

FCC Radio Test Report

FCC ID : 2AD37JIKMW115D
Equipment : 2.4GHz USB Receiver
Brand Name : j5create
Model Name : JIKMW115-D
Applicant : KAIJET TECHNOLOGY INTERNATIONAL CORPORATION
8F., No.109, Zhongcheng Rd., Tucheng Dist.,
New Taipei City 236, Taiwan, R.O.C.
Manufacturer : Magic Control Technology Corporation
10F., No.123, Zhongcheng Rd., Tucheng Dist.,
New Taipei City 236, Taiwan R.O.C.
Standard : 47 CFR FCC Part 15.247

The product was received on Jul. 26, 2021, and testing was started from Aug. 05, 2021 and completed on Aug. 09, 2021. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)



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PHOTOGRAPHS OF EUT V01



Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

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:
None

Reviewed by: Sam Tsai

Report Producer: Amber Chiu



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Modulation	Ch. Frequency (MHz)	Channel Number
2400-2483.5	GFSK	2403.85-2479.85	0-15 [16]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	GFSK	1	1TX

Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
0	2403.85	8	2441.85
1	2407.85	9	2445.85
2	2414.85	10	2453.85
3	2419.85	11	2459.85
4	2422.85	12	2463.85
5	2426.85	13	2466.85
6	2436.85	14	2473.85
7	2439.85	15	2479.85

Note:

- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	MCT	MA0D	PCB	N/A	0

Note 1: The EUT has one antenna.

For SRD 2.4GHz function:

For SRD 2.4GHz mode (1TX/1RX)

Only Ant. 1 can be used as transmitting/receiving.



1.1.3 EUT Information

Operational Condition				
EUT Power Type	From Host system			
EUT Function	<input type="checkbox"/> Point-to-multipoint	<input checked="" type="checkbox"/>	Point-to-point	
Beamforming Function	<input type="checkbox"/> With beamforming	<input checked="" type="checkbox"/>	Without beamforming	
Type of EUT				
<input checked="" type="checkbox"/>	Stand-alone			
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)			
	Combined Equipment - Brand Name / Model No.: ...			
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)			
	Host System - Brand Name / Model No.: ...			
<input type="checkbox"/>	Other:			

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
GFSK	0.017	17.7	134.375u	10k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

1.2 Testing Applied Standards

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

- ◆ 47 CFR FCC Part 15
- ◆ ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of TAF:

- ◆ KDB 558074 D01 v05r02
- ◆ KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
<input checked="" type="checkbox"/> Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Billy Wang	20.1~26.9°C / 59~63%	09/Aug/2021
RF Conducted	TH01-HY	Barry Hsiao	24.9~25.7°C / 55~64%	09/Aug/2021
Radiated	03CH03-HY	Billy Wang	23.1~23.5°C / 58~60%	05/Aug/2021
<input type="checkbox"/> Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode




Test Software Version	CompX Test V1.1
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Mode	Power Setting
GFSK	-
2403.85MHz	default
2441.85MHz	default
2479.85MHz	default

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	USB Mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests			
Tests Item	Emissions in Restricted Frequency Bands		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	CTX		
1	USB Mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	



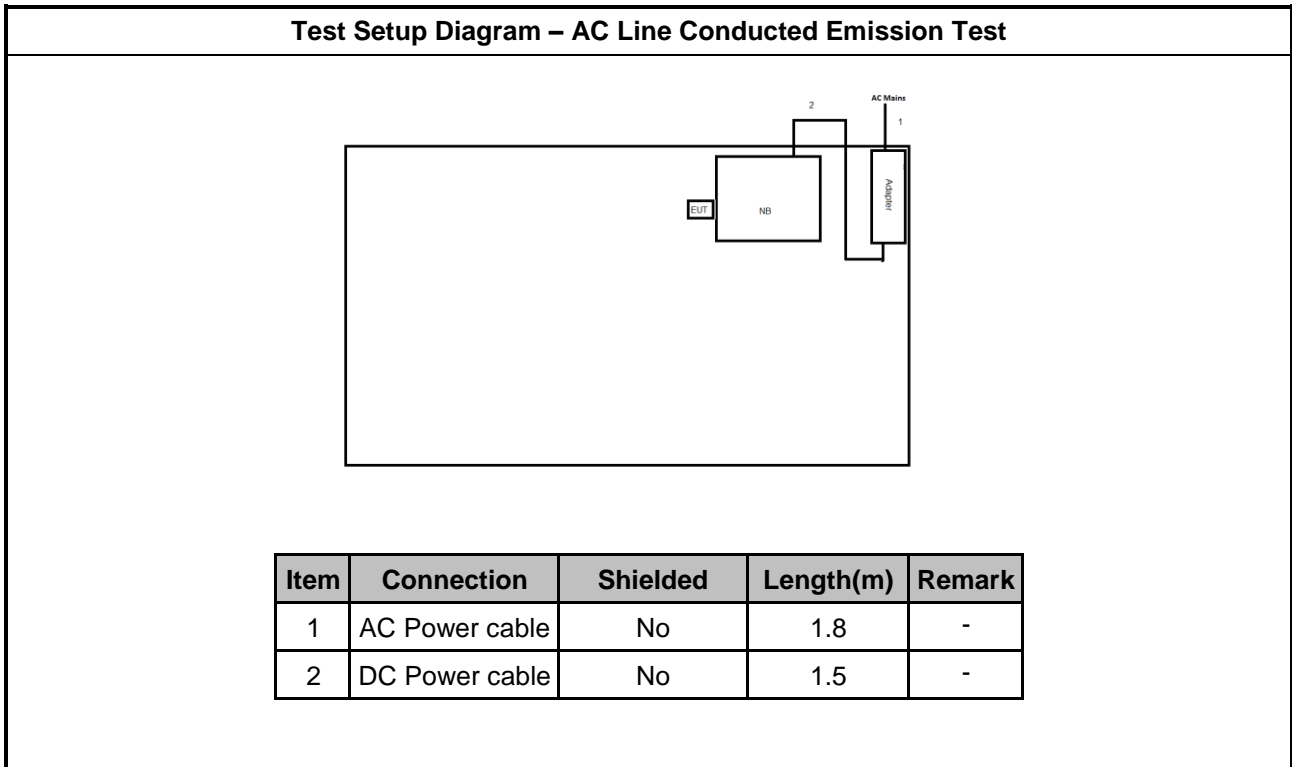
2.3 Support Equipment

Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	HP	5220M	-	-
2	Adapter(for NB)	HP	PPP009D	-	-

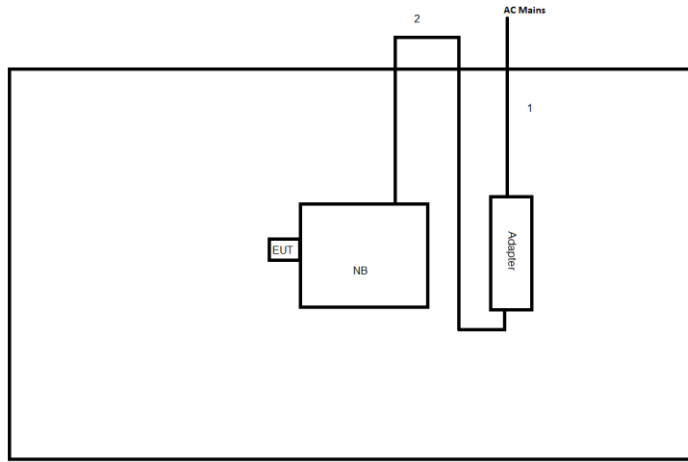
Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-

Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	HP	5220M	-	-
2	Adapter(for NB)	HP	PPP009D	-	-

2.4 Test Setup Diagram



Test Setup Diagram - Radiated Test (TX)



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.5	-



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

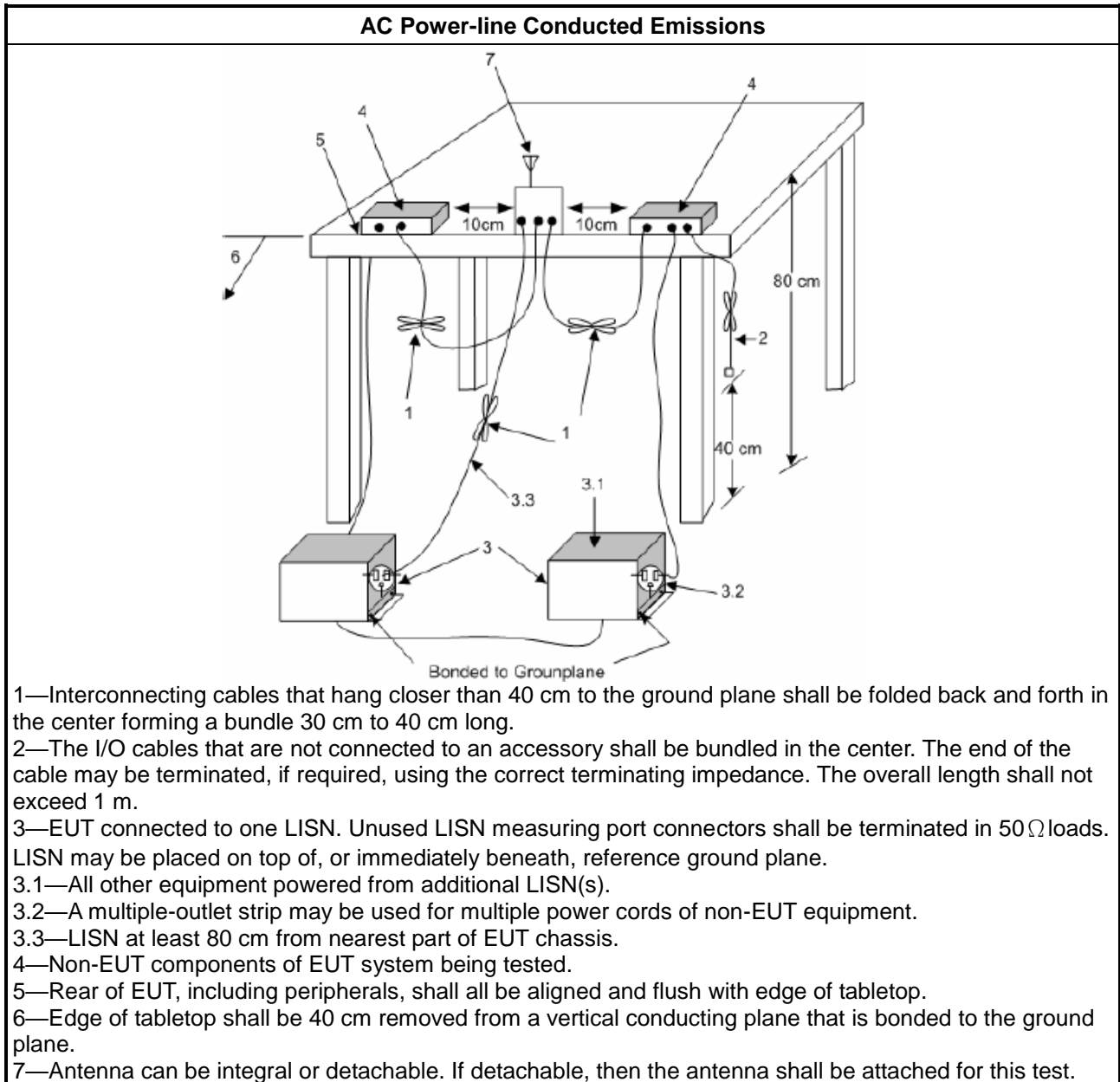
Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
<ul style="list-style-type: none"> ▪ 6 dB bandwidth \geq 500 kHz.

