Relative humidity: 27%

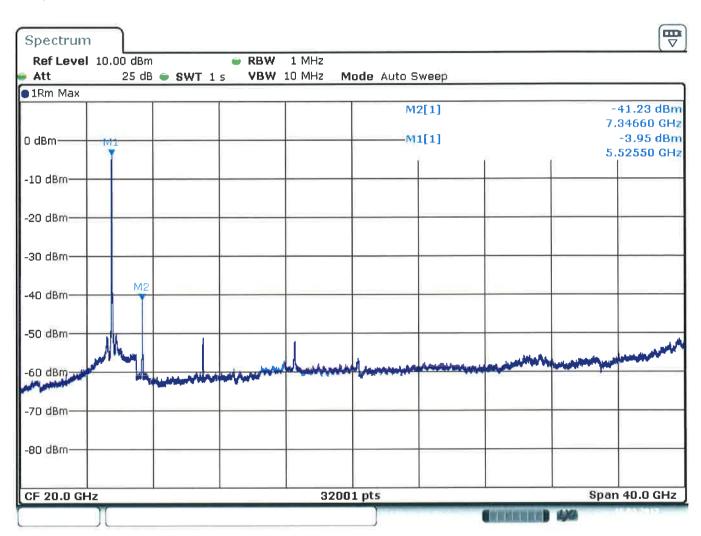


Undesirable Emission Limits

§ 15.407(b) 6.2.3 (2)

Conducted measurement

Setup: CH 100-104: 5510 MHz



Date: 16.MAR.2017 13:43:05

LIMIT SUBCLAUSE 15.407(b)(3) - 6.2.3 (2)

For transmitters operating in the 5.47-5.725 GHz band	
	not exceed an e.i.r.p. of −27 dBm/MHz.

Relative humidity:

27%

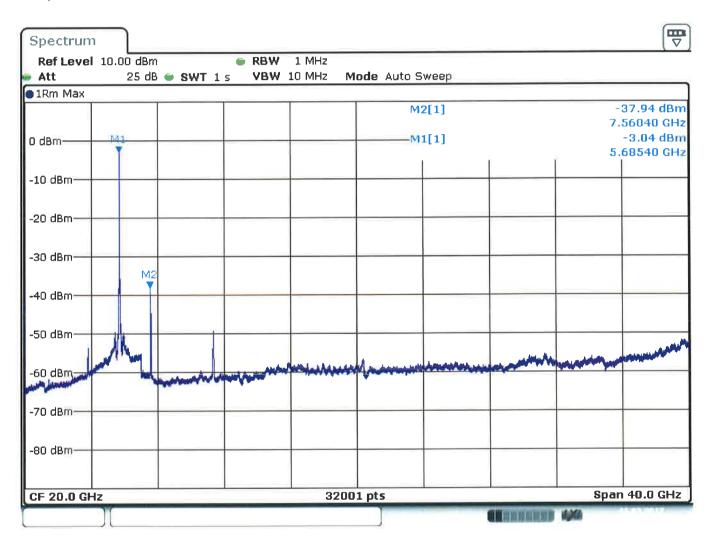


Undesirable Emission Limits

§ 15.407(b) 6.2.3 (2)

Conducted measurement

Setup: CH 132-136: 5670 MHz



Date: 16.MAR.2017 13:44:33

LIMIT

SUBCLAUSE 15.407(b)(3) - 6.2.3 (2)

For transmitters operating in the 5.47-5.725 GHz band
All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

Relative humidity:

27%

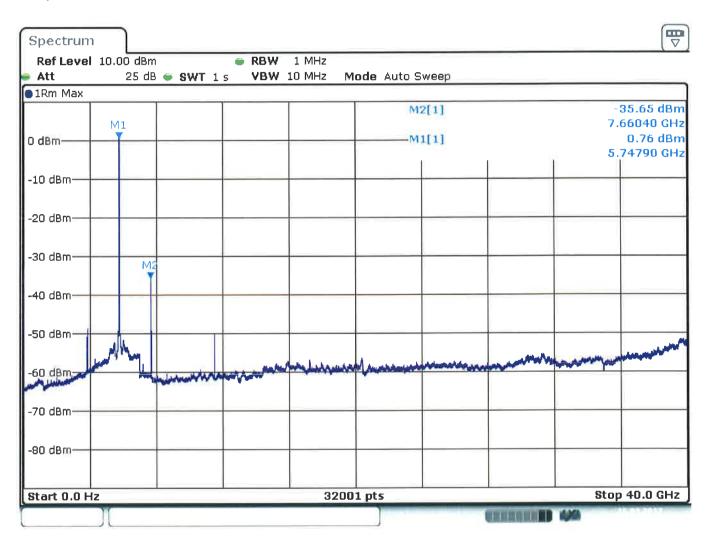


Undesirable Emission Limits

§ 15.407(b) 6.2.4 (2)

Conducted measurement

Setup: CH 149: 5745 MHz



Date: 16.MAR.2017 13:30:57

LIMIT SUBCLAUSE 15.407(b)(4) - 6.2.4 (2)

For transmitters operating in the 5.725-5.85 GHz band below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

Relative humidity:

27%

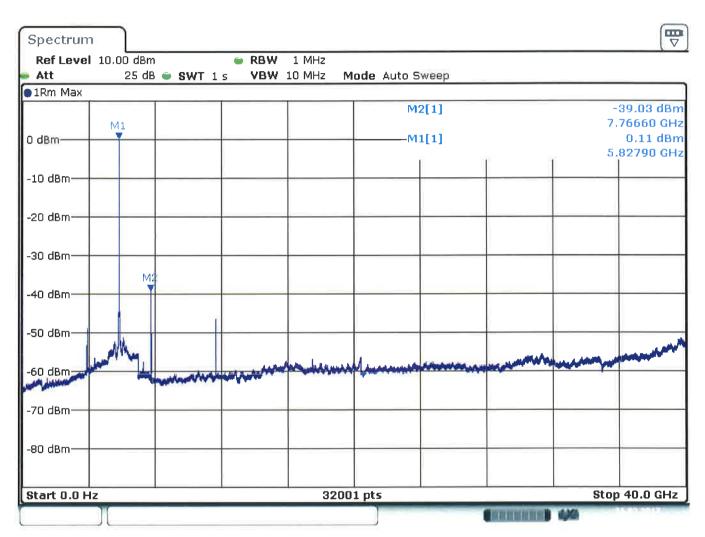


Undesirable Emission Limits

§ 15.407(b) 6.2.4 (2)

Conducted measurement

Setup: CH 165: 5825 MHz



Date: 16.MAR.2017 13:32:28

LIMIT SUBCLAUSE 15.407(b)(4) - 6.2.4 (2)

	All emissions within the frequency range from the band edge to 10 MHz above or	
the 5.725-5.85 GHz band	below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall	
	not exceed an e.i.r.p. of −27 dBm/MHz.	

