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TEST REPORT

of

FCC Part 15 Subpart E §15.407
IC RSS-247 Issue 3 and RSS-Gen Issue 5

FCC ID: BEJTFBMEIBN3EU
IC Certification: 2703H-TFBMEIBN3EU

Equipment Under Test	:	Telematics
Model Name	:	TFBMEIBN3EU
Variant Model Name(s)	:	Refer to page 4
Applicant	:	FCC: LG Electronics USA, Inc. IC: LG ELECTRONICS INC.
Manufacturer	:	LG Electronics Co., Ltd.
Date of Receipt	:	2023.12.13
Date of Test(s)	:	2024.03.04 ~ 2024.09.20
Date of Issue	:	2024.09.20

In the configuration tested, the EUT complied with the standards specified above. This test report does not assure KOLAS accreditation.

1) The results of this test report are effective only to the items tested.
2) The SGS Korea is not responsible for the sampling, the results of this test report apply to the sample as received.
3) This test report cannot be reproduced, except in full, without prior written permission of the Company.
4) The data marked ※ in this report was provided by the customer and may affect the validity of the test results.
We are responsible for all the information of this test report except for the data(※) provided by the customer.

Tested by: Murphy Kim

Technical Manager: Jinhyoung Cho

SGS Korea Co., Ltd. Gunpo Laboratory

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1. General Information

1.1. Testing Laboratory

SGS Korea Co., Ltd. (Gunpo Laboratory)
- 10-2, LS-ro 182beon-gil, Gunpo-si, Gyeonggi-do, Korea, 15807
- 4, LS-ro 182beon-gil, Gunpo-si, Gyeonggi-do, Korea, 15807
- Designation number: KR0150

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Phone No. : +82 31 688 0901
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1.2. Details of Applicant

FCC Applicant	:	LG Electronics USA, Inc.
FCC Address	:	111 Sylvan Avenue, North Building, Englewood Cliffs, New Jersey, United States, 07632
IC Applicant	:	LG ELECTRONICS INC.
IC Address	:	222, LG-ro, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, Korea (Republic of), 451-713
Contact Person	:	Kim, David
Phone No.	:	+1 201 470 2696

1.3. Details of Manufacturer

Company	:	LG Electronics Inc.
Address	:	128, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea, 07336

1.4. Description of EUT

Kind of Product	Telematics				
Model Name	TFBMEIBN3EU				
Approved Module	FCC ID: BEJTM16FNNABM0 IC Certification: 2703H-TM16FNNABM0				
Variant Model Names	TFBMNINN0EN, TFBMEIBN3FR				
Serial Number	Conducted: #1 Radiated: #2				
Power Supply	DC 12 V				
Frequency Range	5 180 ㎒ ~ 5 240 ㎒ (Band 1: 11ax_HE20) 5 190 ㎒ ~ 5 230 ㎒ (Band 1: 11ax_HE40) 5 210 ㎒ (Band 1: 11ax_HE80) 5 260 ㎒ ~ 5 320 ㎒ (Band 2A: 11ax_HE20) 5 270 ㎒ ~ 5 310 ㎒ (Band 2A: 11ax_HE40) 5 290 ㎒ (Band 2A: 11ax_HE80) 5 500 ㎒ ~ 5 720 ㎒ (Band 2C: 11ax_HE20) 5 510 ㎒ ~ 5 710 ㎒ (Band 2C: 11ax_HE40) 5 530 ㎒ ~ 5 690 ㎒ (Band 2C: 11ax_HE80) 5 745 ㎒ ~ 5 825 ㎒ (Band 3: 11ax_HE20) 5 755 ㎒ ~ 5 795 ㎒ (Band 3: 11ax_HE40) 5 775 ㎒ (Band 3: 11ax_HE80)				
Modulation Technique	OFDMA				
Number of Channels	4 channels (Band 1: 11ax_HE20) 2 channels (Band 1: 11ax_HE40) 1 channel (Band 1: 11ax_HE80) 4 channels (Band 2A: 11ax_HE20) 2 channels (Band 2A: 11ax_HE40) 1 channel (Band 2A: 11ax_HE80) 9 channels (Band 2C: 11ax_HE20) 4 channels (Band 2C: 11ax_HE40) 2 channels (Band 2C: 11ax_HE80) 5 channels (Band 3: 11ax_HE20) 2 channels (Band 3: 11ax_HE40) 1 channel (Band 3: 11ax_HE80)				
Antenna Type	Ant. 1: Pattern	Ant. 2: Pattern	Ant. 3: Chip	Ant. 4: Pattern	
Antenna Gain※	Frequency range	Ant. 1	Ant. 2	Ant. 3	Ant. 4
	5 150 ㎒ ~ 5 250 ㎒	6.46 dBi	6.43 dBi	2.20 dBi	5.00 dBi
	5 250 ㎒ ~ 5 350 ㎒	5.73 dBi	5.84 dBi	2.20 dBi	5.00 dBi
	5 470 ㎒ ~ 5 725 ㎒	6.86 dBi	5.21 dBi	1.90 dBi	5.00 dBi
	5 725 ㎒ ~ 5 850 ㎒	5.67 dBi	4.29 dBi	2.40 dBi	5.00 dBi
H/W Version	Rev. C3				
S/W Version	v010.038.045				
FVIN	N/A				

1.5. Declaration by the Manufacturer

- The EUT has four ports (Port1, Port 2, Port 3 and Port 4).
- WLAN 5G transmits both SISO and MIMO mode.
- The EUT is a slave without radar detection.
- The EUT is not supported TDWR(5.6 - 5.65 ㎓) band.

1.6. Automatically Discontinue Transmission

1.6.1. Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operating failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

1.6.2. Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting form remote device and verify whether it shall resend or discontinue transmission.

1.7. Test Equipment List

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Interval	Cal. Due
Signal Generator	R&S	SMA100B	106887	Oct. 06, 2023	Annual	Oct. 06, 2024
Spectrum Analyzer	R&S	FSV30	103453	Oct. 31, 2023	Annual	Oct. 31, 2024
Spectrum Analyzer	Agilent	N9020A	MY53421758	Sep. 10, 2024	Annual	Sep. 10, 2025
Spectrum Analyzer	Agilent	N9030A	US51350132	Nov. 27, 2023	Annual	Nov. 27, 2024
Power Meter	Anritsu	ML2495A	1223004	May 29, 2024	Annual	May 29, 2025
Power Sensor	Anritsu	MA2411B	1207272	May 29, 2024	Annual	May 29, 2025
Attenuator	AEROFLEX / INMET	40AH2W-10	40G-1	Jun. 19, 2024	Annual	Jun. 19, 2025
Low Pass Filter	Mini-Circuits	NLP-1200+	V 8979400903-2	Feb. 07, 2024	Annual	Feb. 07, 2025
Low Pass Filter	WT MICROWAVE INC	WT-A1700-LS	WT151207001	Apr. 08, 2024	Annual	Apr. 08, 2025
High Pass Filter	Wainwright Instrument GmbH	WHKX6.0/18G-10SS	51	Jul. 26, 2024	Annual	Jul. 26, 2025
High Pass Filter	Wainwright Instrument GmbH	WHNX7.5/26.5G-6SS	15	Jun. 07, 2024	Annual	Jun. 07, 2025
DC Power Supply	R&S	HMP2020	022802107	Oct. 31, 2023	Annual	Oct. 31, 2024
Preamplifier	H.P.	8447F	2944A03909	Aug. 09, 2024	Annual	Aug. 09, 2025
Signal Conditioning Unit	R&S	SCU-18F	101058	Dec. 07, 2023	Annual	Dec. 07, 2024
Preamplifier	TESTEK	JS44-18004000-35-8P	1546891	Oct. 06, 2023	Annual	Oct. 06, 2024
Loop Antenna	Schwarzbeck Mess-Elektronik	FMZB 1519	1519-039	Aug. 21, 2023	Biennial	Aug. 21, 2025
Bilog Antenna	Schwarzbeck Mess-Elektronik	VULB 9163	9163-396	Apr. 02, 2024	Biennial	Apr. 02, 2026
Horn Antenna	R&S	HF906	100326	Feb. 19, 2024	Annual	Feb. 19, 2025
Horn Antenna	Schwarzbeck Mess-Elektronik	BBHA 9170	BBHA9170223	Oct. 10, 2023	Annual	Oct. 10, 2024
Test Receiver	R&S	ESU26	100109	Jan. 16, 2024	Annual	Jan. 16, 2025
Turn Table	Innco systems GmbH	DS 1200 S	N/A	N.C.R.	N/A	N.C.R.
Controller	Innco systems GmbH	CONTROLLER CO3000-4P	CO3000/963/3 8330516/L	N.C.R.	N/A	N.C.R.
Antenna Mast	Innco systems GmbH	MA4640-XP-ET	MA4640/536/3 8330516/L	N.C.R.	N/A	N.C.R.
Anechoic Chamber	SY Corporation	L × W × H (9.6 m × 6.4 m × 6.6 m)	N/A	N.C.R.	N/A	N.C.R.
Coaxial Cable	RFONE	NMST-13A26-NMST-5 m	TPC2402190004	Apr. 03, 2024	Semi-Annual	Oct. 03, 2024
Coaxial Cable	Qualwave Inc.	NMST-13A26-NMST-10 m	TPC2402190001	Apr. 03, 2024	Semi-Annual	Oct. 03, 2024
Coaxial Cable	RFONE	PL360P-292M292M-1.5M-A	20200324002	Apr. 12, 2024	Semi-Annual	Oct. 12, 2024

Note;
- For equipment listed above that has a calibration date or calibration due date that falls within the test date range, care was taken to ensure that this equipment was used after the calibration date and before the calibration due date.

1.8. Summary of Test Result

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15 Subpart E, IC RSS-247 Issue 3, RSS-Gen Issue 5			
Section in FCC	**Section in IC**	**Test Item(s)**	**Result**
15.205(a) 15.209(a) 15.407(b)(1) 15.407(b)(2) 15.407(b)(3) 15.407(b)(4)	RSS-Gen Issue 5 8.9 RSS-247 Issue 3 6.2.1.2 RSS-247 Issue 3 6.2.2.2 RSS-247 Issue 3 6.2.3.2 RSS-247 Issue 3 6.2.4.3	Transmitter Radiated Spurious Emissions	Complied
15.407(a)	RSS-Gen Issue 5 6.7	26 dB Bandwidth & 99 % Bandwidth	Complied
15.407(e)	RSS-247 Issue 3 6.2.4.2	6 dB Bandwidth	Complied
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	RSS-247 Issue 3 6.2.1.1 RSS-247 Issue 3 6.2.2.1 RSS-247 Issue 3 6.2.3.1 RSS-247 Issue 3 6.2.4.2	Maximum Conducted Output Power	Complied
15.407(a)(1) 15.407(a)(2) 15.407(a)(3)	RSS-247 Issue 3 6.2.1.1 RSS-247 Issue 3 6.2.2.1 RSS-247 Issue 3 6.2.3.1 RSS-247 Issue 3 6.2.4.2	Maximum Power Spectral Density	Complied
15.207	RSS-Gen Issue 5 8.8	AC Power Line Conducted Emission	N/A[1)]

Note;

1) The AC power line test was not performed because the EUT use battery power for operation and which do not operate from the AC power lines.

1.9. Test Procedure(s)

The measurement procedures described in the American National Standard of Procedures for Compliance Testing of unlicensed Wireless Devices (ANSI C63.10-2013) and the guidance provided in KDB 789033 D02 General UNII Test Procedures New Rules v02r01 were used in the measurement of the DUT.

1.10. Sample Calculation

Where relevant, the following sample calculation is provided:

1.10.1. Conducted Test

Offset value (㏈) = Attenuator (㏈) + Cable loss (㏈)

1.10.2. Radiation Test

Field strength level (㏈㎶/m)

= Measured level (㏈㎶) + Antenna factor (㏈/m) + Cable loss (㏈) - Amplifier gain (㏈)

1.11. Information of Software for test

- Using the software of MobaXterm v23.6 to test for the WLAN.

