



2.5.6 Test Results

COFDM Transmitter

Bandwidth (MHz)	Data Rate/MCS	Frequency (MHz)	Band Edge Frequency (MHz)	Level (dBc)
1.25	64QAM	2401.875	2400	-51.77
2.50	64QAM	2403.750	2400	-42.10
5.00	64QAM	2407.500	2400	-48.80
10.00	64QAM	2420.000	2400	-50.86

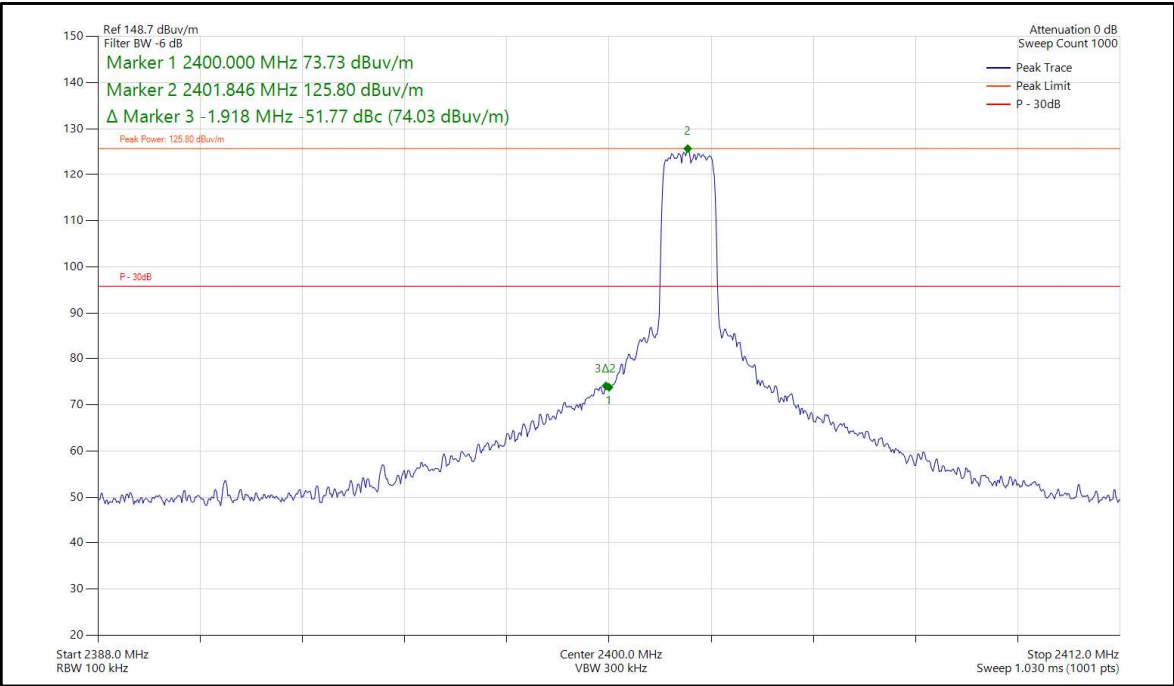


Figure 59 - BOT_ABE, 2401.875 MHz, 1.25 MHz Bandwidth, Band Edge Frequency 2400 MHz

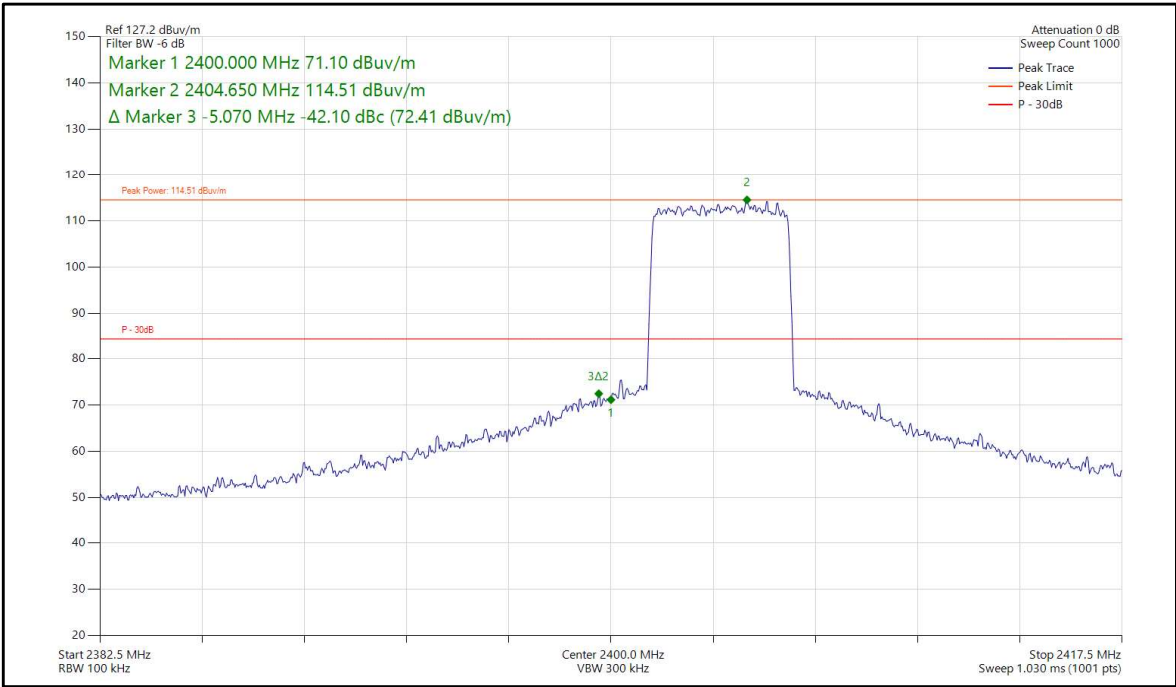


Figure 60 - BOT_ABE, 2403.75 MHz, 2.5 MHz Bandwidth, Band Edge Frequency 2400 MHz

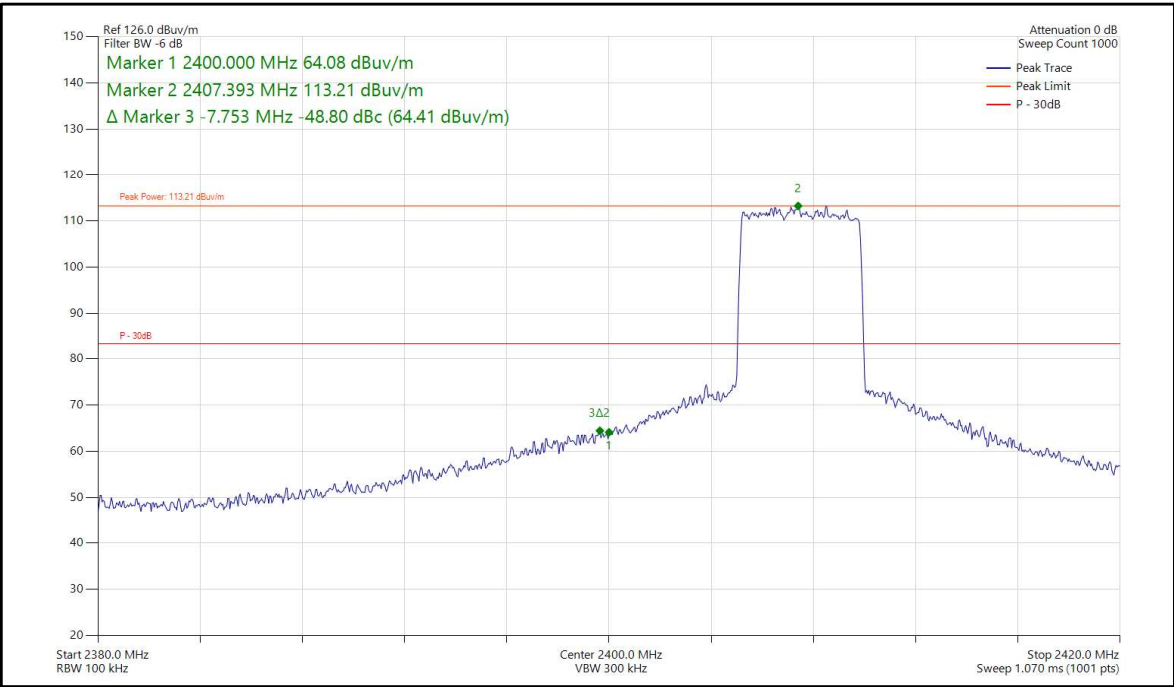


Figure 61 - BOT_ABE, 2407.5 MHz, 5 MHz Bandwidth, Band Edge Frequency 2400 MHz

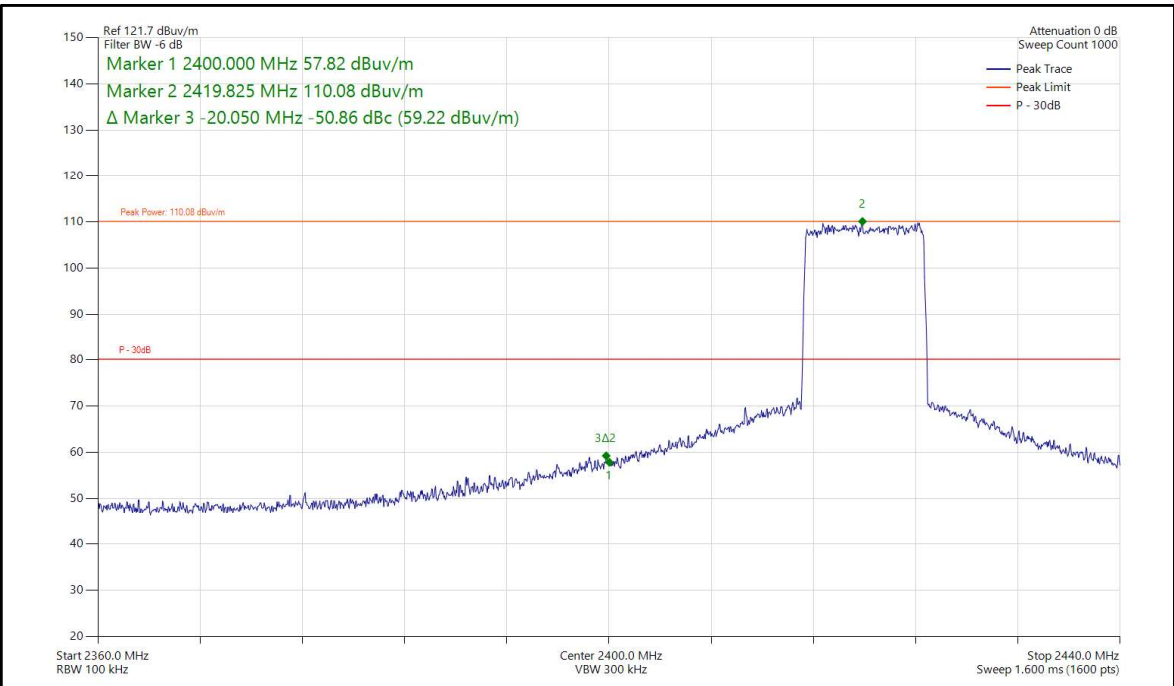


Figure 62 – BOT_ABE, 2420 MHz, 10 MHz Bandwidth, Band Edge Frequency 2400 MHz

FCC 47 CFR Part 15, Limit Clause 15.247 (d)

20 dB below the fundamental measured in a 100 kHz bandwidth using a peak detector. If the transmitter complies with the conducted power limits, based on the use of RMS averaging over a time interval, the attenuation required shall be 30 dB below the fundamental instead of 20 dB.

ISED RSS-247, Limit Clause 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

2.5.7 Test Location and Test Equipment Used

This test was carried out in RF Chamber 11.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
True RMS Multimeter	Fluke	79 Series III	411	12	09-Jan-2026
Hygrometer	Rotronic	I-1000	3220	12	02-Dec-2025
Test Receiver	Rohde & Schwarz	ESW44	5084	12	13-Dec-2025
Emissions Software	TUV SUD	EmX V3.5.3	5125	-	Software
3m Semi-Anechoic Chamber	Rainford	RF Chamber 11	5136	36	14-Nov-2027
Mast	Maturo	TAM 4.0-P	5158	-	TU
Mast and Turntable Controller	Maturo	Maturo NCD	5159	-	TU
Turntable	Maturo	TT 15WF	5160	-	TU
Antenna (DRG, 1 GHz to 10.5 GHz)	Schwarzbeck	BBHA9120B	5215	12	14-Jul-2025
Cable (N-Type to N-Type, 8 m)	Junkosha	MWX221-08000NMSNMS/B	5521	6	19-Aug-2025
Cable (SMA to SMA 3m)	Junkosha	MWX221-03000AMSAMS/B	6000	12	12-Jun-2026

Table 26

TU - Traceability Unscheduled

2.6 Spurious Radiated Emissions

2.6.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (d) and 15.209
ISED RSS-247, Clause 3.3 and 5.5
ISED RSS-GEN, Clause 6.13 and 8.9

2.6.2 Equipment Under Test and Modification State

BluSDR-30-C, S/N: FR009550 - Modification State 0

2.6.3 Date of Test

29-July-2025 to 30-July-2025

2.6.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 6.3, 6.5 and 6.6.

