



FCC RADIO TEST REPORT

FCC ID : UZ7ET4010B
Equipment : Kiosk Computer
Brand Name : ZEBRA
Model Name : ET4010B
Applicant : Zebra Technologies Corporation
3 Overlook Point, Lincolnshire, IL 60069 USA
Manufacturer : Zebra Technologies Corporation
3 Overlook Point, Lincolnshire, IL 60069 USA
Standard : FCC Part 15 Subpart E §15.407

The product was received on May 04, 2026 and testing was performed from May 15, 2026 to May 21, 2026. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Product Feature of Equipment Under Test.....	5
1.2 Product Specification of Equipment Under Test.....	6
1.3 Modification of EUT	8
1.4 Testing Location	8
1.5 Applicable Standards.....	8
2 Test Configuration of Equipment Under Test	9
2.1 Carrier Frequency and Channel	9
2.2 Test Mode.....	11
2.3 Connection Diagram of Test System.....	13
2.4 Support Unit used in test configuration and system	13
2.5 EUT Operation Test Setup	13
3 Test Result	14
3.1 Maximum Conducted Output Power Measurement	14
3.2 Unwanted Emissions Measurement	16
3.3 Antenna Requirements	22
4 List of Measuring Equipment.....	23
5 Measurement Uncertainty	24
Appendix A. Conducted Test Results	
Appendix B. Radiated Spurious Emission Test Data	
Appendix C. Duty Cycle Plots	
Appendix D. Setup Photographs	



History of this test report

Report No.	Version	Description	Issue Date
FR641615E	01	Initial issue of report	Jun. 08, 2026



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
-	15.403	6dB & 26dB Bandwidth	Pass	See Note
-	2.1049	99% Occupied Bandwidth	Pass	See Note
3.1	15.407(a)	Maximum Conducted Output Power	Pass	-
-	15.407(a)	Power Spectral Density	Pass	See Note
3.2	15.407(b)	Unwanted Emissions	Pass	4.68 dB under the limit at 5403.72 MHz
-	15.207	AC Conducted Emission	Pass	See Note
3.3	15.203	Antenna Requirement	Pass	-

Note: This is a variant report. Details of the changes are provided in the Product Equality Declaration document. All applicable test cases were previously performed and reported under FCC ID: UZ7ET4010B. Based on the original report, the relevant test cases for the variant product were reviewed and verified.

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: William Chen

Report Producer: Freda Wu



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Kiosk Computer
Brand Name	ZEBRA
Model Name	ET4010B
FCC ID	UZ7ET4010B
EUT supports Radios application	NFC WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80/VHT160 WLAN 11ax HE20/HE40/HE80/HE160 WLAN 11be EHT20/EHT40/EHT80/EHT160/EHT320 Bluetooth BR/EDR/LE
HW Version	EV
SW Version	15-16-09.00-VG-U00-PRD-ERS-04
MFC	03APR26
EUT Stage	Identical Prototype

Remark: The EUT's information above is declared by manufacturer.

Specification of Accessories				
Power Supply 1	Brand Name	Zebra	Part Number	PWR-BUA5V16W0WW
Power Supply 2	Brand Name	Delta	Model Name	ADP-36PH B
DC LINE CORD	Brand Name	Zebra	Part Number	CBL-DC-383A1-01
AC LINE CORD	Brand Name	Zebra	Part Number	50-16000-182R
USB Cable 1 USB-C to C Cable	Brand Name	Zebra	Part Number	CBL-EC5X-USBC3A-01
USB Cable 2 for USB A Scanners	Brand Name	Zebra	Part Number	CBA-U46-S07ZAR
Scanner	Brand Name	Zebra	Model Name	KC401-SCNR
Handheld Scanner	Brand Name	Zebra	Model Name	DS3608
Wall Mounting Bracket (100 VESA)	Brand Name	Zebra	Part Number	KT-152097-01
Wall Mounting Bracket (w/pwr supply holder)	Brand Name	Zebra	Part Number	KT-152097-03
Wall Mounting Bracket (Slim)	Brand Name	Zebra	Part Number	KT-152098-03
Pole Mounting (w/pwr supply holder)	Brand Name	Zebra	Part Number	KT-152096-03
CC6000 Print Kiosk mounting kit	Brand Name	Zebra	Part Number	BRKT-DPA-SK1-01

1.2 Product Specification of Equipment Under Test

Product Specification is subject to this standard	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5720 MHz 5745 MHz ~ 5825 MHz
Antenna Type	<Ant. 6>: IFA Antenna <Ant. 7>: IFA Antenna
Antenna Gain	<5150MHz ~ 5250MHz> : <Ant. 6>: -1.11 dBi <Ant. 7>: -1.67 dBi <5250MHz ~ 5350MHz> : <Ant. 6>: -0.79 dBi <Ant. 7>: -0.23 dBi <5470MHz ~ 5725MHz> : <Ant. 6>: -0.48 dBi <Ant. 7>: 0.27 dBi <5745MHz ~ 5825MHz> : <Ant. 6>: -0.90 dBi <Ant. 7>: -0.36 dBi
Type of Modulation	802.11a/n: OFDM (BPSK/QPSK/16QAM/64QAM) 802.11ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM) 802.11ax: OFDMA (BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM) 802.11be: OFDMA (BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM/4096-QAM)

