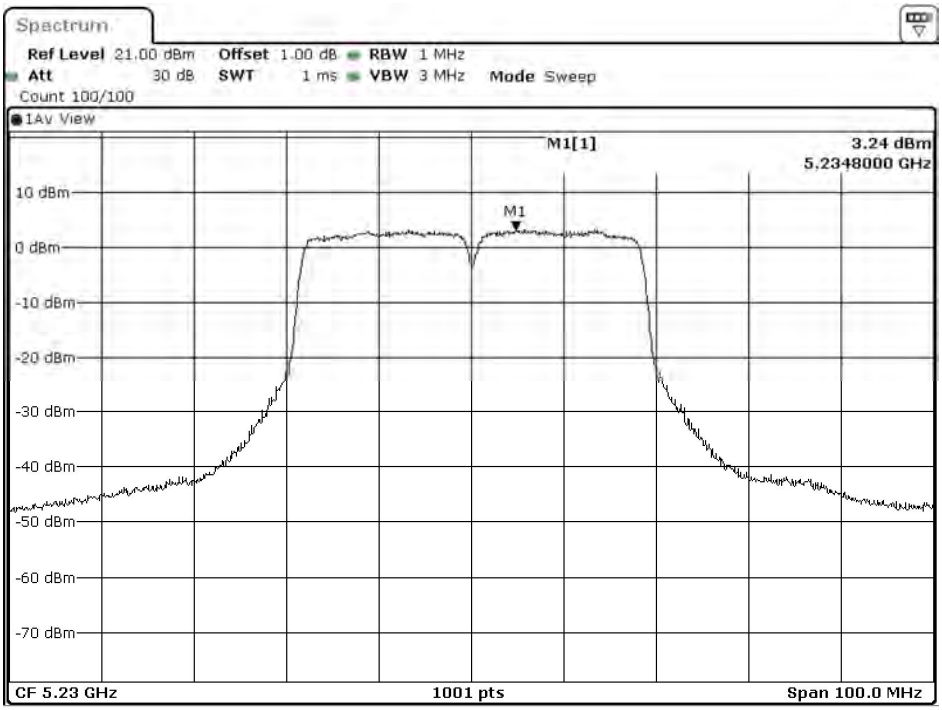
Channel 38 - Chain A

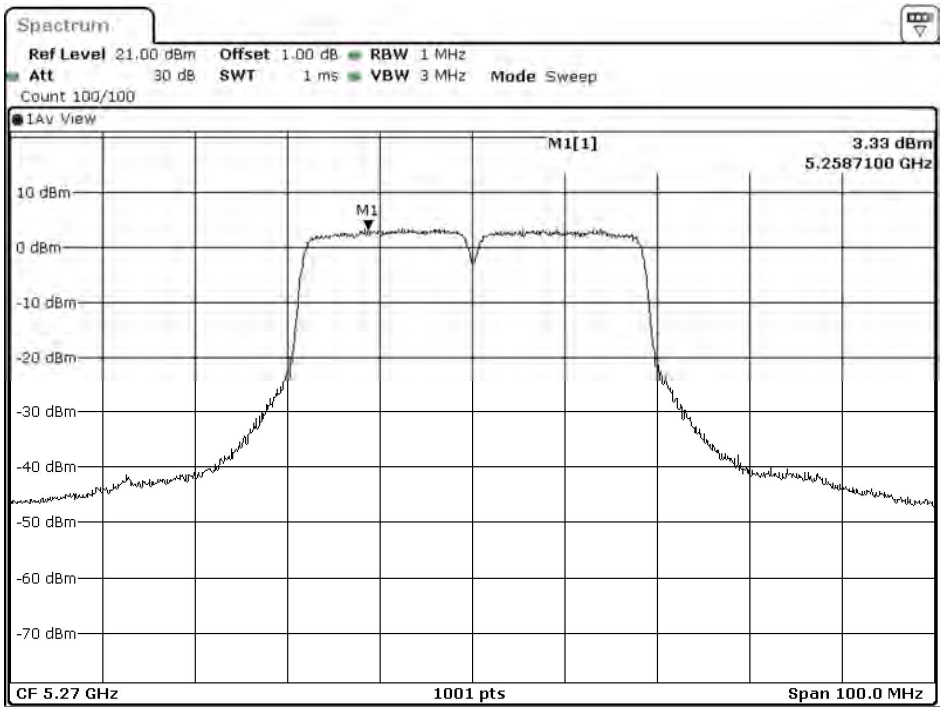
Date: 22.FEB.2021 05:47:56

Channel 46 - Chain A



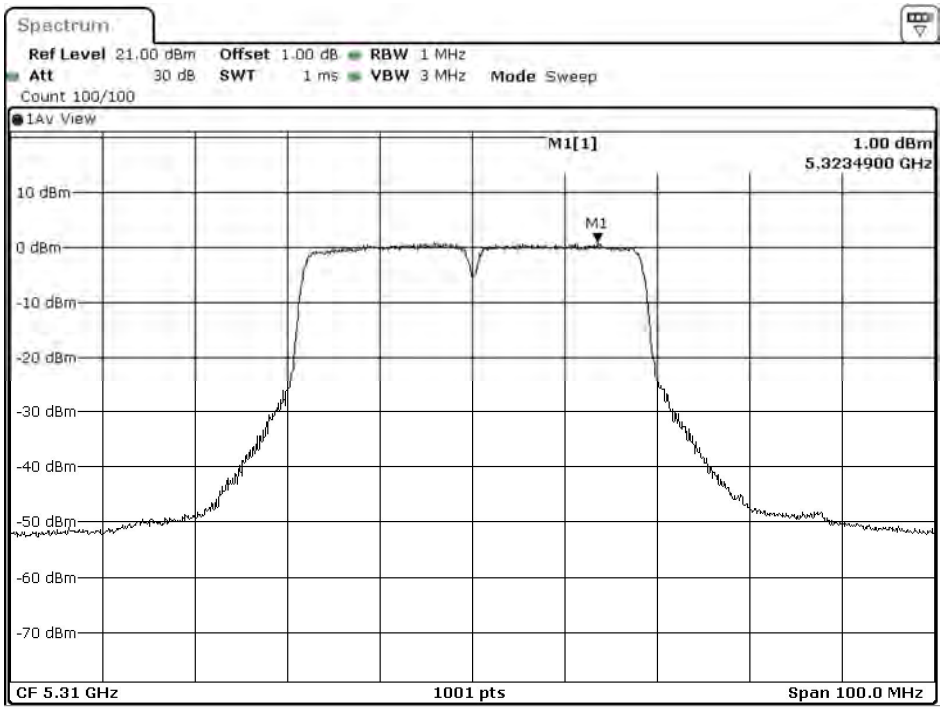
Date: 22.FEB.2021 05:49:39

Channel 54 - Chain A



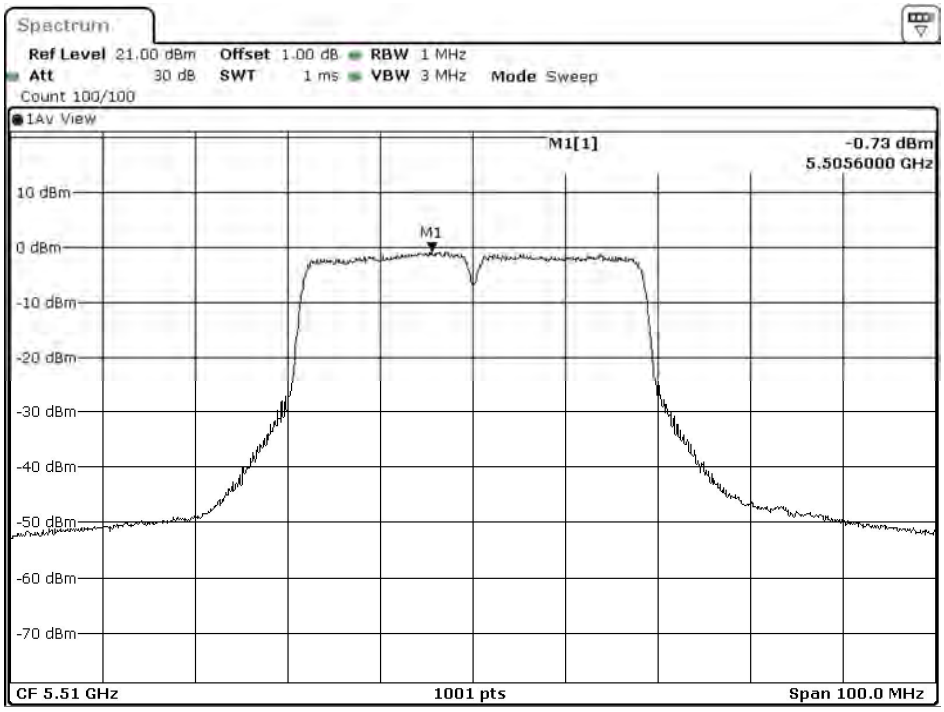
Date: 22.FEB.2021 05:52:07

Channel 62 - Chain A



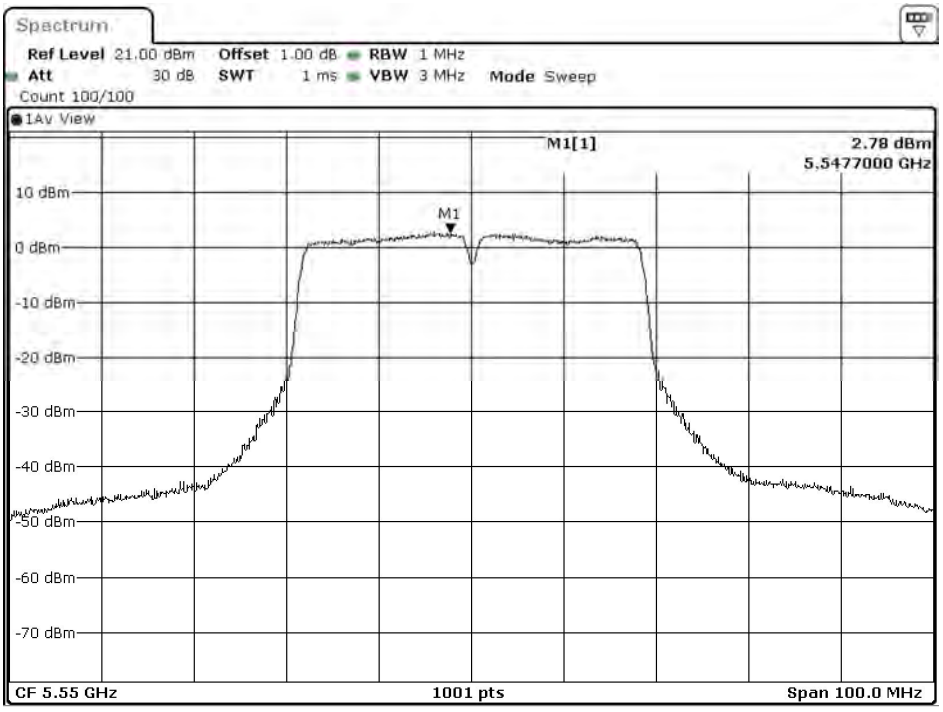
Date: 22.FEB.2021 05:53:52

Channel 102 - Chain A



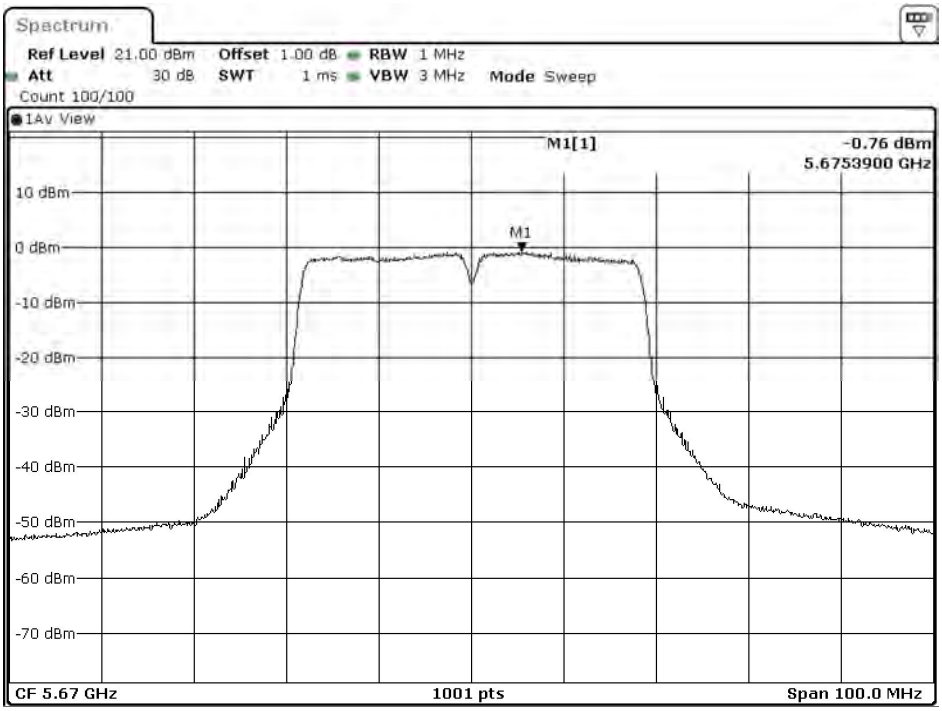
Date: 22.FEB.2021 05:55:35

Channel 110 - Chain A



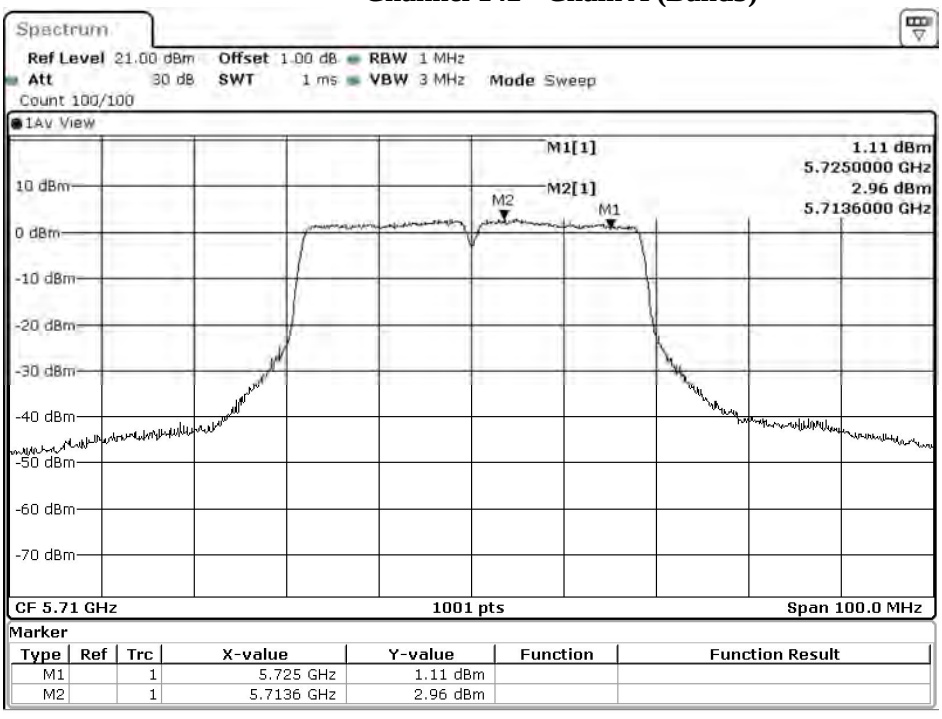
Date: 22.FEB.2021 05:57:16

Channel 134 - Chain A



Date: 22.FEB.2021 05:59:03

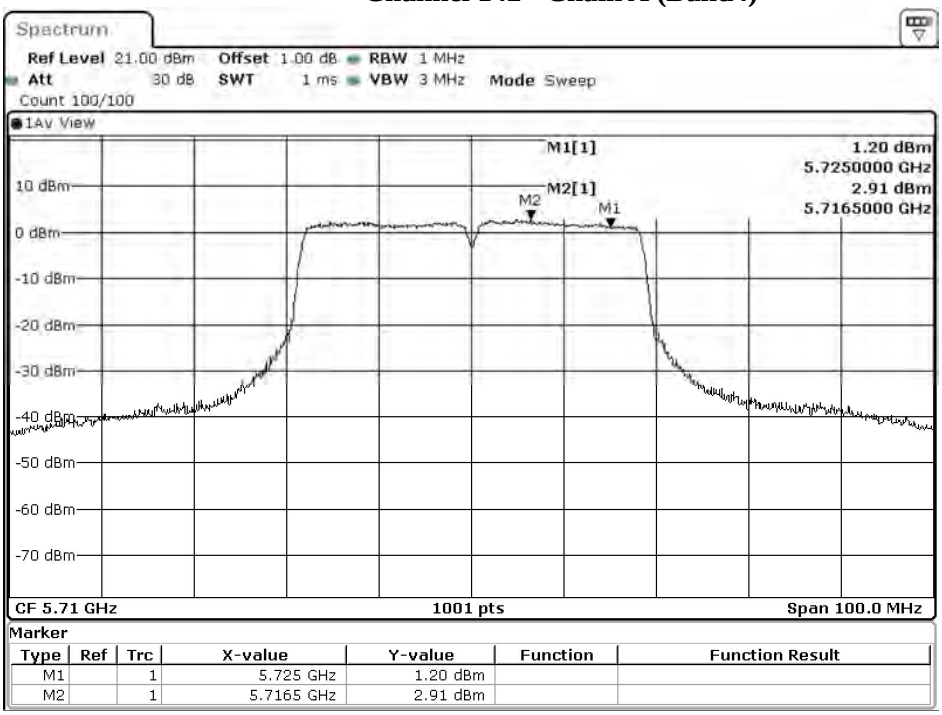
Channel 142 - Chain A (Band3)



Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.725 GHz	1.11 dBm		
M2		1	5.7136 GHz	2.96 dBm		

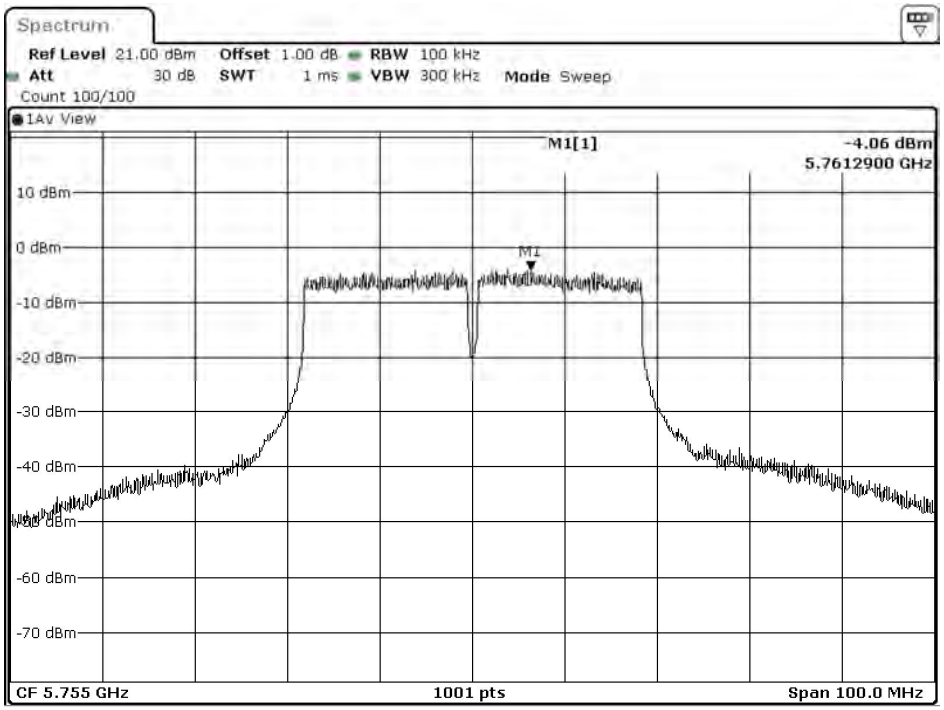
Date: 22.FEB.2021 05:44:24

Channel 142 - Chain A (Band4)



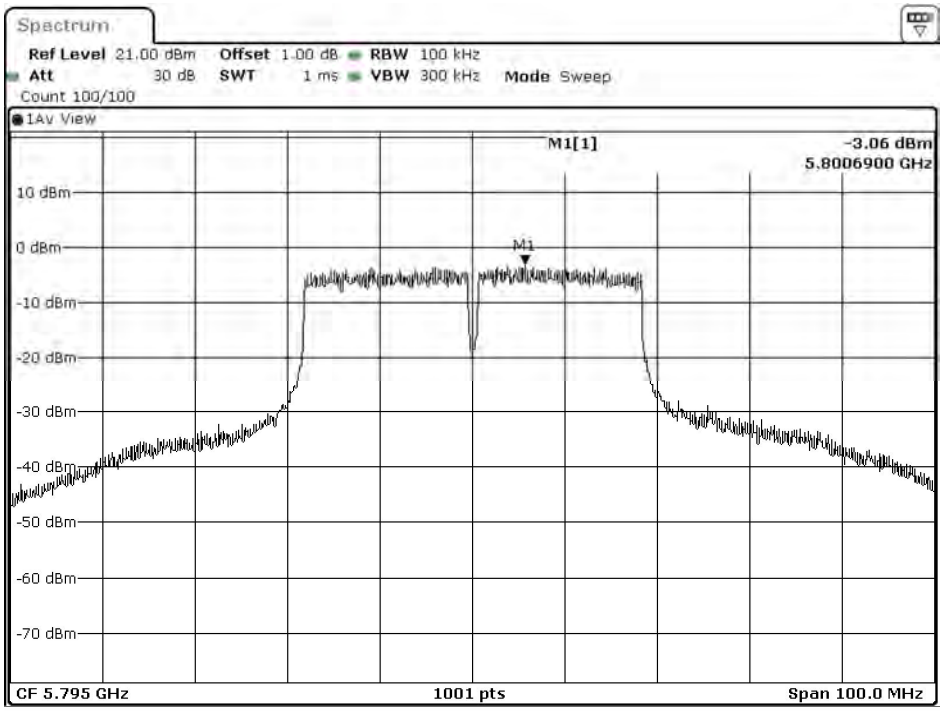
Date: 22.FEB.2021 07:49:47

Channel 151 - Chain A



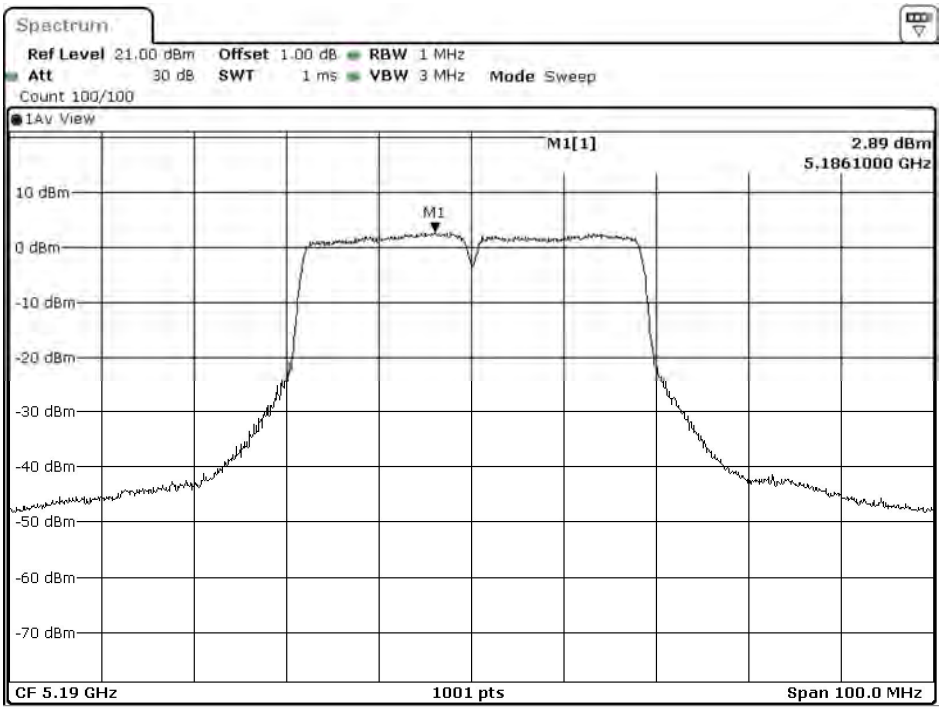
Date: 22.FEB.2021 06:00:52

Channel 159 - Chain A



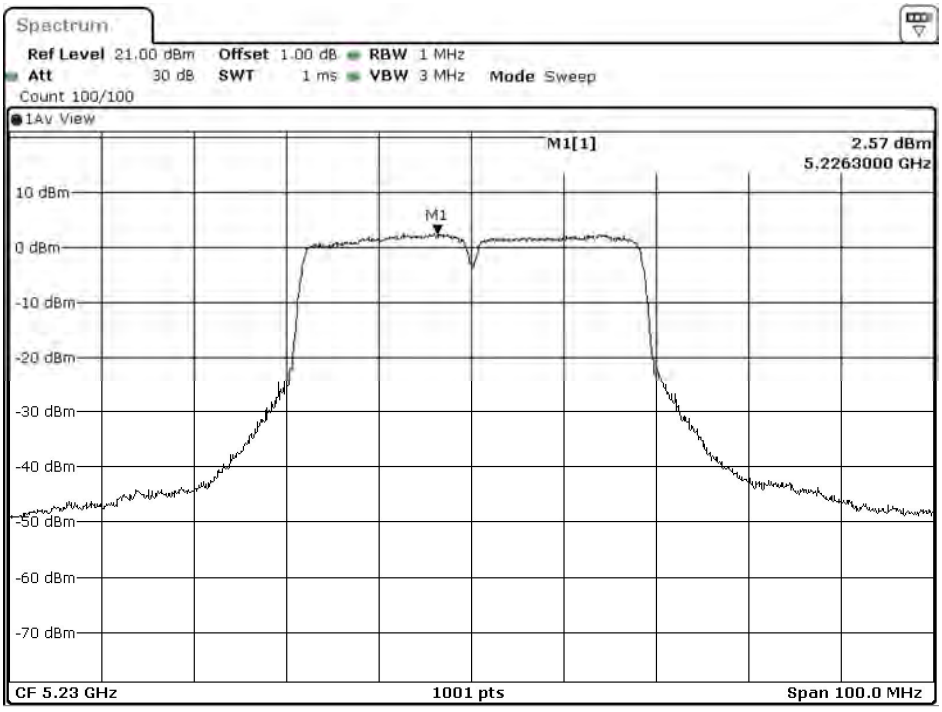
Date: 22.FEB.2021 06:02:14

Channel 38 - Chain B



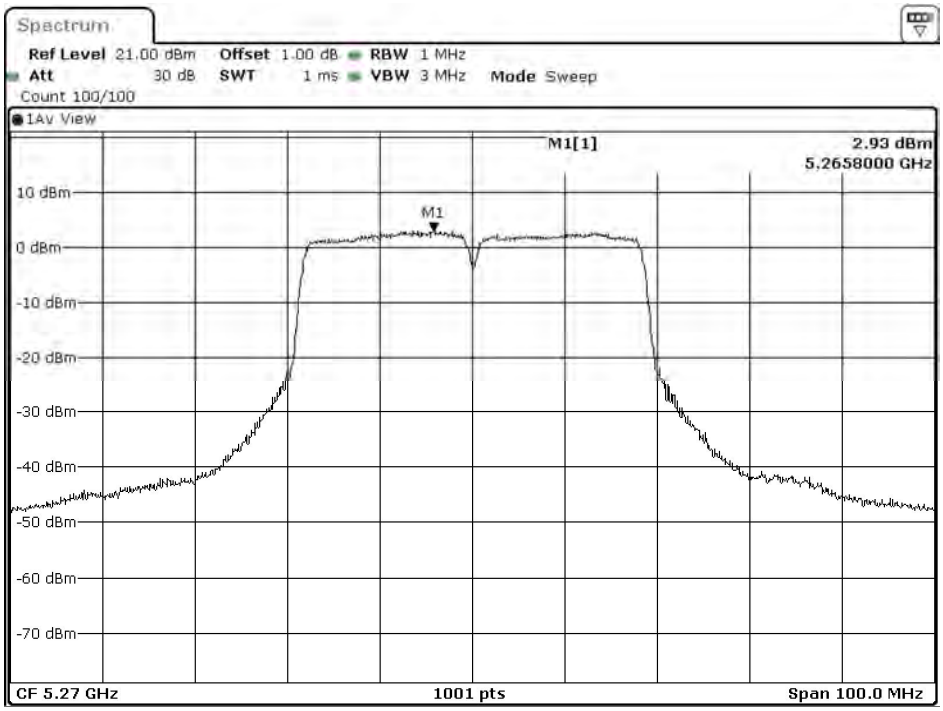
Date: 22.FEB.2021 07:53:18

Channel 46 - Chain B



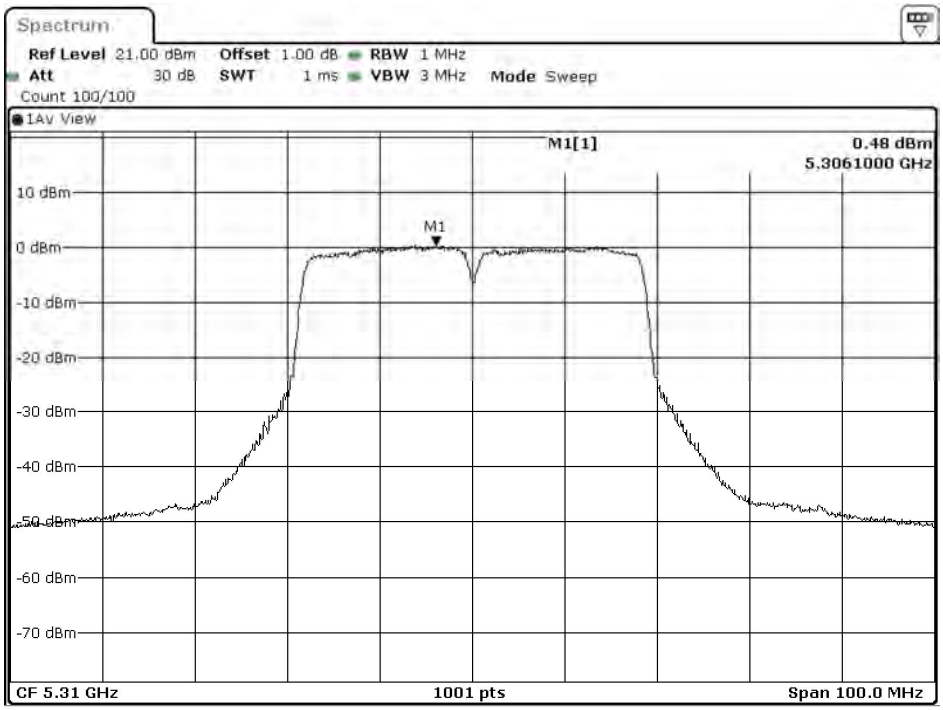
Date: 22.FEB.2021 07:55:01

Channel 54 - Chain B



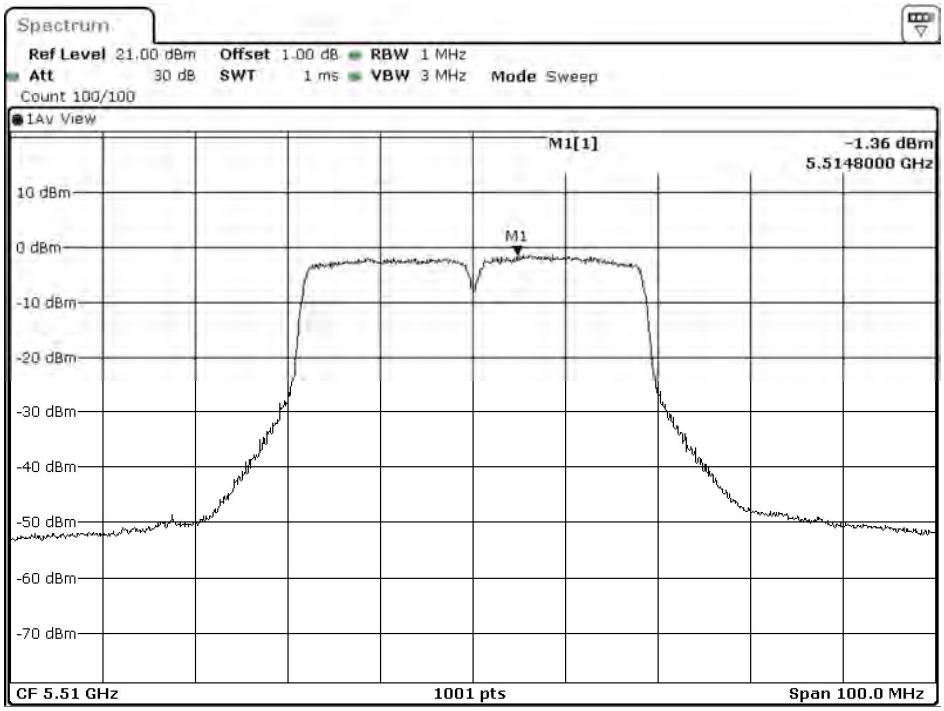
Date: 22.FEB.2021 07:57:30

Channel 62 - Chain B



Date: 22.FEB.2021 07:59:14

Channel 102 - Chain B

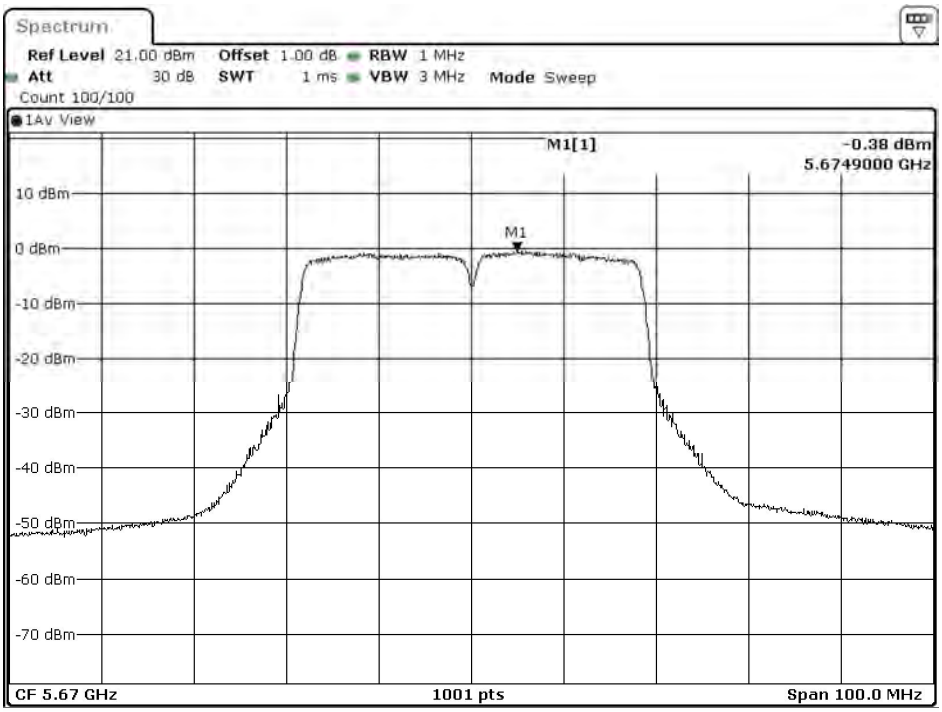


Date: 22.FEB.2021 08:00:57

Channel 110 - Chain B

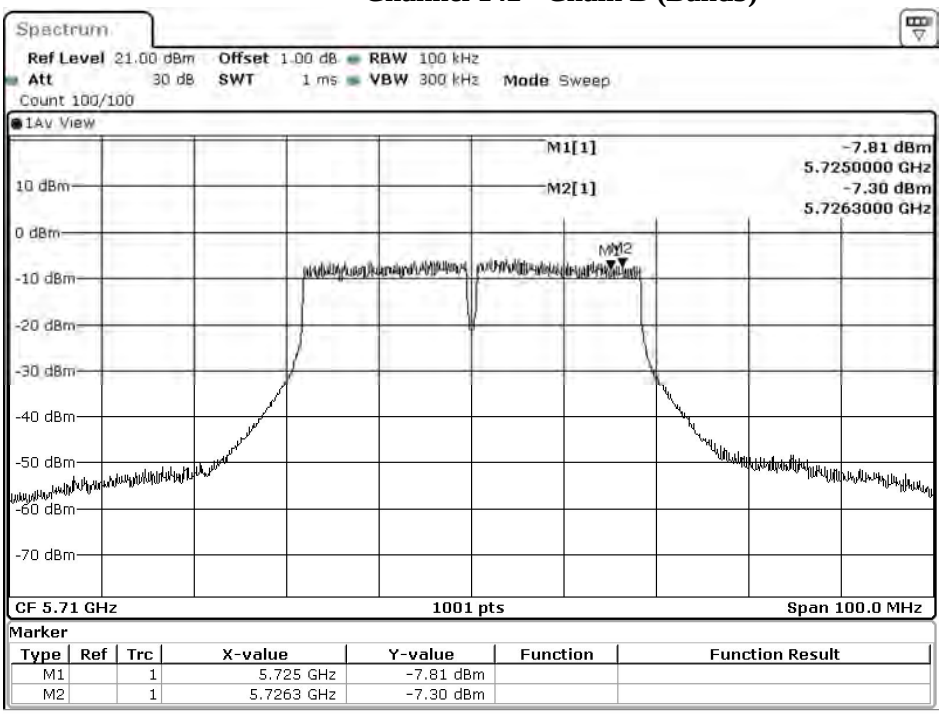
Date: 22.FEB.2021 08:02:38

Channel 134 - Chain B



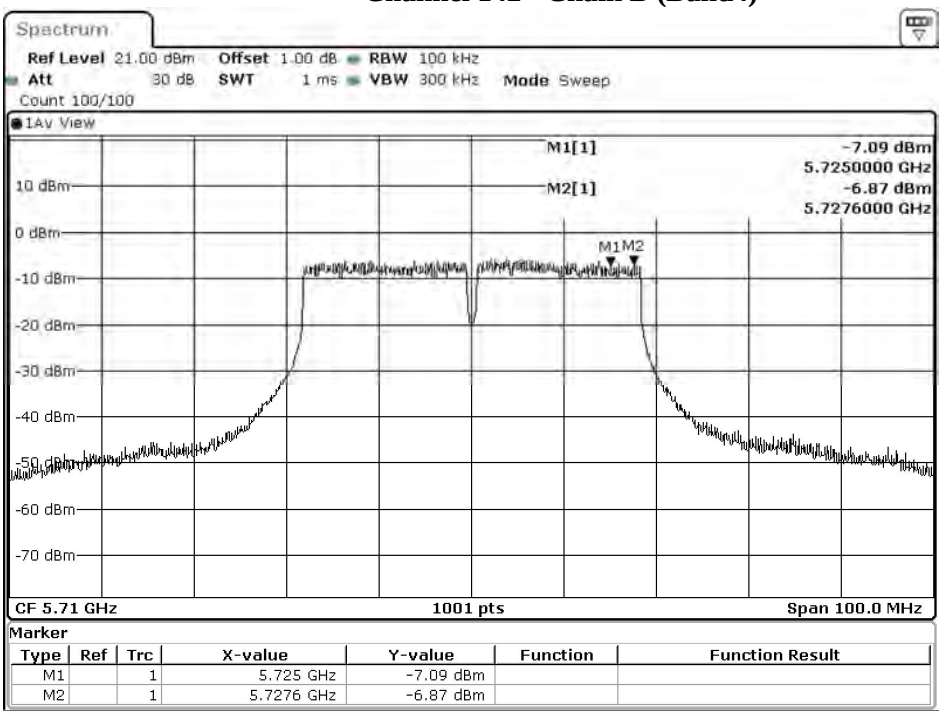
Date: 22.FEB.2021 08:04:26

Channel 142 - Chain B (Band3)



Date: 22.FEB.2021 05:44:45

Channel 142 - Chain B (Band4)