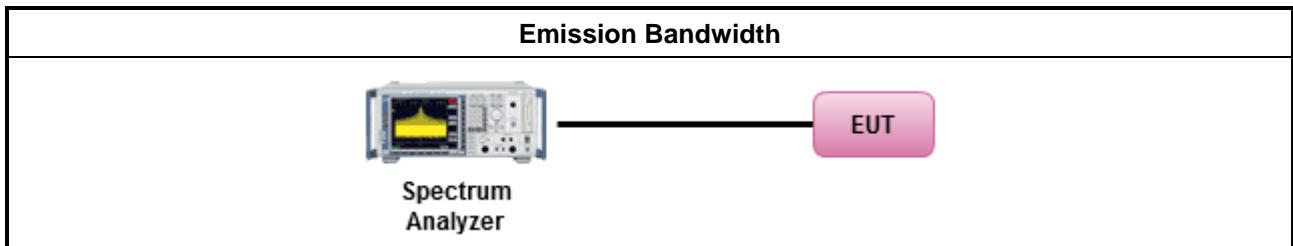
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/> Refer as KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
<input type="checkbox"/> Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
<input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	<ul style="list-style-type: none"> ▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS): <ul style="list-style-type: none"> - Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm - Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm - Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
e.i.r.p. Power Limit:	
	<ul style="list-style-type: none"> ▪ 2400-2483.5 MHz Band
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS) <ul style="list-style-type: none"> - Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm - Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm - Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

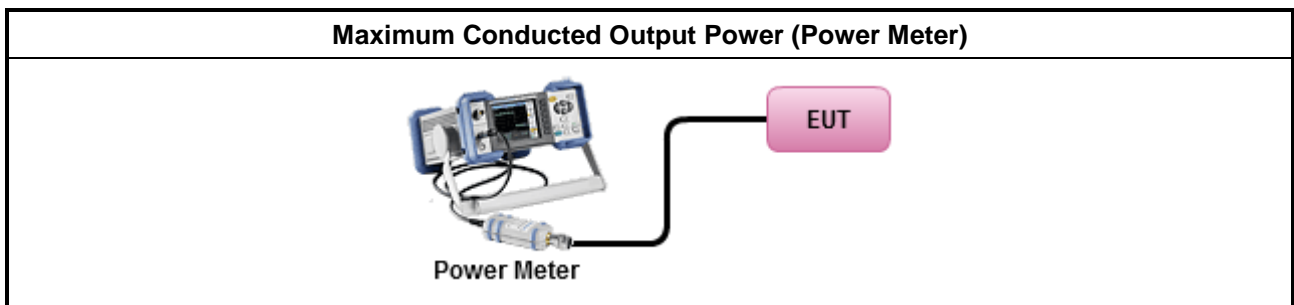
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Maximum Peak Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
<ul style="list-style-type: none"> ▪ Maximum Average Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. 	
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
<ul style="list-style-type: none"> Power Spectral Density (PSD) \leq 8 dBm/3kHz

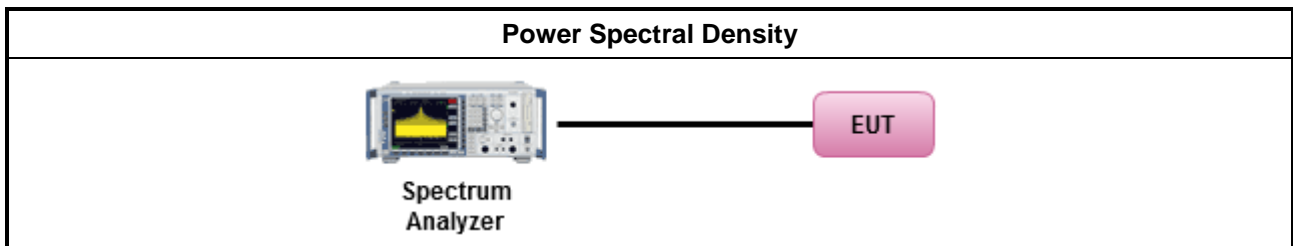
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
<input checked="" type="checkbox"/> Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
<ul style="list-style-type: none"> For conducted measurement. <ul style="list-style-type: none"> If The EUT supports multiple transmit chains using options given below: <ul style="list-style-type: none"> Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average level.

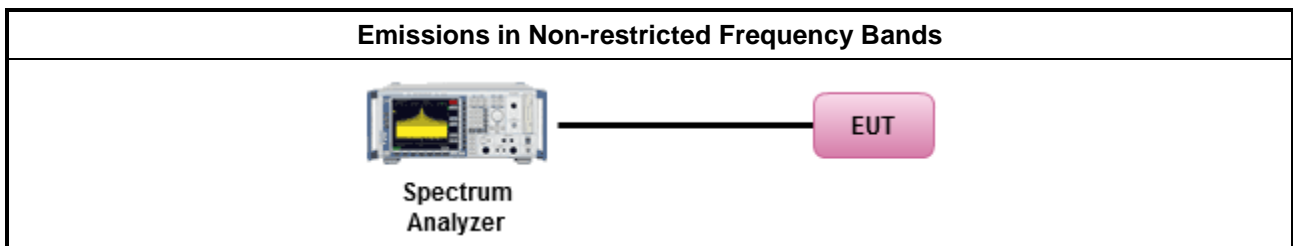
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
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: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

3.6.2 Measuring Instruments

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



3.6.3 Test Procedures

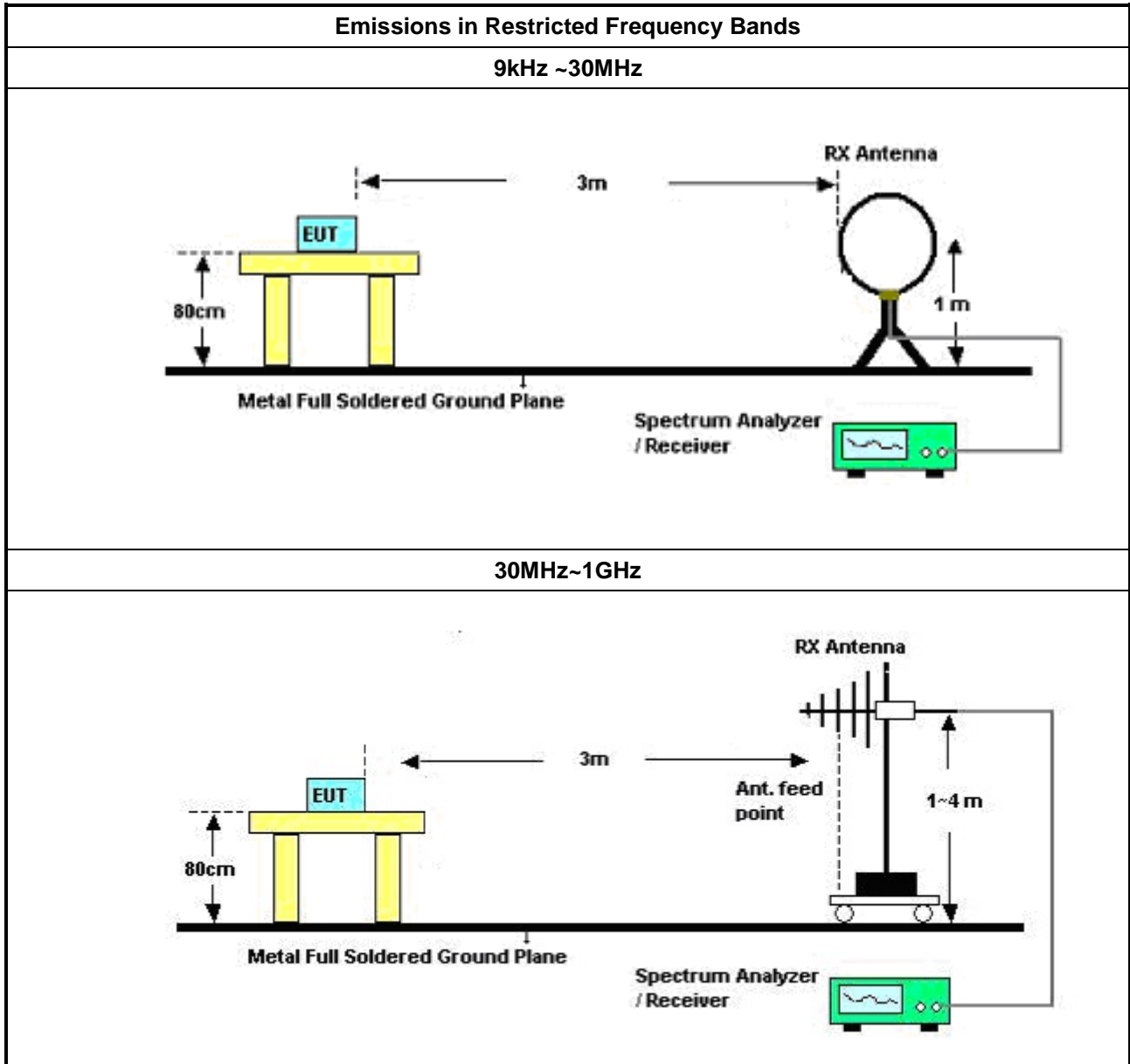
Test Method	
	<ul style="list-style-type: none"> The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
	<ul style="list-style-type: none"> Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
	<ul style="list-style-type: none"> For the transmitter unwanted emissions shall be measured using following options below:
	<ul style="list-style-type: none"> Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
	<ul style="list-style-type: none"> For the transmitter band-edge emissions shall be measured using following options below:
	<ul style="list-style-type: none"> Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	<ul style="list-style-type: none"> Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none"> Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
	<ul style="list-style-type: none"> Use the following spectrum analyzer settings:
	<ul style="list-style-type: none"> Set RBW=100 kHz for f < 1 GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	<ul style="list-style-type: none"> Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement. For average measurement, refer as 1.1.4.
	<ul style="list-style-type: none"> KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.
	<ul style="list-style-type: none"> Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	<ul style="list-style-type: none"> Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

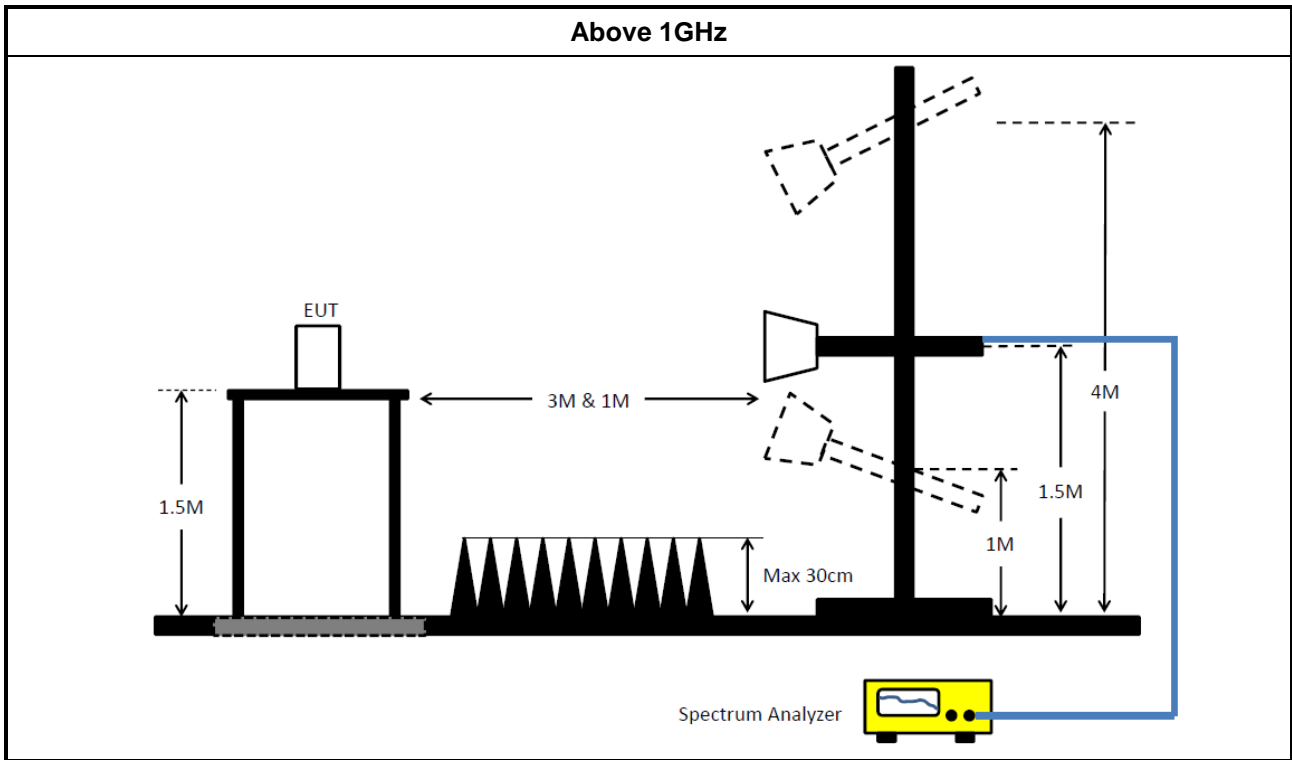
3.6.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

3.6.5 Test Setup





3.6.6 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR	102052	9kHz ~ 3.6GHz	19/Apr/2021	18/Apr/2022
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	11/Nov/2020	10/Nov/2021
RF Cable 5m	TITAN	TITAN	CO04-cable-01	0.1MHz~200MHz	03/Mar/2021	02/Mar/2022
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	21/Sep/2020	20/Sep/2021

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101013	10Hz~40GHz	30/Mar/2021	29/Mar/2022
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	20/Oct/2020	19/Oct/2021
Pulse Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	23/Feb/2021	22/Feb/2022
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	23/Feb/2021	22/Feb/2022

**Instrument for Radiated Test**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	04/Aug/2021	03/Aug/2022
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz~18GHz 3m	03/Aug/2021	02/Aug/2022
Signal Analyzer	R&S	FSV40	101500	10Hz~40GHz	19/Aug/2020	18/Aug/2021
Amplifier	HP	8447D	2944A08033	10kHz~1.3GHz	13/Apr/2021	12/Apr/2022
Microwave System Preamplifier	KEYSIGHT	83017A	MY53270196	1GHz~26.5GHz	06/Oct/2020	05/Oct/2021
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	06/Sep/2020	05/Sep/2021
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz~18GHz	24/Mar/2021	23/Mar/2022
RF Cable-R03m	Jye Bao	RG142	MY37335/4+CB021 -1+CB021-2	30MHz~1GHz	17/Mar/2021	16/Mar/2022
RF CABLE 5+6m	HUBER+SUHNER	SUOFLEX 104	SN MY38596/4+SN 804300/4	1GHz~40GHz	28/Jul/2021	27/Jul/2022
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	11/Mar/2021	10/Mar/2022
Microwave Prempplier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	09/Mar/2021	08/Mar/2022
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	16/Mar/2021	15/Mar/2022
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	19/Apr/2021	18/Apr/2022
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz~30MHz	16/Jun/2021	15/Jun/2022