Remark:

1. MIMO Ant. 6+7 Directional Gain is a calculated result from MIMO Ant. 6 and MIMO Ant. 7. The formula used in calculation is documented in section 1.2.1.
2. Power of MIMO Ant. 6 + Ant. 7 is a calculated result from sum of the power MIMO Ant. 6 and MIMO Ant. 7.
3. 802.11be Support Tx Beamforming mode, and the manufacturer declares that Tx Beamforming power/EIRP is less than CDD mode 3dbm, so CDD mode cover Tx Beamforming mode.
4. The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.

1.2.1 Antenna Directional Gain

<For CDD Mode>

Follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f)ii)

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows:

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

G_{ANT} is set equal to the gain of the antenna having the highest gain.

For PSD measurements, the directional gain calculation.

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k/20}$ if the k th antenna is being fed by spatial stream j , or zero if it is not;
 G_k is the gain in dBi of the k th antenna.

As minimum $N_{SS}=1$ is supported by EUT, the formula can be simplified as:

Directional gain = $10 \cdot \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi

Where $G_1, G_2, \dots, G_N$ denote single antenna gain.

The directional gain "DG" is calculated as following table.

			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant 6	Ant 7	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band II	-0.79	-0.23	-0.23	2.50	0.00	0.00

Calculation example:

If a device has two antenna, $G_{ANT6} = -0.79$ dBi; $G_{ANT7} = -0.23$ dBi

Directional gain of power measurement = $\max(-0.79, -0.23) + 0 = -0.23$ dBi

Directional gain of PSD derived from formula which is

$$10 \times \log \left\{ \left[10^{(-0.79 \text{ dBi} / 20)} + 10^{(-0.23 \text{ dBi} / 20)} \right]^2 / 2 \right\}$$

$$= 2.50 \text{ dBi}$$

Power and PSD limit reduction = Composite gain – 6dBi, (min = 0)

1.3 Modification of EUT

No modifications made to the EUT during the testing.

1.4 Testing Location

The test location is accredited based on TAF code 3786 designated by NCC (National Communication Commission).

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)

FCC designation No.: TW3786

Note: The test site complies with ANSI C63.4 2014 requirement.

1.5 Applicable Standards

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

- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ FCC Part 15 Subpart E
- ♦ ANSI C63.10-2020 + Cor.1-2023

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape) and accessory (Adapter or Earphone), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and only the worst case emissions were reported in this report.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5150-5250 MHz Band 1 (U-NII-1)	36	5180	44	5220
	38*	5190	46*	5230
	40	5200	48	5240
	42#	5210		
Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54*	5270	62*	5310
	56	5280	64	5320
	58#	5290		
Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	102*	5510	116	5580
	104	5520	132	5660
	106#	5530	134*	5670
	108	5540	136	5680
	110*	5550	140	5700

Frequency Band	Channel	Freq. (MHz)
5150-5350 MHz	50@	5250
5470-5725 MHz	114@	5570

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
TDWR Channel	118*	5590	124	5620
	120	5600	126*	5630
	122#	5610	128	5640

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
Straddle Channel	138#	5690	144	5720
	142*	5710		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5725-5850 MHz Band 4 (U-NII-3)	149	5745	157	5785
	151*	5755	159*	5795
	153	5765	161	5805
	155#	5775	165	5825

Note:

1. The above Frequency and Channel with "*" are 802.11n HT40 , 802.11ac VHT40 , 802.11ax HE40 and 802.11be EHT40.
2. The above Frequency and Channel with "#" are 802.11ac VHT80 , 802.11ax HE80 and 802.11be EHT80.
3. The above Frequency and Channel with "@" are 802.11ac VHT160 , 802.11ax HE160 and 802.11be EHT160.



2.2 Test Mode

The final test modes include the worst data rates for each modulation shown in the table below.

MIMO Mode

Modulation	Data Rate
802.11be EHT160	MCS0

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	120
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11be EHT20	802.11be EHT20	802.11be EHT20
L	Low	36	52	100
M	Middle	44	60	120
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11be EHT40	802.11be EHT40	802.11be EHT40
L	Low	38	54	102
M	Middle	-	-	118
H	High	46	62	134
Straddle		-	-	142

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11be EHT80	802.11be EHT80	802.11be EHT80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	122
Straddle		-	-	138



BW160	5150-5350 MHz	5470-5725MHz
	802.11be EHT160	802.11be EHT160
Ch. #	50	114

Remark:

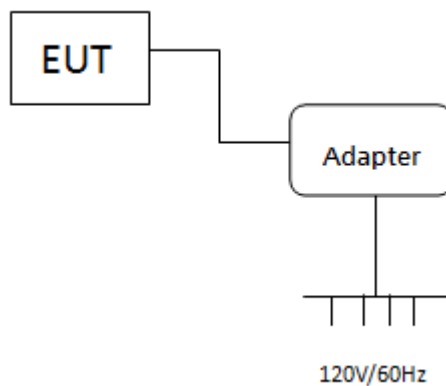
1. The conducted power level of each chain in MIMO mode is equal or higher than SISO mode.
2. The detailed Radiated test modes are shown in Appendix B.
3. For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.

