

Radiated Field Strength												
Frequency (MHz)	Mode	Modulation	Detector	Antenna Polarization	Frequency Range (MHz)	Measured Field Strength [F _S _{Meas}] (dBuV @ 3m)	Cable Loss [L _c] (dBm)	Receive Antenna [ACF] (dB)	Corrected Field Strength [F _S _{Corr}] (dBuV/m @3m)	Limit @30m [Lim _{30m}] (dBuV/m)	Limit* @3m [Lim _{3m}] (dBuV/m)	Margin (dB)
13.56	NFC	ASK	RMS	Front	13.410 - 13.553	10.68	0.5	10.65	21.83	50.50	90.5	68.7
					13.567 - 13.710	10.07			21.22			69.3
					13.110 - 13.410	-0.24			10.91	40.50	80.5	69.6
					13.710 - 14.010	-1.06			10.09			70.4
Result:											Complies	

* Limit @ 3m = Limit @ 30m + 40dB/decade = 50.5dBuV/m + 40dB = 90.5dBuV/m

* Limit @ 3m = Limit @ 30m + 40dB/decade = 40.5dBuV/m + 40dB = 80.5dBuV/m

FS_{Corr} = FS_{Meas} + ACF + L_C

Margin = Limit_{3m} - FS_{Corr}

Radiated Field Strength												
Frequency (MHz)	Mode	Modulation	Detector	Antenna Polarization		Measured Field Strength [FS _{Meas}] (dBuV @ 3m)	Cable Loss [L _c] (dBm)	Receive Antenna [ACF ^H] (dBuA/m)	Corrected Field Strength [H _{Corr}] (dBuA/m @3m)	Limit @30m [Lim _{30m}] (dBuV/m)	Limit** @3m [Lim _{3m}] (dBuA/m)	Margin
13.56	NFC	ASK	RMS	Front	13.410 - 13.553	10.68	0.5	-40.85	-29.67	50.50	39.0	68.7
					13.567 - 13.710	10.07			-30.28			69.3
					13.110 - 13.410	-0.24			-40.59	40.50	29.0	69.6
					13.710 - 14.010	-1.06			-41.41			70.4
Result:											Complies	

** Limit @ 3m = Limit @ 30m + 40dB/decade = 50.5dBuV/m + 40dB = 90.5dBuV/m

** Limit @ 3m = Limit @ 30m + 40dB/decade = 40.5dBuV/m + 40dB = 80.5dBuV/m

In accordance with ISED Notice 2020 - DRS0023:

"Guidance on Magnetic Field Strength Radiated Emissions Measurements 9kHz - 30MHz"

Limit Correction

Limit^H (dBuA/m) = Limit^E (dBuV/m) - Z₀ (dBΩ)

Where Z₀ = Free-Space Impedance = 120πΩ = 377Ω => 20Log377Ω = 51.5dBΩ

Limit^H (dBuA/m) = Limit^E (dBuV/m) - Z₀ (dBΩ) = 90.5dBuV/m - 51.5dBΩ = 39dBuA/m @ 3m

Limit^H (dBuA/m) = Limit^E (dBuV/m) - Z₀ (dBΩ) = 180.5dBuV/m - 51.5dBΩ = 29dBuA/m @ 3m

Measurement Correction

H_{Corr}(dBuA/m) = E_{Meas}(dBuV) + ACF^H(dB/Ωm) + L_C - G_A

Where ACF^H is the Magnetic Antenna Correction Factor, L_C is Cable Loss, G_A is Pre-Amplifier Gain

