CMC Centro Misure Compatibilità S.r.l.
Via della Fisica, 20
36016 Thiene (VI) – ITALY
Tel./Fax +39 0445 367702
www.cmclab.it - info@cmclab.it

LAB N° 0168

Independent Testing Laboratory
Accredited by ACCREDIA according to UNI CEI EN ISO/IEC 17025 cert. nr. 0168

TEST REPORT nr. R19090501

Federal Communication Commission (FCC)

Test item

Description .....: KEYFOB-TYPE BLUETOOTH LOW ENERGY BEACON
Trademark .....: BLUEUP
Model/Type .....: BlueBeacon Tag Gen2 (BlueBeacon 05/02)
FCC ID .....: 2ALP7BB0502

Test Specification

Standard.....: FCC Rules & Regulations, Title 47:2018
Part 15 paragraph(s): 203, 204, 205, 207, 209 and 247

Client's name .....: BLUEUP S.r.l.s.
Address .....: Loc. Belvedere, Ingresso 2 – 53034 Colle Val d'Elsa (SI) – ITALY

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

Report

Tested by .....: M. Segalla .....

Approved by .....: R. Beghetto – *Laboratory Manager* .....
Date of issue .....: 17.09.19
Contents.....: 93 pages

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 4

5. PHOTOGRAPH(S) OF EUT 5

5.1 PHOTOGRAPH(S) OF EUT 5

6. EQUIPMENT LIST 6

7. MEASUREMENT UNCERTAINTY 7

8. REFERENCE DOCUMENTS 9

9. DEVIATION FROM TEST SPECIFICATION 10

10. TEST CASE VERDICTS 10

11. RESULTS 11

11.1 ANTENNA REQUIREMENTS 12
11.2 EMISSIONS IN RESTRICTED FREQUENCY BANDS AND IN UNRESTRICTED FREQUENCY BANDS 13
11.3 DTS BANDWIDTH 66
11.4 BAND EDGE 71
11.5 FUNDAMENTAL EMISSION OUTPUT POWER 77
11.6 MAXIMUM POWER SPECTRAL DENSITY LEVEL IN THE FUNDAMENTAL EMISSION 83
11.7 SPURIOUS EMISSION 89

1. Summary

Standard:

FCC Rules & Regulations, Title 47:2018
Part 15 paragraph(s): 203, 204, 205, 207, 209 and 247

Test specifications	*Environmental Phenomena*	*Tests sequence*	*Result*
Part 15.247 (a) (1)	Pseudo randomly ordered list of hopping frequencies	1	Complies
Part 15.203	Antenna requirements	2	Complies
Part 15.207	Conducted emissions	--	N.A. (+)
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

(+) Devices which only employ battery power. See FCC Part 15.207 (c)

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

2. Description of Equipment under test (EUT)

Power supply	:	3 Vdc from battery
Serial Number	:	--
Type of equipment	:	☑ Transmitter Unit
		☑ Receiver Unit
Type of station	:	❑ Fixed station
		☑ Portable station
		❑ Mobile station
Frequency band	:	2400 – 2483,5 MHz
Nominal frequencies	:	F_L: 2401 MHz F_M: 2441 MHz F_H: 2480 MHz
Pseudo randomly ordered list of hopping frequencies	:	See document BlueBeaconTag_Gen2_OperationalDescription

2.1 Test Site

Company	:	CMC Centro Misure Compatibilità S.r.l.
Address	:	Via della Fisica, 20
		36016 Thiene (VI) – ITALY
Test site facility's FCC registration number	:	182474

