JAPAN DFS TEST REPORT

Equipment	:	ROG Rapture Tri-band Gaming Router
Brand Name	:	ASUS
Model Name	:	GT-AX11000
Applicant	:	ASUSTeK COMPUTER INC. No. 15, Li-Te Rd., Peitou District, Taipei 112, Taiwan, R.O.C.
Manufacturer (1)	:	ASKEY TECHNOLOGY (JIANG SU) LTD NO1388, Jiao Tong Road, Wujiang Economic Technological Development Area Jiangsu Province 215200 China
Manufacturer (2)	:	Compal Networking (KunShan) Co., LTD. No. 520, Nanbang Rd., Economic & Technical Development Zone Kunshan, Jiangsu Province China
Standard	:	MIC Certification Rule, Article 2 Paragraph 1 Item 19-3 MIC Certification Rule, Article 2 Paragraph 1 Item 19-3-2

The product was received on Nov. 27, 2018, and testing was started from Mar. 18, 2019 and completed on Mar. 26, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in MIC Notice No.88 Appendix No.45 and shown compliance with the applicable MIC Ordinance Regulating Radio Equipment Article 49.20 and ARIB RCB STD-71 technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
JZ812227-09	01	Initial issue of report	Sep. 18, 2019

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
2.5	NT No.368,2011	Channel Availability Check (CAC)	PASS	-
2.6	NT No.368,2011	In-service Monitoring	PASS	-
2.7	NT No.368,2011	Channel Shutdown and Non-Occupancy Period	PASS	-

RLE: Radio Law Enforcement Regulations
ORE: Ordinance Regulating Radio Equipment
TR: Terminal and Other Equipment Regulations
NT: Notification of the Ministry of Internal Affairs and Communications

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Vicky Huang

1 General Description

1.1 Information

1.1.1 DFS General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5700	100-140 [11]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5670	102-134 [5]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5610	106-122 [2]
5150-5350	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5725		5570	114 [1]

- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40, VHT80 and VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM,
- 256QAM, 1024QAM modulation.

1.1.2 Frequency Band

Frequency Band	
☒	W53:
	☒ (20MHz) - 5260, 5280, 5300, 5320MHz
	☒ (40MHz) - 5270, 5310MHz
	☒ (80MHz) - 5290MHz
☒	W52+W53:
	☒ (160MHz) contiguous – 5250MHz
☒	W56:
	☒ (20MHz) - 5500, 5520, 5540, 5560, 5580, 5600, 5620, 5640, 5660, 5680, 5700MHz
	☒ (40MHz) - 5510, 5550, 5590, 5630, 5670MHz
	☒ (80MHz) - 5530, 5610MHz
	☒ (160MHz) contiguous - 5570MHz
☐	W52+W56: (80+80 MHz) non-contiguous - 5210, 5530MHz or 5210, 5610MHz
☐	W53+W56: (80+80 MHz) non-contiguous - 5290, 5530MHz or 5290, 5610MHz
Note: The EUT supports 802.11a/n/ac/ax	

1.1.3 Antenna Information

Set	Ant.	Port			Brand	P/N	Type	Connector	Gain (dBi)		
		2.4GHz	5GHz B1/B2	5GHz B3					2.4GHz	5GHz B1/B2	5GHz B3
1	1	1	-	4	WHA YU	C660-510413-A	Dipole	Reverse SMA Plug	1.9	-	2.3
	2	2	-	3	WHA YU	C660-510413-A	Dipole	Reverse SMA Plug	1.9	-	2.3
	3	3	-	2	WHA YU	C660-510413-A	Dipole	Reverse SMA Plug	1.9	-	2.3
	4	4	-	1	WHA YU	C660-510413-A	Dipole	Reverse SMA Plug	1.9	-	2.3
	5	-	1	-	WHA YU	C660-510413-A	Dipole	Reverse SMA Plug	-	2.3	-
	6	-	2	-	WHA YU	C660-510413-A	Dipole	Reverse SMA Plug	-	2.3	-
	7	-	3	-	WHA YU	C660-510413-A	Dipole	Reverse SMA Plug	-	2.3	-
	8	-	4	-	WHA YU	C660-510413-A	Dipole	Reverse SMA Plug	-	2.3	-
2	1	1	-	4	WHA YU	C660-510431-A	Dipole	Reverse SMA Plug	1.9	-	2.3
	2	2	-	3	WHA YU	C660-510431-A	Dipole	Reverse SMA Plug	1.9	-	2.3
	3	3	-	2	WHA YU	C660-510431-A	Dipole	Reverse SMA Plug	1.9	-	2.3
	4	4	-	1	WHA YU	C660-510431-A	Dipole	Reverse SMA Plug	1.9	-	2.3
	5	-	1	-	WHA YU	C660-510431-A	Dipole	Reverse SMA Plug	-	2.3	-
	6	-	2	-	WHA YU	C660-510431-A	Dipole	Reverse SMA Plug	-	2.3	-
	7	-	3	-	WHA YU	C660-510431-A	Dipole	Reverse SMA Plug	-	2.3	-
	8	-	4	-	WHA YU	C660-510431-A	Dipole	Reverse SMA Plug	-	2.3	-
3	1	1	-	4	PSA	RFDPA161000SBLB801	Dipole	Reverse SMA Plug	1.9	-	2.3
	2	2	-	3	PSA	RFDPA161000SBLB801	Dipole	Reverse SMA Plug	1.9	-	2.3
	3	3	-	2	PSA	RFDPA161000SBLB801	Dipole	Reverse SMA Plug	1.9	-	2.3
	4	4	-	1	PSA	RFDPA161000SBLB801	Dipole	Reverse SMA Plug	1.9	-	2.3
	5	-	1	-	PSA	RFDPA161000SBLB801	Dipole	Reverse SMA Plug	-	2.3	-
	6	-	2	-	PSA	RFDPA161000SBLB801	Dipole	Reverse SMA Plug	-	2.3	-
	7	-	3	-	PSA	RFDPA161000SBLB801	Dipole	Reverse SMA Plug	-	2.3	-
	8	-	4	-	PSA	RFDPA161000SBLB801	Dipole	Reverse SMA Plug	-	2.3	-
4	1	1	-	4	Walsin	RFDPA161000SBLB802	Dipole	Reverse SMA Plug	1.9	-	2.3
	2	2	-	3	Walsin	RFDPA161000SBLB802	Dipole	Reverse SMA Plug	1.9	-	2.3
	3	3	-	2	Walsin	RFDPA161000SBLB802	Dipole	Reverse SMA Plug	1.9	-	2.3
	4	4	-	1	Walsin	RFDPA161000SBLB802	Dipole	Reverse SMA Plug	1.9	-	2.3
	5	-	1	-	Walsin	RFDPA161000SBLB802	Dipole	Reverse SMA Plug	-	2.3	-
	6	-	2	-	Walsin	RFDPA161000SBLB802	Dipole	Reverse SMA Plug	-	2.3	-
	7	-	3	-	Walsin	RFDPA161000SBLB802	Dipole	Reverse SMA Plug	-	2.3	-
	8	-	4	-	Walsin	RFDPA161000SBLB802	Dipole	Reverse SMA Plug	-	2.3	-

Note1: The above information was declared by manufacturer.

Note2: B1 means Band1. The rule also applies to B2, B3.

Because WHA YU's antennas、PSA's antennas and Walsin's antennas are the same type antennas and same gain, only the WHA YU's set 1 antennas was tested and recorded in the report.

<For 2.4GHz Band>

For IEEE 802.11b/g/n/ac/ax mode <4TX/4RX>:

Ant.1 (Port 1), Ant.2 (Port 2), Ant.3 (Port 3) and Ant.4 (Port 4) will transmit/receive the same signal simultaneously.

Ant.1 (Port 1), Ant.2 (Port 2), Ant.3 (Port 3) and Ant.4 (Port 4) can be used as transmitting/receiving antennas.

<For 5GHz Band>

For Band 1/2

For IEEE 802.11a/n/ac/ax mode <4TX/4RX>:

Ant.5 (Port 1), Ant.6 (Port 2), Ant.7 (Port 3) and Ant.8 (Port 4) will transmit/receive the same signal simultaneously.

Ant.5 (Port 1), Ant.6 (Port 2), Ant.7 (Port 3) and Ant.8 (Port 4) can be used as transmitting/receiving antennas.

For Band 3

For IEEE 802.11a/n/ac/ax mode <4TX/4RX>:

Ant.1 (Port 4), Ant.2 (Port 3), Ant.3 (Port 2) and Ant.4 (Port 1) will transmit/receive the same signal simultaneously.

Ant.1 (Port 4), Ant.2 (Port 3), Ant.3 (Port 2) and Ant.4 (Port 1) can be used as transmitting/receiving antennas.

1.1.4 Table for Multiple Listing

There are four EUT, the detail information as following:

EUT	SKU	LAN Transformer		Power IC		2.5G phy chip	
		Brand Name	P/N	Brand Name	P/N	Brand Name	P/N
1	1	SWAPnet	NS777202*1	Richtek	RT6220	Broadcom	BCM84880
		SWAPnet	NS771802*1	Richtek	RT6217		
2	2	Mingtek	HN8001VG*1	Richtek	RT6220	Broadcom	BCM84880
		Mingtek	HN18101HF*1	Richtek	RT6217		
3	3	SWAPnet	NS777202*1	MPS	MP8765	Broadcom	BCM54991
		SWAPnet	NS771802*1	MPS	MP2315		
4	4	Mingtek	HN8001VG*1	MPS	MP8765	Broadcom	BCM54991
		Mingtek	HN18101HF*1	MPS	MP2315		

Note: The SKU does not affect the test result of RF tests, so only SKU1 was tested and recorded in this report.

1.1.5 Table for Slight Change

This product is an extension of original one reported under Sporton project number: JZ812227-06

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

Modifications	Performance Checking
1. Adding the second sources (EUT3 and EUT4). Please refer to section 1.1.4 for detail Information. 2. Adding a new adapter (Brand: DELTA, Model:ADP-65GD D) 3. Add a set of antennas (Brand:Walsin, P/N: RFDPA161000SBLB802) with the same type and same gain.	Do not effect the test results

Note: All the test results were based on original report.

1.2 Accessories

Accessories					
Equipment Name	**Brand Name**	**Model Name**	**Type**	**Rating**	**Remark**
Adapter 1	PI	AD887320	010-6LF	Input: 100-240V~50/60Hz, 1.5A Outpot:19V,3.42A	-
Adapter 2	PI	AD2087320	010-5LF	Input: 100-240V~50/60Hz, 1.5A Outpot:19V,3.42A	-
Adapter 3	DELTA	ADP-65DW B	-	Input: 100-240V~50-60Hz, 1.5A Outpot:19V,3.42A	-
Adapter 4	DELTA	ADP-65GD D	-	Input: 100-240V~50/60Hz, 1.5A Outpot:19V,3.42A	DC Power Cable:Non-shielded, 1.8m
Others					
RJ-45 cable: Shielded, 1.5m					
Power cord*1: Non-shielded, 0.9m (for Adapter 4 use only)					

1.3 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	N/A

1.4 Testing Applied Standards

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

- MIC Ordinance Regulating Radio Equipment Article 49.20
- MIC Notice No.88 Appendix No.45

1.5 Testing Location Information

Testing Location					
☐	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973			
☒	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085			
Test Condition		**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**
DFS Site		DF01-CB	Jay Tseng	22~24°C / 50~60%	Mar. 18, 2019~ Mar. 26, 2019

2 Test Configuration of EUT

2.1 EUT Information

EUT Information				
Operating Mode	☒	AP Router (Master)		
	☒	Bridge (Slave without radar detection)		
	☒	Extender (Master)		
	☒	Mesh (Slave without radar detection)		
Software / Firmware Version	9.0.0.4.384_5944			
Communication Mode	☒	IP Based (Load Based)	☐	Frame Based
TPC Function	☒	With TPC	☐	Without TPC

2.2 Test Channel Frequencies Configuration

Test Channel Frequencies Configuration		
Frequency Range (MHz)	**IEEE Std. 802.11**	**Test Channel Freq. (MHz)**
5250-5350MHz	ax (HEW20)	5300
5470-5725MHz	ax (HEW20)	5500
5250-5350MHz	ax (HEW40)	5310
5470-5725MHz	ax (HEW40)	5510
5250-5350MHz	ax (HEW80)	5290
5470-5725MHz	ax (HEW80)	5530
5250-5350MHz	ax (HEW160)	5250
5470-5725MHz	ax (HEW160)	5570

2.3 The Worst Case Measurement Configuration

Tests Item	Dynamic Frequency Selection (DFS)
Test Condition	Conducted measurement at transmit chains
Modulation Mode	11ax (HEW 20), 11ax (HEW 40), 11ax (HEW 80), 11ax (HEW160)
☒	For conducted tests, antenna ports are used for the tests and Master lowest antenna gain that was used to set the DFS Detection Threshold level during calibration of the test setup.
☐	For radiated tests, the DFS test should be performed with lowest antenna gain (regardless of antenna type).
Modulation modes consist of below configuration: 11a: IEEE 802.11a, HT20/HT40: IEEE 802.11n, VHT20/VHT40/VHT80/VHT160: IEEE 802.11ac, HEW20/HEW40/HEW80/HEW160: IEEE 802.11ax	

Note: 1. The EUT supports below functions:

(1) AP Router (Master)

(2) Bridge (Slave without radar detection)

(3) Extender (Master)

(4) Mesh (Slave without radar detection)

2. The EUT only be used at Z axis.

3. Only AP Router (Master) was tested and recorded in this report.

2.4 General DFS Information

2.4.1 DFS Parameters

DFS requirement values	
Parameter	**Value**
Channel Availability Check Time	60 sec
Channel Move Time	10 sec
Channel Closing Transmission Time	260 ms
Non-occupancy period	Minimum 30 minutes

W53: Parameters DFS radar test signal				
Test Signal (#)	**Pulse width [μs]**	**Pulse repetition frequency PRF [Hz]**	**Pulses per burst [PPB]**	**Detection Probability (%)**
1	1	700	18	≥60
2	2.5	260	18	≥60

W56: Un-modulation Parameters DFS radar test signal				
Test Signal (#)	**Pulse width [μs]**	**Pulse repetition frequency PRF [Hz]**	**Pulses per burst [PPB]**	**Detection Probability (%)**
1	0.5	720	18	≥60
2	1.0	700	18	≥60
3	2.0	250	18	≥60
4	1~5 (step 1)	200-500 (step 1)	23~29	≥60
5	6~10 (step 1)	2000-5000 (step 1)	16~18	≥60
6	11~20 (step 1)	2000-5000 (step 1)	12~16	≥60
Aggregate (Radar Types 1-6)				≥80

W56: Chirp Modulation (5~20MHz) Parameters DFS radar test signal					
Test Signal (#)	**Pulse width [μs]**	**Pulse repetition frequency PRF [Hz]**	**Number of Pulses per Burst**	**Number of Bursts**	**Detection Probability (%)**
7	50-100 (step 1)	500-1000 (step 1)	1-3	8-20	≥80

W56: 5250-5724 MHz Frequency Hopping Modulation Parameters DFS radar test signal					
Test Signal (#)	**Pulse width [μs]**	**Pulse repetition frequency PRF [Hz]**	**Number of Pulses per Burst**	**Hopping Length (ms)**	**Detection Probability (%)**
8	1	3000	9 (3ms)	300	≥70

2.4.2 DFS Threshold Level

DFS Threshold Level	
DFS Threshold level: -64 dBm	☒ at the antenna connector
	☐ in front of the antenna
Note 1: The DFS **Detection Threshold Level** is chosen the worse Interference Detection Threshold level (-64dBm) as the test parameter. Note 2: maximum EIRP < 200mW (23dBm). DFS **Detection Threshold Level** is (-62dBm) + G_{ANT} maximum EIRP ≥ 200mW (23dBm). DFS **Detection Threshold Level** is (-64dBm) + G_{ANT}	

2.4.3 User Access Restrictions

User Access Restrictions
☒ DFS controls (hardware or software) related to radar detection are NOT accessible to the user

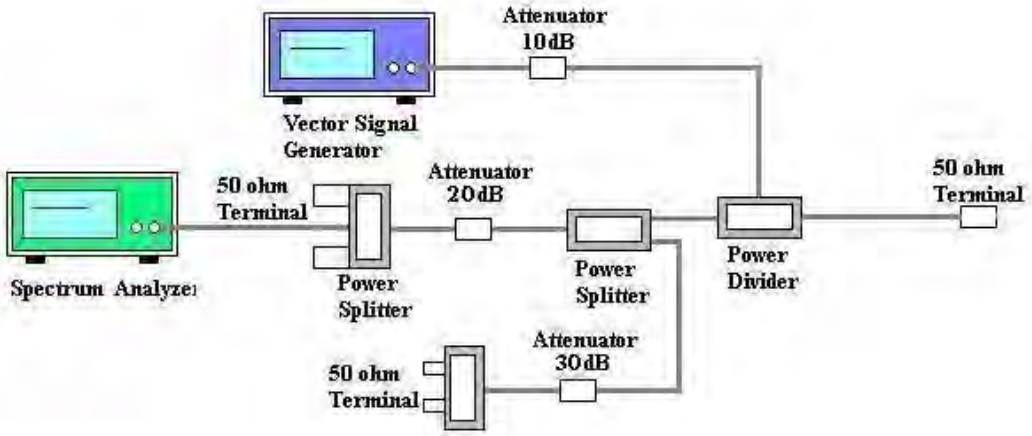
2.4.4 Channel Loading/Data Streaming

☒	Test transmission sequence is from the Master to the Slave.
	☒ For W53 band (5250-5350 MHz) Monitoring of operating channel with about 50% loading over maximum signal transmission speed.
	☒ For W56 band (5470-5725 MHz) Monitoring of operating channel with about 17% loading over maximum signal transmission speed.
	☒ No transmissions on channels being checked during a Channel Availability Check and Confirming Available Channels.

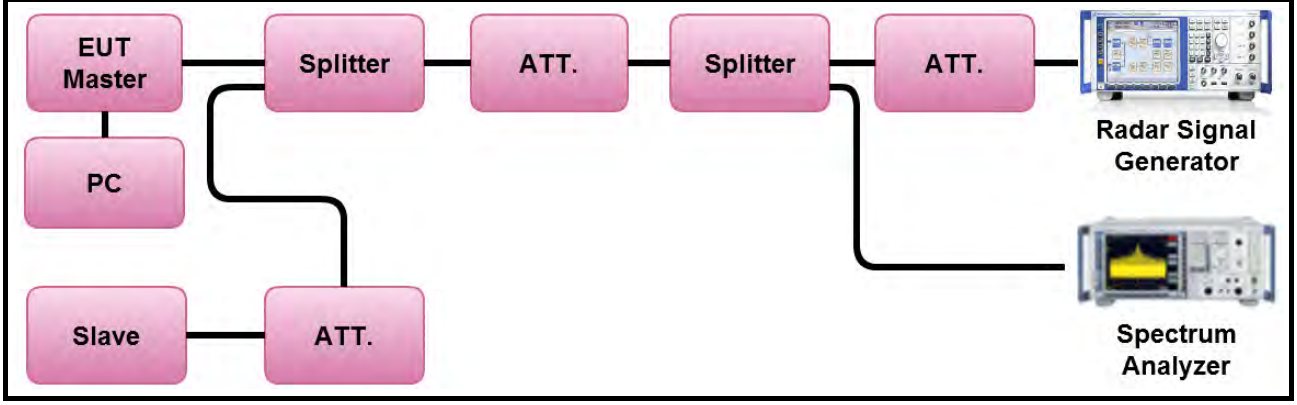
2.4.5 Test Setup and Calibration Setup

A spectrum analyzer is used as a monitor to verify that the EUT has vacated the Channel within the (Channel Closing Transmission Time and Channel Move Time, and does not transmit on a Channel during the Non-Occupancy Period after the detection and Channel move.

