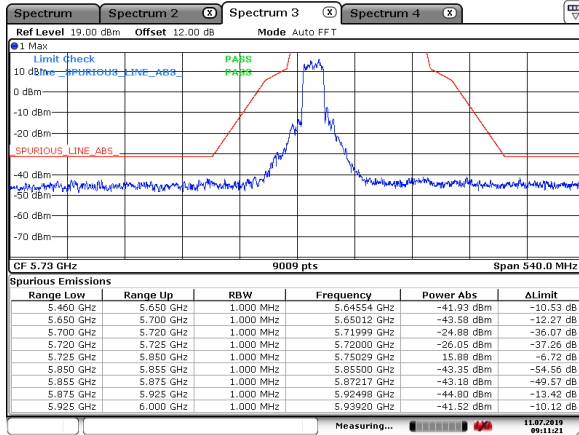
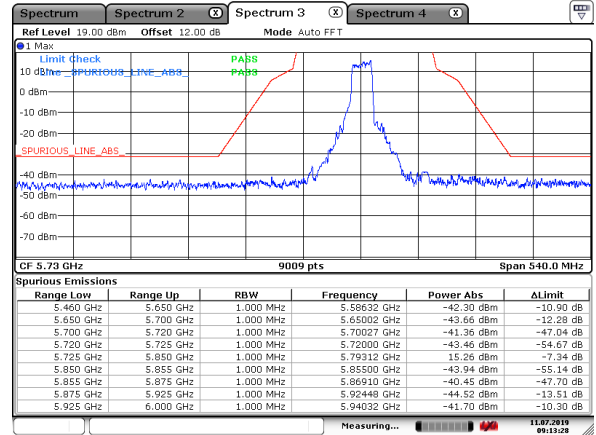


5745MHz with SISO



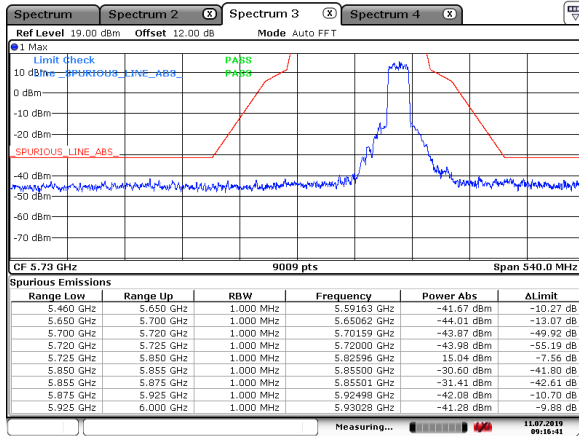
Date: 11.JUL.2019 09:11:21

5785MHz with SISO



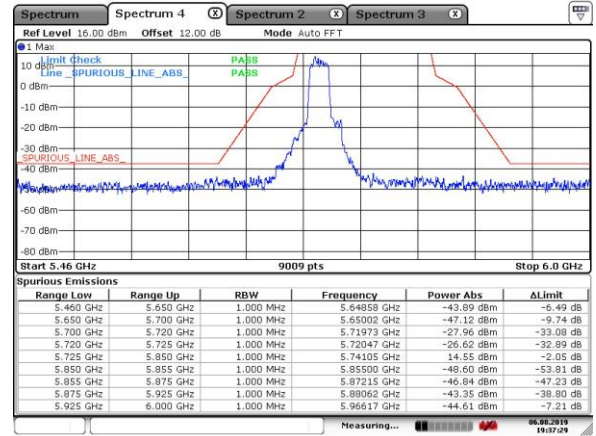
Date: 11.JUL.2019 09:13:28

5825MHz with SISO



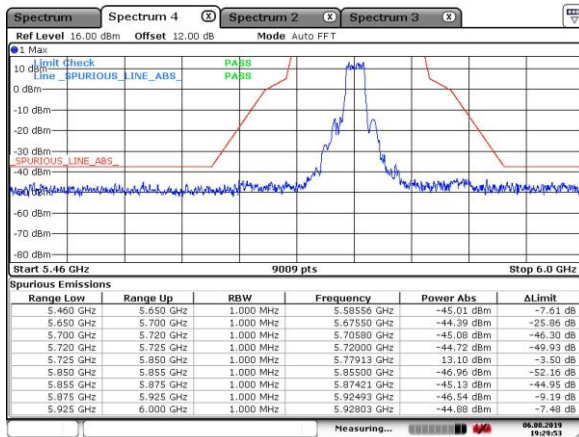
Date: 11.JUL.2019 09:16:41

5745MHz with CDD



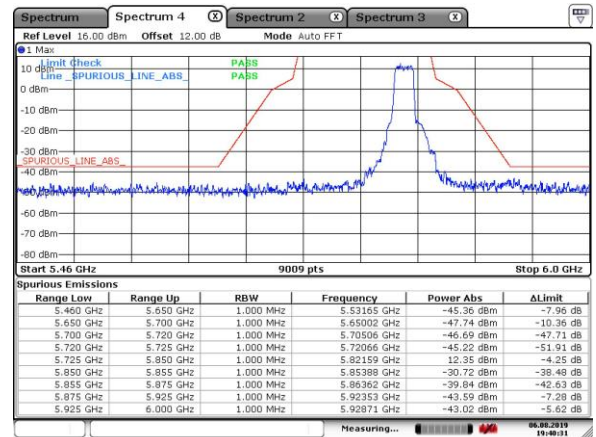
Date: 6.AUG.2019 19:17:29

5785MHz with CDD



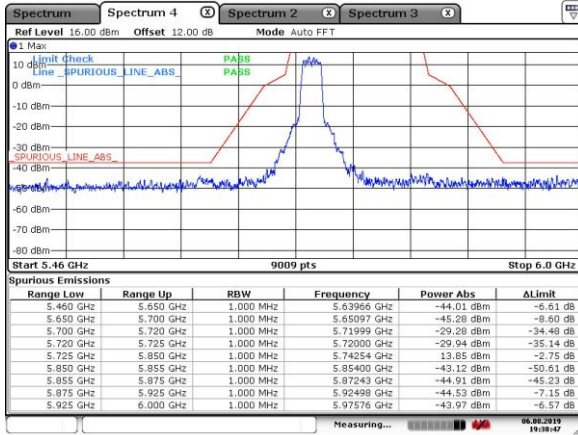
Date: 6.AUG.2019 19:29:53

5825MHz with CDD



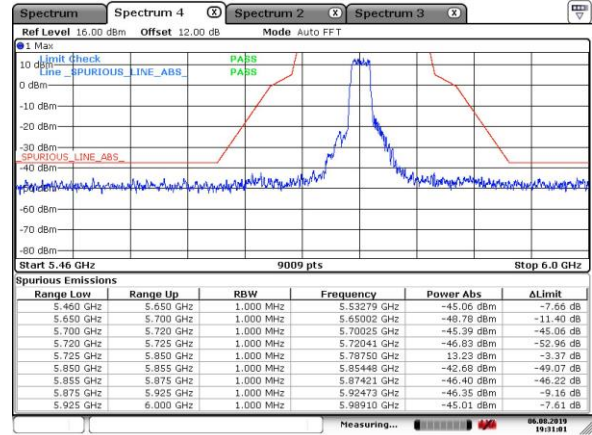
Date: 6.AUG.2019 19:40:31

5745MHz with Beamforming



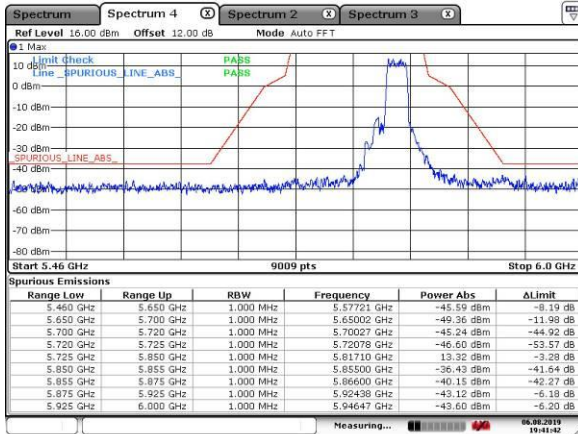
Date: 6.AUG.2019 19:38:48

5785MHz with Beamforming



Date: 6.AUG.2019 19:31:01

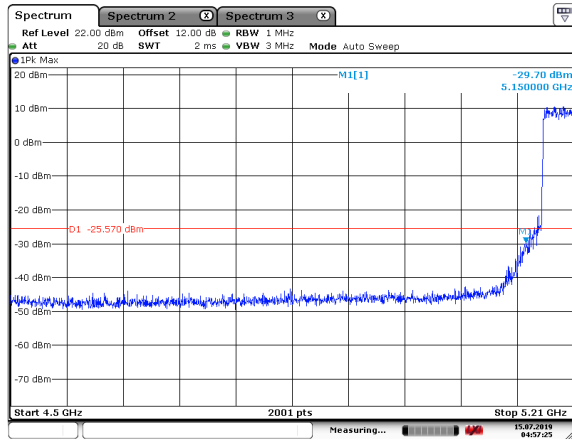
5825MHz with Beamforming



Date: 6.AUG.2019 19:41:43

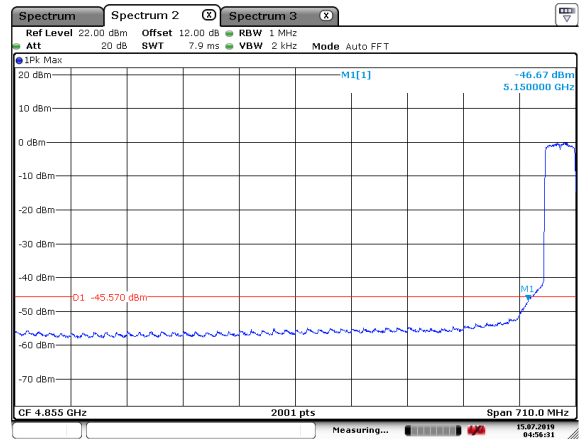
802.11ax(40MHz)

