



REPORT No.: SZ25090192W03

TEST REPORT

APPLICANT : Eforthink Technology Co., Ltd.

PRODUCT NAME : UWB Indoor Wall-mounted
Positioning Base Station

MODEL NAME : D32

BRAND NAME : EforLink

FCC ID : 2BTEQEFORLINKD32

STANDARD(S) : 47 CFR Part 15 Subpart F

RECEIPT DATE : 2026-06-16

TEST DATE : 2026-06-30 to 2026-08-03

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MORLAB

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Change History		
Version	Date	Reason for change
1.0	2026-09-15	First edition



1. Summary of Test Result

No.	Section	Description	Test Date	Test Engineer	Result	Remark
1	15.203	Antenna Requirement	N/A	N/A	PASS	/
2	N/A	Duty Cycle of Test Signal	Jun. 30, 2026	Zhu Peihong	N/A	/
3	15.503(a), 15.517(b)	UWB Bandwidth and Occupied Bandwidth	Jun. 30, 2026	Zhu Peihong	PASS	/
4	15.517(e)	Peak Power Spectral Density	Jun. 30, 2026	Zhu Peihong	PASS	/
5	15.209, 15.517(c), 15.517(d)	Radiated Emission	Jul. 23, 2026	Tian Xin	PASS	/
6	15.207	Conducted Emission	Jul. 23, 2026	Tian Xin	PASS	/

Note 1: Any additions, deviation, or exclusions from the method shall be noted in the "Remark".

1.1. Applicable Testing Methods

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

- 47 CFR Part 15 Subpart C
- ANSI C63.10-2020
- KDB 393764 D01 UWB FAQ v02r01



1.2. Test Equipment List

1.2.1 Conducted Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
EXA Signal Analyzer	MY53470836	N9010A	Agilent	2025.12.23	2026.12.22
RF Cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
SMA Connector	CN01	RF03	HUBER-SUHNER	N/A	N/A

1.2.2 Conducted Emission Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	101052	ESPI	R&S	2026.05.07	2027.05.06
LISN	103131	ENV 216	R&S	2026.03.18	2027.03.17
RF Coaxial Cable (DC-100MHz)	BNC	MRE04	Qualwave	2026.05.06	2027.05.05

1.2.3 List of Software Used

Description	Manufacturer	Software Version
JS32-RE	Tonscend	5.0.0
TS+ -[JS32-CE]	Tonscend	2.5.0.0

**1.2.4 Radiated Test Equipment**

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Signal Analyzer	MY56060145	N9020A	Agilent	2026.04.28	2027.04.27
Test Antenna - Bi-Log	9163-274	VULB 9163	Schwarzbeck	2026.06.28	2027.06.27
Test Antenna - Loop	1519-022	FMZB1519	Schwarzbeck	2026.05.09	2027.05.08
Test Antenna – Horn	01774	BBHA 9120D	Schwarzbeck	2026.05.30	2027.05.29
Test Antenna – Horn	BBHA9170 #773	BBHA9170	Schwarzbeck	2025.06.20	2026.06.19
Preamplifier (10MHz-6GHz)	46732	S10M100L38 02	LUCIX CORP.	2026.05.07	2027.05.06
Preamplifier (2GHz-18GHz)	61171/61172	S020180L32 03	LUCIX CORP.	2026.05.07	2027.05.06
Preamplifier (18GHz-40GHz)	DS77209	DCLNA0118-40C-S	Decentest	2026.05.07	2027.05.06
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2025.09.03	2026.09.02
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2025.09.03	2026.09.02
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2025.09.03	2026.09.02
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-KK-0.5	Qualwave	2025.09.03	2026.09.02
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-KKF-2	Qualwave	2025.09.03	2026.09.02
RF Coaxial Cable (DC-18GHz)	22120181	QA500-18-NN-5	Qualwave	2025.09.03	2026.09.02
Anechoic Chamber	N/A	9m*6m*6m	CRT	2025.06.21	2028.06.20
Anechoic Chamber	N/A	9m*6m*6m	CRT	2025.04.19	2028.04.18



1.3. Measurement Uncertainty

Test Items	Uncertainty	Remark
Peak Power Spectral Density	$\pm 2.22\text{dB}$	Confidence levels of 95%
Bandwidth	$\pm 5\%$	Confidence levels of 95%
Radiated Emission	$\pm 2.95\text{dB}$	Confidence levels of 95%
Conducted Emission	$\pm 2.44\text{dB}$	Confidence levels of 95%

1.4. Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, Guangdong Province, P. R. China
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FCC Designation Number:	CN1192
FCC Test Firm Registration Number:	226174



2. General Description

2.1. Information of Applicant and Manufacturer

Applicant:	Eforthink Technology Co., Ltd.
Applicant Address:	Units 904,905,906, 9/Floor & Unit 1007, 10/Floor Building 1,898 Baicao Road, Gaoxin West District Chengdu City, Sichuan Province, China
Manufacturer:	Eforthink Technology Co., Ltd.
Manufacturer Address:	Units 904,905,906, 9/Floor & Unit 1007, 10/Floor Building 1,898 Baicao Road, Gaoxin West District Chengdu City, Sichuan Province, China

2.2. Information of EUT

Product Name:	UWB Indoor Wall-mounted Positioning Base Station
Sample No.:	1#, 4#, 7#
Hardware Version:	V0401
Software Version:	V8.10
Equipment Type:	UWB
Modulation Type:	BPSK
Operating Frequency Range:	7737.6MHz-8236.8MHz
Channel List:	Refer to section 2.3 in this report.
Application Category:	☐ GPRs/Wall image Systems ☐ Through-wall imaging systems ☐ Surveillance systems ☐ Medical imaging systems ☐ Vehicular radar systems ☒ Indoor UWB systems ☐ Hand held UWB systems
Antenna Type:	Chip Antenna
Antenna Gain:	3.5dBi

Note 1: The EUT description presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information. For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



2.3.Channel List of EUT

Channel	Frequency (MHz)
9	7987.2

Note 1: The black bold channels were selected for test.

2.4.Test Configuration of EUT

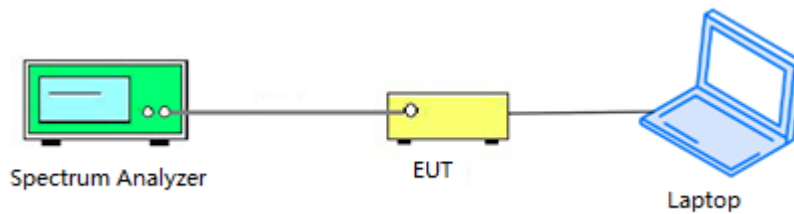
The EUT is controlled by dedicated software-“Wireless R&D Testing Tools.exe” provided by the manufacturer, which needs to be installed on a computer, to transmit at the default maximum power level.

2.5.Test Conditions

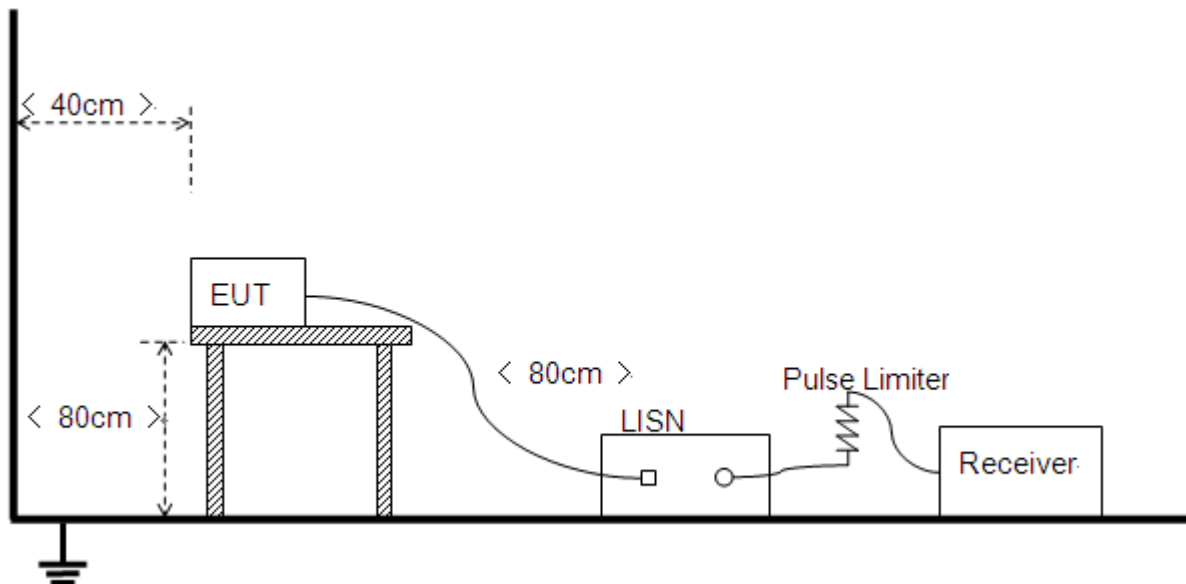
Temperature (°C):	15-35
Relative Humidity (%):	30-60
Atmospheric Pressure (kPa):	86-106