This device supports WiFi 7 puncturing and Multi RU features.

80M channel puncturing 20M M-RU_RU484+RU242	-	242	484	-	-	-	-
	242	-	484	-	-	-	-
	484	-	242	-	-	-	-
	484	242	-	-	-	-	-
160M channel puncturing 20M M-RU_RU996+RU484+RU242	-	242	484	996			
	242	-	484	996			
	484	-	242	996			
	484	242	-	996			
	996			-	242	484	
	996			242	-	484	
	996			484	-	242	
	996			484	242	-	
160M channel puncturing 40M M-RU_RU996+RU484	-	484	996				
	484	-	996				
	996			-	484		
	996			484	-		

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	NB	Lenovo	NB-44	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT V 4.0.193.1” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

3 Test Result

3.1 Maximum Conducted Output Power Measurement

3.1.1 Limit of Maximum Conducted Output Power

For the 5.15–5.25 GHz bands:

■ For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

For the 5.25–5.725 GHz bands:

■ The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

For the band 5.725–5.85 GHz bands:

■ The maximum conducted output power over the frequency band of operation shall not exceed 1 W.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.1.3 Test Procedures

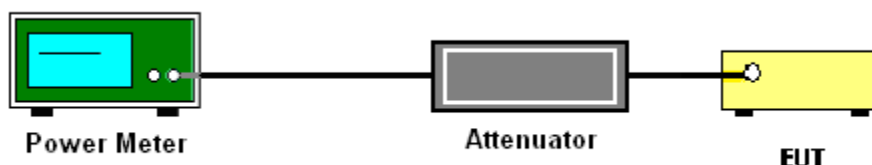
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter.
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

3.1.4 Test Setup



3.1.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.2 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.2.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz .

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz . Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz .

For transmitters operating in the 5.725-5.85 GHz band:

15.407(b)(4)(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

- (2) Unwanted spurious emissions falls in restricted bands shall comply with the general field strength limits as below table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.



$$E = \frac{1000000\sqrt{30P}}{3} \text{ } \mu\text{V/m, where P is the eirp (Watts)}$$

EIRP (dBm)	Field Strength at 3m (dB μ V/m)
- 27	68.3

3.2.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.2.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000 MHz

- RBW = 120 kHz
- VBW = 300 kHz
- Detector = Peak
- Trace mode = max hold

(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

- RBW = 1 MHz
- VBW $\geq$ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

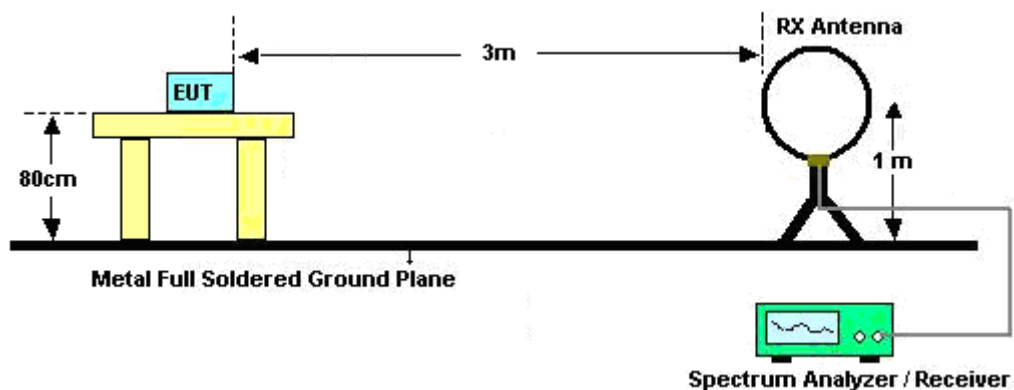
(3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz

- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

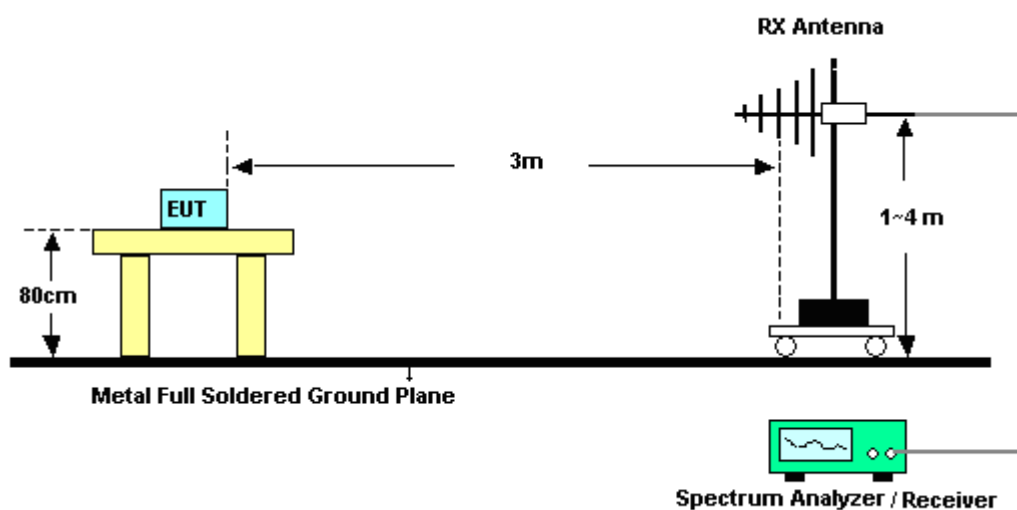
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as “-”.
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-”.

3.2.4 Test Setup

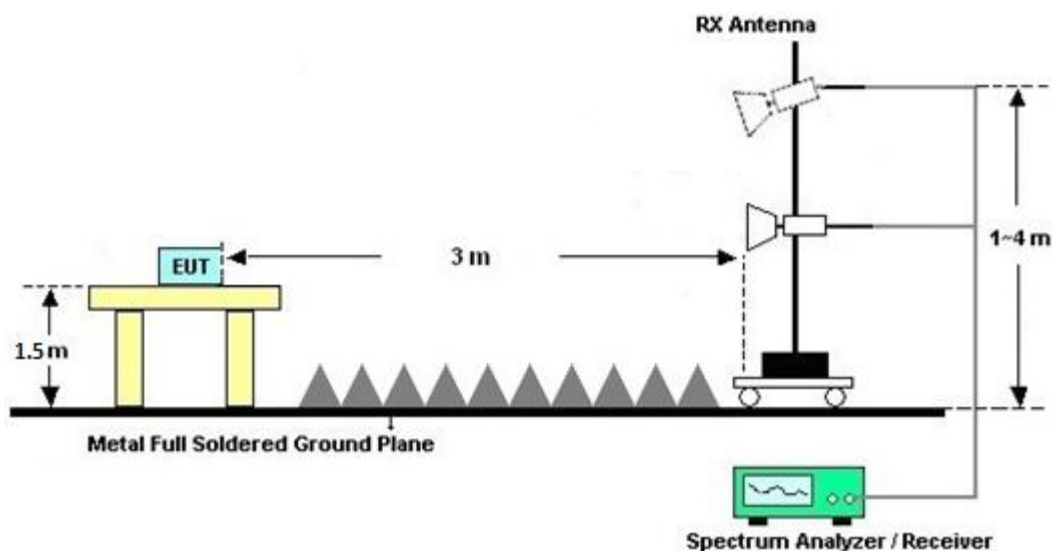
For radiated emissions below 30MHz



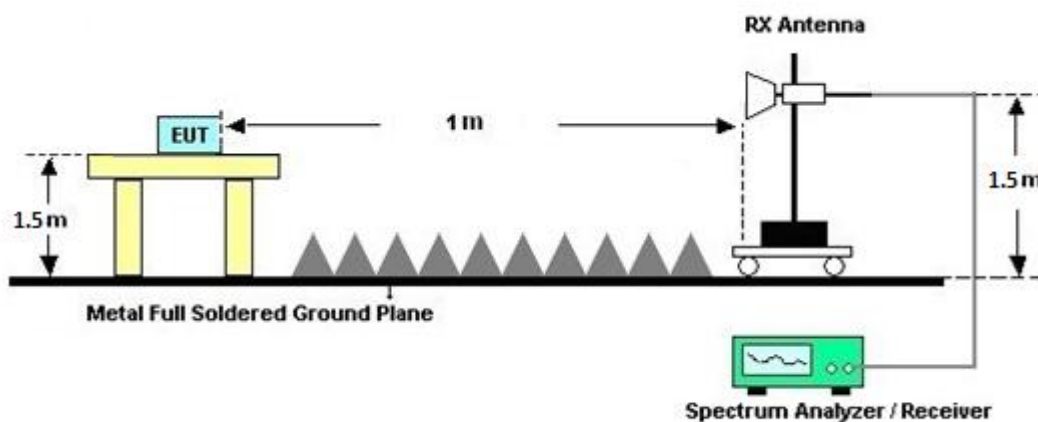
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



3.2.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which starts from 9 kHz to 30 MHz, is pre-scanned and the result which is 20 dB lower than the limit line is not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.2.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B.

3.2.7 Duty Cycle

Please refer to Appendix C.

3.2.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix B.