1.12. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Parameter	Uncertainty	
Maximum Conducted Output Power	0.34 ㏈	
Maximum Power Spectral Density	0.65 ㏈	
99 % Bandwidth	0.03 ㎒	
26 ㏈ Bandwidth	0.03 ㎒	
6 ㏈ Bandwidth	0.06 ㎒	
Radiated Emission, 9 ㎑ to 30 ㎒	H	3.60 ㏈
	V	3.60 ㏈
Radiated Emission, below 1 ㎓	H	4.60 ㏈
	V	4.90 ㏈
Radiated Emission, above 1 ㎓	H	3.90 ㏈
	V	3.80 ㏈

All measurement uncertainty values are shown with a coverage factor k = 2 to indicate a 95 % level of confidence

1.13. Test Report Revision

Revision	Report Number	Date of Issue	Description
0	F690501-RF-RTL005442	2024.09.20	Initial

1.14. Device Capabilities

Mode	SISO				CDD / MIMO		
	Port 1	Port 2	Port 3	Port 4	Port 1 + 2	Port 1 + 3	Port 1 + 4
Bluetooth Low Energy	O	X	X	X	X	X	X
WLAN 2 ㎓	X	X	O	O	O	O	O
WLAN 5 ㎓	X	X	O	O	O	O	O
WLAN 6 ㎓	X	X	O	X	O	O	X

Note;

The EUT has four ports and all ports transmit by one WLAN module.
11b mode is transmit only SISO in Port 3 and Port 4.
The Port 1 passes directly through the module and Port 2, Port 3 and Port 4 are distributed through the switch end.
All the conducted test for MIMO mode were performed at the point of before the switch as the worst case.

Mode	Measurement point			
	Highest Output Power (㏈m)			
	Before switch	End of Port 2	End of Port 3	End of Port 4
11ax_HE20	**4.08**	3.57	2.50	3.12
11ax_HE40	**3.15**	2.59	0.58	2.76
11ax_HE80	**2.29**	0.95	-0.21	1.21

1.15. Worst-Case Configuration and Test Mode

Mode	Ant. Port	Bandwidth (㎒)	Data rate with highest output power
11ax_HE20	SISO	20	MCS0
11ax_HE40		40	MCS0
11ax_HE80		80	MCS0
11ax_HE20	MIMO	20	MCS0
11ax_HE40		40	MCS0
11ax_HE80		80	MCS0

RU offset for Tones

Mode	Tones	RU offset
11ax_HE20	26T	0
		4
		8
	52T	37
		38
		40
	106T	53
		54
	242T/SU	61/-
11ax_HE40	26T	0
		9
		17
	52T	37
		41
		44
	106T	53
		54
		56
	242T	61
		62
	484T/SU	65/-
11ax_HE80	26T	0
		9
		17
	52T	37
		41
		44
	106T	53
		54
		56
	242T	61
		62
		64
	484T	65
		66
	996T/SU	67/-

No difference in physical waveforms between Full RU mode and SU mode, the test was performed with one mode with the highest output power among the Full RU mode and SU mode.

26 Tone is the highest PSD among other Tones. Therefore, all tests were performed with 26 Tone in MU mode and additional test were performed with SU Mode.

Radiated emission above 1 ㎓ was performed with the EUT set to transmit Low/Middle/High channels and only one RU offset of each channel as worst case according to conducted output power.

Conducted tests were performed with the EUT set to transmit Low/Middle/High channels with highest output power.

1.16. Information of Variant Models

Model Names	*Installation capability on PCB	GNSS	WiFi / BLE	Backup Battery	Model Remark
TFBMEINN3EU	O	O	O	O	Basic Model
TFBMNINN0EN	X	O	O	X	Variant Model
TFBMEIBN3FR	O	O	O	O	

*Cellular Antennas are mounted on TFBMEIBN3EU, TFBMNINN0EN, TFBMEIBN3FR
O: Popped
X: De-Popped

Note;

All test items performed with basic model.

1.17. Duty Cycle of EUT

Regarding to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, Ⅱ.B, the maximum duty cycles of all modes were investigated and set the spectrum analyzer as below.
Set RBW ≥ EBW if possible; otherwise, set RBW to the largest available value, Set VBW ≥ RBW.
Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T and the number of sweep points across duration T exceeds 100.

Mode	Ant. port	Tones	Duty Cycle (%)	Correction Factor (dB)
11ax_HE20	SISO	26T	99.45	-
		52T	99.30	-
		106T	99.33	-
		242T	99.15	-
		SU	99.41	-
	MIMO	26T	99.09	-
		52T	99.09	-
		106T	99.03	-
		242T	98.17	-
		SU	99.27	-
11ax_HE40	SISO	26T	99.69	-
		52T	99.69	-
		106T	99.42	-
		242T	99.32	-
		484T	99.57	-
		SU	99.42	-
	MIMO	26T	99.35	-
		52T	98.96	-
		106T	99.01	-
		242T	99.29	-
		484T	98.87	-
		SU	99.15	-
11ax_HE80	SISO	26T	99.37	-
		52T	99.29	-
		106T	99.17	-
		242T	99.40	-
		484T	99.57	-
		996T	99.58	-
		SU	99.56	-
	MIMO	26T	98.57	-
		52T	98.95	-
		106T	99.17	-
		242T	99.01	-
		484T	98.86	-
		996T	98.74	-
		SU	99.51	-

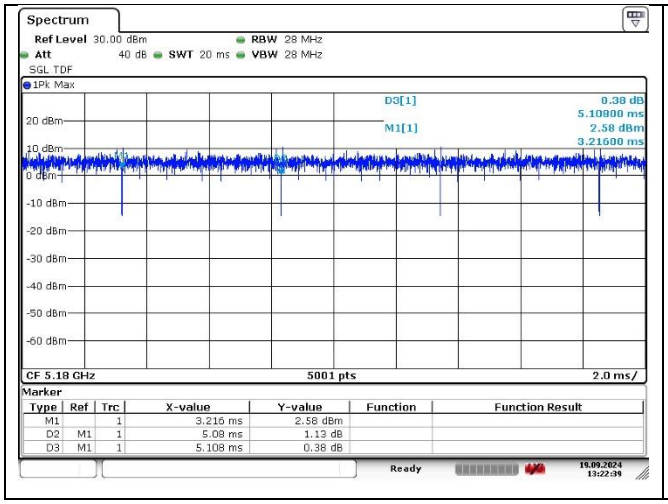
Remark;

1. As measured duty cycles of EUT, all of mode and data rate keep constant period and are converted to log scale (power averaging) to compensate correction factor to result of average test items.
2. Duty Cycle (%) = (Tx on time / Tx on + off time) x 100
3. Correction Factor (dB) = 10 log (1 / Duty Cycle)
4. Duty cycle is over 98 %, compensation is no required.

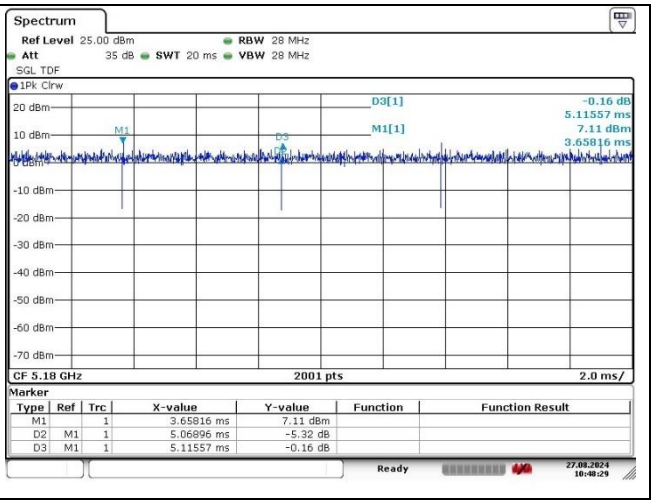
- Test plots

11ax_HE20_26T

SISO



MIMO



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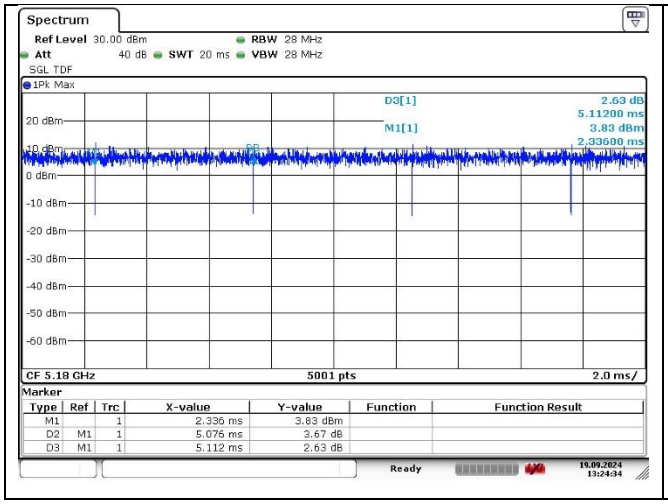

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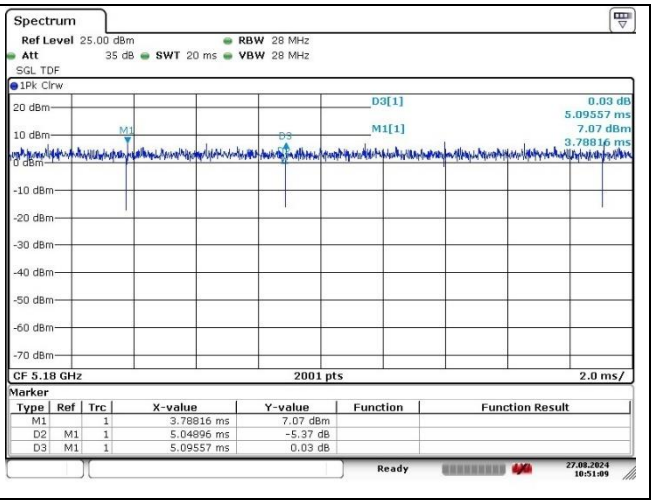

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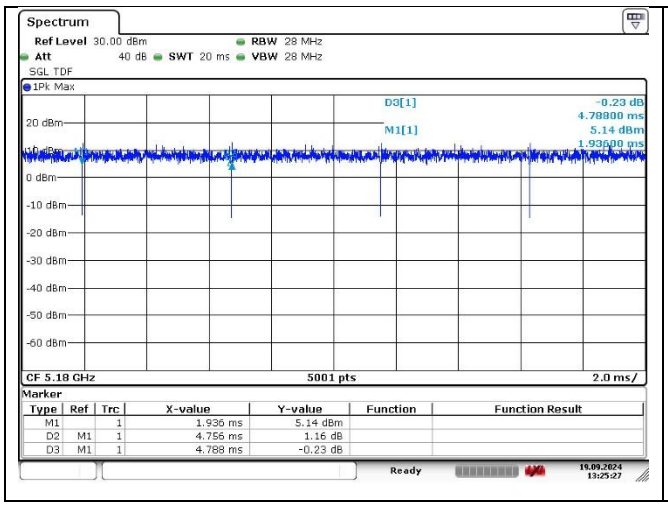

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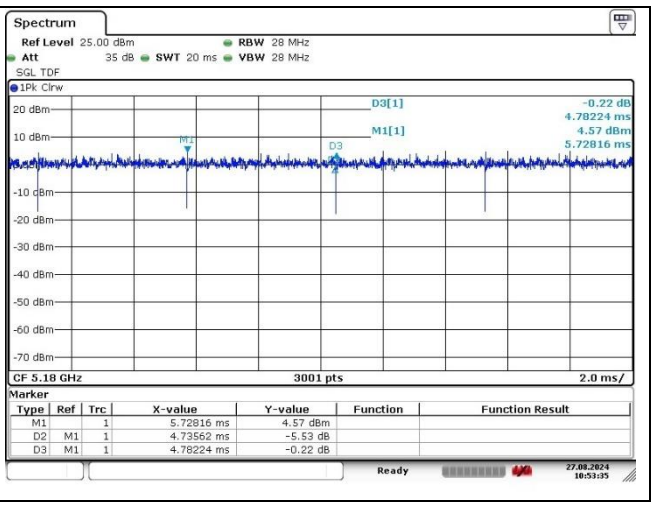

