



TEST REPORT nr. R17205501

Federal Communication Commission (FCC)

Test item

Description: DISHWASHER
Trademark: BEKO
Model/Type: E8P
FCC ID: 2AO7BARWM02

Test Specification

Standard: FCC Rules & Regulations, Title 47:2017
Part 15 paragraph(s): 203, 207, 209 and 247

Client's name: ARCELIK A.S. DISHWASHER PLANT
Address: Altinordu Cad No 3 Osb Sincan Ankara, 06935 – TURKEY

Manufacturer's name : Same as client
Address: --

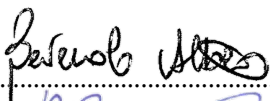
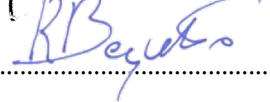
Report

Tested by: A. Bertezolo

Approved by: R. Beghetto – Laboratory Manager

Date of issue: 16.10.18

Contents: 233 pages

This test report shall not be reproduced except in full without the written approval of CMC.
The test results presented in this report relate only to the item tested.



Index

1. SUMMARY	3
2. DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)	4
2.1 TEST SITE	4
3. TESTING AND SAMPLING	4
4. OPERATIVE CONDITIONS	5
5. EQUIPMENT LIST	6
6. MEASUREMENT UNCERTAINTY	7
7. REFERENCE DOCUMENTS	9
8. DEVIATION FROM TEST SPECIFICATION	10
9. TEST CASE VERDICTS	10
10. RESULTS	11
10.1 ANTENNA REQUIREMENTS	12
10.2 CONDUCTED EMISSIONS	13
10.3 EMISSIONS IN RESTRICTED FREQUENCY BANDS AND IN UNRESTRICTED FREQUENCY BANDS	27
10.4 DTS BANDWIDTH	188
10.5 BAND EDGE	196
10.6 FUNDAMENTAL EMISSION OUTPUT POWER	210
10.7 MAXIMUM POWER SPECTRAL DENSITY LEVEL IN THE FUNDAMENTAL EMISSION	218
10.8 SPURIOUS EMISSION	226



1. Summary

Standard:

FCC Rules & Regulations, Title 47:2017
Part 15 paragraph(s): 203, 207, 209 and 247

Test specifications	Environmental Phenomena	Tests sequence	Result
Part 15.203	Antenna requirements	1	Complies
Part 15.207	Conducted emissions	2	Complies
Part 15.209	Emissions in restricted frequency bands and in unrestricted frequency bands	3	Complies
Part 15.247 (a) (2)	DTS bandwidth	4	Complies
Part 15.247 (d)	Band edge	5	Complies
Part 15.209 and 15.247	Fundamental emission output power	6	Complies
Part 15.209 and 15.247	Maximum power spectral density level in the fundamental emission	7	Complies
Part 15.209	Spurious emission	8	Complies

The Test Report was given to the Client representatives for necessary documentation of ratification of the tested equipment and it is valid for the FCC certification



4. Operative conditions

EUT exercising : EUT supplied and switched ON, standby mode.

Radiated disturbance test on frequencies below 1 GHz and continuous disturbance voltage test have been performed with EUT on "intensive 70 °C" cycle.

Maximum settable power = 14, due to the spurious emission and to the band edge.

All measurements have been performed with power = 14 as worst case

Test configuration : EUT classified as floor-standing equipment



5. Equipment list

<i>Id. number</i>	<i>Manufacturer</i>	<i>Model</i>	<i>Description</i>	<i>Serial number</i>	<i>Last calibration</i>	<i>Due date calibration</i>
CMC S010	Rohde & Schwarz	ESH3-Z2	Limitatore di impulsi	--	January '18	January '19
CMC S164	Rohde & Schwarz	ESU26	Receiver 20 Hz - 26.5 GHz	100052	January '18	January '19
CMC S200	Schwarzbeck	NSLK 8128	V-LISN	8128-273	January '18	January '19
CMC S206	Rohde & Schwarz	ESCI 7	EMC Receiver 9KHz-7GHz	100781	January '18	January '19
CMC S241	Schwarzbeck	BBV 9718	Broadband Preamplifier (0,5-18GHz)	9718-126	January '18	January '19
CMC S251	Schwarzbeck	BBV 9745	Broadband Preamplifier (9kHz - 2GHz)	9745-0019	September '17	September '18
CMC S290	Schwarzbeck	BBHA 9170	Horn Antenna (15-26,5 GHz)	9170-043	October '16	October '19
CMC S295	Rohde & Schwarz	FSW43	Spectrum Analyzer 43GHz	104059	November '16	November '19
CMC S298	RIGOL	DSG3060	RF Signal Generator (9kHz-6GHz)	DSG3A183600076	November '17	November '18
20 dB attenuator					Calibrated before the tests	



6. Measurement uncertainty

Test	Test Setup	Expanded uncertainty	Note
Conducted emission CISPR 16 LISN 50uH 0,009-0,0150MHz	PE001_01	3,4 dB	1
Conducted emission CISPR 16 LISN 50uH 0,150-30,0MHz	PE001_01	2,8 dB	1
Conducted emission CISPR 16 Voltage Probe 0,15-30MHz	PE001_02	2,6 dB	1
Conducted emission CISPR 16 Current Probe 0,15-30MHz	PE001_03	2,2 dB	1
Conducted emission CISPR 16 ISN 0,15-30MHz	PE001_04	4,5 dB	1
Clic CISPR 16 LISN 50uH 0,150-30,0MHz	PE001_05	3,1 dB	1
Disturbance Power 30-300 MHz	PE002_01	3,4 dB	1
Radiated Emission LAS 0,15-30MHz	PE003_01	1,5 dB	1
Radiated Emission CISPR 16 Loop Ant. 0,15-30MHz	PE004_01	3,8 dB	1
Radiated Emission CISPR 16 Bicon. Ant. 30-300MHz	PE004_02	3,3 dB	1
Radiated Emission CISPR 16 LogP. Ant. 300-1000MHz	PE004_03	3,1 dB	1
Radiated Emission CISPR 16 Horn Ant. 1-18GHz	PE004_04	3,6 dB	1
Human Exposure to electromagnetic fields	PE005_01	15,0 %	1
Harmonic current emissions test	PE006_01	10 mA + 1,6 %	1
Voltage fluctuation and flicker test	PE007_01	4,2 %	1
Radiated Immunity 80MHz-6GHz	PE102_XX	2,1 dB 0,82 V/m a 3V/m	1
Conducted Immunity 0,15-230MHz	PE105_XX	1,2 dB 0,44 V a 3V	1
AC Magnetic field	PE106_01	1,55 % 0,15 A/m a 10A/m	1
Pulse Magnetic field	PE107_01	6,24 % 18,7 A/m a 300A/m	1
Dumped Magnetic field	PE108_01	6,24 % 1,87 A/m a 30A/m	1
Common mode conducted immunity	PE112_01	2,20 % 0,22 V a 10V	1



Test	Test Setup	Expanded uncertainty	Note
Power/Spurious 9kHz-30MHz	PR001_01	3,8 dB	1
Power/Spurious ERP 30-1000MHz d=10m	PR001_02+03	4,3 dB	1
Misura della potenza EIRP 1-18GHz d=3m	PR001_04	4,3 dB	1
Misura della potenza EIRP 18-40GHz d=3m	PR001_05	5,5 dB	1
Frequency error	PR002_01+02	$< 1 \times 10^{-7}$	1
Timing zero span (1001pts.)	PR002_01+02	0,2 % SWT	1
Modulation bandwidth	PR002_01+02	$< 1 \times 10^{-7}$	1
Conducted RF power and spurious emission	PR002_01+02	1,2 dB	1
Adjacent channel power	PR002_01+02	1,2 dB	1
Blocking	PR002_01+02	1,2 dB	1

Note 1:

The expanded uncertainty reported according to EN55016-4-2:2011 is based on a standard uncertainty multiplied by a coverage factor of $K=2$, providing a level of confidence of $p = 95\%$

Note 2:

It has been demonstrated that the used test equipment meets the specified requirements in the standard with at least a 95% confidence, covering factor $k = 2$



7. Reference documents

Reference no.	Description
FCC Rules and Regulation Title 47 part 15:2017	--
ANSI C63.4:2014	American National Standard for Methods of Measuring of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz – 40 GHz
ANSI C63.10:2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
KDB 558074 D01 DTS Meas Guidance v04	Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under § 15.247
Internal Procedure PM001 rev. 3.0 (Quality Manual)	Measure Procedure
Internal procedure INC_M rev. 9.0 (Quality Manual)	Measurement uncertainty calculation



8. Deviation from test specification

None

9. Test case verdicts

Test case does not apply to the test object : N.A.

Test item does meet the requirement : Complies

Test item does not meet the requirement : Does not comply

Test not performed : N.E.

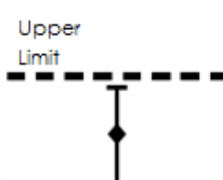
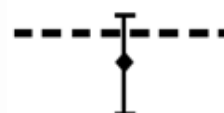


10. Results

In this clause tests results are reported.

Measurement uncertainty is in accordance with document CMC INC_M rev. 9.0.