2.6. Test Setup Layout Diagram

2.6.1. Conducted Measurement

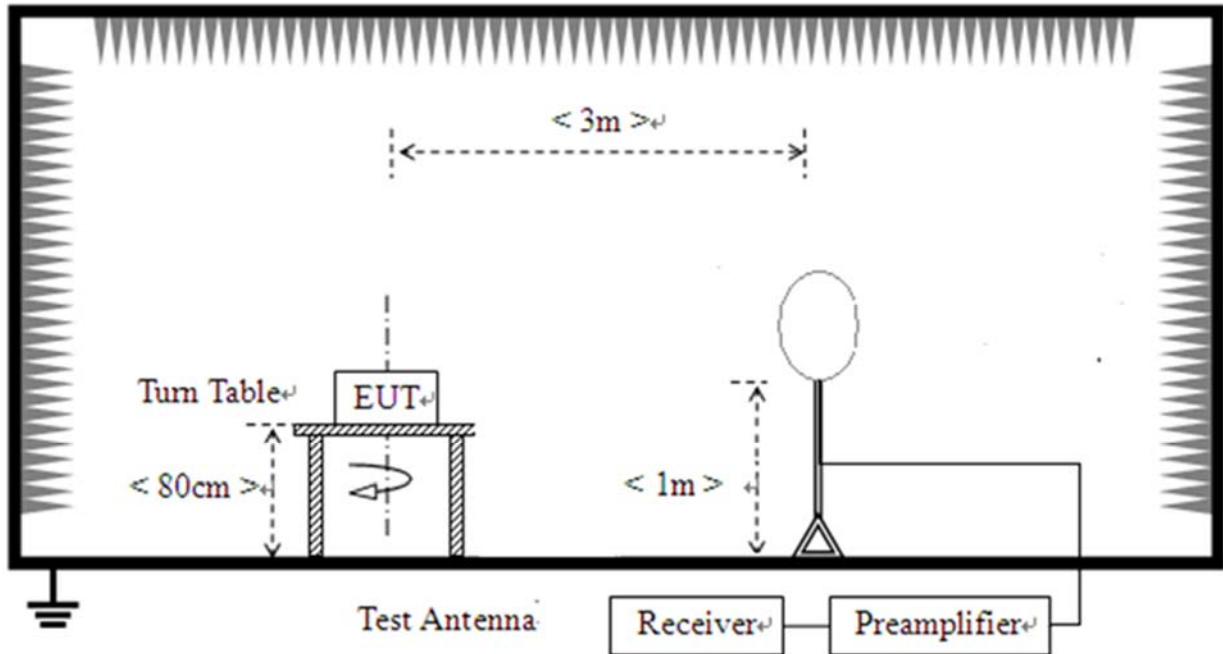


2.6.2. Conducted Emission Measurement

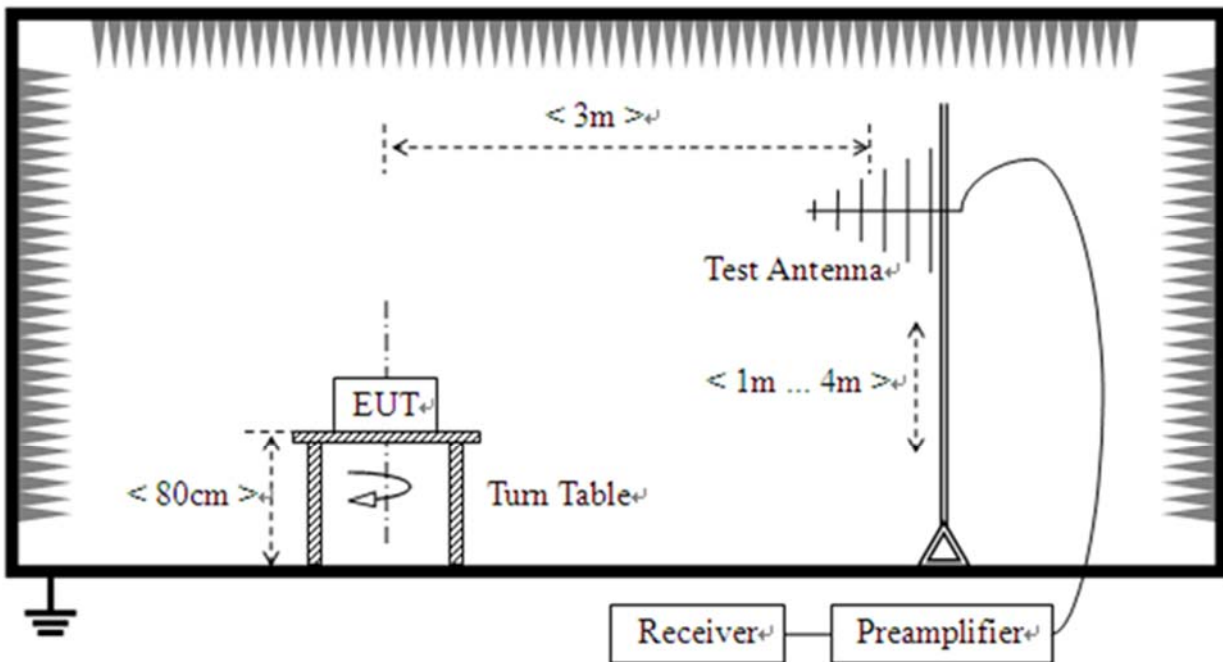


2.6.3.Radiation Measurement

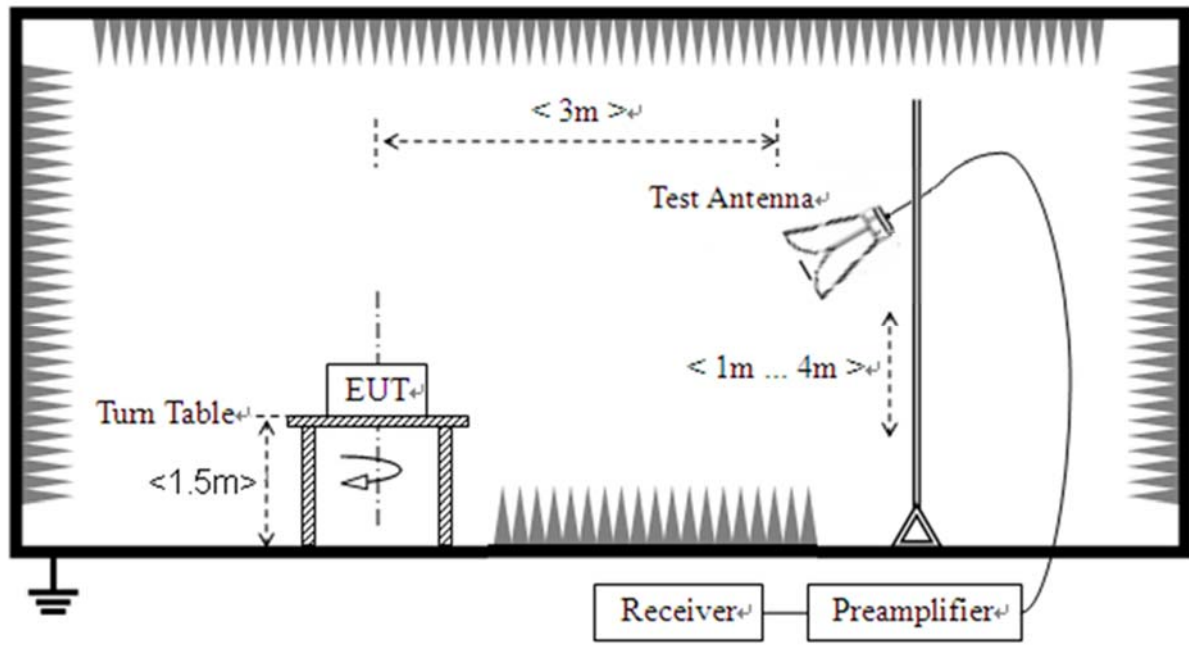
1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to 1GHz



3) For radiated emissions above 1GHz



3. Test Results

3.1. Antenna Requirement

3.1.1. Requirements

According to FCC 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

3.1.2. Results

Antenna location	Antenna Type	Coupling Method
☒ Internal ☐ External	☐ FPC Antenna ☐ Spring Antenna ☐ Ceramic Antenna ☐ Integrated Antenna ☐ Dipole Antenna ☐ PCB Antenna ☐ PIFA Antenna ☒ Chip Antenna	☐ I-PEX Connector ☐ SMA Connector ☐ RP-SMA Connector ☐ Metal Shrapnel ☒ Layout



3.2. UWB Bandwidth and Occupied Bandwidth

3.2.1. Requirements

47 CFR 15.503(a) -The UWB bandwidth is the frequency band bounded by the points that are 10 dB below the highest radiated emission, as based on the complete transmission system including the antenna. The upper boundary is designated f_H and the lower boundary is designated f_L . The frequency at which the highest radiated emission occurs is designated f_M .

47 CFR 15.503(b) -The center frequency, f_C , equals $(f_H + f_L)/2$.

47 CFR 15.503(c) -The fractional bandwidth equals $2(f_H - f_L) / (f_H + f_L)$.

47 CFR 15.503(d) -A Ultra-wideband (UWB) transmitter that, at any point in time, has a fractional bandwidth equal to or greater than 0.20 or has a UWB bandwidth equal to or greater than 500 MHz, regardless of the fractional bandwidth.

ANSI C63.10 section 3.1-The occupied bandwidth is the bandwidth containing 99% of the total integrated power of the transmitted spectrum, centered on the assigned frequency.

3.2.2. Test Procedure

UWB Bandwidth: ANSI C63.10, section 10.1,

Occupied Bandwidth: ANSI C63.10 section 6.9.

3.2.3. Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.2.4. Test Results

Refer to Annex A.2 in this report.



3.3. Peak Power Spectral Density

3.3.1. Requirements

47 CFR 15.517(e) -There is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on the frequency at which the highest radiated emission occurs, f_M . That limit is 0 dBm EIRP.

47 CFR 15.521(g) -If a resolution bandwidth other than 50 MHz is employed, the peak EIRP limit shall be $20 \log (RBW/50)$ dBm where RBW is the resolution bandwidth in megahertz that is employed. This may be converted to a peak field strength level at 3 meters using $E(\text{dBuV/m}) = P(\text{dBm EIRP}) + 95.2$.

3.3.2. Test Procedure

ANSI C63.10, section 10.3.5 and section 10.3.6.

3.3.3. Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.3.4. Test Results

Refer to Annex A.3 in this report.

3.4. Radiated Emissions

3.4.1. Requirements

47 CFR 15.517(c)-The radiated emissions at or below 960 MHz from a device operating under the provisions of this section shall not exceed the emission levels in § 15.209:

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

The radiated emissions above 960 MHz from a device operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz:

Frequency (MHz)	EIRP (dBm)	Field Strength@3m (μV/m)	Field Strength@3m (dBμV/m)
960-1610	-75.3	9.92	19.93
1610-1990	-63.3	11.85	21.47
1990-3100	-61.3	49.71	33.93
3100-10600	-41.3	497.09	53.93
Above 10600	-61.3	49.71	33.93

According to section annex G.2 in ANSI C63.10, the EIRP can be converted into electric field strength using the following formula:

$$EIRP = p_t \times g_t = (E \times d)^2 / 30$$

where

p_t	is the transmitter output power in watts
g_t	is the numeric gain of the transmitting antenna (dimensionless)
E	is the electric field strength in V/m
d	is the measurement distance in meters (m)

$$ERP = EIRP / 1.64 = (E \times d)^2 / (30 \times 1.64) = (E \times d)^2 / 49.2$$



Note1: For above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.

3.4.2. Test Procedure

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 30MHz, the emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9kHz-90 kHz, 110kHz-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video band width is set to 3MHz for peak measurements and as applicable for average measurements.

The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions. For measurements above 1 GHz, keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response.

3.4.3. Test Setup Layout

Refer to chapter 2.6.3 in this report.

3.4.4. Test Results

Refer to Annex A.4 in this report.



According to ANSI C63.10, because of peak detection will yield amplitudes equal to or greater than amplitudes measured with the quasi-peak (or average) detector, the measurement data from a spectrum analyzer peak detector will represent the worst-case results, if the peak measured value complies with the quasi-peak (or average) limit, it is unnecessary to perform an quasi-peak measurement (or average).

The measurement results are obtained as below:

$$E [\text{dB}\mu\text{V/m}] = U_R + A_T + A_{\text{Factor}} [\text{dB}]; A_T = L_{\text{Cable loss}} [\text{dB}] - G_{\text{preamp}} [\text{dB}]$$

A_T : Total correction Factor except Antenna

U_R : Receiver Reading

G_{preamp} : Preamplifier Gain

A_{Factor} : Antenna Factor at 3m

During the test, the total correction Factor A_T and A_{Factor} were built in test software.

