

Annex 1: Measurement diagrams to Test Report 20-1-0017101T02a-C1-A1



Number of pages:	5	Date of Report:	2021-Mar-16
Testing company:	CETECOM GmbH Im Teelbruch 116 45219 Essen Germany Tel. + 49 (0) 20 54 / 95 19-0 Fax: + 49 (0) 20 54 / 95 19-150	Applicant:	SICK AG
Test Object / Tested Device(s):	UWB Tag LOCU101-0110		
FCC ID:	WRMLOCU1	IC:	10066A-LOCU1
Testing has been carried out in accordance with:	FCC Regulations: Title 47 CFR, Chapter I FCC Regulations, Subchapter A Subpart B: §15.107, §15.109 (Class B limits) ISED Regulations: ICES-003, Issue 6 (2016+Update 2019)		

1 Measurement diagrams

3.01

Common Information

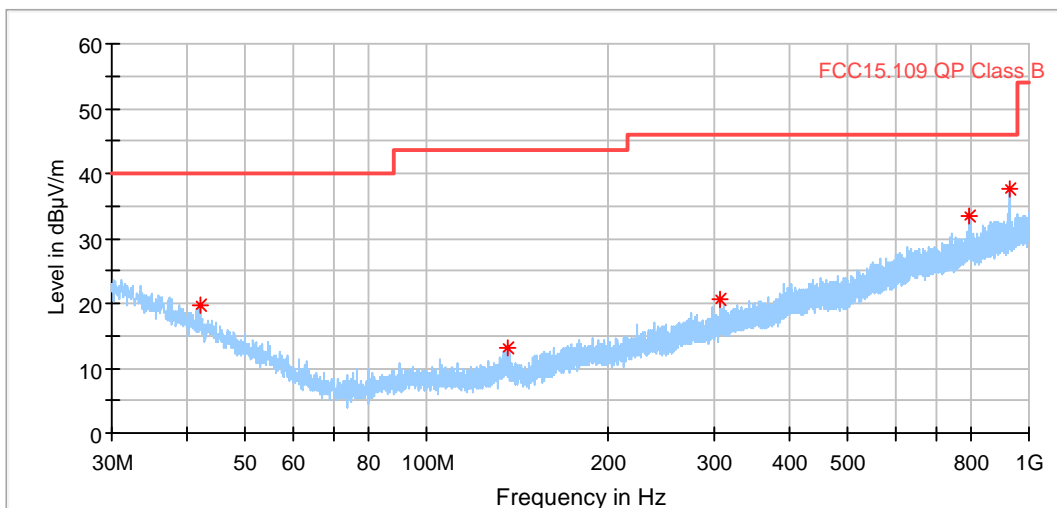
Test Description: Electric Field Strength Measurement
 Test Spec.: FCC15.109/ ICES-003, Issue 6
 Antenna: receiving antenna is directed to all sides
 Operating Mode: All Radios OFF / Sensors ON: Accelerometer
 Environmental Conditions: Humidity : 40% rH; Temperature: 20 °C
 Operator: HLa
 Verdict: Passed

EUT Information

PMT number: 20-1-00171S04_C01
 Manufacturer: SICK AG
 Product: UWB Tag
 Model: LOCU101-0110

 HW version: v1r3
 FW version: 3.125.7 UWB TX off
 Serial number: 1950 0112
 Connected Interfaces: --
 Power Supply: Li-Pol 300 mAh Battery
 Comments: EUT laying

Full Spectrum



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
42.120000	19.64	40.00	20.36	---	---	182.0	V	270.0	16.2
136.020000	13.17	43.50	30.33	---	---	105.0	H	90.0	9.7
306.600000	20.58	46.00	25.42	---	---	182.0	H	90.0	15.4
798.300000	33.58	46.00	12.42	---	---	182.0	V	90.0	25.3
928.350000	37.67	46.00	8.33	---	---	105.0	V	180.0	27.0