Judgement of compliance:

Case 1	Case 2	Case 3	Case 4
			
The sample complies with the requirement.	The sample complies with the requirement.	The sample does not comply with the requirement.	The sample does not comply with the requirement.
The measurement results is within the specification limit when the measurement uncertainty is taken into account.	It is not possible to state compliance using a 95% coverage probability for the expanded uncertainty although the measurement result is below the limit.	It is not possible to state compliance using a 95% coverage probability for the expanded uncertainty also the measurement result is upper the limit.	The measurement results is outside the specification limit when the measurement uncertainty is taken into account.

In agreement with ILAC-G8: 03/2009 Guidelines on the Reporting of Compliance with Specification.



10.1 Antenna requirements

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.203
- Internal procedure PM001
- See clause 4 of this test report
- Test date: February 2nd, 2018
- Technician: A. Bertezolo

Test configuration

Test site:
Laboratory

Auxiliary equipment:
See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test equipment used

--
Measurement uncertainty: See clause 7 of this test report

Test specification

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.
The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.
The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31 (d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded

Environmental conditions

Temperature (°C)	Atmospheric pressure (kPa)	Relative humidity (%)
23	100	42

Result

Antenna Type	External R.F. power amplifier	Gain	Remarks	Results
Internal antenna	Not Present	3 dBi	--	Complies

Result: The requirements are met



10.2 Conducted emissions

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.207
- ANSI C63.10 cl. 6.2
- Internal procedure PM001
- See clause 4 of this test report
- Test date: June 18th, 2018
- Technician: A. Bertezolo

Test configuration and test method

Test site:
Shielded chamber

Auxiliary equipment:
See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test equipment used

CMC S010, CMC S200, CMC S206
Measurement uncertainty: See clause 7 of this test report

Test specification

Port: Main port
Frequency range: 150 kHz – 30 MHz
EUT – LISN distance: 80 cm
EUT – reference ground plane distance: 10 mm

Environmental conditions

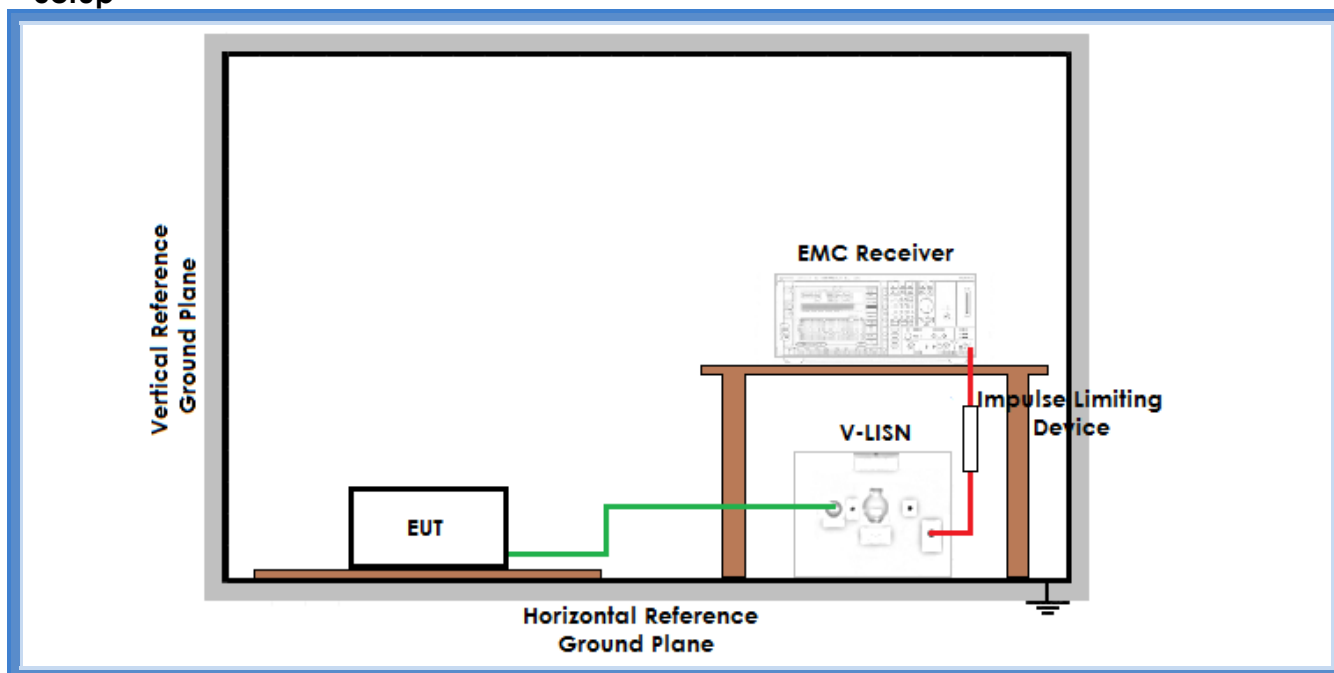
Temperature (°C)	Atmospheric pressure (kPa)	Relative humidity (%)
21	98	46

Acceptance limits

Frequency range (MHz)	dB(μV) Quasi-peak	dB(μV) Average
0,15 to 0,50	66 to 56	56 to 46
0,50 to 5	56	46
5 to 30	60	50



Setup



Result

WiFi b mode

Line	Graphs	Remarks	Result
N	G172055N04	--	Complies
L1	G172055N05	--	Complies

Remarks: Tests performed on frequency channel that provide the highest emission level

WiFi g mode

Line	Graphs	Remarks	Result
L1	G172055N06	--	Complies
N	G172055N07	--	Complies

Remarks: Tests performed on frequency channel that provide the highest emission level

WiFi n mode

Line	Graphs	Remarks	Result
N	G172055N08	--	Complies
L1	G172055N09	--	Complies

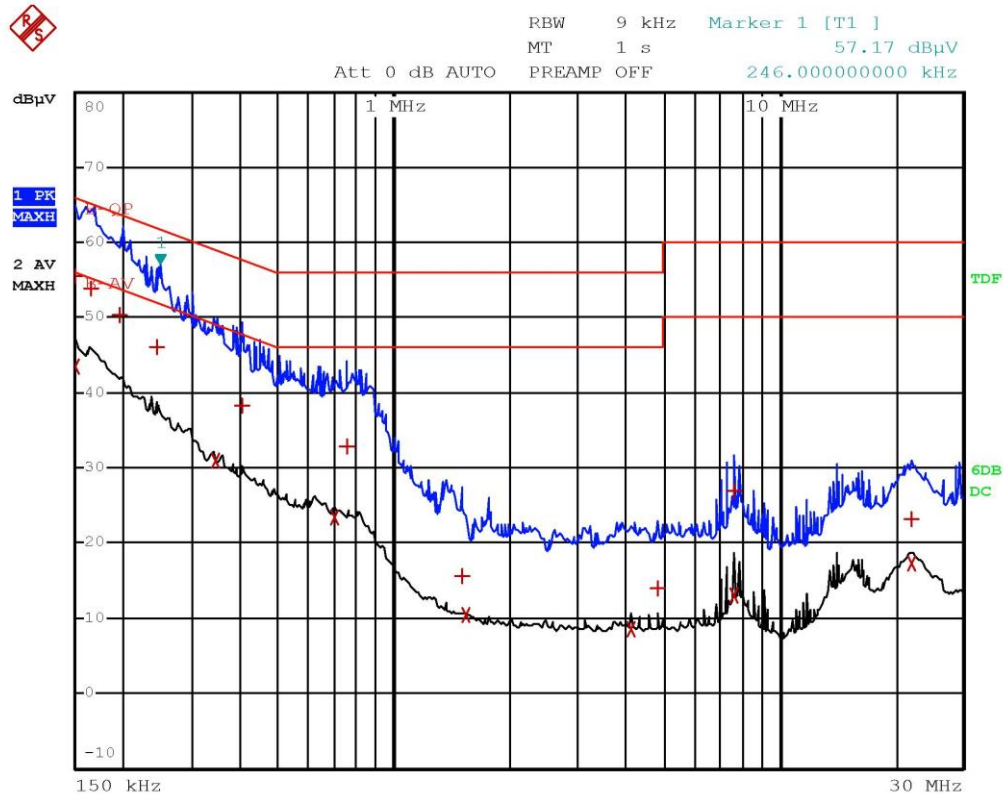
Remarks: Tests performed on frequency channel that provide the highest emission level

Graphs Legend

PK: Peak; QP [1s] (quasi-peak at 1 second) values are marked with a +
AV: Average; AV [1s] (average at 1 second) values are marked with a X