Calibration Setup



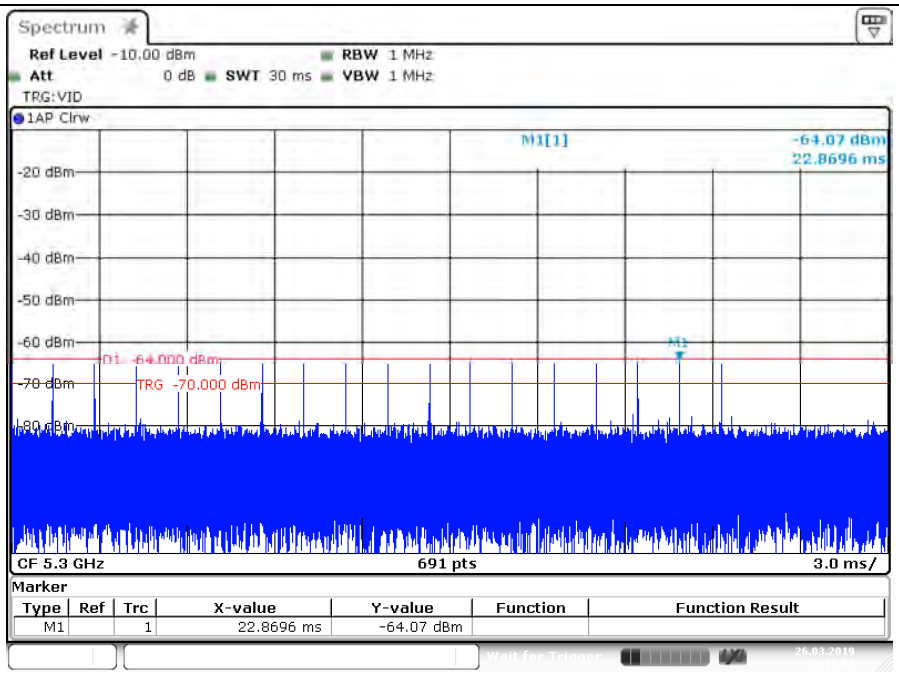
Master Conducted Measurement



2.4.6 Radar Waveform calibration Plot

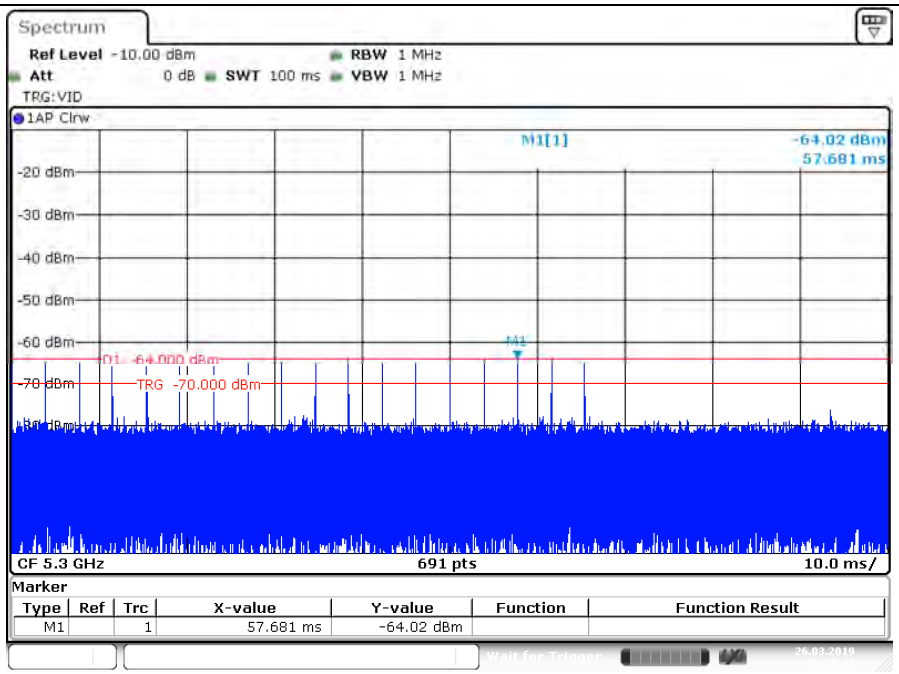
W53 band (5250-5350 MHz)

Radar #1 DFS detection threshold level and the burst of pulses on the Channel frequency



Date: 26.MAR.2019 03:19:04

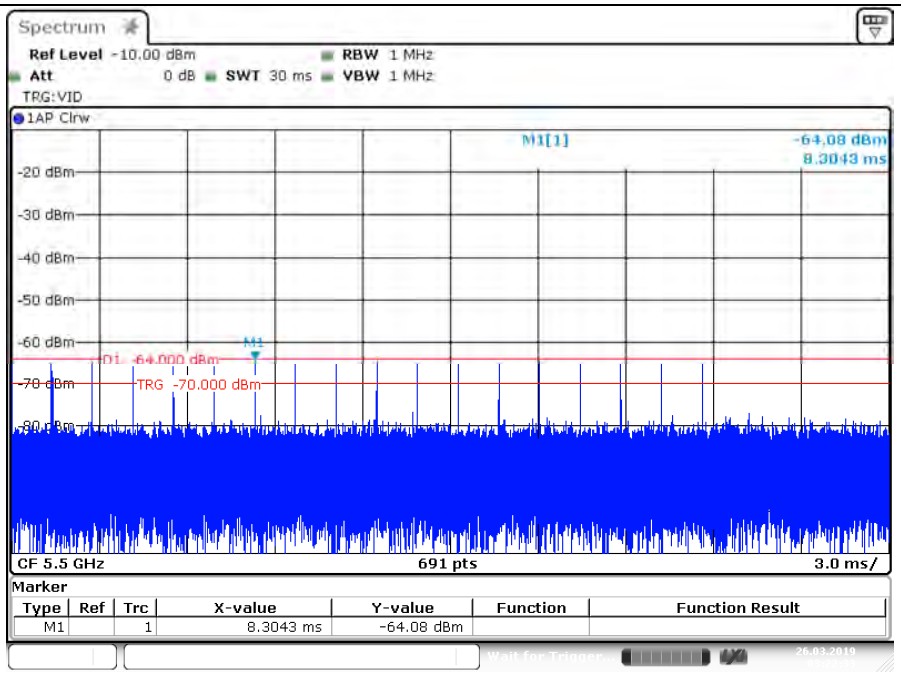
Radar #2 DFS detection threshold level and the burst of pulses on the Channel frequency



Date: 26.MAR.2019 03:19:43

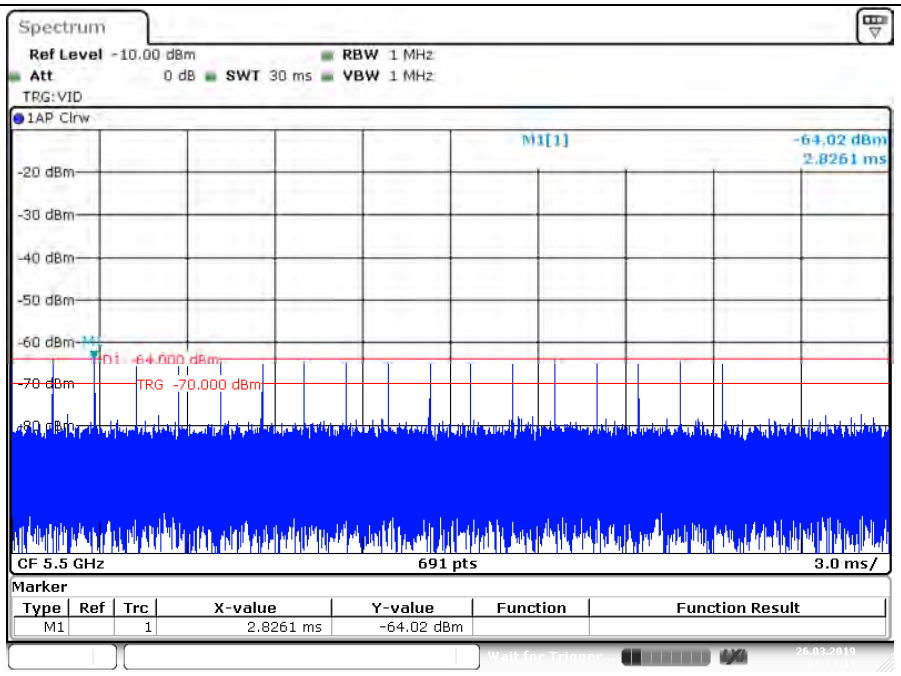
W56 band (5470-5725 MHz)

Radar #1 DFS detection threshold level and the burst of pulses on the Channel frequency



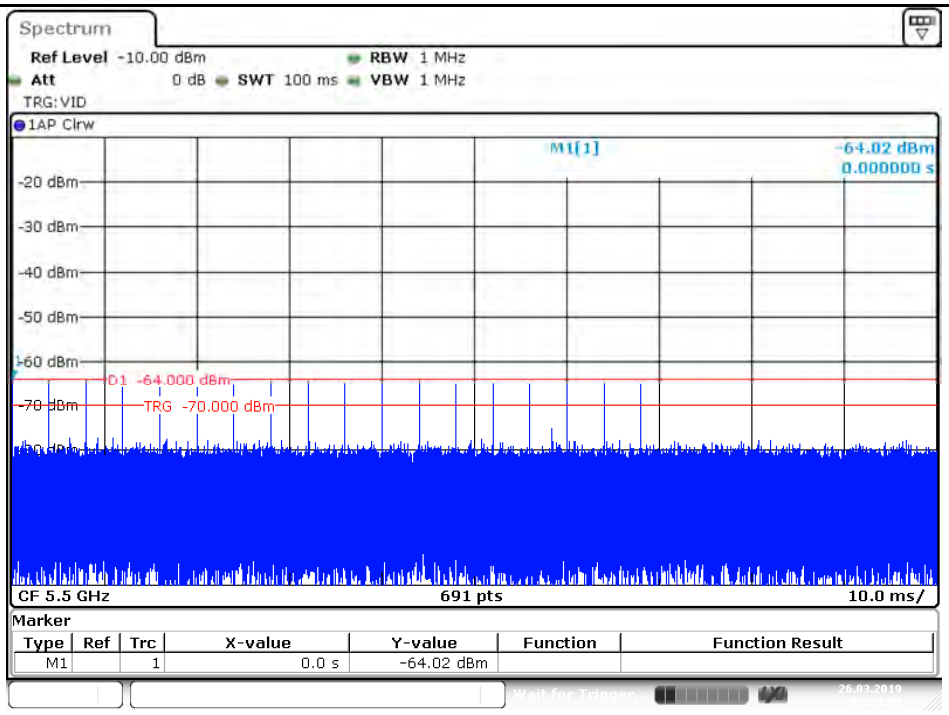
Date: 26.MAR.2019 03:22:33

Radar #2 DFS detection threshold level and the burst of pulses on the Channel frequency



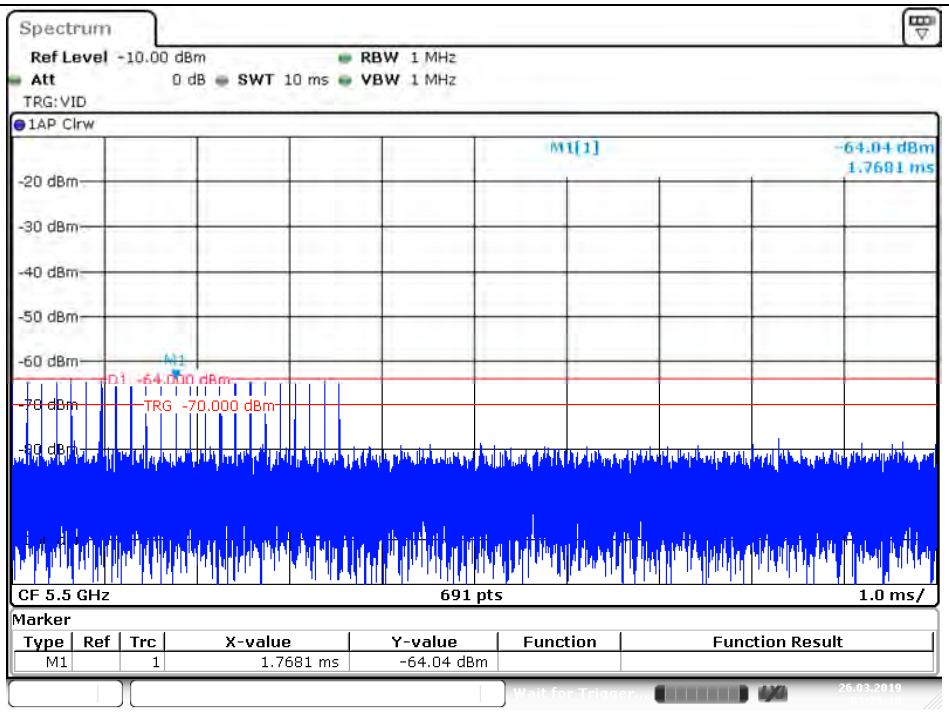
Date: 26.MAR.2019 03:23:14

Radar #3 DFS detection threshold level and the burst of pulses on the Channel frequency



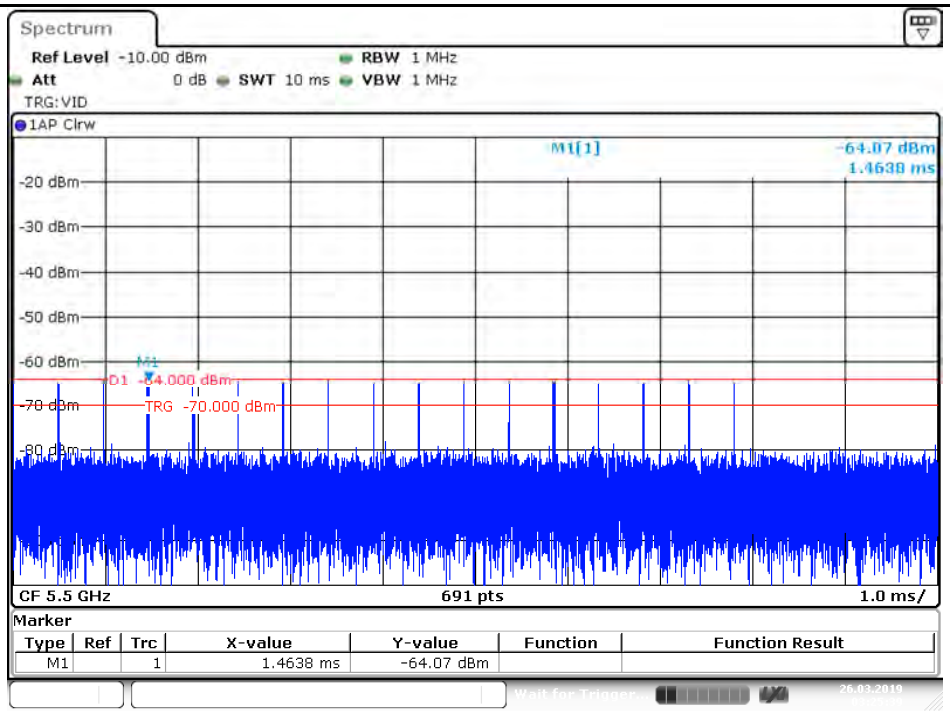
Date: 26.MAR.2019 03:24:03

Radar #4 DFS detection threshold level and the burst of pulses on the Channel frequency



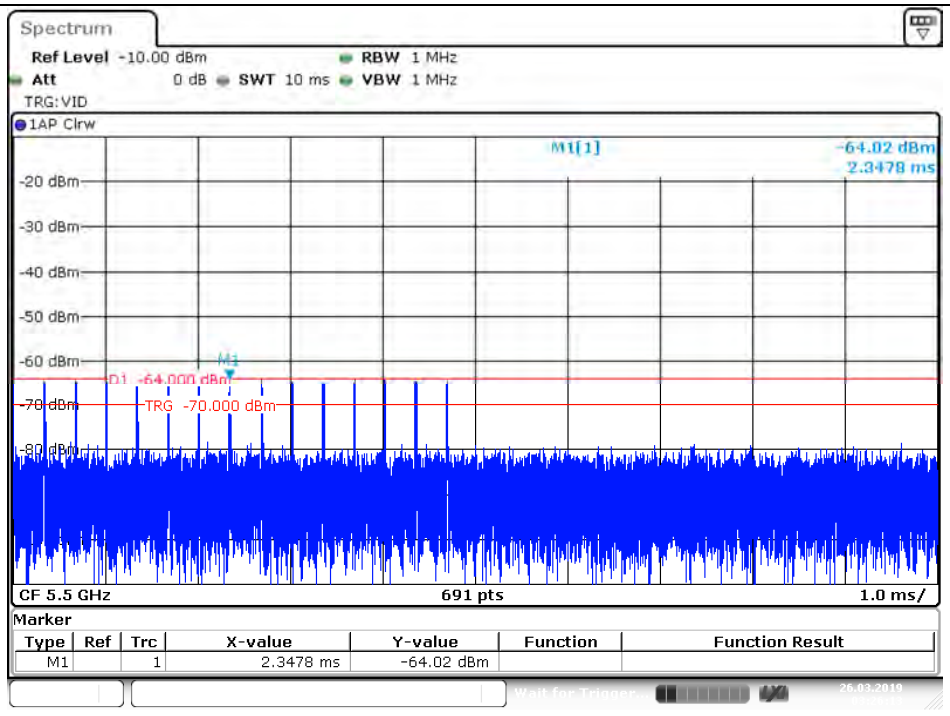
Date: 26.MAR.2019 03:25:10

Radar #5 DFS detection threshold level and the burst of pulses on the Channel frequency



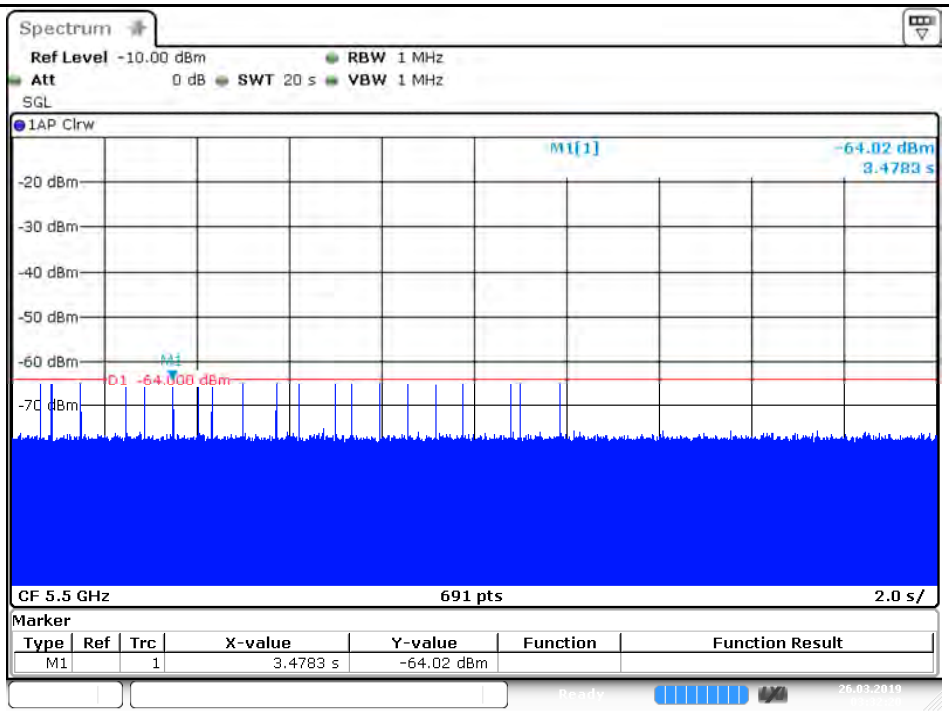
Date: 26.MAR.2019 03:25:39

Radar #6 DFS detection threshold level and the burst of pulses on the Channel frequency



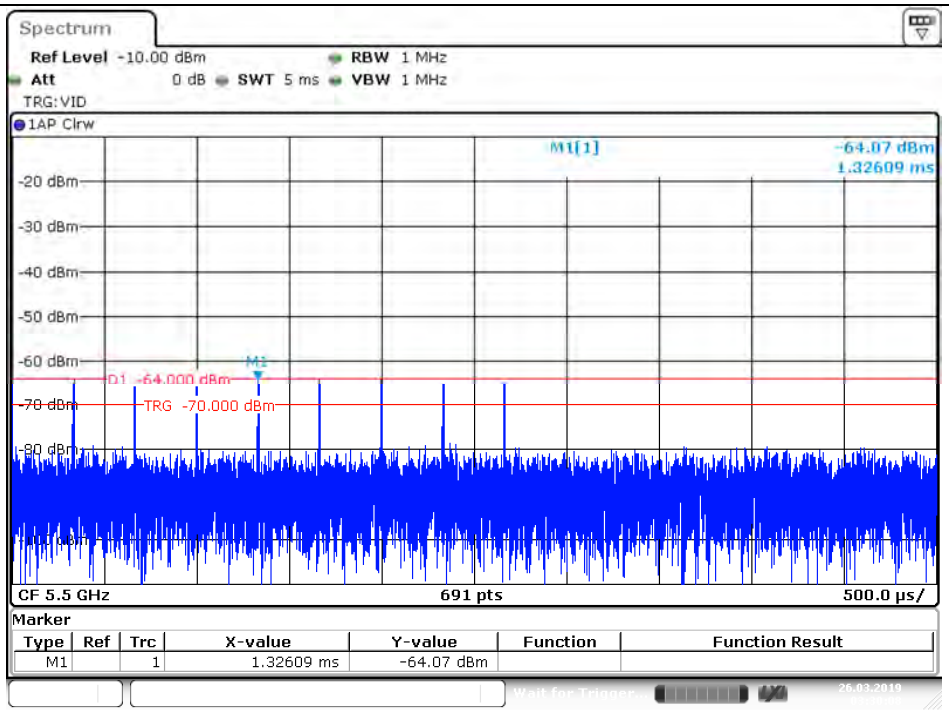
Date: 26.MAR.2019 03:26:13

Radar #7 DFS detection threshold level and the burst of pulses on the Channel frequency



Date: 26.MAR.2019 03:32:20

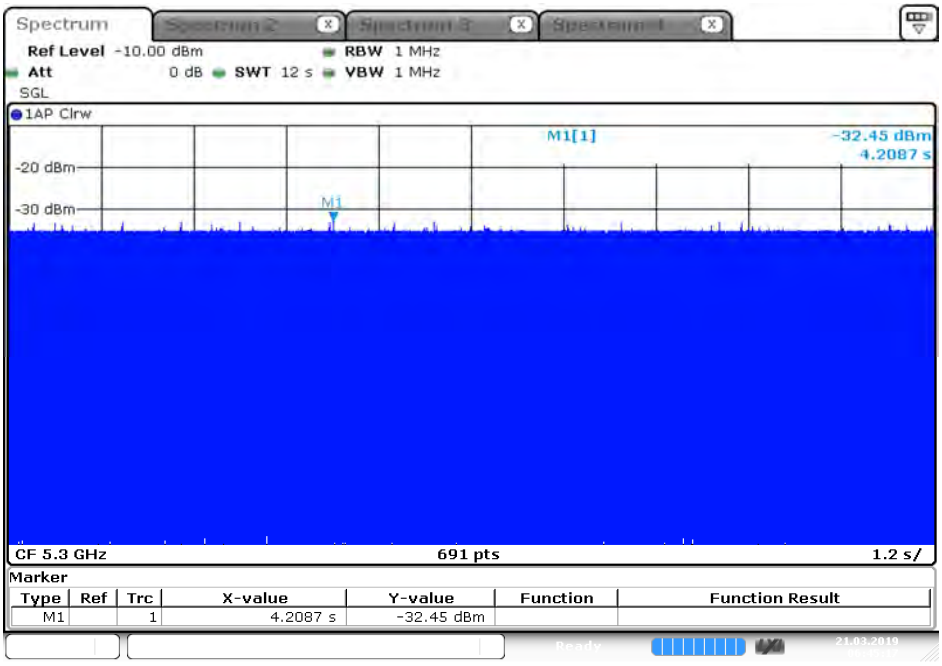
Radar #8 DFS detection threshold level and a single hop (9 pulses) on the Channel frequency within UNII detection bandwidth.