3.3 Antenna Requirements

3.3.1 Standard Applicable

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

3.3.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LOOP Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Mar. 16, 2026	May 19, 2026~ May 21, 2026	Mar. 15, 2027	Radiation (03CH21-HY)
Bilog Antenna	TESEQ & WOKEN	CBL 6111D & 00802N1D-06	63303 & 001	30MHz~1GHz	Nov. 26, 2025	May 19, 2026~ May 21, 2026	Nov. 25, 2026	Radiation (03CH21-HY)
Double Ridged Guide Horn Antenna	RFSPIN	DRH18-E	LE2C03A18E N	1GHz~18GHz	Aug. 07, 2025	May 19, 2026~ May 21, 2026	Aug. 06, 2026	Radiation (03CH21-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	1223	18GHz~40GHz	Jul. 02, 2025	May 19, 2026~ May 21, 2026	Jul. 01, 2026	Radiation (03CH21-HY)
Amplifier	SONOMA	310N	421580	30MHz~1GHz	Jul. 13, 2025	May 19, 2026~ May 21, 2026	Jul. 12, 2026	Radiation (03CH21-HY)
Amplifier	EMEC	EM01G18GA	060876	1GHz~18GHz	Sep. 26, 2025	May 19, 2026~ May 21, 2026	Sep. 25, 2026	Radiation (03CH21-HY)
Preamplifier	EMEC	EM18G40G	060873	18GHz~40GHz	Aug. 26, 2025	May 19, 2026~ May 21, 2026	Aug. 25, 2026	Radiation (03CH21-HY)
EXA Signal Analyzer	Keysight	N9010B	MY62170358	10Hz~44GHz	Sep. 09, 2025	May 19, 2026~ May 21, 2026	Sep. 08, 2026	Radiation (03CH21-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9kHz~30MHz	Mar. 04, 2026	May 19, 2026~ May 21, 2026	Mar. 03, 2027	Radiation (03CH21-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804397/2,804 612/2,803954 /2	30MHz~40GHz	Aug. 11, 2025	May 19, 2026~ May 21, 2026	Aug. 10, 2026	Radiation (03CH21-HY)
RF Cable	EMCI	EMC101Y-KM- KM-1000	240906	30MHz~40GHz	Oct. 21, 2025	May 19, 2026~ May 21, 2026	Oct. 20, 2026	Radiation (03CH21-HY)
Hygrometer	TECPEL	DTM-303A	TP211568	N/A	Oct. 21, 2025	May 19, 2026~ May 21, 2026	Oct. 20, 2026	Radiation (03CH21-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	May 19, 2026~ May 21, 2026	N/A	Radiation (03CH21-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	May 19, 2026~ May 21, 2026	N/A	Radiation (03CH21-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	May 19, 2026~ May 21, 2026	N/A	Radiation (03CH21-HY)
Software	Audix	E3 6.2009-8- 24	RK-001053	N/A	N/A	May 19, 2026~ May 21, 2026	N/A	Radiation (03CH21-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 04, 2025	May 15, 2026	Nov. 03, 2026	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	17I00015SNO 37 (NO:167)	10MHz~6GHz	Nov. 14, 2025	May 15, 2026	Nov. 13, 2026	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 29, 2025	May 15, 2026	Aug. 28, 2026	Conducted (TH05-HY)
Switch Control Mainframe	E-Instument	ETF-1405-0	EC1900067 (BOX7)	N/A	Jul. 02, 2025	May 15, 2026	Jul. 01, 2026	Conducted (TH05-HY)
Software	Sporton	BTWIFI_Final_ version_24051 3	N/A	Conducted Other Test Item	N/A	May 15, 2026	N/A	Conducted (TH05-HY)

5 Measurement Uncertainty

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	6.4 dB
---	--------

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.8 dB
---	--------

Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.8 dB
---	--------

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.3 dB
---	--------

Appendix A. Test Result of Conducted Test Items

Test Engineer:	YEN WU	Temperature:	21~25	°C
Test Date:	2026/5/15	Relative Humidity:	51~54	%

TEST RESULTS DATA
Average Power Table

FCC U-NII-2A MIMO														
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 6	Ant 7	SUM	Ant 6	Ant 7	Ant 6	Ant 7		
EHT160	MCS0	2	50	5250	Full	14.70	15.50	18.13	23.98		-0.23		30	Pass

Appendix B. Radiated Spurious Emission Test Data

Test Engineer :	Jack Cheng and Ray Lung	Temperature :	18~26°C
		Relative Humidity :	50~70%

Note symbol

-L	Low channel location
-R	High channel location

B1. Radiated Spurious Emission Test Modes

Mode	Band	Band (GHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 1	U-NII-1	5.15-5.25	6+7	802.11be EHT160	50	5250	MCS0	Full RU	-

B2. Summary of each worse mode

Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	RU	Remark
1	802.11be EHT160	50	5403.72	49.32	54.00	-4.68	V	Avg.	Pass	Full RU	Band Edge
	802.11be EHT160	50	15750.00	43.79	54.00	-10.21	H	Avg.	Pass	Full RU	Harmonic



