

TEST REPORT

REPORT NUMBER: 25B02W000009-002

ON

Type of Equipment:	Cloud POS Printer
Type of Designation:	NT320
Brand Name:	SUNMI
Manufacturer:	Shanghai Sunmi Technology Co.,Ltd.
FCC ID:	2AH25NT320
IC	22621-NT320

ACCORDING TO

FCC Part 2,FCC Part 15C, RSS-Gen Issue 5, RSS-247 Issue 3,ANSI C63.10-2013

Chongqing Academy of Information and Communications Technology

Month date, year

Jun.26th, 2025

Signature

Zhou Jin

Director

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of Chongqing Academy of Information and Communications Technology.



Report No.: 25B02W000009-002

Revision Version

Report Number	Revision	Date
25B02W000009-002	00	2025-06-26

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1. Test Laboratory

1.1. Testing Location

Name:	Chongqing Academy of Information and Communications Technology
Designation Number:	CN1239
IC Registration Number:	29397
Address:	No.19 EastRoad,Xiantao Big-data Valley,Yubei District,Chongqing,People's Republic of China
Postal Code:	401336
Telephone:	0086-23-88069965
Fax:	0086-23-88608777

1.2. Testing Environment

Normal Temperature:	15-35°C
Relative Humidity:	30-60%

1.3. Project data

Testing Start Date:	2025-04-18
Testing End Date:	2025-06-19

1.4. Signature

2025-06-23

Li Runhao
(Prepared this test report)

Date

2025-06-23

Wang Lili
(Reviewed this test report)

Date

2025-06-26

Zhou Jin
Director of the laboratory
(Approved this test report)

Date

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2. Client Information

2.1. Applicant Information

Company Name:	Shanghai Sunmi Technology Co.,Ltd.
Address /Post:	Room 505,No.388,Song Hu Road,Yang Pu District,Shanghai,China
City:	ShangHai
Country:	China
Telephone:	+86 13510126210
Fax:	N/A
Email:	chan.yang@sunmi.com
Contact Person:	Emma Yang

2.2. Manufacturer Information

Company Name:	Shanghai Sunmi Technology Co.,Ltd.
Address /Post:	Room 505,No.388,Song Hu Road,Yang Pu District,Shanghai,China
City:	ShangHai
Country:	China
Telephone:	+86 13510126210
Fax:	N/A
Email:	chan.yang@sunmi.com
Contact Person:	Emma Yang

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3. Equipment under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

EUT Description	Cloud POS Printer
Model name	NT320
Brand name	SUNMI
BLUETOOTH Frequency Band	2402MHz-2480MHz
Type of BT modulation	GFSK; $\pi/4$ DQPSK; 8DPSK
HVIN	NT320
Extreme Temperature	0/+40°C
Nominal Test Voltage	5V
Extreme Test High Voltage	5.25V
Extreme Test Low Voltage	4.75V

Note1: Photographs of EUT are shown in ANNEX A of this test report.

Note2: High and low voltage values in extreme condition test are given by manufacturer.

Note3: The Extreme Temperature is provided by the manufacturer and has not been verified by the laboratory.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
25B02W000009#S4	N507D53S10180	80CC_MB_X2600_V5.0	V4.1.17	2025-04-16
25B02W000009#S3	N507D53S10198	80CC_MB_X2600_V5.0	V4.1.17	2025-04-16

*EUT ID: is used to identify the test sample in the lab internally.

No.	Item(s)	Data
1	Antenna gain of EUT	2.7dBi

Note: The data of antenna gain is provided by the Antenna specification may affect the validity of the test results in this report, and the impact and consequences of this shall be undertaken by the customer.

3.3. Outline of Equipment under Test

Technology	Band	UL Freq. (MHz)	DL Freq. (MHz)	Channel Separation
BLUETOOTH	CH0-78	2402-2480		1MHz

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Test frequency list:

GFSK	Channel	0	39	78
	Freq. (MHz)	2402	2441	2480
$\pi/4$ DQPSK	Channel	0	39	78
	Freq. (MHz)	2402	2441	2480
8DPSK	Channel	0	39	78
	Freq. (MHz)	2402	2441	2480

Emissions Information:

TestMode	Frequency Min(MHz)	Frequency Max(MHz)	Max OutPut Power(dBm)	Max OutPut Power(W)	OBW (KHz)	Necessary Bandwidth & Emission Classification
DH5	2402	2480	10.26	0.0106	891	891KF1D
2DH5	2402	2480	7.81	0.0060	1212	1M21G1D
3DH5	2402	2480	8.15	0.0065	1221	1M22G1D

Note: This report is for BT only.

3.4. Internal Identification of AE used during the test

AE ID*	Description	Note	dB*
C1	RF cable	--	0.8
C2	USB Cable	--	--
Q1	Notebook PC	Lenovo X1 Carbon	--
A1	PC Adapter	--	--

AE ID*: is used to identify the test sample in the lab internally.

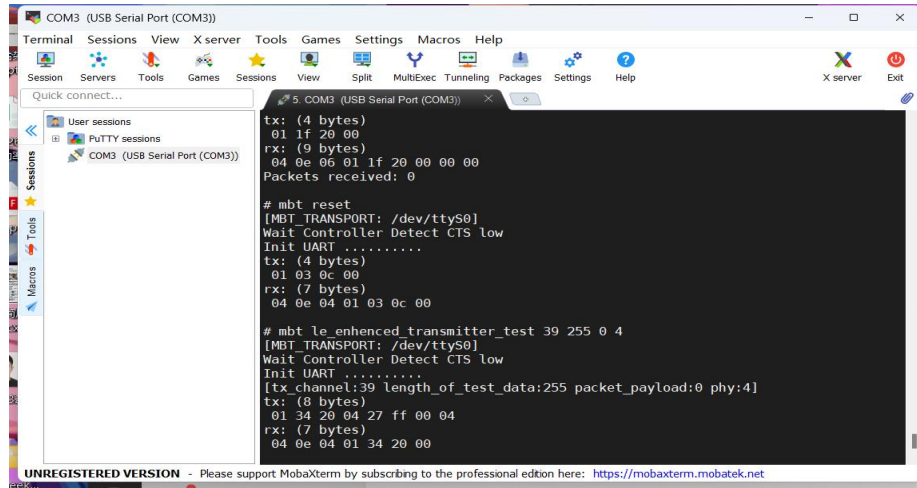
dB*: is provided customer.

3.5. EUT Test RF Configuration

EUT uses engineering mode to control RF emissions, changing power levels, channels, rates, and HT.

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```
COM3 (USB Serial Port (COM3))
Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help
Quick connect...
User sessions
PuTTY sessions
COM3 (USB Serial Port (COM3))

tx: (4 bytes)
01 1f 20 00
rx: (9 bytes)
04 0e 06 01 1f 20 00 00 00
Packets received: 0

# mbt reset
[MBT_TRANSPORT: /dev/ttyS0]
Wait Controller Detect CTS low
Init UART .....
tx: (4 bytes)
01 03 0c 00
rx: (7 bytes)
04 0e 04 01 03 0c 00

# mbt le enhanced transmitter_test 39 255 0 4
[MBT_TRANSPORT: /dev/ttyS0]
Wait Controller Detect CTS low
Init UART .....
[tx_channel:39 length_of_test_data:255 packet_payload:0 phy:4]
tx: (8 bytes)
01 34 20 04 27 ff 00 04
rx: (7 bytes)
04 0e 04 01 34 20 00

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4. Reference Documents

4.1. Documents supplied by applicant

PICS/PIXIT, referring to Annex B for detailed information, is supplied by the client or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations	--
FCC Part 15C	FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz	--
RSS-Gen Issue 5	General Requirements for Compliance of Radio Apparatus	2021
RSS-247 Issue 3	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices	2023
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	2013
KDB 558074 D01	Guidance for Performing Compliance Measurements on Frequency Hopping Spread Spectrum systems (DSS) Operating Under §15.247	v05r02
Note:FCC Part 2 and KDB 558074 D01 is not A2LA certified.		

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5. Test Equipments Utilized

5.1. RF Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacture	Cal. Interval	Cal.Due Date
1	Spectrum analyzer	FSQ 26	201137	--	--	R&S	1 Year	2025-06-28

5.2. RSE and CE Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacture	Cal. Interval	Cal.Due Date
1	EMI Test Receiver	ESU40	100307	--	--	R&S	1 Year	2025-06-28
2	TRILOG Broadband Antenna	VULB9163	9163-586	--	--	Schwarzbeck	2 Years	2026-10-28
3	Horn antenna	9120D	1083	--	--	Schwarzbeck	2 Years	2026-11-08
4	Horn antenna	DATE 1152	LM7127	--	--	ETS	2 Years	2026-09-30
5	Horn antenna	DATE 1012	LM5945	--	--	ETS	2 Years	2026-09-30
6	Loop Antenna	6502	00143163	--	--	ETS	2 Year	2026-09-04
7	Amplifier1	SCU-08F1	8320027	--	--	R&S	--	--
8	Amplifier2	SCU-18F	180093	--	--	R&S	--	--
9	2-Line V-Network	ENV216	102368	--	--	R&S	1 Year	2026-05-23
10	Test Receiver	ESR 3	101382	03	3.48 SP2	R&S	1 Year	2025-06-28
11	Test Receiver	ESW 26	101382	00	1.50 SP1	R&S	1 Year	2025-06-28

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5.3. Climate Chamber

No.	Name	Type	SN	Manufacture	Cal. Interval	Cal.Due Date
--	--	--	--	--	--	--

5.4. Anechoic chamber Vibration table

No.	Name	Type	SN	Manufacture	Cal. Interval	Cal.Due Date
1	Fully-Anechoic Chamber	FAC5	--	TDK	3 Years	2027-11-04
2	Anechoic Chamber	SAC 10	--	TDK	3 Years	2027-11-05

5.5. Test software

N o.	Name	version	SN	Manufacture
1	EMC32 (Transmitter Spurious Emission-Radiated Above 1GHz)	V9.26.01	--	R&S
2	EMC32 (Transmitter Spurious Emission-Radiated Below 1GHz)	V 10.20.01	--	R&S
3	EMC32 (AC Powerline Conducted Emission)	V 10.40.10	--	R&S
4	WIFI/BT CE/FCC/ICautomated testing software	V1.0.0.0	--	Beijing Zhiwang Xince Technology Co., Ltd

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6. Test Results

6.1. Summary of Test Results

A brief summary of the tests carried out is shown as following.

FCC Rules	IC Rules	Name of Test	Result
15.247(b)	RSS-247 5.4	Maximum Peak Output Power	Pass
15.247(a)	RSS-247 5.1	20dB Occupied Bandwidth	Pass ^{note2}
2.1049	RSS-GEN 6.7	99% Occupied Bandwidth	Pass ^{note2}
15.247 (d)	RSS-247 5.5	Band Edges Compliance	Pass
15.247(a)	RSS-247 5.1	Time Of Occupancy (Dwell Time)	Pass
15.247(a)	RSS-247 5.1	Carrier Frequency Separation	Pass
15.247(a)	RSS-247 5.1	Number Of Hopping Channels	Pass
15.247(d)	RSS-247 5.5	Transmitter Spurious Emission-Conducted	Pass
15.247,15.209,15.205	RSS-GEN 8.9, 8.10	Transmitter Spurious Emission-Radiated	Pass
15.207	RSS-GEN 8.8	AC Powerline Conducted Emission	Pass
15.203/15.247(c)	RSS Gen 6.8, RSS-247 5.4	Antenna requirement	Pass ^{Note 1}
NOTE 1: Bluetooth used an Internal antenna with max Gain 2.7 dBi that complied with 15.203/15.247(c) Requirements.			
NOTE 2: This project has no restrictions on requirements.			

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6.2. Peak Output Power-Conducted

Specifications:	FCC Part 15.247(b), RSS-247 5.4
DUT Serial Number:	N507D53S10180
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Conducted Limit (dBm)	EIRP Limit(dBm)
FCC Part 15.247(b)	GFSK:≤30, $\pi/4$ -DQPSK and 8DPSK≤20.97	N/A
RSS-247 5.4	GFSK:≤30, $\pi/4$ -DQPSK and 8DPSK≤20.97	≤36

Measurement Uncertainty:

Measurement Uncertainty	0.36dB
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Test Procedure

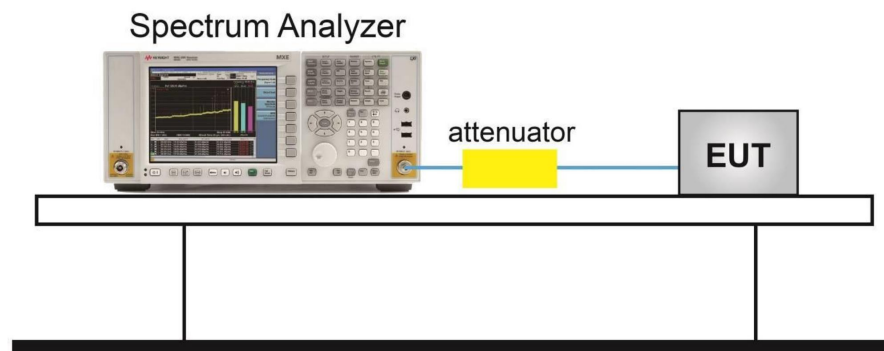
The measurement is according to ANSI C63.10 clause 7.8.5.

1. The output power of EUT was connected to the spectrum analyzer by cable and divide. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Use the following spectrum analyzer settings:
 - a) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.
 - b) RBW > 20 dB bandwidth of the emission being measured.
 - c) VBW ≥ RBW.
 - d) Sweep: Auto.
 - e) Detector function: Peak.
 - f) Trace: Max hold.
4. Allow trace to stabilize.
5. Use the marker-to-peak function to set the marker to the peak of the emission.
6. The indicated level is the peak output power, after any corrections for external attenuators and cables.
7. Record the results.

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Test setup:



Antenna gain of EUT:

No.	Item(s)	Data
1	Antenna gain of EUT	2.7dBi

Note: The data is provided by the customer may affect the validity of the test results in this report, and the impact and consequences of this shall be undertaken by the customer.

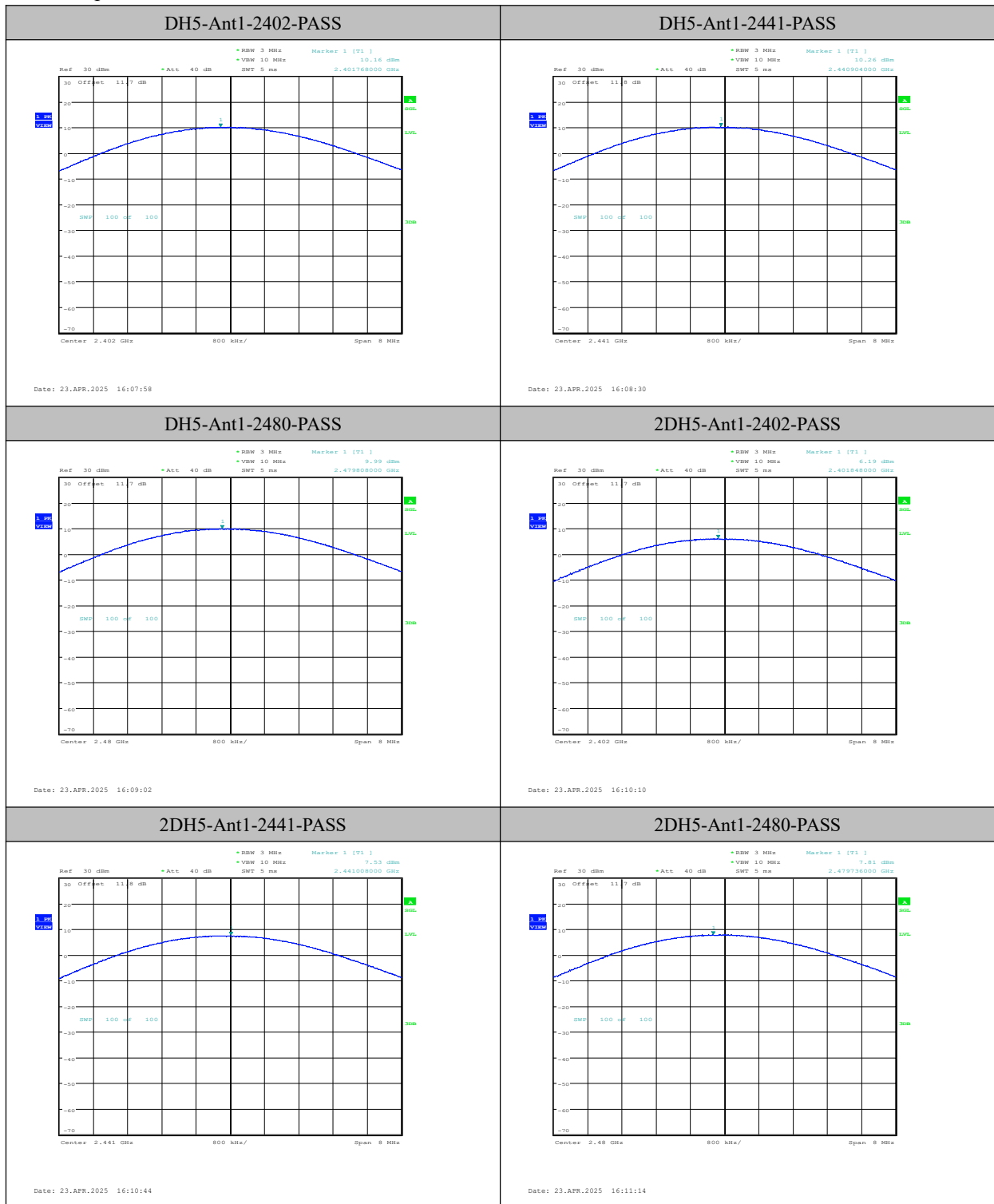
Measurement Results:

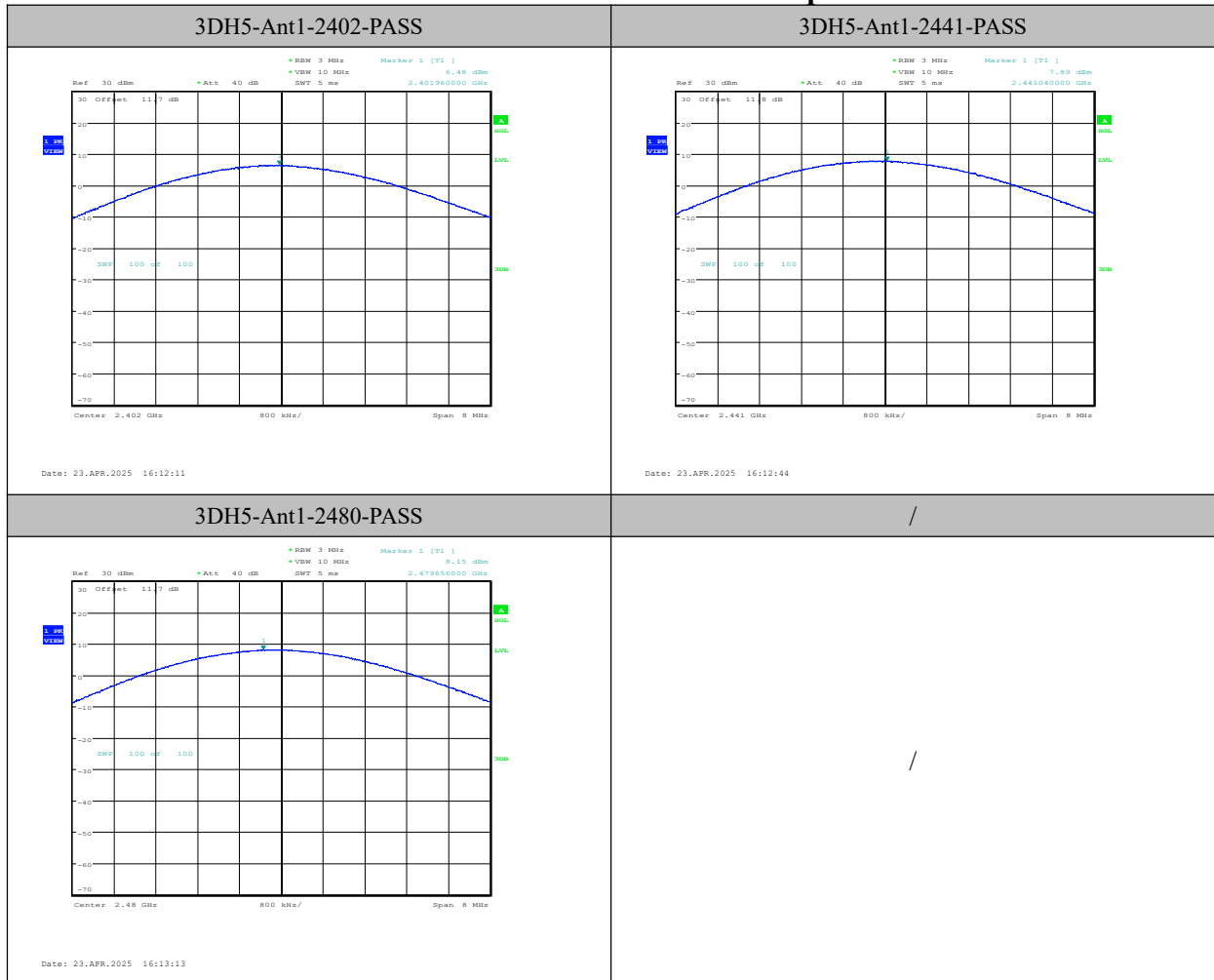
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	EIRP[dBm]	EIRP Limit[dBm]	Verdict
DH5	Ant1	2402	10.16	≤ 30	12.86	≤ 36	PASS
DH5	Ant1	2441	10.26	≤ 30	12.96	≤ 36	PASS
DH5	Ant1	2480	9.99	≤ 30	12.69	≤ 36	PASS
2DH5	Ant1	2402	6.19	≤ 20.97	8.89	≤ 36	PASS
2DH5	Ant1	2441	7.53	≤ 20.97	10.23	≤ 36	PASS
2DH5	Ant1	2480	7.81	≤ 20.97	10.51	≤ 36	PASS
3DH5	Ant1	2402	6.48	≤ 20.97	9.18	≤ 36	PASS
3DH5	Ant1	2441	7.89	≤ 20.97	10.59	≤ 36	PASS
3DH5	Ant1	2480	8.15	≤ 20.97	10.85	≤ 36	PASS

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Test Graphs





6.3. 20dB Bandwidth

Specifications:	15.247(a),RSS-247 5.1
DUT Serial Number:	N507D53S10180
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

Measurement Uncertainty:

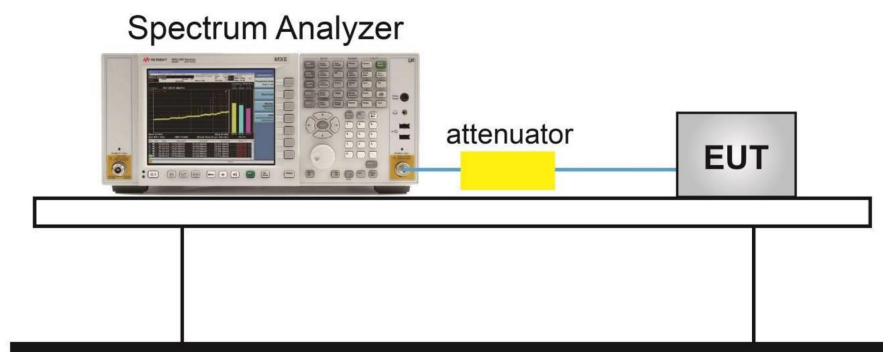
Measurement Uncertainty	4.2kHz
-------------------------	--------

Test procedures:

The measurement is according to ANSI C63.10 clause 7.8.7

1. Connect the EUT through cable and divide with spectrum analyzer.
2. Enable the EUT transmit maximum power.
3. Set the spectrum analyzer as step 4 to step 7.
4. Span: two or five times of OBW
5. RBW= 1% to 5% of the OBW; VBW is approximately three times of RBW; Max Hold.
6. Select the max peak, and N DB DOWN=20dB.
7. Record the results.

Test Setup:



Measurement Results:

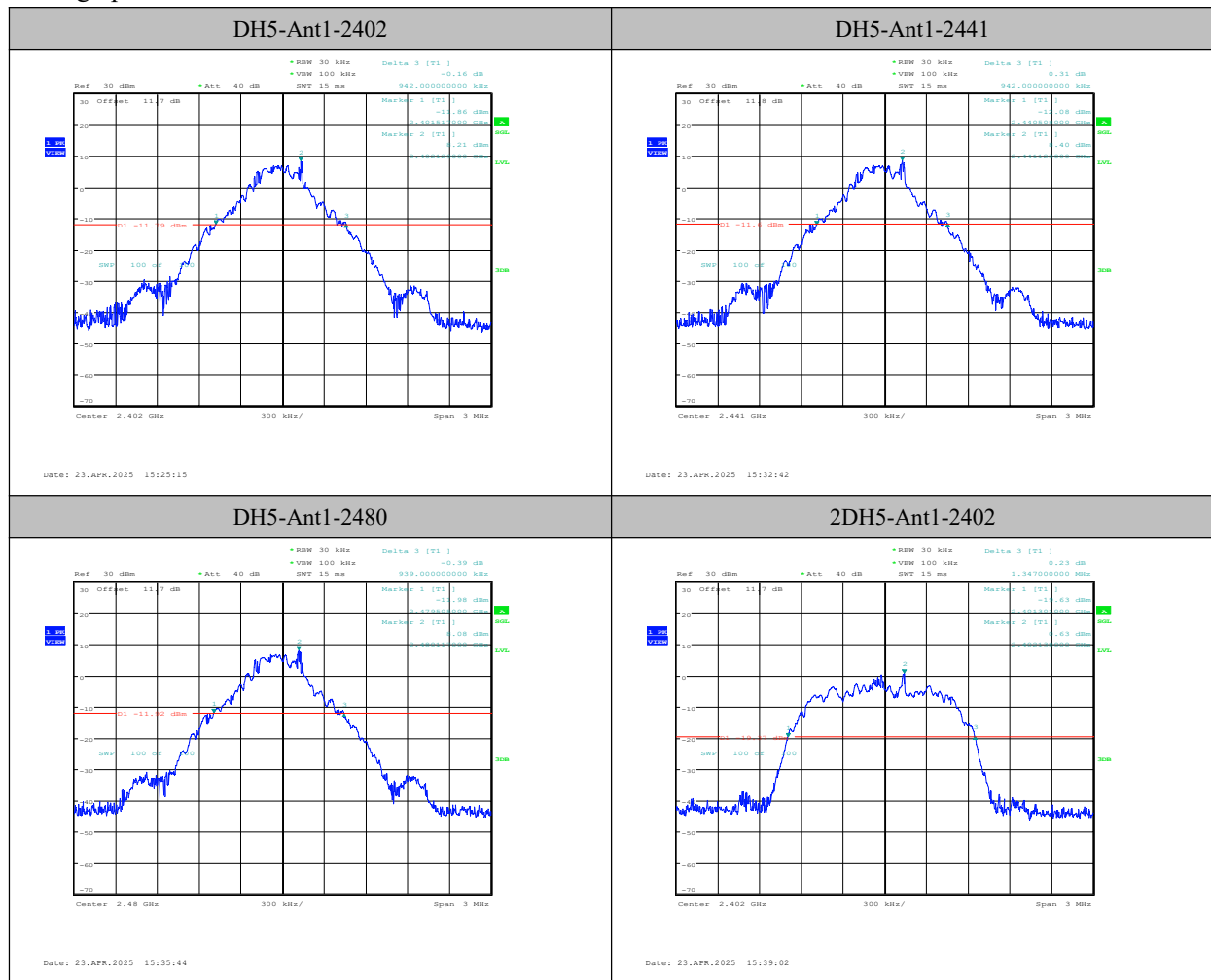
TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]
DH5	Ant1	2402	0.94	2401.52	2402.46
DH5	Ant1	2441	0.94	2440.51	2441.45
DH5	Ant1	2480	0.94	2479.51	2480.44

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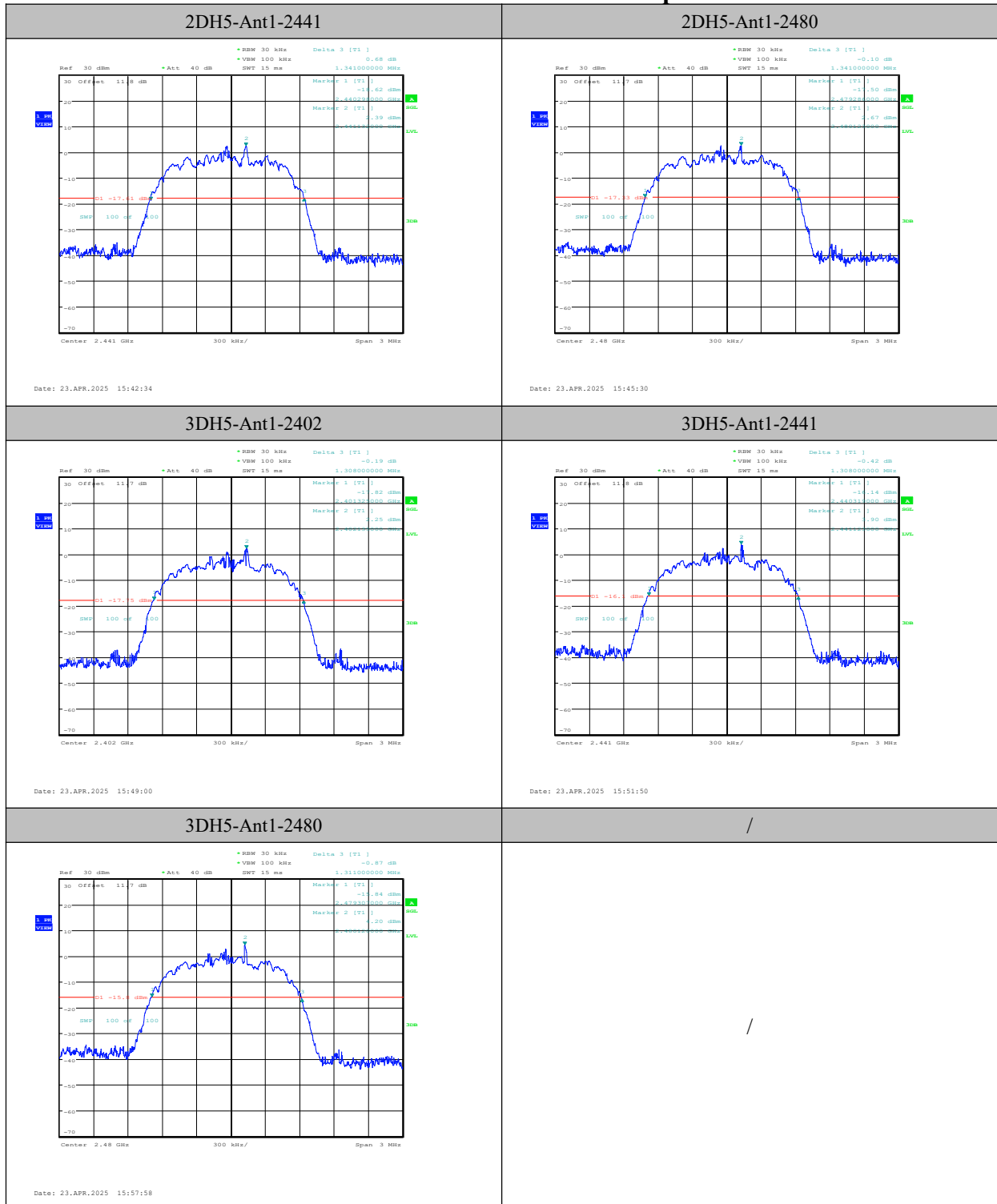
2DH5	Ant1	2402	1.35	2401.30	2402.65
2DH5	Ant1	2441	1.34	2440.30	2441.64
2DH5	Ant1	2480	1.34	2479.29	2480.63
3DH5	Ant1	2402	1.31	2401.32	2402.63
3DH5	Ant1	2441	1.31	2440.32	2441.63
3DH5	Ant1	2480	1.31	2479.31	2480.62

Test graphs



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6.4. 99% Occupied Bandwidth

Specifications:	2.1049,RSS-GEN 6.7
DUT Serial Number:	N507D53S10180
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

Measurement Uncertainty:

Measurement Uncertainty	4.2kHz
-------------------------	--------

Test procedures:

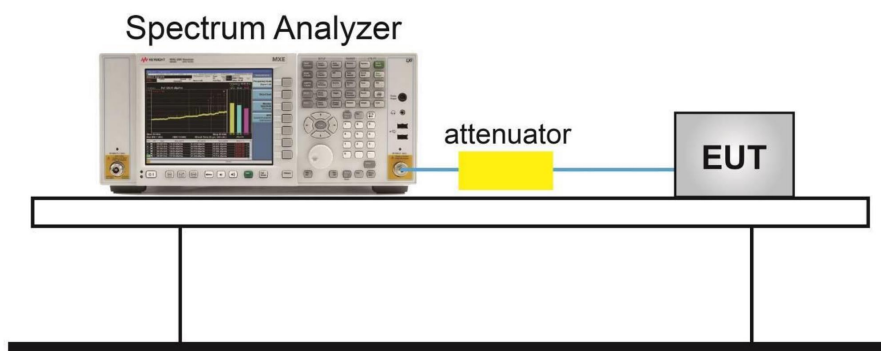
The measurement is according to ANSI C63.10 clause 6.9.3.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set RBW shall be in the range of 1% to 5% of the OBW.
4. Set the VBW $\geq [3 \times \text{RBW}]$.
5. Detector = peak.
6. Trace mode = max hold.
7. Sweep = auto couple.
8. Allow the trace to stabilize.
9. The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

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Test setup:



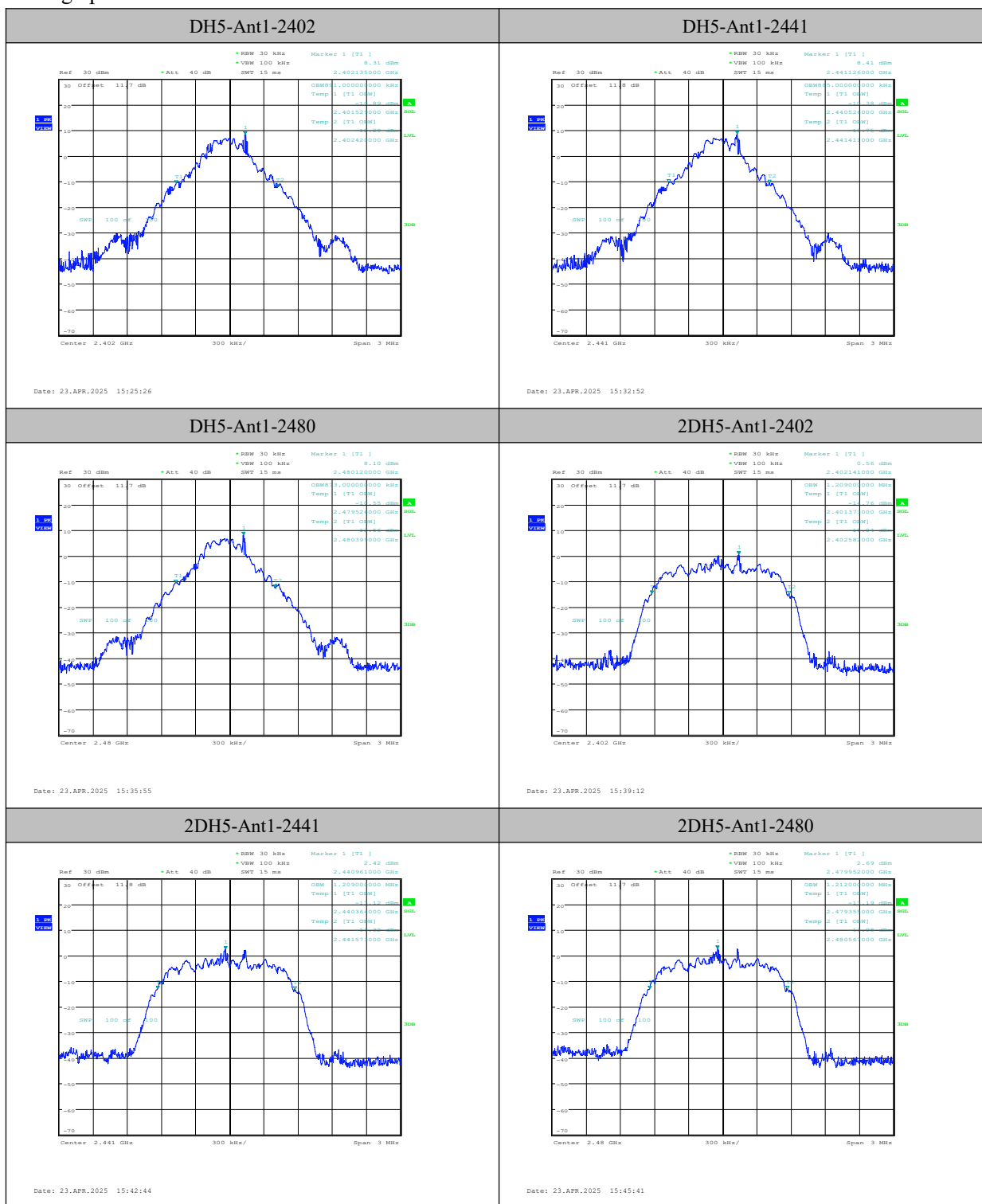
Measurement Results:

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
DH5	Ant1	2402	0.891	2401.5290	2402.4200
DH5	Ant1	2441	0.885	2440.5260	2441.4110
DH5	Ant1	2480	0.873	2479.5260	2480.3990
2DH5	Ant1	2402	1.209	2401.3730	2402.5820
2DH5	Ant1	2441	1.209	2440.3640	2441.5730
2DH5	Ant1	2480	1.212	2479.3550	2480.5670
3DH5	Ant1	2402	1.209	2401.3700	2402.5790
3DH5	Ant1	2441	1.221	2440.3520	2441.5730
3DH5	Ant1	2480	1.218	2479.3460	2480.5640

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Test graphs

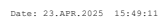


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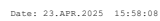


3DH5-Ant1-2402



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FAX:0086-23-88608777

6.5. Frequency Band Edges-Conducted

Specifications:	FCC Part 15.247(d), RSS-247 5.5
DUT Serial Number:	N507D53S10180
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit(dBc)
FCC Part 15.247(d)	>20
RSS-247 5.5	>20

Measurement Uncertainty:

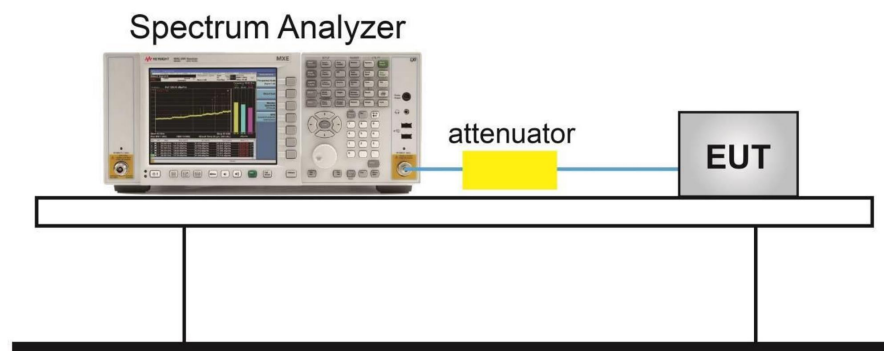
Measurement Uncertainty	0.62dB
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Test procedures:

The measurement is according to ANSI C63.10 clause 7.8.6.

1. Connect the EUT to spectrum analyzer.
2. Set RBW=100k, VBW=300k, span more than 1.5 times channel bandwidth (2MHz).
3. Detector =peak, sweep time=auto couple, trace mode=max hold. Allow sweep to continue until the trace stabilizes.

Test setup:



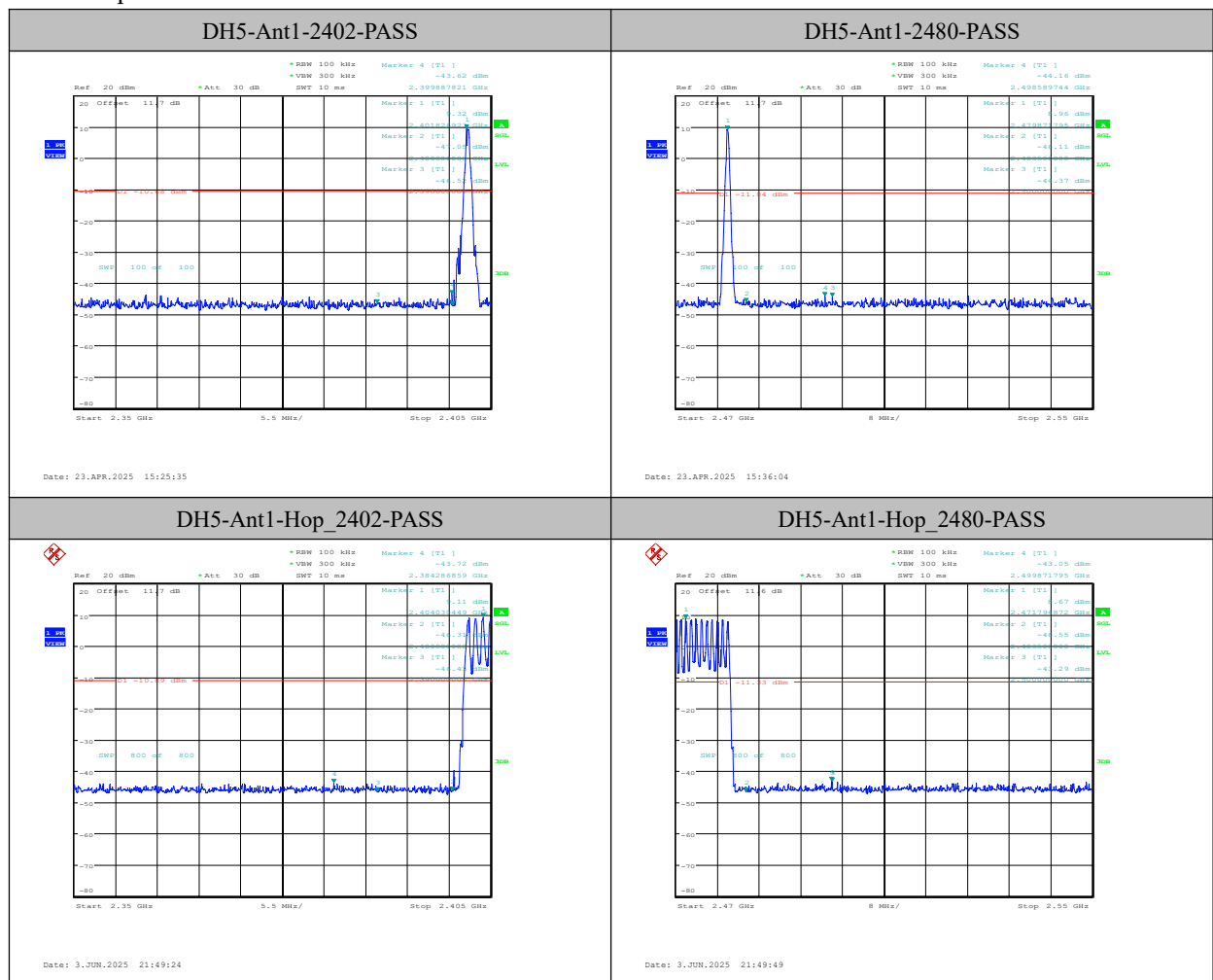
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Measurement Results:

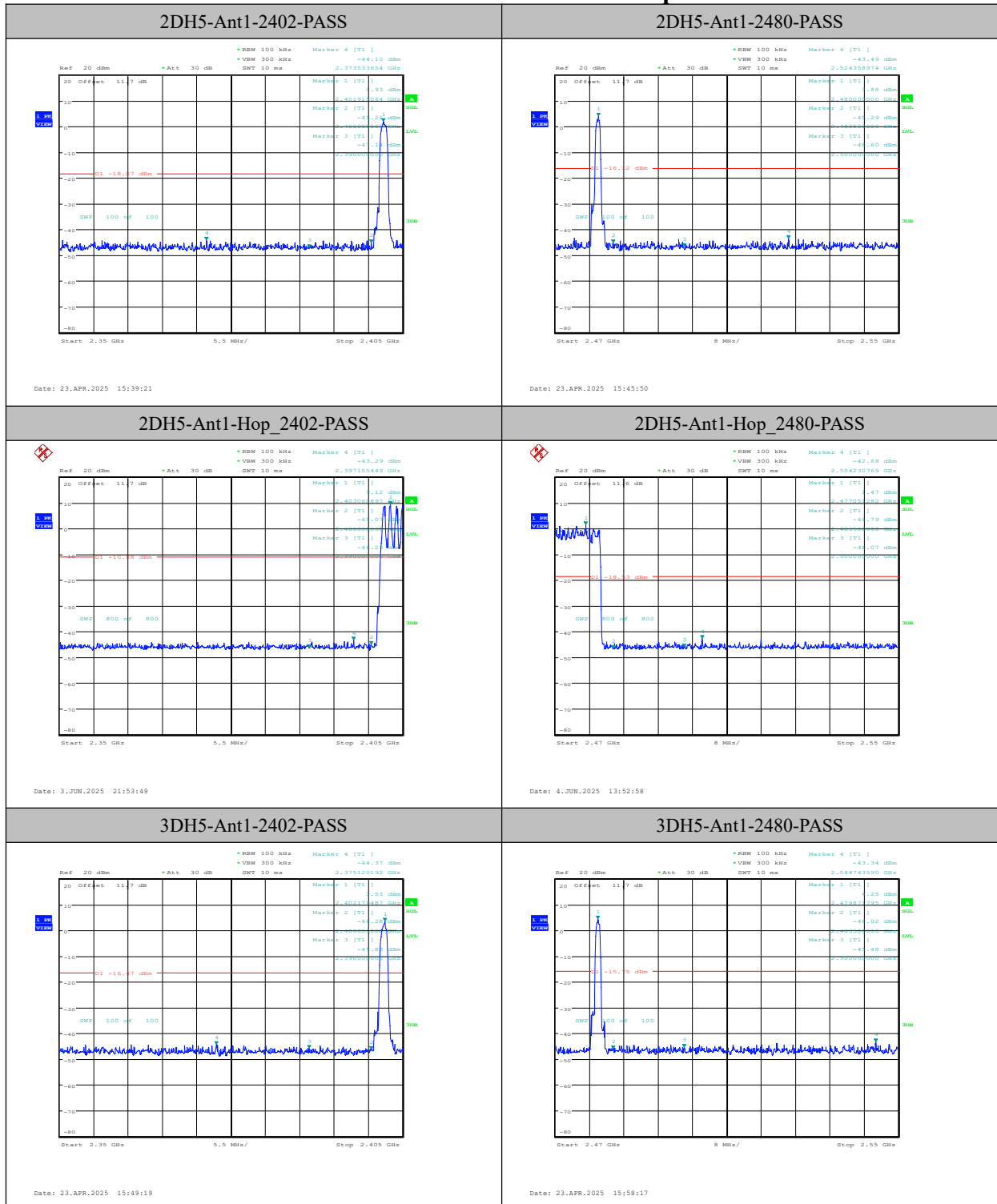
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	9.32	-43.62	≤-10.68	PASS
DH5	Ant1	High	2480	8.96	-44.16	≤-11.04	PASS
DH5	Ant1	Low	Hop_2402	9.11	-43.72	≤-10.89	PASS
DH5	Ant1	High	Hop_2480	8.67	-43.05	≤-11.33	PASS
2DH5	Ant1	Low	2402	1.93	-44.1	≤-18.07	PASS
2DH5	Ant1	High	2480	3.88	-43.49	≤-16.12	PASS
2DH5	Ant1	Low	Hop_2402	9.12	-43.29	≤-10.88	PASS
2DH5	Ant1	High	Hop_2480	1.47	-42.69	≤-18.53	PASS
3DH5	Ant1	Low	2402	3.53	-44.37	≤-16.47	PASS
3DH5	Ant1	High	2480	4.25	-43.34	≤-15.75	PASS
3DH5	Ant1	Low	Hop_2402	9.07	-43.7	≤-10.93	PASS
3DH5	Ant1	High	Hop_2480	8.59	-43.33	≤-11.41	PASS

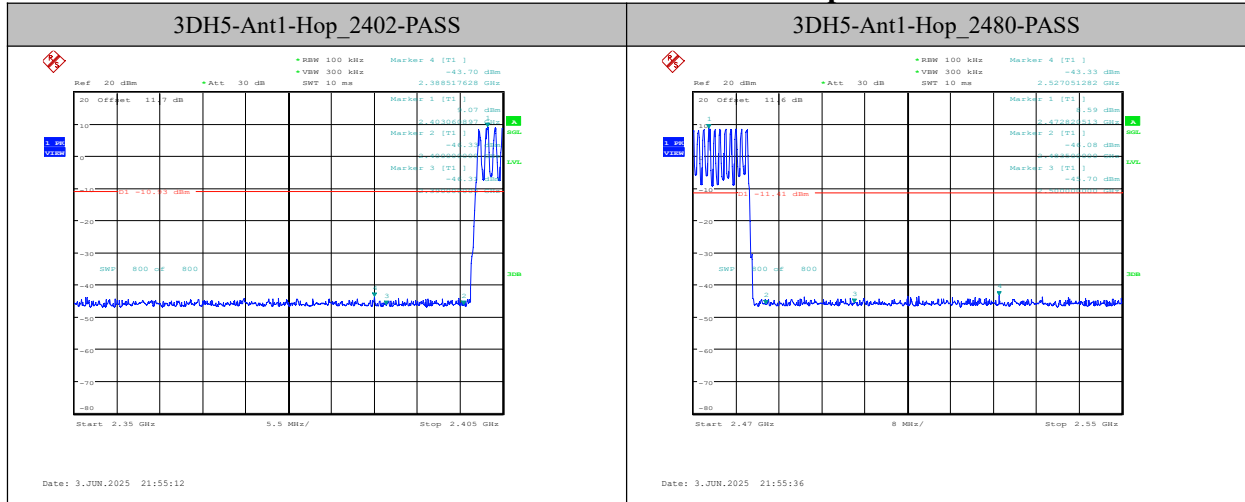
Test Graphs



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6.6. Time Of Occupancy (Dwell Time)

Specifications:	FCC Part 15.247(a), RSS-247 5.1
DUT Serial Number:	N507D53S10180
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
FCC Part 15.247(a)	<400ms
RSS-247 5.1	<400ms

Measurement Uncertainty:

Measurement Uncertainty	2.44ms
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Test procedures

The measurement is according to ANSI C63.10 clause 7.8.4

1. Connect the EUT through cable and divide with spectrum analyzer.
2. Enable the EUT transmit maximum power.
3. Set the spectrum analyzer as step 4 to step 8.
4. Span: Zero span, centered on a hopping channel.
5. RBW shall be $\leq$ channel spacing and where possible RBW should be set $\gg 1 / T$, where T is the expected dwell time per channel.
6. Sweep: As necessary to capture the entire dwell time per hopping channel; where possible use a video trigger and trigger delay so that the transmitted signal starts a little to the right of the start of the plot. The trigger level might need slight adjustment to prevent triggering when the system hops on an adjacent channel; a second plot might be needed with a longer sweep time to show two successive hops on a channel.
7. Detector function: Peak.
8. Trace: Clear-write, single sweep
9. Place markers at the start of the first transmission on the channel and at the end of the last transmission.
The dwell time per hop is the time between these two markers.

To determine the number of hops on a channel in the regulatory observation period repeat the measurement using a longer sweep time. When the device uses a single hopping sequence the period of measurement should be sufficient to capture at least 2 hops. When the device uses a dynamic hopping sequence, or the sequence varies, the period of measurement may need to capture multiple hops to better determine the average time of occupancy. Count the number of hops on the channel across the sweep time.