Note 1: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Note 2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note 3: For the frequency, which started from 18GHz to 40GHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

3.5. Conducted Emissions

3.5.1. Requirements

According to FCC section 15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

Frequency Range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

Note:

- (a) The lower limit shall apply at the band edges.
- (b) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

3.5.2. Test Procedure

The Table-top EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.10.

3.5.3. Test Setup Layout

Refer to chapter 2.6.2 in this report.

3.5.4. Test Results

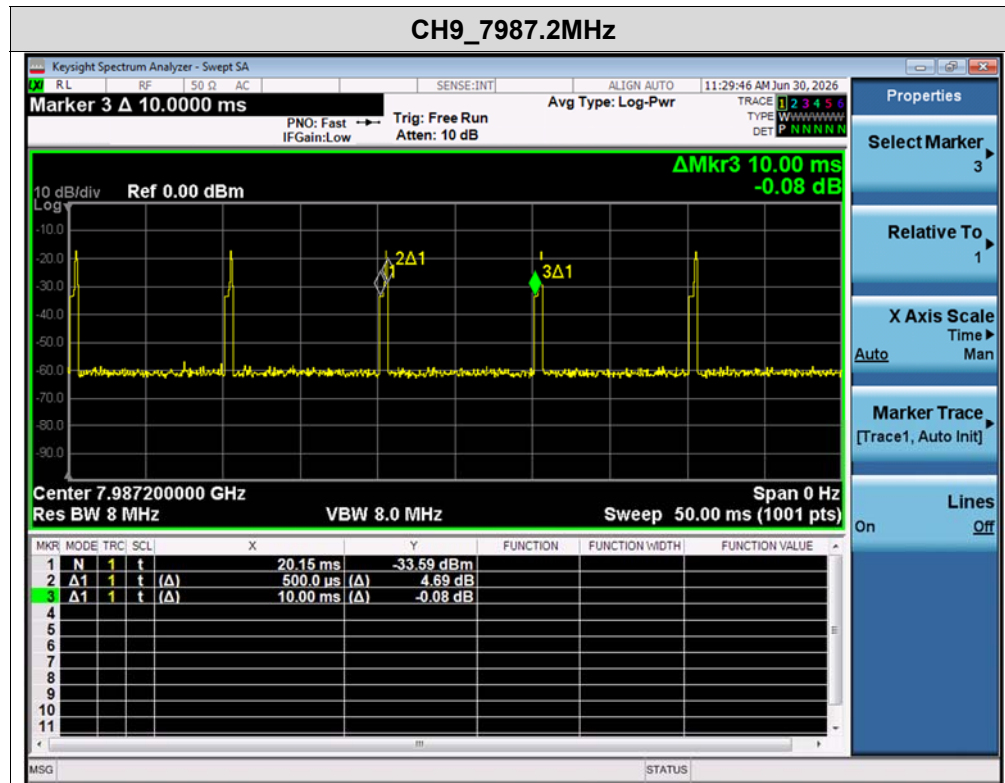
Refer to Annex A.5 in this report.



Annex A Test Data and Result

A.1. Duty Cycle of Test Signal

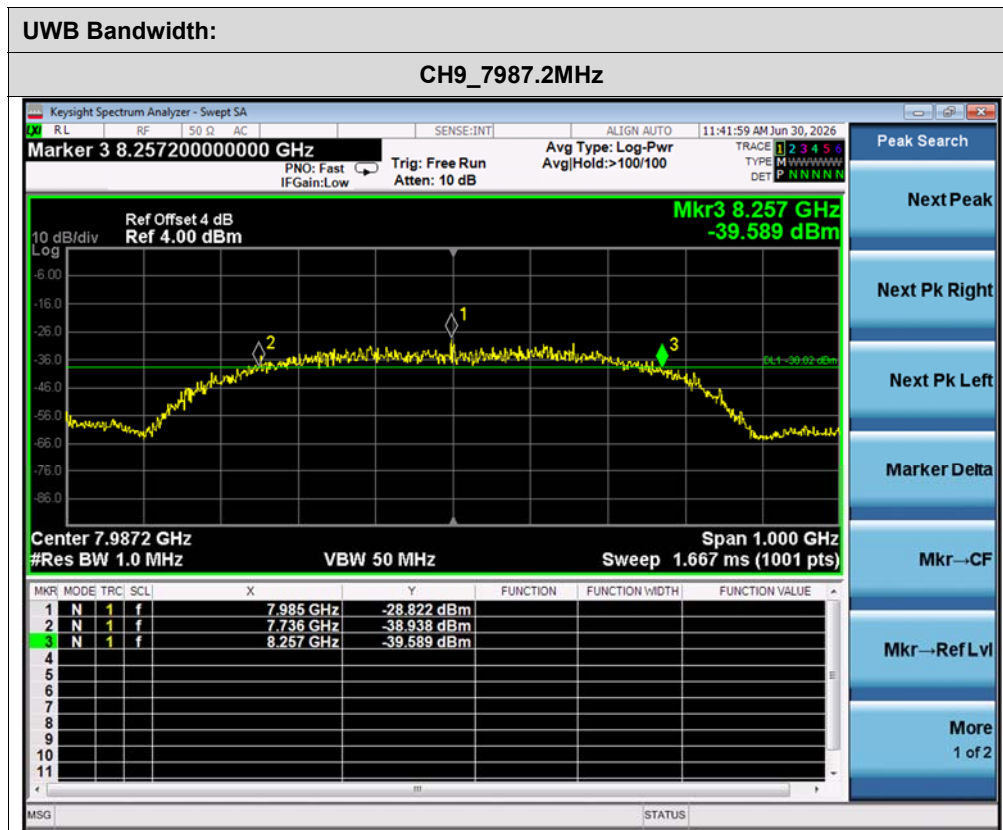
CH.	Frequency (MHz)	Tx_on (ms)	Tx_On+Off (ms)	Duty Cycle (%)
CH9	7987.2	0.50	10.00	5

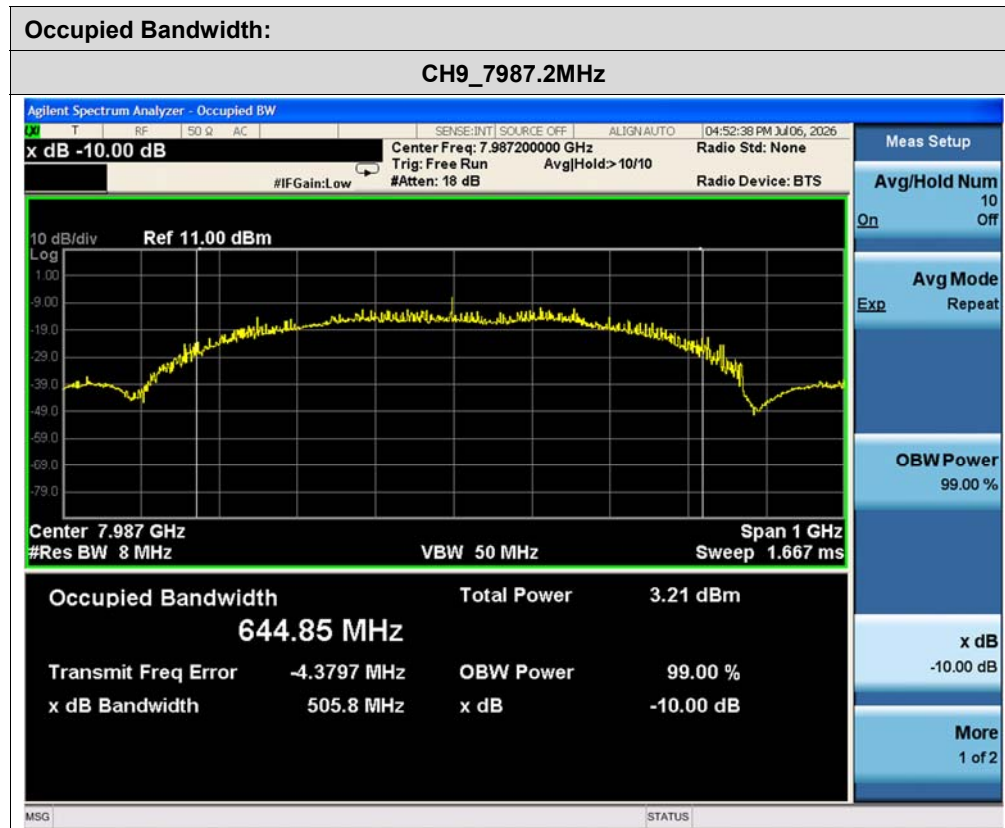


**A.2. UWB Bandwidth and Occupied Bandwidth**

Ch. Freq.(MHz) \ Items		f_L (MHz)	f_H (MHz)	UWB Transmitter ^{Note1}		Occupied Bandwidth (MHz)
				UWB Bandwidth (MHz)	Fractional Bandwidth	
Results	7987.2	7736.0	8257.0	521.0	0.065	644.85
Limits	7987.2	>3100	<10600	>=500	>=0.2	-
Verdict	7987.2	PASS	PASS	PASS		-

Note1: The fractional bandwidth equal to or greater than 0.20 or has a UWB bandwidth equal to or greater than 500 MHz, regardless of the fractional bandwidth.

