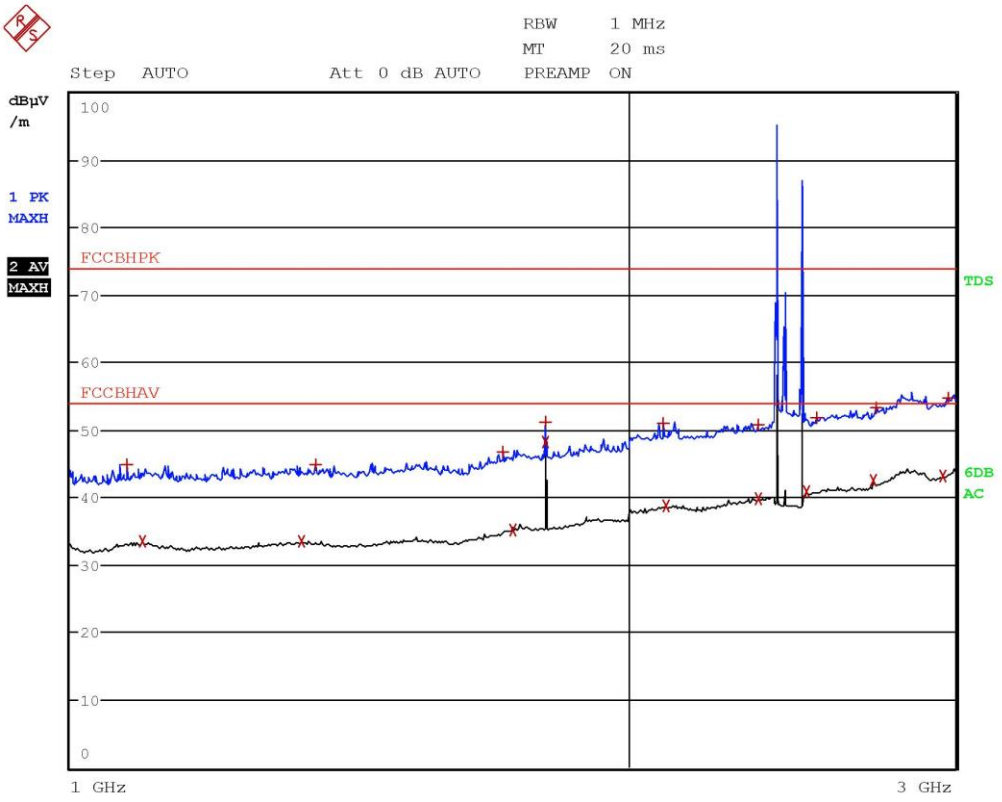


Gandini 20181903

CMC Centro Misure Compatibilità S.r.l.

