

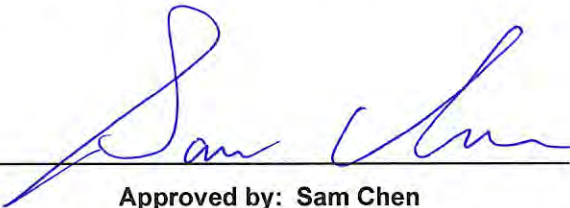


RADIO TEST REPORT

FCC ID : UDX-600200010
Equipment : Cisco Wireless 9178I Series Wi-Fi 7 Access Point
Brand Name : CISCO
Model Name : CW9178I
Applicant : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134 USA
Manufacturer : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134 USA
Standard : 47 CFR FCC Part 15.407

The product was received on Sep. 15, 2025, and testing was started from Sep. 15, 2025 and completed on Sep. 17, 2025. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2020 and shown compliance with the applicable technical standards.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.


Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory
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Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Information.....	5
1.2 Applicable Standards	19
1.3 Testing Location Information	19
1.4 Measurement Uncertainty	19
2 Test Configuration of EUT.....	20
2.1 The Worst Case Measurement Configuration	20
2.2 EUT Operation during Test	21
2.3 Accessories	21
2.4 Support Equipment.....	21
3 Transmitter Test Result	22
3.1 Contention Based Protocol.....	22
4 Test Equipment and Calibration Data	23
Appendix A. Test Results of Contention-Based Protocol	
Photographs of EUT v01	



TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A12_5 Ver1.1



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.3	15.203	Antenna Requirement	PASS	-
3.1	15.407(d)	Contention-Based Protocol	PASS	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sam Chen

Report Producer: Wendy Pan



1 General Description

1.1 Information

1.1.1 RF General Information

For Indoor Access Point and Subordinate:

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5925-7125	ax (HEW20), be (EHT20)	5955-7115	1-233 [59]
5925-7125	ax (HEW40), be (EHT40)	5965-7085	3-227 [29]
5925-7125	ax (HEW80), be (EHT80)	5985-7025	7-215 [14]
5925-7125	ax (HEW160), be (EHT160)	6025-6985	15-207 [7]
5925-7125	be (EHT320)	6105-6905	31-191 [6]

<Radio 4>

Band	Mode	BWch (MHz)	Nant
5.925-7.125GHz	802.11ax HEW20	20	1, 2, 4TX/4RX
5.925-7.125GHz	802.11ax HEW20-BF	20	2, 4TX/4RX
5.925-7.125GHz	802.11be EHT20	20	1, 2, 4TX/4RX
5.925-7.125GHz	802.11be EHT20-BF	20	2, 4TX/4RX
5.925-7.125GHz	802.11ax HEW40	40	1, 2, 4TX/4RX
5.925-7.125GHz	802.11ax HEW40-BF	40	2, 4TX/4RX
5.925-7.125GHz	802.11be EHT40	40	1, 2, 4TX/4RX
5.925-7.125GHz	802.11be EHT40-BF	40	2, 4TX/4RX
5.925-7.125GHz	802.11ax HEW80	80	1, 2, 4TX/4RX
5.925-7.125GHz	802.11ax HEW80-BF	80	2, 4TX/4RX
5.925-7.125GHz	802.11be EHT80	80	1, 2, 4TX/4RX
5.925-7.125GHz	802.11be EHT80-BF	80	2, 4TX/4RX
5.925-7.125GHz	802.11ax HEW160	160	1, 2, 4TX/4RX
5.925-7.125GHz	802.11ax HEW160-BF	160	2, 4TX/4RX
5.925-7.125GHz	802.11be EHT160	160	1, 2, 4TX/4RX
5.925-7.125GHz	802.11be EHT160-BF	160	2, 4TX/4RX
5.925-7.125GHz	802.11be EHT320	320	1, 2, 4TX/4RX
5.925-7.125GHz	802.11be EHT320-BF	320	2, 4TX/4RX

<Scanning Radio 5>

Band	Mode	BWch (MHz)	Nant
5.925-7.125GHz	802.11ax HEW20	20	1TX/2RX

**For Standard Power Access Point:**

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5925-6425	ax (HEW20), be (EHT20)	5955-6415	1-93 [24]
6525-6875		6535-6855	117-181 [17]
5925-6425	ax (HEW40), be (EHT40)	5965-6405	3-91 [12]
6525-6875		6565-6845	123-179 [8]
5925-6425	ax (HEW80), be (EHT80)	5985-6385	7-87 [6]
6525-6875		6625-6785	135-167 [3]
5925-6425	ax (HEW160), be (EHT160)	6025-6345	15-79 [3]
6525-6875		6665	143 [1]
5925-6425	be (EHT320)	6105-6265	31-63 [2]

<Radio 4>

Band	Mode	BWch (MHz)	Nant
5.925-6.425GHz	802.11ax HEW20	20	1, 2, 4TX/4RX
5.925-6.425GHz	802.11ax HEW20-BF	20	2, 4TX/4RX
5.925-6.425GHz	802.11be EHT20	20	1, 2, 4TX/4RX
5.925-6.425GHz	802.11be EHT20-BF	20	2, 4TX/4RX
5.925-6.425GHz	802.11ax HEW40	40	1, 2, 4TX/4RX
5.925-6.425GHz	802.11ax HEW40-BF	40	2, 4TX/4RX
5.925-6.425GHz	802.11be EHT40	40	1, 2, 4TX/4RX
5.925-6.425GHz	802.11be EHT40-BF	40	2, 4TX/4RX
5.925-6.425GHz	802.11ax HEW80	80	1, 2, 4TX/4RX
5.925-6.425GHz	802.11ax HEW80-BF	80	2, 4TX/4RX
5.925-6.425GHz	802.11be EHT80	80	1, 2, 4TX/4RX
5.925-6.425GHz	802.11be EHT80-BF	80	2, 4TX/4RX
5.925-6.425GHz	802.11ax HEW160	160	1, 2, 4TX/4RX
5.925-6.425GHz	802.11ax HEW160-BF	160	2, 4TX/4RX
5.925-6.425GHz	802.11be EHT160	160	1, 2, 4TX/4RX
5.925-6.425GHz	802.11be EHT160-BF	160	2, 4TX/4RX
5.925-6.425GHz	802.11be EHT320	320	1, 2, 4TX/4RX
5.925-6.425GHz	802.11be EHT320-BF	320	2, 4TX/4RX
6.525-6.875GHz	802.11ax HEW20	20	1, 2, 4TX/4RX
6.525-6.875GHz	802.11ax HEW20-BF	20	2, 4TX/4RX
6.525-6.875GHz	802.11be EHT20	20	1, 2, 4TX/4RX
6.525-6.875GHz	802.11be EHT20-BF	20	2, 4TX/4RX
6.525-6.875GHz	802.11ax HEW40	40	1, 2, 4TX/4RX
6.525-6.875GHz	802.11ax HEW40-BF	40	2, 4TX/4RX
6.525-6.875GHz	802.11be EHT40	40	1, 2, 4TX/4RX



Band	Mode	BWch (MHz)	Nant
6.525-6.875GHz	802.11be EHT40-BF	40	2, 4TX/4RX
6.525-6.875GHz	802.11ax HEW80	80	1, 2, 4TX/4RX
6.525-6.875GHz	802.11ax HEW80-BF	80	2, 4TX/4RX
6.525-6.875GHz	802.11be EHT80	80	1, 2, 4TX/4RX
6.525-6.875GHz	802.11be EHT80-BF	80	2, 4TX/4RX
6.525-6.875GHz	802.11ax HEW160	160	1, 2, 4TX/4RX
6.525-6.875GHz	802.11ax HEW160-BF	160	2, 4TX/4RX
6.525-6.875GHz	802.11be EHT160	160	1, 2, 4TX/4RX
6.525-6.875GHz	802.11be EHT160-BF	160	2, 4TX/4RX
6.525-6.875GHz	802.11be EHT320	320	1, 2, 4TX/4RX
6.525-6.875GHz	802.11be EHT320-BF	320	2, 4TX/4RX

<Scanning Radio 5>

Band	Mode	BWch (MHz)	Nant
5.925-6.425GHz	802.11ax HEW20	20	1TX/2RX
6.525-6.875GHz	802.11ax HEW20	20	1TX/2RX



MRU (static preamble puncturing)

For Multi_RU:

RU-tone	Bandwidth(MHz)	6GHz Test CH	
		UNII-5	UNII-8
		CH7	CH215
242+242(MCS0)	242 242	V	V
242+242(MCS4)	242 242	V	V
484+242(MCS0)	484 242	V	V
484+242(MCS4)	484 242	V	V

RU-tone	Bandwidth(MHz)	6GHz Test CH	
		UNII-5	UNII-8
		CH15	CH207
996+484(MCS0)	484 996	V	V
996+484(MCS4)	484 996	V	V
996+484+3x242(MCS0)	484 242 242 242	V	V
996+484+3x242(MCS4)	484 242 242 242	V	V
484+484(MCS0)	484 484	V	V
484+484(MCS4)	484 484	V	V

RU-tone	Bandwidth(MHz)	6GHz Test CH	
		UNII-5	UNII-8
		CH15	CH191
3X996(MCS0)	996 996 996	V	—
3X996(MCS4)	996 996 996	V	—
2X996+484(MCS0)	996 484 996	—	V
2X996+484(MCS4)	996 484 996	—	V
2X996+484(MCS0)	996 484 996	V	V
2X996+484(MCS4)	996 484 996	V	V
2X996(MCS0)	996 996	V	V
2X996(MCS4)	996 996	V	V

For Puncturing:

RU-tone	MRU (static preamble puncturing)	Bandwidth(MHz)	6GHz Test CH	
			UNII-5	UNII-8
		80	CH7	CH215
484+242	1	242 484	--	V
	2	242 484	V	V
	3	484 242	V	V
	4	484 242	V	--

RU-tone	MRU (static preamble puncturing)	Bandwidth(MHz)	6GHz Test CH	
			UNII-5	UNII-8
		160	CH15	CH207
996+484	1	484 996	--	V
	2	484 996	V	V
	3	996 484	V	V
	4	996 484	V	--
996+484+242	1	242 484 996	--	V
	2	242 484 996	V	V
	3	484 242 996	V	V
	4	484 242 996	V	V
	5	996 242 484	V	V
	6	996 242 484	V	V
	7	996 484 242	V	V
	8	996 484 242	V	--



RU-tone	MRU (static preamble puncturing)	Bandwidth[MHz]				6GHz Test CH	
		320				UNII-5 CH31	UNII-8 CH191
2x996+484	1		484	996	996	—	—
	2	484	996	996	996	V	—
	3	996	484	996	996	V	—
	4	996	996	484	996	V	—
	5	996	996	996	484	V	—
	6	996	996	484	996	V	—
	7		484	996	996	—	V
	8		484	996	996	—	V
	9		996	484	996	—	V
	10		996	996	484	—	V
	11		996	996	996	—	V
	12		996	996	484	—	—
3x996	1		996	996	996	—	V
	2		996	996	996	V	V
	3		996	996	996	V	V
	4		996	996	996	V	—
3x996+484	1		484	996	996	—	V
	2	484	996	996	996	V	V
	3		996	484	996	V	V
	4		996	996	484	V	V
	5		996	996	996	V	V
	6		996	996	484	V	V
	7		996	996	996	V	V
	8		996	996	484	V	—

Note:

- ♦ HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ EHT20, EHT40, EHT80, EHT160 and EHT320 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

**1.1.2 Worst case of MRU(static preamble puncturing) evaluation procedure**

1. Complete test Full RU BE & PSD
2. Measure the PSD of each MRU(static preamble puncturing) by conducted method and it is less than the Full RU conducted PSD.
3. Measure the Band edge emission of each MRU(static preamble puncturing) by conducted method and find out the MRU(static preamble puncturing) worst case configuration.
4. Follow step 3 to find the worst MRU(static preamble puncturing) configuration and perform radiated PSD testing.
5. Follow step 3 to find the worst MRU(static preamble puncturing) configuration and perform radiated unwanted emission testing.
6. Confirm whether the worst MRU(static preamble puncturing) configuration setting in steps 2 and step 4 is the same. If there is a channel where the setting drops due to the test in step 4, the PSD of MRU(static preamble puncturing) needs to be retested.
7. Use worst configuration of MRU(static preamble puncturing) and perform MASK measurements by conducted method .