11ax_HE20_242T

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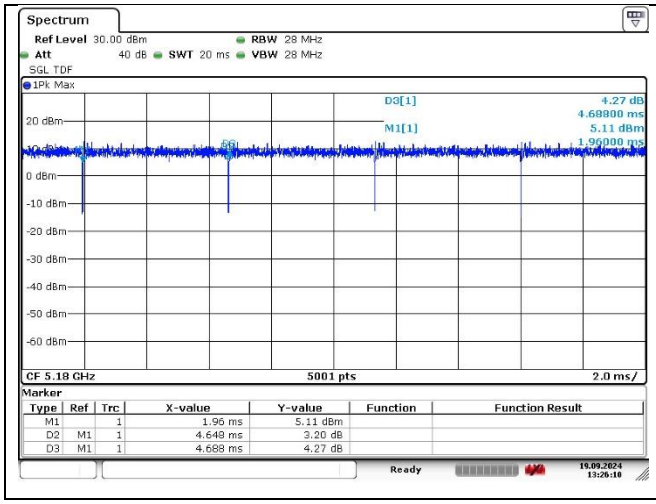
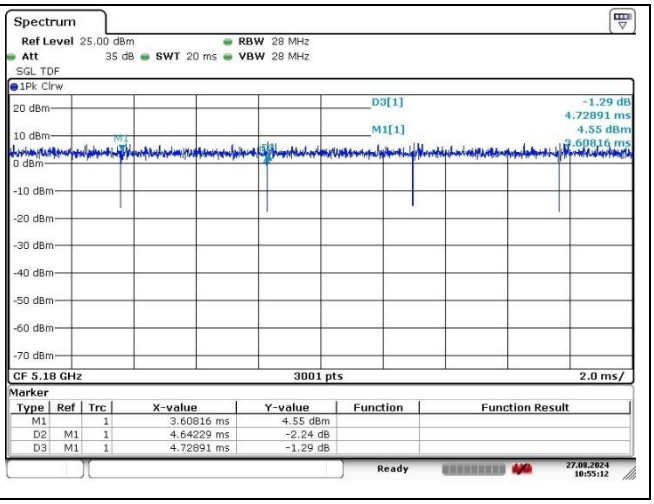
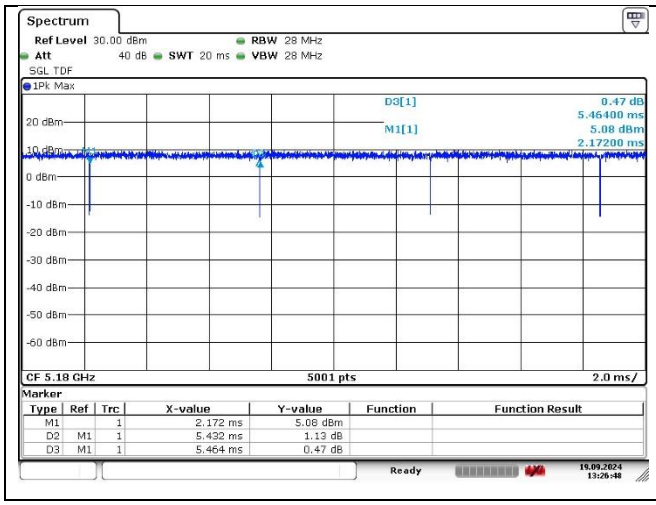


MIMO



11ax_HE20_SU

SISO



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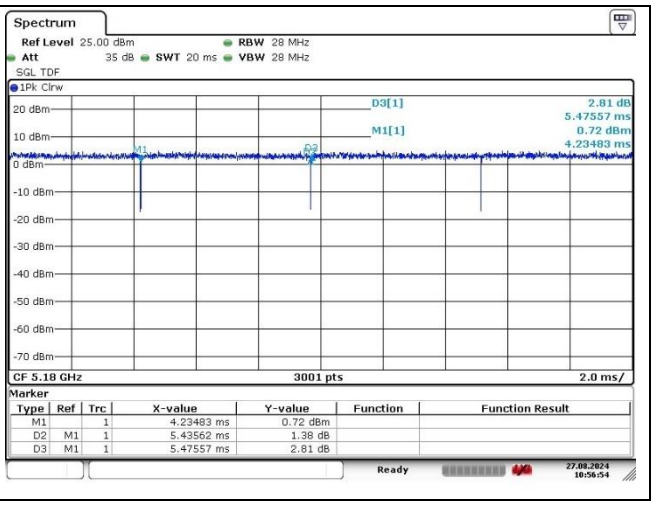
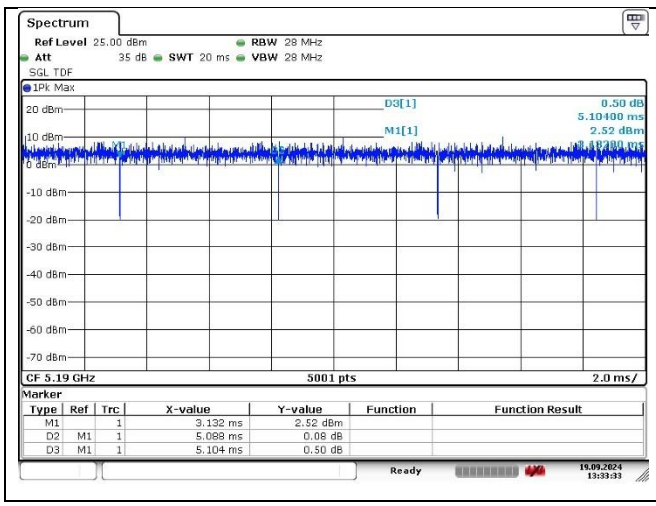


11ax_HE40_26T

SISO



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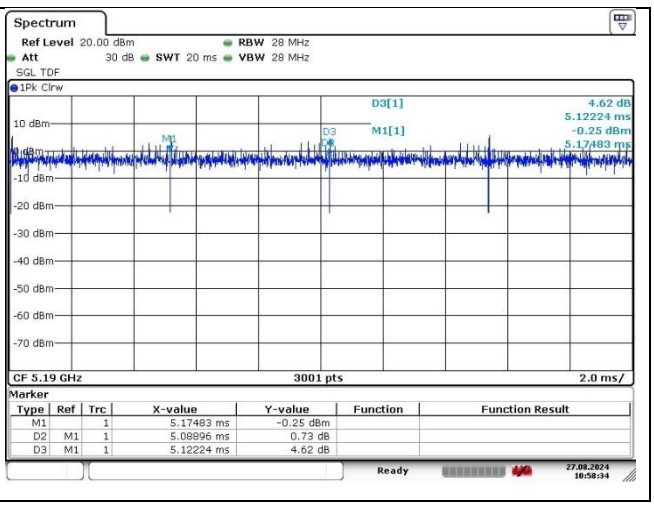

11ax_HE40_52T

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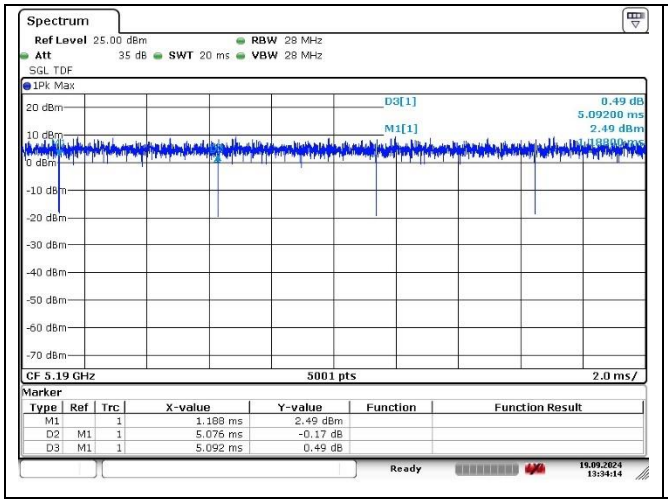

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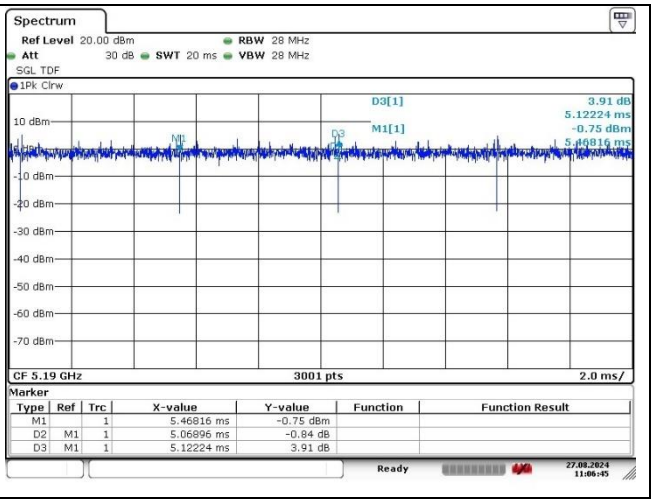

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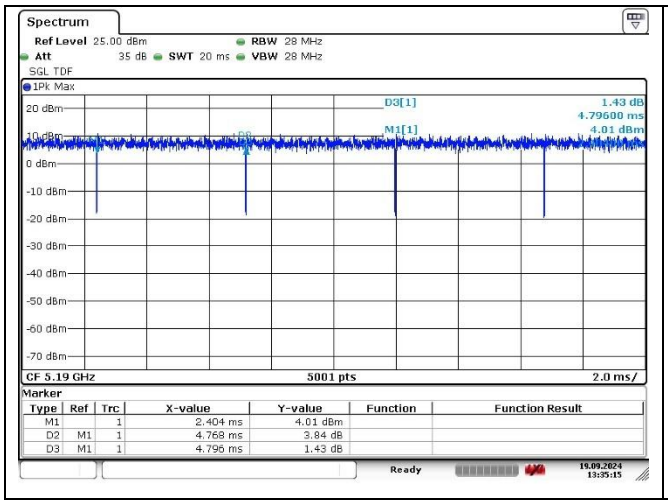

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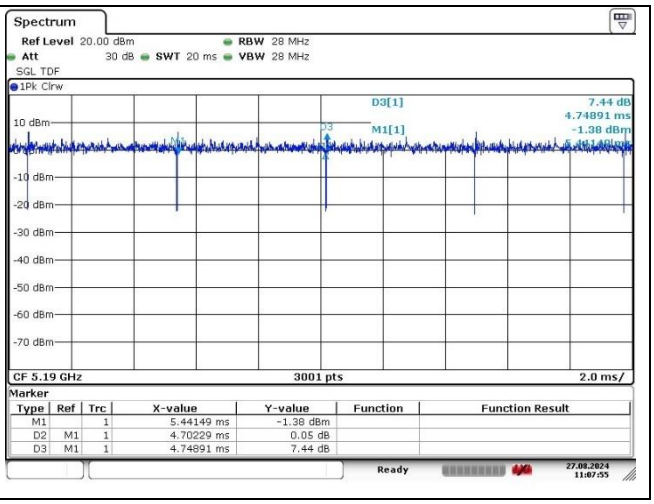
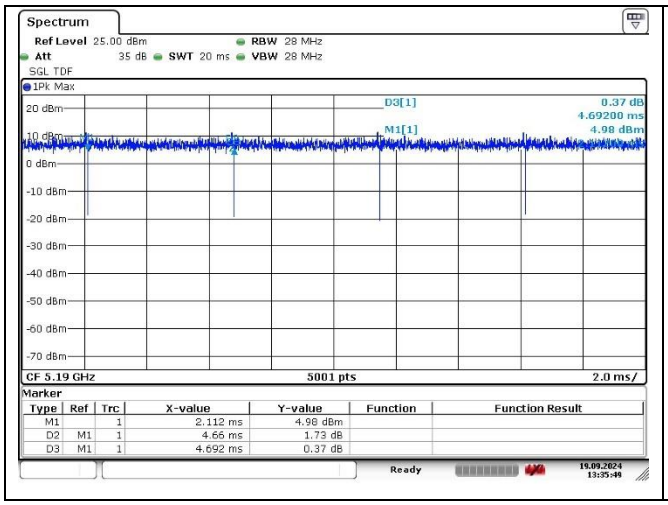
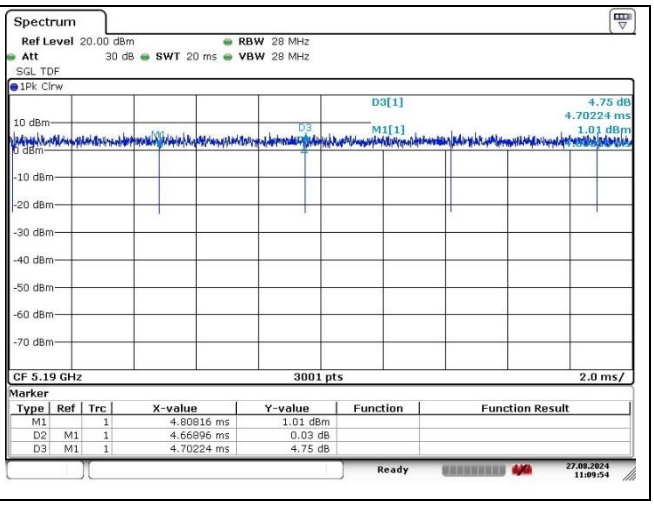


