

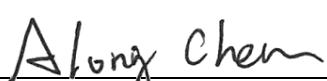


# FCC Test Report

**FCC ID** : SUFEL420C  
**Equipment** : e.LABEL 4.2 G3  
**Model No.** : e.LABEL 4.2 G3  
**Brand Name** : DIGI  
**Applicant** : DIGI SINGAPORE PTE. LTD.  
**Address** : 4 Leng Kee Rd, #05-03/04/05&11, SIS Building,  
Singapore 159088  
**Standard** : 47 CFR FCC Part 15.249  
**Received Date** : Feb. 20, 2025  
**Tested Date** : Mar. 26, 2025

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:



Along Chen / Assistant Manager

Approved by:



Gary Chang / Manager

## Table of Contents

<b>1</b>	<b>GENERAL DESCRIPTION .....</b>	<b>5</b>
1.1	Information.....	5
1.2	Local Support Equipment List .....	7
1.3	Test Setup Chart .....	7
1.4	The Equipment List .....	8
1.5	Test Standards .....	9
1.6	Deviation from Test Standard and Measurement Procedure.....	9
1.7	Measurement Uncertainty .....	9
<b>2</b>	<b>TEST CONFIGURATION.....</b>	<b>10</b>
2.1	Testing Facility .....	10
2.2	The Worst Test Modes and Channel Details .....	10
<b>3</b>	<b>TRANSMITTER TEST RESULTS .....</b>	<b>11</b>
3.1	Unwanted Emission.....	11
3.2	20dB and Occupied Bandwidth .....	14
<b>4</b>	<b>TEST LABORATORY INFORMATION .....</b>	<b>15</b>

### Appendix A. Unwanted Emission

### Appendix B. 20dB and Occupied Bandwidth

## Release Record

Report No.	Version	Description	Issued Date
FR442501-01	Rev. 01	Initial issue	May 26, 2025

## Summary of Test Results

FCC Rules	Test Items	Measured	Result
15.207	AC Power Line Conducted Emissions	Note <sup>1</sup>	N/A
15.249(a)	Field Strength of Fundamental	Meet the requirement of limit	Pass
15.249(a)(d)	Field Strength of Harmonics and Emissions Radiated outside of the Specified Frequency Bands	Meet the requirement of limit	Pass
15.215(c)	20dB bandwidth	Meet the requirement of limit	Pass
15.203	Antenna Requirement	Meet the requirement of limit	Pass

N/A means Not Applicable.  
Note<sup>1</sup>: The EUT consumes DC power from battery, so the test is not required.

### Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

### Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

## 1 General Description

### 1.1 Information

#### 1.1.1 Specification of the Equipment under Test (EUT)

RF General Information				
Frequency Range (MHz)	Modulation	Ch. Freq. (MHz)	Channel Number	Data Rate
2402-2480	GFSK	2402-2480	0-78 [79]	250 kbps

#### 1.1.2 Antenna Details

Ant. No.	Type	Connector	Gain (dBi)
1	PCB ANTENNA	LAYOUT ON PCB BOARD	3.3

#### 1.1.3 Power Supply Type of Equipment under Test (EUT)

Power Type	3Vdc from battery
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#### 1.1.4 Accessories

N/A

### 1.1.5 Channel List

Frequency band (MHz)				2400~2483.5			
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461	---	---

### 1.1.6 Test Tool and Duty Cycle

Test Tool	SmartRF Studio, Version: 2.28.0	
Duty Cycle and Duty Factor	Duty Cycle (%)	Duty Factor (dB)
	42	3.77

### 1.1.7 Power Index of Test Tool

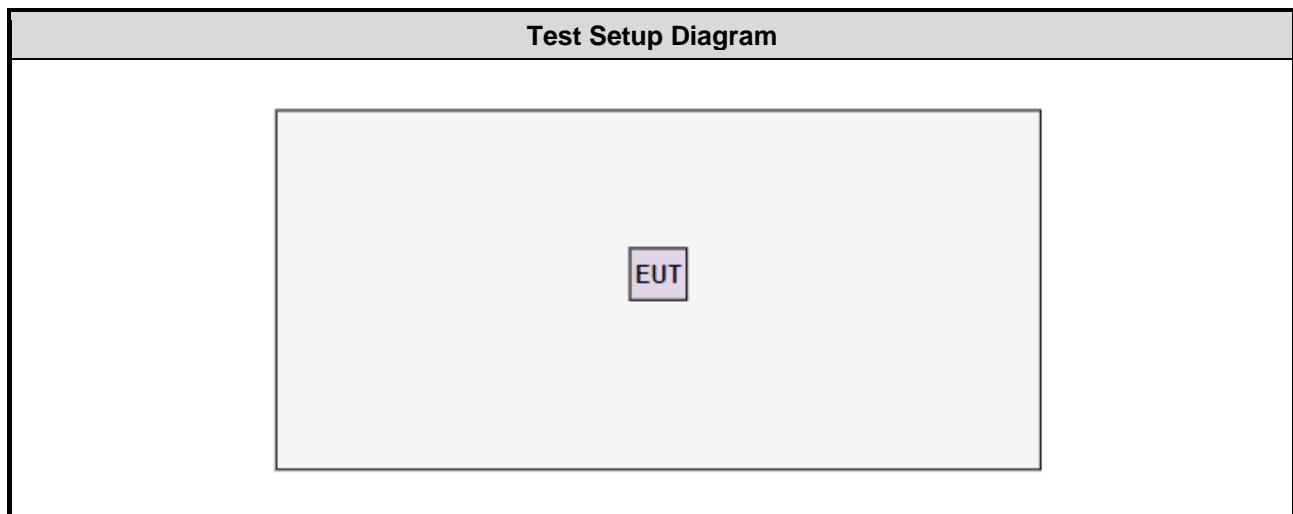
Modulation Mode	Test Frequency (MHz)		
	2402	2440	2480
GFSK	default	default	default

## 1.2 Local Support Equipment List

Support Equipment List					
No.	Equipment	Brand	Model	FCC ID	Remarks
1	Laptop	DELL	Latitude 5400	DoC	---
2	Fixture	DIGI	SmartRF05EB	---	Provided by applicant.