Summary

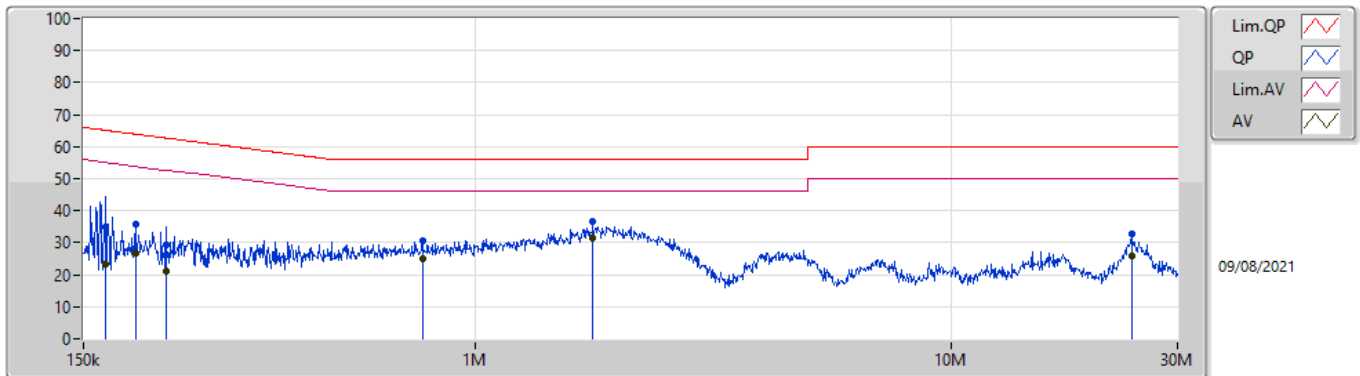
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	1.768M	31.56	46.00	-14.44	Line



Mode Config

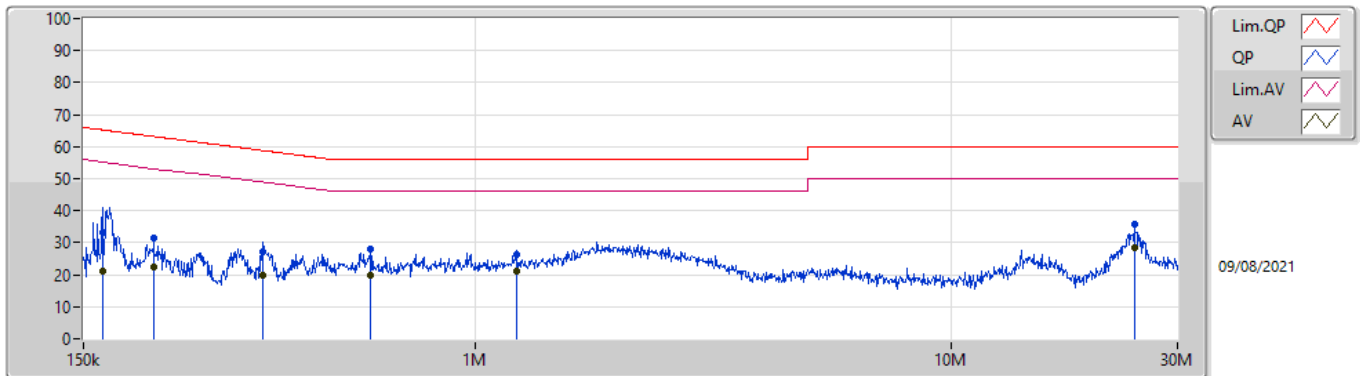
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	167.071k	35.10	65.10	-30.00	Line	-
Mode 1	Pass	AV	167.071k	23.07	55.10	-32.03	Line	-
Mode 1	Pass	QP	192.892k	35.59	63.92	-28.33	Line	-
Mode 1	Pass	AV	192.892k	26.69	53.92	-27.23	Line	-
Mode 1	Pass	QP	223.595k	29.22	62.69	-33.47	Line	-
Mode 1	Pass	AV	223.595k	21.02	52.69	-31.67	Line	-
Mode 1	Pass	QP	773.833k	30.69	56.00	-25.31	Line	-
Mode 1	Pass	AV	773.833k	25.17	46.00	-20.83	Line	-
Mode 1	Pass	QP	1.768M	36.59	56.00	-19.41	Line	-
Mode 1	Pass	AV	1.768M	31.56	46.00	-14.44	Line	-
Mode 1	Pass	QP	24.064M	32.77	60.00	-27.23	Line	-
Mode 1	Pass	AV	24.064M	26.04	50.00	-23.96	Line	-
Mode 1	Pass	QP	164.425k	33.18	65.24	-32.06	Neutral	-
Mode 1	Pass	AV	164.425k	21.09	55.24	-34.15	Neutral	-
Mode 1	Pass	QP	210.599k	31.55	63.19	-31.64	Neutral	-
Mode 1	Pass	AV	210.599k	22.42	53.19	-30.77	Neutral	-
Mode 1	Pass	QP	358.13k	27.21	58.77	-31.56	Neutral	-
Mode 1	Pass	AV	358.13k	20.03	48.77	-28.74	Neutral	-
Mode 1	Pass	QP	601.76k	27.99	56.00	-28.01	Neutral	-
Mode 1	Pass	AV	601.76k	19.65	46.00	-26.35	Neutral	-
Mode 1	Pass	QP	1.22M	26.40	56.00	-29.60	Neutral	-
Mode 1	Pass	AV	1.22M	21.15	46.00	-24.85	Neutral	-
Mode 1	Pass	QP	24.452M	35.69	60.00	-24.31	Neutral	-
Mode 1	Pass	AV	24.452M	28.64	50.00	-21.36	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	167.071k	35.10	65.10	-30.00	19.63	Line	-	15.47	9.69	0.04	9.90
AV	167.071k	23.07	55.10	-32.03	19.63	Line	-	3.44	9.69	0.04	9.90
QP	192.892k	35.59	63.92	-28.33	19.62	Line	-	15.97	9.68	0.04	9.90
AV	192.892k	26.69	53.92	-27.23	19.62	Line	-	7.07	9.68	0.04	9.90
QP	223.595k	29.22	62.69	-33.47	19.62	Line	-	9.60	9.68	0.04	9.90
AV	223.595k	21.02	52.69	-31.67	19.62	Line	-	1.40	9.68	0.04	9.90
QP	773.833k	30.69	56.00	-25.31	19.57	Line	-	11.12	9.67	0.07	9.83
AV	773.833k	25.17	46.00	-20.83	19.57	Line	-	5.60	9.67	0.07	9.83
QP	1.768M	36.59	56.00	-19.41	19.58	Line	-	17.01	9.68	0.10	9.80
AV	1.768M	31.56	46.00	-14.44	19.58	Line	-	11.98	9.68	0.10	9.80
QP	24.064M	32.77	60.00	-27.23	19.83	Line	-	12.94	9.61	0.32	9.90
AV	24.064M	26.04	50.00	-23.96	19.83	Line	-	6.21	9.61	0.32	9.90

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	164.425k	33.18	65.24	-32.06	19.63	Neutral	-	13.55	9.69	0.04	9.90
AV	164.425k	21.09	55.24	-34.15	19.63	Neutral	-	1.46	9.69	0.04	9.90
QP	210.599k	31.55	63.19	-31.64	19.62	Neutral	-	11.93	9.68	0.04	9.90
AV	210.599k	22.42	53.19	-30.77	19.62	Neutral	-	2.80	9.68	0.04	9.90
QP	358.13k	27.21	58.77	-31.56	19.63	Neutral	-	7.58	9.67	0.06	9.90
AV	358.13k	20.03	48.77	-28.74	19.63	Neutral	-	0.40	9.67	0.06	9.90
QP	601.76k	27.99	56.00	-28.01	19.60	Neutral	-	8.39	9.67	0.07	9.86
AV	601.76k	19.65	46.00	-26.35	19.60	Neutral	-	0.05	9.67	0.07	9.86
QP	1.22M	26.40	56.00	-29.60	19.56	Neutral	-	6.84	9.67	0.09	9.80
AV	1.22M	21.15	46.00	-24.85	19.56	Neutral	-	1.59	9.67	0.09	9.80
QP	24.452M	35.69	60.00	-24.31	19.95	Neutral	-	15.74	9.73	0.32	9.90
AV	24.452M	28.64	50.00	-21.36	19.95	Neutral	-	8.69	9.73	0.32	9.90



Summary

Mode	Max-N dB	Max-OBW	ITU-Code	Min-N dB	Min-OBW
	(Hz)	(Hz)		(Hz)	(Hz)
2.4-2.4835GHz	-	-	-	-	-
GFSK_Nss1_1TX	1.678M	2.901M	2M90F1D	1.593M	2.324M