Date: 26.MAR.2019 03:30:08

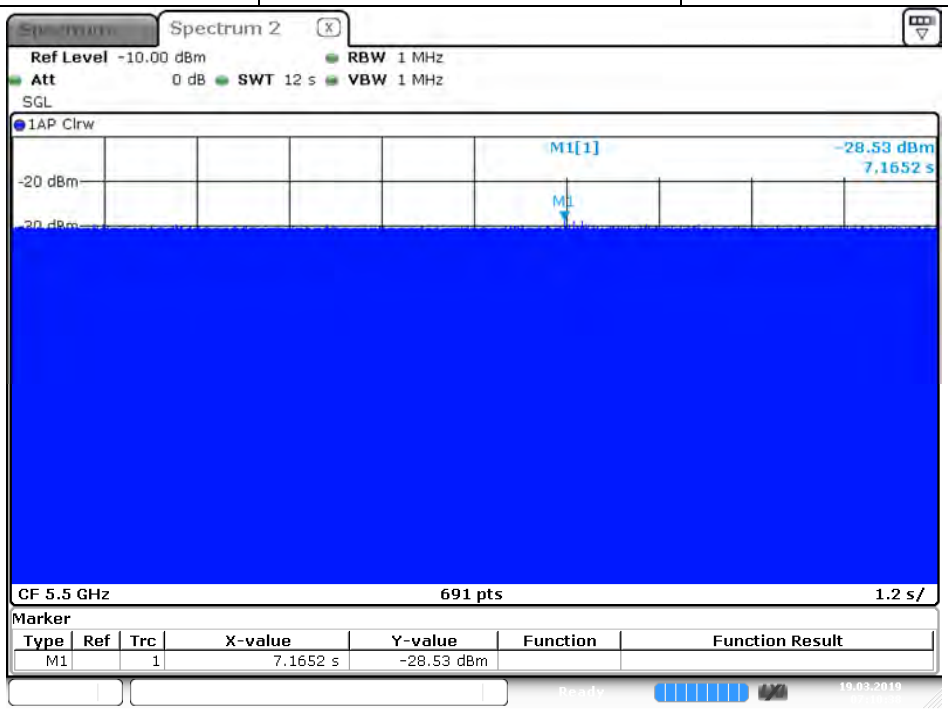
2.4.7 Data traffic Plot

EUT Data traffic Plot	Modulation Mode: ax (HEW20)	Test Frequency: 5300 MHz



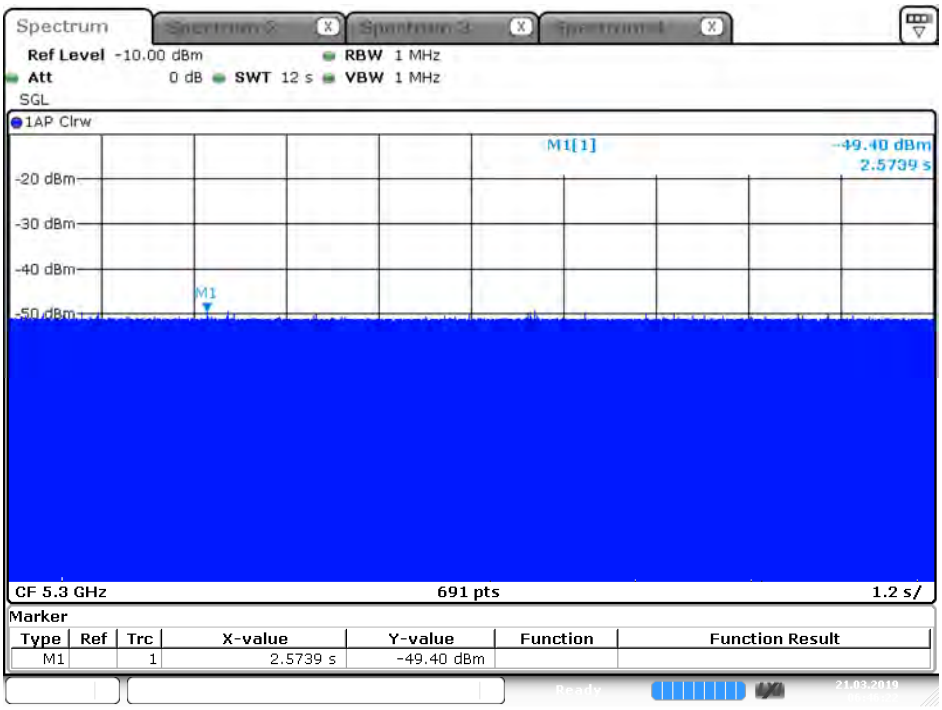
Date: 21.MAR.2019 06:45:17

EUT Data traffic Plot	Modulation Mode: ax (HEW20)	Test Frequency: 5500 MHz



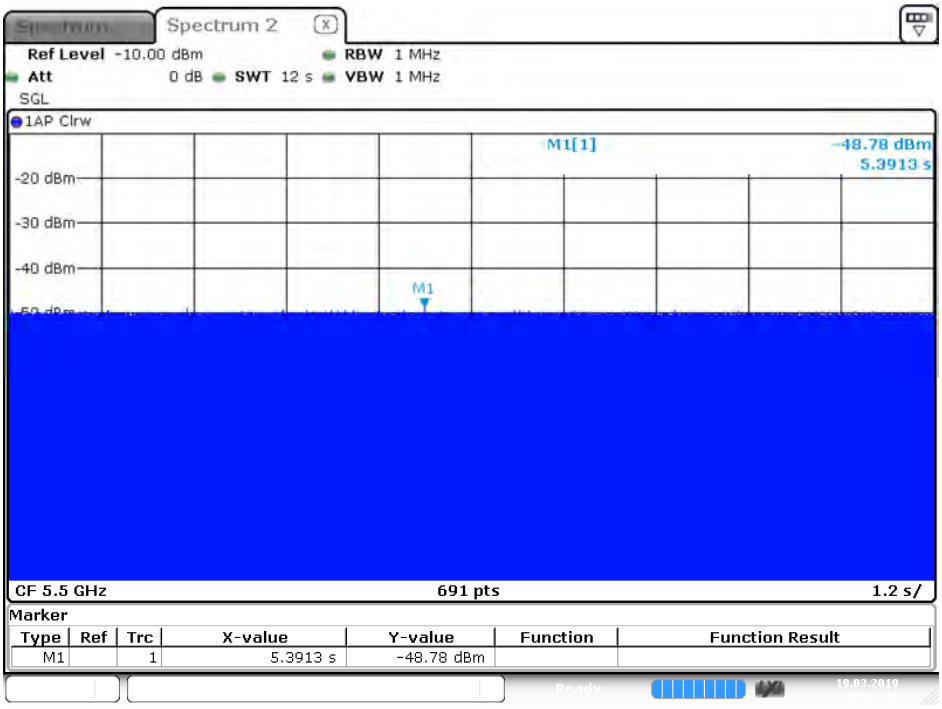
Date: 19.MAR.2019 07:10:38

Slave Data Traffic Plot	Modulation Mode: ax (HEW20)	Test Frequency: 5300 MHz



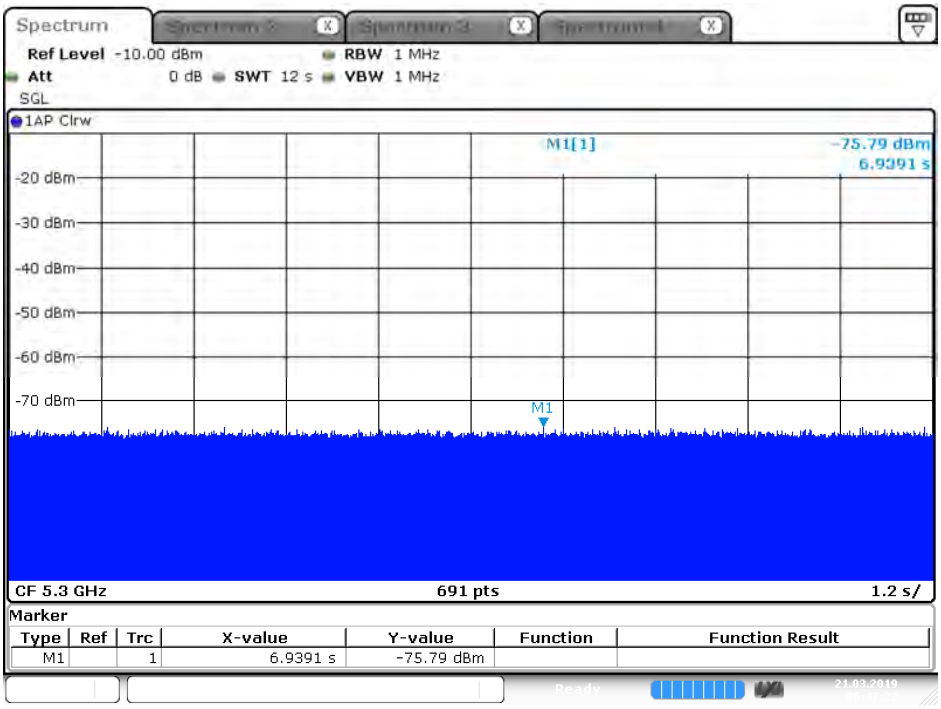
Date: 21.MAR.2019 06:46:21

Slave Data Traffic Plot	Modulation Mode: ax (HEW20)	Test Frequency: 5500 MHz



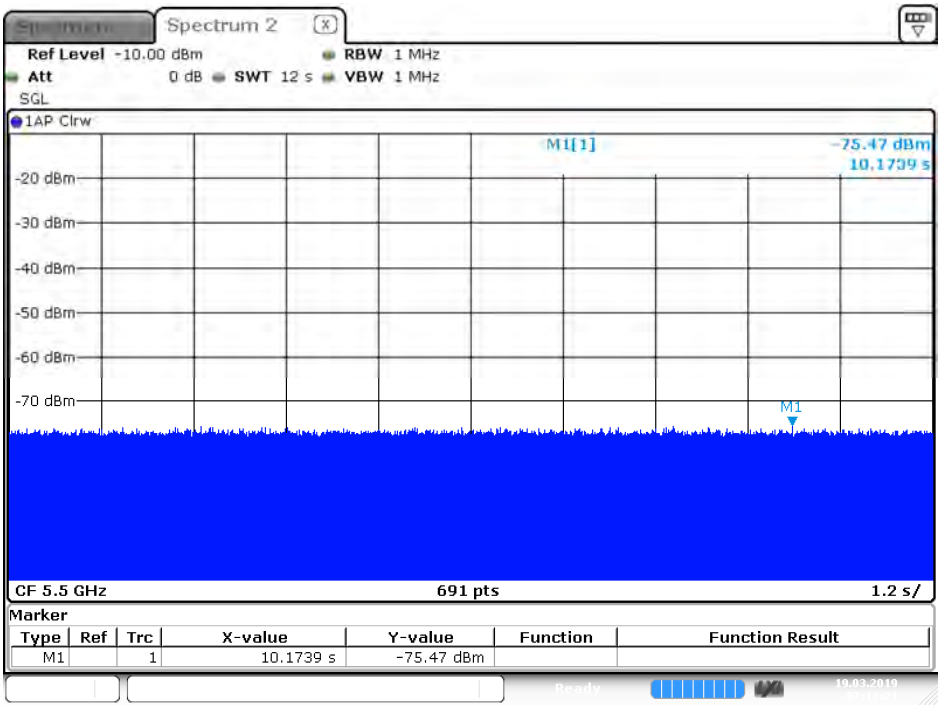
Date: 19.MAR.2019 07:13:32

Without Data Traffic Plot	Modulation Mode: ax (HEW20)	Test Frequency: 5300 MHz



Date: 21.MAR.2019 06:47:22

Without Data Traffic Plot	Modulation Mode: ax (HEW20)	Test Frequency: 5500 MHz



Date: 19.MAR.2019 07:12:21

2.5 Channel Availability Check (CAC)

2.5.1 Channel Availability Check Limit

Channel Availability Check Limit
☒ The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute (60 sec) on the intended operating frequency.

2.5.2 Measuring Instruments

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

2.5.3 Test Procedures

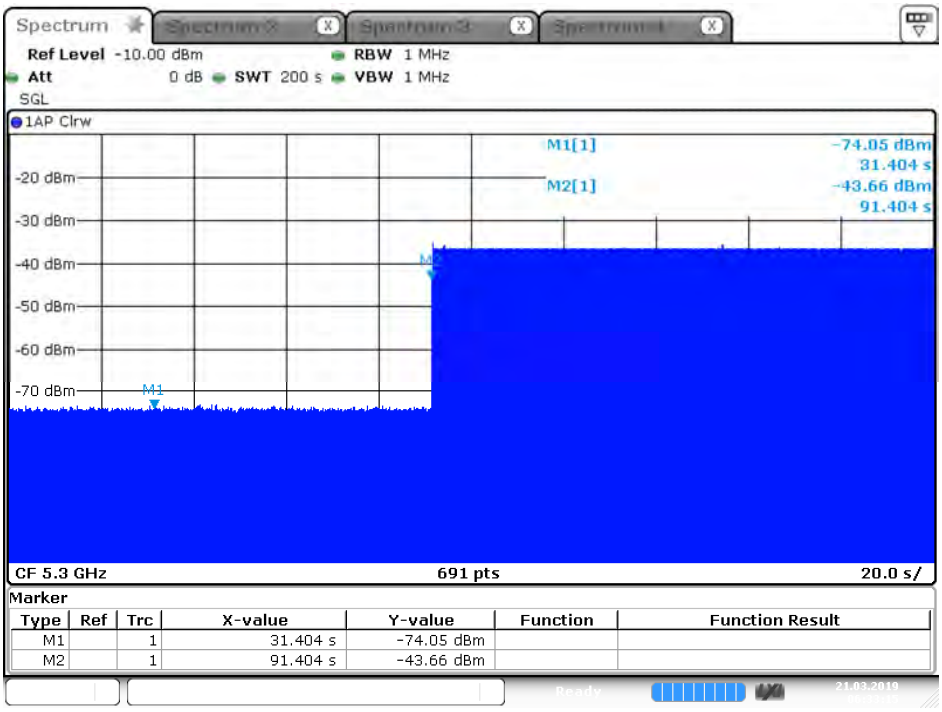
Test Method for W53	
Measuring Equipment Conditions	MIC Notice No.88 Appendix No.45, clause 13.2/26.2
Conditions of Equipment under Test	MIC Notice No.88 Appendix No.45, clause 13.3/26.3
Measuring Operation Procedures	MIC Notice No.88 Appendix No.45, clause 13.4/26.4
Presentation of Results	MIC Notice No.88 Appendix No.45, clause 13.5/26.5
Other Conditions	MIC Notice No.88 Appendix No.45, clause 13.6/26.6

Test Method for W56	
Measuring Equipment Conditions	MIC Notice No.88 Appendix No.45, clause 13.2/27.2
Conditions of Equipment under Test	MIC Notice No.88 Appendix No.45, clause 13.3/27.3
Measuring Operation Procedures	MIC Notice No.88 Appendix No.45, clause 13.4/27.4
Presentation of Results	MIC Notice No.88 Appendix No.45, clause 13.5/27.5
Other Conditions	MIC Notice No.88 Appendix No.45, clause 13.6/27.6

2.5.4 Radar Detection Threshold (Initial Channel Availability Check) Result

W53 band (5250-5350 MHz)	Modulation Mode: ax (HEW20)

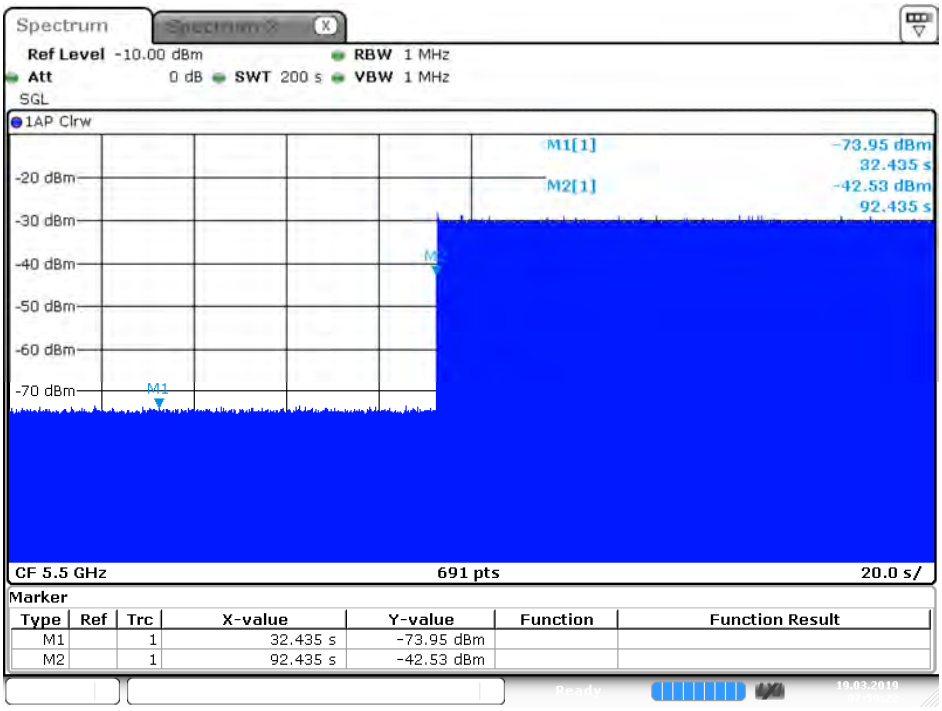
The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (31.404 sec). The initial power up time of the EUT is indicated by marker 1 (31.404 sec). Initial beacons/data transmissions are indicated by marker 2 (91.404 sec).



Date: 21.MAR.2019 06:33:14

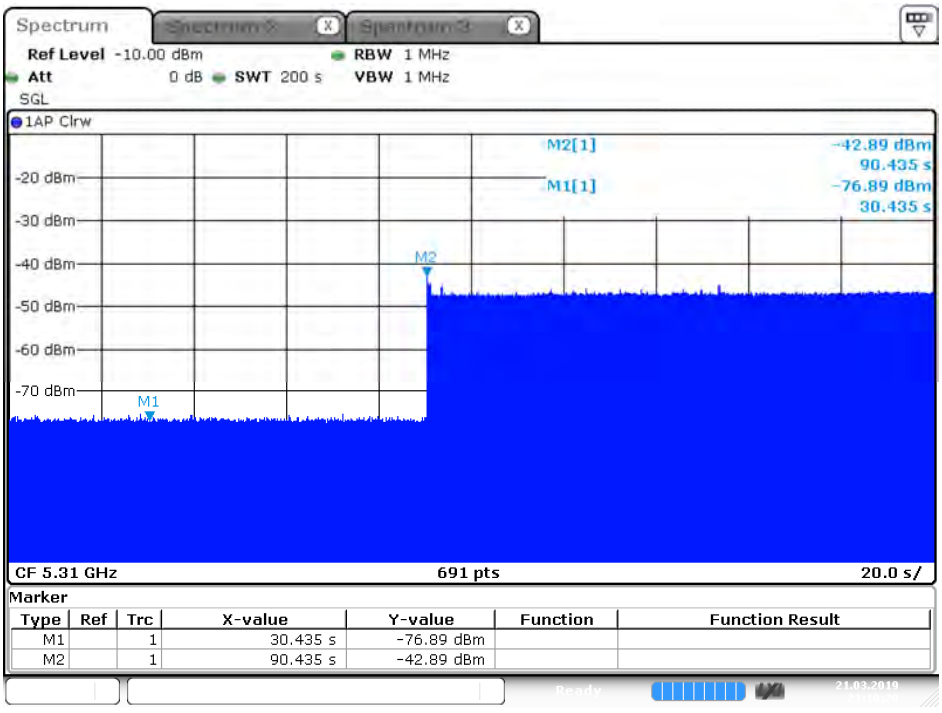
W56 band (5470-5725 MHz)	Modulation Mode: ax (HEW20)

The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (32.435 sec). The initial power up time of the EUT is indicated by marker 1 (32.435sec). Initial beacons/data transmissions are indicated by marker 2 (92.435 sec).