Note: The support laptop and fixture are disconnected from EUT and removed from testing table after sending command from laptop to control EUT to transmit and receive continuously.

## 1.3 Test Setup Chart



## 1.4 The Equipment List

<b>Test Item</b>	Radiated Emission				
<b>Test Site</b>	966 chamber1 / (03CH01-WS)				
<b>Tested Date</b>	Mar. 26, 2025				
Instrument	Brand	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Mar. 11, 2025	Mar. 10, 2026
Spectrum Analyzer	R&S	FSV40	101498	Nov. 12, 2024	Nov. 11, 2025
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 05, 2024	Nov. 04, 2025
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Aug. 09, 2024	Aug. 08, 2025
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Nov. 28, 2024	Nov. 27, 2025
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 18, 2024	Nov. 17, 2025
Preamplifier	EMC	EMC02325	980225	Jun. 17, 2024	Jun. 16, 2025
Preamplifier	EMC	EMC118A45SE	980898	Jul. 05, 2024	Jul. 04, 2025
Preamplifier	EMC	EMC184045SE	980903	Jul. 30, 2024	Jul. 29, 2025
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Oct. 02, 2024	Oct. 01, 2025
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Oct. 02, 2024	Oct. 01, 2025
LF cable 11M	EMC	EMCCFD400-NW-N W-11000	200801	Oct. 02, 2024	Oct. 01, 2025
LF cable 1M	EMC	EMCCFD400-NM-N M-1000	160502	Oct. 02, 2024	Oct. 01, 2025
RF Cable	EMC	EMC104-35M-35M- 8000	210920	Oct. 02, 2024	Oct. 01, 2025
RF Cable	EMC	EMC104-35M-35M- 3000	210922	Oct. 02, 2024	Oct. 01, 2025
Attenuator	Pasternack	PE7005-10	10-1	Oct. 02, 2024	Oct. 01, 2025
HIGHPASS FILTER 3.1-18G	WHK	WHK3.1/18G-10SS	39	Oct. 02, 2024	Oct. 01, 2025
Measurement Software	Sporton	SENSE-EMI	V5.11	NA	NA
Measurement Software	Sporton	SENSE-15247_FS	V5.11	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

## 1.5 Test Standards

47 CFR FCC Part 15.249

ANSI C63.10-2013

## 1.6 Deviation from Test Standard and Measurement Procedure

None

## 1.7 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	±34.130 Hz
Unwanted Emission ≤ 1GHz	±3.41 dB
Unwanted Emission > 1GHz	±4.59 dB

## 2 Test Configuration

### 2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	03CH01-WS
Address of Test Site	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- ISED#: 10807A
- CAB identifier: TW2732

### 2.2 The Worst Test Modes and Channel Details

Test item	Mode	Test Frequency (MHz)	Data Rate	Test Configuration
Field Strength of Fundamental	GFSK	2402, 2440, 2480	250 kbps	-
Unwanted Emissions ≤ 1GHz	GFSK	2402	250 kbps	-
Unwanted Emissions > 1GHz	GFSK	2402, 2440, 2480	250 kbps	-
20dB bandwidth	GFSK	2402, 2440, 2480	250 kbps	-

**NOTE:**

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Z-plane** results were found as the worst case and were shown in this report.

## 3 Transmitter Test Results

### 3.1 Unwanted Emission

This section includes field strength of fundamental, field strength of harmonics and emissions radiated outside of the operating frequency bands.

#### 3.1.1 Limit of field strength of fundamental and field strength of harmonics

Fundamental Frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
2400–2483.5 MHz	50	500

#### 3.1.2 Limit of Unwanted Emissions

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in below table, whichever is the lesser attenuation.

Radiated emission limits			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

**Note 1:**

Qusai-Peak value is measured for frequency below 1GHz except for 9–90 kHz, 110–490 kHz frequency band. Peak and average value are measured for frequency above 1GHz. The limit on average radio frequency emission is as above table. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit

**Note 2:**

Measurements may be performed at a distance other than what is specified provided. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor as below, Frequency at or above 30 MHz: 20 dB/decade Frequency below 30 MHz: 40 dB/decade.

### 3.1.3 Test Procedures

1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at test table. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