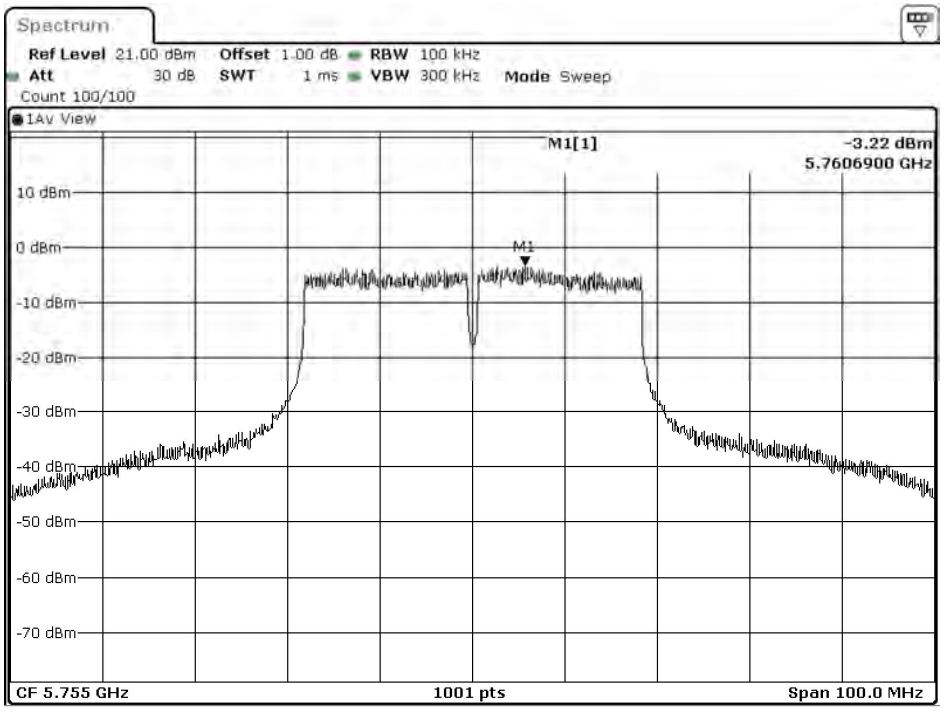


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.725 GHz	-7.09 dBm		
M2		1	5.7276 GHz	-6.87 dBm		

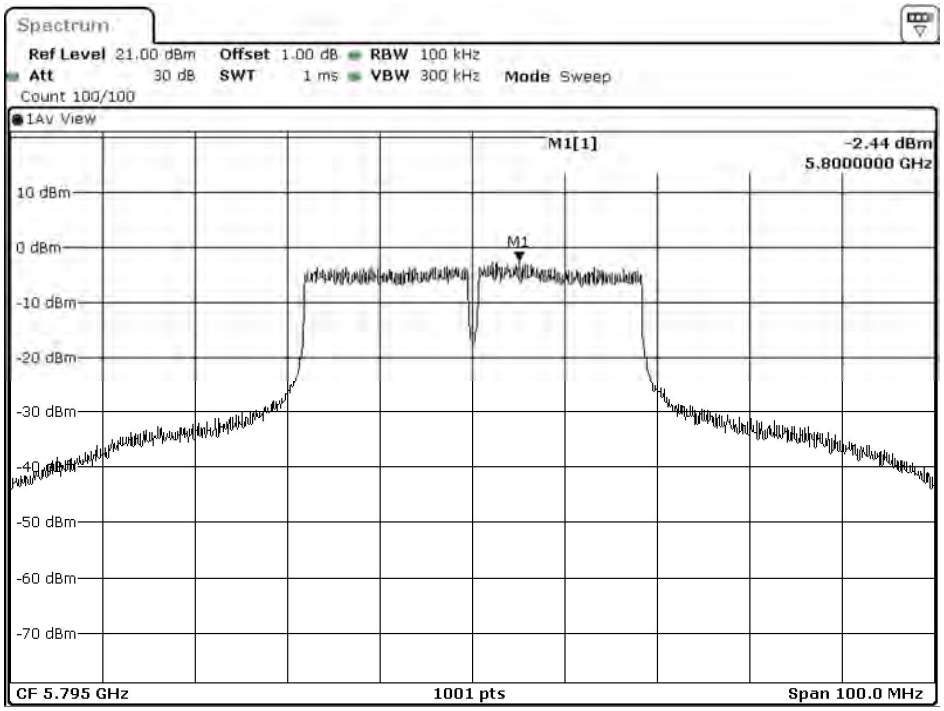
Date: 22.FEB.2021 07:50:07

Channel 151 - Chain B



Date: 22.FEB.2021 08:06:14

Channel 159 - Chain B



Date: 22.FEB.2021 08:07:36

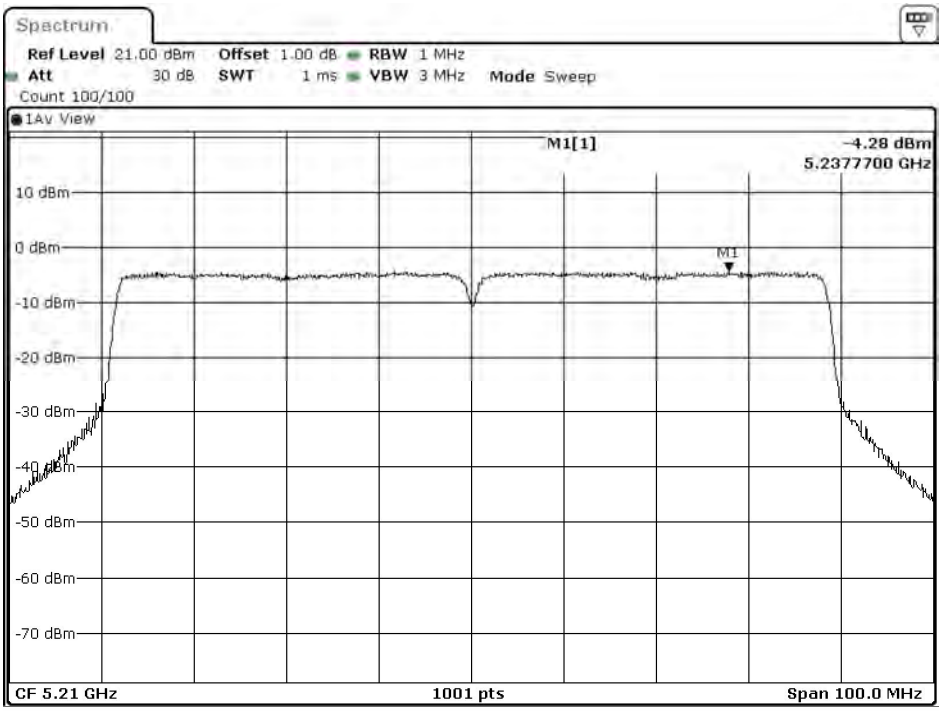
Product : Wireless module
Test Item : Peak Power Spectral Density
Test Mode : Mode 6: Transmit (802.11ac-80BW 32.5Mbps) – Dipole Antenna
Test Date : 2021/02/19

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain (dBm)	PPSD/MHz (dBm)	10*log (dBm)	Duty factor (db)	Total PPSD/MHz (dBm)	Limit (dBm)	Result
42	5210	MCS0	A	-4.28	3.01	0.66	-0.61	8.39	Pass
			B	-4.62	3.01	0.66	-0.95	8.39	Pass
58	5290	MCS0	A	-5.29	3.01	0.66	-1.62	8.85	Pass
			B	-6.03	3.01	0.66	-2.36	8.85	Pass
106	5530	MCS0	A	-5.08	3.01	0.66	-1.41	8.13	Pass
			B	-4.96	3.01	0.66	-1.29	8.13	Pass
122	5610	MCS0	A	-1.37	3.01	0.66	2.30	8.13	Pass
			B	-0.92	3.01	0.66	2.75	8.13	Pass
138	5690(Band3)	MCS0	A	-2.12	3.01	0.66	1.55	8.13	Pass
			B	-1.67	3.01	0.66	2.00	8.13	Pass

.

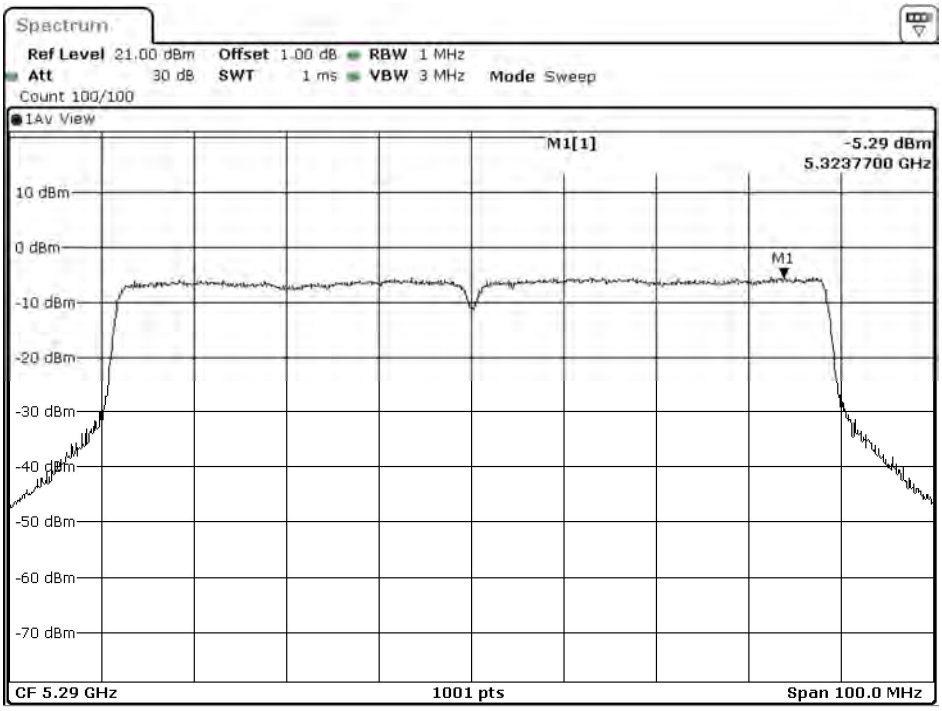
Channel	Frequency (MHz)	Data Rata (Mbps)	Chain (dBm)	PPSD (dBm)	BWCF (dB)	10*log (dBm)	Duty factor (db)	Total PPSD (dBm)	Limit (dBm)	Result
138	5690(Band4)	MCS0	A	-10.90	6.98	3.01	0.66	-0.25	27.43	Pass
			B	-10.63	6.98	3.01	0.66	0.02	27.43	Pass
155	5775	MCS0	A	-11.24	6.98	3.01	0.66	-0.59	27.43	Pass
			B	-10.73	6.98	3.01	0.66	-0.08	27.43	Pass

Channel 42 - Chain A



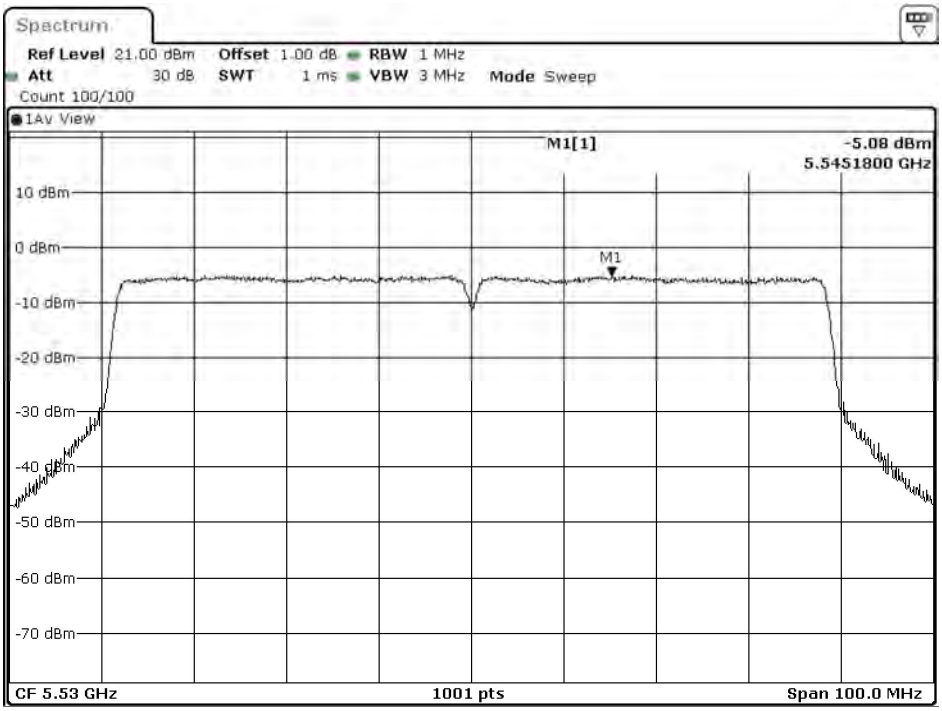
Date: 22.FEB.2021 06:14:29

Channel 58 - Chain A



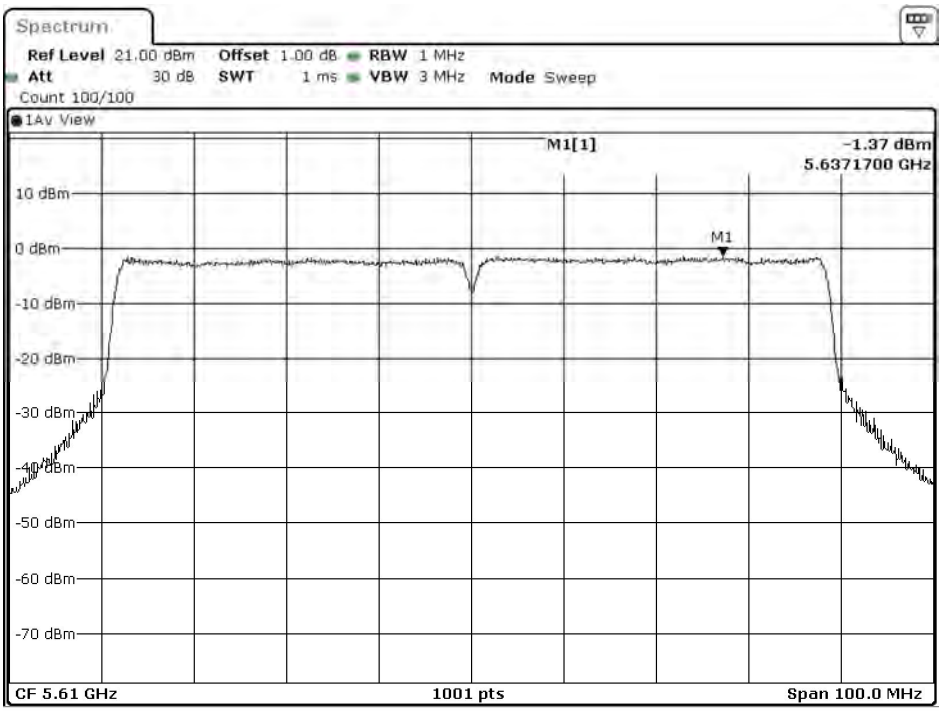
Date: 22.FEB.2021 06:16:14

Channel 106 - Chain A



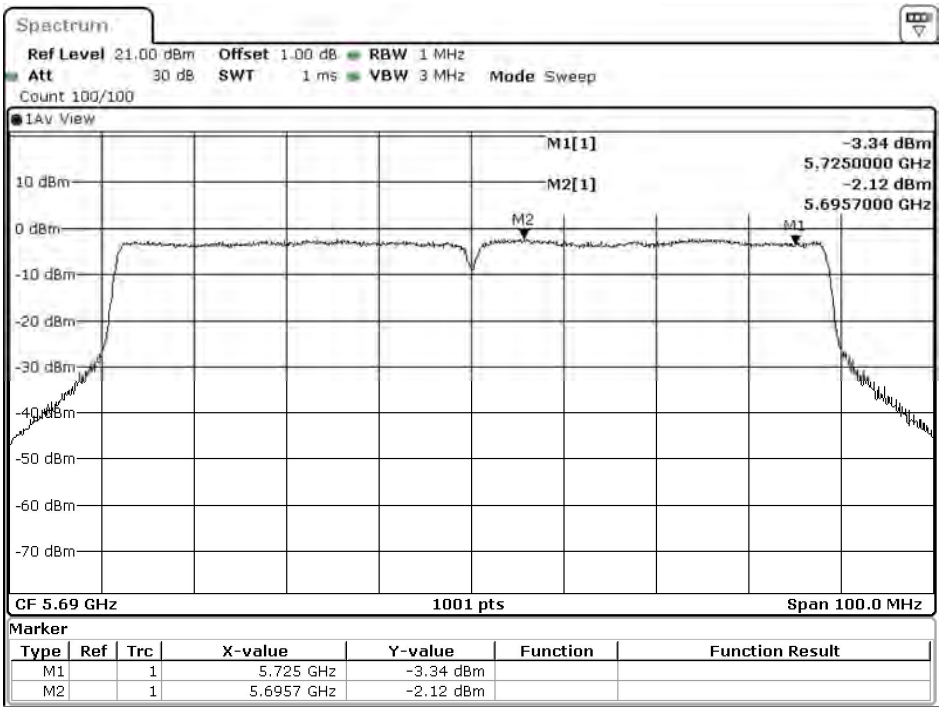
Date: 22.FEB.2021 06:18:02

Channel 122 - Chain A



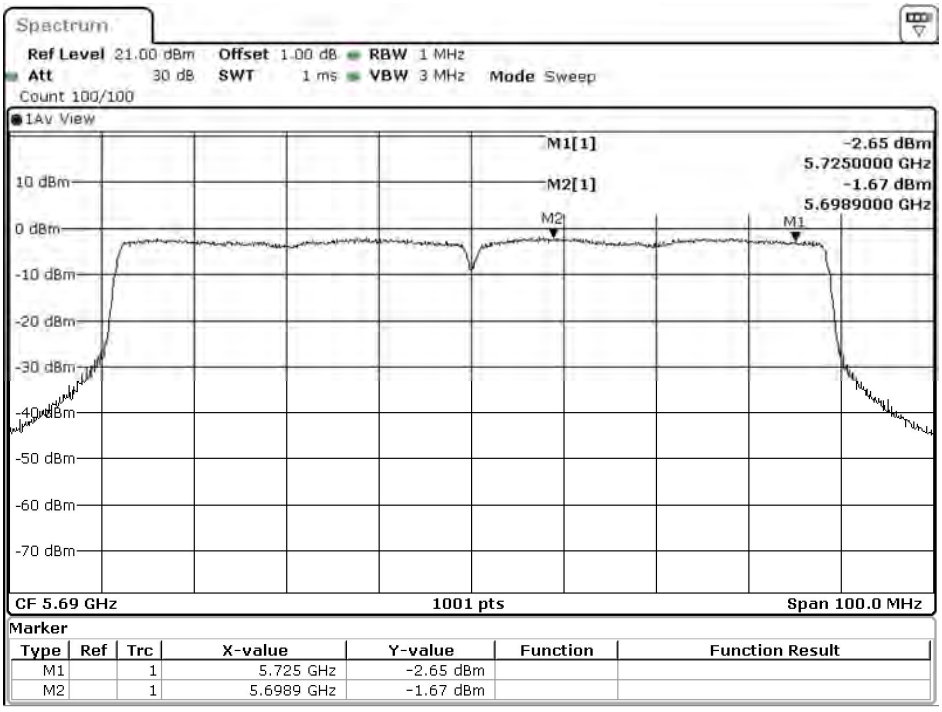
Date: 22.FEB.2021 06:19:50

Channel 138 - Chain A ((Band3))



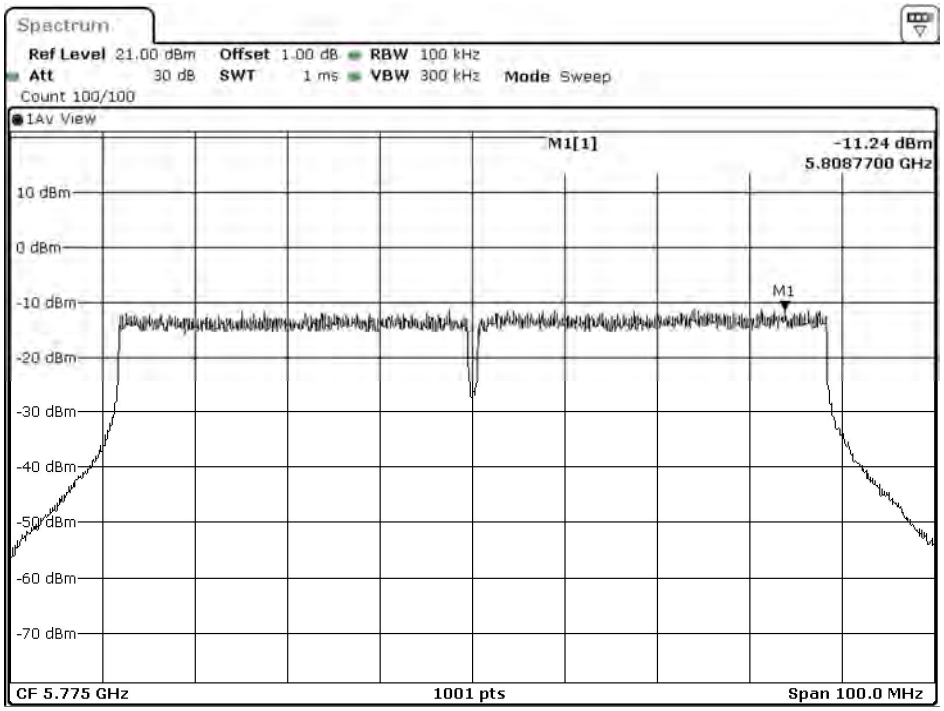
Date: 22.FEB.2021 06:21:36

Channel 138 - Chain A ((Band4)



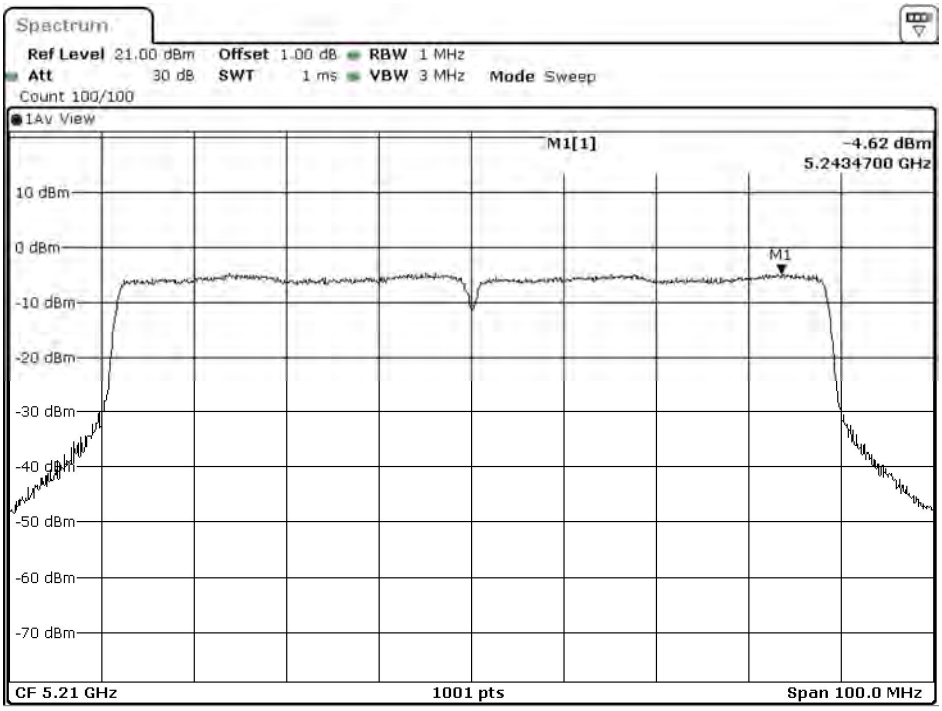
Date: 22.FEB.2021 08:26:59

Channel 155 - Chain A



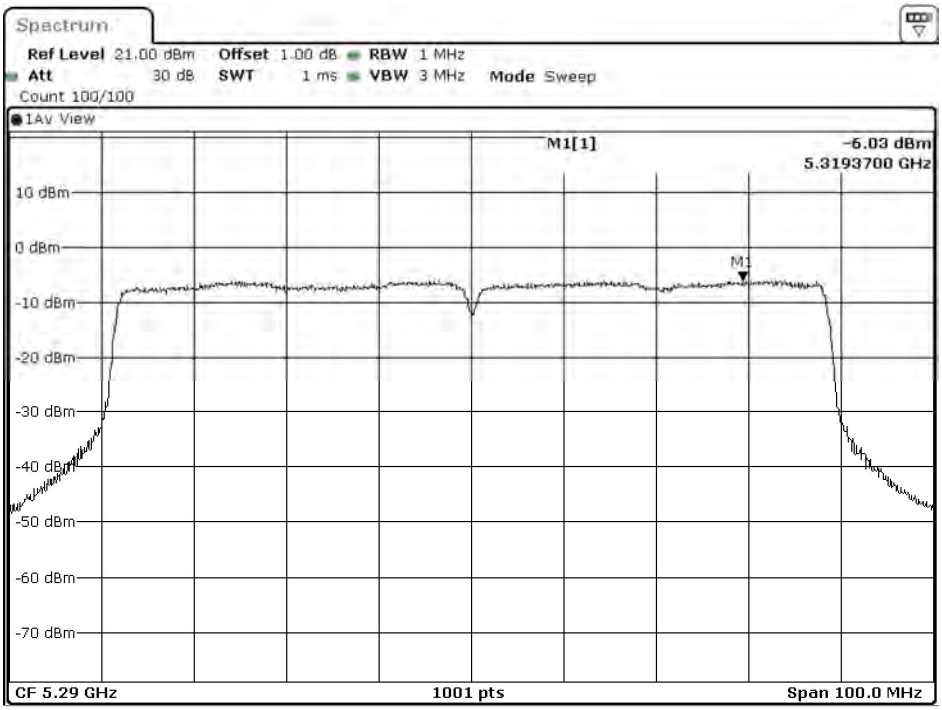
Date: 22.FEB.2021 06:24:23

Channel 42 - Chain B



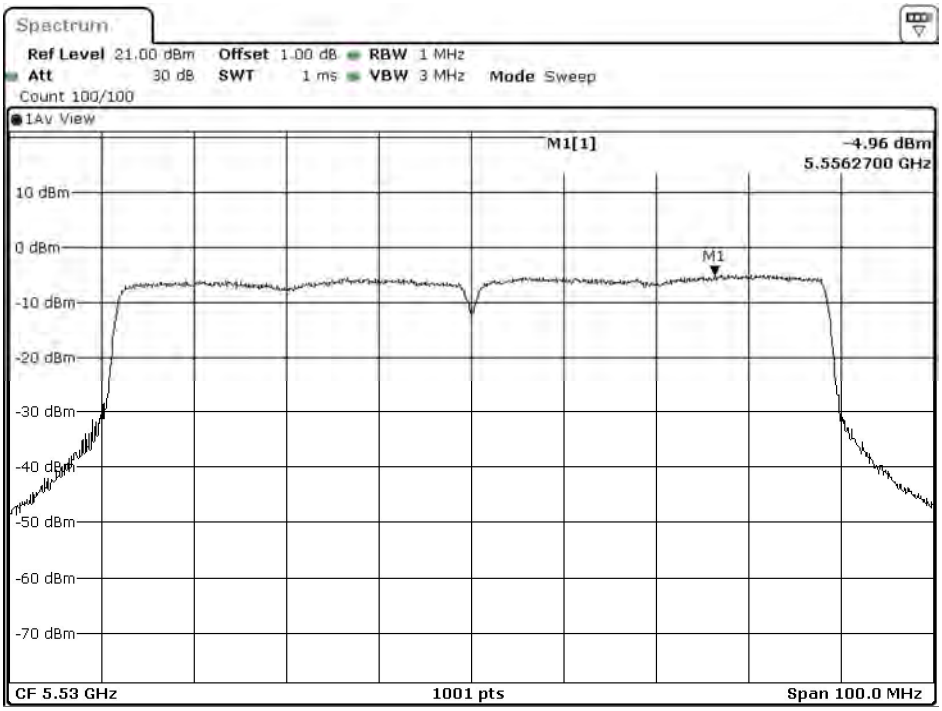
Date: 22.FEB.2021 08:19:51

Channel 58 - Chain B



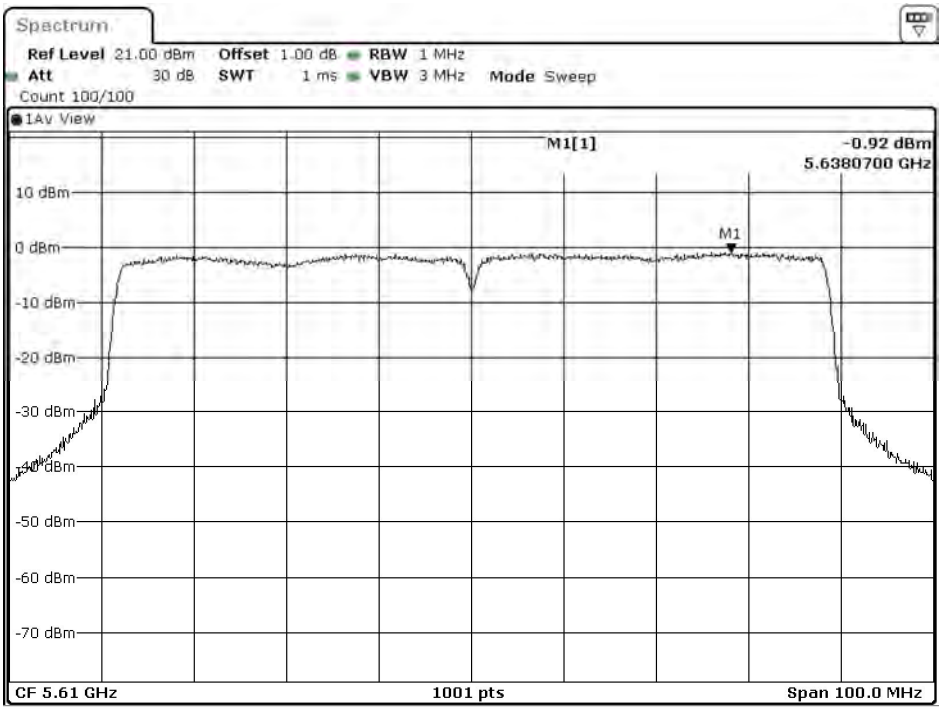
Date: 22.FEB.2021 08:21:37

Channel 106 - Chain B



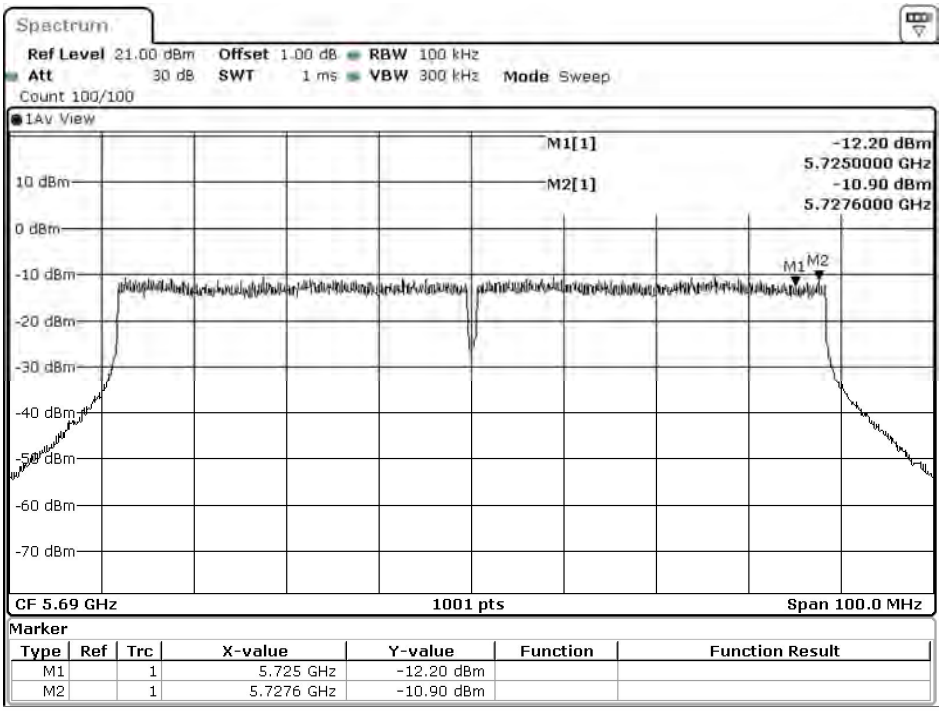
Date: 22.FEB.2021 08:23:24

Channel 122 - Chain B



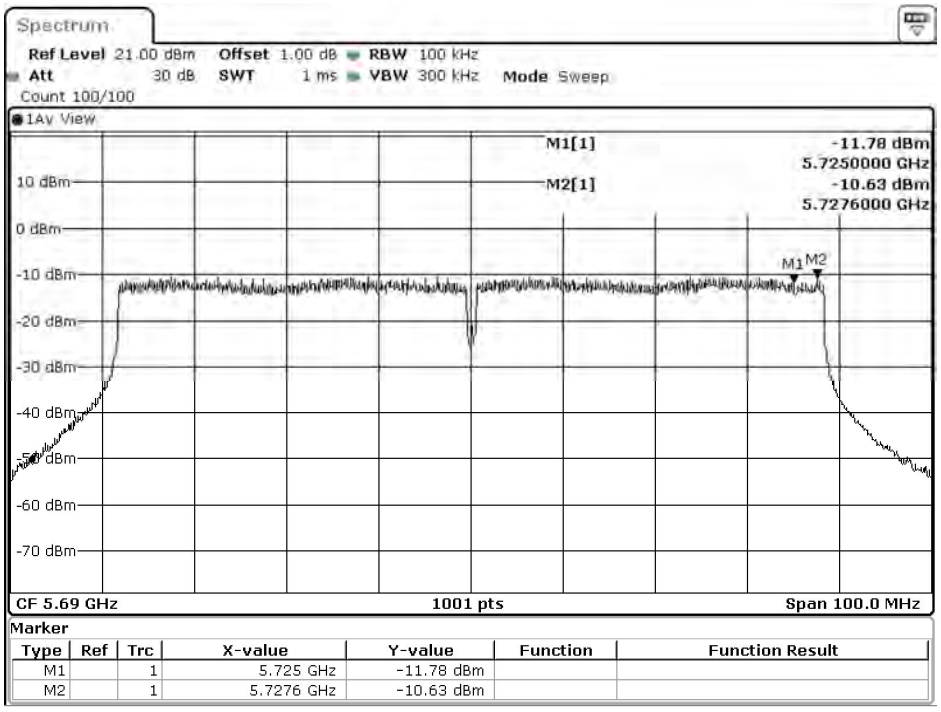
Date: 22.FEB.2021 08:25:13

Channel 138 - Chain B ((Band3))



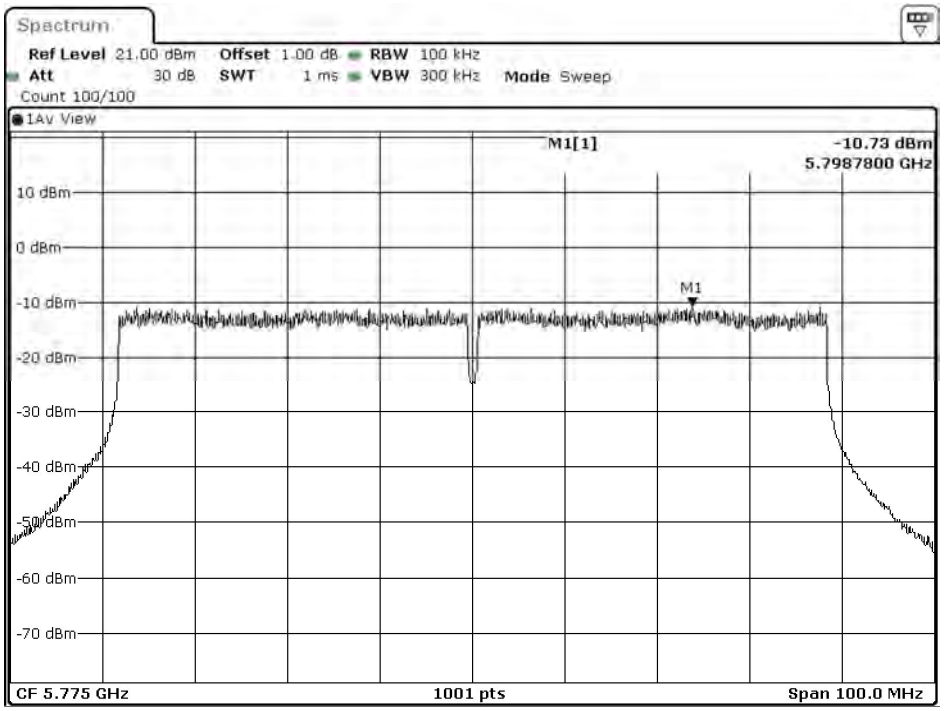
Date: 22.FEB.2021 06:21:57

Channel 138 - Chain B ((Band4)



Date: 22.FEB.2021 08:27:19

Channel 155 - Chain B



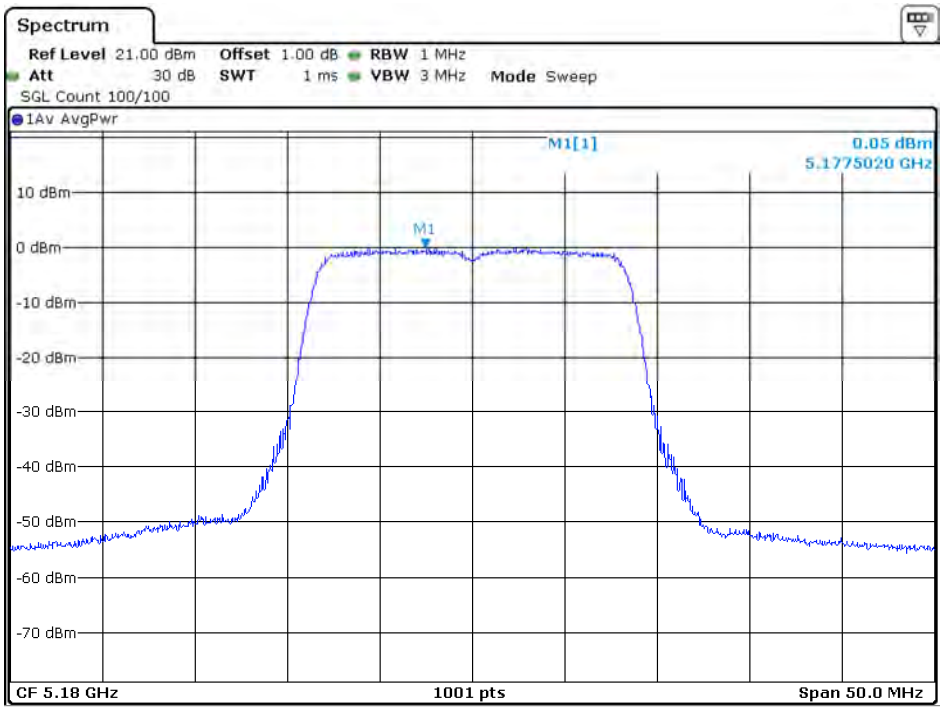
Date: 22.FEB.2021 08:29:46

Product : Wireless module
Test Item : Peak Power Spectral Density
Test Mode : Mode 1: Transmit (802.11a 6Mbps) – Panel Antenna
Test Date : 2021/02/19

Channel Number	Frequency (MHz)	Data Rata (Mbps)	Measurement Level (dBm)	Total PPSD/MHz (dBm)	Required Limit (dBm)	Result
36	5180	6	0.05	0.21	0.62	Pass
44	5220	6	0.08	0.24	0.62	Pass
48	5240	6	0.27	0.43	0.62	Pass
52	5260	6	0.23	0.39	0.62	Pass
60	5300	6	0.06	0.22	0.62	Pass
64	5320	6	0.15	0.31	0.62	Pass
100	5500	6	-0.44	-0.28	0.06	Pass
116	5580	6	-0.47	-0.31	0.06	Pass
140	5700	6	-0.47	-0.31	0.06	Pass