Relative humidity:

27%

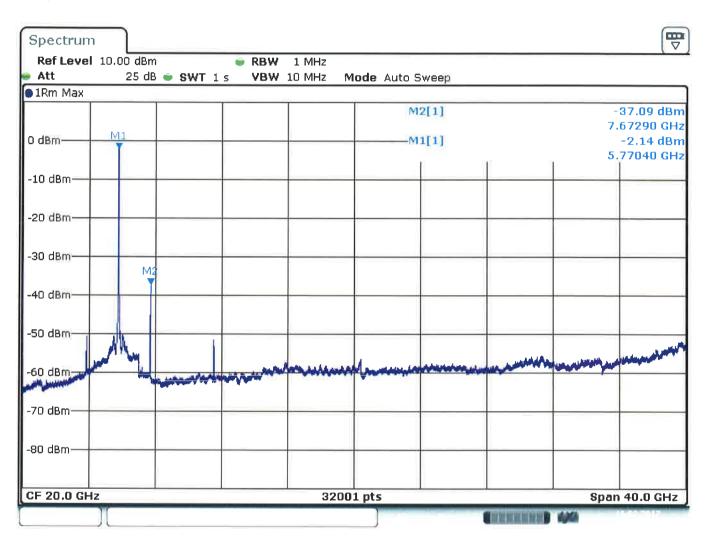


Undesirable Emission Limits

§ 15.407(b) 6.2.4 (2)

Conducted measurement

Setup: CH 149-153: 5755 MHz



Date: 16.MAR.2017 13:46:05

LIMIT SUBCLAUSE 15.407(b)(4) - 6.2.4 (2)

For transmitters operating in the 5.725-5.85 GHz band below the band edge shall not exceed an e.i.r.p. of -17 dBm/M frequencies 10 MHz or greater above or below the band edge, emis not exceed an e.i.r.p. of -27 dBm/MHz.

Relative humidity:

27%

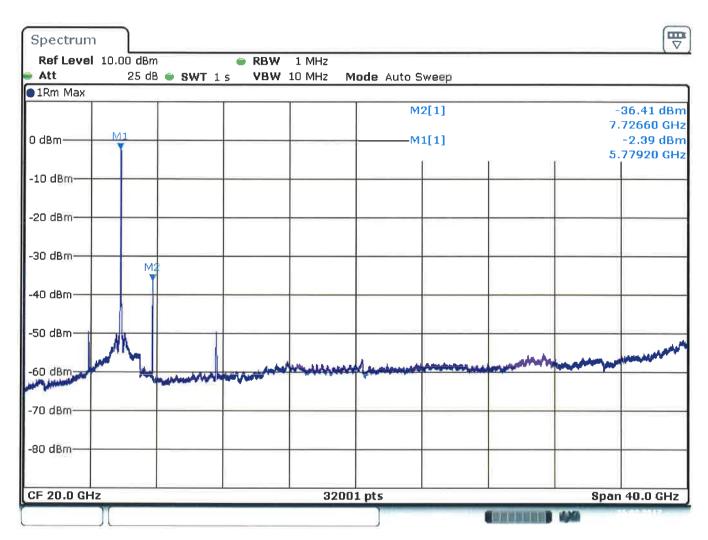


Undesirable Emission Limits

§ 15.407(b) 6.2.4 (2)

Conducted measurement - Antenna 1

Setup: CH 157-161: 5795 MHz



Date: 16.MAR.2017 13:48:14

LIMIT SUBCLAUSE 15.407(b)(4) - 6.2.4 (2)

All emissions within the frequency range from the band edge to 10 MHz above or	
below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for	
frequencies 10 MHz or greater above or below the band edge, emissions shall	
not exceed an e.i.r.p. of −27 dBm/MHz.	

Relative humidity:

27%

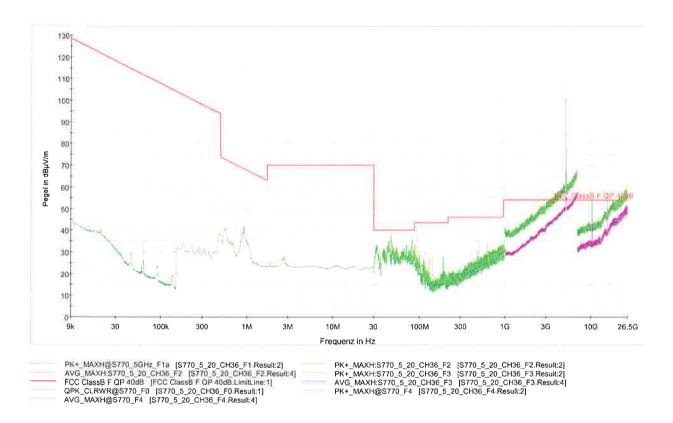


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 36: 5180 MHz



Worst case emission: $50.3~dB\mu V/m$ @ 15540~MHz Remark:Although the measurement above ends at 26.5~GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

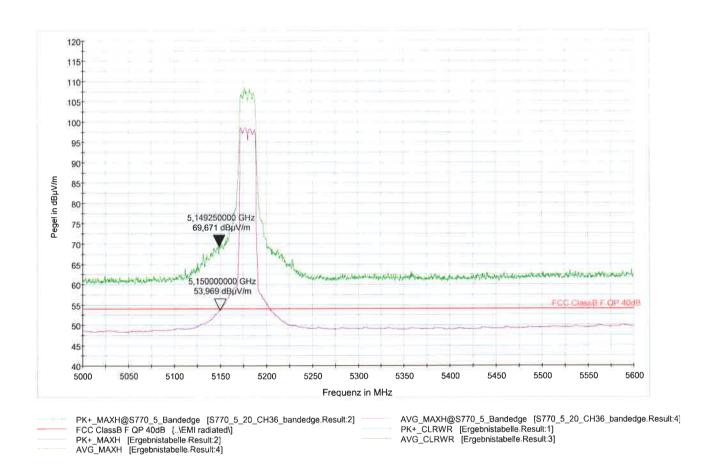


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line): Band Edge requirement

Setup: CH 36: 5180 MHz



LIMIT

SUBCLAUSE 15.209(a) - RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Band edge of the nearest restricted band: 5150 MHz.

Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-200

Relative humidity:

27%

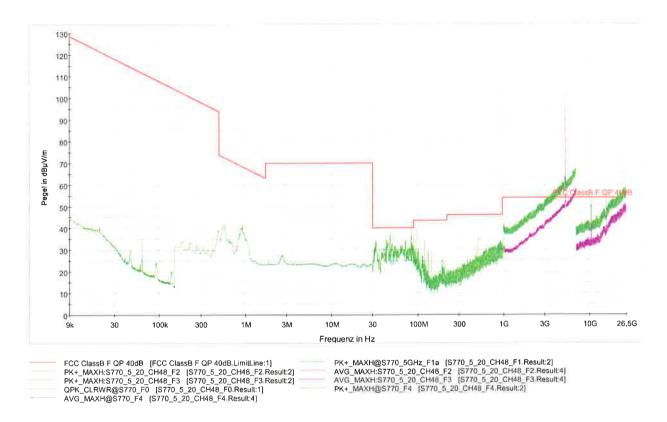


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 48: 5240 MHz



Worst case emission: $48.2~dB\mu V/m$ @ 15720~MHz Remark:Although the measurement above ends at 26.5~GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity: 27%

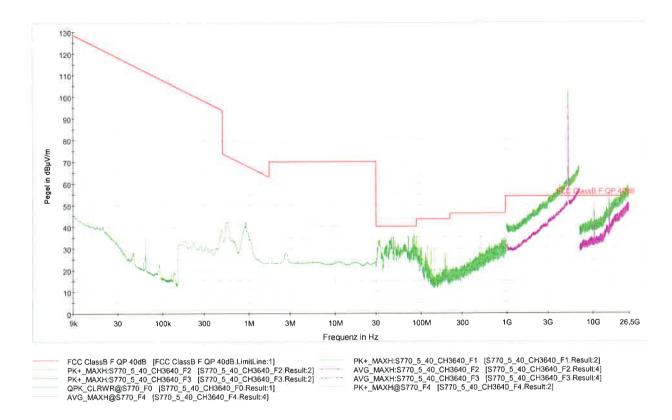


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 36-40: 5190 MHz



Worst case emission: $48.4 \text{ dB}\mu\text{V/m}$ @ 15570 MHz Remark:Although the measurement above ends at 26.5 GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

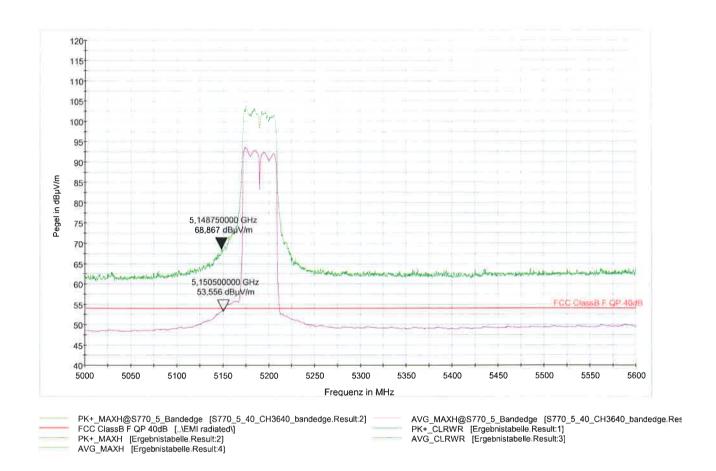


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line): Band Edge requirement

Setup: CH 36-40: 5190 MHz



LIMIT

SUBCLAUSE 15.209(a) - RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Band edge of the nearest restricted band: 5150 MHz.

Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-200

Relative humidity: 27%

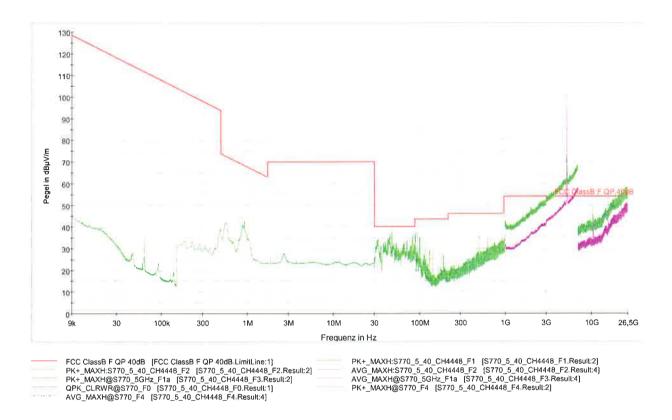


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 44-48: 5230 MHz



Worst case emission: $47.2~dB\mu V/m$ @ 15690~MHz Remark:Although the measurement above ends at 26.5~GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

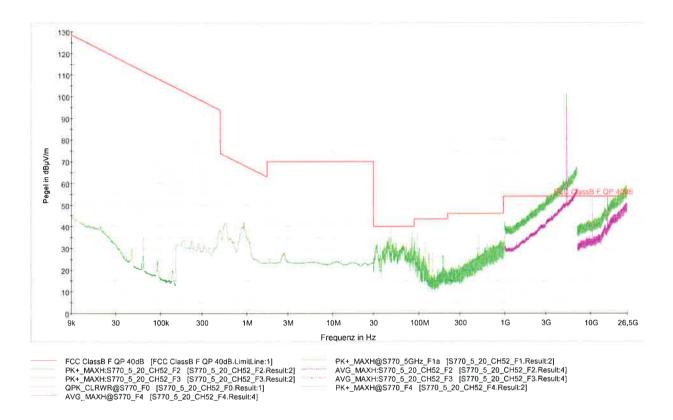


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 52: 5260 MHz



Worst case emission: 49,9 dBµV/m @ 15780 MHz Remark:Although the measurement above ends at 26,5 GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

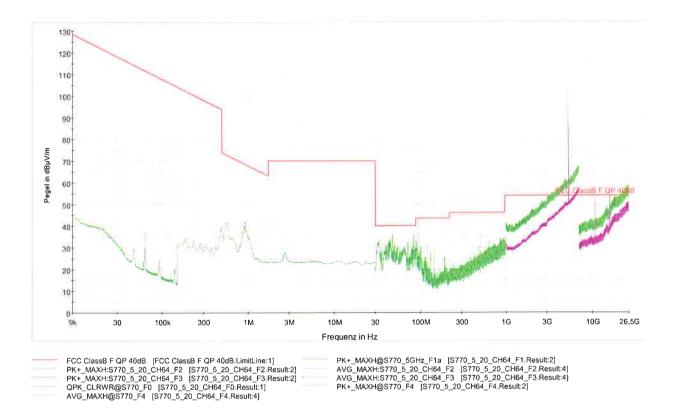


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 64: 5320 MHz



Worst case emission: $50,3~dB\mu V/m~@~10640~MHz$ Remark:Although the measurement above ends at 26,5~GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

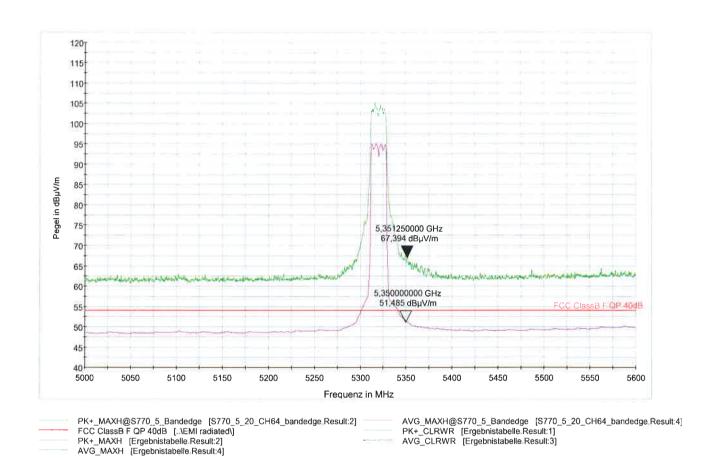


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line): Band Edge requirement

Setup: CH 64: 5320 MHz



LIMIT

SUBCLAUSE 15.209(a) - RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Band edge of the nearest restricted band: 5350 MHz.

Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-200

Relative humidity:

27%

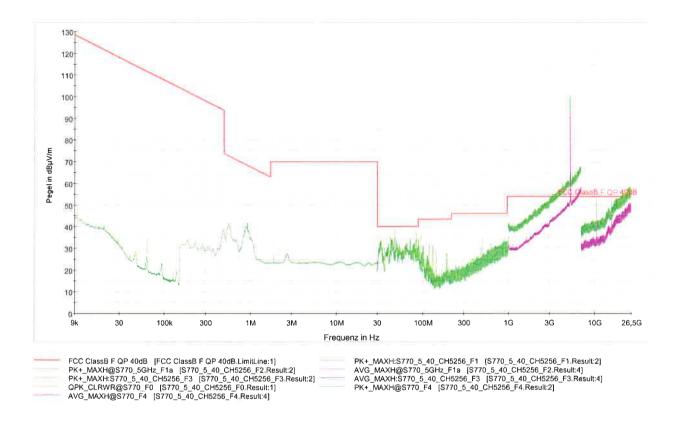


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line)

Setup: CH 52-56: 5270 MHz



Worst case emission: $45,6~dB\mu V/m~@~10540~MHz$ Remark:Although the measurement above ends at 26,5~GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

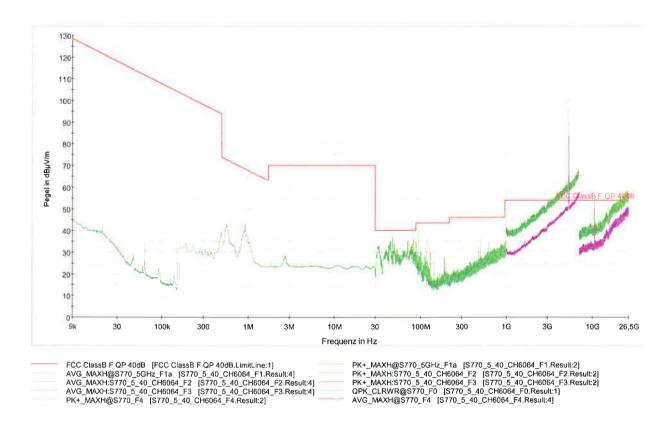


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 60-64: 5310 MHz



Worst case emission: $45.9~dB\mu V/m~@~10620~MHz$ Remark:Although the measurement above ends at 26.5~GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

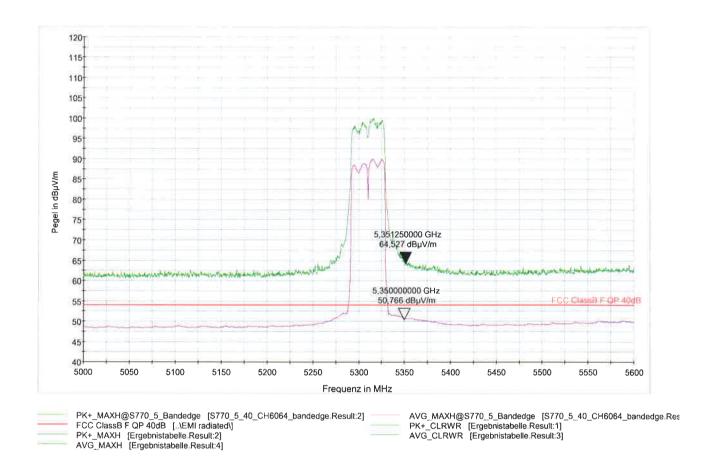


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line): Band Edge requirement

Setup: CH 60-64: 5310 MHz



LIMIT

SUBCLAUSE 15.209(a) - RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Band edge of the nearest restricted band: 5350 MHz.

Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-200

Relative humidity:

27%

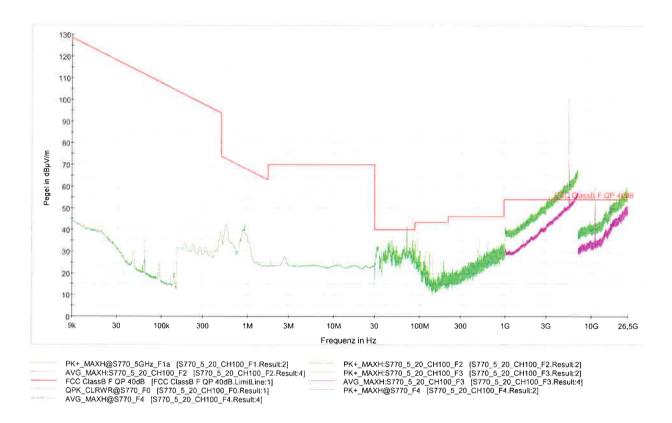


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 100: 5500 MHz



Worst case emission: 50,6 dBµV/m @ 11000 MHz

Remark:Although the measurement above ends at 26,5 GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity: 27%

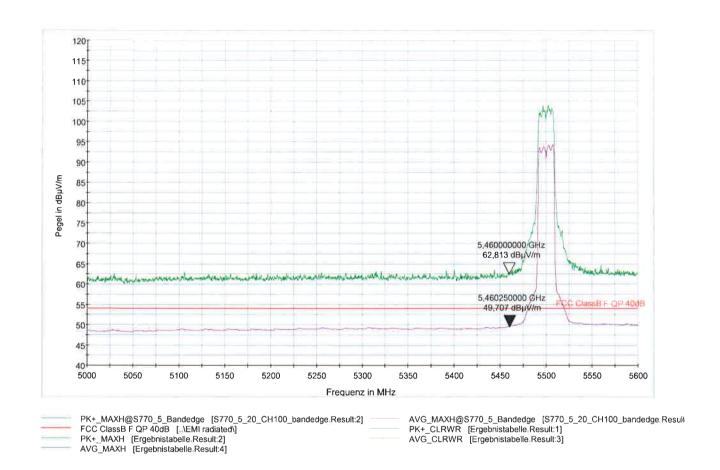


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line): Band Edge requirement

Setup: CH 100: 5500 MHz



LIMIT

SUBCLAUSE 15.209(a) - RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Band edge of the nearest restricted band: 5460 MHz.

Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-200

Relative humidity:

27%

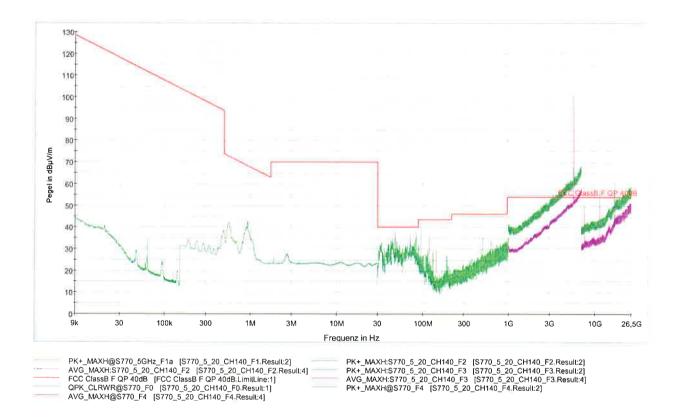


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 140: 5700 MHz



Worst case emission: 51,8 dB μ V/m @ 17100 MHz Remark:Although the measurement above ends at 26,5 GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

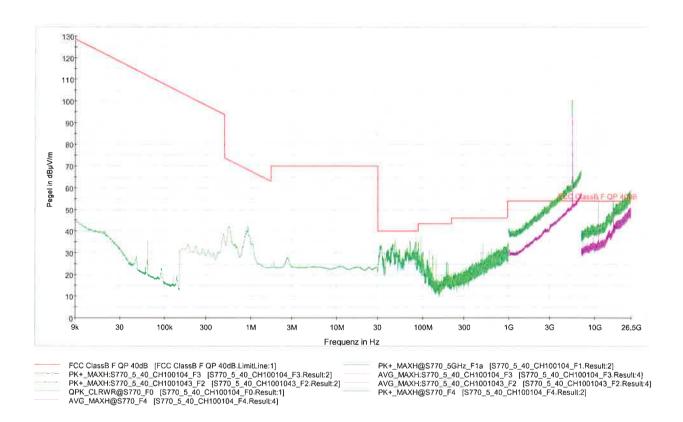


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 100-104: 5510 MHz



Worst case emission: 48,9 dBµV/m @ 16530 MHz

Remark:Although the measurement above ends at 26,5 GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT

SUBCLAUSE 15.209(a) - RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

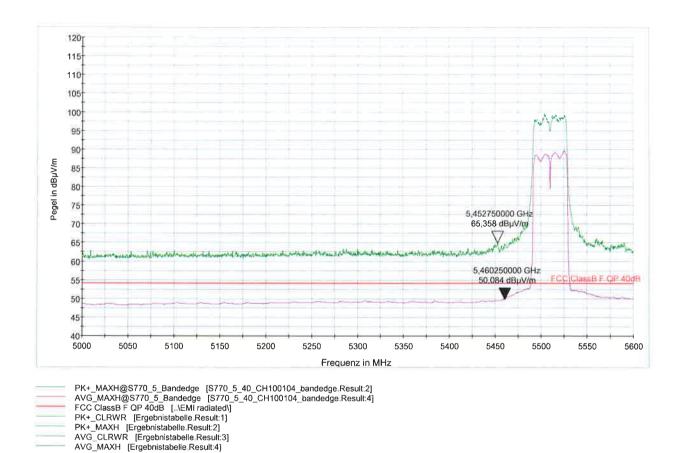


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line): Band Edge requirement

Setup: CH 100-104: 5510 MHz



LIMIT

SUBCLAUSE 15.209(a) - RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Band edge of the nearest restricted band: 5460 MHz.

Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-200

Relative humidity:

27%

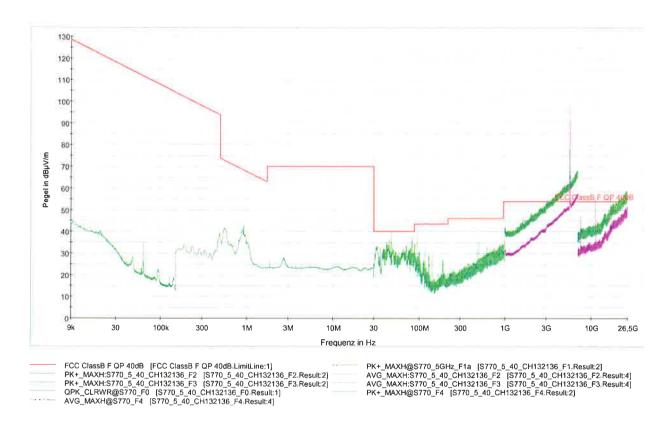


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 132-136: 5670 MHz



Worst case emission: $50.3 \text{ dB}\mu\text{V/m}$ @ 17010 MHz Remark: Although the measurement above ends at 26.5 GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

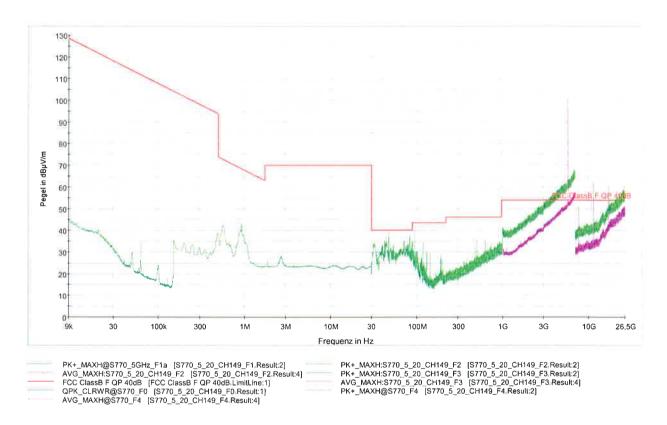


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 149: 5745 MHz



Worst case emission: $53,6~dB\mu V/m$ @ 17235~MHz Remark:Although the measurement above ends at 26,5~GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

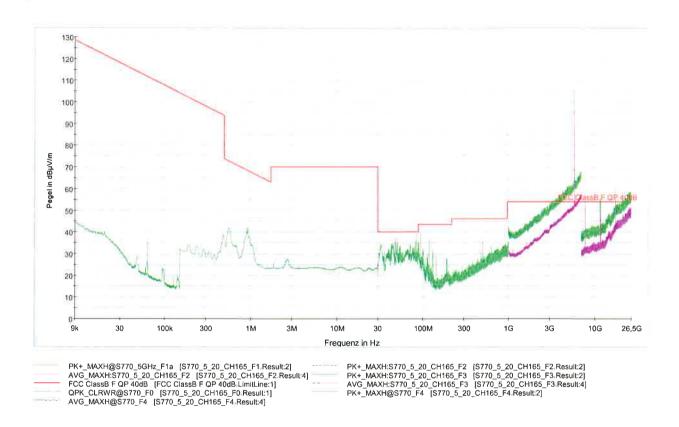


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 165: 5825 MHz



Worst case emission: $53,3~dB\mu V/m~@~17475~MHz$ Remark:Although the measurement above ends at 26,5~GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