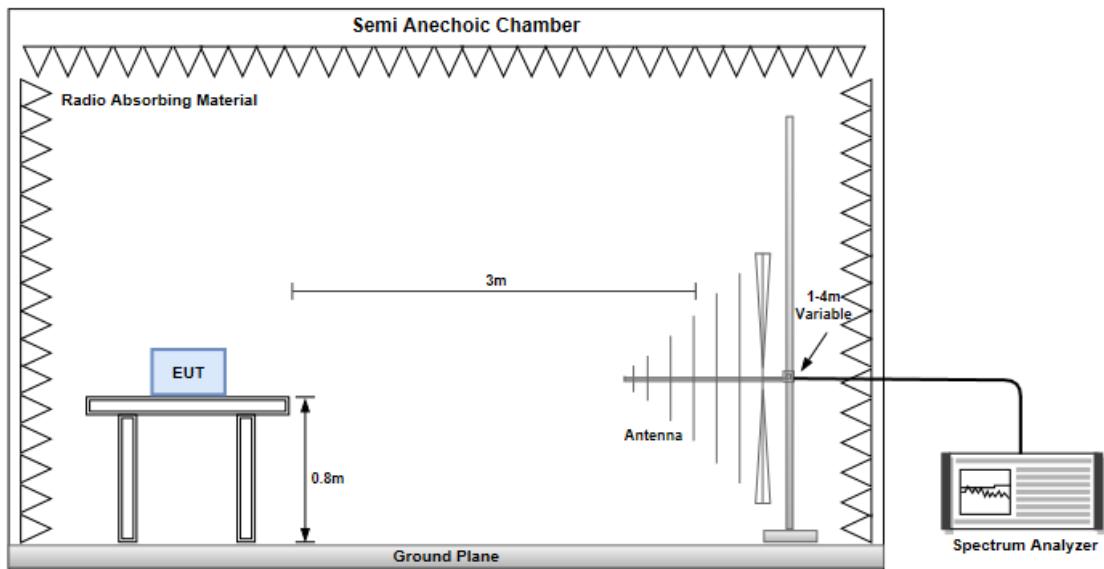
1. Radiated emission below 1GHz  
120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission
2. Radiated emission above 1GHz / Peak value except fundamental  
RBW=1MHz, VBW=3MHz and Peak detector
3. Radiated emission above 1GHz / Average value for field strength of fundamental and harmonics  
The average value is: Average = Peak value + 20log(Duty cycle) Where the duty factor is calculated from following formula:

$$20\log (\text{Duty cycle}) = 20\log \frac{0.683 \times 3 \text{ ms}}{100 \text{ ms}} = -33.77 \text{ dB}$$

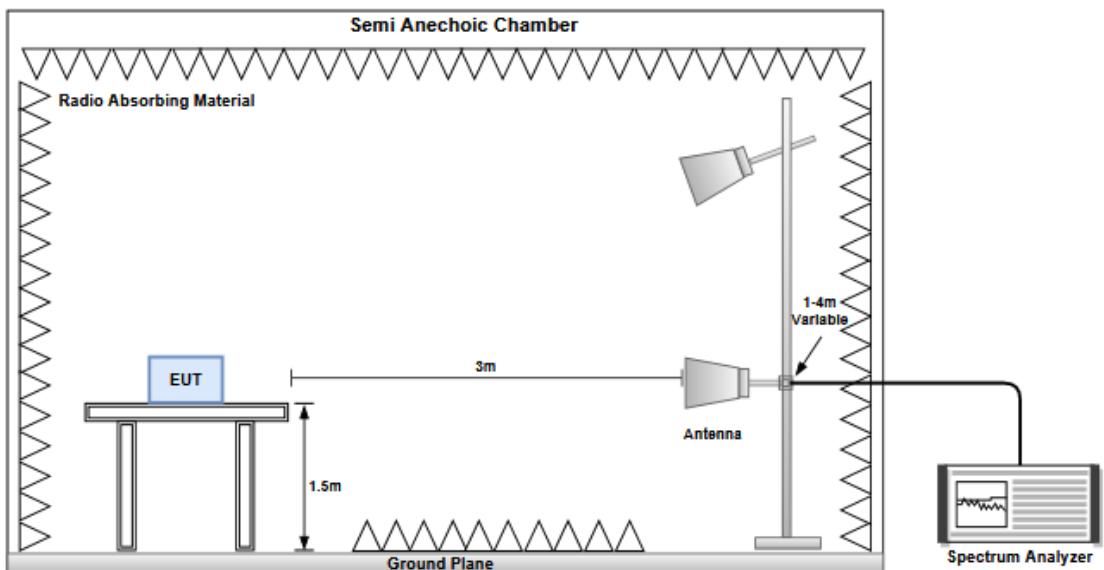
4. Radiated emission above 1GHz / Average value for other emissions  
RBW=1MHz, VBW=1/T and Peak detector
5. Radiated emission Peak value for fundamental  
RBW=1MHz, VBW=3MHz and Peak detector

### 3.1.4 Test Setup

#### Radiated Emissions below 1 GHz



#### Radiated Emissions above 1 GHz



### 3.1.5 Test Results

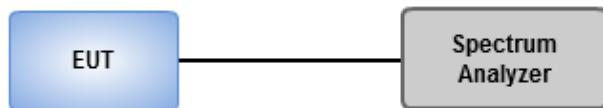
Refer to Appendix A.

## 3.2 20dB and Occupied Bandwidth

### 3.2.1 Test Procedures

1. Set resolution bandwidth (RBW) = 3 kHz, Video bandwidth = 10 kHz.
2. Detector = Peak, Trace mode = max hold
3. Sweep = auto couple, Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 20dB relative to the maximum level measured in the fundamental emission.
5. Use the occupied measurement function of spectrum analyzer to measure 99% occupied bandwidth.

### 3.2.2 Test Setup



### 3.2.3 Test Results

Ambient Condition	25°C / 62%	Tested By	Allen Lee
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Refer to Appendix B.

## 4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website <http://www.icertifi.com.tw>.

### Linkou

Tel: 886-2-2601-1640  
No.30-2, Ding Fwu Tsuen, Lin Kou  
District, New Taipei City, Taiwan  
(R.O.C.)

### Kwei Shan

Tel: 886-3-271-8666  
No.3-1, Lane 6, Wen San 3rd  
St., Kwei Shan Dist., Tao Yuan  
City 33381, Taiwan (R.O.C.)  
No.2-1, Lane 6, Wen San 3rd  
St., Kwei Shan Dist., Tao Yuan  
City 33381, Taiwan (R.O.C.)

