ROHDE&SCHWARZ

13.Jan 17 16:20

Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Hopping mode
Operator	Andrej Skof

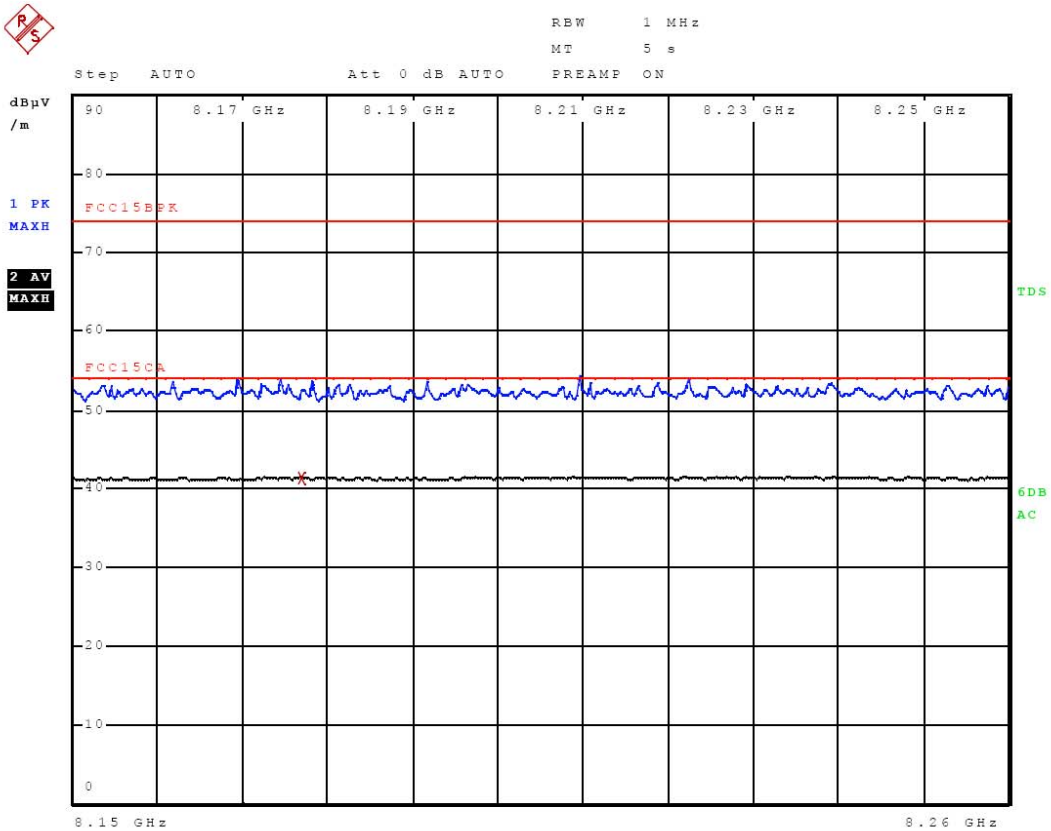
Test Spec

HORIZONTAL 150 cm, 0 deg

Stepped Scan (1 Range)

Scan Start: 8.15 GHz
Scan Stop: 8.26 GHz
Detector: Trace 1: MAX PEAK Trace 2: Average
Transducer: RE-18GHz

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
8.150000 GHz	8.260000 GHz	400.00 kHz	1.00 MHz	1 ms	Auto	35 dB	INPUT1



ROHDE&SCHWARZ

13.Jan 17 16:20

Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Hopping mode
Operator	Andrej Skof

Test Spec

HORIZONTAL 150 cm, 0 deg

Final Measurement

Meas Time:	5 s
Margin:	15 dB
Peaks:	1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
2	8.176800000 GHz	41.23	CISPR Averag	-12.77

ROHDE&SCHWARZ

13.Jan 17 16:23

Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Hopping mode
Operator	Andrej Skof

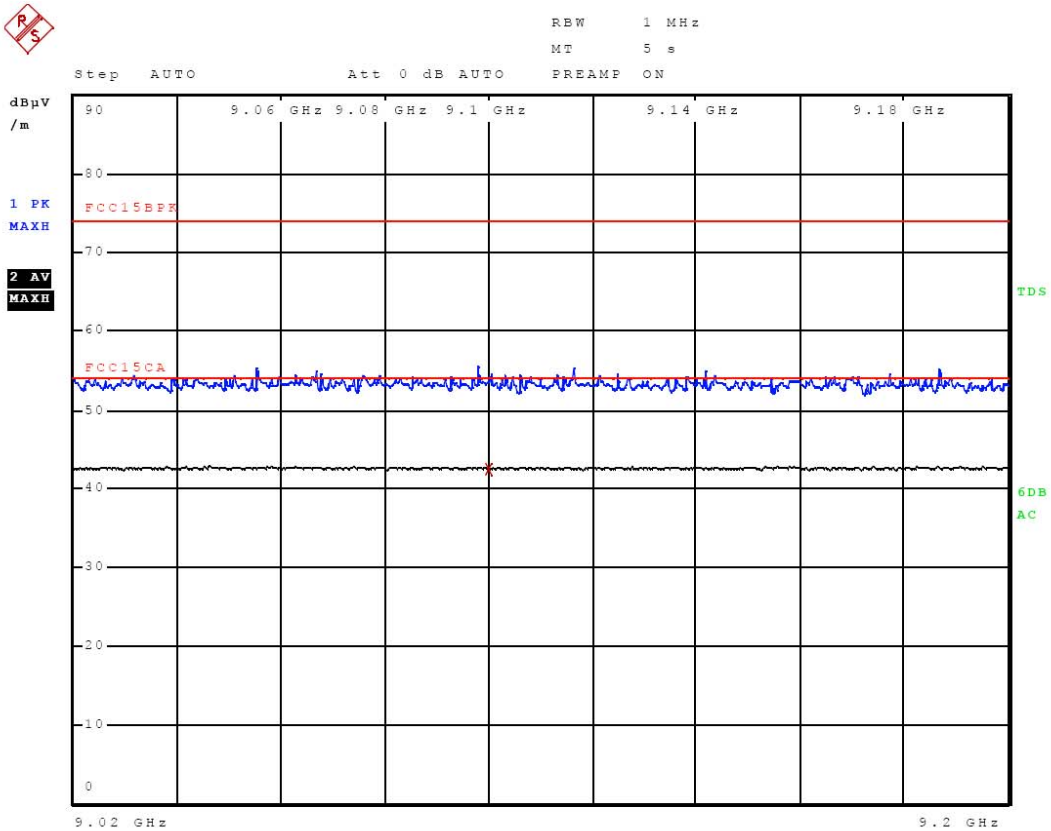
Test Spec

VERTICAL 150 cm, 0 deg

Stepped Scan (1 Range)

Scan Start: 9.02 GHz
Scan Stop: 9.2 GHz
Detector: Trace 1: MAX PEAK Trace 2: Average
Transducer: RE-18GHz

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
9.020000 GHz	9.200000 GHz	400.00 kHz	1.00 MHz	1 ms	Auto	35 dB	INPUT1



ROHDE&SCHWARZ

13.Jan 17 16:23

Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Hopping mode
Operator	Andrej Skof

Test Spec

VERTICAL 150 cm, 0 deg

Final Measurement

Meas Time:	5 s
Margin:	15 dB
Peaks:	1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
2	9.100000000 GHz	42.50	CISPR Averag	-11.50

ROHDE&SCHWARZ

13.Jan 17 16:20

Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Hopping mode
Operator	Andrej Skof

