





# **TEST REPORT No. AR16-0001202-01**

performed in accordance with

FCC Rules: Code of Federal Regulations (CFR) no. 47 Part 15 Subpart F Section 15.509

PRODUCT	Ground penetrating radar	
MODEL(s) TESTED	AR600V24H10	
FCC ID	UFW-AR600V24H10	
TRADE MARK(s)	IDS GEORADAR S.r.I.	

APPLICANT IDS GEORADAR S.r.l Via E. Calabresi, 20 – I-56121 PISA	
--	--

Tested by	Roberto Radice	
Approved by	Giovanni Di Turi [Laboratory manager]	

## **Revision Sheet**

Release No.	Date	Revision Description		
Rev. 0	2016-07-15	First edition		
Rev. 1	2016-10-05	Modified General overview at section 3; added ground reflection factor on test 7.5  Digital signed - AR16-0001202-01_Rev.1_TR_FCC Part 15F 15.509_IDS_Georadar_Mod.AR600V24H10		

The results of tests and checks reported in this Test Report refer exclusively to the samples tested and described in the Report itself.

This Report shall not be reproduced partially the written approval of IMQ S.p.A..









#### 1. **GENERAL DATA**

SAMPLE				
Samples received on	2016-06-28		(item sent and sampling by applicant)	
IMQ reference samples	BEM 82402			
Samples tested No.	1			
Object under analysis recognition	Not ca	rried out		
			ated, characteristics of products were taken from client vere not verified by the laboratory	
TEST LOCATION				
Testing dates	2016-06-28 ÷ 2016-06-29			
Testing laboratory.	IMQ S.p.A Via Quintiliano, 43 – I-20138 Milano			
Testing site	Viale Lombardia, 20 – I-20021 Bollate (MI)			
ENVIRONMENTAL CONDITIONING				
Parameter	Measured			
Ambient Temperature	25 ÷ 30 °C			
Relative Humidity	40 ÷ 60 %			
Atmospheric Pressure	900 ÷ 1000 mbar			

# **REMARKS**

Throughout this report a point is used as the decimal separator.

The ability or reliability of this product to perform its intended function in a particular application has not been investigated.

Unless otherwise specified, warnings, installation instruction and/or user manual provided with the sample have been checked in Italian or English version only.

IMQ declines any responsibility derived from missing or wrong information provided aside by the applicant.









#### REFERENCE DOCUMENT 2.

	DOCUMENT	DATE	TITLE
$\boxtimes$	47 CFR Part 15	2016	Radio Frequency Device
	ANSI C63.4	2014	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
$\boxtimes$	ANSI C63.10 <sup>(*)</sup>	2013	American National Standard for Testing Unlicensed Wireless Devices
$\boxtimes$	FCC Order, ET Docket No. 98-153 (FCC 02-48) <sup>(*)</sup>	2002	Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems
$\boxtimes$	KDB Publication No. 393764 V01 <sup>(*)</sup>	2015	UWB Compliance Measurements

Date: 2016-10-05

(\*) not accredited by ACCREDIA







#### **UNIT UNDER TEST (EUT) DETAILS** 3.

# **GENERAL DATA**

Model	AR600V24H10	
FCC ID	UFW-AR600V24H10	

Manufacturer IDS GEORADAR S.r.l. Via E. Calabresi, 20 – I-56121 PISA
--

EUT classification	Ground penetrating radar (GPR)	
The AR600V24H10 system is a Ground penetrating radar (GPR) system, i.e. according to the FCC definition, a field disturbance sensor that is designed operate only when in contact with the ground for the purpose of detecting of obtaining the images of buried objects or determining the physical propertie within the ground.  The energy from the GPR is intentionally directed down into the ground for purpose.  The AR600V24H10 product includes:  one antenna including one array of twelve couples of transmitting and receiving dipoles in vertical polarisation and one array of five couples of transmitting and receiving dipoles in horizontal polarization		
Power supply type	DC 12 V battery supplied	
Operating frequency	965 to 1712 MHz (10 dB Bandwidth)	
Channel Spacing	Not applicable	
Pulse Repetition Frequency (PRF)	400 kHz	
Antenna description	Integral permanently attached	
Antenna Type	Dipole	







# 4. TEST CONFGURATION OF UNIT UNDER TEST

# **EUT CONFIGURATION**

The Equipment under test was powered with a battery and placed directly on the dry sand with no ground plane under it.



# STATE OF THE EUT DURING TESTS

Ref.	Mode	Description
#1	Operating	Continuous transmission with the antenna fitted in a manner typical of normal indented use.

# SUPPORT EQUIPMENT

Defined as equipment needed for correct operation or loading of the EUT, but not considered as tested:

Equipment	Manufacturer	Model
The control unit (hereinafter referred as D.A.D – Digital Antenna Driver) that is linked to a laptop computer for storing the collected data.	IDS	/









# **EUT TECHNICAL DOCUMENTATION**

Document	Reference	
DAD & antenna block diagrams	1	
User Manual	N doc:MN/2016/011 Rev 1.0	
Technical description of the system	TECHNICAL DESCRIPTION OF THE UNIT: AR600V24H10	







# 5. TEST SET-UP DESCRIPTION

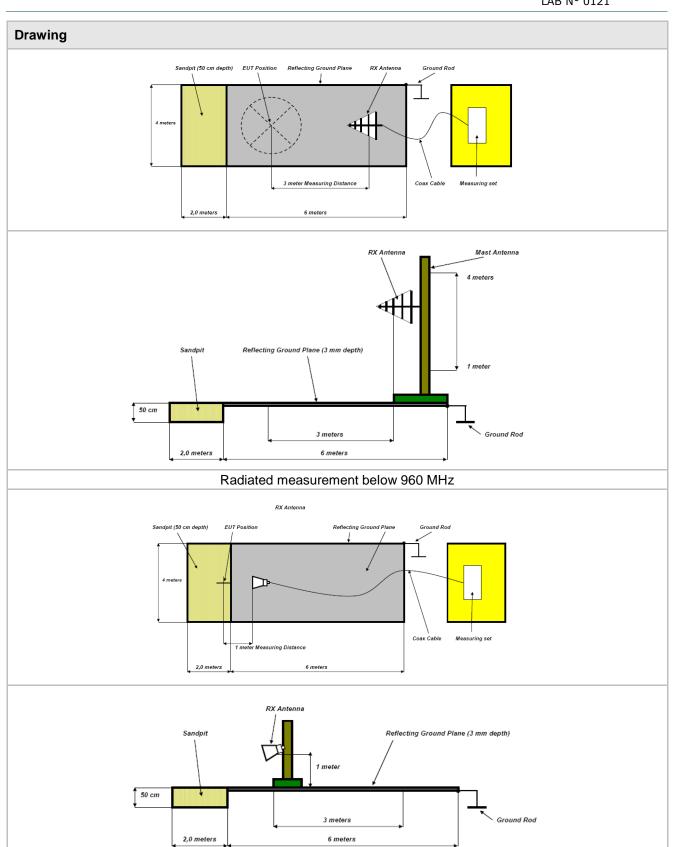
Type of test facilities	Open Area Test Site (OATS) The test site is flat and the level area is clear of overhead wires and reflecting structures, it is sufficiently large to permit measuring antenna placement at specified distance. Adequate spacing distance is assured between the EUT and measuring antenna to any adjacent large reflecting structures.
Test distance	<ul> <li>3 meters measuring distance.</li> <li>1 meter above 960 MHz for measurement to device not placed on the ground plane with the antenna pointed in the direction of the radiating head.</li> </ul>
Ground plane	Galvanized sheet steel soldered panels is installed on the floor, electric contact between the individual plates is provided via continues metallic strips. Dimensions: 6.0m x 4.0m x 3.0mm (LxWxD)
Antenna positioner	Semi-Automatic remotely controlled Antenna mast, scan over a range of 1 to 4 meters above the ground plane. Manual antenna polarization change.
Sandpit	2.0m x 4.0m x 50cm (LxWxD) sandpit area filled with dry sand placed in front of the ground plane (test on UWB Ground penetrating radar).











Radiated measurement above 960 MHz







#### **SUMMARY OF TEST RESULTS** 6.

POSSIBLE TEST CASE VERDICTS:			
Test object does meet the requirement	PASS		
Test object does not meet the requirement	FAIL		
Test case does not apply to the test object	N.A.		
Test not performed	N.P.		

CFR47 Part 15	TITLE	RESULT
§ 15.207(a)	Conducted Emission	N.A. <sup>1</sup>
§ 15.505	Cross reference	PASS
§ 15.507	Marketing of UWB equipment	PASS
§ 15.509	Pulse Repetition Frequency (PRF)	PASS
§ 15.509(a)	UWB Bandwidth	PASS
§ 15.509(c)	Transmission duration	PASS
§ 15.509(c) § 15.209	Radiated emission ≤ 960 MHz	PASS
§ 15.509(d)	Radiated emission > 960 MHz	PASS
§ 15.509(e)	Radiated emission in GPS bands	PASS
§ 15.509(f)	Highest radiated emission at f <sub>M</sub>	PASS
§ 15.521	Technical requirements applicable to all UWB devices	PASS
§ 15.525 § 15.509(b)	Coordination requirement	PASS

Note 1	Port not present, battery operating device
--------	--









#### **TEST RESULTS** 7.

#### 7.1 **CROSS REFERENCE**

## **TEST REQUIREMENT**

- Except where specifically stated otherwise within this subpart, the provisions of Subparts A and B and of Sections 15.201 through 15.204 and Section 15.207 of Subpart C of this part apply to unlicensed UWB intentional radiators. The provisions of Sections 15.35(c) and 15.205 do not apply to devices operated under this subpart. The provisions of Footnote US 246 to the Table of Frequency Allocations contained in Section 2.106 of this chapter does not apply to devices operated under this subpart.
- The requirements of Subpart F apply only to the radio transmitter, i.e., the intentional radiator, contained in the UWB device. Other aspects of the operation of a UWB device may be subject to requirements contained elsewhere in this chapter. In particular, a UWB device that contains digital circuitry not directly associated with the operation of the transmitter also is subject to the requirements for unintentional radiators in Subpart B of this chapter. Similarly, an associated receiver that operates (tunes) within the frequency range 30 MHz to 960 MHz is subject to the requirements in Subpart B of this chapter.

REQUIREMENT	DESCRIPTION	
15.505(a)	Equipment under test complies with all the relevant and applicable requirements of Subpart A, Subpart B and Section 15.201 through 15.204 and Section 15.207 of Subpart C.	
15.505(b)	The Digital circuitry portion of the EUT has been tested and verified to comply with 47 CFR Part 15, subpart B.	

Date: 2016-10-05

## **TEST RESULT**

The EUT meets the requirements of sections 15.505.









#### 7.2 MARKETING OF UWB EQUIPMENT

#### **TEST REQUIREMENT**

In some cases, the operation of UWB devices is limited to specific parties, e.g., law enforcement, fire and rescue organizations operating under the auspices of a state or local government. The marketing of UWB devices must be directed solely to parties eligible to operate the equipment. The responsible party, as defined in Section 2.909 of this chapter, is responsible for ensuring that the equipment is marketed only to eligible parties. Marketing of the equipment in any other manner may be considered grounds for revocation of the grant of certification issued for the equipment

REQUIREMENT	DESCRIPTION
§ 15.507 § 2.909	The responsible party is properly informed about the responsible for ensuring that the equipment is marketed only to eligible parties, and provide correct information on the customers and users.  (See Important note for the US customers of the "AR600V24H10 - User manual")

Date: 2016-10-05

#### **TEST RESULT**

The EUT meets the requirements of sections 15.507.



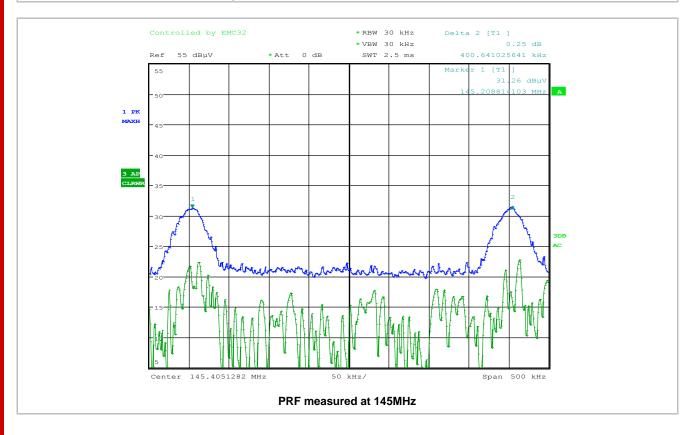






#### PULSE REPETITION FREQUENCY (PRF) 7.3

TEST REQUIREMENT				
Test definition	Pulse Repetition Frequency (PRF) is the trigger repetition frequency			
Test setup	ANSI C63.4			
Test facility	Open Area Test Site (OATS)			
Test distance	3 meters			
RBW bandwidth	30 kHz			
VBW bandwidth	30 kHz			
Detector	A-Peak			
Deviation to test procedure	None			
EUT operating condition	#1			
Remark	None			

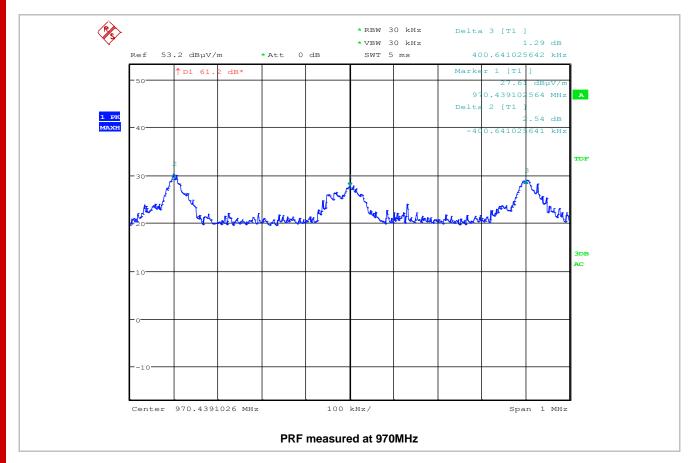












PRF Declared	PRF Measured	Result
400 kHz	400 kHz	PASS









#### 7.4 **UWB BANDWIDTH**

TEST REQUIREMENT				
UWB definition	The bandwidth of a UWB emission is defined by the points on the emission spectrum where the amplitude is 10 dB below the maximum emission amplitude (i.e., the -10 dB points).  In cases where the measured emission spectrum contains multiple (more than two) -10 dB points, the outermost points define the bandwidth (i.e., the widest bandwidth is assumed).			
Test setup	ANSI C63.4			
Test facility	Open Area Test Site (OATS)			
Test distance	3 meters			
RBW bandwidth	1 MHz			
VBW bandwidth	3 MHz			
Detector	Peak			
Deviation to test procedure	None			
EUT operating condition	#1			
Remark	Frequency span is large enough to display a full spectrum of the RF emission			

# **LIMITS**

The UWB bandwidth of an imaging system operating under the provisions of this section must be below 10.6







#### **TEST PROCEDURE**

- 1) The receiving antenna which varied from 1 to 4 m to find the highest emission is positioned 3 m away from the EUT.
- 2) Measure the Highest radiated emission at  $f_{\rm M}$  as described in the test No. 8.
- 3) Recorded the upper and lower frequency that are at the side of the band bounded by the points at 10 dB below the highest radiated UWB emission level.
  - Measuring the bandwidth of a UWB device using a radiated test set-up, it is imperative that appropriate adjustments be made to the measured amplitude levels to account for the frequency-dependent components of the measurement system (e.g., antenna gain or factor, pre-amplifier gain, cable loss, etc). Since UWB emissions can have bandwidths several GHz wide, these frequency-dependent characteristics can vary dramatically over the fundamental emission.
  - According to the nature of the broadband emission characteristics, significant care mast be taken to capture the true spectrum of emission, extremely narrow sweep widths is recommended.
- 4) The UWB bandwidth is the different of the upper and lower frequency recorded.

SUMMURY OF TEST RESULT DATA						
Frequency of Maximum Receiver Antenna		Maximum Lower and Upper emission level -10 dB frequencies			10 dB	Result
emission level f <sub>M</sub>	polarization	@ 1 MHz RBW (Peak)	Lower f <sub>L</sub>	Upper f <sub>H</sub>	Bandwidth	
(MHz)	[V/H]	(dB <sub>µ</sub> V/m)	(MHz)	(MHz)	(MHz)	
1048.00	V	47.11	965.00	1712.00	747.00	PASS

Date: 2016-10-05

## **TEST RESULT**

The EUT meets the requirements of sections 15.509(a)









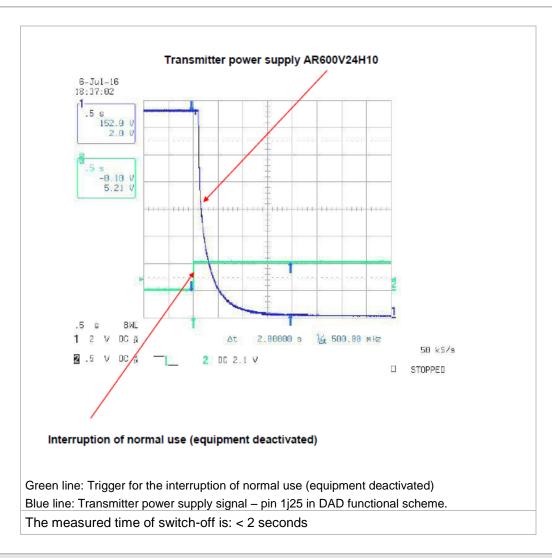
#### 7.5 TRANSMISSION DURATION

## **TEST REQUIREMENT**

c) A GPR that is designed to be operated while being hand held and a wall imaging system shall contain a manually operated switch that causes the transmitter to cease operation within 10 seconds of being released by the operator. In lieu of a switch located on the imaging system, it is permissible to operate an imaging system by remote control provided the imaging system ceases transmission within 10 seconds of the remote switch being released by the operator

## **DESCRIPTION**

The equipment is not an hand held device. When normal use is interrupted, the equipment is deactivated by a software switch.



Date: 2016-10-05

## **TEST RESULT**

The EUT meets the requirements of sections 15.509(c)









#### 7.5 RADIATED DISTURBANCES ≤ 960 MHz

TEST REQUIREMENT				
Test definition	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 Section 15.209			
Test setup	ANSI C63.4			
Test facility	Open Area Test Site (OATS)			
Test distance	3 meters			
RBW bandwidth	120 kHz			
Detector	Quasi-Peak			
EUT operating condition	#1			
Remark	None			

LIMITS					
Frequency (MHz)	Field Strengths Limits (dBμV/m)	Measuring RBW (kHz)	Distance (meters)		
0.009-0.490	67.6-20*Logf(kHz)	1	300		
0.490-1.705	87.6-20*Logf(kHz)	9	30		
1.705-30	29.5	9	30		
30-88	40.0	120	3		
88-216	43.5	120	3		
216-960	46.0	120	3		









#### **TEST PROCEDURE**

- 1) The EUT was placed on sandpit area filled with dry sand initially placed in front of the ground plane (0° degree position)
- The receiving antenna which varied from 1 to 4 m to find the highest emission is positioned 3 m away from the EUT.
- The receiving antenna was positioned in horizontal polarization.
- The measurements were made with the detector set to peak with a bandwidth of 120 kHz during monitoring the frequency range below 960 MHz.
- Upon detection of a suspect emission signal, its amplitude and frequency were noted.
- It is recommended to demodulate the received signals for suitable discrimination of the ambient emission from the EUT emission.
- 7) At the worst case combination of the EUT operating mode and antenna height, the field strength measure was recorded. At each of the frequencies were a field strength was recorded the final measurement was performed with a Quasi-Peak detector.
- 8) The receiving antenna was positioned in vertical polarization and the steps 2 to 6 was repeated.
- The EUT was rotating from 0° to 360° degrees with 45° step increment and the steps 4 to 7 was repeated.
- 10) All the worst case combination field strength emissions founded of each EUT position and antenna polarization was recorded in the following table and compared with the applicable limits.

Frequency (MHz)	EUT Position (angle °)	Antenna Polarization (V/H)	Correcting reading (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
62.980000	135	V	36.7	40.0	3.3	PASS
116.870000	135	V	41.9	43.5	1.6	PASS
141.480000	270	V	35.2	43.5	8.3	PASS
169.350000	315	V	32.2	43.5	11.3	PASS
190.560000	315	V	25.5	43.5	18	PASS
218.080000	90	V	37.8	46.0	8.2	PASS
253.810000	180	V	27.7	46.0	18.3	PASS
295.400000	180	V	27.7	46.0	18.3	PASS
321.370000	180	V	26.8	46.0	19.2	PASS
347.680000	90	V	37.9	46.0	8.1	PASS
378.260000	180	V	25.2	46.0	20.8	PASS
416.170000	180	V	25.7	46.0	20.3	PASS
455.330000	180	V	26.9	46.0	19.1	PASS
497.010000	45	Н	30.7	46.0	15.3	PASS
530.000000	45	V	39.8	46.0	6.2	PASS
562.780000	225	V	36.6	46.0	9.4	PASS
737.000000	225	Н	45.1	46.0	0.9	PASS
786.000000	225	V	36.4	46.0	9.6	PASS
827.600000	225	V	36.4	46.0	9.6	PASS
887.900000	90	Н	40.9	46.0	5.1	PASS

Remark: Ambient signal were detected in the different frequency ranges, each of measured signal close or above the limits was examined with relation to the EUT.