External Pre-Amplifier (G_A) not used

Margin = Limit_{3m} - H_{Corr}

Out-Of-Band Field Strength

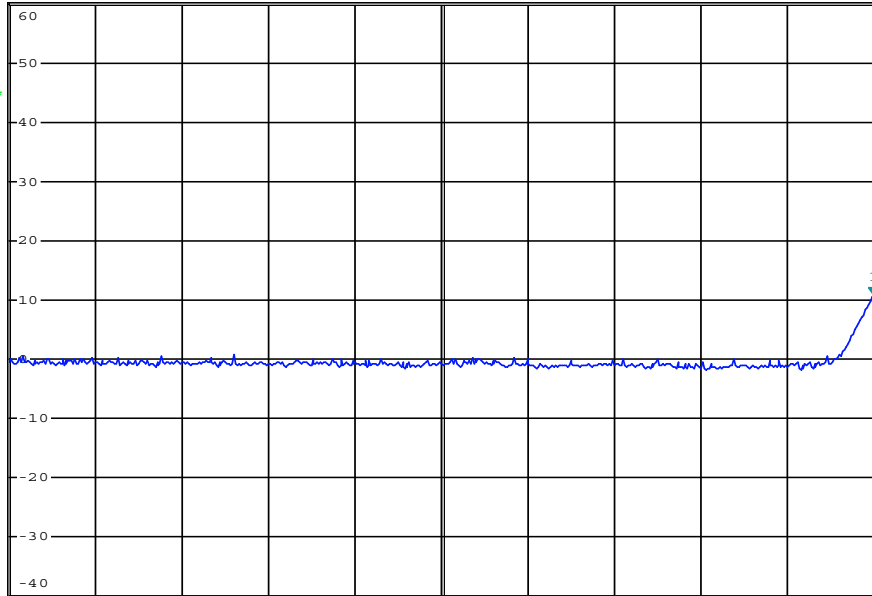


*RBW 10 kHz Marker 1 [T1]
VBW 100 kHz 10.68 dBuV
*SWT 2 s 13.55300000 MHz

Ref 60 dBuV

*Att 0 dB

1 RM
MAXH



Start 13.41 MHz

14.3 kHz/

Stop 13.553 MHz

Date: 31.OCT.2022 14:23:59

Channel Frequency:

13.56 MHz

Frequency Range:

13.410 - 13.533 MHz

Antenna Polarization:

Front

Modulation Setting:

ASK

Protocol:

NFC

Measured Field Strength:

10.68 dBuV

Out-Of-Band Field Strength

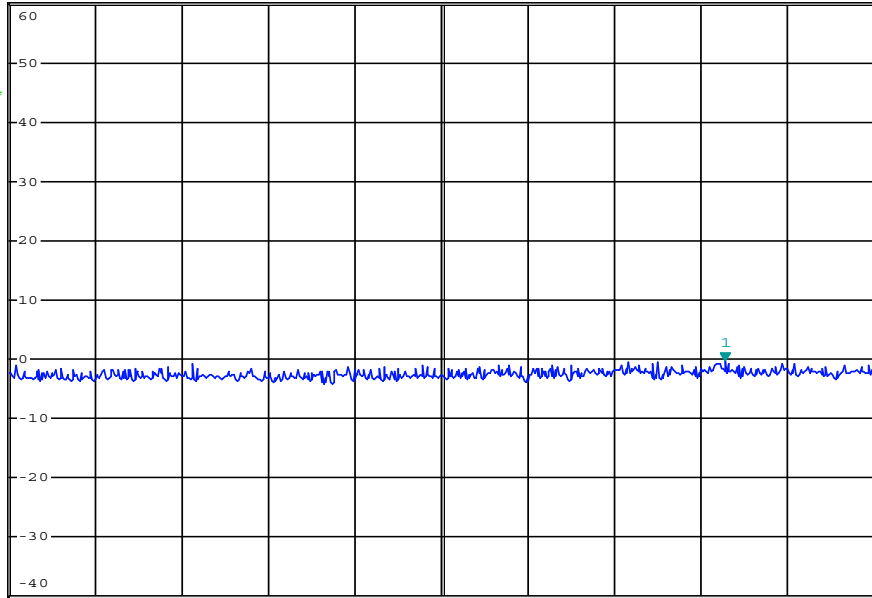


*RBW 10 kHz Marker 1 [T1]
VBW 100 kHz -0.24 dBuV
*SWT 2 s 13.358400000 MHz

Ref 60 dBuV

*Att 0 dB

1 RM
VIEW



Start 13.11 MHz

30 kHz/

Stop 13.41 MHz

Date: 31.OCT.2022 14:26:21

Channel Frequency:

13.56 MHz

Frequency Range:

13.110 - 13.410 MHz

Antenna Polarization:

Front

Modulation Setting:

ASK

Protocol:

NFC

Measured Field Strength:

-0.24 dBuV

Out-Of-Band Field Strength

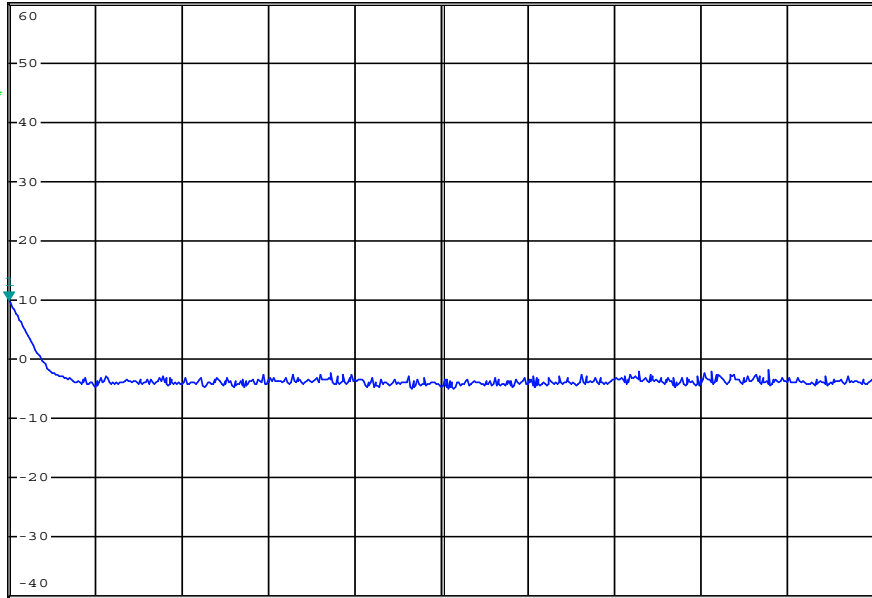


*RBW 10 kHz Marker 1 [T1]
VBW 100 kHz 10.07 dBμV
*SWT 2 s 13.56700000 MHz

Ref 60 dBμV

*Att 0 dB

1 RM
VIEW



Start 13.567 MHz

14.3 kHz/

Stop 13.71 MHz

Date: 31.OCT.2022 14:24:53

Channel Frequency:

13.56 MHz

Frequency Range:

13.567 - 13.710 MHz

Antenna Polarization:

Front

Modulation Setting:

ASK

Protocol:

NFC

Measured Field Strength:

10.07 dBuV

Out-Of-Band Field Strength

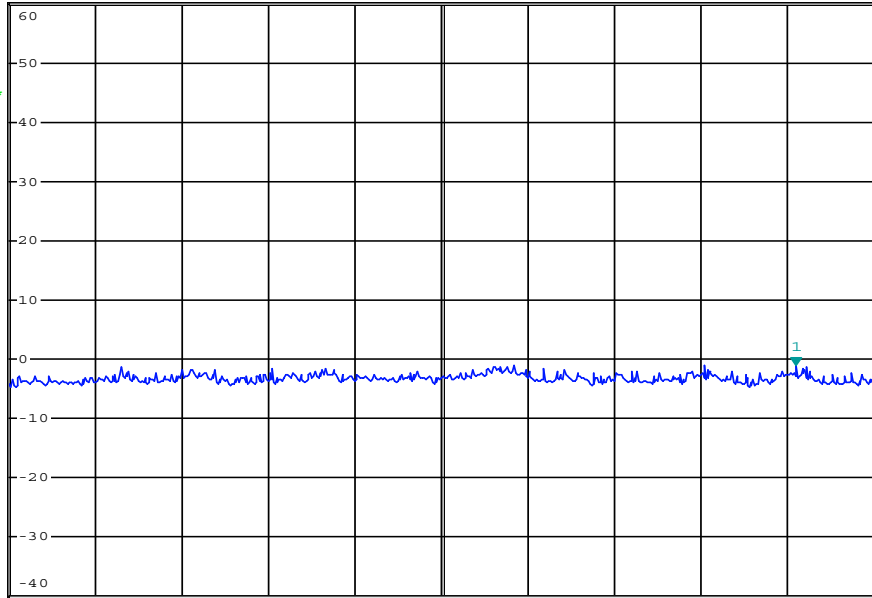


*RBW 10 kHz Marker 1 [T1]
VBW 100 kHz -1.08 dBuV
*SWT 2 s 13.983000000 MHz

Ref 60 dBuV

*Att 0 dB

1 RM
VIEW



Start 13.71 MHz

30 kHz/

Stop 14.01 MHz

Date: 31.OCT.2022 14:25:37

Channel Frequency:

13.56 MHz

Frequency Range:

13.710 - 14.010 MHz

Antenna Polarization:

Front

Modulation Setting:

ASK

Protocol:

NFC

Measured Field Strength:

-1.08 dBuV