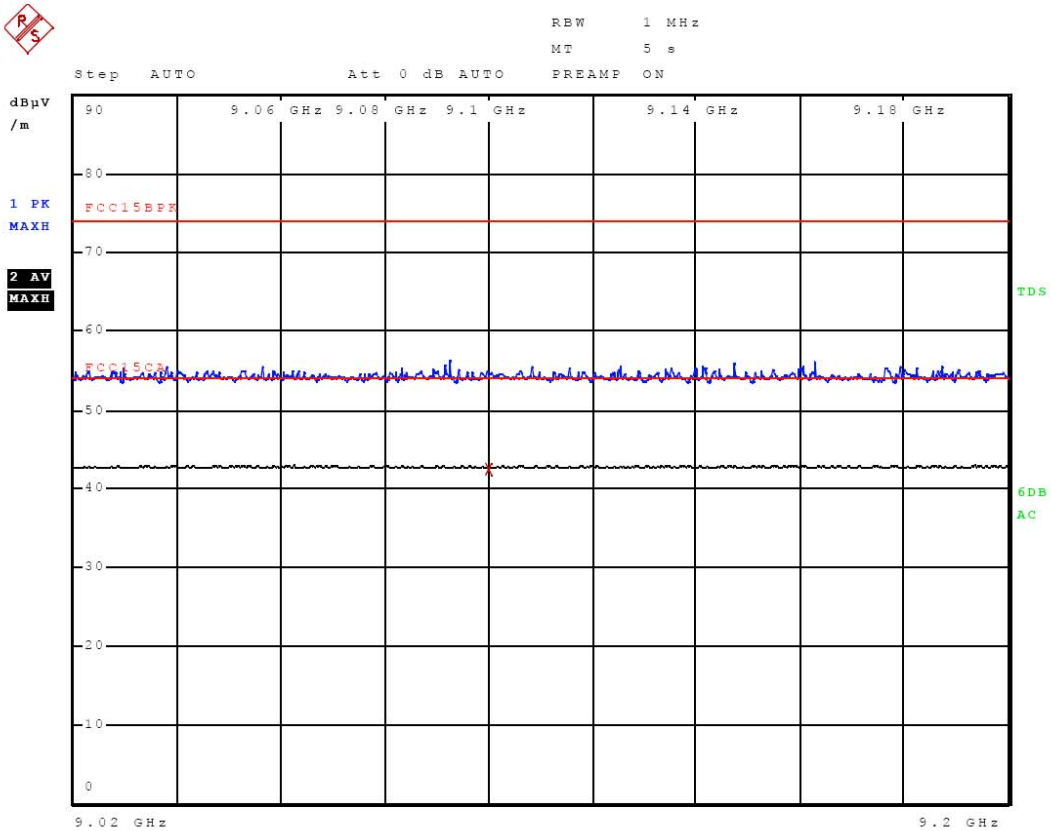
Test Spec

HORIZONTAL 150 cm, 0 deg

Stepped Scan (1 Range)

Scan Start: 9.02 GHz
Scan Stop: 9.2 GHz
Detector: Trace 1: MAX PEAK Trace 2: Average
Transducer: RE-18GHz

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
9.020000 GHz	9.200000 GHz	400.00 kHz	1.00 MHz	1 ms	Auto	35 dB	INPUT1



ROHDE&SCHWARZ

13.Jan 17 16:20

Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Hopping mode
Operator	Andrej Skof

Test Spec

HORIZONTAL 150 cm, 0 deg

Final Measurement

Meas Time:	5 s
Margin:	15 dB
Peaks:	1

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
2	9.100000000 GHz	42.48	CISPR Averag	-11.52

Radiated Emission - Band Edge

C20170001

11.Apr 17 14:06

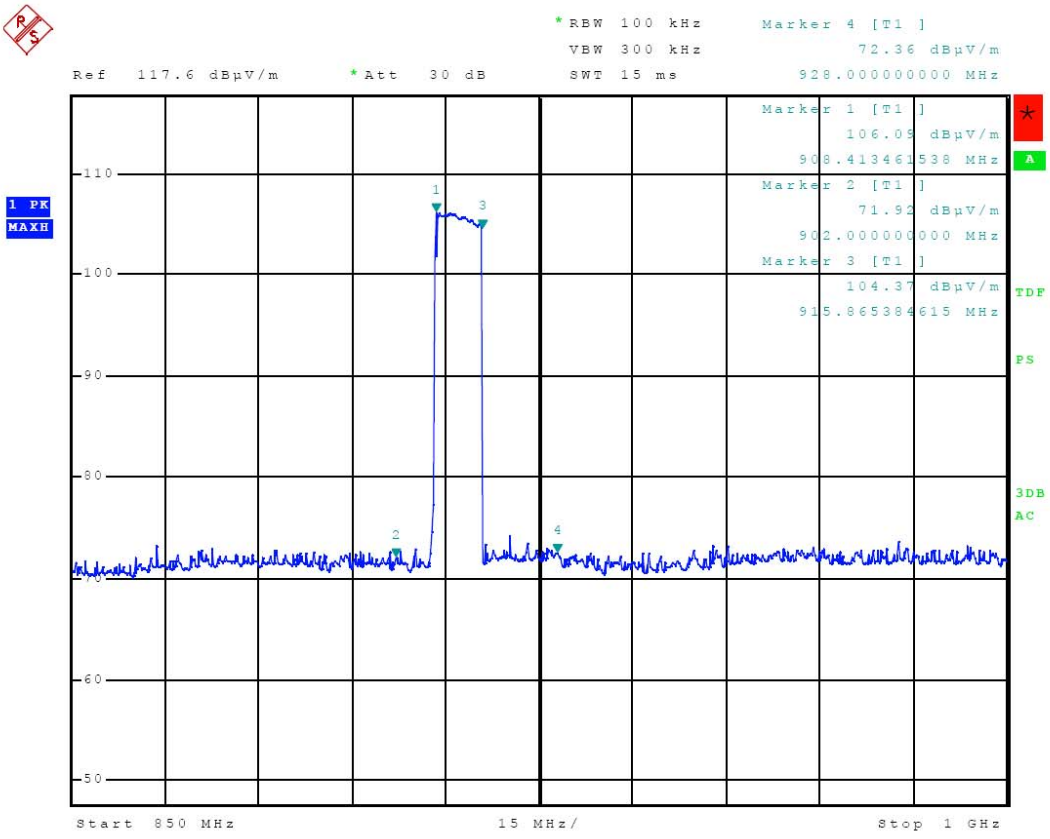
Meas Type	RADIATED EMISSION, BAND EDGE
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Hopping ON
Operator	Andrej Skof

Test Spec

VERTICAL 100 cm, 0 deg

Sweep Settings Screen A

Center Frequency	925.000000 MHz	Ref Level	117.600 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	150.000000 MHz	Ref Position	100.000 %
Start Frequency	850.000000 MHz	Level Range	70.000 dB
Stop Frequency	1.000000 GHz	RF Att	30.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	15.00 ms	Y-Axis	LOG



C20170001

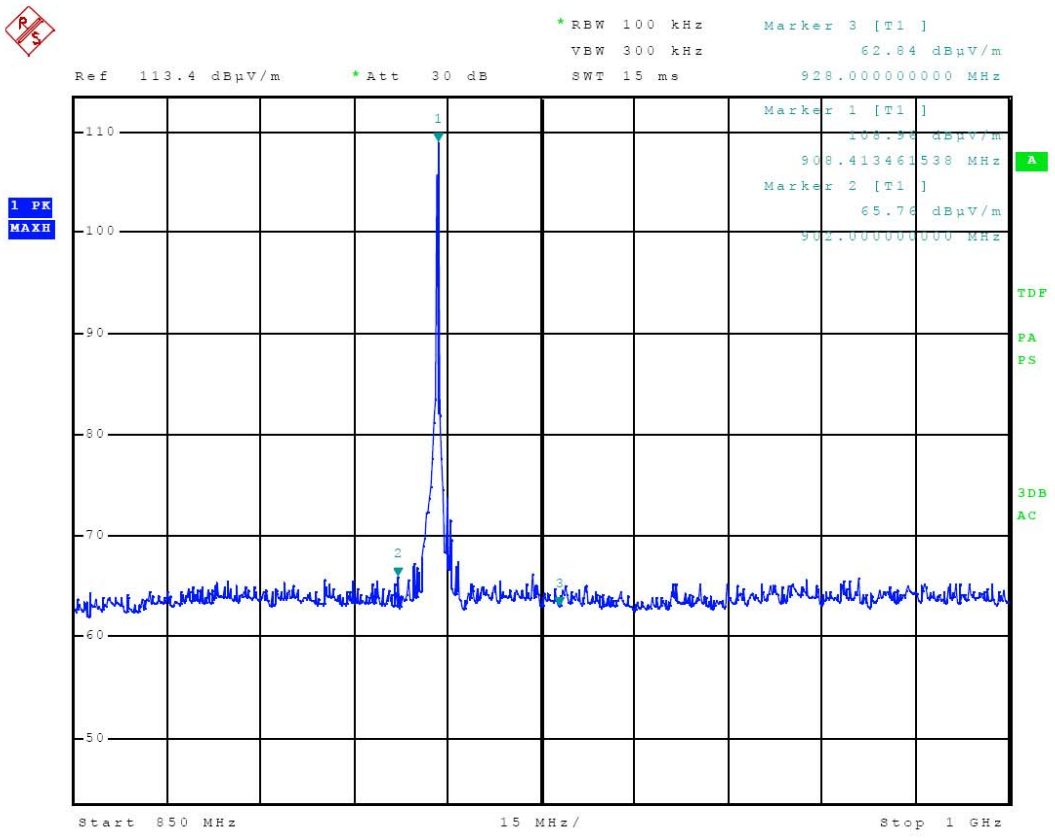
11.Apr 17 14:33

Meas Type	RADIATED EMISSION, BAND EDGE
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Channel 1 (Hopping disabled)
Operator	Andrej Skof
Test Spec	