Date: 2016-10-05

# **TEST RESULT**

The EUT meets the requirements of sections 15.509(d) and 15.209.

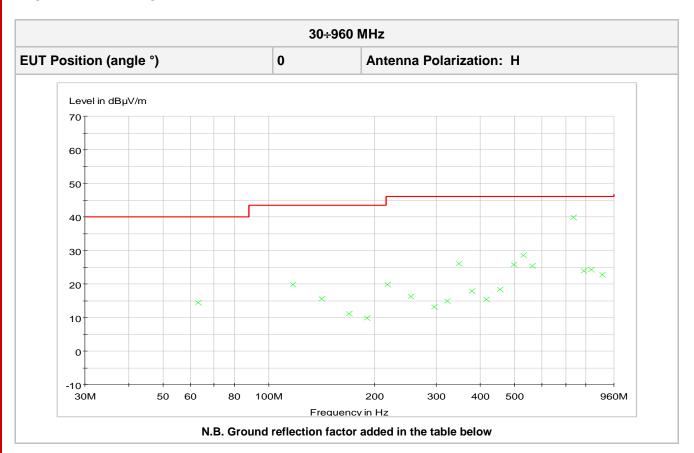








## **TEST DATA DETAILS**



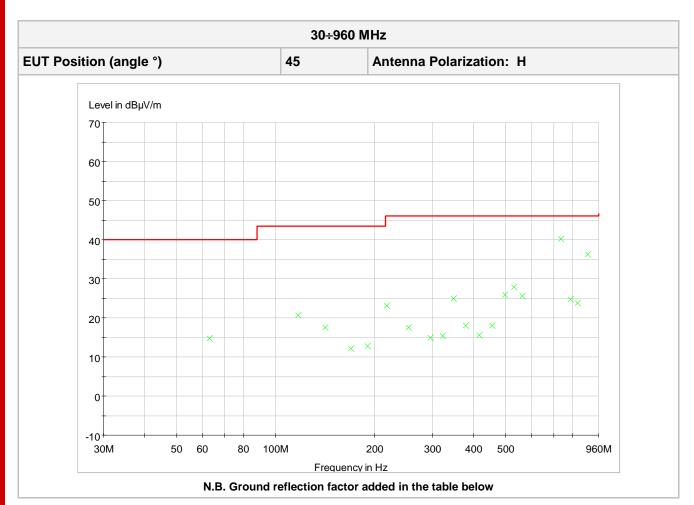
EUT	Position (ang	ıle °)	0		Anteni	na Polarization	1	н
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	1.25	12.40	0.75	0	4.7	19.1	40.00	20.9
116.870000	6.97	11.80	1.03	0	4.7	24.5	43.50	19
141.480000	4.05	10.30	1.15	0	4.7	20.2	43.50	23.3
169.350000	1.04	8.9	1.26	0	4.7	15.9	43.50	27.6
190.560000	-0.53	9.1	1.33	0	4.7	14.6	43.50	28.9
218.080000	7.26	11.2	1.44	0	4.7	24.6	46.00	21.4
253.810000	2.37	12.4	1.53	0	4.7	21	46.00	25
295.400000	-1.67	13.1	1.67	0	4.7	17.8	46.00	28.2
321.370000	-0.01	13.2	1.71	0	4.7	19.6	46.00	26.4
347.680000	10.21	14.0	1.79	0	4.7	30.7	46.00	15.3
378.260000	0.55	15.5	1.85	0	4.7	22.6	46.00	23.4
416.170000	-2.35	15.8	1.95	0	4.7	20.1	46.00	25.9
455.330000	0.08	16.2	2.02	0	4.7	23	46.00	23
497.010000	7.26	16.4	2.14	0	4.7	30.5	46.00	15.5
530.000000	9.19	17.1	2.21	0	4.7	33.2	46.00	12.8
562.780000	6.14	17.1	2.26	0	4.7	30.2	46.00	15.8
737.000000	17.9	19.3	2.60	0	4.7	44.5	46.00	1.5
786.000000	1.63	19.6	2.67	0	4.7	28.6	46.00	17.4
827.600000	1.34	20.2	2.76	0	4.7	29	46.00	17
887.900000	-0.85	20.8	2.85	0	4.7	27.5	46.00	18.5











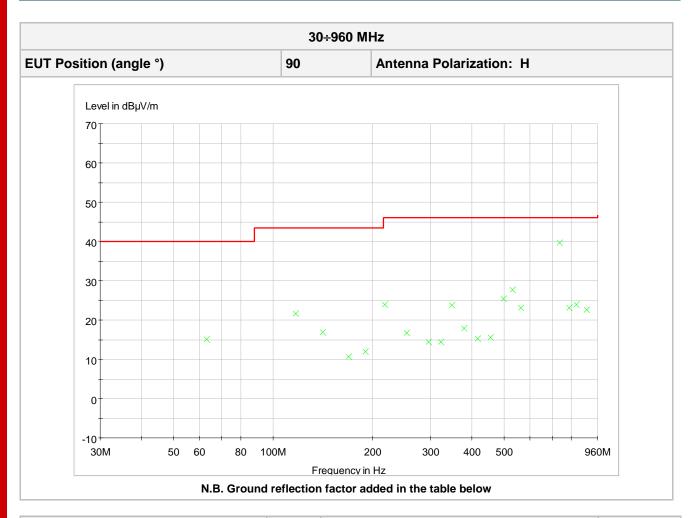
EUT	Position (ang	gle °)	45		Anteni	na Polarization	Н	
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	1.65	12.40	0.75	0	4.7	19.5	40.00	20.5
116.870000	7.77	11.80	1.03	0	4.7	25.3	43.50	18.2
141.480000	6.05	10.30	1.15	0	4.7	22.2	43.50	21.3
169.350000	2.04	8.9	1.26	0	4.7	16.9	43.50	26.6
190.560000	2.37	9.1	1.33	0	4.7	17.5	43.50	26
218.080000	10.46	11.2	1.44	0	4.7	27.8	46.00	18.2
253.810000	3.67	12.4	1.53	0	4.7	22.3	46.00	23.7
295.400000	0.03	13.1	1.67	0	4.7	19.5	46.00	26.5
321.370000	0.49	13.2	1.71	0	4.7	20.1	46.00	25.9
347.680000	9.21	14.0	1.79	0	4.7	29.7	46.00	16.3
378.260000	0.65	15.5	1.85	0	4.7	22.7	46.00	23.3
416.170000	-2.15	15.8	1.95	0	4.7	20.3	46.00	25.7
455.330000	-0.22	16.2	2.02	0	4.7	22.7	46.00	23.3
497.010000	7.46	16.4	2.14	0	4.7	30.7	46.00	15.3
530.000000	8.49	17.1	2.21	0	4.7	32.5	46.00	13.5
562.780000	6.14	17.1	2.26	0	4.7	30.2	46.00	15.8
737.000000	18.3	19.3	2.60	0	4.7	44.9	46.00	1.1
786.000000	2.43	19.6	2.67	0	4.7	29.4	46.00	16.6
827.600000	0.74	20.2	2.76	0	4.7	28.4	46.00	17.6
887.900000	12.55	20.8	2.85	0	4.7	40.9	46.00	5.1











EUT	Position (ang	gle °)	90		Anten	factor     (dB)     (dBμV/m)     (dBμV/m)       4.7     19.8     40.00       4.7     26.3     43.50				
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	reflection		Limit	Margin		
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)		
62.980000	1.95	12.40	0.75	0	4.7	19.8	40.00	20.2		
116.870000	8.77	11.80	1.03	0	4.7	26.3	43.50	17.2		
141.480000	5.45	10.30	1.15	0	4.7	21.6	43.50	21.9		
169.350000	0.54	8.9	1.26	0	4.7	15.4	43.50	28.1		
190.560000	1.57	9.1	1.33	0	4.7	16.7	43.50	26.8		
218.080000	11.26	11.2	1.44	0	4.7	28.6	46.00	17.4		
253.810000	2.77	12.4	1.53	0	4.7	21.4	46.00	24.6		
295.400000	-0.27	13.1	1.67	0	4.7	19.2	46.00	26.8		
321.370000	-0.41	13.2	1.71	0	4.7	19.2	46.00	26.8		
347.680000	7.91	14.0	1.79	0	4.7	28.4	46.00	17.6		
378.260000	0.55	15.5	1.85	0	4.7	22.6	46.00	23.4		
416.170000	-2.45	15.8	1.95	0	4.7	20	46.00	26		
455.330000	-2.62	16.2	2.02	0	4.7	20.3	46.00	25.7		
497.010000	6.86	16.4	2.14	0	4.7	30.1	46.00	15.9		
530.000000	8.39	17.1	2.21	0	4.7	32.4	46.00	13.6		
562.780000	3.64	17.1	2.26	0	4.7	27.7	46.00	18.3		
737.000000	17.8	19.3	2.60	0	4.7	44.4	46.00	1.6		
786.000000	0.73	19.6	2.67	0	4.7	27.7	46.00	18.3		
827.600000	1.04	20.2	2.76	0	4.7	28.7	46.00	17.3		
887.900000	-1.05	20.8	2.85	0	4.7	27.3	46.00	18.7		

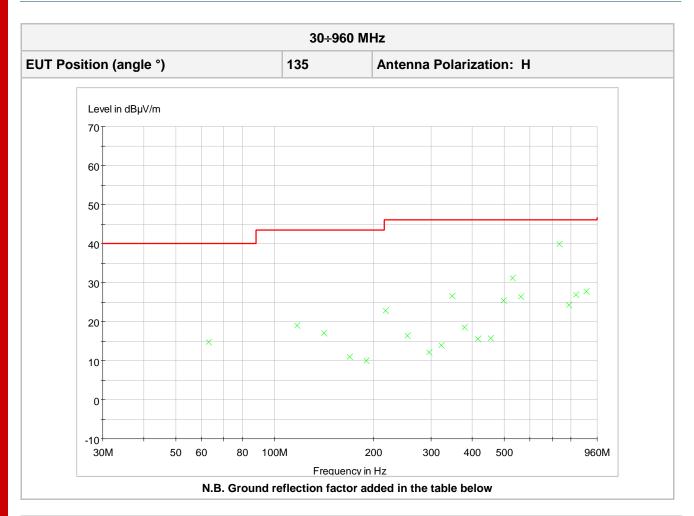












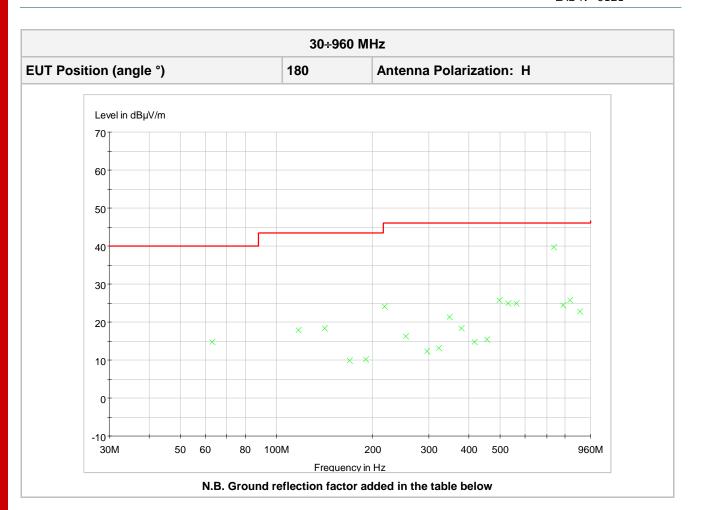
EUT	Position (ang	jle °)	135		Anten	na Polarizatior	1	Н
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	1.65	12.40	0.75	0	4.7	19.5	40.00	20.5
116.870000	6.27	11.80	1.03	0	4.7	23.8	43.50	19.7
141.480000	5.65	10.30	1.15	0	4.7	21.8	43.50	21.7
169.350000	0.84	8.9	1.26	0	4.7	15.7	43.50	27.8
190.560000	-0.43	9.1	1.33	0	4.7	14.7	43.50	28.8
218.080000	10.16	11.2	1.44	0	4.7	27.5	46.00	18.5
253.810000	2.47	12.4	1.53	0	4.7	21.1	46.00	24.9
295.400000	-2.67	13.1	1.67	0	4.7	16.8	46.00	29.2
321.370000	-1.01	13.2	1.71	0	4.7	18.6	46.00	27.4
347.680000	10.71	14.0	1.79	0	4.7	31.2	46.00	14.8
378.260000	1.25	15.5	1.85	0	4.7	23.3	46.00	22.7
416.170000	-2.25	15.8	1.95	0	4.7	20.2	46.00	25.8
455.330000	-2.42	16.2	2.02	0	4.7	20.5	46.00	25.5
497.010000	6.86	16.4	2.14	0	4.7	30.1	46.00	15.9
530.000000	11.89	17.1	2.21	0	4.7	35.9	46.00	10.1
562.780000	7.04	17.1	2.26	0	4.7	31.1	46.00	14.9
737.000000	18	19.3	2.60	0	4.7	44.6	46.00	1.4
786.000000	2.03	19.6	2.67	0	4.7	29	46.00	17
827.600000	4.04	20.2	2.76	0	4.7	31.7	46.00	14.3
887.900000	4.05	20.8	2.85	0	4.7	32.4	46.00	13.6











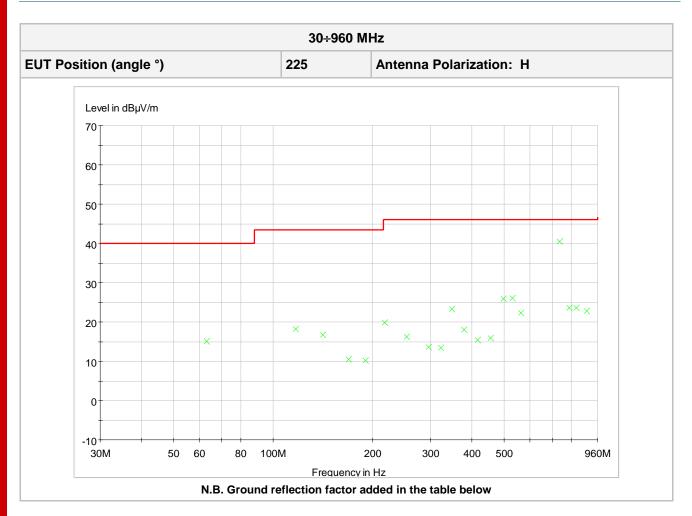
EUT	Position (ang	le °)	180		Antenn	a Polarization		Н
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	1.55	12.40	0.75	0	4.7	19.4	40.00	20.6
116.870000	5.07	11.80	1.03	0	4.7	22.6	43.50	20.9
141.480000	6.85	10.30	1.15	0	4.7	23	43.50	20.5
169.350000	-0.36	8.9	1.26	0	4.7	14.5	43.50	29
190.560000	-0.23	9.1	1.33	0	4.7	14.9	43.50	28.6
218.080000	11.46	11.2	1.44	0	4.7	28.8	46.00	17.2
253.810000	2.37	12.4	1.53	0	4.7	21	46.00	25
295.400000	-2.37	13.1	1.67	0	4.7	17.1	46.00	28.9
321.370000	-1.81	13.2	1.71	0	4.7	17.8	46.00	28.2
347.680000	5.61	14.0	1.79	0	4.7	26.1	46.00	19.9
378.260000	0.95	15.5	1.85	0	4.7	23	46.00	23
416.170000	-2.95	15.8	1.95	0	4.7	19.5	46.00	26.5
455.330000	-2.72	16.2	2.02	0	4.7	20.2	46.00	25.8
497.010000	7.16	16.4	2.14	0	4.7	30.4	46.00	15.6
530.000000	5.59	17.1	2.21	0	4.7	29.6	46.00	16.4
562.780000	5.64	17.1	2.26	0	4.7	29.7	46.00	16.3
737.000000	17.7	19.3	2.60	0	4.7	44.3	46.00	1.7
786.000000	2.13	19.6	2.67	0	4.7	29.1	46.00	16.9
827.600000	2.84	20.2	2.76	0	4.7	30.5	46.00	15.5
887.900000	-0.95	20.8	2.85	0	4.7	27.4	46.00	18.6











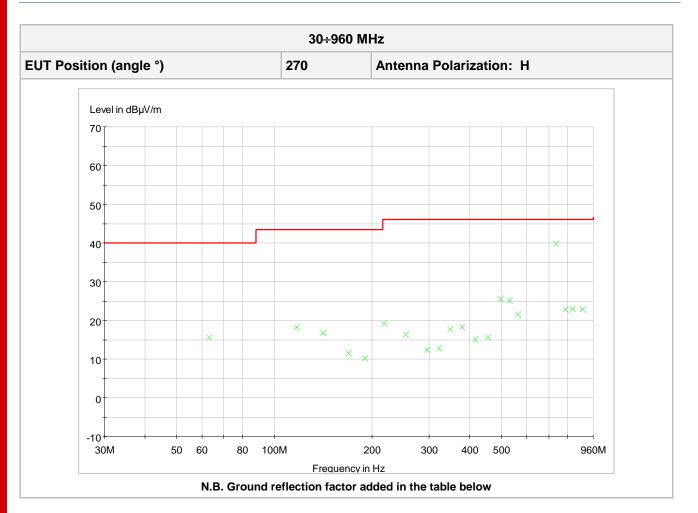
EUT	Position (ang	jle °)	225		Anten	na Polarizatior	1	Н
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	1.85	12.40	0.75	0	4.7	19.7	40.00	20.3
116.870000	5.27	11.80	1.03	0	4.7	22.8	43.50	20.7
141.480000	5.25	10.30	1.15	0	4.7	21.4	43.50	22.1
169.350000	0.44	8.9	1.26	0	4.7	15.3	43.50	28.2
190.560000	-0.23	9.1	1.33	0	4.7	14.9	43.50	28.6
218.080000	7.16	11.2	1.44	0	4.7	24.5	46.00	21.5
253.810000	2.37	12.4	1.53	0	4.7	21	46.00	25
295.400000	-1.17	13.1	1.67	0	4.7	18.3	46.00	27.7
321.370000	-1.41	13.2	1.71	0	4.7	18.2	46.00	27.8
347.680000	7.51	14.0	1.79	0	4.7	28	46.00	18
378.260000	0.75	15.5	1.85	0	4.7	22.8	46.00	23.2
416.170000	-2.35	15.8	1.95	0	4.7	20.1	46.00	25.9
455.330000	-2.32	16.2	2.02	0	4.7	20.6	46.00	25.4
497.010000	7.36	16.4	2.14	0	4.7	30.6	46.00	15.4
530.000000	6.79	17.1	2.21	0	4.7	30.8	46.00	15.2
562.780000	2.94	17.1	2.26	0	4.7	27	46.00	19
737.000000	18.5	19.3	2.60	0	4.7	45.1	46.00	0.9
786.000000	1.43	19.6	2.67	0	4.7	28.4	46.00	17.6
827.600000	0.74	20.2	2.76	0	4.7	28.4	46.00	17.6
887.900000	-0.85	20.8	2.85	0	4.7	27.5	46.00	18.5











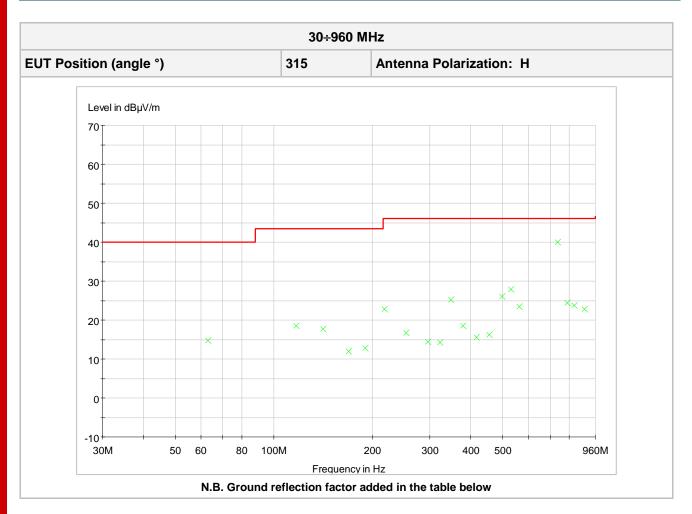
EUT	Position (ang	jle °)	270		Anten	na Polarizatior	ı	Н
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	2.45	12.40	0.75	0	4.7	20.3	40.00	19.7
116.870000	5.27	11.80	1.03	0	4.7	22.8	43.50	20.7
141.480000	5.25	10.30	1.15	0	4.7	21.4	43.50	22.1
169.350000	1.24	8.9	1.26	0	4.7	16.1	43.50	27.4
190.560000	-0.33	9.1	1.33	0	4.7	14.8	43.50	28.7
218.080000	6.56	11.2	1.44	0	4.7	23.9	46.00	22.1
253.810000	2.37	12.4	1.53	0	4.7	21	46.00	25
295.400000	-2.37	13.1	1.67	0	4.7	17.1	46.00	28.9
321.370000	-2.21	13.2	1.71	0	4.7	17.4	46.00	28.6
347.680000	1.91	14.0	1.79	0	4.7	22.4	46.00	23.6
378.260000	0.75	15.5	1.85	0	4.7	22.8	46.00	23.2
416.170000	-2.65	15.8	1.95	0	4.7	19.8	46.00	26.2
455.330000	-2.62	16.2	2.02	0	4.7	20.3	46.00	25.7
497.010000	7.06	16.4	2.14	0	4.7	30.3	46.00	15.7
530.000000	5.69	17.1	2.21	0	4.7	29.7	46.00	16.3
562.780000	2.04	17.1	2.26	0	4.7	26.1	46.00	19.9
737.000000	18	19.3	2.60	0	4.7	44.6	46.00	1.4
786.000000	0.43	19.6	2.67	0	4.7	27.4	46.00	18.6
827.600000	-0.06	20.2	2.76	0	4.7	27.6	46.00	18.4
887.900000	-0.95	20.8	2.85	0	4.7	27.4	46.00	18.6