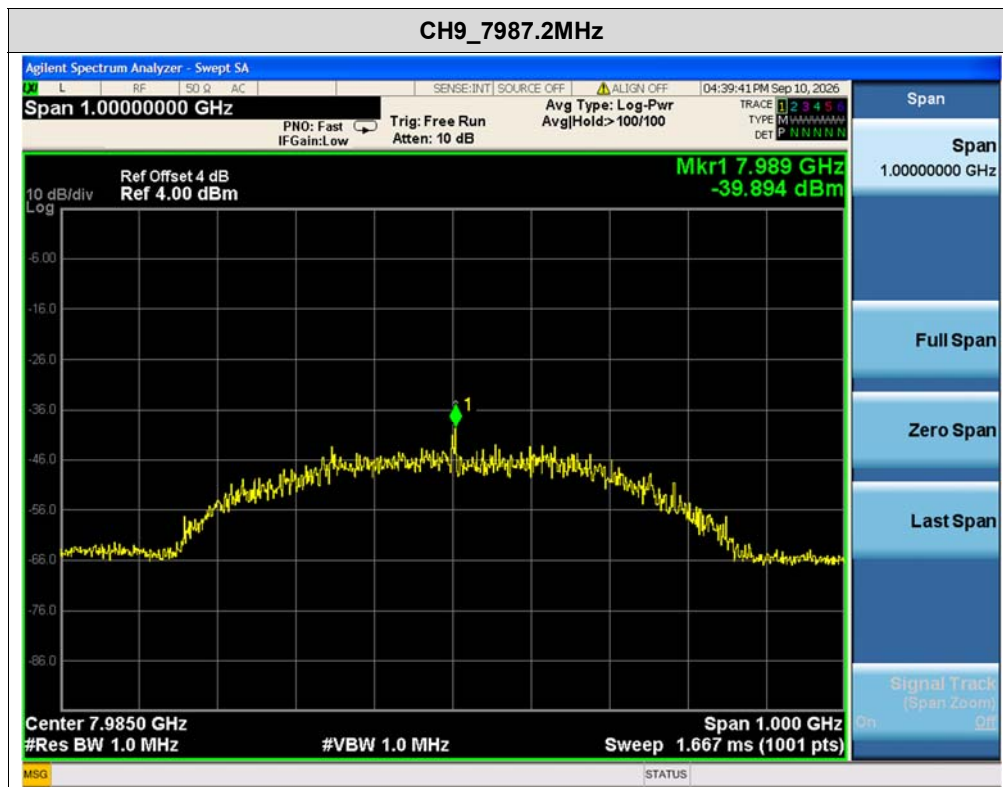






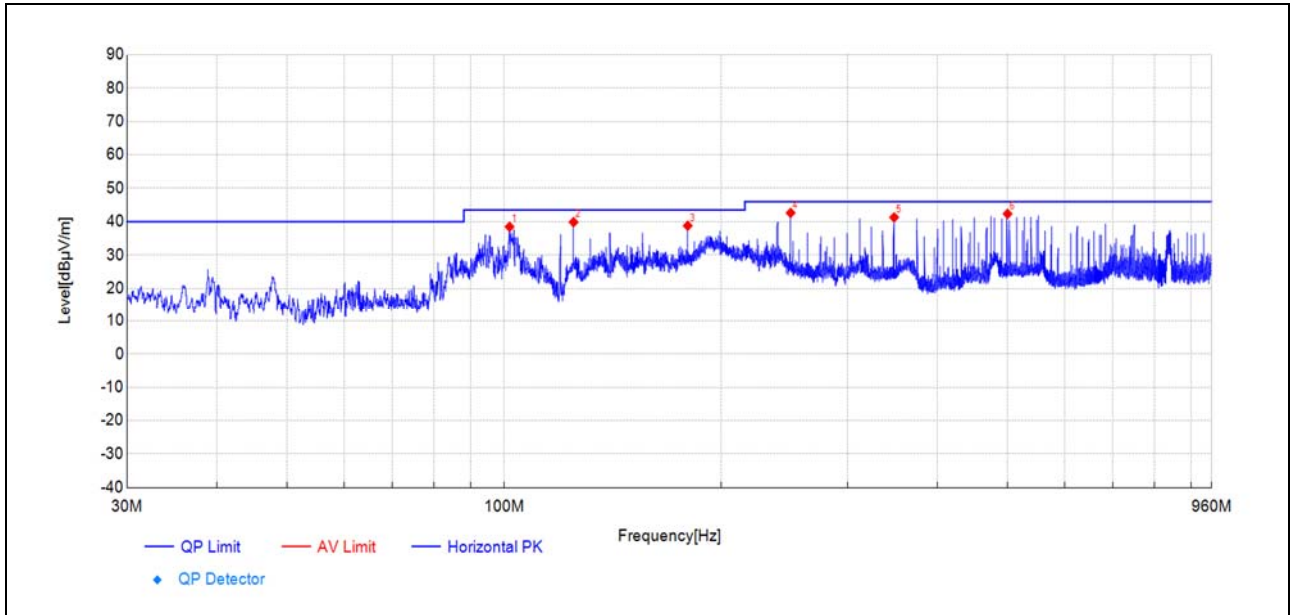
A.3. Peak Power Spectral Density

Freq. (MHz)	Power Setting (PL)	Conducted Emission Level within 1MHz (dBm)	Antenna Gain (dBi)	EIRP Emission Level within 1MHz (dBm)	Limit (dBm)		Verdict
					50 MHz BW centered on f_m	RBW=1 MHz ($\leq 20 \cdot \log(RBW/50)$)	
7987.2	0x1D1D1D1D	-39.894	3.50	-36.394	0	-33.979	PASS



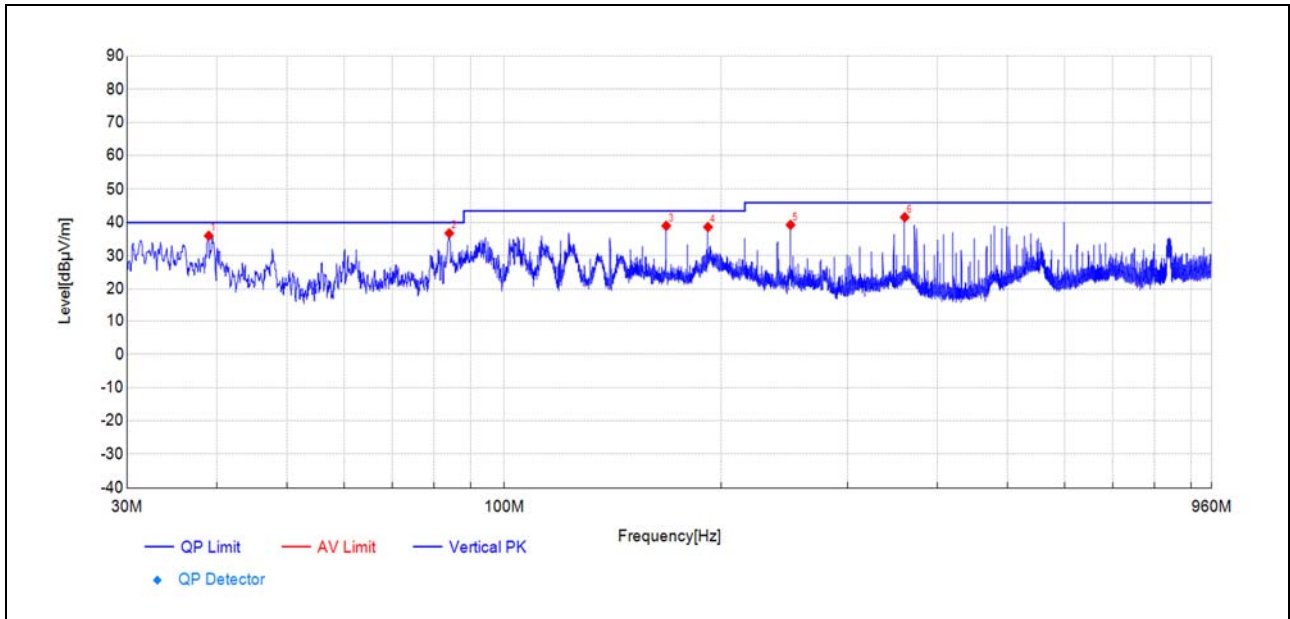
A.4. Radiated Emissions

Plot for Channel 9



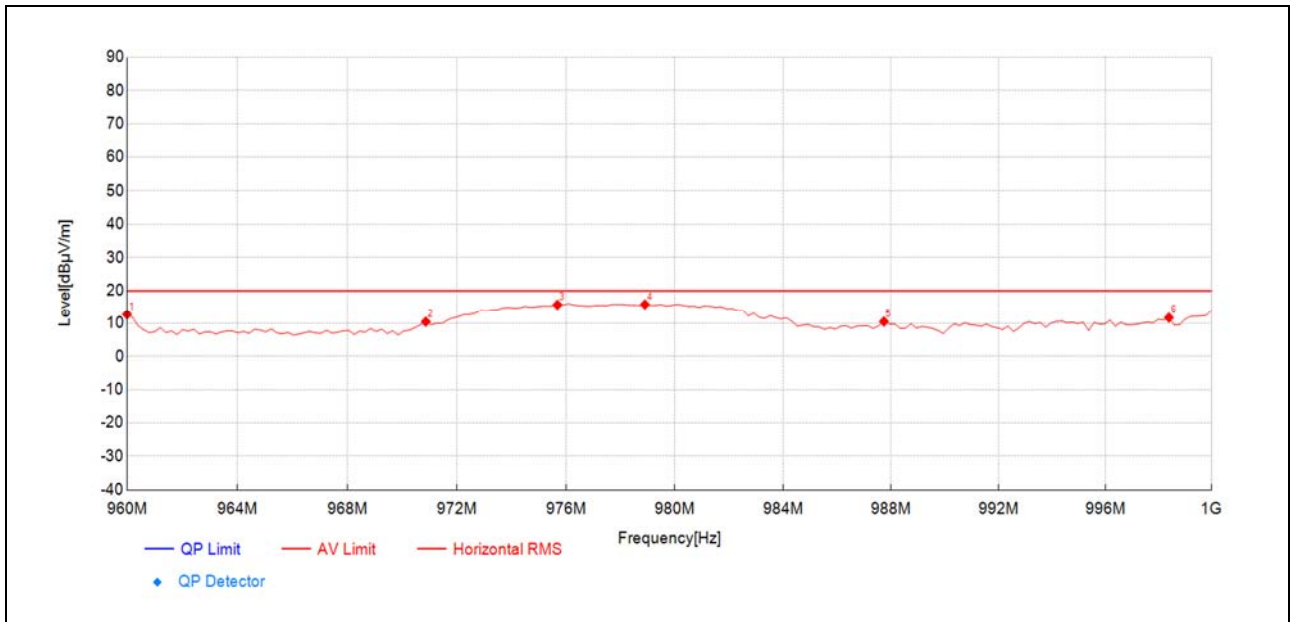
(Antenna Horizontal, 30MHz to 960MHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
101.85	68.8	38.45	-30.320	43.50	5.05	155	91	PK	PASS
124.96	72.8	39.86	-32.930	43.50	3.64	155	117	PK	PASS
179.96	70.3	38.78	-31.550	43.50	4.72	155	0	PK	PASS
250.01	70.7	42.62	-28.120	46.00	3.38	155	65	PK	PASS
348.02	66.6	41.29	-25.260	46.00	4.71	155	156	PK	PASS
500.03	64.0	42.34	-21.660	46.00	3.66	155	168	PK	PASS