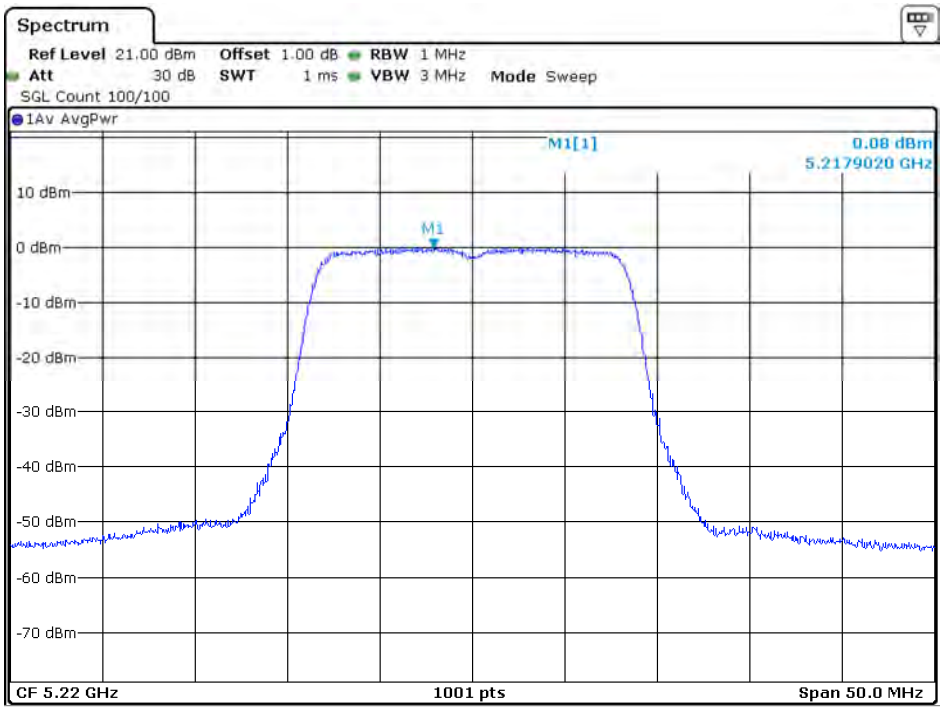
Channel Number	Frequency (MHz)	Data Rata (Mbps)	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
149	5745	6	1.28	6.98	8.42	30	Pass
157	5785	6	2.82	6.98	9.96	30	Pass
165	5825	6	1.20	6.98	8.34	30	Pass

Channel 36:



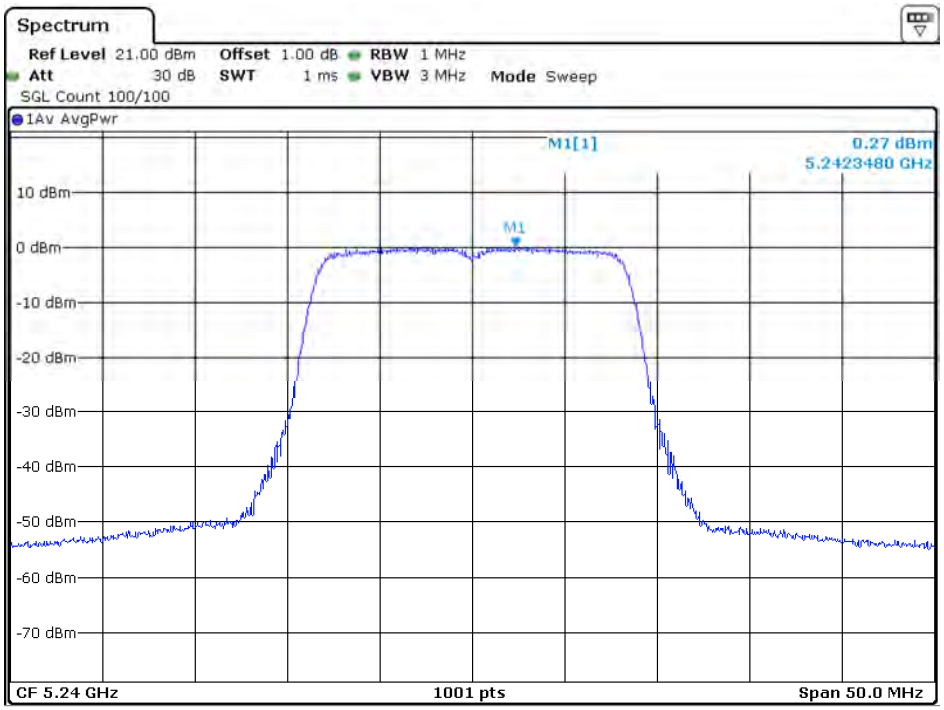
Date: 22.FEB.2021 07:56:12

Channel 44:



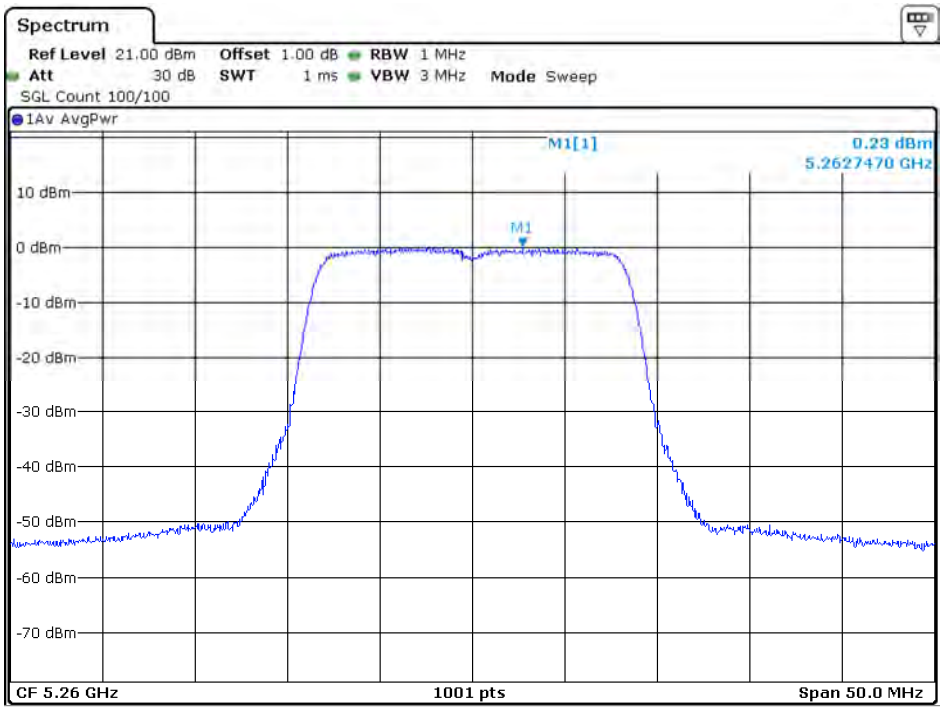
Date: 22.FEB.2021 08:01:22

Channel 48:



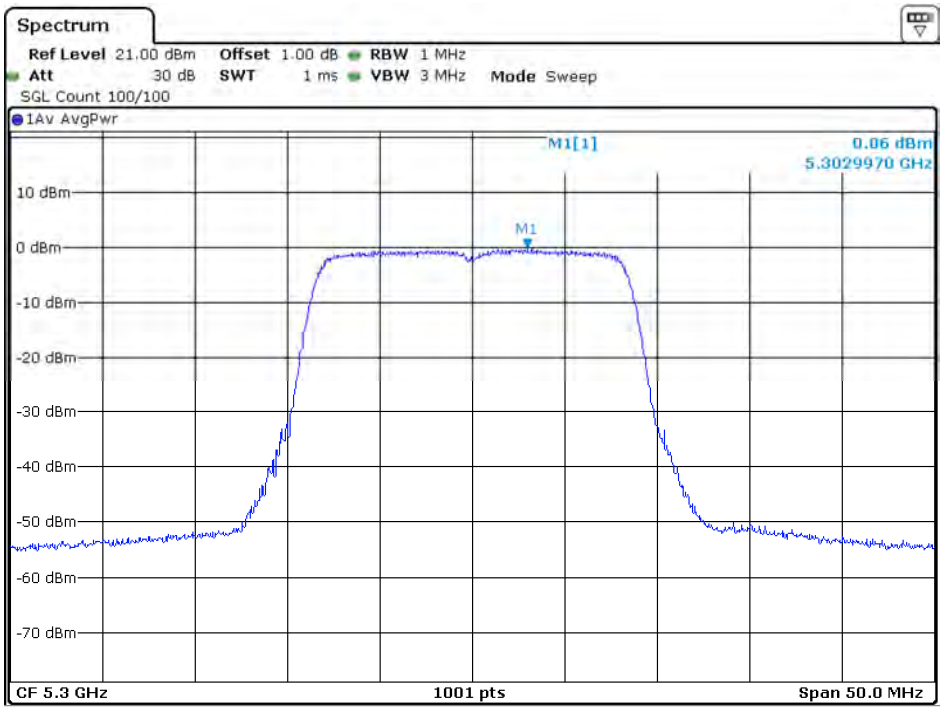
Date: 22.FEB.2021 08:03:06

Channel 52:



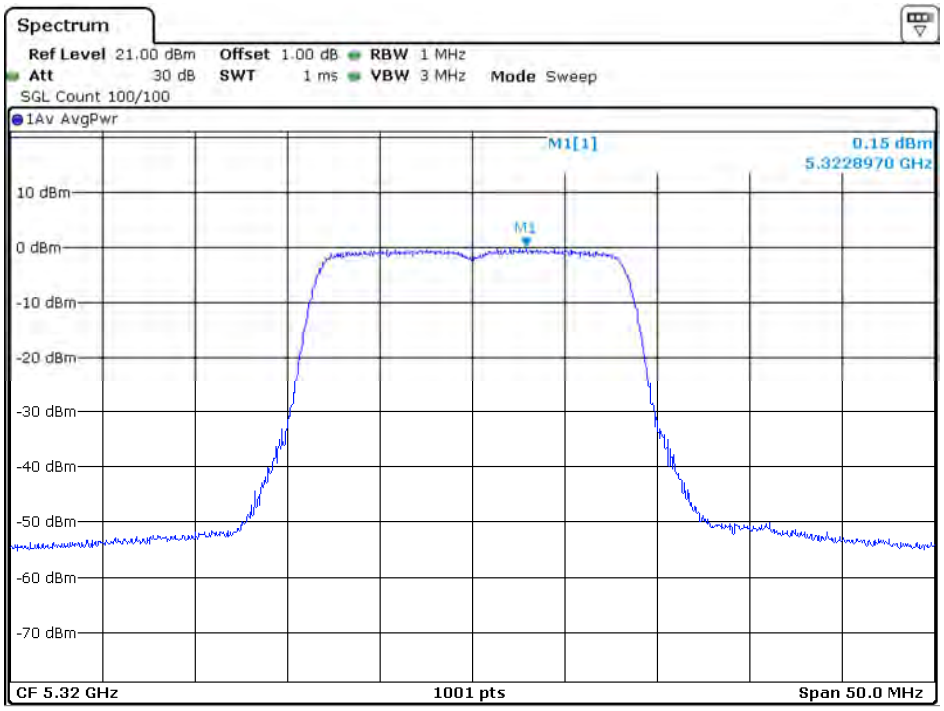
Date: 22.FEB.2021 08:04:18

Channel 60:



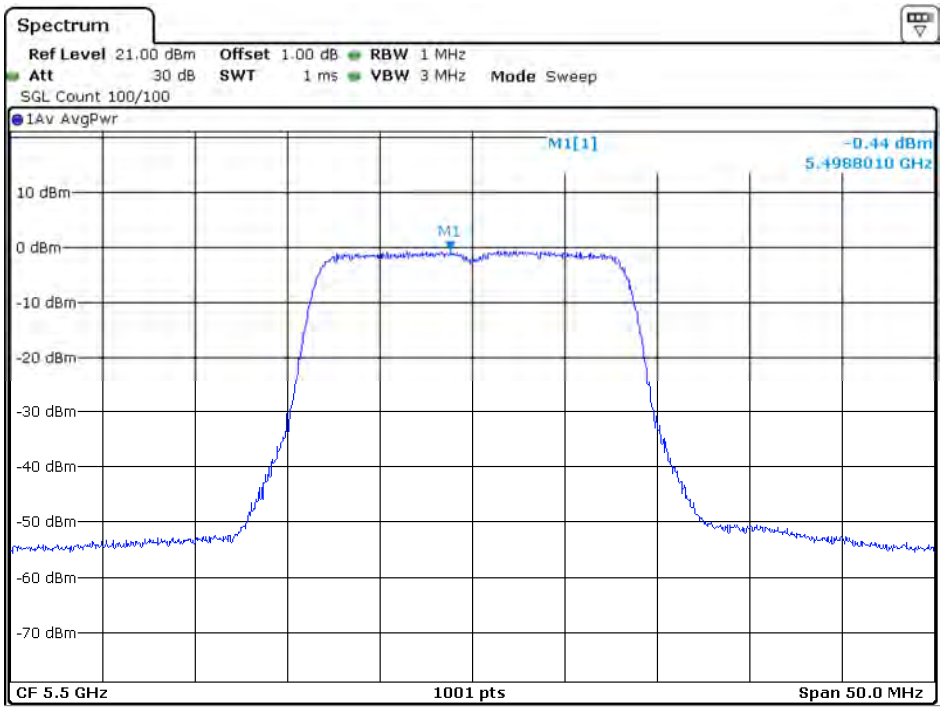
Date: 22.FEB.2021 08:05:18

Channel 64:



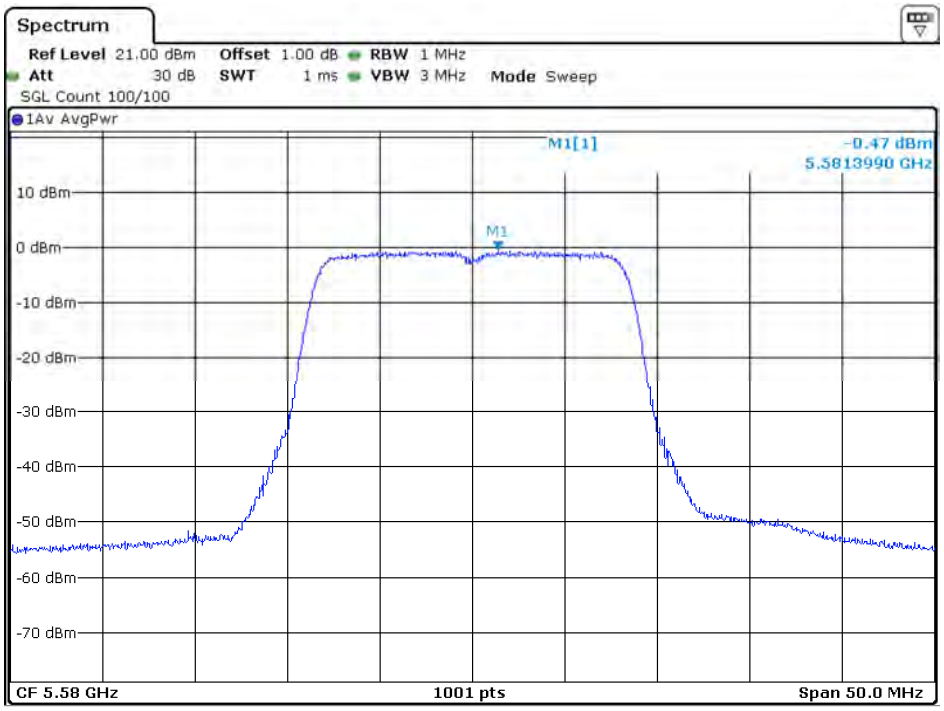
Date: 22.FEB.2021 08:06:32

Channel 100:



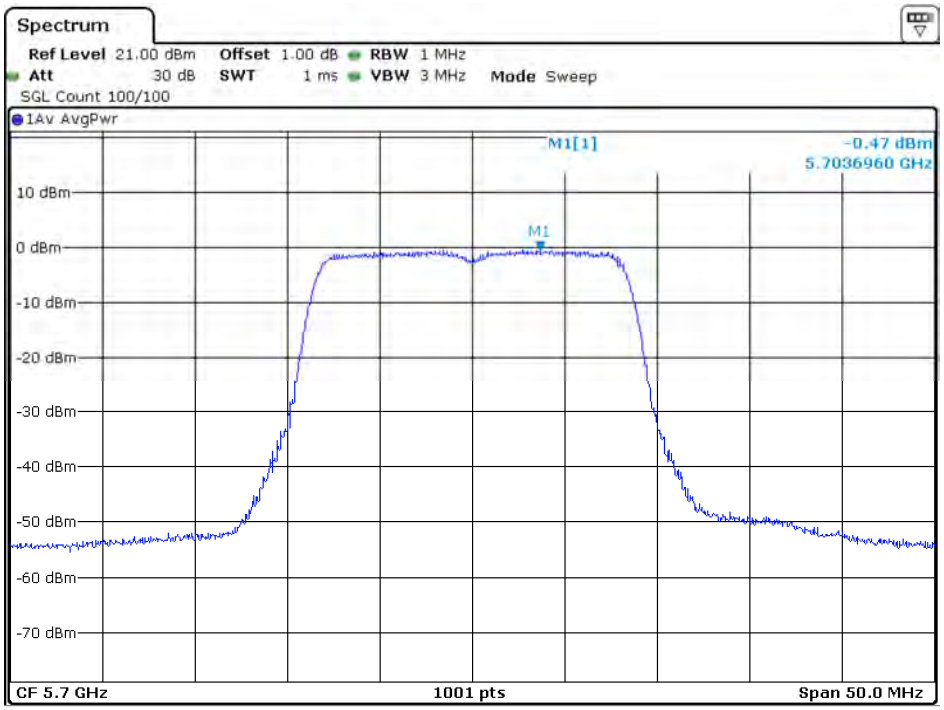
Date: 22.FEB.2021 08:08:44

Channel 116:



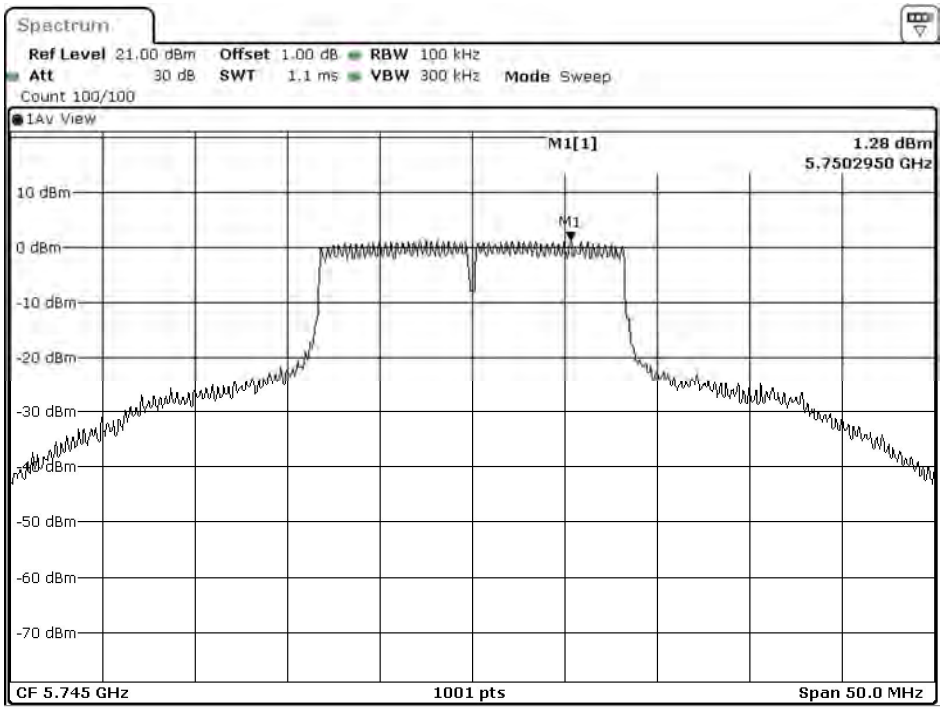
Date: 22.FEB.2021 08:09:53

Channel 140:



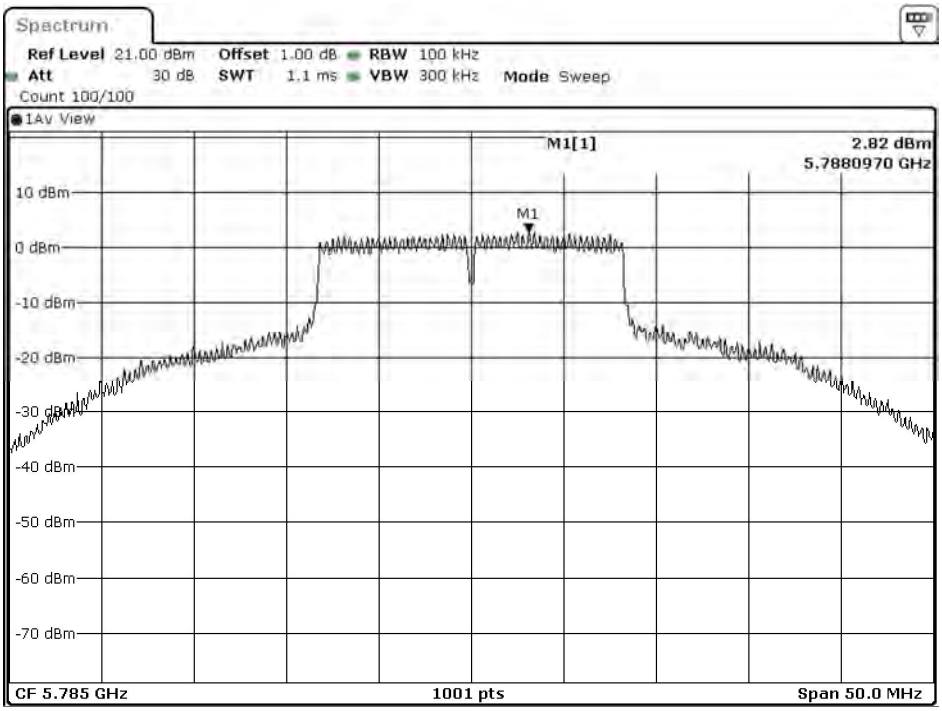
Date: 22.FEB.2021 08:10:46

Channel 149



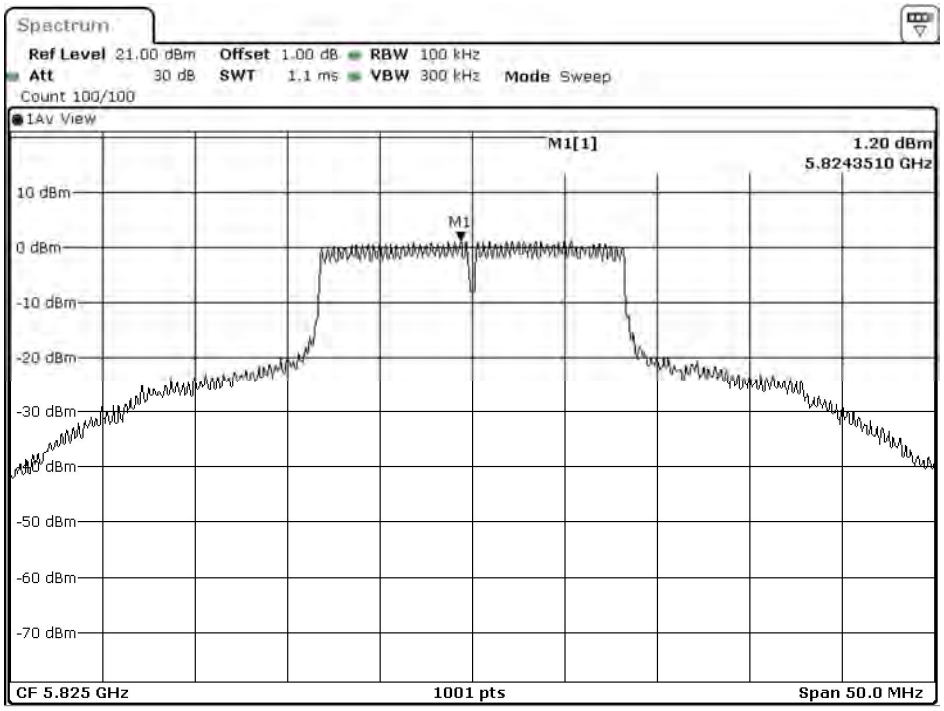
Date: 22.FEB.2021 07:34:25

Channel 157



Date: 22.FEB.2021 07:36:41

Channel 165



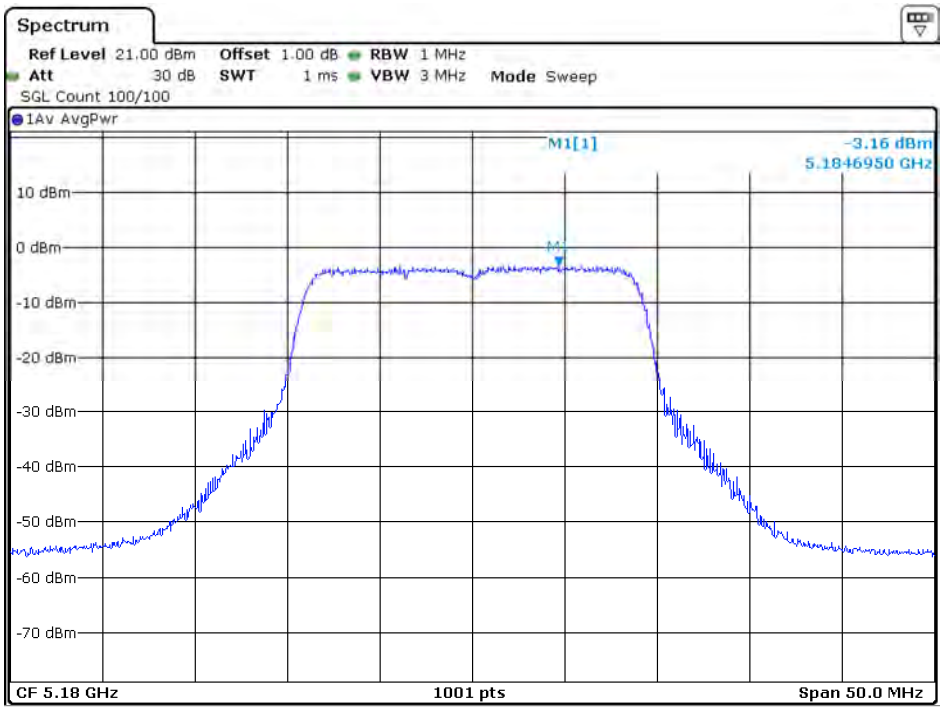
Date: 22.FEB.2021 07:38:56

Product : Wireless module
Test Item : Peak Power Spectral Density
Test Mode : Mode 4: Transmit (802.11ac-20BW 7.2Mbps) – Panel Antenna
Test Date : 2021/02/19

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain (dBm)	PPSD/MHz (dBm)	10*log(2) (dB)	Total PPSD/MHz (dBm)	Limit (dBm)	Result
36	5180	HT8	A	-3.16	3.01	-0.02	0.62	Pass
			B	-3.04	3.01	0.10	0.62	Pass
44	5220	HT8	A	-2.90	3.01	0.24	0.62	Pass
			B	-3.03	3.01	0.11	0.62	Pass
48	5240	HT8	A	-3.13	3.01	0.01	0.62	Pass
			B	-3.02	3.01	0.12	0.62	Pass
52	5260	HT8	A	-3.34	3.01	-0.20	0.62	Pass
			B	-2.77	3.01	0.37	0.62	Pass
60	5300	HT8	A	-2.90	3.01	0.24	0.62	Pass
			B	-2.76	3.01	0.38	0.62	Pass
64	5320	HT8	A	-3.01	3.01	0.13	0.62	Pass
			B	-2.97	3.01	0.17	0.62	Pass
100	5500	HT8	A	-3.44	3.01	-0.30	0.06	Pass
			B	-3.77	3.01	-0.63	0.06	Pass
116	5580	HT8	A	-3.18	3.01	-0.04	0.06	Pass
			B	-3.36	3.01	-0.22	0.06	Pass
140	5700	HT8	A	-3.21	3.01	-0.07	0.06	Pass
			B	-3.36	3.01	-0.22	0.06	Pass
144	5720(Band3)	HT8	A	-3.20	3.01	-0.06	0.06	Pass
			B	-3.37	3.01	-0.23	0.06	Pass

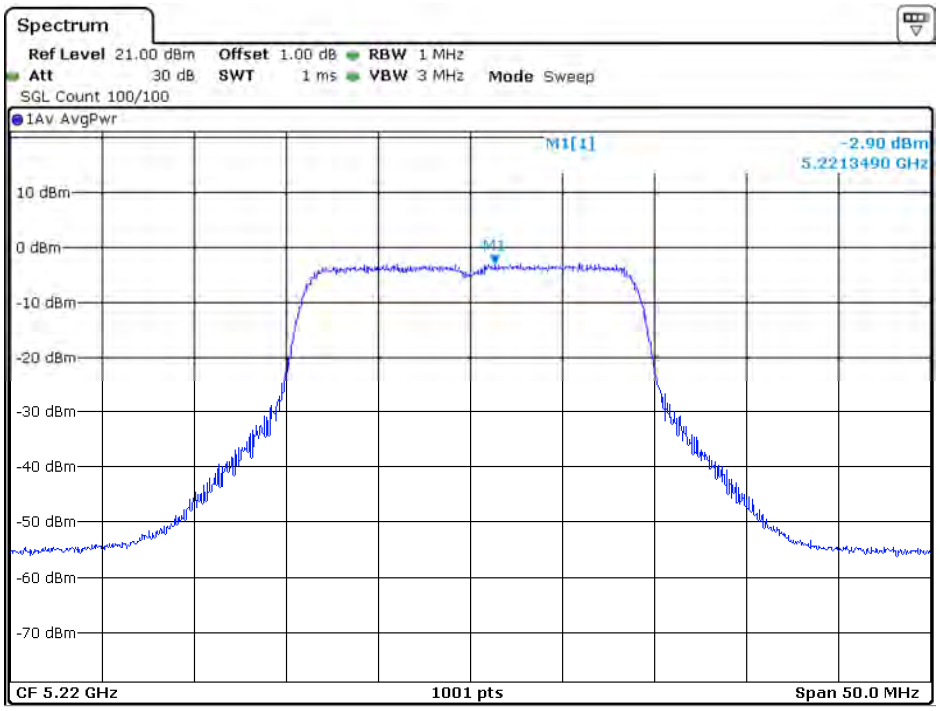
Channel	Frequency (MHz)	Data Rata (Mbps)	Chain (dBm)	PPSD (dBm)	BWCF (dB)	10*log(2) (dB)	Duty factor (db)	Total PPSD (dBm)	Limit (dBm)	Result
144	5720(Band4)	HT8	A	-12.14	6.98	3.01	0.13	-2.02	30	Pass
			B	-11.97	6.98	3.01	0.13	-1.85		Pass
149	5745	HT8	A	-3.05	6.98	3.01	0.13	7.07	30	Pass
			B	-2.10	6.98	3.01	0.13	8.02		Pass
157	5785	HT8	A	2.57	6.98	3.01	0.13	12.69	30	Pass
			B	3.38	6.98	3.01	0.13	13.50		Pass
165	5825	HT8	A	-2.27	6.98	3.01	0.13	7.85	30	Pass
			B	-1.51	6.98	3.01	0.13	8.61		Pass