### Kwei Shan Site II

Tel: 886-3-271-8640  
No.14-1, Lane 19, Wen San 3rd  
St., Kwei Shan Dist., Tao Yuan  
City 33381, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

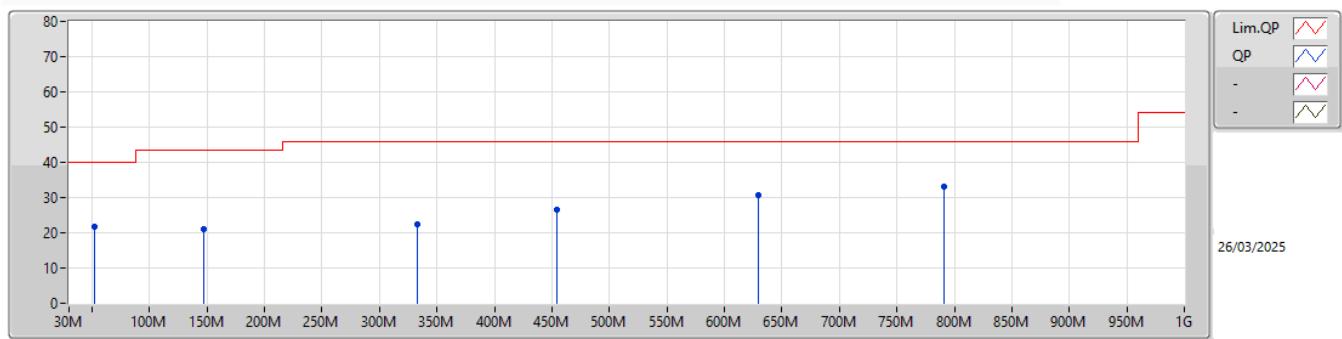
Tel: 886-3-271-8666  
Fax: 886-3-318-0345  
Email: ICC\_Service@icertifi.com.tw

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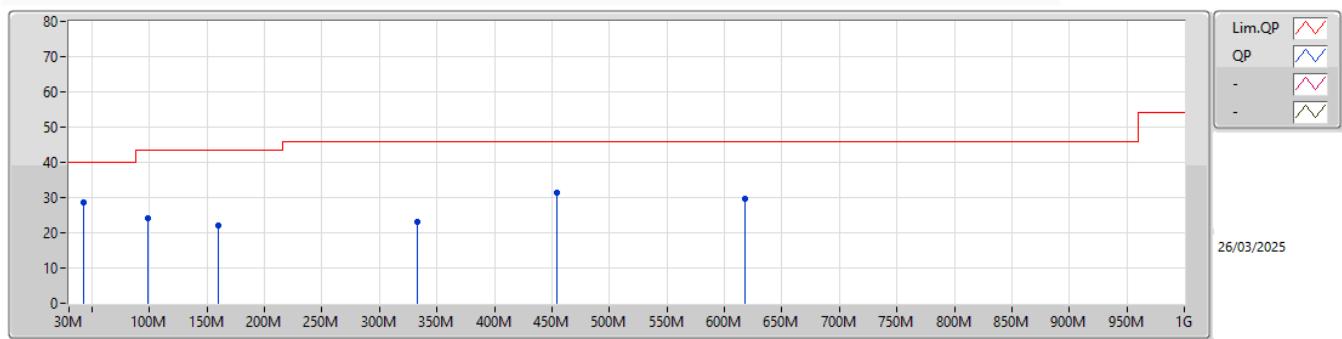


**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	43.1M	28.47	40.00	-11.53	Vertical

**Mode 1**

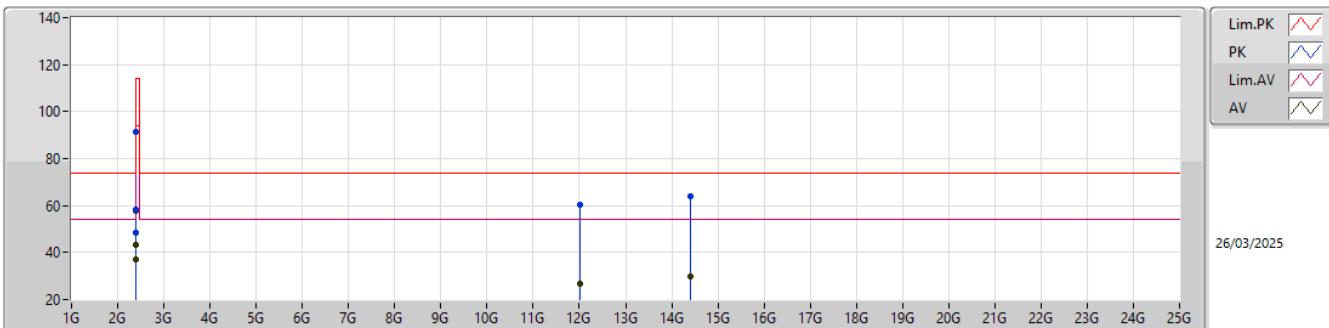
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB/m)	CL (dB)	PA (dB)	
PK	52.2M	21.68	40.00	-18.32	-8.29	3	Horizontal	-	-	-	29.97	19.12	0.73	28.14	
PK	147.5M	21.12	43.50	-22.38	-8.70	3	Horizontal	-	-	-	29.82	18.35	1.20	28.25	
PK	333.2M	22.46	46.00	-23.54	-7.10	3	Horizontal	-	-	-	29.56	19.30	1.81	28.21	
PK	454M	26.71	46.00	-19.29	-4.11	3	Horizontal	-	-	-	30.82	22.10	1.98	28.19	
PK	629.6M	30.57	46.00	-15.43	-0.18	3	Horizontal	-	-	-	30.75	25.50	2.45	28.13	
PK	791.3M	33.12	46.00	-12.88	2.40	3	Horizontal	-	-	-	30.72	27.43	2.82	27.85	