For frequencies > 1 GHz, plots for average measurements were taken in accordance with ANSI C63.10, clause 11.12.2.5.2.

The EUT was placed on the non-conducting platform in a manner typical of a normal installation. As the EUT was considered mobile/portable and therefore reasonable to be used in multiple planes, pre-scans were performed with the EUT orientated in X, Y and Z planes with reference to the ground plane.

The plots shown are the characterisation of the EUT. The limits on the plots represent the most stringent case for restricted bands, (74/54 dBuV/m) when compared to 20 dBc outside restricted bands. The limits shown have been used as a threshold to determine where further measurements are necessary. Where results are within 10 dB of the limits shown on the plots, further investigation was carried out and reported in results tables.

The following conversion can be applied to convert from dBuV/m to uV/m:
 $10^{(\text{Field Strength in dBuV/m}/20)}$

At a measurement distance of 1 meter the limit line was increased by $20 \cdot \text{LOG}(3/1) = 9.54$ dB. Where formal measurements have been necessary, the results have been presented in the emissions table.

For the duration of the test, the EUT was operated in a 2x2 MIMO configuration.

2.6.5 Example Test Setup Diagram

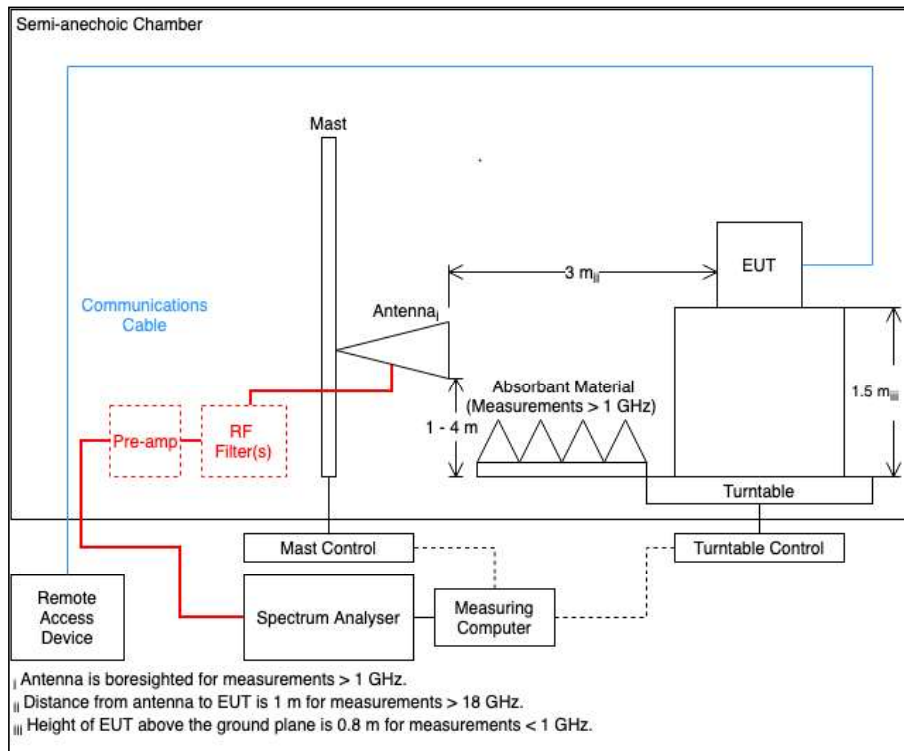


Figure 63

2.6.6 Environmental Conditions

Ambient Temperature	20.1 - 21.6 °C
Relative Humidity	40.9 - 44.9 %

2.6.7 Test Results

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2362.125	40.84	54.00	-13.16	CISPR Avg	332	100	Horizontal
2362.360	39.74	54.00	-14.26	CISPR Avg	325	100	Vertical

Table 27 - Bot_Channel_X, 2401.875 MHz, 1.25 MHz Bandwidth, 30 MHz to 26 GHz

No other emissions found within 10 dB of the limit.

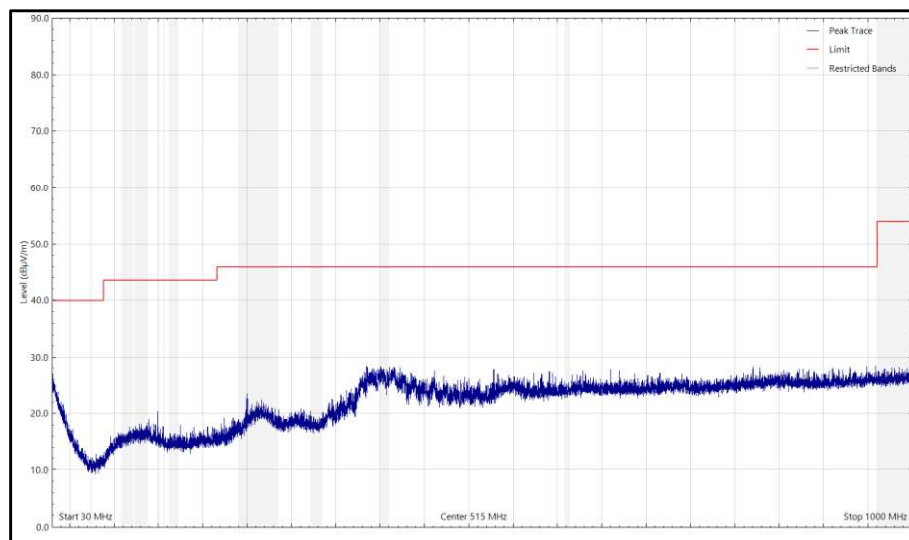


Figure 64 - Bot_Channel_X, 2401.875 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Horizontal (Peak)

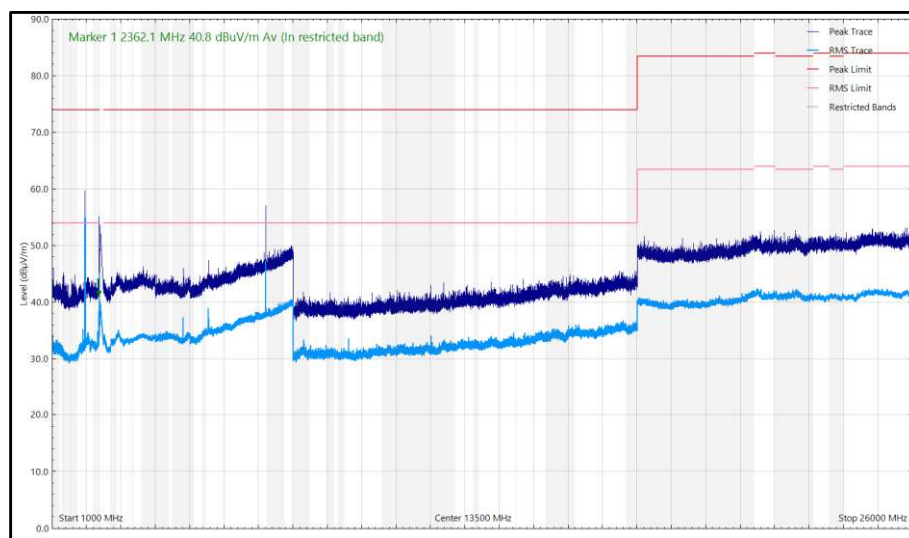


Figure 65 - Bot_Channel_X, 2401.875 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Horizontal

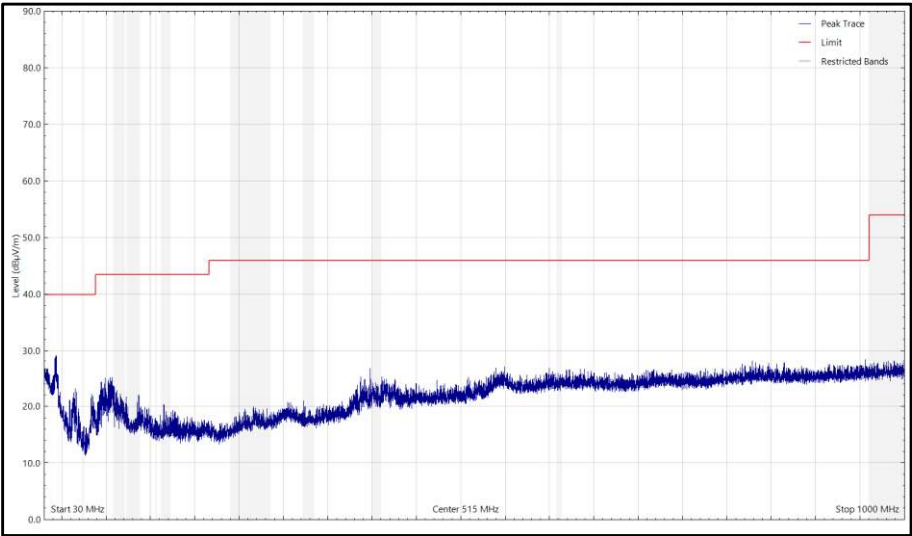


Figure 66 - Bot_Channel_X, 2401.875 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Vertical (Peak)

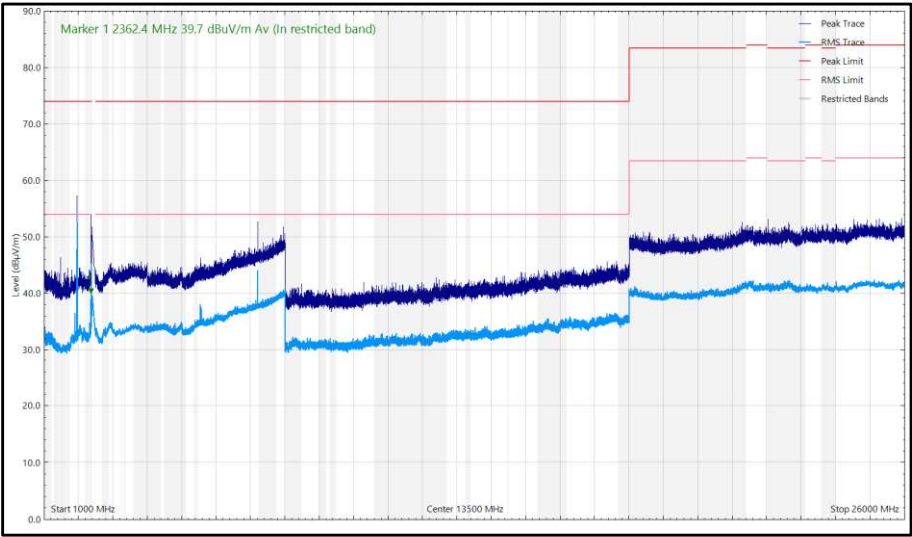


Figure 67 - Bot_Channel_X, 2401.875 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
5537.776	33.80	54.00	-20.20	RMS	196	153	Vertical
7316.425	46.62	54.00	-7.38	CISPR Avg	279	387	Vertical
7316.750	48.83	54.00	-5.17	CISPR Avg	242	222	Horizontal

Table 28 - Mid_Channel_X, 2438.750 MHz, 1.25 MHz Bandwidth, 30 MHz to 26 GHz

No other emissions found within 10 dB of the limit.

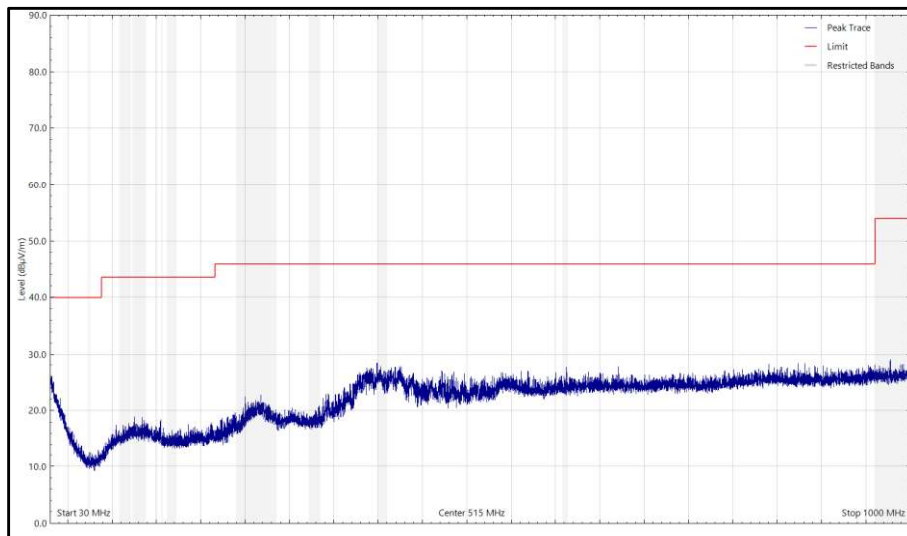


Figure 68 - Mid_Channel_X, 2438.750 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Horizontal (Peak)