Channel 36 - Chain A



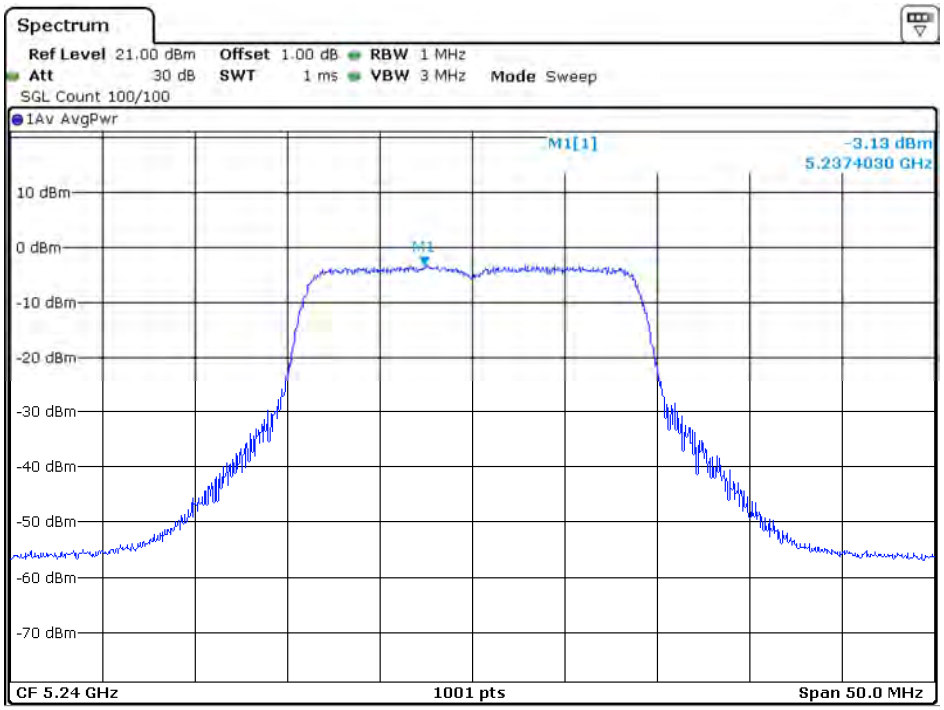
Date: 22.FEB.2021 09:20:39

Channel 44 - Chain A



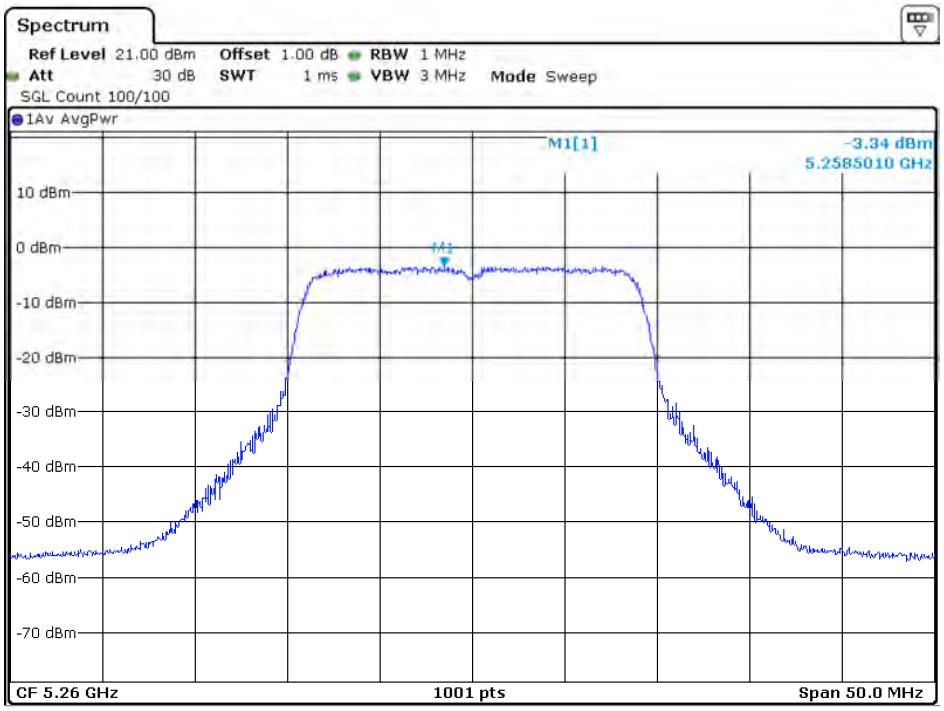
Date: 22.FEB.2021 09:22:51

Channel 48 - Chain A



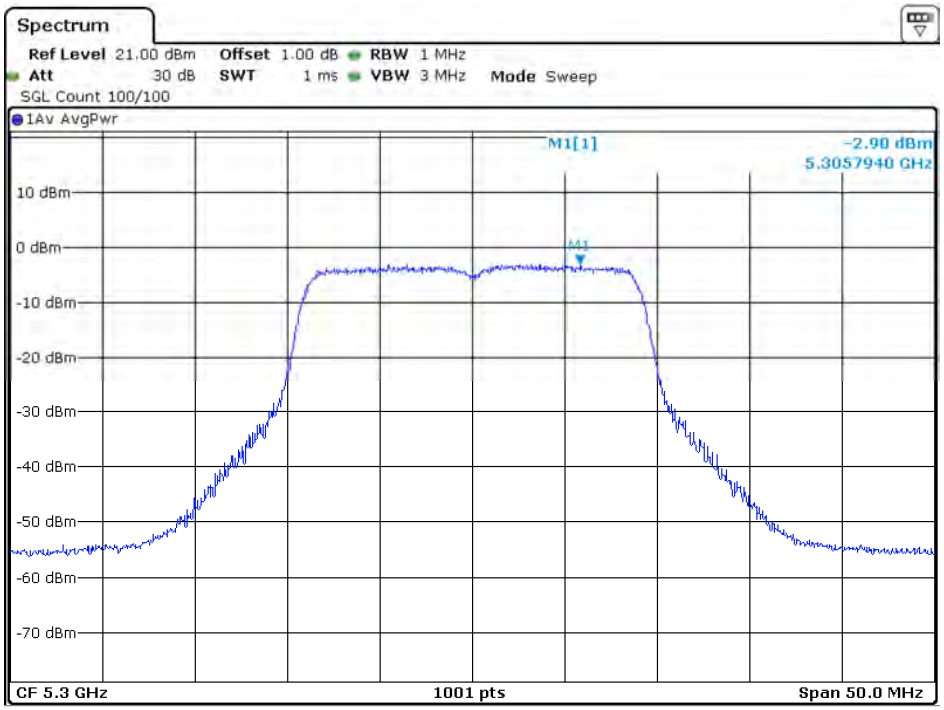
Date: 22.FEB.2021 09:24:46

Channel 52 - Chain A



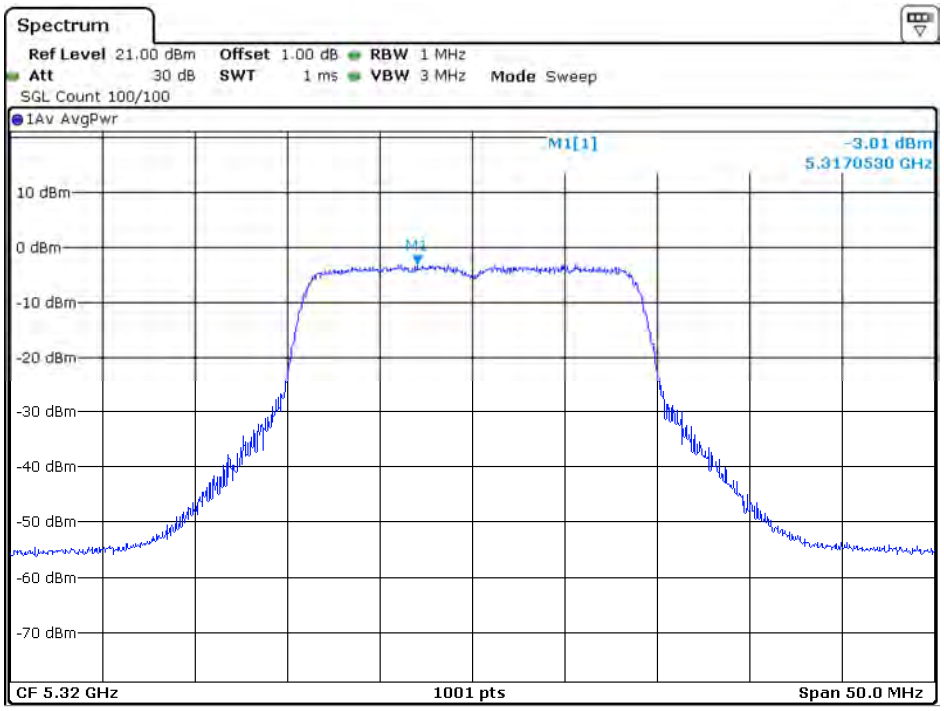
Date: 22.FEB.2021 09:26:32

Channel 60 - Chain A



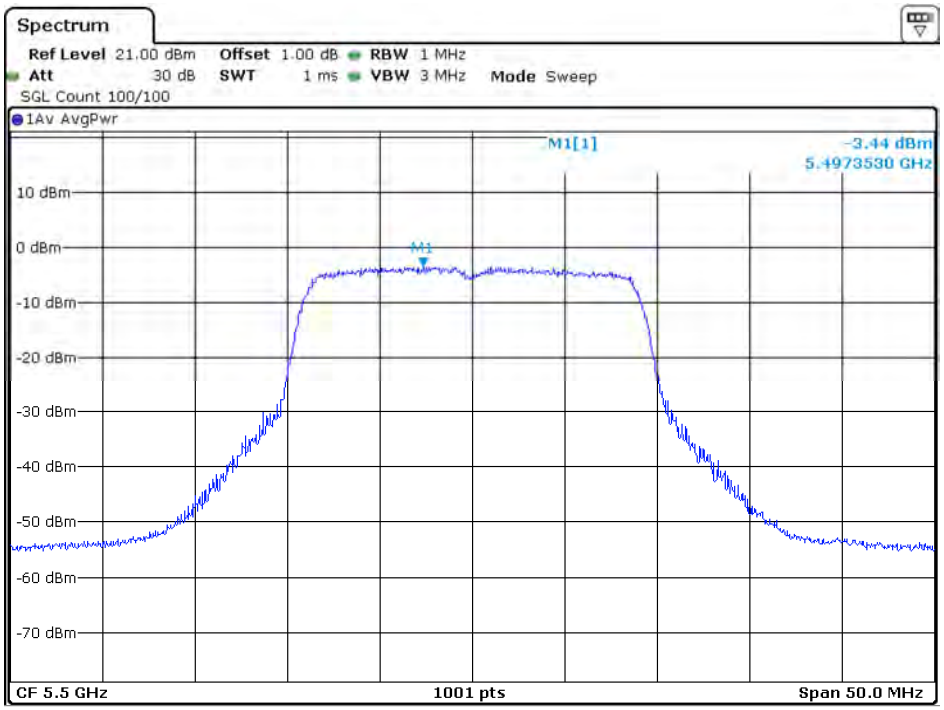
Date: 22.FEB.2021 09:28:41

Channel 64 - Chain A



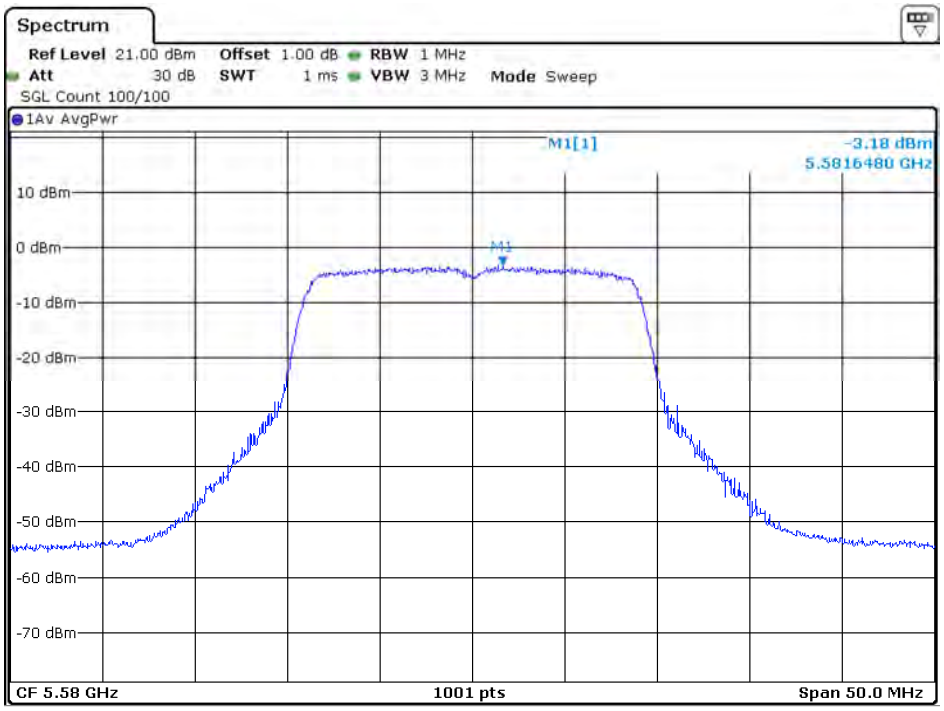
Date: 22.FEB.2021 09:30:21

Channel 100 - Chain A



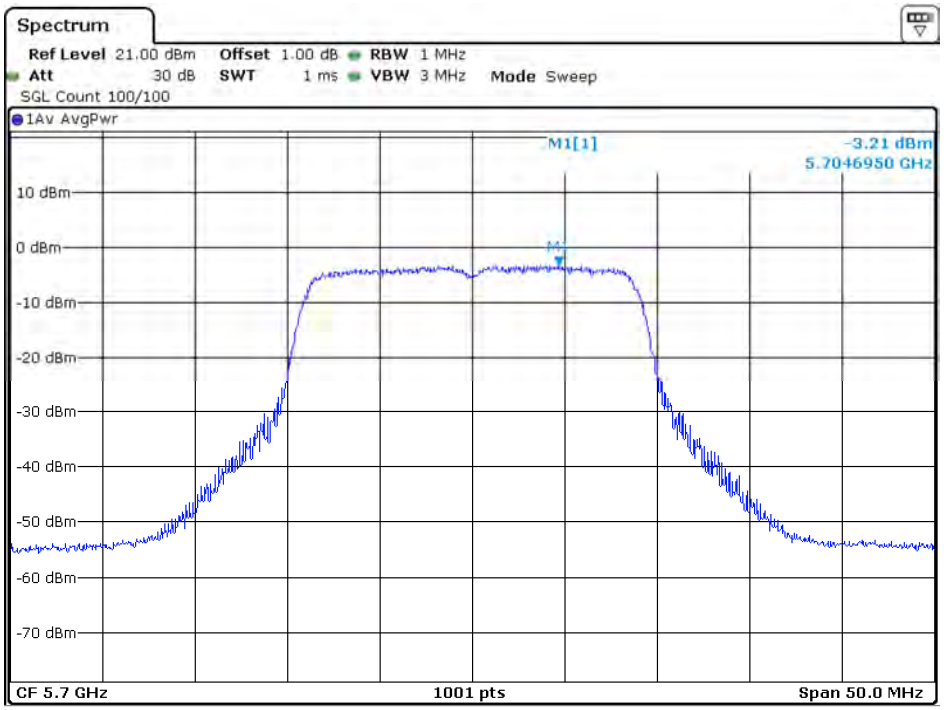
Date: 22.FEB.2021 09:32:52

Channel 116 - Chain A



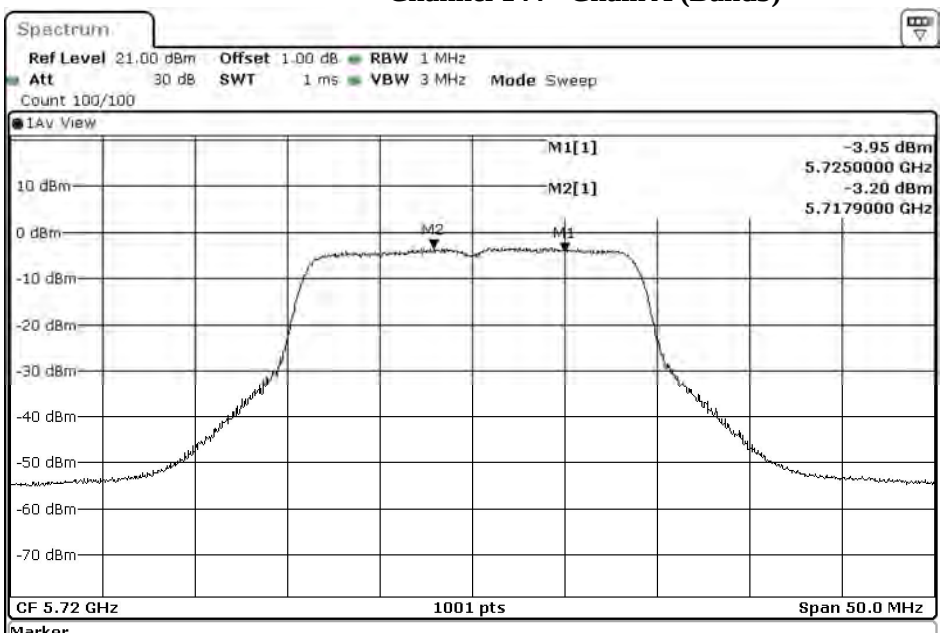
Date: 22.FEB.2021 09:34:48

Channel 140 - Chain A



Date: 22.FEB.2021 09:36:21

Channel 144 - Chain A (Band3)

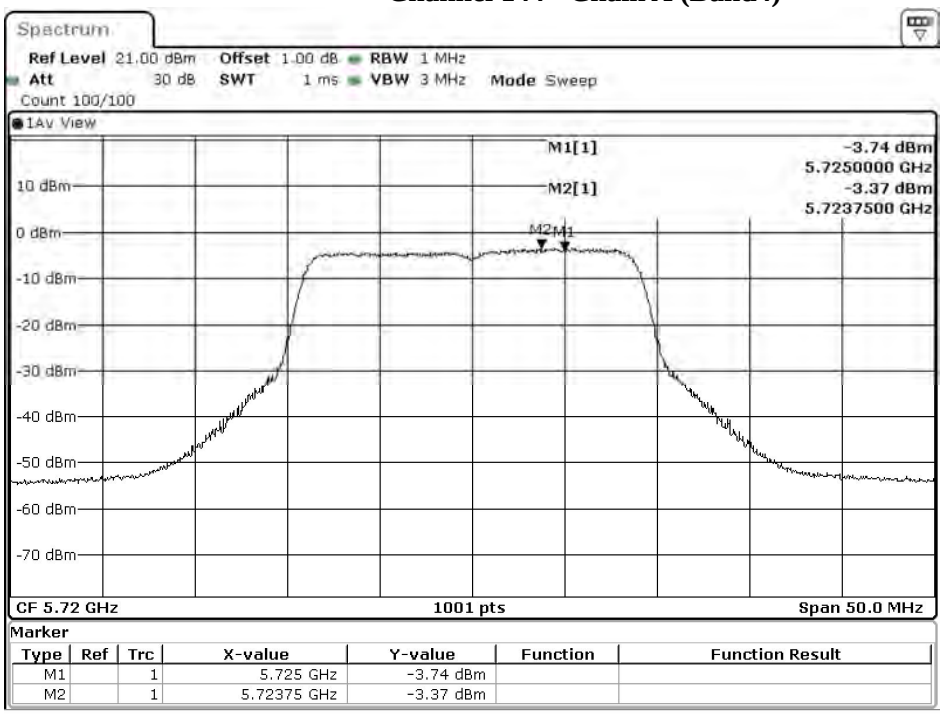


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.725 GHz	-3.95 dBm		
M2		1	5.7179 GHz	-3.20 dBm		

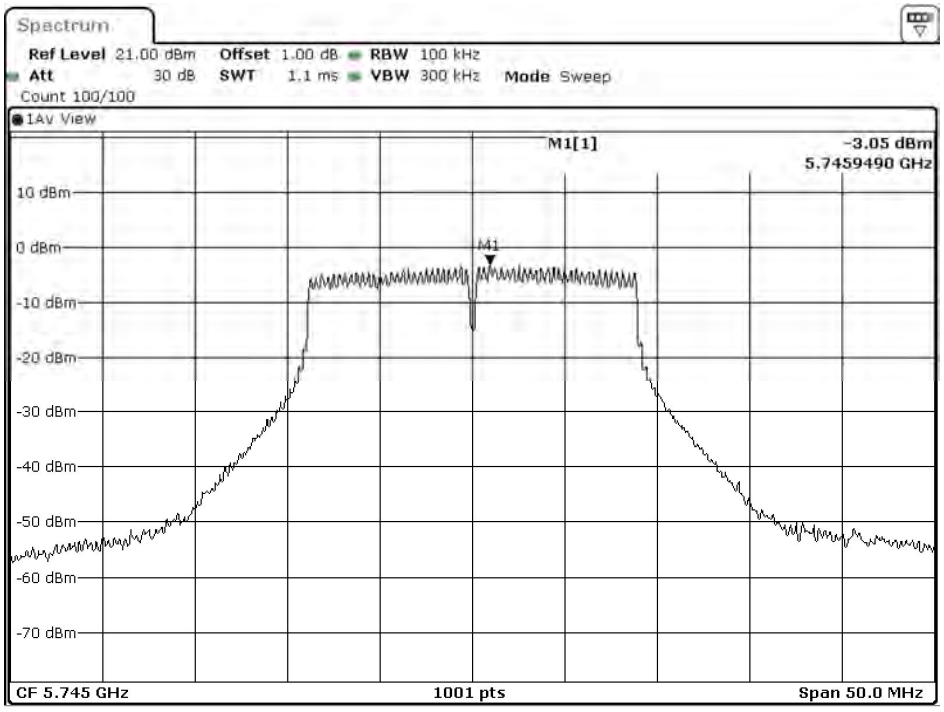
Date: 22.FEB.2021 09:50:33

Channel 144 - Chain A (Band4)



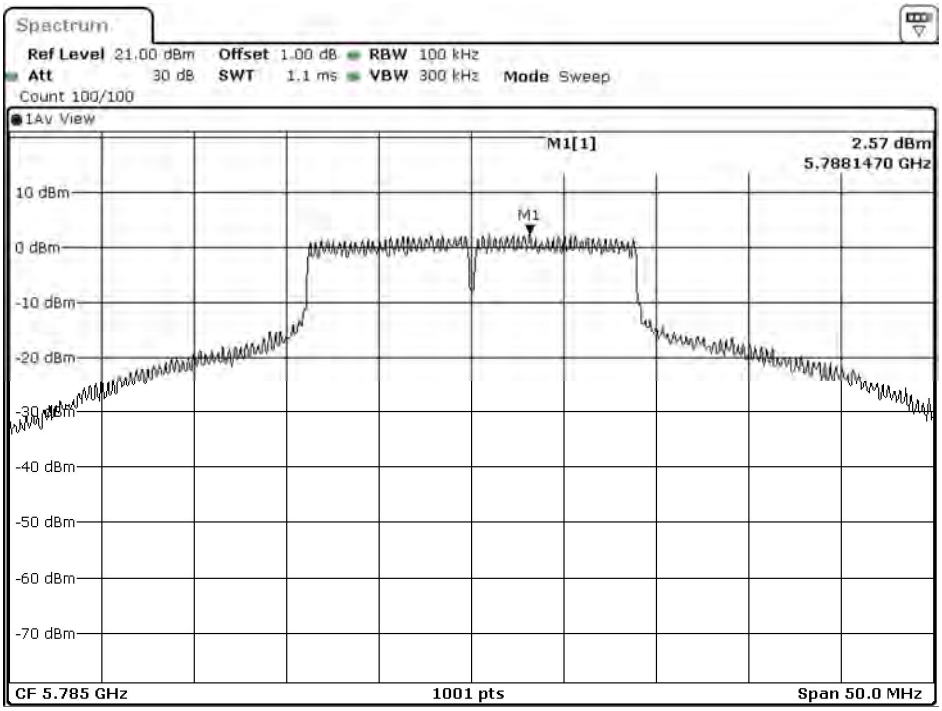
Date: 22.FEB.2021 11:55:56

Channel 149 - Chain A



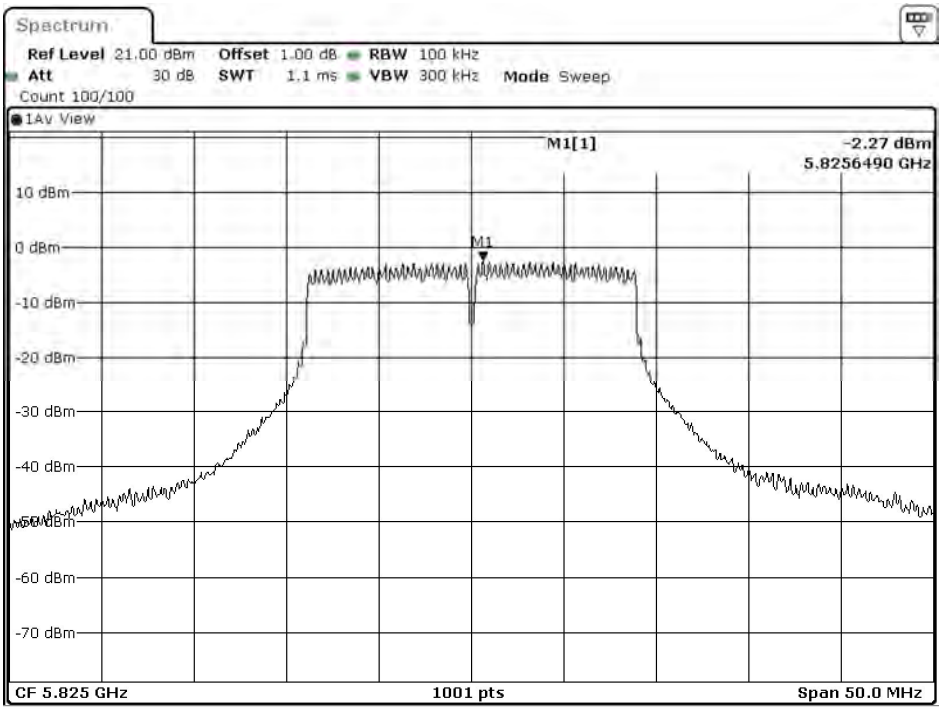
Date: 22.FEB.2021 09:04:57

Channel 157 - Chain A



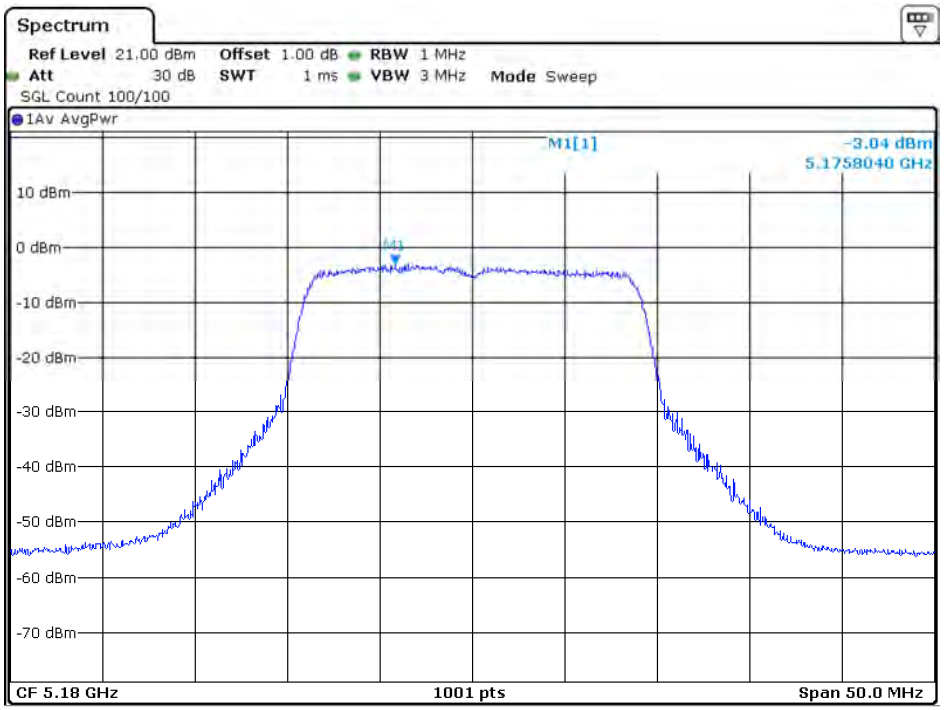
Date: 22.FEB.2021 09:06:49

Channel 165 - Chain A



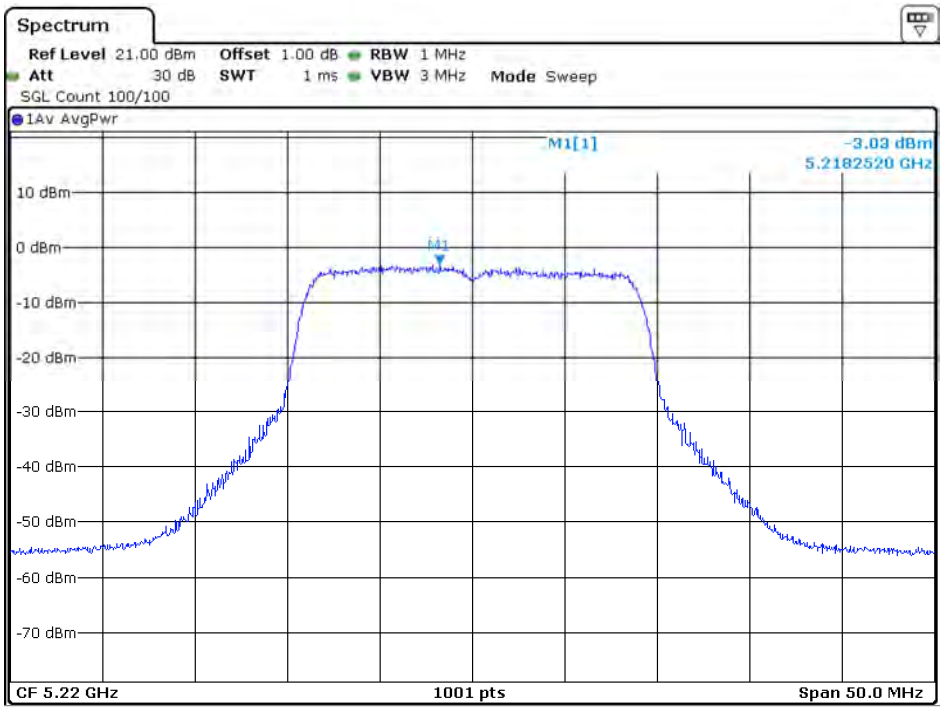
Date: 22.FEB.2021 09:08:18

Channel 36 - Chain B



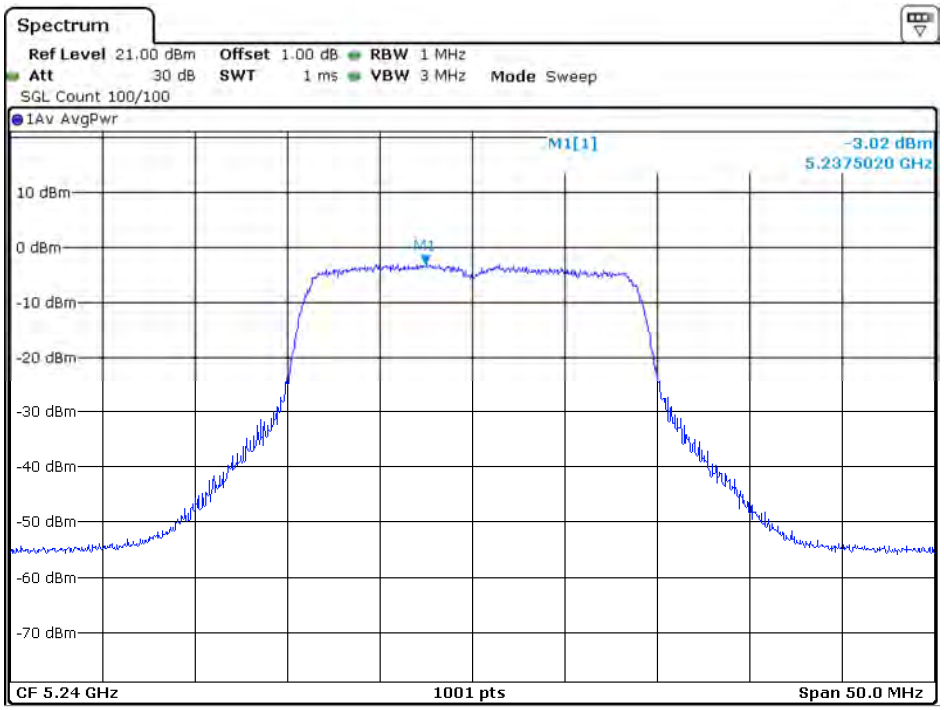
Date: 22.FEB.2021 11:26:47

Channel 44 - Chain B



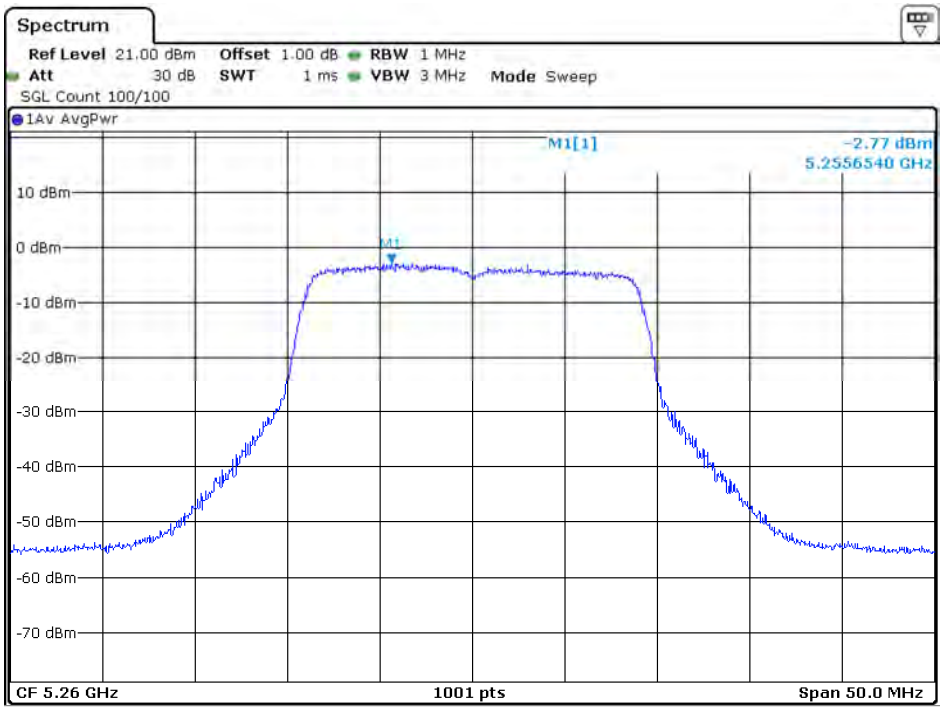
Date: 22.FEB.2021 11:28:34

Channel 48 – Chain B



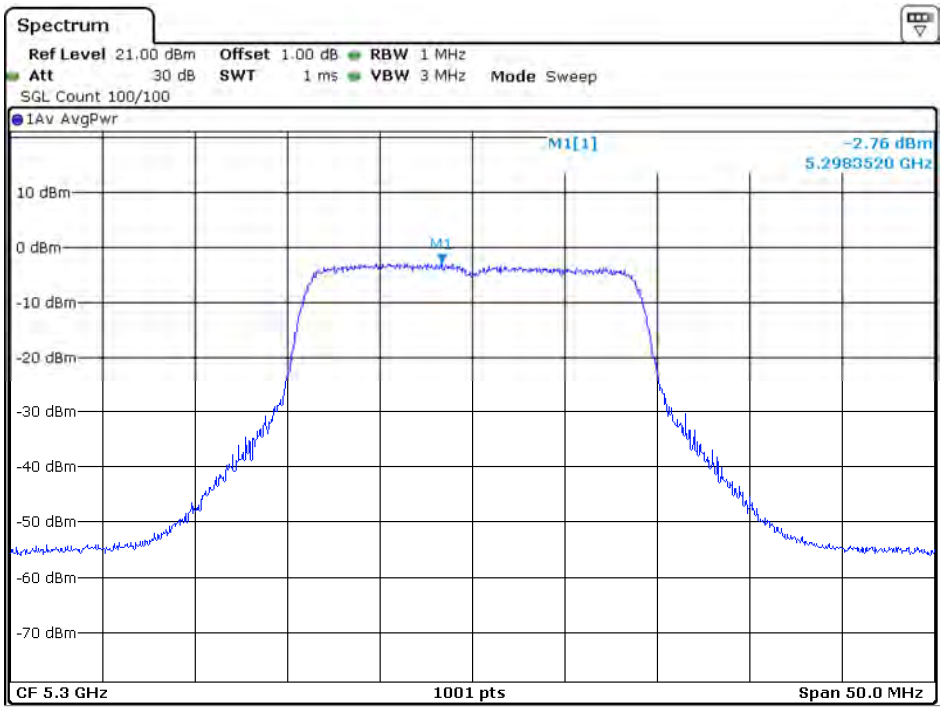
Date: 22.FEB.2021 11:30:42

Channel 52 - Chain B



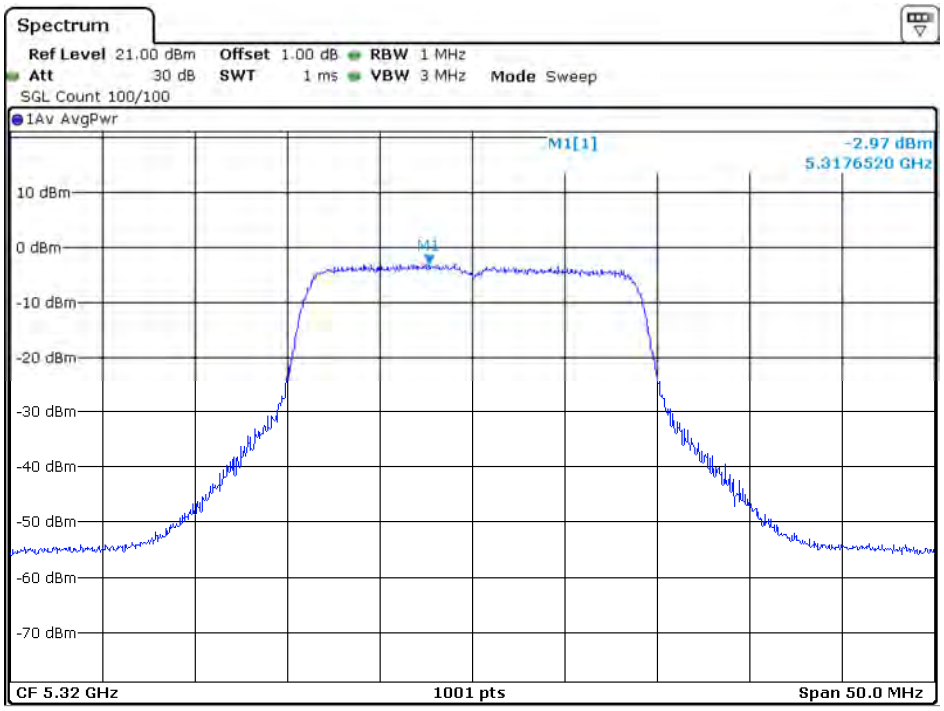
Date: 22.FEB.2021 11:32:10

Channel 60 - Chain B



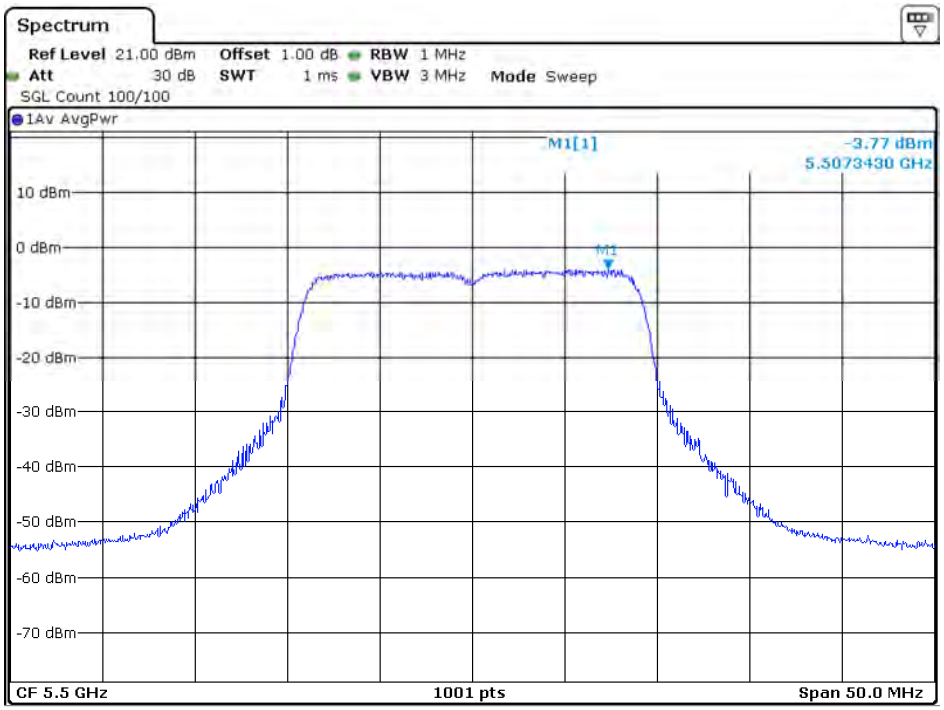
Date: 22.FEB.2021 11:34:26

Channel 64 - Chain B



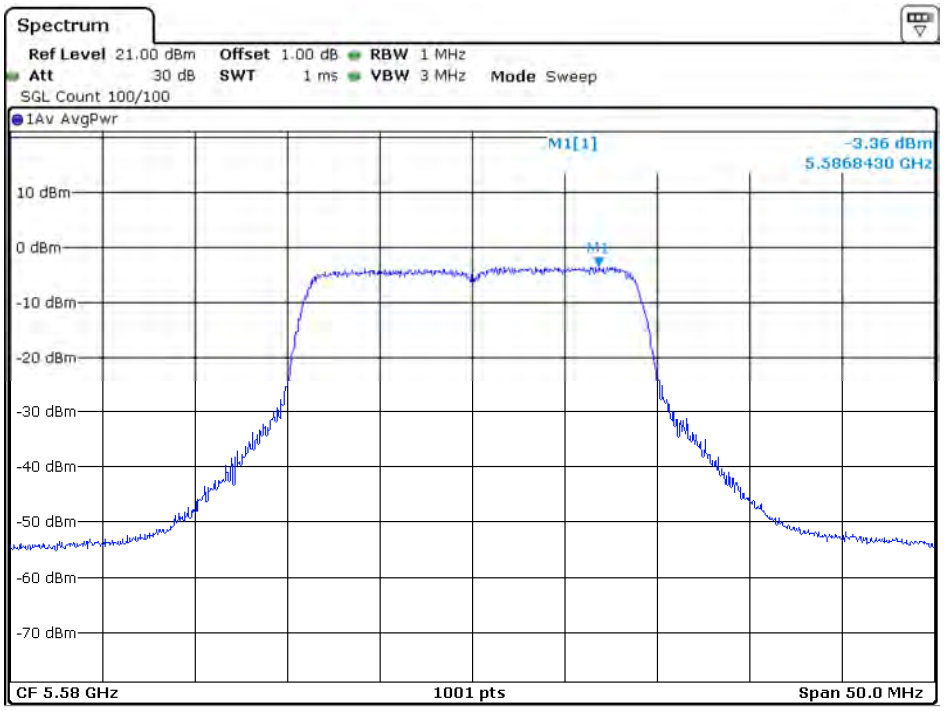
Date: 22.FEB.2021 11:36:09

Channel 100 - Chain B



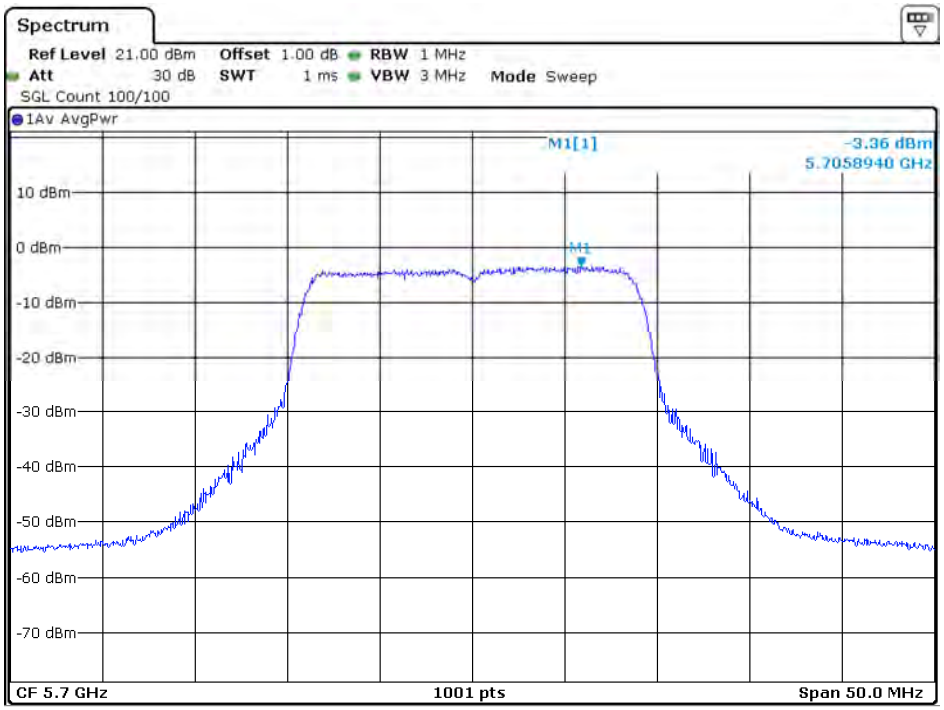
Date: 22.FEB.2021 11:38:36

Channel 116 - Chain B



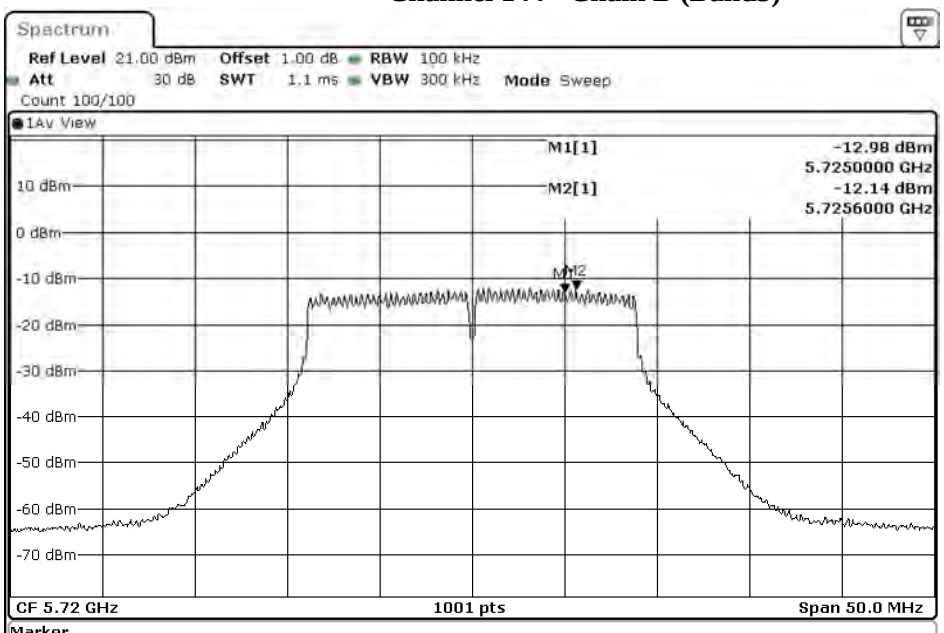
Date: 22.FEB.2021 11:40:37

Channel 140 - Chain B



Date: 22.FEB.2021 11:42:07

Channel 144 - Chain B (Band3)