3.02

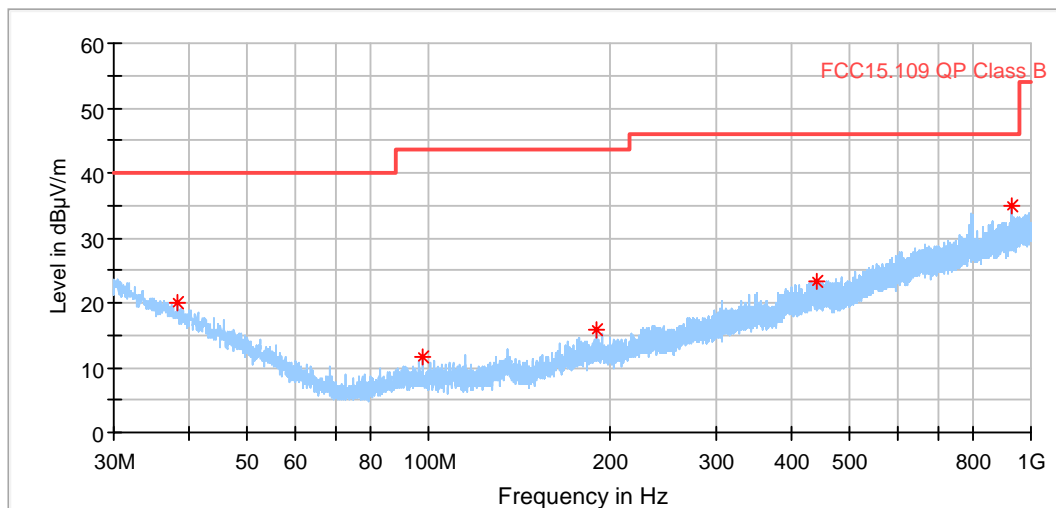
Common Information

Test Description:	Electric Field Strength Measurement
Test Spec.:	FCC15.109/ ICES-003, Issue 6
Antenna:	receiving antenna is directed to all sides
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Verdict:	Passed

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FW version:	3.125.7 UWB TX off
Serial number:	1950 0112
Connected Interfaces:	--
Power Supply:	Li-Pol 300 mAh Battery
Comments:	EUT standing

Full Spectrum



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
38.340000	20.09	40.00	19.91	---	---	182.0	H	0.0	17.8
97.560000	11.60	43.50	31.90	---	---	105.0	V	90.0	8.2
189.360000	15.70	43.50	27.80	---	---	105.0	V	0.0	11.4
439.170000	23.33	46.00	22.67	---	---	182.0	H	180.0	19.4
927.210000	34.88	46.00	11.12	---	---	105.0	V	180.0	27.0

4.01

Common Information

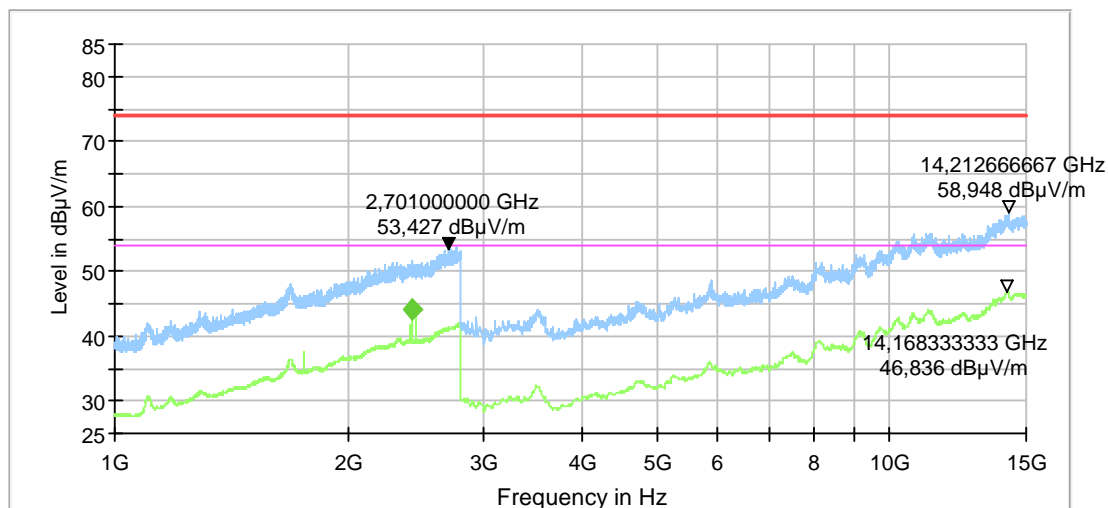
Test Description:	Radiated Field Strength Emission
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.50.0
Test Standard:	FCC Part 15.109, class B / ICES-003, Issue 6
Operating Mode:	All Radios OFF / Sensors ON: Accelerometer
Equipment Class:	Class B
Environmental Conditions:	Humidity : 40% rH; Temperature: 20 °C
Operator:	HLa
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT number:	20-1-00171504_C01
Manufacturer:	SICK AG
Product:	UWB Tag
Model:	LOCU101-0110