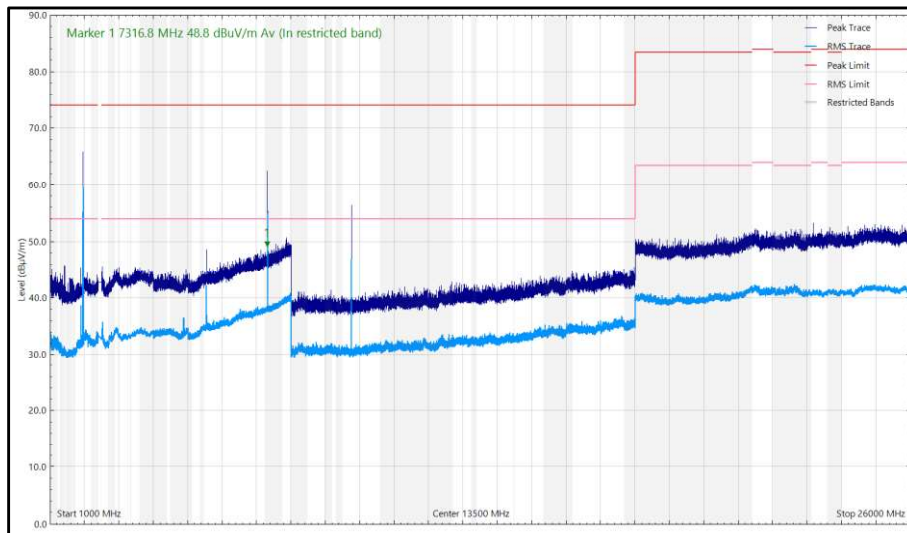


Figure 69 - Mid_Channel_X, 2438.750 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Horizontal

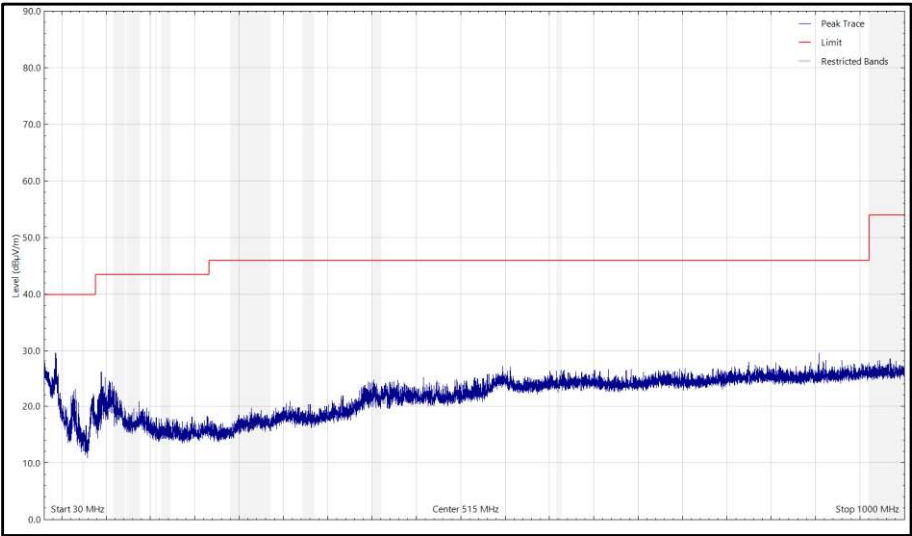


Figure 70 - Mid_Channel_X, 2438.750 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Vertical (Peak)

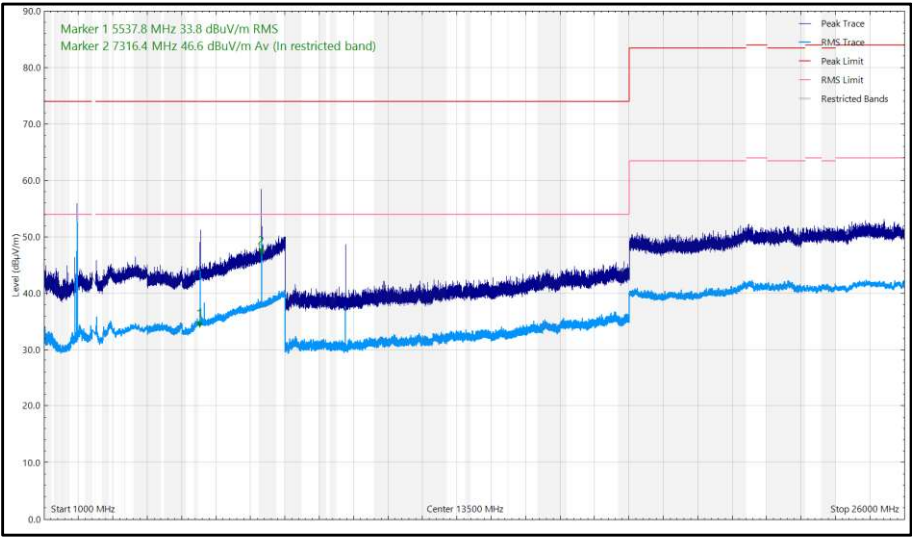


Figure 71 - Mid_Channel_X, 2438.750 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
405.790	32.01	46.00	-13.99	Q-Peak	85	219	Horizontal
7426.621	69.57	74.00	-4.43	Peak	225	152	Horizontal
7426.621	53.07	54.00	-0.93	CISPR Avg	225	152	Horizontal
7427.100	48.61	54.00	-5.39	CISPR Avg	287	393	Vertical

Table 29 - Top_Channel_X, 2475.625 MHz, 1.25 MHz Bandwidth, 30 MHz to 26 GHz

No other emissions found within 10 dB of the limit.

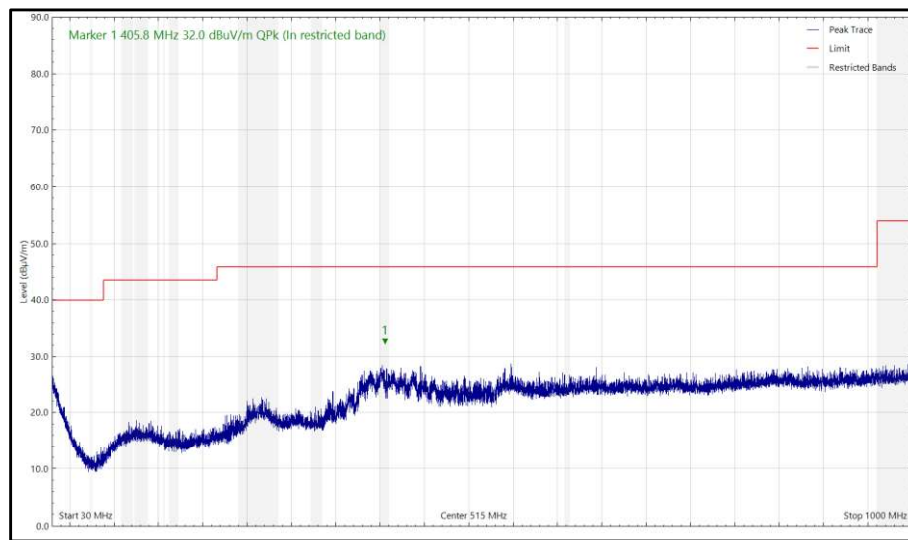


Figure 72 - Top_Channel_X, 2475.625 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Horizontal (Peak)

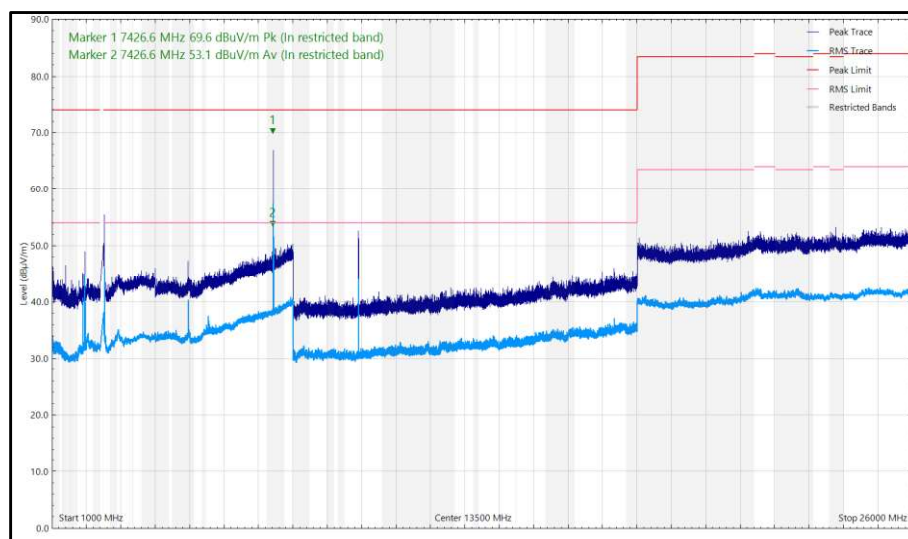


Figure 73 - Top_Channel_X, 2475.625 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Horizontal

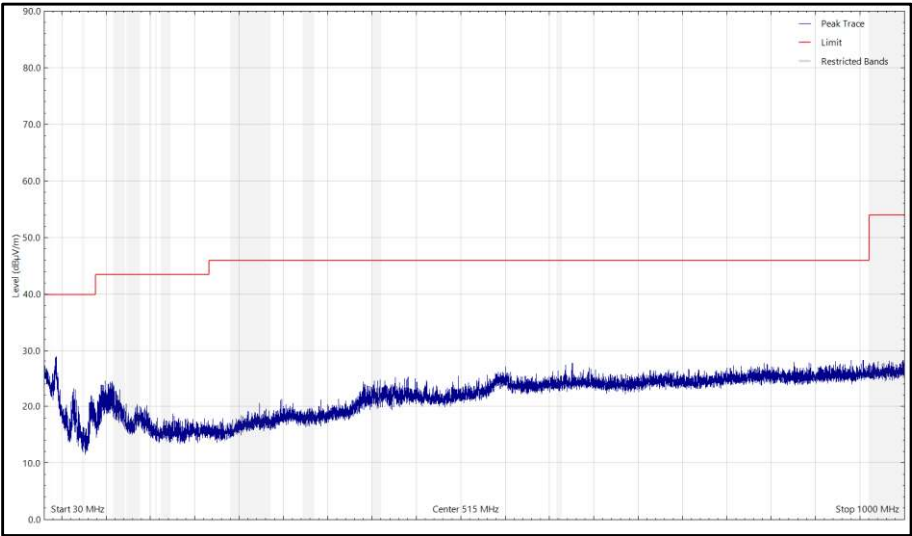


Figure 74 - Top_Channel_X, 2475.625 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Vertical (Peak)

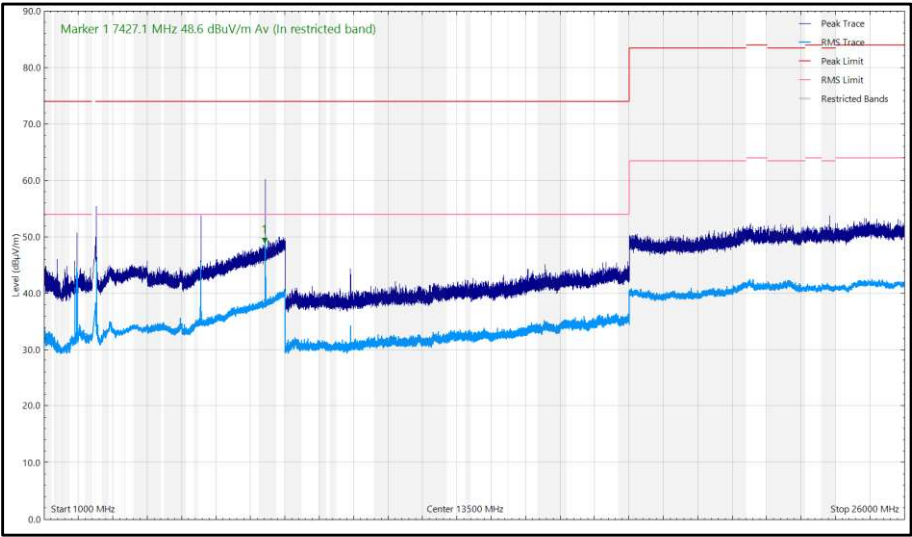


Figure 75 - Top_Channel_X, 2475.625 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2361.695	41.62	54.00	-12.38	CISPR Avg	175	150	Horizontal
2361.885	47.40	54.00	-6.60	CISPR Avg	52	159	Vertical

Table 30 - Bot_Channel_Y, 2401.875 MHz, 1.25 MHz Bandwidth, 30 MHz to 26 GHz

No other emissions found within 10 dB of the limit.