**1.1.3 Antenna Information**

Ant.	Brand Name	Model Name	Antenna Type	Connector	Support Function	Gain (dBi)
1	WNC	95XEAK15.G98	PIFA	I-PEX	Radio 1 2.4GHz and Radio 2 5GHz UNII 1~2A	Note2
2	WNC	95XEAK15.G96	PCB	I-PEX	Radio 1 2.4GHz and Radio 2 5GHz UNII 1~2A	
3	WNC	95XEAK15.G97	PCB	I-PEX	Radio 1 2.4GHz and Radio 2 5GHz UNII 1~2A	
4	WNC	95XEAK15.G99	PIFA	I-PEX	Radio 1 2.4GHz and Radio 2 5GHz UNII 1~2A	
5	WNC	95XEAK15.GA3	PIFA	I-PEX	Radio 3 5GHz UNII 1~3	
6	WNC	95XEAK15.GA1	PCB	I-PEX	Radio 3 5GHz UNII 1~3	
7	WNC	95XEAK15.GA2	PCB	I-PEX	Radio 3 5GHz UNII 1~3	
8	WNC	95XEAK15.GA4	PIFA	I-PEX	Radio 3 5GHz UNII 1~3	
9	WNC	95XEAK15.GA7	PIFA	I-PEX	Radio 4 6GHz UNII 5~8	
10	WNC	95XEAK15.GA5	PCB	I-PEX	Radio 4 6GHz UNII 5~8	
11	WNC	95XEAK15.GA6	PCB	I-PEX	Radio 4 6GHz UNII 5~8	
12	WNC	95XEAK15.GA8	PIFA	I-PEX	Radio 4 6GHz UNII 5~8	
13	WNC	95XEAK15.GAB	PIFA	I-PEX	Radio 5 2.4GHz, 5GHz UNII 1~3 and 6GHz UNII 5~8	
14	WNC	95XEAK15.GAC	PIFA	I-PEX	Radio 5 2.4GHz, 5GHz UNII 1~3 and 6GHz UNII 5~8	
15	WNC	95XEAK15.GA9	PIFA	I-PEX	Radio 6 Bluetooth and Zigbee	
16	WNC	95XEAK15.GBM	PIFA	I-PEX	Radio 7 UWB	
17	WNC	95XEAK15.GBD	PCB	I-PEX	Radio 7 UWB	
18	WNC	95XEAK15.GAA	PIFA	I-PEX	Radio 8 GPS	



Ant.	Port															
	R1: WLAN 2.4GHz			R2: WLAN 5GHz UNII 1~2A			R3: WLAN 5GHz UNII 1~3			R4: WLAN 6GHz UNII 5~8			R5: WLAN 2.4GHz, WLAN 5GHz UNII 1~3, WLAN 6GHz UNII 5~8	R6: Bluetooth /Zigbee	R7: UWB	R8: GPS
	1TX	2TX	4TX	1TX	2TX	4TX	1TX	2TX	4TX	1TX	2TX	4TX	1TX	1TX	2TX	1RX
1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-
2	-	-	4	-	-	4	-	-	-	-	-	-	-	-	-	-
3	-	2	2	-	2	2	-	-	-	-	-	-	-	-	-	-
4	-	-	3	-	-	3	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-
6	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-
11	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

Note 1: R means Radio.



Note 2:

Ant.	Antenna Gain (dBi)								
	R1: WLAN 2.4GHz			R2: WLAN 5GHz UNII 1~2A					
				5.2G			5.3G		
1	2.85			3.51			3.24		
2	3.82			3.53			2.9		
3	3.85			3.93			3.85		
4	2.41			4.97			3.73		
Ant.	R3: WLAN 5GHz UNII 1~3								
	5.2G			5.3G			5.6G		
5	3.19			2.63			3.54		3.53
6	4.83			3.89			4.03		3.86
7	4.73			3.86			4.54		3.48
8	3.64			2.51			3.91		3.45
Ant.	R4: WLAN 6GHz UNII 5~8								
	6.175G			6.475G			6.695G		
9	4.69			3.74			4.57		5.38
10	4.68			5.42			5.56		4.3
11	4.77			4.82			4.67		4.42
12	4.7			2.33			3.23		3.98
Ant.	R5: WLAN 2.4GHz/5GHz UNII 1~3/WLAN 6GHz UNII 5~8								
	2.45G	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G
13	2.17	2.74	3.39	4.78	3.51	3.96	4.67	4.31	4.8
14	1.83	5.46	4.17	6.68	6.06	5.1	4.49	4.37	4.7
Ant.	R6: Bluetooth/Zigbee								
	2.91								
Ant.	R7: UWB								
	6.3								
16	6.5								
17									
Ant.	R8: GPS								
	1.16GHz~1.19GHz					1.56GHz~1.59GHz			
18	2.3					4.9			

Note 3:

Item	Directional Gain (dBi)								
	R1: WLAN 2.4GHz			R2: WLAN 5GHz UNII 1~2A					
				5.2G			5.3G		
2T1S	4.47			3.93			3.85		
2T2S	3.85			3.93			3.85		
4T1S	7.01			5.11			4.06		
4T2S	4.01			4.97			3.85		
4T4S	3.85			4.97			3.85		
Item	R3: WLAN 5GHz UNII 1~3 / R4: WLAN 6GHz UNII 5~8								
	5.2G	5.3G	5.6G	5.785G	6.175G	6.475G	6.695G	6.995G	
2T1S	4.83	3.89	4.03	3.86	4.97	4.82	4.67	4.42	
2T2S	4.83	3.89	4.03	3.86	4.77	4.82	4.67	4.42	
4T1S	6.96	5.69	6.34	5.28	6.14	6.09	6.02	5.46	
4T2S	4.83	3.89	4.54	3.86	4.77	5.42	5.56	5.38	
4T4S	4.83	3.89	4.54	3.86	4.77	5.42	5.56	5.38	

Note 4: The above information (excepting antenna gain of Radio 1~6) was declared by manufacturer.

Note 5: Radio 1~5: Maximum Directional Gain following KDB662911 D03.

For WLAN 2.4GHz function (Radio 1):

For IEEE 802.11b/g/n/VHT/ax/be mode (1TX,2TX,4TX/4RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Only Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For 4TX

Port 1, Port 2, Port 3 and Port 4 can be use as transmitting antenna.



Port 1, Port 2, Port 3 and Port 4 could transmit simultaneously.

For 4RX

Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.

Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.

For WLAN 5GHz UNII 1~2A function (Radio 2):

For IEEE 802.11a/n/ac/ax/be mode (1TX,2TX,4TX/4RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Only Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For 4TX

Port 1, Port 2, Port 3 and Port 4 can be use as transmitting antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit simultaneously.

For 4RX

Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.

Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.

For WLAN 5GHz UNII 1~3 function (Radio 3):

For IEEE 802.11a/n/ac/ax/be mode (1TX,2TX,4TX/4RX)

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Only Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For 4TX

Port 1, Port 2, Port 3 and Port 4 can be use as transmitting antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit simultaneously.

For 4RX

Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.

Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.

For WLAN 6GHz UNII 5~8 function (Radio 4):

For IEEE 802.11ax/be mode (1TX,2TX,4TX/4RX)

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX

Only Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For 4TX

Port 1, Port 2, Port 3 and Port 4 can be use as transmitting antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit simultaneously.

For 4RX

Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.

Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.

For Scanning Radio 5:

For WLAN 2.4GHz function:

For IEEE 802.11b/g/n/VHT/ax mode (1TX/2RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2RX

Port 1 and Port 2 can be used as receiving antennas.

Port 1 and Port 2 could receive simultaneously.

For WLAN 5GHz UNII 1~3 function:



For IEEE 802.11a/n/ac/ax mode (1TX/2RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2RX

Port 1 and Port 2 can be used as receiving antennas.

Port 1 and Port 2 could receive simultaneously.

For WLAN 6GHz UNII 5~8:

For IEEE 802.11ax mode (1TX/2RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2RX

Port 1 and Port 2 can be used as receiving antennas.

Port 1 and Port 2 could receive simultaneously.

For Bluetooth/Zigbee function (Radio 6):

For Bluetooth/Zigbee mode (1TX/1RX):

Only Port 1 can be used as transmitting/receiving antenna.

For UWB function (Radio 7):

For UWB mode (2TX/4RX):

For 2TX

Port 1 and Port 2 can be use as transmitting antenna.

Port 1 and Port 2 could transmit simultaneously.

For 4RX

Port 1, Port 2, Port 3 and Port 4 can be used as receiving antennas.

Port 1, Port 2, Port 3 and Port 4 could receive simultaneously.

For GPS function (Radio 8):

For GPS mode (1RX):

Only Port 1 can be used as receiving antenna.

**1.1.4 EUT Operational Condition**

EUT Power Type	From PoE			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/VHT/ax/be in Radio1-2.4GHz, n/ac/ax/be in Radio2 and Radio 3-5GHz and ax/be in Radio4-6GHz.			
Device Type	☒	Indoor Access Point	☒	Subordinate
	☐	Indoor Client	☒	Standard Power Access Point
	☐	Dual Client	☐	Standard Client
	☐	Fixed Client	☐	Very Low Power
Condition of EUT	☒	Indoor	☐	Outdoor
Channel Puncturing Function	☒	Supported Static Puncturing for Radio 4		
	☐	Supported Dynamic Puncturing		
	☒	Unsupported for Scanning Radio 5		
	Note: The EUT doesn't support puncturing for CBP.			
Support RU	☒	Full RU for Radio 4 and Scanning Radio 5	☒	Partial RU for Radio 4
Software / Firmware Version for CBP	T-202508271653-G139dddef5fa9-Lade9353dde80-mattjmck-suitcase			

Note: The above information was declared by manufacturer.

1.1.5 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR411617AC

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Adding the Subordinate mode for Radio 4 for Meraki only through SW change.	Contention-Based Protocol
2. Updating test standard to "ANSI C63.10-2020" from "ANSI C63.10-2013".	
3. Enable Cisco Ultra-Reliable Wireless Backhaul (CURWB) feature which supports P2MP Master in 5GHz UNII 1~3 and 6GHz UNII 5~8 (6ID only), and P2MP Slave with radar detection in 5GHz UNII 1~3.	After evaluating, it doesn't affect the test results.

1.1.6 Table for Multiple Listing

Equipment Name	Model	Software	Frequencies supported by 320MHz
Cisco Wireless 9178I Series Wi-Fi 7 Access Point	CW9178I	Cisco	6105, 6265, 6425, 6745 MHz
		Meraki	6105, 6265, 6425, 6585, 6745, 6905 MHz

Note: The above information was declared by manufacturer.

1.1.7 Table for EUT Support Function

Function	Software	6GHz Mode	Supports Band
AP	Cisco Meraki	Indoor Access Point, Standard Power Access Point	2.4GHz, 5GHz UNII 1~3, 6GHz UNII 5~8, Bluetooth, Zigbee, UWB and GPS
Mesh	Meraki	Subordinate	6GHz UNII 5~8
CURWB P2MP Master	Cisco	Indoor Access Point	5GHz UNII 1~3, 6GHz UNII 5~8
CURWB P2MP Slave with radar detection	Cisco	N/A	5GHz UNII 1~3

Note: The above information was declared by manufacturer.

1.1.8 Table for Radio function

Radio \ Function	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz		Bluetooth	Zigbee	UWB	GPS
			Indoor Access Point & Standard Power Access Point	Subordinate				
1	✓	-	-	-	-	-	-	-
2	-	✓ (UNII 1~2A)	-	-	-	-	-	-
3	-	✓ (UNII 2C~3/UNII 1~3)	-	-	-	-	-	-
4	-	-	✓	✓ (Meraki SW)	-	-	-	-
5 (Scanning Radio)	✓	✓ (UNII 1~3)	✓	-	-	-	-	-
6	-	-	-	-	✓	✓	-	-
7	-	-	-	-	-	-	✓	-
8	-	-	-	-	-	-	-	✓

Note1: The above information was declared by manufacturer.

Note2: For WLAN 2.4GHz: The Radio 1 and Radio 5 can't operate at the same frequency.

For WLAN 5GHz: The Radio 2, 3, 5 can't operate at the same frequency.

For WLAN 6GHz: The Radio 4 and Radio 5 can't operate at the same frequency simultaneously.

1.1.9 Table for EUT Operation Function

Mode	Operation Function
1	R1: 2.4GHz+R2: 5GHz Low Band+R3: 5GHz Full Band/High band+R4: 6GHz+R5: 2.4GHz+R6: Bluetooth+R7: UWB
2	R1: 2.4GHz+R2: 5GHz Low Band+R3: 5GHz Full Band/High band+R4: 6GHz+R5: 5GHz+R6: Bluetooth+R7: UWB
3	R1: 2.4GHz+R2: 5GHz Low Band+R3: 5GHz Full Band/High band+R4: 6GHz+R5: 6GHz+R6: Bluetooth+R7: UWB
4	R1: 2.4GHz+R2: 5GHz Low Band+R3: 5GHz Full Band/High band+R4: 6GHz+R5: 2.4GHz+R6: Zigbee+R7: UWB
5	R1: 2.4GHz+R2: 5GHz Low Band+R3: 5GHz Full Band/High band+R4: 6GHz+R5: 5GHz+R6: Zigbee+R7: UWB
6	R1: 2.4GHz+R2: 5GHz Low Band+R3: 5GHz Full Band/High band+R4: 6GHz+R5: 6GHz+R6: Zigbee+R7: UWB

Note: The above information was declared by manufacturer.



1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15.407
- ♦ ANSI C63.10-2020
- ♦ FCC KDB 789033 v02r01

The following reference test guidance is not within the scope of accreditation of TAF.