5190MHz with SISO



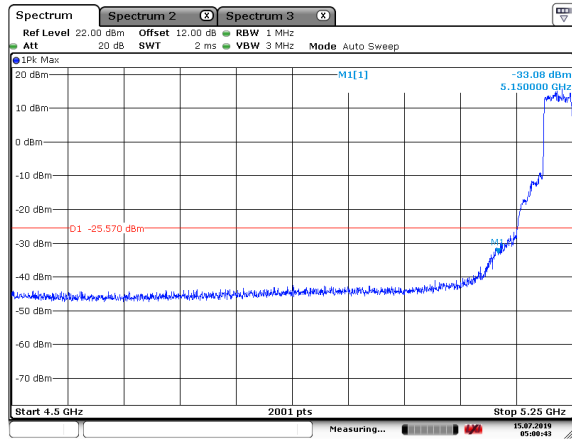
Date: 15.JUL.2019 04:57:26

5190MHz with SISO



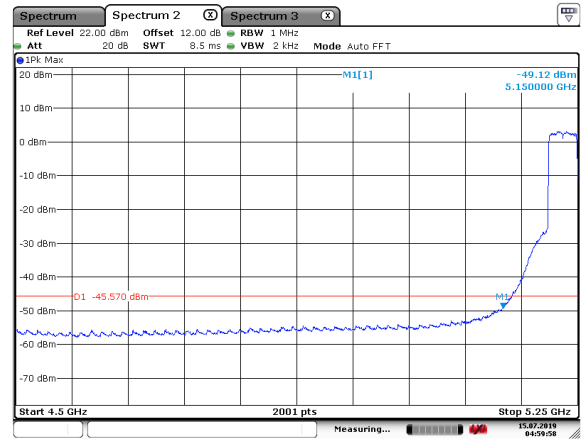
Date: 15.JUL.2019 04:56:31

5230MHz with SISO



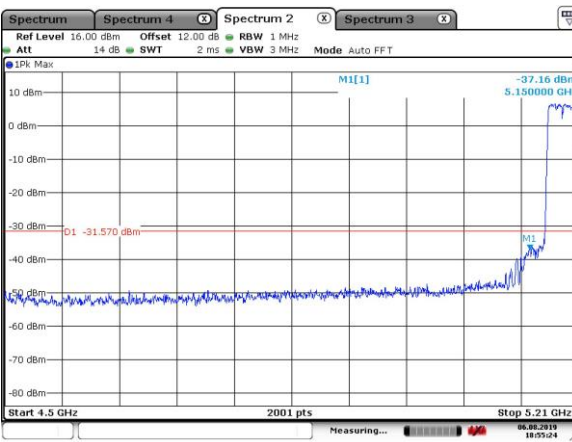
Date: 15.JUL.2019 05:00:43

5230MHz with SISO



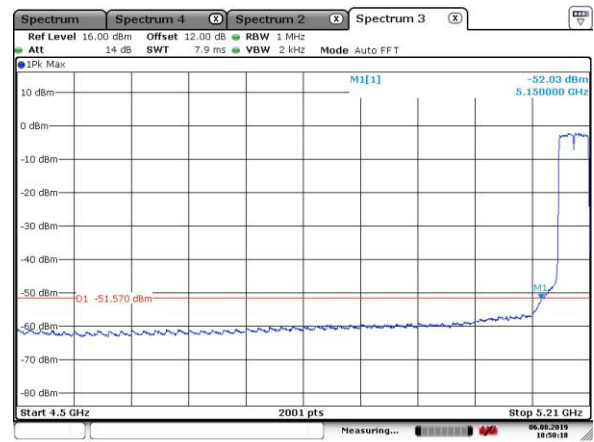
Date: 15.JUL.2019 04:59:09

5190MHz with CDD



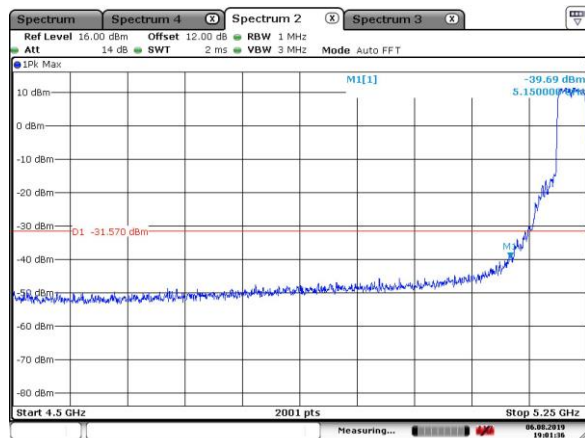
Date: 6.AUG.2019 18:55:24

5190MHz with CDD

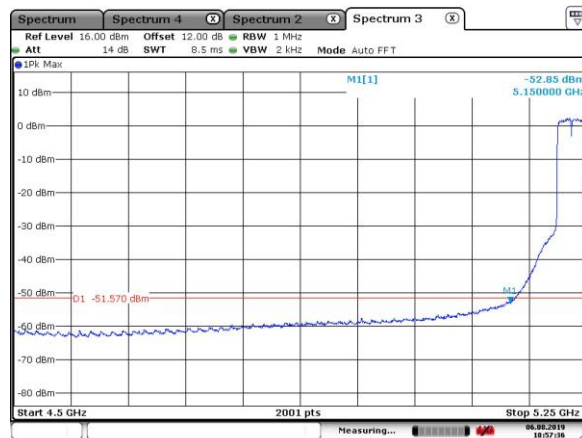


Date: 6.AUG.2019 18:50:18

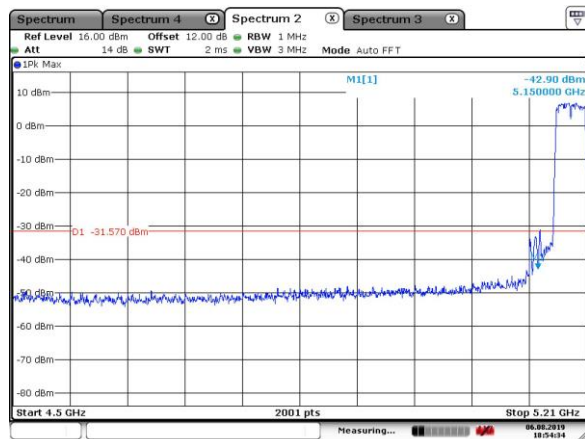
5230MHz with CDD



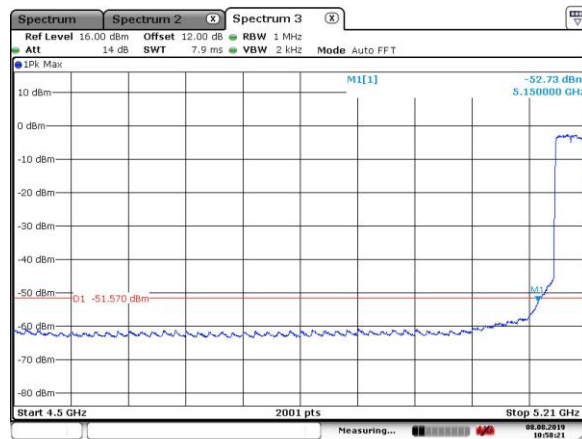
5230MHz with CDD



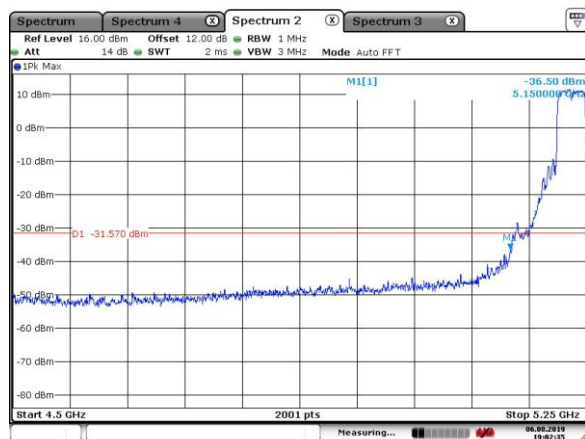
5190MHz with Beamforming



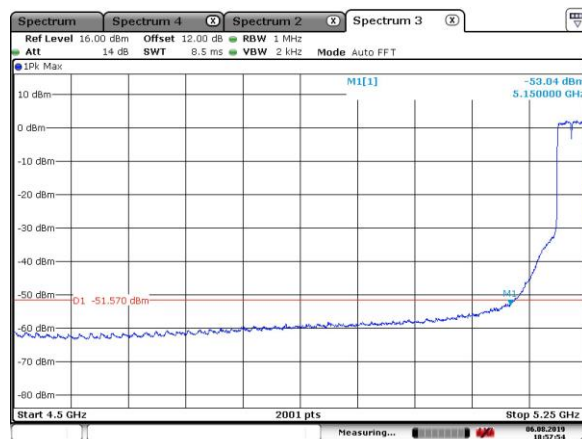
5190MHz with Beamforming



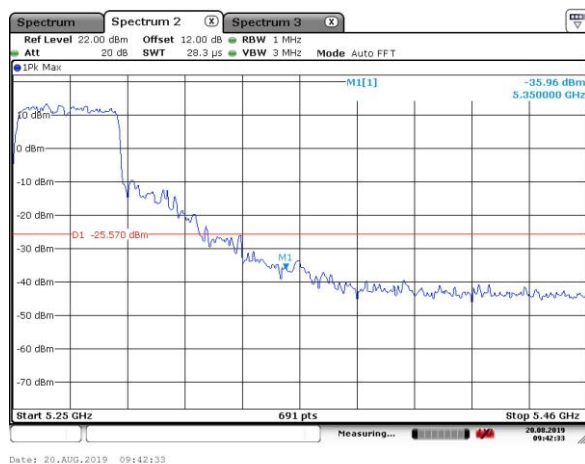
5230MHz with Beamforming