3. Testing and sampling

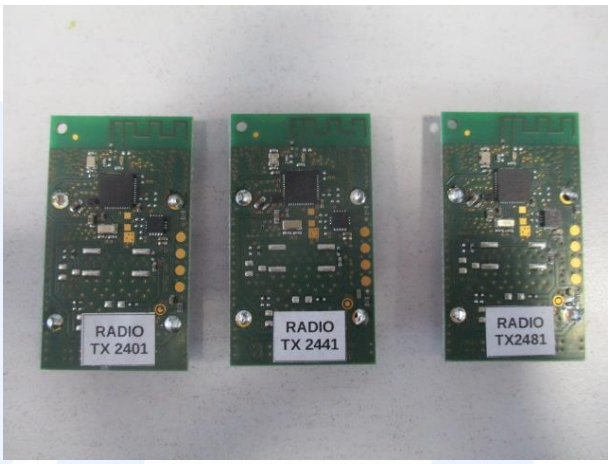
Date of receipt of test item	:	08.04.19
Testing start date	:	23.05.19
Testing end date	:	23.05.19
Samples tested nr.	:	3, 1 sample for each nominal frequency
Sampling procedure.	:	Equipment used for testing was picked up by the manufacturer, at the end of the production process with random criterion
Internal identification	:	adhesive label with the product number P190478

4. Operative conditions

EUT exercising	:	EUT in continuous transmission at maximum power

5. Photograph(s) of EUT

5.1 Photograph(s) of EUT



6. Equipment list

Id. number	*Manufacturer*	*Model*	*Description*	*Serial number*	*Last calibration*	*Due date calibration*
CMC S108	EMCO	3115	Horn Antenna	9811-5622	June '16	June '19
CMC S127	Schaffner	HLA6120	Loop Antenna	1191	November '18	November '23
CMC S164	Rohde & Schwarz	ESU26	EMC interference receiver	100052	January '19	January '20
CMC S206	Rohde & Schwarz	ESCI 7	EMC Receiver 9KHz-7GHz	100781	January '19	January '20
CMC S260	CMC	Wfr_N	Shielded Cable	Wfr_ant10-1	November '18	November '19
CMC S261	CMC	Wfr_N	Shielded Cable	Wfr_ant20-1	November '18	November '19
CMC S262	CMC	Wfr_N_fix	Shielded Cable	Wfr_fix32-1	November '18	November '19
CMC S263	CMC	Wfr_N_fix	Shielded Cable	Wfr_fix31-1	November '18	November '19
CMC S264	CMC	Wfr_N	Shielded Cable	Wfr_ext03-1	November '18	November '19
CMC S271	Schwarzbeck	BBA 9106 + VHBB 9124	Biconical Antenna (30-300MHz)	831	June '16	June '19
CMC S287	Schwarzbeck	VUSLP 9111B	Log-periodic Antenna (200 MHz-3Ghz)	9111B-203	June '16	June '19
CMC S290	Schwarzbeck	BBHA 9170	Horn Antenna (15-40 GHz)	733	October '16	October '19

7. 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	3,0 dB	1
Conducted emission CISPR 16 Voltage Probe 0,15-30MHz	PE001_02	2,9 dB	1
Conducted emission CISPR 16 Current Probe 0,15-30MHz	PE001_03	2,6 dB	1
Conducted emission CISPR 16 ISN 0,15-30MHz	PE001_04	4,7 dB	1
Clic CISPR 16 LISN 50uH 0,150-30,0MHz	PE001_05	3,1 dB	1
Disturbance Power 30-300 MHz	PE002_01	3,6 dB	1
Radiated Emission LAS 0,15-30MHz	PE003_01	2,0 dB	1
Radiated Emission CISPR 16 Loop Ant. 0,15-30MHz	PE004_01	4,0 dB	1
Radiated Emission CISPR 16 Bicon. Ant. 30-300MHz	PE004_02	3,9 dB	1
Radiated Emission CISPR 16 LogP. Ant. 300-1000MHz	PE004_03	3,8 dB	1
Radiated Emission CISPR 16 Horn Ant. 1-18GHz	PE004_04	4,2 dB	1
Human Exposure to electromagnetic fields	PE005_01	23,6 %	1
Harmonic current emissions test	PE006_01	10 mA + 2,6 %	1
Voltage fluctuation and flicker test	PE007_01	4,8 %	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	6,25 % 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