Mode	1																																																																																							
	Band Edge - L																																																																																							
	U-NII-1_5.15-5.25_802.11be EHT160_CH50_Full RU_5250MHz																																																																																							
ANT	A6+A7																																																																																							
Pol.	Horizontal	Fundamental																																																																																						
Peak	Level (dBuV/m) Date: 2026-05-19 Site : 03CH21-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C03A18EN_250807 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SMT:Auto <table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>5104.25</td><td>55.42</td><td>74.00</td><td>-18.58</td><td>43.61</td><td>32.50</td><td>12.56</td><td>34.21</td><td>0.96</td><td>159</td><td>30 Peak</td></tr></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor				MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5104.25	55.42	74.00	-18.58	43.61	32.50	12.56	34.21	0.96	159	30 Peak	Level (dBuV/m) Date: 2026-05-19 Site : 03CH21-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C03A18EN_250807 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SMT:Auto <table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>5250.00</td><td>102.49</td><td>-----</td><td>-----</td><td>90.90</td><td>32.33</td><td>12.73</td><td>34.47</td><td>1.00</td><td>159</td><td>30 Peak</td></tr></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor				MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5250.00	102.49	-----	-----	90.90	32.33	12.73	34.47	1.00	159	30 Peak
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																														
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor																																																																																	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																														
1	5104.25	55.42	74.00	-18.58	43.61	32.50	12.56	34.21	0.96	159	30 Peak																																																																													
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																															
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor																																																																																	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																														
1	5250.00	102.49	-----	-----	90.90	32.33	12.73	34.47	1.00	159	30 Peak																																																																													
Avg	Level (dBuV/m) Date: 2026-05-19 Site : 03CH21-HY Condition: AVG_BE_54 3m DRH18-E_LE2C03A18EN_250807 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SMT:Auto <table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>5141.25</td><td>45.94</td><td>54.00</td><td>-8.06</td><td>34.15</td><td>32.50</td><td>12.59</td><td>34.26</td><td>0.96</td><td>159</td><td>30 Average</td></tr></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor				MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5141.25	45.94	54.00	-8.06	34.15	32.50	12.59	34.26	0.96	159	30 Average	Level (dBuV/m) Date: 2026-05-19 Site : 03CH21-HY Condition: AVG_54 3m DRH18-E_LE2C03A18EN_250807 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SMT:Auto <table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>5250.00</td><td>93.47</td><td>-----</td><td>-----</td><td>81.84</td><td>32.37</td><td>12.71</td><td>34.44</td><td>0.99</td><td>159</td><td>30 Average</td></tr></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor				MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5250.00	93.47	-----	-----	81.84	32.37	12.71	34.44	0.99	159	30 Average
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																															
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor																																																																																	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																														
1	5141.25	45.94	54.00	-8.06	34.15	32.50	12.59	34.26	0.96	159	30 Average																																																																													
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																															
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor																																																																																	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																														
1	5250.00	93.47	-----	-----	81.84	32.37	12.71	34.44	0.99	159	30 Average																																																																													



Mode	1	
	Band Edge - R	
	U-NII-1_5.15-5.25_802.11be EHT160_CH50_Full RU_5250MHz	
ANT	A6+A7	
Pol.	Horizontal	Fundamental
Peak		



		1																																																																																																			
Mode	Band Edge - L																																																																																																				
	U-NII-1_5.15-5.25_802.11be EHT160_CH50_Full RU_5250MHz																																																																																																				
ANT	A6+A7																																																																																																				
Pol.	Vertical						Fundamental																																																																																														
Peak	Level (dBuV/m) Date: 2026-05-19 Site : 03CH21-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C03A18EN_250807 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SMT:Auto <table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th colspan="2">Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th><th></th></tr><tr><td>1</td><td>5126.75</td><td>56.64</td><td>74.00</td><td>-17.36</td><td>44.84</td><td>32.50</td><td>12.58</td><td>34.24</td><td>0.96</td><td>235</td><td>0 Peak</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark		Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor					MHz	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg		1	5126.75	56.64	74.00	-17.36	44.84	32.50	12.58	34.24	0.96	235	0 Peak	Level (dBuV/m) Date: 2026-05-19 Site : 03CH21-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C03A18EN_250807 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SMT:Auto <table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th colspan="2">Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>5250.00</td><td>102.82</td><td>-----</td><td>-----</td><td>91.14</td><td>32.44</td><td>12.66</td><td>34.39</td><td>0.97</td><td>235</td><td>0 Peak</td></tr></table>						Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark		Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor					MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5250.00	102.82	-----	-----	91.14	32.44	12.66	34.39	0.97	235	0 Peak
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																											
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor																																																																																														
	MHz	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																												
1	5126.75	56.64	74.00	-17.36	44.84	32.50	12.58	34.24	0.96	235	0 Peak																																																																																										
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																												
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor																																																																																														
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																											
1	5250.00	102.82	-----	-----	91.14	32.44	12.66	34.39	0.97	235	0 Peak																																																																																										
Avg	Level (dBuV/m) Date: 2026-05-19 Site : 03CH21-HY Condition: AVG_BE_54 3m DRH18-E_LE2C03A18EN_250807 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SMT:Auto <table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th colspan="2">Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>5148.25</td><td>46.63</td><td>54.00</td><td>-7.37</td><td>34.85</td><td>32.50</td><td>12.59</td><td>34.27</td><td>0.96</td><td>235</td><td>0 Average</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark		Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor					MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5148.25	46.63	54.00	-7.37	34.85	32.50	12.59	34.27	0.96	235	0 Average	Level (dBuV/m) Date: 2026-05-19 Site : 03CH21-HY Condition: AVG_54 3m DRH18-E_LE2C03A18EN_250807 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SMT:Auto <table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th colspan="2">Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>5250.00</td><td>94.94</td><td>-----</td><td>-----</td><td>83.31</td><td>32.37</td><td>12.71</td><td>34.44</td><td>0.99</td><td>235</td><td>0 Average</td></tr></table>						Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark		Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor					MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5250.00	94.94	-----	-----	83.31	32.37	12.71	34.44	0.99	235	0 Average
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																											
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor																																																																																														
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																											
1	5148.25	46.63	54.00	-7.37	34.85	32.50	12.59	34.27	0.96	235	0 Average																																																																																										
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																												
Freq	Level	Line Margin	Level	Factor	Loss	Factor	Factor																																																																																														
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																											
1	5250.00	94.94	-----	-----	83.31	32.37	12.71	34.44	0.99	235	0 Average																																																																																										