- ♦ FCC KDB 987594 D02 v02r01
- ♦ FCC KDB 662911 D03 v01

1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)
(TAF: 3787)	TEL: 886-3-656-9065 FAX: 886-3-656-9085
	Test site Designation No. TW3787 with FCC.
	Conformity Assessment Body Identifier (CABID) TW3787 with ISCED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted (Contention-Based Protocol test)	DF02-CB	KJ Chang	23.3~24.7 / 59~60	Sep. 15, 2025~Sep. 17, 2025

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Output Power Measurement	1.3 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	Contention Based Protocol
Test Condition	Conducted measurement at transmit chains
1	Radio 4 for Meraki SW

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	Radio 1(2.4GHz) + Radio 2(5GHz Low Band) + Radio 3(5GHz Full Band/High Band) + Radio 4(6GHz Full Band) + Scanning Radio 5(2.4GHz) + Radio 6(Bluetooth) + Radio 7(UWB)
2	Radio 1(2.4GHz) + Radio 2(5GHz Low Band) + Radio 3(5GHz Full Band/High Band) + Radio 4(6GHz Full Band) + Scanning Radio 5(5GHz) + Radio 6(Bluetooth) + Radio 7(UWB)
3	Radio 1(2.4GHz) + Radio 2(5GHz Low Band) + Radio 3(5GHz Full Band/High Band) + Radio 4(6GHz Full Band) + Scanning Radio 5(6GHz) + Radio 6(Bluetooth) + Radio 7(UWB)
4	Radio 1(2.4GHz) + Radio 2(5GHz Low Band) + Radio 3(5GHz Full Band/High Band) + Radio 4(6GHz Full Band) + Scanning Radio 5(2.4GHz) + Radio 6(Zigbee) + Radio 7(UWB)
5	Radio 1(2.4GHz) + Radio 2(5GHz Low Band) + Radio 3(5GHz Full Band/High Band) + Radio 4(6GHz Full Band) + Scanning Radio 5(5GHz) + Radio 6(Zigbee) + Radio 7(UWB)
6	Radio 1(2.4GHz) + Radio 2(5GHz Low Band) + Radio 3(5GHz Full Band/High Band) + Radio 4(6GHz Full Band) + Scanning Radio 5(6GHz) + Radio 6(Zigbee) + Radio 7(UWB)
Refer to Sporton Test Report No.: FA411617-17 for Co-location RF Exposure Evaluation.	

Note1: The PoEs are for measurement only, would not be marketed.

The information of PoE as below:

Power	Brand Name	Model Name
PoE 1	Microsemi	PD-9001GR/AT/AC
PoE 2	PHIHONG	POE29U-1AT(PL)
PoE 3	DELTA	ADH-65AR B
PoE 4	PHIHONG	POEA33U-1ATE
PoE 5	PHIHONG	POE60U-1BT-X
PoE 6	PHIHONG	POE60U-BTA(X66M-R)
PoE 7	PHIHONG	POE60U-BTA(X664-R)
PoE 8	DELTA	ADH-65AR P



2.2 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.3 Accessories

Accessories
Bracket 1*1
Bracket 2*1

2.4 Support Equipment

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	WLAN AP	ASUS	RT-AX88U	MSQ-RTAXHP00
D	WLAN module	MediaTek Inc.	MT7927	RAS-MT7927
E	WLAN AP	CISCO	CW9178I	UDX-600200010
F	PoE 5	PHIHONG	POE60U-1BT-X	N/A

3 Transmitter Test Result

3.1 Contention Based Protocol

3.1.1 Contention Based Protocol Limit

EUT can detect an AWGN signal with 90% (or better) level of certainty.

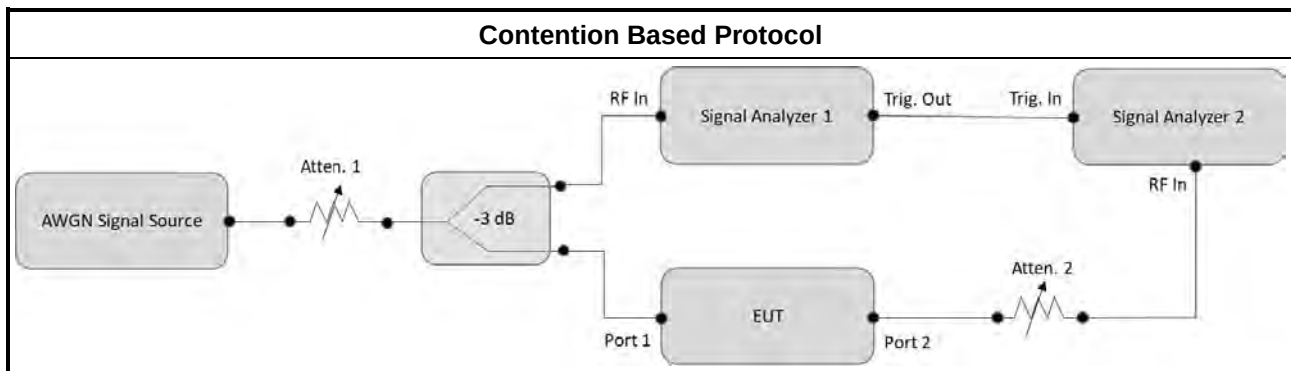
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method	
☐	For Contention Based Protocol shall be measured using following options below:
☒	Refer as FCC KDB 987594 D02, I) Contention Based Protocol.

3.1.4 Test Setup



3.1.5 Test Result of Contention Based Protocol

Refer as Appendix A



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101025	9kHz ~ 40GHz	Nov. 08, 2024	Nov. 07, 2025	Conduction (DF02-CB)
Signal generator	R&S	SMB100A	181239	1MHz-40GHz	Jan. 08, 2025	Jan. 07, 2026	Conduction (DF02-CB)
Vector Signal Generator	R&S	SMM100A	101894	100kHz ~ 7.5GHz	Oct. 28, 2024	Oct. 27, 2025	Conduction (DF02-CB)
RF Power Divider	STI	2 Way	DV-8G -05	1 ~ 8GHz	Oct. 02, 2024	Oct. 01, 2025	Conduction (DF02-CB)
RF Power Divider	STI	2 Way	DV-8G -06	1 ~ 8GHz	Oct. 02, 2024	Oct. 01, 2025	Conduction (DF02-CB)
RF Power Divider	STI	2 Way	DV-8G -07	1 ~ 8GHz	Oct. 02, 2024	Oct. 01, 2025	Conduction (DF02-CB)
RF Power Divider	STI	2 Way	DV-8G -08	1 ~ 8GHz	Oct. 02, 2024	Oct. 01, 2025	Conduction (DF02-CB)
RF Power Divider	Woken	4 Way	DF02-DV02	1 ~ 6GHz	Oct. 02, 2024	Oct. 01, 2025	Conduction (DF02-CB)
RF Power Divider	Woken	4 Way	DF02-DV04	1 ~ 6GHz	Oct. 02, 2024	Oct. 01, 2025	Conduction (DF02-CB)
RF Power Divider	Woken	4 Way	DF02-DV05	1 ~ 6GHz	Oct. 02, 2024	Oct. 01, 2025	Conduction (DF02-CB)
RF Cable-high	Woken	RG402	Cable-60	1~18 GHz	Oct. 01, 2024	Sep. 30, 2025	Conduction (DF02-CB)
RF Cable-high	Woken	RG402	Cable-61	1~18 GHz	Oct. 01, 2024	Sep. 30, 2025	Conduction (DF02-CB)
RF Cable-high	Woken	RG402	Cable-63	1~18 GHz	Oct. 01, 2024	Sep. 30, 2025	Conduction (DF02-CB)
100MS/s Digitizer	N.I	USB-5133	F65206	N/A	Mar. 26, 2025	Mar. 25, 2026	Conduction (DF02-CB)

Note: Calibration Interval of instruments listed above is one year.

Contention Based Protocol Threshold Level 802.11be EHT20										
UNII Band	Channel	Bandwidth (MHz)	Frequency (MHz)	Interference frequency (MHz)		EUT Status	Injected AWGN Power (dBm)	Ant Gain (dBi)	Detection Power(dBm)	Detection Limit (dBm)
5	53	20	6215	Center	6215	OFF	-70.67	2.33	-73.00	≤ -62
						Minimal	-71.67	2.33	-74.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
6	101	20	6455	Center	6455	OFF	-68.67	2.33	-71.00	≤ -62
						Minimal	-69.67	2.33	-72.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
7	149	20	6695	Center	6695	OFF	-69.67	2.33	-72.00	≤ -62
						Minimal	-70.67	2.33	-73.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
8	213	20	7015	Center	7015	OFF	-68.67	2.33	-71.00	≤ -62
						Minimal	-69.67	2.33	-72.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62

Contention Based Protocol Threshold Level 802.11be EHT320										
UNII Band	Channel	Bandwidth (MHz)	Frequency (MHz)	Interference frequency (MHz)		EUT Status	Injected AWGN Power (dBm)	Ant Gain (dBi)	Detection Power(dBm)	Detection Limit (dBm)
5	31	320	6105	Low edge	5950	OFF	-63.67	2.33	-66.00	≤ -62
						Minimal	-64.67	2.33	-67.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
				Center	6105	OFF	-64.67	2.33	-67.00	≤ -62
						Minimal	-65.67	2.33	-68.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
				High edge	6260	OFF	-68.67	2.33	-71.00	≤ -62
						Minimal	-69.67	2.33	-72.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
5/6/7	95	320	6425	Low edge	6270	OFF	-67.67	2.33	-70.00	≤ -62
						Minimal	-68.67	2.33	-71.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
				Center	6425	OFF	-60.67	2.33	-63.00	≤ -62
						Minimal	-61.67	2.33	-64.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
				High edge	6580	OFF	-68.67	2.33	-71.00	≤ -62
						Minimal	-69.67	2.33	-72.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
7/8	159	320	6745	Low edge	6590	OFF	-71.67	2.33	-74.00	≤ -62
						Minimal	-72.67	2.33	-75.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
				Center	6745	OFF	-63.67	2.33	-66.00	≤ -62
						Minimal	-64.67	2.33	-67.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
				High edge	6900	OFF	-64.67	2.33	-67.00	≤ -62
						Minimal	-65.67	2.33	-68.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
7/8	191	320	6905	Low edge	6750	OFF	-67.67	2.33	-70.00	≤ -62
						Minimal	-68.67	2.33	-71.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
				Center	6905	OFF	-63.67	2.33	-66.00	≤ -62
						Minimal	-64.67	2.33	-67.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62
				High edge	7060	OFF	-66.67	2.33	-69.00	≤ -62
						Minimal	-67.67	2.33	-70.00	≤ -62
						ON	-79.67	2.33	-82.00	≤ -62

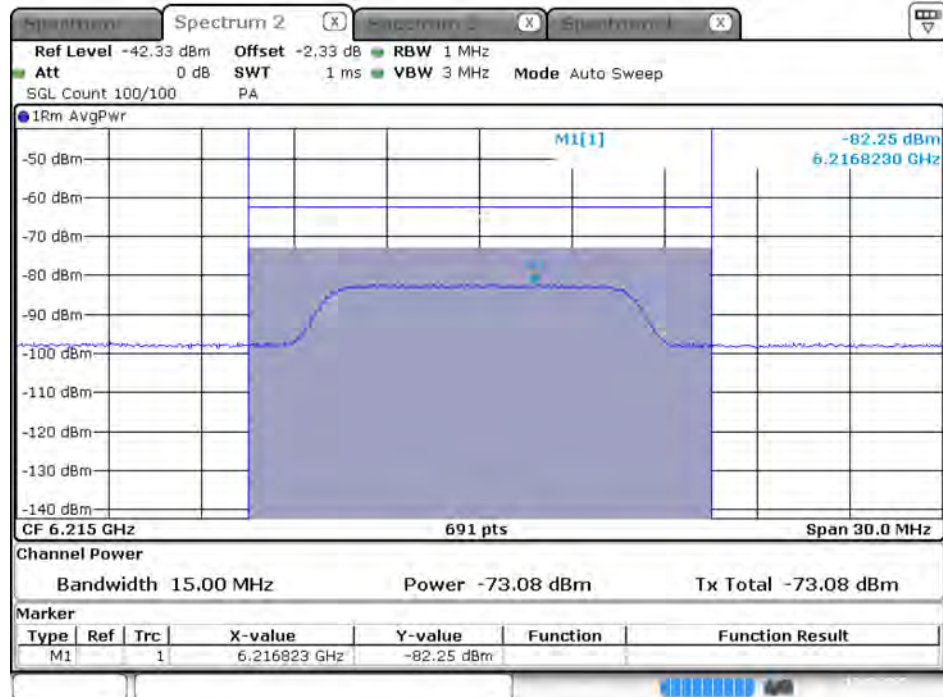
Contention Based protocol 802.11be EHT20											
UNII Band	Channel	Bandwidth (MHz)	Frequency (MHz)	Interference frequency (MHz)		AWGN Threshold Level (dBm)	EUT Status	Number of Detected (out of 10 times)	Detection Probability (%)	Limit (%)	Test Result
5	53	20	6215	Center	6215	-73.00	OFF	9	90	90	PASS
6	101	20	6455	Center	6455	-71.00	OFF	9	90	90	PASS
7	149	20	6695	Center	6695	-72.00	OFF	9	90	90	PASS
8	213	20	7015	Center	7015	-71.00	OFF	10	100	90	PASS