W53 band (5250-5350 MHz)	Modulation Mode: ax (HEW40)

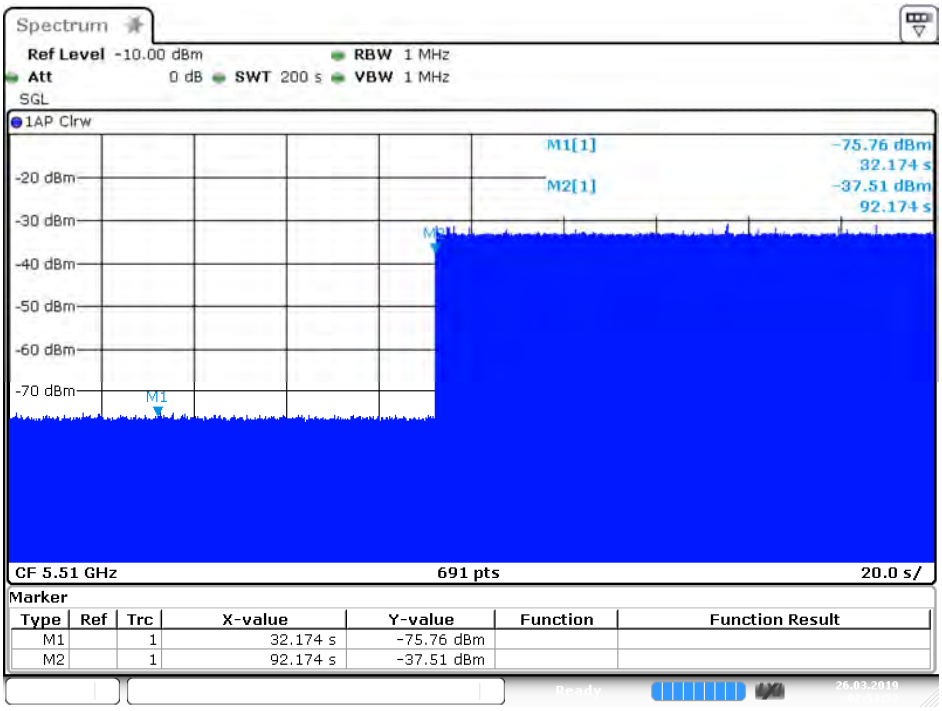
The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (30.435 sec). The initial power up time of the EUT is indicated by marker 1 (30.435 sec). Initial beacons/data transmissions are indicated by marker 2 (90.435 sec).



Date: 21.MAR.2019 21:10:20

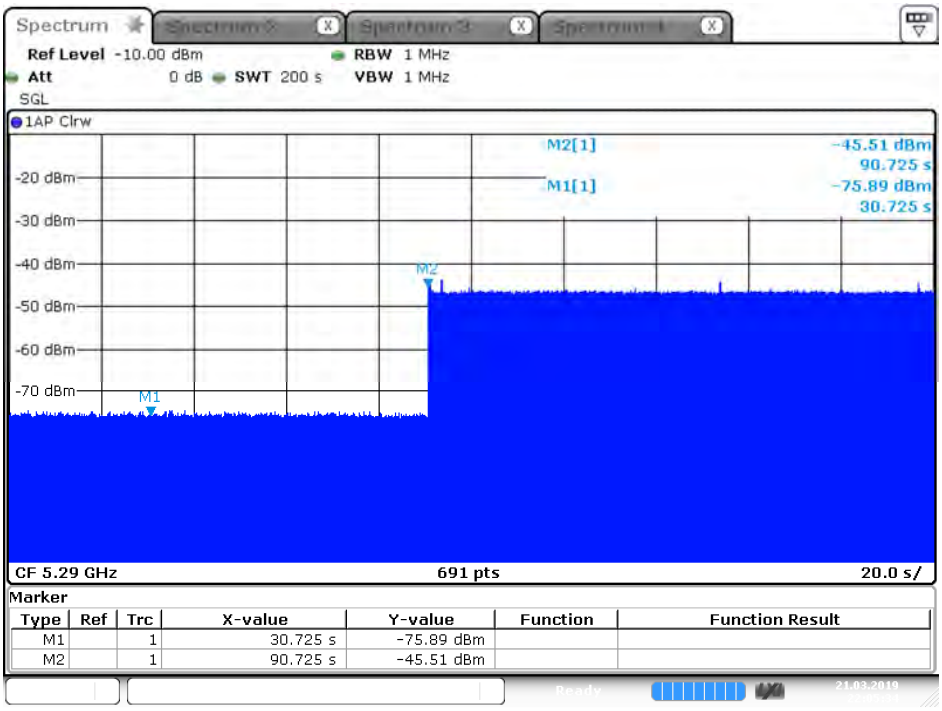
W56 band (5470-5725 MHz)	Modulation Mode: ax (HEW40)

The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (32.174 sec). The initial power up time of the EUT is indicated by marker 1 (32.174 sec). Initial beacons/data transmissions are indicated by marker 2 (92.174 sec).



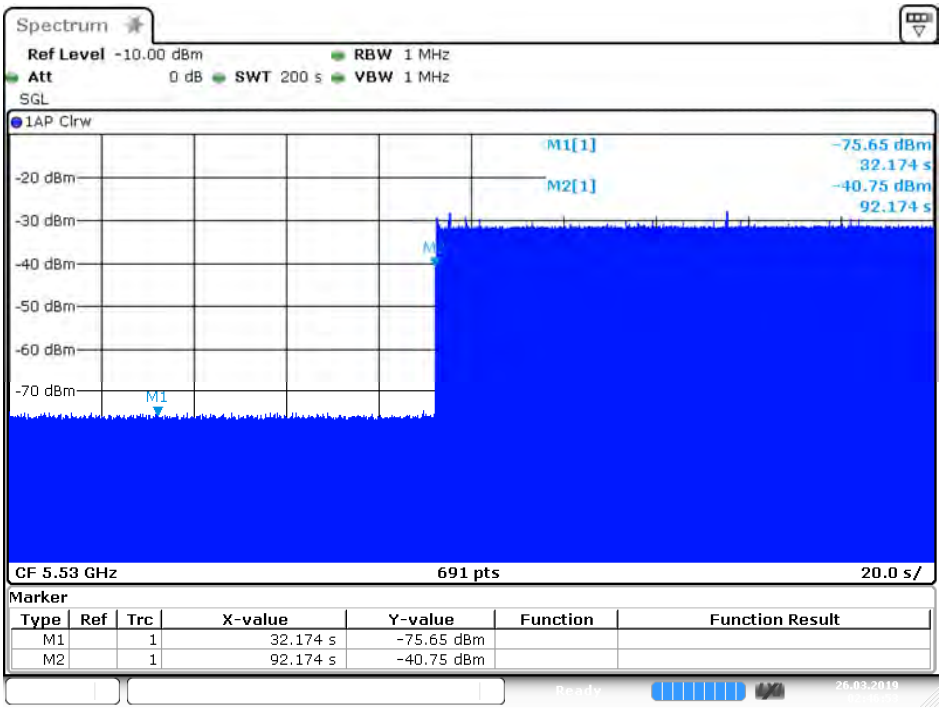
W53 band (5250-5350 MHz)	Modulation Mode: ax (HEW80)

The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (30.725 sec). The initial power up time of the EUT is indicated by marker 1 (30.725 sec). Initial beacons/data transmissions are indicated by marker 2 (90.725 sec).



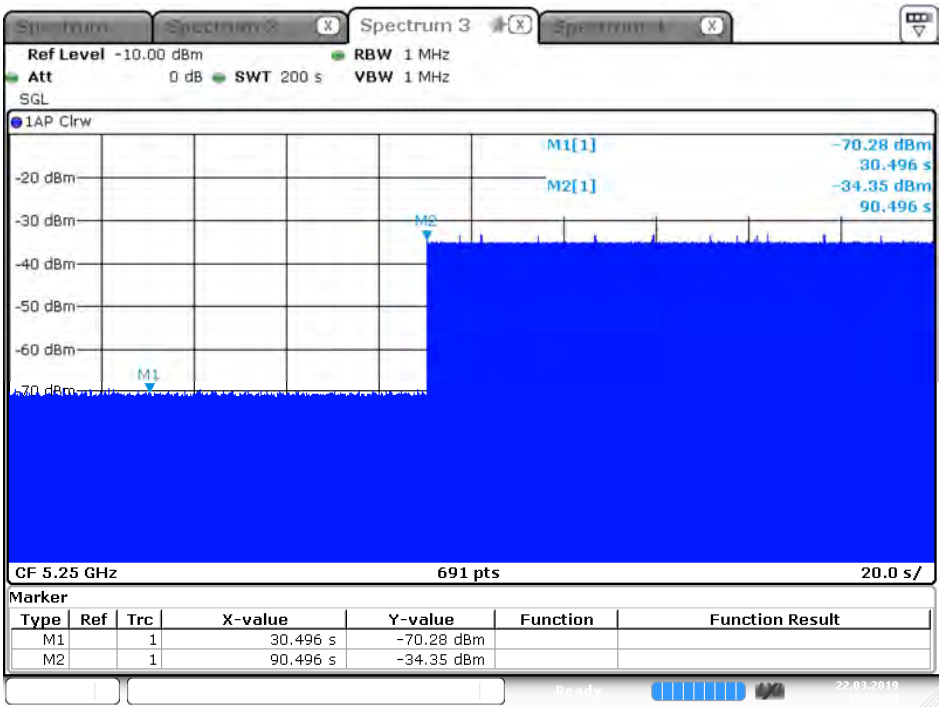
W56 band (5470-5725 MHz)	Modulation Mode: ax (HEW80)

The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (32.174 sec). The initial power up time of the EUT is indicated by marker 1 (32.174 sec). Initial beacons/data transmissions are indicated by marker 2 (92.174 sec).



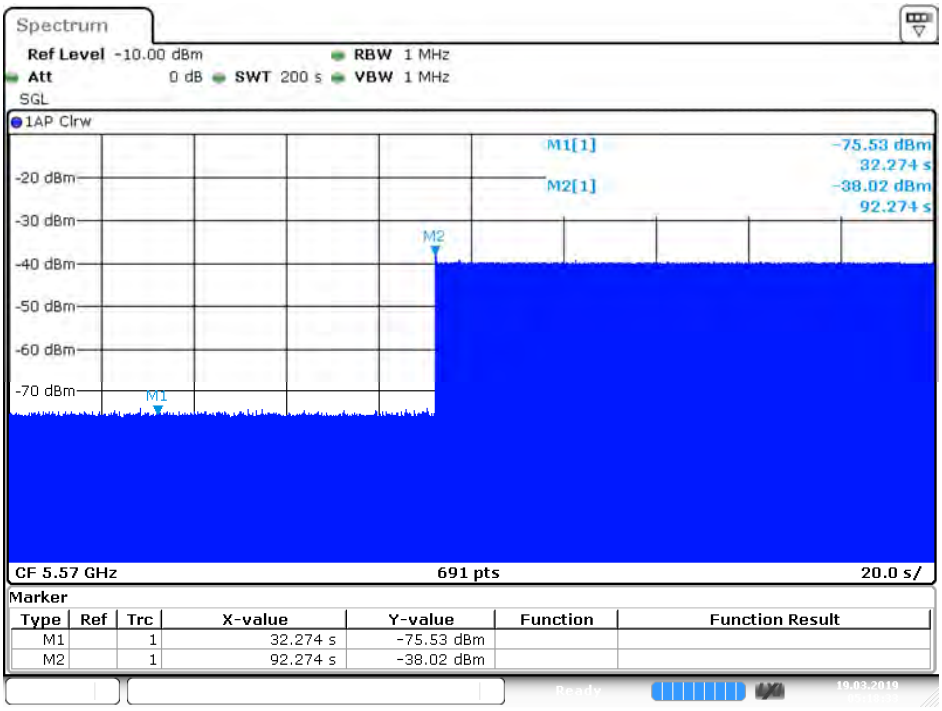
W53 band (5250-5350 MHz)	Modulation Mode: ax (HEW160)

The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (30.496 sec). The initial power up time of the EUT is indicated by marker 1 (30.496 sec). Initial beacons/data transmissions are indicated by marker 2 (90.496 sec).



W56 band (5470-5725 MHz)	Modulation Mode: ax (HEW160)

The EUT does not transmit any beacon or data transmissions until at least 1 minute after the completion of the power-on cycle (32.274 sec). The initial power up time of the EUT is indicated by marker 1 (32.274 sec). Initial beacons/data transmissions are indicated by marker 2 (92.274 sec).



2.5.5 Radar Detection Threshold (during the Channel Availability Check) Result

Radar Detection Threshold (during the Channel Availability Check) Result					
Detection Threshold Level (dBm)			-64		
Modulation Mode	**Freq. (MHz)**	**Radar Test Signal (#)**	**Nr of Times Triggered (# out of 4)**	**Detection Probability (%)**	**Detection Probability Limit (%)**
ax (HEW20)	5300	1 - Fixed	4	100	100
		2 - Fixed	4	100	100
ax (HEW20)	5500	1 - Fixed	4	100	100
		2 - Fixed	4	100	100
		3 - Fixed	4	100	100
		4 - Variable	4	100	100
		5 - Variable	4	100	100
		6 - Variable	4	100	100
		7 - Chirp	4	100	100
		8 - Hopping	4	100	100
Result		**PASS**			

Radar Detection Threshold (during the Channel Availability Check) Result					
Detection Threshold Level (dBm)			-64		
Modulation Mode	**Freq. (MHz)**	**Radar Test Signal (#)**	**Nr of Times Triggered (# out of 4)**	**Detection Probability (%)**	**Detection Probability Limit (%)**
ax (HEW40)	5310	1 - Fixed	4	100	100
		2 - Fixed	4	100	100
ax (HEW40)	5510	1 - Fixed	4	100	100
		2 - Fixed	4	100	100
		3 - Fixed	4	100	100
		4 - Variable	4	100	100
		5 - Variable	4	100	100
		6 - Variable	4	100	100
		7 - Chirp	4	100	100
		8 - Hopping	4	100	100
Result		**PASS**			

Radar Detection Threshold (during the Channel Availability Check) Result					
Detection Threshold Level (dBm)			-64		
Modulation Mode	**Freq. (MHz)**	**Radar Test Signal (#)**	**Nr of Times Triggered (# out of 4)**	**Detection Probability (%)**	**Detection Probability Limit (%)**
ax (HEW80)	5290	1 - Fixed	4	100	100
		2 - Fixed	4	100	100
ax (HEW80)	5530	1 - Fixed	4	100	100
		2 - Fixed	4	100	100
		3 - Fixed	4	100	100
		4 - Variable	4	100	100
		5 - Variable	4	100	100
		6 - Variable	4	100	100
		7 - Chirp	4	100	100
		8 - Hopping	4	100	100
Result		**PASS**			

Radar Detection Threshold (during the Channel Availability Check) Result					
Detection Threshold Level (dBm)			-64		
Modulation Mode	**Freq. (MHz)**	**Radar Test Signal (#)**	**Nr of Times Triggered (# out of 4)**	**Detection Probability (%)**	**Detection Probability Limit (%)**
ax (HEW160)	5250	1 - Fixed	4	100	100
		2 - Fixed	4	100	100
ax (HEW160)	5570	1 - Fixed	4	100	100
		2 - Fixed	4	100	100
		3 - Fixed	4	100	100
		4 - Variable	4	100	100
		5 - Variable	4	100	100
		6 - Variable	4	100	100
		7 - Chirp	4	100	100
		8 - Hopping	4	100	100
Result		**PASS**			

2.6 In-service Monitoring

2.6.1 In-service Monitoring Limit

In-service Monitoring Limit	
☒	The *In-Service Monitoring* shall be used to monitor an *Operating Channel*.
☒	The *In-Service-Monitoring* shall start immediately after the EUT has started transmissions on a channel. During the *In-Service Monitoring*, the EUT shall be capable of detecting any of the radar test signals that fall within the started transmissions ranges and with a level above the *Radar Detection Threshold*.
☒	The minimum required detection probability is defined in clause2.4.1 DFS Parameters.

2.6.2 Measuring Instruments

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

2.6.3 Test Procedures

Test Method for W53	
Measuring Equipment Conditions	MIC Notice No.88 Appendix No.45, clause 13.2/26.2
Conditions of Equipment under Test	MIC Notice No.88 Appendix No.45, clause 13.3/26.3
Measuring Operation Procedures	MIC Notice No.88 Appendix No.45, clause 13.4/26.4
Presentation of Results	MIC Notice No.88 Appendix No.45, clause 13.5/26.5
Other Conditions	MIC Notice No.88 Appendix No.45, clause 13.6/26.6

Test Method for W56	
Measuring Equipment Conditions	MIC Notice No.88 Appendix No.45, clause 13.2/27.2
Conditions of Equipment under Test	MIC Notice No.88 Appendix No.45, clause 13.3/27.3
Measuring Operation Procedures	MIC Notice No.88 Appendix No.45, clause 13.4/27.4
Presentation of Results	MIC Notice No.88 Appendix No.45, clause 13.5/27.5
Other Conditions	MIC Notice No.88 Appendix No.45, clause 13.6/27.6

2.6.4 Test Result of In-service Monitoring

In-service Monitoring Result					
Detection Threshold Level (dBm)			-64 (DFS Detection Threshold)		
Modulation Mode	**Freq. (MHz)**	**Radar Test Signal (#)**	**Nr of Times Triggered (# out of 20)**	**Detection Probability (%)**	**Detection Probability Limit (%)**
ax (HEW20)	5300	1 - Fixed	17	85	60
		2 - Fixed	18	90	60
ax (HEW20)	5500	1 - Fixed	18	90	60
		2 - Fixed	18	90	60
		3 - Fixed	19	95	60
		4 - Variable	18	90	60
		5 - Variable	17	85	60
		6 - Variable	16	80	60
		7 - Chirp	17	85	80
		8 - Hopping	20	100	70
Result		**PASS**			

In-service Monitoring Result					
Detection Threshold Level (dBm)			-64 (DFS Detection Threshold)		
Modulation Mode	**Freq. (MHz)**	**Radar Test Signal (#)**	**Nr of Times Triggered (# out of 20)**	**Detection Probability (%)**	**Detection Probability Limit (%)**
ax (HEW40)	5310	1 - Fixed	14	70	60
		2 - Fixed	17	85	60
ax (HEW40)	5510	1 - Fixed	18	90	60
		2 - Fixed	19	95	60
		3 - Fixed	17	85	60
		4 - Variable	18	90	60
		5 - Variable	18	90	60
		6 - Variable	17	85	60
		7 - Chirp	18	90	80
		8 - Hopping	20	100	70
Result		**PASS**			

In-service Monitoring Result					
Detection Threshold Level (dBm)			-64 (DFS Detection Threshold)		
Modulation Mode	**Freq. (MHz)**	**Radar Test Signal (#)**	**Nr of Times Triggered (# out of 20)**	**Detection Probability (%)**	**Detection Probability Limit (%)**
ax (HEW80)	5290	1 - Fixed	16	80	60
		2 - Fixed	18	90	60
ax (HEW80)	5530	1 - Fixed	18	90	60
		2 - Fixed	18	90	60
		3 - Fixed	17	85	60
		4 - Variable	18	90	60
		5 - Variable	18	90	60
		6 - Variable	16	80	60
		7 - Chirp	18	90	80
		8 - Hopping	20	100	70
Result		**PASS**			

In-service Monitoring Result					
Detection Threshold Level (dBm)			-64 (DFS Detection Threshold)		
Modulation Mode	**Freq. (MHz)**	**Radar Test Signal (#)**	**Nr of Times Triggered (# out of 20)**	**Detection Probability (%)**	**Detection Probability Limit (%)**
ax (HEW160)	5250	1 - Fixed	16	80	60
		2 - Fixed	15	75	60
ax (HEW160)	5570	1 - Fixed	19	95	60
		2 - Fixed	18	90	60
		3 - Fixed	18	90	60
		4 - Variable	17	85	60
		5 - Variable	18	90	60
		6 - Variable	15	75	60
		7 - Chirp	17	85	80
		8 - Hopping	20	100	70
Result		**PASS**			