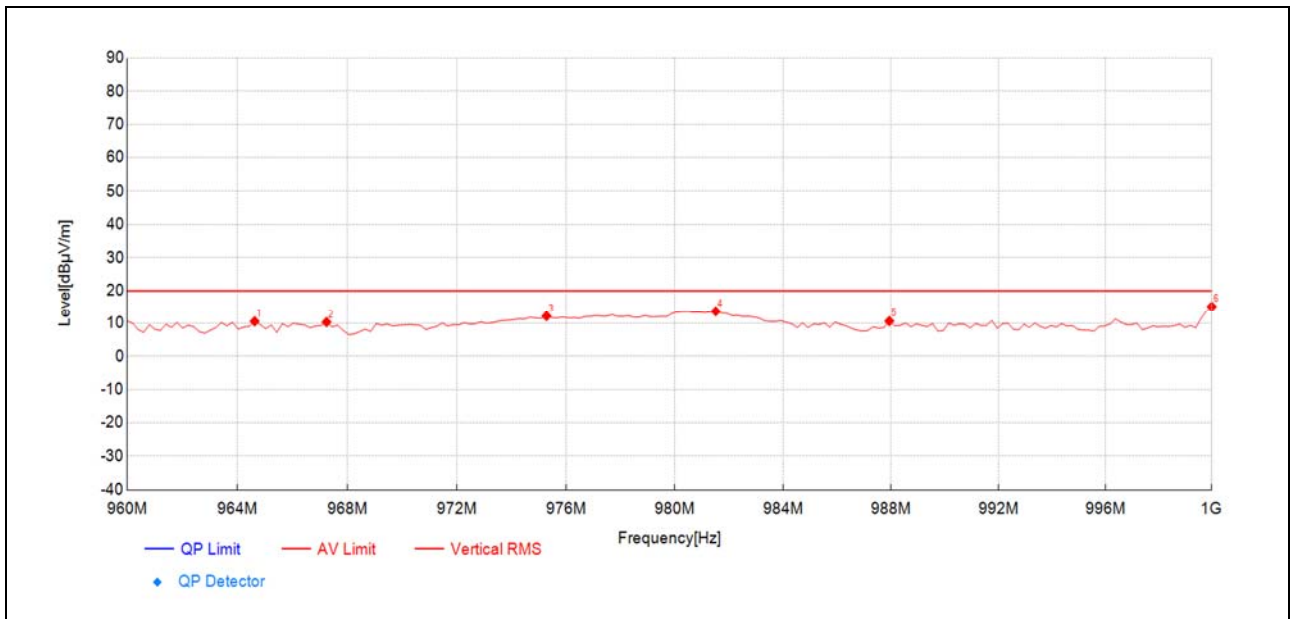
(Antenna Vertical, 30MHz to 960MHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
38.95	65.4	36.01	-29.420	40.00	3.99	155	153	PK	PASS
84.00	71.1	36.76	-34.300	40.00	3.24	155	310	PK	PASS
168.01	71.3	39.00	-32.330	43.50	4.50	155	153	PK	PASS
192.01	68.2	38.63	-29.600	43.50	4.87	155	179	PK	PASS
249.96	67.4	39.29	-28.120	46.00	6.71	155	25	PK	PASS
360.02	67.0	41.60	-25.350	46.00	4.40	155	50	PK	PASS



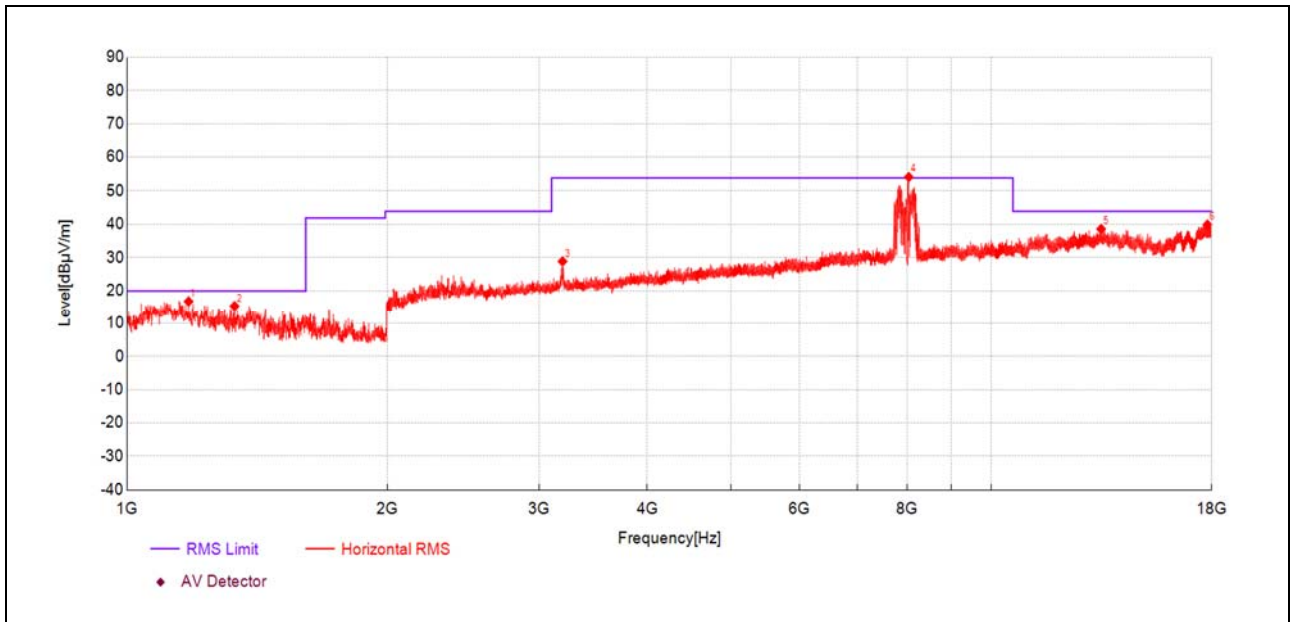
(Antenna Horizontal, 960MHz to 1GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
960.00	26.8	12.69	-14.060	19.90	7.21	155	215	RMS	PASS
970.85	24.2	10.45	-13.780	19.90	9.45	155	126	RMS	PASS
975.68	29.3	15.71	-13.630	19.90	4.19	155	126	RMS	PASS
978.89	29.4	15.81	-13.590	19.90	4.09	155	126	RMS	PASS
987.74	23.9	10.50	-13.380	19.90	9.40	155	90	RMS	PASS
998.39	24.4	11.70	-12.730	19.90	8.20	155	98	RMS	PASS



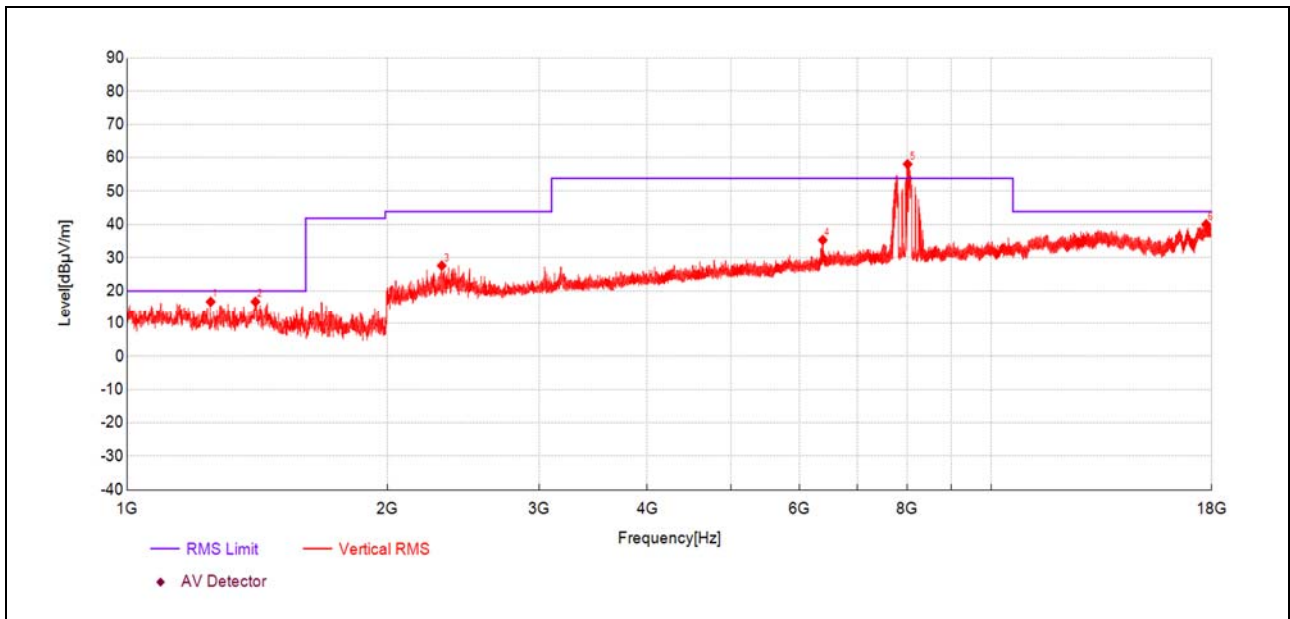
(Antenna Vertical, 960MHz to 1GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
964.62	24.5	10.55	-13.900	19.90	9.35	155	29	RMS	PASS
967.24	24.2	10.32	-13.850	19.90	9.58	155	29	RMS	PASS
975.28	25.8	12.17	-13.640	19.90	7.73	155	38	RMS	PASS
981.51	27.2	13.66	-13.530	19.90	6.24	155	118	RMS	PASS
987.94	24.0	10.64	-13.370	19.90	9.26	155	20	RMS	PASS
1000.00	27.7	15.15	-12.520	19.90	4.75	155	136	RMS	PASS



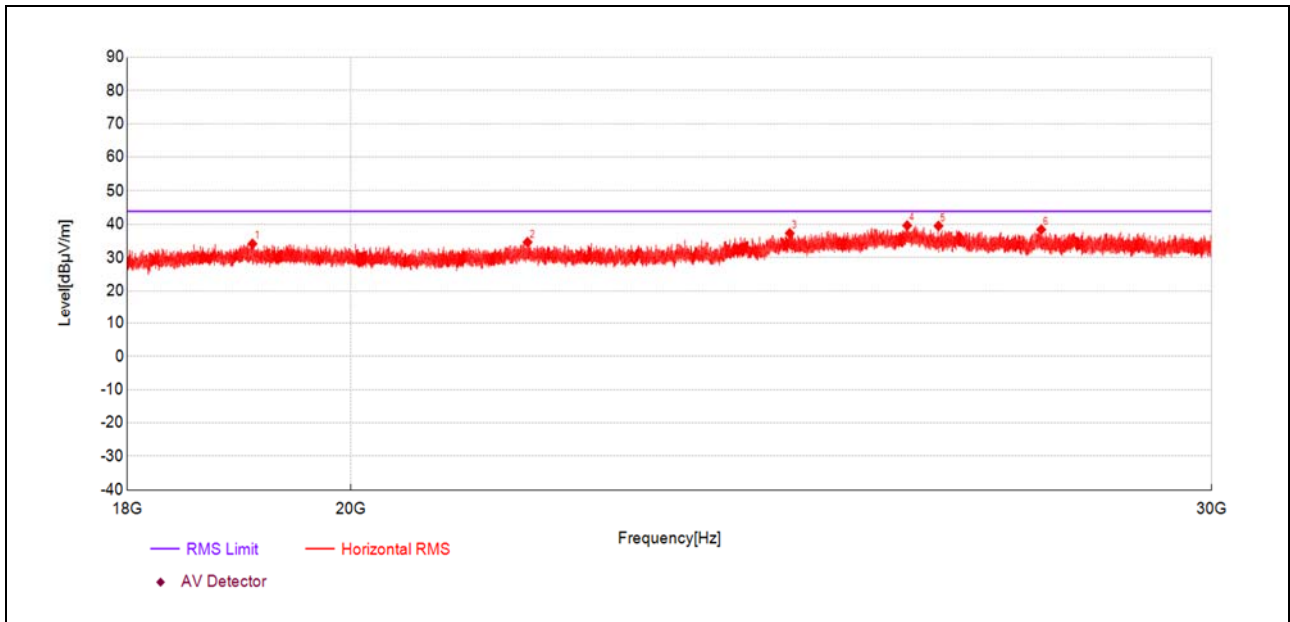
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
1178.26	40.5	16.76	-23.690	19.90	3.14	155	111	RMS	PASS
1331.75	39.1	15.32	-23.820	19.90	4.58	155	111	RMS	PASS
3191.61	45.3	28.83	-16.500	53.91	25.08	155	360	RMS	PASS
8029.46	57.9	54.20	-3.720	-	-	155	233	RMS	NA
13405.50	33.8	38.57	4.740	43.90	5.33	155	283	RMS	PASS
17797.94	30.1	39.86	9.740	43.90	4.04	155	359	RMS	PASS