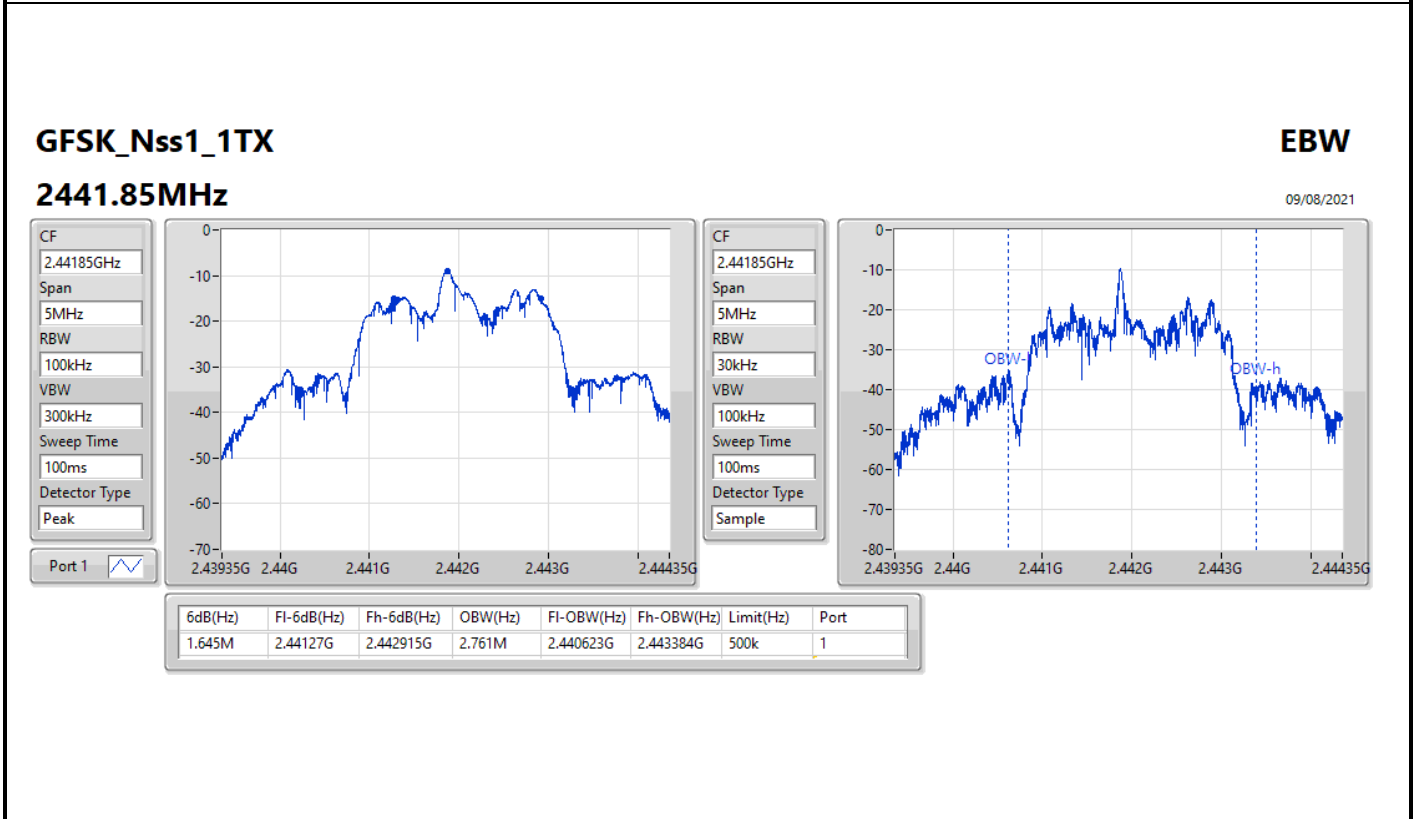
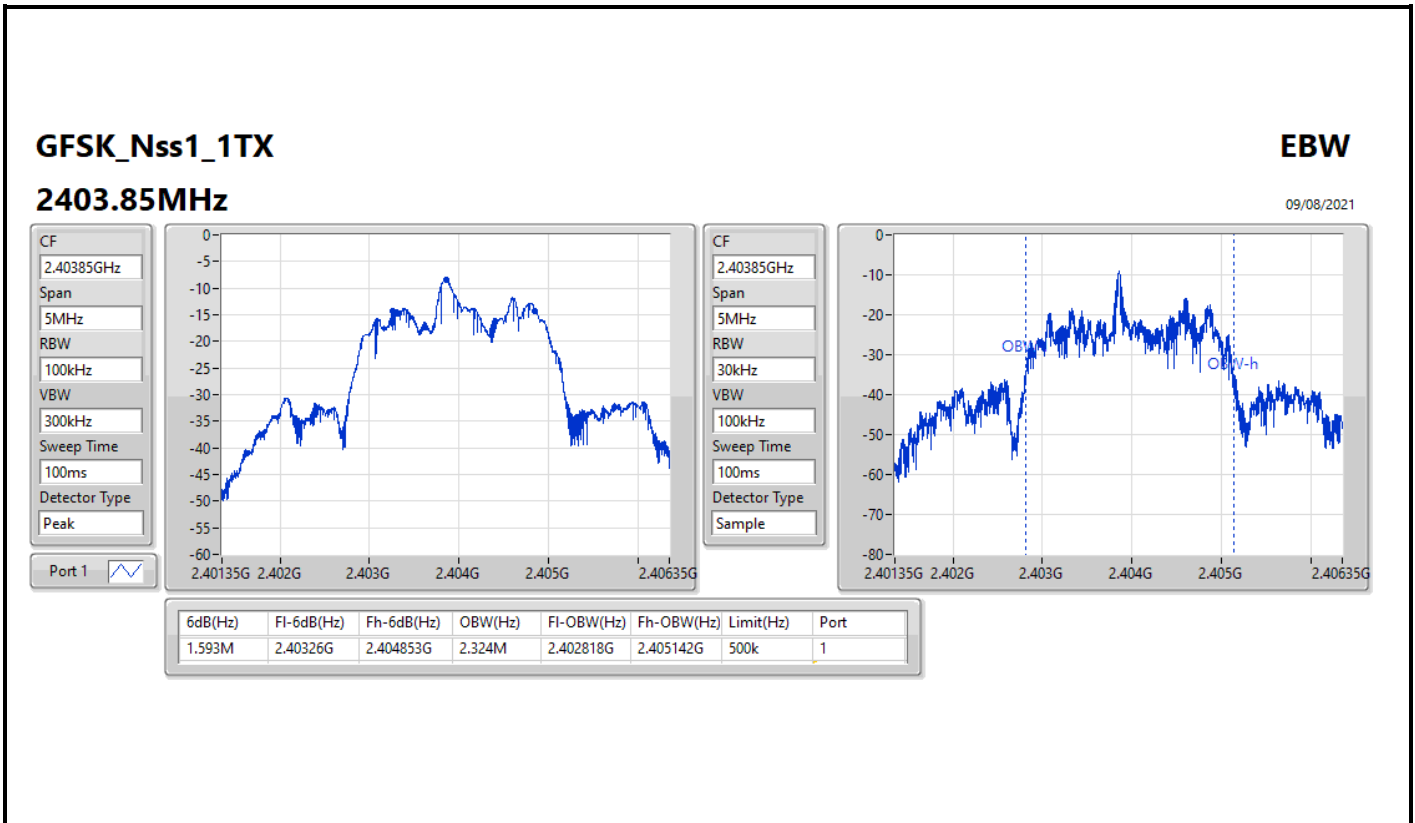
Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
GFSK_Nss1_1TX	-	-	-	-
2403.85MHz	Pass	500k	1.593M	2.324M
2441.85MHz	Pass	500k	1.645M	2.761M
2479.85MHz	Pass	500k	1.678M	2.901M

Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

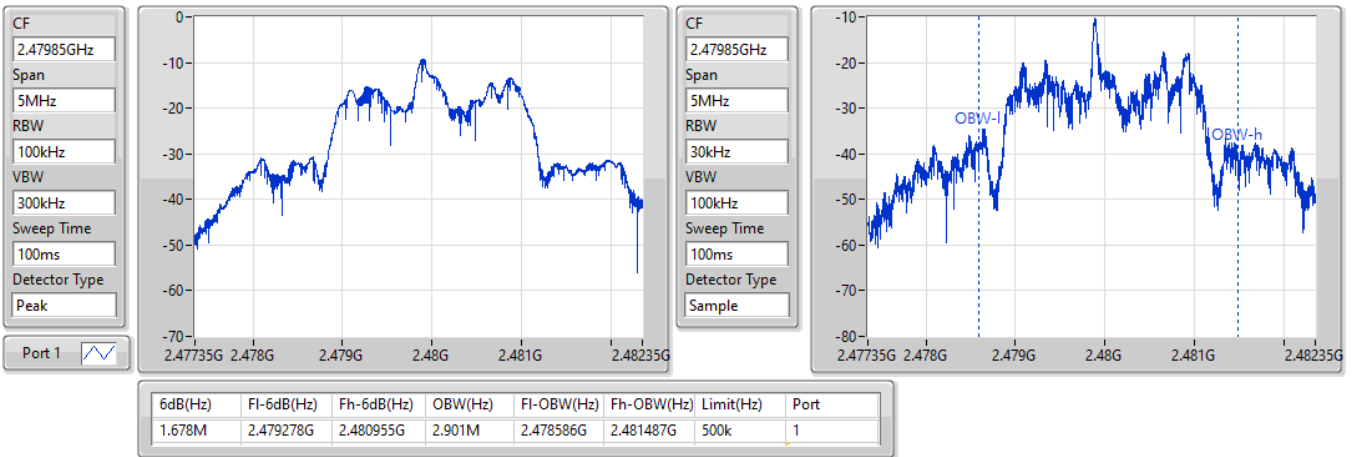


GFSK_Nss1_1TX

EBW

2479.85MHz

09/08/2021





Summary

Mode	Total Power	Total Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
GFSK_Nss1_1TX	-9.46	0.00011



Result

Mode	Result	DG	Port 1	Total Power	Power Limit
		(dBi)	(dBm)	(dBm)	(dBm)
GFSK_Nss1_1TX	-	-	-	-	-
2403.85MHz	Pass	0.00	-11.40	-11.40	30.00
2441.85MHz	Pass	0.00	-9.46	-9.46	30.00
2479.85MHz	Pass	0.00	-10.46	-10.46	30.00

DG = Directional Gain; Port X = Port X output power



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
GFSK_Nss1_1TX	-23.58

RBW = 3kHz;



Result

Mode	Result	DG	Port 1	PD	PD Limit
		(dBi)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
GFSK_Nss1_1TX	-	-	-	-	-
2403.85MHz	Pass	0.00	-23.58	-23.58	8.00
2441.85MHz	Pass	0.00	-24.13	-24.13	8.00
2479.85MHz	Pass	0.00	-24.50	-24.50	8.00

DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

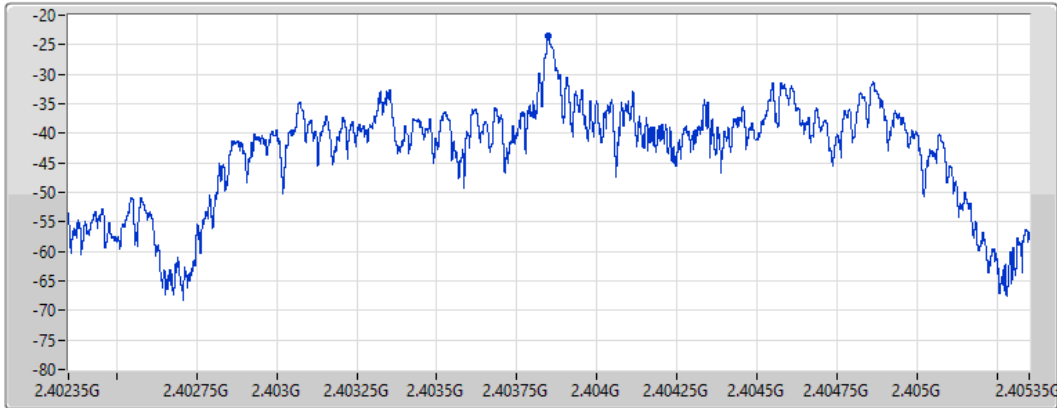
GFSK_Nss1_1TX


PSD

2403.85MHz

09/08/2021

CF
2.40385GHz
Span
3MHz
RBW
3kHz
VBW
10kHz
Sweep Time
632.01845us
Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-23.58	-23.58	-23.58

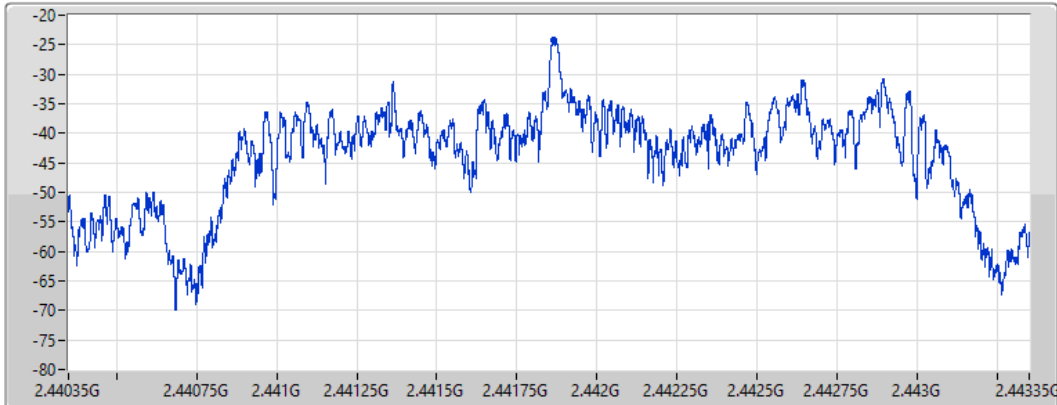
GFSK_Nss1_1TX


PSD

2441.85MHz

09/08/2021

CF
2.44185GHz
Span
3MHz
RBW
3kHz
VBW
10kHz
Sweep Time
33.4ms
Detector Type
Peak



Port 1 

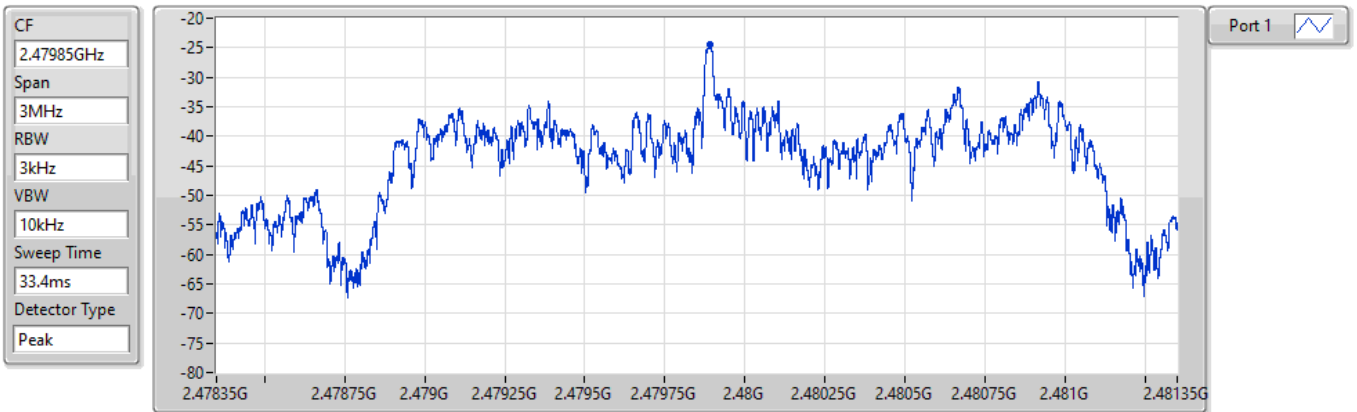
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-24.13	-24.13	-24.13