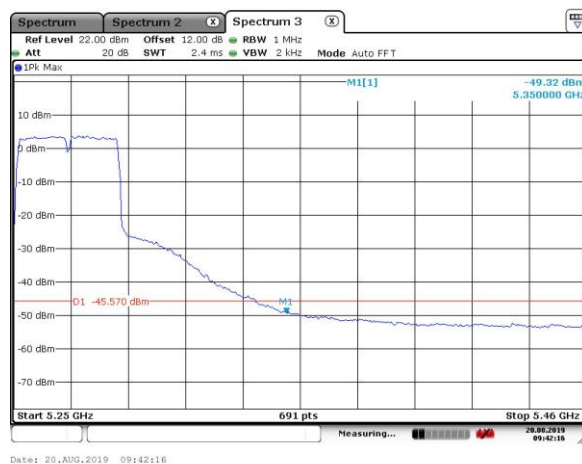
5230MHz with Beamforming



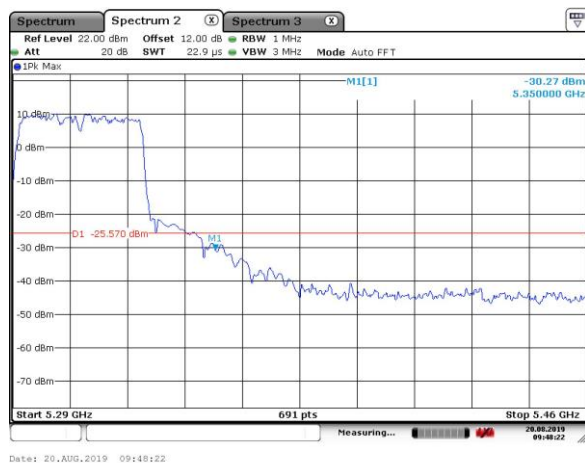
5270MHz with SISO



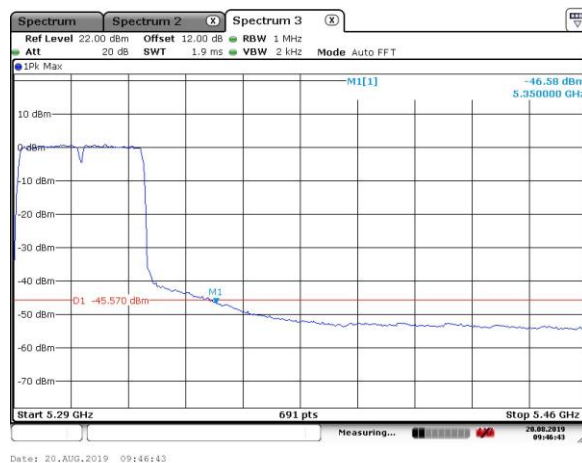
5270MHz with SISO



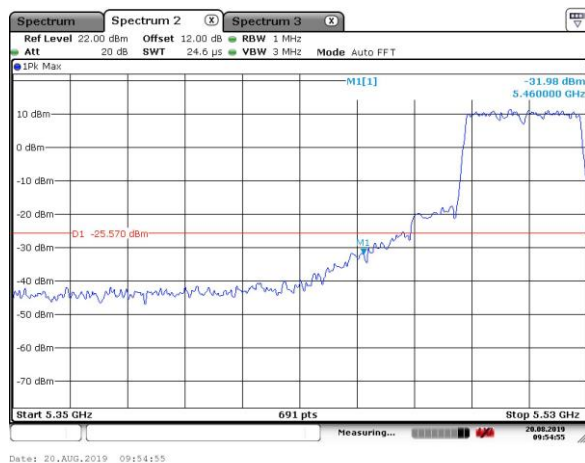
5310MHz with SISO



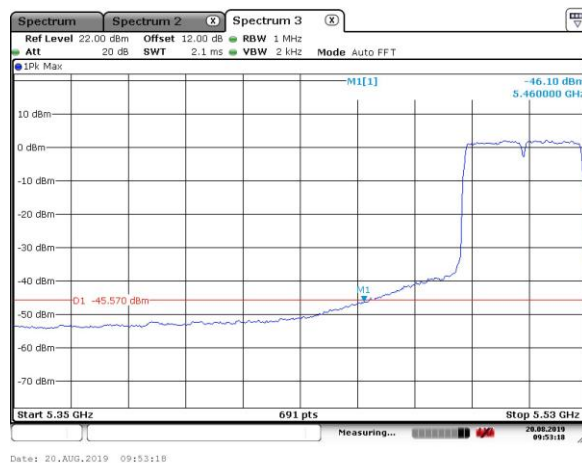
5310MHz with SISO



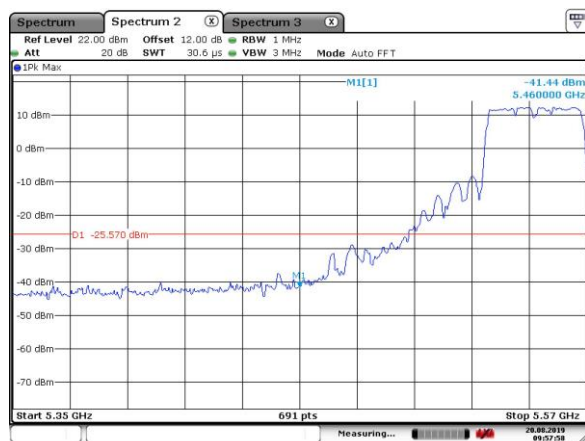
5510MHz with SISO



5510MHz with SISO

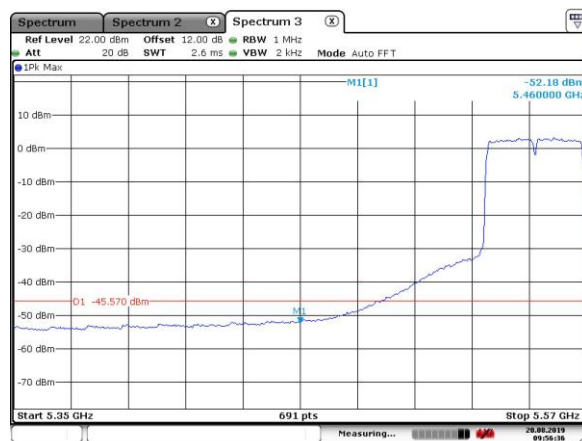


5550MHz with SISO



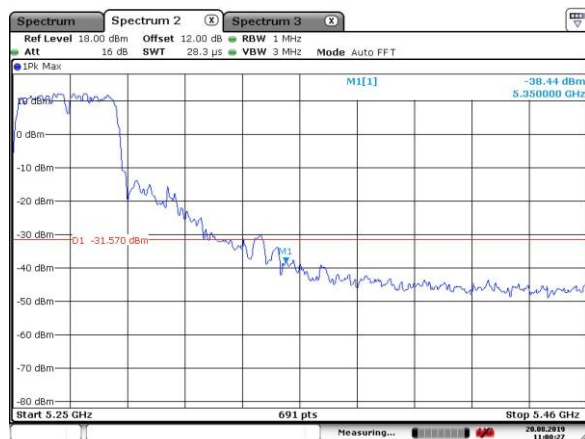
Date: 20.AUG.2019 09:57:58

5550MHz with SISO



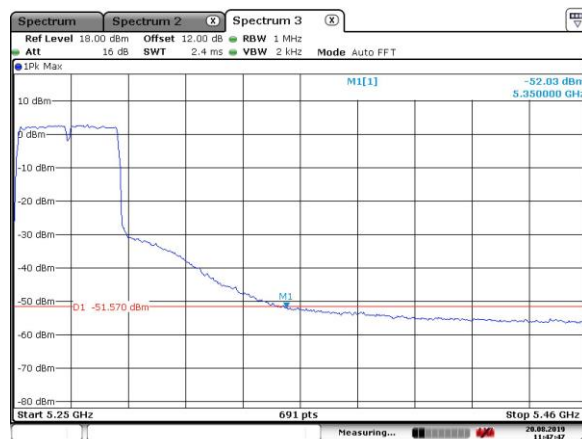
Date: 20.AUG.2019 09:56:36

5270MHz with CDD



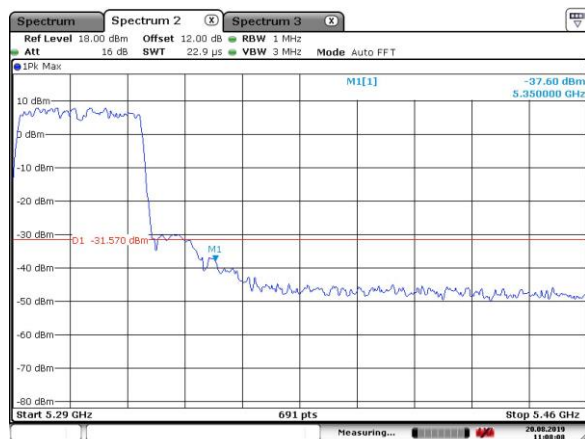
Date: 20.AUG.2019 11:00:27

5270MHz with CDD



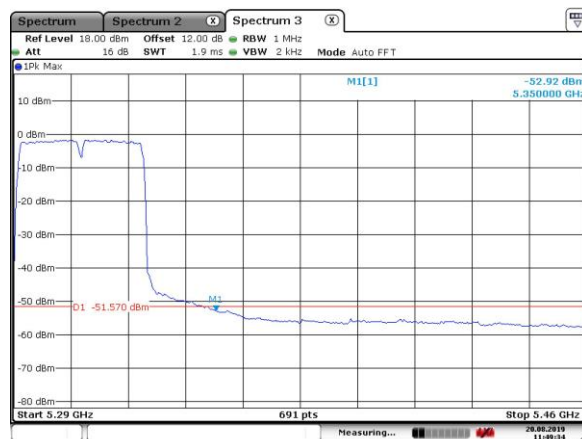
Date: 20.AUG.2019 11:47:48

5310MHz with CDD



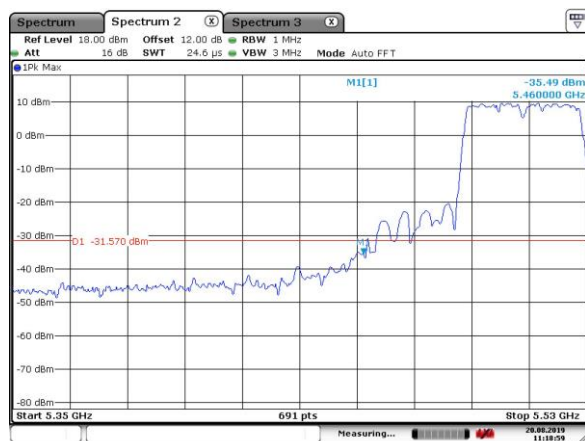