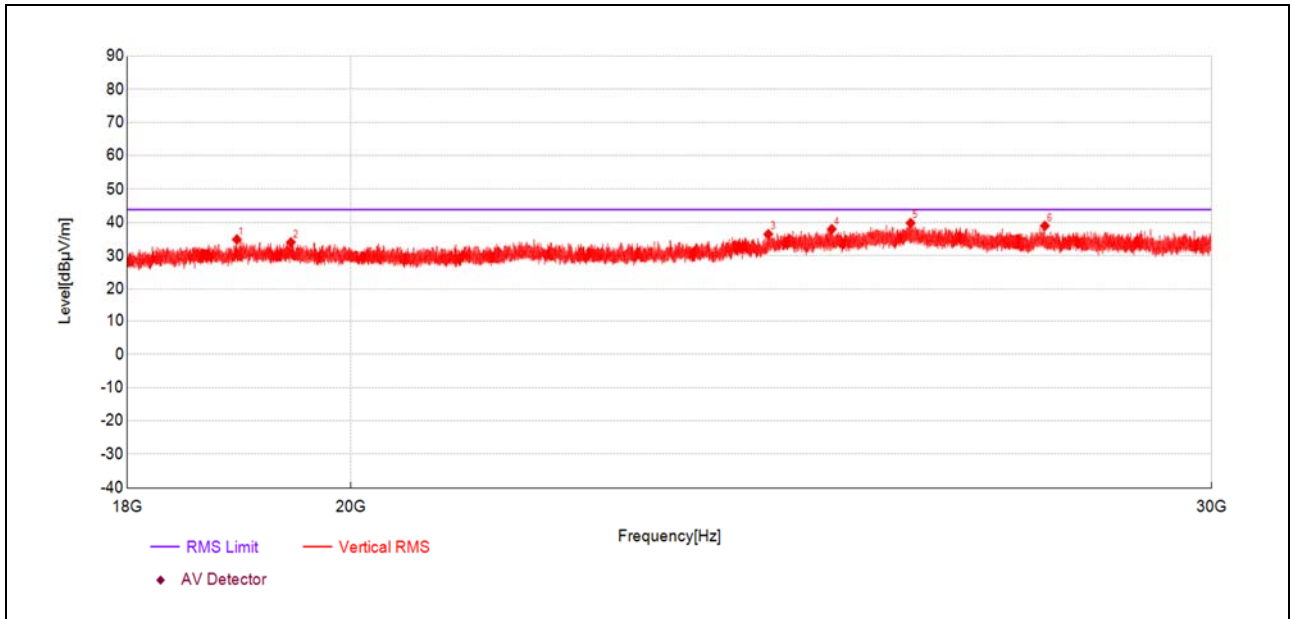
(Antenna Vertical, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
1249.66	40.6	16.66	-23.940	19.90	3.24	155	0	RMS	PASS
1408.01	40.1	16.68	-23.380	19.90	3.22	155	114	RMS	PASS
2313.41	47.8	27.58	-20.170	43.90	16.32	155	114	RMS	PASS
6384.30	41.4	35.29	-6.100	53.91	18.62	155	96	RMS	PASS
8004.69	61.7	58.02	-3.700	-	-	155	96	RMS	NA
17736.25	30.5	40.07	9.610	43.90	3.83	155	266	RMS	PASS



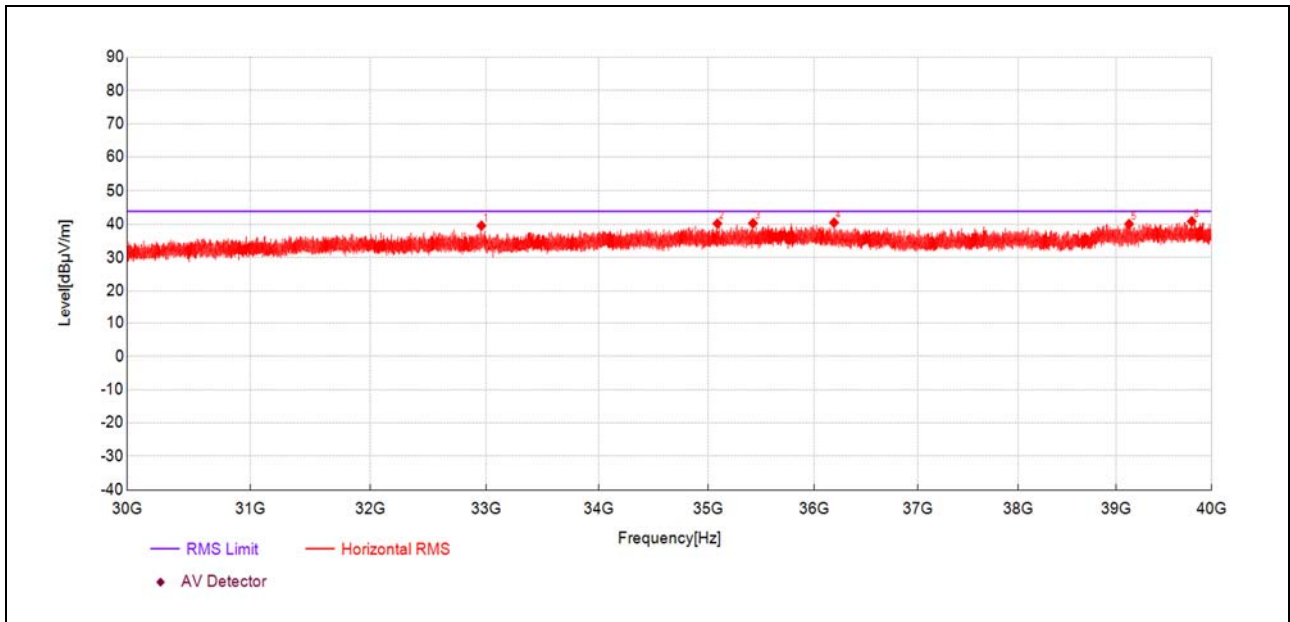
(Antenna Horizontal, 18GHz to 30GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
19095.90	33.5	34.13	0.630	43.90	9.77	155	360	RMS	PASS
21737.10	31.6	34.62	3.030	43.90	9.28	155	39	RMS	PASS
24593.10	29.9	37.29	7.370	43.90	6.61	155	265	RMS	PASS
25991.40	30.1	39.62	9.480	43.90	4.28	155	132	RMS	PASS
26377.50	30.9	39.50	8.570	43.90	4.40	155	91	RMS	PASS
27685.80	30.8	38.41	7.610	43.90	5.49	155	291	RMS	PASS



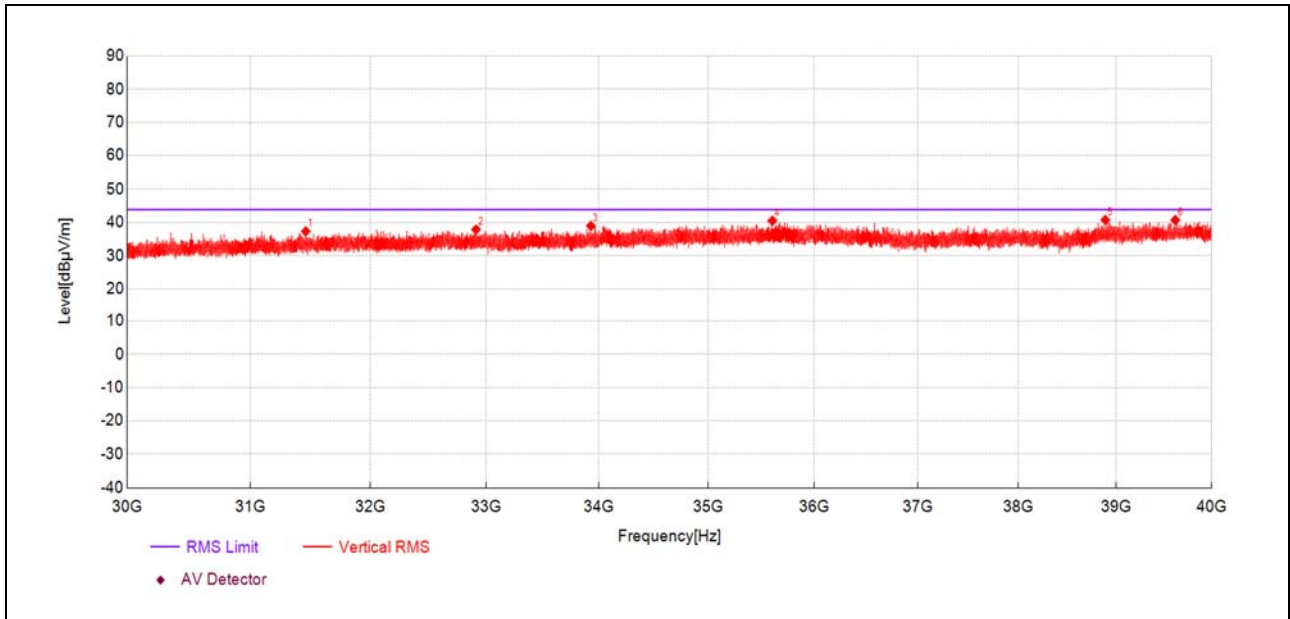
(Antenna Vertical, 18GHz to 30GHz)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
18955.80	34.4	34.87	0.500	43.90	9.03	155	43	RMS	PASS
19443.90	33.5	34.02	0.520	43.90	9.88	155	135	RMS	PASS
24346.50	29.7	36.48	6.770	43.90	7.42	155	55	RMS	PASS
25084.80	30.2	38.00	7.820	43.90	5.90	155	2	RMS	PASS
26033.40	30.5	39.84	9.370	43.90	4.06	155	111	RMS	PASS
27732.60	31.4	38.99	7.600	43.90	4.91	155	270	RMS	PASS