**Mode 1**

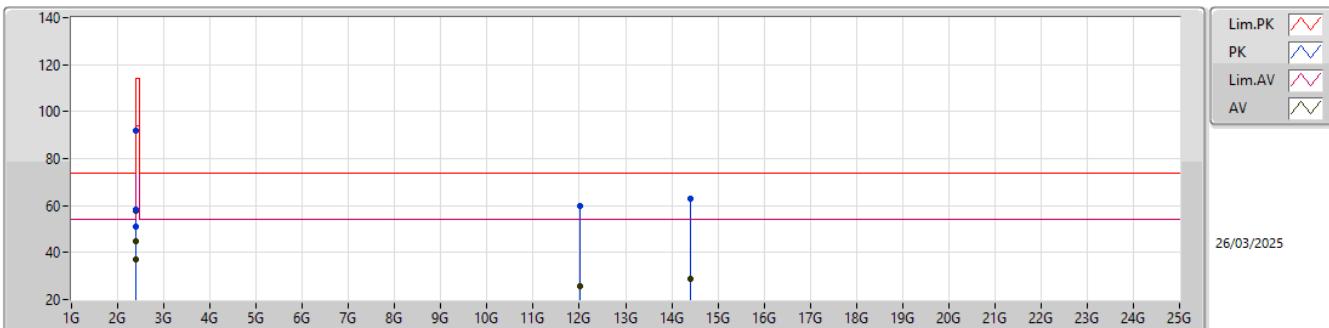
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PK	43.1M	28.47	40.00	-11.53	-8.55	3	Vertical	-	-	-	37.02	18.97	0.60	28.12	
PK	98.5M	23.98	43.50	-19.52	-13.46	3	Vertical	-	-	-	37.44	13.75	1.02	28.23	
PK	160M	22.23	43.50	-21.27	-8.61	3	Vertical	-	-	-	30.84	18.40	1.25	28.26	
PK	333.1M	23.14	46.00	-22.86	-7.10	3	Vertical	-	-	-	30.24	19.30	1.81	28.21	
PK	454M	31.35	46.00	-14.65	-4.11	3	Vertical	-	-	-	35.46	22.10	1.98	28.19	
PK	617.8M	29.55	46.00	-16.45	-0.42	3	Vertical	-	-	-	29.97	25.31	2.42	28.15	

**Summary**

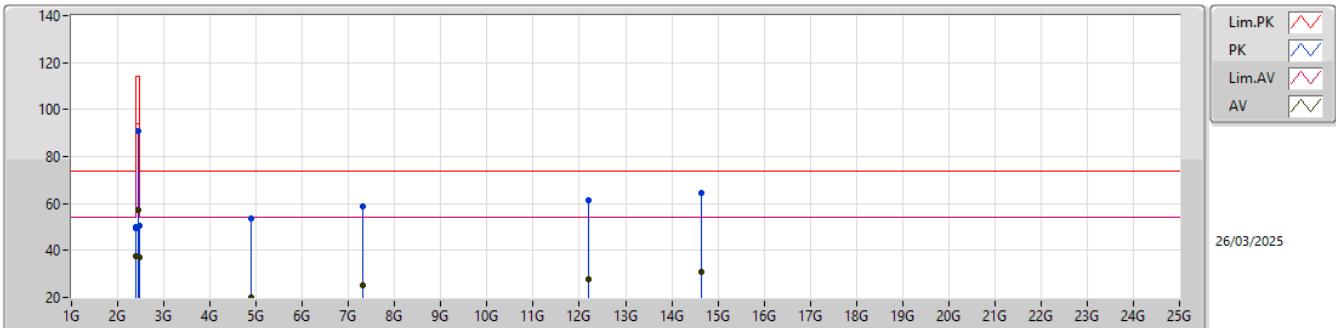
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
SRD_1MHz_Nss1_1TX	Pass	PK	14.88G	65.29	74.00	-8.71	3	Horizontal	154	2.23	-

**2.4-2.4835GHz\_SRD\_1MHz\_Nss1\_1TX**
**2402MHz\_TX**


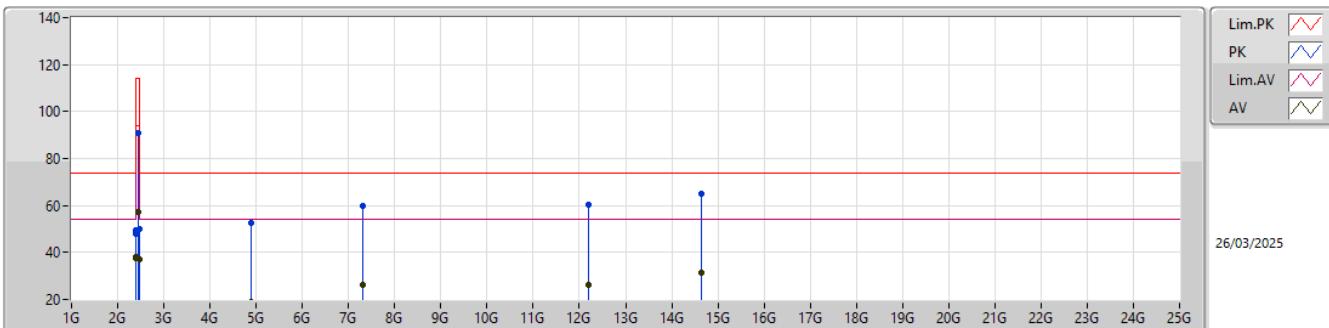
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.39G	37.22	54.00	-16.78	41.61	3	Horizontal	160	1.45	-	27.80	4.70	36.89			
PK	2.39G	48.67	74.00	-25.33	53.06	3	Horizontal	160	1.45	-	27.80	4.70	36.89			
AV	2.4G	43.39	54.00	-10.61	47.88	3	Horizontal	160	1.45	-	27.70	4.71	36.90			
PK	2.4G	58.44	74.00	-15.56	62.93	3	Horizontal	160	1.45	-	27.70	4.71	36.90			
AV	2.402G	57.55	94.00	-36.45	-	3	Horizontal	-	-	-	-	-	-			
PK	2.402G	91.32	114.00	-22.68	95.82	3	Horizontal	160	1.45	-	27.70	4.71	36.91			
AV	12.01G	26.73	54.00	-27.27	-	3	Horizontal	-	-	-	-	-	-			
PK	12.01G	60.50	74.00	-13.50	53.83	3	Horizontal	196	2.30	-	39.34	10.23	42.90			
AV	14.412G	29.96	54.00	-24.04	-	3	Horizontal	-	-	-	-	-	-			
PK	14.412G	63.73	74.00	-10.27	56.26	3	Horizontal	156	2.29	-	41.90	10.91	45.34			