The average number of hops on the same channel within the regulatory observation period is calculated

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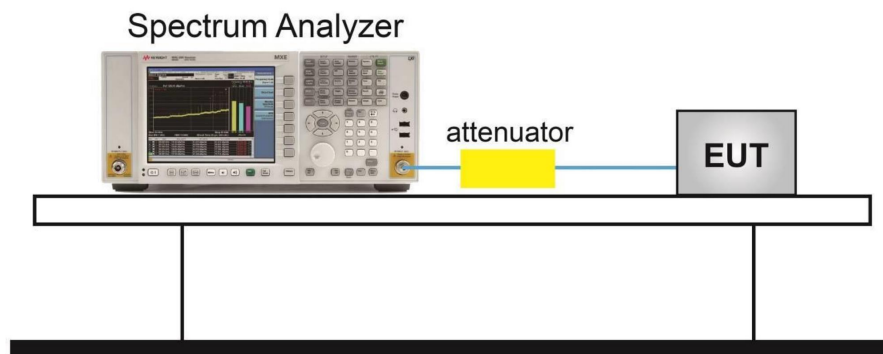
Report No.: 25B02W000009-002

from the number of hops on the channel divided by the spectrum analyzer sweep time multiplied by the regulatory observation period. For example, if three hops are counted with an analyzer sweep time of 500 ms and the regulatory observation period is 10 s, then the number of hops in that ten seconds is $3 / 0.5 \times 10$, or 60 hops.

The average time of occupancy is calculated by multiplying the dwell time per hop by the number of hops in the observation period. Where the device shares the same hopping algorithms (dwell time, channel selection) across multiple data rates or modulation schemes then the time of occupancy need only be measured for one of those modulation schemes or data rates. If the dwell time value varies with different modes of operation (data rate, modulation format, number of hopping channels, etc.), then repeat this test for each variation in dwell time.

Spectral plots of the channel occupancy shall be included in the report.

Test Setup



Measurement Results:

TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.878	80	0.230	≤ 0.4	PASS
2DH5	Ant1	Hop	2.881	120	0.346	≤ 0.4	PASS
3DH5	Ant1	Hop	2.884	120	0.346	≤ 0.4	PASS

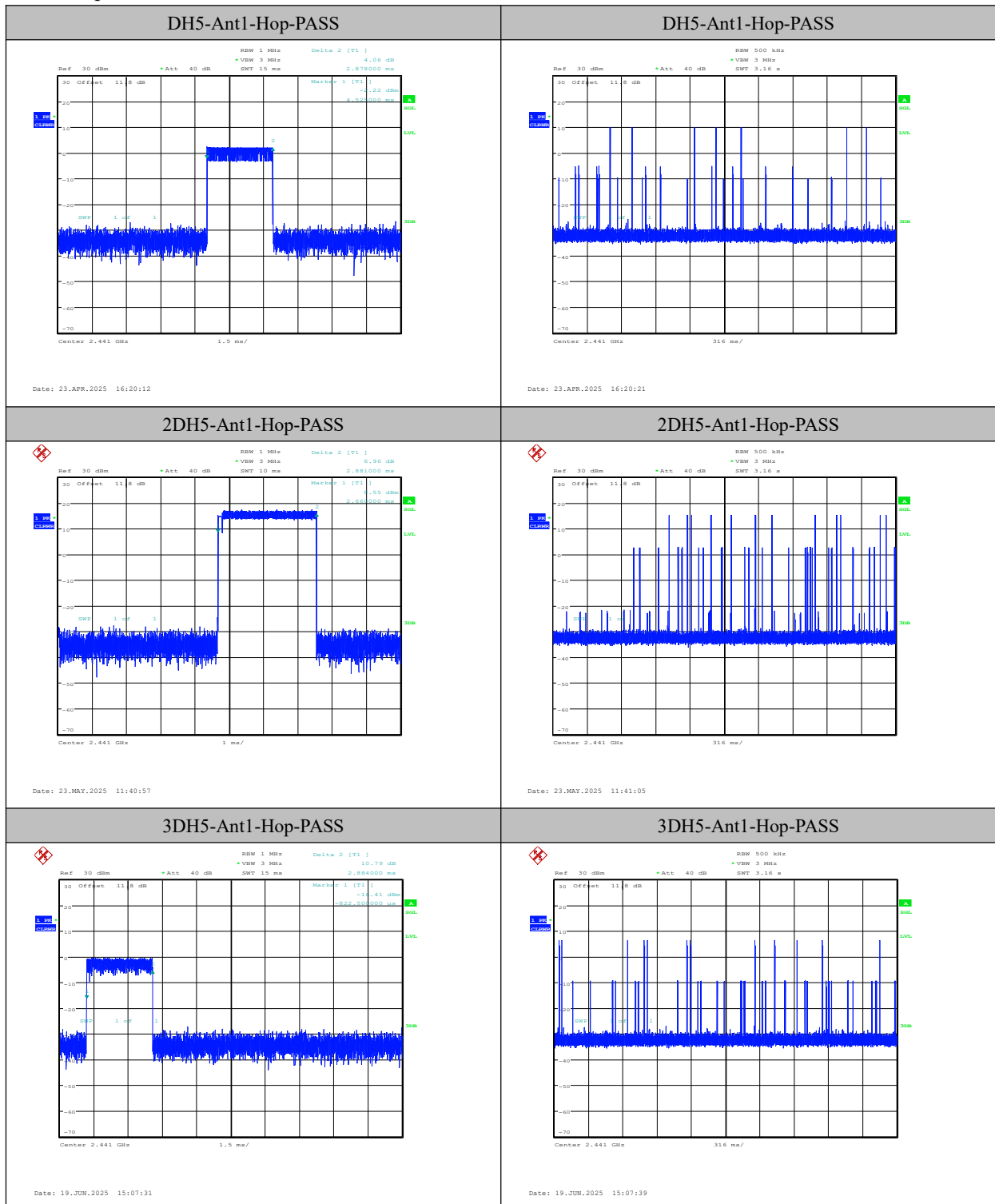
Note:

1. Result= BurstWidth* TotalHops.
2. All the test data for each data were verified, but only the worst case was reported.

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Test Graphs



6.7. Carrier Frequency Separation

Specifications:	FCC Part 15.247(a), RSS-247 5.1
DUT Serial Number:	N507D53S10180
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
FCC Part 15.247(a)	GFSK: Over 25kHz or 20dB bandwidth $\pi/4$ DQPSK; 8DPSK: Over 25kHz or $(2/3)*20$ dB bandwidth
RSS-247 5.1	GFSK: Over 25kHz or 20dB bandwidth $\pi/4$ DQPSK; 8DPSK: Over 25kHz or $(2/3)*20$ dB bandwidth

Measurement Uncertainty:

Measurement Uncertainty	4.0kHz
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Test procedures:

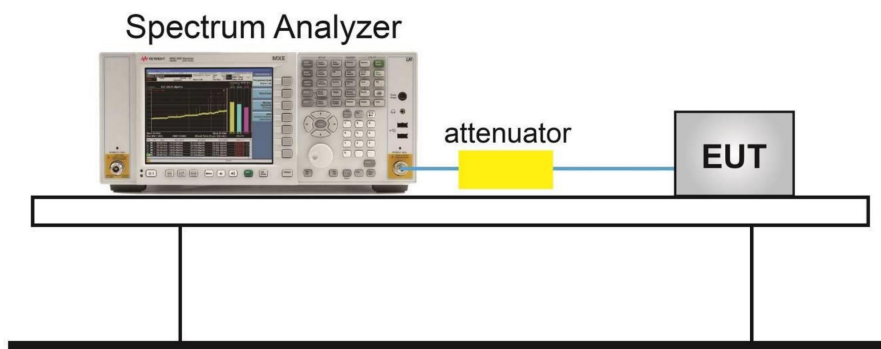
The measurement is according to ANSI C63.10 clause 7.8.2.

1. Connect the EUT through cable and divide and spectrum analyzer.
2. Enable the EUT transmit in hopping mode.
3. Span: Wide enough to capture the peaks of two adjacent channels.
4. RBW: Start with the RBW set to approximately 30% of the channel spacing; adjust as necessary to best identify the center of each individual channel.
5. Video (or average) bandwidth (VBW) $\geq$ RBW.
6. Sweep: Auto.
7. Detector function: Peak.
8. Trace: Max hold.
9. Allow the trace to stabilize.

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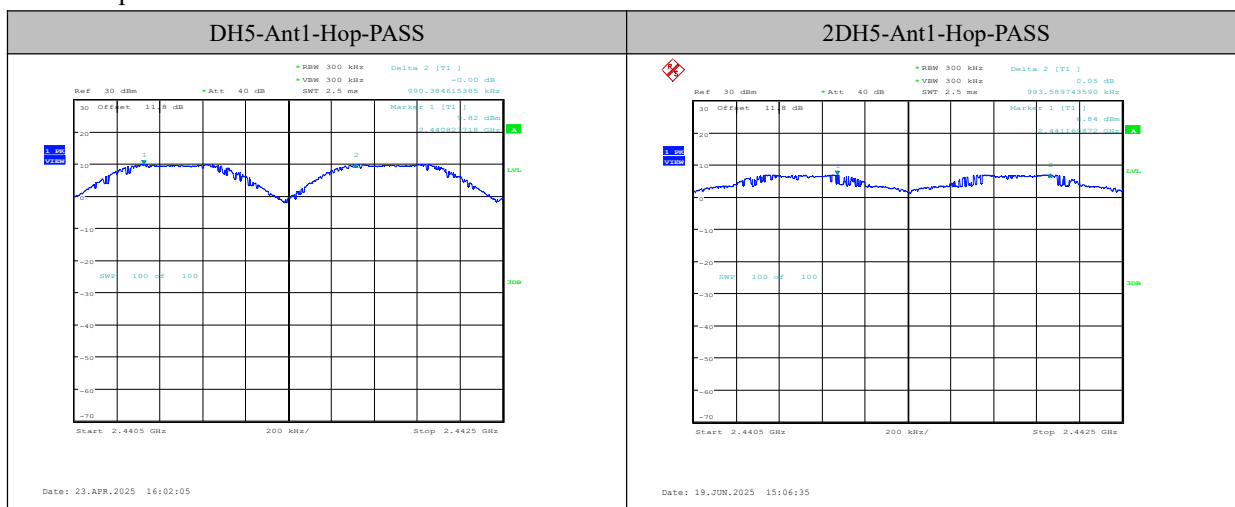
Test Setup:



Measurement Results:

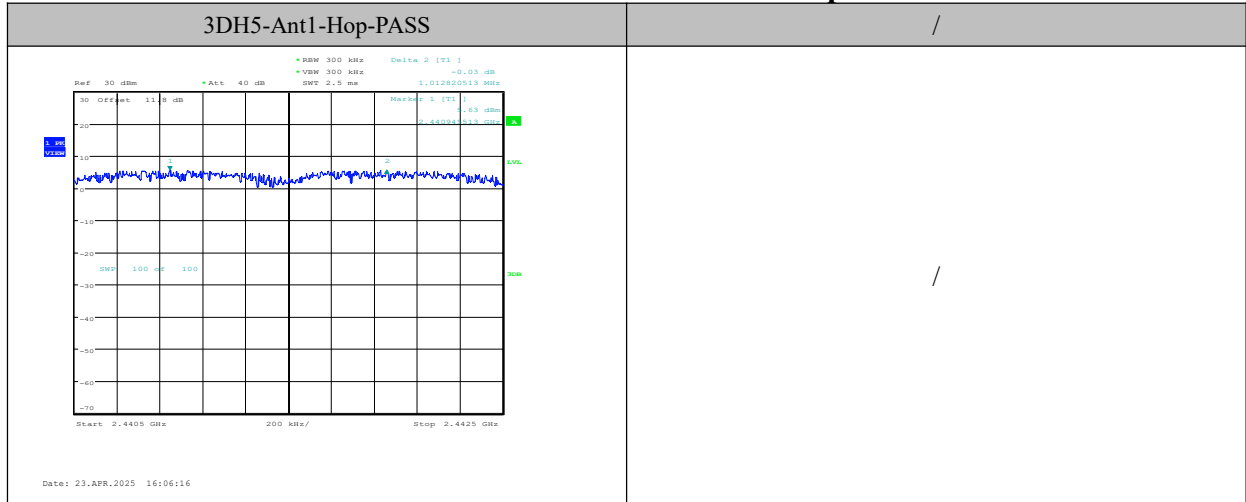
TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.990	≥ 0.940	PASS
2DH5	Ant1	Hop	0.994	≥ 0.900	PASS
3DH5	Ant1	Hop	1.013	≥ 0.873	PASS

Test Graphs



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6.8. Number Of Hopping Channels

Specifications:	FCC Part 15.247(a), RSS-247 5.1
DUT Serial Number:	N507D53S10180
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
FCC Part 15.247(a)	At least 15 non-overlapping channels
RSS-247 5.1	At least 15 non-overlapping channels

Measurement Uncertainty:

Measurement Uncertainty	--
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Test procedure:

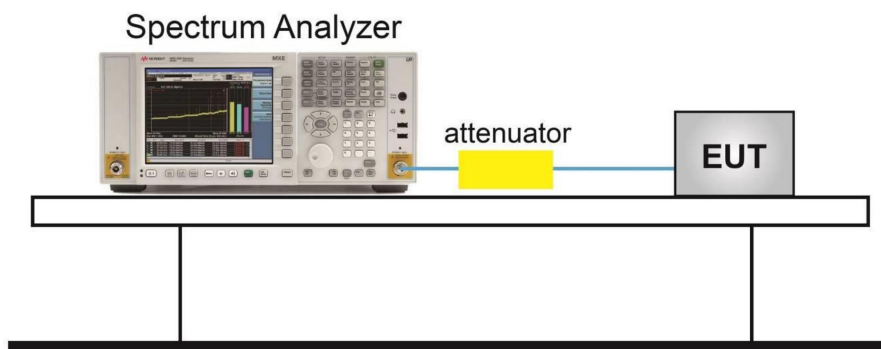
The measurement is according to ANSI C63.10 clause 7.8.3.

1. Connect the EUT through cable and divide with spectrum analyzer.
2. Enable the EUT transmit in hopping mode.
3. Span: The frequency band of operation. Depending on the number of channels the device supports, it may be necessary to divide the frequency range of operation across multiple spans, to allow the individual channels to be clearly seen.
4. RBW: To identify clearly the individual channels, set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller.
5. VBW $\geq$ RBW.
6. Sweep: Auto.
7. Detector function: Peak.
8. Trace: Max hold.
9. Allow the trace to stabilize.
10. Record the test results.

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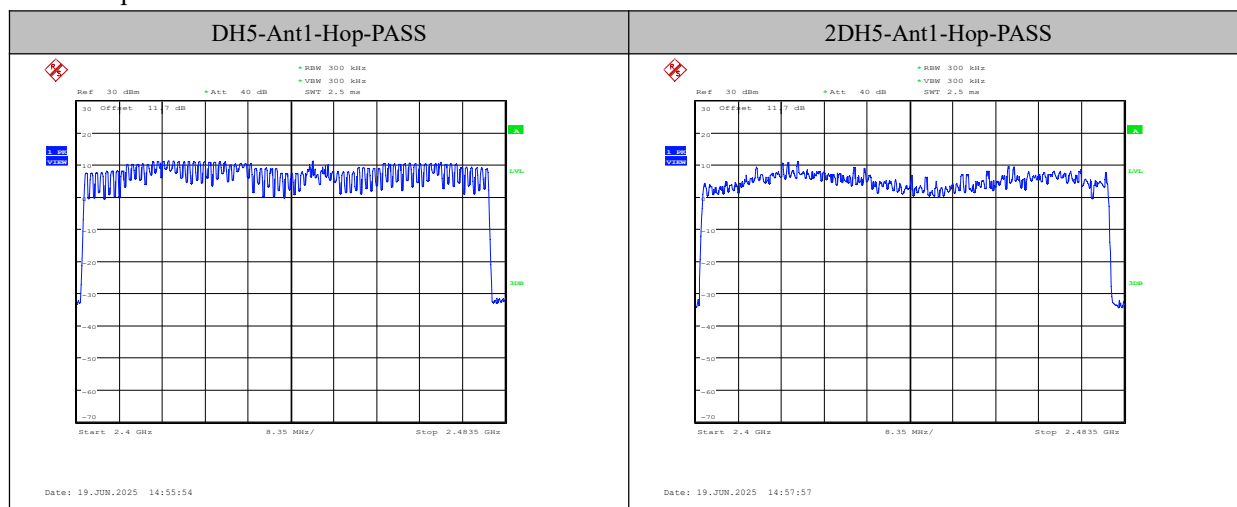
Test Setup:



Measurement Results:

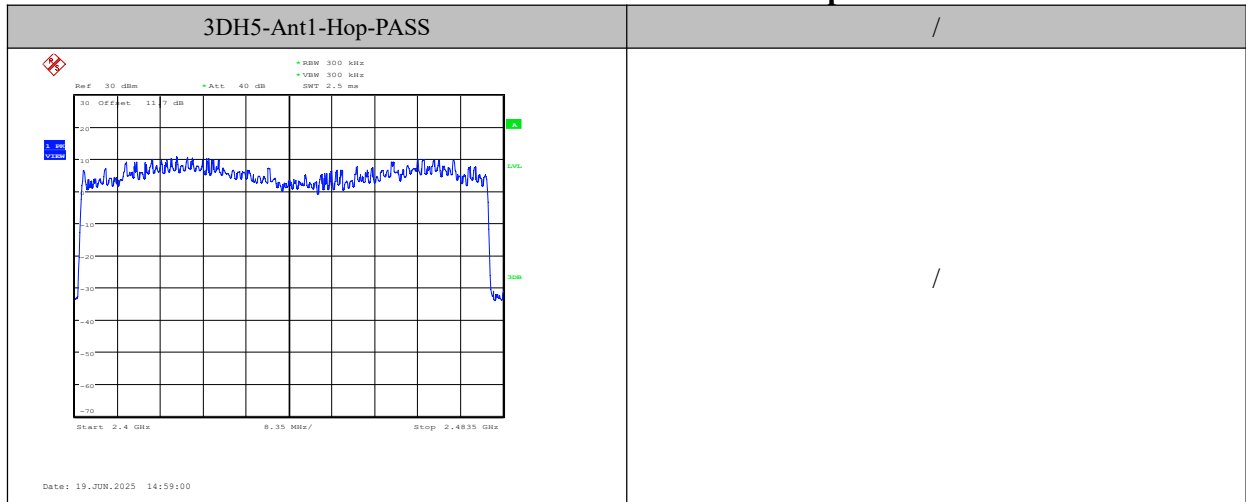
TestMode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥ 15	PASS
2DH5	Ant1	Hop	79	≥ 15	PASS
3DH5	Ant1	Hop	79	≥ 15	PASS

Test Graphs



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6.9. Transmitter Spurious Emission-Conducted

Specifications:	FCC Part 15.247(d), RSS-247 5.5
DUT Serial Number:	N507D53S10180
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
FCC Part 15.247(d)	20dB below peak output power in 100kHz
RSS-247 5.5	20dB below peak output power in 100kHz bandwidth

Measurement Uncertainty:

Measurement Uncertainty	0.62dB
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Test procedures:

Reference level measurement

- Set instrument center frequency to DTS channel center frequency.
- Set the span to ≥ 1.5 times the DTS bandwidth.
- Set the RBW = 100 kHz.
- Set the VBW $\geq [3 \times \text{RBW}]$.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

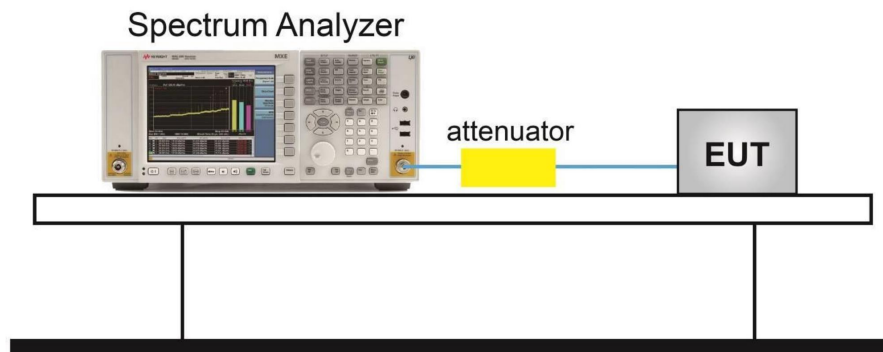
Emission level measurement

- Set the center frequency and span to encompass frequency range to be measured.
- Set the RBW = 100 kHz.
- Set the VBW $\geq [3 \times \text{RBW}]$.

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- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

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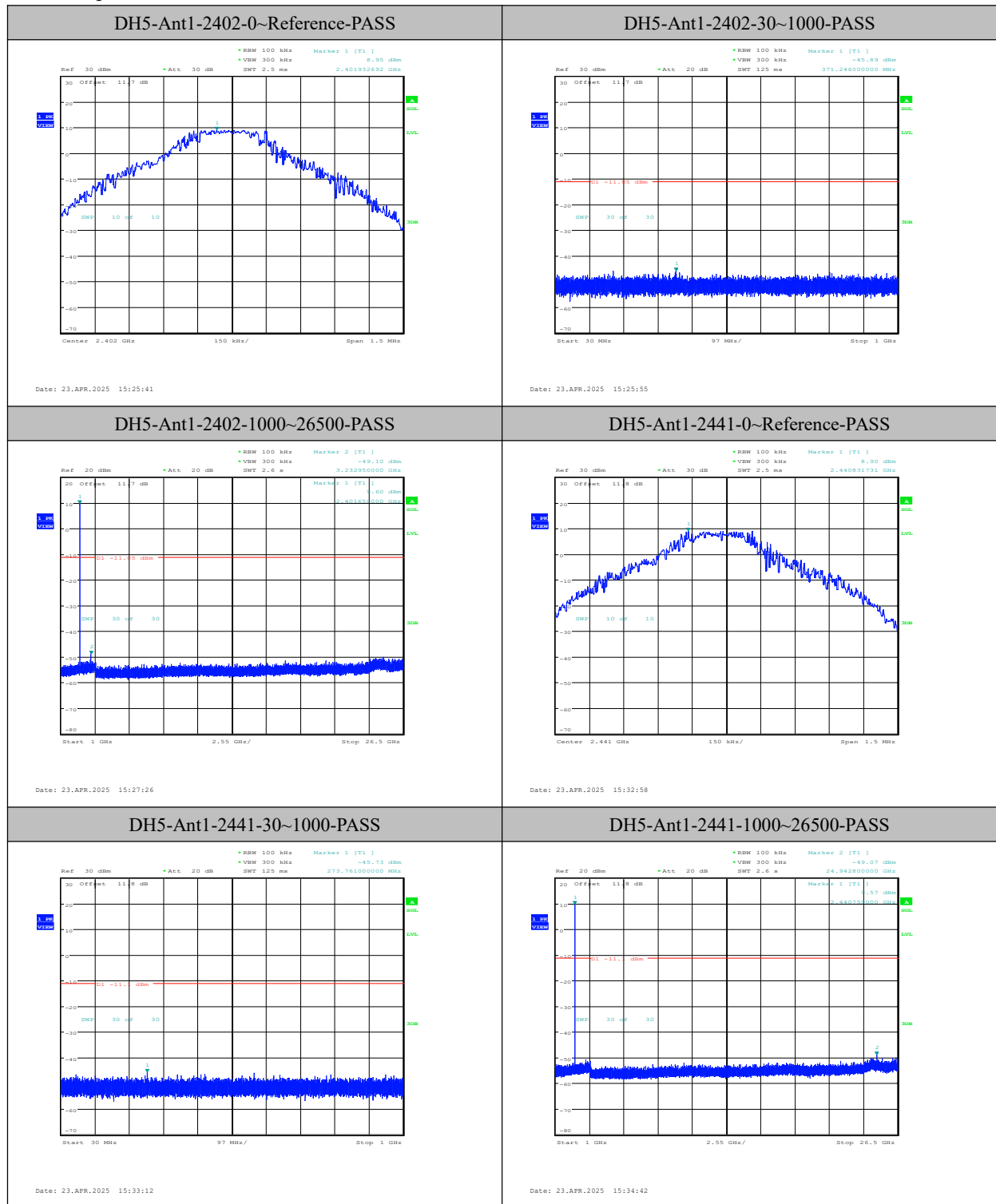
Measurement Results:

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	8.95	8.95	---	PASS
DH5	Ant1	2402	30~1000	8.95	-45.89	≤-11.05	PASS
DH5	Ant1	2402	1000~26500	8.95	-49.10	≤-11.05	PASS
DH5	Ant1	2441	0~Reference	8.90	8.90	---	PASS
DH5	Ant1	2441	30~1000	8.90	-45.73	≤-11.10	PASS
DH5	Ant1	2441	1000~26500	8.90	-49.07	≤-11.10	PASS
DH5	Ant1	2480	0~Reference	9.15	9.15	---	PASS
DH5	Ant1	2480	30~1000	9.15	-45.90	≤-10.85	PASS
DH5	Ant1	2480	1000~26500	9.15	-46.31	≤-10.85	PASS
2DH5	Ant1	2402	0~Reference	2.67	2.67	---	PASS
2DH5	Ant1	2402	30~1000	2.67	-46.40	≤-17.33	PASS
2DH5	Ant1	2402	1000~26500	2.67	-43.69	≤-17.33	PASS
2DH5	Ant1	2441	0~Reference	4.02	4.02	---	PASS
2DH5	Ant1	2441	30~1000	4.02	-46.01	≤-15.98	PASS
2DH5	Ant1	2441	1000~26500	4.02	-44.37	≤-15.98	PASS
2DH5	Ant1	2480	0~Reference	4.67	4.67	---	PASS
2DH5	Ant1	2480	30~1000	4.67	-45.87	≤-15.33	PASS
2DH5	Ant1	2480	1000~26500	4.67	-44.60	≤-15.33	PASS
3DH5	Ant1	2402	0~Reference	3.66	3.66	---	PASS
3DH5	Ant1	2402	30~1000	3.66	-45.97	≤-16.34	PASS
3DH5	Ant1	2402	1000~26500	3.66	-43.30	≤-16.34	PASS
3DH5	Ant1	2441	0~Reference	3.27	3.27	---	PASS
3DH5	Ant1	2441	30~1000	3.27	-45.53	≤-16.73	PASS
3DH5	Ant1	2441	1000~26500	3.27	-44.19	≤-16.73	PASS
3DH5	Ant1	2480	0~Reference	3.55	3.55	---	PASS
3DH5	Ant1	2480	30~1000	3.55	-46.40	≤-16.45	PASS
3DH5	Ant1	2480	1000~26500	3.55	-43.63	≤-16.45	PASS

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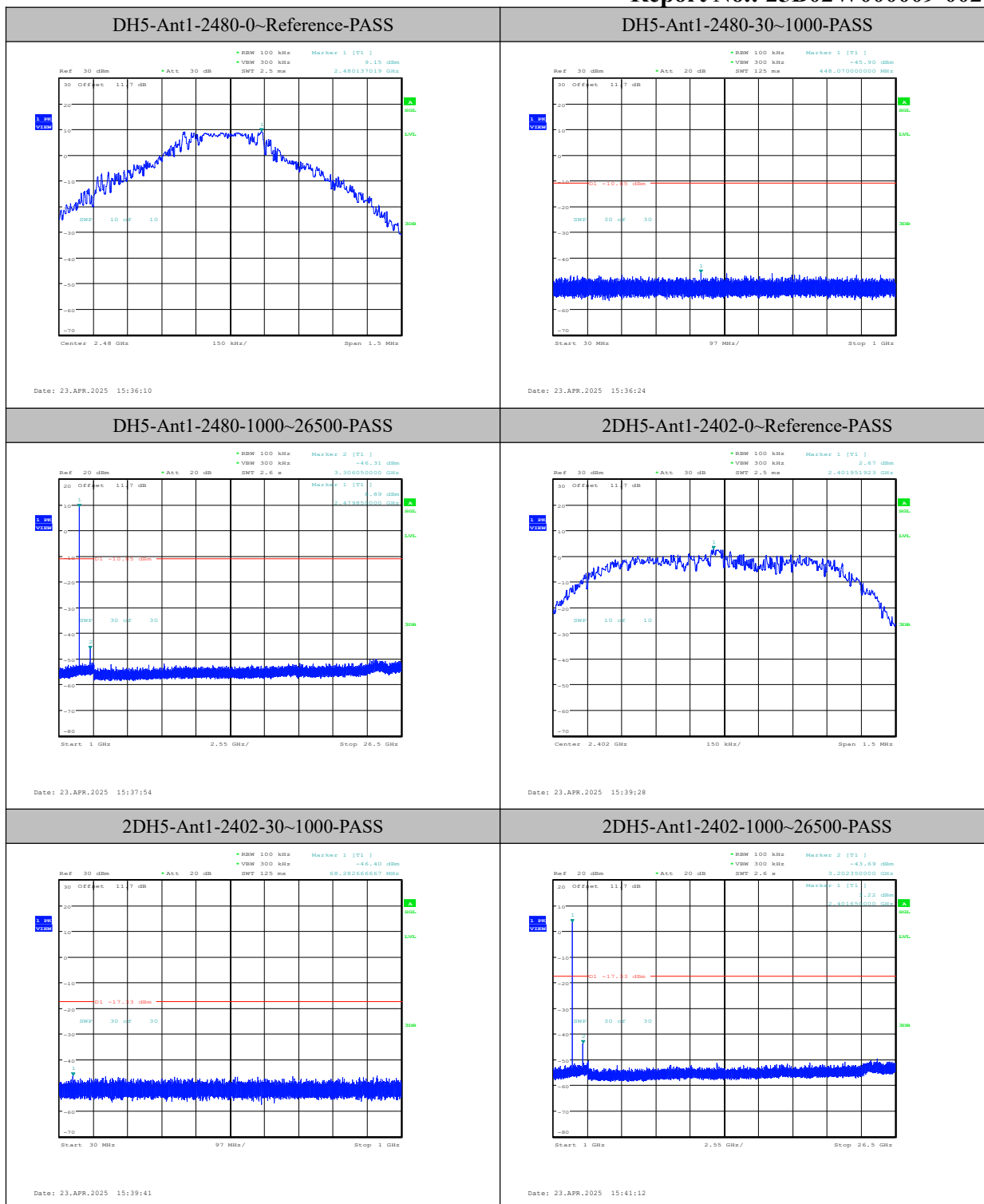
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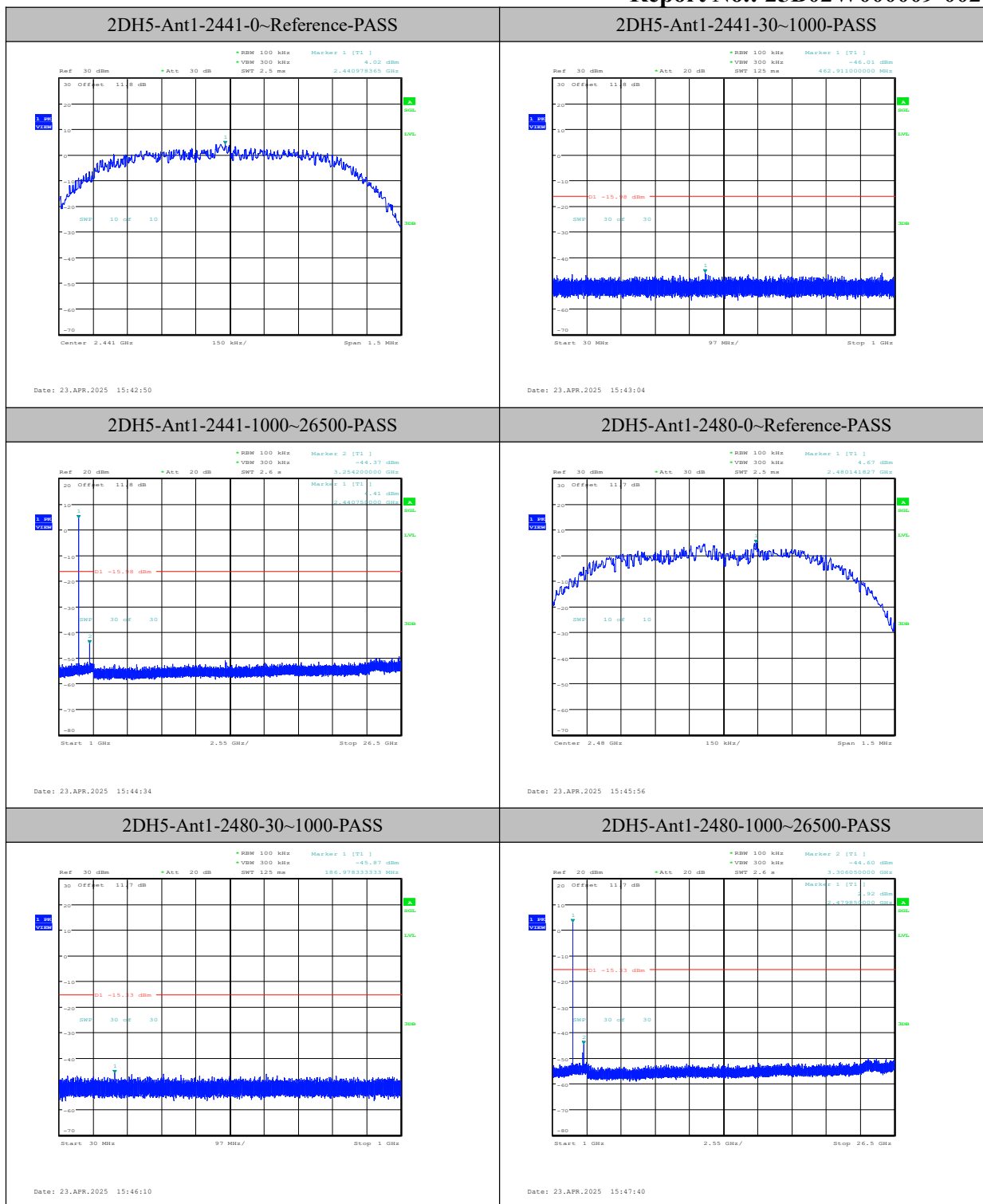
Test Graphs