11ax_HE40_242T

SISO

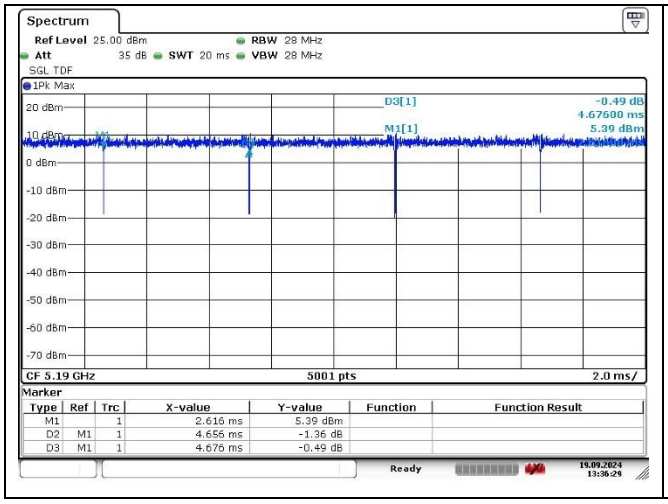


MIMO

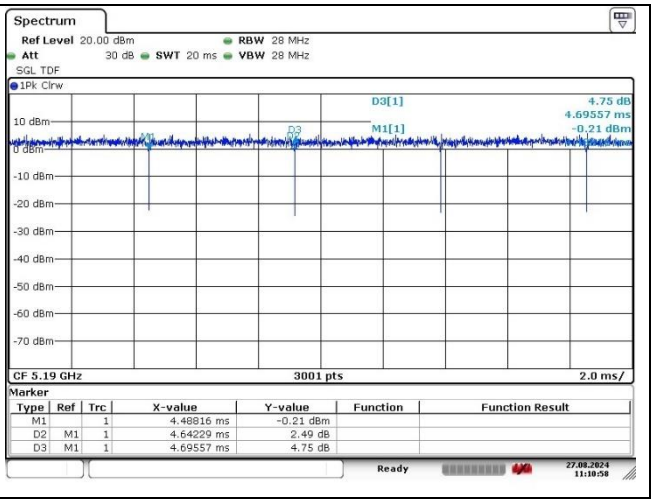


11ax_HE40_484T

SISO

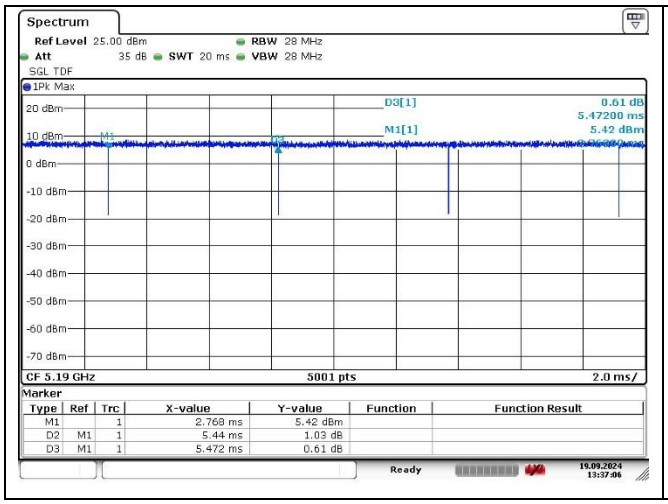


MIMO

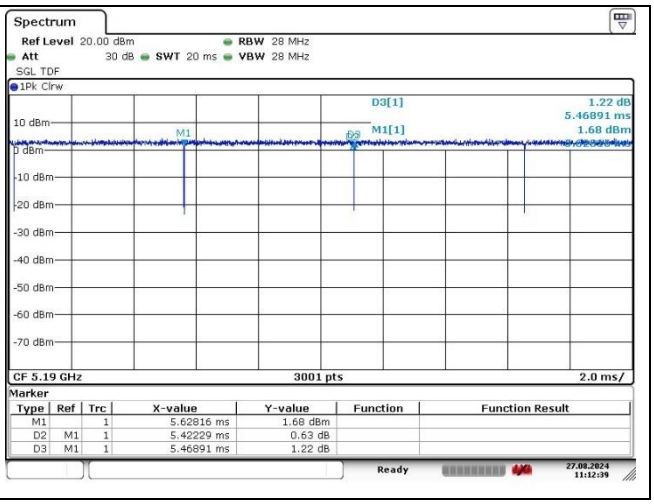


11ax_HE40_SU

SISO

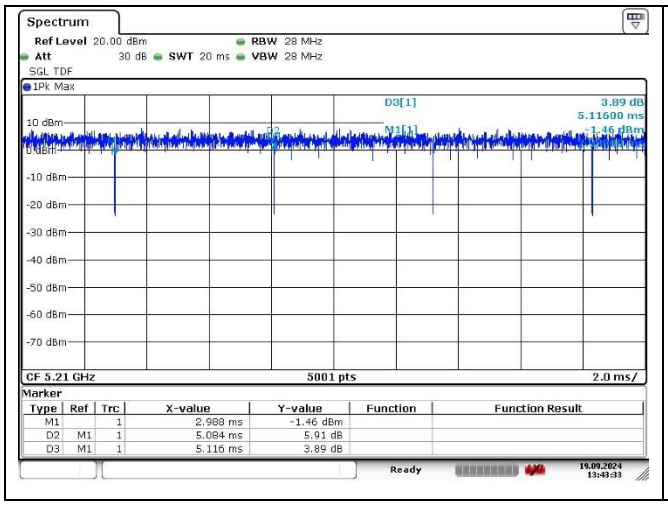


MIMO

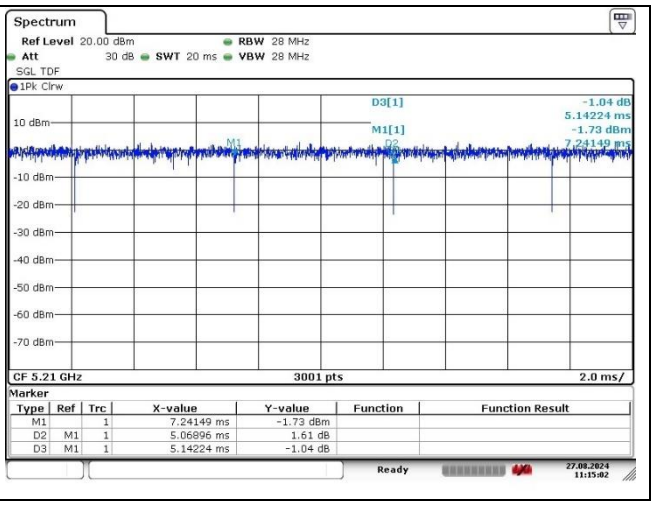


11ax_HE80_26T

SISO

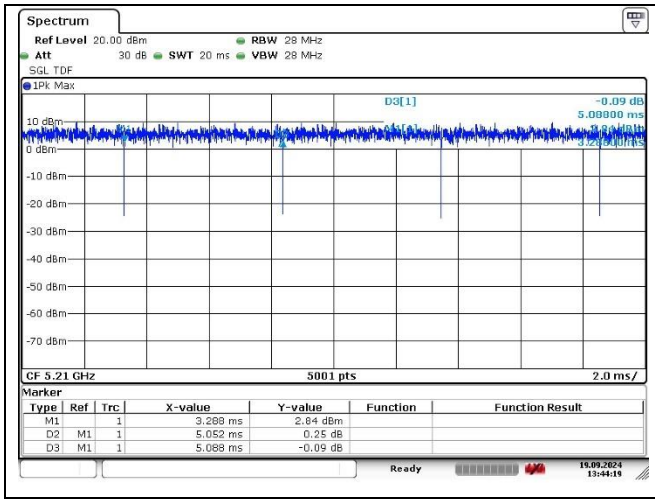


MIMO

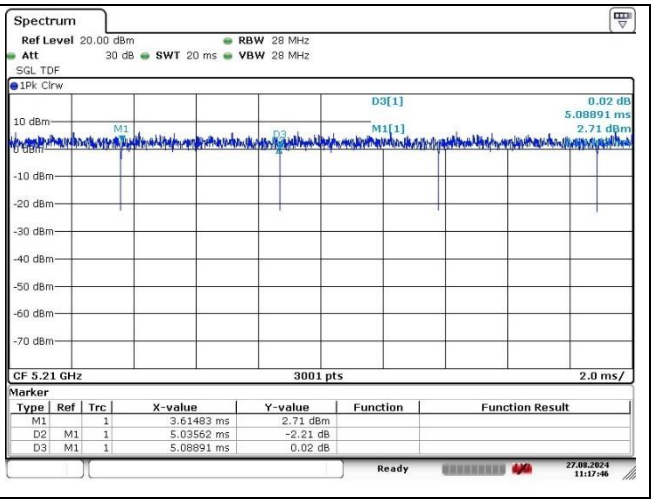


11ax_HE80_52T

SISO

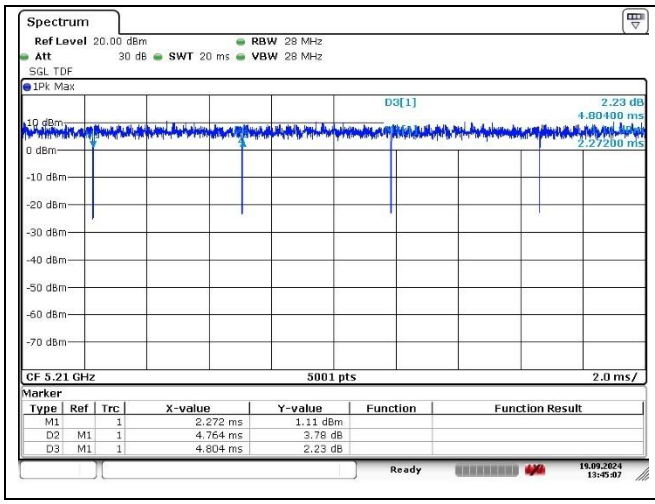


MIMO

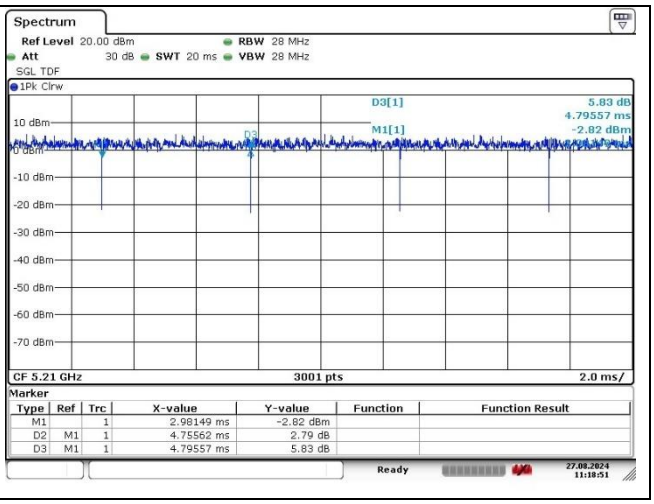


11ax_HE80_106T

SISO

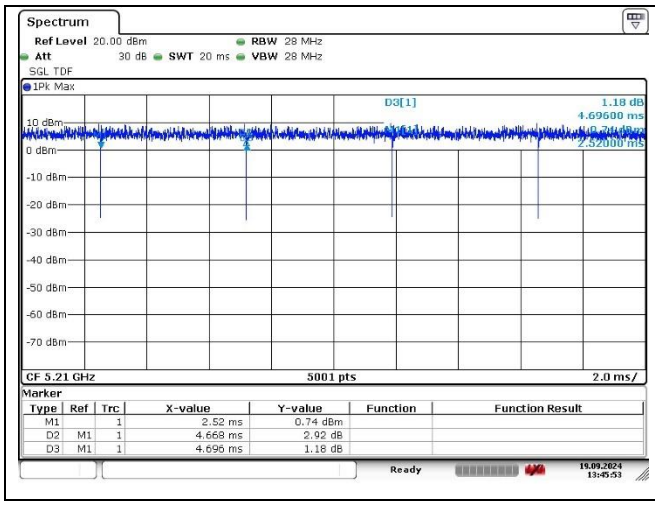


MIMO



11ax_HE80_242T

SISO



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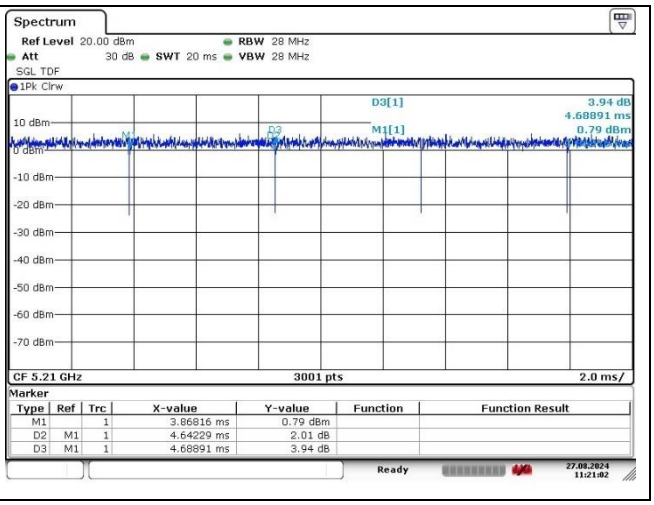
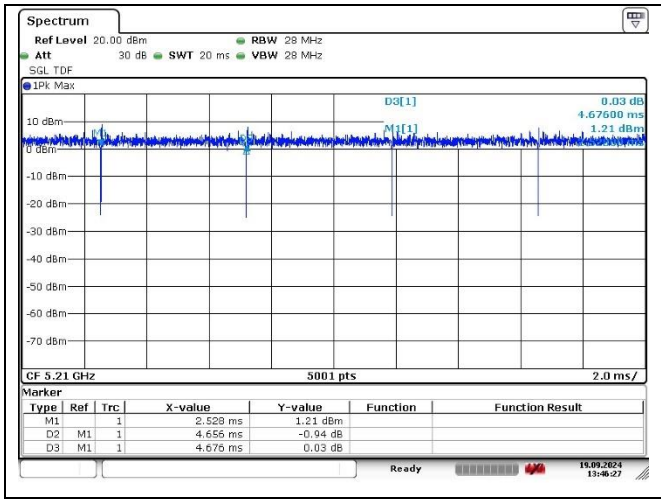
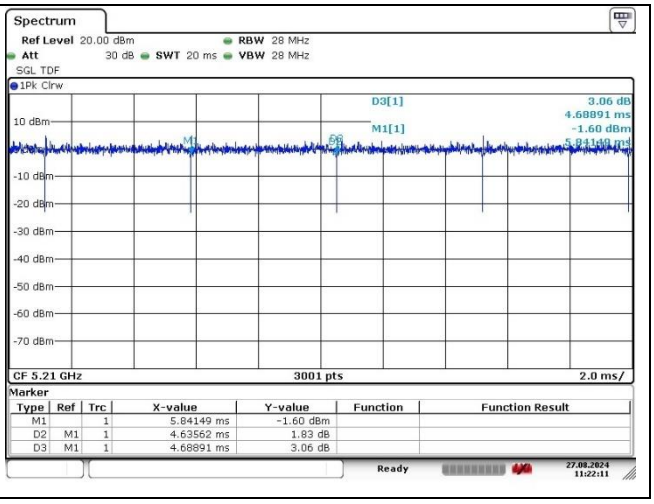