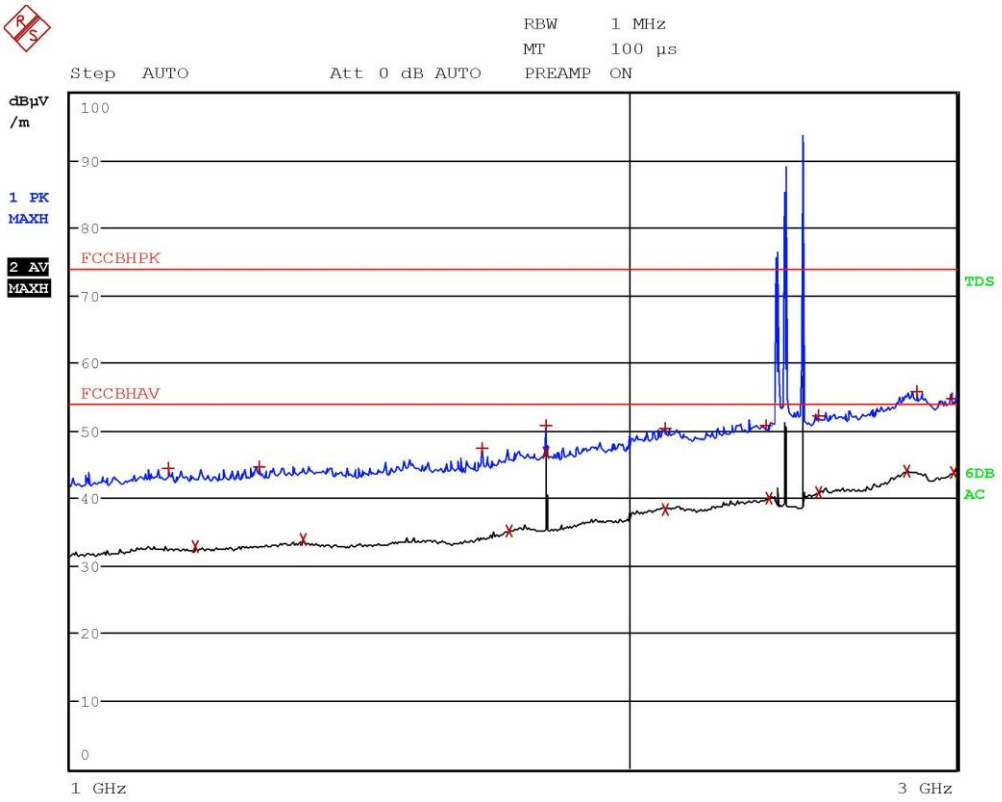
EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	1.0724 GHz	44.85	-29.12
2 Average	1.0936 GHz	33.51	-20.46
2 Average	1.3312 GHz	33.58	-20.39
1 Max Peak	1.3556 GHz	44.82	-29.15
1 Max Peak	1.7112 GHz	46.79	-27.18
2 Average	1.7312 GHz	35.11	-18.87
1 Max Peak	1.8048 GHz	51.25	-22.72
2 Average	1.8048 GHz	48.29	-5.68
1 Max Peak	2.086 GHz	50.86	-23.11
2 Average	2.0936 GHz	38.77	-15.20
1 Max Peak	2.3464 GHz	50.73	-23.24
2 Average	2.348 GHz	39.74	-14.23
2 Average	2.4915 GHz	40.78	-13.19
1 Max Peak	2.5223 GHz	51.85	-22.12
2 Average	2.7071 GHz	42.49	-11.48
1 Max Peak	2.7183 GHz	53.21	-20.76
2 Average	2.9519 GHz	43.08	-10.89
1 Max Peak	2.9715 GHz	54.73	-19.24

Gandini 20181903

CMC Centro Misure Compatibilità S.r.l.



Gandini 20181904

CMC Centro Misure Compatibilità S.r.l.

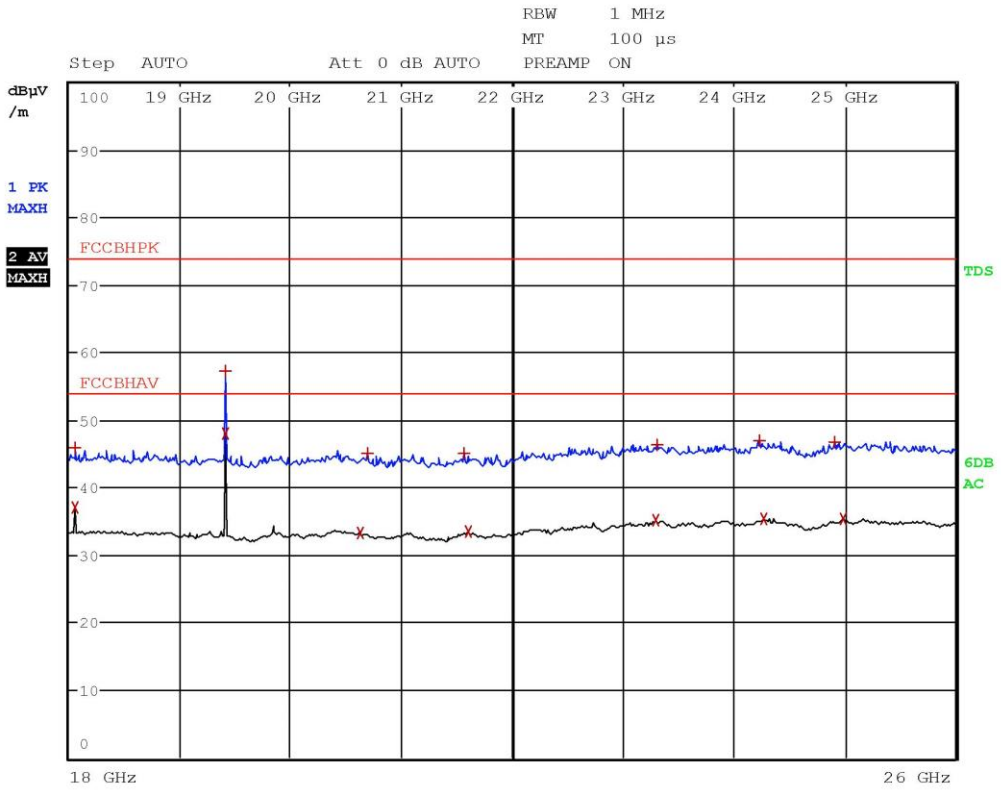
EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

	TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1	Max Peak	1.1296 GHz	44.51	-29.46
2	Average	1.1664 GHz	32.95	-21.02
1	Max Peak	1.2632 GHz	44.72	-29.26
2	Average	1.3344 GHz	33.95	-20.02
1	Max Peak	1.666 GHz	47.38	-26.60
2	Average	1.722 GHz	35.26	-18.71
1	Max Peak	1.8044 GHz	50.71	-23.26
2	Average	1.8044 GHz	46.71	-7.26
1	Max Peak	2.09 GHz	50.33	-23.64
2	Average	2.0912 GHz	38.35	-15.62
1	Max Peak	2.368 GHz	50.71	-23.26
2	Average	2.3776 GHz	39.93	-14.04
2	Average	2.5287 GHz	40.86	-13.11
1	Max Peak	2.5291 GHz	52.12	-21.85
2	Average	2.8223 GHz	44.11	-9.86
1	Max Peak	2.8559 GHz	55.82	-18.15
1	Max Peak	2.9823 GHz	54.65	-19.32
2	Average	2.9895 GHz	43.85	-10.12

Gandini 20181904

CMC Centro Misure Compatibilità S.r.l.



Gandini 20181905

CMC Centro Misure Compatibilità S.r.l.

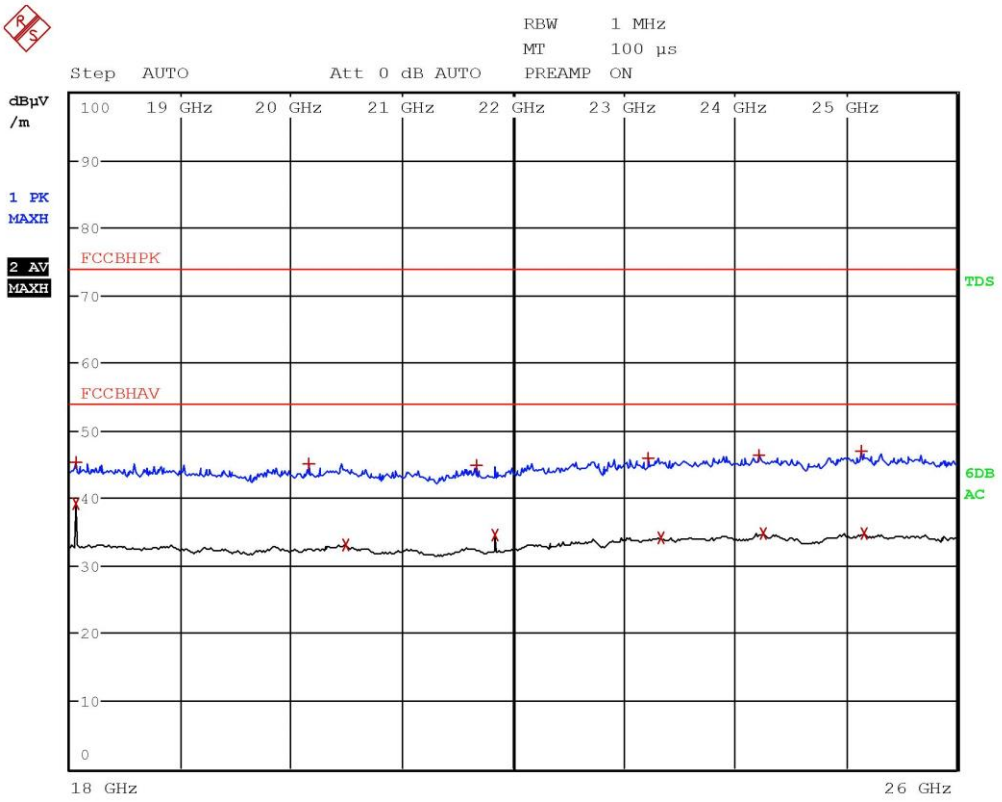
EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	18.0452 GHz	45.83	-28.14
2 Average	18.0456 GHz	37.00	-16.97
2 Average	19.4092 GHz	47.93	-6.04
1 Max Peak	19.4096 GHz	57.15	-16.82
2 Average	20.6236 GHz	33.36	-20.61
1 Max Peak	20.6944 GHz	45.13	-28.84
1 Max Peak	21.5616 GHz	45.01	-28.96
2 Average	21.6028 GHz	33.48	-20.49
2 Average	23.2892 GHz	35.17	-18.80
1 Max Peak	23.308 GHz	46.35	-27.62
1 Max Peak	24.2328 GHz	47.03	-26.94
2 Average	24.2724 GHz	35.40	-18.57
1 Max Peak	24.9116 GHz	46.75	-27.22
2 Average	24.9884 GHz	35.47	-18.50