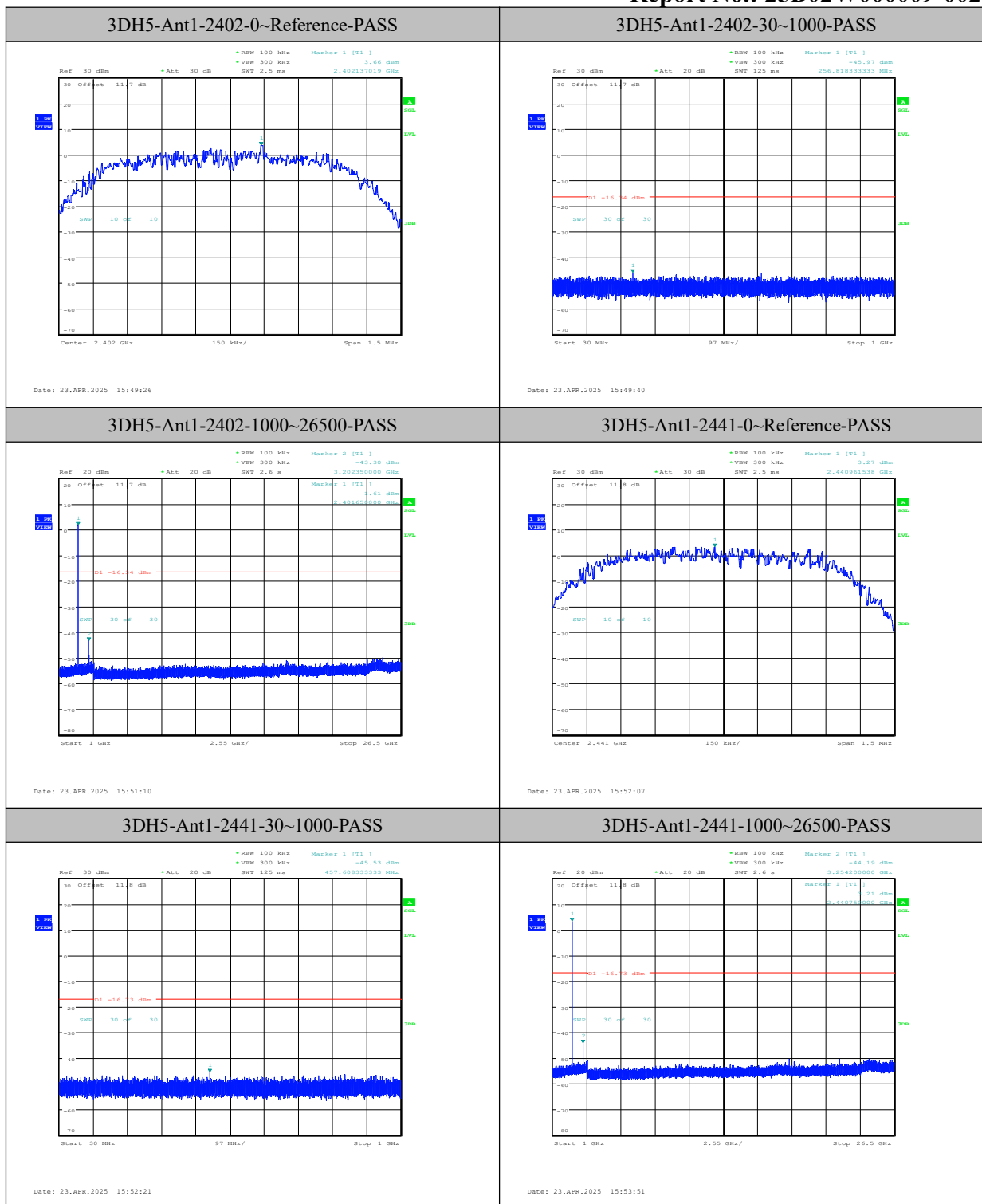


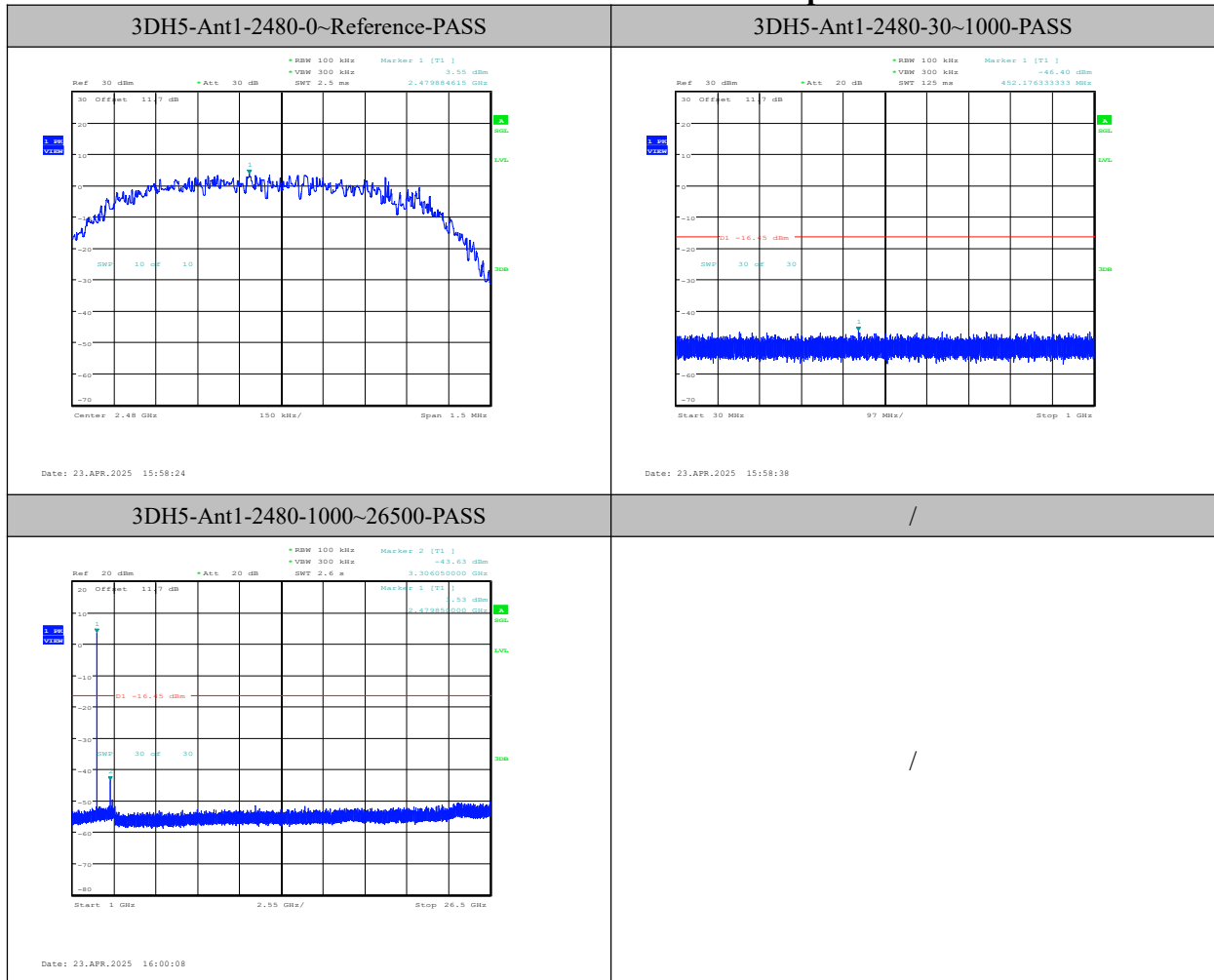
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6.10. Transmitter Spurious Emission-Radiated

Specifications:	FCC Part 15.247(d),15.205(a),15.209(a), RSS-GEN 8.9, 8.10
DUT Serial Number:	N507D53S10198
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60%
Test Results:	Pass

Limit Level Construction:

Limit in restricted band

Frequency of emission (MHz)	Field strength (mV/m)	Field strength (dBuV/m)
0.009~0.49	2400/F (kHz)	129-94
0.49~1.705	24000/F (kHz)	74-63
1.705~30	30	70
30~88	100	40
88~216	150	43.5
216~960	200	46
Above 960	500	54

Measurement Uncertainty:

Measurement Uncertainty	30MHz-150MHz 3.82 dB (k=2) 150MHz-1000MHz 3.97 dB (k=2) 1000MHz-3000MHz 3.09 dB (k=2) 3000MHz-6000MHz 3.29 dB (k=2) 6000MHz-18000MHz 3.91 dB (k=2) 18000MHz-26000MHz 4.60 dB (k=2)
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Test procedures:

Portable, small, lightweight, or modular devices that may be handheld, worn on the body, or placed on a table during operation shall be positioned on a non-conducting platform, the top of which is 80 cm above the reference ground plane. The preferred area occupied by the EUT arrangement is 1 m by 1.5 m. For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m. but it may be larger or smaller to accommodate various sized EUTs. For testing purposes, ceiling- and wall-mounted devices also shall be positioned on a tabletop (see also ANSI C63.10-2013 section 6.3.4 and 6.3.5). In making any tests involving handheld, body-worn, or ceiling-mounted equipment, it is essential to recognize that the measured levels may be dependent on the orientation (attitude) of the three orthogonal axes of the EUT. Thus, exploratory tests as specified in 8.3.1 shall be carried out for various axes orientations to determine the attitude having maximum or near-maximum emission level.

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height varied from 1m to 4m and the EUT azimuth were varied from 0° to 360° in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Test Settings – Below 1GHz (Quasi-Peak Field Strength Measurements)

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set the RBW = 100 kHz.
3. Set the VBW = 300 kHz.
4. Detector = quasi-peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Trace was allowed to stabilize.

Test Settings – Above 1GHz (Peak Field Strength Measurements)

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set the RBW = 1MHz.
3. Set the VBW = 3MHz.
4. Detector = peak
5. Trace mode = max hold
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces.

Test Settings – Above 1GHz (Average Field Strength Measurements)

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set the RBW = 1MHz.
3. Set the VBW = 3MHz.
4. Detector = power average (RMS).
5. Number of measurement points = 1001 (Number of points must be $\geq 2 \times \text{span} \backslash \text{RBW}$)
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces.

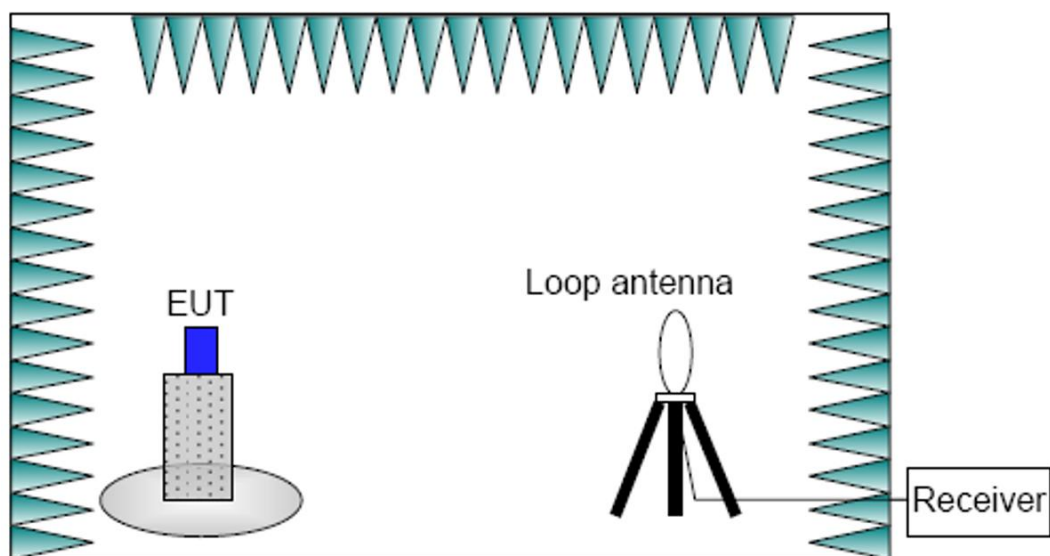
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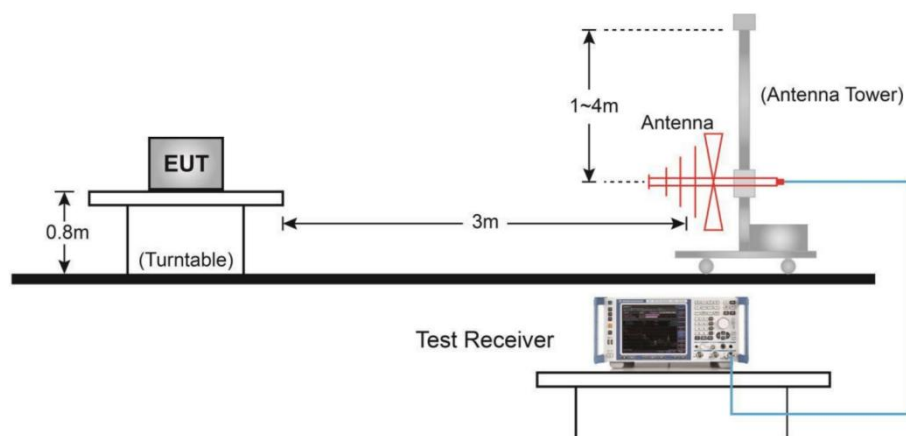
Frequency of emission	RBW/VBW	Sweep Time (s)
0.009~30	9KHz/30KHz	Auto
30~1000	100KHz/300KHz	5
1000~4000	1MHz/3MHz	15
4000~18000	1MHz/3MHz	40
18000~26500	1MHz/3MHz	20

Test Setup:

Below 30MHz Test Setup



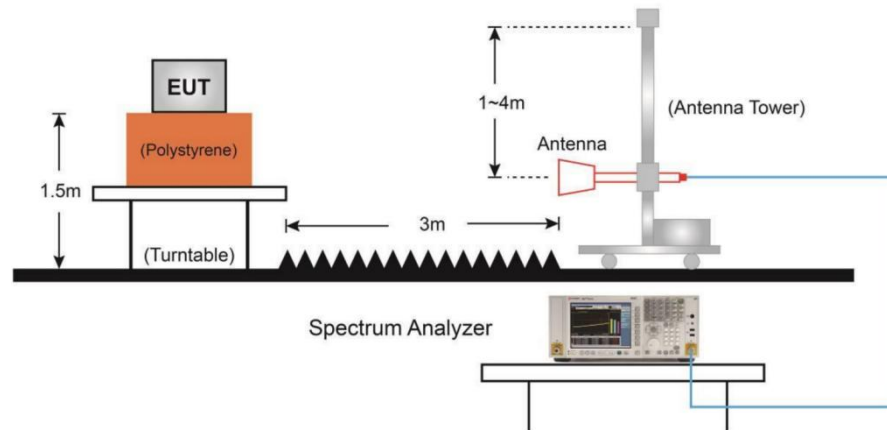
Below 1GHz Test Setup



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Above 1GHz Test Setup



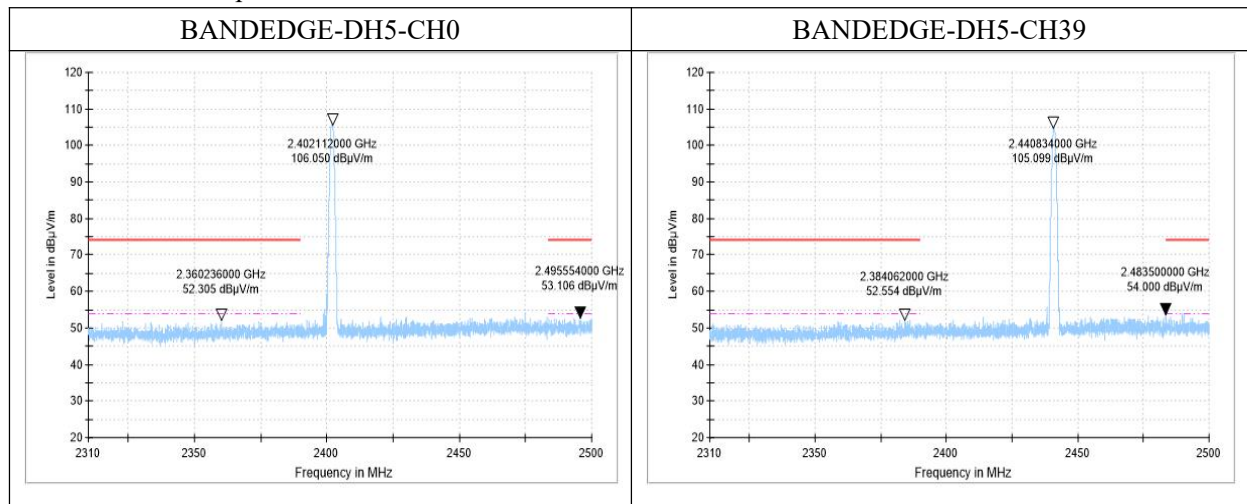
Measurement Results:

A “reference path loss” is established and AR_{pi} is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

The measurement results are obtained as described below:

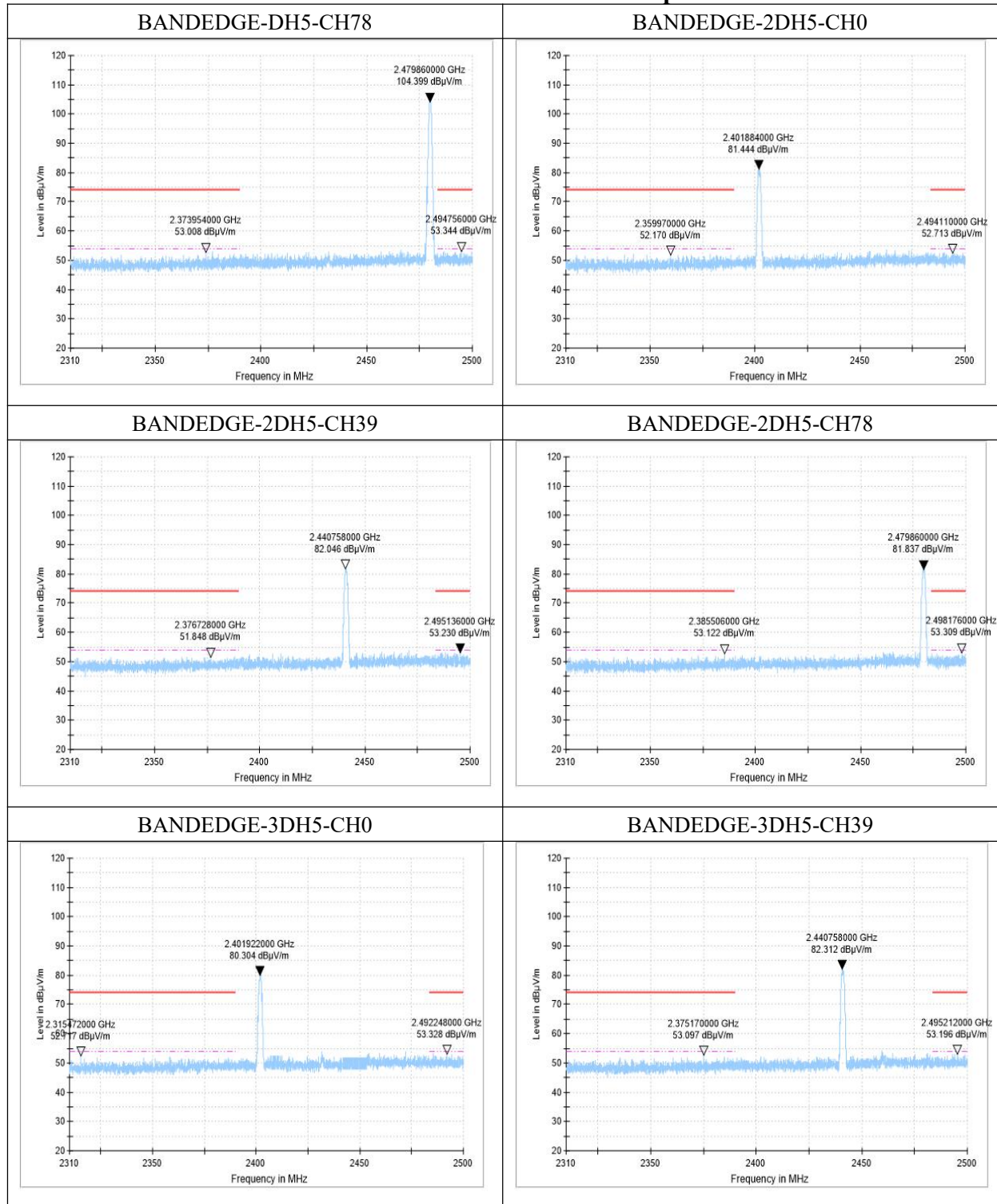
AR_{pi} = Cable loss + Antenna Factor-Preamplifier gain

Result = P_{Mea} + AR_{pi}

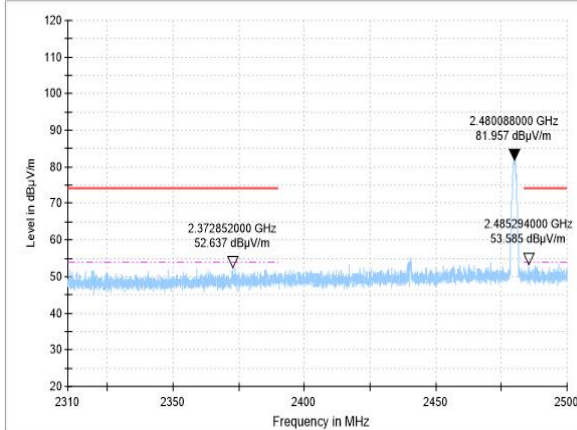


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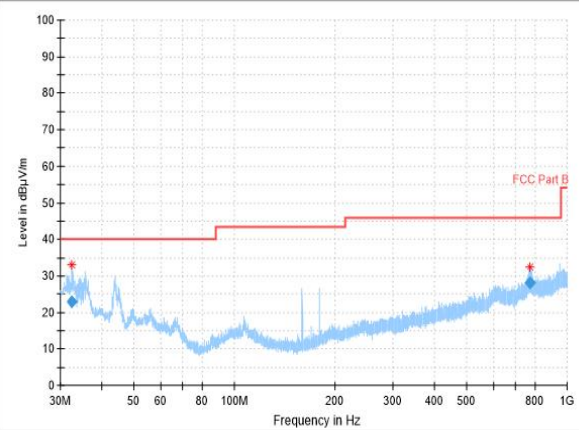
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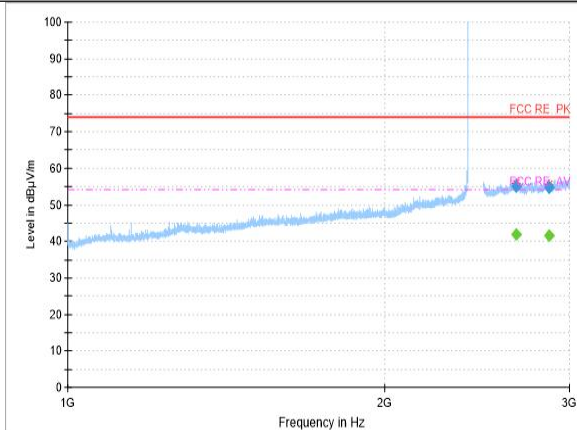
BANDEDGE-3DH5-CH78