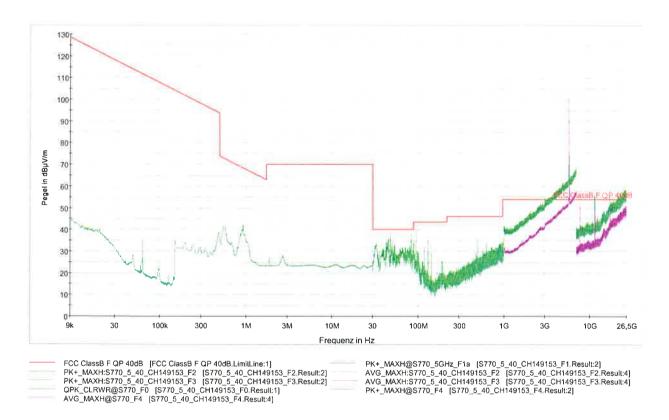


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 149-153: 5755 MHz



Worst case emission: 51,3 dBµV/m @ 17265 MHz Remark:Although the measurement above ends at 26,5 GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

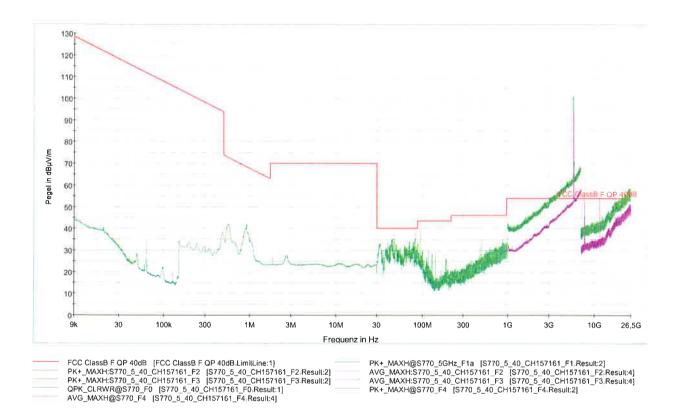


Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a) RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: CH 157-161: 5795 MHz



Worst case emission: $52,6~dB\mu V/m~@~7727~MHz$ Remark:Although the measurement above ends at 26,5~GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Relative humidity:

27%

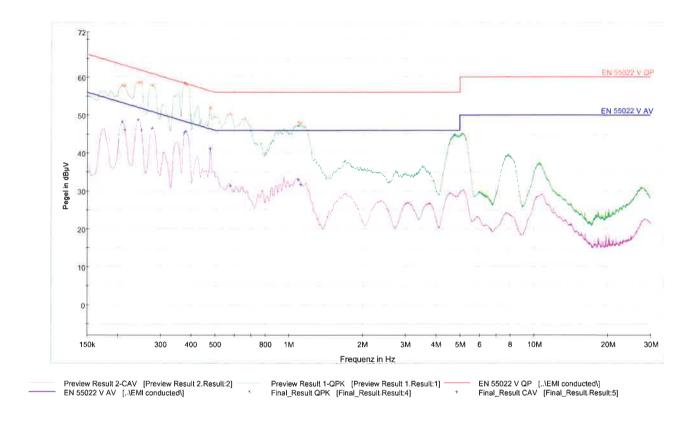


Conducted Limits

§ 15.207 RSS-Gen 8.8

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: 20 MHz BW - for each mode on the channel with highest RF output power was measured



Worst case Quasi-Peak emission: 58,32 dBµV (0,07 dB margin) @ 0,375 MHz

LIMIT SUBCLAUSE 15.207(a) – RSS-Gen 8.8

	Conducted limit (dBµV)		
Frequency of emission (MHz)	Quasi-peak	Average	
0.15-0.5	66 to 56*	56 to 46*	
0.5-5	56	46	
5-30	60	50	

^{*}Decreases with the logarithm of the frequency.

Test Equipment used: NT-300; NT-554; NT-441; EMV-205

Relative humidity:

27%

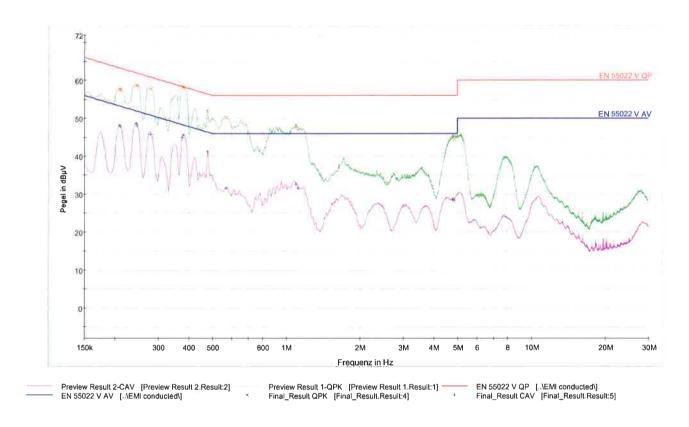


Conducted Limits

§ 15.207 RSS-Gen 8.8

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: 40 MHz BW - for each mode on the channel with highest RF output power was measured



Worst case Quasi-Peak emission: 58,21 dBµV (0,08 dB margin) @ 0,3795 MHz

LIMIT SUBCLAUSE 15.207(a) - RSS-Gen 8.8

	Conducted limit (dBµV)		
Frequency of emission (MHz)	Quasi-peak	Average	
0.15-0.5	66 to 56*	56 to 46*	
0.5-5	56	46	
5-30	60	50	

^{*}Decreases with the logarithm of the frequency.

Test Equipment used: NT-300; NT-554; NT-441; EMV-205

Test Report Reference: INE-AT/FG-17/117

Ambient temperature: 23°C

Relative humidity:

27%



Maximum permissible Exposure

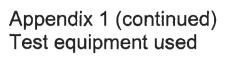
§2.1091

A mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons.