In-service Monitoring Result				
Detection Threshold Level (dBm)			-64 (DFS Detection Threshold)	
Modulation Mode	**Freq. (MHz)**	**Radar Test Signal (#)**	**Detection Probability (%)**	**Detection Probability Limit (%)**
ax (HEW20)	5500	1 - Fixed	90	60
		2 - Fixed	90	
		3 - Fixed	95	
		4 - Variable	90	
		5 - Variable	85	
		6 - Variable	80	
		Total	88	80
ax (HEW40)	5510	1 - Fixed	90	60
		2 - Fixed	95	
		3 - Fixed	85	
		4 - Variable	90	
		5 - Variable	90	
		6 - Variable	85	
		Total	89	80
ax (HEW80)	5530	1 - Fixed	90	60
		2 - Fixed	90	
		3 - Fixed	85	
		4 - Variable	90	
		5 - Variable	90	
		6 - Variable	80	
		Total	88	80
ax (HEW160)	5570	1 - Fixed	95	60
		2 - Fixed	90	
		3 - Fixed	90	
		4 - Variable	85	
		5 - Variable	90	
		6 - Variable	75	
		Total	85	80
Result		**PASS**		

2.7 Channel Shutdown and Non-Occupancy Period

2.7.1 Channel Shutdown and Non-Occupancy Period Limit

Channel Shutdown and Non-Occupancy Period Limit	
Channel Move Time	10 sec
Channel Closing Transmission Time	260 ms in Channel Move Time 10 sec period.
Non-occupancy period	Minimum 30 minutes

2.7.2 Measuring Instruments

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

2.7.3 Test Procedures

Test Method for W53	
Measuring Equipment Conditions	MIC Notice No.88 Appendix No.45, clause 13.2/26.2
Conditions of Equipment under Test	MIC Notice No.88 Appendix No.45, clause 13.3/26.3
Measuring Operation Procedures	MIC Notice No.88 Appendix No.45, clause 13.4/26.4
Presentation of Results	MIC Notice No.88 Appendix No.45, clause 13.5/26.5
Other Conditions	MIC Notice No.88 Appendix No.45, clause 13.6/26.6

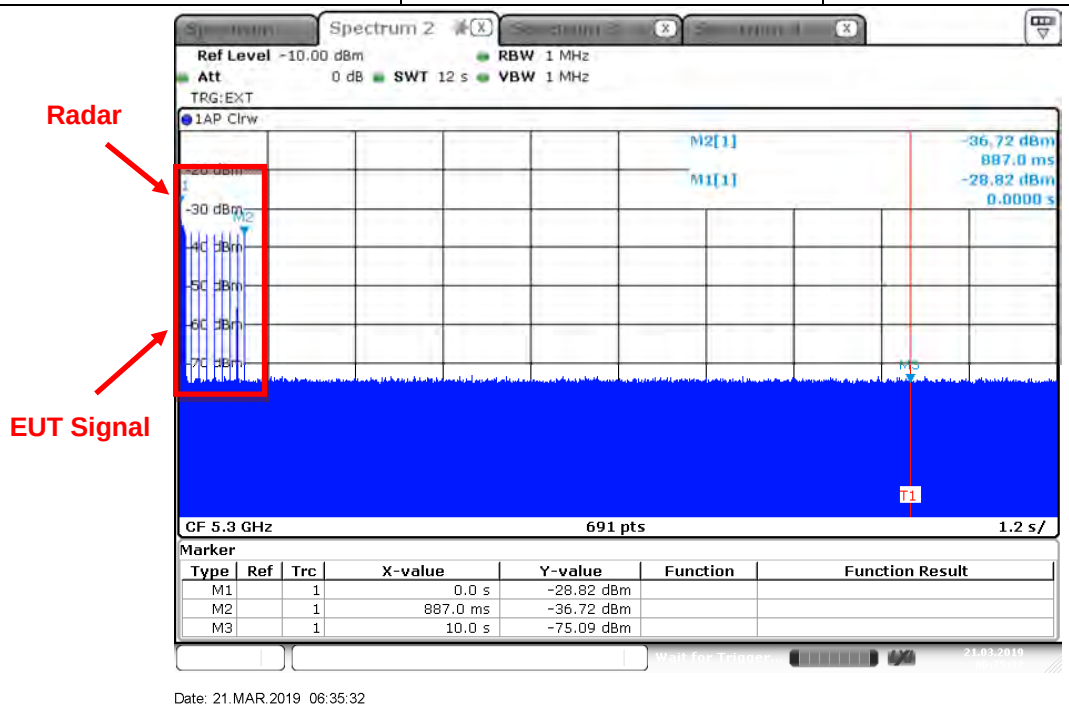
Test Method for W56	
Measuring Equipment Conditions	MIC Notice No.88 Appendix No.45, clause 13.2/27.2
Conditions of Equipment under Test	MIC Notice No.88 Appendix No.45, clause 13.3/27.3
Measuring Operation Procedures	MIC Notice No.88 Appendix No.45, clause 13.4/27.4
Presentation of Results	MIC Notice No.88 Appendix No.45, clause 13.5/27.5
Other Conditions	MIC Notice No.88 Appendix No.45, clause 13.6/27.6

2.7.4 Test Result of Channel Shutdown

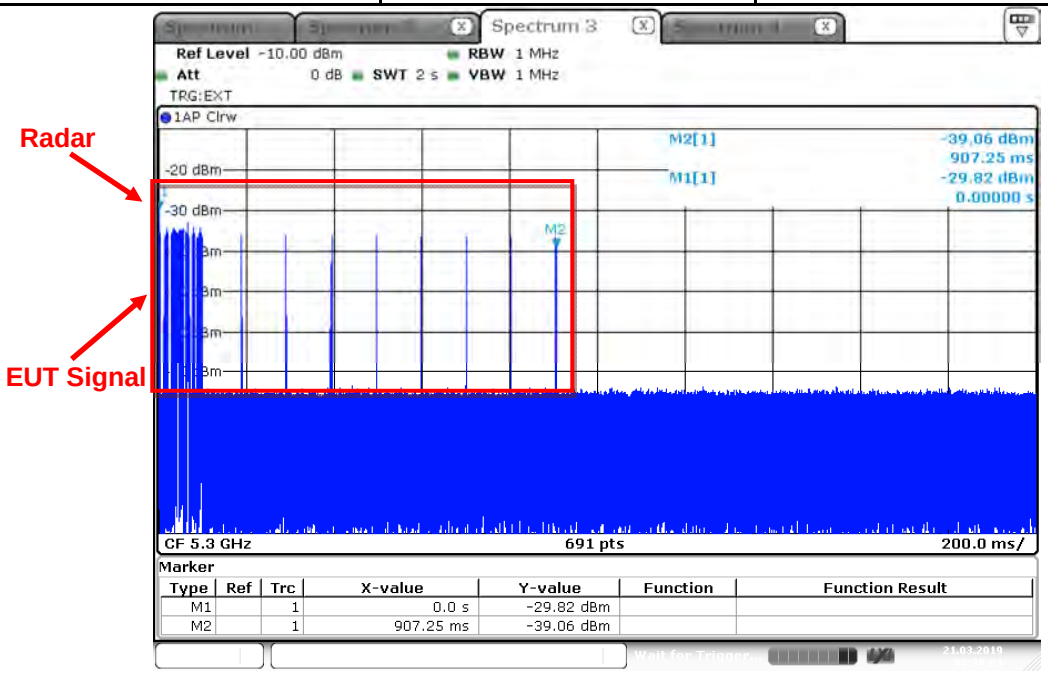
Channel Shutdown and Non-Occupancy Period Result				
Detection Threshold Level (dBm)			-64	
Modulation Mode	**Freq. (MHz)**	**Radar Test Signal**	**Channel Closing Transmission Time (ms)**	**Channel Move Time (s)**
ax (HEW20)	5300	1 - Fixed	107.246	0.887
ax (HEW20)	5500	2 - Fixed	31.884	0.743
ax (HEW40)	5310	1 - Fixed	26.086	0.860
ax (HEW40)	5510	2 - Fixed	28.985	0.869
ax (HEW80)	5290	1 - Fixed	72.463	0.834
ax (HEW80)	5530	2 - Fixed	26.086	0.782
ax (HEW160)	5250	1 - Fixed	139.130	0.930
ax (HEW160)	5570	2 - Fixed	63.768	0.830
Limit			260 ms	10 sec
Result			**PASS**	

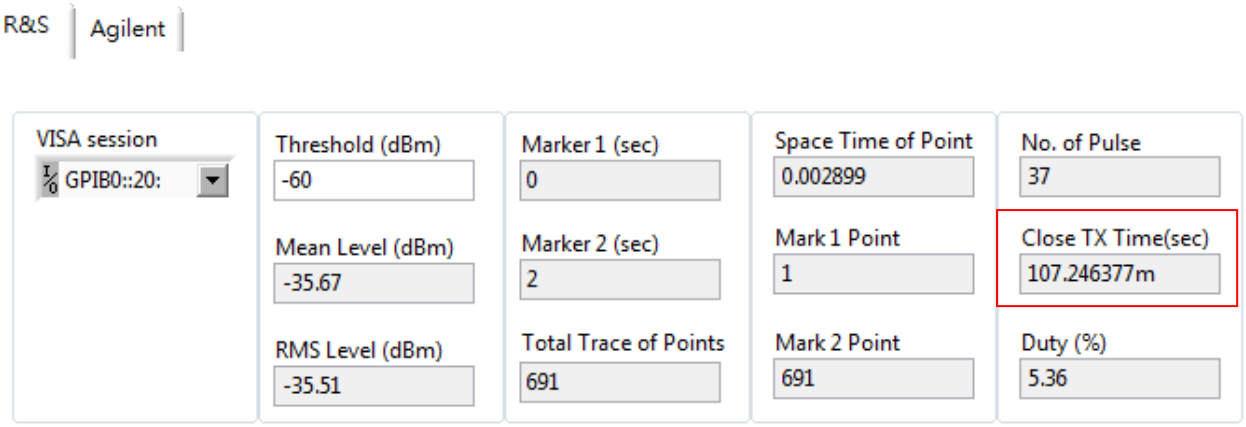
2.7.5 Channel Shutdown Plots

W53 band (5250-5350 MHz)		
Radar #1 Channel Move Time: < 10 sec		
Modulation Mode: ax (HEW20)	Test Frequency: 5300 MHz	Channel Move Time: 0.887 s



Radar #1 Channel Closing Transmission Time: 107.246 ms		Sampling Bins (B): 690
Modulation Mode: ax (HEW20)	Test Frequency: 5300 MHz	Number of Sampling Bins (N): 37

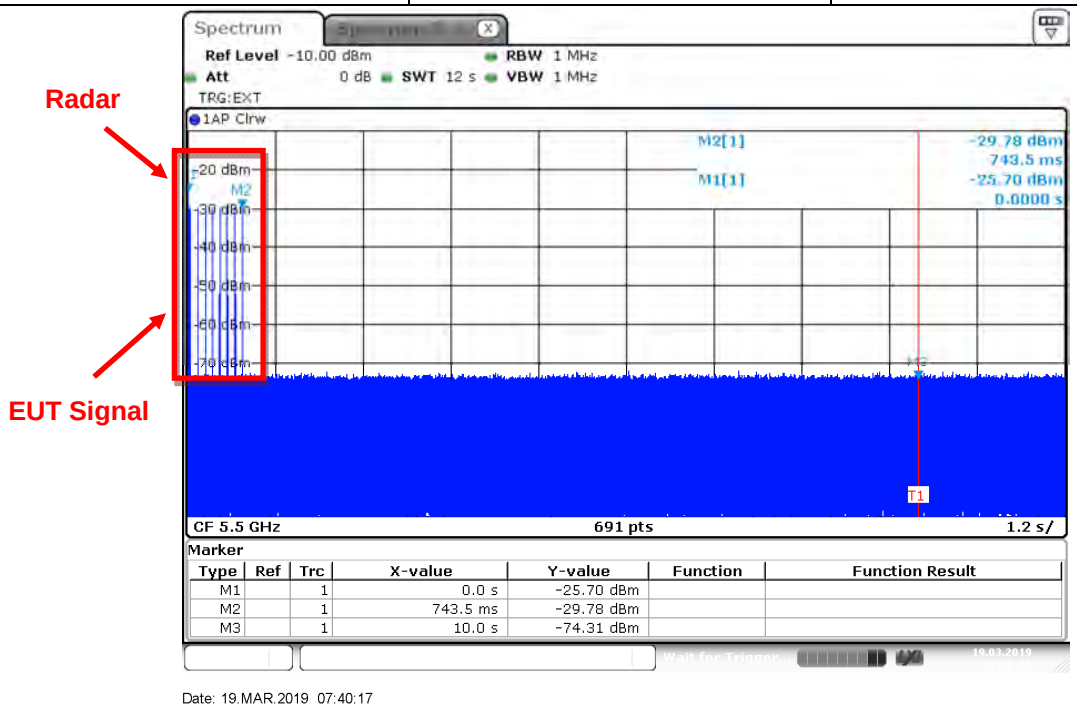




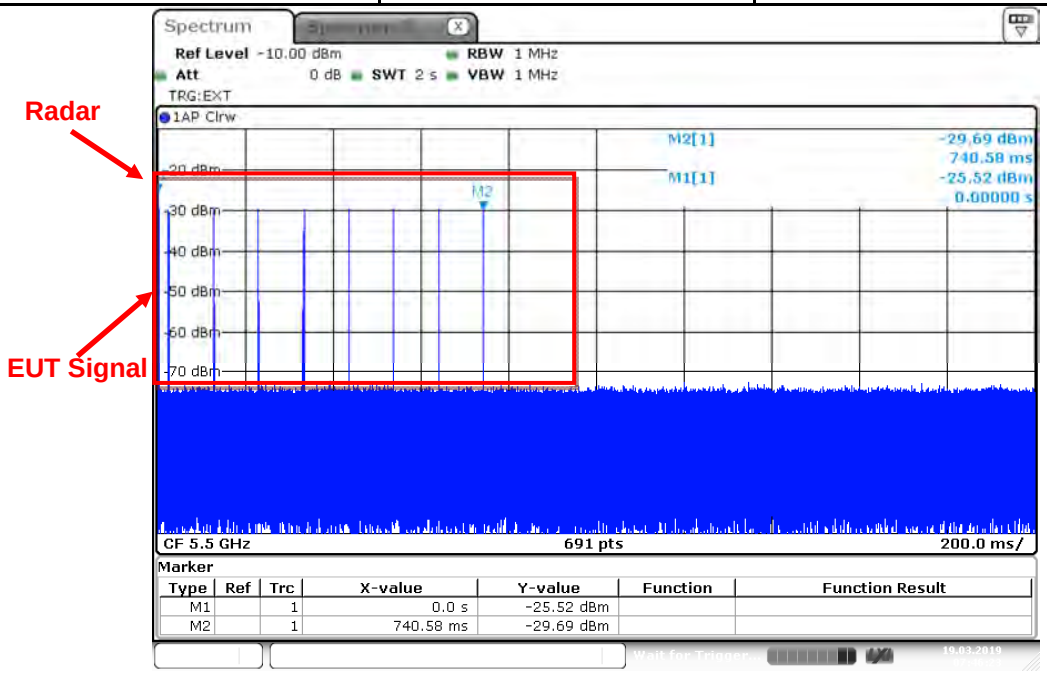
Dwell=S / B=2000ms / 690=2.898551ms, C=N x Dwell=37 x 2.898551ms=107.246 ms

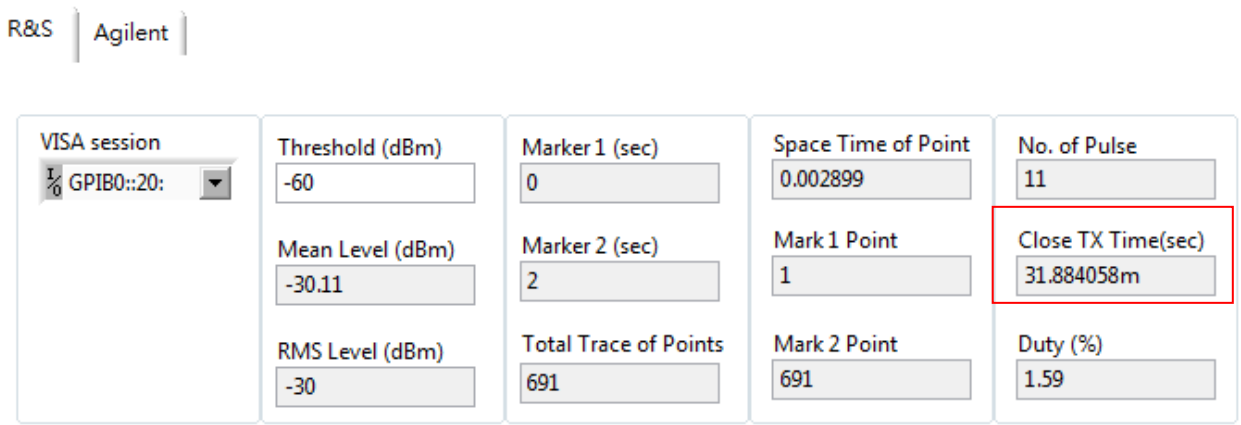
Note: The first sweep point of spectrum analyzer is occupied by radar signal, therefore, the number "Sweep Point-1" should be used for Channel Closing Transmission Time calculation.
The Channel Closing Transmission Time is calculated by Closing Time = N*(Sweep time/Sweep Point-1) where N is the number of spectrum analyzer sampling bins.

W56 band (5470-5725 MHz)		
Radar #2 Channel Move Time: < 10 sec		
Modulation Mode: ax (HEW20)	Test Frequency: 5500 MHz	Channel Move Time: 0.743 s



Radar #2 Channel Closing Transmission Time: 31.884 ms		Sampling Bins (B): 690
Modulation Mode: ax (HEW20)	Test Frequency: 5500 MHz	Number of Sampling Bins (N): 11

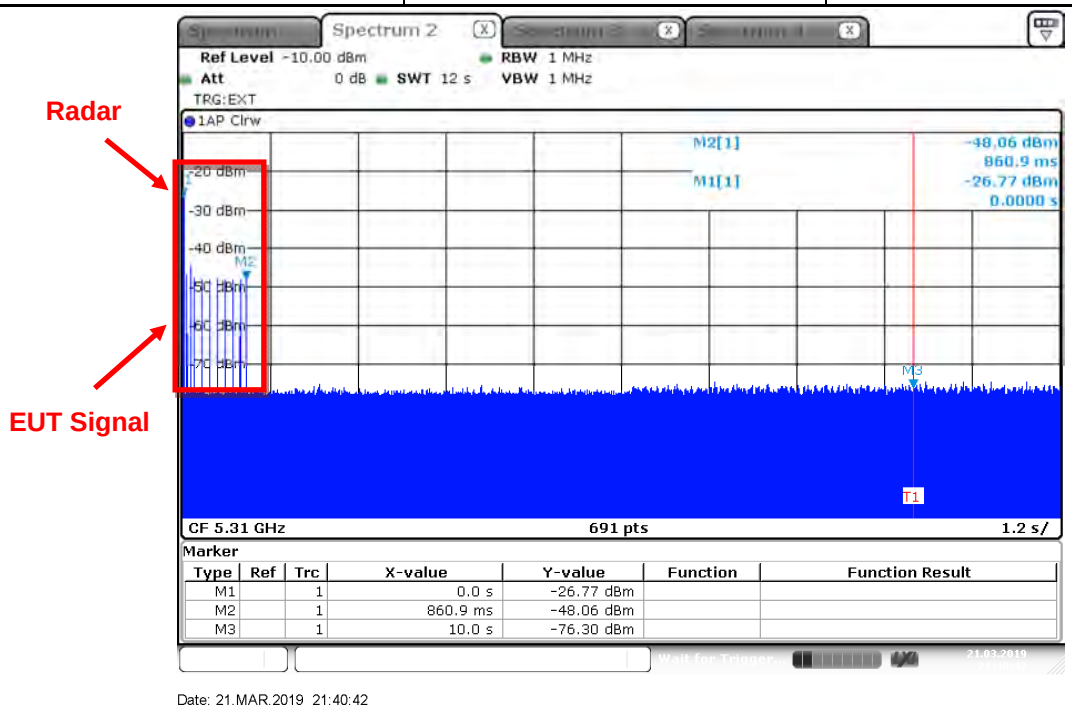




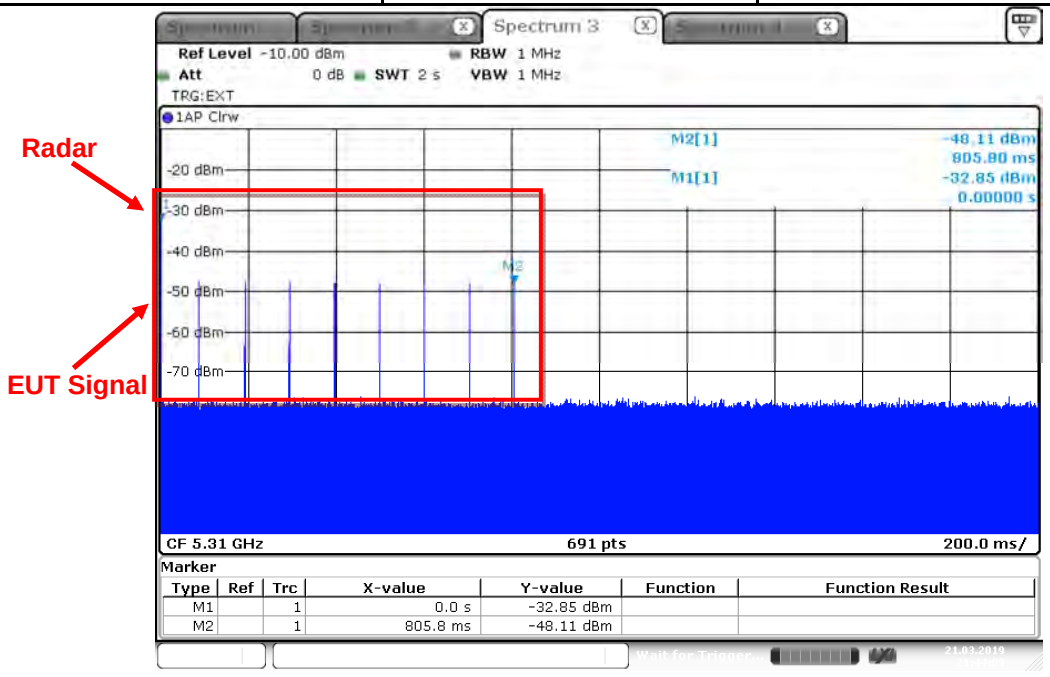
Dwell=S / B=2000ms / 690=2.898551ms, C=N x Dwell=11 x 2.898551ms=31.884 ms

