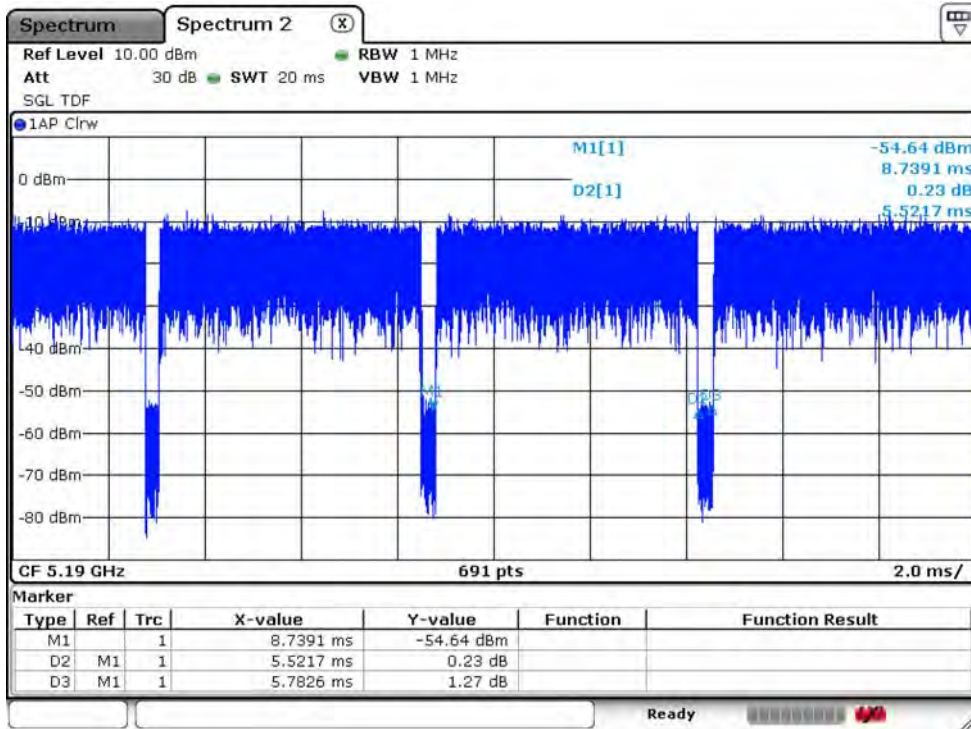
802.11a



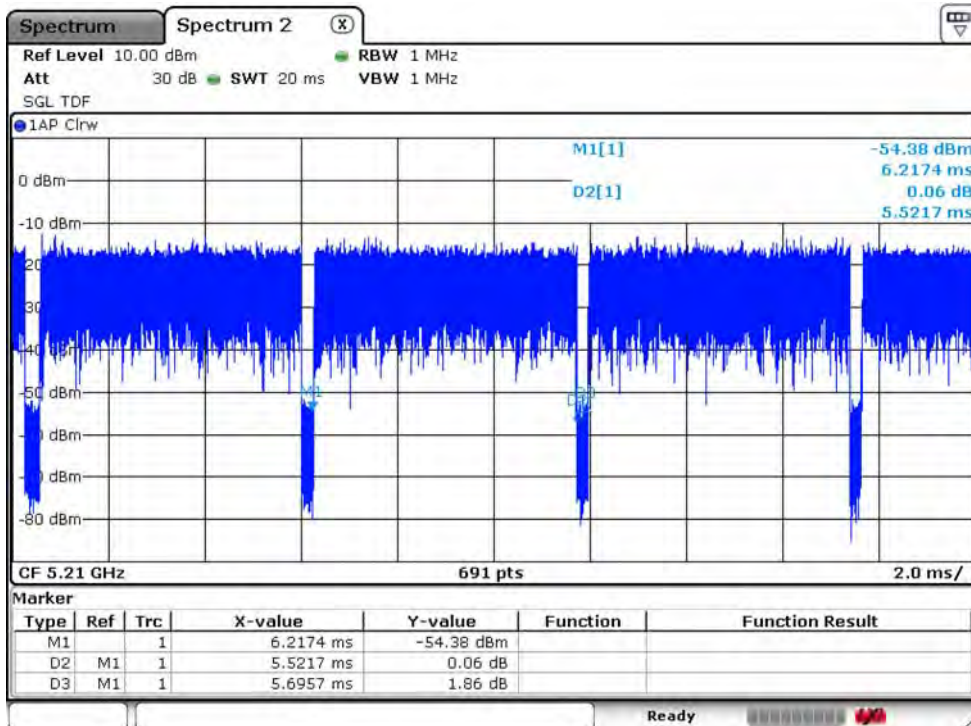
802.11ax20 (RU Config-Full)