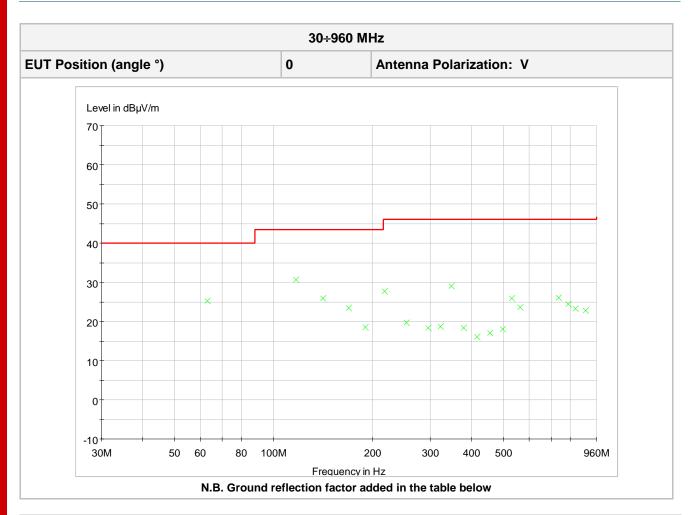
EUT	Position (ang	jle °)	315	Antenna Polarizat			۱	Н
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	1.65	12.40	0.75	0	4.7	19.5	40.00	20.5
116.870000	5.67	11.80	1.03	0	4.7	23.2	43.50	20.3
141.480000	6.15	10.30	1.15	0	4.7	22.3	43.50	21.2
169.350000	1.84	8.9	1.26	0	4.7	16.7	43.50	26.8
190.560000	2.37	9.1	1.33	0	4.7	17.5	43.50	26
218.080000	10.16	11.2	1.44	0	4.7	27.5	46.00	18.5
253.810000	2.87	12.4	1.53	0	4.7	21.5	46.00	24.5
295.400000	-0.37	13.1	1.67	0	4.7	19.1	46.00	26.9
321.370000	-0.71	13.2	1.71	0	4.7	18.9	46.00	27.1
347.680000	9.51	14.0	1.79	0	4.7	30	46.00	16
378.260000	1.15	15.5	1.85	0	4.7	23.2	46.00	22.8
416.170000	-2.05	15.8	1.95	0	4.7	20.4	46.00	25.6
455.330000	-1.92	16.2	2.02	0	4.7	21	46.00	25
497.010000	7.46	16.4	2.14	0	4.7	30.7	46.00	15.3
530.000000	8.59	17.1	2.21	0	4.7	32.6	46.00	13.4
562.780000	4.04	17.1	2.26	0	4.7	28.1	46.00	17.9
737.000000	18	19.3	2.60	0	4.7	44.6	46.00	1.4
786.000000	2.13	19.6	2.67	0	4.7	29.1	46.00	16.9
827.600000	0.84	20.2	2.76	0	4.7	28.5	46.00	17.5
887.900000	-0.95	20.8	2.85	0	4.7	27.4	46.00	18.6











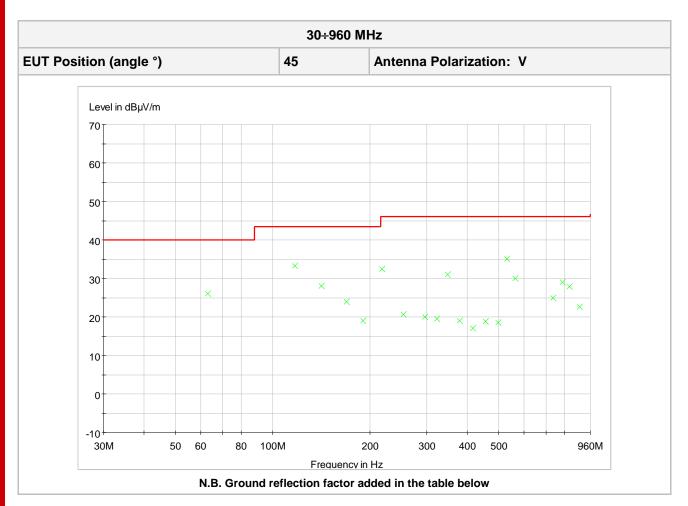
EUT	Position (ang	le °)	0		Anteni	na Polarization		V
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	12.05	12.40	0.75	0	4.7	29.9	40.00	10.1
116.870000	17.77	11.80	1.03	0	4.7	35.3	43.50	8.2
141.480000	14.45	10.30	1.15	0	4.7	30.6	43.50	12.9
169.350000	13.24	8.9	1.26	0	4.7	28.1	43.50	15.4
190.560000	7.97	9.1	1.33	0	4.7	23.1	43.50	20.4
218.080000	15.06	11.2	1.44	0	4.7	32.4	46.00	13.6
253.810000	5.77	12.4	1.53	0	4.7	24.4	46.00	21.6
295.400000	3.63	13.1	1.67	0	4.7	23.1	46.00	22.9
321.370000	3.69	13.2	1.71	0	4.7	23.3	46.00	22.7
347.680000	13.21	14.0	1.79	0	4.7	33.7	46.00	12.3
378.260000	1.05	15.5	1.85	0	4.7	23.1	46.00	22.9
416.170000	-1.65	15.8	1.95	0	4.7	20.8	46.00	25.2
455.330000	-1.22	16.2	2.02	0	4.7	21.7	46.00	24.3
497.010000	-0.54	16.4	2.14	0	4.7	22.7	46.00	23.3
530.000000	6.59	17.1	2.21	0	4.7	30.6	46.00	15.4
562.780000	4.24	17.1	2.26	0	4.7	28.3	46.00	17.7
737.000000	4.2	19.3	2.60	0	4.7	30.8	46.00	15.2
786.000000	2.23	19.6	2.67	0	4.7	29.2	46.00	16.8
827.600000	0.24	20.2	2.76	0	4.7	27.9	46.00	18.1
887.900000	-0.75	20.8	2.85	0	4.7	27.6	46.00	18.4











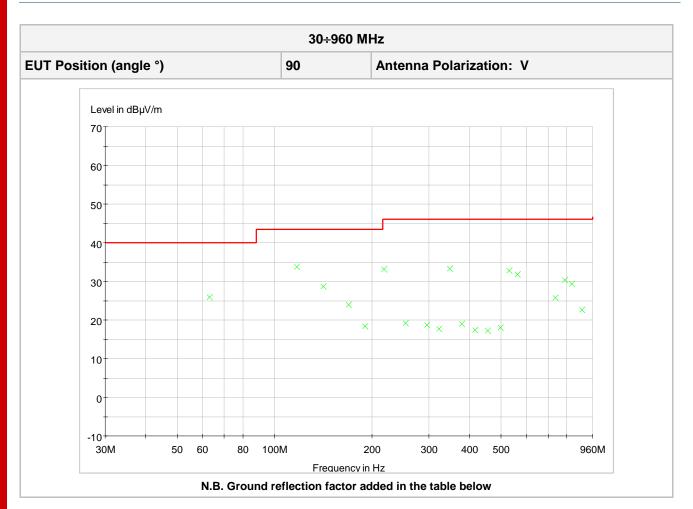
EUT	Position (ang	gle °)	45		Anten	na Polarizatior	1	V
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	12.85	12.40	0.75	0	4.7	30.7	40.00	9.3
116.870000	20.37	11.80	1.03	0	4.7	37.9	43.50	5.6
141.480000	16.65	10.30	1.15	0	4.7	32.8	43.50	10.7
169.350000	13.74	8.9	1.26	0	4.7	28.6	43.50	14.9
190.560000	8.57	9.1	1.33	0	4.7	23.7	43.50	19.8
218.080000	19.76	11.2	1.44	0	4.7	37.1	46.00	8.9
253.810000	6.77	12.4	1.53	0	4.7	25.4	46.00	20.6
295.400000	5.33	13.1	1.67	0	4.7	24.8	46.00	21.2
321.370000	4.59	13.2	1.71	0	4.7	24.2	46.00	21.8
347.680000	15.11	14.0	1.79	0	4.7	35.6	46.00	10.4
378.260000	1.65	15.5	1.85	0	4.7	23.7	46.00	22.3
416.170000	-0.65	15.8	1.95	0	4.7	21.8	46.00	24.2
455.330000	0.68	16.2	2.02	0	4.7	23.6	46.00	22.4
497.010000	-0.04	16.4	2.14	0	4.7	23.2	46.00	22.8
530.000000	15.79	17.1	2.21	0	4.7	39.8	46.00	6.2
562.780000	10.74	17.1	2.26	0	4.7	34.8	46.00	11.2
737.000000	3.1	19.3	2.60	0	4.7	29.7	46.00	16.3
786.000000	6.73	19.6	2.67	0	4.7	33.7	46.00	12.3
827.600000	4.94	20.2	2.76	0	4.7	32.6	46.00	13.4
887.900000	-0.95	20.8	2.85	0	4.7	27.4	46.00	18.6











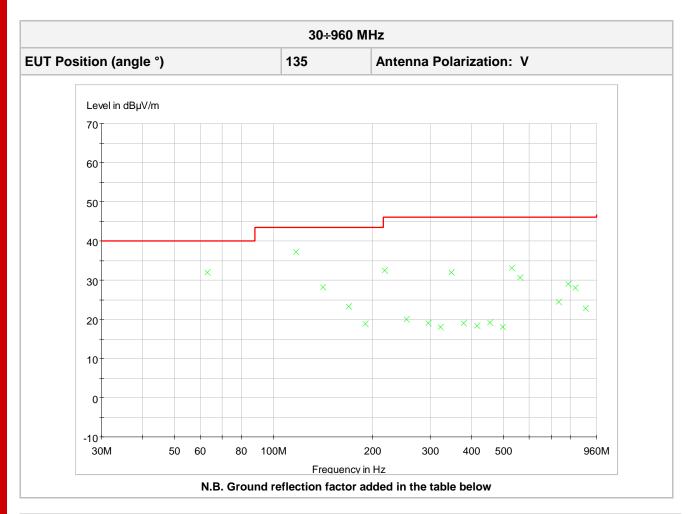
EUT	Position (ang	jle °)	90		Anten	na Polarization	)	V
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	12.75	12.40	0.75	0	4.7	30.6	40.00	9.4
116.870000	20.97	11.80	1.03	0	4.7	38.5	43.50	5
141.480000	17.25	10.30	1.15	0	4.7	33.4	43.50	10.1
169.350000	13.74	8.9	1.26	0	4.7	28.6	43.50	14.9
190.560000	7.97	9.1	1.33	0	4.7	23.1	43.50	20.4
218.080000	20.46	11.2	1.44	0	4.7	37.8	46.00	8.2
253.810000	5.27	12.4	1.53	0	4.7	23.9	46.00	22.1
295.400000	3.83	13.1	1.67	0	4.7	23.3	46.00	22.7
321.370000	2.89	13.2	1.71	0	4.7	22.5	46.00	23.5
347.680000	17.41	14.0	1.79	0	4.7	37.9	46.00	8.1
378.260000	1.75	15.5	1.85	0	4.7	23.8	46.00	22.2
416.170000	-0.35	15.8	1.95	0	4.7	22.1	46.00	23.9
455.330000	-0.92	16.2	2.02	0	4.7	22	46.00	24
497.010000	-0.54	16.4	2.14	0	4.7	22.7	46.00	23.3
530.000000	13.49	17.1	2.21	0	4.7	37.5	46.00	8.5
562.780000	12.34	17.1	2.26	0	4.7	36.4	46.00	9.6
737.000000	3.8	19.3	2.60	0	4.7	30.4	46.00	15.6
786.000000	8.13	19.6	2.67	0	4.7	35.1	46.00	10.9
827.600000	6.44	20.2	2.76	0	4.7	34.1	46.00	11.9
887.900000	-1.05	20.8	2.85	0	4.7	27.3	46.00	18.7











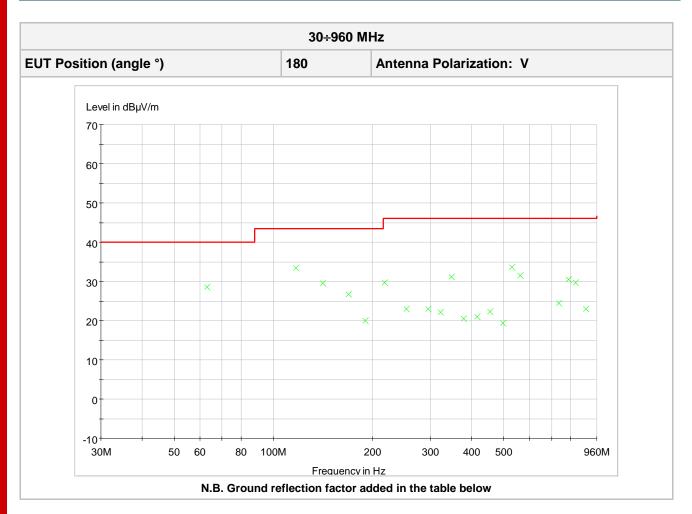
EUT Position (angle °)			135		Anten	na Polarization	1	V
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	18.85	12.40	0.75	0	4.7	36.7	40.00	3.3
116.870000	24.37	11.80	1.03	0	4.7	41.9	43.50	1.6
141.480000	16.75	10.30	1.15	0	4.7	32.9	43.50	10.6
169.350000	13.04	8.9	1.26	0	4.7	27.9	43.50	15.6
190.560000	8.47	9.1	1.33	0	4.7	23.6	43.50	19.9
218.080000	19.86	11.2	1.44	0	4.7	37.2	46.00	8.8
253.810000	6.07	12.4	1.53	0	4.7	24.7	46.00	21.3
295.400000	4.23	13.1	1.67	0	4.7	23.7	46.00	22.3
321.370000	3.19	13.2	1.71	0	4.7	22.8	46.00	23.2
347.680000	16.21	14.0	1.79	0	4.7	36.7	46.00	9.3
378.260000	1.65	15.5	1.85	0	4.7	23.7	46.00	22.3
416.170000	0.65	15.8	1.95	0	4.7	23.1	46.00	22.9
455.330000	0.98	16.2	2.02	0	4.7	23.9	46.00	22.1
497.010000	-0.54	16.4	2.14	0	4.7	22.7	46.00	23.3
530.000000	13.79	17.1	2.21	0	4.7	37.8	46.00	8.2
562.780000	11.34	17.1	2.26	0	4.7	35.4	46.00	10.6
737.000000	2.5	19.3	2.60	0	4.7	29.1	46.00	16.9
786.000000	6.63	19.6	2.67	0	4.7	33.6	46.00	12.4
827.600000	5.04	20.2	2.76	0	4.7	32.7	46.00	13.3
887.900000	-0.85	20.8	2.85	0	4.7	27.5	46.00	18.5











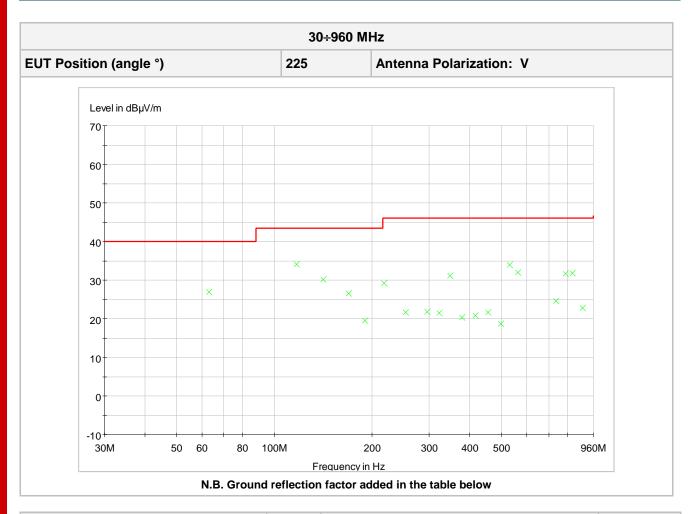
EUT	Position (ang	jle °)	180	Antenna Polarization			1	V
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	15.45	12.40	0.75	0	4.7	33.3	40.00	6.7
116.870000	20.57	11.80	1.03	0	4.7	38.1	43.50	5.4
141.480000	17.95	10.30	1.15	0	4.7	34.1	43.50	9.4
169.350000	16.64	8.9	1.26	0	4.7	31.5	43.50	12
190.560000	9.57	9.1	1.33	0	4.7	24.7	43.50	18.8
218.080000	17.06	11.2	1.44	0	4.7	34.4	46.00	11.6
253.810000	9.07	12.4	1.53	0	4.7	27.7	46.00	18.3
295.400000	8.23	13.1	1.67	0	4.7	27.7	46.00	18.3
321.370000	7.19	13.2	1.71	0	4.7	26.8	46.00	19.2
347.680000	15.31	14.0	1.79	0	4.7	35.8	46.00	10.2
378.260000	3.15	15.5	1.85	0	4.7	25.2	46.00	20.8
416.170000	3.25	15.8	1.95	0	4.7	25.7	46.00	20.3
455.330000	3.98	16.2	2.02	0	4.7	26.9	46.00	19.1
497.010000	0.76	16.4	2.14	0	4.7	24	46.00	22
530.000000	14.39	17.1	2.21	0	4.7	38.4	46.00	7.6
562.780000	12.14	17.1	2.26	0	4.7	36.2	46.00	9.8
737.000000	2.5	19.3	2.60	0	4.7	29.1	46.00	16.9
786.000000	8.23	19.6	2.67	0	4.7	35.2	46.00	10.8
827.600000	6.74	20.2	2.76	0	4.7	34.4	46.00	11.6
887.900000	-0.65	20.8	2.85	0	4.7	27.7	46.00	18.3











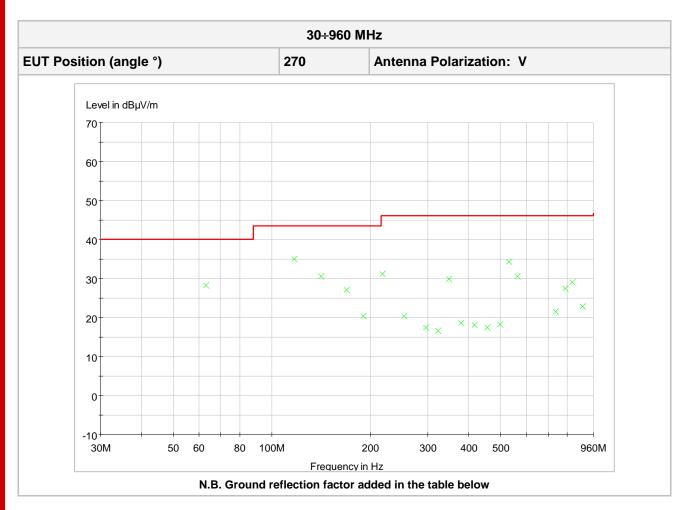
EUT	Position (ang	jle °)	225	Antenna Polarization			V	
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	13.75	12.40	0.75	0	4.7	31.6	40.00	8.4
116.870000	21.27	11.80	1.03	0	4.7	38.8	43.50	4.7
141.480000	18.65	10.30	1.15	0	4.7	34.8	43.50	8.7
169.350000	16.44	8.9	1.26	0	4.7	31.3	43.50	12.2
190.560000	9.07	9.1	1.33	0	4.7	24.2	43.50	19.3
218.080000	16.56	11.2	1.44	0	4.7	33.9	46.00	12.1
253.810000	7.77	12.4	1.53	0	4.7	26.4	46.00	19.6
295.400000	6.93	13.1	1.67	0	4.7	26.4	46.00	19.6
321.370000	6.69	13.2	1.71	0	4.7	26.3	46.00	19.7
347.680000	15.31	14.0	1.79	0	4.7	35.8	46.00	10.2
378.260000	3.05	15.5	1.85	0	4.7	25.1	46.00	20.9
416.170000	3.15	15.8	1.95	0	4.7	25.6	46.00	20.4
455.330000	3.38	16.2	2.02	0	4.7	26.3	46.00	19.7
497.010000	0.16	16.4	2.14	0	4.7	23.4	46.00	22.6
530.000000	14.69	17.1	2.21	0	4.7	38.7	46.00	7.3
562.780000	12.54	17.1	2.26	0	4.7	36.6	46.00	9.4
737.000000	2.7	19.3	2.60	0	4.7	29.3	46.00	16.7
786.000000	9.43	19.6	2.67	0	4.7	36.4	46.00	9.6
827.600000	8.74	20.2	2.76	0	4.7	36.4	46.00	9.6
887.900000	-0.75	20.8	2.85	0	4.7	27.6	46.00	18.4