Contention Based protocol 802.11be EHT320											
UNII Band	Channel	Bandwidth (MHz)	Frequency (MHz)	Interference frequency (MHz)		AWGN Threshold Level (dBm)	EUT Status	Number of Detected (out of 10 times)	Detection Probability (%)	Limit (%)	Test Result
5	31	320	6105	Low edge	5950	-66.00	OFF	10	100	90	PASS
				Center	6105	-67.00	OFF	9	90	90	PASS
				High edge	6260	-71.00	OFF	10	100	90	PASS
5/6/7	95	320	6425	Low edge	6270	-70.00	OFF	10	100	90	PASS
				Center	6425	-63.00	OFF	9	90	90	PASS
				High edge	6580	-71.00	OFF	9	90	90	PASS
7/8	159	320	6745	Low edge	6590	-74.00	OFF	10	100	90	PASS
				Center	6745	-66.00	OFF	9	90	90	PASS
				High edge	6900	-67.00	OFF	10	100	90	PASS
7/8	191	320	6905	Low edge	6750	-70.00	OFF	9	90	90	PASS
				Center	6905	-66.00	OFF	10	100	90	PASS
				High edge	7060	-69.00	OFF	9	90	90	PASS

Incumbent signal (AWGN) Plot

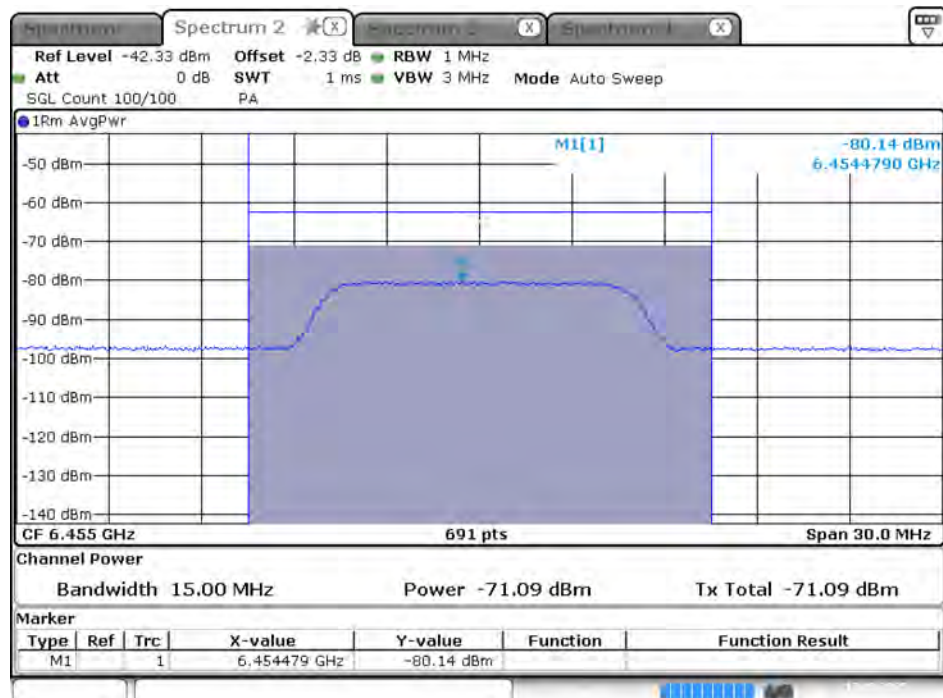
Bandwidth: 20MHz

Frequency (MHz): 6215 MHz



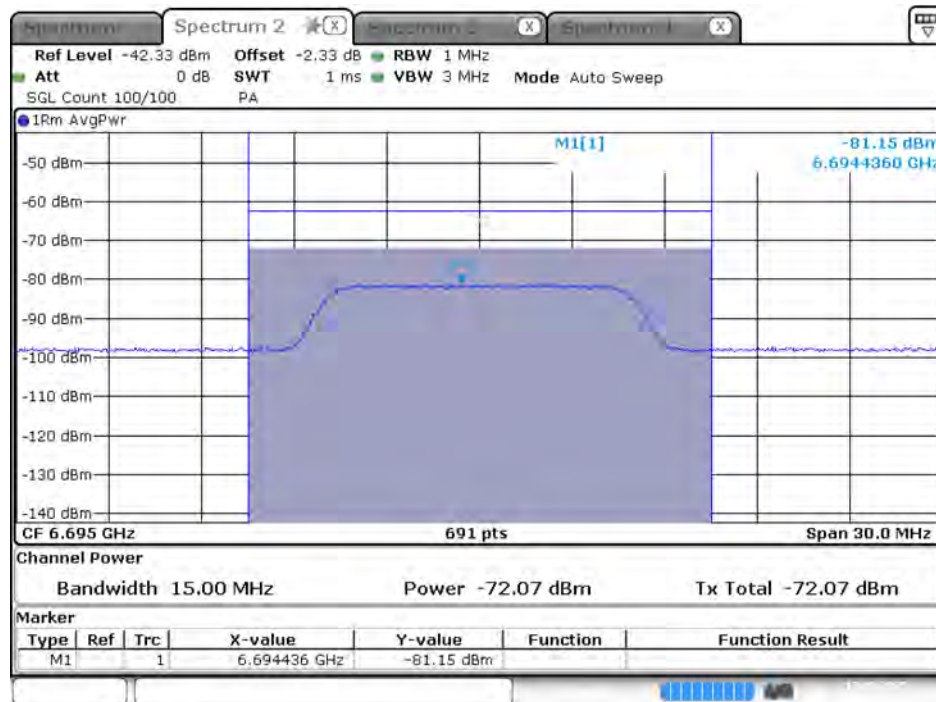
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Frequency (MHz): 6455 MHz