Date: 20.AUG.2019 11:08:08

5310MHz with CDD



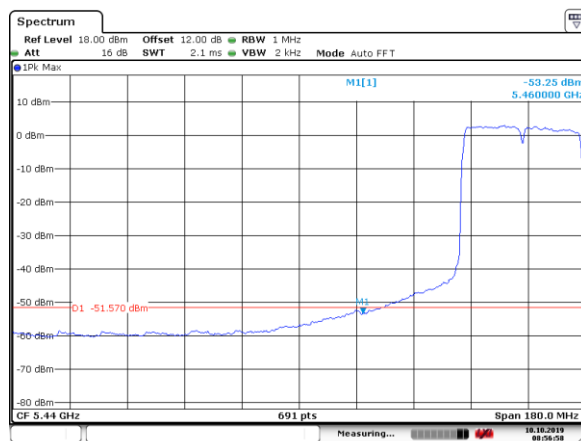
Date: 20.AUG.2019 11:49:34

5510MHz with CDD



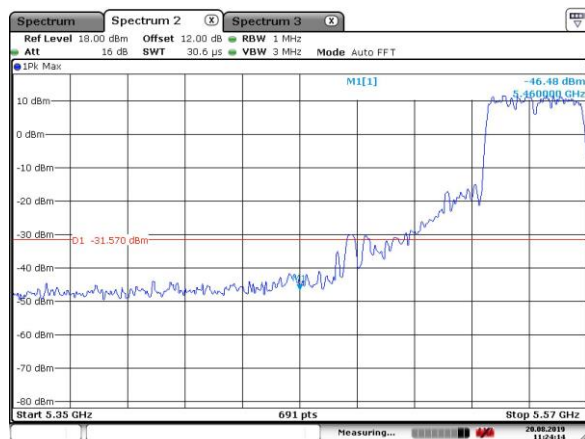
Date: 20.AUG.2019 11:18:59

5510MHz with CDD



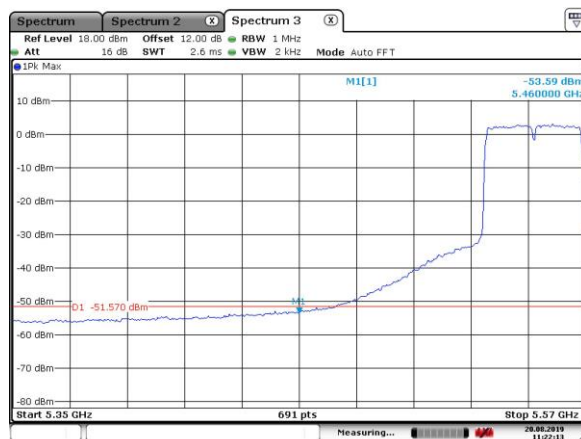
Date: 10.OCT.2019 08:56:57

5550MHz with CDD



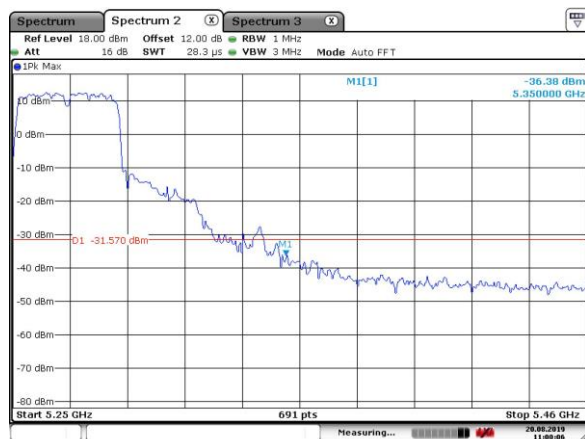
Date: 20.AUG.2019 11:24:14

5550MHz with CDD



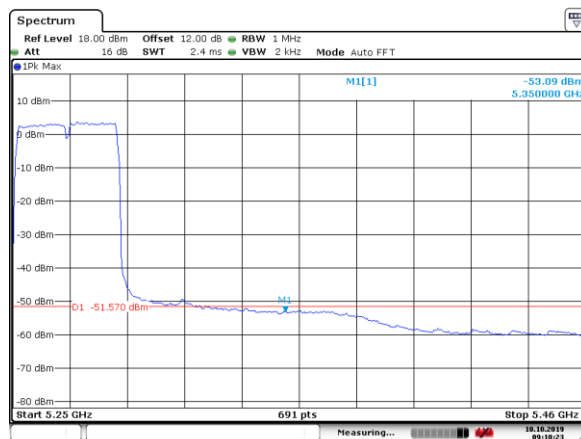
Date: 20.AUG.2019 11:22:13

5270MHz with Beamforming



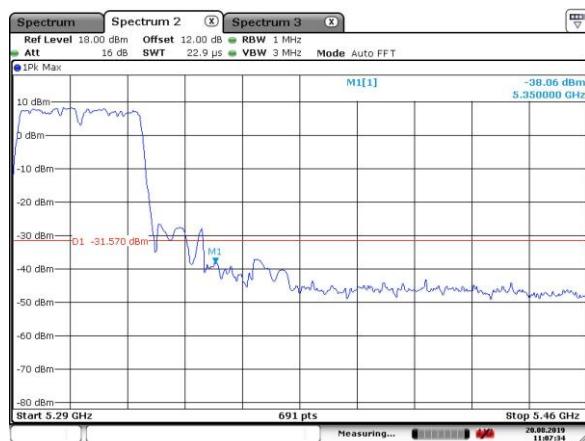
Date: 20.AUG.2019 11:00:06

5270MHz with Beamforming



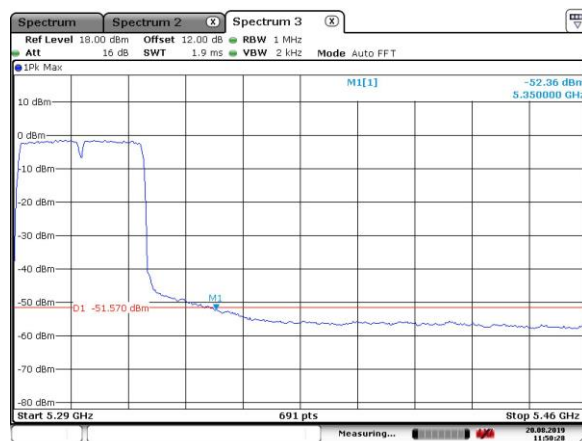
Date: 10.OCT.2019 09:10:23

5310MHz with Beamforming



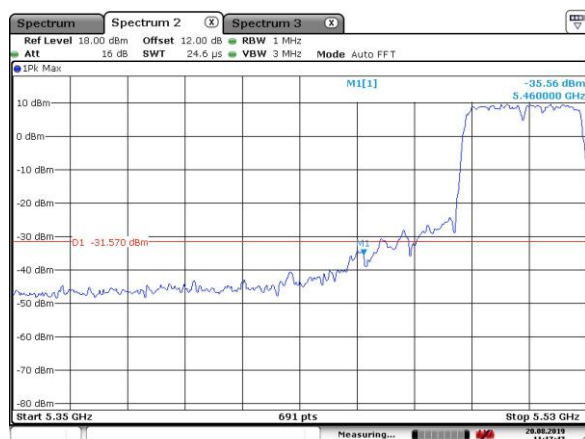
Date: 20.AUG.2019 11:07:34

5310MHz with Beamforming



Date: 20.AUG.2019 11:50:28

5510MHz with Beamforming