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	4,7 dB	1
Misura della potenza EiRP 18-40GHz d=3m	PR001_05	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
Rev_19_02 date 27/03/2019			

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

8. Reference documents

Reference no.	*Description*
FCC Rules and Regulation Title 47 part 15:2018	--
KDB 558074 D01 15.247 Meas Guidance v05	Guidance for compliance measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices operating under section 15.247 of the FCC rules
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
Internal Procedure PM001 rev. 3.0 (Quality Manual)	Measure Procedure
Internal procedure INC_M rev. 9.1 (Quality Manual)	Measurement uncertainty calculation

9. Deviation from test specification

None

10. Test case verdicts

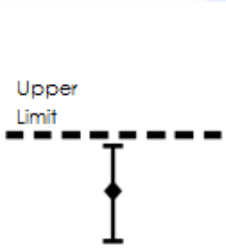
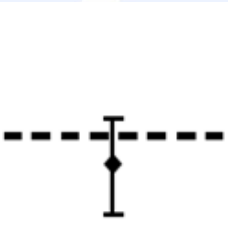
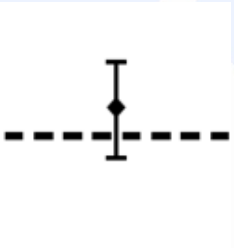
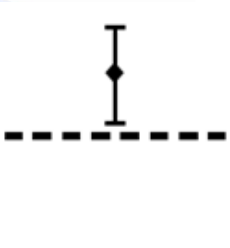
Test case does not apply to the test object	:	N.A.
Test item does meet the requirement	:	Complies
Test item does not meet the requirement	:	Does not comply
Test not performed	:	N.E.

11. Results

In this clause tests results are reported.

Measurement uncertainty is in accordance with document CMC INC_M rev. 9.1.

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.

11.1 Antenna requirements

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.203 and 15.204
- Internal procedure PM001
- See clause 4 of this test report

Test configuration and test method

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.

Result

Antenna Type	*External R.F. power amplifier*	*Gain*	*Remarks*	*Results*
Integrated antenna	Not Present	0 dBi	--	Complies

Result: The requirements are met

11.2 Emissions in restricted frequency bands and in unrestricted frequency bands

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part. 15.209
- Internal procedure PM001
- See clause 4 of this test report

Test configuration and test method

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 S108, CMC S127, CMC S164, CMC S271, CMC S287, CMC S290
Measurement uncertainty: See clause 7 of this test report

Test specification

Port: Enclosure
Frequency range: 0,009 MHz – 26000 MHz
Antenna polarization: Horizontal (H) – Vertical (V)
10 m for frequencies ≤ 30 MHz
3 m for frequencies > 30 MHz