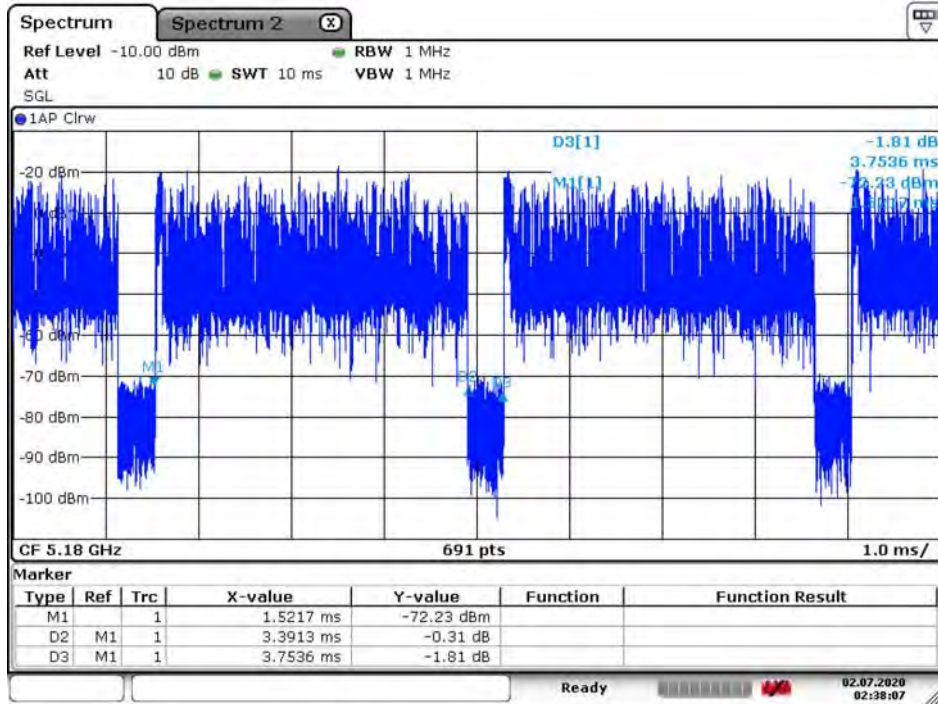
802.11ax40 (RU Config-Full)



802.11ax80 (RU Config-Full)