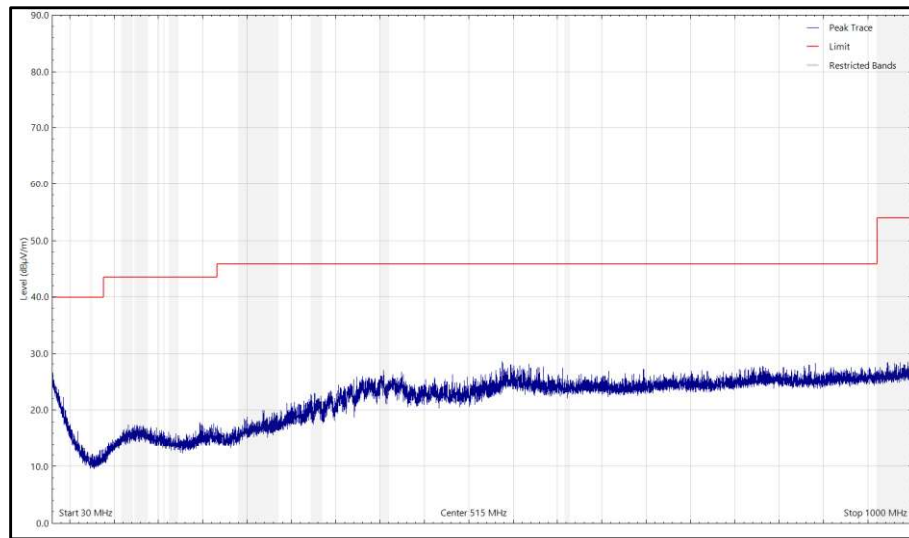


Figure 76 - Bot_Channel_Y, 2401.875 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Horizontal (Peak)

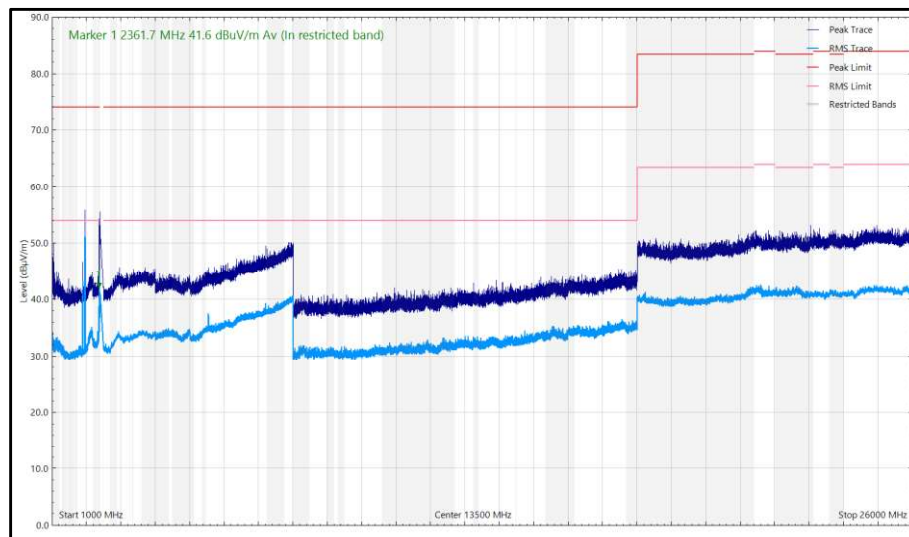


Figure 77 - Bot_Channel_Y, 2401.875 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Horizontal

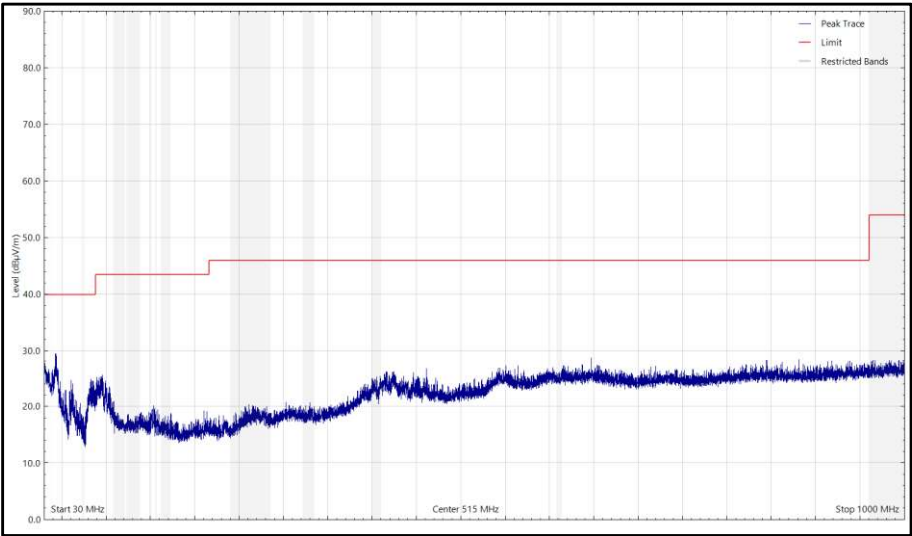


Figure 78 - Bot_Channel_Y, 2401.875 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Vertical (Peak)

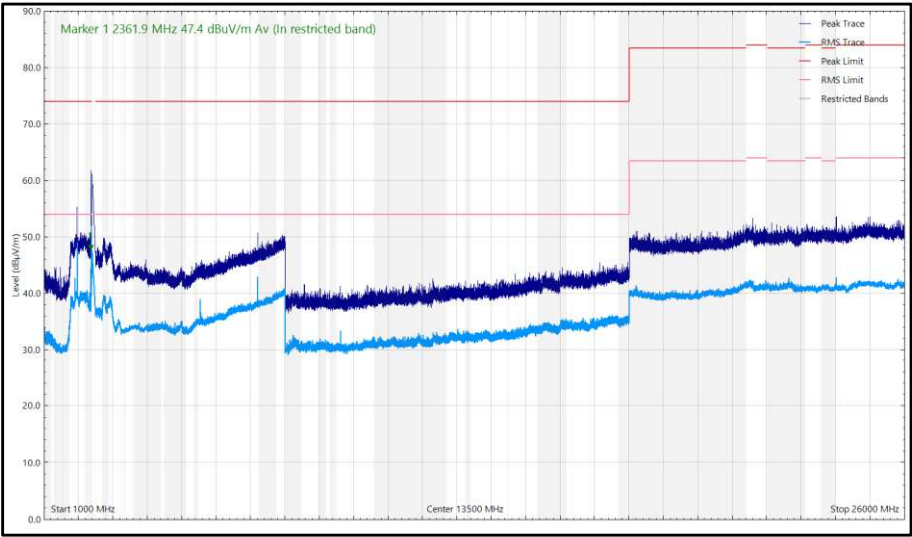


Figure 79 - Bot_Channel_Y, 2401.875 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Vertical



Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
7316.600	43.91	54.00	-10.09	CISPR Avg	135	157	Vertical

Table 31 - Mid_Channel_Y, 2438.750 MHz, 1.25 MHz Bandwidth, 30 MHz to 26 GHz

No other emissions found within 10 dB of the limit.

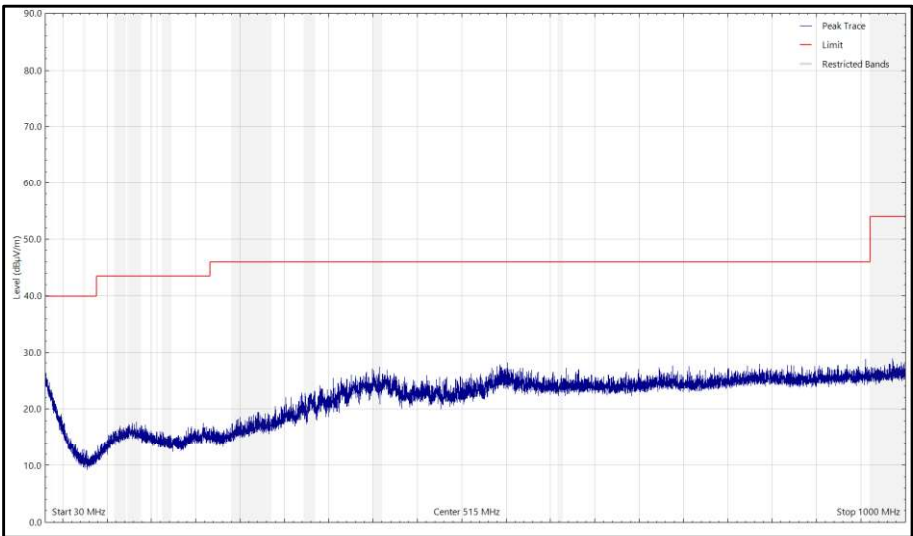


Figure 80 - Mid_Channel_Y, 2438.750 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Horizontal (Peak)

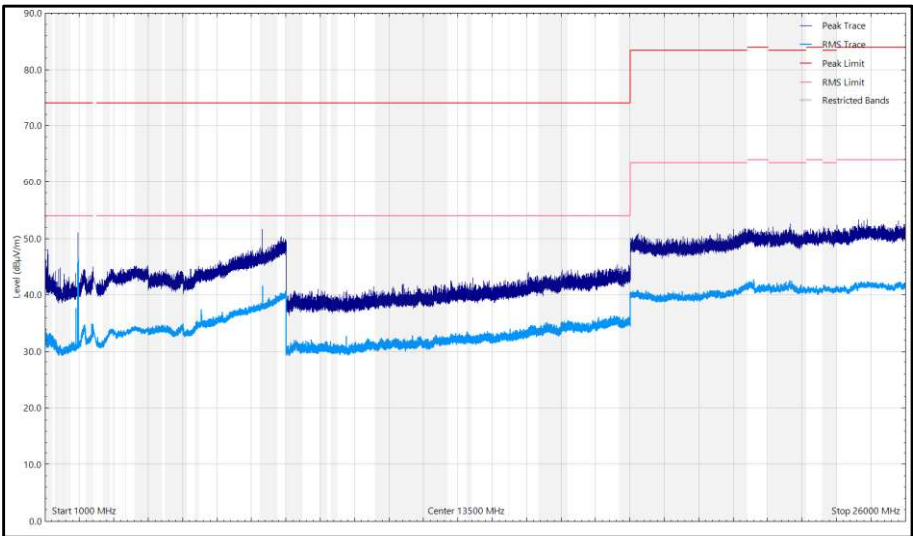


Figure 81 - Mid_Channel_Y, 2438.750 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Horizontal

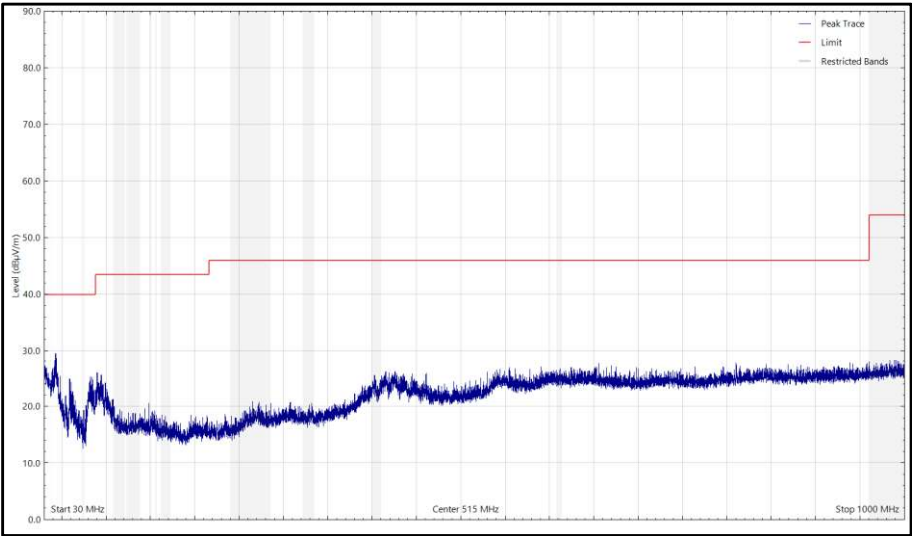


Figure 82 - Mid_Channel_Y, 2438.750 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Vertical (Peak)

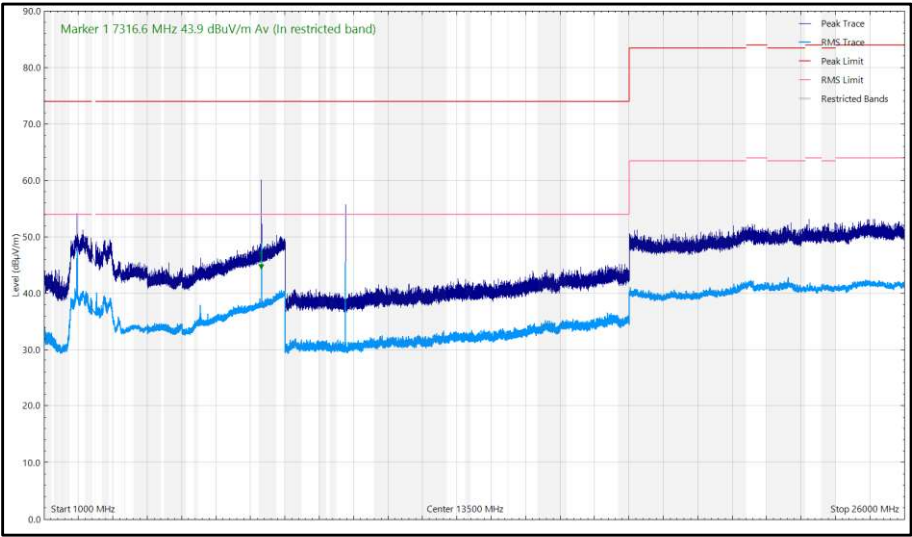


Figure 83 - Mid_Channel_Y, 2438.750 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Vertical



Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
7426.950	47.37	54.00	-6.63	CISPR Avg	138	155	Vertical

Table 32 - Top_Channel_Y, 2475.625 MHz, 1.25 MHz Bandwidth, 30 MHz to 26 GHz

No other emissions found within 10 dB of the limit.