GFSK_Nss1_1TX

PSD

2479.85MHz

09/08/2021



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-24.50	-24.50	-24.50



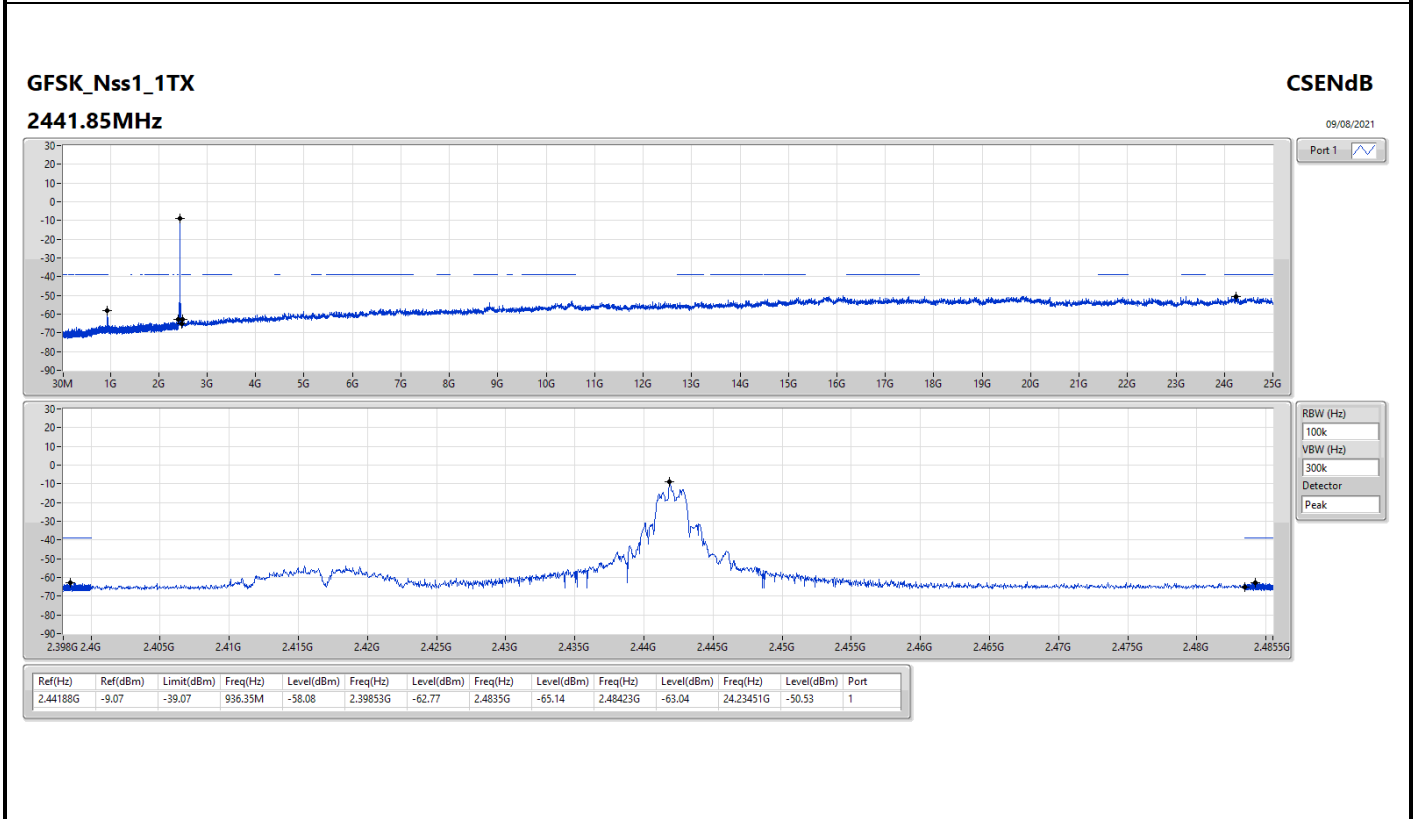
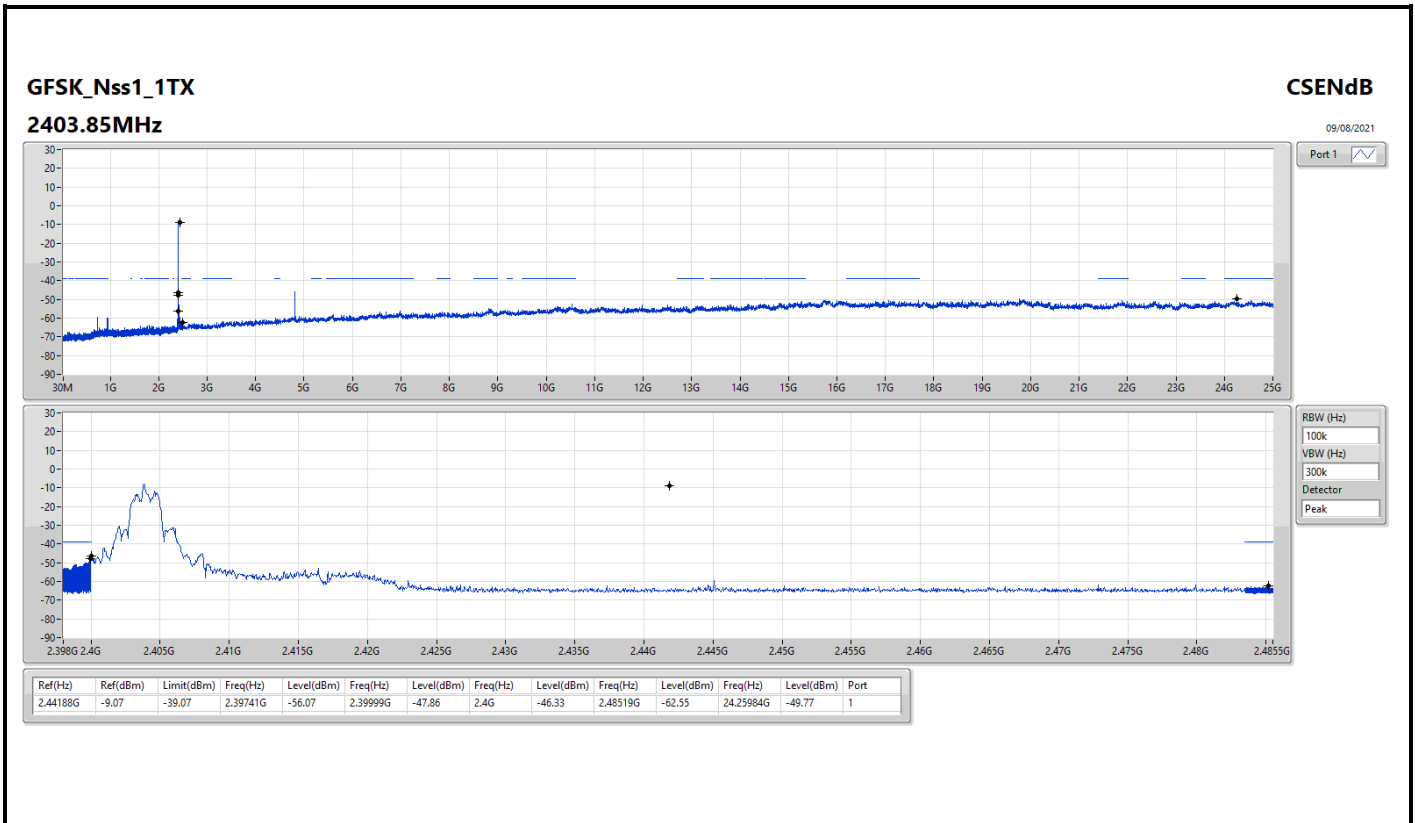
Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GFSK_Nss1_1TX	Pass	2.44188G	-9.07	-39.07	936.35M	-59.71	2.39888G	-62.92	2.4835G	-51.30	2.484G	-45.80	24.53845G	-49.92	1



Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
GFSK_Nss1_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2403.85MHz	Pass	2.44188G	-9.07	-39.07	2.39741G	-56.07	2.39999G	-47.86	2.4G	-46.33	2.48519G	-62.55	24.25984G	-49.77	1
2441.85MHz	Pass	2.44188G	-9.07	-39.07	936.35M	-58.08	2.39853G	-62.77	2.4835G	-65.14	2.48423G	-63.04	24.23451G	-50.53	1
2479.85MHz	Pass	2.44188G	-9.07	-39.07	936.35M	-59.71	2.39888G	-62.92	2.4835G	-51.30	2.484G	-45.80	24.53845G	-49.92	1





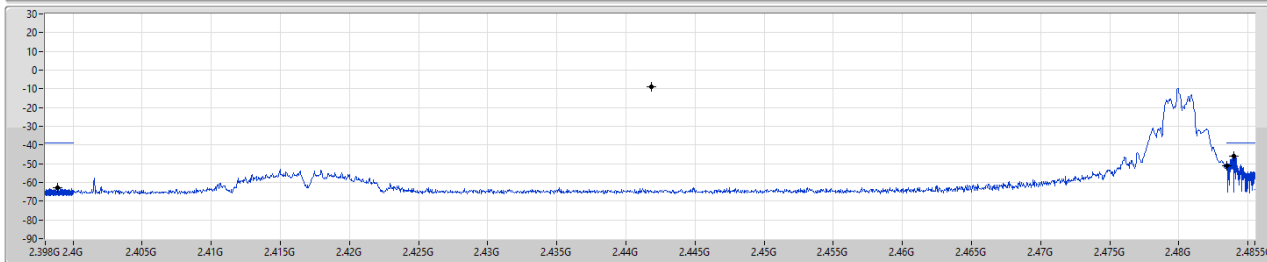
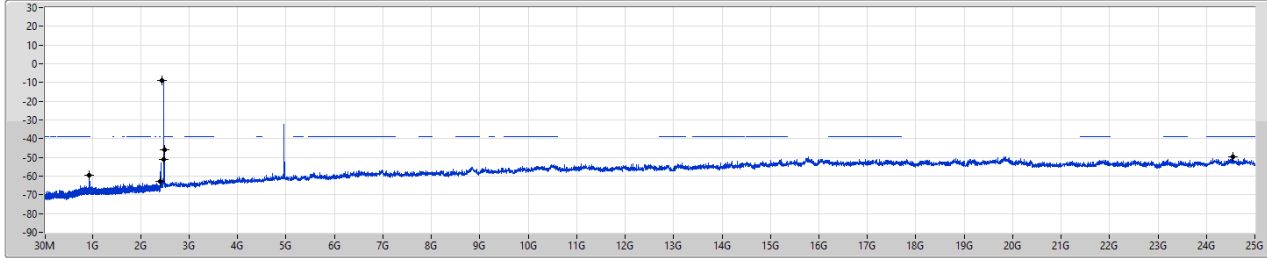
GFSK_Nss1_1TX

2479.85MHz

CSEndB

09/08/2021

Port 1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44188G	-9.07	-39.07	936.35M	-59.71	2.39888G	-62.92	2.4835G	-51.30	2.484G	-45.80	2.483845G	-49.92	1



Summary

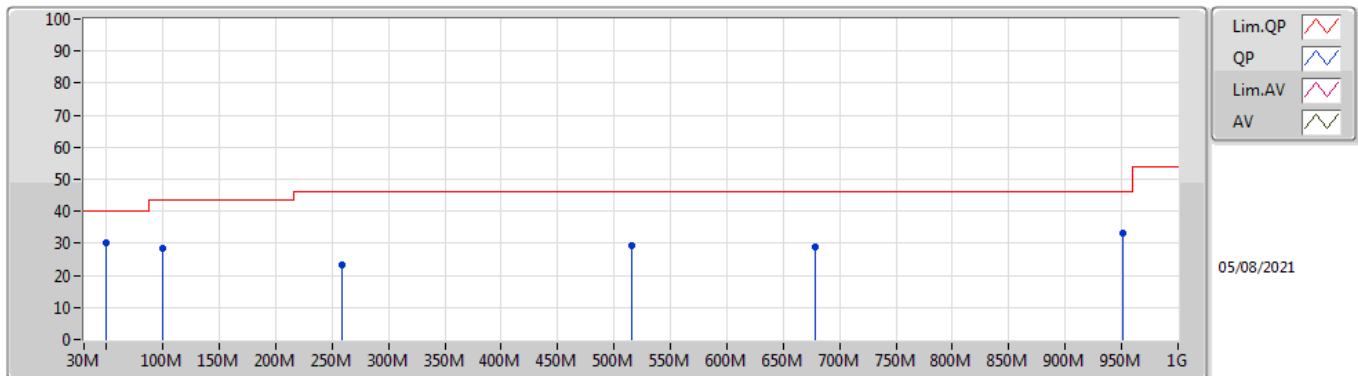
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
GFSK_Nss1_1TX	Pass	PK	49.4M	30.29	40.00	-9.71	3	Vertical	360	1.00	-