Graphs

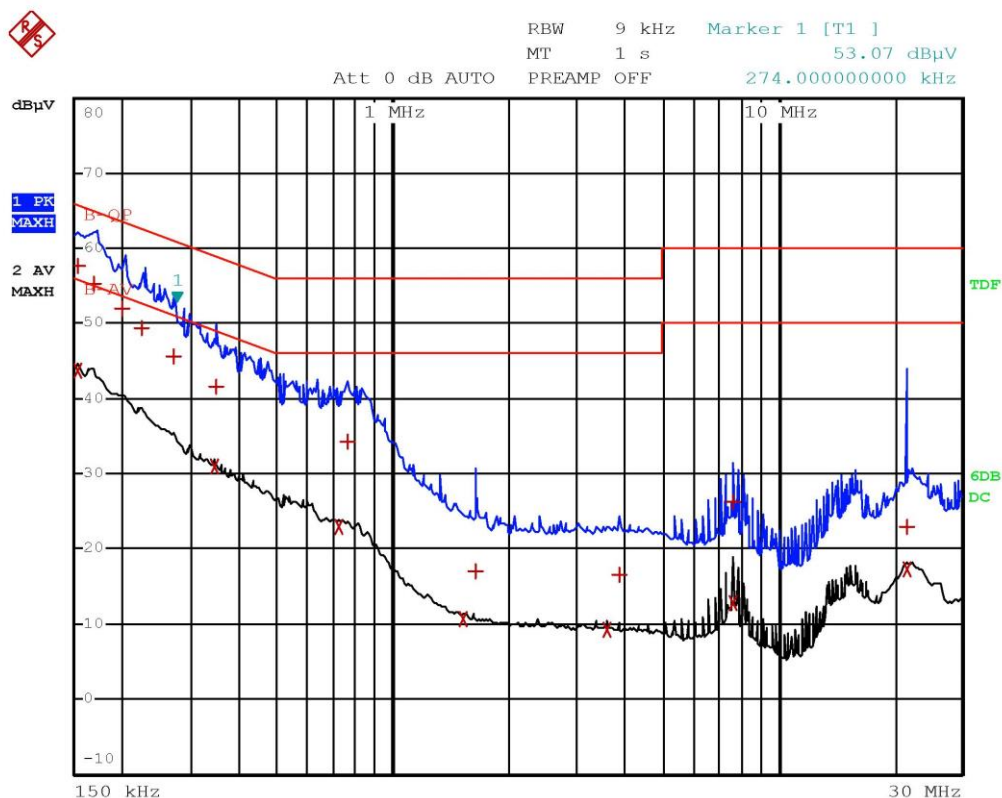


Bertezzo 172055N04



EDIT PEAK LIST (Final Measurement Results)				
Trace1:	B-QP			
Trace2:	B-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB	
2 Average	150 kHz	43.60	-12.39	
1 Quasi Peak	150 kHz	55.66	-10.33	
1 Quasi Peak	166 kHz	53.97	-11.18	
1 Quasi Peak	198 kHz	50.26	-13.42	
1 Quasi Peak	246 kHz	46.21	-15.67	
2 Average	342 kHz	31.00	-18.14	
1 Quasi Peak	402 kHz	38.26	-19.54	
2 Average	702 kHz	23.34	-22.66	
1 Quasi Peak	754 kHz	32.86	-23.13	
1 Quasi Peak	1.506 MHz	15.64	-40.35	
2 Average	1.542 MHz	10.41	-35.58	
2 Average	4.118 MHz	8.65	-37.34	
1 Quasi Peak	4.834 MHz	14.08	-41.91	
1 Quasi Peak	7.61 MHz	27.07	-32.92	
2 Average	7.61 MHz	13.08	-36.92	
2 Average	22.01 MHz	17.36	-32.63	
1 Quasi Peak	22.154 MHz	23.26	-36.73	

Bertezzolo 172055N04

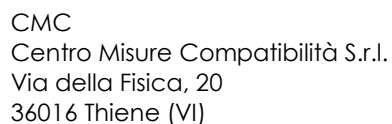


Bertezzo 172055N05

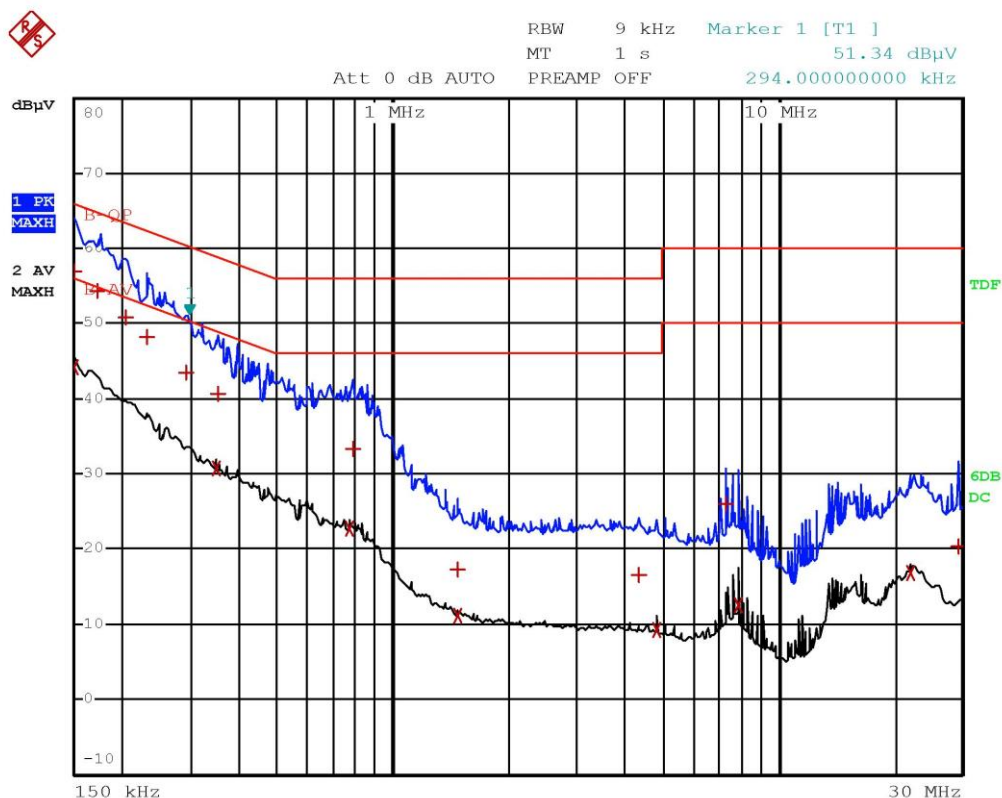


EDIT PEAK LIST (Final Measurement Results)				
Trace1:	B-QP			
Trace2:	B-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB	
2 Average	154 kHz	43.85	-11.92	
1 Quasi Peak	154 kHz	57.77	-8.00	
1 Quasi Peak	170 kHz	55.29	-9.66	
1 Quasi Peak	202 kHz	52.03	-11.49	
1 Quasi Peak	226 kHz	49.42	-13.17	
1 Quasi Peak	274 kHz	45.64	-15.35	
2 Average	342 kHz	30.93	-18.22	
1 Quasi Peak	346 kHz	41.64	-17.41	
2 Average	726 kHz	22.96	-23.03	
1 Quasi Peak	766 kHz	34.31	-21.68	
2 Average	1.53 MHz	10.59	-35.40	
1 Quasi Peak	1.642 MHz	16.94	-39.05	
2 Average	3.618 MHz	9.35	-36.64	
1 Quasi Peak	3.866 MHz	16.49	-39.50	
1 Quasi Peak	7.61 MHz	26.31	-33.68	
2 Average	7.61 MHz	12.74	-37.25	
1 Quasi Peak	21.566 MHz	22.95	-37.04	
2 Average	21.71 MHz	17.21	-32.78	