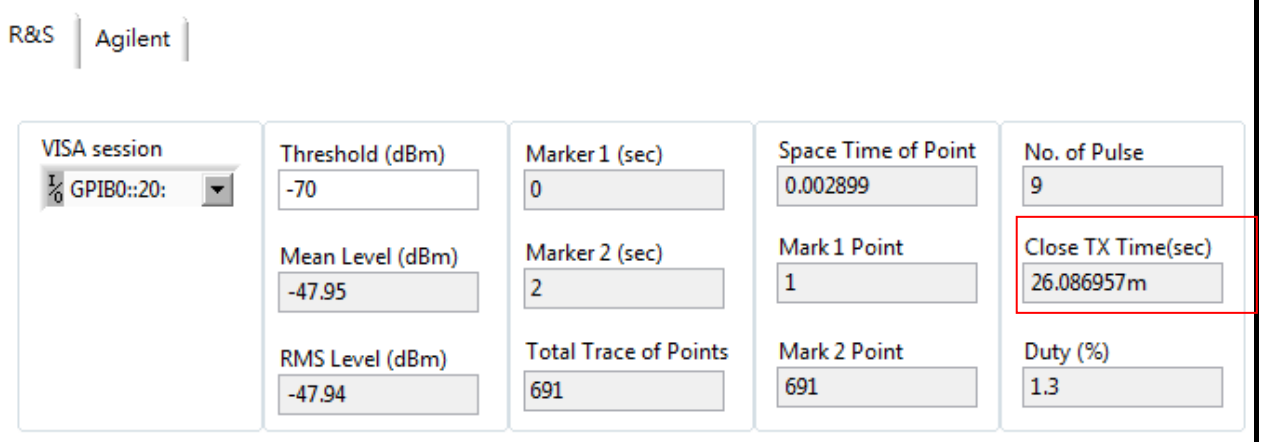
Note: The first sweep point of spectrum analyzer is occupied by radar signal, therefore, the number "Sweep Point-1" should be used for Channel Closing Transmission Time calculation.
The Channel Closing Transmission Time is calculated by Closing Time = N*(Sweep time/Sweep Point-1) where N is the number of spectrum analyzer sampling bins.

W53 band (5250-5350 MHz)		
Radar #1 Channel Move Time: < 10 sec		
Modulation Mode: ax (HEW40)	Test Frequency: 5310 MHz	Channel Move Time: 0.860 s



Radar #1 Channel Closing Transmission Time: 26.086 ms		Sampling Bins (B): 690
Modulation Mode: ax (HEW40)	Test Frequency: 5310 MHz	Number of Sampling Bins (N): 9

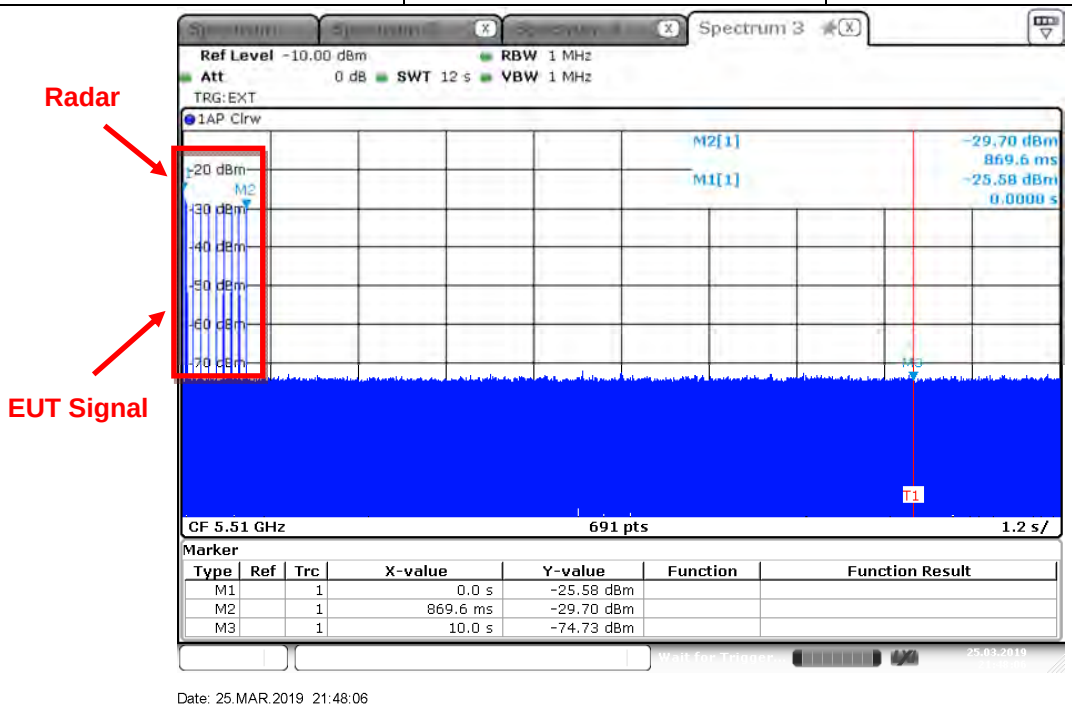




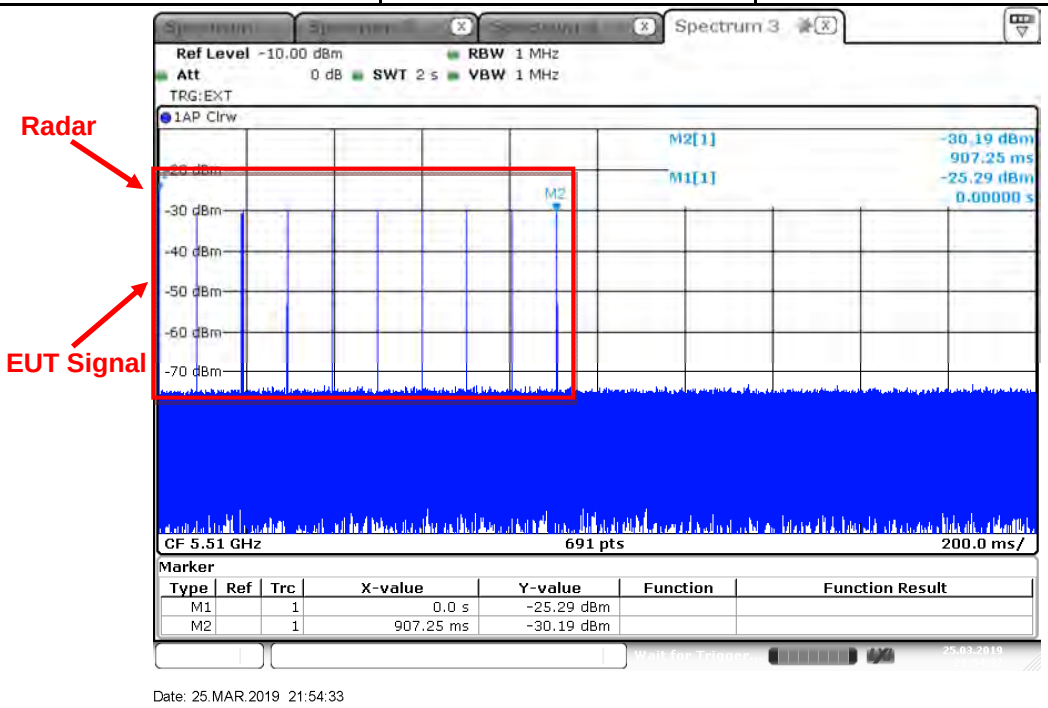
Dwell=S / B=2000ms / 690=2.898551ms, C=N x Dwell=9 x 2.898551ms=26.086 ms

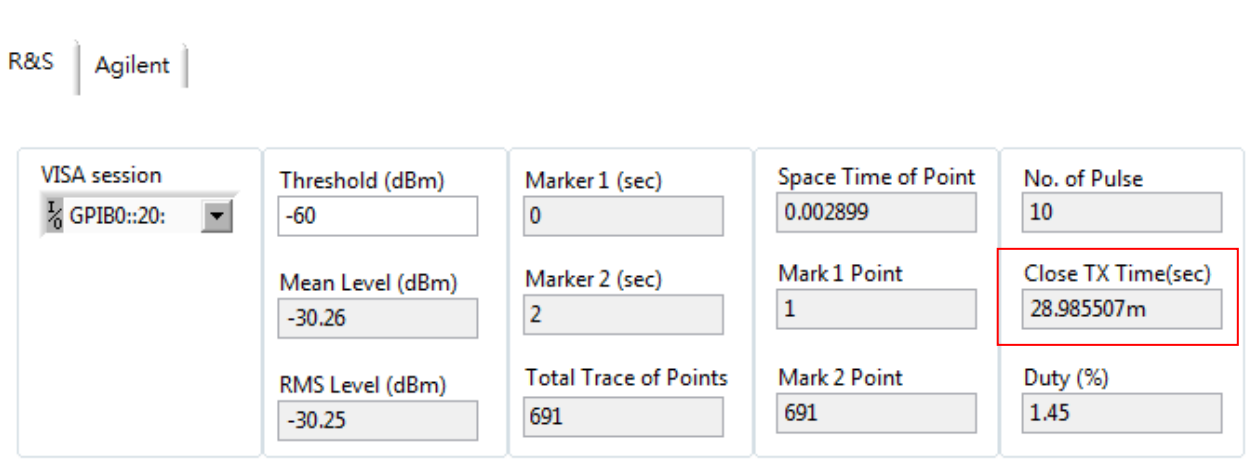
Note: The first sweep point of spectrum analyzer is occupied by radar signal, therefore, the number "Sweep Point-1" should be used for Channel Closing Transmission Time calculation.
The Channel Closing Transmission Time is calculated by Closing Time = N*(Sweep time/Sweep Point-1) where N is the number of spectrum analyzer sampling bins.

W56 band (5470-5725 MHz)		
Radar #2 Channel Move Time: < 10 sec		
Modulation Mode: ax (HEW40)	Test Frequency: 5510 MHz	Channel Move Time: 0.869 s



Radar #2 Channel Closing Transmission Time: 28.985 ms		Sampling Bins (B): 690
Modulation Mode: ax (HEW40)	Test Frequency: 5510 MHz	Number of Sampling Bins (N): 10

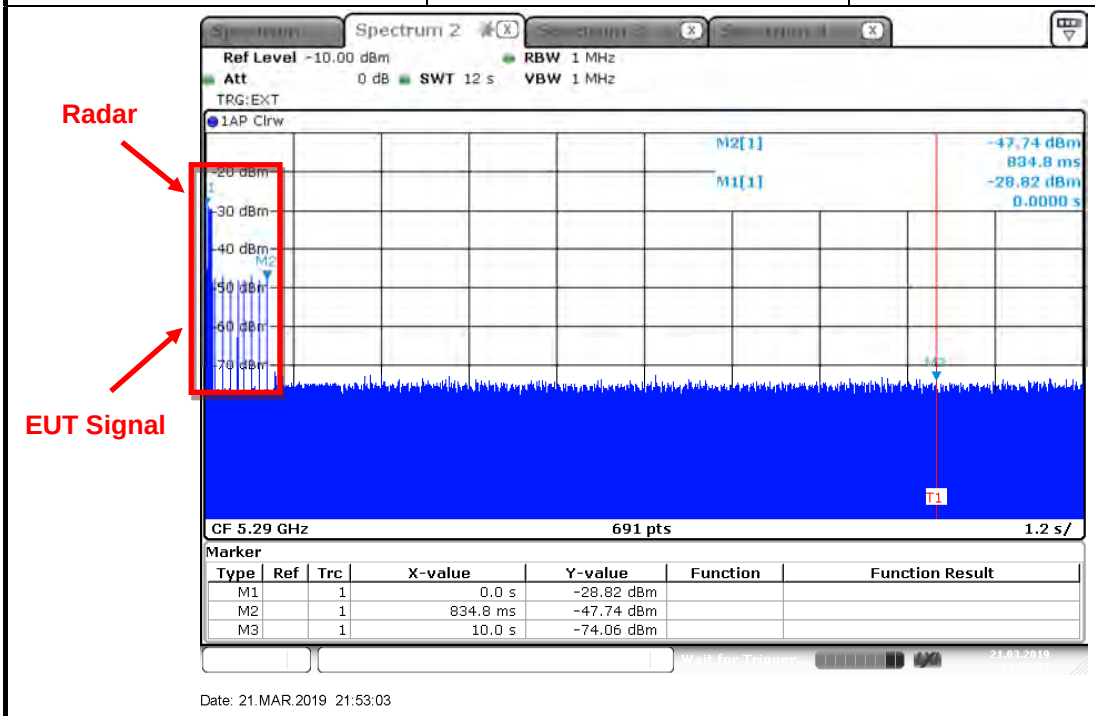




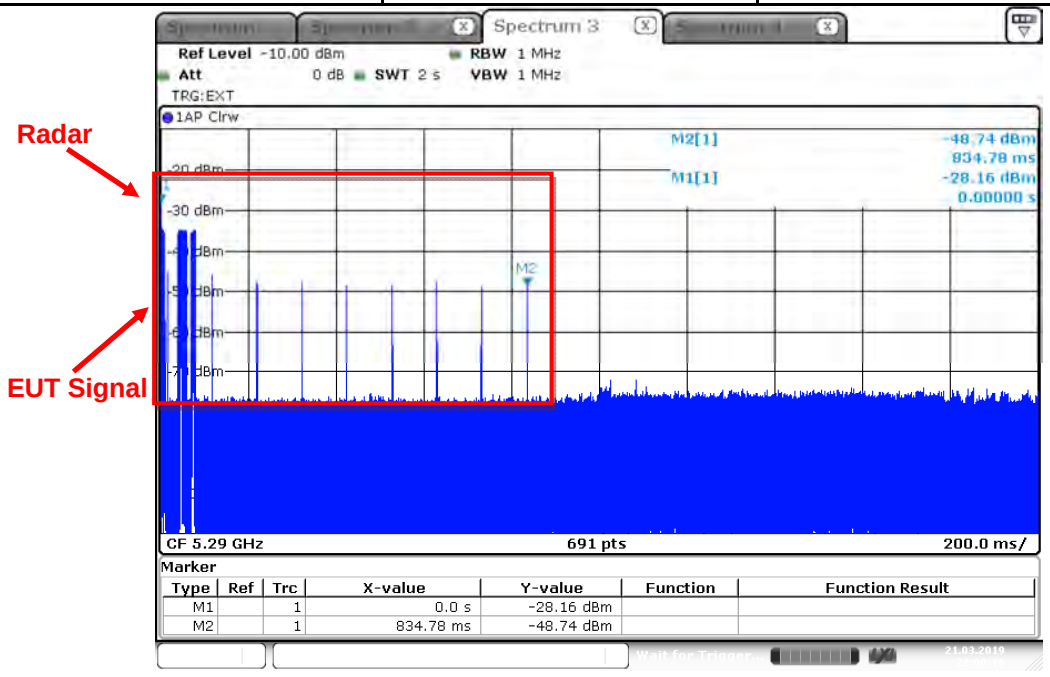
Dwell=S / B=2000ms / 690=2.898551ms, C=N x Dwell=10 x 2.898551ms=28.985 ms

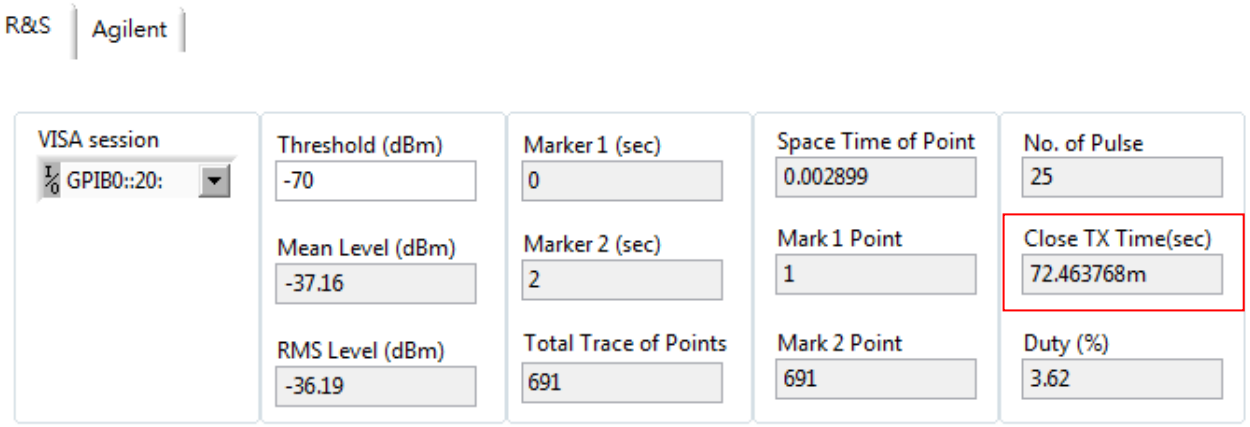
Note: The first sweep point of spectrum analyzer is occupied by radar signal, therefore, the number "Sweep Point-1" should be used for Channel Closing Transmission Time calculation.
The Channel Closing Transmission Time is calculated by Closing Time = N*(Sweep time/Sweep Point-1) where N is the number of spectrum analyzer sampling bins.