HW version:	v1r3
FW version:	3.125.7 UWB TX off
Serial number:	1950 0112
Connected Interfaces:	--
Power Supply:	Li-Pol 300 mAh Battery
Comments:	EUT standing

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)
2413.3830	---	44.19	54.00	9.81	100.0	1000.000	155.0	V	272.0	90.0	36

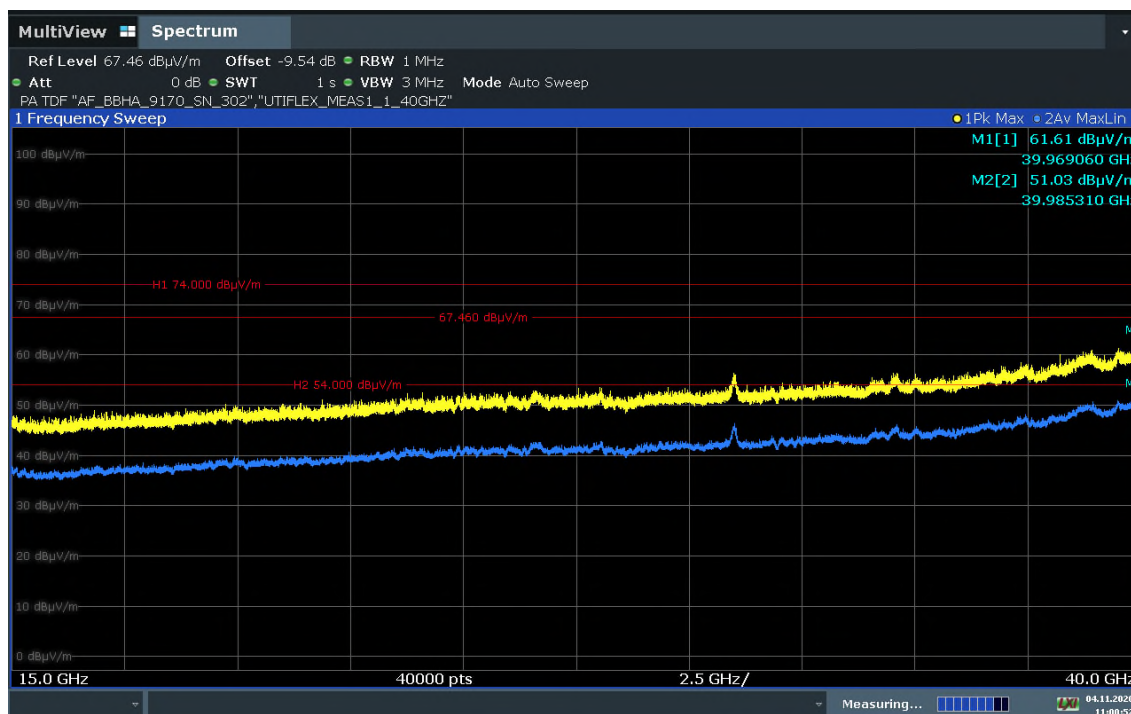
4.02

Common Information

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End Of Annex 1