(Antenna Horizontal, 30GHz to 40GHz)

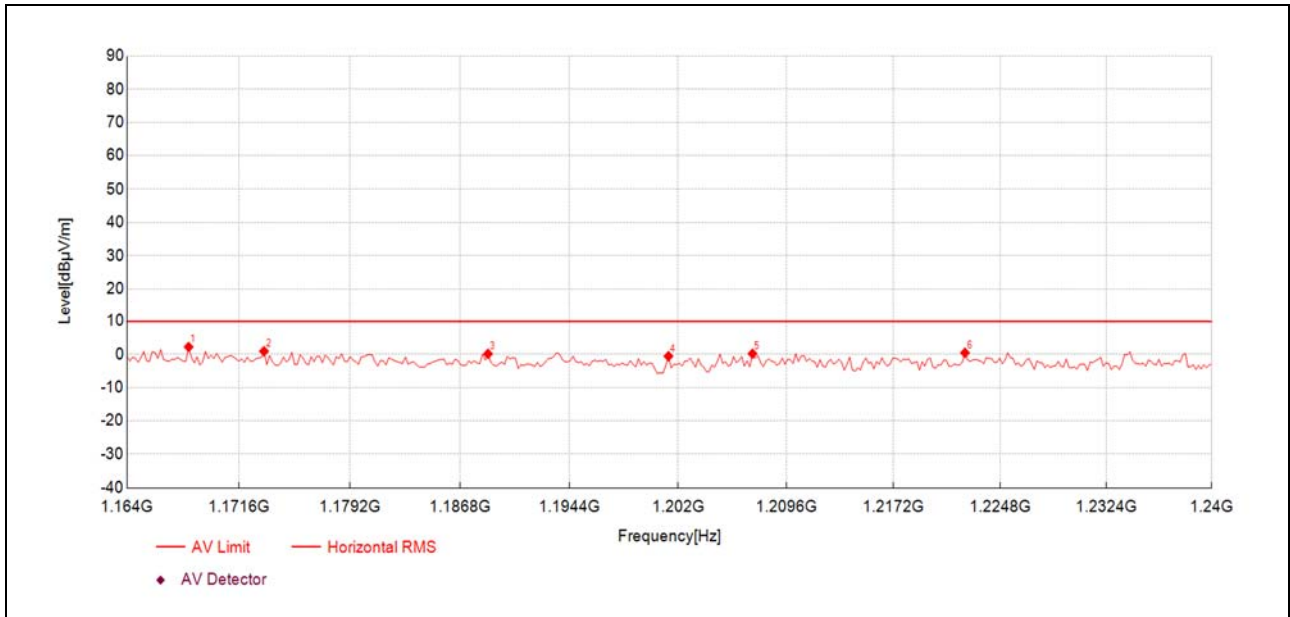
Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
32956.75	35.2	39.57	4.360	43.90	4.33	155	330	RMS	PASS
35085.25	33.6	40.21	6.660	43.90	3.69	155	360	RMS	PASS
35417.50	33.5	40.29	6.790	43.90	3.61	155	155	RMS	PASS
36187.75	33.7	40.48	6.750	43.90	3.42	155	360	RMS	PASS
39133.00	31.4	40.07	8.660	43.90	3.83	155	330	RMS	PASS
39788.75	31.8	40.87	9.090	43.90	3.03	155	223	RMS	PASS



(Antenna Vertical, 30GHz to 40GHz)

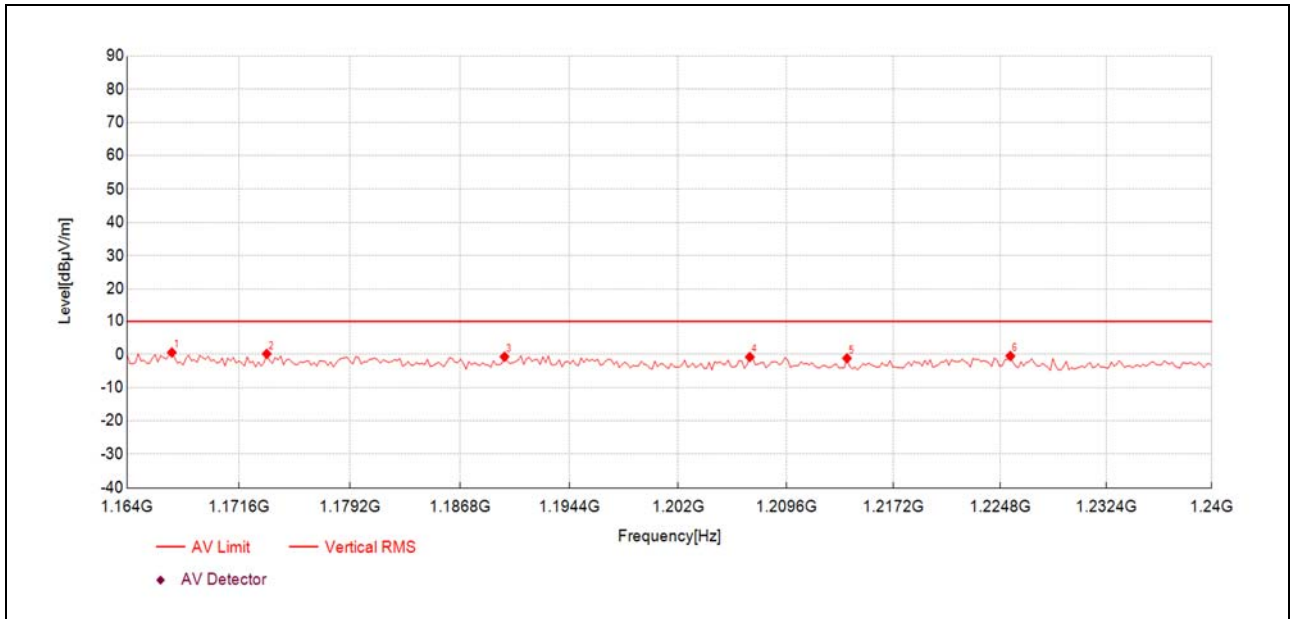
Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
31456.50	33.6	37.31	3.670	43.90	6.59	155	231	RMS	PASS
32909.50	33.5	37.88	4.390	43.90	6.02	155	83	RMS	PASS
33927.50	33.3	38.97	5.630	43.90	4.93	155	70	RMS	PASS
35600.50	33.7	40.52	6.860	43.90	3.38	155	283	RMS	PASS
38887.00	32.1	40.76	8.650	43.90	3.14	155	110	RMS	PASS
39615.50	31.7	40.74	9.060	43.90	3.16	155	243	RMS	PASS

Plot for 1164MHz to 1240MHz



(Antenna Horizontal)

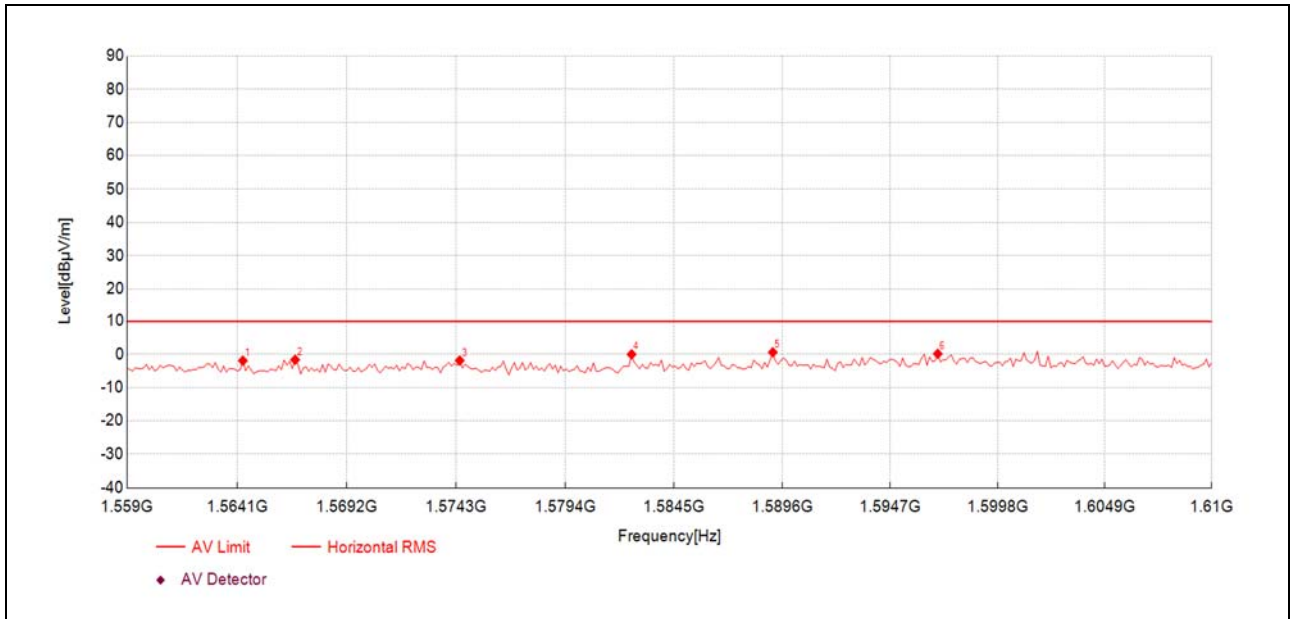
Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
1168.19	8.2	2.20	-6.030	9.90	7.70	155	104	RMS	PASS
1173.33	7.0	0.90	-6.060	9.90	9.00	155	86	RMS	PASS
1188.76	6.3	0.12	-6.160	9.90	9.78	155	123	RMS	PASS
1201.33	5.7	-0.59	-6.240	9.90	10.49	155	123	RMS	PASS
1207.24	6.4	0.17	-6.240	9.90	9.73	155	133	RMS	PASS
1222.29	6.7	0.42	-6.270	9.90	9.48	155	104	RMS	PASS



(Antenna Vertical)