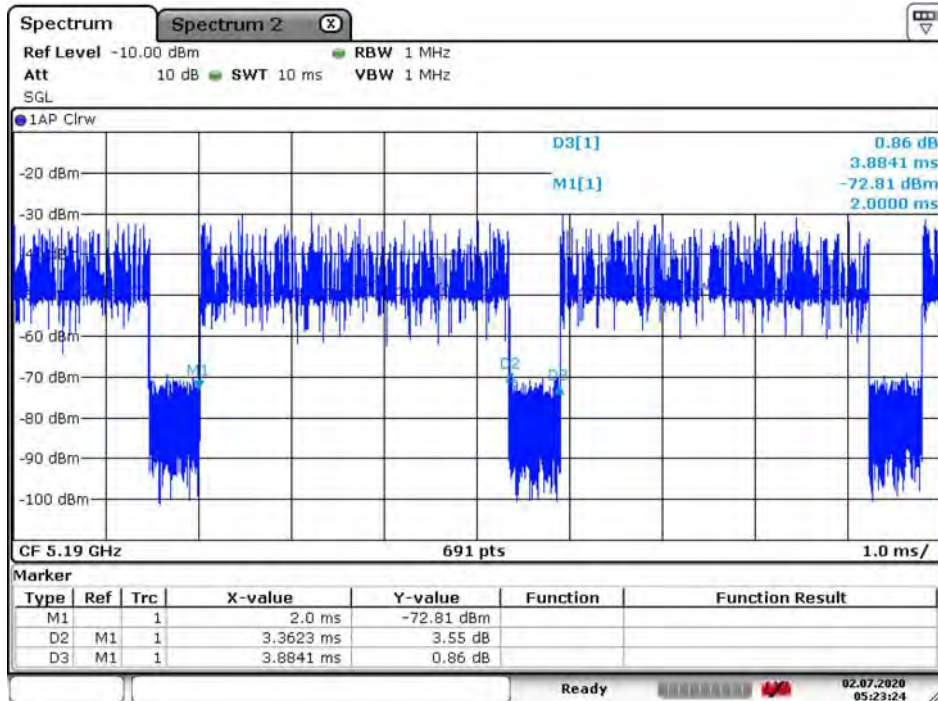


802.11ax20 (RU Config-edges mode)



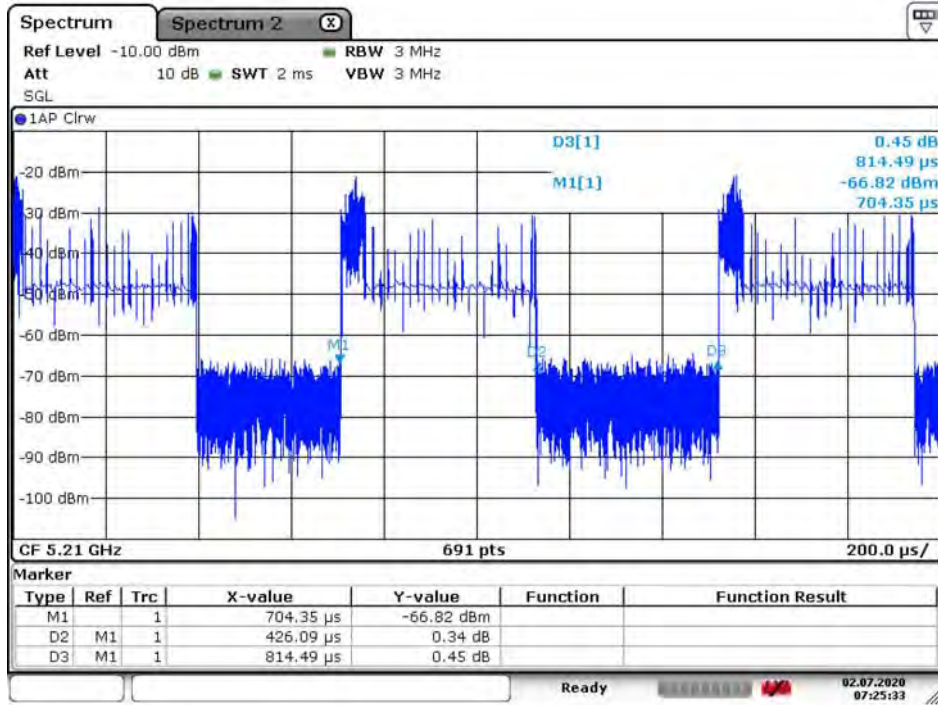
Date: 2.JUL.2020 02:38:07

802.11ax40 (RU Config-edges mode)