Result

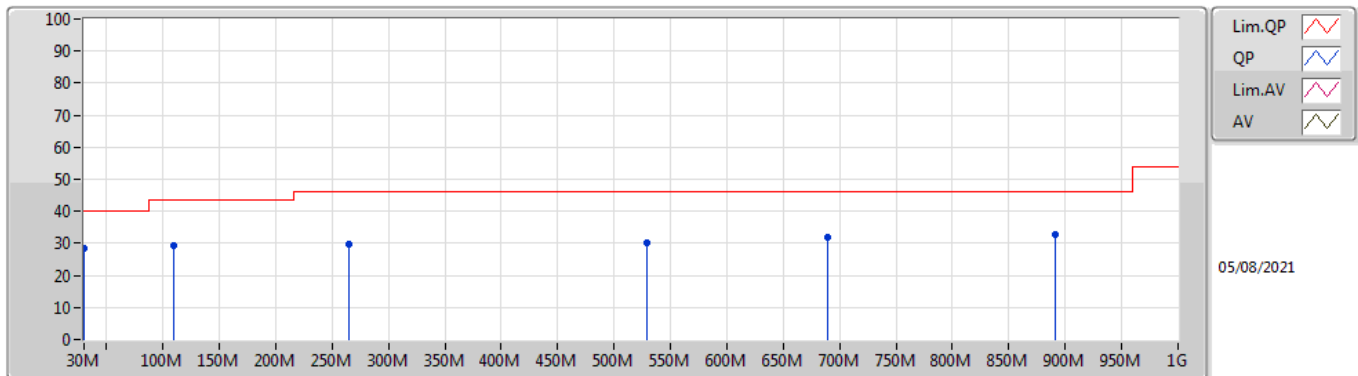
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
GFSK_Nss1_1TX	-	-	-	-	-	-	-	-	-	-	-
2441.85MHz	Pass	PK	49.4M	30.29	40.00	-9.71	3	Vertical	360	1.00	-
2441.85MHz	Pass	PK	99.84M	28.31	43.50	-15.19	3	Vertical	360	1.00	-
2441.85MHz	Pass	PK	258.92M	23.25	46.00	-22.75	3	Vertical	360	1.00	-
2441.85MHz	Pass	PK	515M	29.38	46.00	-16.62	3	Vertical	360	1.00	-
2441.85MHz	Pass	PK	677.96M	28.92	46.00	-17.08	3	Vertical	360	1.00	-
2441.85MHz	Pass	PK	951.5M	33.23	46.00	-12.77	3	Vertical	360	1.00	-
2441.85MHz	Pass	PK	30M	28.44	40.00	-11.56	3	Horizontal	0	1.00	-
2441.85MHz	Pass	PK	109.54M	29.43	43.50	-14.07	3	Horizontal	0	1.00	-
2441.85MHz	Pass	PK	264.74M	29.55	46.00	-16.45	3	Horizontal	0	1.00	-
2441.85MHz	Pass	PK	528.58M	30.02	46.00	-15.98	3	Horizontal	0	1.00	-
2441.85MHz	Pass	PK	689.6M	32.01	46.00	-13.99	3	Horizontal	0	1.00	-
2441.85MHz	Pass	PK	891.36M	32.61	46.00	-13.39	3	Horizontal	0	1.00	-

GFSK_Nss1_1TX
2441.85MHz_USB



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	49.4M	30.29	40.00	-9.71	-13.10	3	Vertical	360	1.00	-	43.39	13.40	1.13	27.63
PK	99.84M	28.31	43.50	-15.19	-9.60	3	Vertical	360	1.00	-	37.91	16.09	1.70	27.39
PK	258.92M	23.25	46.00	-22.75	-5.38	3	Vertical	360	1.00	-	28.63	18.64	2.71	26.73
PK	515M	29.38	46.00	-16.62	-1.06	3	Vertical	360	1.00	-	30.44	22.83	3.93	27.82
PK	677.96M	28.92	46.00	-17.08	0.63	3	Vertical	360	1.00	-	28.29	24.17	4.55	28.09
PK	951.5M	33.23	46.00	-12.77	4.29	3	Vertical	360	1.00	-	28.94	26.03	5.71	27.45

GFSK_Nss1_1TX
2441.85MHz_USB



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	30M	28.44	40.00	-11.56	-3.42	3	Horizontal	0	1.00	-	31.86	23.32	0.90	27.64
PK	109.54M	29.43	43.50	-14.07	-8.55	3	Horizontal	0	1.00	-	37.98	17.04	1.79	27.38
PK	264.74M	29.55	46.00	-16.45	-5.41	3	Horizontal	0	1.00	-	34.96	18.59	2.74	26.74
PK	528.58M	30.02	46.00	-15.98	-1.02	3	Horizontal	0	1.00	-	31.04	22.93	3.99	27.94
PK	689.6M	32.01	46.00	-13.99	0.69	3	Horizontal	0	1.00	-	31.32	24.17	4.59	28.07
PK	891.36M	32.61	46.00	-13.39	3.30	3	Horizontal	0	1.00	-	29.31	25.62	5.29	27.61



Summary

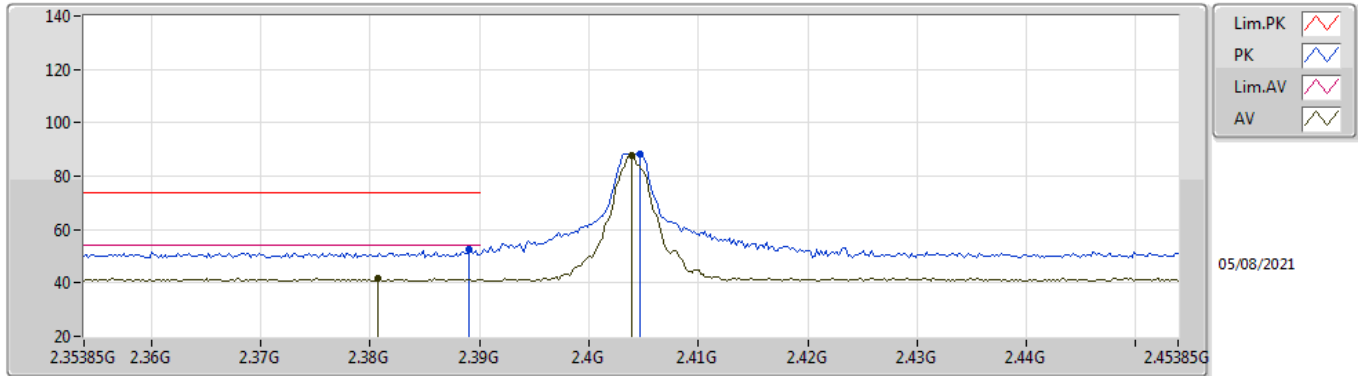
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
GFSK_Nss1_1TX	Pass	AV	2.4835G	53.27	54.00	-0.73	3	Vertical	335	1.00	-



Result

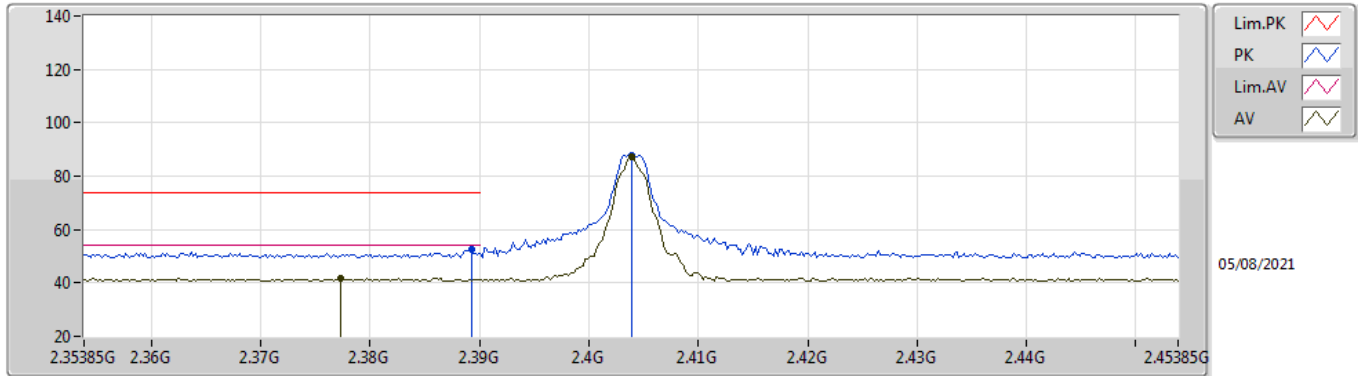
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
GFSK_Nss1_TX	-	-	-	-	-	-	-	-	-	-	-
2403.85MHz	Pass	AV	2.38065G	41.80	54.00	-12.20	3	Vertical	42	1.22	-
2403.85MHz	Pass	AV	2.40385G	87.81	Inf	-Inf	3	Vertical	42	1.22	-
2403.85MHz	Pass	PK	2.38905G	52.65	74.00	-21.35	3	Vertical	42	1.22	-
2403.85MHz	Pass	PK	2.40465G	88.45	Inf	-Inf	3	Vertical	42	1.22	-
2403.85MHz	Pass	AV	2.37725G	41.91	54.00	-12.09	3	Horizontal	236	1.31	-
2403.85MHz	Pass	AV	2.40385G	87.15	Inf	-Inf	3	Horizontal	236	1.31	-
2403.85MHz	Pass	PK	2.38925G	52.77	74.00	-21.23	3	Horizontal	236	1.31	-
2403.85MHz	Pass	PK	2.40385G	87.70	Inf	-Inf	3	Horizontal	236	1.31	-
2403.85MHz	Pass	AV	4.80752G	45.91	54.00	-8.09	3	Vertical	201	1.01	-
2403.85MHz	Pass	PK	4.8074G	50.18	74.00	-23.82	3	Vertical	201	1.01	-
2403.85MHz	Pass	AV	4.80758G	45.43	54.00	-8.57	3	Horizontal	247	1.95	-
2403.85MHz	Pass	PK	4.80926G	49.14	74.00	-24.86	3	Horizontal	247	1.95	-
2441.85MHz	Pass	AV	2.34945G	41.99	54.00	-12.01	3	Vertical	238	1.21	-
2441.85MHz	Pass	AV	2.44145G	88.31	Inf	-Inf	3	Vertical	238	1.21	-
2441.85MHz	Pass	AV	2.49625G	42.03	54.00	-11.97	3	Vertical	238	1.21	-
2441.85MHz	Pass	PK	2.38905G	52.15	74.00	-21.85	3	Vertical	238	1.21	-
2441.85MHz	Pass	PK	2.44265G	90.19	Inf	-Inf	3	Vertical	238	1.21	-
2441.85MHz	Pass	PK	2.48425G	51.32	74.00	-22.68	3	Vertical	238	1.21	-
2441.85MHz	Pass	AV	2.38505G	41.69	54.00	-12.31	3	Horizontal	178	2.13	-
2441.85MHz	Pass	AV	2.44225G	92.43	Inf	-Inf	3	Horizontal	178	2.13	-
2441.85MHz	Pass	AV	2.48665G	42.10	54.00	-11.90	3	Horizontal	178	2.13	-
2441.85MHz	Pass	PK	2.38945G	52.05	74.00	-21.95	3	Horizontal	178	2.13	-
2441.85MHz	Pass	PK	2.44185G	94.78	Inf	-Inf	3	Horizontal	178	2.13	-
2441.85MHz	Pass	PK	2.49665G	51.49	74.00	-22.51	3	Horizontal	178	2.13	-
2441.85MHz	Pass	AV	4.8837G	49.21	54.00	-4.79	3	Vertical	93	1.36	-
2441.85MHz	Pass	AV	7.32151G	43.24	54.00	-10.76	3	Vertical	263	1.97	-
2441.85MHz	Pass	PK	4.88352G	51.93	74.00	-22.07	3	Vertical	93	1.36	-
2441.85MHz	Pass	PK	7.32531G	52.75	74.00	-21.25	3	Vertical	263	1.97	-
2441.85MHz	Pass	AV	4.8837G	48.19	54.00	-5.81	3	Horizontal	122	1.50	-
2441.85MHz	Pass	AV	7.32115G	42.83	54.00	-11.17	3	Horizontal	18	1.50	-
2441.85MHz	Pass	PK	4.88254G	51.41	74.00	-22.59	3	Horizontal	122	1.50	-
2441.85MHz	Pass	PK	7.32095G	53.37	74.00	-20.63	3	Horizontal	18	1.50	-
2479.85MHz	Pass	AV	2.38145G	41.74	54.00	-12.26	3	Vertical	335	1.00	-
2479.85MHz	Pass	AV	2.47985G	90.10	Inf	-Inf	3	Vertical	335	1.00	-
2479.85MHz	Pass	AV	2.4835G	53.27	54.00	-0.73	3	Vertical	335	1.00	-
2479.85MHz	Pass	PK	2.38105G	51.48	74.00	-22.52	3	Vertical	335	1.00	-
2479.85MHz	Pass	PK	2.47985G	90.77	Inf	-Inf	3	Vertical	335	1.00	-
2479.85MHz	Pass	PK	2.4835G	65.04	74.00	-8.96	3	Vertical	335	1.00	-
2479.85MHz	Pass	AV	2.38905G	41.67	54.00	-12.33	3	Horizontal	356	1.85	-
2479.85MHz	Pass	AV	2.47985G	88.92	Inf	-Inf	3	Horizontal	356	1.85	-
2479.85MHz	Pass	AV	2.4835G	52.84	54.00	-1.16	3	Horizontal	356	1.85	-
2479.85MHz	Pass	PK	2.38785G	50.93	74.00	-23.07	3	Horizontal	356	1.85	-
2479.85MHz	Pass	PK	2.47905G	89.59	Inf	-Inf	3	Horizontal	356	1.85	-
2479.85MHz	Pass	PK	2.4835G	63.65	74.00	-10.35	3	Horizontal	356	1.85	-
2479.85MHz	Pass	AV	4.95971G	51.11	54.00	-2.89	3	Vertical	360	1.03	-
2479.85MHz	Pass	AV	7.44049G	43.03	54.00	-10.97	3	Vertical	241	1.54	-
2479.85MHz	Pass	PK	4.95962G	55.09	74.00	-18.91	3	Vertical	360	1.03	-
2479.85MHz	Pass	PK	7.43735G	52.81	74.00	-21.19	3	Vertical	241	1.54	-
2479.85MHz	Pass	AV	4.95971G	48.78	54.00	-5.22	3	Horizontal	129	1.80	-
2479.85MHz	Pass	AV	7.43963G	43.27	54.00	-10.73	3	Horizontal	111	1.41	-
2479.85MHz	Pass	PK	4.95964G	53.05	74.00	-20.95	3	Horizontal	129	1.80	-
2479.85MHz	Pass	PK	7.4378G	52.53	74.00	-21.47	3	Horizontal	111	1.41	-