**2.4-2.4835GHz\_SRD\_1MHz\_Nss1\_1TX**
**2402MHz\_TX**


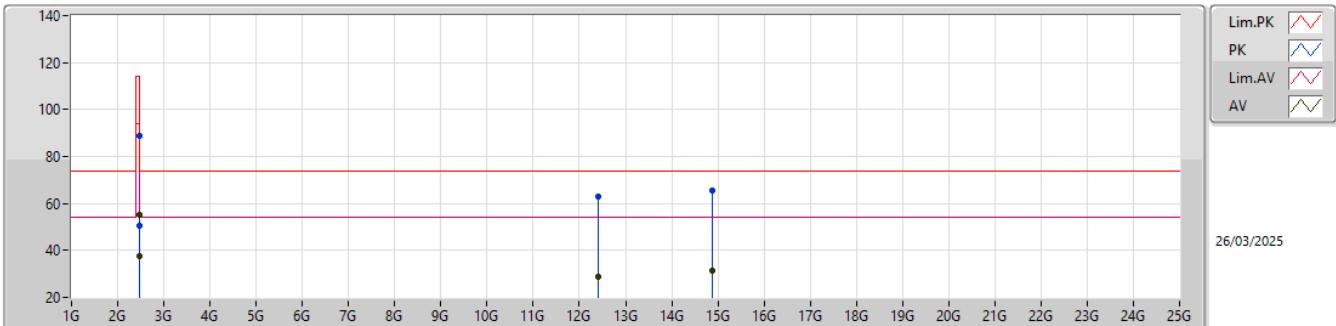
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.39G	37.13	54.00	-16.87	41.52	3	Vertical	169	2.47	-	27.80	4.70	36.89			
PK	2.39G	50.79	74.00	-23.21	55.18	3	Vertical	169	2.47	-	27.80	4.70	36.89			
AV	2.4G	44.62	54.00	-9.38	49.11	3	Vertical	169	2.47	-	27.70	4.71	36.90			
PK	2.4G	58.40	74.00	-15.60	62.89	3	Vertical	169	2.47	-	27.70	4.71	36.90			
AV	2.402G	57.87	94.00	-36.13	-	3	Vertical	-	-	-	-	-	-			
PK	2.402G	91.64	114.00	-22.36	96.14	3	Vertical	169	2.47	-	27.70	4.71	36.91			
AV	12.01G	25.82	54.00	-28.18	-	3	Vertical	-	-	-	-	-	-			
PK	12.01G	59.59	74.00	-14.41	52.92	3	Vertical	147	2.15	-	39.34	10.23	42.90			
AV	14.412G	28.92	54.00	-25.08	-	3	Vertical	-	-	-	-	-	-			
PK	14.412G	62.69	74.00	-11.31	55.22	3	Vertical	181	1.37	-	41.90	10.91	45.34			