Bertezzo 172055N05



LAB N° 0168

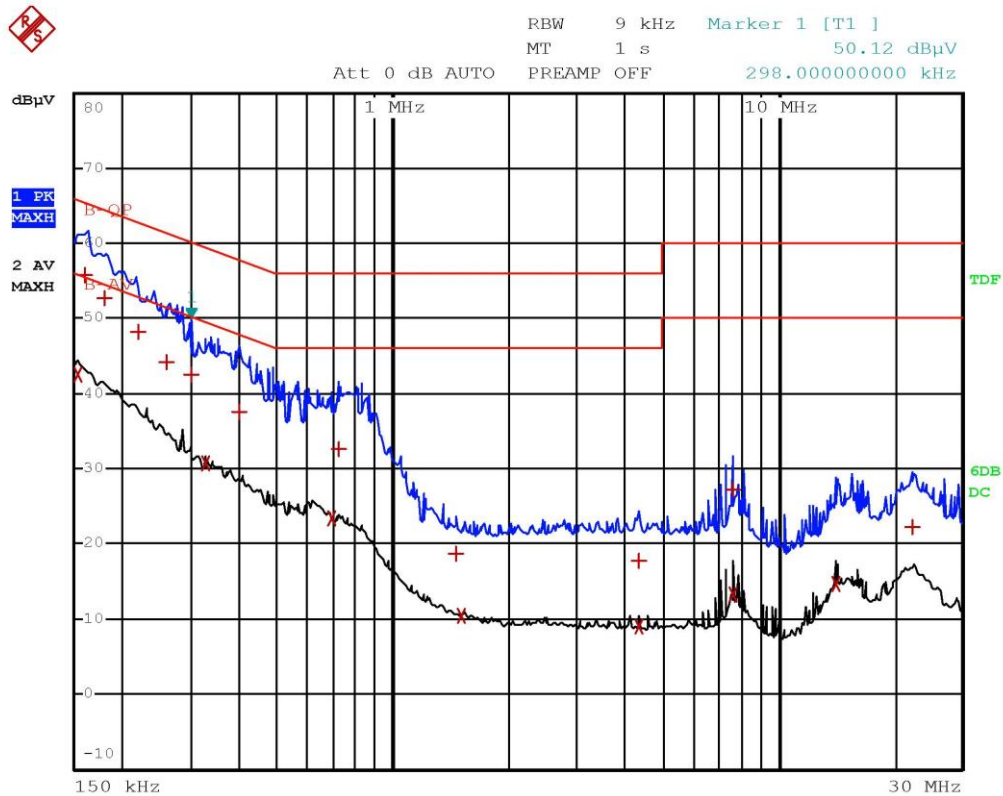


Bertezzo 172055N06



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	B-QP		
Trace2:	B-AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB
1 Quasi Peak	150 kHz	57.08	-8.91
2 Average	150 kHz	44.23	-11.76
1 Quasi Peak	174 kHz	54.31	-10.45
1 Quasi Peak	206 kHz	50.83	-12.53
1 Quasi Peak	230 kHz	48.28	-14.16
1 Quasi Peak	294 kHz	43.61	-16.79
2 Average	346 kHz	30.82	-18.23
1 Quasi Peak	350 kHz	40.66	-18.30
2 Average	774 kHz	22.71	-23.28
1 Quasi Peak	790 kHz	33.38	-22.61
2 Average	1.474 MHz	11.26	-34.74
1 Quasi Peak	1.482 MHz	17.19	-38.80
1 Quasi Peak	4.366 MHz	16.64	-39.35
2 Average	4.866 MHz	9.22	-36.77
1 Quasi Peak	7.362 MHz	25.97	-34.02
2 Average	7.862 MHz	12.61	-37.38
2 Average	22.098 MHz	16.92	-33.07
1 Quasi Peak	29.482 MHz	20.29	-39.70

Bertezzolo 172055N06

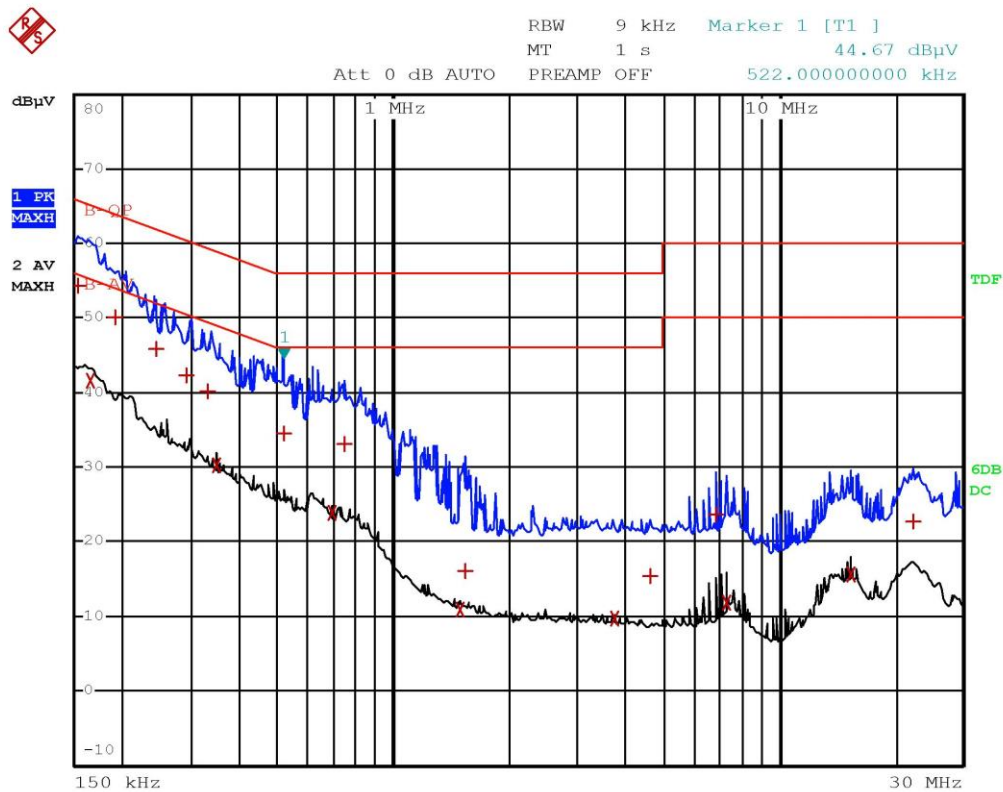


Bertezzolo 172055N07



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	B-QP		
Trace2:	B-AV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
2 Average	154 kHz	42.59	-13.18
1 Quasi Peak	162 kHz	55.78	-9.57
1 Quasi Peak	182 kHz	52.74	-11.65
1 Quasi Peak	218 kHz	48.11	-14.77
1 Quasi Peak	262 kHz	44.10	-17.26
1 Quasi Peak	298 kHz	42.56	-17.73
2 Average	326 kHz	30.76	-18.78
1 Quasi Peak	398 kHz	37.59	-20.30
2 Average	690 kHz	23.31	-22.69
1 Quasi Peak	726 kHz	32.53	-23.46
1 Quasi Peak	1.454 MHz	18.64	-37.35
2 Average	1.506 MHz	10.49	-35.50
1 Quasi Peak	4.366 MHz	17.74	-38.25
2 Average	4.366 MHz	9.01	-36.98
1 Quasi Peak	7.61 MHz	27.10	-32.90
2 Average	7.61 MHz	13.24	-36.75
2 Average	14.098 MHz	14.61	-35.38
1 Quasi Peak	22.398 MHz	22.12	-37.87

Bertezzo 172055N07

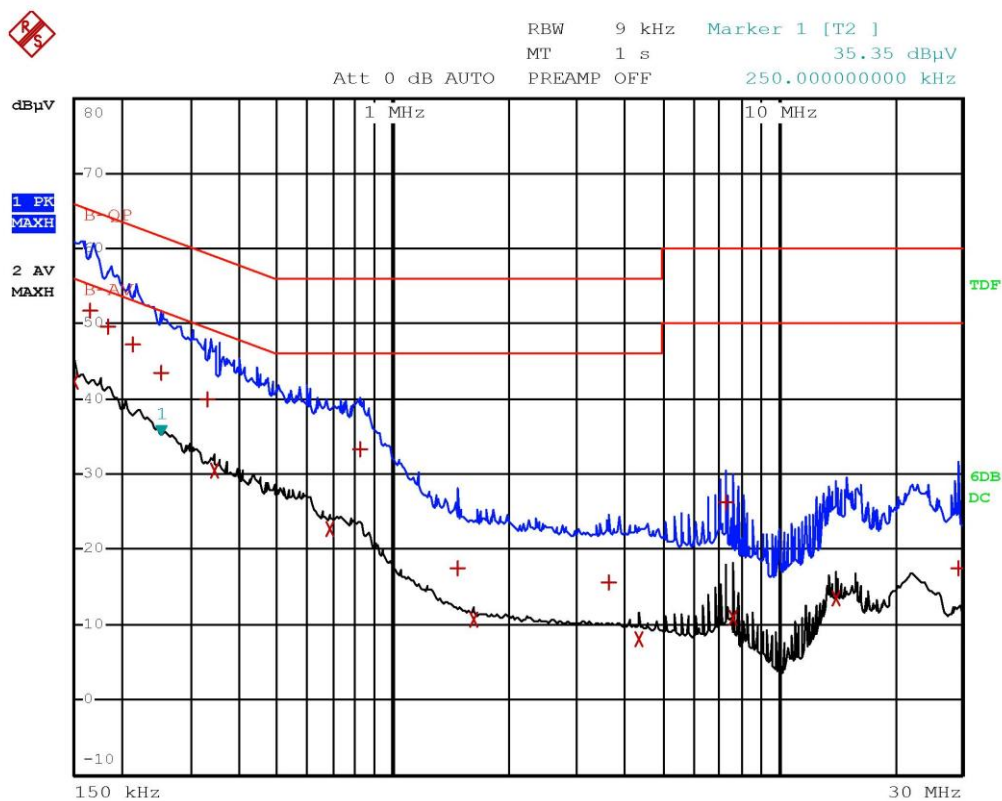
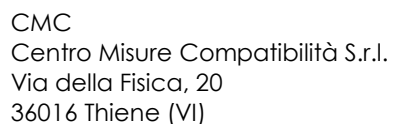


Bertezzolo 172055N08



EDIT PEAK LIST (Final Measurement Results)				
Trace1:	B-QP			
Trace2:	B-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB	
1 Quasi Peak	154 kHz	54.25	-11.52	
2 Average	166 kHz	41.65	-13.50	
1 Quasi Peak	194 kHz	50.02	-13.83	
1 Quasi Peak	242 kHz	45.95	-16.07	
1 Quasi Peak	294 kHz	42.41	-17.99	
1 Quasi Peak	334 kHz	40.10	-19.24	
2 Average	346 kHz	30.22	-18.83	
1 Quasi Peak	522 kHz	34.52	-21.47	
2 Average	690 kHz	23.85	-22.15	
1 Quasi Peak	750 kHz	33.05	-22.94	
2 Average	1.494 MHz	10.91	-35.08	
1 Quasi Peak	1.546 MHz	16.11	-39.88	
2 Average	3.746 MHz	9.79	-36.20	
1 Quasi Peak	4.626 MHz	15.43	-40.57	
1 Quasi Peak	6.862 MHz	23.71	-36.28	
2 Average	7.358 MHz	11.89	-38.10	
2 Average	15.35 MHz	15.52	-34.48	
1 Quasi Peak	22.37 MHz	22.63	-37.36	