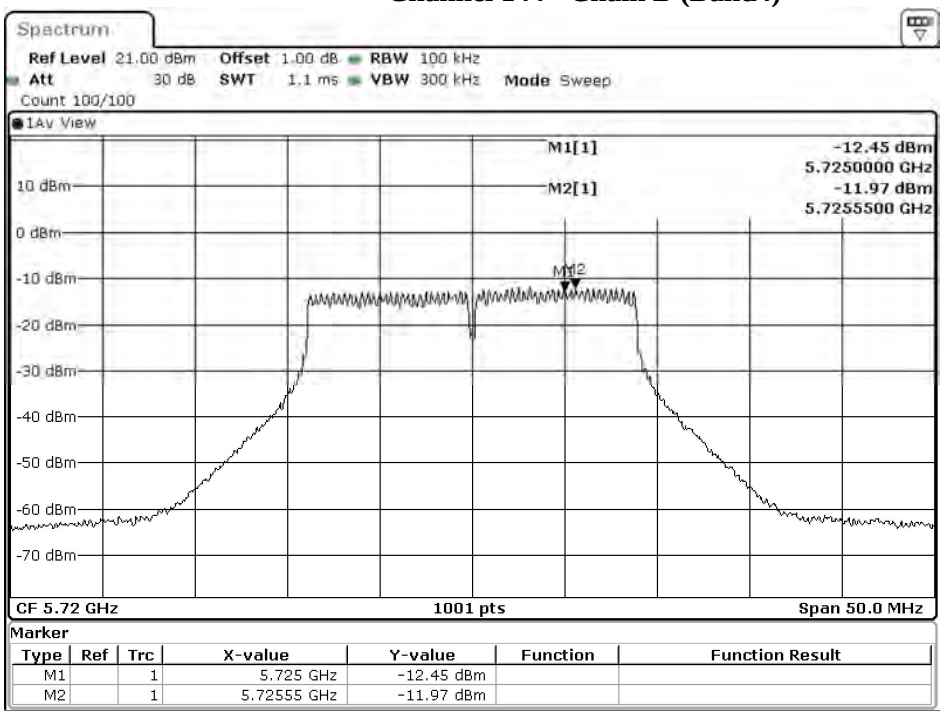


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.725 GHz	-12.98 dBm		
M2		1	5.7256 GHz	-12.14 dBm		

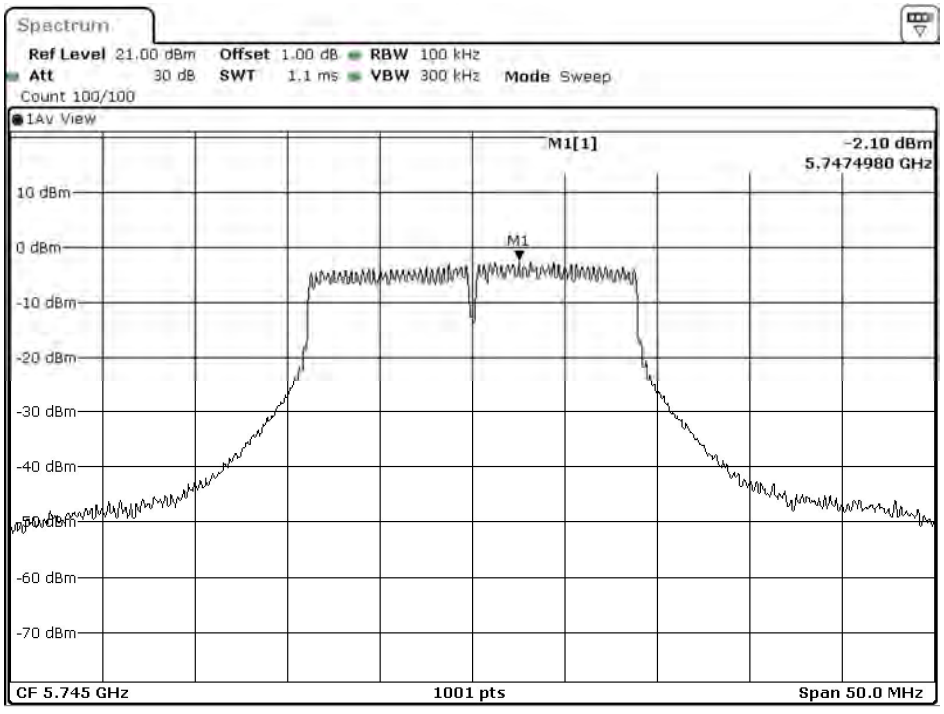
Date: 22.FEB.2021 09:50:54

Channel 144 - Chain B (Band4)



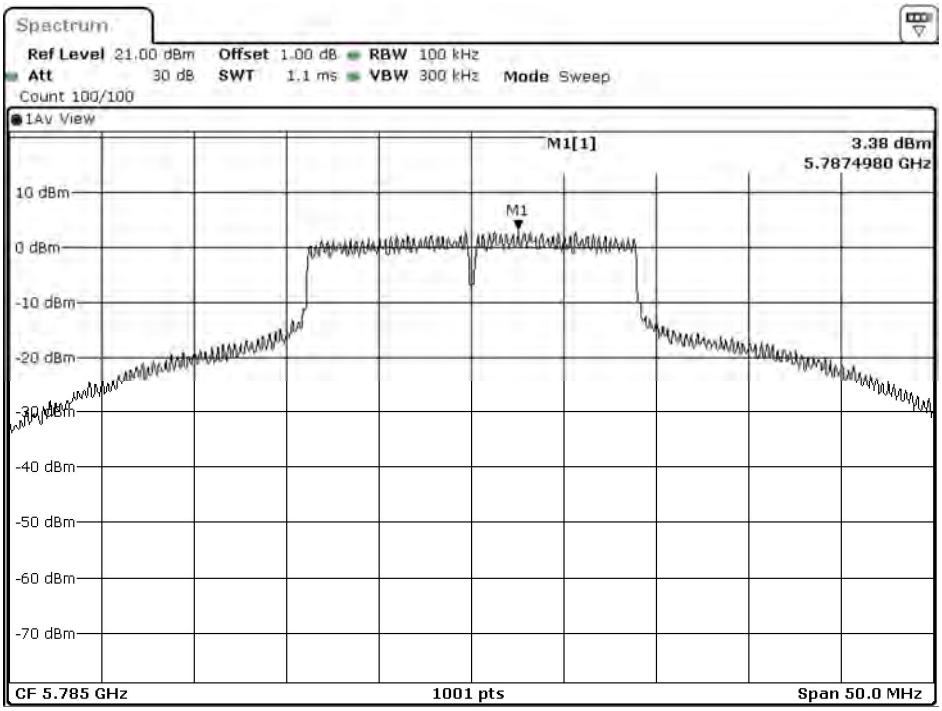
Date: 22.FEB.2021 11:56:17

Channel 149 - Chain B



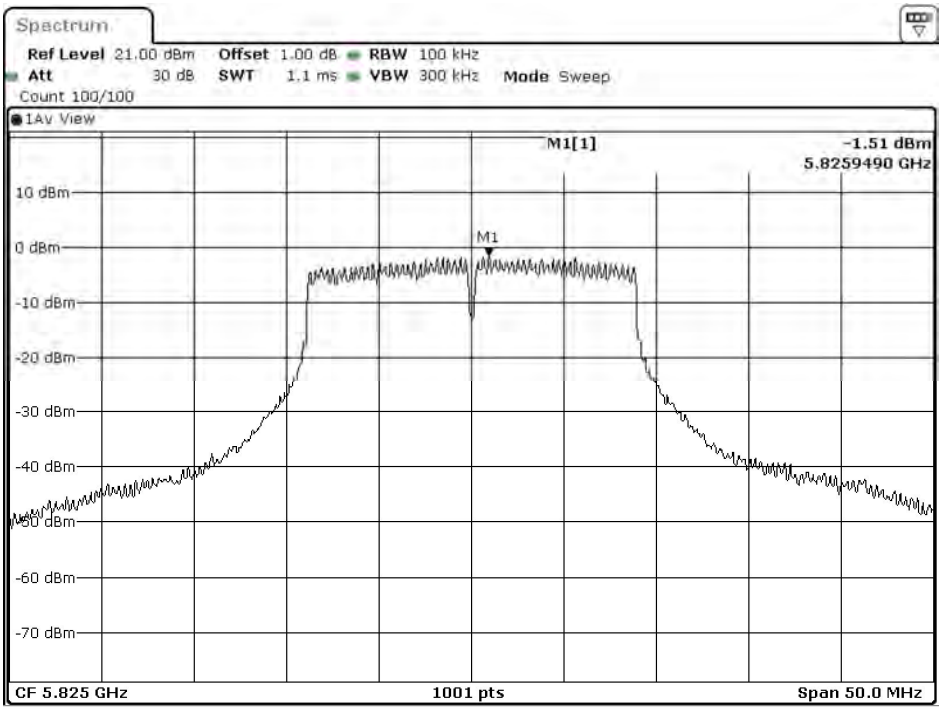
Date: 22.FEB.2021 11:10:20

Channel 157 - Chain B



Date: 22.FEB.2021 11:12:12

Channel 165 - Chain B



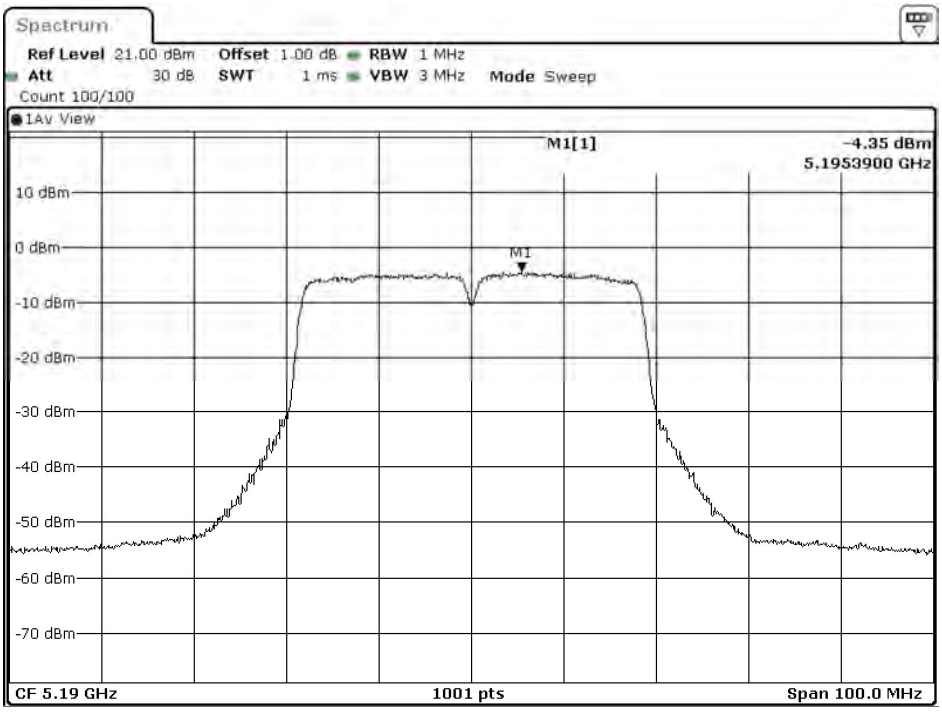
Date: 22.FEB.2021 11:13:41

Product : Wireless module
Test Item : Peak Power Spectral Density
Test Mode : Mode 5: Transmit (802.11ac-40BW 15Mbps) – Panel Antenna
Test Date : 2021/02/19

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain (dBm)	PPSD/MHz (dBm)	10*log(2) (dB)	Duty factor (db)	Total PPSD/MHz (dBm)	Limit (dBm)	Result
38	5190	HT8	A	-4.35	3.01	0.24	-1.10	0.62	Pass
			B	-4.38	3.01	0.24	-1.13	0.62	Pass
46	5230	HT8	A	-4.38	3.01	0.24	-1.13	0.62	Pass
			B	-4.70	3.01	0.24	-1.45	0.62	Pass
54	5270	HT8	A	-4.24	3.01	0.24	-0.99	0.62	Pass
			B	-4.59	3.01	0.24	-1.34	0.62	Pass
62	5310	HT8	A	-4.68	3.01	0.24	-1.43	0.62	Pass
			B	-4.70	3.01	0.24	-1.45	0.62	Pass
102	5510	HT8	A	-5.28	3.01	0.24	-2.03	0.06	Pass
			B	-5.47	3.01	0.24	-2.22	0.06	Pass
110	5550	HT8	A	-5.03	3.01	0.24	-1.78	0.06	Pass
			B	-5.29	3.01	0.24	-2.04	0.06	Pass
134	5670	HT8	A	-4.77	3.01	0.24	-1.52	0.06	Pass
			B	-4.84	3.01	0.24	-1.59	0.06	Pass
142	5710(Band3)	HT8	A	-5.64	3.01	0.24	-2.39	0.06	Pass
			B	-5.40	3.01	0.24	-2.15	0.06	Pass

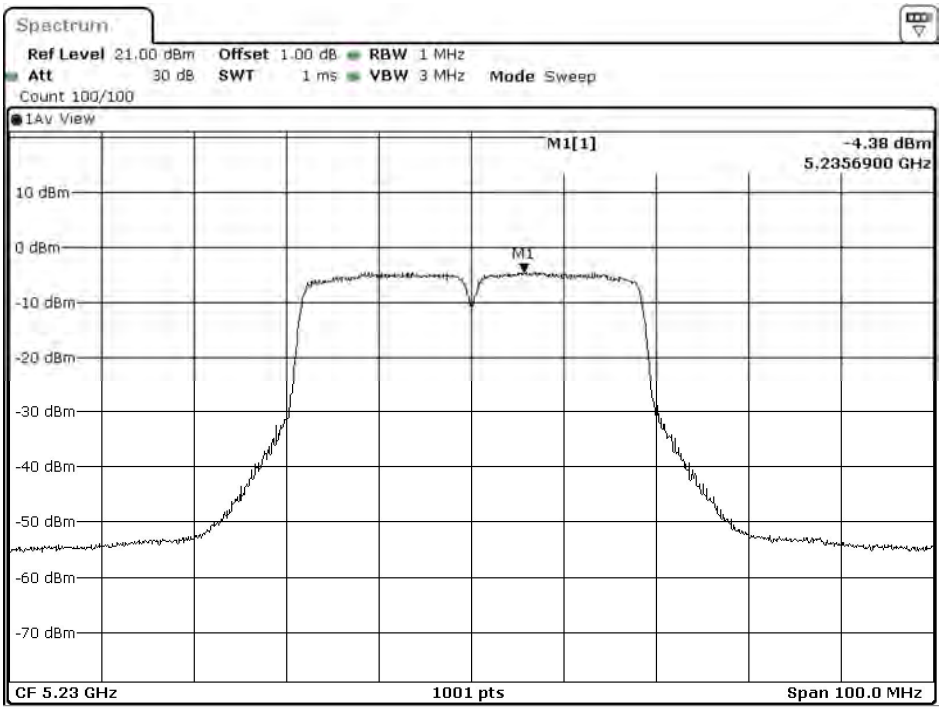
Channel	Frequency (MHz)	Data Rata (Mbps)	Chain (dBm)	PPSD (dBm)	BWCF (dB)	10*log(2) (dB)	Duty factor (db)	Total PPSD (dBm)	Limit (dBm)	Result
142	5710(Band4)	HT8	A	-15.32	6.98	3.01	0.24	-5.09	30	Pass
			B	-15.39	6.98	3.01	0.24	-5.16		Pass
151	5755	HT8	A	-7.52	6.98	3.01	0.24	2.71	30	Pass
			B	-7.05	6.98	3.01	0.24	3.18		Pass
159	5795	HT8	A	-6.84	6.98	3.01	0.24	3.39	30	Pass
			B	-6.30	6.98	3.01	0.24	3.93		Pass

Channel 38 - Chain A



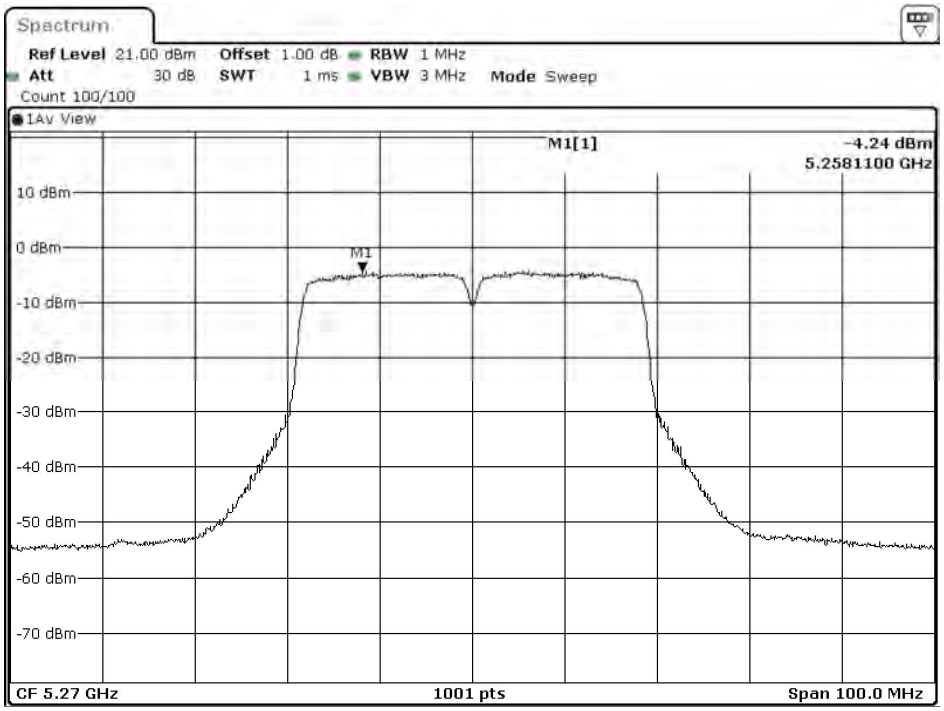
Date: 22.FEB.2021 10:08:15

Channel 46 - Chain A



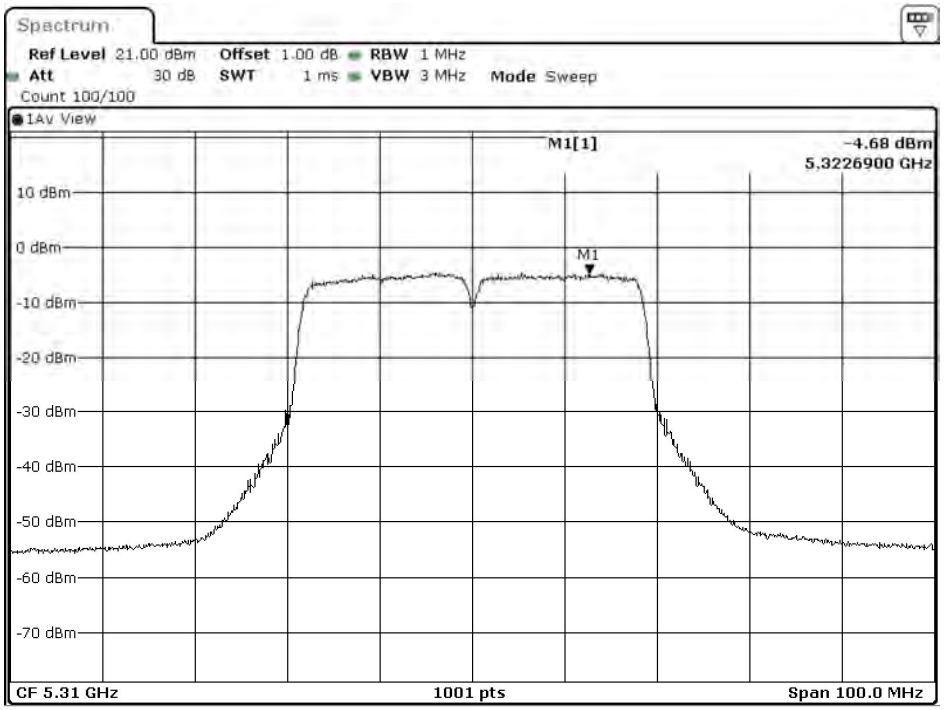
Date: 22.FEB.2021 10:10:07

Channel 54 - Chain A



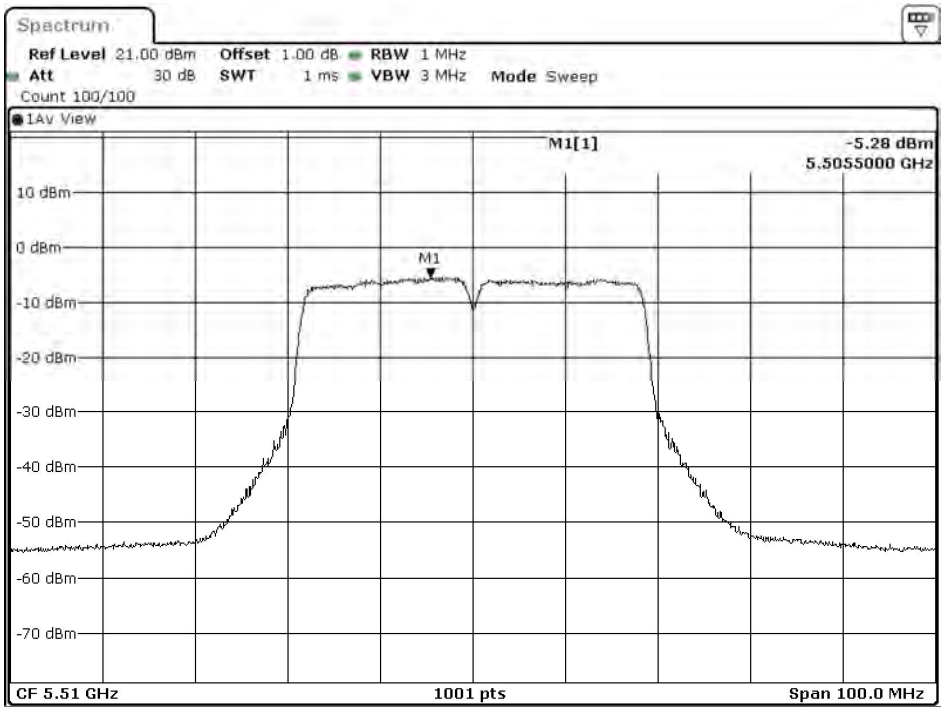
Date: 22.FEB.2021 10:11:59

Channel 62 - Chain A



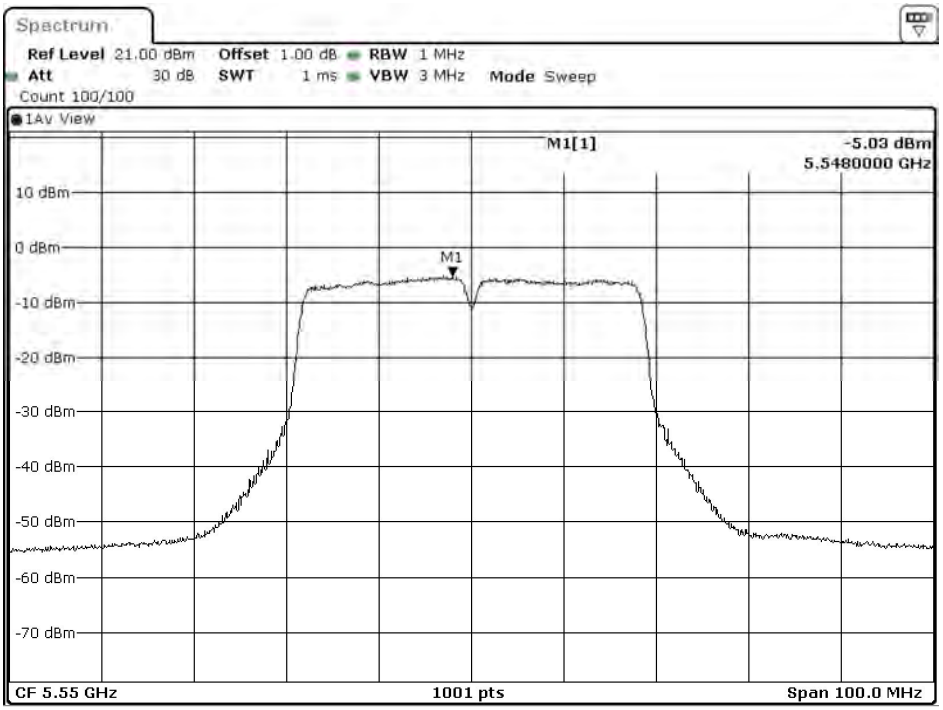
Date: 22.FEB.2021 10:14:37

Channel 102 - Chain A



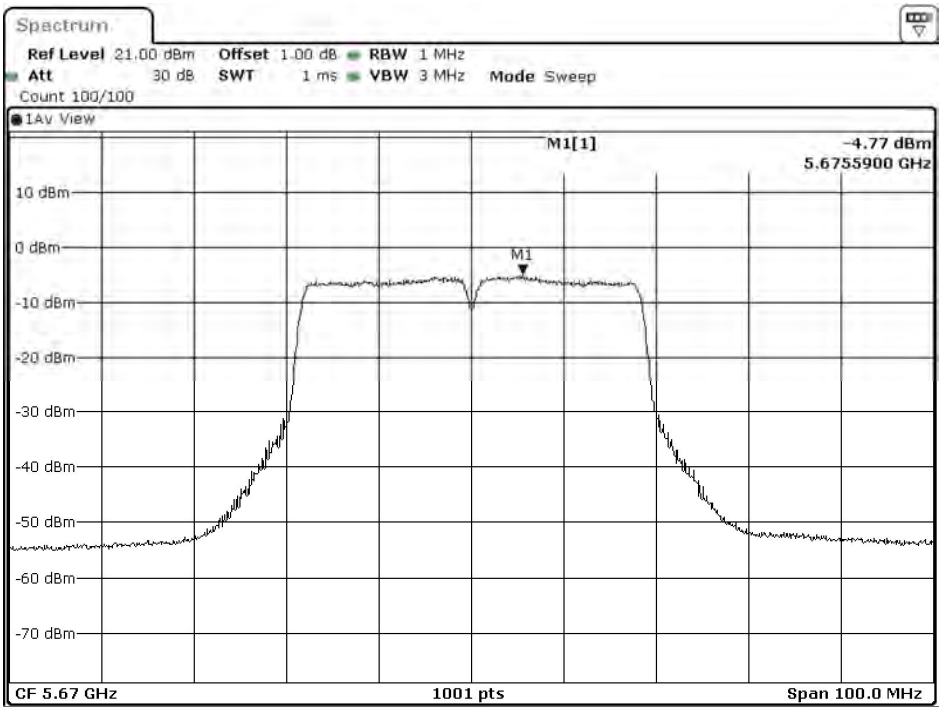
Date: 22.FEB.2021 10:16:40

Channel 110 - Chain A



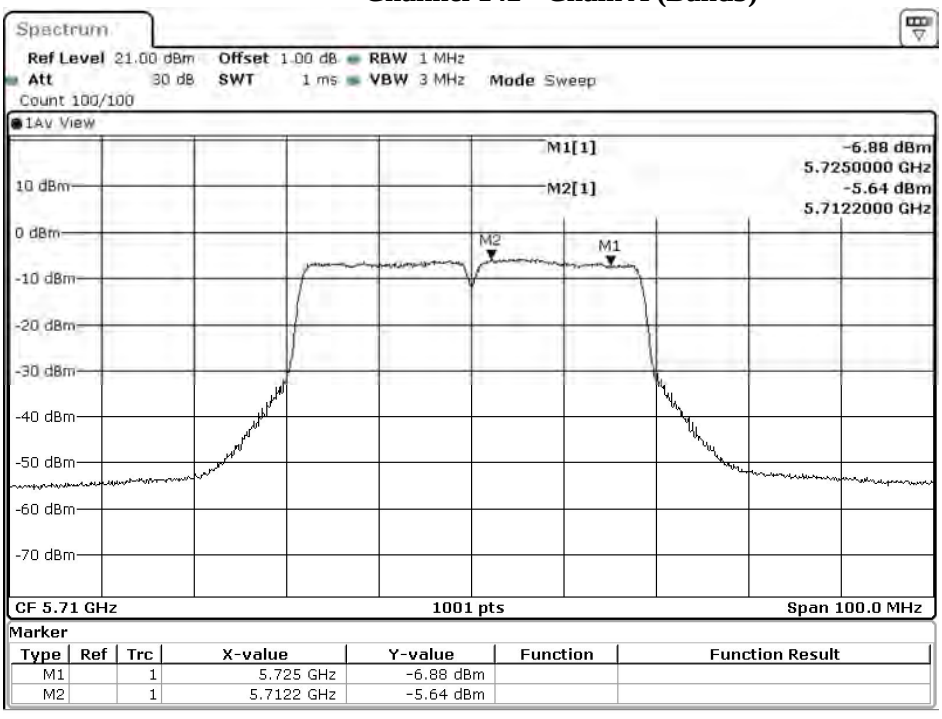
Date: 22.FEB.2021 10:18:30

Channel 134 - Chain A



Date: 22.FEB.2021 10:20:16

Channel 142 - Chain A (Band3)

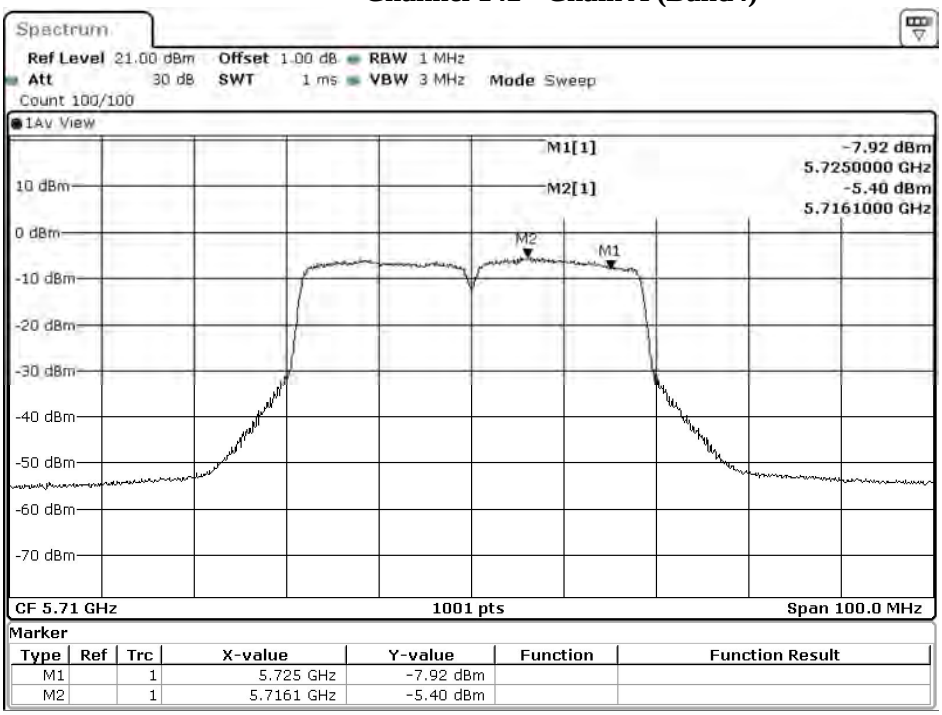


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.725 GHz	-6.88 dBm		
M2		1	5.7122 GHz	-5.64 dBm		

Date: 22.FEB.2021 10:05:00

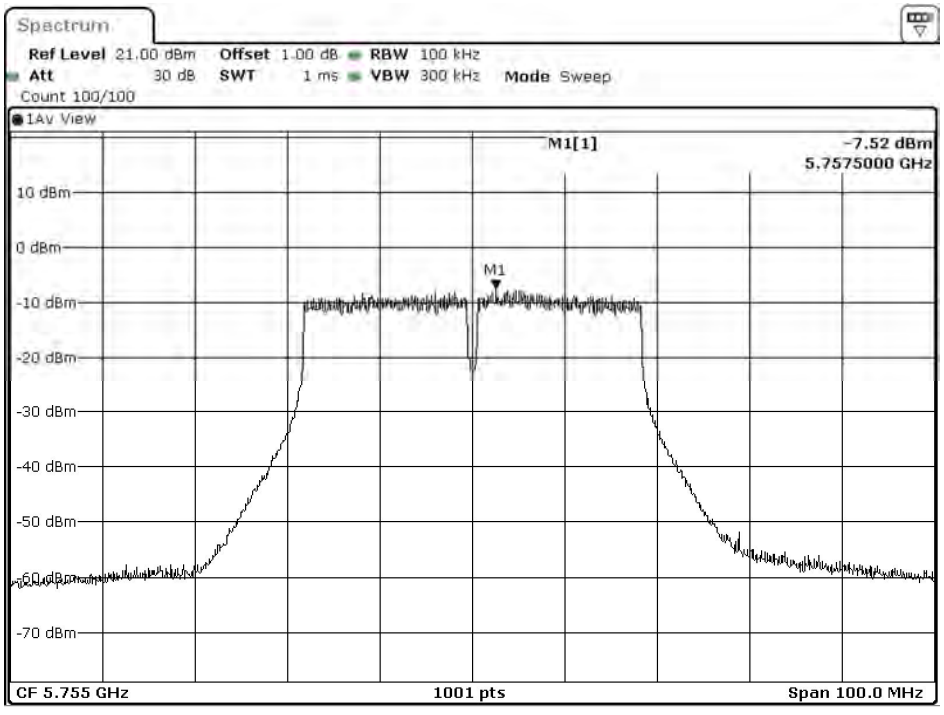
Channel 142 - Chain A (Band4)



Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.725 GHz	-7.92 dBm		
M2		1	5.7161 GHz	-5.40 dBm		