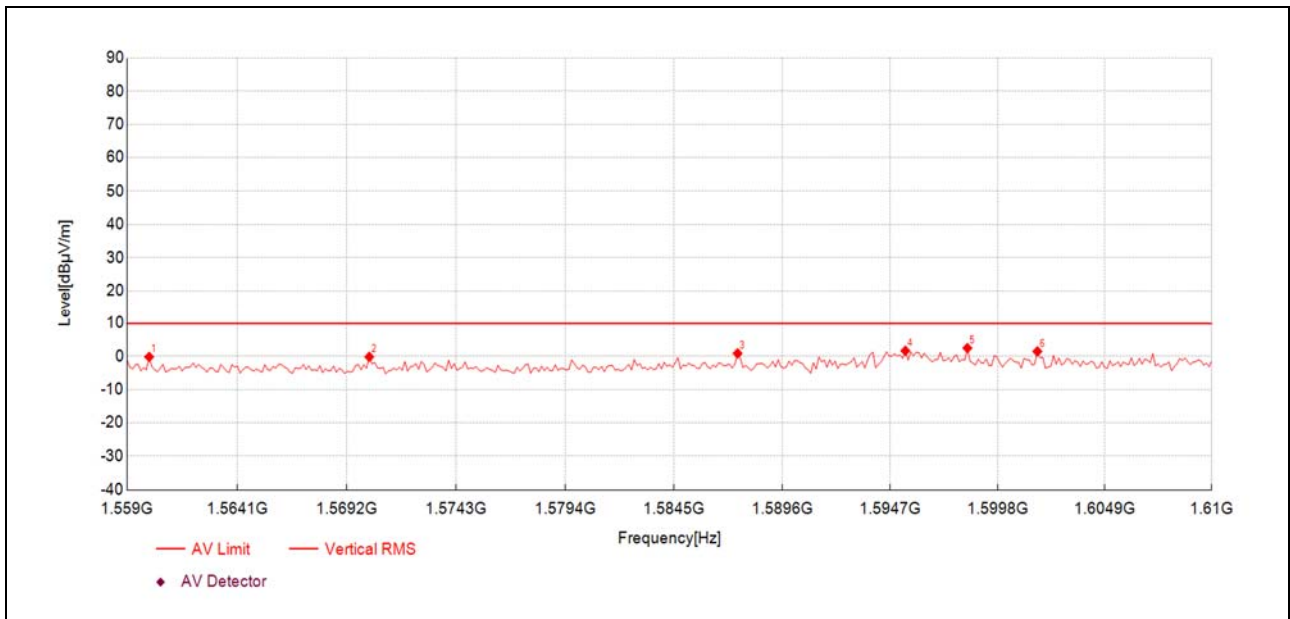
Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
1167.05	6.5	0.52	-6.020	9.90	9.38	155	110	RMS	PASS
1173.52	6.2	0.11	-6.070	9.90	9.79	155	219	RMS	PASS
1189.90	5.4	-0.74	-6.170	9.90	10.64	155	358	RMS	PASS
1207.05	5.4	-0.81	-6.240	9.90	10.71	155	359	RMS	PASS
1213.90	5.1	-1.20	-6.260	9.90	11.10	155	110	RMS	PASS
1225.52	5.7	-0.54	-6.270	9.90	10.44	155	118	RMS	PASS

Plot for 1559MHz to 1610MHz



(Antenna Horizontal)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
1564.37	3.2	-1.93	-5.160	9.90	11.83	155	349	RMS	PASS
1566.80	3.5	-1.66	-5.190	9.90	11.56	155	42	RMS	PASS
1574.47	3.3	-1.90	-5.230	9.90	11.80	155	67	RMS	PASS
1582.52	5.3	-0.02	-5.300	9.90	9.92	155	52	RMS	PASS
1589.17	5.9	0.59	-5.340	9.90	9.31	155	52	RMS	PASS
1596.96	5.5	0.13	-5.400	9.90	9.77	155	86	RMS	PASS



(Antenna Vertical)

Fre. (MHz)	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
1560.02	5.0	-0.19	-5.140	9.90	10.09	155	360	RMS	PASS
1570.25	5.0	-0.17	-5.210	9.90	10.07	155	84	RMS	PASS
1587.50	6.2	0.85	-5.340	9.90	9.05	155	74	RMS	PASS
1595.43	7.0	1.65	-5.380	9.90	8.25	155	74	RMS	PASS
1598.37	7.9	2.46	-5.400	9.90	7.44	155	219	RMS	PASS
1601.69	6.9	1.46	-5.430	9.90	8.44	155	183	RMS	PASS



A.5. Conducted Emissions

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Set RBW=9kHz, VBW=30kHz. Refer to recorded points and plots below.

Note: Both of the test voltage AC 120V/60Hz and AC 230V/50Hz were considered and tested respectively, only the results of the worst case AC 120V/60Hz were recorded in this report.

A. Test Setup:

Test Mode: EUT+Notebook+Notebook adapter+Serial port board+UWB TX

Test voltage: AC 120V/60Hz

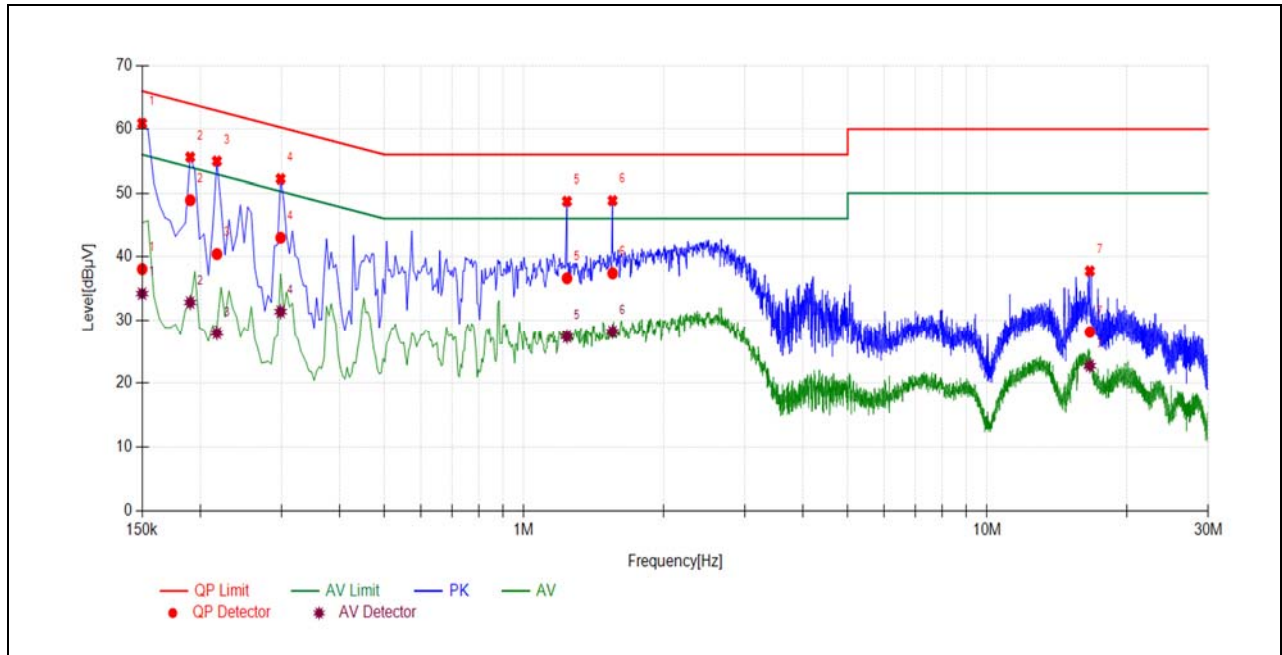
The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V]} = U_R + L_{\text{Cable loss}} \text{ [dB]} + A_{\text{Factor}}$$

U_R : Receiver Reading

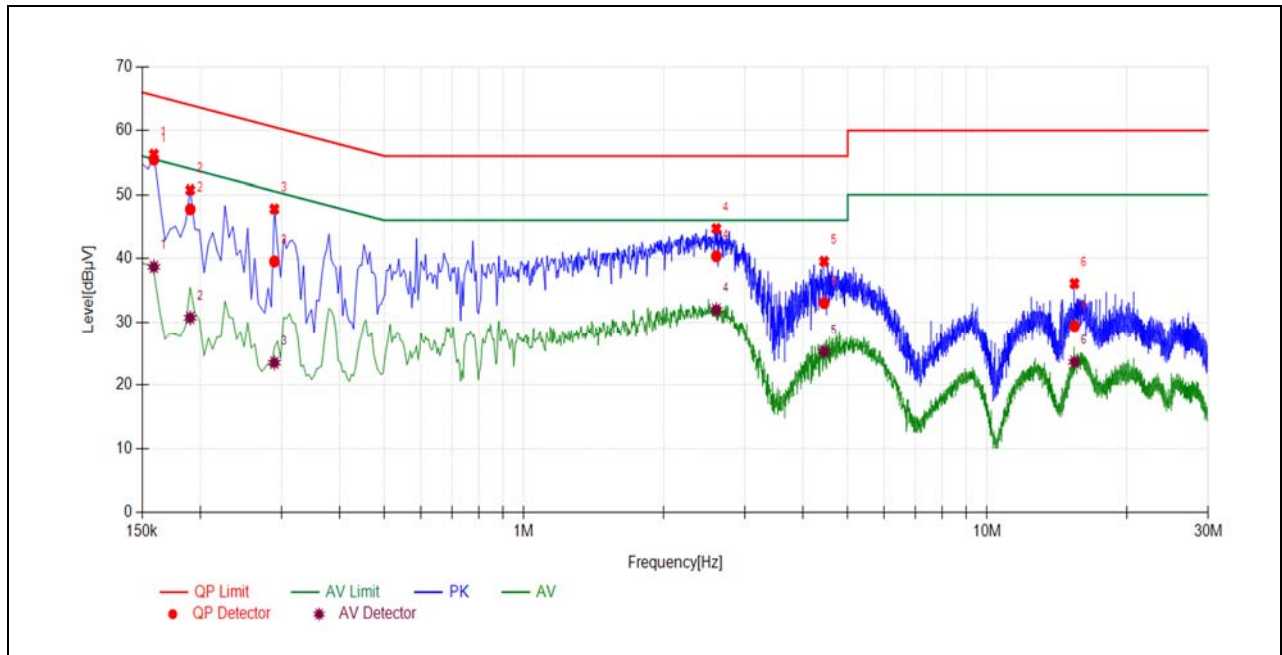
A_{Factor} : Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1500	38.05	34.20	66.00	56.00	Line	PASS
2	0.1905	48.91	32.80	64.02	54.02		PASS
3	0.2175	40.43	27.90	62.91	52.91		PASS
4	0.2985	43.00	31.34	60.29	50.29		PASS
5	1.2391	36.62	27.33	56.00	46.00		PASS
6	1.5540	37.39	28.14	56.00	46.00		PASS
7	16.6602	28.08	22.70	60.00	50.00		PASS



(N Phase)

No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1590	55.43	38.69	65.52	55.52	Neutral	PASS
2	0.1905	47.73	30.70	64.01	54.01		PASS
3	0.2895	39.55	23.49	60.54	50.54		PASS
4	2.6023	40.37	31.95	56.00	46.00		PASS
5	4.4478	33.01	25.26	56.00	46.00		PASS
6	15.4368	29.38	23.63	60.00	50.00		PASS



Notes

1. The report shall have report stamp or our company stamp.
2. The report shall be invalid without all the signatures of the editor and approver.
3. The report shall not be changed.
4. Any objections must be raised to Morlab within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit.
5. Conformity declaration:
 - ☒ Morlab issues a statement of conformity based on the corresponding standards (default)
 - ☐ Morlab issues a statement of conformity based on the applicant requirement
6. Use of uncertainty of measurement for decisions on conformity (decision rule):

No decision rule is specified by the testing standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule).

————— END OF REPORT —————