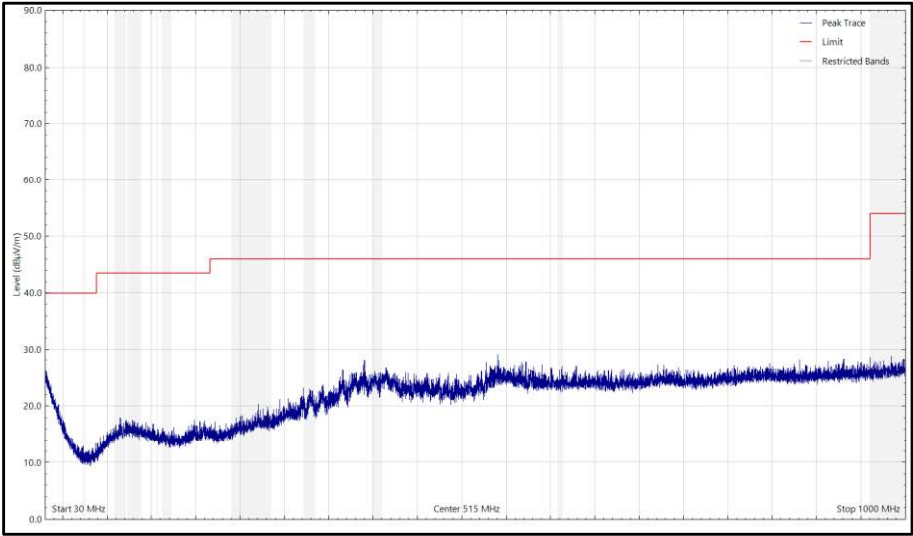


Figure 84 - Top_Channel_Y, 2475.625 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Horizontal (Peak)

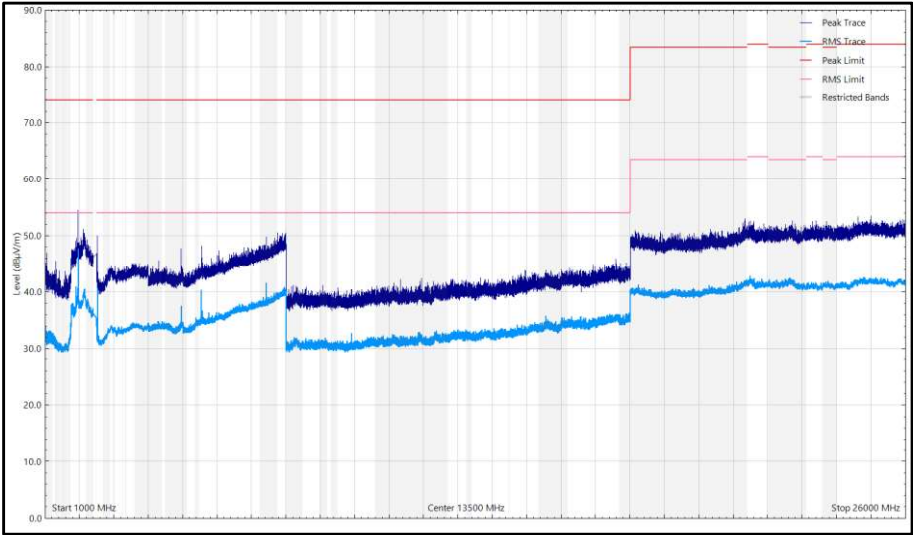


Figure 85 - Top_Channel_Y, 2475.625 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Horizontal

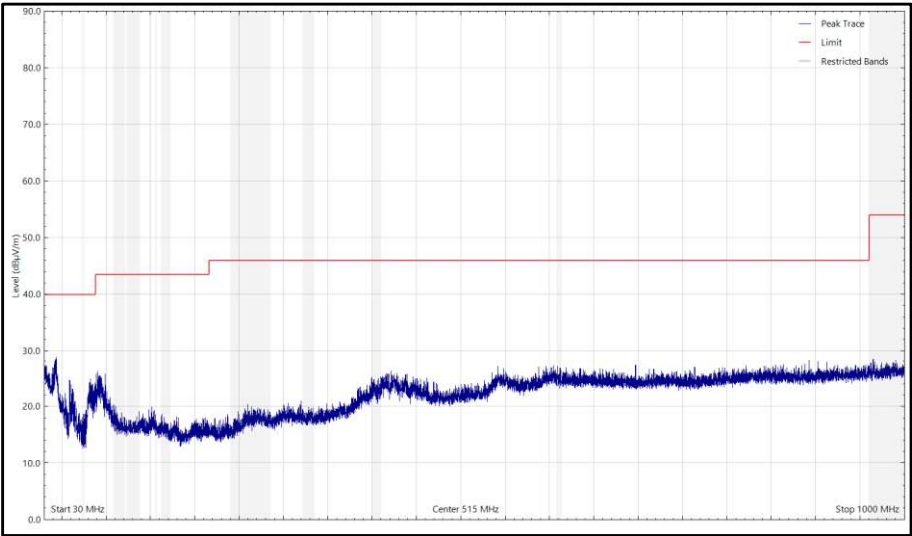


Figure 86 - Top_Channel_Y, 2475.625 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Vertical (Peak)

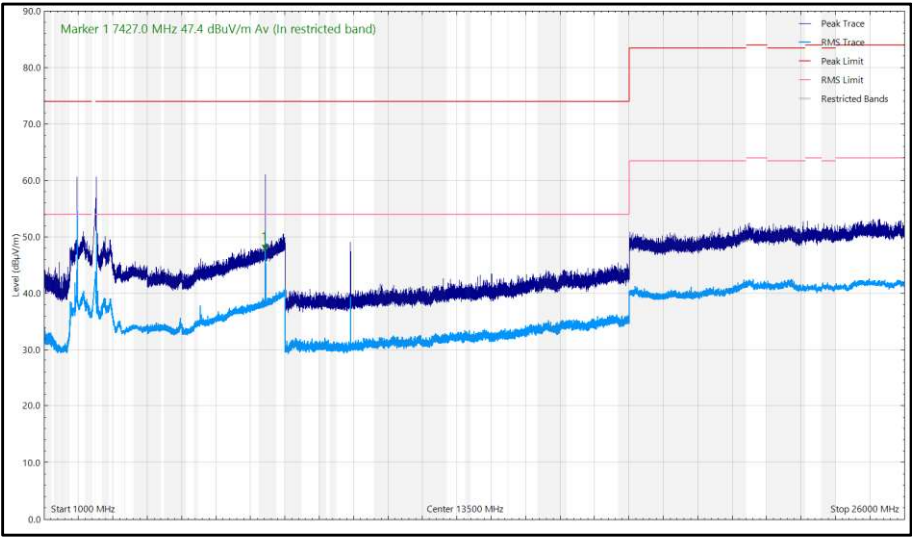


Figure 87 - Top_Channel_Y, 2475.625 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Vertical



Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
2361.750	47.60	54.00	-6.40	CISPR Avg	101	152	Horizontal
2362.155	42.13	54.00	-11.87	CISPR Avg	179	254	Vertical

Table 33 - Bot_Channel_Z, 2401.875 MHz, 1.25 MHz Bandwidth, 30 MHz to 26 GHz

No other emissions found within 10 dB of the limit.

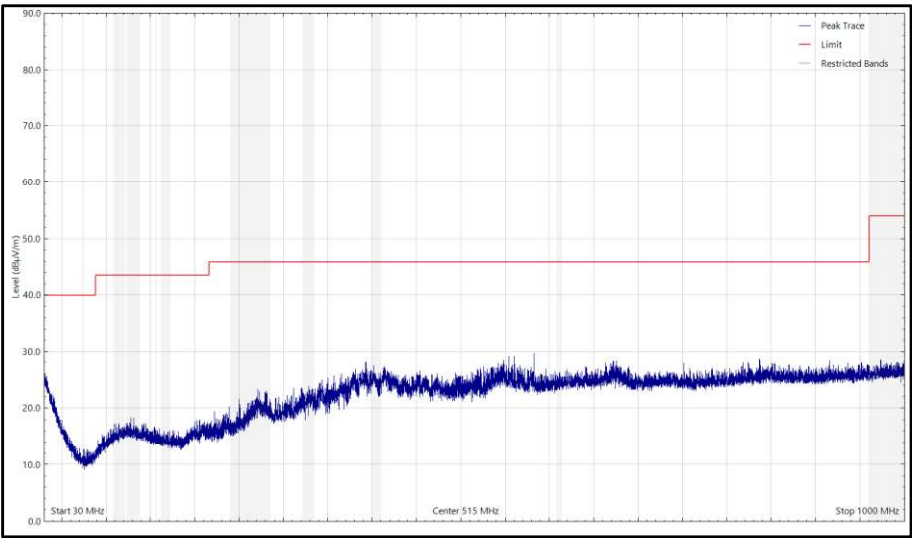


Figure 88 - Bot_Channel_Z, 2401.875 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Horizontal (Peak)

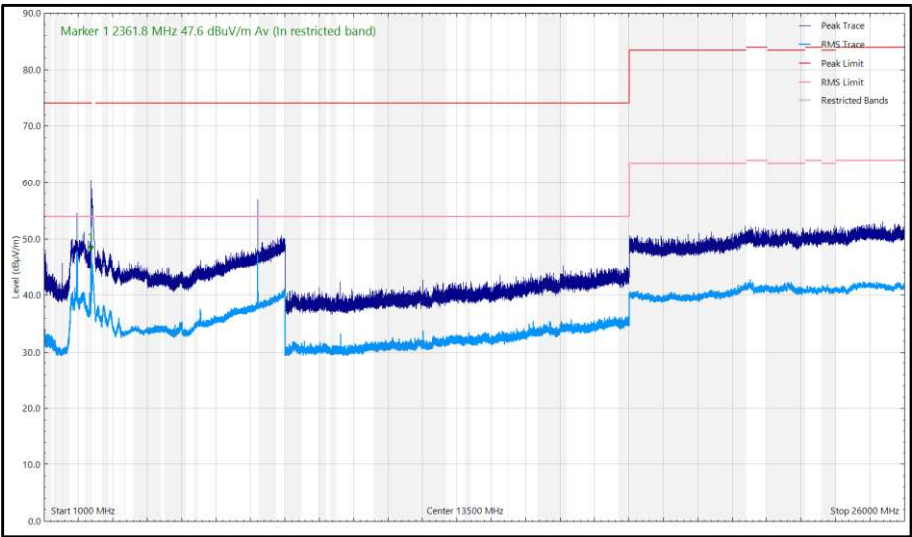


Figure 89 - Bot_Channel_Z, 2401.875 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Horizontal

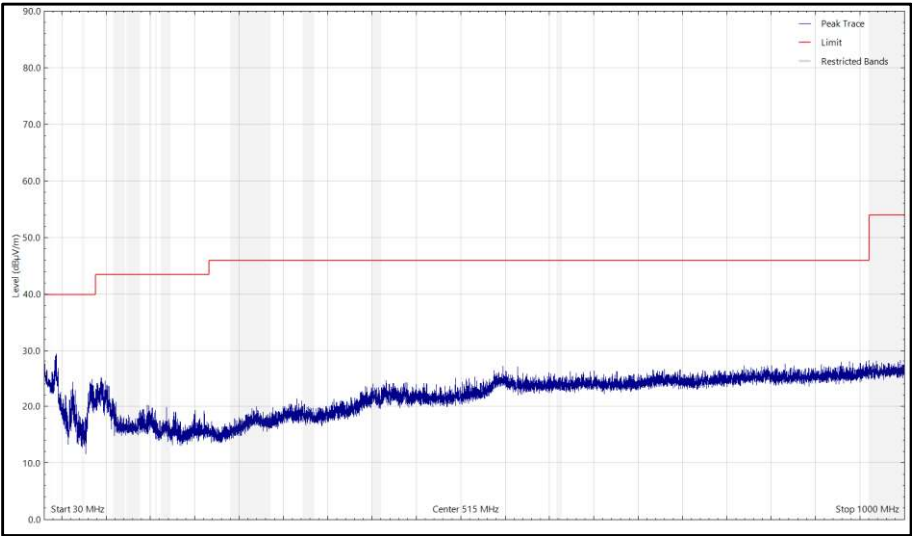


Figure 90 - Bot_Channel_Z, 2401.875 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Vertical (Peak)

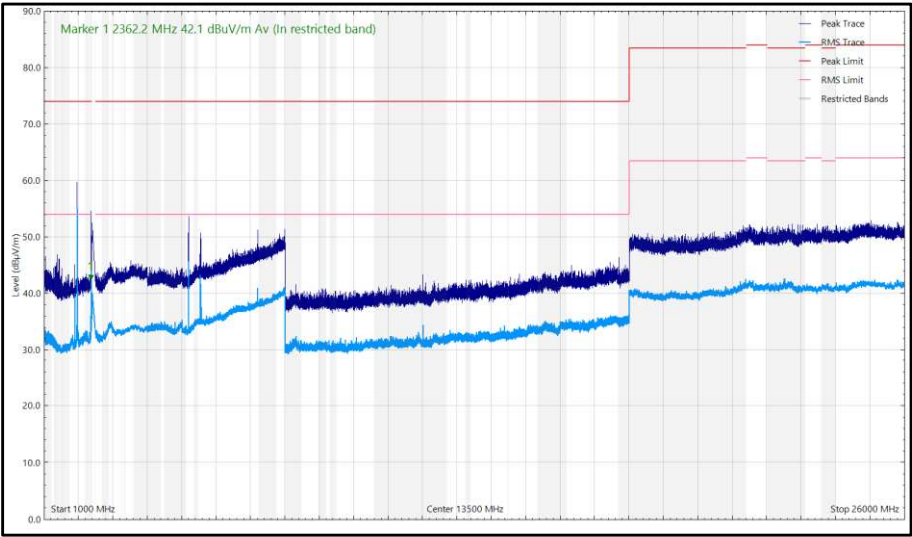


Figure 91 - Bot_Channel_Z, 2401.875 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
7316.135	47.54	54.00	-6.46	CISPR Avg	185	381	Vertical
7316.515	47.14	54.00	-6.86	CISPR Avg	310	151	Horizontal

Table 34 - Mid_Channel_Z, 2438.750 MHz, 1.25 MHz Bandwidth, 30 MHz to 26 GHz

No other emissions found within 10 dB of the limit.