VERTICAL 100 cm, 0 deg

Sweep Settings Screen A

Center Frequency	925.000000 MHz	Ref Level	113.400 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	150.000000 MHz	Ref Position	100.000 %
Start Frequency	850.000000 MHz	Level Range	70.000 dB
Stop Frequency	1.000000 GHz	RF Att	30.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	15.00 ms	Y-Axis	LOG



C20170001

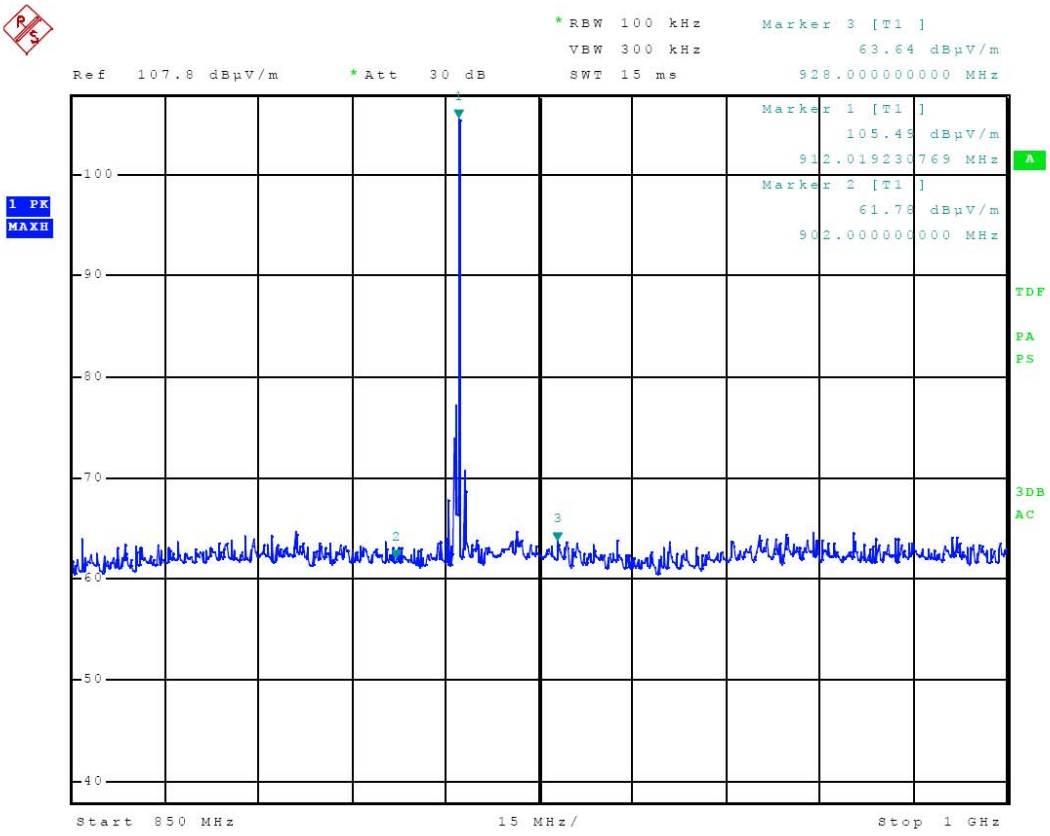
11.Apr 17 14:44

Meas Type	RADIATED EMISSION, BAND EDGE
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Channel 25 (Hopping disabled)
Operator	Andrej Skof

Test Spec
VERTICAL 100 cm, 0 deg

Sweep Settings Screen A

Center Frequency	925.000000 MHz	Ref Level	107.800 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	150.000000 MHz	Ref Position	100.000 %
Start Frequency	850.000000 MHz	Level Range	70.000 dB
Stop Frequency	1.000000 GHz	RF Att	30.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	15.00 ms	Y-Axis	LOG



C20170001

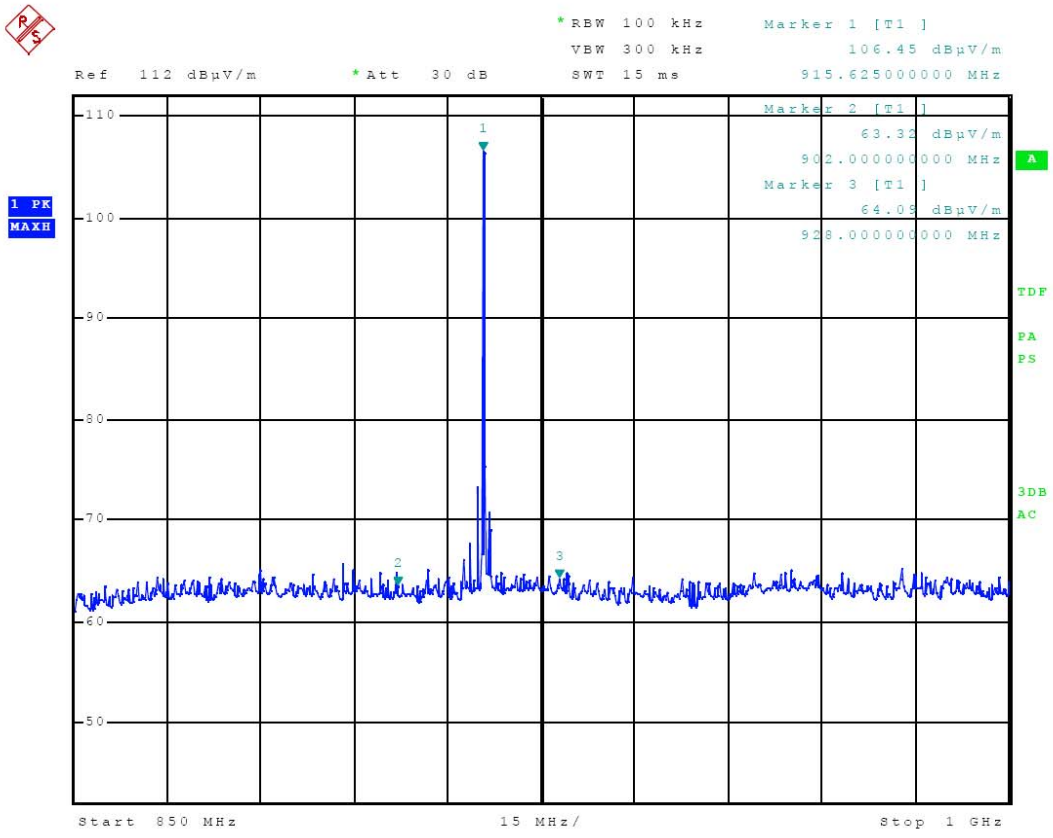
11.Apr 17 14:47

Meas Type	RADIATED EMISSION, BAND EDGE
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Channel 50 (Hopping disabled)
Operator	Andrej Skof
Test Spec	

VERTICAL 100 cm, 0 deg

Sweep Settings Screen A

Center Frequency	925.000000 MHz	Ref Level	112.000 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	150.000000 MHz	Ref Position	100.000 %
Start Frequency	850.000000 MHz	Level Range	70.000 dB
Stop Frequency	1.000000 GHz	RF Att	30.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	15.00 ms	Y-Axis	LOG