Bertezzolo 172055N08



Bertezzo 172055N09



EDIT PEAK LIST (Final Measurement Results)				
Trace1:	B-QP			
Trace2:	B-AV			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB	
2 Average	150 kHz	42.30	-13.69	
1 Quasi Peak	166 kHz	51.87	-13.28	
1 Quasi Peak	186 kHz	49.76	-14.45	
1 Quasi Peak	214 kHz	47.31	-15.73	
1 Quasi Peak	250 kHz	43.57	-18.18	
1 Quasi Peak	334 kHz	39.86	-19.48	
2 Average	342 kHz	30.60	-18.54	
2 Average	686 kHz	22.60	-23.39	
1 Quasi Peak	818 kHz	33.43	-22.56	
1 Quasi Peak	1.478 MHz	17.55	-38.44	
2 Average	1.622 MHz	10.75	-35.24	
1 Quasi Peak	3.638 MHz	15.59	-40.40	
2 Average	4.366 MHz	8.14	-37.85	
1 Quasi Peak	7.362 MHz	26.27	-33.72	
2 Average	7.61 MHz	10.94	-39.05	
2 Average	14.098 MHz	13.59	-36.40	
1 Quasi Peak	29.478 MHz	17.56	-42.43	

Bertezzolo 172055N09

Result: The requirements are met



10.3 Emissions in restricted frequency bands and in unrestricted frequency bands

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part. 15.209
- KDB 558074 D01 DTS Meas Guidance v04 cl. 11 and 12
- ANSI C63.10 cl. 6.4, 6.5 and 6.6
- Internal procedure PM001
- See clause 4 of this test report
- Test date: February 15th, 2018
- Technician: A. Bertezzolo

Test configuration

Test site:
Semi-anechoic chamber

Auxiliary equipment:
See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test equipment used

CMC S164, CMC S241, CMC S251, CMC S290, CMC S298
Measurement uncertainty: See clause 7 of this test report

Test specification

Port: Enclosure
Frequency range: 30 – 26000 MHz
Antenna polarization: Horizontal (H) – Vertical (V)
EUT height about the floor:
80 cm for frequencies $\leq$ 1000 MHz
150 cm for frequencies $>$ 1000 MHz
EUT – Antenna distance:
10 m for frequencies $\leq$ 1000 MHz
3 m for frequencies $>$ 1000 MHz

Environmental conditions

Temperature (°C)	Atmospheric pressure (kPa)	Relative humidity (%)
22	100	42

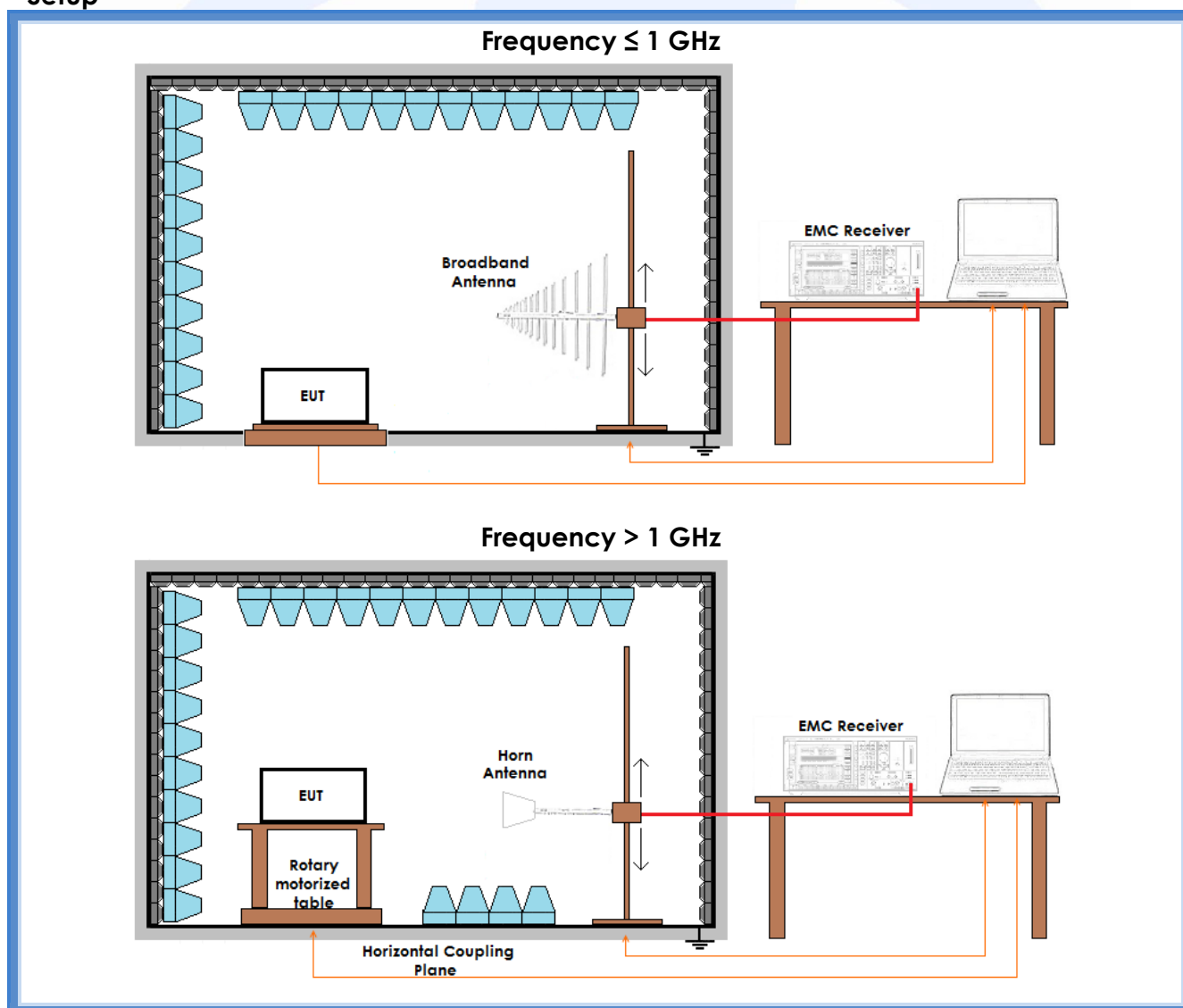


Acceptance limits

Frequency range (MHz)	Test distance (m)	Limits [dB(μV/m)]	
30 to 88	3	40	
88 to 216	3	43,5	
216 to 960	3	46,0	
Above 960	3	53,9	
	Test distance (m)	Linear average detector [dB(μV/m)]	Peak detector [dB(μV/m)]
Above 1000	3	53,9	73,9

Remarks: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

Setup





Result

WiFi b mode

Polarization	Frequency Range (MHz)	Graphs	Remarks	Result
V	300 – 1000	G17205501	Worst case	Complies
H	300 – 1000	G17205502	Worst case	Complies
H	30 – 300	G17205511	Worst case	Complies
V	30 – 300	G17205512	Worst case	Complies
H	1000 – 2400	G17205513	Lowest channel	Complies
V	1000 – 2400	G17205514	Lowest channel	Complies
H	1000 – 2400	G17205523	Medium channel	Complies
V	1000 – 2400	G17205524	Medium channel	Complies
V	1000 – 2400	G17205525	Highest channel	Complies
H	1000 – 2400	G17205526	Highest channel	Complies
H	2483,5 – 4000	G17205535	Highest channel	Complies
V	2483,5 – 4000	G17205536	Highest channel	Complies
V	2483,5 – 4000	G17205537	Medium channel	Complies
H	2483,5 – 4000	G17205538	Medium channel	Complies
H	2483,5 – 4000	G17205547	Lowest channel	Complies
V	2483,5 – 4000	G17205548	Lowest channel	Complies
H	4000 – 10000	G17205557	Lowest channel	Complies
V	4000 – 10000	G17205558	Lowest channel	Complies
V	4000 – 10000	G17205559	Medium channel	Complies
H	4000 – 10000	G17205560	Medium channel	Complies
H	4000 – 10000	G17205561	Highest channel	Complies
V	4000 – 10000	G17205562	Highest channel	Complies
V	10000 – 18000	G17205510U	Worst case	Complies
H	10000 – 18000	G17205510V	Worst case	Complies
H	18000 – 26000	G17205511H	Worst case	Complies
V	18000 – 26000	G17205511I	Worst case	Complies
Remarks: Measurements at frequencies lower than 1000 MHz have been performed with an EUT – antenna distance of 10 m. Measured values have been corrected with different conversion factors, based on the measuring distance provided by the standard. Peaks above the limits are caused by the nominal transmitting frequencies				