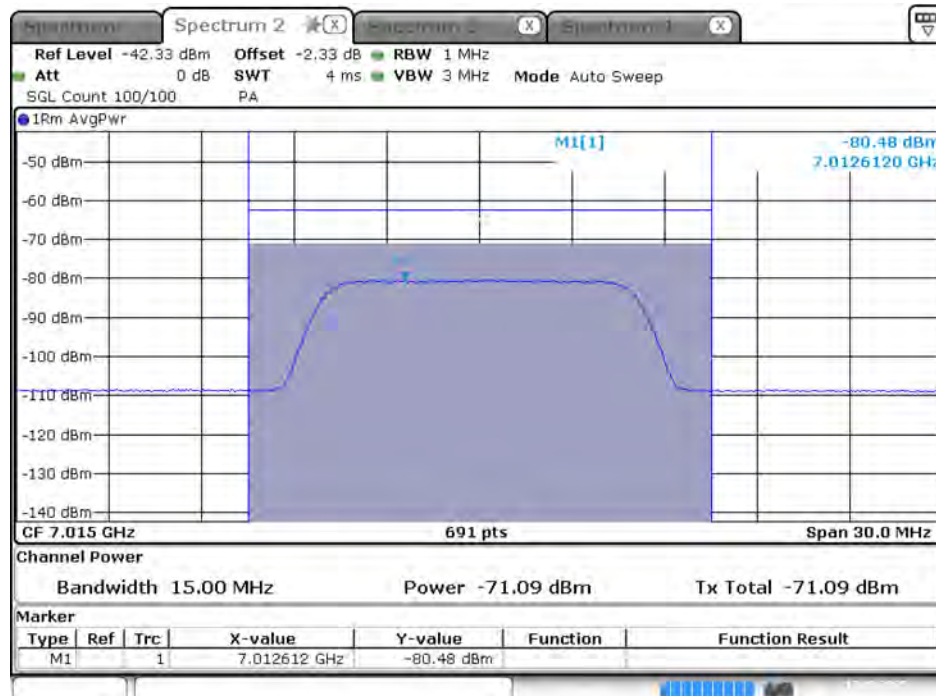
Date: 17,SEP.2025 10:36:27

Frequency (MHz): 6695 MHz



Date: 17,SEP.2025 10:36:52

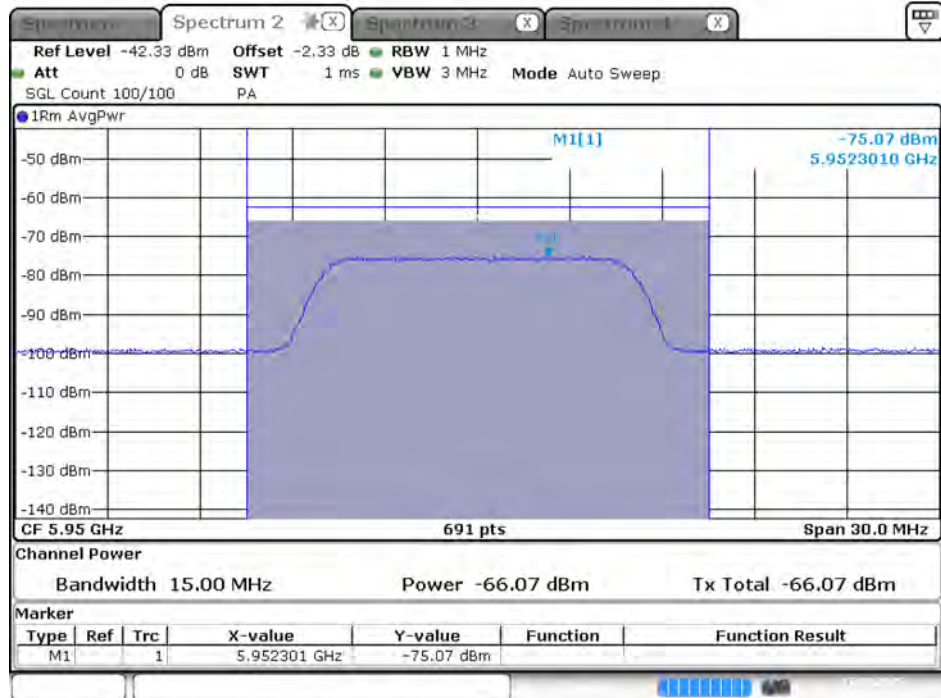
Frequency (MHz): 7015 MHz



Date: 17,SEP.2025 10:37:39

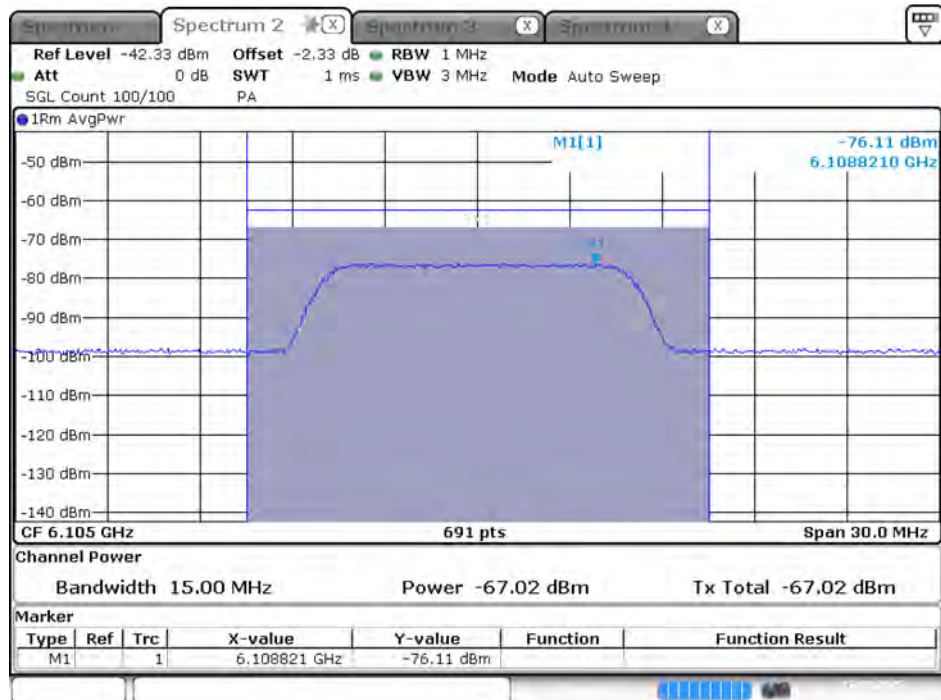
Bandwidth: 320MHz

Frequency (MHz): 5950 MHz



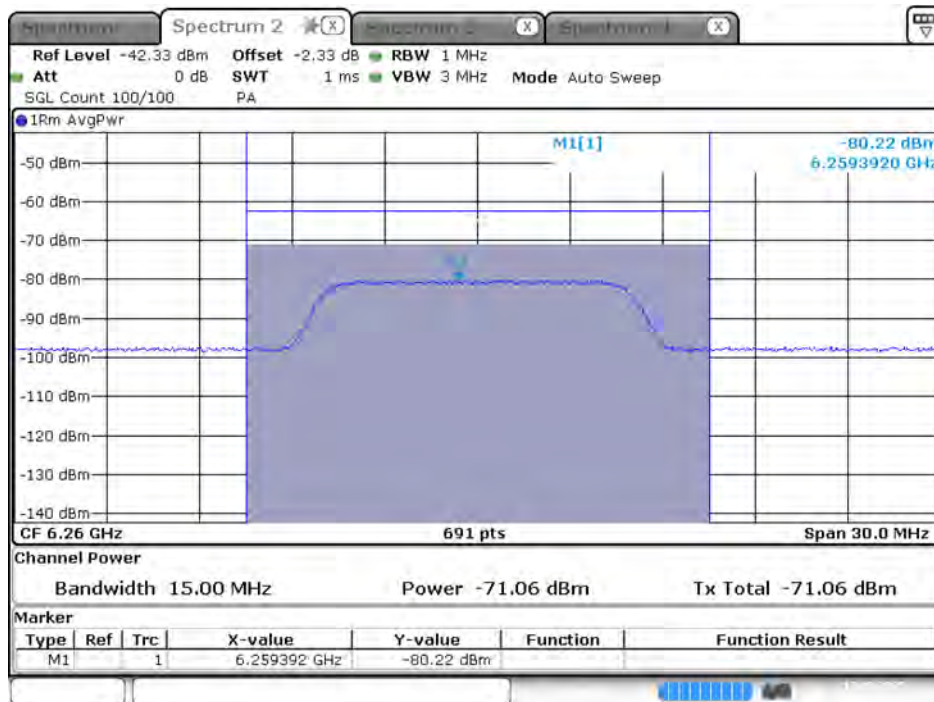
Date: 17.SEP.2025 10:38:36

Frequency (MHz): 6105 MHz



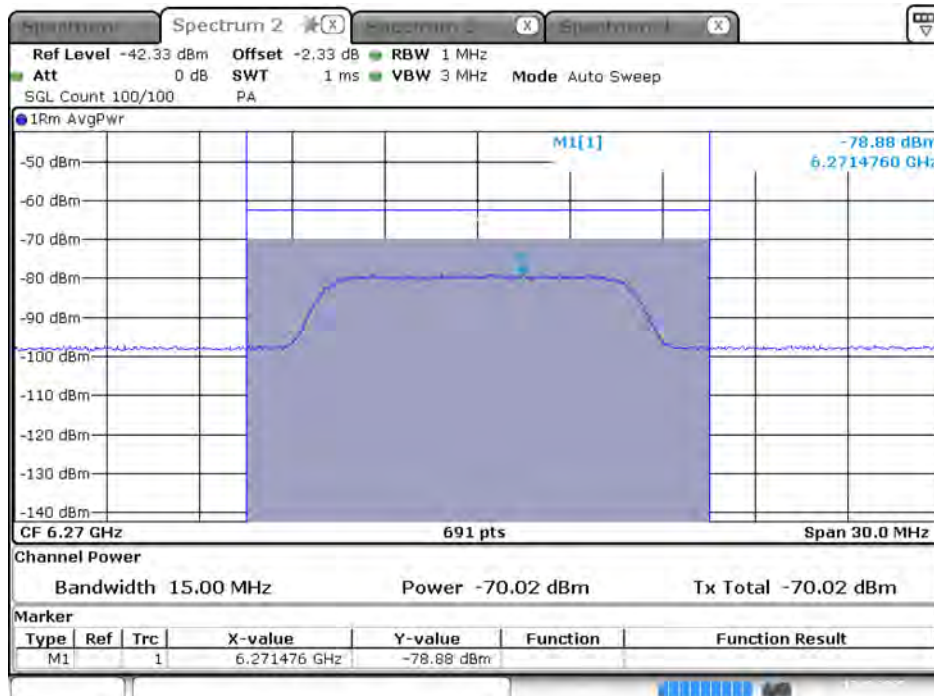
Date: 17.SEP.2025 10:38:56

Frequency (MHz): 6260 MHz



Date: 17.SEP.2025 10:39:22

Frequency (MHz): 6270 MHz

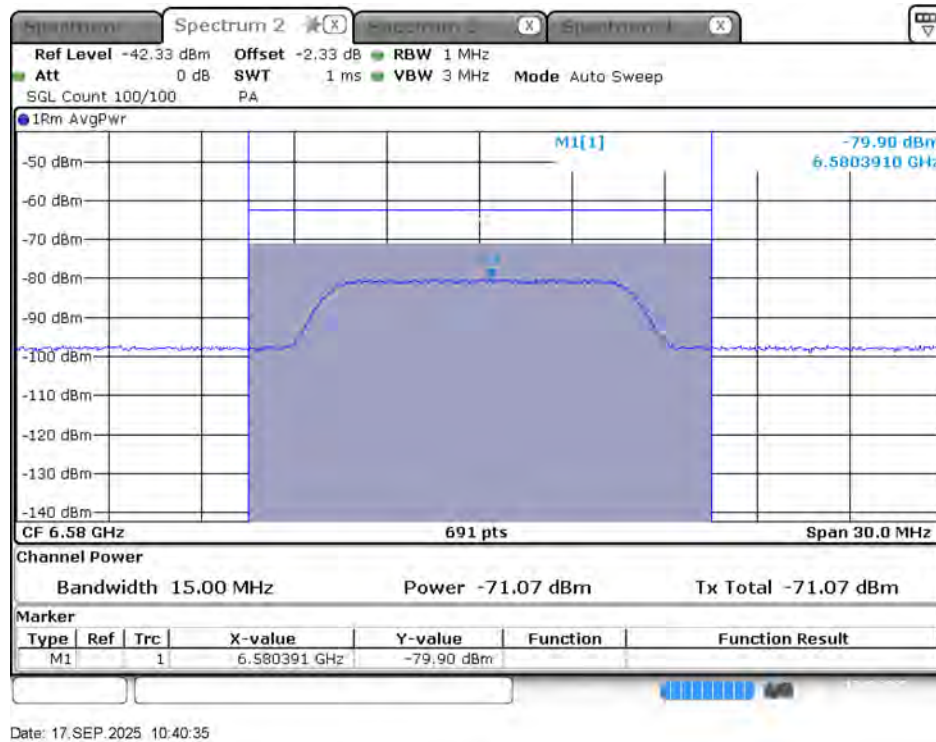


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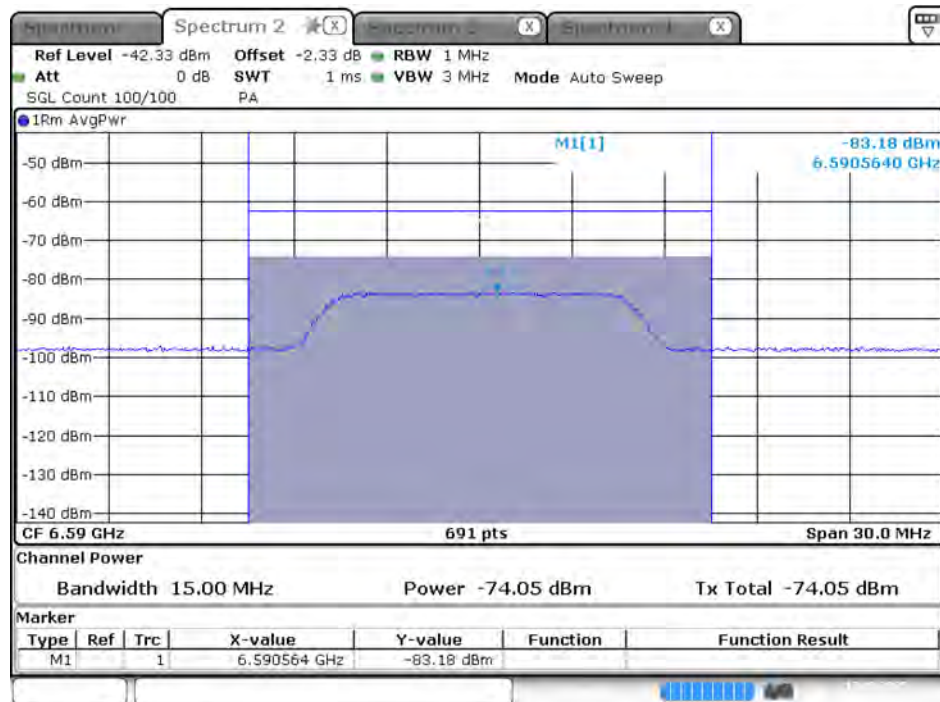
Frequency (MHz): 6425 MHz