C20170001

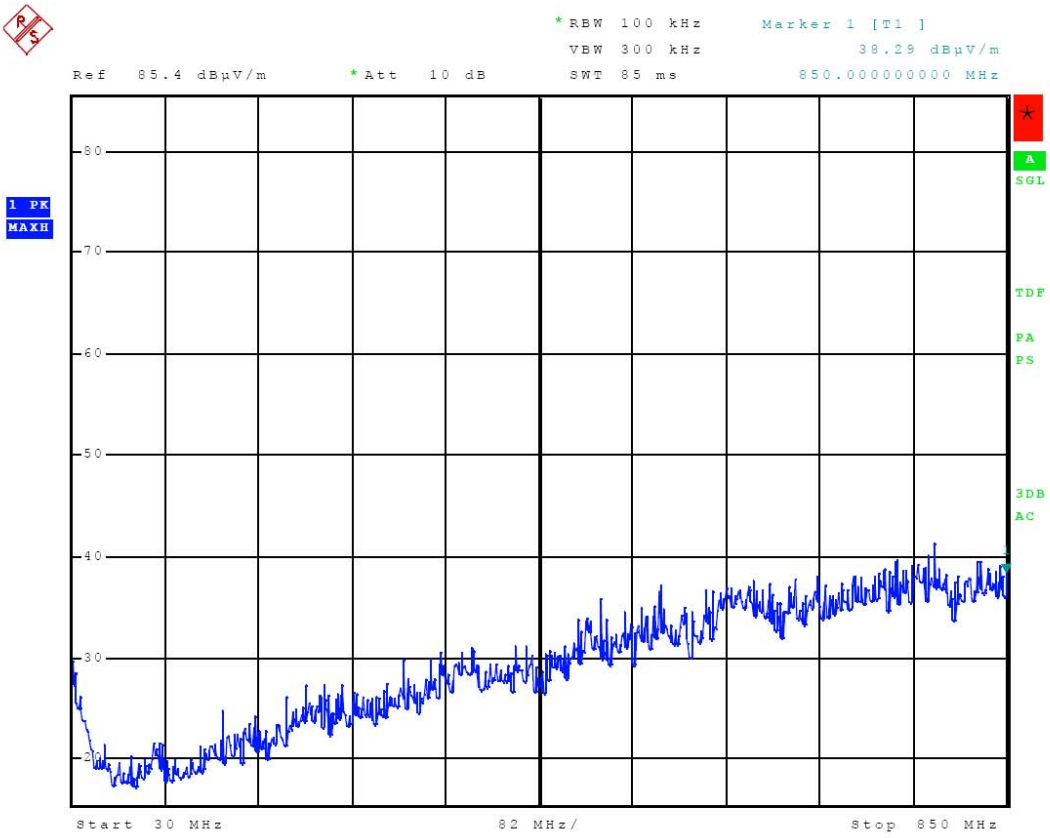
11.Apr 17 14:18

Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Hopping ON
Operator	Andrej Skof

Test Spec
VERTICAL 100 cm, 0 deg

Sweep Settings Screen A

Center Frequency	440.000000 MHz	Ref Level	85.400 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	820.000000 MHz	Ref Position	100.000 %
Start Frequency	30.000000 MHz	Level Range	70.000 dB
Stop Frequency	850.000000 MHz	RF Att	10.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	85.00 ms	Y-Axis	LOG



C20170001

11.Apr 17 14:38

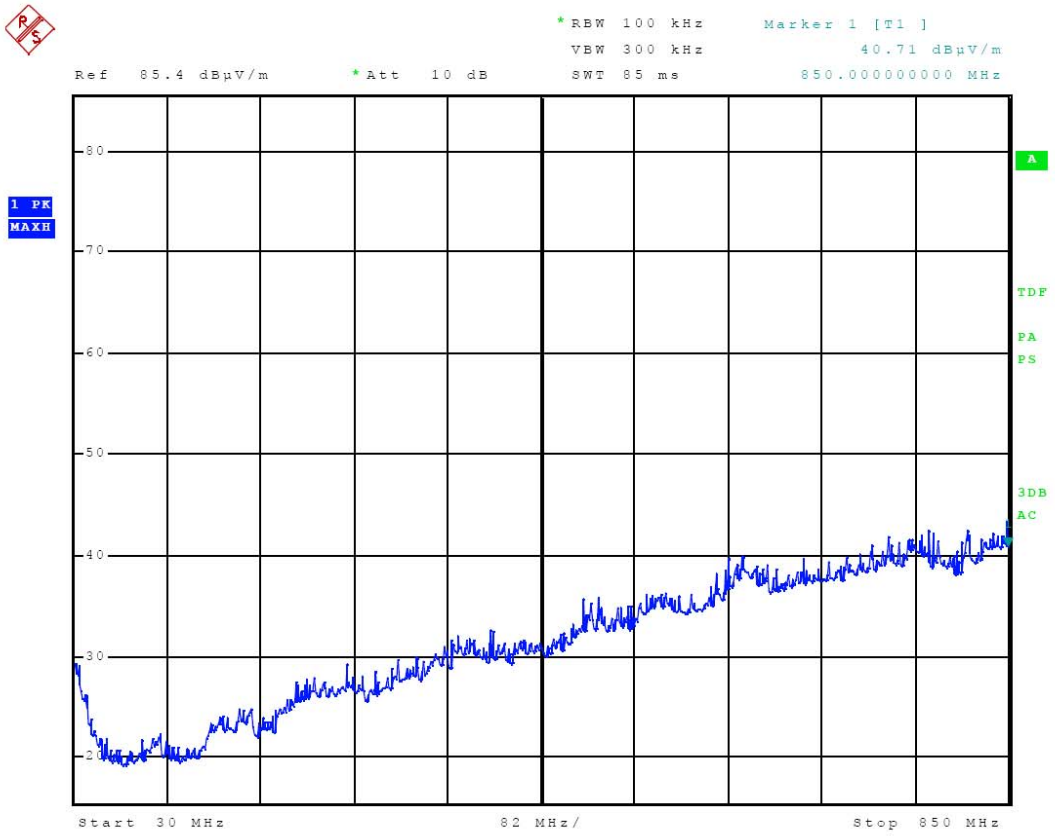
Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Channel 1 (Hopping disabled)
Operator	Andrej Skof

Test Spec

VERTICAL 100 cm, 0 deg

Sweep Settings Screen A

Center Frequency	440.000000 MHz	Ref Level	85.400 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	820.000000 MHz	Ref Position	100.000 %
Start Frequency	30.000000 MHz	Level Range	70.000 dB
Stop Frequency	850.000000 MHz	RF Att	10.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	85.00 ms	Y-Axis	LOG



C20170001

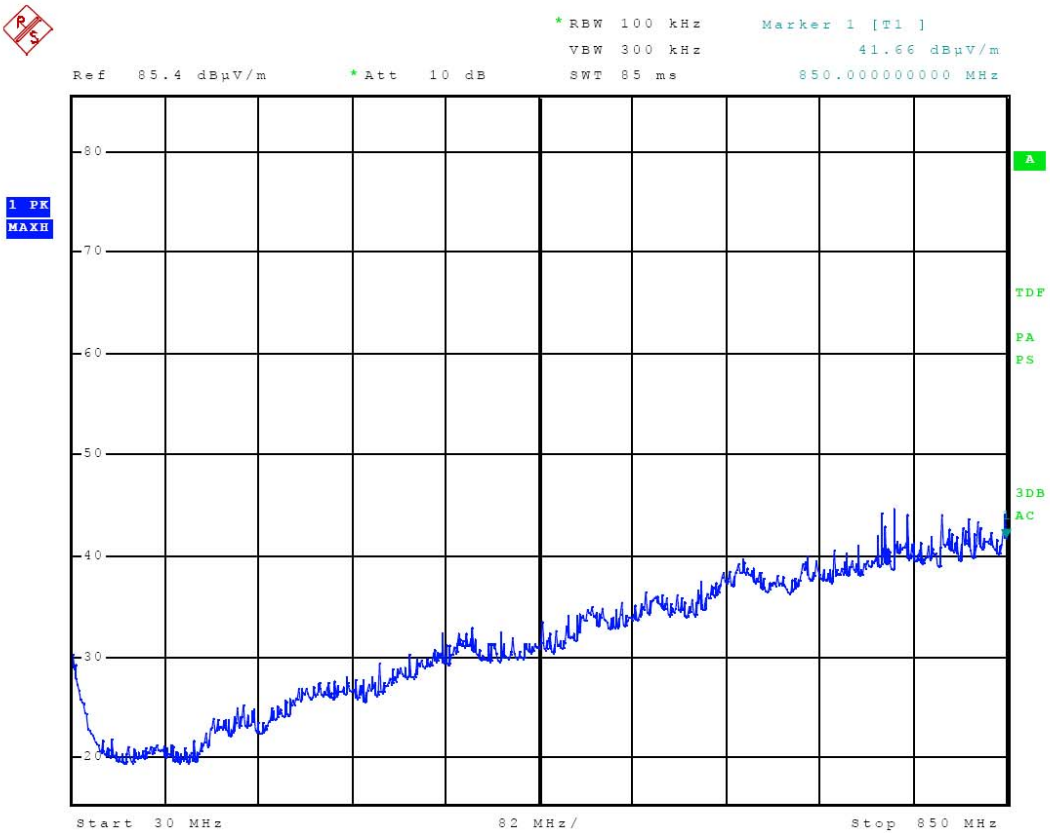
11.Apr 17 14:40

Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Channel 25 (Hopping disabled)
Operator	Andrej Skof

Test Spec
VERTICAL 100 cm, 0 deg

Sweep Settings Screen A

Center Frequency	440.000000 MHz	Ref Level	85.400 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	820.000000 MHz	Ref Position	100.000 %
Start Frequency	30.000000 MHz	Level Range	70.000 dB
Stop Frequency	850.000000 MHz	RF Att	10.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	85.00 ms	Y-Axis	LOG