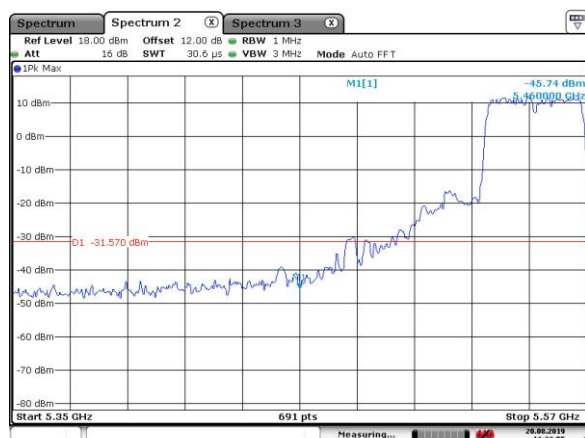
Date: 20.AUG.2019 11:17:47

5510MHz with Beamforming



Date: 10.OCT.2019 08:58:02

5550MHz with Beamforming



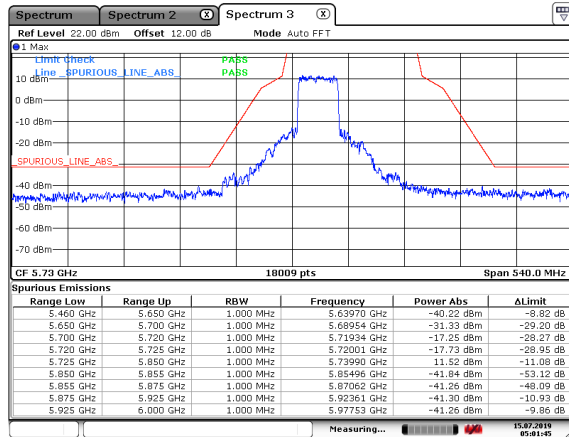
Date: 20.AUG.2019 11:23:55

5550MHz with Beamforming



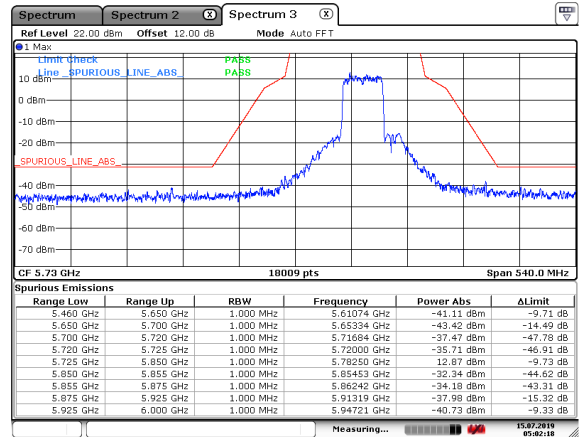
Date: 20.AUG.2019 11:22:25

5755MHz with SISO



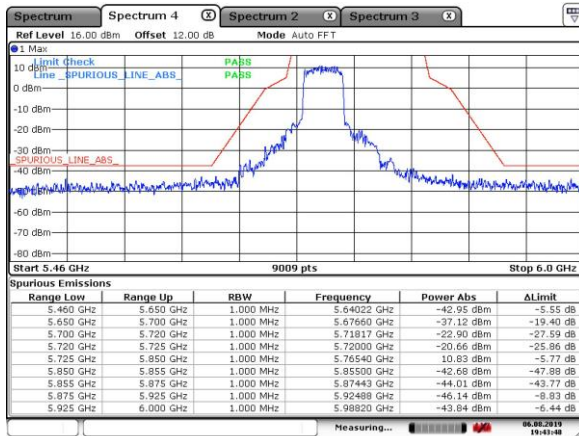
Date: 15.JUL.2019 05:01:45

5795MHz with SISO



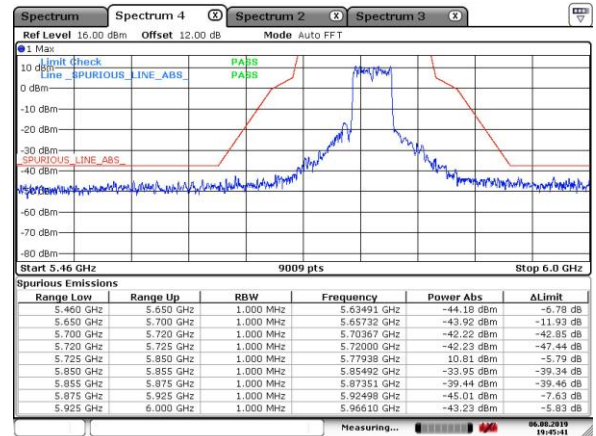
Date: 15.JUL.2019 05:02:18

5755MHz with CDD



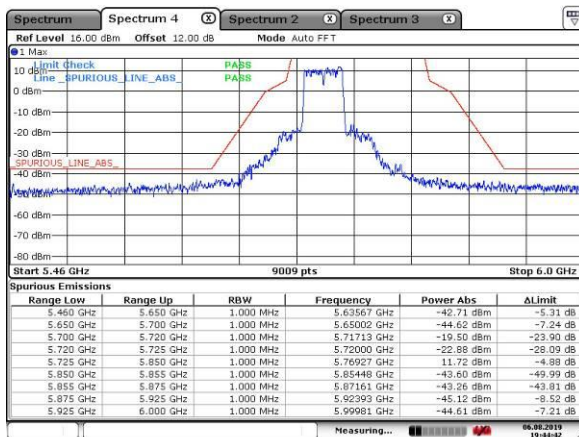
Date: 6.AUG.2019 19:43:18

5795MHz with CDD



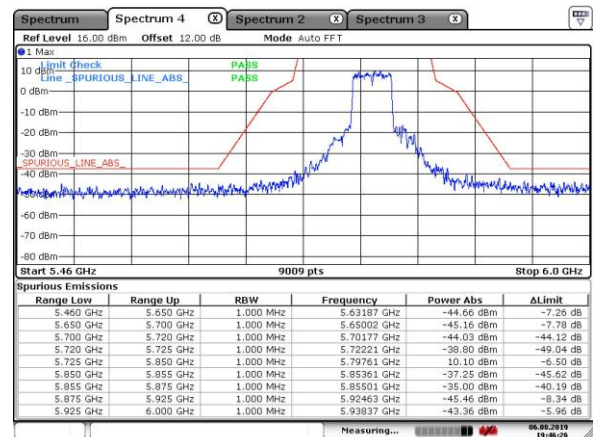
Date: 6.AUG.2019 19:45:42

5755MHz with Beamforming



Date: 6.AUG.2019 19:44:41

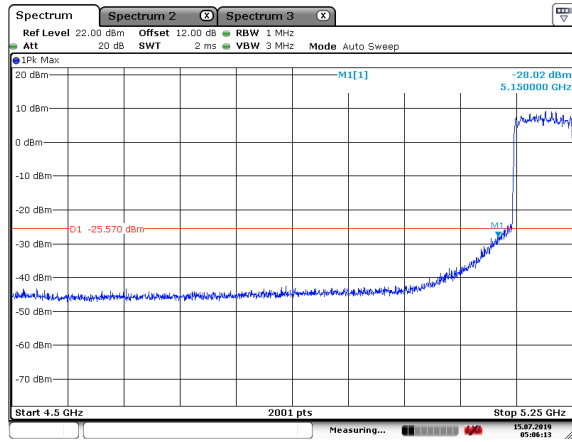
5795MHz with Beamforming



Date: 6.AUG.2019 19:46:26

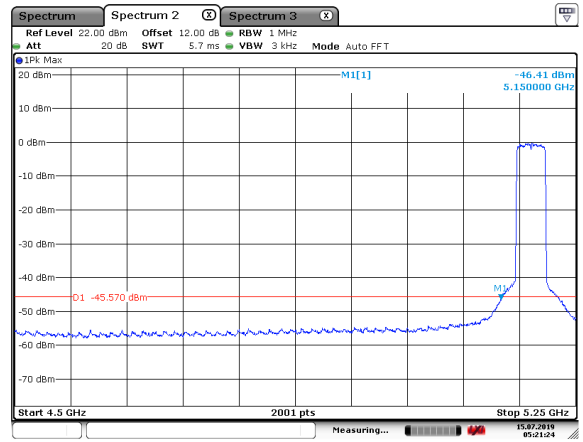
802.11ax(80MHz)