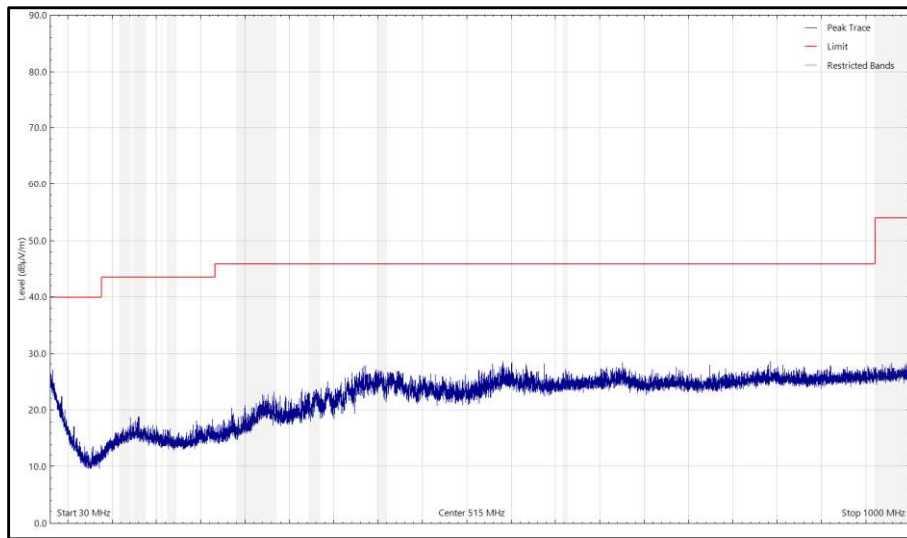


Figure 92 - Mid_Channel_Z, 2438.750 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Horizontal (Peak)

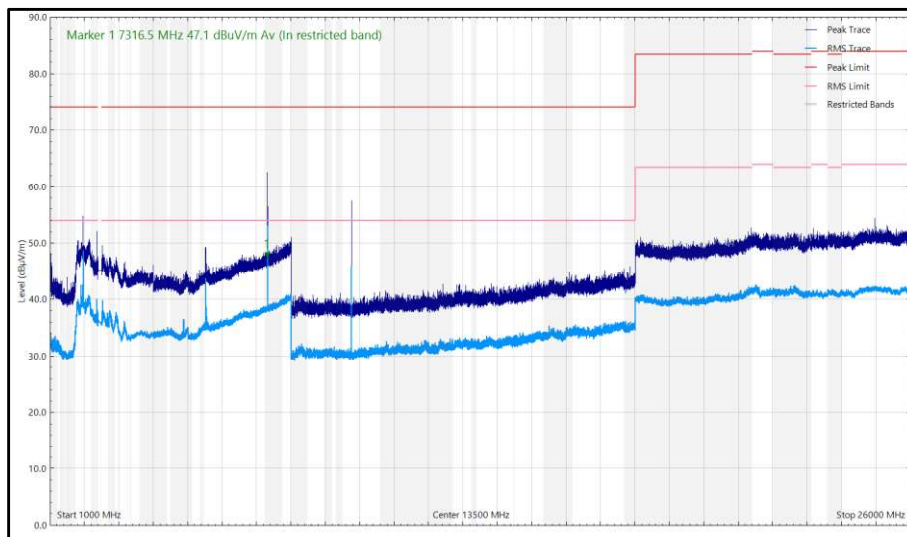


Figure 93 - Mid_Channel_Z, 2438.750 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Horizontal

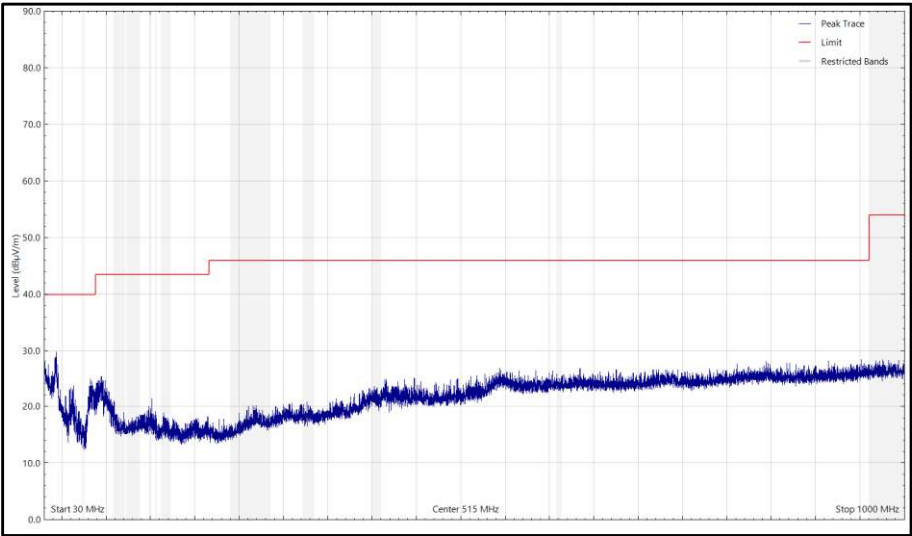


Figure 94 - Mid_Channel_Z, 2438.750 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Vertical (Peak)

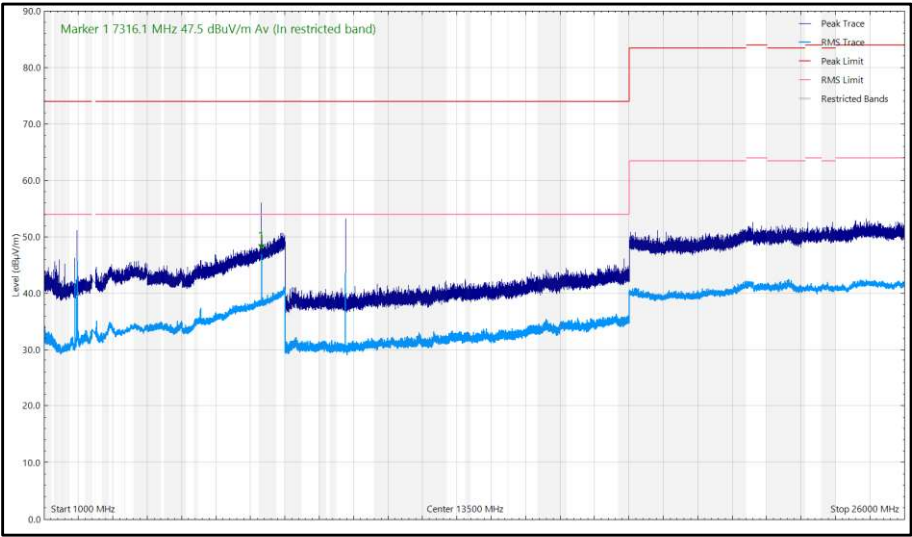


Figure 95 - Mid_Channel_Z, 2438.750 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Vertical

Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
7426.880	52.37	54.00	-1.63	CISPR Avg	166	387	Vertical
7427.599	71.07	74.00	-2.93	Peak	44	160	Horizontal
7427.599	50.73	54.00	-3.27	CISPR Avg	44	160	Horizontal

Table 35 - Top_Channel_Z, 2475.625 MHz, 1.25 MHz Bandwidth, 30 MHz to 26 GHz

No other emissions found within 10 dB of the limit.

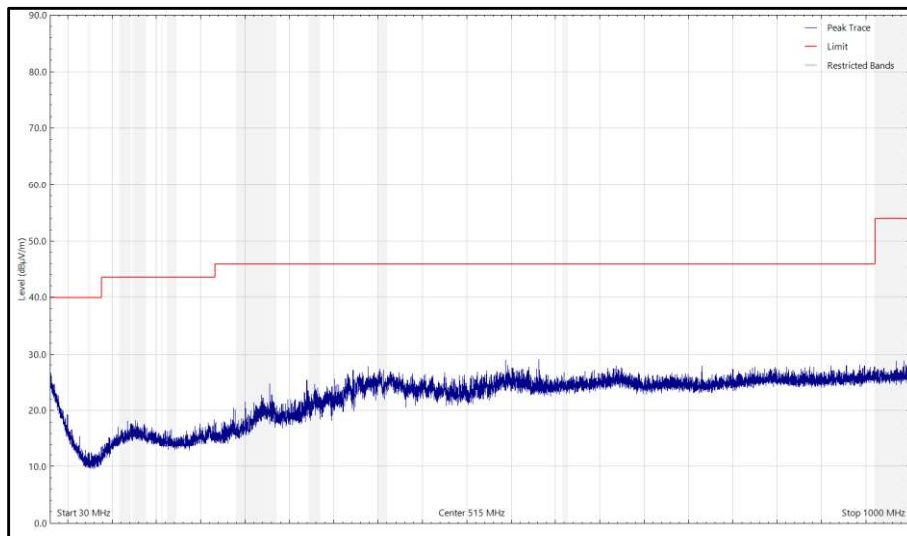


Figure 96 - Top_Channel_Z, 2475.625 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Horizontal (Peak)

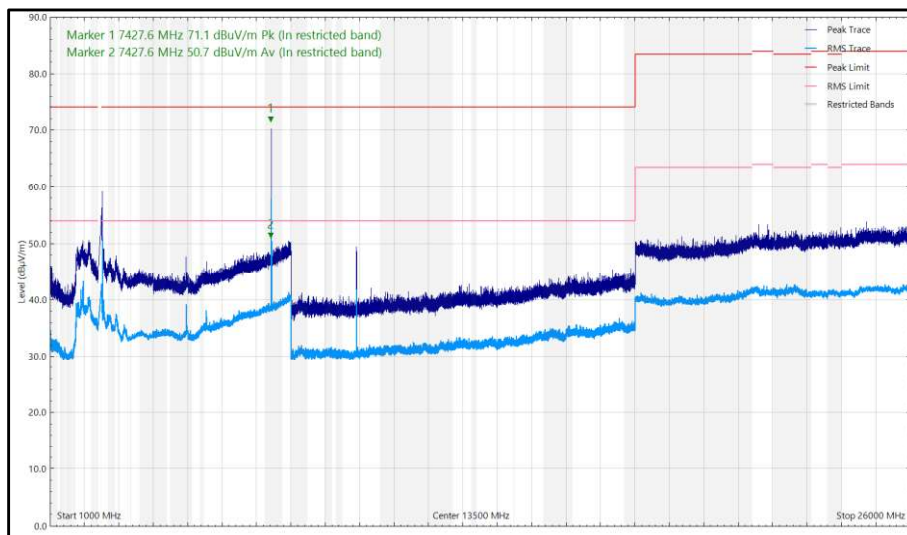


Figure 97 - Top_Channel_Z, 2475.625 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Horizontal

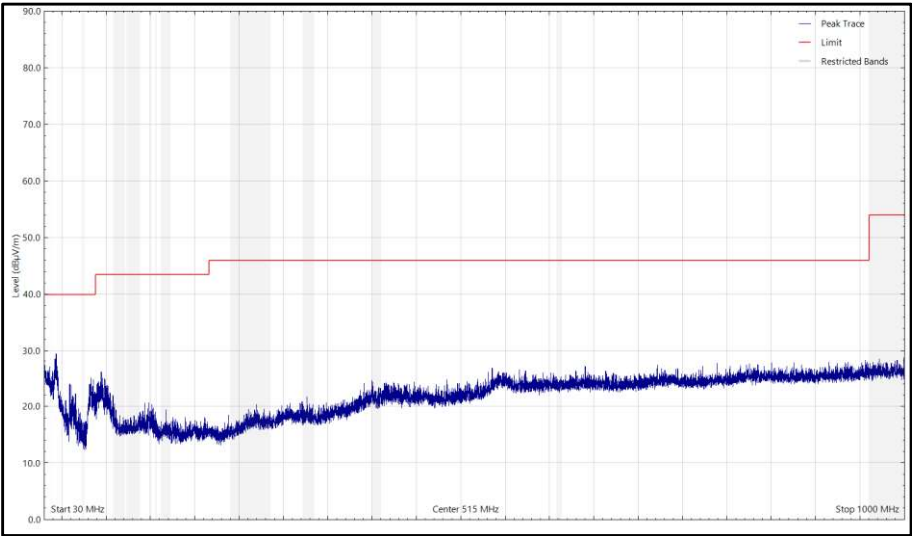


Figure 98 - Top_Channel_Z, 2475.625 MHz, 1.25 MHz Bandwidth, 30 MHz to 1 GHz, Vertical (Peak)