C20170001

11.Apr 17 14:52

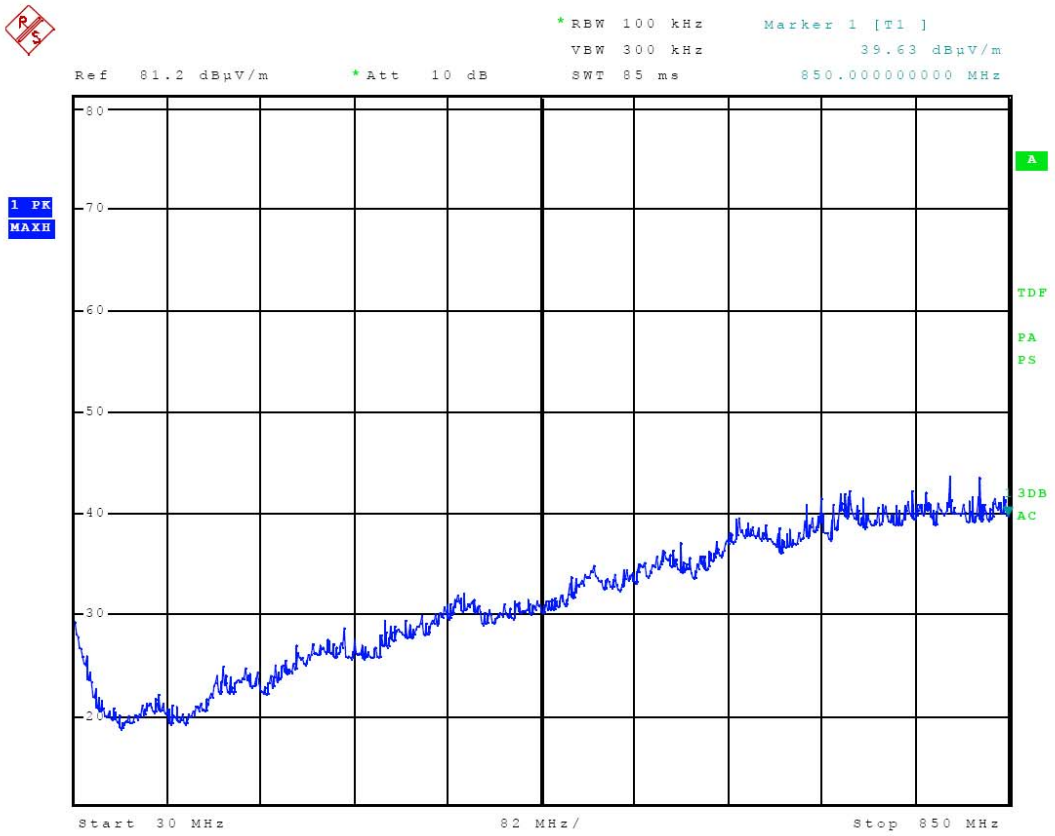
Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	Channel 50 (Hopping disabled)
Operator	Andrej Skof

Test Spec

VERTICAL 100 cm, 0 deg

Sweep Settings Screen A

Center Frequency	440.000000 MHz	Ref Level	81.200 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	820.000000 MHz	Ref Position	100.000 %
Start Frequency	30.000000 MHz	Level Range	70.000 dB
Stop Frequency	850.000000 MHz	RF Att	10.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	85.00 ms	Y-Axis	LOG



C20170001

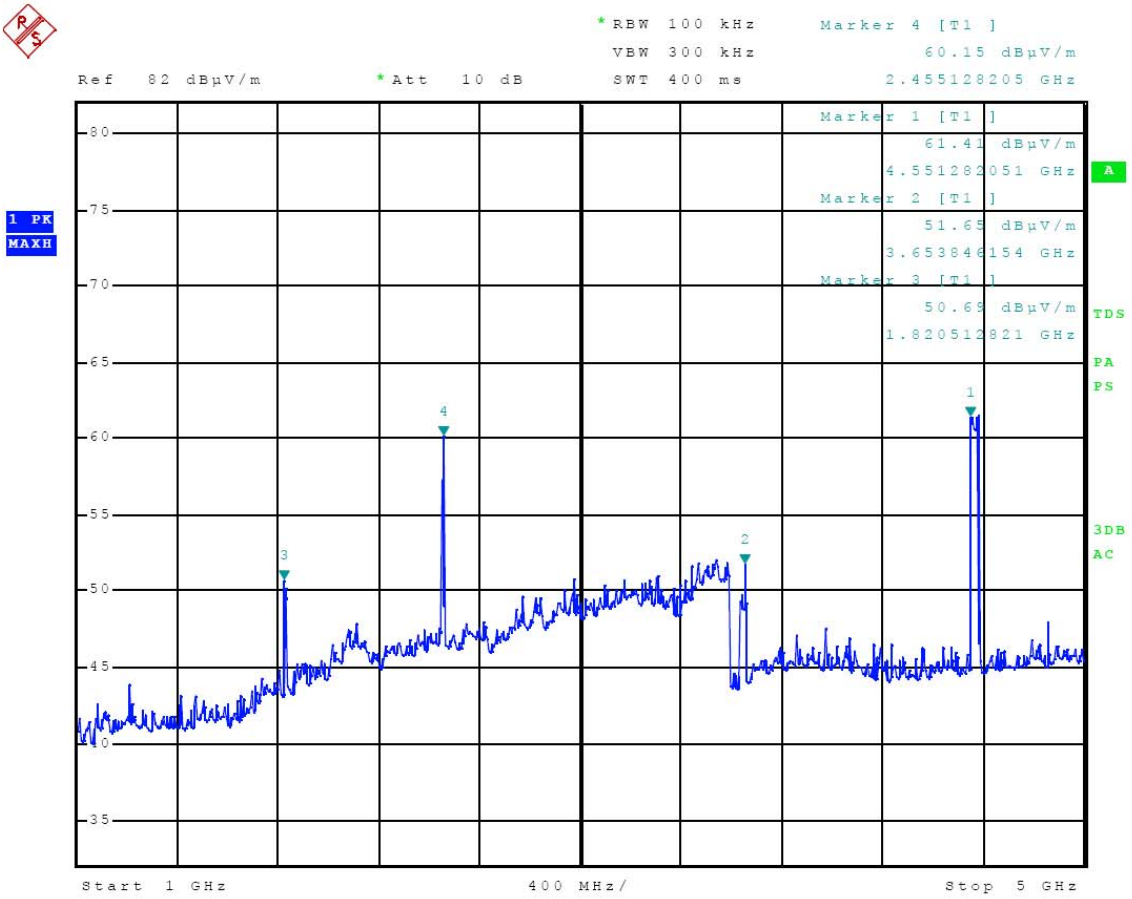
Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	HOPPING ON
Operator	Andrej Skof

Test Spec

HORIZONTAL 150 cm, 0 deg

Sweep Settings Screen A

Center Frequency	3.000000 GHz	Ref Level	82.000 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	4.000000 GHz	Ref Position	100.000 %
Start Frequency	1.000000 GHz	Level Range	50.000 dB
Stop Frequency	5.000000 GHz	RF Att	10.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	400.00 ms	Y-Axis	LOG



C20170001

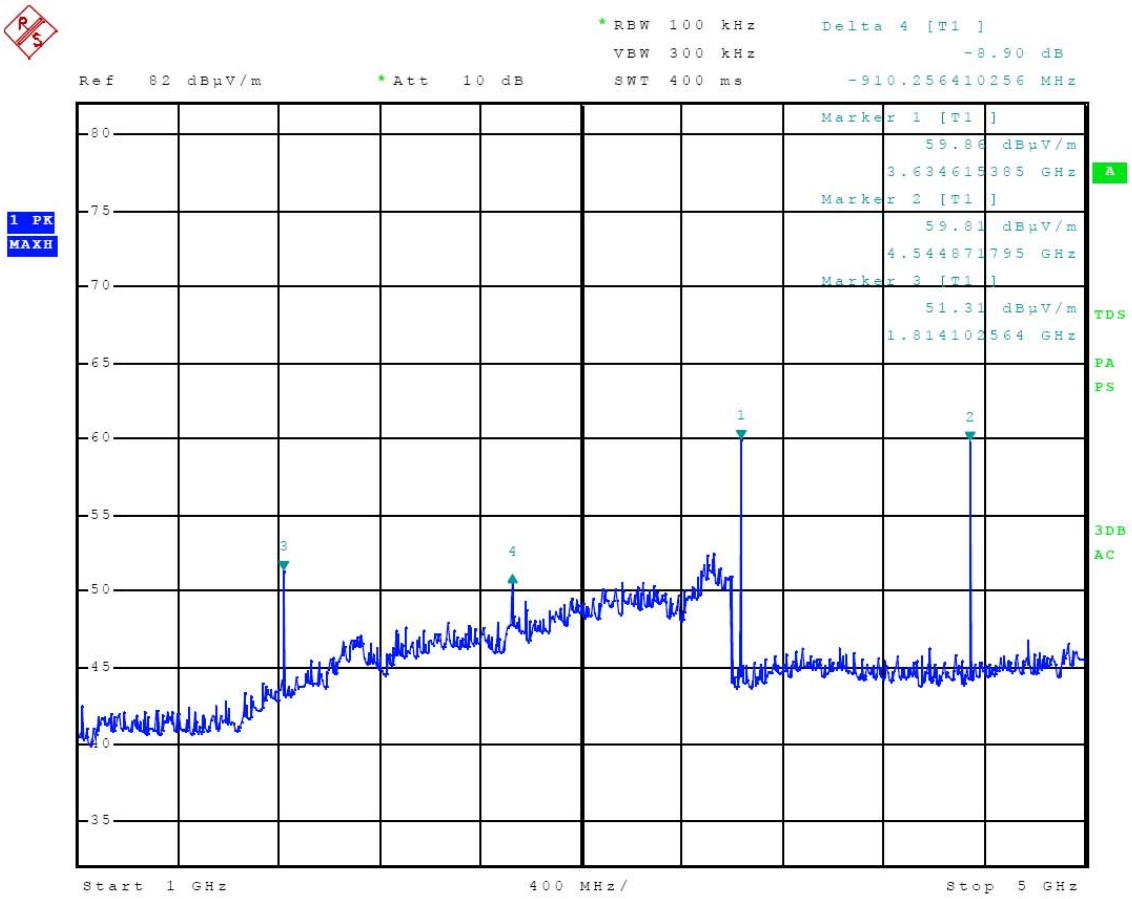
Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	CH1 (Hopping disabled)
Operator	Andrej Skof