Gandini 20181905

CMC Centro Misure Compatibilità S.r.l.



Gandini 20181906

CMC Centro Misure Compatibilità S.r.l.

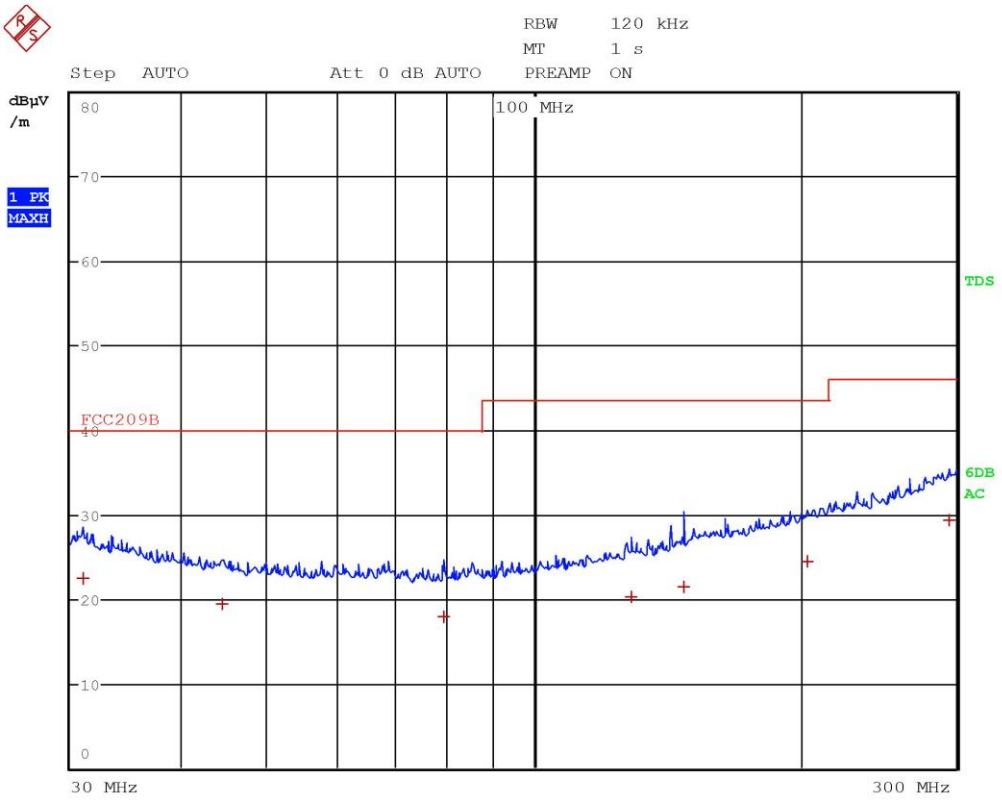
EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	18.046 GHz	45.34	-28.63
2 Average	18.046 GHz	39.28	-14.69
1 Max Peak	20.1472 GHz	45.00	-28.97
2 Average	20.4852 GHz	33.09	-20.88
1 Max Peak	21.662 GHz	44.83	-29.14
2 Average	21.8368 GHz	34.55	-19.42
1 Max Peak	23.218 GHz	45.89	-28.08
2 Average	23.3312 GHz	34.16	-19.81
1 Max Peak	24.2224 GHz	46.30	-27.67
2 Average	24.2544 GHz	34.72	-19.25
1 Max Peak	25.1376 GHz	47.01	-26.96
2 Average	25.16 GHz	34.73	-19.24

Gandini 20181906

CMC Centro Misure Compatibilità S.r.l.