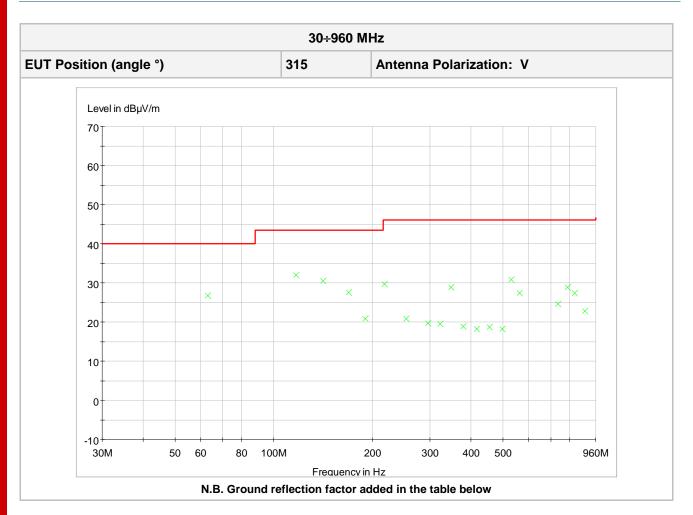
EUT	Position (ang	ıle °)	270	Antenna Polarization			V	
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	15.05	12.40	0.75	0	4.7	32.9	40.00	7.1
116.870000	21.97	11.80	1.03	0	4.7	39.5	43.50	4
141.480000	19.05	10.30	1.15	0	4.7	35.2	43.50	8.3
169.350000	16.94	8.9	1.26	0	4.7	31.8	43.50	11.7
190.560000	9.97	9.1	1.33	0	4.7	25.1	43.50	18.4
218.080000	18.56	11.2	1.44	0	4.7	35.9	46.00	10.1
253.810000	6.37	12.4	1.53	0	4.7	25	46.00	21
295.400000	2.63	13.1	1.67	0	4.7	22.1	46.00	23.9
321.370000	1.69	13.2	1.71	0	4.7	21.3	46.00	24.7
347.680000	14.11	14.0	1.79	0	4.7	34.6	46.00	11.4
378.260000	1.15	15.5	1.85	0	4.7	23.2	46.00	22.8
416.170000	0.25	15.8	1.95	0	4.7	22.7	46.00	23.3
455.330000	-0.82	16.2	2.02	0	4.7	22.1	46.00	23.9
497.010000	-0.24	16.4	2.14	0	4.7	23	46.00	23
530.000000	14.99	17.1	2.21	0	4.7	39	46.00	7
562.780000	11.04	17.1	2.26	0	4.7	35.1	46.00	10.9
737.000000	-0.5	19.3	2.60	0	4.7	26.1	46.00	19.9
786.000000	5.13	19.6	2.67	0	4.7	32.1	46.00	13.9
827.600000	5.94	20.2	2.76	0	4.7	33.6	46.00	12.4
887.900000	-0.95	20.8	2.85	0	4.7	27.4	46.00	18.6











EUT	Position (ang	jle °)	315		Anten	V		
Frequency	QP Reading value	Antenna Factor	Cable Loss	Pre- Amp. Gain	Ground reflection factor	QP Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB3/m)	(dB)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
62.980000	13.65	12.40	0.75	0	4.7	31.5	40.00	8.5
116.870000	19.17	11.80	1.03	0	4.7	36.7	43.50	6.8
141.480000	19.05	10.30	1.15	0	4.7	35.2	43.50	8.3
169.350000	17.34	8.9	1.26	0	4.7	32.2	43.50	11.3
190.560000	10.37	9.1	1.33	0	4.7	25.5	43.50	18
218.080000	17.06	11.2	1.44	0	4.7	34.4	46.00	11.6
253.810000	6.87	12.4	1.53	0	4.7	25.5	46.00	20.5
295.400000	4.83	13.1	1.67	0	4.7	24.3	46.00	21.7
321.370000	4.69	13.2	1.71	0	4.7	24.3	46.00	21.7
347.680000	13.11	14.0	1.79	0	4.7	33.6	46.00	12.4
378.260000	1.45	15.5	1.85	0	4.7	23.5	46.00	22.5
416.170000	0.45	15.8	1.95	0	4.7	22.9	46.00	23.1
455.330000	0.48	16.2	2.02	0	4.7	23.4	46.00	22.6
497.010000	-0.44	16.4	2.14	0	4.7	22.8	46.00	23.2
530.000000	11.49	17.1	2.21	0	4.7	35.5	46.00	10.5
562.780000	8.04	17.1	2.26	0	4.7	32.1	46.00	13.9
737.000000	2.6	19.3	2.60	0	4.7	29.2	46.00	16.8
786.000000	6.63	19.6	2.67	0	4.7	33.6	46.00	12.4
827.600000	4.34	20.2	2.76	0	4.7	32	46.00	14
887.900000	-0.95	20.8	2.85	0	4.7	27.4	46.00	18.6









#### RADIATED DISTURBANCES > 960 MHz 7.6

TEST REQUIREMENT					
Test definition	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.				
Test setup	ANSI C63.4				
Test facility	Open Area Test Site (OATS)				
Test distance	1 meter				
RBW bandwidth	1 MHz				
Detector	RMS Average				
EUT operating condition	#1				
Remark	None				

IMITS							
Frequency (MHz)	EIRP (1 MHz BW) (dBm)	Field strength @ 3 meters (1 MHz BW) (dBµV/m)	Field strength @ 1 meters (1 MHz BW) (dBµV/m)				
960-1610	-65.3	29.9	39.4				
1610-1990	-53.3	41.9	51.4				
1990-3100	-51.3	43.9	53.4				
3100-10600	-41.3	53.9	63.4				
Above 10600	-51.3	43.9	53.4				
Above 10600		43.9	53.4				

Note: The limits were converted from EIRP to field strength at 3 and 1 meter according to FCC 15.503(k).









#### **TEST PROCEDURE**

- The EUT was placed on sandpit area filled with dry sand initially placed in front of the ground plane (0° degree position)
- 2) The receiving antenna is placed at 1 meter away from the EUT and it is pointed in the direction of the radiating head with an inclination of -10° to find the highest emission.
- The receiving antenna was positioned in horizontal polarization.
- The measurements were made with the detector set to RMS with a bandwidth of 1 MHz during monitoring the frequency range above 960 MHz.
- Upon detection of a suspect emission signal, its amplitude and frequency were noted.
- It is recommended to demodulate the received signals for suitable discrimination of the ambient emission from the EUT emission.
- At the worst case combination of the EUT operating mode and antenna height, the field strength 7) measure was recorded.
- 8) The receiving antenna was positioned in vertical polarization and the steps 2 to 6 was repeated.
- 9) The EUT was rotating from 0° to 360° degrees with 45° step increment and the steps 4 to 7 was
- 10) All the worst case combination field strength emissions founded of each EUT position and antenna polarization was recorded in the following table and compared with the applicable limits.

#### **SUMMURY OF TEST RESULT DATA**

All maximum Field strength emission are found at the following test set-up conditions

Frequency (MHz)	EUT Position (angle °)	Antenna Polarization (V/H)	Correcting reading (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
969.00	135	Н	33.1	39.4	6.3	PASS
1012.00	0	V	30.9	39.4	8.5	PASS
1025.00	135	V	32.6	39.4	6.8	PASS
1036.00	90	V	32.1	39.4	7.3	PASS
1048.00	135	V	36.1	39.4	3.3	PASS
1053.00	135	V	34.2	39.4	5.2	PASS
1064.00	135	V	35.4	39.4	4	PASS
1067.00	135	V	34.9	39.4	8.5	PASS
1074.00	135	V	32.7	39.4	6.7	PASS
1105.00	90	V	31.4	39.4	8	PASS
1128.00	0	V	33.8	39.4	5.6	PASS
1143.00	0	V	31.4	39.4	8	PASS
1163.00	270	V	33.5	39.4	5.9	PASS
1185.00	270	V	31.9	39.4	7.5	PASS
1196.00	270	V	31.1	39.4	8.3	PASS
1220.00	45	V	31.5	39.4	7.9	PASS
1232.00	45	V	31.9	39.4	7.5	PASS
1241.00	45	V	29.9	39.4	9.5	PASS
1254.00	0	V	30.9	39.4	8.5	PASS
1267.00	90	V	31.7	39.4	7.7	PASS
1277.00	90	V	31.1	39.4	8.3	PASS
1297.00	270	V	30.4	39.4	9	PASS
1308.00	270	V	29.0	39.4	10.4	PASS
1358.00	270	V	29.8	39.4	9.6	PASS
1377.00	270	V	29.4	39.4	10	PASS
1401.00	90	V	28.9	39.4	10.5	PASS
1449.00	90	V	29.1	39.4	10.3	PASS
1481.00	45	V	29.2	39.4	10.2	PASS







Date: 2016-10-05



LAB N° 0121

1518.00	45	V	29.1	39.4	10.3	PASS
1592.00	45	V	29.7	39.4	9.7	PASS
1662.00	45	V	28.8	51.4	22.6	PASS
1712.00	180	V	30.0	51.4	21.4	PASS
1758.00	0	Н	29.1	51.4	22.3	PASS
1904.00	180	Н	32.1	51.4	19.3	PASS
1918.00	270	V	25.8	51.4	25.6	PASS
1950.00	90	V	25.3	51.4	26.1	PASS
1989.00	135	V	23.1	51.4	28.3	PASS
2275.00	90	V	27.2	53.4	26.2	PASS
2537.00	90	V	27.5	53.4	25.9	PASS
2808.00	45	V	29.8	53.4	23.6	PASS
3137.00	135	V	30.2	63.4	33.2	PASS
3870.00	0	V	31.6	63.4	31.8	PASS
4500.00	0	V	32.5	63.4	30.9	PASS
5703.00	90	Н	34.3	63.4	29.1	PASS
6493.00	0	V	37.1	63.4	26.3	PASS
7793.00	0	V	40.8	63.4	22.6	PASS

# **TEST RESULT**

The EUT meets the requirements of sections 15.509(d)

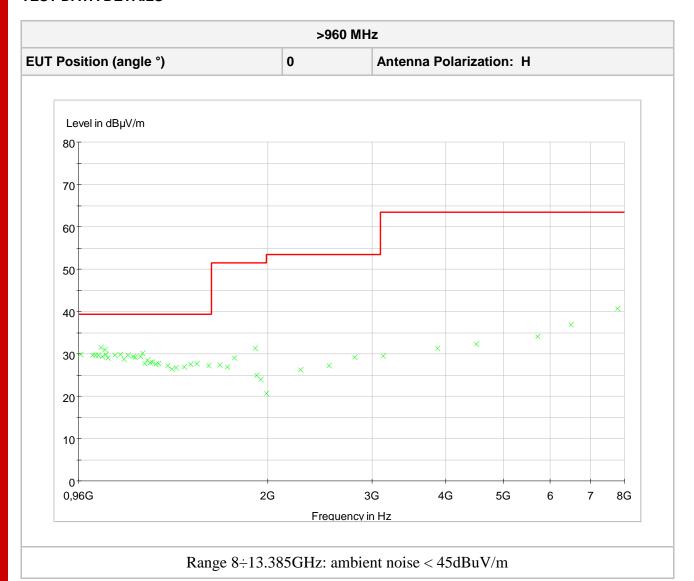








# **TEST DATA DETAILS**











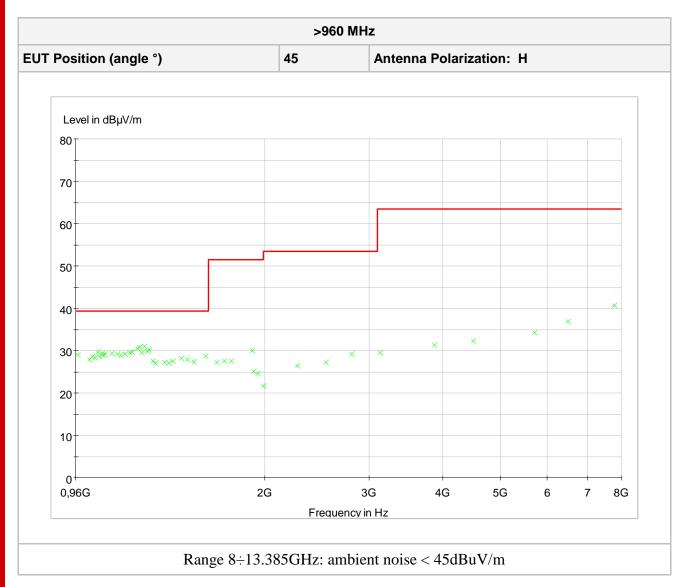
EUT	Position (ang	le °)	0	Ant	enna Polarizatio	n	Н
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	40.46	24.7	3.34	-38.7	29.8	39.4	9.6
1012.000000	40.26	24.7	3.34	-38.7	29.6	39.4	9.8
1025.000000	40.36	24.7	3.34	-38.7	29.7	39.4	9.7
1036.000000	40.36	24.7	3.34	-38.7	29.7	39.4	9.7
1048.000000	42	24.7	3.4	-38.7	31.4	39.4	8
1053.000000	39.9	24.7	3.4	-38.7	29.3	39.4	10.1
1064.000000	41.5	24.7	3.4	-38.7	30.9	39.4	8.5
1067.000000	40.5	24.7	3.4	-38.7	29.9	39.4	9.5
1074.000000	39.6	24.7	3.4	-38.7	29	39.4	10.4
1105.000000	40.18	24.7	3.52	-38.7	29.7	39.4	9.7
1128.000000	40.38	24.7	3.52	-38.7	29.9	39.4	9.5
1143.000000	39.18	24.7	3.52	-38.7	28.7	39.4	10.7
1163.000000	40.18	24.7	3.52	-38.7	29.7	39.4	9.7
1185.000000	39.72	24.7	3.68	-38.7	29.4	39.4	10
1196.000000	39.42	24.7	3.68	-38.7	29.1	39.4	10.3
1220.000000	39.72	24.7	3.68	-38.7	29.4	39.4	10
1232.000000	40.52	24.7	3.68	-38.7	30.2	39.4	9.2
1241.000000	38.12	24.7	3.68	-38.7	27.8	39.4	11.6
1254.000000	38.82	24.7	3.68	-38.7	28.5	39.4	10.9
1267.000000	38.12	24.7	3.68	-38.7	27.8	39.4	11.6
1277.000000	38.42	24.7	3.68	-38.7	28.1	39.4	11.3
1297.000000	37.68	24.7	3.82	-38.7	27.5	39.4	11.9
1308.000000	37.88	24.7	3.82	-38.7	27.7	39.4	11.7
1358.000000	37.48	24.7	3.82	-38.7	27.3	39.4	12.1
1377.000000	36.44	24.7	3.96	-38.7	26.4	39.4	13
1401.000000	36.84	24.7	3.96	-38.7	26.8	39.4	12.6
1449.000000	36.94	24.7	3.96	-38.7	26.9	39.4	12.5
1481.000000	37.54	24.7	3.96	-38.7	27.5	39.4	11.9
1518.000000	36.02	25.5	4.08	-37.9	27.7	39.4	11.7
1592.000000	35.44	25.5	4.16	-37.9	27.2	39.4	12.2
1662.000000	35.35	25.5	4.35	-37.9	27.3	51.4	24.1
1712.000000	34.95	25.5	4.35	-37.9	26.9	51.4	24.1
1758.000000	37.1	25.5	4.33	-37.9	29.1	51.4	22.3
1904.000000	39.24	25.5	4.46	-37.9	31.3	51.4	
	32.84	25.5	4.46	-37.9	24.9	51.4	20.1
1918.000000							
1950.000000	31.8	25.5	4.6	-37.9	24	51.4	27.4
1989.000000	28.29	25.5	4.71	-37.9	20.6	51.4	30.8
2275.000000	32.24	26.4	4.96	-37.3	26.3	53.4	27.1
2537.000000	31.5	27.7	5.3	-37.3	27.2	53.4	26.2
2808.000000	32.17	28.8	5.63	-37.4	29.2	53.4	24.2
3137.000000	31.75	28.8	6.35	-37.4	29.5	63.4	33.9
3870.000000	31.03	30.5	6.57	-36.8	31.3	63.4	32.1
4500.000000	30.12	31.8	7.18	-36.8	32.3	63.4	31.1
5703.000000	30.2	32.5	8.1	-36.6	34.2	63.4	29.2
6493.000000	29.33	35.8	8.67	-36.9	36.9	63.4	26.5
7793.000000	30.45	37.1	9.55	-36.5	40.6	63.4	22.8



















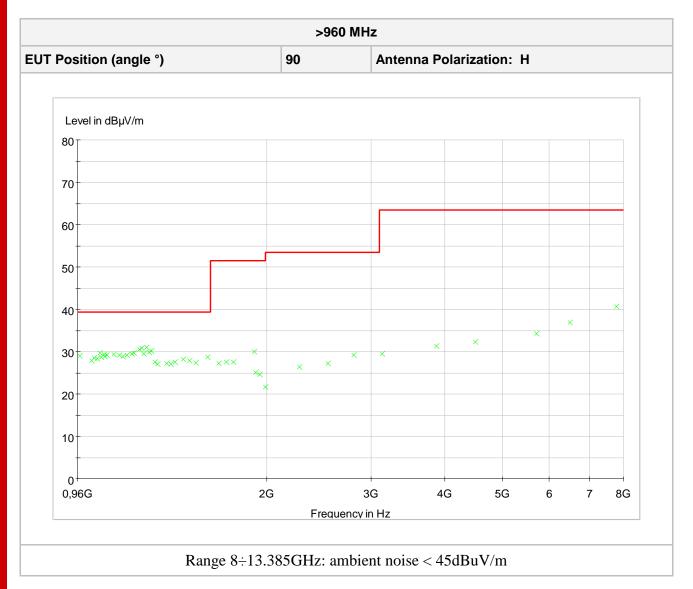
EUT	Position (ang	le °)	45	Ant	enna Polarizatio	n	Н
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	39.76	24.7	3.34	-38.7	29.1	39.40	10.3
1012.000000	38.46	24.7	3.34	-38.7	27.8	39.40	11.6
1025.000000	39.16	24.7	3.34	-38.7	28.5	39.40	10.9
1036.000000	39.06	24.7	3.34	-38.7	28.4	39.40	11
1048.000000	40.3	24.7	3.4	-38.7	29.7	39.40	9.7
1053.000000	39.2	24.7	3.4	-38.7	28.6	39.40	10.8
1064.000000	40	24.7	3.4	-38.7	29.4	39.40	10
1067.000000	39.4	24.7	3.4	-38.7	28.8	39.40	10.6
1074.000000	39.7	24.7	3.4	-38.7	29.1	39.40	10.3
1105.000000	39.88	24.7	3.52	-38.7	29.4	39.40	10
1128.000000	39.78	24.7	3.52	-38.7	29.3	39.40	10.1
1143.000000	39.28	24.7	3.52	-38.7	28.8	39.40	10.6
1163.000000	39.68	24.7	3.52	-38.7	29.2	39.40	10.2
1185.000000	39.82	24.7	3.68	-38.7	29.5	39.40	9.9
1196.000000	40.02	24.7	3.68	-38.7	29.7	39.40	9.7
1220.000000	40.82	24.7	3.68	-38.7	30.5	39.40	8.9
1232.000000	41.12	24.7	3.68	-38.7	30.8	39.40	8.6
1241.000000	39.82	24.7	3.68	-38.7	29.5	39.40	9.9
1254.000000	41.22	24.7	3.68	-38.7	30.9	39.40	8.5
1267.000000	40.22	24.7	3.68	-38.7	29.9	39.40	9.5
1277.000000	40.52	24.7	3.68	-38.7	30.2	39.40	9.2
1297.000000	37.68	24.7	3.82	-38.7	27.5	39.40	11.9
1308.000000	37.08	24.7	3.82	-38.7	27.1	39.40	12.3
1358.000000	37.28	24.7	3.82	-38.7	27.1	39.40	12.3
1377.000000	37.04	24.7	3.96	-38.7	27.0	39.40	12.4
1401.000000	37.64	24.7	3.96	-38.7	27.6	39.40	11.8
1449.000000	38.24	24.7	3.96	-38.7	28.2	39.40	11.8
1481.000000	37.94	24.7	3.96	-38.7	27.9	39.40	11.5
	35.82	25.5	4.08	-37.9	27.5	39.40	11.9
1518.000000							
1592.000000 1662.000000	37.04 35.25	25.5 25.5	4.16 4.35	-37.9 -37.9	28.8	39.40 51.40	10.6 24.2
1712.000000	35.55	25.5	4.35	-37.9	27.5	51.40	23.9
1758.000000	35.5	25.5	4.4	-37.9	27.5	51.40	23.9
1904.000000	37.94	25.5	4.46	-37.9	30.0	51.40	21.4
1918.000000	33.14	25.5	4.46	-37.9	25.2	51.40	26.2
1950.000000	32.4	25.5	4.6	-37.9	24.6	51.40	26.8
1989.000000	29.29	25.5	4.71	-37.9	21.6	51.40	29.8
2275.000000	32.34	26.4	4.96	-37.3	26.4	53.40	27
2537.000000	31.5	27.7	5.3	-37.3	27.2	53.40	26.2
2808.000000	32.17	28.8	5.63	-37.4	29.2	53.40	24.2
3137.000000	31.75	28.8	6.35	-37.4	29.5	63.40	33.9
3870.000000	31.13	30.5	6.57	-36.8	31.4	63.40	32
4500.000000	30.12	31.8	7.18	-36.8	32.3	63.40	31.1
5703.000000	30.2	32.5	8.1	-36.6	34.2	63.40	29.2
6493.000000	29.43	35.8	8.67	-36.9	37.0	63.40	26.4
7793.000000	30.55	37.1	9.55	-36.5	40.7	63.40	22.7



