Frequency (MHz): 6580 MHz

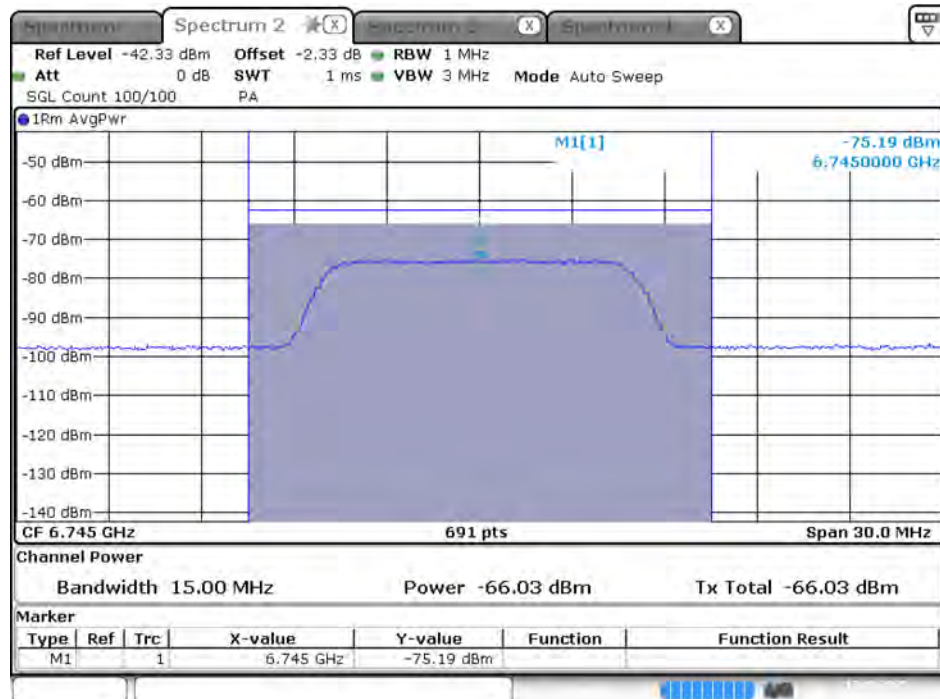


Frequency (MHz): 6590 MHz



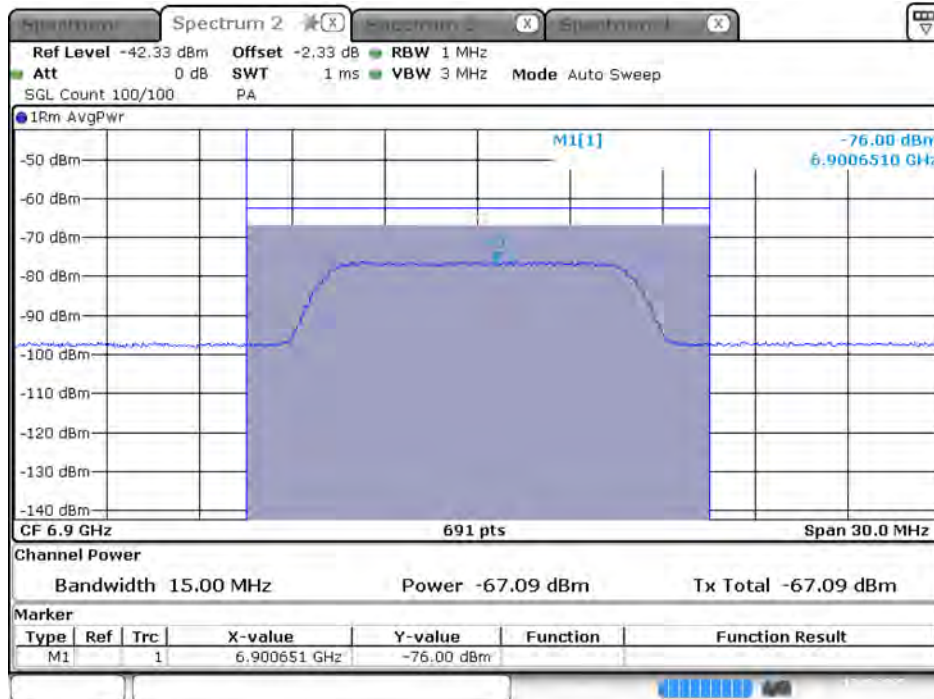
Date: 17.SEP.2025 10:40:57

Frequency (MHz): 6745 MHz



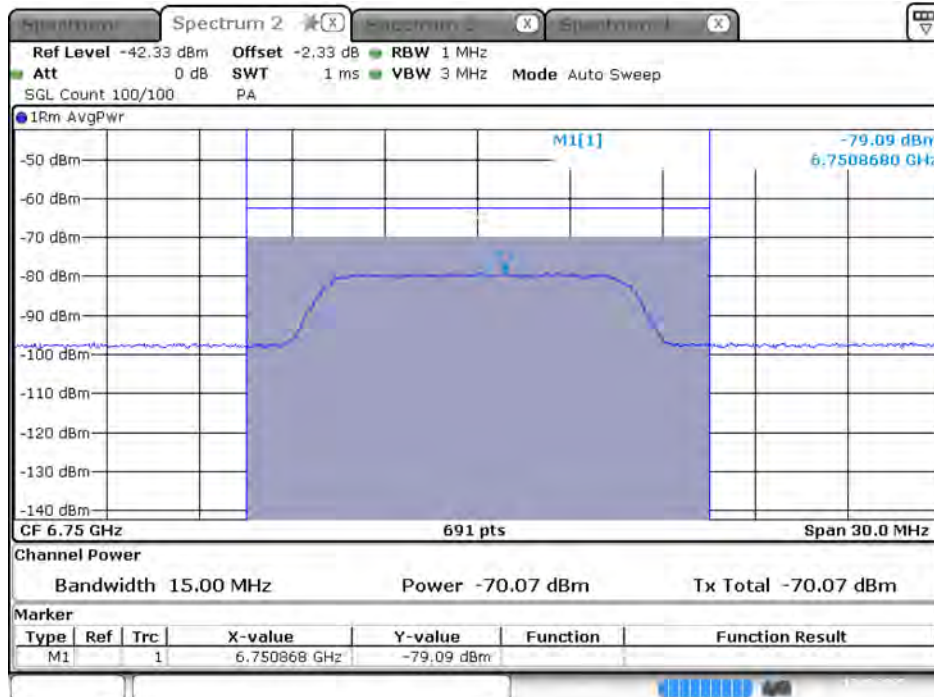
Date: 17.SEP.2025 10:41:36

Frequency (MHz): 6900 MHz



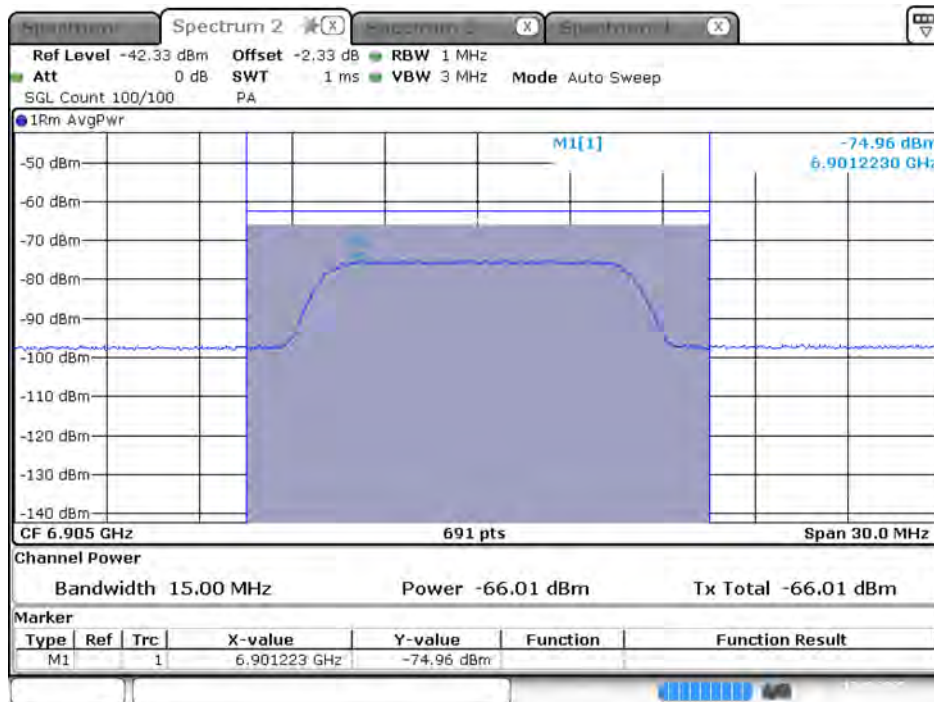
Date: 17.SEP.2025 10:41:56

Frequency (MHz): 6750 MHz



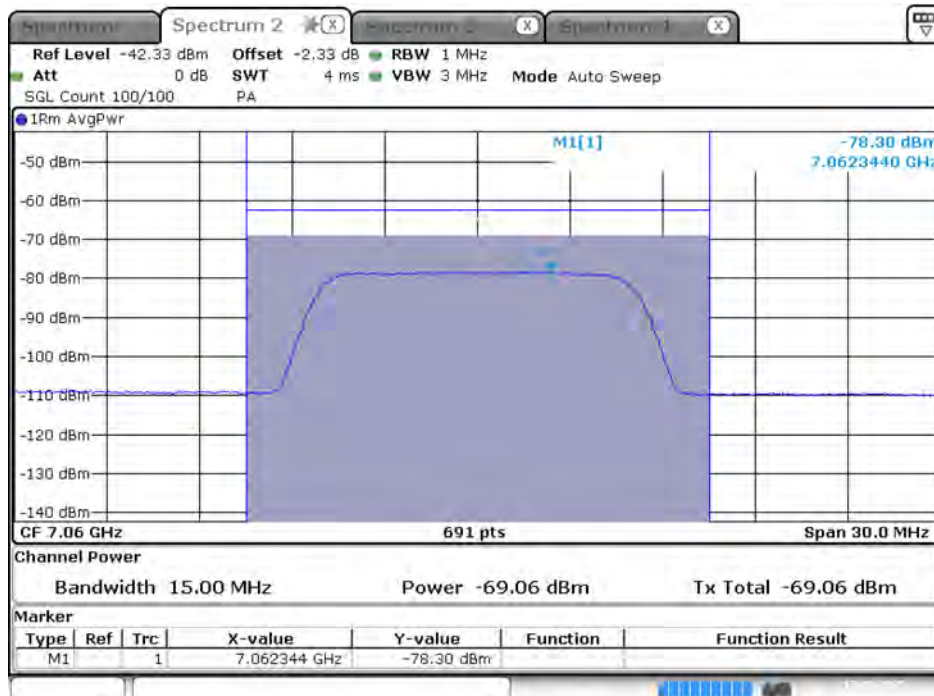
Date: 17.SEP.2025 10:42:25

Frequency (MHz): 6905 MHz



Date: 17.SEP.2025 10:42:44

Frequency (MHz): 7060 MHz

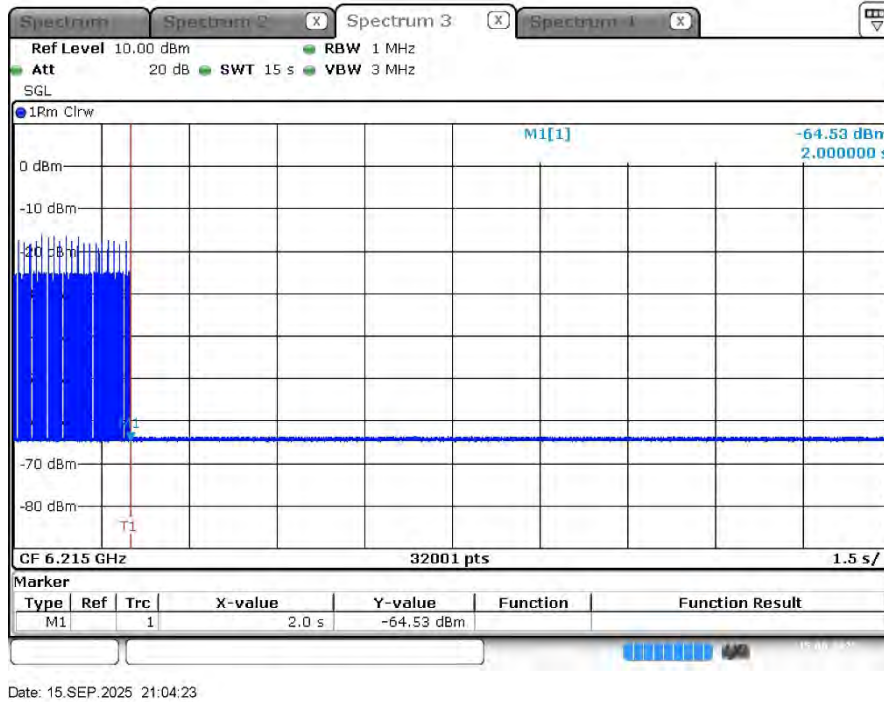


Date: 17.SEP.2025 10:43:12

Contention-Based Protocol Plot

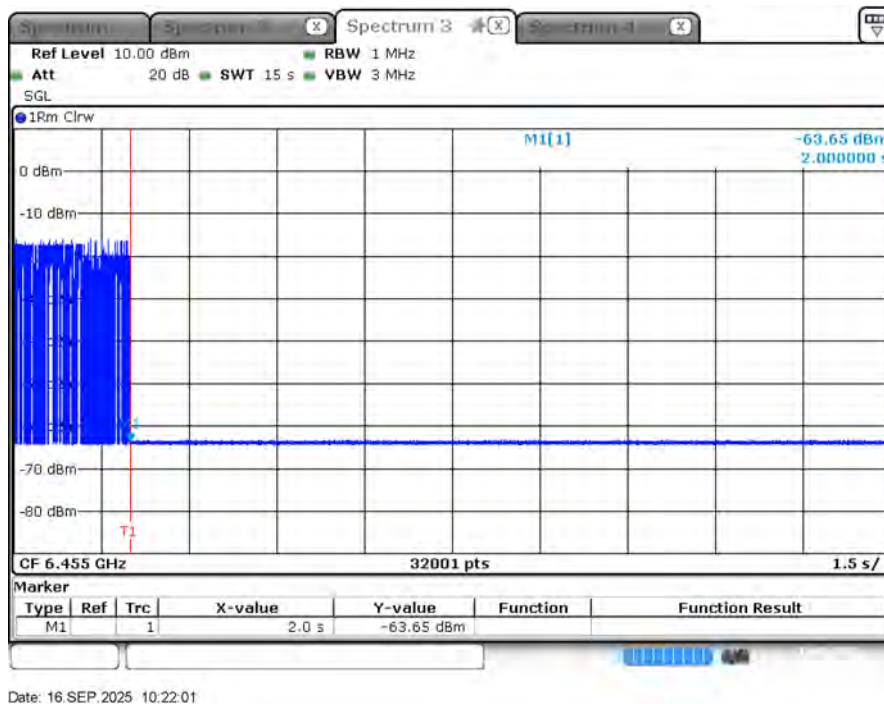
Bandwidth: 20MHz

Test CH 53 ; Incumbent signal 6215 MHz



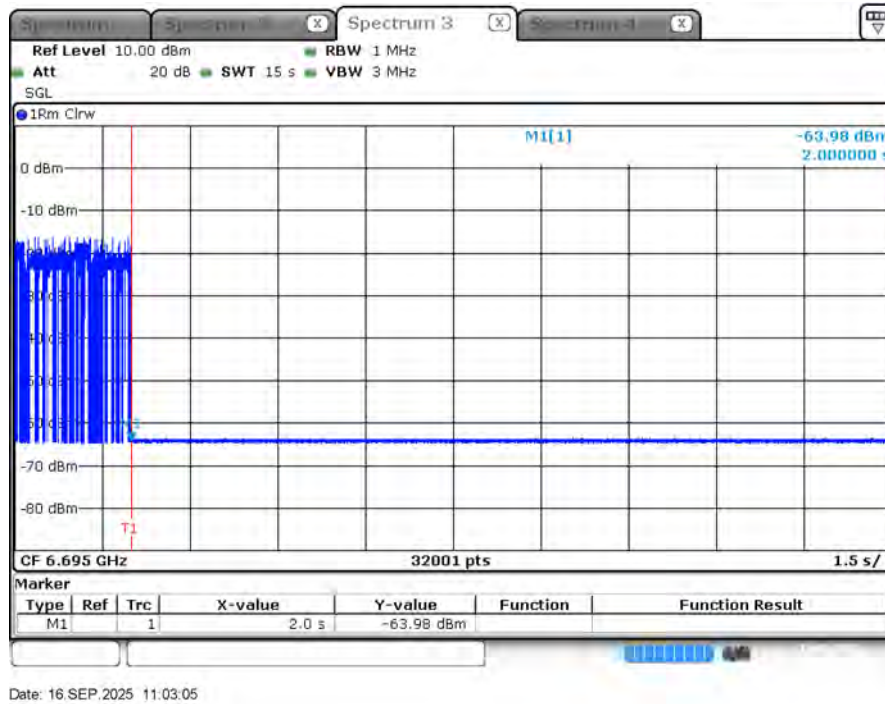
Note : M1 : Inject AWGN signal

Test CH 101 ; Incumbent signal 6455 MHz



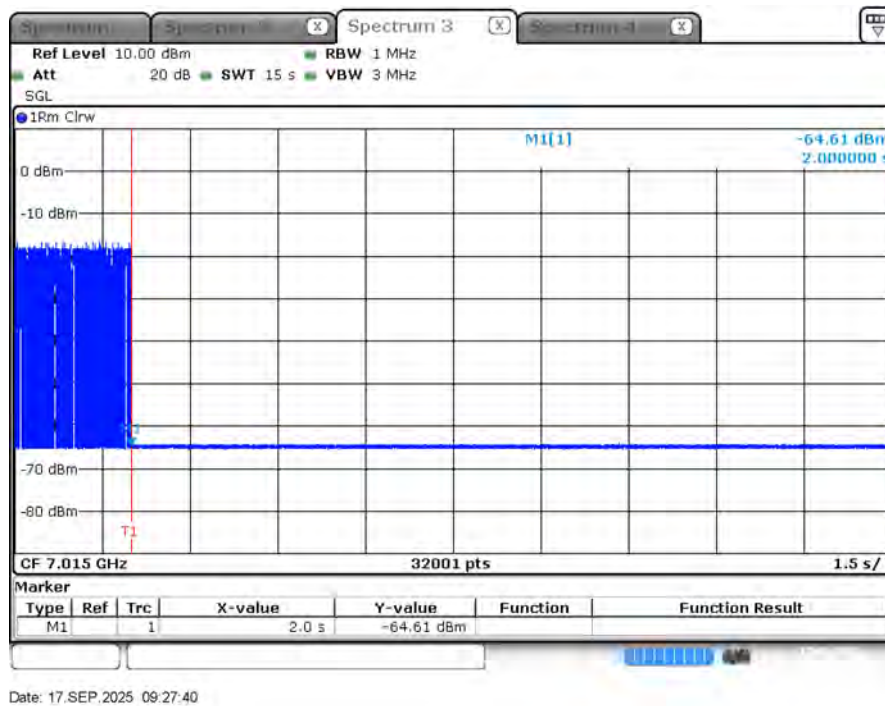
Note : M1 : Inject AWGN signal