Gandini 20181907

CMC Centro Misure Compatibilità S.r.l.

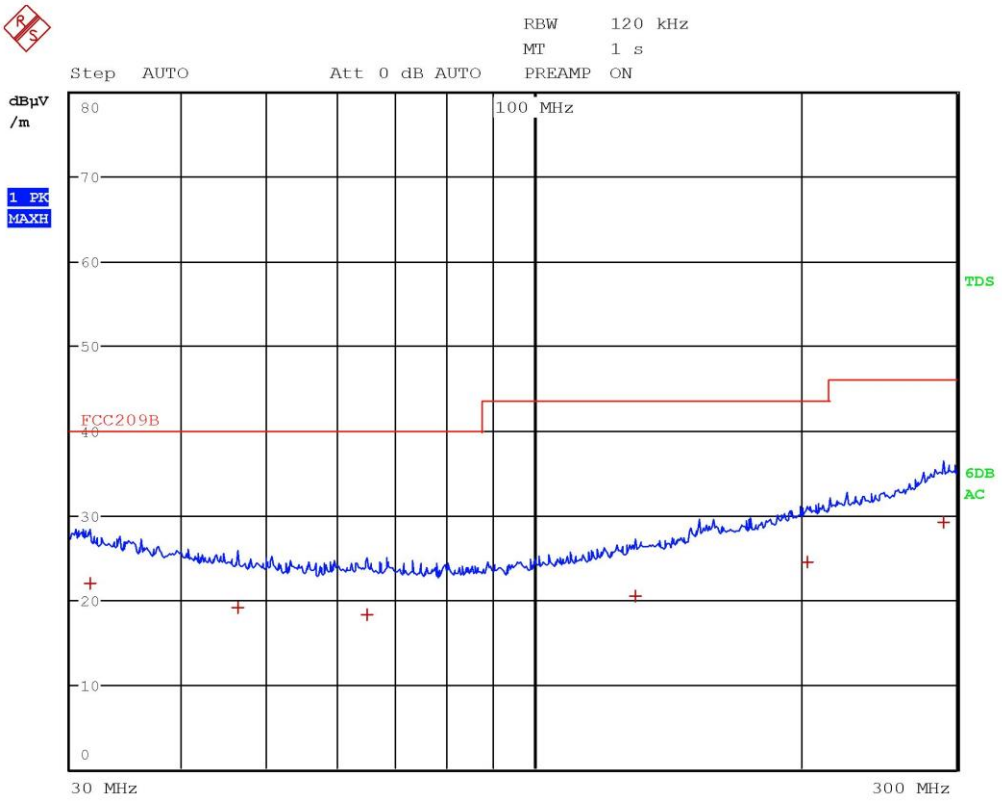
EDIT PEAK LIST (Final Measurement Results)

Trace1:	FCC209B
Trace2:	---
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Quasi Peak	30.92 MHz	22.39	-17.60
1 Quasi Peak	44.52 MHz	19.48	-20.52
1 Quasi Peak	79.04 MHz	17.88	-22.11
1 Quasi Peak	128.92 MHz	20.30	-23.21
1 Quasi Peak	147.84 MHz	21.36	-22.15
1 Quasi Peak	203.84 MHz	24.50	-19.01
1 Quasi Peak	294.72 MHz	29.34	-16.67

Gandini 20181907

CMC Centro Misure Compatibilità S.r.l.



Gandini 20181908

CMC Centro Misure Compatibilità S.r.l.