Test Spec

HORIZONTAL 150 cm, 0 deg

Sweep Settings Screen A

Center Frequency	3.000000 GHz	Ref Level	82.000 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	4.000000 GHz	Ref Position	100.000 %
Start Frequency	1.000000 GHz	Level Range	50.000 dB
Stop Frequency	5.000000 GHz	RF Att	10.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	400.00 ms	Y-Axis	LOG



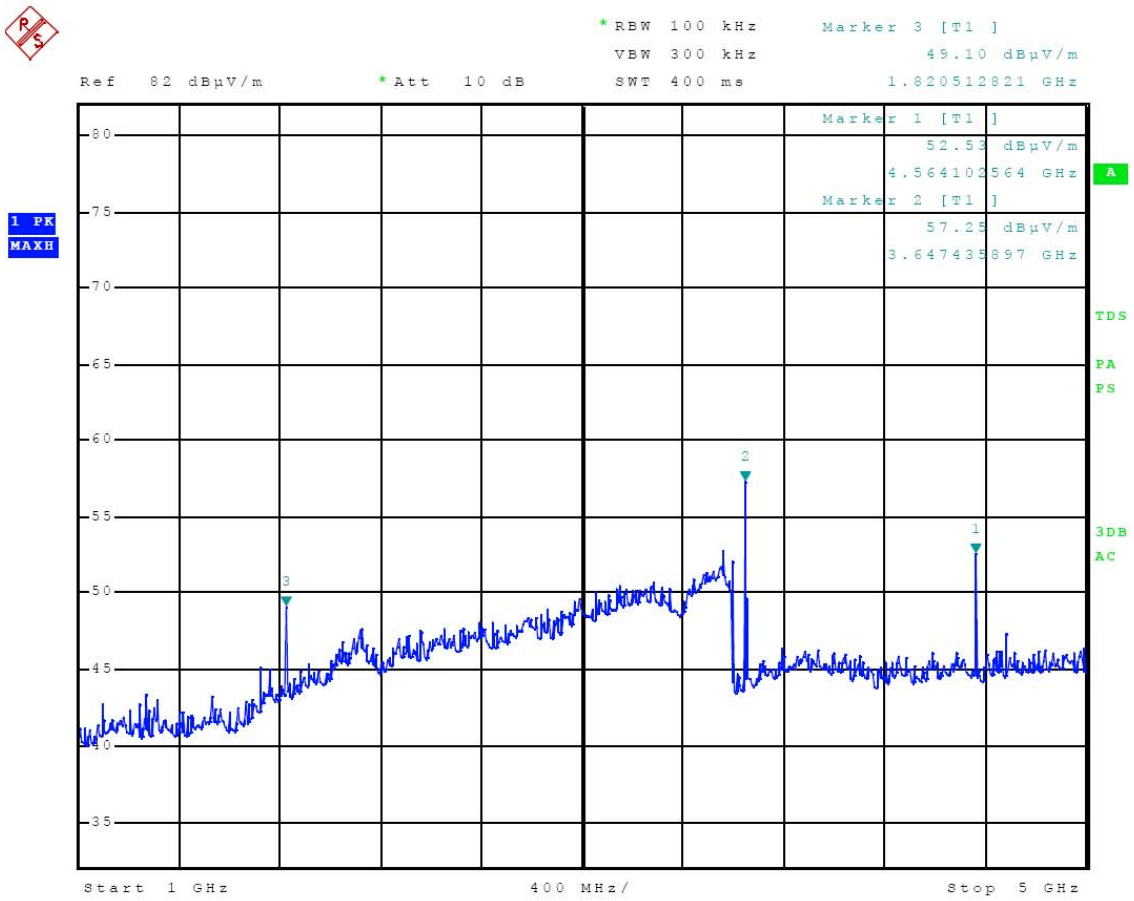
C20170001

Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	CH25 (Hopping disabled)
Operator	Andrej Skof
Test Spec	

VERTICAL 150 cm, 0 deg

Sweep Settings Screen A

Center Frequency	3.000000 GHz	Ref Level	82.000 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	4.000000 GHz	Ref Position	100.000 %
Start Frequency	1.000000 GHz	Level Range	50.000 dB
Stop Frequency	5.000000 GHz	RF Att	10.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	400.00 ms	Y-Axis	LOG



C20170001

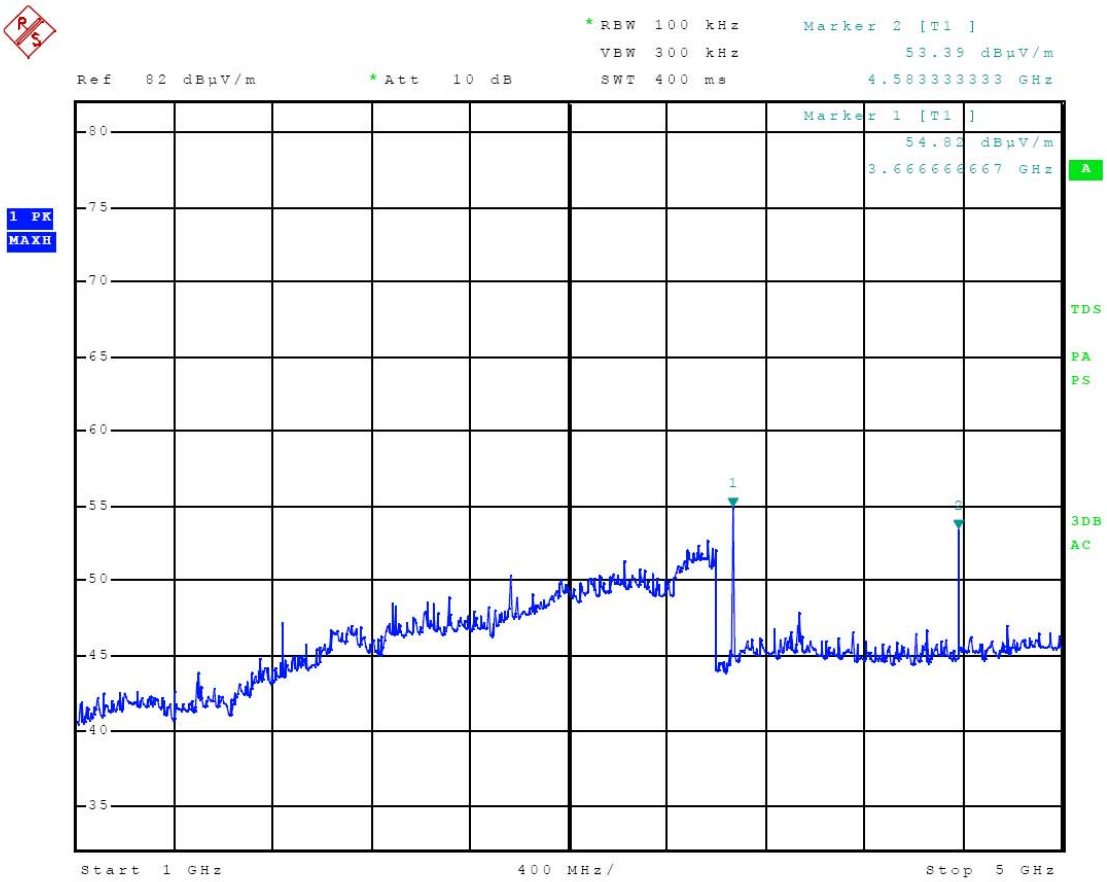
Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	CH50 (Hopping disabled)
Operator	Andrej Skof