Test CH 149 ; Incumbent signal 6695 MHz



Note : M1 : Inject AWGN signal

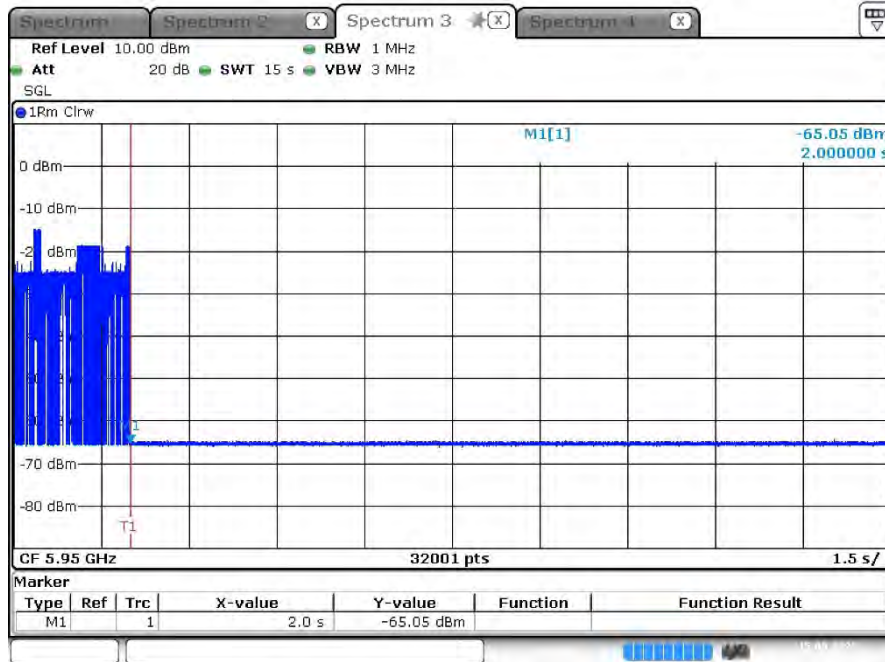
Test CH 213 ; Incumbent signal 7015 MHz



Note : M1 : Inject AWGN signal

Bandwidth: 320MHz

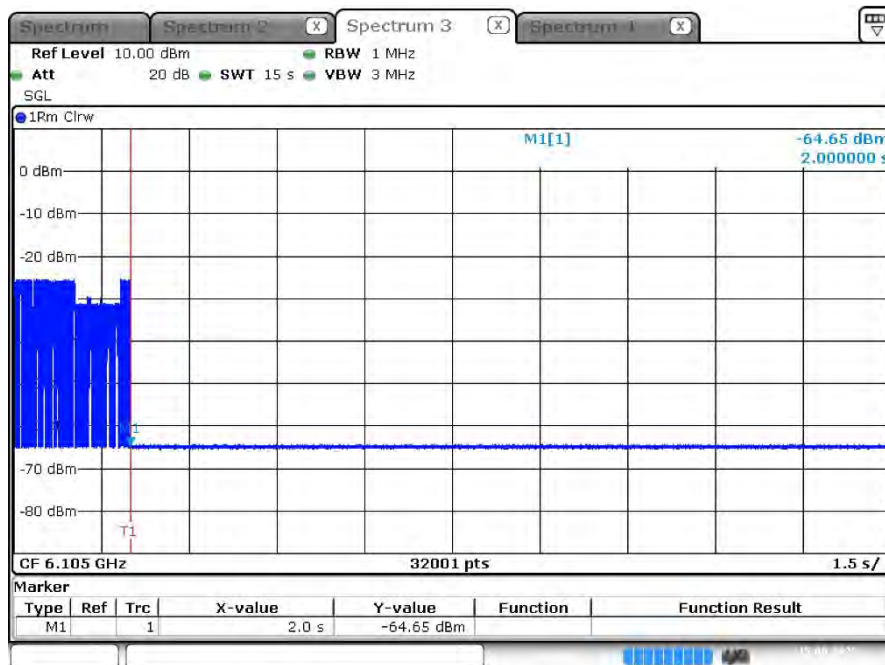
Test CH 31 ; Incumbent signal 5950 MHz



Date: 15.SEP.2025 19:18:40

Note : M1 : Inject AWGN signal

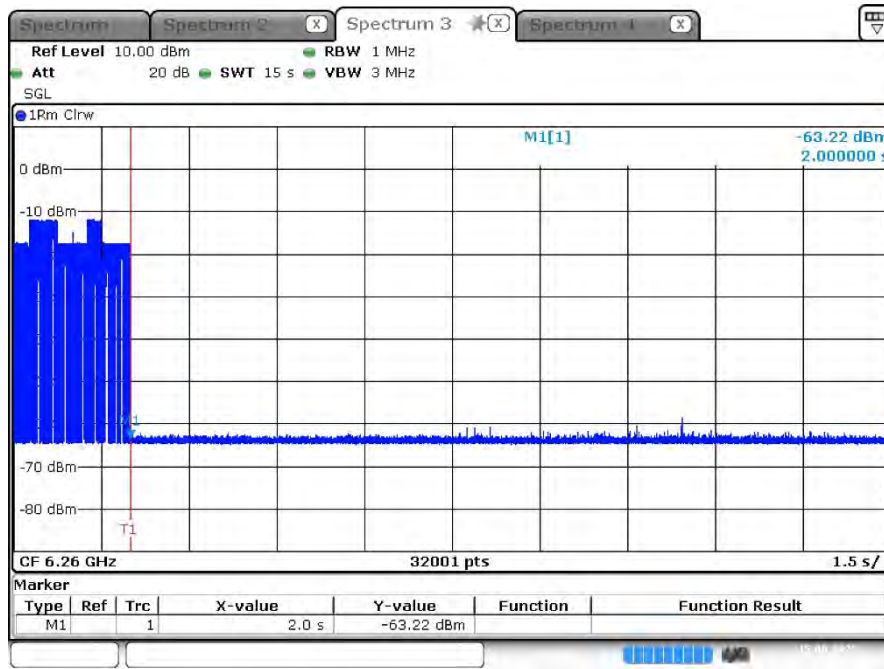
Test CH 31 ; Incumbent signal 6105 MHz



Date: 15.SEP.2025 18:45:27

Note : M1 : Inject AWGN signal

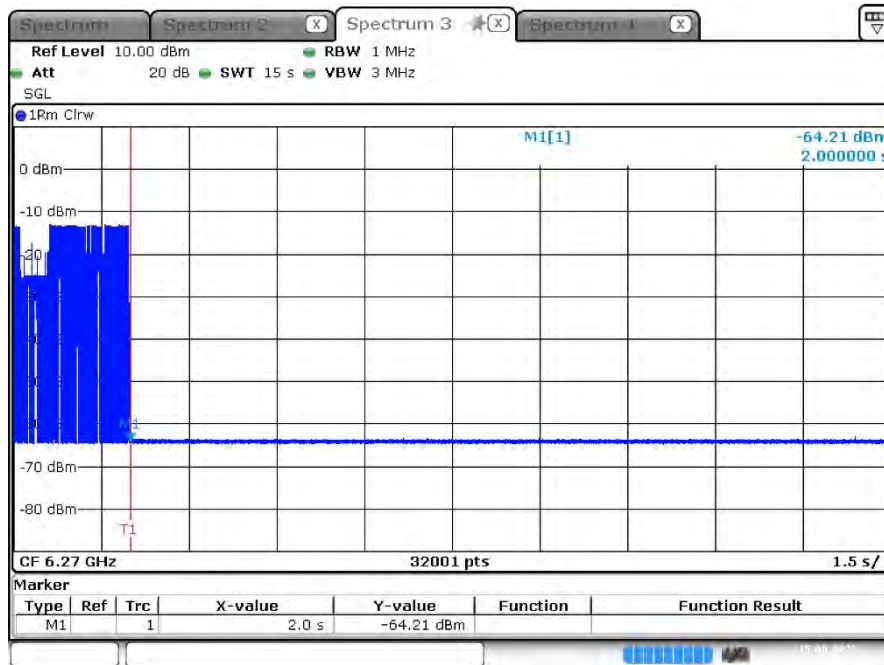
Test CH 31 ; Incumbent signal 6260 MHz



Date: 15.SEP.2025 19:32:23

Note : M1 : Inject AWGN signal

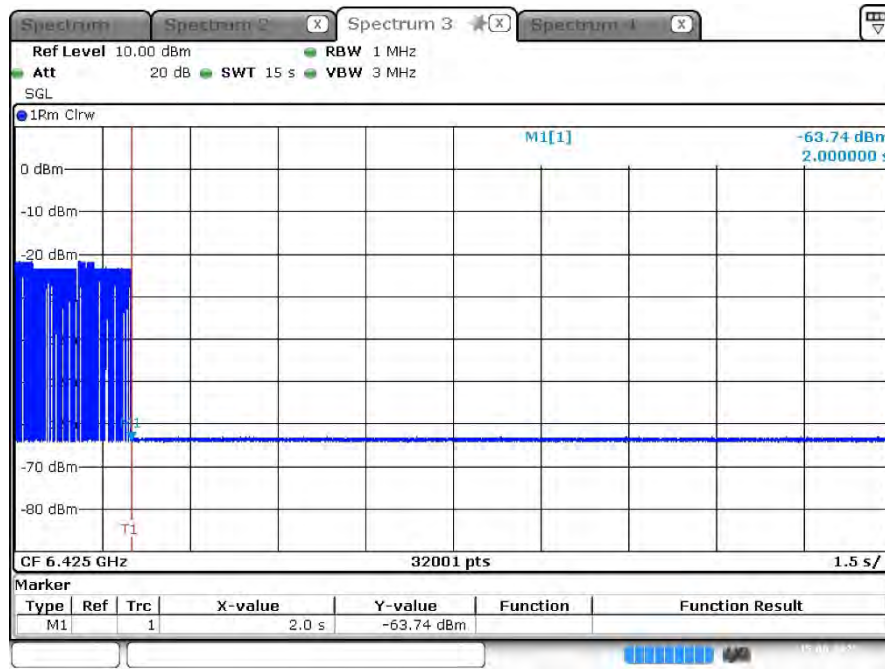
Test CH 127 ; Incumbent signal 6270 MHz



Date: 15.SEP.2025 21:55:16

Note : M1 : Inject AWGN signal

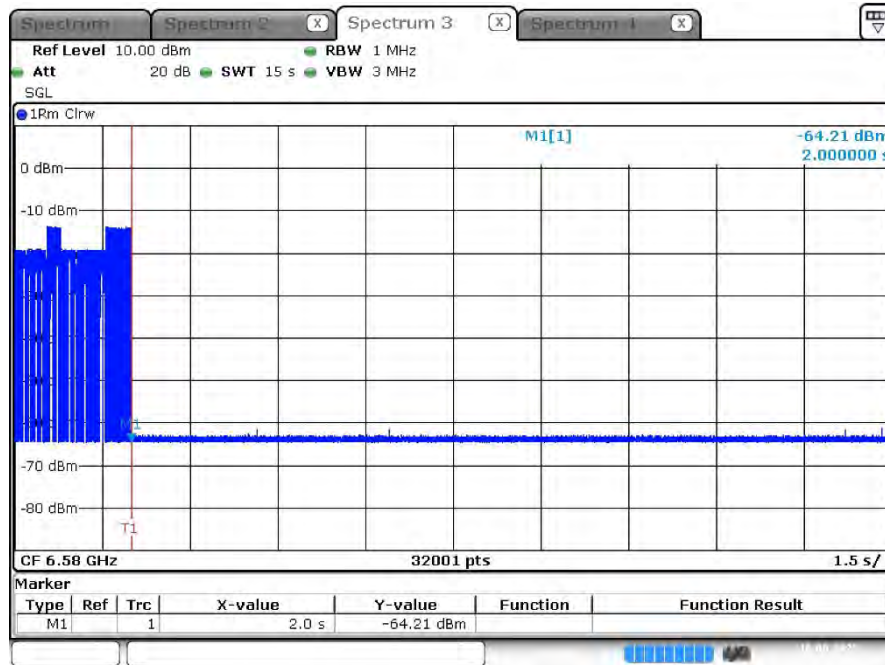
Test CH 127 ; Incumbent signal 6425 MHz



Date: 15.SEP.2025 22:32:57

Note : M1 : Inject AWGN signal