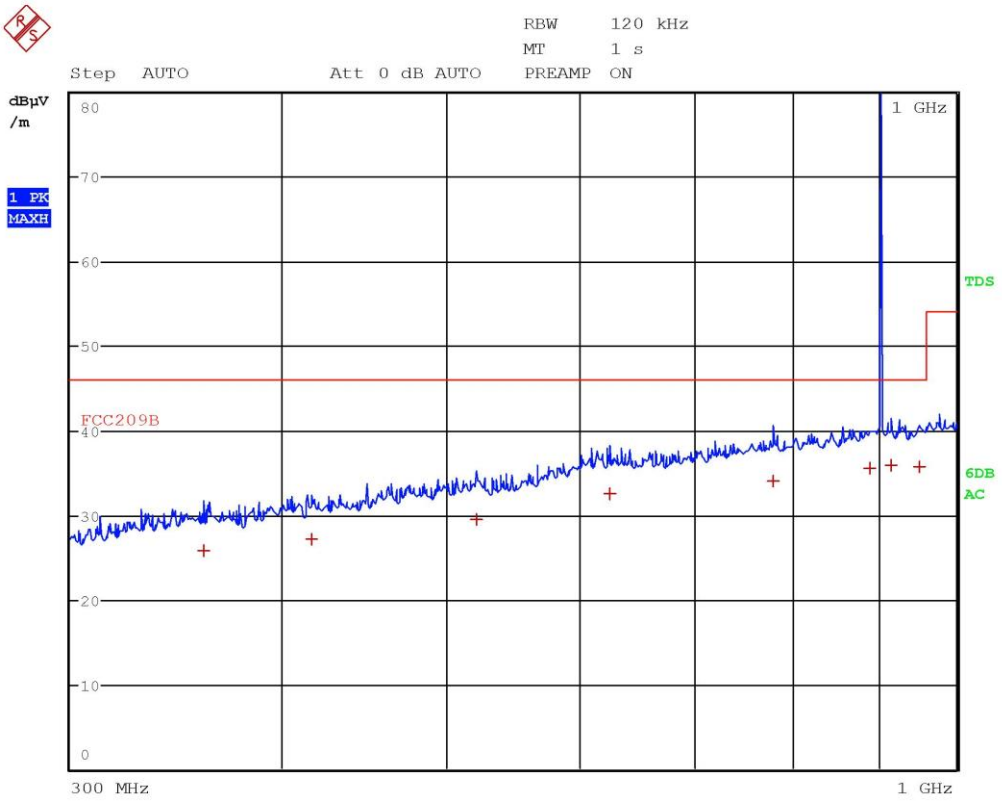
EDIT PEAK LIST (Final Measurement Results)

Trace1:	FCC209B
Trace2:	---
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Quasi Peak	31.56 MHz	21.99	-18.00
1 Quasi Peak	46.32 MHz	19.02	-20.97
1 Quasi Peak	64.92 MHz	18.30	-21.69
1 Quasi Peak	130.44 MHz	20.38	-23.13
1 Quasi Peak	203.44 MHz	24.49	-19.02
1 Quasi Peak	289.92 MHz	29.09	-16.92

Gandini 20181908

CMC Centro Misure Compatibilità S.r.l.



Gandini 20181909

CMC Centro Misure Compatibilità S.r.l.

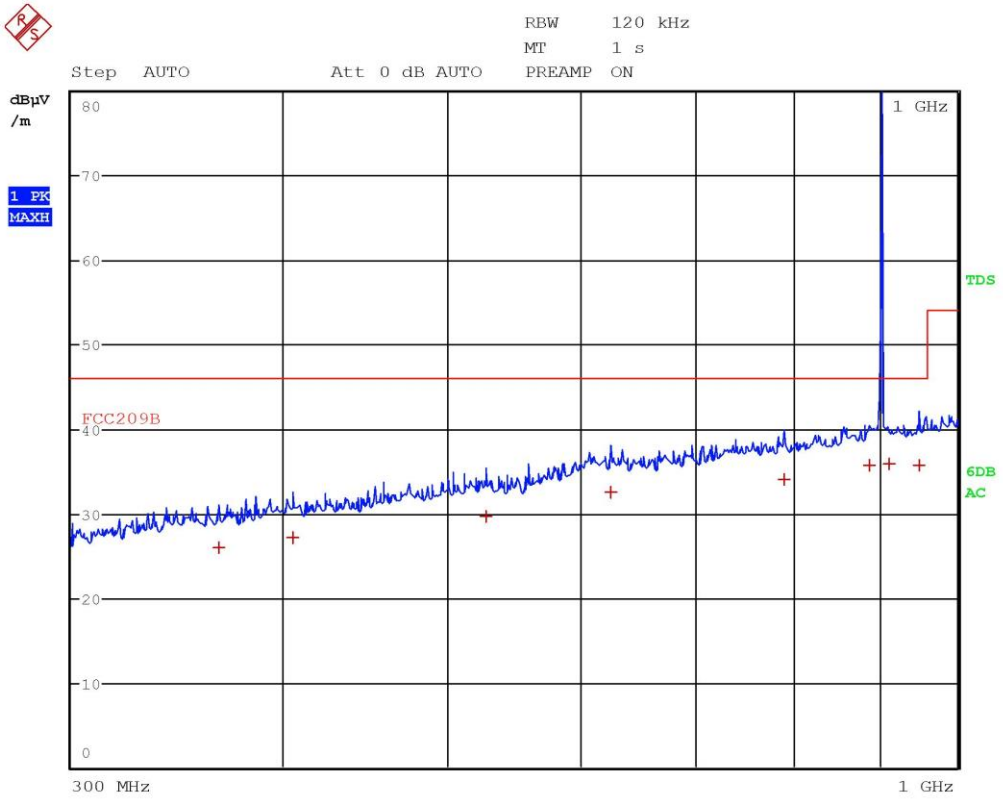
EDIT PEAK LIST (Final Measurement Results)