11ax_HE80_484T

SISO

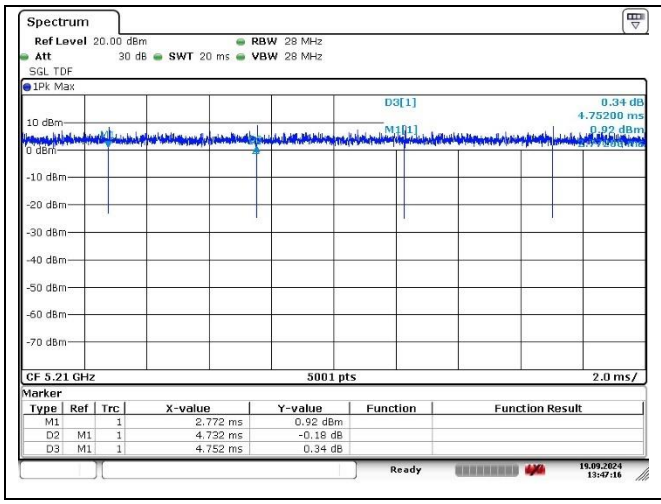


MIMO

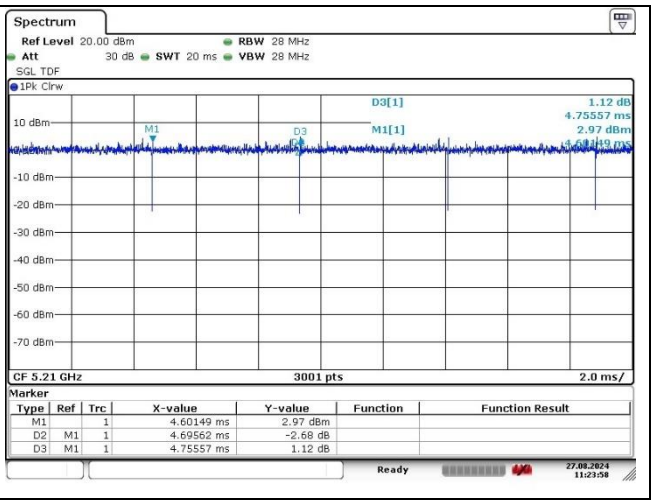


11ax_HE80_996T

SISO

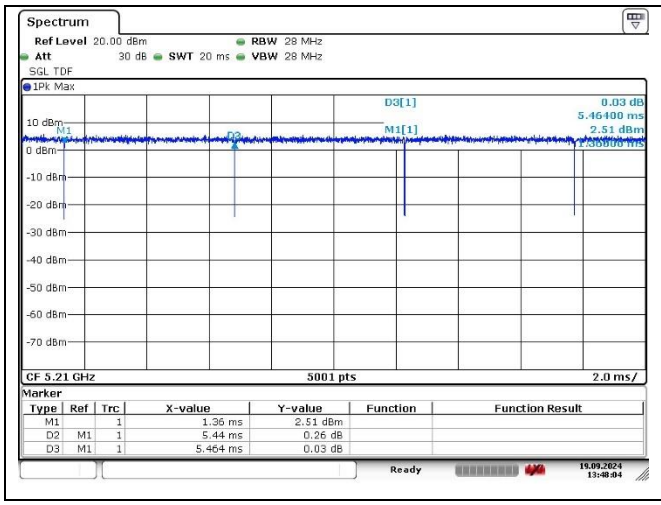


MIMO

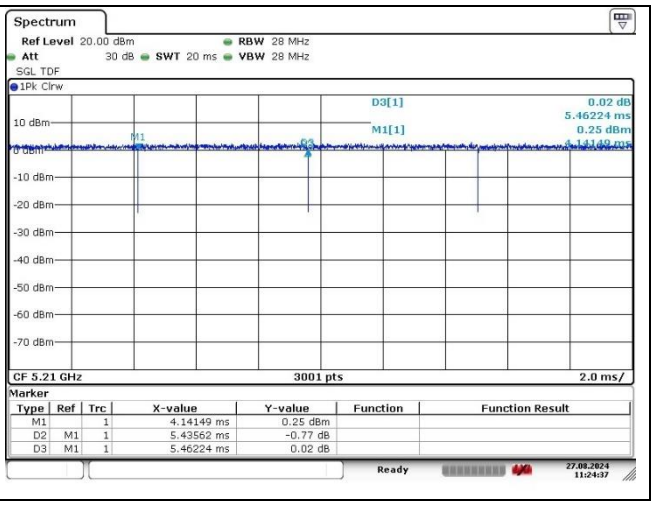


11ax_HE80_SU

SISO



MIMO

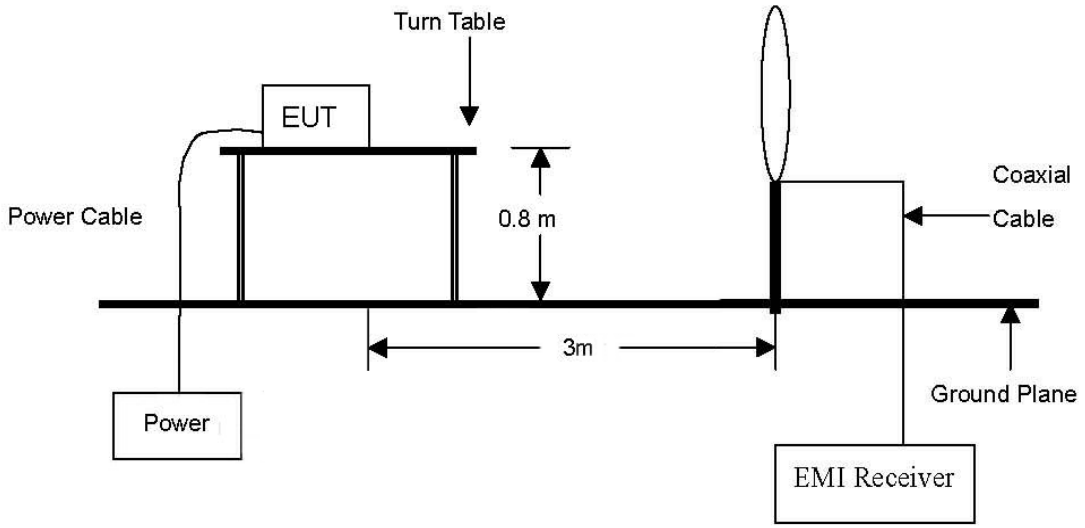


2. Transmitter Radiated Spurious Emissions

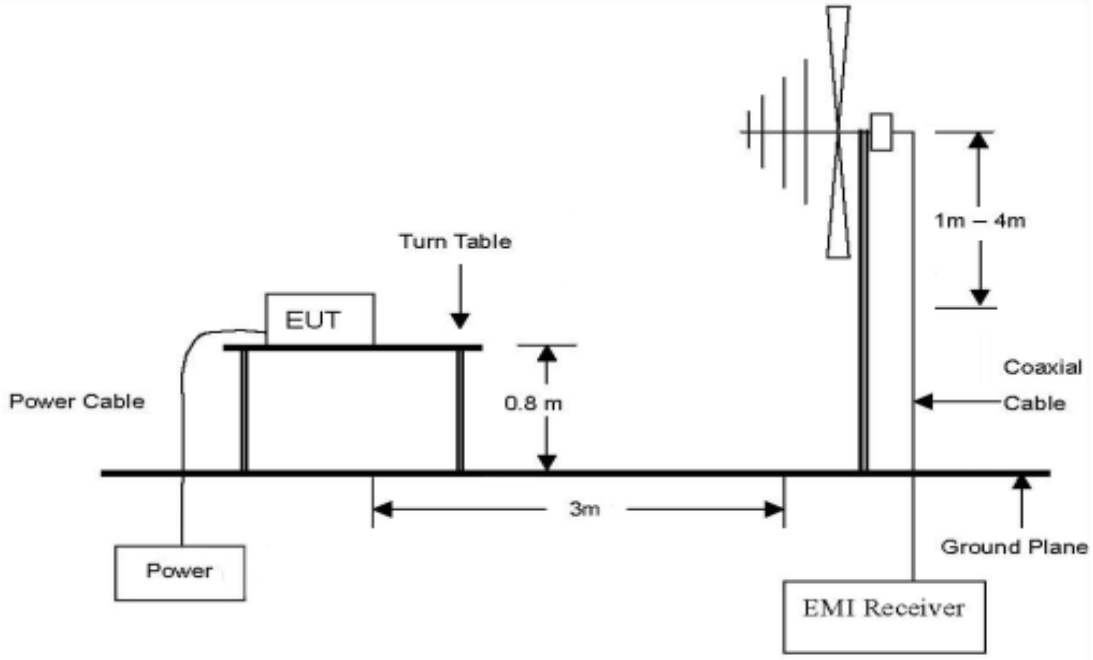
2.1. Test Setup

2.1.1. Transmitter radiated spurious emissions

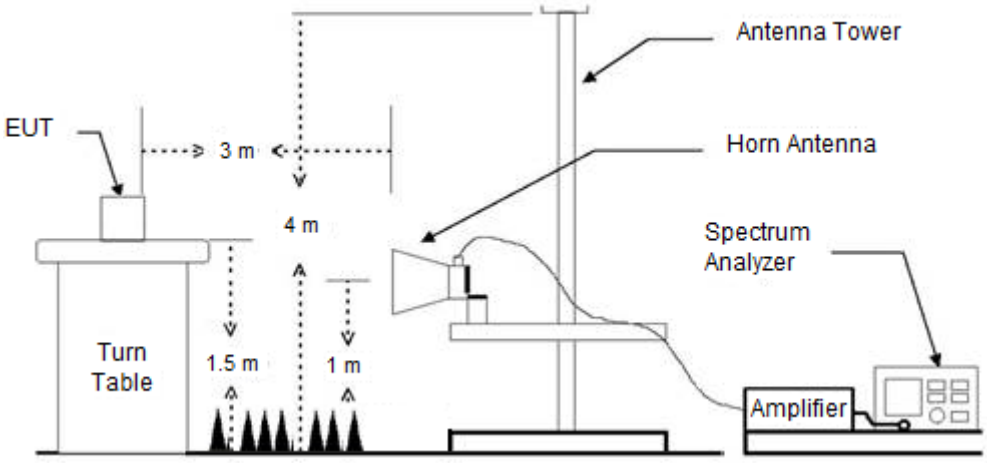
The diagram below shows the test setup that is utilized to make the measurements for emission from 9 ㎑ to 30 ㎒ emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission from 30 ㎒ to 1 ㎓ emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission. The spurious emissions were investigated form 1 ㎓ to the 10th harmonic of the highest fundamental frequency or 40 ㎓, whichever is lower.



2.2. Limit

2.2.1. FCC

According to § 15.407(b)

(1) For transmitters operating in the 5.15-5.25 ㎓ band: All emissions outside of the 5.15-5.35 ㎓ band shall not exceed an e.i.r.p. of -27 ㏈m/㎒.

(2) For transmitters operating in the 5.25-5.35 ㎓ band: All emissions outside of the 5.15-5.35 ㎓ band shall not exceed an e.i.r.p. of -27 ㏈m/㎒.

(3) For transmitters operating in the 5.47-5.725 ㎓ band: All emissions outside of the 5.47-5.725 ㎓ band shall not exceed an e.i.r.p. of -27 ㏈m/㎒.

(4) For transmitters operating in the 5.725-5.85 ㎓ band:

(i) All emissions shall be limited to a level of -27 ㏈m/㎒ at 75 ㎒ or more above or below the band edge increasing linearly to 10 ㏈m/㎒ at 25 ㎒ above or below the band edge, and from 25 ㎒ above or below the band edge increasing linearly to a level of 15.6 ㏈m/㎒ at 5 ㎒ above or below the band edge, and from 5 ㎒ above or below the band edge increasing linearly to a level of 27 ㏈m/㎒ at the band edge.

According to § 15.209(a), except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (㎒)	Field Strength (㎶/m)	Measurement Distance (Meters)
0.009-0.490	2 400/F(㎑)	300
0.490-1.705	24 000/F(㎑)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 ㎒, 76-88 ㎒, 174-216 ㎒ or 470-806 ㎒. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

2.2.2. IC

According to RSS-247 Issue 3,
6.2.1.2 Frequency band 5 150-5 250 ㎒
For transmitters with operating frequencies in the band 5 150-5 250 ㎒, all emissions outside the band 5 150-5 350 ㎒ shall not exceed -27 ㏈m/㎒ e.i.r.p. Any unwanted emissions that fall into the band 5 250-5 350 ㎒ shall be attenuated below the channel power by at least 26 ㏈, when measured using a resolution bandwidth between 1 and 5 % of the occupied bandwidth (i.e. 99% bandwidth), above 5 250 ㎒. The 26 ㏈ bandwidth may fall into the 5 250-5 350 ㎒ band; however, if the occupied bandwidth also falls within the 5 250- 5350 ㎒ band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5 250-5 350 ㎒ including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5 250-5 350 ㎒ band.

6.2.2.2 Frequency band 5 250-5 350 ㎒
Devices shall comply with the following:
a) All emissions outside the band 5 250-5 350 ㎒ shall not exceed -27 ㏈m/㎒ e.i.r.p.; or

b) All emissions outside the band 5 150-5 350 ㎒ shall not exceed -27 ㏈m/㎒ e.i.r.p. and its power shall comply with the spectral power density for operation within the band 5 150-5 250 ㎒. The device, except devices installed in vehicles, shall be labelled or include in the user manual the following text “for indoor use only.”

6.2.3.2 Frequency band 5 470-5 600 ㎒ and 5 650-5 725 ㎒
Emissions outside the band 5 470-5 725 ㎒ shall not exceed -27 ㏈ m/㎒ e.i.r.p. However, devices with bandwidth overlapping the band edge of 5 725 ㎒ can meet the emission limit of -27 ㏈ m/㎒ e.i.r.p. at 5 850 ㎒ instead of 5 725 ㎒.

6.2.4.3 Frequency band 5 725-5 850 ㎒

Devices operating in the band 5 725-5 850 ㎒ shall have comply with the following e.i.r.p. spectral density limits:
a) 27 ㏈m/㎒ at frequencies from the band edges decreasing linearly to 15.6 ㏈m/㎒ at 5 ㎒ above or below the band edges;