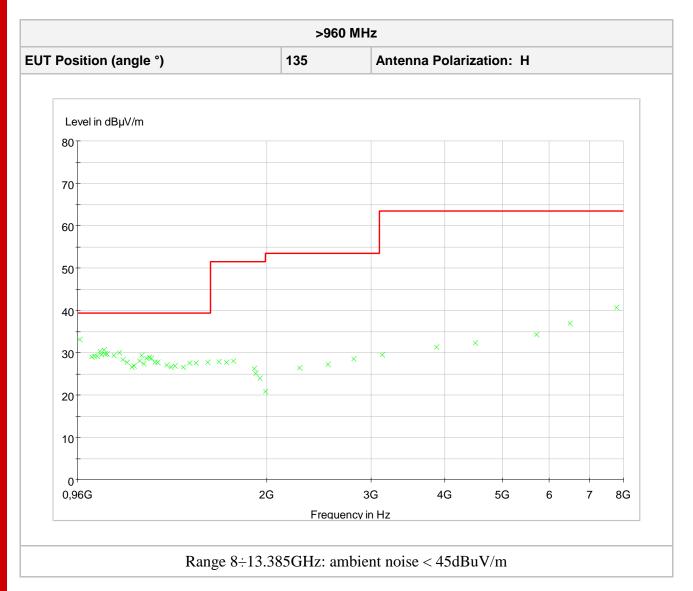
EUT	Position (ang	le °)	90	Ant	enna Polarizatio	n	Н
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	41.76	24.7	3.34	-38.7	31.1	39.40	8.3
1012.000000	37.56	24.7	3.34	-38.7	26.9	39.40	12.5
1025.000000	37.56	24.7	3.34	-38.7	26.9	39.40	12.5
1036.000000	38.96	24.7	3.34	-38.7	28.3	39.40	11.1
1048.000000	40.5	24.7	3.4	-38.7	29.9	39.40	9.5
1053.000000	39.4	24.7	3.4	-38.7	28.8	39.40	10.6
1064.000000	39.2	24.7	3.4	-38.7	28.6	39.40	10.8
1067.000000	38.3	24.7	3.4	-38.7	27.7	39.40	11.7
1074.000000	39	24.7	3.4	-38.7	28.4	39.40	11
1105.000000	38.88	24.7	3.52	-38.7	28.4	39.40	11
1128.000000	39.38	24.7	3.52	-38.7	28.9	39.40	10.5
1143.000000	38.88	24.7	3.52	-38.7	28.4	39.40	11
1163.000000	40.38	24.7	3.52	-38.7	29.9	39.40	9.5
1185.000000	38.02	24.7	3.68	-38.7	27.7	39.40	11.7
1196.000000	37.82	24.7	3.68	-38.7	27.5	39.40	11.9
1220.000000	37.22	24.7	3.68	-38.7	26.9	39.40	12.5
1232.000000	37.22	24.7	3.68	-38.7	26.9	39.40	12.5
1241.000000	36.22	24.7	3.68	-38.7	25.9	39.40	13.5
1254.000000	38.22	24.7	3.68	-38.7	27.9	39.40	11.5
1267.000000	38.02	24.7	3.68	-38.7	27.7	39.40	11.7
1277.000000	38.12	24.7	3.68	-38.7	27.8	39.40	11.7
1297.000000	37.28	24.7	3.82	-38.7	27.1	39.40	12.3
1308.000000	36.98	24.7	3.82	-38.7	26.8	39.40	12.5
1358.000000	36.58	24.7	3.82	-38.7	26.4	39.40	13
1377.000000	35.74	24.7	3.96	-38.7	25.7	39.40	13.7
1401.000000	36.14	24.7	3.96	-38.7	26.1	39.40	13.7
1449.000000	36.24	24.7	3.96	-38.7	26.2	39.40	13.3
1481.000000	36.54	24.7	3.96	-38.7	26.5	39.40	12.9
1518.000000	35.32	25.5	4.08	-37.9	27.0	39.40	12.4
1592.000000	34.74	25.5	4.16	-37.9	26.5	39.40	12.9
1662.000000	34.05	25.5	4.35	-37.9	26.0	51.40	25.4
1712.000000	35.05	25.5	4.35	-37.9	27.0	51.40	24.4
1758.000000	35.6	25.5	4.4	-37.9	27.6	51.40	23.8
1904.000000	33.94	25.5	4.46	-37.9	26.0	51.40	25.4
1918.000000	32.44	25.5	4.46	-37.9	24.5	51.40	26.9
1950.000000	32.4	25.5	4.6	-37.9	24.6	51.40	26.8
1989.000000	29.39	25.5	4.71	-37.9	21.7	51.40	29.7
2275.000000	32.24	26.4	4.96	-37.3	26.3	53.40	27.1
2537.000000	31.5	27.7	5.3	-37.3	27.2	53.40	26.2
2808.000000	31.47	28.8	5.63	-37.4	28.5	53.40	24.9
3137.000000	31.85	28.8	6.35	-37.4	29.6	63.40	33.8
3870.000000	31.13	30.5	6.57	-36.8	31.4	63.40	32
4500.000000	30.22	31.8	7.18	-36.8	32.4	63.40	31
5703.000000	30.3	32.5	8.1	-36.6	34.3	63.40	29.1
6493.000000	29.33	35.8	8.67	-36.9	36.9	63.40	26.5
7793.000000	30.55	37.1	9.55	-36.5	40.7	63.40	22.7



















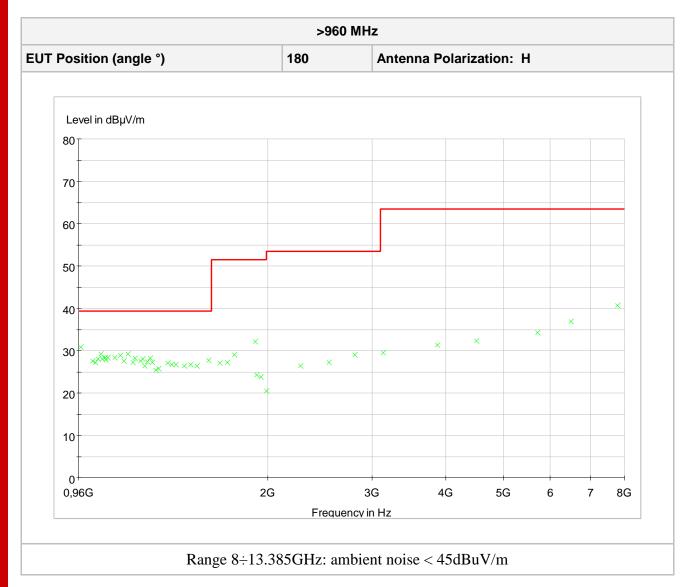
EUT	Position (ang	le °)	135	Ant	enna Polarizatio	n	Н
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	43.76	24.7	3.34	-38.7	33.1	39.40	6.3
1012.000000	39.66	24.7	3.34	-38.7	29.0	39.40	10.4
1025.000000	39.86	24.7	3.34	-38.7	29.2	39.40	10.2
1036.000000	39.86	24.7	3.34	-38.7	29.2	39.40	10.2
1048.000000	40.9	24.7	3.4	-38.7	30.3	39.40	9.1
1053.000000	40.2	24.7	3.4	-38.7	29.6	39.40	9.8
1064.000000	41.3	24.7	3.4	-38.7	30.7	39.40	8.7
1067.000000	40.3	24.7	3.4	-38.7	29.7	39.40	9.7
1074.000000	40.3	24.7	3.4	-38.7	29.7	39.40	9.7
1105.000000	39.88	24.7	3.52	-38.7	29.4	39.40	10
1128.000000	40.38	24.7	3.52	-38.7	29.9	39.40	9.5
1143.000000	38.88	24.7	3.52	-38.7	28.4	39.40	11
1163.000000	38.18	24.7	3.52	-38.7	27.7	39.40	11.7
1185.000000	36.92	24.7	3.68	-38.7	26.6	39.40	12.8
1196.000000	37.22	24.7	3.68	-38.7	26.9	39.40	12.5
1220.000000	38.32	24.7	3.68	-38.7	28.0	39.40	11.4
1232.000000	39.72	24.7	3.68	-38.7	29.4	39.40	10
1241.000000	37.62	24.7	3.68	-38.7	27.3	39.40	12.1
1254.000000	39.12	24.7	3.68	-38.7	28.8	39.40	10.6
1267.000000	39.12	24.7	3.68	-38.7	28.8	39.40	10.6
1277.000000	39.02	24.7	3.68	-38.7	28.7	39.40	10.0
1297.000000	37.88	24.7	3.82	-38.7	27.7	39.40	11.7
1308.000000	37.98	24.7	3.82	-38.7	27.8	39.40	11.7
1358.000000	37.18	24.7	3.82	-38.7	27.0	39.40	12.4
1377.000000	36.54	24.7	3.96	-38.7	26.5	39.40	12.4
1401.000000	36.94	24.7	3.96	-38.7	26.9	39.40	12.5
1449.000000	36.64	24.7	3.96	-38.7	26.6	39.40	12.8
1481.000000	37.64	24.7	3.96	-38.7	27.6	39.40	11.8
1518.000000	35.92	25.5	4.08	-37.9	27.6	39.40	11.8
1592.000000	35.84	25.5	4.16	-37.9	27.6	39.40	11.8
1662.000000	35.95	25.5	4.35	-37.9	27.9	51.40	23.5
1712.000000	35.75	25.5	4.35	-37.9	27.7	51.40	23.7
1758.000000	36.1	25.5	4.4	-37.9	28.1	51.40	23.3
1904.000000	34.14	25.5	4.46	-37.9	26.2	51.40	25.2
1918.000000	33.04	25.5	4.46	-37.9	25.1	51.40	26.3
1950.000000	31.7	25.5	4.6	-37.9	23.9	51.40	27.5
1989.000000	28.59	25.5	4.71	-37.9	20.9	51.40	30.5
2275.000000	32.34	26.4	4.96	-37.3	26.4	53.40	27
2537.000000	31.5	27.7	5.3	-37.3	27.2	53.40	26.2
2808.000000	31.47	28.8	5.63	-37.4	28.5	53.40	24.9
3137.000000	31.75	28.8	6.35	-37.4	29.5	63.40	33.9
3870.000000	31.13	30.5	6.57	-36.8	31.4	63.40	32
4500.000000	30.12	31.8	7.18	-36.8	32.3	63.40	31.1
5703.000000	30.2	32.5	8.1	-36.6	34.2	63.40	29.2
6493.000000	29.33	35.8	8.67	-36.9	36.9	63.40	26.5
7793.000000	30.55	37.1	9.55	-36.5	40.7	63.40	22.7



















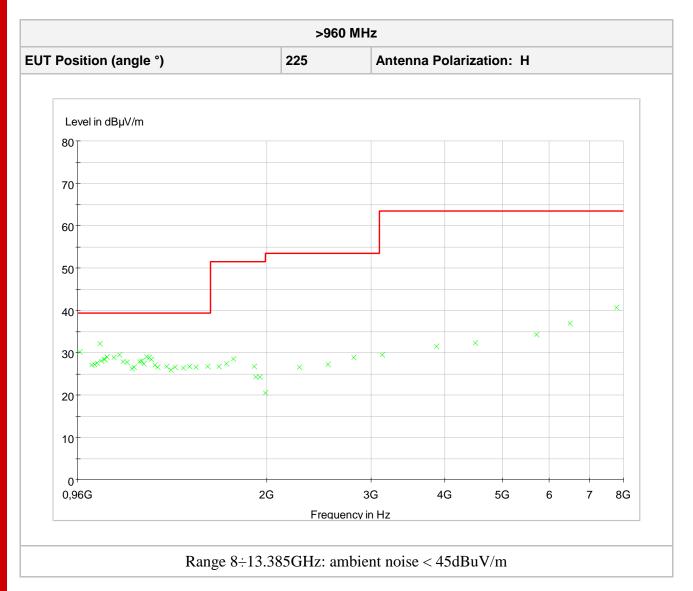
EUT	Position (ang	le °)	180	Ant	enna Polarizatio	n	Н
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	41.46	24.7	3.34	-38.7	30.8	39.40	8.6
1012.000000	38.16	24.7	3.34	-38.7	27.5	39.40	11.9
1025.000000	37.96	24.7	3.34	-38.7	27.3	39.40	12.1
1036.000000	38.66	24.7	3.34	-38.7	28.0	39.40	11.4
1048.000000	39.7	24.7	3.4	-38.7	29.1	39.40	10.3
1053.000000	38.7	24.7	3.4	-38.7	28.1	39.40	11.3
1064.000000	39	24.7	3.4	-38.7	28.4	39.40	11
1067.000000	38.5	24.7	3.4	-38.7	27.9	39.40	11.5
1074.000000	39	24.7	3.4	-38.7	28.4	39.40	11
1105.000000	38.78	24.7	3.52	-38.7	28.3	39.40	11.1
1128.000000	39.38	24.7	3.52	-38.7	28.9	39.40	10.5
1143.000000	37.98	24.7	3.52	-38.7	27.5	39.40	11.9
1163.000000	39.58	24.7	3.52	-38.7	29.1	39.40	10.3
1185.000000	37.52	24.7	3.68	-38.7	27.2	39.40	12.2
1196.000000	38.42	24.7	3.68	-38.7	28.1	39.40	11.3
1220.000000	37.92	24.7	3.68	-38.7	27.6	39.40	11.8
1232.000000	38.32	24.7	3.68	-38.7	28.0	39.40	11.4
1241.000000	36.62	24.7	3.68	-38.7	26.3	39.40	13.1
1254.000000	37.72	24.7	3.68	-38.7	27.4	39.40	12
1267.000000	38.52	24.7	3.68	-38.7	28.2	39.40	11.2
1277.000000	37.52	24.7	3.68	-38.7	27.2	39.40	12.2
1297.000000	35.68	24.7	3.82	-38.7	25.5	39.40	13.9
1308.000000	35.88	24.7	3.82	-38.7	25.7	39.40	13.7
1358.000000	37.28	24.7	3.82	-38.7	27.1	39.40	12.3
1377.000000	36.84	24.7	3.96	-38.7	26.8	39.40	12.5
1401.000000	36.84	24.7	3.96	-38.7	26.8	39.40	12.6
1449.000000	36.34	24.7	3.96	-38.7	26.3	39.40	13.1
1481.000000	36.84	24.7	3.96	-38.7	26.8	39.40	12.6
1518.000000	34.72	25.5	4.08	-37.9	26.4	39.40	13
1592.000000	36.04	25.5	4.16	-37.9	27.8	39.40	11.6
1662.000000	35.15	25.5	4.16	-37.9	27.1	51.40	24.3
1712.000000	35.25	25.5	4.35	-37.9	27.1	51.40	24.3
1712.000000	36.9	25.5	4.33	-37.9	28.9	51.40	22.5
1904.000000	40.04	25.5	4.46	-37.9	32.1	51.40	
							19.3
1918.000000	32.24	25.5	4.46	-37.9	24.3	51.40	27.1
1950.000000	31.6	25.5	4.6	-37.9	23.8	51.40	27.6
1989.000000	28.19	25.5	4.71	-37.9	20.5	51.40	30.9
2275.000000	32.34	26.4	4.96	-37.3	26.4	53.40	27
2537.000000	31.5	27.7	5.3	-37.3	27.2	53.40	26.2
2808.000000	31.97	28.8	5.63	-37.4	29.0	53.40	24.4
3137.000000	31.75	28.8	6.35	-37.4	29.5	63.40	33.9
3870.000000	31.13	30.5	6.57	-36.8	31.4	63.40	32
4500.000000	30.12	31.8	7.18	-36.8	32.3	63.40	31.1
5703.000000	30.2	32.5	8.1	-36.6	34.2	63.40	29.2
6493.000000	29.33	35.8	8.67	-36.9	36.9	63.40	26.5
7793.000000	30.45	37.1	9.55	-36.5	40.6	63.40	22.8



















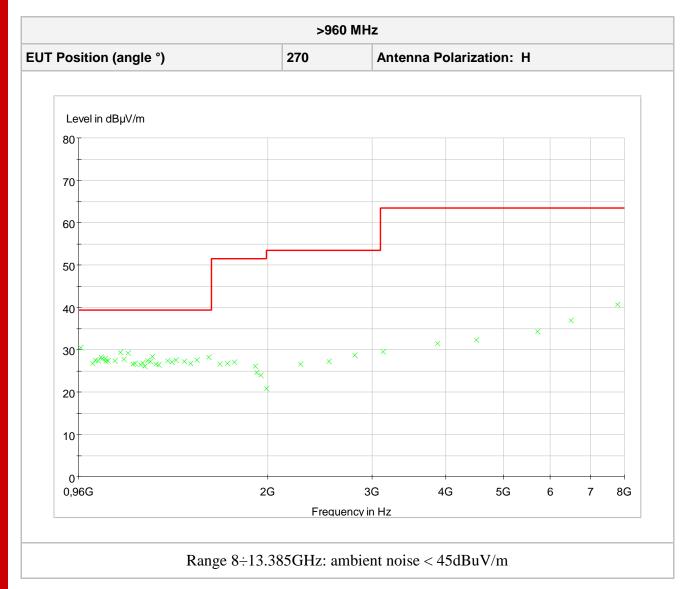
EUT	Position (ang	le °)	225	Ant	enna Polarizatio	n	Н
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	40.86	24.7	3.34	-38.7	30.2	39.40	9.2
1012.000000	37.66	24.7	3.34	-38.7	27.0	39.40	12.4
1025.000000	37.86	24.7	3.34	-38.7	27.2	39.40	12.2
1036.000000	38.26	24.7	3.34	-38.7	27.6	39.40	11.8
1048.000000	42.8	24.7	3.4	-38.7	32.2	39.40	7.2
1053.000000	38.7	24.7	3.4	-38.7	28.1	39.40	11.3
1064.000000	39.1	24.7	3.4	-38.7	28.5	39.40	10.9
1067.000000	38.9	24.7	3.4	-38.7	28.3	39.40	11.1
1074.000000	39.7	24.7	3.4	-38.7	29.1	39.40	10.3
1105.000000	39.38	24.7	3.52	-38.7	28.9	39.40	10.5
1128.000000	39.98	24.7	3.52	-38.7	29.5	39.40	9.9
1143.000000	38.38	24.7	3.52	-38.7	27.9	39.40	11.5
1163.000000	38.08	24.7	3.52	-38.7	27.6	39.40	11.8
1185.000000	36.52	24.7	3.68	-38.7	26.2	39.40	13.2
1196.000000	36.92	24.7	3.68	-38.7	26.6	39.40	12.8
1220.000000	38.22	24.7	3.68	-38.7	27.9	39.40	11.5
1232.000000	38.32	24.7	3.68	-38.7	28.0	39.40	11.4
1241.000000	37.72	24.7	3.68	-38.7	27.4	39.40	12
1254.000000	39.42	24.7	3.68	-38.7	29.1	39.40	10.3
1267.000000	39.12	24.7	3.68	-38.7	28.8	39.40	10.6
1277.000000	38.72	24.7	3.68	-38.7	28.4	39.40	11
1297.000000	37.18	24.7	3.82	-38.7	27.0	39.40	12.4
1308.000000	36.78	24.7	3.82	-38.7	26.6	39.40	12.8
1358.000000	36.88	24.7	3.82	-38.7	26.7	39.40	12.7
1377.000000	35.84	24.7	3.96	-38.7	25.8	39.40	13.6
1401.000000	36.54	24.7	3.96	-38.7	26.5	39.40	12.9
1449.000000	36.44	24.7	3.96	-38.7	26.4	39.40	13
1481.000000	36.84	24.7	3.96	-38.7	26.8	39.40	12.6
1518.000000	34.82	25.5	4.08	-37.9	26.5	39.40	12.0
1592.000000	34.94	25.5	4.16	-37.9	26.7	39.40	12.9
1662.000000			4.35	-37.9	26.7	51.40	24.7
1712.000000	34.75 35.45	25.5 25.5	4.35	-37.9	27.4	51.40	24.7
1712.000000	36.6	25.5	4.33	-37.9	28.6		22.8
1904.000000		25.5	4.46	-37.9	26.7	51.40	24.7
	34.64 32.24	25.5	4.46	-37.9	24.3	51.40 51.40	24.7
1918.000000							
1950.000000	32	25.5	4.6	-37.9	24.2	51.40	27.2
1989.000000	28.09	25.5	4.71	-37.9	20.4	51.40	31
2275.000000	32.44	26.4	4.96	-37.3	26.5	53.40	26.9
2537.000000	31.5	27.7	5.3	-37.3	27.2	53.40	26.2
2808.000000	31.77	28.8	5.63	-37.4	28.8	53.40	24.6
3137.000000	31.75	28.8	6.35	-37.4	29.5	63.40	33.9
3870.000000	31.13	30.5	6.57	-36.8	31.4	63.40	32
4500.000000	30.12	31.8	7.18	-36.8	32.3	63.40	31.1
5703.000000	30.2	32.5	8.1	-36.6	34.2	63.40	29.2
6493.000000	29.33	35.8	8.67	-36.9	36.9	63.40	26.5
7793.000000	30.45	37.1	9.55	-36.5	40.6	63.40	22.8



