Trace1:	FCC209B
Trace2:	---
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Quasi Peak	359.84 MHz	25.84	-20.17
1 Quasi Peak	416.68 MHz	27.18	-18.83
1 Quasi Peak	520.4 MHz	29.57	-16.44
1 Quasi Peak	624.8 MHz	32.45	-13.56
1 Quasi Peak	779.04 MHz	34.03	-11.98
1 Quasi Peak	889.32 MHz	35.56	-10.45
1 Quasi Peak	914.4 MHz	35.85	-10.16
1 Quasi Peak	950.64 MHz	35.68	-10.33

Gandini 20181909

CMC Centro Misure Compatibilità S.r.l.



Gandini 20181910

CMC Centro Misure Compatibilità S.r.l.

EDIT PEAK LIST (Final Measurement Results)

Trace1:	FCC209B
Trace2:	---
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Quasi Peak	366.32 MHz	25.94	-20.07
1 Quasi Peak	405.44 MHz	27.11	-18.90
1 Quasi Peak	527.08 MHz	29.64	-16.38
1 Quasi Peak	624.12 MHz	32.47	-13.54
1 Quasi Peak	789.76 MHz	33.98	-12.03
1 Quasi Peak	887.92 MHz	35.67	-10.34
1 Quasi Peak	912.08 MHz	35.91	-10.10
1 Quasi Peak	949.6 MHz	35.76	-10.25

Gandini 20181910

CMC Centro Misure Compatibilità S.r.l.

Attachment 1

Instruments list

Id. number	*Manufacturer*	*Model*	*Description*	*Serial number*	*Last calibration*	*Due date calibration*
CMC S010	Rohde & Schwarz	ESH3-Z2	Impulses Limiting Device	- - -	January '20	January '21
CMC S108	EMCO	3115	Horn Antenna	9811-5622	June '19	June '22
CMC S127	Schaffner	HLA6120	Loop Antenna	1191	November '18	November '23
CMC S164	Rohde & Schwarz	ESU26	EMC interference receiver	100052	January '20	January '21
CMC S200	Schwarzbeck	NSLK 8128	V-LISN	8128-273	January '20	January '21
CMC S206	Rohde & Schwarz	ESCI 7	EMC Receiver 9KHz-7GHz	100781	January '20	January '21
CMC S260	CMC	Wfr_N	Shielded Cable	Wfr_ant10-1	November '20	November '21
CMC S261	CMC	Wfr_N	Shielded Cable	Wfr_ant20-1	November '20	November '21
CMC S262	CMC	Wfr_N_fix	Shielded Cable	Wfr_fix32-1	November '20	November '21
CMC S263	CMC	Wfr_N_fix	Shielded Cable	Wfr_fix31-1	November '20	November '21
CMC S264	CMC	Wfr_N	Shielded Cable	Wfr_ext03-1	November '20	November '21
CMC S271	Schwarzbeck	BBA 9106 + VHBB 9124	Biconical Antenna (30-300MHz)	831	June '19	June '22
CMC S287	Schwarzbeck	VUSLP 9111B	Log-periodic Antenna (200 MHz-3Ghz)	9111B-203	June '19	June '22
CMC S288	CMC	W_sma_white	Joint Shielded Cable	W_001	November '20	November '21
CMC S295	Rohde & Schwarz	FSW43	Spectrum Analyzer 43GHz	104059	November '19	November '22

CMC Centro Misure Compatibilità S.r.l.