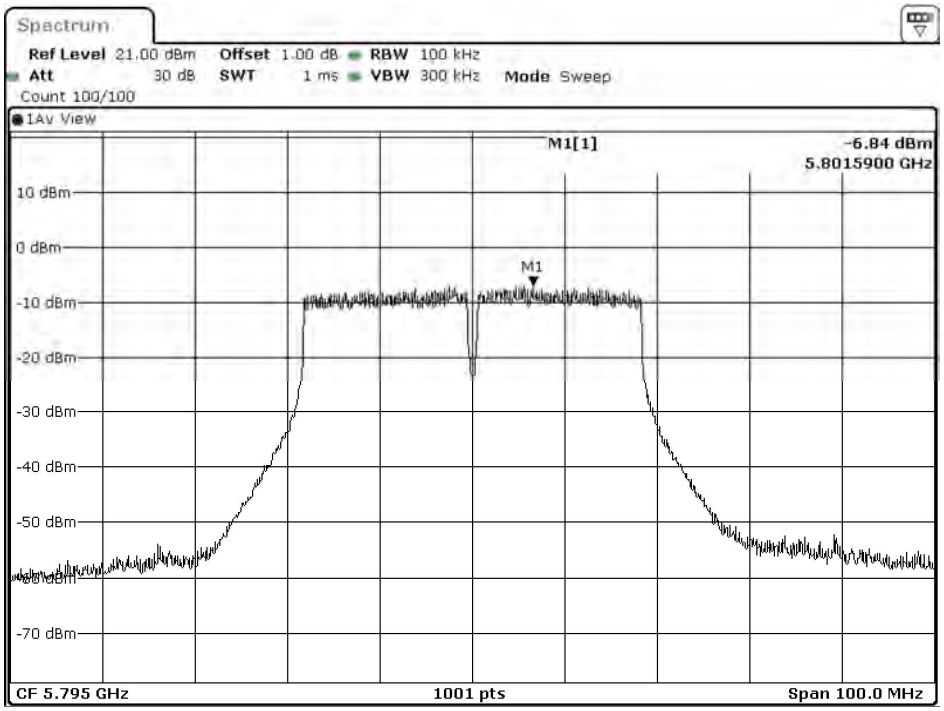
Date: 22.FEB.2021 12:10:23

Channel 151 - Chain A



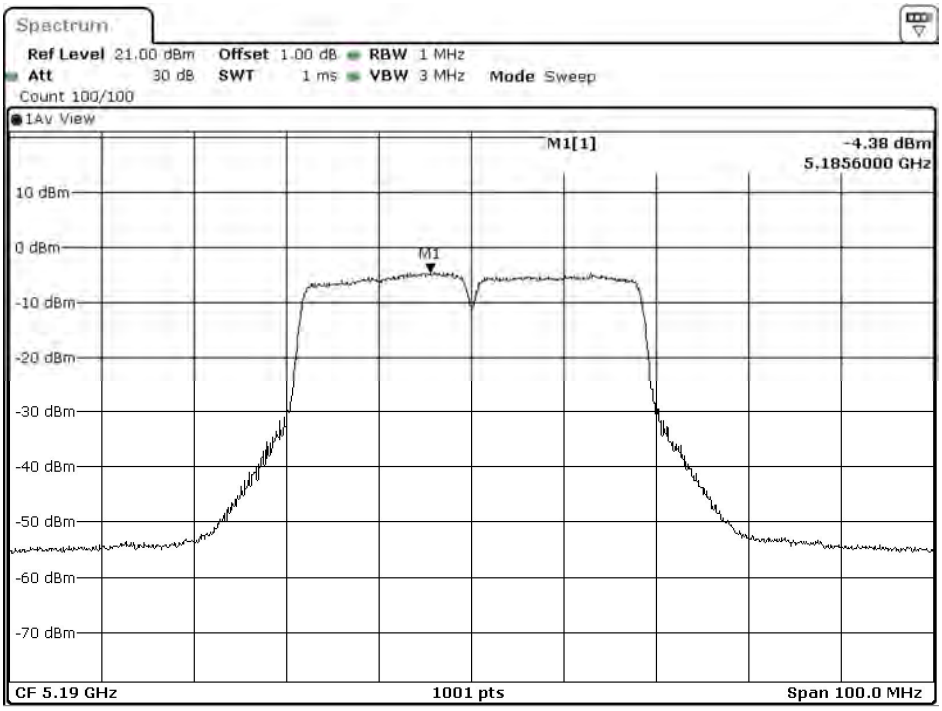
Date: 22.FEB.2021 10:22:10

Channel 159 - Chain A



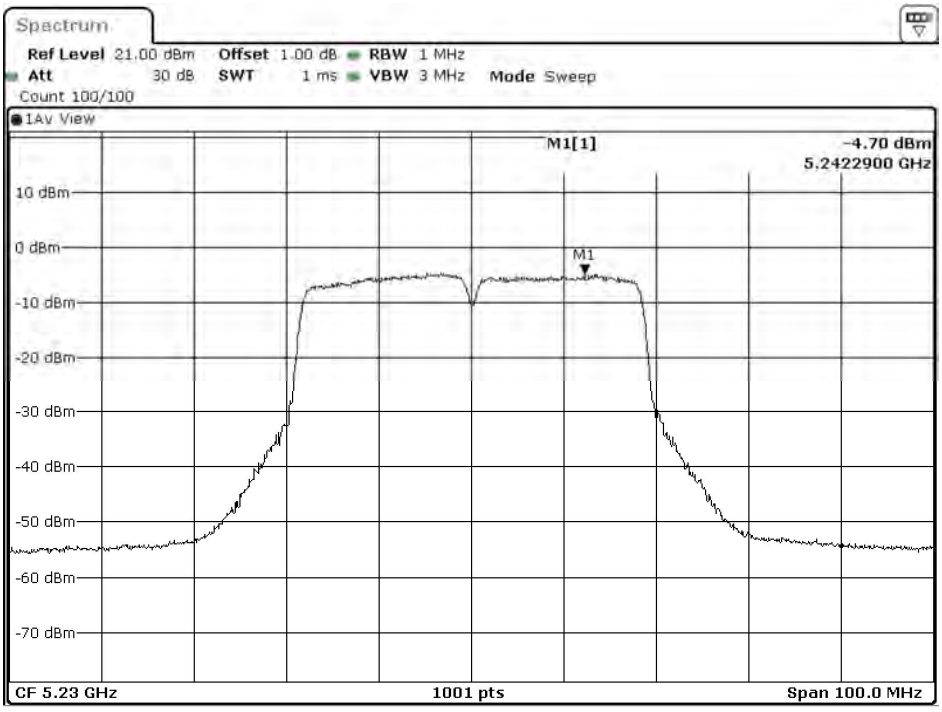
Date: 22.FEB.2021 10:24:31

Channel 38 - Chain B



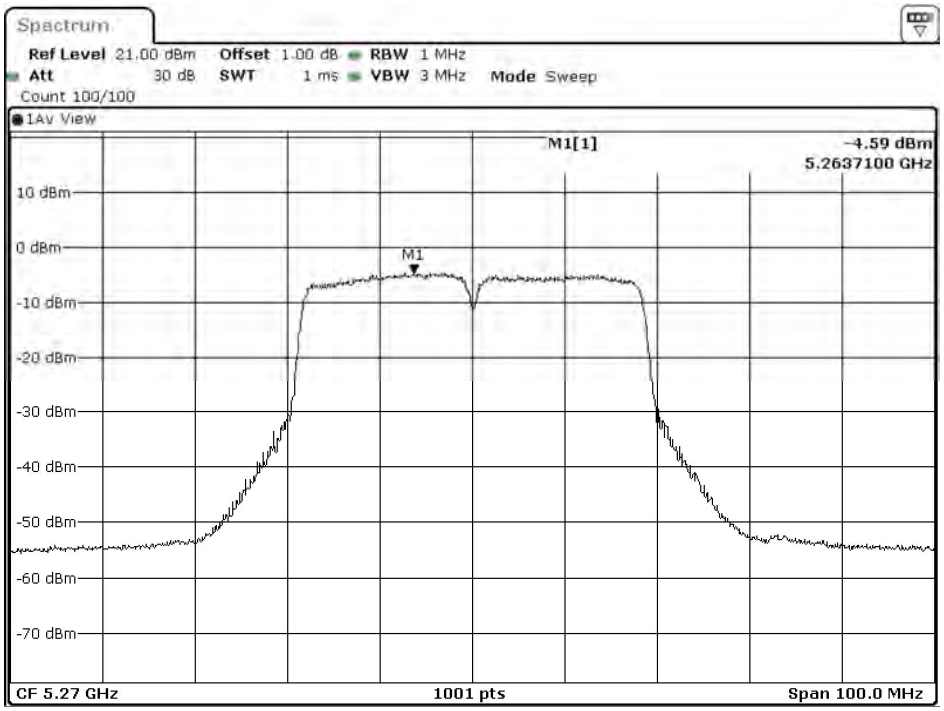
Date: 22.FEB.2021 12:13:38

Channel 46 - Chain B



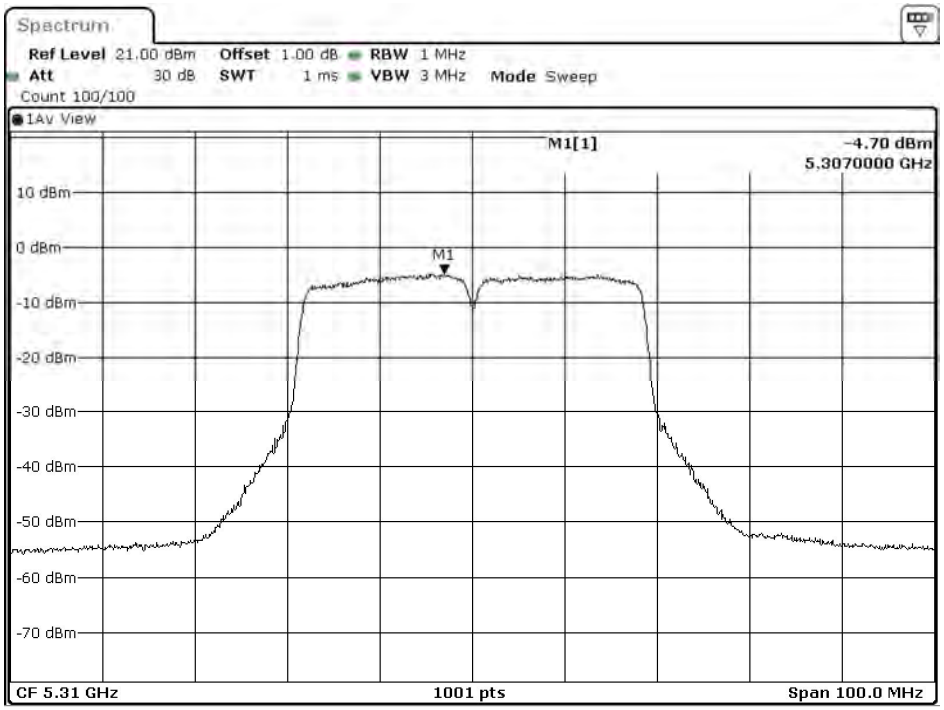
Date: 22.FEB.2021 12:15:30

Channel 54 - Chain B



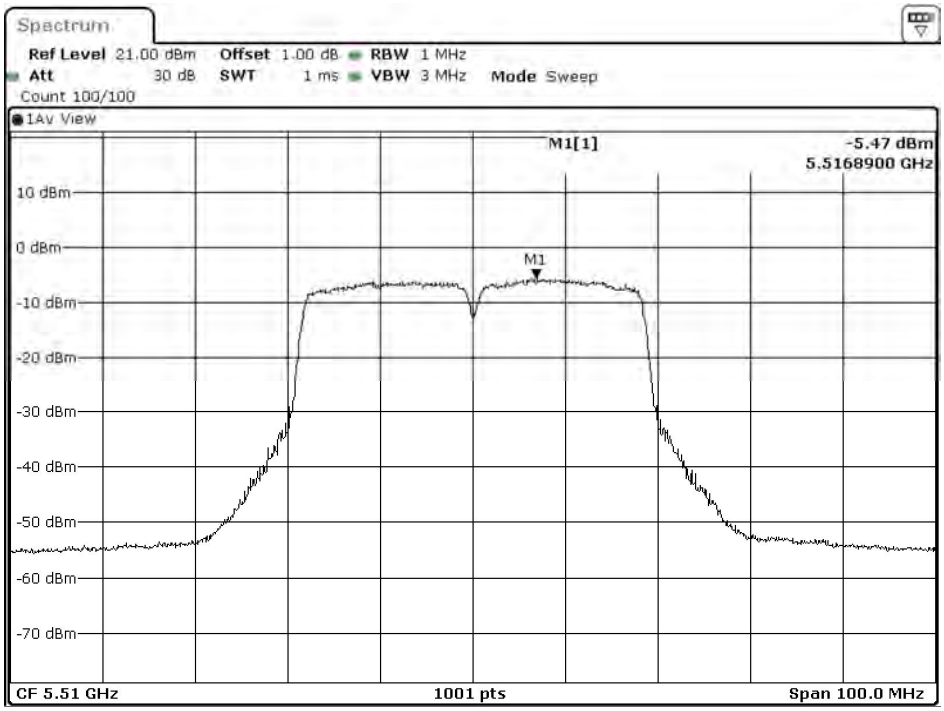
Date: 22.FEB.2021 12:17:23

Channel 62 - Chain B



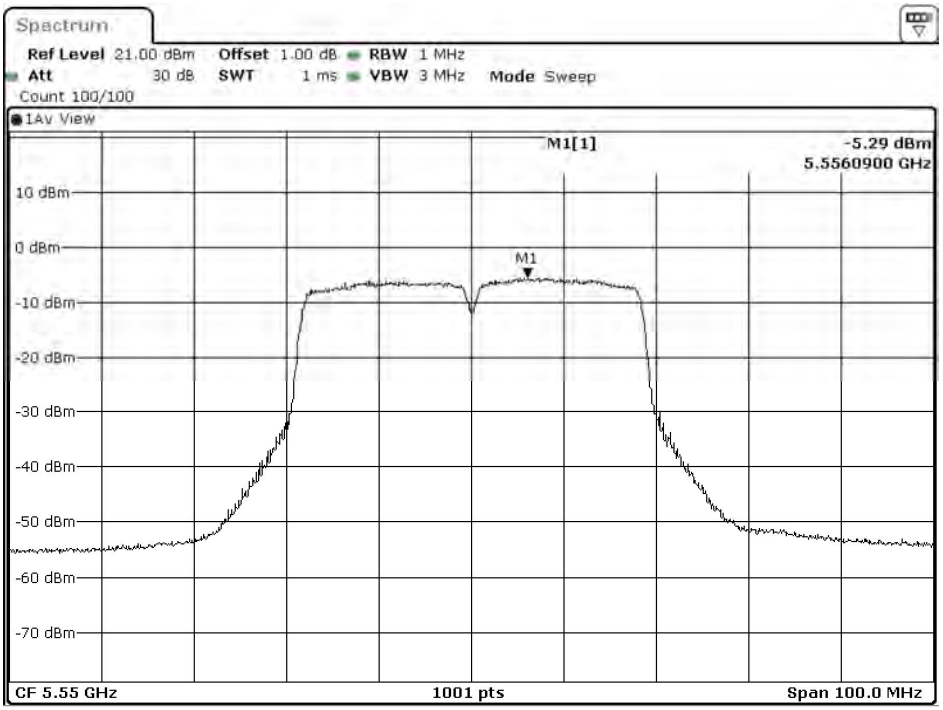
Date: 22.FEB.2021 12:20:00

Channel 102 - Chain B



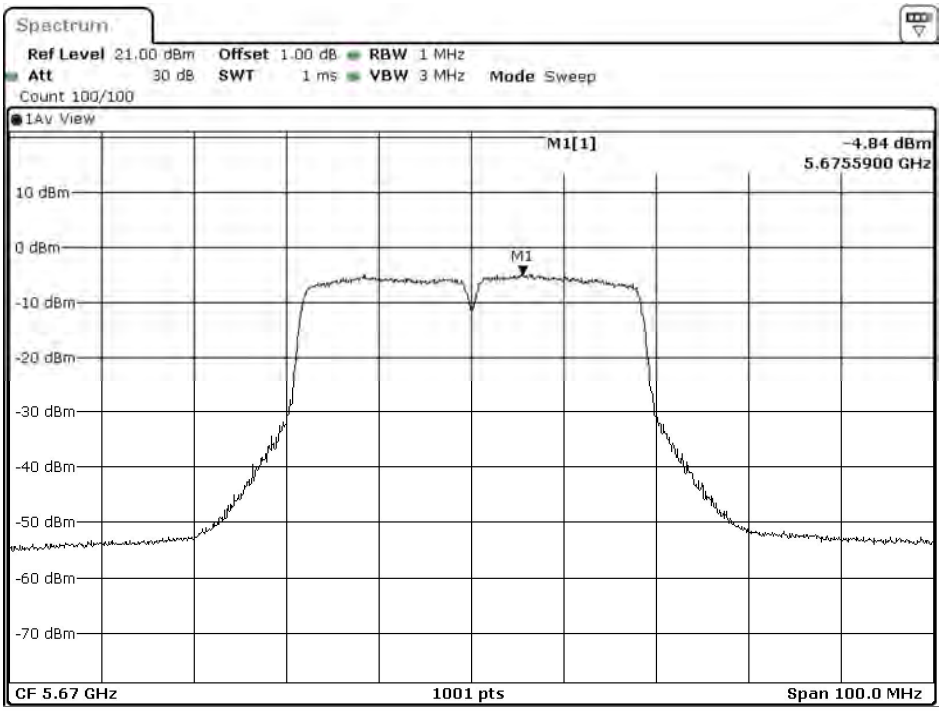
Date: 22.FEB.2021 12:22:03

Channel 110 - Chain B



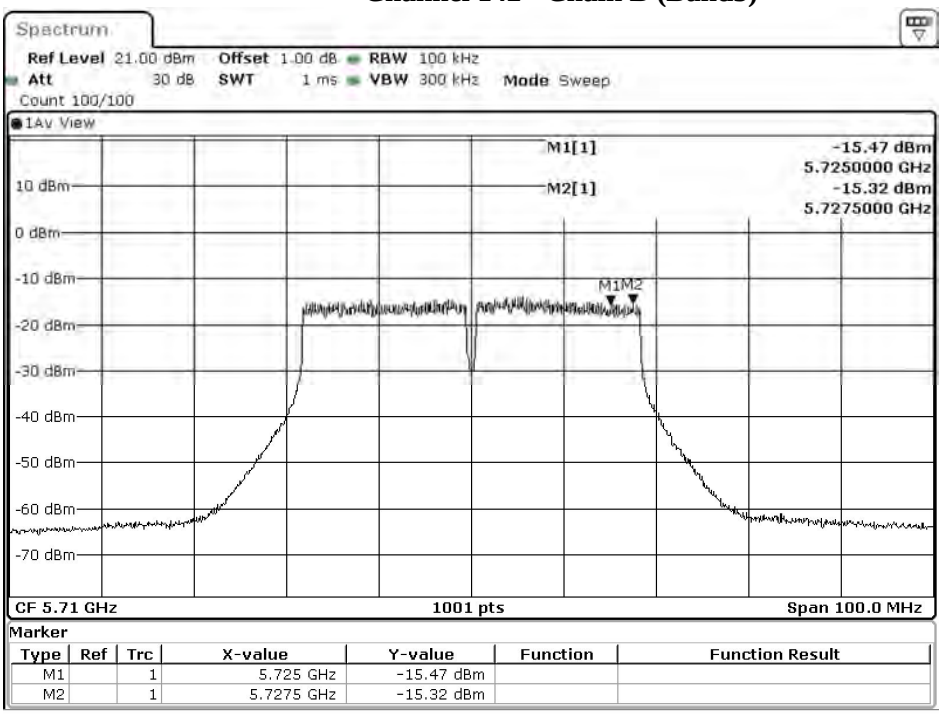
Date: 22.FEB.2021 12:23:53

Channel 134 - Chain B



Date: 22.FEB.2021 12:25:39

Channel 142 - Chain B (Band3)

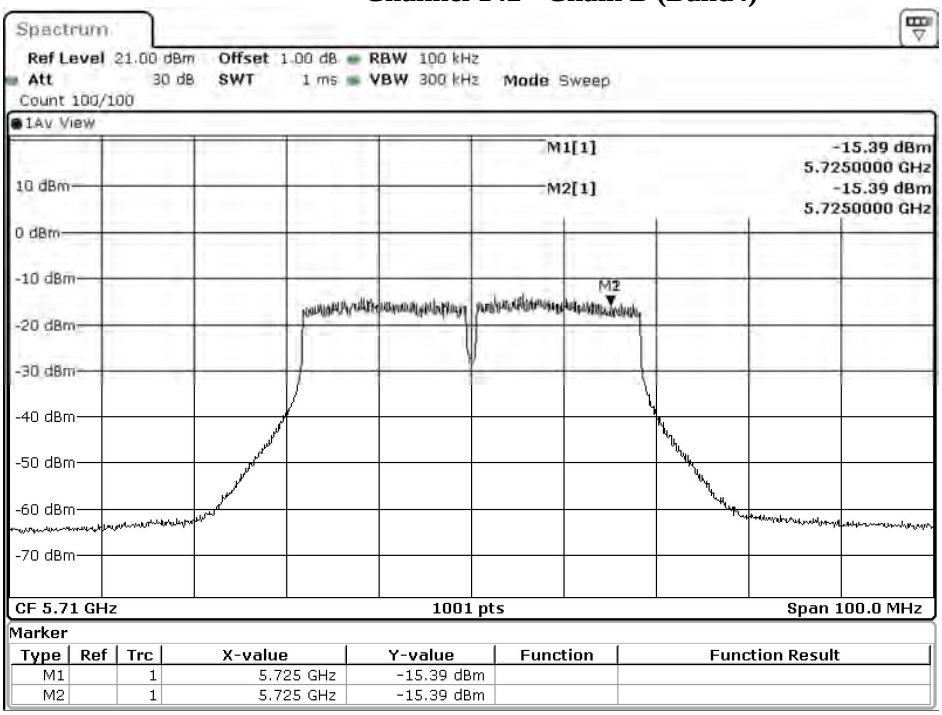


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.725 GHz	-15.47 dBm		
M2		1	5.7275 GHz	-15.32 dBm		

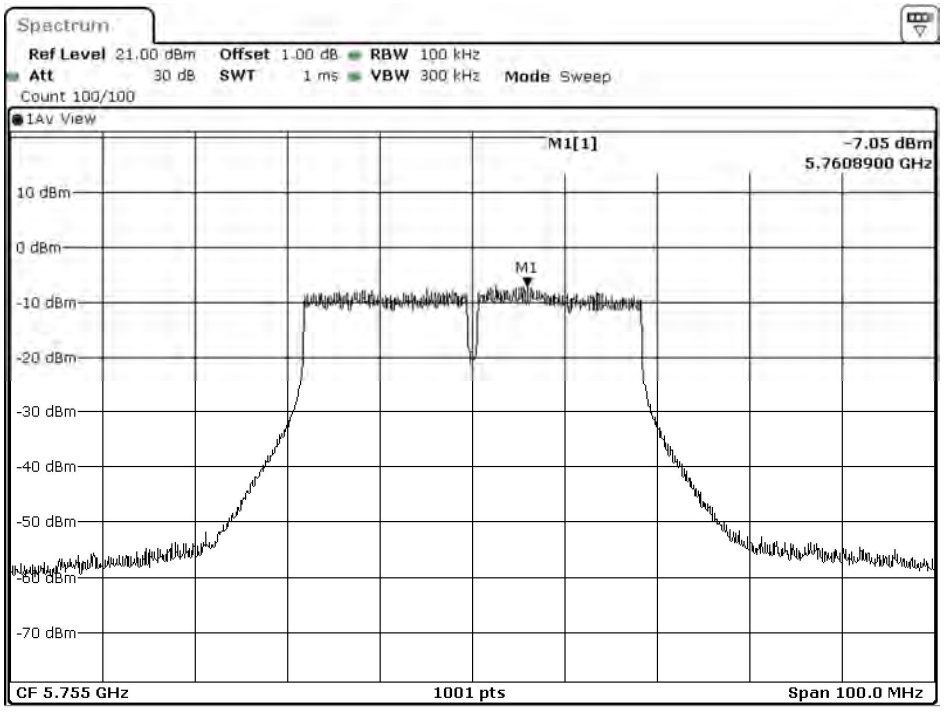
Date: 22.FEB.2021 10:05:21

Channel 142 - Chain B (Band4)



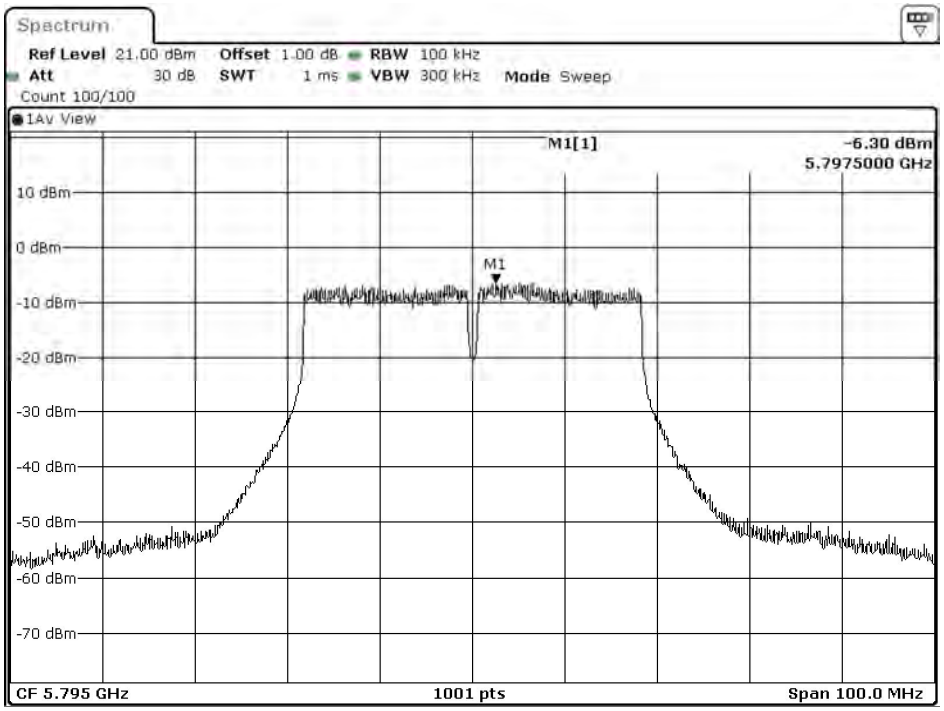
Date: 22.FEB.2021 12:10:44

Channel 151 - Chain B



Date: 22.FEB.2021 12:27:33

Channel 159 - Chain B



Date: 22.FEB.2021 12:29:54

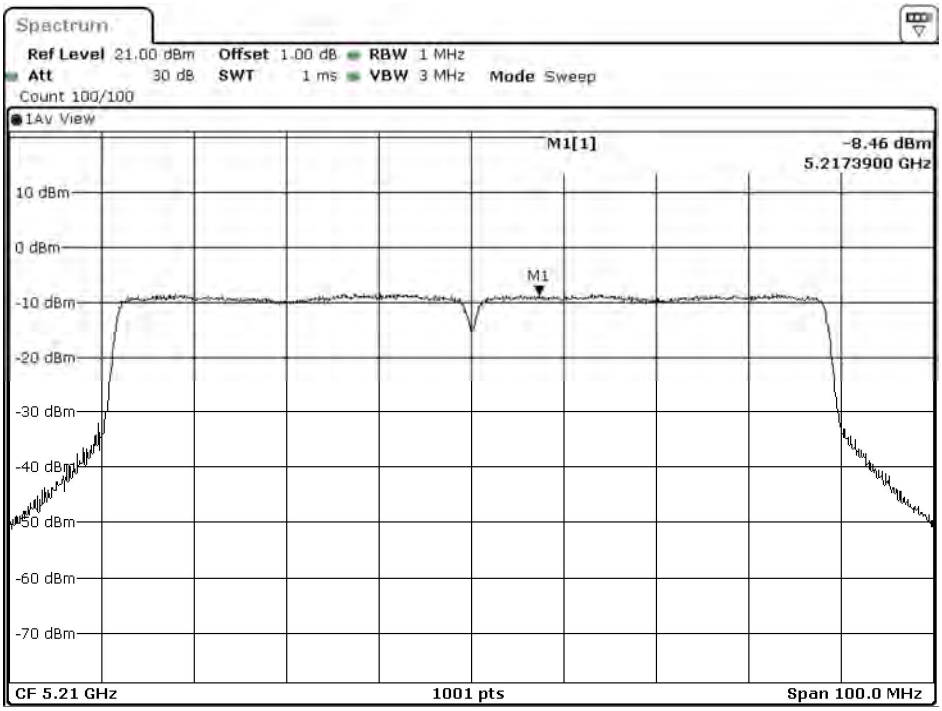
Product : Wireless module
Test Item : Peak Power Spectral Density
Test Mode : Mode 6: Transmit (802.11ac-80BW 32.5Mbps) – Panel Antenna
Test Date : 2021/02/19

Channel	Frequency (MHz)	Data Rata (Mbps)	Chain (dBm)	PPSD/MHz (dBm)	10*log (dBm)	Duty factor (db)	Total PPSD/MHz (dBm)	Limit (dBm)	Result
42	5210	MCS0	A	-8.46	3.01	0.66	-4.79	0.62	Pass
			B	-8.40	3.01	0.66	-4.73	0.62	Pass
58	5290	MCS0	A	-9.30	3.01	0.66	-5.63	0.62	Pass
			B	-9.37	3.01	0.66	-5.70	0.62	Pass
106	5530	MCS0	A	-9.36	3.01	0.66	-5.69	0.06	Pass
			B	-9.18	3.01	0.66	-5.51	0.06	Pass
122	5610	MCS0	A	-8.95	3.01	0.66	-5.28	0.06	Pass
			B	-8.60	3.01	0.66	-4.93	0.06	Pass
138	5690(Band3)	MCS0	A	-9.31	3.01	0.66	-5.64	0.06	Pass
			B	-9.37	3.01	0.66	-5.70	0.06	Pass

.

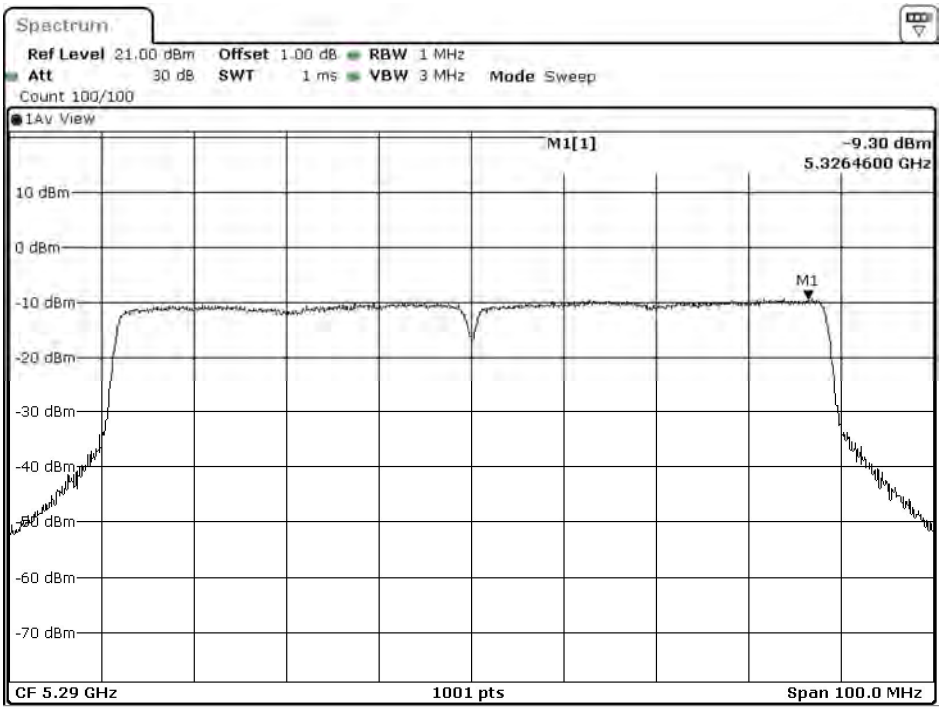
Channel	Frequency (MHz)	Data Rata (Mbps)	Chain (dBm)	PPSD (dBm)	BWCF (dB)	10*log (dBm)	Duty factor (db)	Total PPSD (dBm)	Limit (dBm)	Result
138	5690(Band 4)	MCS0	A	-18.23	6.98	3.01	0.66	-7.58	30.00	Pass
			B	-18.21	6.98	3.01	0.66	-7.56	30.00	Pass
155	5775	MCS0	A	-14.84	6.98	3.01	0.66	-4.19	30.00	Pass
			B	-14.53	6.98	3.01	0.66	-3.88	30.00	Pass

Channel 42 - Chain A



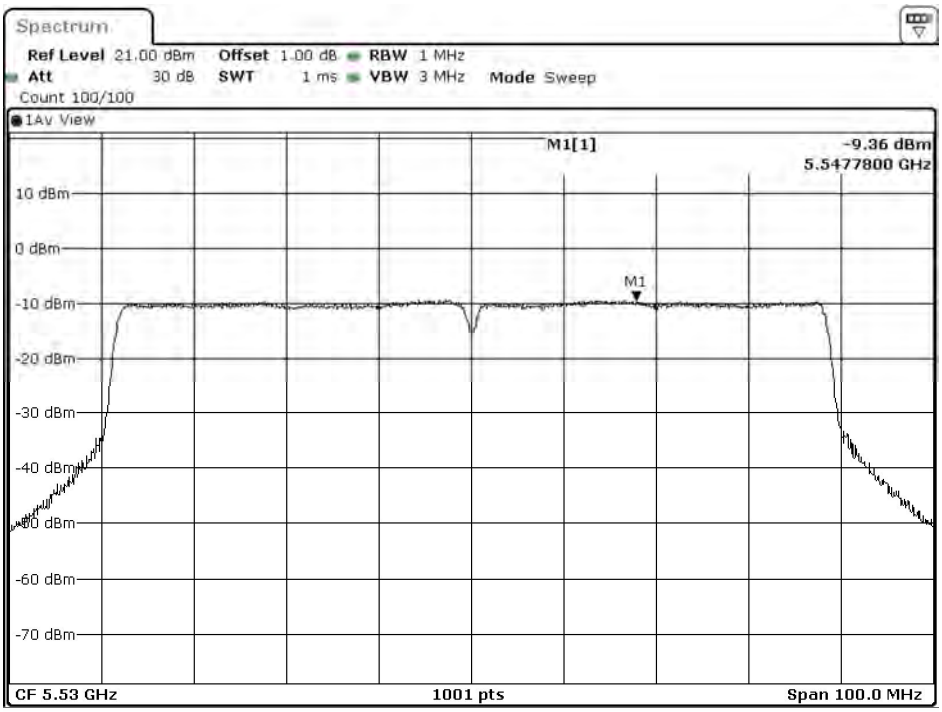
Date: 22.FEB.2021 10:33:04

Channel 58 - Chain A



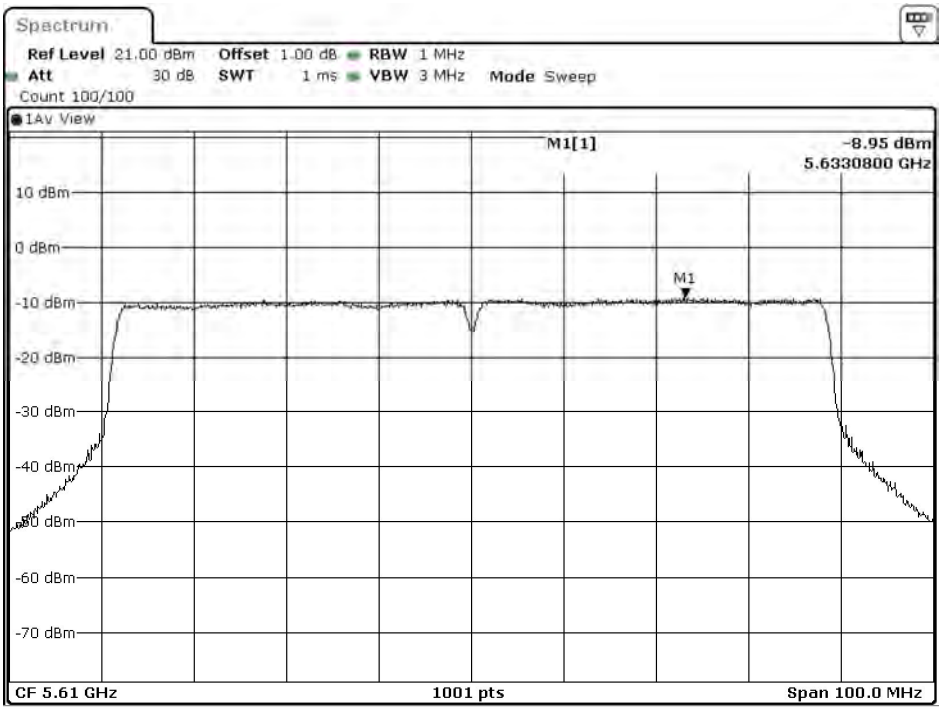
Date: 22.FEB.2021 10:35:32

Channel 106 - Chain A



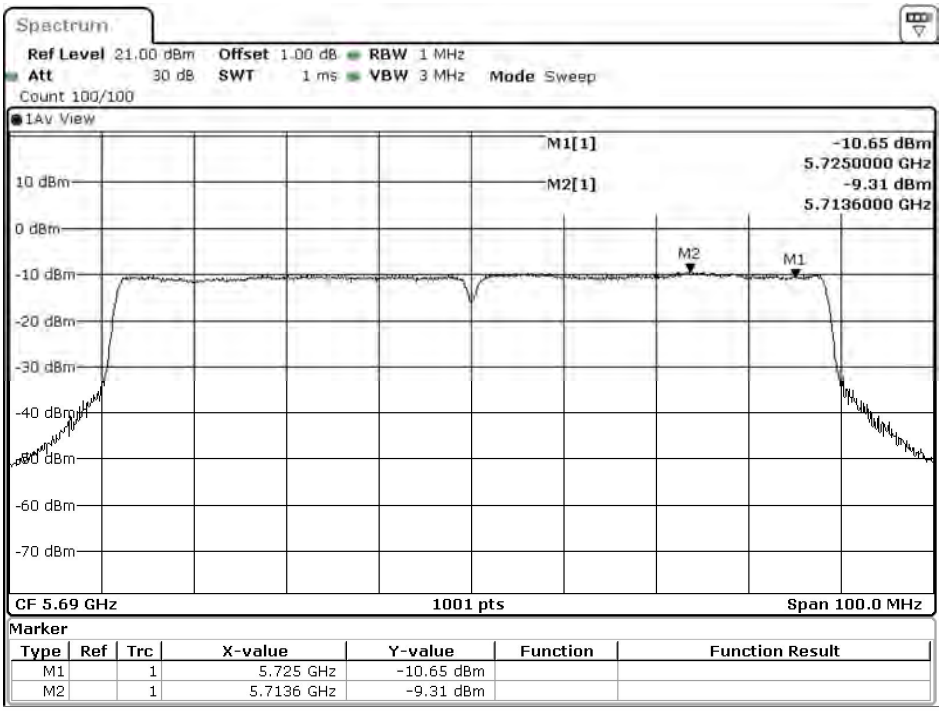
Date: 22.FEB.2021 10:37:45

Channel 122 - Chain A



Date: 22.FEB.2021 10:39:28

Channel 138 - Chain A ((Band3))

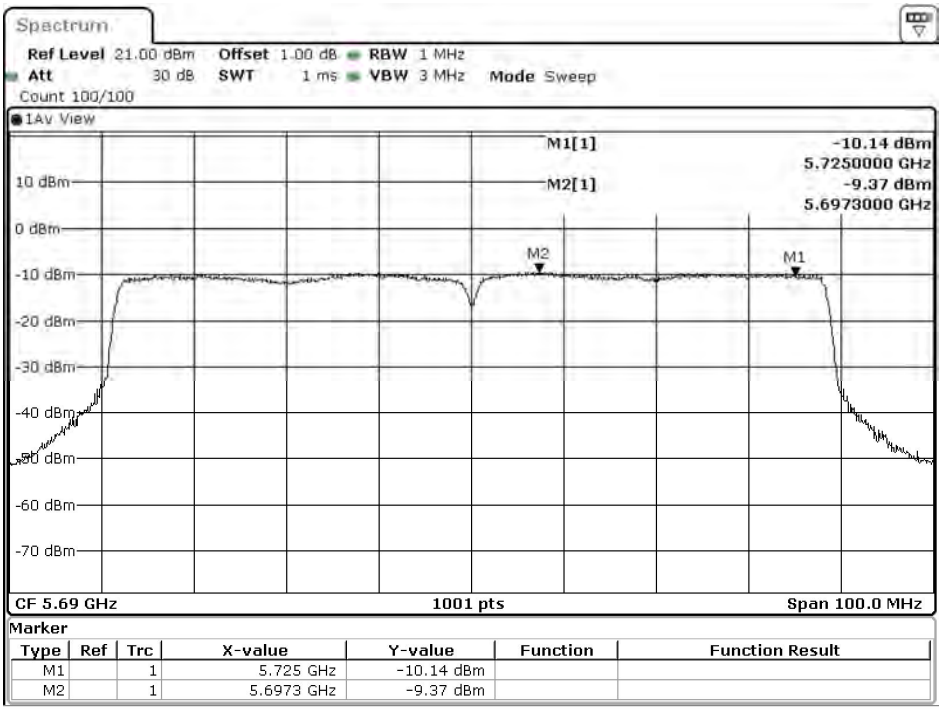


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.725 GHz	-10.65 dBm		
M2		1	5.7136 GHz	-9.31 dBm		

Date: 22.FEB.2021 10:41:32

Channel 138 - Chain A ((Band4)

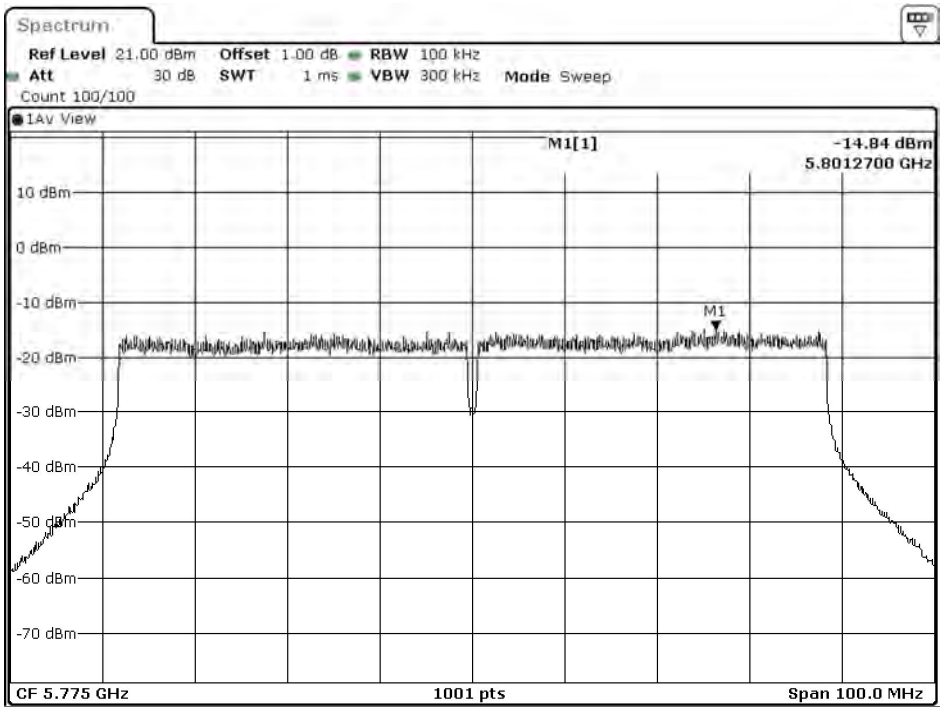


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.725 GHz	-10.14 dBm		
M2		1	5.6973 GHz	-9.37 dBm		