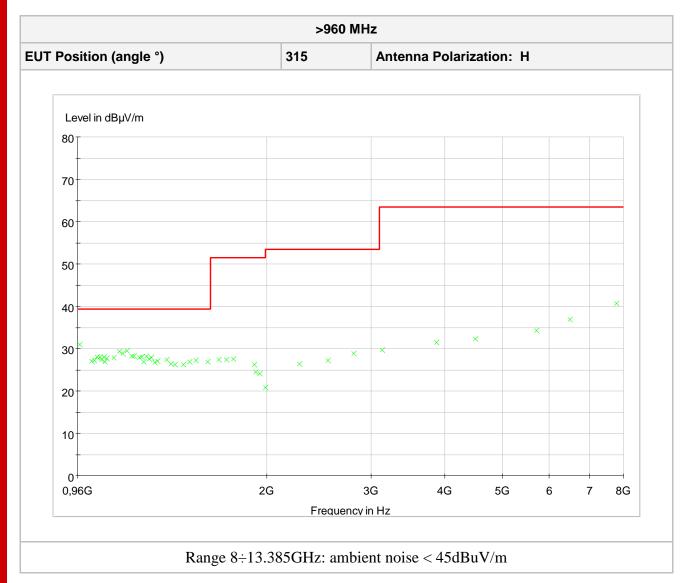
EUT	Position (ang	le °)	270	Ant	enna Polarizatio	n	Н
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	41.16	24.7	3.34	-38.7	30.5	39.40	8.9
1012.000000	37.46	24.7	3.34	-38.7	26.8	39.40	12.6
1025.000000	38.26	24.7	3.34	-38.7	27.6	39.40	11.8
1036.000000	38.06	24.7	3.34	-38.7	27.4	39.40	12
1048.000000	38.8	24.7	3.4	-38.7	28.2	39.40	11.2
1053.000000	38.5	24.7	3.4	-38.7	27.9	39.40	11.5
1064.000000	38.5	24.7	3.4	-38.7	27.9	39.40	11.5
1067.000000	37.8	24.7	3.4	-38.7	27.2	39.40	12.2
1074.000000	38	24.7	3.4	-38.7	27.4	39.40	12
1105.000000	37.88	24.7	3.52	-38.7	27.4	39.40	12
1128.000000	39.78	24.7	3.52	-38.7	29.3	39.40	10.1
1143.000000	38.08	24.7	3.52	-38.7	27.6	39.40	11.8
1163.000000	39.58	24.7	3.52	-38.7	29.1	39.40	10.3
1185.000000	36.92	24.7	3.68	-38.7	26.6	39.40	12.8
1196.000000	37.12	24.7	3.68	-38.7	26.8	39.40	12.6
1220.000000	36.72	24.7	3.68	-38.7	26.4	39.40	13
1232.000000	37.22	24.7	3.68	-38.7	26.9	39.40	12.5
1241.000000	36.32	24.7	3.68	-38.7	26.0	39.40	13.4
1254.000000	37.72	24.7	3.68	-38.7	27.4	39.40	12
1267.000000	37.52	24.7	3.68	-38.7	27.4	39.40	12.2
1207.000000	38.62	24.7	3.68	-38.7	28.3	39.40	11.1
1297.000000	36.78 36.58	24.7	3.82 3.82	-38.7 -38.7	26.6 26.4	39.40 39.40	12.8
1308.000000		24.7	3.82		27.3		13
1358.000000	37.48	24.7		-38.7		39.40	12.1
1377.000000	37.04	24.7	3.96	-38.7	27.0	39.40	12.4
1401.000000	37.64	24.7	3.96	-38.7	27.6	39.40	11.8
1449.000000	37.34	24.7	3.96	-38.7	27.3	39.40	12.1
1481.000000	36.74	24.7	3.96	-38.7	26.7	39.40	12.7
1518.000000	35.82	25.5	4.08	-37.9	27.5	39.40	11.9
1592.000000	36.44	25.5	4.16	-37.9	28.2	39.40	11.2
1662.000000	34.65	25.5	4.35	-37.9	26.6	51.40	24.8
1712.000000	34.75	25.5	4.35	-37.9	26.7	51.40	24.7
1758.000000	35.1	25.5	4.4	-37.9	27.1	51.40	24.3
1904.000000	33.94	25.5	4.46	-37.9	26.0	51.40	25.4
1918.000000	32.54	25.5	4.46	-37.9	24.6	51.40	26.8
1950.000000	31.8	25.5	4.6	-37.9	24.0	51.40	27.4
1989.000000	28.49	25.5	4.71	-37.9	20.8	51.40	30.6
2275.000000	32.44	26.4	4.96	-37.3	26.5	53.40	26.9
2537.000000	31.6	27.7	5.3	-37.3	27.3	53.40	26.1
2808.000000	31.57	28.8	5.63	-37.4	28.6	53.40	24.8
3137.000000	31.75	28.8	6.35	-37.4	29.5	63.40	33.9
3870.000000	31.13	30.5	6.57	-36.8	31.4	63.40	32
4500.000000	30.12	31.8	7.18	-36.8	32.3	63.40	31.1
5703.000000	30.3	32.5	8.1	-36.6	34.3	63.40	29.1
6493.000000	29.33	35.8	8.67	-36.9	36.9	63.40	26.5
7793.000000	30.55	37.1	9.55	-36.5	40.7	63.40	22.7

















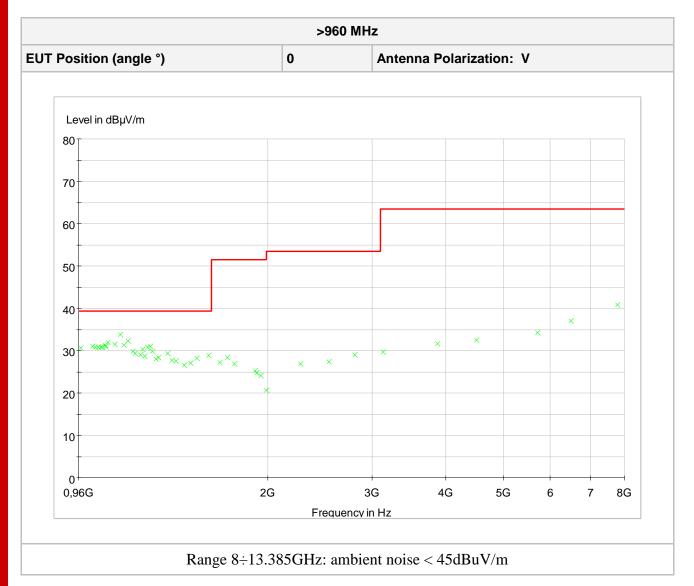
EUT	Position (ang	le °)	315	Ant	enna Polarizatio	n	Н
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	41.66	24.7	3.34	-38.7	31.0	39.40	8.4
1012.000000	37.76	24.7	3.34	-38.7	27.1	39.40	12.3
1025.000000	37.76	24.7	3.34	-38.7	27.1	39.40	12.3
1036.000000	38.66	24.7	3.34	-38.7	28.0	39.40	11.4
1048.000000	38.7	24.7	3.4	-38.7	28.1	39.40	11.3
1053.000000	38	24.7	3.4	-38.7	27.4	39.40	12
1064.000000	38.6	24.7	3.4	-38.7	28.0	39.40	11.4
1067.000000	37.5	24.7	3.4	-38.7	26.9	39.40	12.5
1074.000000	38.3	24.7	3.4	-38.7	27.7	39.40	11.7
1105.000000	38.28	24.7	3.52	-38.7	27.8	39.40	11.6
1128.000000	39.78	24.7	3.52	-38.7	29.3	39.40	10.1
1143.000000	39.28	24.7	3.52	-38.7	28.8	39.40	10.6
1163.000000	39.98	24.7	3.52	-38.7	29.5	39.40	9.9
1185.000000	38.52	24.7	3.68	-38.7	28.2	39.40	11.2
1196.000000	38.52	24.7	3.68	-38.7	28.2	39.40	11.2
1220.000000	38.12	24.7	3.68	-38.7	27.8	39.40	11.6
1232.000000	38.42	24.7	3.68	-38.7	28.1	39.40	11.3
1241.000000	37.22	24.7	3.68	-38.7	26.9	39.40	12.5
1254.000000	38.52	24.7	3.68	-38.7	28.2	39.40	11.2
1267.000000	37.92	24.7	3.68	-38.7	27.6	39.40	11.8
1277.000000	38.12	24.7	3.68	-38.7	27.8	39.40	11.6
1297.000000	36.88	24.7	3.82	-38.7	26.7	39.40	12.7
1308.000000	37.18	24.7	3.82	-38.7	27.0	39.40	12.7
1358.000000	37.18	24.7	3.82	-38.7	27.3	39.40	12.1
1377.000000	36.34	24.7	3.96	-38.7	26.3	39.40	13.1
				-38.7			
1401.000000	36.24	24.7	3.96		26.2	39.40	13.2
1449.000000	36.24	24.7	3.96 3.96	-38.7 -38.7	26.2	39.40 39.40	13.2
1481.000000	36.94	24.7					12.5
1518.000000	35.52	25.5	4.08	-37.9	27.2	39.40	12.2
1592.000000	35.14	25.5	4.16	-37.9	26.9	39.40	12.5
1662.000000	35.55	25.5	4.35	-37.9	27.5	51.40	23.9
1712.000000	35.55	25.5	4.35	-37.9	27.5	51.40	23.9
1758.000000	35.6	25.5	4.4	-37.9	27.6	51.40	23.8
1904.000000	34.24	25.5	4.46	-37.9	26.3	51.40	25.1
1918.000000	32.34	25.5	4.46	-37.9	24.4	51.40	27
1950.000000	31.9	25.5	4.6	-37.9	24.1	51.40	27.3
1989.000000	28.59	25.5	4.71	-37.9	20.9	51.40	30.5
2275.000000	32.44	26.4	4.96	-37.3	26.5	53.40	26.9
2537.000000	31.5	27.7	5.3	-37.3	27.2	53.40	26.2
2808.000000	31.77	28.8	5.63	-37.4	28.8	53.40	24.6
3137.000000	31.85	28.8	6.35	-37.4	29.6	63.40	33.8
3870.000000	31.13	30.5	6.57	-36.8	31.4	63.40	32
4500.000000	30.12	31.8	7.18	-36.8	32.3	63.40	31.1
5703.000000	30.3	32.5	8.1	-36.6	34.3	63.40	29.1
6493.000000	29.33	35.8	8.67	-36.9	36.9	63.40	26.5
7793.000000	30.55	37.1	9.55	-36.5	40.7	63.40	22.7



















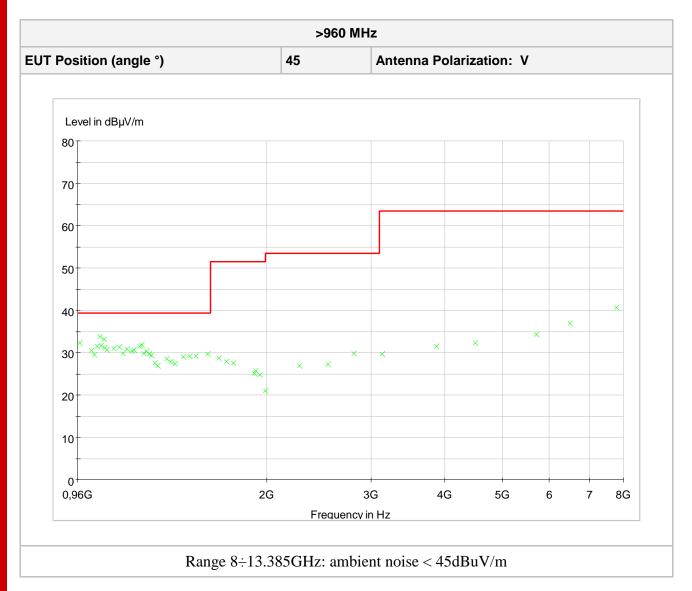
EUT	Position (ang	le °)	0	Ant	enna Polarizatio	n	٧
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	41.26	24.7	3.34	-38.7	30.6	39.40	8.8
1012.000000	41.56	24.7	3.34	-38.7	30.9	39.40	8.5
1025.000000	41.46	24.7	3.34	-38.7	30.8	39.40	8.6
1036.000000	41.36	24.7	3.34	-38.7	30.7	39.40	8.7
1048.000000	41.4	24.7	3.4	-38.7	30.8	39.40	8.6
1053.000000	41.4	24.7	3.4	-38.7	30.8	39.40	8.6
1064.000000	41.9	24.7	3.4	-38.7	31.3	39.40	8.1
1067.000000	41.6	24.7	3.4	-38.7	31.0	39.40	8.4
1074.000000	42.5	24.7	3.4	-38.7	31.9	39.40	7.5
1105.000000	41.88	24.7	3.52	-38.7	31.4	39.40	8
1128.000000	44.28	24.7	3.52	-38.7	33.8	39.40	5.6
1143.000000	41.88	24.7	3.52	-38.7	31.4	39.40	8
1163.000000	42.78	24.7	3.52	-38.7	32.3	39.40	7.1
1185.000000	40.22	24.7	3.68	-38.7	29.9	39.40	9.5
1196.000000	39.62	24.7	3.68	-38.7	29.3	39.40	10.1
1220.000000	39.22	24.7	3.68	-38.7	28.9	39.40	10.5
1232.000000	40.62	24.7	3.68	-38.7	30.3	39.40	9.1
1241.000000	39.02	24.7	3.68	-38.7	28.7	39.40	10.7
1254.000000	41.22	24.7	3.68	-38.7	30.9	39.40	8.5
1267.000000	41.22	24.7	3.68	-38.7	30.9	39.40	8.5
1277.000000	40.12	24.7	3.68	-38.7	29.8	39.40	9.6
1297.000000	38.18	24.7	3.82	-38.7	28.0	39.40	11.4
1308.000000	38.58	24.7	3.82	-38.7	28.4	39.40	11.4
1358.000000	39.48	24.7	3.82	-38.7	29.3	39.40	10.1
1377.000000	37.84	24.7	3.96	-38.7	27.8	39.40	11.6
1401.000000	37.64	24.7	3.96	-38.7	27.6	39.40	11.8
1449.000000	36.54	24.7	3.96	-38.7	26.5	39.40	12.9
1481.000000	37.04	24.7	3.96	-38.7	27.0	39.40	12.4
1518.000000	36.42	25.5	4.08	-37.9	28.1	39.40	11.3
1592.000000	37.14	25.5	4.16	-37.9	28.9	39.40	10.5
1662.000000	35.25	25.5	4.35	-37.9	27.2	51.40	24.2
1712.000000	36.35	25.5	4.35	-37.9	28.3	51.40	23.1
1758.000000	34.9	25.5	4.33	-37.9	26.9	51.40	24.5
1904.000000	33.24	25.5	4.46	-37.9	25.3	51.40	26.1
1904.000000	32.74	25.5	4.46	-37.9	24.8	51.40	26.6
1950.000000	32	25.5	4.6	-37.9	24.2	51.40	27.2
1989.000000	28.29	25.5	4.71	-37.9	20.6	51.40	30.8
2275.000000	32.84	26.4	4.96	-37.3	26.9	53.40	26.5
2537.000000	31.7	27.7	5.3	-37.3	27.4	53.40	26
2808.000000	32.07	28.8	5.63	-37.4	29.1	53.40	24.3
3137.000000	31.95	28.8	6.35	-37.4	29.7	63.40	33.7
3870.000000	31.33	30.5	6.57	-36.8	31.6	63.40	31.8
4500.000000	30.32	31.8	7.18	-36.8	32.5	63.40	30.9
5703.000000	30.3	32.5	8.1	-36.6	34.3	63.40	29.1
6493.000000	29.53	35.8	8.67	-36.9	37.1	63.40	26.3
7793.000000	30.65	37.1	9.55	-36.5	40.8	63.40	22.6



















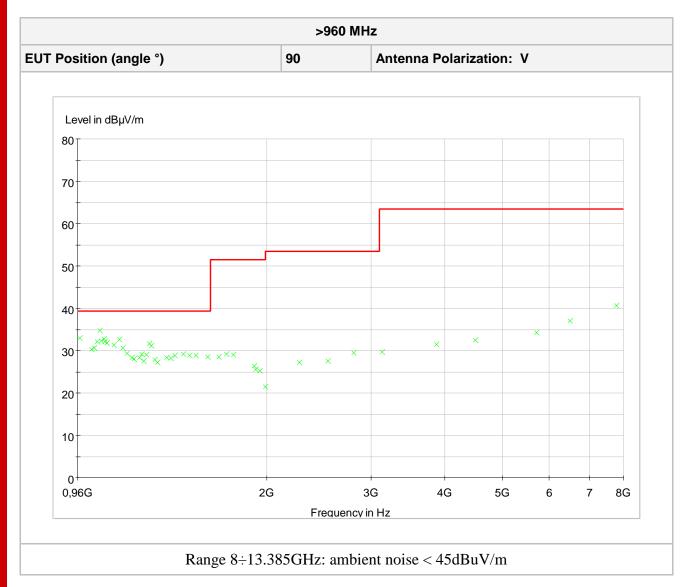
EUT	Position (angl	le °)	45	Ant	enna Polarizatio	n	V
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	42.96	24.7	3.34	-38.7	32.3	39.40	7.1
1012.000000	41.26	24.7	3.34	-38.7	30.6	39.40	8.8
1025.000000	40.16	24.7	3.34	-38.7	29.5	39.40	9.9
1036.000000	42.16	24.7	3.34	-38.7	31.5	39.40	7.9
1048.000000	44.3	24.7	3.4	-38.7	33.7	39.40	5.7
1053.000000	42.2	24.7	3.4	-38.7	31.6	39.40	7.8
1064.000000	43.6	24.7	3.4	-38.7	33.0	39.40	6.4
1067.000000	41.7	24.7	3.4	-38.7	31.1	39.40	8.3
1074.000000	41.2	24.7	3.4	-38.7	30.6	39.40	8.8
1105.000000	41.48	24.7	3.52	-38.7	31.0	39.40	8.4
1128.000000	41.78	24.7	3.52	-38.7	31.3	39.40	8.1
1143.000000	40.38	24.7	3.52	-38.7	29.9	39.40	9.5
1163.000000	41.38	24.7	3.52	-38.7	30.9	39.40	8.5
1185.000000	40.62	24.7	3.68	-38.7	30.3	39.40	9.1
1196.000000	40.92	24.7	3.68	-38.7	30.6	39.40	8.8
1220.000000	41.82	24.7	3.68	-38.7	31.5	39.40	7.9
1232.000000	42.22	24.7	3.68	-38.7	31.9	39.40	7.5
1241.000000	40.22	24.7	3.68	-38.7	29.9	39.40	9.5
1254.000000	40.72	24.7	3.68	-38.7	30.4	39.40	9
1267.000000	40.02	24.7	3.68	-38.7	29.7	39.40	9.7
1277.000000	39.72	24.7	3.68	-38.7	29.4	39.40	10
1297.000000	37.68	24.7	3.82	-38.7	27.5	39.40	11.9
1308.000000	36.98	24.7	3.82	-38.7	26.8	39.40	12.6
1358.000000	38.78	24.7	3.82	-38.7	28.6	39.40	10.8
1377.000000	37.94	24.7	3.96	-38.7	27.9	39.40	11.5
1401.000000	37.44	24.7	3.96	-38.7	27.4	39.40	11.3
1449.000000	39.04	24.7	3.96	-38.7	29.0	39.40	10.4
1481.000000	39.24	24.7	3.96	-38.7	29.0	39.40	10.4
	37.42	25.5	4.08	-37.9	29.1	39.40	10.2
1518.000000 1592.000000	37.94	25.5	4.16	-37.9	29.7	39.40	9.7
1662.000000	36.85	25.5	4.16	-37.9	28.8	51.40	22.6
1712.000000	35.85	25.5	4.35	-37.9	27.8	51.40	23.6
1712.000000			4.33				
1904.000000	35.6	25.5 25.5	4.46	-37.9	27.6 25.1	51.40	23.8
	33.04			-37.9		51.40	26.3 25.7
1918.000000	33.64	25.5	4.46	-37.9	25.7	51.40	
1950.000000	32.5	25.5	4.6	-37.9	24.7	51.40	26.7
1989.000000	28.69	25.5	4.71	-37.9	21.0	51.40	30.4
2275.000000	32.74	26.4	4.96	-37.3	26.8	53.40	26.6
2537.000000	31.6	27.7	5.3	-37.3	27.3	53.40	26.1
2808.000000	32.77	28.8	5.63	-37.4	29.8	53.40	23.6
3137.000000	31.85	28.8	6.35	-37.4	29.6	63.40	33.8
3870.000000	31.23	30.5	6.57	-36.8	31.5	63.40	31.9
4500.000000	30.22	31.8	7.18	-36.8	32.4	63.40	31
5703.000000	30.2	32.5	8.1	-36.6	34.2	63.40	29.2
6493.000000	29.43	35.8	8.67	-36.9	37.0	63.40	26.4
7793.000000	30.55	37.1	9.55	-36.5	40.7	63.40	22.7



