GFSK_Nss1_1TX
2403.85MHz_TX



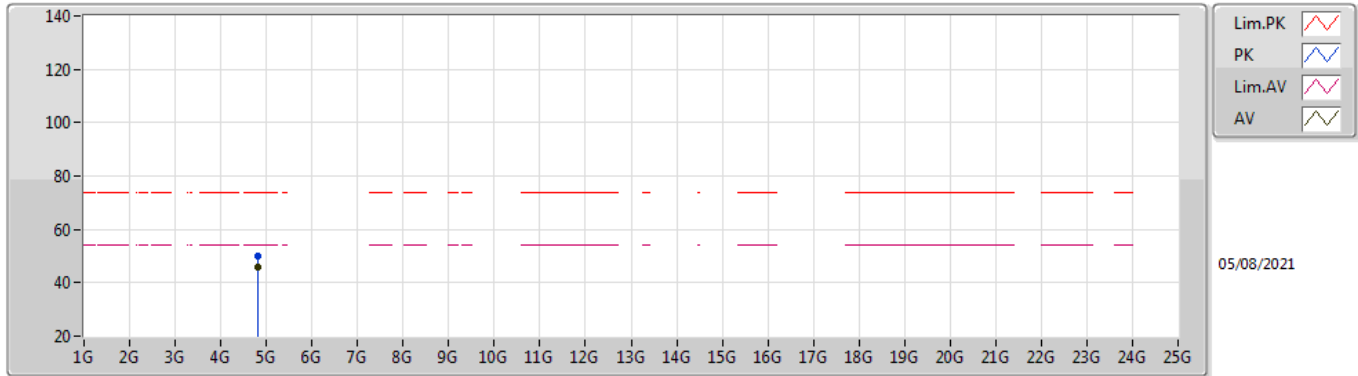
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AV	2.38065G	41.80	54.00	-12.20	2.02	3	Vertical	42	1.22	-	39.78	27.68	4.36	30.02
AV	2.40385G	87.81	Inf	-Inf	1.98	3	Vertical	42	1.22	-	85.83	27.60	4.39	30.01
PK	2.38905G	52.65	74.00	-21.35	1.99	3	Vertical	42	1.22	-	50.66	27.64	4.37	30.02
PK	2.40465G	88.45	Inf	-Inf	1.98	3	Vertical	42	1.22	-	86.47	27.60	4.39	30.01

GFSK_Nss1_1TX
2403.85MHz_TX



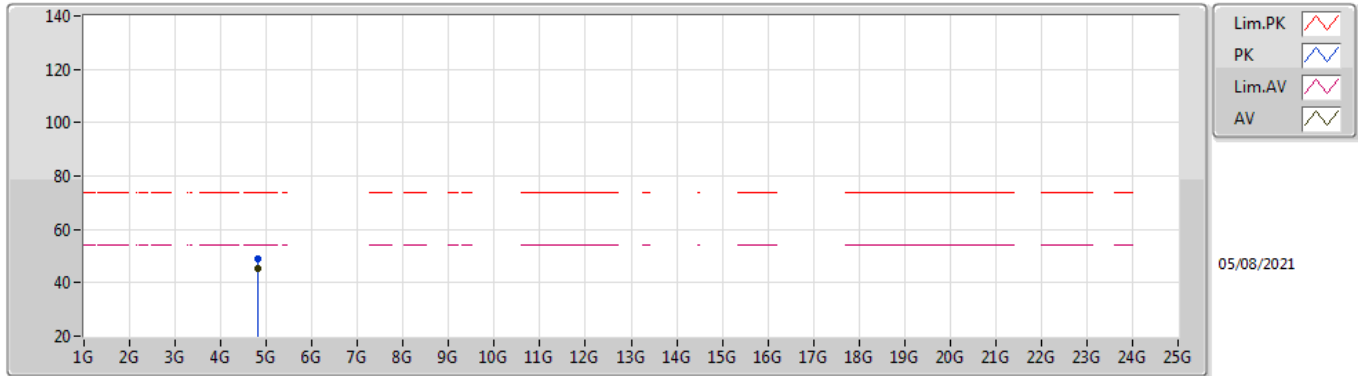
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AV	2.37725G	41.91	54.00	-12.09	2.03	3	Horizontal	236	1.31	-	39.88	27.69	4.36	30.02
AV	2.40385G	87.15	Inf	-Inf	1.98	3	Horizontal	236	1.31	-	85.17	27.60	4.39	30.01
PK	2.38925G	52.77	74.00	-21.23	1.99	3	Horizontal	236	1.31	-	50.78	27.64	4.37	30.02
PK	2.40385G	87.70	Inf	-Inf	1.98	3	Horizontal	236	1.31	-	85.72	27.60	4.39	30.01

GFSK_Nss1_1TX
2403.85MHz_TX



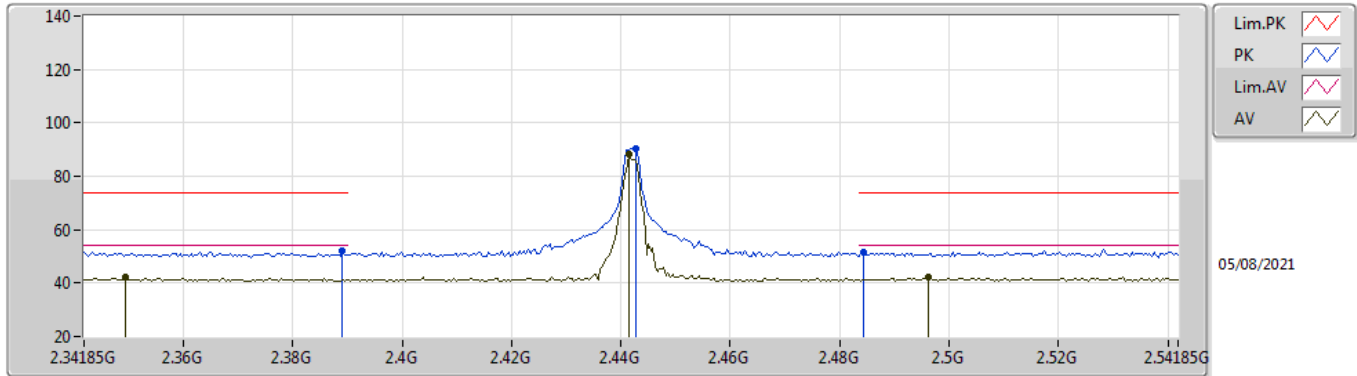
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AV	4.80752G	45.91	54.00	-8.09	8.15	3	Vertical	201	1.01	-	37.76	31.12	6.26	29.23
PK	4.8074G	50.18	74.00	-23.82	8.14	3	Vertical	201	1.01	-	42.04	31.11	6.26	29.23

GFSK_Nss1_1TX
2403.85MHz_TX



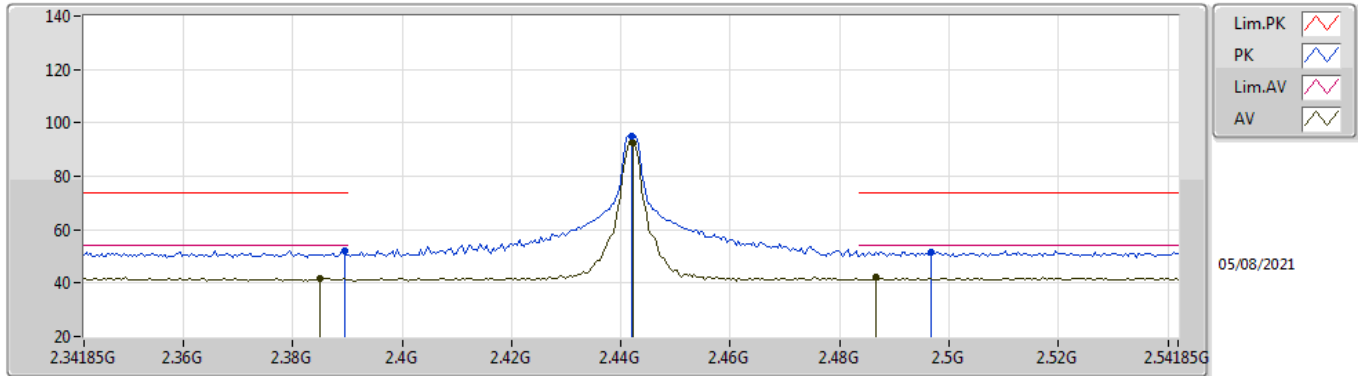
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AV	4.80758G	45.43	54.00	-8.57	8.15	3	Horizontal	247	1.95	-	37.28	31.12	6.26	29.23
PK	4.80926G	49.14	74.00	-24.86	8.16	3	Horizontal	247	1.95	-	40.98	31.12	6.27	29.23

GFSK_Nss1_1TX
2441.85MHz_TX



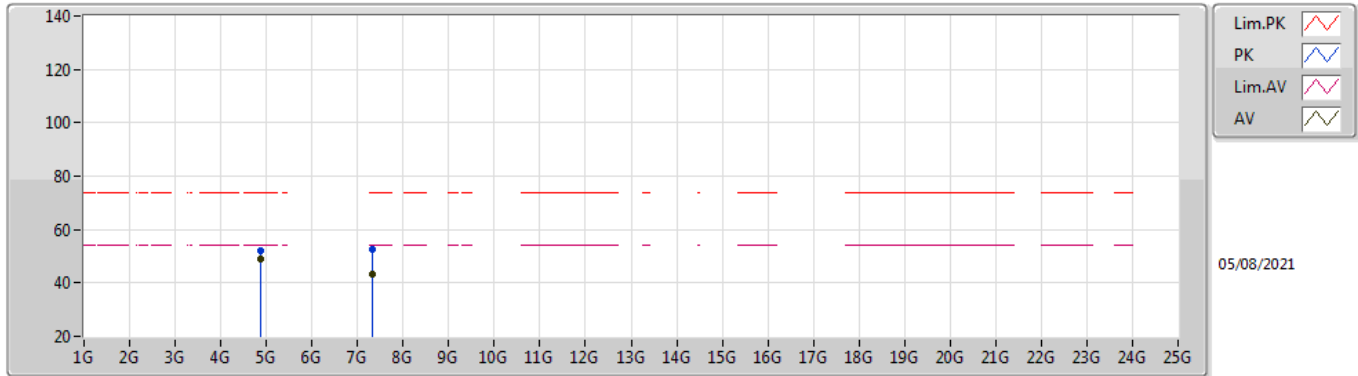
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AV	2.34945G	41.99	54.00	-12.01	2.09	3	Vertical	238	1.21	-	39.90	27.80	4.33	30.04
AV	2.44145G	88.31	Inf	-Inf	2.05	3	Vertical	238	1.21	-	86.26	27.60	4.44	29.99
AV	2.49625G	42.03	54.00	-11.97	2.25	3	Vertical	238	1.21	-	39.78	27.69	4.52	29.96
PK	2.38905G	52.15	74.00	-21.85	1.99	3	Vertical	238	1.21	-	50.16	27.64	4.37	30.02
PK	2.44265G	90.19	Inf	-Inf	2.05	3	Vertical	238	1.21	-	88.14	27.60	4.44	29.99
PK	2.48425G	51.32	74.00	-22.68	2.20	3	Vertical	238	1.21	-	49.12	27.67	4.50	29.97