b) 15.6 ㏈m/㎒ at 5 ㎒ above or below the band edges decreasing linearly to 10 ㏈m/㎒ at 25 ㎒ above or below the band edges;

c) 10 ㏈m/㎒ at 25 ㎒ above or below the band edges decreasing linearly to -27 ㏈m/㎒ at 75 ㎒ above or below the band edges; and

d) -27 ㏈m/㎒ at frequencies more than 75 ㎒ above or below the band edges.

2.3. Test Procedures

Radiated spurious emissions from the EUT were measured according to the dictates in section G of KDB 789033 D02 General UNII Test Procedures New Rules v02r01 and ANSI C63.10-2013.

2.3.1. Test Procedures for emission below 30 ㎒

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter anechoic chamber test site. The table was rotated 360 degrees to determine the position of the highest radiation.
2. Then antenna is a loop antenna is fixed at one meter above the ground to determine the maximum value of the field strength. Both parallel and perpendicular of the antenna are set to make the measurement.
3. For each suspected emission, the EUT was arranged to its worst case and then the table was turned from 0 degrees to 360 degrees to find the maximum reading.
4. The test-receiver system was set to average or quasi peak detect function and Specified Bandwidth with Maximum Hold Mode.

2.3.2. Test Procedures for emission from above 30 ㎒

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter anechoic chamber test site below 1 ㎓ and 1.5 meter above the ground at a 3 meter anechoic chamber test site above 1 ㎓. The table was rotated 360 degrees to determine the position of the highest radiation.
2. During performing radiated emission below 1 ㎓, the EUT was set 3 meters away from the interference receiving antenna, which was mounted on the top of a variable-height antenna tower. During performing radiated emission above 1 ㎓, the EUT was set 3 meter away from the interference-receiving antenna.
3. The antenna is a bi-log antenna, a horn antenna and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. For measurements below 1 ㎓ resolution bandwidth is set to 100 ㎑ for peak detection measurements or 120 ㎑ for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.
6. For measurements Above 1 ㎓ resolution bandwidth is set to 1 ㎒, the video bandwidth is set to 3 ㎒ for peak measurements and as applicable for average measurements.

- II.G.4. Unwanted emissions measurements below 1 ㎓.
Compliance shall be demonstrated using CISPR quasi-peak detection; however, peak detection is permitted as an alternative to quasi-peak detection.

- II.G.5. Unwanted maximum emissions measurements above 1 ㎓.
Peak emission levels are measured by setting the analyzer as follows:
Set to RBW = 1 ㎒, VBW ≥ 3 ㎒, Detector = Peak, Sweep time = auto, Trace mode= Max hold.

- II.G.6. Average unwanted emissions measurements above 1 ㎓.
Set to RBW = 1 ㎒, VBW ≥ 3 ㎒, Detector = power averaging (rms), Averaging type = power averaging (rms), Sweep time = auto, Perform a trace average of at least 100 traces If the transmission is continuous, If the transmission is not continuous, the number of traces shall be increased by a factor of 1/x, where x is the duty cycle. For example, with 50 % duty cycle, at least 200 traces shall be averaged.

If tests are performed with the EUT transmitting at a duty cycle less than 98 %, a correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 % duty cycle. The correction factor is computed as follows:

- If power averaging (rms) mode was used in II.G.6.c)(iv), the correction factor is 10 log (1 / x), where x is the duty cycle. For example, if the transmit duty cycle was 50 %, then 3 ㏈ must be added to the measured emission levels.

- The radiation test of the EUT was investigated in three orthogonal orientations X, Y, and Z described in the test setup photo. All radiated testing of EUT was performed with worst case axis.

2.4. Test Result

Ambient temperature : (23 ± 1) ℃
Relative humidity : 47 % R.H.

2.4.1. Radiated Spurious Emission below 1 000 ㎒

The frequency spectrum from 9 ㎑ to 1 000 ㎒ was investigated. All reading values are peak values.