W53 band (5250-5350 MHz)		
Radar #1 Channel Move Time: < 10 sec		
Modulation Mode: ax (HEW80)	Test Frequency: 5290 MHz	Channel Move Time: 0.834 s



Radar #1 Channel Closing Transmission Time: 72.463 ms		Sampling Bins (B): 690
Modulation Mode: ax (HEW80)	Test Frequency: 5290 MHz	Number of Sampling Bins (N): 25

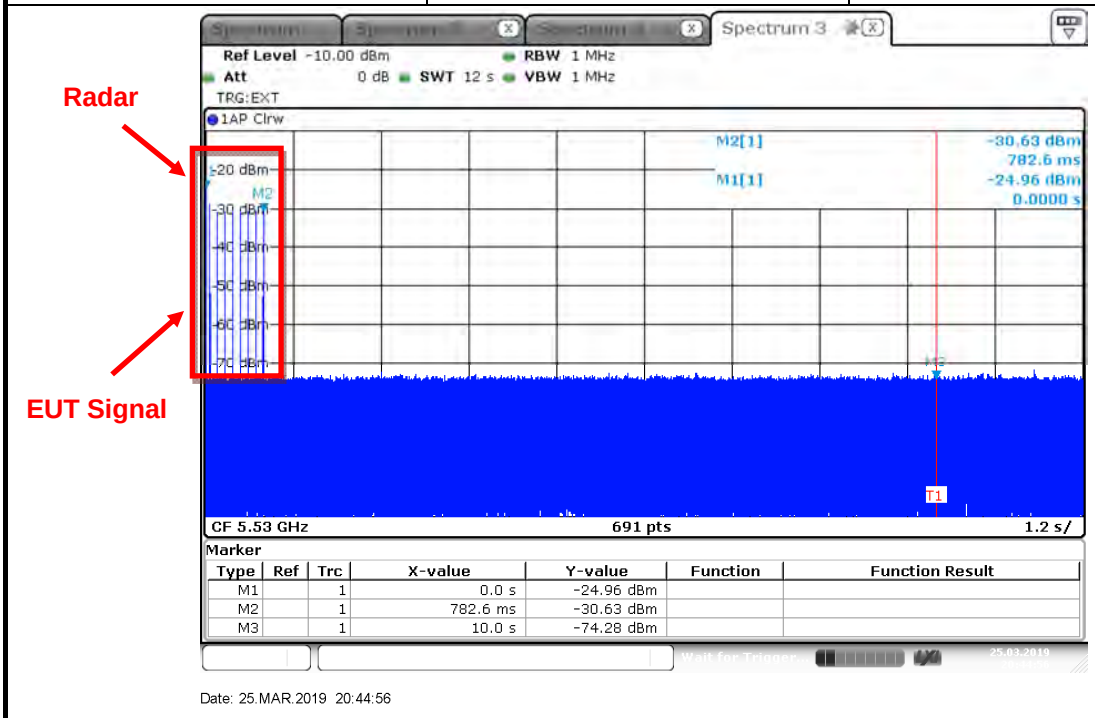




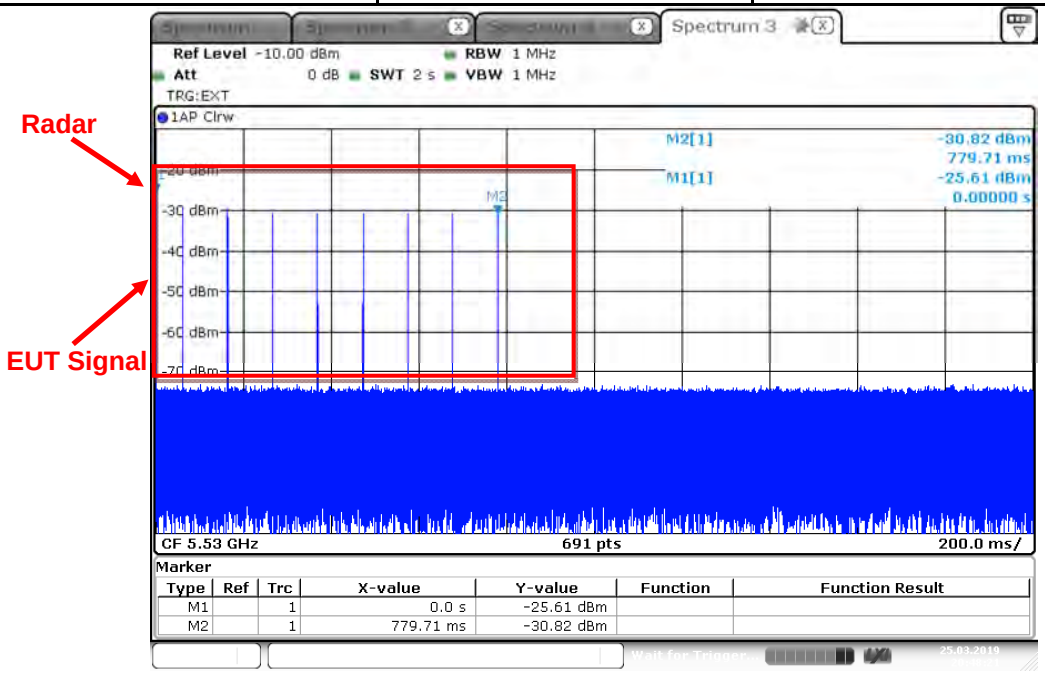
Dwell=S / B=2000ms / 690=2.898551ms, C=N x Dwell=25 x 2.898551ms=72.463 ms

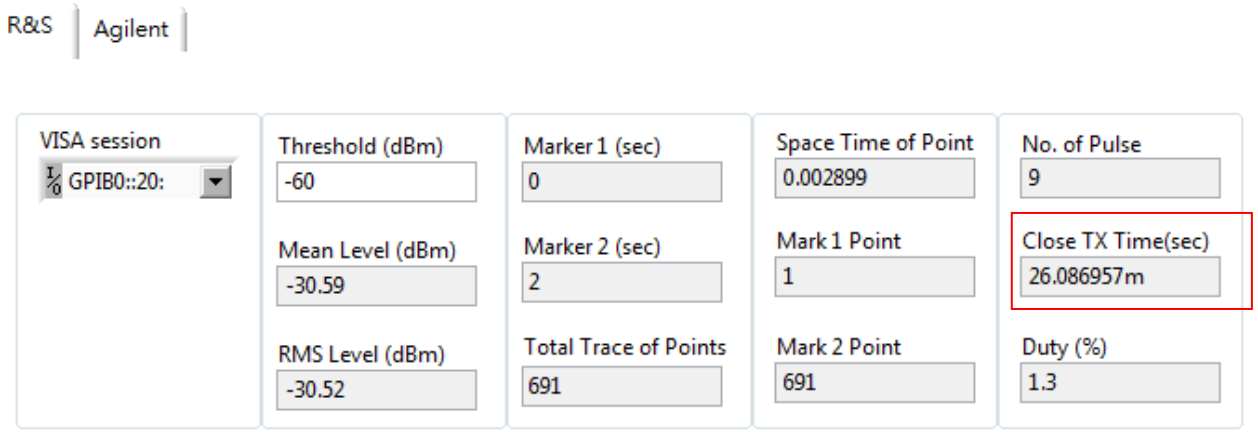
Note: The first sweep point of spectrum analyzer is occupied by radar signal, therefore, the number "Sweep Point-1" should be used for Channel Closing Transmission Time calculation.
The Channel Closing Transmission Time is calculated by Closing Time = N*(Sweep time/Sweep Point-1) where N is the number of spectrum analyzer sampling bins.

W56 band (5470-5725 MHz)		
Radar #2 Channel Move Time: < 10 sec		
Modulation Mode: ax (HEW80)	Test Frequency: 5530 MHz	Channel Move Time: 0.782 s



Radar #2 Channel Closing Transmission Time: 26.086 ms		Sampling Bins (B): 690
Modulation Mode: ax (HEW80)	Test Frequency: 5530 MHz	Number of Sampling Bins (N): 9

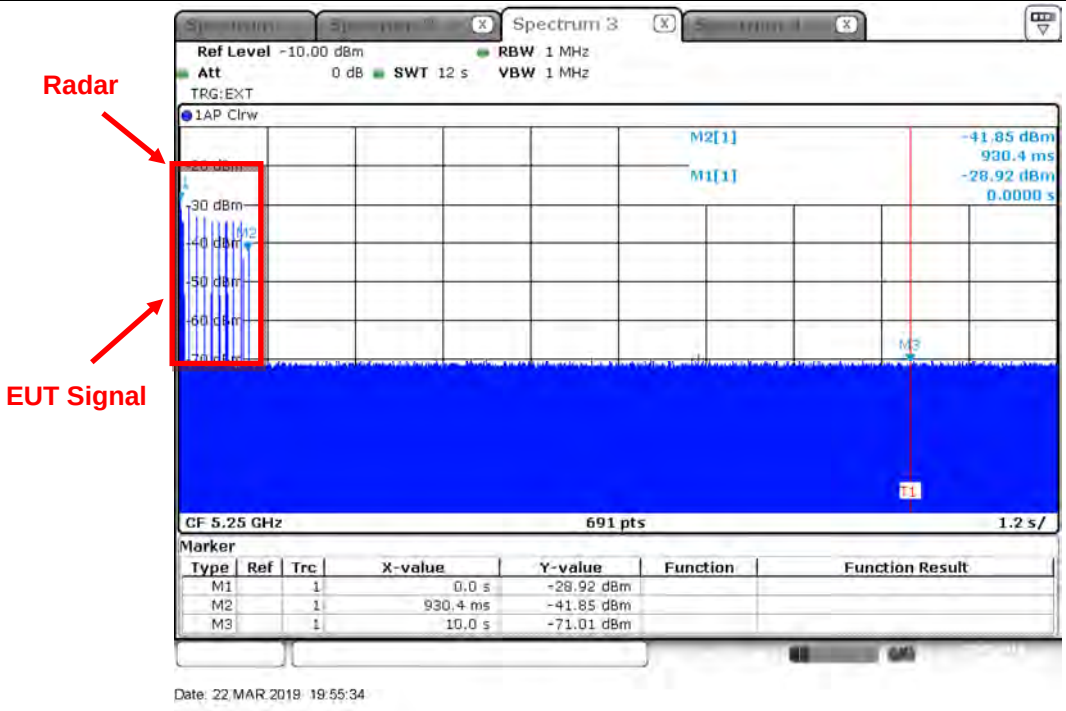




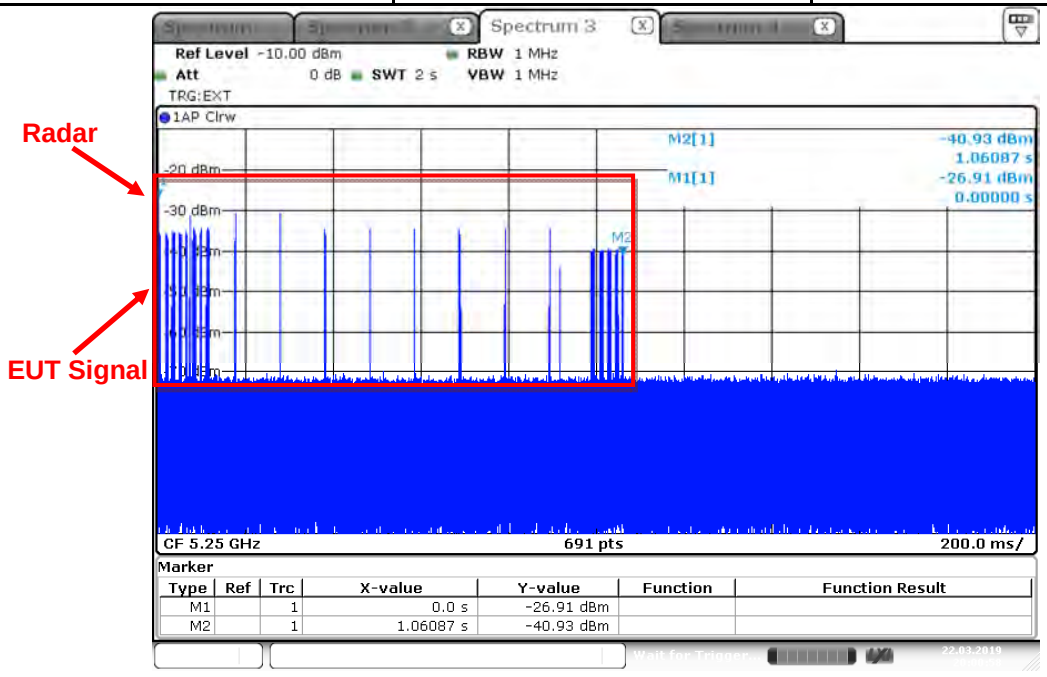
Dwell=S / B=2000ms / 690=2.898551ms, C=N x Dwell=9 x 2.898551ms=26.086 ms

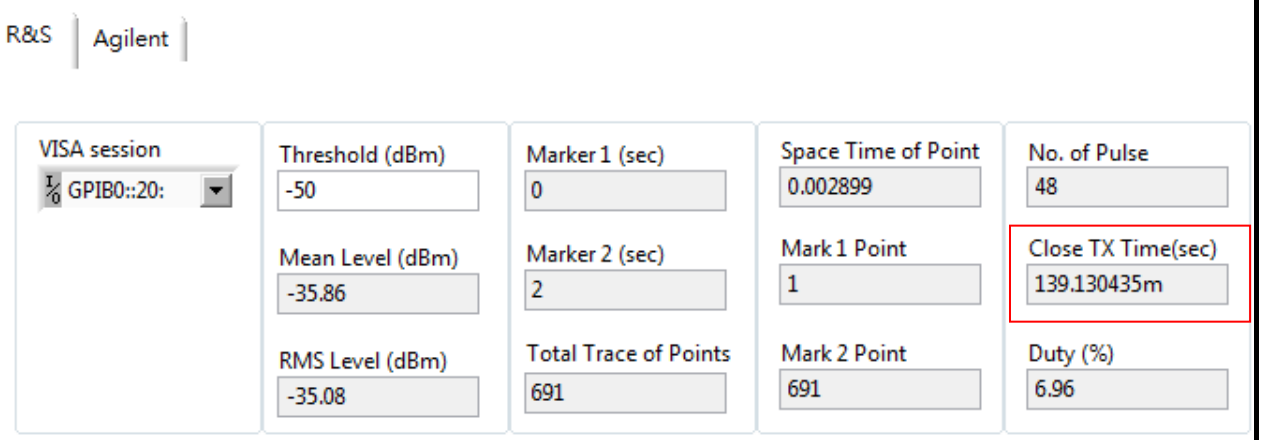
Note: The first sweep point of spectrum analyzer is occupied by radar signal, therefore, the number "Sweep Point-1" should be used for Channel Closing Transmission Time calculation.
The Channel Closing Transmission Time is calculated by Closing Time = N*(Sweep time/Sweep Point-1) where N is the number of spectrum analyzer sampling bins.

W53 band (5250-5350 MHz)		
Radar #1 Channel Move Time: < 10 sec		
Modulation Mode: ax (HEW160)	Test Frequency: 5250 MHz	Channel Move Time: 0.930 s



Radar #1 Channel Closing Transmission Time: 139.130 ms		Sampling Bins (B): 690
Modulation Mode: ax (HEW160)	Test Frequency: 5250 MHz	Number of Sampling Bins (N): 48

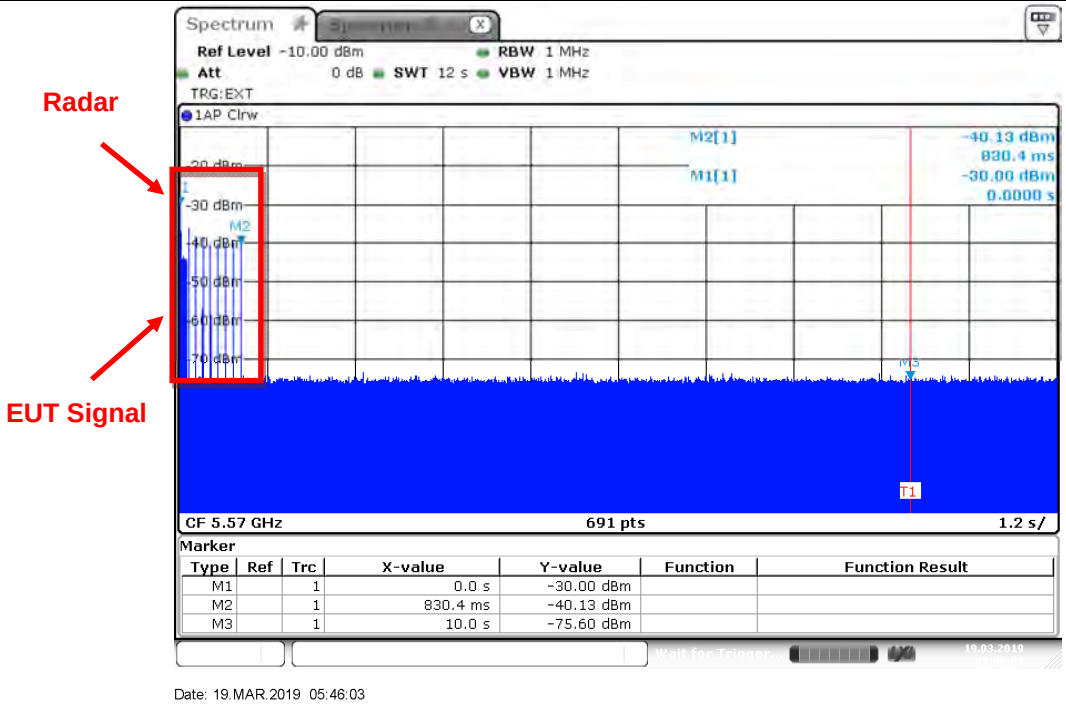




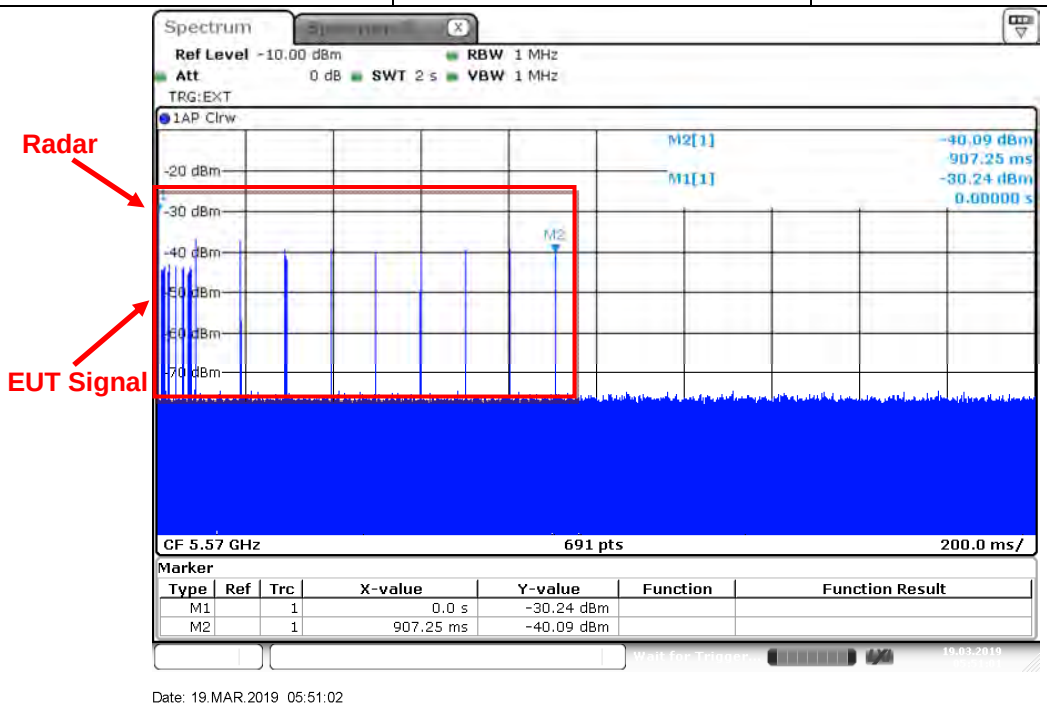
Dwell=S / B=2000ms / 690=2.898551ms, C=N x Dwell=48 x 2.898551ms=139.130 ms

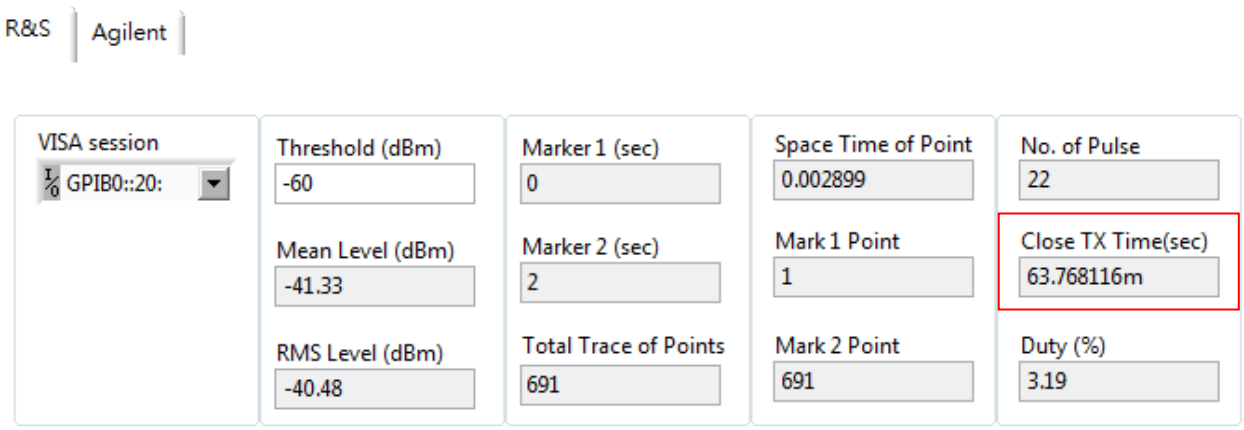
Note: The first sweep point of spectrum analyzer is occupied by radar signal, therefore, the number "Sweep Point-1" should be used for Channel Closing Transmission Time calculation.
The Channel Closing Transmission Time is calculated by Closing Time = N*(Sweep time/Sweep Point-1) where N is the number of spectrum analyzer sampling bins.

W56 band (5470-5725 MHz)		
Radar #1 Channel Move Time: < 10 sec		
Modulation Mode: ax (HEW160)	Test Frequency: 5570 MHz	Channel Move Time: 0.830s



Radar #1 Channel Closing Transmission Time: 63.768 ms		Sampling Bins (B): 690
Modulation Mode: ax (HEW160)	Test Frequency: 5570 MHz	Number of Sampling Bins (N): 22





Dwell=S / B=2000ms / 690=2.898551ms, C=N x Dwell=22 x 2.898551ms=63.768 ms

Note: The first sweep point of spectrum analyzer is occupied by radar signal, therefore, the number "Sweep Point-1" should be used for Channel Closing Transmission Time calculation.
The Channel Closing Transmission Time is calculated by Closing Time = N*(Sweep time/Sweep Point-1) where N is the number of spectrum analyzer sampling bins.