Environmental conditions

Temperature (°C)	*Atmospheric pressure (kPa)*	*Relative humidity (%)*
22	100	45

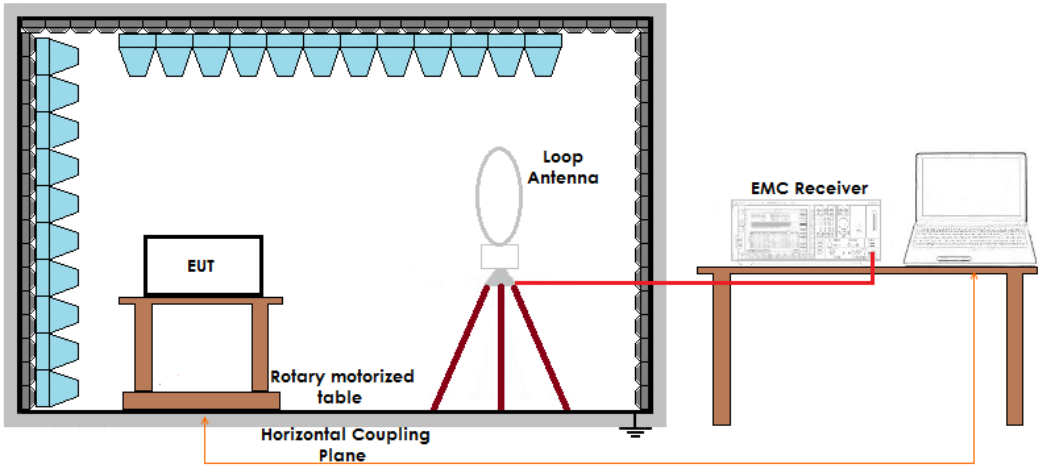
Acceptance limits

Frequency range (MHz)	*Test distance (m)*	*Limits [dB(µV/m)]*	
0,009 to 0,490	300	48,5 to 13,8	
0,490 to 1,705	30	33,8 to 22,9	
1,705 to 30	30	29,5	
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

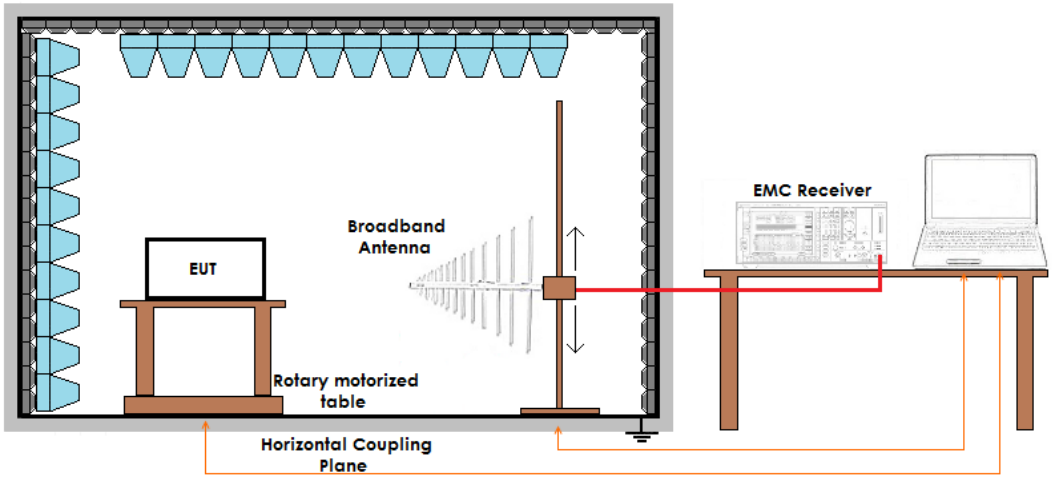
Remarks: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector. The results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