- SISO

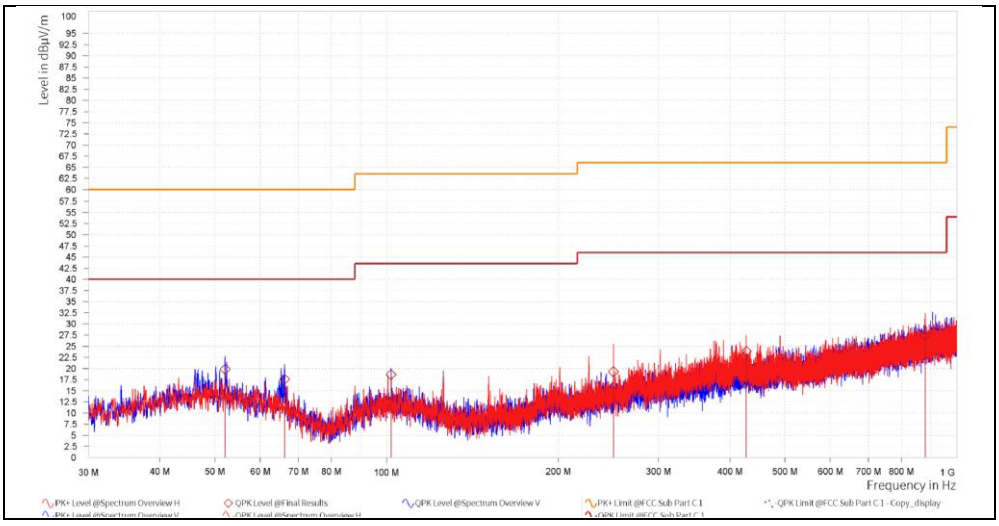
Ant. 3

Radiated Emissions			Ant	Correction (dB/m)	Total	Limit	
Frequency (㎒)	Reading (dBμV)	Detect Mode	Pol.		Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
880.30	24.21	Quasi Peak	H	3.21	27.42	46.00	18.58
Above 900.00	Not detected	-	-	-	-	-	-

Remark;

1. Spurious emissions for all channels and modes were investigated and almost the same below 1 ㎓.
2. Test from 30 ㎒ to 1 000 ㎒ was performed using the software of ELEKTRA(V5.02) from Rohde & Schwarz GmbH & Co. KG.
3. Reported spurious emissions are in **11ax_HE20_52T (Band 2C) / MCS0 / High channel** as worst case among other modes.
4. Radiated spurious emission measurement as below.
   (Actual = Reading + Correction)
   (Correction = Antenna Factor + AMP Factor + Cable Loss)
5. According to §15.31(o), emission levels are not report much lower than the limits by over 20 ㏈.

- Test plot



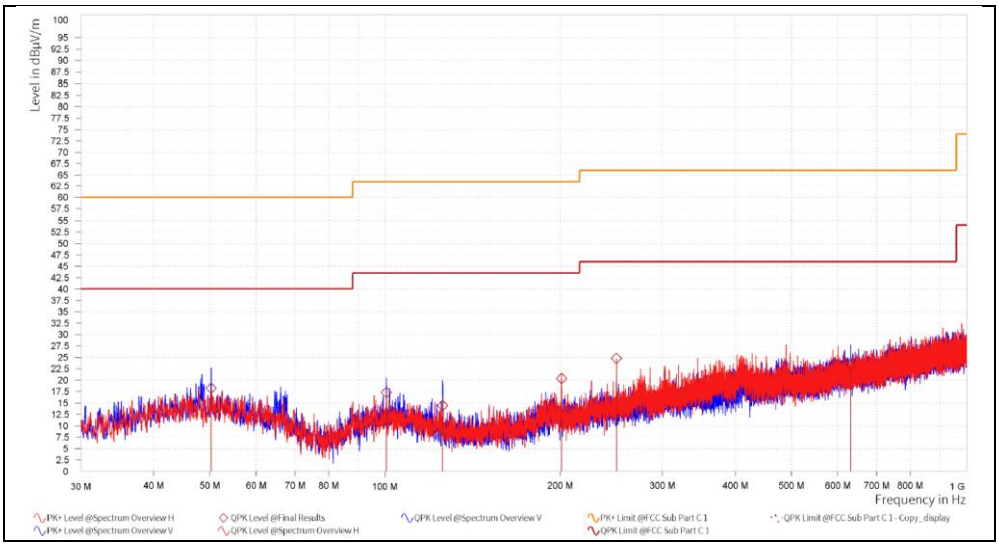
Ant. 4

Radiated Emissions			Ant	Correction (dB/m)	Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.		Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
50.27	25.43	Quasi Peak	V	-7.25	18.18	40.00	21.82
Above 100.00	Not detected	-	-	-	-	-	-

Remark;

1. Spurious emissions for all channels and modes were investigated and almost the same below 1 ㎓.
2. Test from 30 ㎒ to 1 000 ㎒ was performed using the software of ELEKTRA(V5.02) from Rohde & Schwarz GmbH & Co. KG.
3. Reported spurious emissions are in **11ax_HE20_52T (Band 2C) / MCS0 / High channel** as worst case among other modes.
4. Radiated spurious emission measurement as below.
   (Actual = Reading + Correction)
   (Correction = Antenna Factor + AMP Factor + Cable Loss)
5. According to §15.31(o), emission levels are not report much lower than the limits by over 20 ㏈.

- Test plot



- MIMO(CDD)

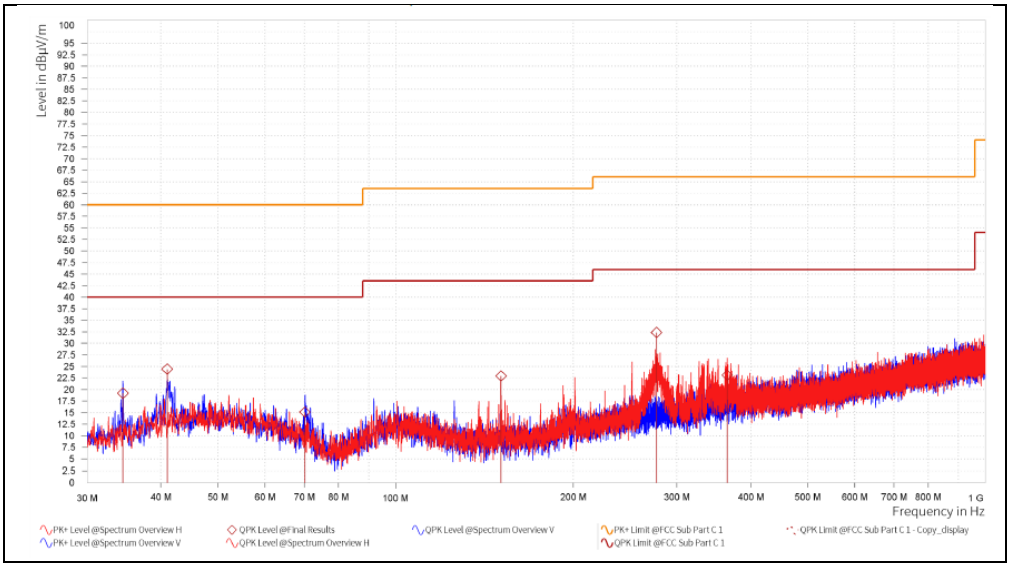
Ant. 1 + Ant. 2

Radiated Emissions			Ant	Correction (dB/m)	Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.		Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
40.99	32.51	Quasi Peak	V	-8.14	24.37	40.00	15.63
276.90	39.07	Quasi Peak	H	-6.73	32.34	46.00	13.66
Above 300.00	Not detected	-	-	-	-	-	-

Remark;

1. Spurious emissions for all channels and modes were investigated and almost the same below 1 ㎓.
2. Test from 30 ㎒ to 1 000 ㎒ was performed using the software of ELEKTRA(V5.02) from Rohde & Schwarz GmbH & Co. KG.
3. Reported spurious emissions are in **11ax_HE40_SU (Band 3) / MCS0 / High channel** as worst case among other modes.
4. Radiated spurious emission measurement as below.
   (Actual = Reading + Correction)
   (Correction = Antenna Factor + AMP Factor + Cable Loss)
5. According to §15.31(o), emission levels are not report much lower than the limits by over 20 ㏈.

- Test plot



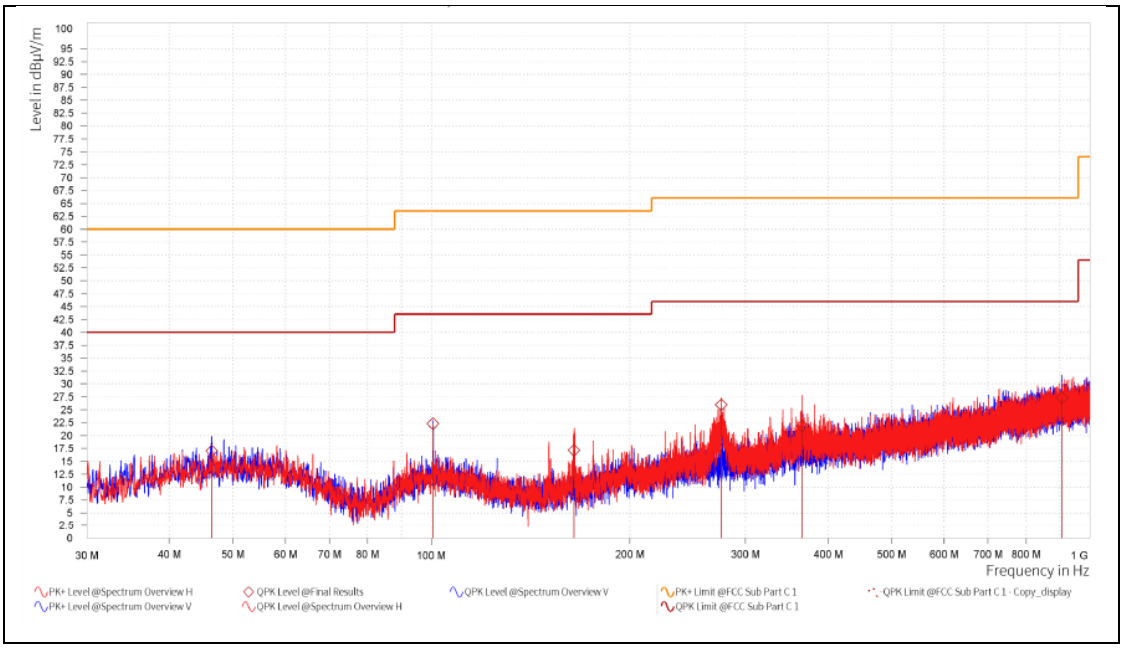
Ant. 1 + Ant. 3

Radiated Emissions			Ant	Correction (dB/m)	Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.		Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
906.07	23.64	Quasi Peak	V	3.66	27.30	46.00	18.70

Remark;

1. Spurious emissions for all channels and modes were investigated and almost the same below 1 ㎓.
2. Test from 30 ㎒ to 1 000 ㎒ was performed using the software of ELEKTRA(V5.02) from Rohde & Schwarz GmbH & Co. KG.
3. Reported spurious emissions are in **11ax_HE40_SU (Band 3) / MCS0 / High channel** as worst case among other modes.
4. Radiated spurious emission measurement as below.
   (Actual = Reading + Correction)
   (Correction = Antenna Factor + AMP Factor + Cable Loss)
5. According to §15.31(o), emission levels are not report much lower than the limits by over 20 ㏈.