WiFi g mode

Polarization	Frequency Range (MHz)	Graphs	Remarks	Result
H	300 – 1000	G17205503	Worst case	Complies
V	300 – 1000	G17205504	Worst case	Complies
V	30 – 300	G17205509	Worst case	Complies
H	30 – 300	G17205510	Worst case	Complies
V	1000 – 2400	G17205515	Lowest channel	Complies
H	1000 – 2400	G17205516	Lowest channel	Complies
V	1000 – 2400	G17205521	Medium channel	Complies
H	1000 – 2400	G17205522	Medium channel	Complies
H	1000 – 2400	G17205527	Highest channel	Complies
V	1000 – 2400	G17205528	Highest channel	Complies
V	2483,5 – 4000	G17205533	Highest channel	Complies
H	2483,5 – 4000	G17205534	Highest channel	Complies
H	2483,5 – 4000	G17205539	Medium channel	Complies
V	2483,5 – 4000	G17205540	Medium channel	Complies
V	2483,5 – 4000	G17205545	Lowest channel	Complies
H	2483,5 – 4000	G17205546	Lowest channel	Complies
V	4000 – 10000	G17205563	Lowest channel	Complies
H	4000 – 10000	G17205564	Lowest channel	Complies
H	4000 – 10000	G17205565	Medium channel	Complies
V	4000 – 10000	G17205566	Medium channel	Complies
V	4000 – 10000	G17205567	Highest channel	Complies
H	4000 – 10000	G17205568	Highest channel	Complies
H	10000 – 18000	G17205510Z	Worst case	Complies
V	10000 – 18000	G17205511A	Worst case	Complies
V	18000 – 26000	G17205511F	Worst case	Complies
H	18000 – 26000	G17205511G	Worst case	Complies
Remarks: Measurements at frequencies lower than 1000 MHz have been performed with an EUT – antenna distance of 10 m. Measured values have been corrected with different conversion factors, based on the measuring distance provided by the standard. Peaks above the limits are caused by the nominal transmitting frequencies				



WiFi n mode

Polarization	Frequency Range (MHz)	Graphs	Remarks	Result
V	300 – 1000	G17205505	Worst case	Complies
H	300 – 1000	G17205506	Worst case	Complies
H	30 – 300	G17205507	Worst case	Complies
V	30 – 300	G17205508	Worst case	Complies
H	1000 – 2400	G17205517	Lowest channel	Complies
V	1000 – 2400	G17205518	Lowest channel	Complies
H	1000 – 2400	G17205519	Medium channel	Complies
V	1000 – 2400	G17205520	Medium channel	Complies
V	1000 – 2400	G17205529	Highest channel	Complies
H	1000 – 2400	G17205530	Highest channel	Complies
H	2483,5 – 4000	G17205531	Highest channel	Complies
V	2483,5 – 4000	G17205532	Highest channel	Complies
V	2483,5 – 4000	G17205541	Medium channel	Complies
H	2483,5 – 4000	G17205542	Medium channel	Complies
H	2483,5 – 4000	G17205543	Lowest channel	Complies
V	2483,5 – 4000	G17205544	Lowest channel	Complies
V	4000 – 10000	G17205551	Lowest channel	Complies
H	4000 – 10000	G17205552	Lowest channel	Complies
H	4000 – 10000	G17205553	Medium channel	Complies
V	4000 – 10000	G17205554	Medium channel	Complies
V	4000 – 10000	G17205555	Highest channel	Complies
H	4000 – 10000	G17205556	Highest channel	Complies
V	10000 – 18000	G17205511B	Worst case	Complies
H	10000 – 18000	G17205511C	Worst case	Complies
H	18000 – 26000	G17205511D	Worst case	Complies
V	18000 – 26000	G17205511E	Worst case	Complies
Remarks: Measurements at frequencies lower than 1000 MHz have been performed with an EUT – antenna distance of 10 m. Measured values have been corrected with different conversion factors, based on the measuring distance provided by the standard. Peaks above the limits are caused by the nominal transmitting frequencies				

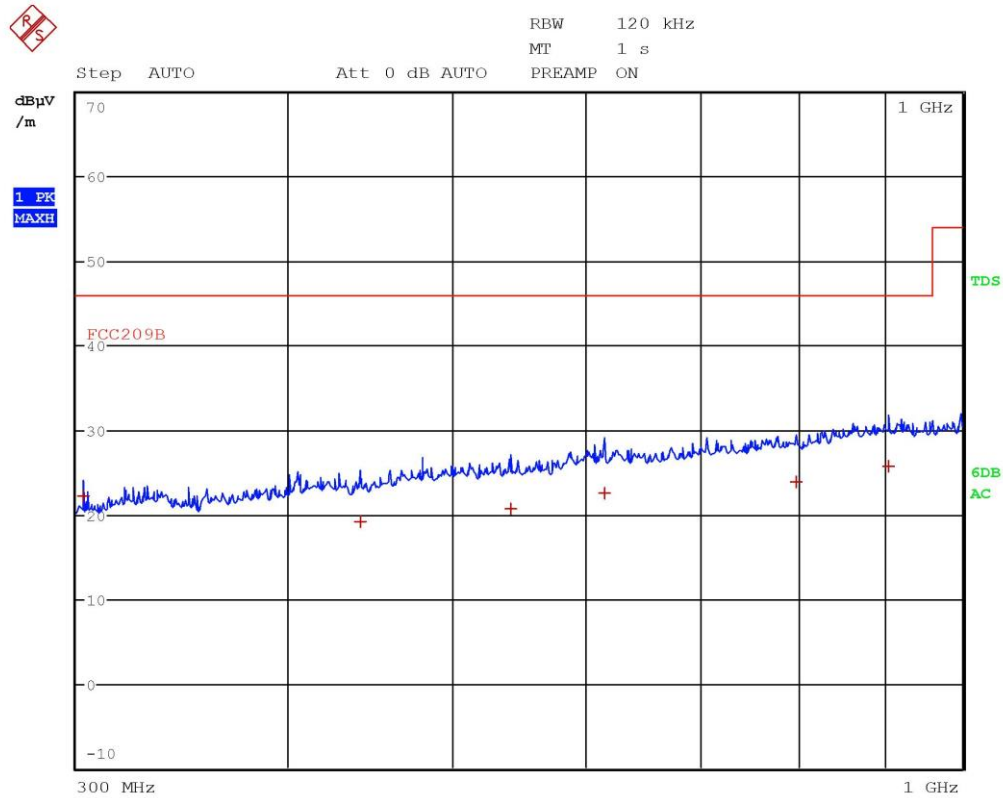
Graphs Legend

PK: Peak; QP [1s] (quasi-peak at 1 second) values are marked with a +

AV: Average; AV [1s] (average at 1 second) values are marked with a x



Graphs

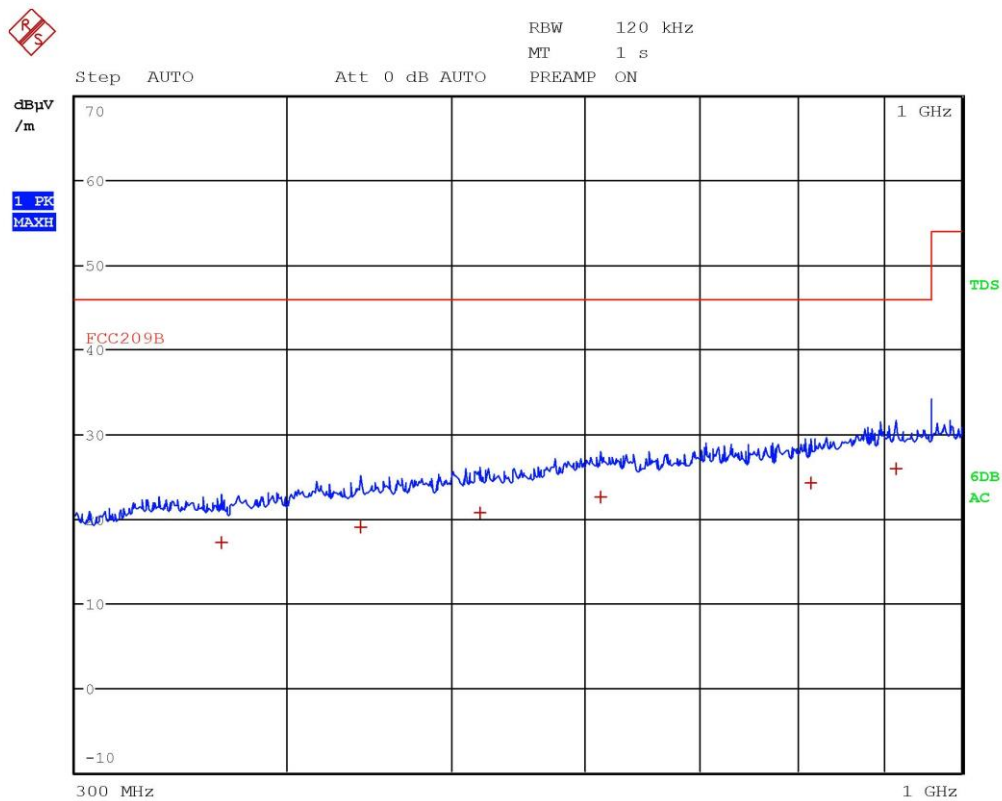


Bertezzo 17205501



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCC209B		
Trace2:	---		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV/m	DELTA LIMIT dB
1 Quasi Peak	303 MHz	22.20	-23.81
1 Quasi Peak	441.32 MHz	19.17	-26.84
1 Quasi Peak	541.88 MHz	20.59	-25.42
1 Quasi Peak	615.48 MHz	22.49	-23.52
1 Quasi Peak	797.96 MHz	23.89	-22.12
1 Quasi Peak	904.4 MHz	25.66	-20.35