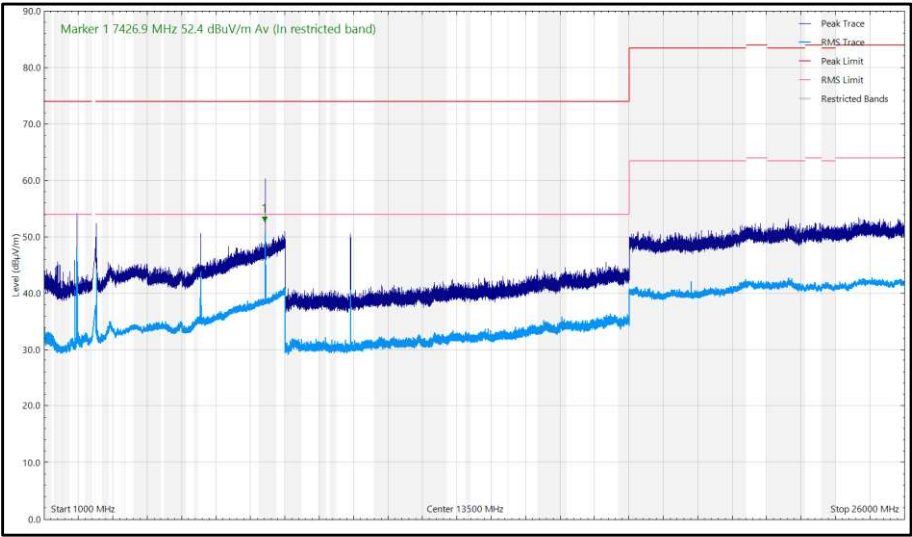


Figure 99 - Top_Channel_Z, 2475.625 MHz, 1.25 MHz Bandwidth, 1 GHz to 26 GHz, Vertical