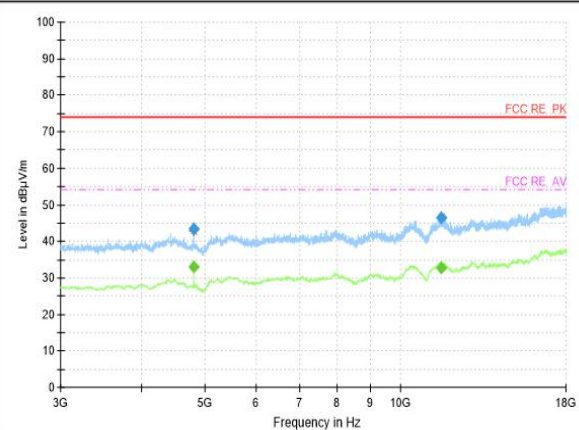
RSE-DH5-CH0-30MHz-1GHz



RSE-DH5-CH0-1GHz-3GHz

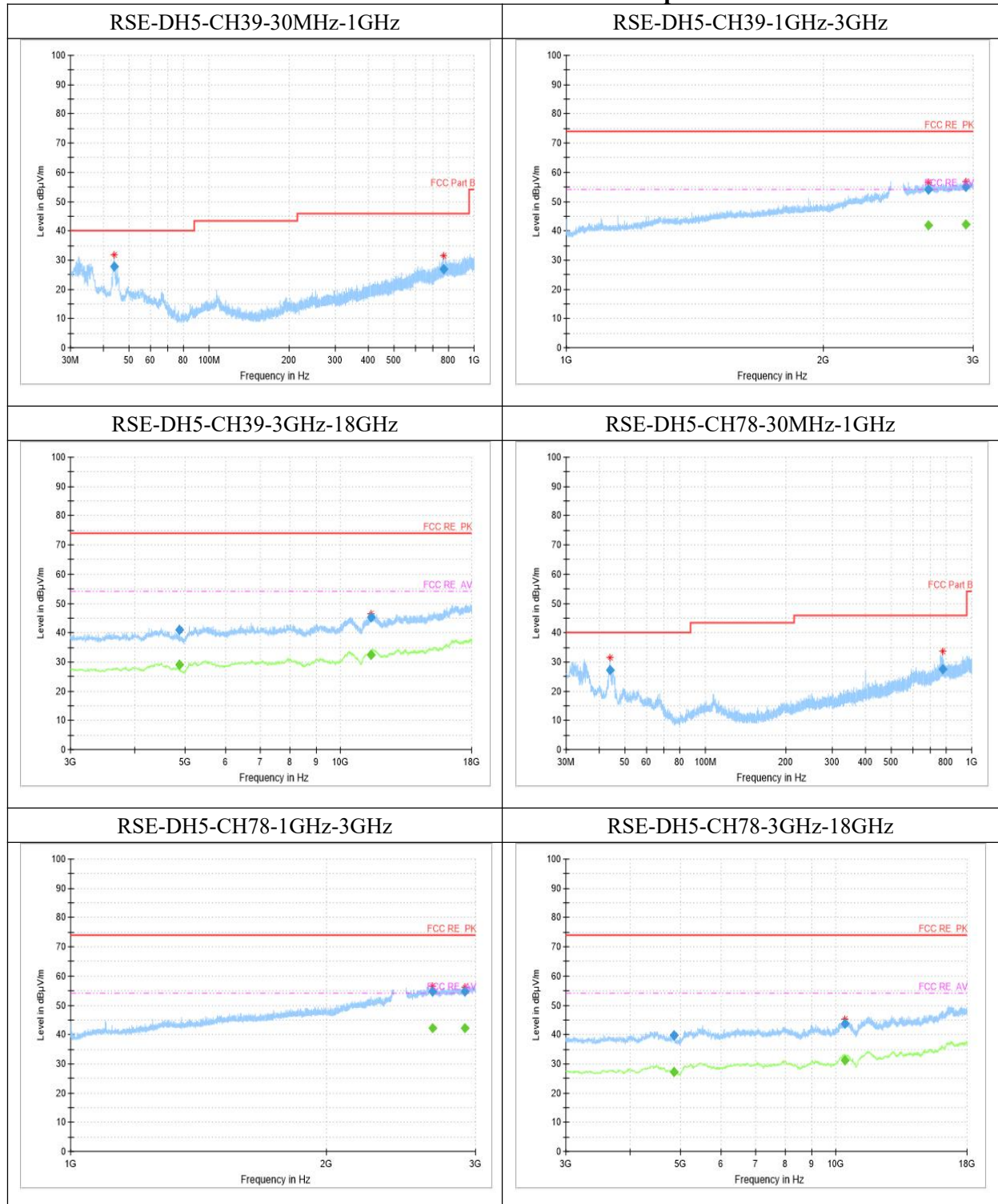


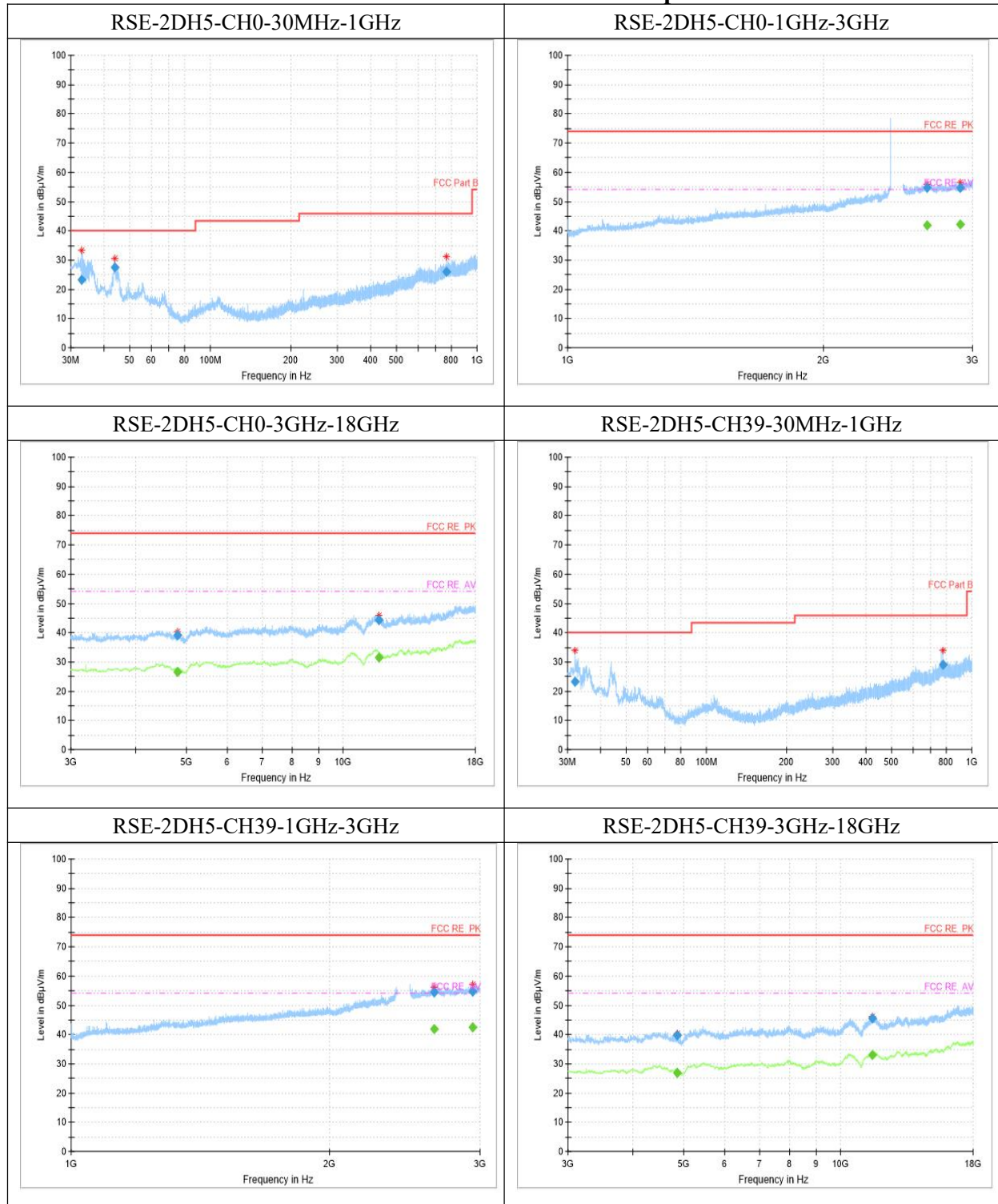
RSE-DH5-CH0-3GHz-18GHz

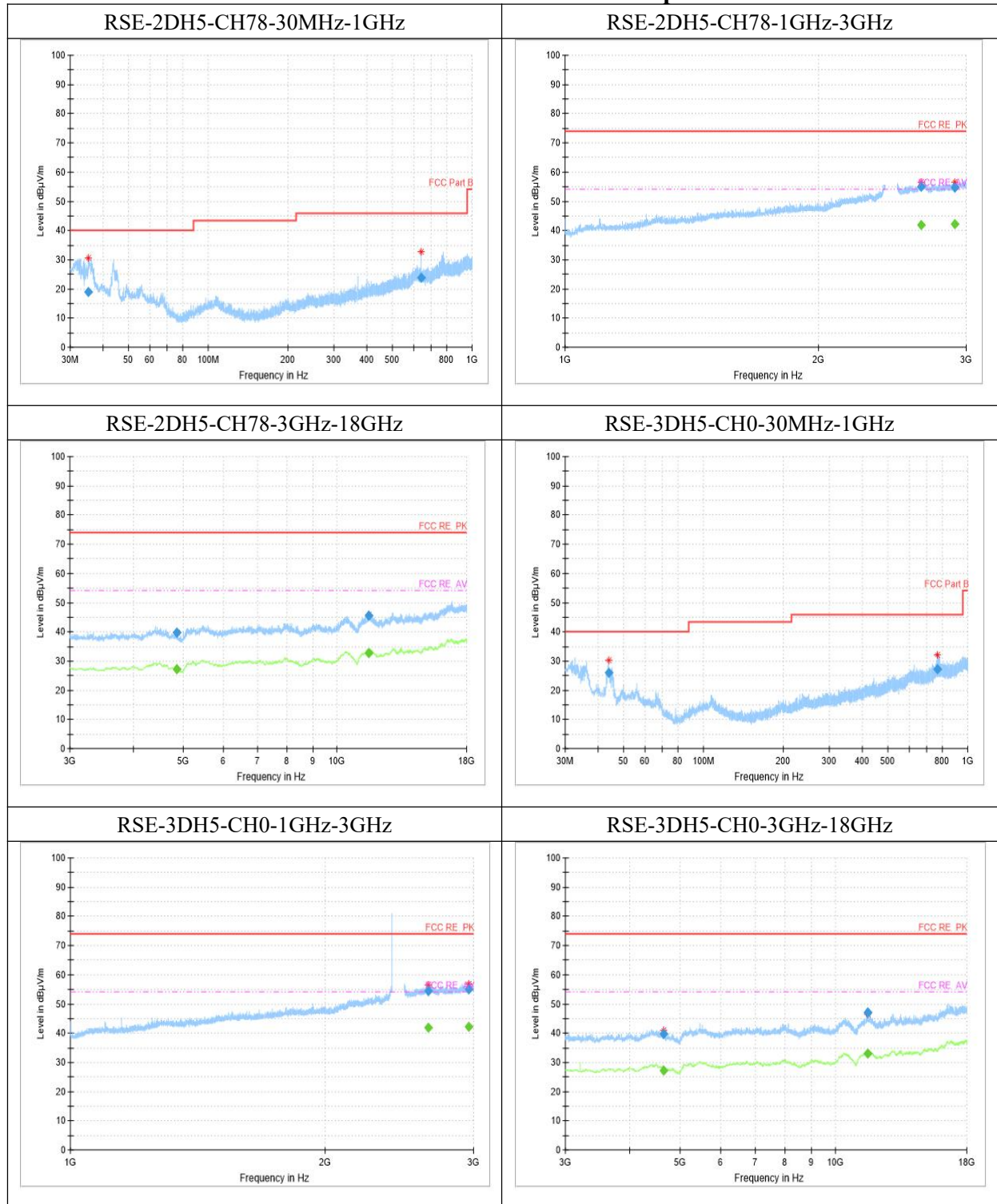


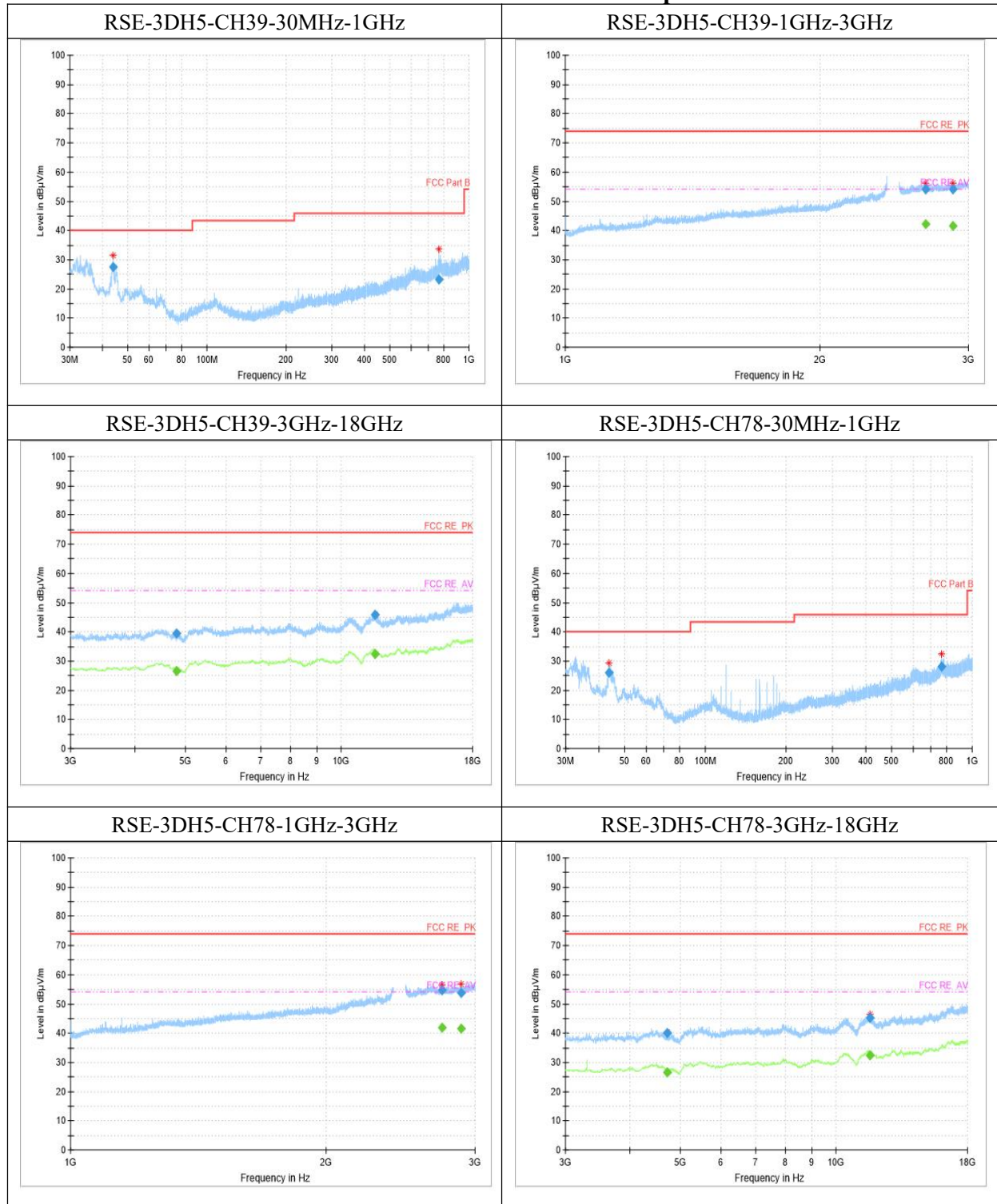
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Note:

1. The out-of- limit signal in the picture is the main frequency signal.
2. Only data in worst mode is provided.
3. Sweep the whole frequency band through the range from 30MHz to the 10th harmonic of the carrier, the Emissions in the frequency band 18GHz-26.5GHz is more than 20dB below the limit are not report.
4. The test data below 30MHz is more than 20dB lower than the limit value, so it is not provided in the report.
5. Horizontal and vertical polarity is all have been tested, the result of them is synthesized in the above data diagram.

RSE-DH5-CH0-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
32.4	22.86	-15	37.86	17.14	40.00	V
772.4	28.01	0	28.01	17.99	46.00	V

RSE-DH5-CH0-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2666.9	55.06	18	37.06	18.94	74.00	H
2866.7	54.73	18	36.73	19.27	74.00	H

RSE-DH5-CH0-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2666.9	42.05	18	24.05	11.95	54.00	H
2866.7	41.55	18	23.55	12.45	54.00	H

RSE-DH5-CH0-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4804.2	43.42	-4	47.42	30.58	74.00	H
11581.0	46.38	3	43.38	27.62	74.00	H

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RSE-DH5-CH0-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4804.2	33.11	-4	37.11	20.89	54.00	H
11581.0	32.79	3	29.79	21.21	54.00	H

RSE-DH5-CH39-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
43.8	27.79	-12	39.79	12.21	40.00	V
768.6	26.95	0	26.95	19.05	46.00	V

RSE-DH5-CH39-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2658.2	54.18	18	36.18	19.82	74.00	H
2938.8	54.97	18	36.97	19.03	74.00	H

RSE-DH5-CH39-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2658.2	41.89	18	23.89	12.11	54.00	H
2938.8	42.24	18	24.24	11.76	54.00	H

RSE-DH5-CH39-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4881.6	41.13	-3	44.13	32.87	74.00	H
11474.0	45.25	3	42.25	28.75	74.00	V

RSE-DH5-CH39-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4881.6	29.17	-3	32.17	24.83	54.00	H

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11474.0	32.54	3	29.54	21.46	54.00	V
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RSE-DH5-CH78-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
43.8	27.28	-12	39.28	12.72	40.00	V
776.1	27.48	0	27.48	18.52	46.00	V

RSE-DH5-CH78-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2669.1	54.63	18	36.63	19.37	74.00	V
2910.4	54.72	18	36.72	19.28	74.00	H

RSE-DH5-CH78-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2669.1	42.07	18	24.07	11.93	54.00	V
2910.4	42.12	18	24.12	11.88	54.00	H

RSE-DH5-CH78-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4864.8	39.87	-3	42.87	34.13	74.00	H
10427.8	43.87	2	41.87	30.13	74.00	V

RSE-DH5-CH78-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4864.8	27.12	-3	30.12	26.88	54.00	H
10427.8	31.2	2	29.2	22.80	54.00	V

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RSE-2DH5-CH0-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
32.9	23.15	-15	38.15	16.85	40.00	V
43.8	27.47	-12	39.47	12.53	40.00	V
767.0	26.12	0	26.12	19.88	46.00	V

RSE-2DH5-CH0-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2651.3	54.62	18	36.62	19.38	74.00	V
2901.6	54.86	17	37.86	19.14	74.00	V

RSE-2DH5-CH0-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2651.3	41.91	18	23.91	12.09	54.00	V
2901.6	42.06	17	25.06	11.94	54.00	V

RSE-2DH5-CH0-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4803.8	39.27	-4	43.27	34.73	74.00	H
11730.9	44.45	3	41.45	29.55	74.00	V

RSE-2DH5-CH0-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4803.8	26.7	-4	30.7	27.30	54.00	H
11730.9	31.57	3	28.57	22.43	54.00	V

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RSE-2DH5-CH39-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
32.1	23.22	-15	38.22	16.78	40.00	V
776.0	28.93	0	28.93	17.07	46.00	V

RSE-2DH5-CH39-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2651.3	54.47	18	36.47	19.53	74.00	V
2941.4	54.87	18	36.87	19.13	74.00	V

RSE-2DH5-CH39-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2651.3	41.91	18	23.91	12.09	54.00	V
2941.4	42.42	18	24.42	11.58	54.00	V

RSE-2DH5-CH39-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4866.5	39.81	-3	42.81	34.19	74.00	H
11507.9	45.6	3	42.6	28.40	74.00	V

RSE-2DH5-CH39-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4866.5	26.9	-3	29.9	27.10	54.00	H
11507.9	32.9	3	29.9	21.10	54.00	V

RSE-2DH5-CH78-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
35.2	18.85	-14	32.85	21.15	40.00	V

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642.2	23.82	-2	25.82	22.18	46.00	V
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RSE-2DH5-CH78-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2650.7	55.03	18	37.03	18.97	74.00	V
2909.8	54.84	18	36.84	19.16	74.00	V

RSE-2DH5-CH78-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2650.7	41.97	18	23.97	12.03	54.00	V
2909.8	42.12	18	24.12	11.88	54.00	V

RSE-2DH5-CH78-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4864.6	39.7	-3	42.7	34.30	74.00	H
11583.2	45.5	3	42.5	28.50	74.00	H

RSE-2DH5-CH78-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4864.6	27.12	-3	30.12	26.88	54.00	H
11583.2	32.81	3	29.81	21.19	54.00	H

RSE-3DH5-CH0-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
43.8	26	-12	38	14.00	40.00	V
768.5	27.13	0	27.13	18.87	46.00	V

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RSE-3DH5-CH0-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2650.4	54.43	18	36.43	19.57	74.00	H
2958.0	55.19	18	37.19	18.81	74.00	H

RSE-3DH5-CH0-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2650.4	41.88	18	23.88	12.12	54.00	H
2958.0	42.34	18	24.34	11.66	54.00	H

RSE-3DH5-CH0-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4658.5	39.71	-4	43.71	34.29	74.00	V
11556.5	47.06	3	44.06	26.94	74.00	V

RSE-3DH5-CH0-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4658.5	27.26	-4	31.26	26.74	54.00	V
11556.5	32.95	3	29.95	21.05	54.00	V

RSE-3DH5-CH39-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
43.8	27.67	-12	39.67	12.33	40.00	V
769.0	23.17	0	23.17	22.83	46.00	V

RSE-3DH5-CH39-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2668.6	54.24	18	36.24	19.76	74.00	H

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2872.0	54.16	18	36.16	19.84	74.00	V
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RSE-3DH5-CH39-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2668.6	42.08	18	24.08	11.92	54.00	H
2872.0	41.47	18	23.47	12.53	54.00	V

RSE-3DH5-CH39-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4808.9	39.43	-4	43.43	34.57	74.00	V
11632.5	45.83	3	42.83	28.17	74.00	V

RSE-3DH5-CH39-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4808.9	26.62	-4	30.62	27.38	54.00	V
11632.5	32.38	3	29.38	21.62	54.00	V

RSE-3DH5-CH78-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
43.5	25.96	-12	37.96	14.04	40.00	V
768.9	28.27	0	28.27	17.73	46.00	V

RSE-3DH5-CH78-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2743.7	54.71	17	37.71	19.29	74.00	H
2885.7	53.96	17	36.96	20.04	74.00	H

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RSE-3DH5-CH78-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2743.7	41.88	17	24.88	12.12	54.00	H
2885.7	41.52	17	24.52	12.48	54.00	H

RSE-3DH5-CH78-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4724.5	39.94	-4	43.94	34.06	74.00	H
11641.4	45.18	3	42.18	28.82	74.00	V

RSE-3DH5-CH78-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4724.5	26.61	-4	30.61	27.39	54.00	H
11641.4	32.38	3	29.38	21.62	54.00	V

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6.11. AC Powerline Conducted Emission

Specifications:	FCC Part 15.207, RSS-GEN 8.8
DUT Serial Number:	N507D53S10198
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60%
Test Results:	Pass

Method of Measurement: ANSI C63.10-2013-clause 6.2

1.The one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.

2.If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.

3.The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.

4.If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.

If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements within the fundamental emission band of the transmitter, but only for those measurements.³⁶ Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency. Diagram or photograph the test setup that was used. See Clause 8 for full reporting requirements.

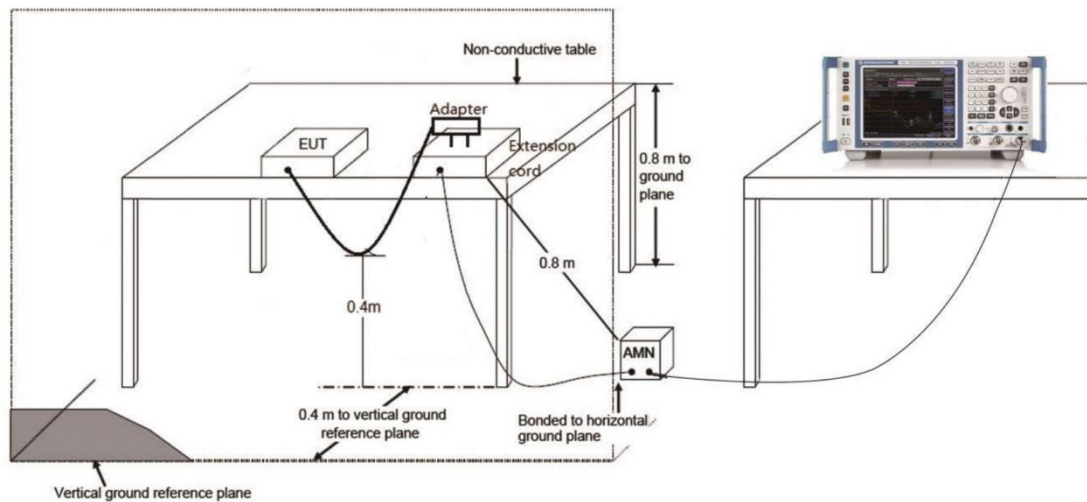
Measurement Uncertainty:

Measurement Uncertainty	1.97db (k=2)
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Test Setup

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Test Condition

Voltage (V)	Frequency (Hz)
120	60

Measurement Result and limit:

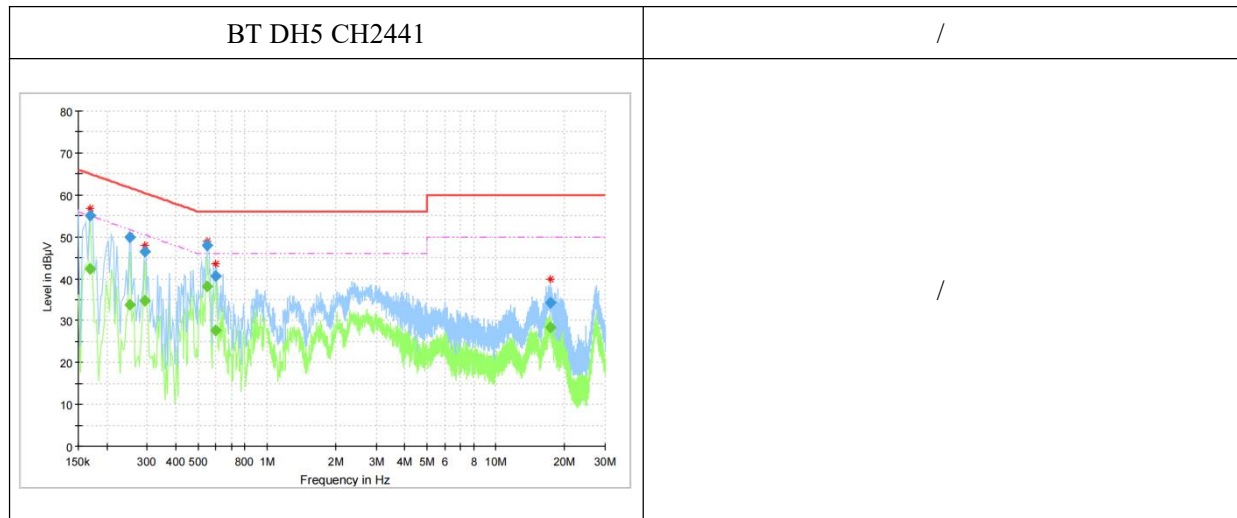
(Quasi-peak-average Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Conclusion
0.15 to 0.5	66 to 56	56 to 46	P
0.5 to 5	56	46	
5 to 30	60	50	

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

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Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.168656	55.14	---	65.03	9.89	15000.0	9.000	N	ON	10.1
0.168656	---	42.40	55.03	12.63	15000.0	9.000	N	ON	10.1
0.250744	49.87	---	61.73	11.87	15000.0	9.000	L1	ON	10.1
0.250744	---	33.66	51.73	18.08	15000.0	9.000	L1	ON	10.1
0.291788	---	34.76	50.47	15.71	15000.0	9.000	N	ON	10.3
0.291788	46.49	---	60.47	13.98	15000.0	9.000	N	ON	10.3
0.549244	---	38.07	46.00	7.93	15000.0	9.000	N	ON	10.1
0.549244	47.86	---	56.00	8.14	15000.0	9.000	N	ON	10.1
0.597750	---	27.71	46.00	18.29	15000.0	9.000	N	ON	10.0
0.597750	40.57	---	56.00	15.43	15000.0	9.000	N	ON	10.0
17.231663	---	28.32	50.00	21.68	15000.0	9.000	N	ON	9.8
17.231663	34.32	---	60.00	25.68	15000.0	9.000	N	ON	9.8

Note:

1. All modes have been tested and only the worst mode is recorded in the report.
2. L1 and N is all have been tested, the result of them is synthesized in the above data diagram.

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ANNEX A EUT Photos

See the document "25B02W000009-External Photos".

See the document "25B02W000009-Internal Photos".

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ANNEX B Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

*****END OF REPORT*****

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