Bertezzo 17205501

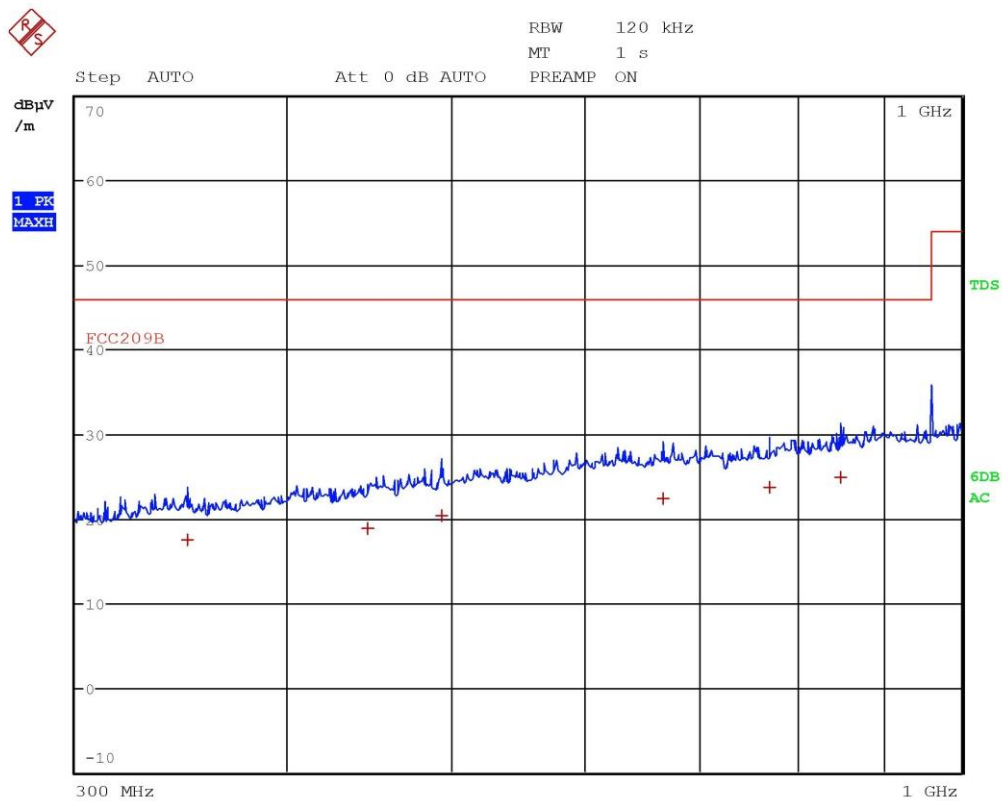


Bertezzo 17205502



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCC209B		
Trace2:	---		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV/m	DELTA LIMIT dB
1 Quasi Peak	366 MHz	17.15	-28.87
1 Quasi Peak	442.12 MHz	18.91	-27.10
1 Quasi Peak	519.76 MHz	20.66	-25.35
1 Quasi Peak	612.8 MHz	22.53	-23.48
1 Quasi Peak	815.52 MHz	24.18	-21.83
1 Quasi Peak	915.52 MHz	25.94	-20.07

Bertezzolo 17205502

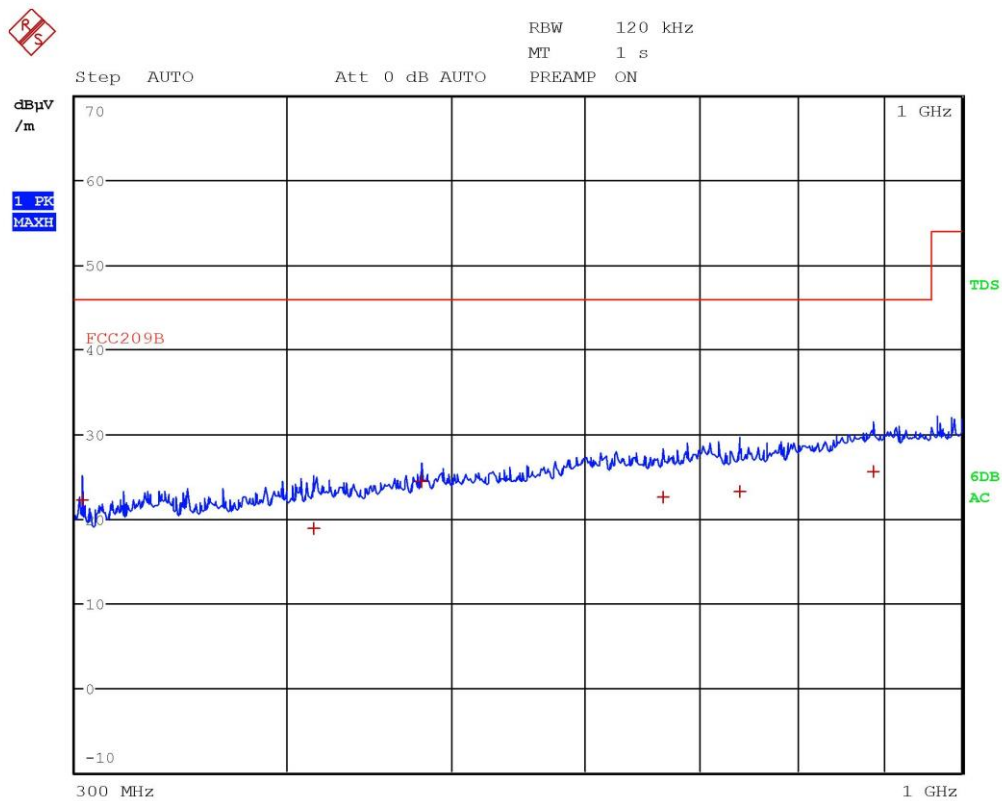


Bertezzo 17205503



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCC209B		
Trace2:	---		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV/m	DELTA LIMIT dB
1 Quasi Peak	349.56 MHz	17.56	-28.46
1 Quasi Peak	446.36 MHz	18.78	-27.23
1 Quasi Peak	493.28 MHz	20.27	-25.74
1 Quasi Peak	666.88 MHz	22.39	-23.62
1 Quasi Peak	771 MHz	23.71	-22.30
1 Quasi Peak	848.84 MHz	24.81	-21.20

Bertezzolo 17205503

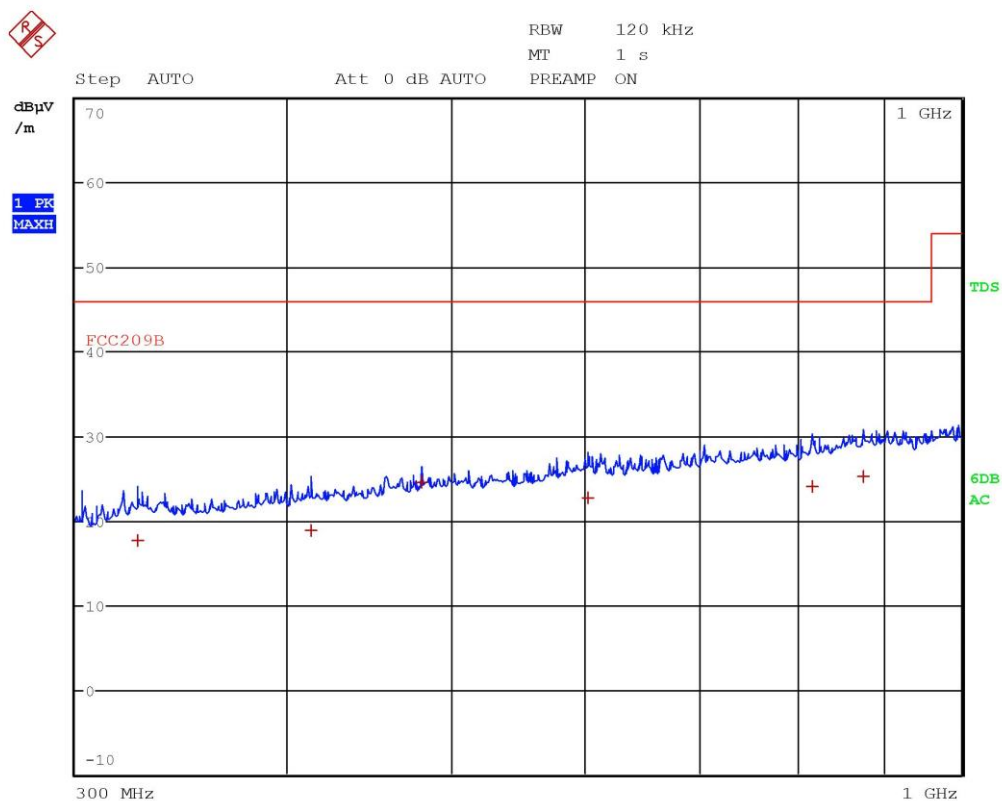


Bertezzolo 17205504



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCC209B		
Trace2:	---		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV/m	DELTA LIMIT dB
1 Quasi Peak	303 MHz	22.21	-23.80
1 Quasi Peak	414.44 MHz	18.81	-27.20
1 Quasi Peak	480.04 MHz	24.38	-21.64
1 Quasi Peak	666.84 MHz	22.45	-23.56
1 Quasi Peak	740.68 MHz	23.11	-22.90
1 Quasi Peak	886.96 MHz	25.48	-20.53