5210MHz with SISO



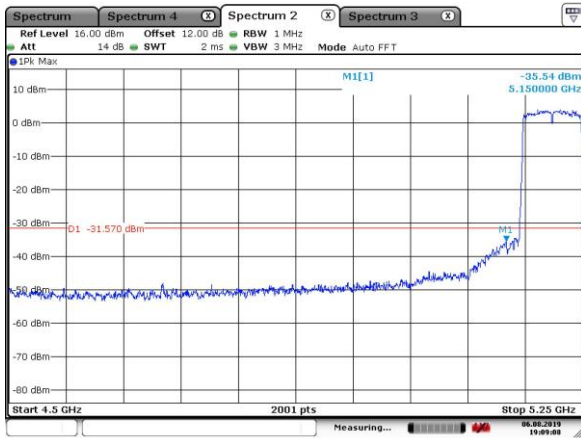
Date: 15.JUL.2019 05:06:13

5210MHz with SISO



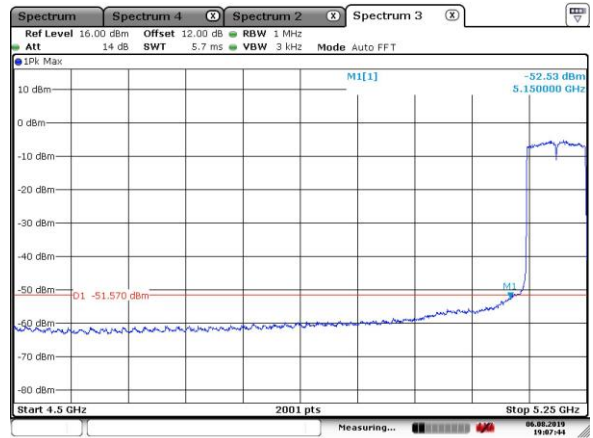
Date: 15.JUL.2019 05:21:24

5210MHz with CDD



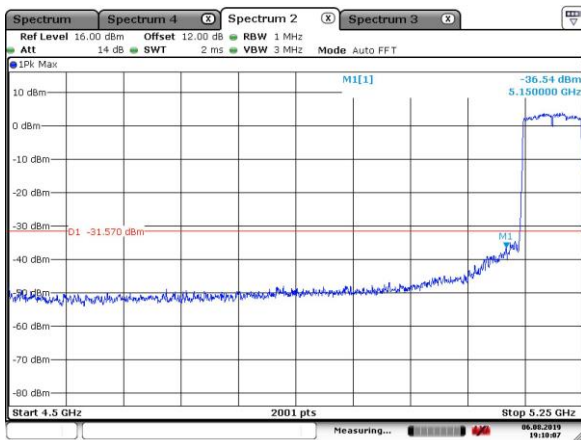
Date: 6.AUG.2019 19:09:08

5210MHz with CDD



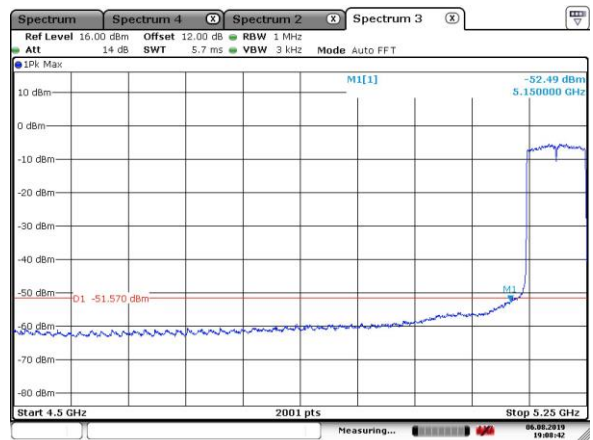
Date: 6.AUG.2019 19:07:44

5210MHz with Beamforming



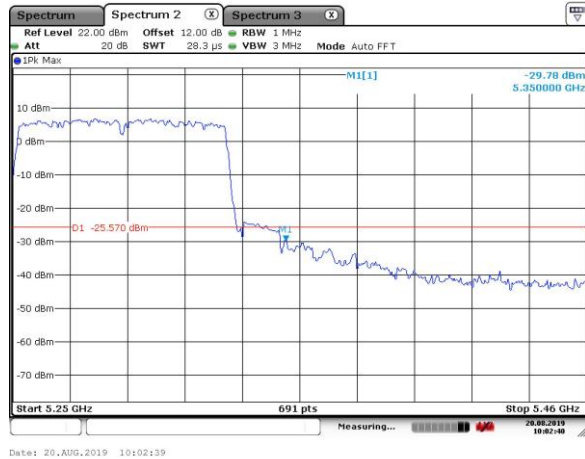
Date: 6.AUG.2019 19:10:07

5210MHz with Beamforming



Date: 6.AUG.2019 19:08:42

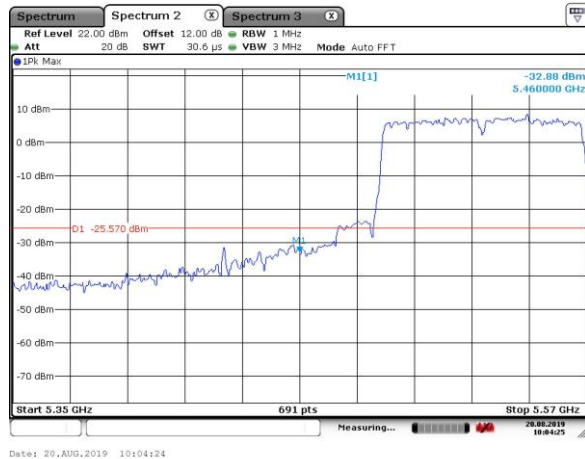
5290MHz with SISO



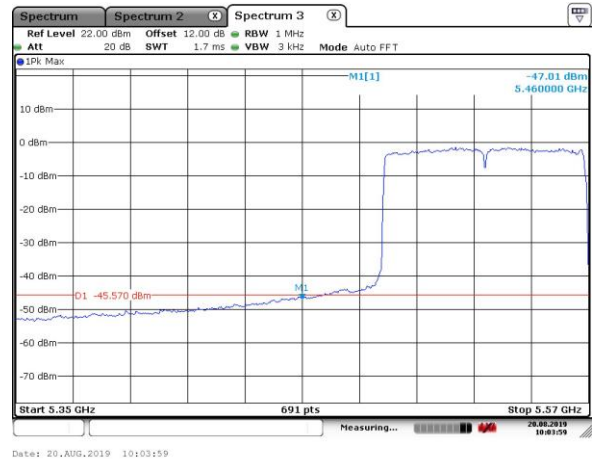
5290MHz with SISO



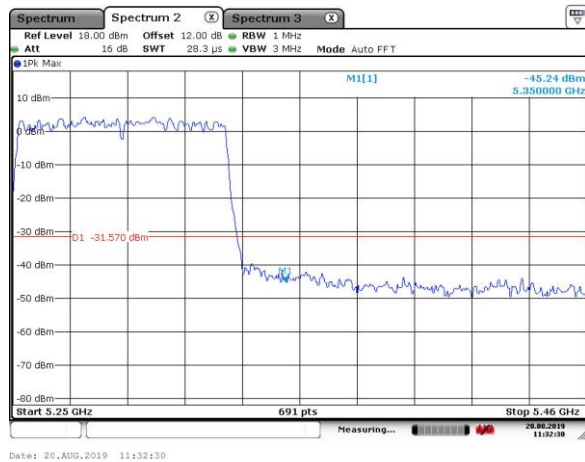
5530MHz with SISO



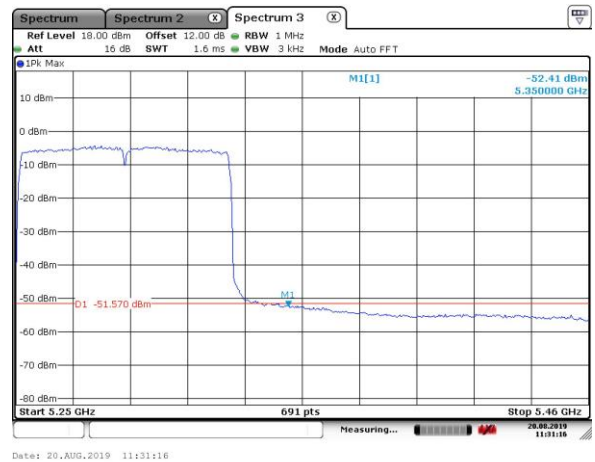
5530MHz with SISO



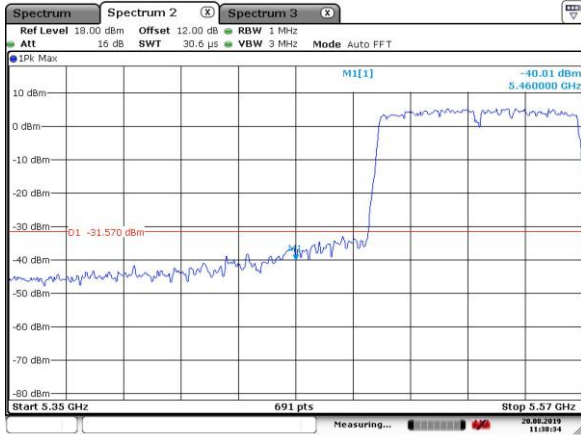
5290MHz with CDD



5290MHz with CDD

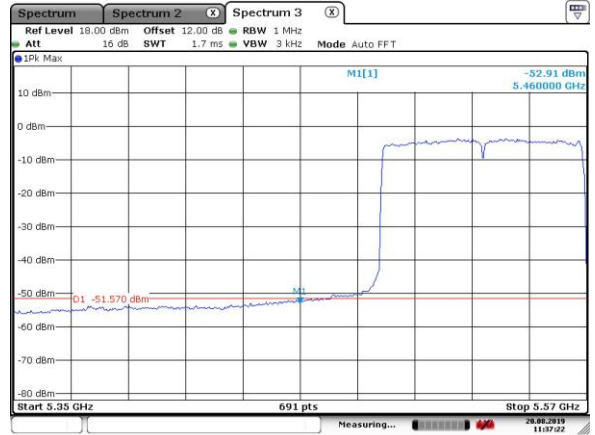


5530MHz with CDD



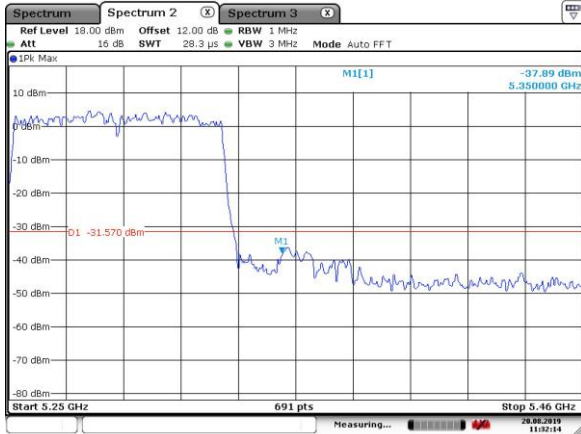
Date: 20.AUG.2019 11:38:34

5530MHz with CDD



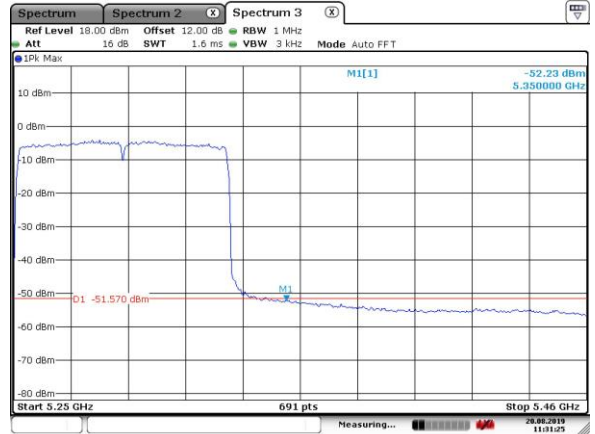
Date: 20.AUG.2019 11:37:22

5290MHz with Beamforming



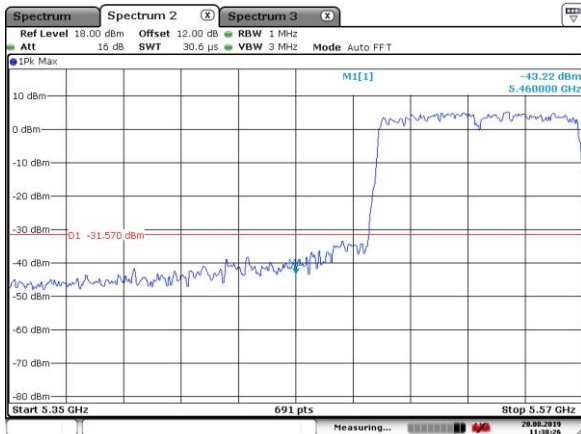
Date: 20.AUG.2019 11:32:14

5290MHz with Beamforming



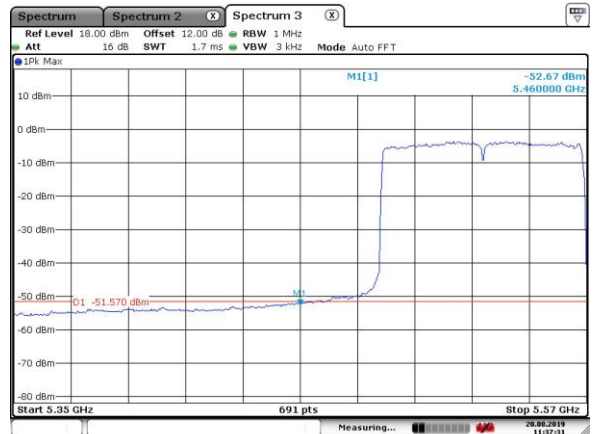
Date: 20.AUG.2019 11:31:25

5530MHz with Beamforming



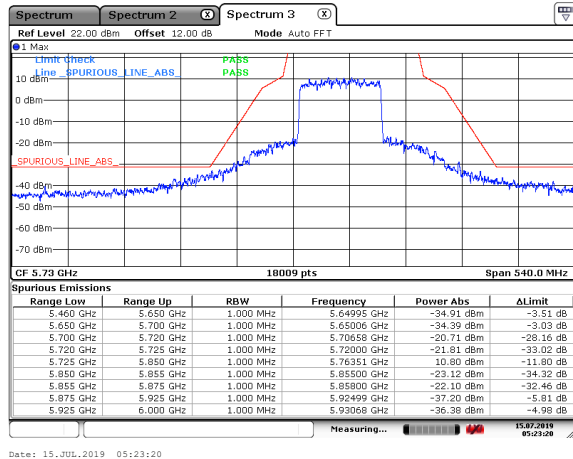
Date: 20.AUG.2019 11:38:26

5530MHz with Beamforming

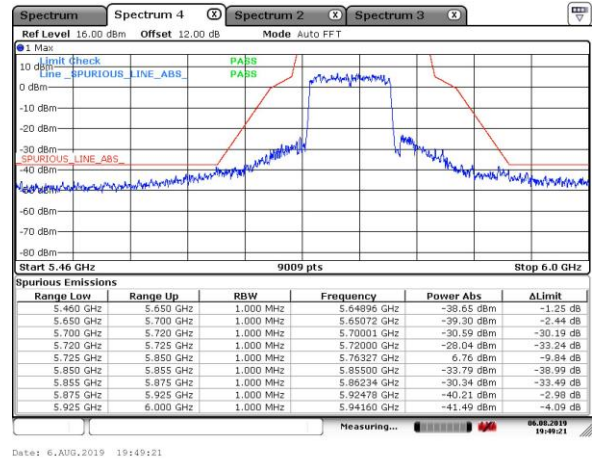


Date: 20.AUG.2019 11:37:31

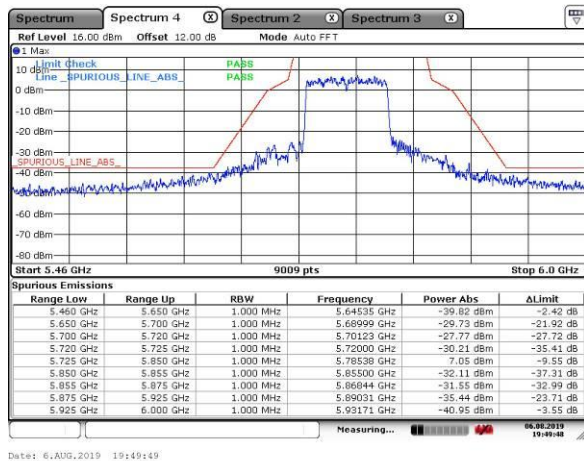
5775MHz with SISO



5775MHz with CDD



5775MHz with Beamforming



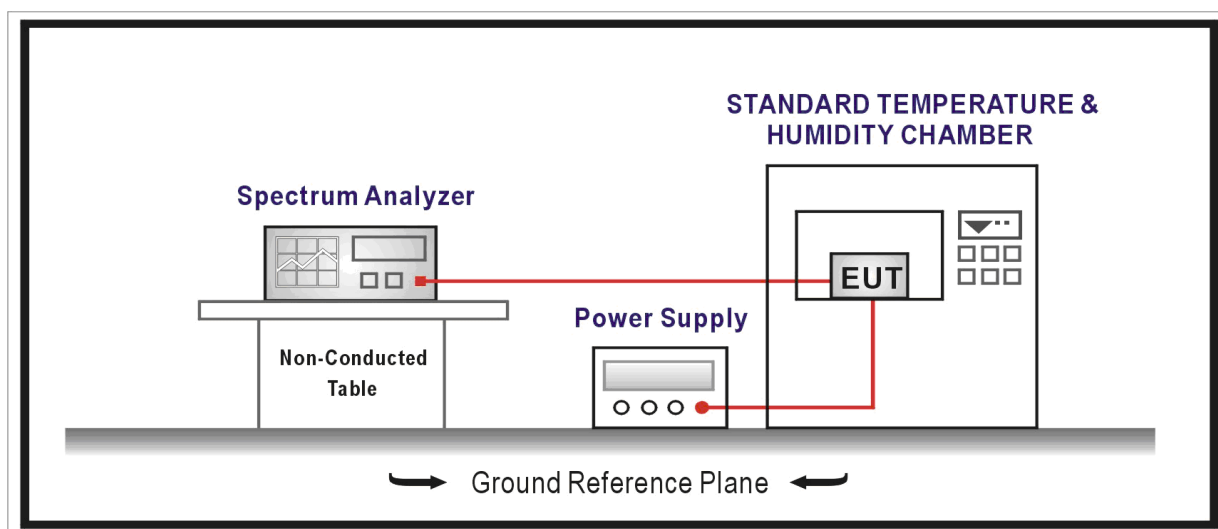
10. Frequency Stability

10.1. Test Equipment

Frequency Stability / TR-7					
Instrument	Manufacturer	Type No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2021.07.11	2022.07.10
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2021.08.12	2022.08.11
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2021.07.11	2022.07.10
AC Power Supply	IDRC	CF-500TP	979422	N/A	N/A
DC Power Supply	IDRC	CD-035-020PR	977272	N/A	N/A
High and low temperature damp and heat test box	Gaoyu	ASTD-TH-P-100 OR	N/A	2021.09.17	2022.09.16