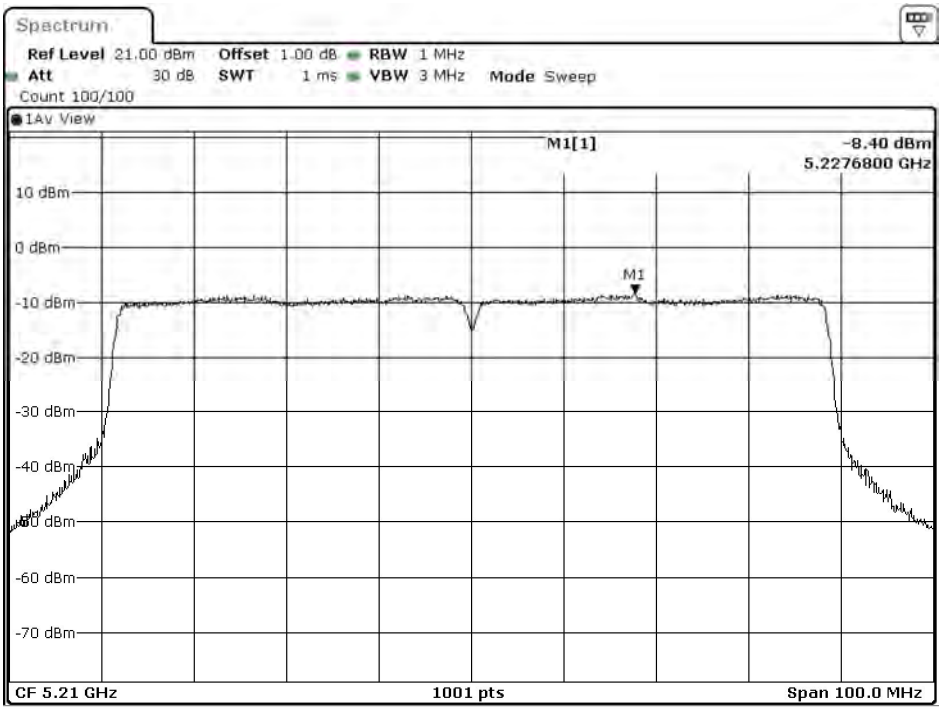
Date: 22.FEB.2021 12:46:56

Channel 155 - Chain A



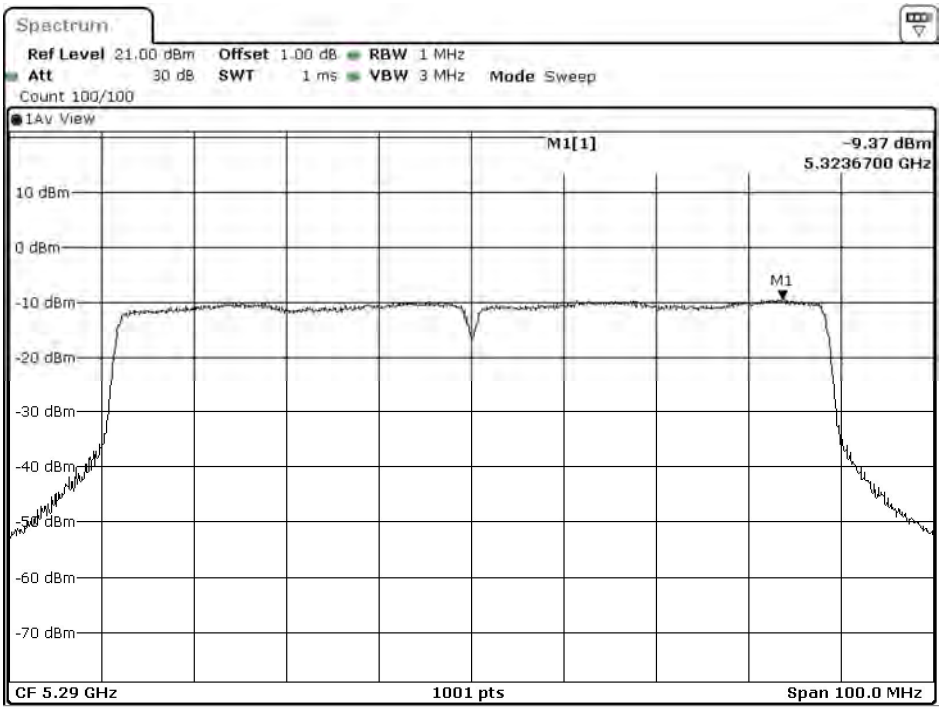
Date: 22.FEB.2021 10:44:13

Channel 42 - Chain B



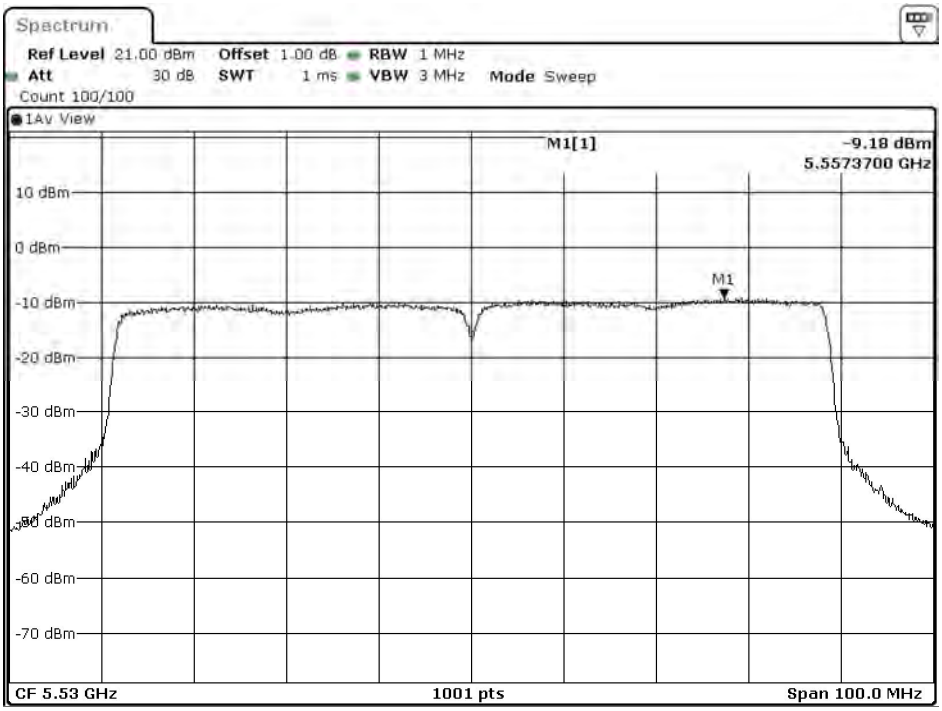
Date: 22.FEB.2021 12:38:27

Channel 58 - Chain B



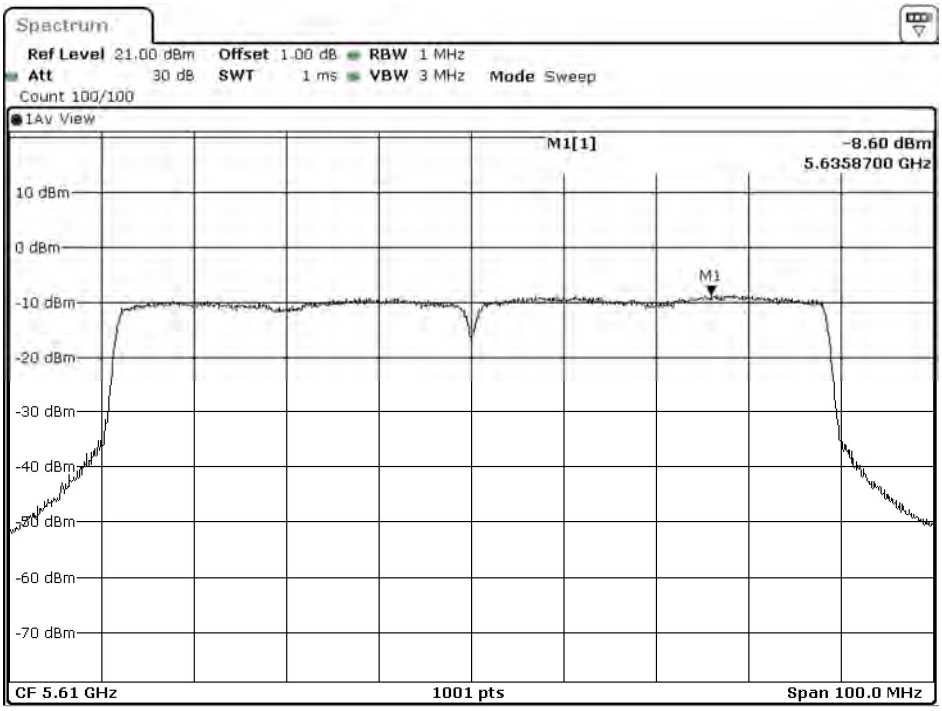
Date: 22.FEB.2021 12:40:55

Channel 106 - Chain B



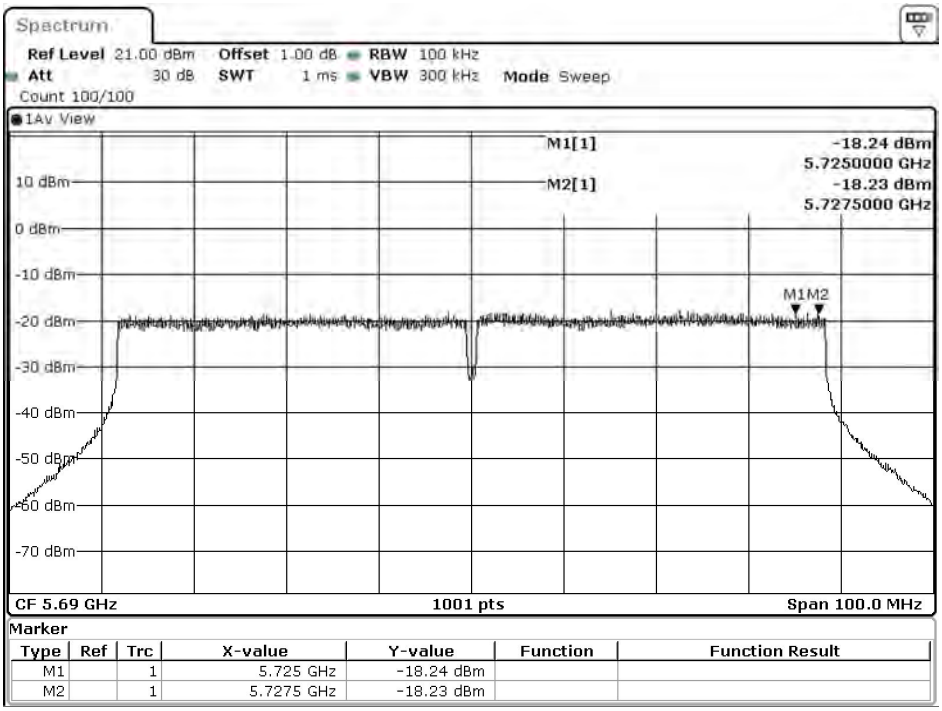
Date: 22.FEB.2021 12:43:08

Channel 122 - Chain B



Date: 22.FEB.2021 12:44:51

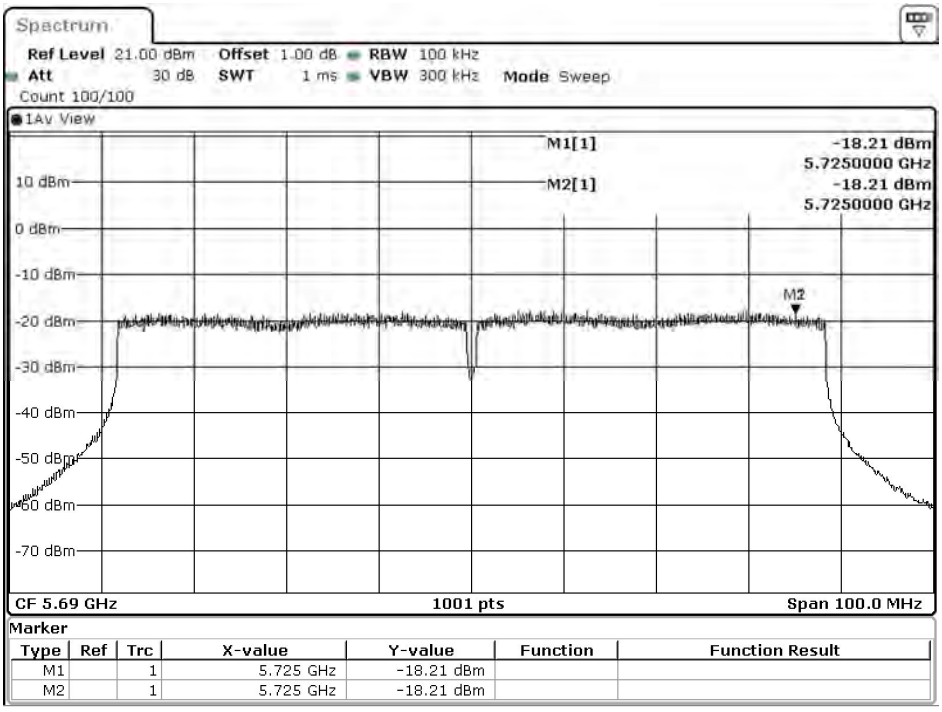
Channel 138 - Chain B ((Band3))



Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.725 GHz	-18.24 dBm		
M2		1	5.7275 GHz	-18.23 dBm		

Date: 22.FEB.2021 10:41:53

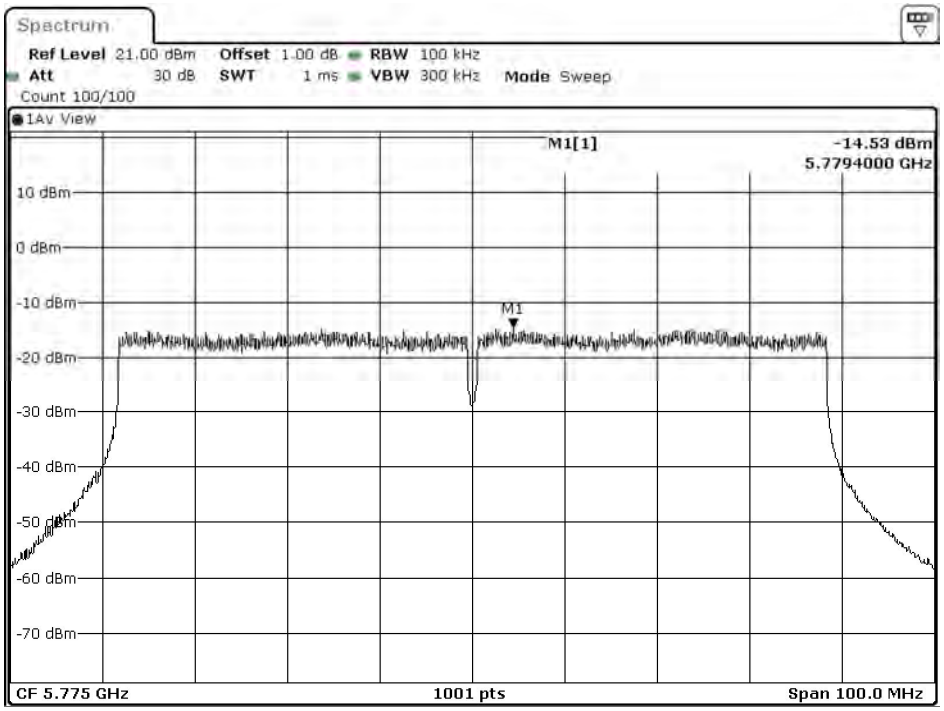
Channel 138 - Chain B ((Band4)



Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.725 GHz	-18.21 dBm		
M2		1	5.725 GHz	-18.21 dBm		

Date: 22.FEB.2021 12:47:16

Channel 155 - Chain B

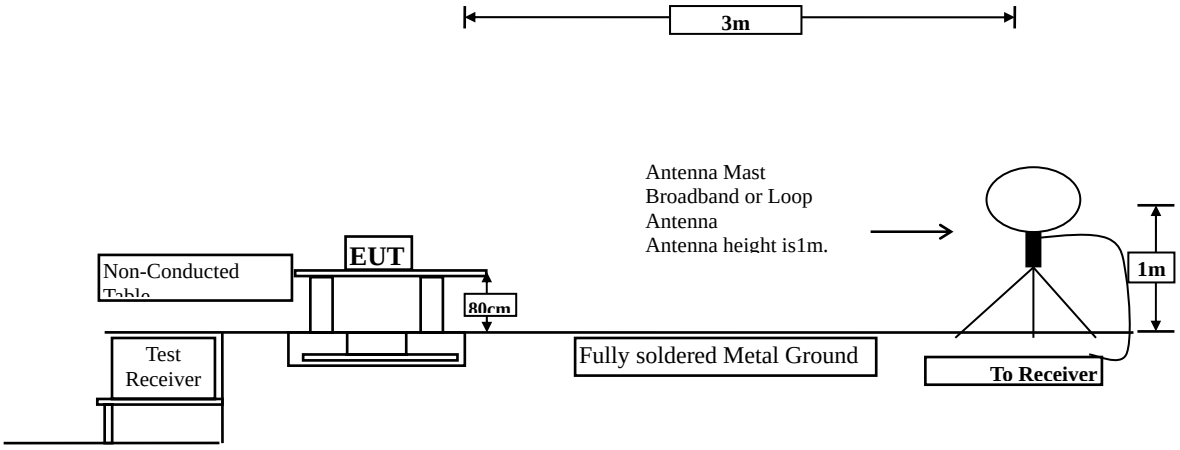


Date: 22.FEB.2021 12:49:36

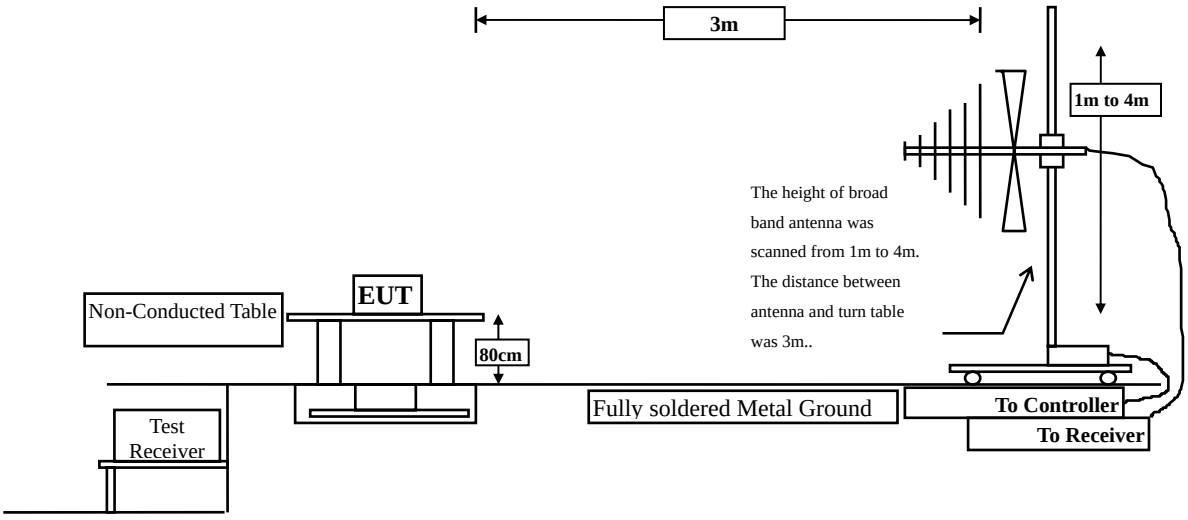
5. Radiated Emission

5.1. Test Setup

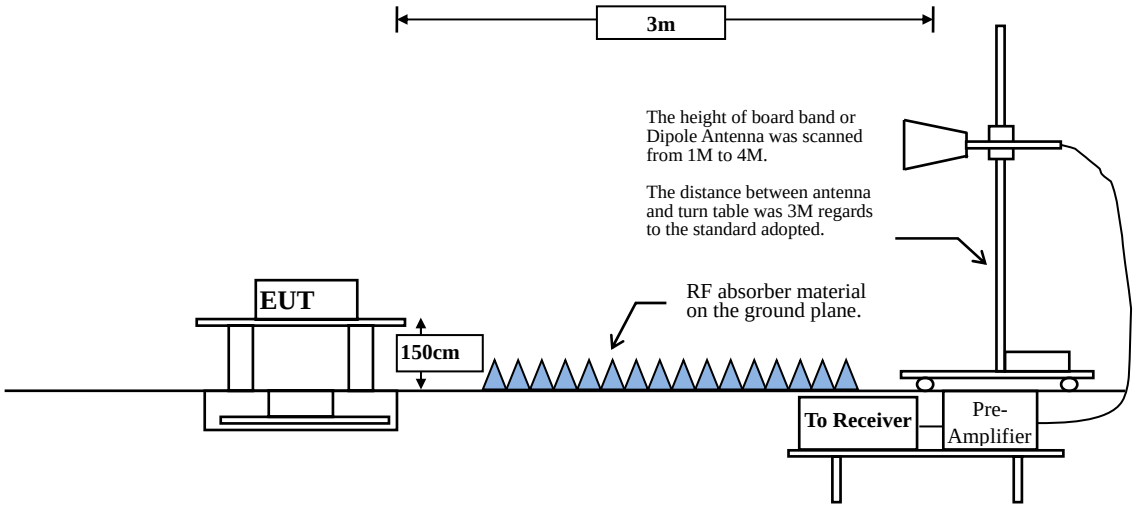
Radiated Emission Under 30MHz



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.)

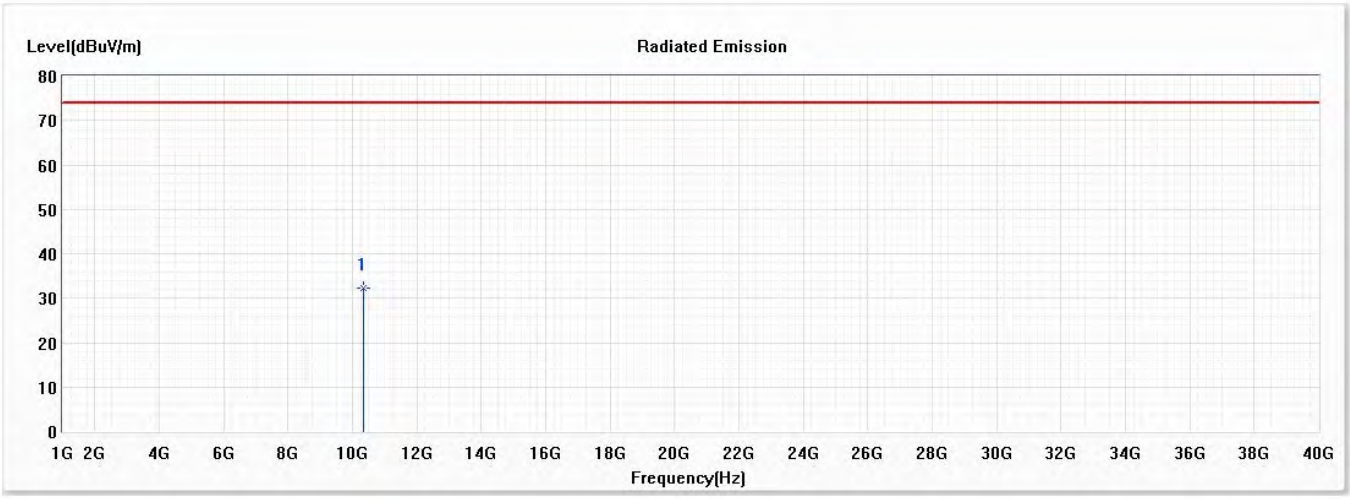
5GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11 a	96.35	2.1100	474	500
802.11 ac20	97.00	2.5900	386	500
802.11 ac40	94.57	1.3050	766	1k
802.11 ac80	85.87	0.4860	2058	3k

Note: Duty Cycle Refer to Section 8

5.4. Test Result of Radiated Emission

Product : Wireless module
Test Item : Harmonic Radiated Emission Data
Test Mode : Mode 1: Transmit (802.11a 6Mbps) (5180MHz) – Dipole Antenna
Test Date : 2021/02/20

Horizontal



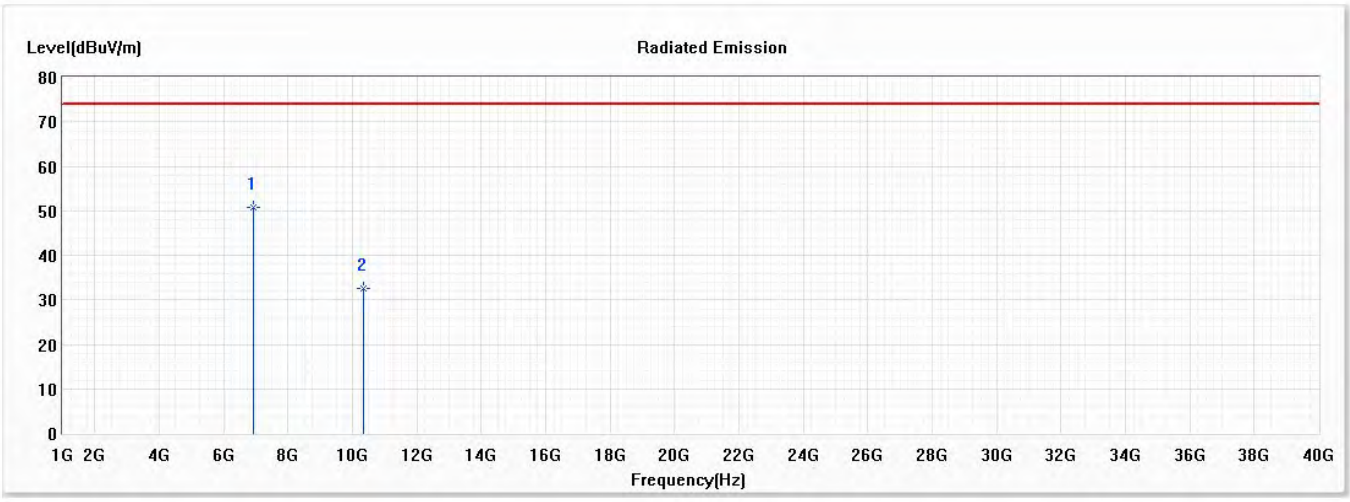
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10360.000	32.31	74.00	-41.69	33.60	-1.29	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5180MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



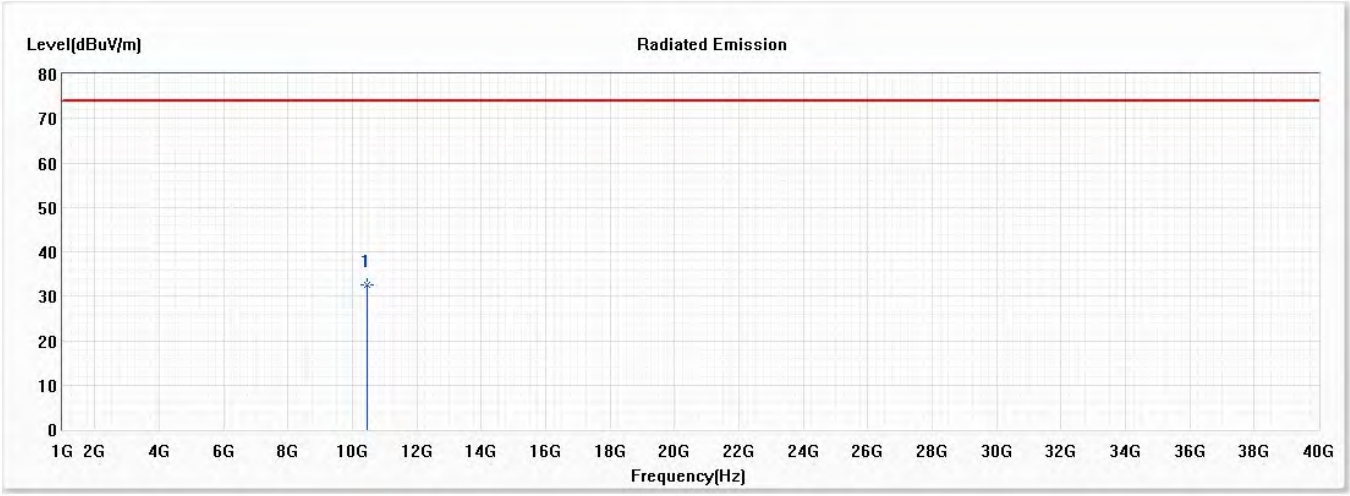
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	6906.600	50.67	74.00	-23.33	56.42	-5.75	PK
2	10360.000	32.45	74.00	-41.55	33.74	-1.29	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5220MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



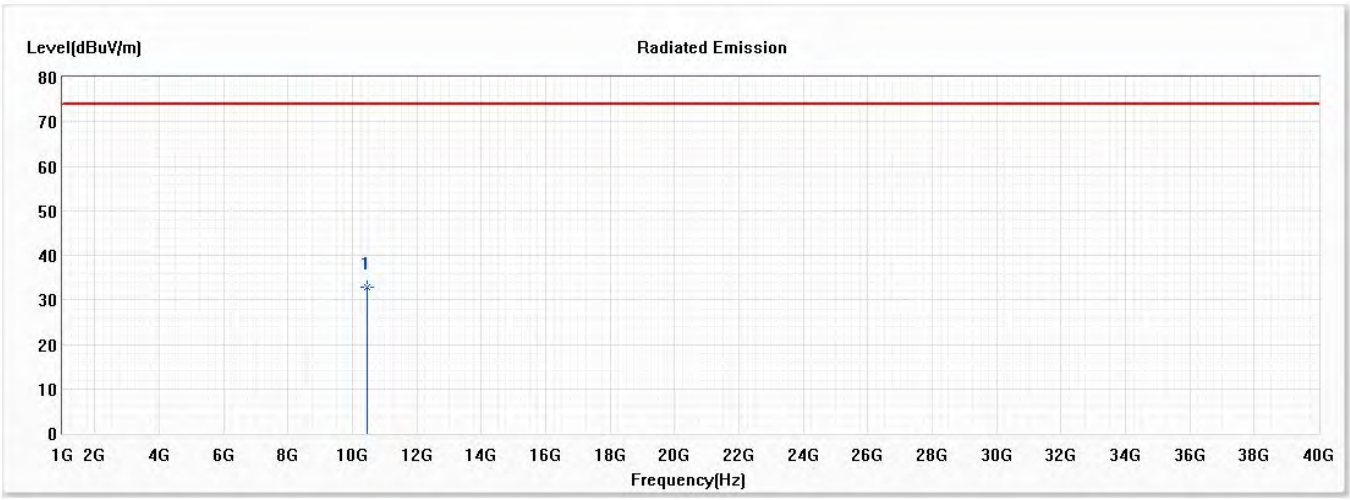
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10440.000	32.55	74.00	-41.45	33.58	-1.03	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5220MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



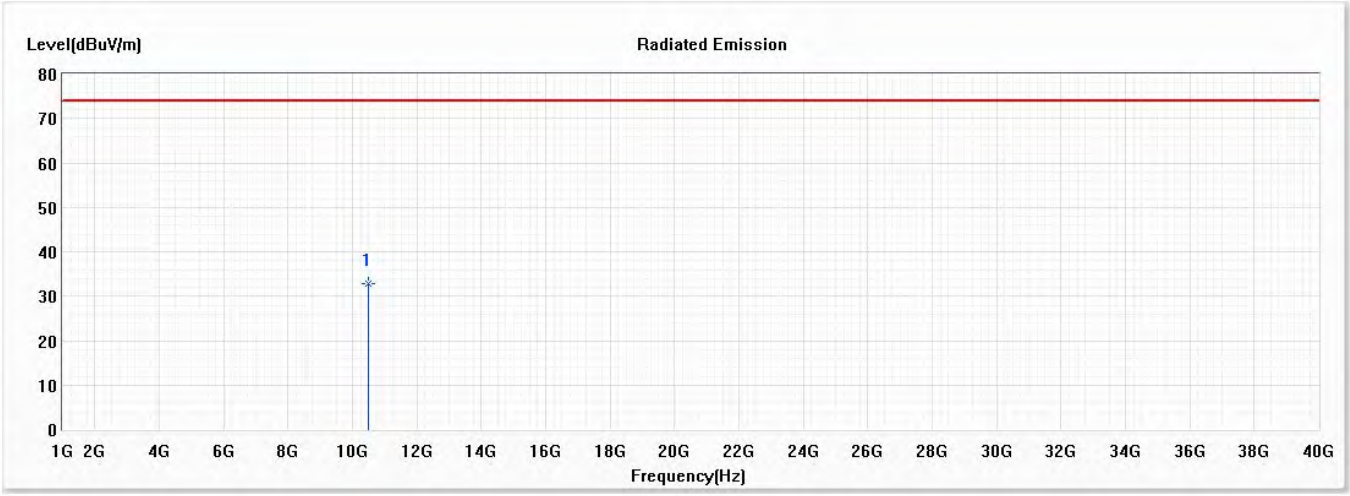
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10440.000	32.85	74.00	-41.15	33.88	-1.03	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5240MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



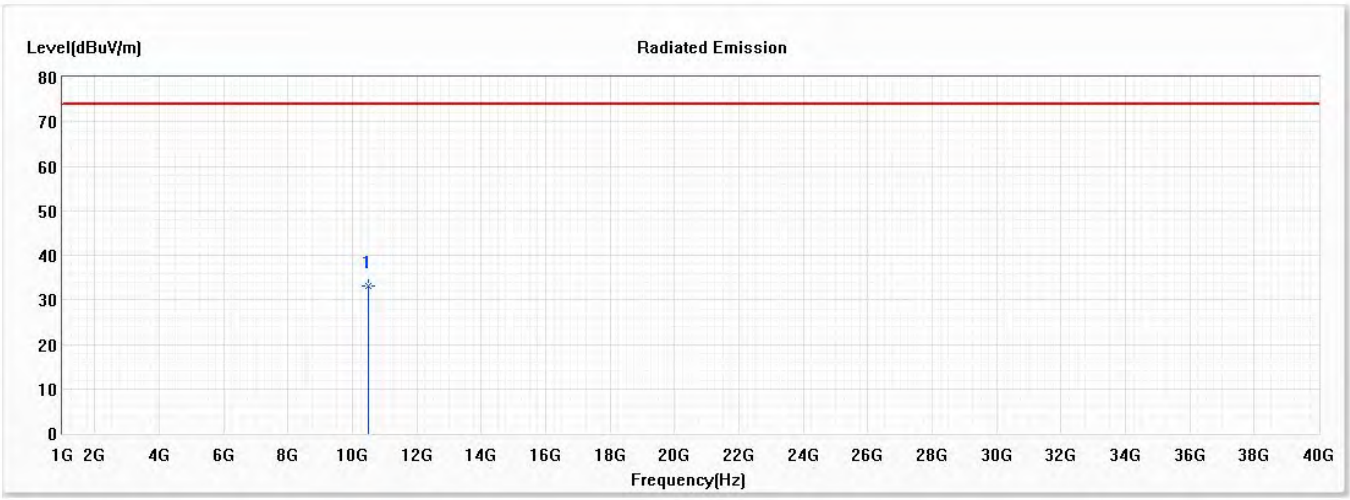
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10480.000	32.73	74.00	-41.27	33.62	-0.89	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5240MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



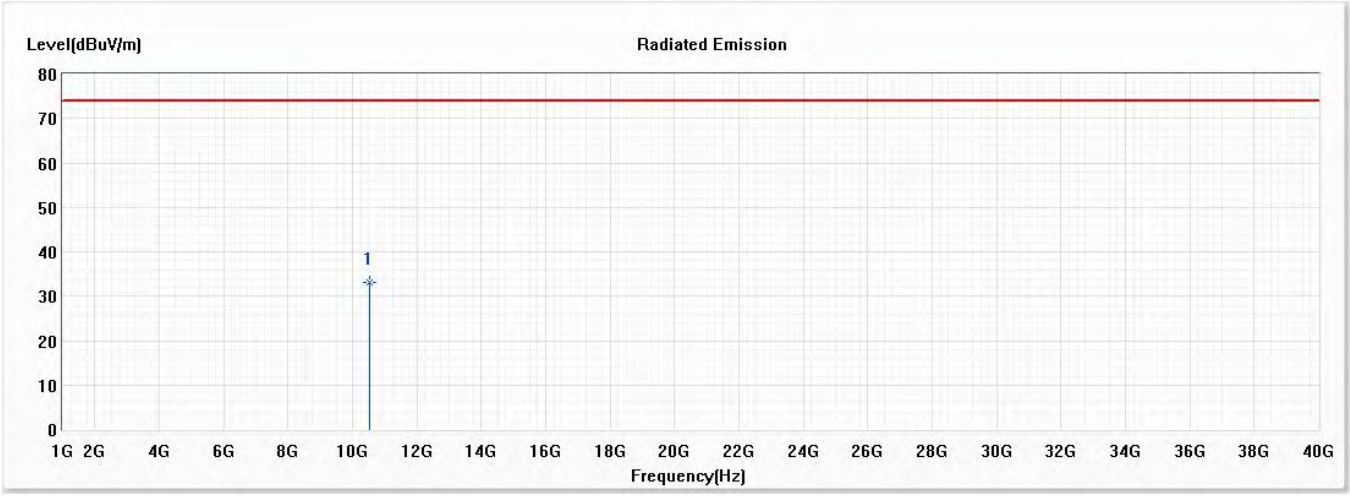
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10480.000	32.99	74.00	-41.01	33.88	-0.89	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5260MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



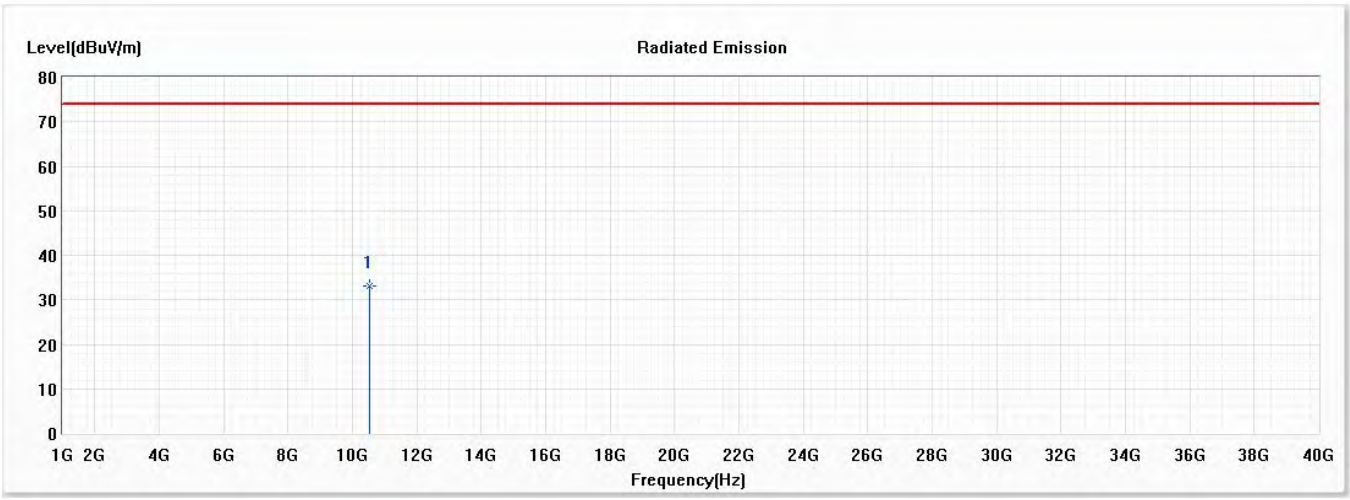
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10520.000	33.12	74.00	-40.88	33.89	-0.77	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5260MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



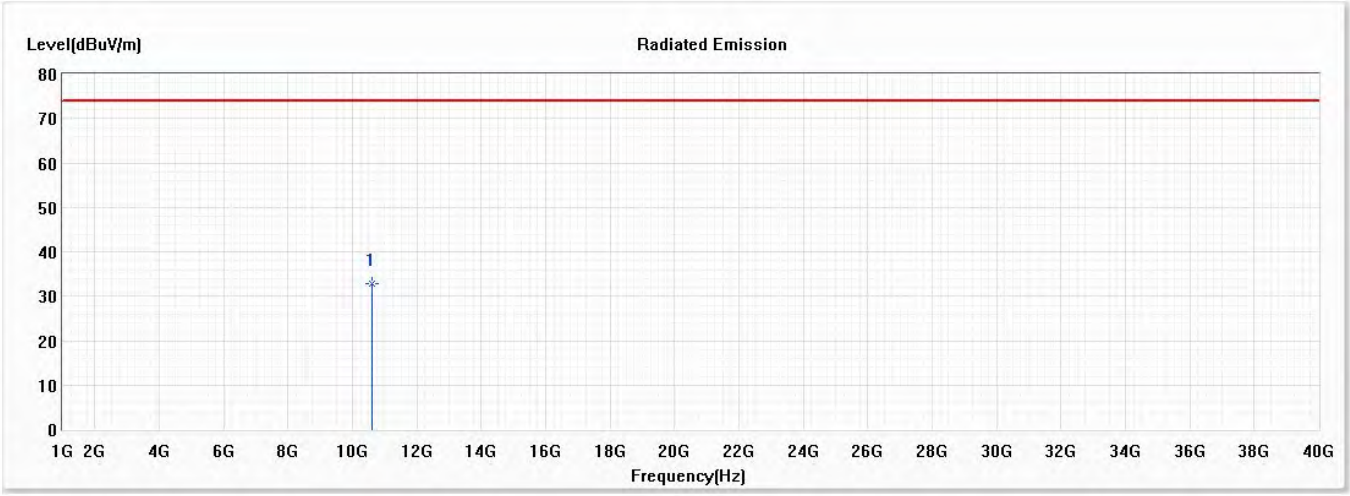
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10520.000	33.14	74.00	-40.86	33.91	-0.77	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5300MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