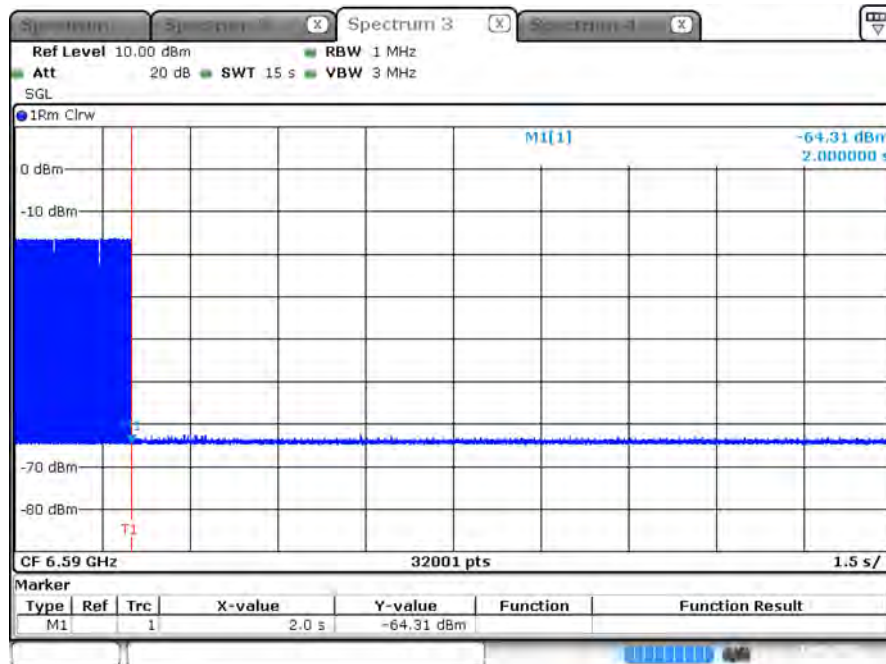
Test CH 127 ; Incumbent signal 6580 MHz



Date: 16.SEP.2025 01:03:03

Note : M1 : Inject AWGN signal

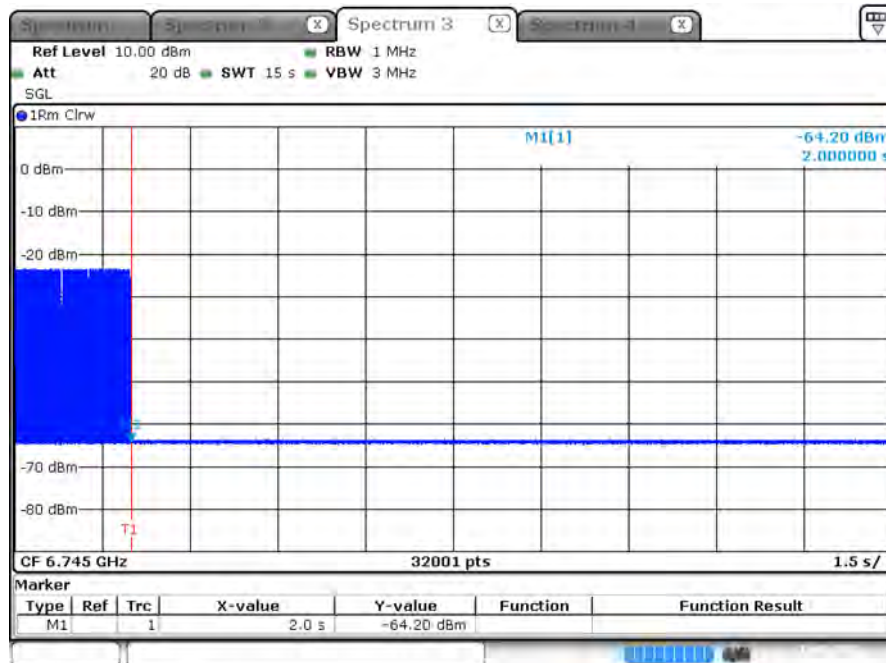
Test CH 159 ; Incumbent signal 6590 MHz



Date: 16.SEP.2025 13:54:50

Note : M1 : Inject AWGN signal

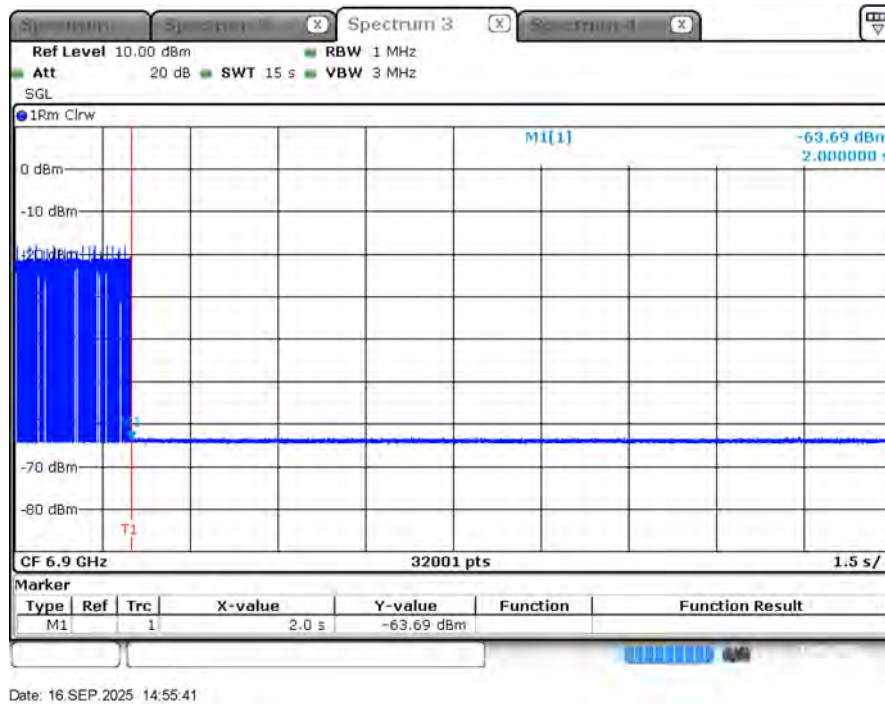
Test CH 159 ; Incumbent signal 6745 MHz



Date: 16.SEP.2025 14:13:49

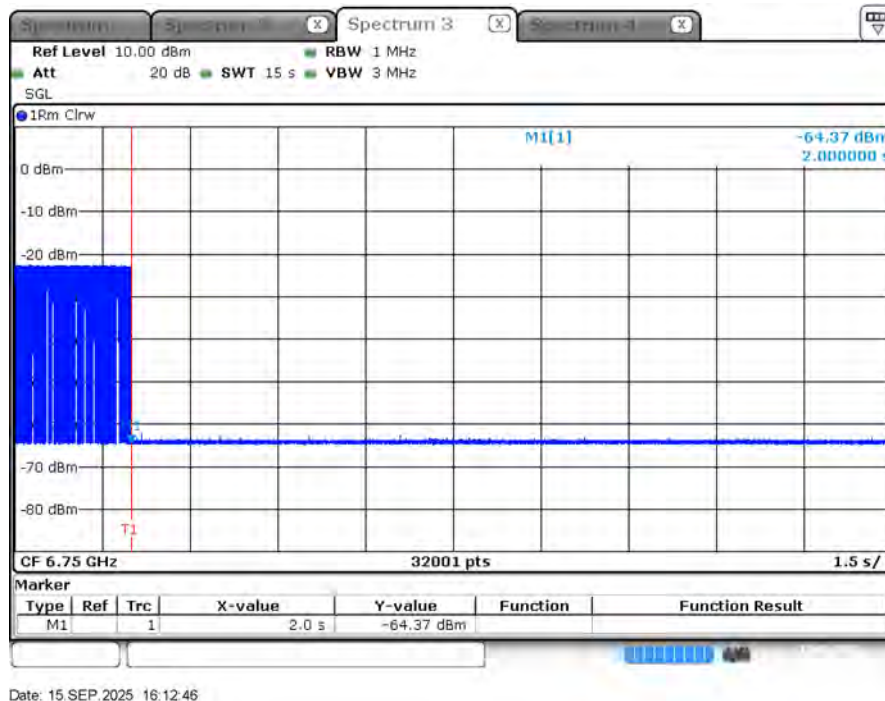
Note : M1 : Inject AWGN signal

Test CH 159 ; Incumbent signal 6900 MHz



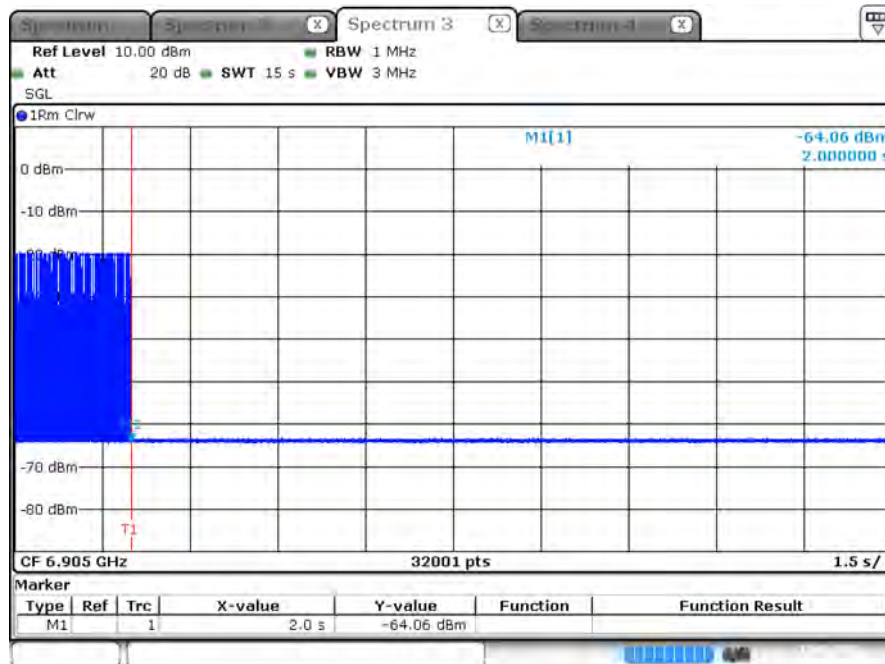
Note : M1 : Inject AWGN signal

Test CH 191 ; Incumbent signal 6750 MHz



Note : M1 : Inject AWGN signal

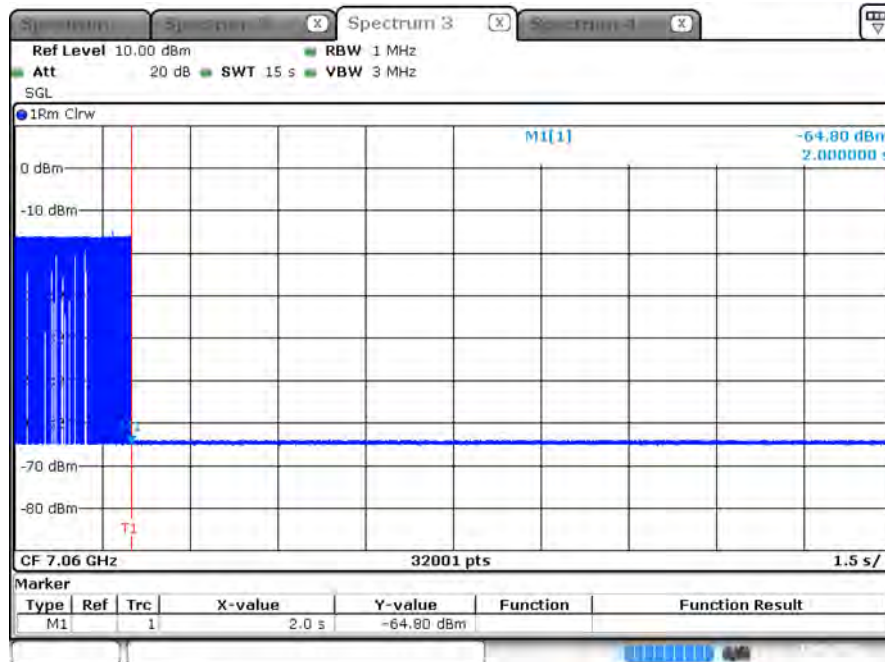
Test CH 191 ; Incumbent signal 6905 MHz



Date: 15.SEP.2025 15:55:06

Note : M1 : Inject AWGN signal

Test CH 191 ; Incumbent signal 7060 MHz



Date: 15.SEP.2025 16:28:08

Note : M1 : Inject AWGN signal

————THE END————