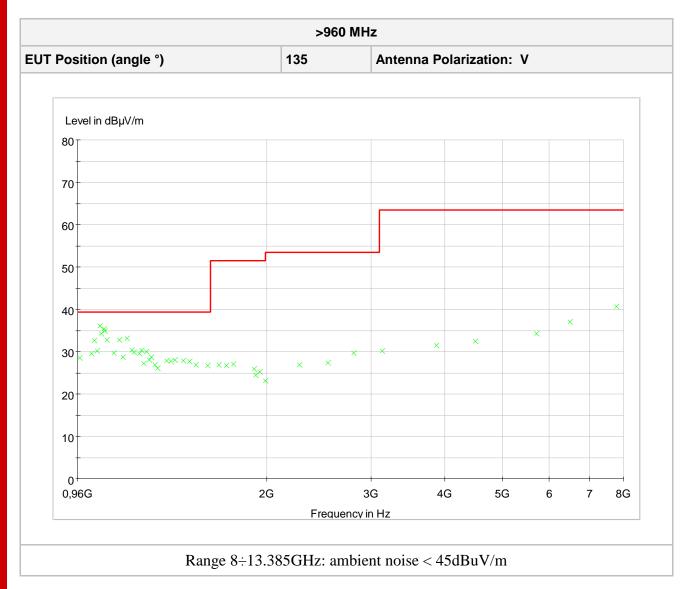
EUT	Position (ang	le °)	90	Ant	enna Polarizatio	n	V
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	43.66	24.7	3.34	-38.7	33.0	39.40	6.4
1012.000000	41.06	24.7	3.34	-38.7	30.4	39.40	9
1025.000000	41.36	24.7	3.34	-38.7	30.7	39.40	8.7
1036.000000	42.76	24.7	3.34	-38.7	32.1	39.40	7.3
1048.000000	45.3	24.7	3.4	-38.7	34.7	39.40	4.7
1053.000000	42.8	24.7	3.4	-38.7	32.2	39.40	7.2
1064.000000	43.4	24.7	3.4	-38.7	32.8	39.40	6.6
1067.000000	42.8	24.7	3.4	-38.7	32.2	39.40	7.2
1074.000000	42.3	24.7	3.4	-38.7	31.7	39.40	7.7
1105.000000	41.88	24.7	3.52	-38.7	31.4	39.40	8
1128.000000	43.08	24.7	3.52	-38.7	32.6	39.40	6.8
1143.000000	41.08	24.7	3.52	-38.7	30.6	39.40	8.8
1163.000000	39.78	24.7	3.52	-38.7	29.3	39.40	10.1
1185.000000	38.62	24.7	3.68	-38.7	28.3	39.40	11.1
1196.000000	38.42	24.7	3.68	-38.7	28.1	39.40	11.3
1220.000000	38.62	24.7	3.68	-38.7	28.3	39.40	11.1
1232.000000	39.52	24.7	3.68	-38.7	29.2	39.40	10.2
1241.000000	37.92	24.7	3.68	-38.7	27.6	39.40	11.8
1254.000000	39.42	24.7	3.68	-38.7	29.1	39.40	10.3
1267.000000	42.02	24.7	3.68	-38.7	31.7	39.40	7.7
1277.000000	41.42	24.7	3.68	-38.7	31.7	39.40	8.3
1297.000000	38.08	24.7	3.82	-38.7	27.9	39.40	11.5
1308.000000	37.38	24.7	3.82	-38.7	27.2	39.40	12.2
1358.000000	38.58	24.7	3.82	-38.7	28.4	39.40	11.2
	38.24	24.7	3.96	-38.7	28.2	39.40	11.2
1377.000000			3.96	-38.7	28.9		
1401.000000	38.94	24.7				39.40	10.5
1449.000000	39.14	24.7	3.96	-38.7	29.1	39.40	10.3
1481.000000	38.94	24.7	3.96	-38.7	28.9	39.40	10.5
1518.000000	37.12	25.5	4.08	-37.9	28.8	39.40	10.6
1592.000000	36.74	25.5	4.16	-37.9	28.5	39.40	10.9
1662.000000	36.55	25.5	4.35	-37.9	28.5	51.40	22.9
1712.000000	37.25	25.5	4.35	-37.9	29.2	51.40	22.2
1758.000000	37	25.5	4.4	-37.9	29.0	51.40	22.4
1904.000000	34.34	25.5	4.46	-37.9	26.4	51.40	25
1918.000000	33.54	25.5	4.46	-37.9	25.6	51.40	25.8
1950.000000	33.1	25.5	4.6	-37.9	25.3	51.40	26.1
1989.000000	29.19	25.5	4.71	-37.9	21.5	51.40	29.9
2275.000000	33.14	26.4	4.96	-37.3	27.2	53.40	26.2
2537.000000	31.8	27.7	5.3	-37.3	27.5	53.40	25.9
2808.000000	32.47	28.8	5.63	-37.4	29.5	53.40	23.9
3137.000000	31.85	28.8	6.35	-37.4	29.6	63.40	33.8
3870.000000	31.23	30.5	6.57	-36.8	31.5	63.40	31.9
4500.000000	30.22	31.8	7.18	-36.8	32.4	63.40	31
5703.000000	30.3	32.5	8.1	-36.6	34.3	63.40	29.1
6493.000000	29.43	35.8	8.67	-36.9	37.0	63.40	26.4
7793.000000	30.55	37.1	9.55	-36.5	40.7	63.40	22.7



















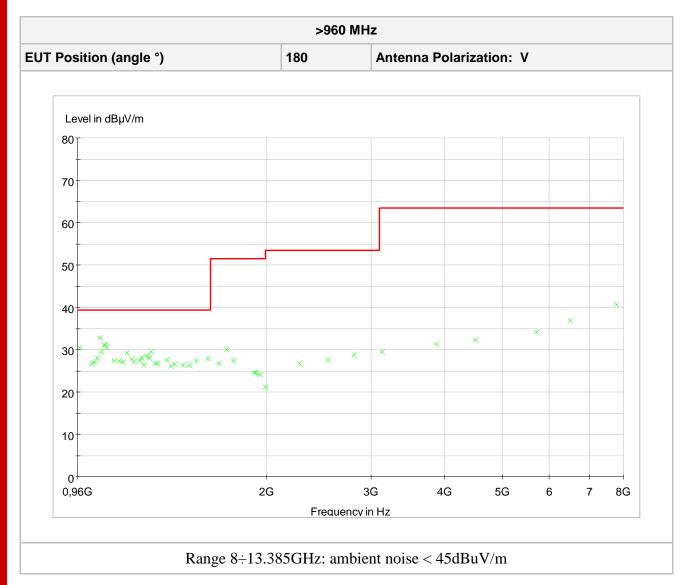
EUT	Position (ang	le °)	135	Ant	enna Polarizatio	n	V
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	39.16	24.7	3.34	-38.7	28.5	39.40	10.9
1012.000000	40.16	24.7	3.34	-38.7	29.5	39.40	9.9
1025.000000	43.26	24.7	3.34	-38.7	32.6	39.40	6.8
1036.000000	40.86	24.7	3.34	-38.7	30.2	39.40	9.2
1048.000000	46.7	24.7	3.4	-38.7	36.1	39.40	3.3
1053.000000	44.8	24.7	3.4	-38.7	34.2	39.40	5.2
1064.000000	46	24.7	3.4	-38.7	35.4	39.40	4
1067.000000	45.5	24.7	3.4	-38.7	34.9	39.40	4.5
1074.000000	43.3	24.7	3.4	-38.7	32.7	39.40	6.7
1105.000000	40.18	24.7	3.52	-38.7	29.7	39.40	9.7
1128.000000	43.28	24.7	3.52	-38.7	32.8	39.40	6.6
1143.000000	39.18	24.7	3.52	-38.7	28.7	39.40	10.7
1163.000000	43.58	24.7	3.52	-38.7	33.1	39.40	6.3
1185.000000	40.52	24.7	3.68	-38.7	30.2	39.40	9.2
1196.000000	40.12	24.7	3.68	-38.7	29.8	39.40	9.6
1220.000000	39.72	24.7	3.68	-38.7	29.4	39.40	10
1232.000000	40.62	24.7	3.68	-38.7	30.3	39.40	9.1
1241.000000	37.62	24.7	3.68	-38.7	27.3	39.40	12.1
1254.000000	40.42	24.7	3.68	-38.7	30.1	39.40	9.3
1267.000000	38.42	24.7	3.68	-38.7	28.1	39.40	11.3
1277.000000	39.02	24.7	3.68	-38.7	28.7	39.40	10.7
1297.000000	37.08	24.7	3.82	-38.7	26.9	39.40	12.5
1308.000000	36.18	24.7	3.82	-38.7	26.0	39.40	13.4
1358.000000	38.08	24.7	3.82	-38.7	27.9	39.40	11.5
1377.000000	37.74	24.7	3.96	-38.7	27.7	39.40	11.7
1401.000000	38.04	24.7	3.96	-38.7	28.0	39.40	11.4
1449.000000	37.84	24.7	3.96	-38.7	27.8	39.40	11.4
1481.000000	37.74	24.7	3.96	-38.7	27.7	39.40	11.7
1518.000000	35.22	25.5	4.08	-37.9	26.9	39.40	12.5
1592.000000	34.94	25.5	4.16	-37.9	26.7	39.40	12.7
1662.000000	34.95	25.5	4.35	-37.9	26.9	51.40	24.5
1712.000000	34.65	25.5	4.35	-37.9	26.6	51.40	24.8
1758.000000	35.1	25.5	4.4	-37.9	27.1	51.40	24.3
1904.000000	33.84	25.5	4.46	-37.9	25.9	51.40	25.5
1918.000000	32.44	25.5	4.46	-37.9	24.5	51.40	26.9
1950.000000	33	25.5	4.6	-37.9	25.2	51.40	26.2
1989.000000	30.79	25.5	4.71	-37.9	23.1	51.40	28.3
2275.000000	32.84	26.4	4.71	-37.3	26.9	53.40	26.5
2537.000000	31.6	27.7	5.3	-37.3	27.3	53.40	26.1
2808.000000	32.67	28.8	5.63	-37.4	29.7	53.40	23.7
3137.000000	32.45	28.8	6.35	-37.4	30.2	63.40	33.2
3870.000000	31.23	30.5	6.57	-36.8	31.5	63.40	31.9
4500.000000		31.8	7.18		32.4		
5703.000000	30.22	31.8	8.1	-36.8 -36.6	34.3	63.40	31
					34.3	63.40	29.1
6493.000000	29.43	35.8	8.67	-36.9		63.40	26.4
7793.000000	30.55	37.1	9.55	-36.5	40.7	63.40	22.7

















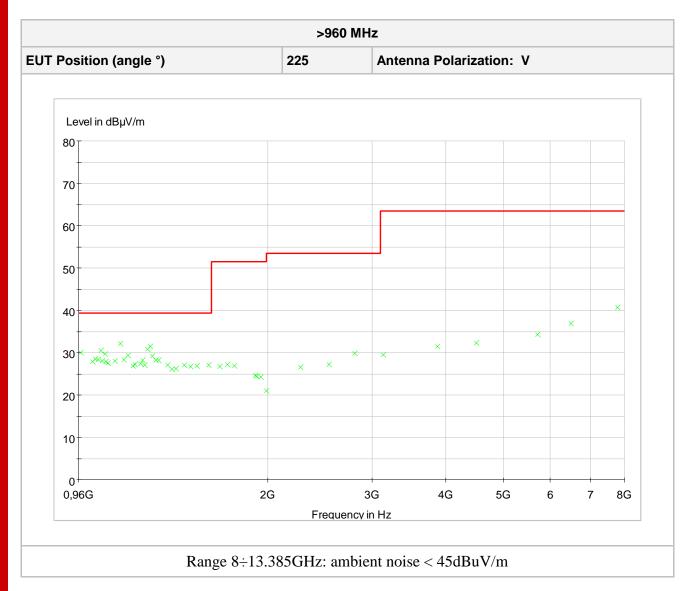
EUT	Position (ang	le °)	180 Antenna Polarization				V
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	41.16	24.7	3.34	-38.7	30.5	39.40	8.9
1012.000000	37.26	24.7	3.34	-38.7	26.6	39.40	12.8
1025.000000	37.66	24.7	3.34	-38.7	27.0	39.40	12.4
1036.000000	38.66	24.7	3.34	-38.7	28.0	39.40	11.4
1048.000000	43.4	24.7	3.4	-38.7	32.8	39.40	6.6
1053.000000	40.1	24.7	3.4	-38.7	29.5	39.40	9.9
1064.000000	41.7	24.7	3.4	-38.7	31.1	39.40	8.3
1067.000000	41.6	24.7	3.4	-38.7	31.0	39.40	8.4
1074.000000	41	24.7	3.4	-38.7	30.4	39.40	9
1105.000000	37.88	24.7	3.52	-38.7	27.4	39.40	12
1128.000000	37.88	24.7	3.52	-38.7	27.4	39.40	12
1143.000000	37.48	24.7	3.52	-38.7	27.0	39.40	12.4
1163.000000	39.68	24.7	3.52	-38.7	29.2	39.40	10.2
1185.000000	38.02	24.7	3.68	-38.7	27.7	39.40	11.7
1196.000000	37.62	24.7	3.68	-38.7	27.3	39.40	12.1
1220.000000	37.72	24.7	3.68	-38.7	27.4	39.40	12.1
1232.000000	38.32	24.7	3.68	-38.7	28.0	39.40	11.4
1241.000000	36.72	24.7	3.68	-38.7	26.4	39.40	13
1254.000000	38.82	24.7	3.68	-38.7	28.5	39.40	10.9
1267.000000	38.42	24.7	3.68	-38.7	28.1	39.40	10.9
1207.000000	39.92	24.7	3.68	-38.7	29.6	39.40	9.8
1297.000000	36.98	24.7	3.82	-38.7	26.8	39.40	12.6
			3.82				12.0
1308.000000	36.88	24.7	3.82	-38.7	26.7 27.5	39.40	
1358.000000	37.68	24.7		-38.7		39.40	11.9
1377.000000	36.14	24.7	3.96	-38.7	26.1	39.40	13.3
1401.000000	36.64	24.7	3.96	-38.7	26.6	39.40	12.8
1449.000000	36.34	24.7	3.96	-38.7	26.3	39.40	13.1
1481.000000	36.34	24.7	3.96	-38.7	26.3	39.40	13.1
1518.000000	35.72	25.5	4.08	-37.9	27.4	39.40	12
1592.000000	36.04	25.5	4.16	-37.9	27.8	39.40	11.6
1662.000000	34.75	25.5	4.35	-37.9	26.7	51.40	24.7
1712.000000	38.05	25.5	4.35	-37.9	30.0	51.40	21.4
1758.000000	35.4	25.5	4.4	-37.9	27.4	51.40	24
1904.000000	32.64	25.5	4.46	-37.9	24.7	51.40	26.7
1918.000000	32.44	25.5	4.46	-37.9	24.5	51.40	26.9
1950.000000	31.9	25.5	4.6	-37.9	24.1	51.40	27.3
1989.000000	28.79	25.5	4.71	-37.9	21.1	51.40	30.3
2275.000000	32.64	26.4	4.96	-37.3	26.7	53.40	26.7
2537.000000	31.8	27.7	5.3	-37.3	27.5	53.40	25.9
2808.000000	31.67	28.8	5.63	-37.4	28.7	53.40	24.7
3137.000000	31.85	28.8	6.35	-37.4	29.6	63.40	33.8
3870.000000	31.13	30.5	6.57	-36.8	31.4	63.40	32
4500.000000	30.12	31.8	7.18	-36.8	32.3	63.40	31.1
5703.000000	30.2	32.5	8.1	-36.6	34.2	63.40	29.2
6493.000000	29.33	35.8	8.67	-36.9	36.9	63.40	26.5
7793.000000	30.45	37.1	9.55	-36.5	40.6	63.40	22.8



















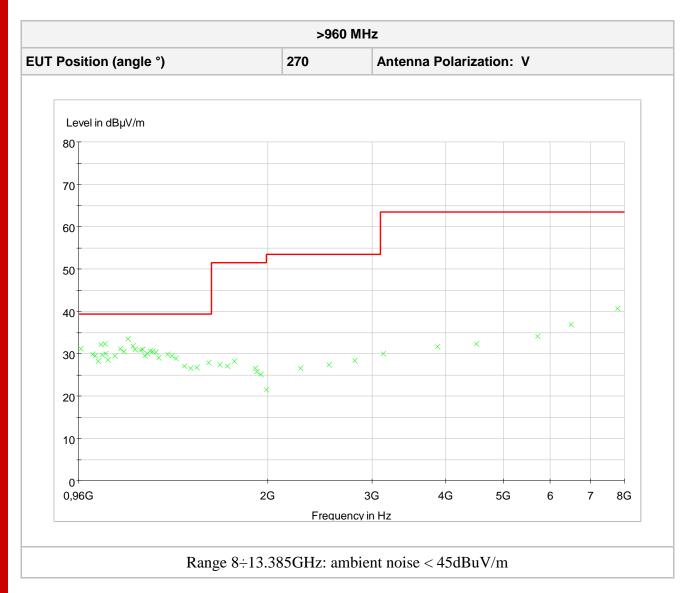
EUT	EUT Position (angle °)		225	Ant	enna Polarization		V
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	40.76	24.7	3.34	-38.7	30.1	39.40	9.3
1012.000000	38.46	24.7	3.34	-38.7	27.8	39.40	11.6
1025.000000	39.26	24.7	3.34	-38.7	28.6	39.40	10.8
1036.000000	38.96	24.7	3.34	-38.7	28.3	39.40	11.1
1048.000000	41	24.7	3.4	-38.7	30.4	39.40	9
1053.000000	38.6	24.7	3.4	-38.7	28.0	39.40	11.4
1064.000000	40.3	24.7	3.4	-38.7	29.7	39.40	9.7
1067.000000	38.5	24.7	3.4	-38.7	27.9	39.40	11.5
1074.000000	38.2	24.7	3.4	-38.7	27.6	39.40	11.8
1105.000000	38.48	24.7	3.52	-38.7	28.0	39.40	11.4
1128.000000	42.68	24.7	3.52	-38.7	32.2	39.40	7.2
1143.000000	38.78	24.7	3.52	-38.7	28.3	39.40	11.1
1163.000000	39.78	24.7	3.52	-38.7	29.3	39.40	10.1
1185.000000	37.22	24.7	3.68	-38.7	26.9	39.40	12.5
1196.000000	37.52	24.7	3.68	-38.7	27.2	39.40	12.2
1220.000000	37.62	24.7	3.68	-38.7	27.3	39.40	12.1
1232.000000	38.52	24.7	3.68	-38.7	28.2	39.40	11.2
1241.000000	37.32	24.7	3.68	-38.7	27.0	39.40	12.4
1254.000000	41.12	24.7	3.68	-38.7	30.8	39.40	8.6
1267.000000	41.72	24.7	3.68	-38.7	31.4	39.40	8
1277.000000	39.52	24.7	3.68	-38.7	29.2	39.40	10.2
1297.000000	38.38	24.7	3.82	-38.7	28.2	39.40	11.2
1308.000000	38.38	24.7	3.82	-38.7	28.2	39.40	11.2
1358.000000	37.28	24.7	3.82	-38.7	27.1	39.40	12.3
1377.000000	36.04	24.7	3.96	-38.7	26.0	39.40	13.4
1401.000000	36.34	24.7	3.96	-38.7	26.3	39.40	13.1
1449.000000	37.14	24.7	3.96	-38.7	27.1	39.40	12.3
1481.000000	36.74	24.7	3.96	-38.7	26.7	39.40	12.7
1518.000000	35.22	25.5	4.08	-37.9	26.9	39.40	12.5
1592.000000	35.34	25.5	4.16	-37.9	27.1	39.40	12.3
1662.000000	34.75	25.5	4.35	-37.9	26.7	51.40	24.7
1712.000000	35.15	25.5	4.35	-37.9	27.1	51.40	24.3
1758.000000	34.8	25.5	4.4	-37.9	26.8	51.40	24.6
1904.000000	32.44	25.5	4.46	-37.9	24.5	51.40	26.9
1918.000000	32.44	25.5	4.46	-37.9	24.5	51.40	26.9
1950.000000	32	25.5	4.6	-37.9	24.2	51.40	27.2
1989.000000	28.59	25.5	4.71	-37.9	20.9	51.40	30.5
2275.000000	32.54	26.4	4.96	-37.3	26.6	53.40	26.8
2537.000000	31.4	27.7	5.3	-37.3	27.1	53.40	26.3
2808.000000	32.77	28.8	5.63	-37.4	29.8	53.40	23.6
3137.000000	31.75	28.8	6.35	-37.4	29.5	63.40	33.9
3870.000000	31.13	30.5	6.57	-36.8	31.4	63.40	32
4500.000000	30.12	31.8	7.18	-36.8	32.3	63.40	31.1
5703.000000	30.2	32.5	8.1	-36.6	34.2	63.40	29.2
6493.000000	29.33	35.8	8.67	-36.9	36.9	63.40	26.5
7793.000000	30.45	37.1	9.55	-36.5	40.6	63.40	22.8

