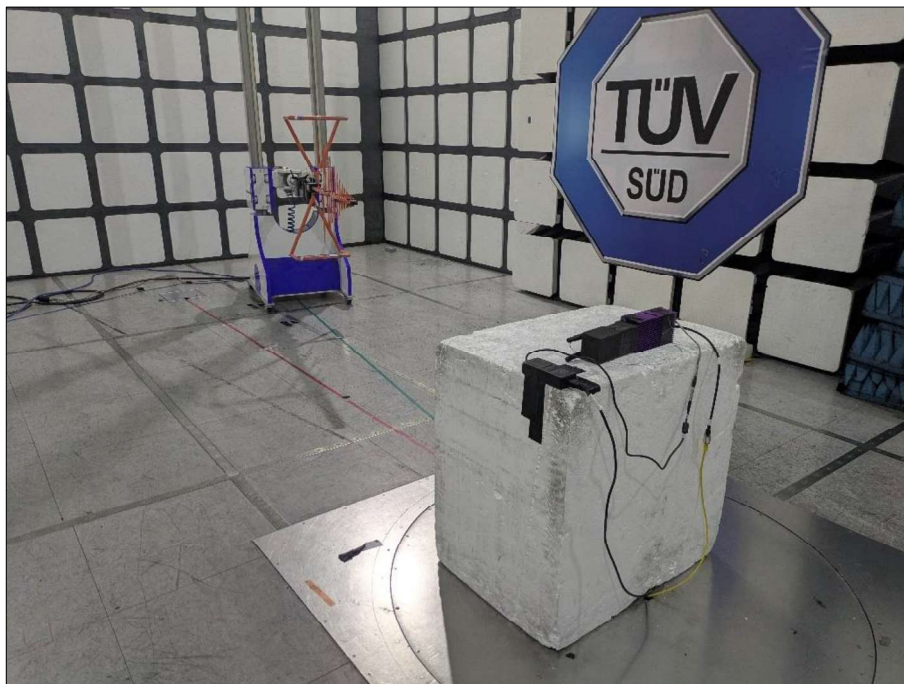


Figure 100 - Test Setup - 30 MHz to 1 GHz



Figure 101 - Test Setup - 1 GHz to 8 GHz

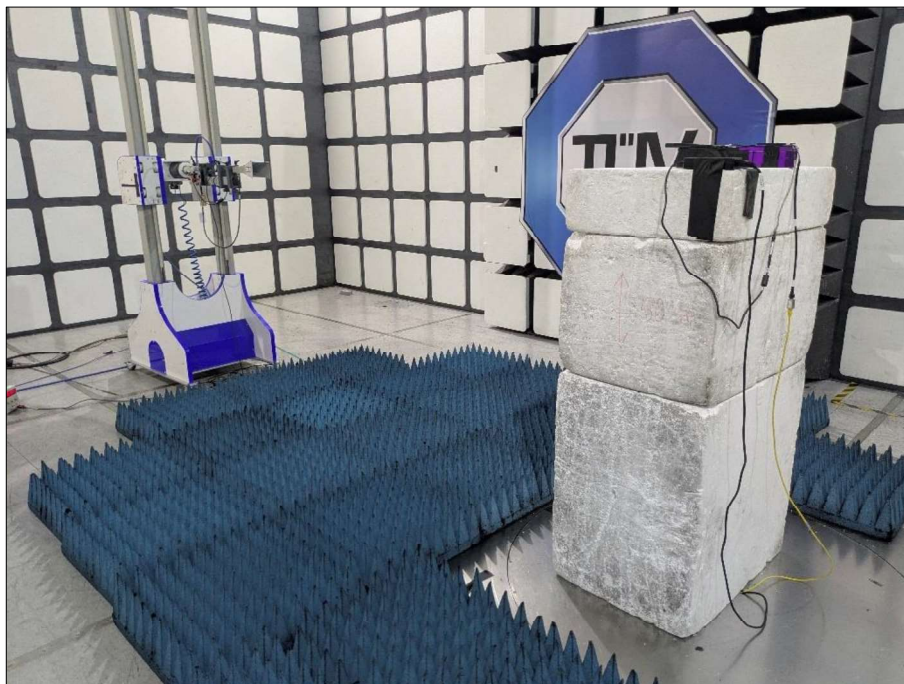


Figure 102 - Test Setup - 8 GHz to 18 GHz

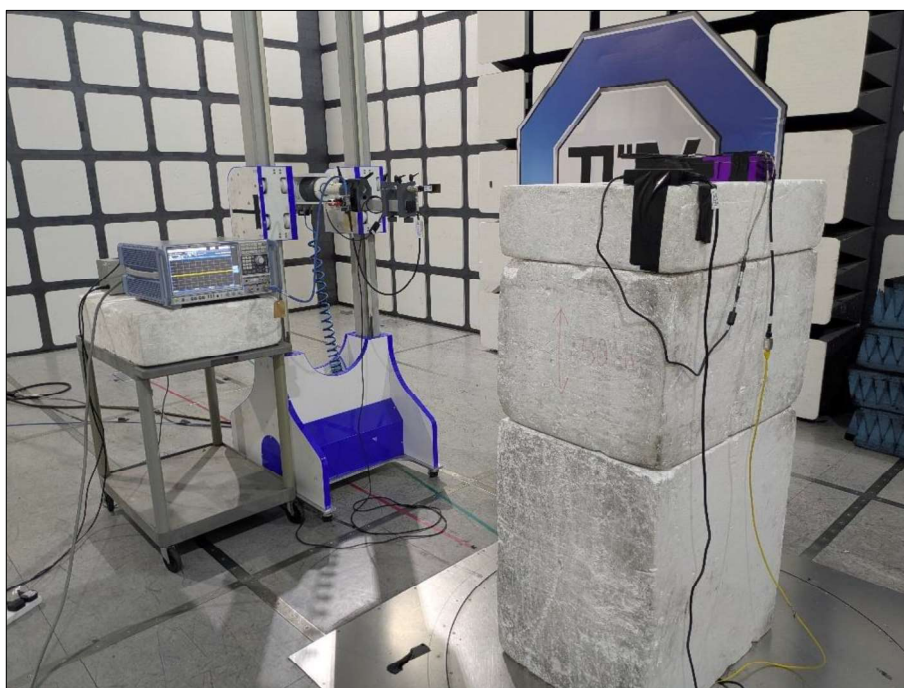


Figure 103 - Test Setup - 18 GHz to 26 GHz

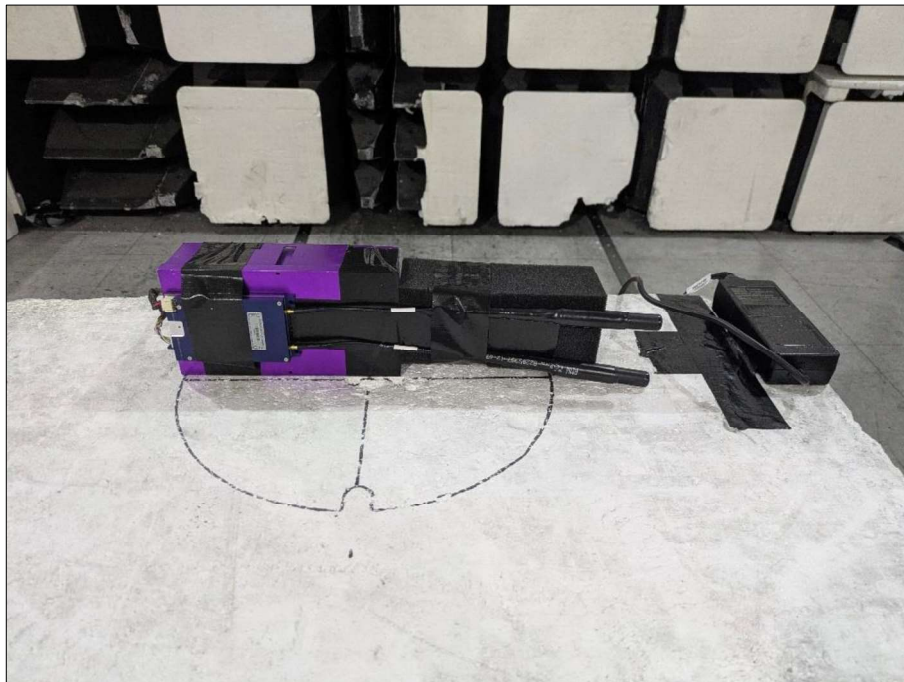


Figure 104 - Test Setup - X Plane

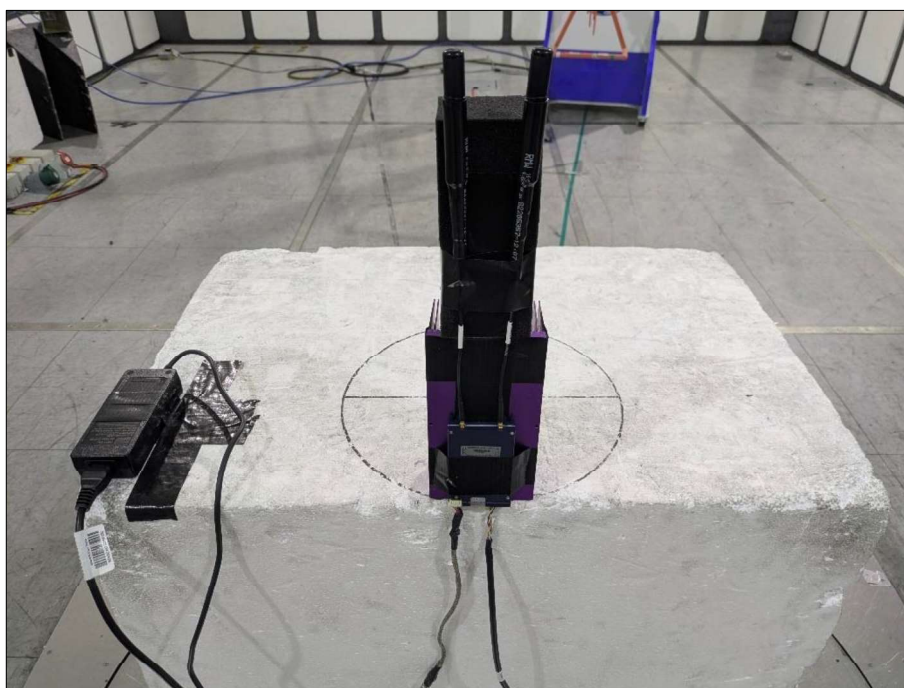


Figure 105 - Test Setup - Y Plane

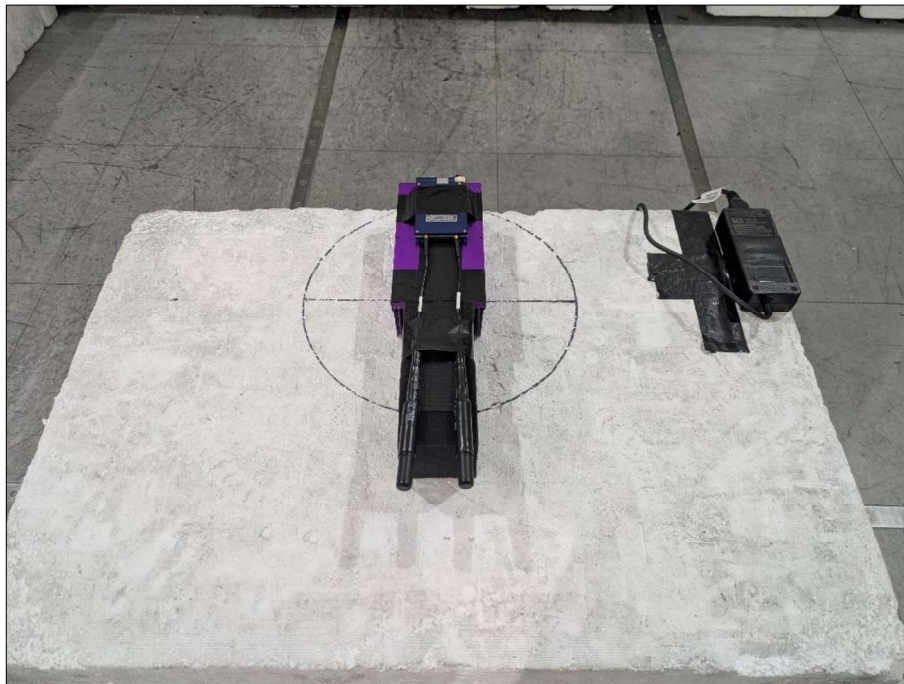


Figure 106 - Test Setup - Z Plane

FCC 47 CFR Part 15, Limit Clause 15.247 (d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in 15.209(a)

ISED RSS-247, Limit Clause 5.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under Section 5.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

In addition, radiated emissions which fall in the restricted bands, as defined in RSS-GEN, clause 8.10, must also comply with the radiated emission limits specified in RSS-GEN clause 8.9.

2.6.8 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 5.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Antenna (DRG, 18 GHz to 40 GHz)	Link Microtek Ltd	AM180HA-K-TU2	230	24	08-Oct-2026
Pre-Amplifier (18 GHz to 40 GHz)	Narda	NARDA DB02-0447	237	12	30-Apr-2026
Antenna (Bilog with attenuator, 30 MHz to 3 GHz)	Schaffner	CBL6143	287	24	29-Aug-2026
3m Semi-Anechoic Chamber	Rainford	RF Chamber 5	1545	36	23-Apr-2027
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Hygrometer	Rotronic	Hygropalm 0	3028	12	12-Aug-2025
True RMS Multimeter	Fluke	179	4007	12	10-Dec-2025
High Pass Filter (4GHz)	K&L Microwave	11SH10-4000/X18000-0/0	4599	12	15-Oct-2025
2 Channel PSU	Rohde & Schwarz	HMP2020	4735	-	O/P Mon
Mast Controller	Maturo GmbH	NCD	4810	-	TU
Tilt Antenna Mast	Maturo GmbH	TAM 4.0-P	4811	-	TU
Antenna (DRG, 1 GHz to 10.5 GHz)	Schwarzbeck	BBHA9120B	4848	12	05-Jul-2026
Band Reject Filter - 2.425 GHz	Wainwright	WRCGV14-2390-2400-2450-2460-50SS	5067	12	14-Oct-2025
Band Reject Filter - 2.4585 GHz	Wainwright	WRCGV14-2423.5-2433.5-2483.5-2493.5-50SS	5069	12	07-Nov-2025
Test Receiver	Rohde & Schwarz	ESW44	5084	12	13-Dec-2025
Emissions Software	TUV SUD	EmX V3.5.3	5125	-	Software
Antenna (DRG, 7.5 GHz to 18 GHz)	Schwarzbeck	HWRD750	5216	12	12-Jul-2026
Pre-amplifier (30 dB, 1GHz to 18GHz)	Schwarzbeck	BBV 9718 C	5261	12	17-Apr-2026
Cable 2.92m	Junkosha	MWX241-01000KMS	5413	12	23-May-2026
Cable (K-Type to K-Type, 1 m)	Junkosha	MWX241-01000KMSKMS/A	5512	12	06-Jun-2026
7 GHz High pass Filter	Wainwright	WHKX12-5850-6800-18000-80SS	5549	12	15-Aug-2025
Pre-Amplifier (8 GHz to 18 GHz)	Wright Technologies	APS06-0061	5596	12	28-Oct-2025



Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
2m Coaxial Cable Assy	Junkosha	MWX221-02000AMSAMS/A	6357	12	13-May-2026
Cable Assy 8m (N to N) 18GHz	Junkosha	MWX221-08000NMSNMS/B	7050	12	01-Jun-2026

Table 36

TU - Traceability Unscheduled
O/P Mon – Output Monitored using calibrated equipment

2.7 Power Spectral Density

2.7.1 Specification Reference

FCC 47 CFR Part 15C, Clause 15.247 (e)
ISED RSS-247, Clause 5.2
ISED RSS-GEN, Clause 6.12

2.7.2 Equipment Under Test and Modification State

BluSDR-30-C, S/N: FR009550 - Modification State 0

2.7.3 Date of Test

13-August-2025 to 14-August-2025

2.7.4 Test Method

This test was performed in accordance with ANSI C63.10, clause 11.10.5.

Where the EUT duty cycle was < 98 % and repeatable within 2 %, the spectrum analyser was set to trace (power) averaging and a duty cycle correction was added as calculated in the result tables below (Method AVGPSD-2).

MIMO output port summing was performed in accordance with KDB 662911 D01 E)2)b).

The EUT was supplied with 120 VAC with an AC PSU to a customer supplied AC/DC converter, resulting in 12 VDC at the EUT input.

To force the EUT to transmit, a second sample was connected via the conducted path and lperf was used to force packets to be sent from the EUT to the second sample. This was connected via a directional coupler and enough attenuation to not be seen while measuring the EUT.

2.7.5 Test Setup Diagram

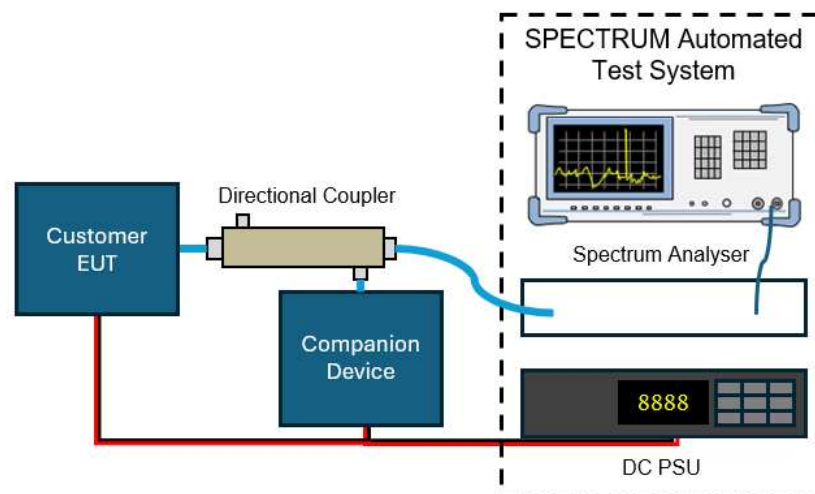


Figure 107 – Test Setup Diagram for Power Spectral Density

2.7.6 Environmental Conditions

Ambient Temperature 22.0 - 22.7 °C
Relative Humidity 66.9 - 67.7 %

2.7.7 Test Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 5.2 b)	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	662911 D01 v02r01 E)2)b)		

DUT Configuration			
Mode:	1.25 MHz	Duty Cycle (%):	100.0
Modulation:	QPSK	DCCF (dB):	0.00
Antenna Configuration:	TxBF	Peak Antenna Gain (dBi):	5.51
Active Port(s):	A+B (A + B)	Active Chain(s):	0+0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2401.875	3.0	2.42	1.99	-	-	5.22	8.00	-2.78
2438.75	3.0	2.09	2.40	-	-	5.26	8.00	-2.74
2475.625	3.0	2.47	2.61	-	-	5.55	8.00	-2.45

Table 37 - Maximum Power Spectral Density Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 5.2 b)	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	2.50 MHz	Duty Cycle (%):	84.7
Modulation:	QPSK	DCCF (dB):	0.72
Antenna Configuration:	TxBF	Peak Antenna Gain (dBi):	5.51
Active Port(s):	A+B (A + B)	Active Chain(s):	0+0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2403.75	3.0	0.37	0.51	-	-	3.45	8.00	-4.55
2436.25	3.0	0.42	0.39	-	-	3.42	8.00	-4.58
2468.75	3.0	0.11	0.56	-	-	3.35	8.00	-4.65

Table 38 - Maximum Power Spectral Density Results



Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 5.2 b)	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	5.00 MHz	Duty Cycle (%):	77.7
Modulation:	QPSK	DCCF (dB):	1.10
Antenna Configuration:	TxBF	Peak Antenna Gain (dBi):	5.51
Active Port(s):	A+B (A + B)	Active Chain(s):	0+0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2407.5	3.0	-1.25	-0.98	-	-	1.90	8.00	-6.10
2437.5	3.0	-1.39	-1.40	-	-	1.62	8.00	-6.38
2467.5	3.0	-0.89	-1.37	-	-	1.89	8.00	-6.11

Table 39 - Maximum Power Spectral Density Results

Test Configuration			
Frequency Range:	2400-2483.5 MHz	Band:	2.4 GHz
Limit Clause(s):	15.247 (e) RSS-247 5.2 b)	Test Method(s):	C63.10 11.10.5
Additional Reference(s):	662911 D01 v02r01 E)2)b)		
Note(s):	DCCF was added to the spectrum analyser reference level offset.		

DUT Configuration			
Mode:	10.00 MHz	Duty Cycle (%):	81.9
Modulation:	QPSK	DCCF (dB):	0.87
Antenna Configuration:	TxBF	Peak Antenna Gain (dBi):	5.51
Active Port(s):	A+B (A + B)	Active Chain(s):	0+0

Test Frequency (MHz)	RBW (kHz)	PSD (dBm/RBW)					Limit (dBm/3 kHz)	Margin (dB)
		A	B	C	D	Σ		
2420	3.0	-2.55	-3.77	-	-	-0.11	8.00	-8.11
2432.5	3.0	-2.41	-3.35	-	-	0.16	8.00	-7.84
2445	3.0	-2.30	-2.66	-	-	0.53	8.00	-7.47

Table 40 - Maximum Power Spectral Density Results

FCC 47 CFR Part 15, Limit Clause 15.247 (e)

The power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

ISED RSS-247, Limit Clause 5.2(b)

The transmitter power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission

2.7.8 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 1.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Directional Coupler	Krytar	1850	58	-	TU
Hygrometer	Rotronic	I-1000	2891	12	02-Dec-2025
GPSDR Frequency Standard	Spectracom	SecureSync 1200-0408-0601	4393	6	18-Sep-2025
Digital Multi-meter	Iso-tech	IDM93N	4435	12	06-Mar-2026
30dB Attenuator	Narda	766-30	4783	12	09-Oct-2025
AC Programmable Power Supply	iTech	IT7324	5226	-	O/P Mon
Power Splitter, 2 way	Mini-Circuits	ZN2PD2-63-S+	5238	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5528	24	18-Sep-2025
Cable (SMA to SMA 3m)	Junkosha	MWX221-03000AMSAMS/B	6000	24	12-Jun-2026
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6350	12	02-Aug-2025
1m Coaxial Cable Assy	Junkosha	MWX221-01000AMSAMS/A	6376	12	06-Jun-2026
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6638	12	02-Aug-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6639	12	02-Aug-2025
Directional Coupler	RF-Lambda	RFDC5M18G20	6913	-	O/P Mon
2m SMA Cable	Junkosha	MWX221-02000AMSAMS/B	6926	12	08-Dec-2025

Table 41

O/P Mon – Output Monitored using calibrated equipment
TU – Traceability Unscheduled

3 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Name	Measurement Uncertainty
Antenna Requirement	N/A
Restricted Band Edges	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Emission Bandwidth	± 183.49 kHz
Maximum Conducted Output Power	± 1.38 dB
Authorised Band Edges	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Spurious Radiated Emissions	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Power Spectral Density	± 1.49 dB

Table 42

Measurement Uncertainty Decision Rule

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115:2021, Clause 4.4.3 (Procedure 2). The measurement results are directly compared with the test limit to determine conformance with the requirements of the standard.

Risk: The uncertainty of measurement about the measured result is negligible with regard to the final pass/fail decision. The measurement result can be directly compared with the test limit to determine conformance with the requirement (compare IEC Guide 115). The level of risk to falsely accept and falsely reject items is further described in ILAC-G8.