Temperature/Humidity Meter	zhichen	ZC1-2	TR7-TH	2021.08.04	2022.08.03

Note: All equipment are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

10.2. Test Setup



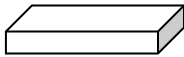
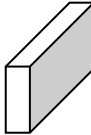
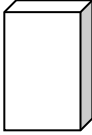
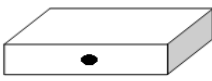
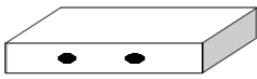


10.3. Limit

Frequency Stability Limit	
UNII Devices	
<input checked="" type="checkbox"/>	In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.
IEEE Std. 802.11n-2009	
<input checked="" type="checkbox"/>	The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band and ± 25 ppm maximum for the 2.4 GHz band.

10.4. Test Procedure

Frequency Stability Test Method				
	References Rule		Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10		6.8	Frequency stability tests
	<input checked="" type="checkbox"/>	ANSI C63.10	6.8.1	Frequency stability with respect to ambient temperature
	<input checked="" type="checkbox"/>	ANSI C63.10	6.8.2	Frequency stability when varying supply voltage

10.5. EUT test Axis definition

Item	Frequency Stability				
Device Category	<input checked="" type="checkbox"/>	Indoor use			
	<input type="checkbox"/>	Outdoor use			
	<input type="checkbox"/>	Fix position use			
	<input type="checkbox"/>	Client use			
Test mode	Mode 1-9				
Test method	<input type="checkbox"/>	Radiated			
		X Axis	Y Axis	Z Axis	
					
		Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	Worst Axis <input type="checkbox"/>	
	<input checked="" type="checkbox"/>	Conducted			
	<input checked="" type="checkbox"/>	Chain 1			
					
	<input checked="" type="checkbox"/>	Chain 1	Chain 2		
					
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3	
					
	<input type="checkbox"/>	Chain 1	Chain 2	Chain 3	Chain 4
					

10.6. Test Result

Product Name	: Wireless Access Point	Power	: AC 120V/60Hz
Test Mode	: Carrier Wave	Test Site	: TR-7
Test Date	: 2019.08.05	Test Engineer	: Simon

Frequency Stability under Temperature at 0min

Temperature Interval (°C)	Test Frequency (MHz)	Deviation (Hz)	ppm	Limit