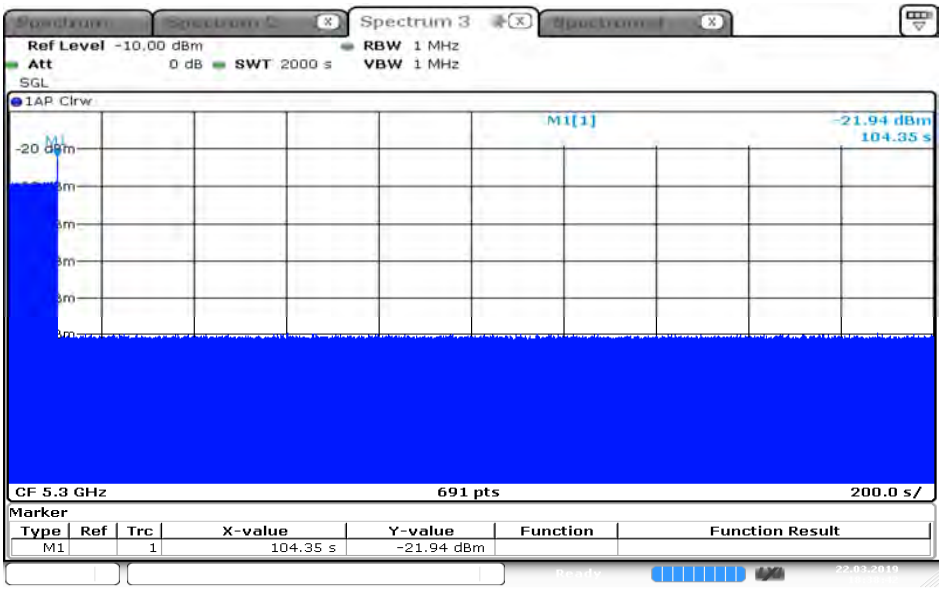
2.7.6 Test Result of Non-Occupancy Period

Non-Occupancy Period Result			
Detection Threshold Level (dBm)			-64
Modulation Mode	**Freq. (MHz)**	**Radar Test Signal**	**Non-Occupancy Period (min)**
ax (HEW20)	5300	1 - Fixed	>30
ax (HEW20)	5500	2 - Fixed	>30
ax (HEW40)	5310	1 - Fixed	>30
ax (HEW40)	5510	2 - Fixed	>30
ax (HEW80)	5290	1 - Fixed	>30
ax (HEW80)	5530	2 - Fixed	>30
ax (HEW160)	5250	1 - Fixed	>30
ax (HEW160)	5570	2 - Fixed	>30
Limit			30 min
Result			**PASS**

2.7.7 Non-Occupancy Period Plots

W53 band (5250-5350 MHz)	Modulation Mode: ax (HEW20)

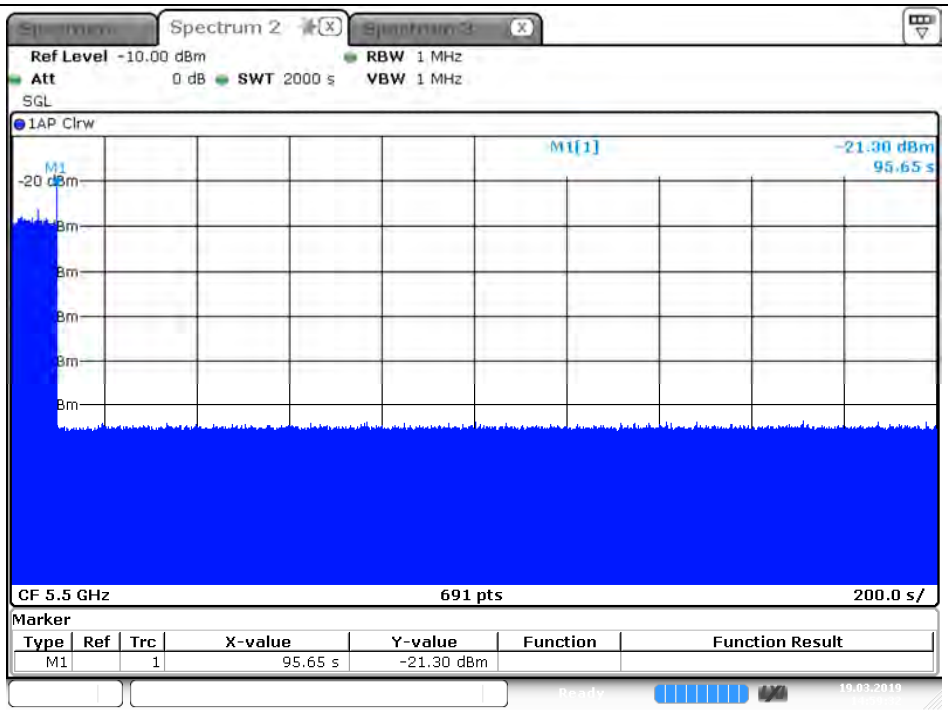
Radar #1 Non-Occupancy Period / *Non-Occupancy Period* is more than 30 min.



Date: 22.MAR.2019 18:38:42

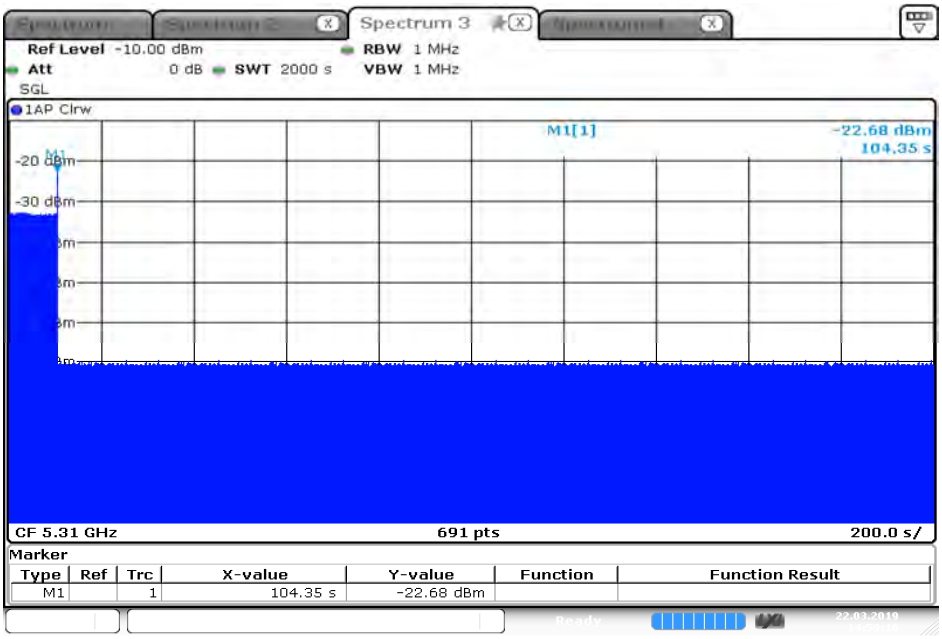
W56 band (5470-5725 MHz)	Modulation Mode: ax (HEW20)

Radar #2 Non-Occupancy Period / *Non-Occupancy Period* is more than 30 min.



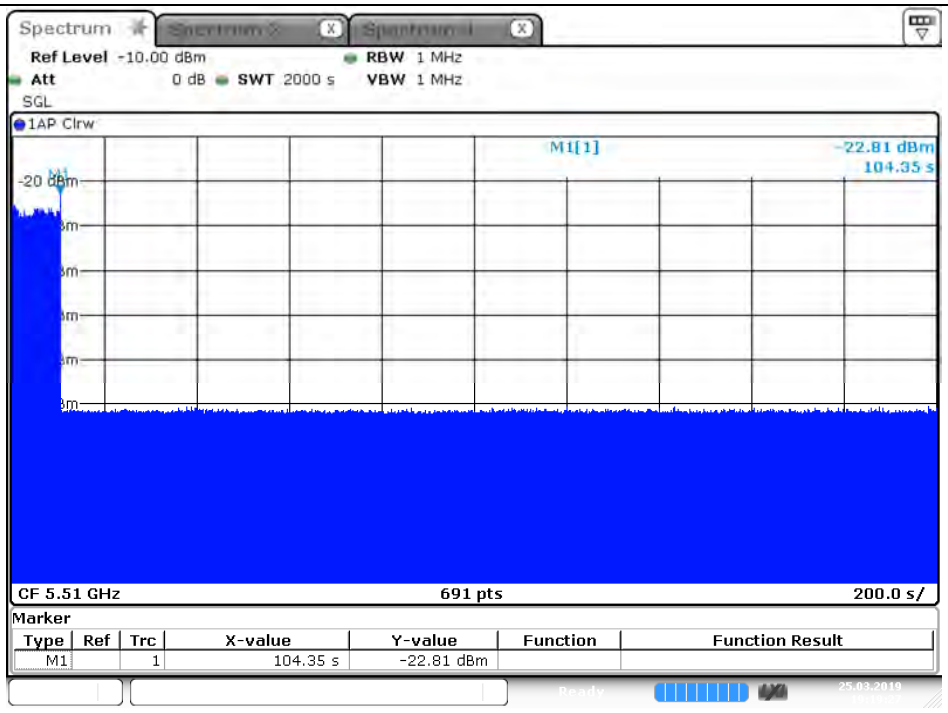
Date: 19.MAR.2019 14:59:31

W53 band (5250-5350 MHz)	Modulation Mode: ax (HEW40)
Radar #1 Non-Occupancy Period / *Non-Occupancy Period* is more than 30 min.	



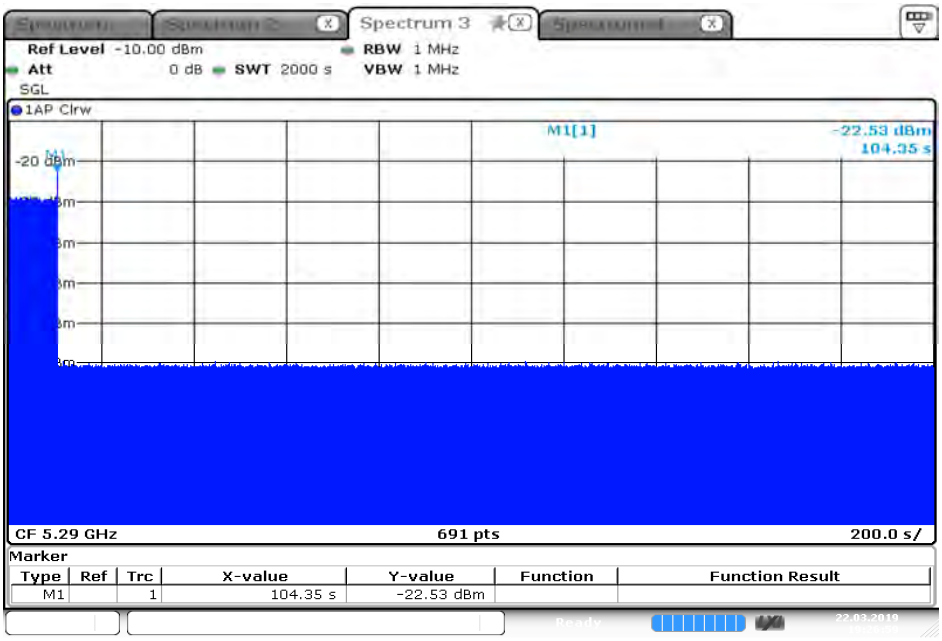
Date: 22.MAR.2019 14:59:16

W56 band (5470-5725 MHz)	Modulation Mode: ax (HEW40)
Radar #2 Non-Occupancy Period / *Non-Occupancy Period* is more than 30 min.	



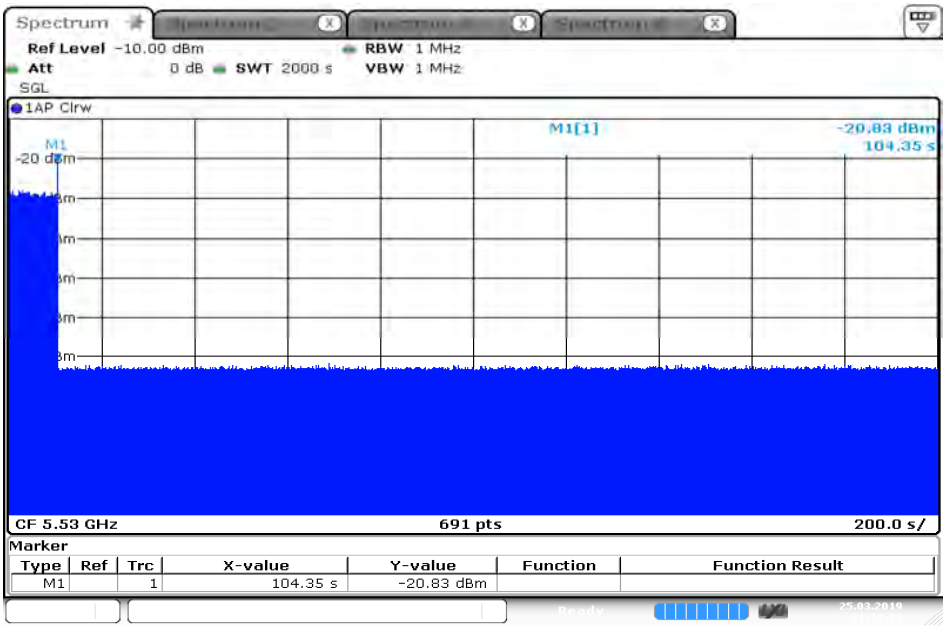
Date: 25.MAR.2019 19:19:27

W53 band (5250-5350 MHz)	Modulation Mode: ax (HEW80)
Radar #1 Non-Occupancy Period / *Non-Occupancy Period* is more than 30 min.	



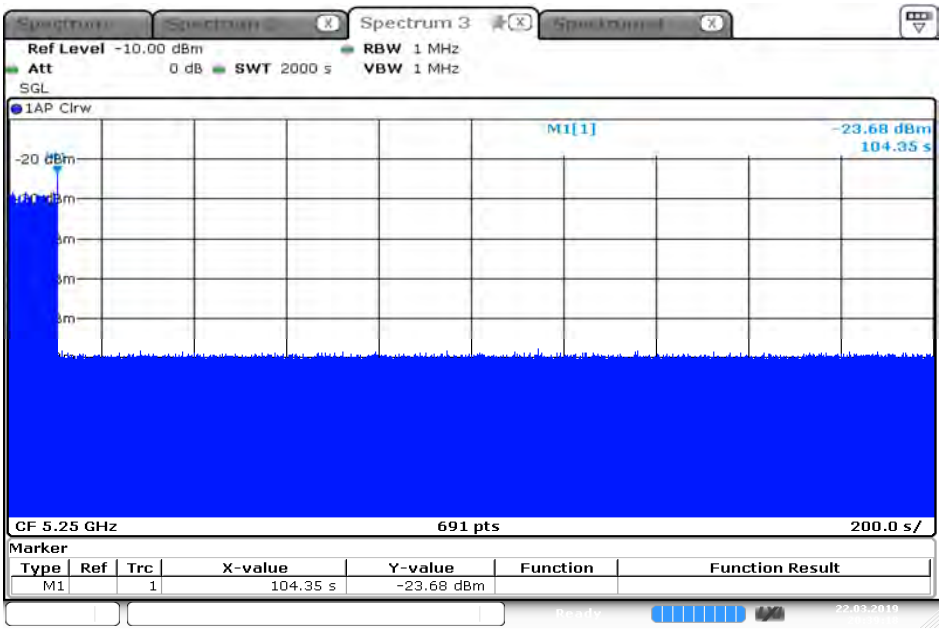
Date: 22.MAR.2019 19:26:59

W56 band (5470-5725 MHz)	Modulation Mode: ax (HEW80)
Radar #2 Non-Occupancy Period / *Non-Occupancy Period* is more than 30 min.	



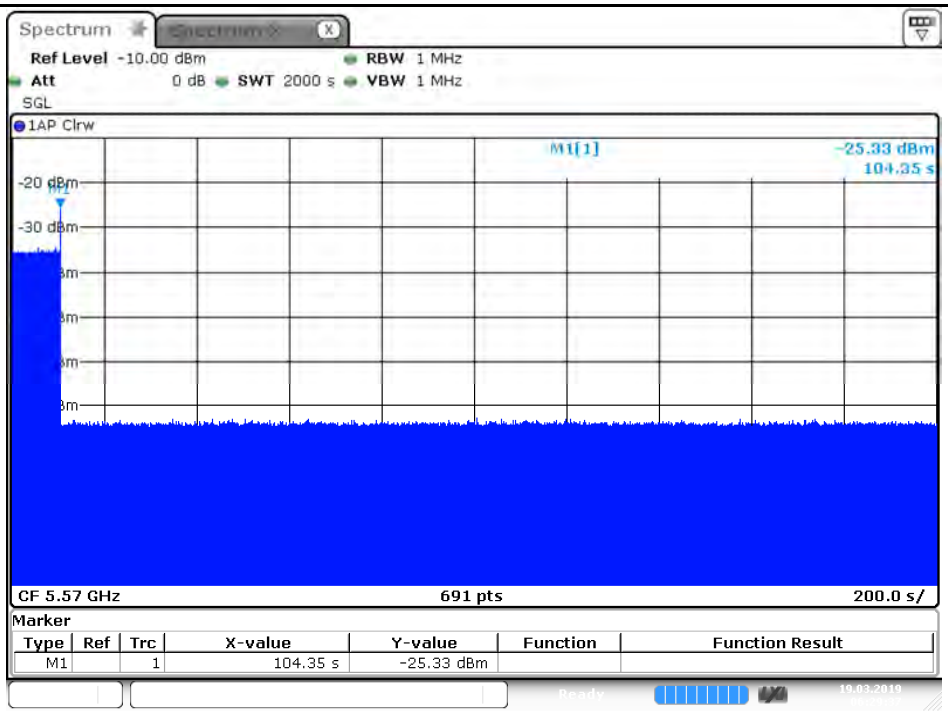
Date: 25.MAR.2019 21:33:23

W53 band (5250-5350 MHz)	Modulation Mode: ax (HEW160)
Radar #1 Non-Occupancy Period / *Non-Occupancy Period* is more than 30 min.	



Date: 22.MAR.2019 20:39:18

W56 band (5470-5725 MHz)	Modulation Mode: ax (HEW160)
Radar #2 Non-Occupancy Period / *Non-Occupancy Period* is more than 30 min.	



Date: 19.MAR.2019 06:29:37

3 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Calibration Method	Calibration Agent Name	Remark
Spectrum Analyzer	R&S	FSV40	101026	9kHz~40GHz	Sep. 28, 2018	Sep. 27, 2019	c)	C	Conducted (DF01-CB)
Vector Signal generator	R&S	SMU200A	102782	100kHz-6GHz	Jan. 16, 2019	Jan. 15, 2020	c)	A	Conducted (DF01-CB)
RF Power Divider	ANAREN	2 Way	DFS-01-DV-02	1GHz ~ 6GHz	Oct. 08, 2018	Oct. 07, 2019	c)	B	Conducted (DF01-CB)
RF Power Divider	MTJ	2 Way	DFS-01-DV-03	1GHz ~ 6GHz	Oct. 08, 2018	Oct. 07, 2019	c)	B	Conducted (DF01-CB)
RF Power Divider	ANAREN	4 Way	DFS-01-DV-01	1GHz ~ 6GHz	Oct. 08, 2018	Oct. 07, 2019	c)	B	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-53	1 GHz –18 GHz	Oct. 08, 2018	Oct. 07, 2019	c)	B	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-54	1 GHz –18 GHz	Oct. 08, 2018	Oct. 07, 2019	c)	B	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-56	1 GHz –18 GHz	Oct. 08, 2018	Oct. 07, 2019	c)	B	Conducted (DF01-CB)
RF Cable-high	Woken	RG402	High Cable-60	1 GHz –18 GHz	Oct. 08, 2018	Oct. 07, 2019	c)	B	Conducted (DF01-CB)

Note:

1. Calibration Interval of instruments listed above is one year.
2. Calibration Agent Name: Describe calibration agent name with its country name, and symbols in “Calibration Agent Name” shows the agent names as follows,
   A: Electronics Testing Center, Taiwan.
   B: Sporton International Inc., Taiwan.
   C: ROHDE&SCHWARZ., Taiwan.
4. Calibration Method
   a)：Calibration conducted by the National Institute of Information and Communications Technology or a designated calibration agency under Article 102-18 paragraph (1)
   b)：Correction conducted pursuant to the provisions of Article 135 or Article 144 of the MeasurementLaw (Law No. 51 of 1992)
   c)：Calibration conducted in foreign countries, which shall be equivalent to the calibration conducted bythe NICT or a designated calibration agency under Article 102-18 paragraph (1)
   d)：Calibration conducted by using other equipment that listed above from a) to c)

4 Measurement Uncertainty

Test Items	Uncertainty	Remark
Conducted Emission	1.7 dB	Confidence levels of 95%