GFSK_Nss1_1TX
2441.85MHz_TX



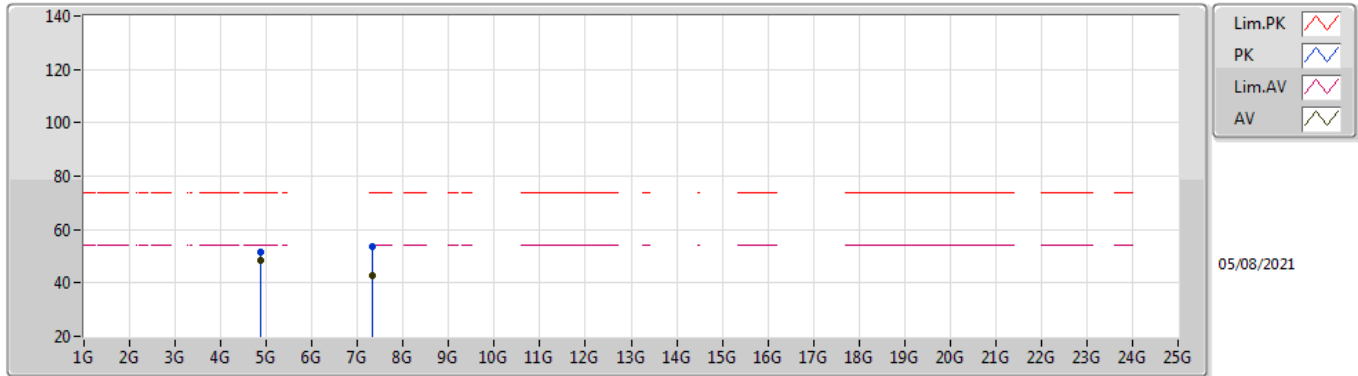
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AV	2.38505G	41.69	54.00	-12.31	2.00	3	Horizontal	178	2.13	-	39.69	27.66	4.36	30.02
AV	2.44225G	92.43	Inf	-Inf	2.05	3	Horizontal	178	2.13	-	90.38	27.60	4.44	29.99
AV	2.48665G	42.10	54.00	-11.90	2.21	3	Horizontal	178	2.13	-	39.89	27.67	4.51	29.97
PK	2.38945G	52.05	74.00	-21.95	1.99	3	Horizontal	178	2.13	-	50.06	27.64	4.37	30.02
PK	2.44185G	94.78	Inf	-Inf	2.05	3	Horizontal	178	2.13	-	92.73	27.60	4.44	29.99
PK	2.49665G	51.49	74.00	-22.51	2.25	3	Horizontal	178	2.13	-	49.24	27.69	4.52	29.96

GFSK_Nss1_1TX
2441.85MHz_TX



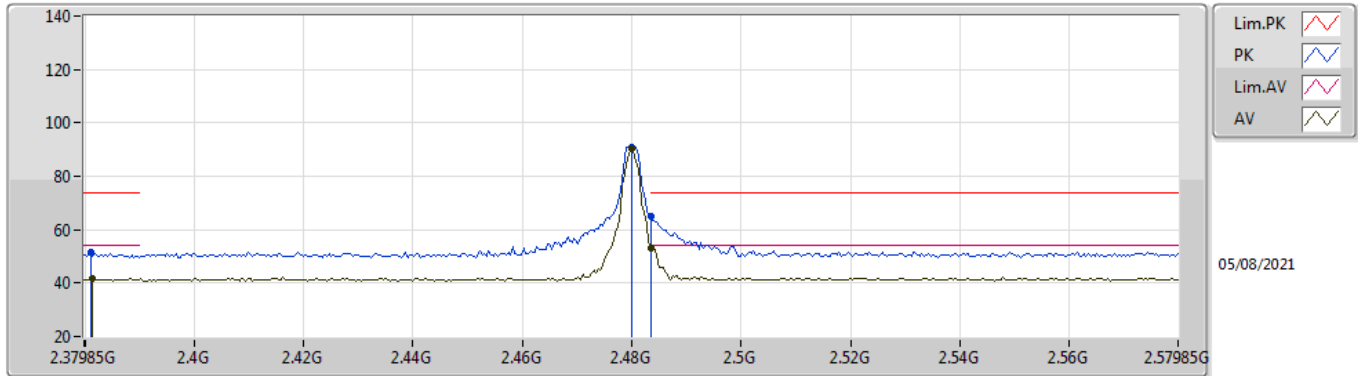
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AV	4.8837G	49.21	54.00	-4.79	8.30	3	Vertical	93	1.36	-	40.91	31.20	6.31	29.21
AV	7.32151G	43.24	54.00	-10.76	14.23	3	Vertical	263	1.97	-	29.01	36.26	8.14	30.17
PK	4.88352G	51.93	74.00	-22.07	8.30	3	Vertical	93	1.36	-	43.63	31.20	6.31	29.21
PK	7.32531G	52.75	74.00	-21.25	14.22	3	Vertical	263	1.97	-	38.53	36.25	8.14	30.17

GFSK_Nss1_1TX
2441.85MHz_TX



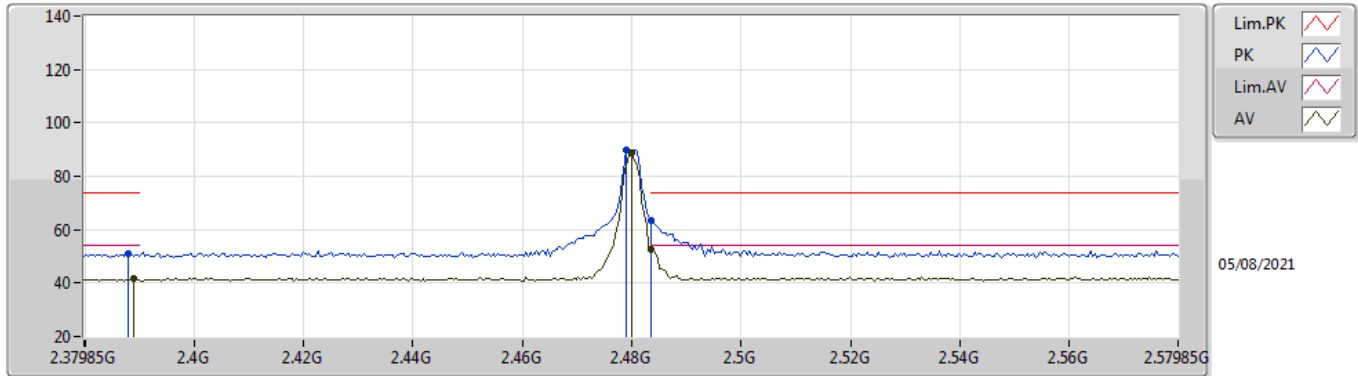
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AV	4.8837G	48.19	54.00	-5.81	8.30	3	Horizontal	122	1.50	-	39.89	31.20	6.31	29.21
AV	7.32115G	42.83	54.00	-11.17	14.23	3	Horizontal	18	1.50	-	28.60	36.26	8.14	30.17
PK	4.88254G	51.41	74.00	-22.59	8.30	3	Horizontal	122	1.50	-	43.11	31.20	6.31	29.21
PK	7.32095G	53.37	74.00	-20.63	14.23	3	Horizontal	18	1.50	-	39.14	36.26	8.14	30.17

GFSK_Nss1_1TX
2479.85MHz_TX



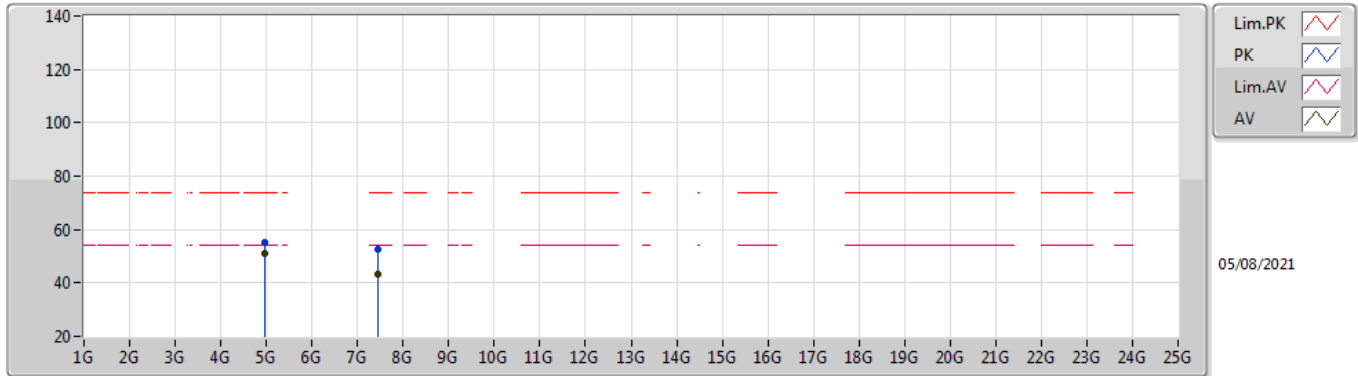
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AV	2.38145G	41.74	54.00	-12.26	2.01	3	Vertical	335	1.00	-	39.73	27.67	4.36	30.02
AV	2.47985G	90.10	Inf	-Inf	2.19	3	Vertical	335	1.00	-	87.91	27.66	4.50	29.97
AV	2.4835G	53.27	54.00	-0.73	2.20	3	Vertical	335	1.00	-	51.07	27.67	4.50	29.97
PK	2.38105G	51.48	74.00	-22.52	2.02	3	Vertical	335	1.00	-	49.46	27.68	4.36	30.02
PK	2.47985G	90.77	Inf	-Inf	2.19	3	Vertical	335	1.00	-	88.58	27.66	4.50	29.97
PK	2.4835G	65.04	74.00	-8.96	2.20	3	Vertical	335	1.00	-	62.84	27.67	4.50	29.97

GFSK_Nss1_1TX
2479.85MHz_TX



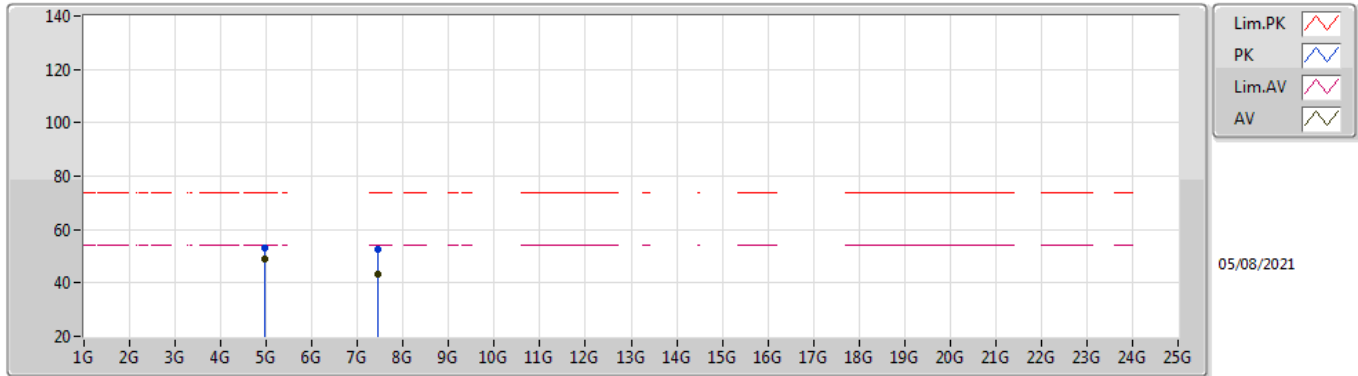
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AV	2.38905G	41.67	54.00	-12.33	1.99	3	Horizontal	356	1.85	-	39.68	27.64	4.37	30.02
AV	2.47985G	88.92	Inf	-Inf	2.19	3	Horizontal	356	1.85	-	86.73	27.66	4.50	29.97
AV	2.4835G	52.84	54.00	-1.16	2.20	3	Horizontal	356	1.85	-	50.64	27.67	4.50	29.97
PK	2.38785G	50.93	74.00	-23.07	2.00	3	Horizontal	356	1.85	-	48.93	27.65	4.37	30.02
PK	2.47905G	89.59	Inf	-Inf	2.18	3	Horizontal	356	1.85	-	87.41	27.66	4.49	29.97
PK	2.4835G	63.65	74.00	-10.35	2.20	3	Horizontal	356	1.85	-	61.45	27.67	4.50	29.97

GFSK_Nss1_1TX
2479.85MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95971G	51.11	54.00	-2.89	8.52	3	Vertical	360	1.03	-	42.59	31.34	6.36	29.18
AV	7.44049G	43.03	54.00	-10.97	14.17	3	Vertical	241	1.54	-	28.86	36.26	8.17	30.26
PK	4.95962G	55.09	74.00	-18.91	8.52	3	Vertical	360	1.03	-	46.57	31.34	6.36	29.18
PK	7.43735G	52.81	74.00	-21.19	14.16	3	Vertical	241	1.54	-	38.65	36.25	8.16	30.25

GFSK_Nss1_1TX
2479.85MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95971G	48.78	54.00	-5.22	8.52	3	Horizontal	129	1.80	-	40.26	31.34	6.36	29.18
AV	7.43963G	43.27	54.00	-10.73	14.17	3	Horizontal	111	1.41	-	29.10	36.26	8.17	30.26
PK	4.95964G	53.05	74.00	-20.95	8.52	3	Horizontal	129	1.80	-	44.53	31.34	6.36	29.18
PK	7.4378G	52.53	74.00	-21.47	14.15	3	Horizontal	111	1.41	-	38.38	36.25	8.16	30.26