Attachment 1

Measurement uncertainty

Test	*Test Setup*	*Expanded uncertainty*	*Note*
Conducted emission CISPR 16 LISN 50uH 0,009-0,0150 MHz	PE001_01	3,4 dB	1
Conducted emission CISPR 16 LISN 50uH 0,150-30,0 MHz	PE001_01	3,0 dB	1
Conducted emission CISPR 16 Voltage Probe 0,15-30 MHz	PE001_02	2,9 dB	1
Conducted emission CISPR 16 Current Probe 0,15-30 MHz	PE001_03	2,6 dB	1
Conducted emission CISPR 16 ISN 0,15-30 MHz	PE001_04	4,7 dB	1
Clic CISPR 16 LISN 50uH 0,150-30,0 MHz	PE001_05	2,9 dB	1
Radiated Emission CDNE 30-300 MHz	PE001_06	3,3 dB	1
Disturbance Power 30-300 MHz	PE002_01	3,6 dB	1
Radiated Emission LAS 0,15-30 MHz	PE003_01	2,0 dB	1
Radiated Emission CISPR 16 Loop Ant. 0,15-30 MHz	PE004_01	4,0 dB	1
Radiated Emission CISPR 16 Bicon. Ant. 30-300 MHz	PE004_02	3,9 dB	1
Radiated Emission CISPR 16 LogP. Ant. 300-1000 MHz	PE004_03	3,8 dB	1
Radiated Emission CISPR 16 Horn Ant. 1-18 GHz	PE004_04	4,2 dB	1
Human Exposure to electromagnetic fields	PE005_01	23,6 %	1
Harmonics	PE006_01	10 mA + 2,6 %	1
Flicker	PE007_01	4,79 %	1
Radiated Immunity 80 MHz - 6 GHz	PE102_XX	1,95 dB 0,75 V/m a 3V/m	1
Conducted Immunity 0,15 - 230 MHz	PE105_XX	1,20 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	6,25 % 18,7 A/m a 300A/m	1
Dumped Magnetic field	PE108_01	6,25 % 1,87 A/m a 30A/m	1
Common mode conducted immunity	PE112_01	2,21 % 0,22 V a 10V	1

CMC Centro Misure Compatibilità S.r.l.

Attachment 1

Test	Test Setup	Expanded uncertainty	Note
Power/Spurious 9kHz-30MHz	PR001_01	4,0 dB	1
Power/Spurious ERP 30-1000MHz d=10m	PR001_02+03	4,7 dB	1
Misura della potenza EiRP 1-18GHz d=3m	PR001_04+05	4,7 dB	1
Misura della potenza EiRP 18-40GHz d=3m	PR001_06	5,4 dB	1
Frequency error	PR002_01+02	< 1x10-7	1
Timing zero span (1001pts.)	PR002_01+02	0,2 % SWT	1
Modulation bandwidth	PR002_01+02	< 1x10-7	1
Conducted RF power and spurious emission	PR002_01+02	1,1 dB	1
Adjacent channel power	PR002_01+02	1,1 dB	1
Blocking	PR002_01+02	1,1 dB	1

Test	Test Setup	Expanded uncertainty	Note
Electrostatic discharge immunity test	PE101_0X		2
Electrical fast transients / burst immunity test	PE103_0X		2
Surge immunity test	PE104_0X		2
Short interruption immunity test	PE109_01		2
Ring Wave immunity test	PE110_01		2
Low frequency immunity test	PE111_01		2
Dumped Oscillotary immunity test	PE113_01		2
Rev_20_02 date 24/02/2020			

Note 1:

The expanded uncertainty reported according to the document EA-4-02 is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of p = 95%

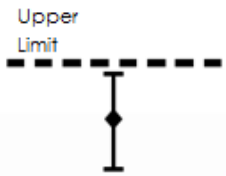
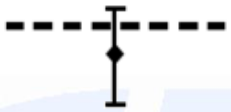
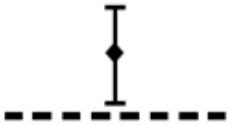
Note 2:

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

CMC Centro Misure Compatibilità S.r.l.

Attachment 1

Judgement of compliance

Case 1	Case 2	Case 3	Case 4
			
The sample complies with the requirements.	The sample complies with the requirements.	The sample does not comply with the requirements.	The sample does not comply with the requirements.
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

Quality manual references – Internal procedure

Internal Procedure PM001 rev. 3.0 (Quality Manual)	Measure procedure
Internal Procedure INC_M rev. 9.1 (Quality Manual)	Measurement uncertainty calculation

CMC Centro Misure Compatibilità S.r.l.