Test Spec

HORIZONTAL 150 cm, 0 deg

Sweep Settings Screen A

Center Frequency	3.000000 GHz	Ref Level	82.000 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	4.000000 GHz	Ref Position	100.000 %
Start Frequency	1.000000 GHz	Level Range	50.000 dB
Stop Frequency	5.000000 GHz	RF Att	10.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	400.00 ms	Y-Axis	LOG



C20170001

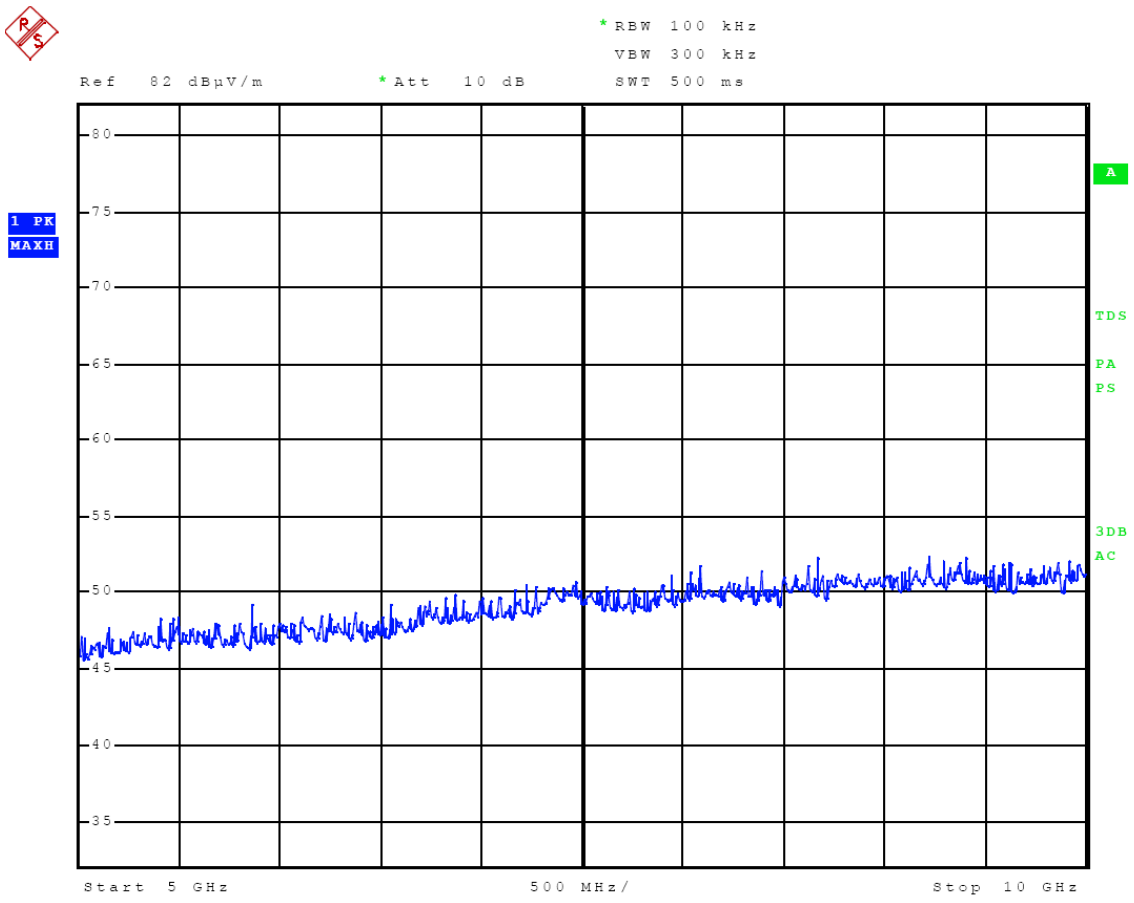
Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	HOPPING ON
Operator	Andrej Skof

Test Spec

HORIZONTAL 150 cm, 0 deg

Sweep Settings Screen A

Center Frequency	7.500000 GHz	Ref Level	82.000 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	5.000000 GHz	Ref Position	100.000 %
Start Frequency	5.000000 GHz	Level Range	50.000 dB
Stop Frequency	10.000000 GHz	RF Att	10.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	500.00 ms	Y-Axis	LOG



C20170001

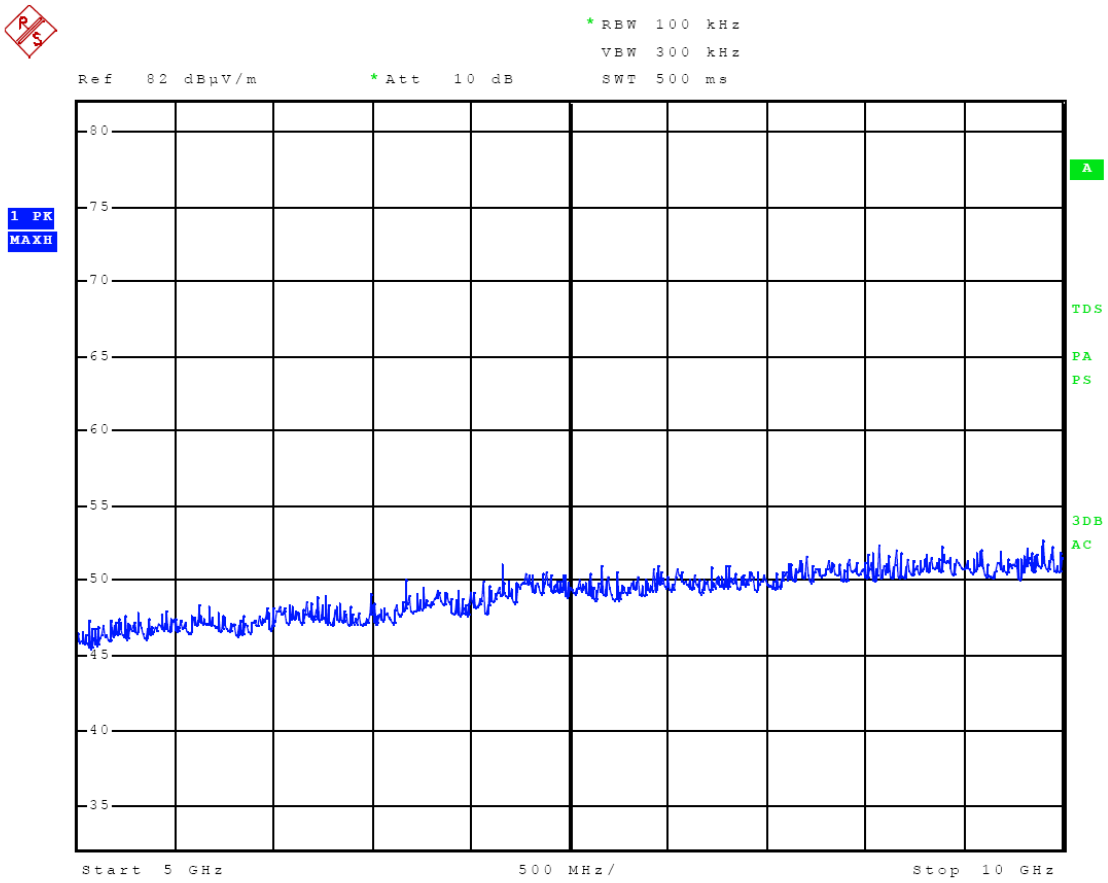
Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	CH1 (Hopping disabled)
Operator	Andrej Skof

Test Spec

HORIZONTAL 150 cm, 0 deg

Sweep Settings Screen A

Center Frequency	7.500000 GHz	Ref Level	82.000 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	5.000000 GHz	Ref Position	100.000 %
Start Frequency	5.000000 GHz	Level Range	50.000 dB
Stop Frequency	10.000000 GHz	RF Att	10.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	500.00 ms	Y-Axis	LOG