-30	5220.000	102	0.020	±20
-20	5220.000	-95	-0.018	±20
-10	5220.000	-79	-0.015	±20
0	5220.000	124	0.024	±20
10	5220.000	139	0.027	±20
20	5220.000	164	0.031	±20
30	5220.000	113	0.022	±20
40	5220.000	-95	-0.018	±20
50	5220.000	-94	-0.018	±20

Frequency Stability under Temperature at 2min

Temperature Interval (°C)	Test Frequency (MHz)	Deviation (Hz)	ppm	Limit
-30	5220.000	-119	-0.023	±20
-20	5220.000	-146	-0.028	±20
-10	5220.000	-86	-0.016	±20
0	5220.000	81	0.016	±20
10	5220.000	146	0.028	±20
20	5220.000	-104	-0.020	±20
30	5220.000	-160	-0.031	±20
40	5220.000	97	0.019	±20
50	5220.000	-143	-0.027	±20

Frequency Stability under Temperature at 5min

Temperature Interval (°C)	Test Frequency (MHz)	Deviation (Hz)	ppm	Limit
-30	5220.000	-129	-0.025	±20
-20	5220.000	-122	-0.023	±20
-10	5220.000	107	0.020	±20
0	5220.000	-88	-0.017	±20
10	5220.000	113	0.022	±20
20	5220.000	179	0.034	±20
30	5220.000	161	0.031	±20
40	5220.000	-95	-0.018	±20
50	5220.000	-91	-0.017	±20

Frequency Stability under Temperature at 10min

Temperature Interval (°C)	Test Frequency (MHz)	Deviation (Hz)	ppm	Limit
-30	5220.000	-117	-0.022	±20
-20	5220.000	188	0.036	±20
-10	5220.000	145	0.028	±20
0	5220.000	-204	-0.039	±20
10	5220.000	-112	-0.021	±20
20	5220.000	-110	-0.021	±20
30	5220.000	-106	-0.020	±20
40	5220.000	97	0.019	±20
50	5220.000	-86	-0.016	±20

Frequency Stability under Voltage

AC Voltage (V)	Test Frequency (MHz)	Deviation (Hz)	ppm	Limit
102	5220.000	-143	-0.027	±20
120	5220.000	171	0.033	±20
138	5220.000	134	0.026	±20

11. Antenna Requirement

11.1. Limit

Antenna Requirement Limit	
<p>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.</p>	

11.2. Antenna Connector Construction

Antenna Connector Construction	
<input checked="" type="checkbox"/>	The use of a permanently attached antenna
<input type="checkbox"/>	The antenna use of a unique coupling to the intentional radiator
<input type="checkbox"/>	The use of a nonstandard antenna jack or electrical connector
Please refer to the attached document "Internal Photograph" to show the antenna connector.	

_____ The End _____