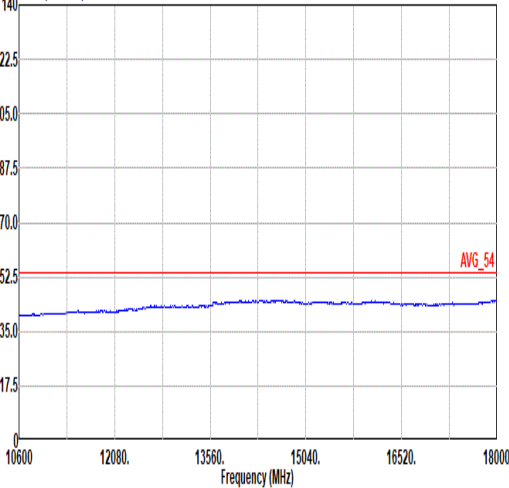
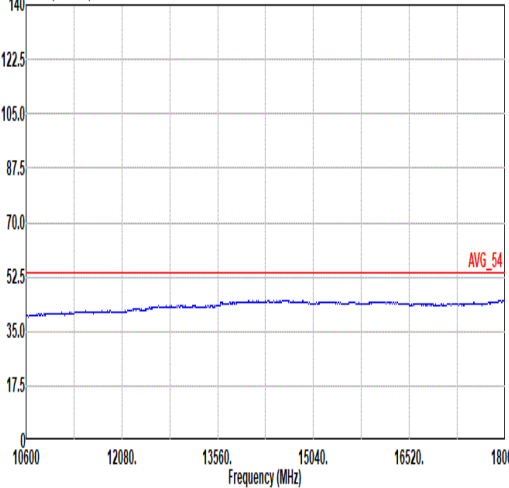


Mode	1																																					
	Band Edge - R																																					
	U-NII-1_5.15-5.25_802.11be EHT160_CH50_Full RU_5250MHz																																					
ANT	A6+A7																																					
Pol.	Vertical	Fundamental																																				
Peak	Level (dBuV/m) Date: 2026-05-19 Site : 03CH21-HY Condition: PEAK_BE_74 3m DRH18-E_LE2C03A18EN_250007 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SMT:Auto <table><tr><th>Freq</th><th>Level</th><th>Limit</th><th>Line Margin</th><th>Read Level</th><th>Ant Factor</th><th>Cable Loss</th><th>Preamp Factor</th><th>Aux Factor</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th><th></th></tr><tr><td>1 5405.40</td><td>58.80</td><td>74.00</td><td>-15.20</td><td>47.29</td><td>32.22</td><td>12.87</td><td>34.64</td><td>1.06</td><td>235</td><td>0</td><td>Peak</td></tr></table>	Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg		1 5405.40	58.80	74.00	-15.20	47.29	32.22	12.87	34.64	1.06	235	0	Peak	Blank
Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark																											
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg																												
1 5405.40	58.80	74.00	-15.20	47.29	32.22	12.87	34.64	1.06	235	0	Peak																											
Avg	Level (dBuV/m) Date: 2026-05-19 Site : 03CH21-HY Condition: AVG_BE_54 3m DRH18-E_LE2C03A18EN_250007 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SMT:Auto <table><tr><th>Freq</th><th>Level</th><th>Limit</th><th>Line Margin</th><th>Read Level</th><th>Ant Factor</th><th>Cable Loss</th><th>Preamp Factor</th><th>Aux Factor</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th><th></th></tr><tr><td>1 5403.72</td><td>49.32</td><td>54.00</td><td>-4.68</td><td>37.83</td><td>32.21</td><td>12.86</td><td>34.64</td><td>1.06</td><td>235</td><td>0</td><td>Average</td></tr></table>	Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg		1 5403.72	49.32	54.00	-4.68	37.83	32.21	12.86	34.64	1.06	235	0	Average	Blank
Freq	Level	Limit	Line Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark																											
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg																												
1 5403.72	49.32	54.00	-4.68	37.83	32.21	12.86	34.64	1.06	235	0	Average																											