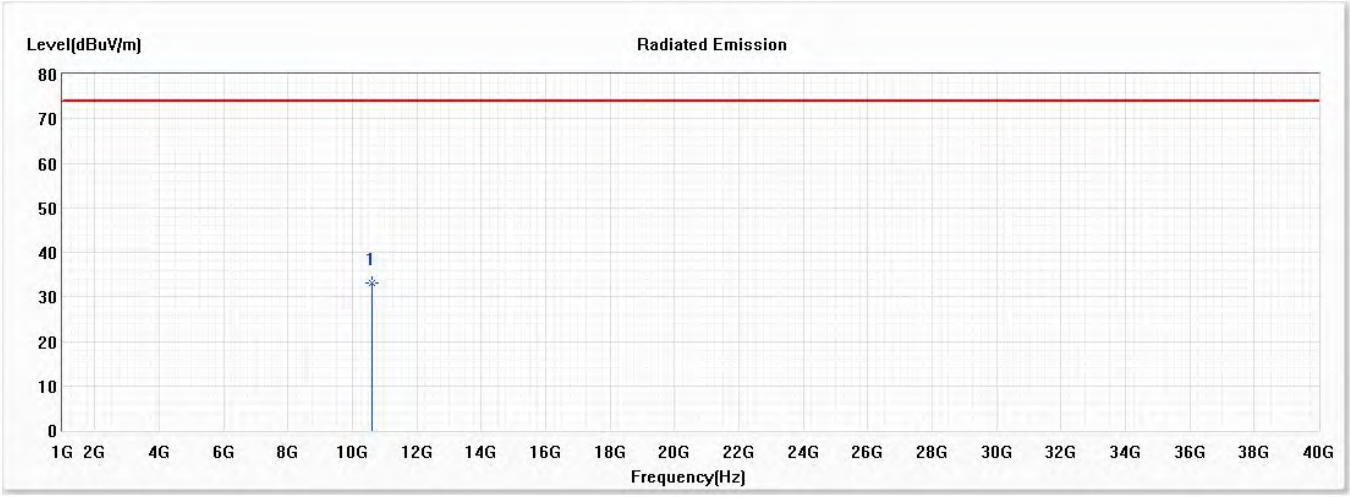
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10600.000	32.78	74.00	-41.22	33.45	-0.67	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5300MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



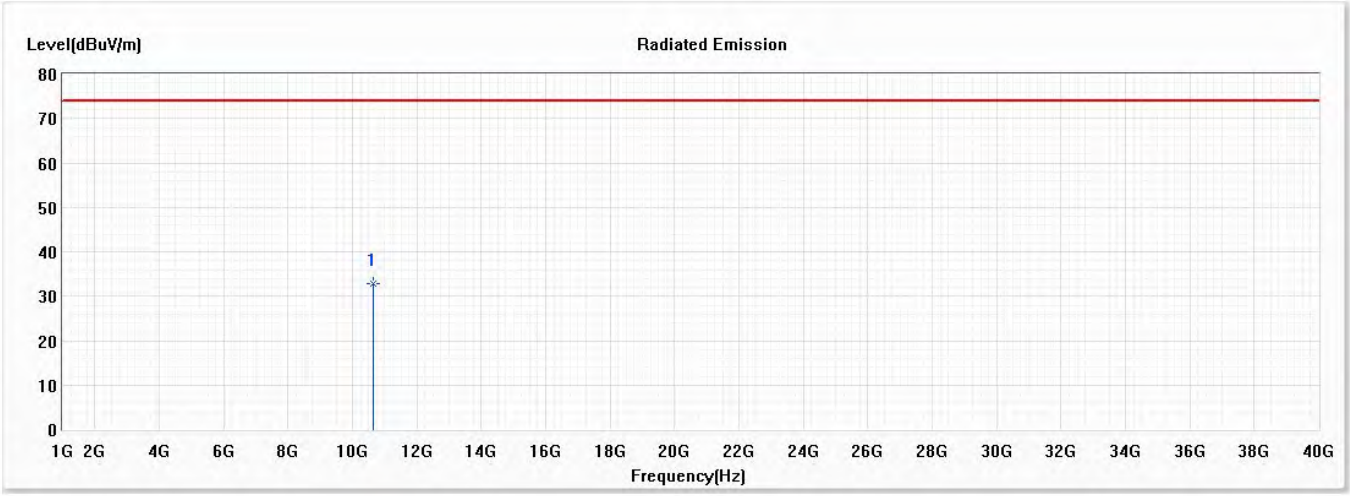
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10600.000	32.98	74.00	-41.02	33.65	-0.67	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5320MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



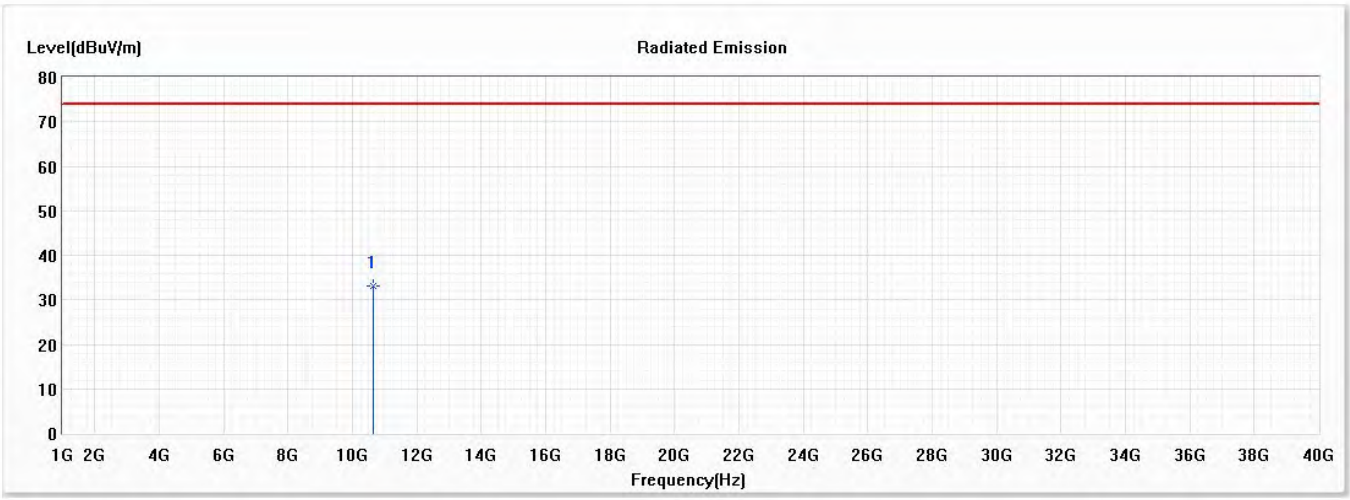
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10640.000	32.84	74.00	-41.16	33.44	-0.60	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5320MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



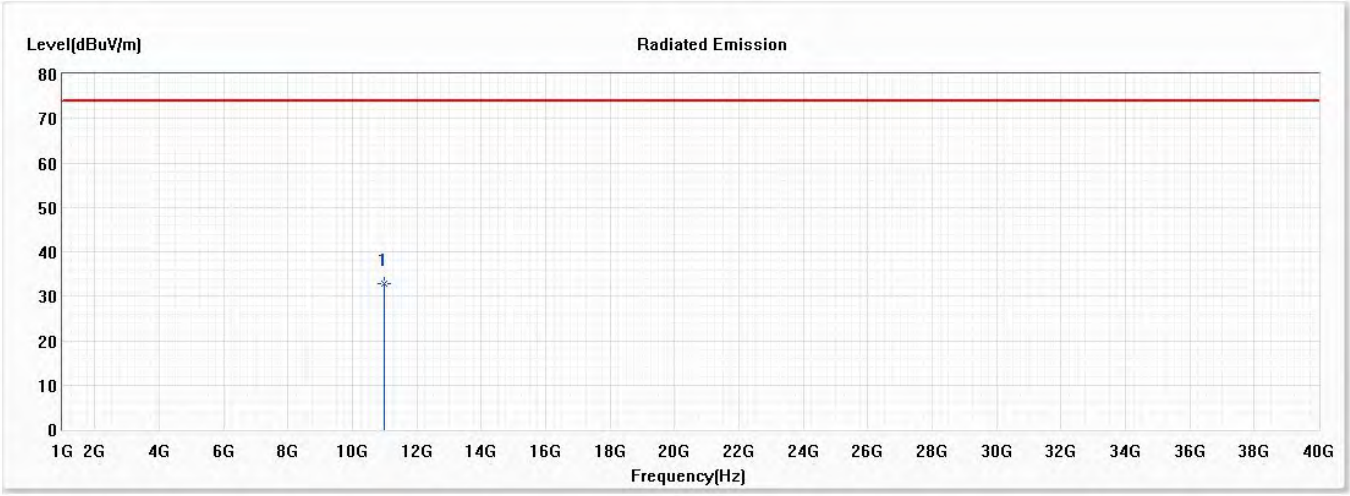
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10640.000	33.15	74.00	-40.85	33.75	-0.60	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5500MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



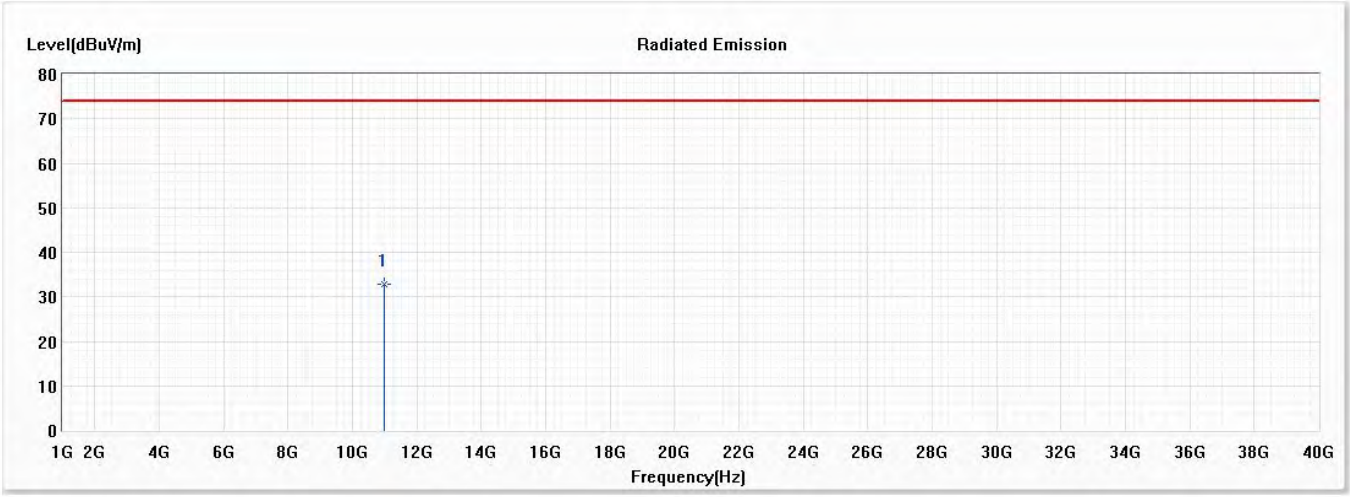
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	11000.000	32.90	74.00	-41.10	32.84	0.06	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5500MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



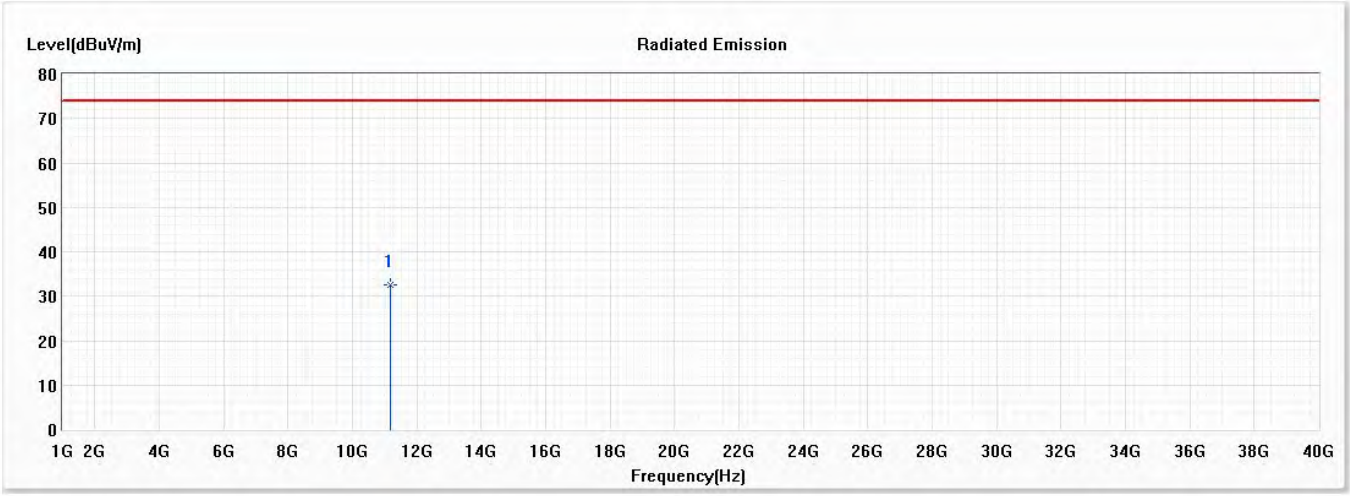
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	11000.000	32.91	74.00	-41.09	32.85	0.06	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5580MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



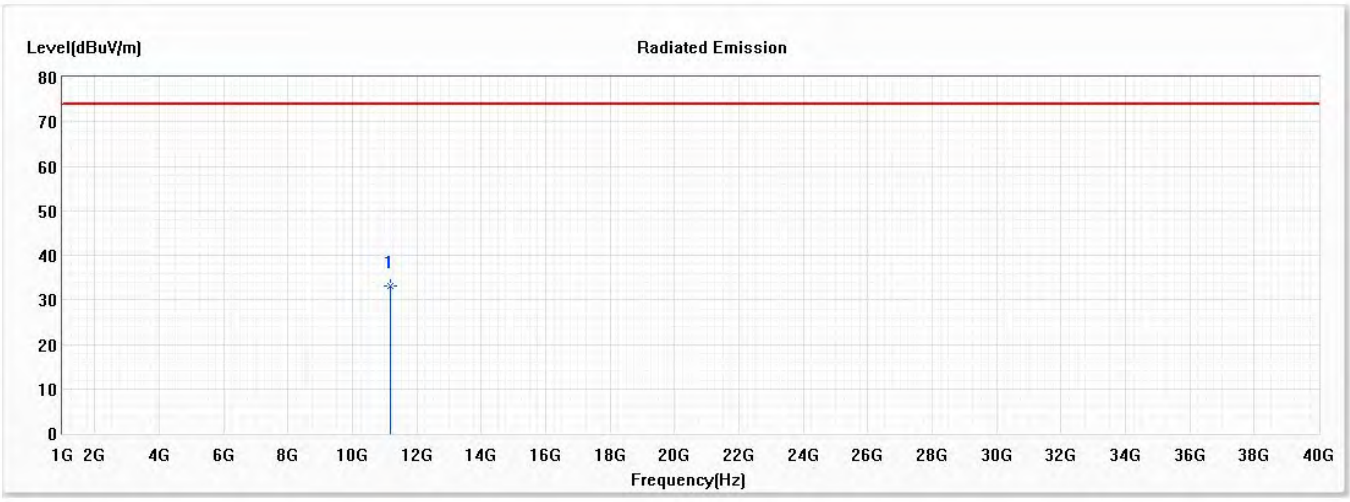
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	11160.000	32.65	74.00	-41.35	32.18	0.47	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5580MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



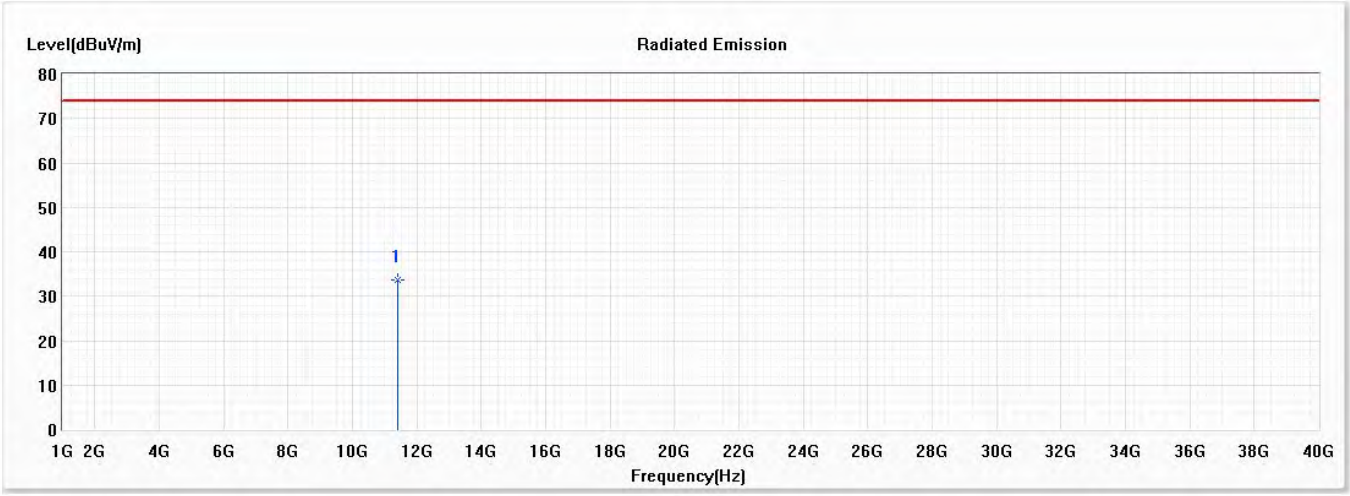
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	11160.000	33.05	74.00	-40.95	32.58	0.47	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5700MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



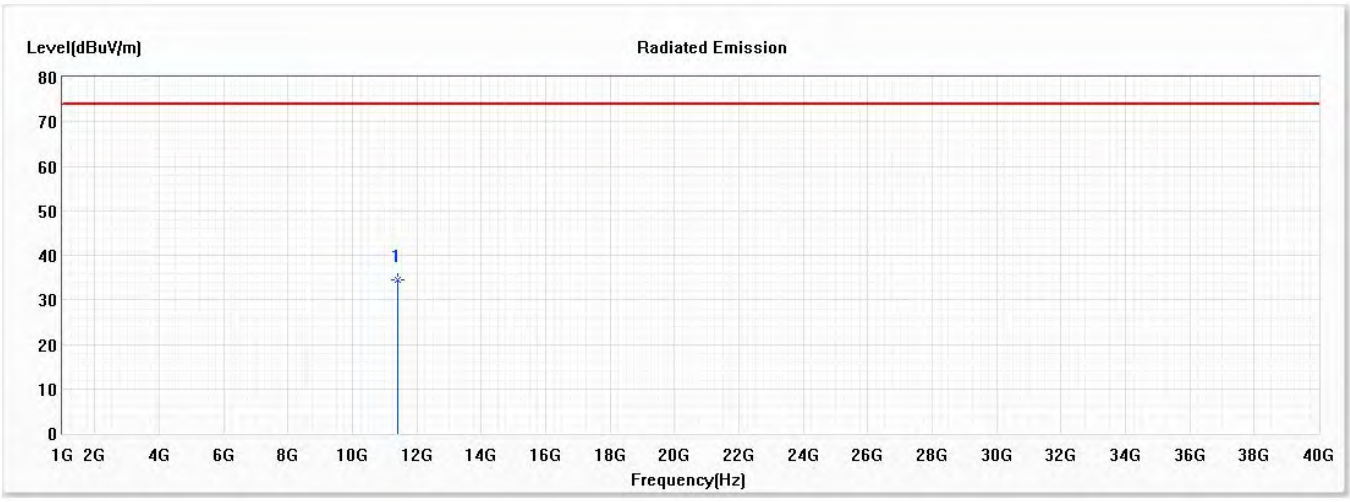
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	11400.000	33.66	74.00	-40.34	32.68	0.98	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5700MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



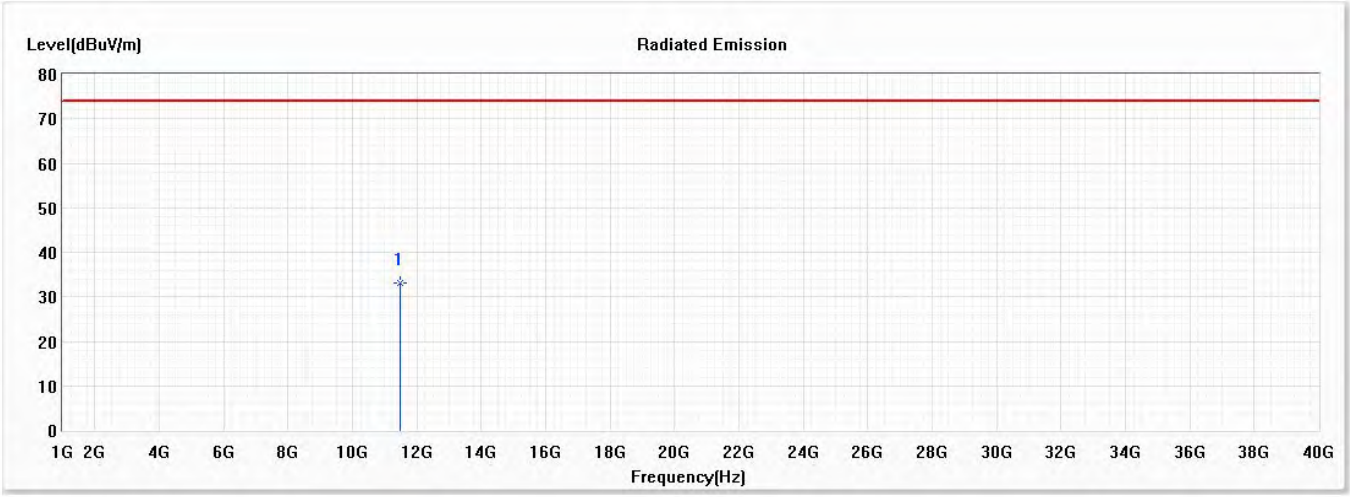
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	11400.000	34.45	74.00	-39.55	33.47	0.98	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5745MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



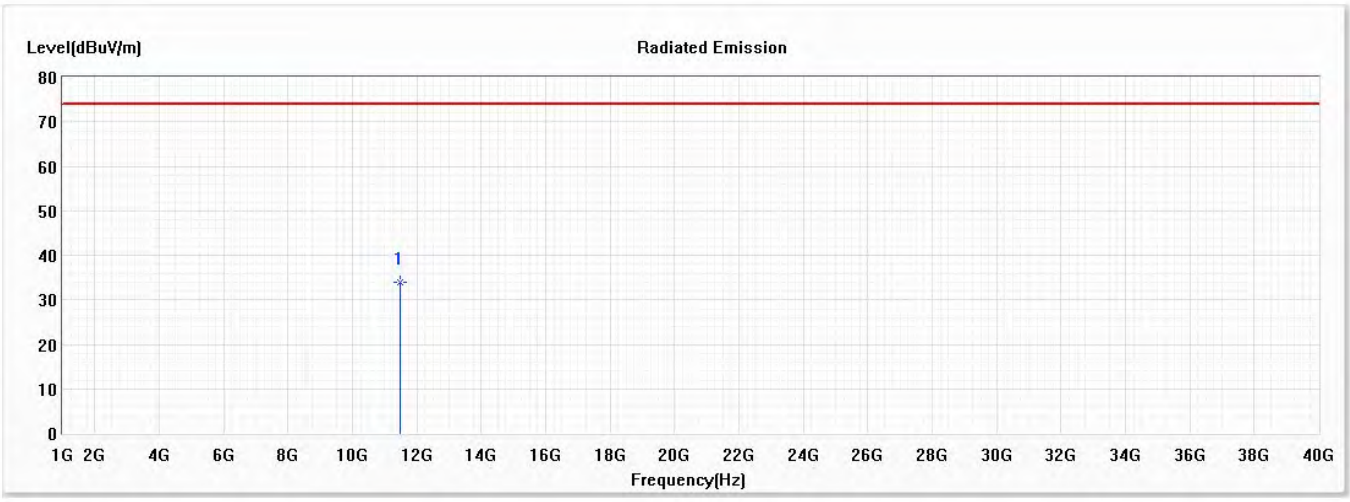
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	11490.000	33.02	74.00	-40.98	31.84	1.18	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5745MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



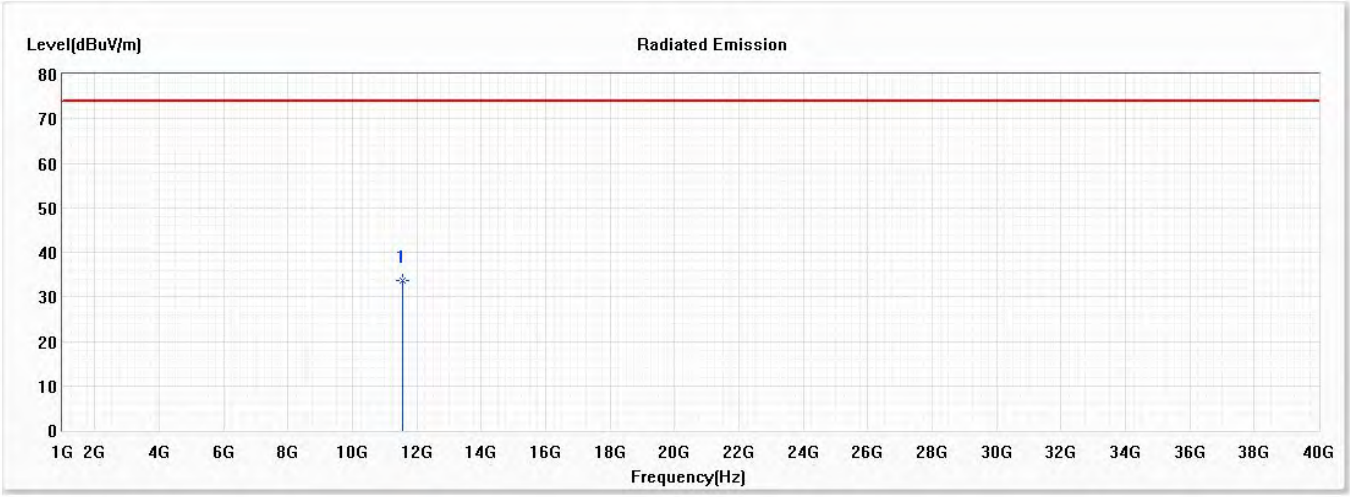
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	11490.000	33.96	74.00	-40.04	32.78	1.18	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5785MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



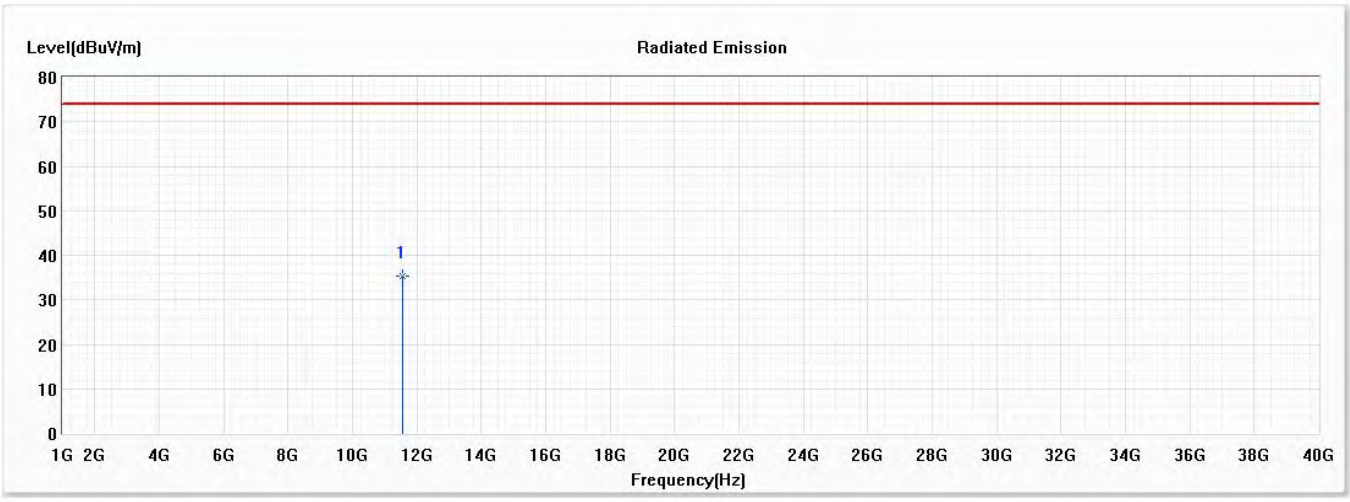
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	11570.000	33.74	74.00	-40.26	32.34	1.40	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5785MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



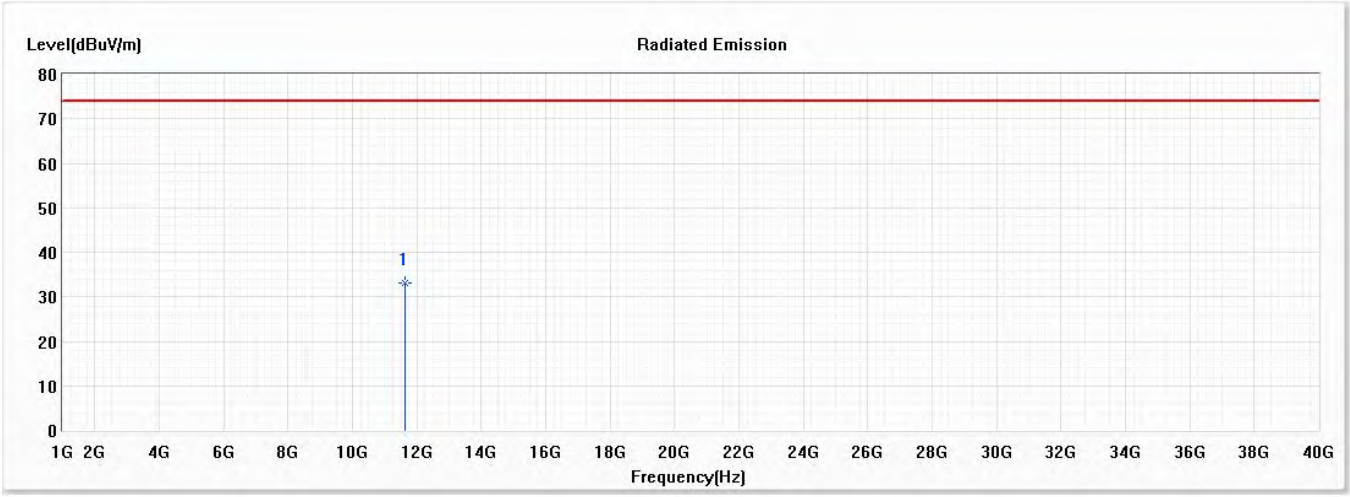
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	11570.000	35.27	74.00	-38.73	33.87	1.40	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5825MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



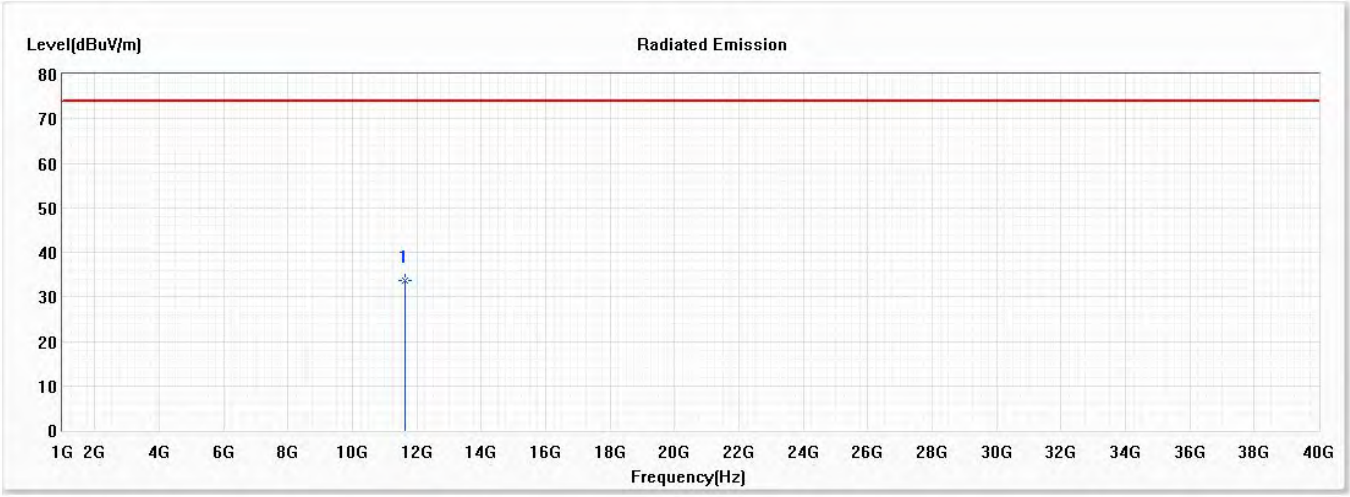
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	11650.000	33.19	74.00	-40.81	31.62	1.57	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11a 6Mbps) (5825MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



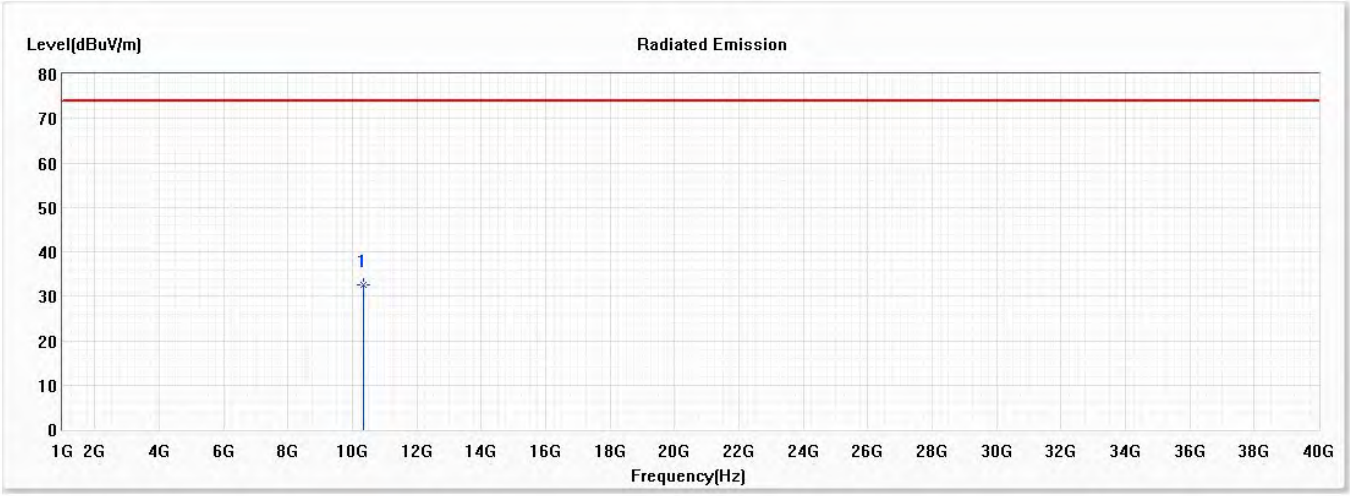
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	11650.000	33.63	74.00	-40.37	32.06	1.57	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 4: Transmit (802.11ac-20BW 7.2Mbps) (5180MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



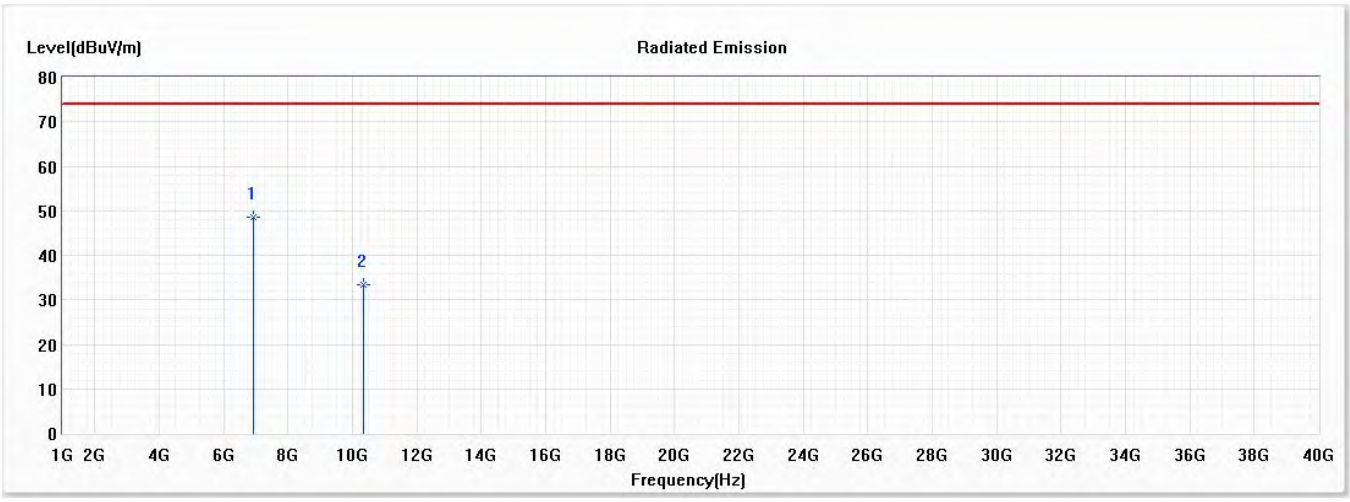
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10360.000	32.62	74.00	-41.38	33.91	-1.29	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 4: Transmit (802.11ac-20BW 7.2Mbps) (5180MHz) – Dipole Antenna
Test Date	:	2021/02/20

Vertical



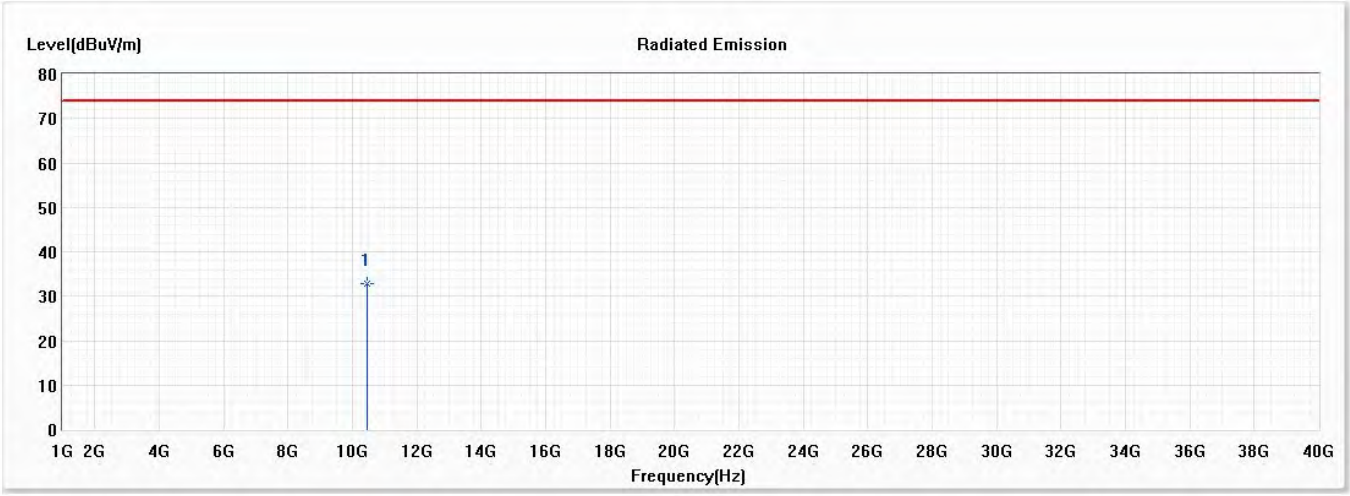
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	6906.600	48.45	74.00	-25.55	54.20	-5.75	PK
2	10360.000	33.29	74.00	-40.71	34.58	-1.29	PK

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	:	Wireless module
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 4: Transmit (802.11ac-20BW 7.2Mbps) (5220MHz) – Dipole Antenna
Test Date	:	2021/02/20

Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	10440.000	32.91	74.00	-41.09	33.94	-1.03	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.