Bertezzolo 17205504

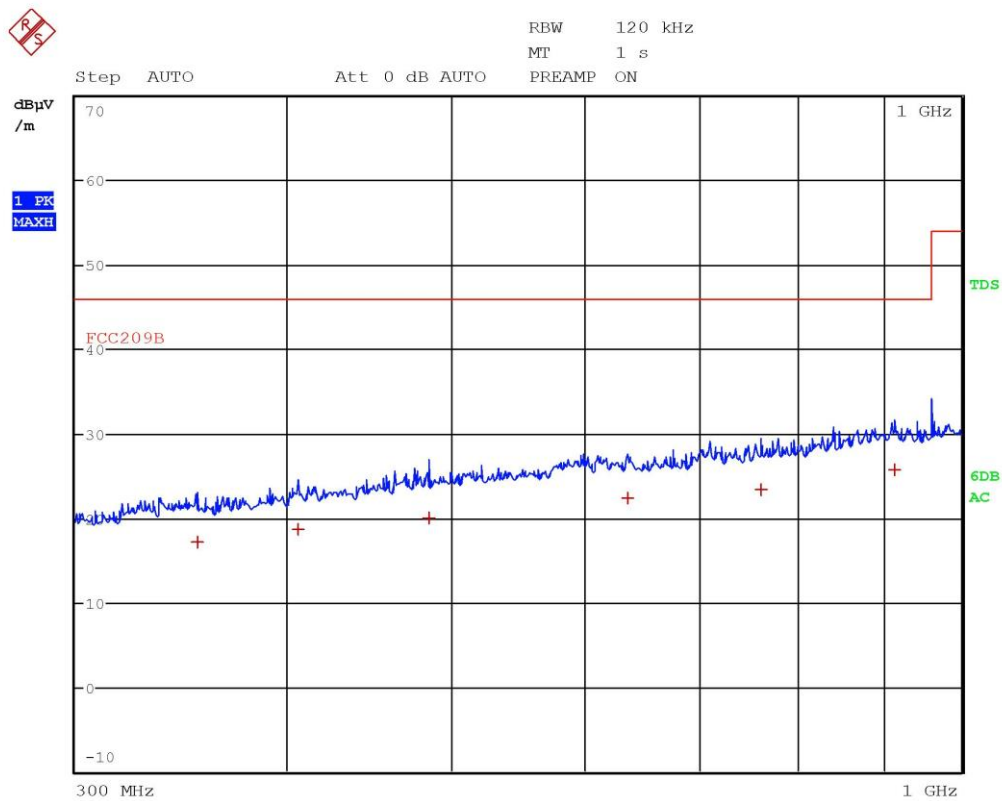


Bertezzolo 17205505



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCC209B		
Trace2:	---		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV/m	DELTA LIMIT dB
1 Quasi Peak	326.36 MHz	17.67	-28.34
1 Quasi Peak	413.24 MHz	18.78	-27.23
1 Quasi Peak	480.04 MHz	24.52	-21.49
1 Quasi Peak	601.72 MHz	22.63	-23.38
1 Quasi Peak	817.12 MHz	23.98	-22.03
1 Quasi Peak	874.8 MHz	25.13	-20.88

Bertezzolo 17205505

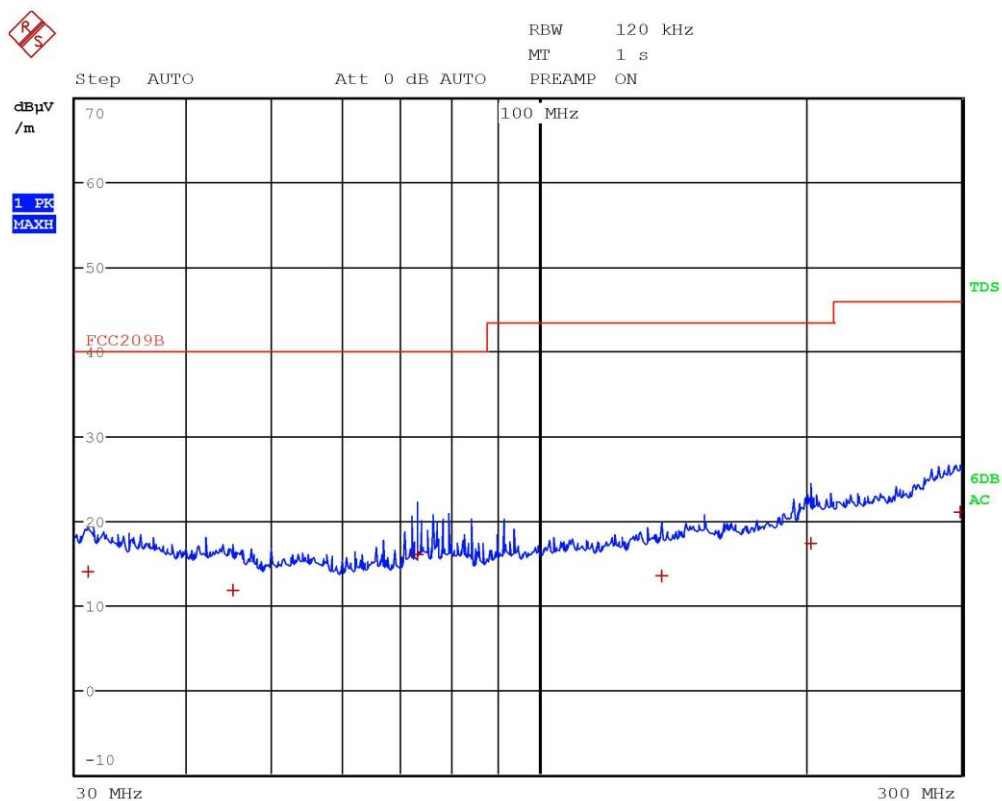


Bertezzolo 17205506



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCC209B		
Trace2:	---		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV/m	DELTA LIMIT dB
1 Quasi Peak	354.44 MHz	17.15	-28.86
1 Quasi Peak	405.72 MHz	18.67	-27.34
1 Quasi Peak	484.88 MHz	20.04	-25.97
1 Quasi Peak	635.08 MHz	22.36	-23.65
1 Quasi Peak	761.4 MHz	23.28	-22.73
1 Quasi Peak	912.64 MHz	25.73	-20.29

Bertezzolo 17205506

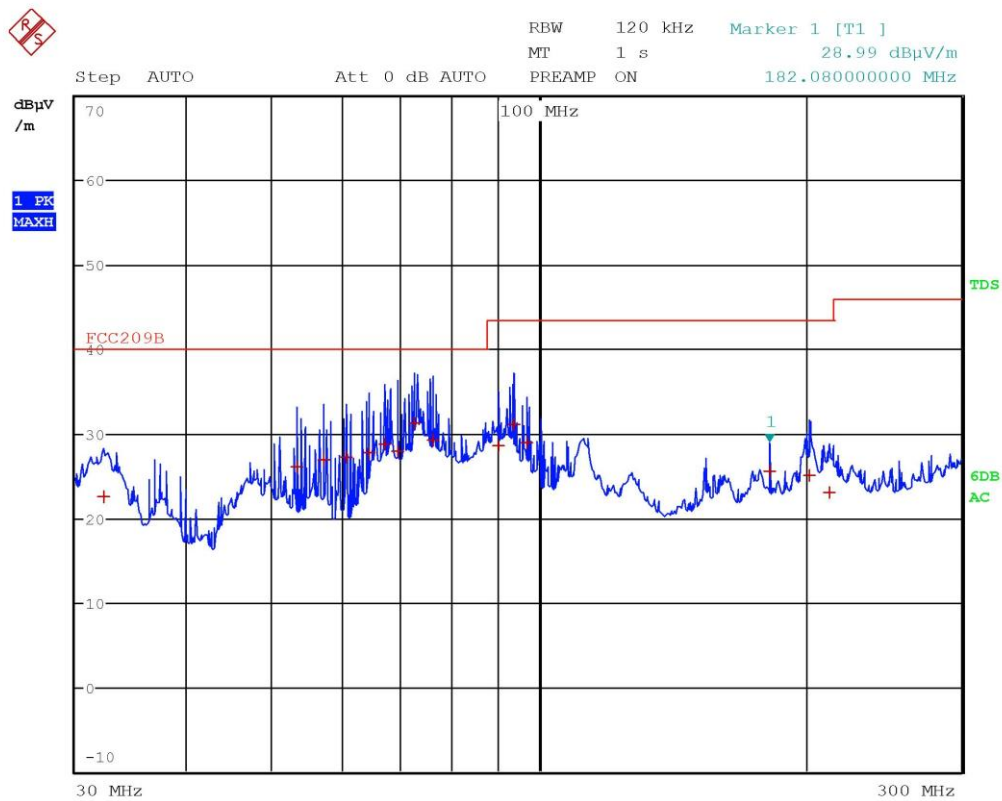


Bertezzolo 17205507



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCC209B		
Trace2:	---		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV/m	DELTA LIMIT dB
1 Quasi Peak	30.96 MHz	14.02	-25.97
1 Quasi Peak	45.2 MHz	11.76	-28.23
1 Quasi Peak	73 MHz	16.01	-23.99
1 Quasi Peak	137.88 MHz	13.41	-30.11
1 Quasi Peak	203.12 MHz	17.28	-26.23
1 Quasi Peak	298.64 MHz	21.06	-24.95

Bertezzolo 17205507



Bertezzo 17205508