Setup

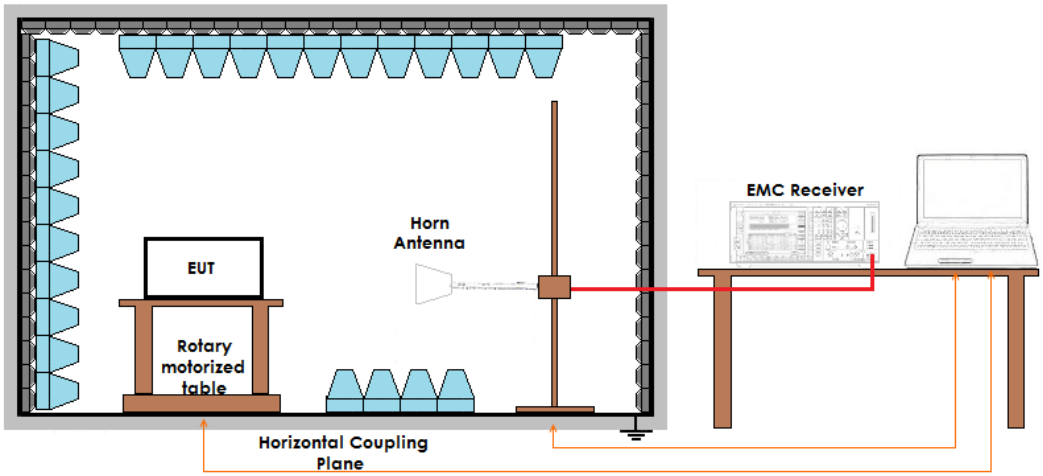
Frequency ≤ 30 MHz



Frequency ≤ 1 GHz



Frequency > 1 GHz



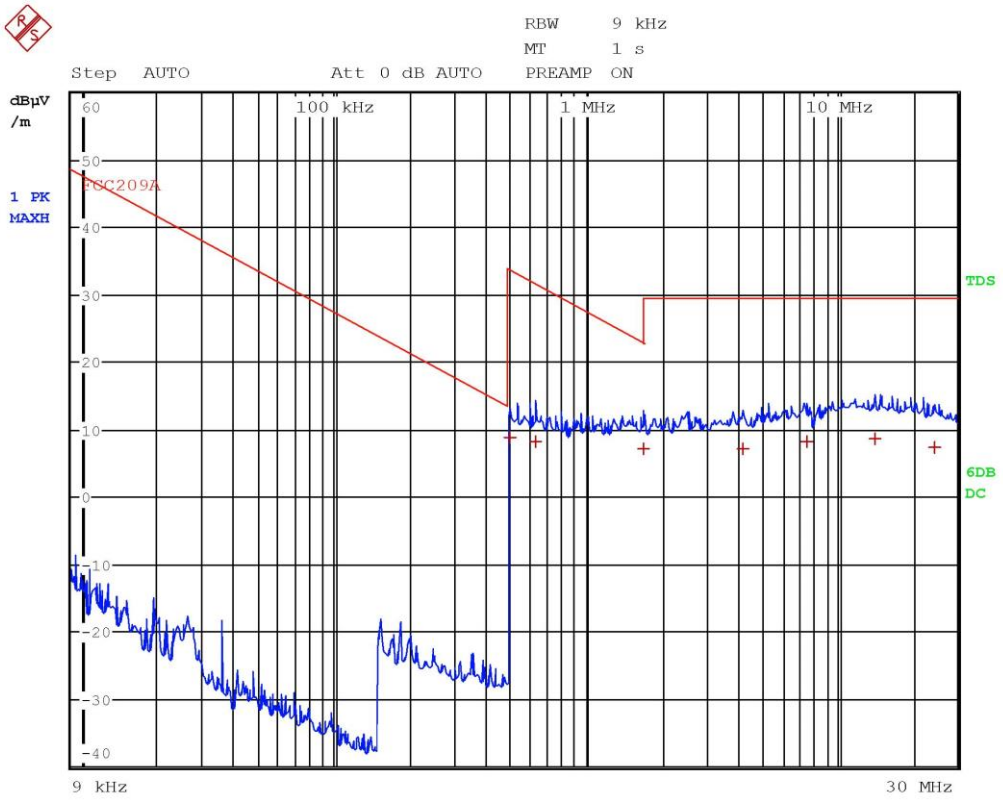
Result

Polarization	*Frequency Range (MHz)*	*Graphs*	*Remarks*	*Result*
Loop	0,009 – 30	G19090501	Worst case	Complies
V	30 – 300	G19090502	Worst case	Complies
H	30 – 300	G19090503	Worst case	Complies
H	300 – 1000	G19090504	Worst case	Complies
V	300 – 1000	G19090505	Worst case	Complies
H	1000 – 4000	G19090506	Lowest channel	Complies
V	1000 – 4000	G19090507	Lowest channel	Complies
V	1000 – 4000	G19090508	Medium channel	Complies
H	1000 – 4000	G19090509	Medium channel	Complies
V	1000 – 4000	G19090510	Highest channel	Complies
H	1000 – 4000	G19090511	Highest channel	Complies
H	4000 – 10000	G19090512	Highest channel	Complies
V	4000 – 10000	G19090513	Highest channel	Complies
V	4000 – 10000	G19090514	Medium channel	Complies
H	4000 – 10000	G19090515	Medium channel	Complies
H	4000 – 10000	G19090516	Lowest channel	Complies
V	4000 – 10000	G19090517	Lowest channel	Complies
V	10000 – 18000	G19090518	Lowest channel	Complies
H	10000 – 18000	G19090519	Lowest channel	Complies
H	10000 – 18000	G19090520	Medium channel	Complies
V	10000 – 18000	G19090521	Medium channel	Complies
V	10000 – 18000	G19090522	Highest channel	Complies
H	10000 – 18000	G19090523	Highest channel	Complies
H	18000 – 26000	G19090524	Worst case	Complies
V	18000 – 26000	G19090525	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 or fall into non-restricted frequency bands. For the assessment of conformity of these latter peaks, see cl. 10.10 of this Test Report