C20170001

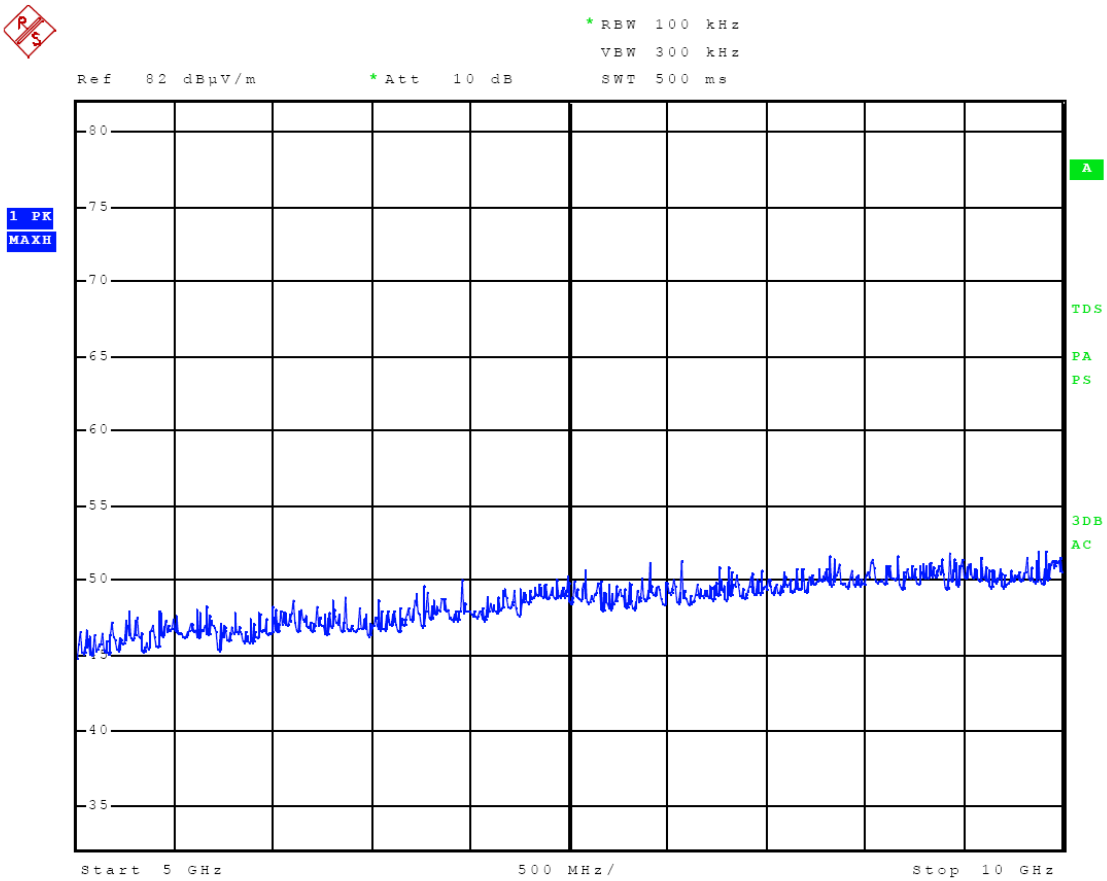
Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	CH25 (Hopping disabled)
Operator	Andrej Skof

Test Spec

HORIZONTAL 150 cm, 0 deg

Sweep Settings Screen A

Center Frequency	7.500000 GHz	Ref Level	82.000 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	5.000000 GHz	Ref Position	100.000 %
Start Frequency	5.000000 GHz	Level Range	50.000 dB
Stop Frequency	10.000000 GHz	RF Att	10.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	500.00 ms	Y-Axis	LOG



C20170001

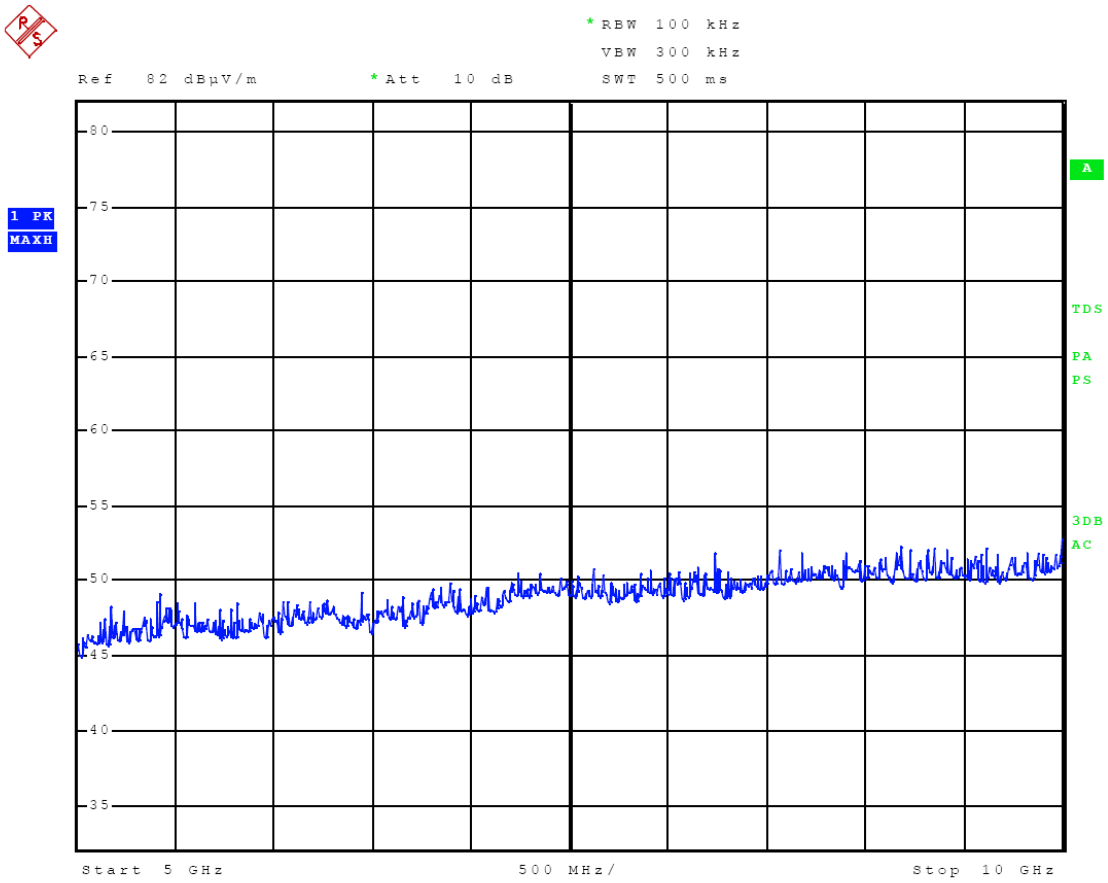
Meas Type	RADIATED EMISSION
Equipment under Test	WSD 011-2
Manufacturer	NAVIS ELEKTRONIKA D.O.O.
OP Condition	CH50 (Hopping disabled)
Operator	Andrej Skof

Test Spec

HORIZONTAL 150 cm, 0 deg

Sweep Settings Screen A

Center Frequency	7.500000 GHz	Ref Level	82.000 dBµV/m
Frequency Offset	0.000000 Hz	Ref Level Offset	0.000 dB
Span	5.000000 GHz	Ref Position	100.000 %
Start Frequency	5.000000 GHz	Level Range	50.000 dB
Stop Frequency	10.000000 GHz	RF Att	10.000 dB
RBW	100.000000 kHz		
VBW	300.000000 kHz	X-Axis	LIN
Sweep Time	500.00 ms	Y-Axis	LOG



3.11 §15.247 (i) RF Exposure Compliance Requirements

Requirement
Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. *See* §1.1307(b)(1) of this chapter
Limits for Limits for Maximum Permissible Exposure from §1.1310 for General Population/Uncontrolled Exposure: 0.6 mW/cm^2

Calculation procedure: OET 65 (Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields:

$S = EIRP / 4\pi R^2$

where:
S = power density (mW/cm^2)
EIRP = equivalent (or effective) isotropically radiated power
R = distance to the center of radiation of the antenna (cm)

Results:
P = 12.03 dBm
R = 20 cm

$S = 0.0024 mW/cm^2$

Conclusion: PASS

4 TEST EQUIPMENT

Description & Manufacturer	Model No.	SIQ No.	Last calibration	Calibrated until	Calibration period	Used
ETS, Anechoic chamber	3m	103949	2016-11	2017-11	24 months	X
Rohde-Schwarz, RFI receiver	ESU8	105187	2015-11	2017-11	24 months	/
Rohde-Schwarz, RFI receiver	ESU26	100428	2016-02	2018-02	24 months	X
R&S, Antenna	HFH2-Z2	/	2015-09	2017-09	24 months	X
EMCO, Antenna	3142B	104351	2015-09	2017-09	24 months	X
EMCO, Antenna	3115	103002	2015-09	2017-09	24 months	X
Heinrich Deisel, Turn table	DS 420.00	103337	NA	NA	NA	X
Antenna tower	/	/	NA	NA	NA	X
Controller for turn table and antenna tower	/	/	NA	NA	NA	X