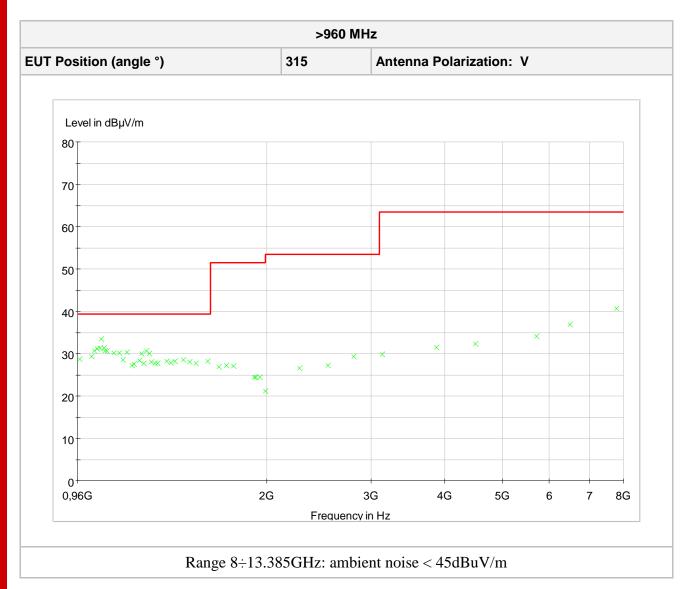
EUT Position (angle °)		270 Antenna Polarization			n	V	
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	41.86	24.7	3.34	-38.7	31.2	39.40	8.2
1012.000000	40.46	24.7	3.34	-38.7	29.8	39.40	9.6
1025.000000	40.16	24.7	3.34	-38.7	29.5	39.40	9.9
1036.000000	38.86	24.7	3.34	-38.7	28.2	39.40	11.2
1048.000000	42.7	24.7	3.4	-38.7	32.1	39.40	7.3
1053.000000	40.2	24.7	3.4	-38.7	29.6	39.40	9.8
1064.000000	42.9	24.7	3.4	-38.7	32.3	39.40	7.1
1067.000000	40.6	24.7	3.4	-38.7	30.0	39.40	9.4
1074.000000	39.2	24.7	3.4	-38.7	28.6	39.40	10.8
1105.000000	40.08	24.7	3.52	-38.7	29.6	39.40	9.8
1128.000000	41.58	24.7	3.52	-38.7	31.1	39.40	8.3
1143.000000	41.08	24.7	3.52	-38.7	30.6	39.40	8.8
1163.000000	43.98	24.7	3.52	-38.7	33.5	39.40	5.9
1185.000000	42.22	24.7	3.68	-38.7	31.9	39.40	7.5
1196.000000	41.42	24.7	3.68	-38.7	31.1	39.40	8.3
1220.000000	41.12	24.7	3.68	-38.7	30.8	39.40	8.6
1232.000000	41.32	24.7	3.68	-38.7	31.0	39.40	8.4
1241.000000	39.82	24.7	3.68	-38.7	29.5	39.40	9.9
1254.000000	40.32	24.7	3.68	-38.7	30.0	39.40	9.4
1267.000000	41.02	24.7	3.68	-38.7	30.7	39.40	8.7
1277.000000	40.72	24.7	3.68	-38.7	30.4	39.40	9
1297.000000	40.58	24.7	3.82	-38.7	30.4	39.40	9
1308.000000	39.18	24.7	3.82	-38.7	29.0	39.40	10.4
1358.000000	39.98	24.7	3.82	-38.7	29.8	39.40	9.6
1377.000000	39.44	24.7	3.96	-38.7	29.4	39.40	10
1401.000000	38.94	24.7	3.96	-38.7	28.9	39.40	10.5
1449.000000	37.14	24.7	3.96	-38.7	27.1	39.40	12.3
1481.000000	36.64	24.7	3.96	-38.7	26.6	39.40	12.8
1518.000000	35.12	25.5	4.08	-37.9	26.8	39.40	12.6
1592.000000	36.04	25.5	4.16	-37.9	27.8	39.40	11.6
1662.000000	35.45	25.5	4.35	-37.9	27.4	51.40	24
1712.000000	35.15	25.5	4.35	-37.9	27.1	51.40	24.3
1758.000000	36.2	25.5	4.4	-37.9	28.2	51.40	23.2
1904.000000	34.54	25.5	4.46	-37.9	26.6	51.40	24.8
1918.000000	33.74	25.5	4.46	-37.9	25.8	51.40	25.6
1950.000000	32.9	25.5	4.6	-37.9	25.1	51.40	26.3
1989.000000	29.09	25.5	4.71	-37.9	21.4	51.40	30
2275.000000	32.54	26.4	4.71	-37.3	26.6	53.40	26.8
2537.000000	31.7	27.7	5.3	-37.3	27.4	53.40	26.8
2808.000000	31.37	28.8	5.63	-37.4	28.4	53.40	25
3137.000000	32.25	28.8	6.35	-37.4	30.0	63.40	33.4
3870.000000	31.33	30.5	6.57	-36.8	31.6	63.40	31.8
4500.000000	30.12	31.8	7.18	-36.8	32.3	63.40	31.8
5703.000000	30.12	31.8	8.1	-36.6	34.2	63.40	29.2
6493.000000	29.33	35.8	8.67	-36.9	36.9	63.40	26.5
7793.000000	30.45	35.8	9.55	-36.5	40.6	63.40	20.5

















EUT Position (angle °)		315 Antenna Polarization			n	V	
Frequency	RMS Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	RMS Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
969.000000	39.36	24.7	3.34	-38.7	28.7	39.40	10.7
1012.000000	39.96	24.7	3.34	-38.7	29.3	39.40	10.1
1025.000000	41.26	24.7	3.34	-38.7	30.6	39.40	8.8
1036.000000	41.86	24.7	3.34	-38.7	31.2	39.40	8.2
1048.000000	42	24.7	3.4	-38.7	31.4	39.40	8
1053.000000	44	24.7	3.4	-38.7	33.4	39.40	6
1064.000000	42	24.7	3.4	-38.7	31.4	39.40	8
1067.000000	41.2	24.7	3.4	-38.7	30.6	39.40	8.8
1074.000000	41.3	24.7	3.4	-38.7	30.7	39.40	8.7
1105.000000	40.68	24.7	3.52	-38.7	30.2	39.40	9.2
1128.000000	40.68	24.7	3.52	-38.7	30.2	39.40	9.2
1143.000000	38.98	24.7	3.52	-38.7	28.5	39.40	10.9
1163.000000	40.88	24.7	3.52	-38.7	30.4	39.40	9
1185.000000	37.62	24.7	3.68	-38.7	27.3	39.40	12.1
1196.000000	37.92	24.7	3.68	-38.7	27.6	39.40	11.8
1220.000000	38.72	24.7	3.68	-38.7	28.4	39.40	11
1232.000000	40.32	24.7	3.68	-38.7	30.0	39.40	9.4
1241.000000	38.02	24.7	3.68	-38.7	27.7	39.40	11.7
1254.000000	41.02	24.7	3.68	-38.7	30.7	39.40	8.7
1267.000000	40.32	24.7	3.68	-38.7	30.0	39.40	9.4
1277.000000	38.32	24.7	3.68	-38.7	28.0	39.40	11.4
1297.000000	37.88	24.7	3.82	-38.7	27.7	39.40	11.7
1308.000000	37.88	24.7	3.82	-38.7	27.7	39.40	11.7
1358.000000	38.38	24.7	3.82	-38.7	28.2	39.40	11.2
1377.000000	37.84	24.7	3.96	-38.7	27.8	39.40	11.6
1401.000000	38.24	24.7	3.96	-38.7	28.2	39.40	11.2
1449.000000	38.54	24.7	3.96	-38.7	28.5	39.40	10.9
1481.000000	38.14	24.7	3.96	-38.7	28.1	39.40	11.3
1518.000000	36.12	25.5	4.08	-37.9	27.8	39.40	11.6
1592.000000	36.34	25.5	4.16	-37.9	28.1	39.40	11.3
1662.000000	34.95	25.5	4.35	-37.9	26.9	51.40	24.5
1712.000000	35.25	25.5	4.35	-37.9	27.2	51.40	24.2
1758.000000	35.25	25.5	4.4	-37.9	27.0	51.40	24.4
1904.000000	32.44	25.5	4.46	-37.9	24.5	51.40	26.9
1918.000000	32.44	25.5	4.46	-37.9	24.5	51.40	26.9
1950.000000	32.3	25.5	4.6	-37.9	24.5	51.40	26.9
1989.000000	28.79	25.5	4.71	-37.9	21.1	51.40	30.3
2275.000000	32.44	26.4	4.71	-37.3	26.5	53.40	26.9
2537.000000	31.6	27.7	5.3	-37.3	27.3	53.40	26.1
2808.000000	32.27	28.8	5.63	-37.4	29.3	53.40	24.1
3137.000000	32.05	28.8	6.35	-37.4	29.8	63.40	33.6
3870.000000	31.13	30.5	6.57	-36.8	31.4	63.40	33.0
4500.000000		31.8	7.18		32.3		
5703.000000	30.12	31.8	8.1	-36.8 -36.6	34.2	63.40	31.1
						63.40	29.2
6493.000000 7793.000000	29.33 30.45	35.8 37.1	8.67 9.55	-36.9 -36.5	36.9 40.6	63.40 63.40	26.5 22.8









#### **RADIATED EMISSION IN GPS BANDS** 7.7

TEST REQUIREMENT				
Test definition	In addition to the radiated emission limits specified for frequency above 960 MHz, UWB transmitters operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of no less than 1 kHz in the GPS frequency bands.			
Test setup	ANSI C63.4			
Test facility	Open Area Test Site (OATS)			
Test distance	1 meter			
RBW bandwidth	1 kHz			
Sweep time	1 ms			
Detector	RMS			
EUT operating condition	#1			
Remark	None			

LIMITS					
Frequency (MHz)	EIRP (1 kHz BW) (dBm)	Field strength @ 3 meters (1 kHz BW) (dBμV/m)	Field strength @ 1 meters (1 kHz BW) (dBμV/m)		
1164-1240	-75.3	19.9	29.4		
1559-1610	-75.3	19.9	29.4		

Note: The limits were converted from EIRP to field strength at 3 and 1 meter according to FCC 15.503(k).







LAB Nº 0121

## **TEST PROCEDURE**

- 1) The EUT was placed on sandpit area filled with dry sand initially placed in front of the ground plane (0° degree position)
- 2) The receiving antenna is placed at 1 meter away from the EUT and it is pointed in the direction of the radiating head with an inclination of -10° to find the highest emission.
- 3) The receiving antenna was positioned in horizontal polarization.
- 4) The measurements were made with the detector set to RMS with a bandwidth of 1 kHz during monitoring the GPS frequency ranges.
- Upon detection of a suspect emission signal. its amplitude and frequency were noted.
- 6) It is recommended to demodulate the received signals for suitable discrimination of the ambient emission from the EUT emission.
- At the worst case combination of the EUT operating mode and antenna height, the field strength measure was recorded.
- 8) The receiving antenna was positioned in vertical polarization and the steps 2 to 6 was repeated.
- 9) The EUT was rotating from 0° to 360° degrees with 45° step increment and the steps 4 to 7 was repeated.
- 10) All the worst case combination field strength emissions founded of each EUT position and antenna polarization was recorded in the following table and compared with the applicable limits.





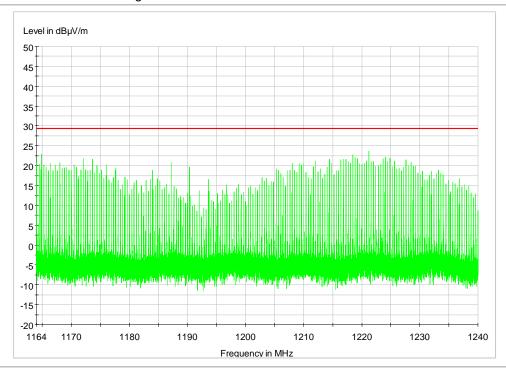


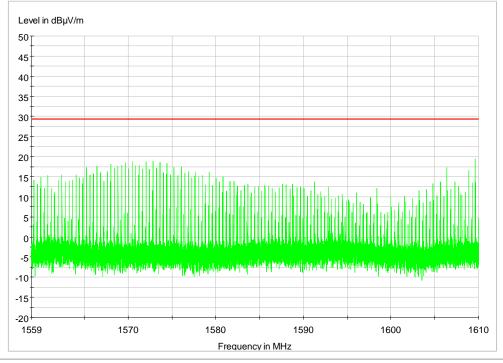


# **SUMMURY OF TEST RESULT DATA**

## **ANTENNA POLARIZATION: HORIZONTAL**

Worst case combination field strength emissions





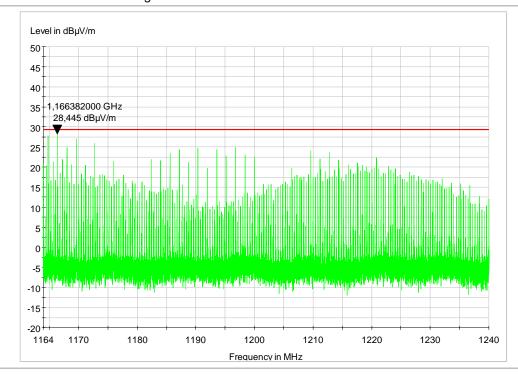


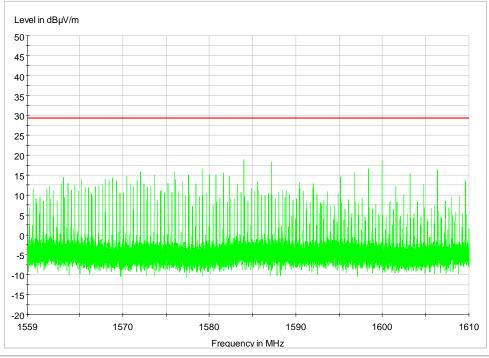




# **ANTENNA POLARIZATION: VERTICAL**

Worst case combination field strength emissions





Date: 2016-10-05

# **TEST RESULT**

The EUT meets the requirements of sections 15.509(e)







#### HIGHEST RADIATED EMISSION AT f<sub>M</sub> 7.8

TEST REQUIREMENT	
Test definition	For UWB devices where the frequency at which the highest radiated emission occurs, $f_{\text{M}}$ . is above 960 MHz. there is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on $f_{\text{M}}$ .
Test setup	ANSI C63.4
Test facility	Open Area Test Site (OATS)
Test distance	3 meters
RBW bandwidth	1 MHz
VBW bandwidth	3 MHz
Detector	Peak
EUT operating condition	#1
Remark	None

# **LIMITS**

The peak emission level contained within a 50 MHz bandwidth cantered on f<sub>M</sub> must be limited to a maximum of 0 dBm EIRP.

EIRP limit (dBm)	Field strength limit @ 3 meters (dBμV/m)	Field strength limit @ 3 meters (measured with 1 MHz RBW) (dBµV/m)
0	95.2	61.2

Note: The limits were converted from EIRP to field strength at 3 meter according to FCC 15.503(k). As the measurement was employed with a 1 MHz resolution bandwidth the applicable limit is adjusted with a 20log(1/50) dB factor.







## **TEST PROCEDURE**

- 1) The EUT was placed on sandpit area filled with dry sand initially placed in front of the ground plane (0° degree position)
- The receiving antenna which varied from 1 to 4 m to find the highest emission is positioned 3 m away 2) from the EUT.
- The receiving antenna was positioned in horizontal polarization.
- 4) The measurements were made with the detector set to peak with a bandwidth of 1 MHz during monitoring the frequency range inside the UWB of the EUT.
- 5) At the worst case combination of the EUT operating mode and antenna height, the field strength measure was recorded.
- The receiving antenna was positioned in vertical polarization and the steps 4 to 6 was repeated.
- 7) The EUT was rotating from 0° to 360° degrees with 45° step increment and the steps 4 to 7 was repeated.
- 8) Record the peak emission from the EUT.

## **SUMMURY OF TEST RESULT DATA**

Maximum Peak emission contained within 50 MHz is found at the following test set-up conditions

EUT Position (angle °)		135	Antenna Polarization		V		
Frequency	PK Reading value	Antenna Factor	Cable Loss	Pre-Amp. Gain	PK Correcting reading	Limit	Margin
(MHz)	(dBµV)	(dB1/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
1048.00	57.71	24.7	3.4	-38.7	47.11	61.20	14.09

Date: 2016-10-05

## **TEST RESULT**

The highest radiated emission. f<sub>M</sub>. has been found at 1048.00 MHz.

The EUT meets the requirements of sections 15.509(f)









#### TECHNICAL REQUIREMENTS APPLICABLE TO ALL UWB DEVICES 7.9

REQUIREMENT	DESCRIPTION
§ 15.521(a)	The EUT is not employed for the operation of toys, operation onboard an aircraft, ship and satellite.
§ 15.521(b)	Permanent attached antenna. No external radio frequency power amplifiers and antenna modifications are permitted.
§ 15.521(c)	The Digital circuitry portion of the EUT has been tested and verified to comply with 47 CFR Part 15, subpart B.
§ 15.521(d)	Considered
§ 15.521(e)	The fM. frequency at which the highest radiated emission occurs is contained within the measured UWB bandwidth.
§ 15.521(f)	The EUT is not intended to detection of tags or the transfer or data or voice information.
§ 15.521(g)	Considered
§ 15.521(h)	Considered
§ 15.521(i)	Prohibition in Sections 2.201(f) and 15.5(d) of this chapter against Class B (damped wave) emissions is not applied.
§ 15.521(j)	Battery operating device not connected to AC power lines.

Date: 2016-10-05

# **TEST RESULT**

The EUT meets the requirements of sections 15.521.







#### 7.10 **COORDINATION REQUIREMENT**

## **TEST REQUIREMENT**

- (a) UWB imaging systems require coordination through the FCC before the equipment may be used. The operator shall comply with any constraints on equipment usage resulting from this coordination.
- (b) The users of UWB imaging devices shall supply operational areas to the FCC Office of Engineering and Technology, which shall coordinate this information with the Federal Government through the National Telecommunications and Information Administration.
- (c) The manufacturers, or their authorized sales agents, must inform purchasers and users of their systems of the requirement to undertake detailed coordination of operational areas with the FCC prior to the equipment being operated.
- (d) Users of authorized, coordinated UWB systems may transfer them to other qualified users, and to different locations upon coordination of change of ownership or location to the FCC and coordination with existing authorized operations.
- (e) The FCC/NTIA coordination report shall identify those geographical areas within which the operation of an imaging system requires additional coordination or within which the operation of an imaging system is prohibited.
- (f) The coordination of routine UWB operations shall not take longer than 15 business days from the receipt of the coordination request by NTIA.

REQUIREMENT	DESCRIPTION
§ 15.525 § 15.509(b)	The responsible party is properly informed about the required coordination requirement and provide correct information to the customers and users about their specific care and legislative obligations.
	(See Important note for the US customers of the "AR600V24H10 - User manual")

Date: 2016-10-05

## **TEST RESULT**

The EUT meets the requirements of sections 15.525 and 15.509(b).







# 8. MEASUREMENTS AND TESTS UNCERTAINTY

The expanded uncertainty was calculated for all measurements and tests listed in this test report according to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements", with UKAS document LAB 34 and is documented in the quality system accordance to ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device

Methods		Expanded Uncertainty	Unit	confidence level	Coverage factor	Degree of freedom
Radiated disturbance	QP detector (30 MHz - 100 MHz) H polarization	4.33	dB	95%	2.00	> 60
	QP detector (30 MHz - 100 MHz) V polarization	4.22	dB	95%	2.00	> 60
	QP detector (100 MHz - 200 MHz) H polarization	3.40	dB	95%	2.00	> 60
	QP detector (100 MHz - 200 MHz) V polarization	4.76	dB	95%	2.00	> 60
	QP detector (200 MHz - 1000 MHz) H polarization	3.91	dB	95%	2.00	> 60
	QP detector (200 MHz - 1000 MHz) V polarization	3.82	dB	95%	2.00	> 60
	PK detector 1-6 GHz	4.77	dB	95%	2.00	> 60
	PK detector 6 – 18 GHz	5.14	dB	95%	2.00	> 60









# 9. LIST OF MEASURING EQUIPMENT AND CALIBRATION INFORMATION

IMQ Serial Number	Instrument	Manufacturer	Туре	Last Cal.	Cal. Period.	Calibration Company
S03463	Horn Antenna	Schwarzbeck	BBHA 9120D	07-14	36	NPL
S03511	Log-Per. Antenna	Ara	LPB-2520/1	04-16	36	NPL
S05562	EMI Receiver	Rohde & Schwarz	ESU 8	06-15	12	Rohde & Schwarz
S03629	Spectrum Analyzer	Rohde & Schwarz	FSP40	04-16	12	Rohde & Schwarz
S03542	Preamplifier 1-26.5GHz	Hewlett Packard	HP 8449B	05-16	24	IMQ
S06201	RF Coax Cable	HUBER+SUHNER	SF-104/11PC35/ 11PC35/3000MM	05-16	12	IMQ
S06220	RF Coax Cable	HUBER+SUHNER	SF104/11PC35/ 11PC35/10000MM	05-16	12	IMQ
S03745	Oscilloscope	Yokogawa	DL 7200	11-15	12	AVIATRONIK
S04159	Multimeter	Fluke	45	04-13	12	IMQ
S06523	Datalogger	DELTA OHM	HD206-1	11-15	12	Allemano Metrology
P01723	Antenna Mast	Sunol Sciences	TWR 93-4	1	1	/









#### 10. PHOTOGRAPHIC DOCUMENTATION

# **EUT IDENTIFICATION**













# SET-UP

# Test set-up below 960 MHz



# Test set-up above 960 MHz











# 11. **OPINIONS AND INTERPRETATIONS - NOT OBJECT TO ACCREDIA ACCREDITATION**

Not Applicable

**END OF REPORT**