**2.4-2.4835GHz\_SRD\_1MHz\_Nss1\_1TX**
**2440MHz\_TX**


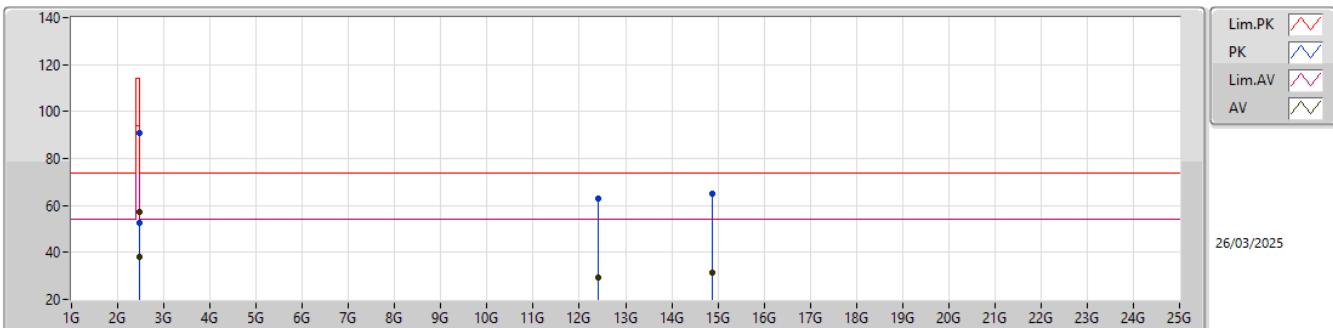
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)				
AV	2.39G	37.49	54.00	-16.51	41.88	3	Horizontal	160	1.22	-	27.80	4.70	36.89				
PK	2.39G	49.58	74.00	-24.42	53.97	3	Horizontal	160	1.22	-	27.80	4.70	36.89				
AV	2.4G	37.50	54.00	-16.50	41.99	3	Horizontal	160	1.22	-	27.70	4.71	36.90				
PK	2.4G	50.13	74.00	-23.87	54.62	3	Horizontal	160	1.22	-	27.70	4.71	36.90				
AV	2.44G	57.02	94.00	-36.98	-	3	Horizontal	-	-	-	-	-	-				
PK	2.44G	90.79	114.00	-23.21	95.37	3	Horizontal	160	1.22	-	27.60	4.76	36.94				
AV	2.4835G	36.96	54.00	-17.04	41.73	3	Horizontal	160	1.22	-	27.40	4.81	36.98				
PK	2.4835G	50.46	74.00	-23.54	55.23	3	Horizontal	160	1.22	-	27.40	4.81	36.98				
AV	4.88G	19.94	54.00	-34.06	-	3	Horizontal	-	-	-	-	-	-				
PK	4.88G	53.71	74.00	-20.29	54.11	3	Horizontal	150	2.40	-	31.40	6.77	38.57				
AV	7.32G	25.08	54.00	-28.92	-	3	Horizontal	-	-	-	-	-	-				
PK	7.32G	58.85	74.00	-15.15	53.35	3	Horizontal	92	1.26	-	36.26	8.63	39.39				
AV	12.2G	27.59	54.00	-26.41	-	3	Horizontal	-	-	-	-	-	-				
PK	12.2G	61.36	74.00	-12.64	54.27	3	Horizontal	151	1.24	-	39.50	10.27	42.68				
AV	14.64G	30.90	54.00	-23.10	-	3	Horizontal	-	-	-	-	-	-				
PK	14.64G	64.67	74.00	-9.33	56.96	3	Horizontal	146	1.19	-	42.18	11.05	45.52				

**2.4-2.4835GHz\_SRD\_1MHz\_Nss1\_1TX**
**2440MHz\_TX**


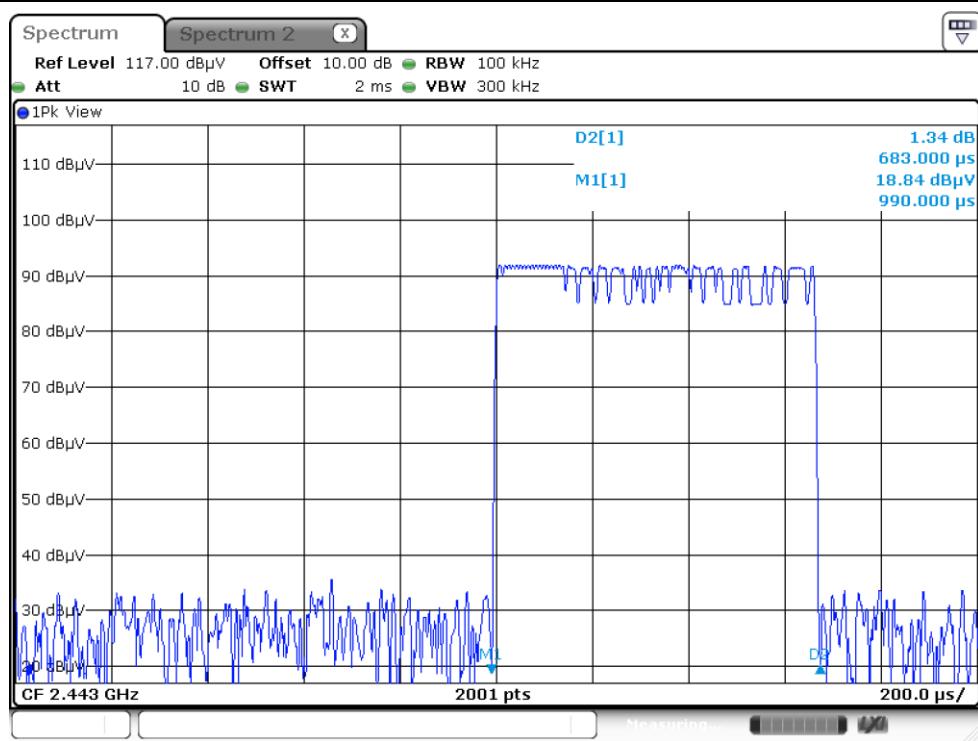
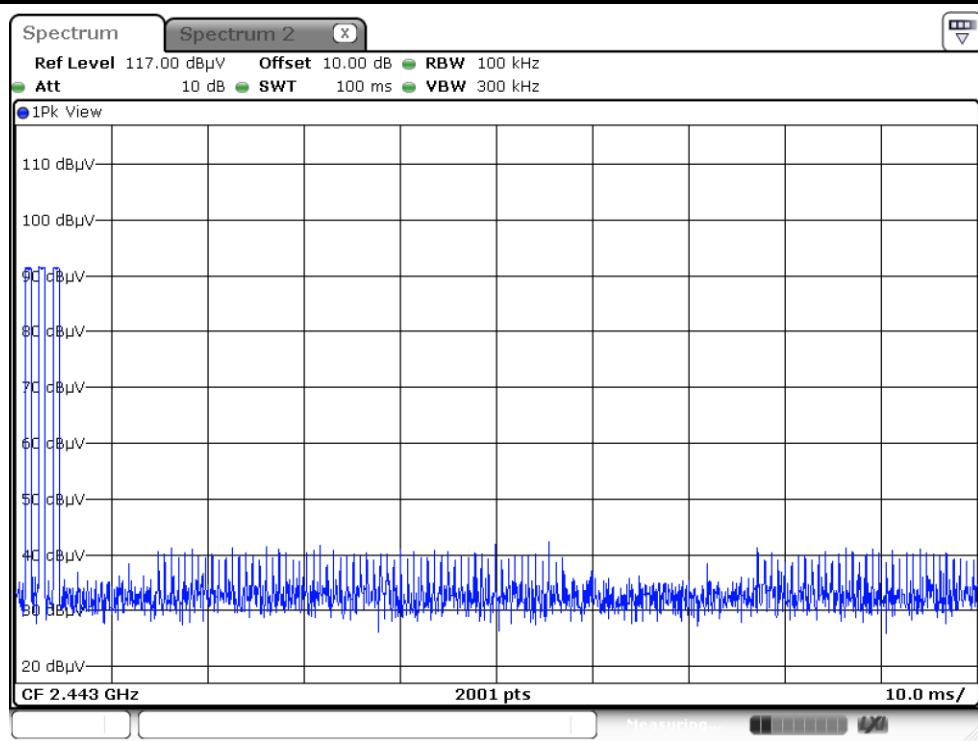
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.39G	37.69	54.00	-16.31	42.08	3	Vertical	227	1.22	-	27.80	4.70	36.89			
PK	2.39G	48.07	74.00	-25.93	52.46	3	Vertical	227	1.22	-	27.80	4.70	36.89			
AV	2.4G	37.85	54.00	-16.15	42.34	3	Vertical	227	1.22	-	27.70	4.71	36.90			
PK	2.4G	49.65	74.00	-24.35	54.14	3	Vertical	227	1.22	-	27.70	4.71	36.90			
AV	2.44G	57.08	94.00	-36.92	-	3	Vertical	-	-	-	-	-	-			
PK	2.44G	90.85	114.00	-23.15	95.43	3	Vertical	227	1.22	-	27.60	4.76	36.94			
AV	2.4835G	37.15	54.00	-16.85	41.92	3	Vertical	227	1.22	-	27.40	4.81	36.98			
PK	2.4835G	49.99	74.00	-24.01	54.76	3	Vertical	227	1.22	-	27.40	4.81	36.98			
AV	4.88G	18.81	54.00	-35.19	-	3	Vertical	-	-	-	-	-	-			
PK	4.88G	52.58	74.00	-21.42	52.98	3	Vertical	276	1.14	-	31.40	6.77	38.57			
AV	7.32G	26.20	54.00	-27.80	-	3	Vertical	-	-	-	-	-	-			
PK	7.32G	59.97	74.00	-14.03	54.47	3	Vertical	191	1.57	-	36.26	8.63	39.39			
AV	12.2G	26.40	54.00	-27.60	-	3	Vertical	-	-	-	-	-	-			
PK	12.2G	60.17	74.00	-13.83	53.08	3	Vertical	158	2.35	-	39.50	10.27	42.68			
AV	14.64G	31.34	54.00	-22.66	-	3	Vertical	-	-	-	-	-	-			
PK	14.64G	65.11	74.00	-8.89	57.40	3	Vertical	182	2.30	-	42.18	11.05	45.52			