- Test plot



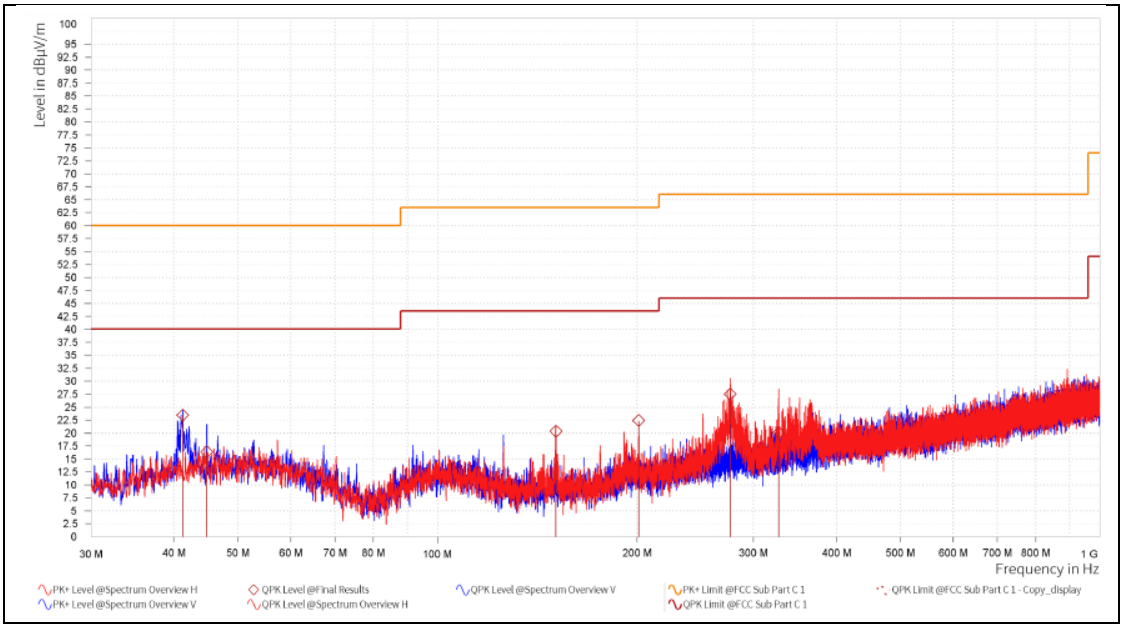
Ant. 1 + Ant. 4

Radiated Emissions			Ant	Correction (dB/m)	Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.		Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
41.25	31.51	Quasi Peak	V	-8.06	23.45	40.00	16.55
276.54	34.25	Quasi Peak	H	-6.73	27.52	46.00	18.48
Above 300.00	Not detected	-	-	-	-	-	-

Remark;

1. Spurious emissions for all channels and modes were investigated and almost the same below 1 ㎓.
2. Test from 30 ㎒ to 1 000 ㎒ was performed using the software of ELEKTRA(V5.02) from Rohde & Schwarz GmbH & Co. KG.
3. Reported spurious emissions are in **11ax_HE40 (Band 3) / MCS0 / High channel** as worst case among other modes.
4. Radiated spurious emission measurement as below.
   (Actual = Reading + Correction)
   (Correction = Antenna Factor + AMP Factor + Cable Loss)
5. According to §15.31(o), emission levels are not report much lower than the limits by over 20 ㏈.

- Test plot



2.4.2. Radiated Spurious Emission above 1 000 ㎒

- SISO

Ant. 3

11ax_HE20_26T (Band 1)

A. Low Channel (5 180 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
*4 500.00	14.76	Peak	V	32.00	8.52	55.28	74.00	18.72
*4 500.00	5.50	Average	V	32.00	8.52	46.02	54.00	7.98
*4 525.25	17.15	Peak	V	32.00	8.54	57.69	74.00	16.31
*4 662.95	6.00	Average	V	32.15	8.67	46.82	54.00	7.18
*5 150.00	13.18	Peak	V	33.60	9.16	55.94	74.00	18.06
*5 150.00	4.87	Average	V	33.60	9.16	**47.63**	54.00	6.37

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. Middle Channel (5 220 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

C. High Channel (5 240 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

11ax_HE20_26T (Band 2A)

A. Low Channel (5 260 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. Middle Channel (5 300 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

C. High Channel (5 320 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
*5 350.00	11.94	Peak	V	34.00	9.38	55.32	74.00	18.68
*5 350.00	4.88	Average	V	34.00	9.38	48.26	54.00	5.74
*5 380.53	16.78	Peak	V	34.06	9.40	60.24	74.00	13.76
*5 447.85	5.72	Average	V	34.00	9.47	**49.19**	54.00	4.81
*5 460.00	13.48	Peak	V	34.00	9.50	56.98	74.00	17.02
*5 460.00	5.28	Average	V	34.00	9.50	48.78	54.00	5.22

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

11ax_HE20_26T (Band 2C)

A. Low Channel (5 500 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
*5 350.00	14.10	Peak	V	34.00	9.38	57.48	74.00	16.52
*5 350.00	4.71	Average	V	34.00	9.38	48.09	54.00	5.91
*5 359.07	16.59	Peak	V	34.02	9.39	60.00	74.00	14.00
*5 434.94	6.01	Average	V	34.03	9.42	**49.46**	54.00	4.54
*5 460.00	13.35	Peak	V	34.00	9.50	56.85	74.00	17.15
*5 460.00	4.52	Average	V	34.00	9.50	48.02	54.00	5.98

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. Middle Channel (5 580 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

C. High Channel (5 700 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
5 725.00	12.61	Peak	V	34.05	9.79	56.45	68.23	11.78
5 753.20	16.23	Peak	V	34.01	9.76	60.00	68.23	8.23

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

11ax_HE20_26T (Band 3)

A. Low Channel (5 745 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
5 628.19	16.66	Peak	V	34.10	9.70	**60.46**	68.23	7.77
5 692.23	15.80	Peak	V	34.10	9.72	59.62	99.48	39.86
5 713.98	15.66	Peak	V	34.13	9.76	59.55	109.14	49.59
5 723.94	14.90	Peak	V	34.15	9.79	58.84	119.81	60.97

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. Middle Channel (5 785 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

C. High Channel (5 825 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
5 854.13	14.80	Peak	V	34.41	9.92	59.13	112.81	53.68
5 859.21	14.90	Peak	V	34.42	9.90	59.22	109.65	50.43
5 889.68	14.57	Peak	V	34.48	9.86	58.91	94.36	35.45
5 936.55	15.61	Peak	V	34.57	9.94	60.12	68.23	8.11

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

11ax_HE20_SU (Band 1)

A. Low Channel (5 180 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
*4 500.00	13.57	Peak	V	32.00	8.52	54.09	74.00	19.91
*4 500.00	5.57	Average	V	32.00	8.52	46.09	54.00	7.91
*4 735.04	17.53	Peak	V	32.37	8.75	58.65	74.00	15.35
*4 707.50	6.43	Average	V	32.32	8.71	47.46	54.00	6.54
*5 150.00	14.47	Peak	V	33.60	9.16	57.23	74.00	16.77
*5 150.00	5.16	Average	V	33.60	9.16	**47.92**	54.00	6.08

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. Middle Channel (5 220 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

C. High Channel (5 240 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

11ax_HE20_SU (Band 2A)

A. Low Channel (5 260 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. Middle Channel (5 300 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

C. High Channel (5 320 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
*5 350.00	13.75	Peak	V	34.00	9.38	57.13	74.00	16.87
*5 350.00	4.89	Average	V	34.00	9.38	48.27	54.00	5.73
*5 435.86	16.74	Peak	V	34.03	9.42	60.19	74.00	13.81
*5 434.33	5.73	Average	V	34.03	9.42	**49.18**	54.00	4.82
*5 460.00	14.47	Peak	V	34.00	9.50	57.97	74.00	16.03
*5 460.00	4.96	Average	V	34.00	9.50	48.46	54.00	5.54

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

11ax_HE20_SU (Band 2C)

A. Low Channel (5 500 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
*5 350.00	13.22	Peak	V	34.00	9.38	56.60	74.00	17.40
*5 350.00	5.36	Average	V	34.00	9.38	48.74	54.00	5.26
*5 446.01	16.04	Peak	V	34.01	9.47	59.52	74.00	14.48
*5 446.55	5.75	Average	V	34.01	9.47	**49.23**	54.00	4.77
*5 460.00	13.23	Peak	V	34.00	9.50	56.73	74.00	17.27
*5 460.00	4.83	Average	V	34.00	9.50	48.33	54.00	5.67

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. Middle Channel (5 580 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

C. High Channel (5 700 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
5 725.00	14.54	Peak	V	34.05	9.79	58.38	68.23	9.85
5 749.00	16.36	Peak	V	34.00	9.76	60.12	68.23	8.11

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

11ax_HE20_SU (Band 3)

A. Low Channel (5 745 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
5 606.69	16.40	Peak	V	34.10	9.63	60.13	68.23	8.10
5 682.98	16.88	Peak	V	34.10	9.72	60.70	92.63	31.93
5 703.66	15.75	Peak	V	34.11	9.73	59.59	106.25	46.66
5 720.93	13.90	Peak	V	34.14	9.78	57.82	112.95	55.13

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. Middle Channel (5 785 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

C. High Channel (5 825 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
5 852.90	14.26	Peak	V	34.41	9.92	58.59	115.62	57.03
5 860.43	15.36	Peak	V	34.42	9.90	59.68	109.31	49.63
5 877.19	15.40	Peak	V	34.45	9.85	59.70	103.61	43.91
5 973.05	16.13	Peak	V	34.65	9.96	**60.74**	68.49	7.75

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

11ax_HE40_26T (Band 1)

A. Low Channel (5 190 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
*4 500.00	14.85	Peak	V	32.00	8.52	55.37	74.00	18.63
*4 500.00	5.75	Average	V	32.00	8.52	46.27	54.00	7.73
*4 555.22	17.25	Peak	V	32.00	8.59	57.84	74.00	16.16
*4 751.24	6.02	Average	V	32.41	8.77	47.20	54.00	6.80
*5 150.00	13.50	Peak	V	33.60	9.16	56.26	74.00	17.74
*5 150.00	4.91	Average	V	33.60	9.16	**47.67**	54.00	6.33

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. High Channel (5 230 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

11ax_HE40_26T (Band 2A)

A. Low Channel (5 270 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. High Channel (5 310 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
*5 350.00	12.34	Peak	V	34.00	9.38	55.72	74.00	18.28
*5 350.00	5.17	Average	V	34.00	9.38	48.55	54.00	5.45
*5 437.14	15.96	Peak	V	34.03	9.43	59.42	74.00	14.58
*5 436.63	5.48	Average	V	34.03	9.43	**48.94**	54.00	5.06
*5 460.00	13.14	Peak	V	34.00	9.50	56.64	74.00	17.36
*5 460.00	5.27	Average	V	34.00	9.50	48.77	54.00	5.23

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

11ax_HE40_26T (Band 2C)

A. Low Channel (5 510 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
*5 350.00	12.76	Peak	V	34.00	9.38	56.14	74.00	17.86
*5 350.00	4.52	Average	V	34.00	9.38	47.90	54.00	6.10
*5 420.63	15.87	Peak	V	34.06	9.38	59.31	74.00	14.69
*5 449.25	5.64	Average	V	34.00	9.48	**49.12**	54.00	4.88
*5 460.00	11.90	Peak	V	34.00	9.50	55.40	74.00	18.60
*5 460.00	4.99	Average	V	34.00	9.50	48.49	54.00	5.51

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. Middle Channel (5 550 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

C. High Channel (5 670 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
5 725.00	13.56	Peak	V	34.05	9.79	57.40	68.23	10.83
5 740.30	16.31	Peak	V	34.02	9.77	60.10	68.23	8.13

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

11ax_HE40_26T (Band 3)

A. Low Channel (5 755 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
5 639.59	16.49	Peak	V	34.10	9.70	**60.29**	68.23	7.94
5 657.61	15.88	Peak	V	34.10	9.71	59.69	73.86	14.17
5 712.90	15.30	Peak	V	34.13	9.76	59.19	108.84	49.65
5 724.16	14.43	Peak	V	34.15	9.79	58.37	120.31	61.94

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. High Channel (5 795 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
5 851.92	15.11	Peak	V	34.40	9.92	59.43	117.85	58.42
5 869.01	15.53	Peak	V	34.44	9.87	59.84	106.90	47.06
5 893.85	15.84	Peak	V	34.49	9.87	60.20	91.28	31.08
5 946.10	15.74	Peak	V	34.59	9.96	60.29	68.23	7.94

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

11ax_HE40_SU (Band 1)

A. Low Channel (5 190 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
*4 500.00	13.44	Peak	V	32.00	8.52	53.96	74.00	20.04
*4 500.00	5.84	Average	V	32.00	8.52	46.36	54.00	7.64
*4 717.22	16.45	Peak	V	32.33	8.72	57.50	74.00	16.50
*4 728.56	6.51	Average	V	32.36	8.74	47.61	54.00	6.39
*5 150.00	13.79	Peak	V	33.60	9.16	56.55	74.00	17.45
*5 150.00	5.26	Average	V	33.60	9.16	**48.02**	54.00	5.98

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-

B. High Channel (5 230 ㎒)

Radiated Emissions			Ant.	Correction Factors		Total	Limit	
Frequency (㎒)	Reading (dB㎶)	Detect Mode	Pol.	AF (dB/m)	AMP+CL (dB)	Actual (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
Above 1 000.00	Not detected	-	-	-	-	-	-	-