Mode	1																																																																																																																									
	Harmonic																																																																																																																									
	U-NII-1_5.15-5.25_802.11be EHT160_CH50_Full RU_5250MHz																																																																																																																									
ANT	A6+A7																																																																																																																									
Pol.	Horizontal	Vertical																																																																																																																								
Peak Avg	Level (dBuV/m) Date: 2026-05-19 Site : 03CH21-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C03A18EN_250807 HORIZONTAL <table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>dB</th><th>cm deg</th></tr><tr><td>1 10500.00</td><td>50.02</td><td>68.20</td><td>-18.18</td><td>32.75</td><td>37.30</td><td>18.09</td><td>39.92</td><td>1.80</td><td>-- -- Peak</td></tr><tr><td>2 15750.00</td><td>55.09</td><td>74.00</td><td>-18.91</td><td>35.67</td><td>40.80</td><td>22.64</td><td>46.16</td><td>2.14</td><td>-- -- Peak</td></tr><tr><td>3 15750.00</td><td>43.79</td><td>54.00</td><td>-10.21</td><td>24.37</td><td>40.80</td><td>22.64</td><td>46.16</td><td>2.14</td><td>-- -- Average</td></tr></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg	1 10500.00	50.02	68.20	-18.18	32.75	37.30	18.09	39.92	1.80	-- -- Peak	2 15750.00	55.09	74.00	-18.91	35.67	40.80	22.64	46.16	2.14	-- -- Peak	3 15750.00	43.79	54.00	-10.21	24.37	40.80	22.64	46.16	2.14	-- -- Average	Level (dBuV/m) Date: 2026-05-19 Site : 03CH21-HY Condition: PEAK(UNII) 3m DRH18-E_LE2C03A18EN_250807 VERTICAL <table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>dB</th><th>cm deg</th></tr><tr><td>1 10500.00</td><td>50.22</td><td>68.20</td><td>-17.98</td><td>32.95</td><td>37.30</td><td>18.09</td><td>39.92</td><td>1.80</td><td>-- -- Peak</td></tr><tr><td>2 15750.00</td><td>54.46</td><td>74.00</td><td>-19.54</td><td>35.04</td><td>40.80</td><td>22.64</td><td>46.16</td><td>2.14</td><td>-- -- Peak</td></tr><tr><td>3 15750.00</td><td>43.78</td><td>54.00</td><td>-10.22</td><td>24.36</td><td>40.80</td><td>22.64</td><td>46.16</td><td>2.14</td><td>-- -- Average</td></tr></table>		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg	1 10500.00	50.22	68.20	-17.98	32.95	37.30	18.09	39.92	1.80	-- -- Peak	2 15750.00	54.46	74.00	-19.54	35.04	40.80	22.64	46.16	2.14	-- -- Peak	3 15750.00	43.78	54.00	-10.22	24.36	40.80	22.64	46.16	2.14	-- -- Average
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																																																
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																																																		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg																																																																																																																	
1 10500.00	50.02	68.20	-18.18	32.75	37.30	18.09	39.92	1.80	-- -- Peak																																																																																																																	
2 15750.00	55.09	74.00	-18.91	35.67	40.80	22.64	46.16	2.14	-- -- Peak																																																																																																																	
3 15750.00	43.79	54.00	-10.21	24.37	40.80	22.64	46.16	2.14	-- -- Average																																																																																																																	
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																																																																																																	
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																																																																																																		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm deg																																																																																																																	
1 10500.00	50.22	68.20	-17.98	32.95	37.30	18.09	39.92	1.80	-- -- Peak																																																																																																																	
2 15750.00	54.46	74.00	-19.54	35.04	40.80	22.64	46.16	2.14	-- -- Peak																																																																																																																	
3 15750.00	43.78	54.00	-10.22	24.36	40.80	22.64	46.16	2.14	-- -- Average																																																																																																																	



Mode	1	
	Harmonic	
	U-NII-1_5.15-5.25_802.11be EHT160_CH50_Full RU_5250MHz	
ANT	A6+A7	
Pol.	Horizontal	Vertical
10.6G ~18G Avg	Level (dBuV/m) Date: 2026-05-19  Site : 03CH21-HY Condition: AVG_54 3m DRH18-E_LE2C03A18EN_250807 HORIZONTAL	Level (dBuV/m) Date: 2026-05-19  Site : 03CH21-HY Condition: AVG_54 3m DRH18-E_LE2C03A18EN_250807 VERTICAL



Appendix C. Duty Cycle Plots

Antenna	Band	Duty Cycle (%)	T(us)	1/T(kHz)	VBW Setting
6+7	5GHz 802.11be EHT160 Full RU	99.60	5447	0.18	10Hz