**2.4-2.4835GHz\_SRD\_1MHz\_Nss1\_1TX**
**2480MHz\_TX**


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)			
AV	2.48G	54.96	94.00	-39.04	-	3	Horizontal	-	-	-	-	-	-			
PK	2.48G	88.73	114.00	-25.27	93.50	3	Horizontal	167	1.32	-	27.40	4.81	36.98			
AV	2.4835G	37.41	54.00	-16.59	42.18	3	Horizontal	167	1.32	-	27.40	4.81	36.98			
PK	2.4835G	50.68	74.00	-23.32	55.45	3	Horizontal	167	1.32	-	27.40	4.81	36.98			
AV	12.4G	28.92	54.00	-25.08	-	3	Horizontal	-	-	-	-	-	-			
PK	12.4G	62.69	74.00	-11.31	55.72	3	Horizontal	160	2.43	-	39.10	10.32	42.45			
AV	14.88G	31.52	54.00	-22.48	-	3	Horizontal	-	-	-	-	-	-			
PK	14.88G	65.29	74.00	-8.71	58.20	3	Horizontal	154	2.23	-	41.56	11.23	45.70			

**2.4-2.4835GHz\_SRD\_1MHz\_Nss1\_1TX**
**2480MHz\_TX**


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB/m)	CL (dB)	PA (dB)		
AV	2.48G	57.12	94.00	-36.88	-	3	Vertical	-	-	-	-	-	-		
PK	2.48G	90.89	114.00	-23.11	95.66	3	Vertical	228	1.22	-	27.40	4.81	36.98		
AV	2.4835G	37.97	54.00	-16.03	42.74	3	Vertical	228	1.22	-	27.40	4.81	36.98		
PK	2.4835G	52.42	74.00	-21.58	57.19	3	Vertical	228	1.22	-	27.40	4.81	36.98		
AV	12.4G	29.30	54.00	-24.70	-	3	Vertical	-	-	-	-	-	-		
PK	12.4G	63.07	74.00	-10.93	56.10	3	Vertical	184	1.16	-	39.10	10.32	42.45		
AV	14.88G	31.18	54.00	-22.82	-	3	Vertical	-	-	-	-	-	-		
PK	14.88G	64.95	74.00	-9.05	57.86	3	Vertical	163	2.25	-	41.56	11.23	45.70		



$$20\log(\text{Duty cycle}) = 20\log\frac{0.683 \times 3 \text{ ms}}{100 \text{ ms}} = -33.77 \text{ dB}$$

Frequency (MHz)	20dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
2402	0.261	0.259
2440	0.261	0.258
2480	0.262	0.258