Date: 2.JUL.2020 05:23:24

802.11ax80 (RU Config-edges mode)



Date: 2.JUL.2020 07:25:33

Product : LV55
 Test Item : Duty Cycle
 Test Mode : Mode 19: Transmit (Beamforming)

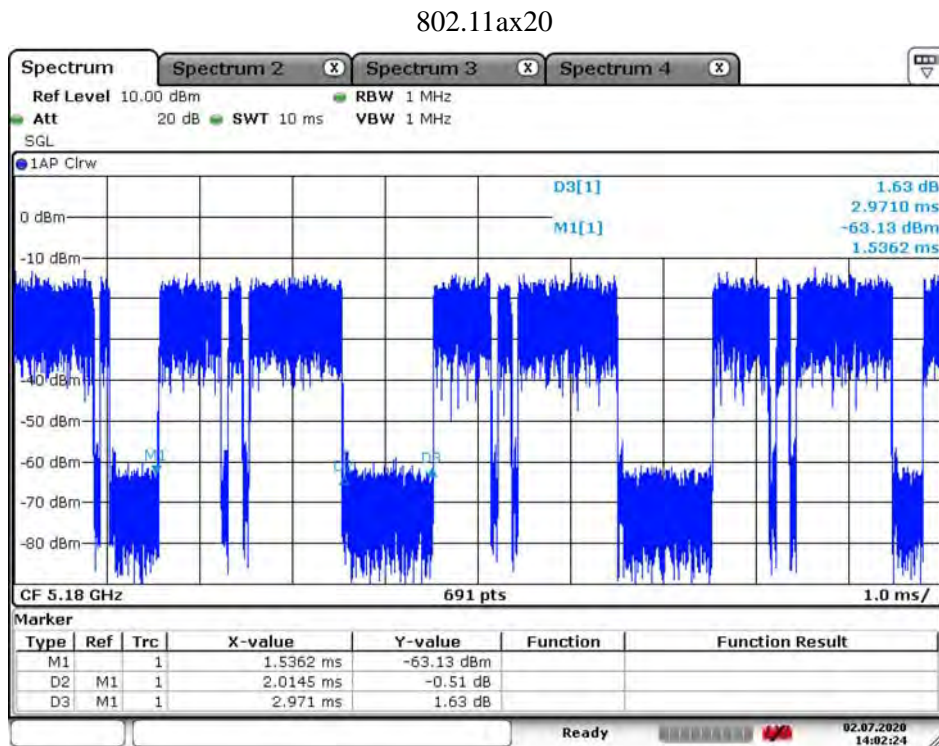
Duty Cycle Formula:

$$\text{Duty Cycle} = \text{Ton} / (\text{Ton} + \text{Toff})$$

$$\text{Duty Factor} = 10 \text{ Log} (1/\text{Duty Cycle})$$

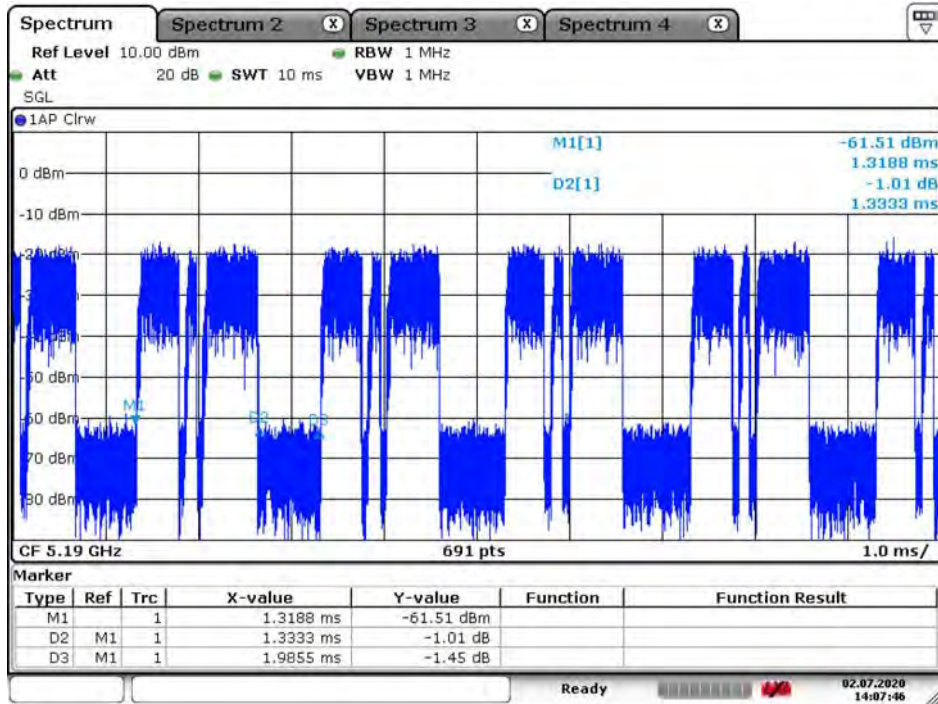
Results:

5GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11 ax20	2.0145	2.9710	67.81	1.69
802.11 ax40	1.3333	1.9855	67.15	1.73
802.11 ax80	1.8116	3.0435	59.52	2.25



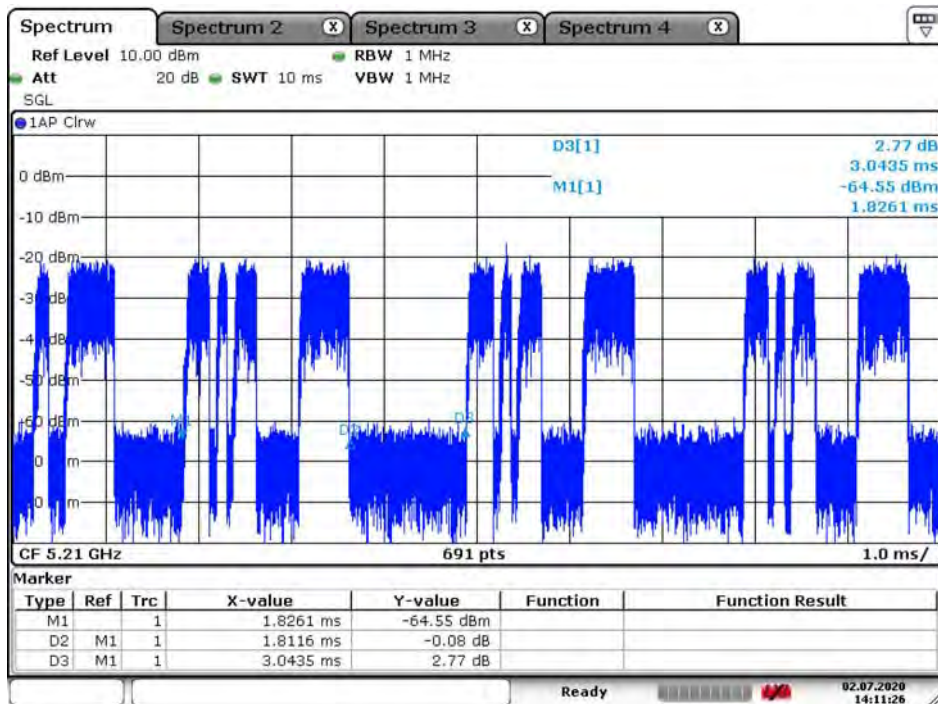
Date: 2.JUL.2020 14:02:24

802.11ax40



Date: 2.JUL.2020 14:07:46

802.11ax80



Date: 2.JUL.2020 14:11:26

9. EMI Reduction Method During Compliance Testing

No modification was made during testing.