Appendix 1 Test equipment used



Anechoic Chamber with 3m measurement distance	NT-100	Spectrumanalyzer – FSP7 9 kHz – 7 GHz	NT-200	Division: Industry & Energy
Stripline according to ISO 11452-5	NT-108	ESCI - Test receiver 9 kHz - 7 GHz	NT-203/1	Danada anti EC
MA4000 - Antenna mast 1 - 4 m height	NT-110/1	ESI26 – Test receiver 20 Hz – 26,5 GHz	NT-207	Department: FG Test report number:
DS - Turntable 0 - 400 ° Azimuth	NT-111/1	Digital Radio Tester CTS55	NT-208	INE-AT/FG-17/117
CO3000 Controller Mast+Turntable	NT-112/1	Noise-gen., ITU-R 559-2 20 Hz – 20 kHz	NT-209	Page: 1 of 4 Date: 19.06.2017, /
HUF-Z3 - Log. Per. Antenna 200 - 1000 MHz	NT-121	CMTA - Radiocommunication analyzer; 0,1 - 1000 MHz	NT-210	Checked by:
HFH-Z2 - Loop Antenna 9 kHz - 30 MHz	NT-122	3271 - Spectrum analyzer 100 Hz - 26,5 GHz	NT-211	1
HFH-Z6 - Rod Antenna 9 kHz - 30 MHz	NT-123	Digital Radio Tester Aeroflex 3920	NT-212/1	
3121C - Dipole Antenna 28 - 1000 MHz	NT-124	Mixer M28HW 26,5 GHz - 40 GHz	NT-214	
3115 - Horn Antenna 1 - 18 GHz (immunity)	NT-125	RubiSource T&M Timing reference	NT-216	
3116 - Horn Antenna 18 - 40 GHz	NT-126	Radiocommunicationanalyzer SWR 1180 MD	NT-217	
SAS-200/543 - Bicon. Antenna 20 MHz - 300 MHz	NT-127	Mixer M19HWD 40 GHz – 60 GHz	NT-218	
AT-1080 - Log. Per. Antenna 80 - 1000 MHz	NT-128	Mixer M12HWD 60 GHz – 90 GHz	NT-219	
HK-116 - bicon. Antenna 20 MHz - 300 MHz	NT-129	DSO9104 Digital scope	NT-220/1	
HK-116 - bicon. Antenna 20 MHz - 300 MHz	NT-130	TPS 2014 Digital scope	NT-222	
3146 - Log. Per. Antenna 200 – 1000 MHz	NT-131	Artificial Ear according to IEC 60318	NT-224	
VULB 9163 Trilog Antenna 30 – 3000 MHz	NT-131/1	1 kHz Sound calibrator	NT-225	
Loop Antenna H-Field	NT-132	B10 - Harmonics and flicker analyzer	NT-232	
Horn Antenna 500 MHz - 2900 MHz	NT-133	SRM-3000 Spectrumanalyzer	NT-233	
Horn Antenna 500 MHz - 6000 MHz	NT-133/1	SRM-3006 Spectrumanalyzer	NT-233/1a	
Log. per. Antenna 800 MHz - 2500 MHz	NT-134	E-field probe SRM 75 MHz – 3 GHz	NT-234	
Log. per. Antenna 800 MHz - 2500 MHz	NT-135	Field Meter NBM-500 incl. E- and H-Field probes	NT-240a-d	
BiConiLog Antenna 26 MHz – 2000 MHz	NT-137	Hall-Teslameter ETM-1	NT-241	
Conical Dipol Antenna PCD8250	NT-138	EFA-3 H-field- / E-field probe	NT-243	
HF 906 - Horn Antenna 1 - 18 GHz (emission)	NT-139	EHP-50F H-field- / E-field probe	NT-243/1	
HZ-1 Antenna tripod	NT-150	Field Meter EMR-200 100 kHz – 3 GHz	NT-244	
BN 1500 Antenna tripod	NT-151	E-field probe 100 kHz – 3 GHz	NT-245	
Ant. tripod for EN61000-4-3 Model TP1000A	NT-156	H-field probe 300 kHz – 30 MHz	NT-246	
Power quality analyzer Fluke 1760 (complete set)	NT-160 - NT-173			





E-field probe 3 MHz – 18 GHz	NT-247		Oscillatory Wave Simulator incl. Coupling networks	NT- 328a+b+c
H-field probe 27 MHz – 1 GHz	NT-248		BTA-250 - RF-Amplifier 9 kHz - 220 MHz / 250 W	NT-330
ELT-400 1 Hz – 400 kHz	NT-249		T82-50 RF-Amplifler 2 GHz – 8 GHz	NT-331
MDS 21 - Absorbing clamp 30 - 1000 MHz	NT-250		500W1000M7 - RF-Amplifler 80 - 1000 MHz / 500 W	NT-332
FCC-203I EM Injection clamp	NT-251		AS0102-65R - RF-Amplifier 1 GHz - 2 GHz	NT-333
FCC-203I-DCN Ferrite decoupling network	NT-252	□.	APA01 – RF-Amplifier 0,5 GHz – 2,5 GHz	NT-334
PR50 Current Probe	NT-253		Preamplifier 1 GHz - 4 GHz	NT-335
i310s Current Probe	NT-254/1		Preamplifier for GPS MKU 152 A	NT-336
Fluke 87 V True RMS Multimeter	NT-260		Preamplifier 100 MHz – 23 GHz	NT-337
Model 2000 Digital Multimeter	NT-261		DC Block 10 MHz – 18 GHz Model 8048	NT-338
Fluke 87 V Digital Multimeter	NT-262/1		2-97201 Electronic load	NT-341
ESH2-Z5-U1 Artificial mains network 4x25A	NT-300		TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-344
ESH3-Z5-U1 Artificial mains network 2x10A	NT-301		TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-345
ESH3-Z6-U1 Artificial mains network 1x100A	NT-302		VDS 200 Mobil-impuls-generator	NT-350
ESH3-Z6-U1 Artificial mains network 1x100A	NT-302a		LD 200 Mobil-impuls-generator	NT-351
PHE 4500/B Power amplifier	NT-304		MPG 200 Mobil-Impuls-Generators	NT-352
EZ10 T-Artificial Network	NT-305		EFT 200 Mobil-impuls-generator	NT-353
SMG - Signal generator 0,1 - 1000 MHz	NT-310		AN 200 S1 Artificial Network	NT-354
SMA100A - Signal generator 9 kHz - 6 GHz	NT-310/1		FP-EFT 32M 3 ph. Coupling filter (Burst)	NT-400/1
RefRad Reference generator	NT-312		PHE 4500 - Mains impedance network	NT-401
SMP 02 Signal generator 10 MHz - 20 GHz	NT-313		IP 6.2 Coupling filter for data lines (Surge)	NT-403
40 MHz Arbitrary Generator TGA1241	NT-315		TK 9421 High Power Volt. Probe 150 kHz - 30 MHz	NT-409
Artificial mains network NSLK 8127-PLC	NT-316		ESH2-Z3 - Probe 9 kHz - 30 MHz	NT-410
PEFT - Burst generator up to 4 kV	NT-320		IP 4 - Capacitive clamp (Burst)	NT-411
ESD 30 System up to 25 kV	NT-321		Highpass-Filter 100 MHz – 3 GHz	NT-412
PSURGE 4.1 Surge generator	NT-324		Highpass-Filter 600 MHz – 4 GHz	NT-413
IMU4000 Immunity test system	NT-325/1		Highpass-Filter 1250 MHz – 4 GHz	NT-414
VCS 500-M6 Surge-Generator	NT-326		Highpass-Filter 1800 MHz – 16 GHz	NT-415

Division: Industry & Energy

Department: FG

Test report number: INE-AT/FG-17/117

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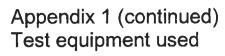
Date: 19.06.2017

Checked by:

Appendix 1 (continued) Test equipment used



Highpass-Filter 3500 MHz – 18 GHz	NT-416	FCC-801-S25 Coupling decoupling network	NT-462	Division: Industry & Energy
RF-Attenuator 10 dB DC – 18 GHz / 50 W	NT-417	FCC-801-T4 Coupling decoupling network	NT-463	Department: FG
RF-Attenuator 6 dB DC – 18 GHz / 50 W	NT-418	FCC-801-C1 Coupling decoupling network	NT-464	Test report number:
RF-Attenuator 3 dB DC – 18 GHz / 50 W	NT-419	SW 9605 - Current probe 150 kHz – 30 MHz	NT-465/1	INE-AT/FG-17/117
RF-Attenuator 20 dB DC - 1000 MHz / 25 W	NT-421	95242-1 – Current probe 1 MHz – 400 MHz	NT-468	Page: 3 of 4 Date: 19.06.2017
RF-Attenuator 30 dB DC - 1000 MHz / 1 W	NT-423	94106-1L-1 – Current probe 100 kHz – 450 MHz	NT-471	Checked by:
RF-Attenuator 30 dB	NT-424	GA 1240 Power amplifier according to EN 61000-4-16	NT-480	1
RF-Attenuator 6 dB DC - 1000 MHz / 1 W	NT-425	Coupling networks according to EN 61000-4-16	NT-481 - NT-483	
RF-Attenuator 6 dB DC - 1000 MHz / 1 W	NT-426	Van der Hoofden Test Head	NT-484	
RF-Attenuator 6 dB	NT-428	PC P4 3 GHz Test computer	NT-500	
RF-Attenuator 0 dB - 81 dB	NT-429	PC P4 1700 MHz Notebook	NT-505	
WRU 27 - Band blocking 27 MHz	NT-430	Monitoring camera with Monitor	NT-511	
WHJ450C9 AA - High pass 450 MHz	NT-431	ES-K1 Version 1.71 SP2 Test software	NT-520	
WHJ250C9 AA - High pass 250 MHz	NT-432	EMC32 Version 10.20.01 Test software	NT-520/1	
RF-Load 150 W	NT-433	SRM-TS Version 1.3 software for SRM-3000	NT-522	
Impedance transducer 1:4; 1:9; 1:16	NT-435	SRM-TS Version 1.3.1 software for SRM-3006	NT-522/1	
RF-Attenuator DC – 18 GHz 6 dB	NT-436	Spitzenberger und Spies Test software V4.1	NT-525	
RF-Attenuator DC – 18 GHz 6 dB	NT-437	Noise power test apparatus according to EN 55014	NT-530	
RF-Attenuator DC – 18 GHz 10 dB	NT-438	Vertical coupling plane (ESD)	NT-531	
RF-Attenuator DC – 18 GHz 20 dB	NT-439	Test cable #4 for EN 61000-4-6	NT-553	
I+P 7780 Directional coupler 100 - 2000 MHz	NT-440	Test cable #3 for conducted emission	NT-554	
ESH3-Z2 - Pulse limiter 9 kHz - 30 MHz	NT-441	Test cable #5+#6 ESD-cable (2x470k)	NT-555 + NT-556	
Power Divider 6 dB/1 W/50 Ohm	NT-443	Test cable #8 Sucoflex 104EA	NT-559	
Directional coupler 0,1 MHz – 70 MHz	NT-444	Test cable #9 (for outdoor measurements)	NT-580	
Directional coupler 0,1 MHz – 70 MHz	NT-445	Test cable #10 (for outdoor measurements)	NT-581	
Tube imitations according to EN 55015	NT-450	Test cable #13 Sucoflex 104PE	NT-584	
FCC-801-M3-16A Coupling decoupling network	NT-458	Test cable #21 for SRM-3000	NT-592	
FCC-801-M2-50A Coupling decoupling network	NT-459	Shield chamber	NT-600	
FCC-801-M5-25 Coupling decoupling network	NT-460	Climatic chamber	M-1200	
FCC-801-AF10 Coupling decoupling network	NT-461			





	Anechoic Chamber 3 m / 5 m measuring distance	EMV-100	Log.per Antenna 80-2700 MHz STLP 9128 E special	EMV-304	Division: Industry & Energy
	_	EMV-101	Log.per Antenna 0,7 – 9 GHz STLP9149	EMV-305	Department: FG
	_	EMV-102	Load Dump Generator LD 200N	EMV-350	Test report number:
	Mast and Turntable controller	EMV-103	Ultra Compact Symulator UCS 200N100	EMV-351	INE-AT/FG-17/117 Page: 4 of 4
	FC-06 EMC Video/Audiosystem	EMV-104	Automotive Power fail module PFM 200N100.1	EMV-352	Date: 19.06.2017
	EMC Software EMC32 Version 10,20.01	EMV-105	Voltage Drop Symulator VDS 200Q100	EMV-353	Checked by:
	-	EMV-110	Arb. Generator AutoWave	EMV-354	•
	Antennapre.amp. 1 – 18 GHz ERZ-LNA0200-1800-30-2	EMV-111	Ultra Compact Symulator UCS 500N7	EMV-355	
	_	EMV-112	Coupling decoupling network CNI 503B7 / 32 A	EMV-356	
		EMV-113	Coupling decoupling network CNI 503B7 / 63 A	EMV-357	
		EMV-114	Telecom Surge Generator TSurge 7	EMV-358	
		EMV-150	Coupling decoupling network CNI 508N2	EMV-359	
Е	•	EMV-151	Coupling decoupling network CNV 504N2.2	EMV-360	
		EMV-200	Immunity generator NSG4060/NSG4060-1	EMV-361	
	_	EMV-201	Coupling network CDND M316-2	EMV-362	
	GPS Frequency normal	EMV-202	Coupling network CT419-5	EMV-363	
	B-88 DC Power supply N5745A	EMV-203	ESD Generator NSG 437	EMV-364	
		EMV-204	Pulse Limiter VTSD 9561-F BNC	EMV-405	
	Spektrum Analyzator	EMV-205	Transient emission BSM200N40+BS200N100	EMV- 450+45 1	
	-	EMV-206	Cap. Coupling Clamp HFK	EMV-455	
		EMV-	Mag. Field System MS100N+MC26100+MC2630	EMV- 456-458	
	PAS15000 Inrush Current Source	207/abc EMV- 208/abc	Coupling network CDN M2-100A	EMV-459	
	_ •	EMV-209	Coupling network CDN M3-32A	EMV-460	
		EMV-210	Coupling network CDN M5-100A	EMV-461	
Ε	-	EMV-300	Current Clamp CIP 9136A	EMV-462	
	-	EMV-301	DC Artificial Network HV-AN 150	EMV- 464+465	
		EMV-302	Coupling Clamp EM 101	EMV-466	
		EMV-303	Decoupling Clamp FTC 101	EMV-467	
	VHBD 9134		Power attenuator DG 250 W 6 GHz 6 dB	EMV-469	
					