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



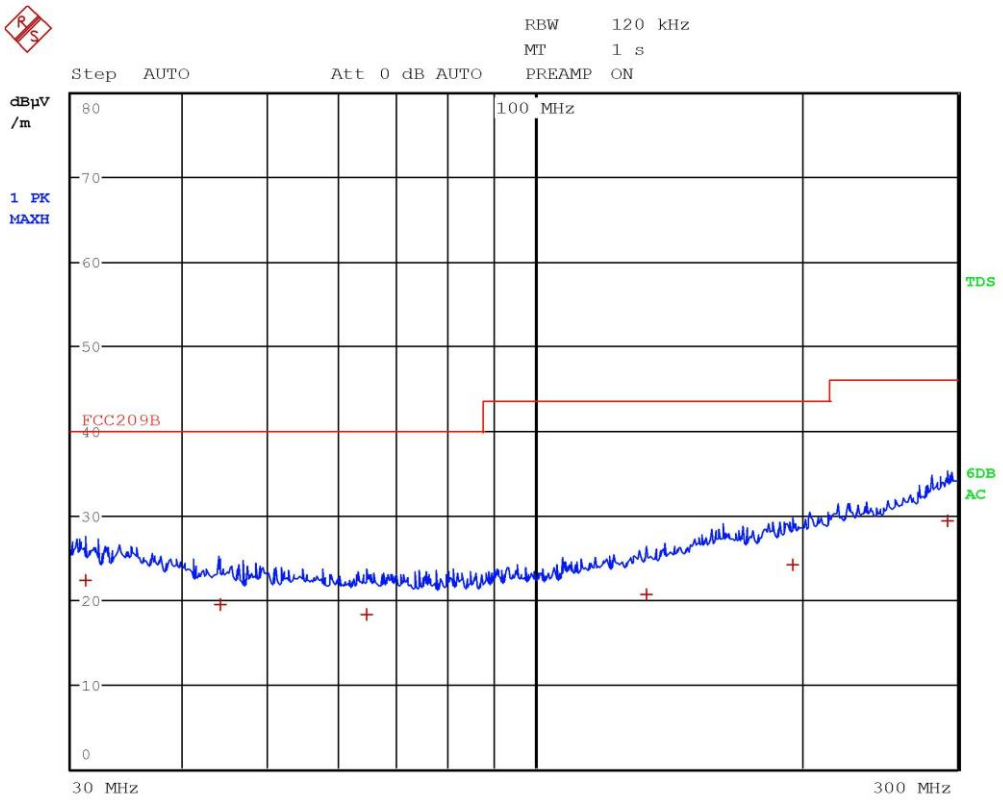
Segalla 19090501

EDIT PEAK LIST (Final Measurement Results)

Trace1:	FCC209A
Trace2:	---
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Quasi Peak	498 kHz	8.89	-24.76
1 Quasi Peak	630 kHz	8.21	-23.40
1 Quasi Peak	1.694 MHz	7.19	-15.83
1 Quasi Peak	4.222 MHz	7.21	-22.32
1 Quasi Peak	7.574 MHz	8.15	-21.38
1 Quasi Peak	14.094 MHz	8.66	-20.87
1 Quasi Peak	24.23 MHz	7.43	-22.10

Segalla 19090501



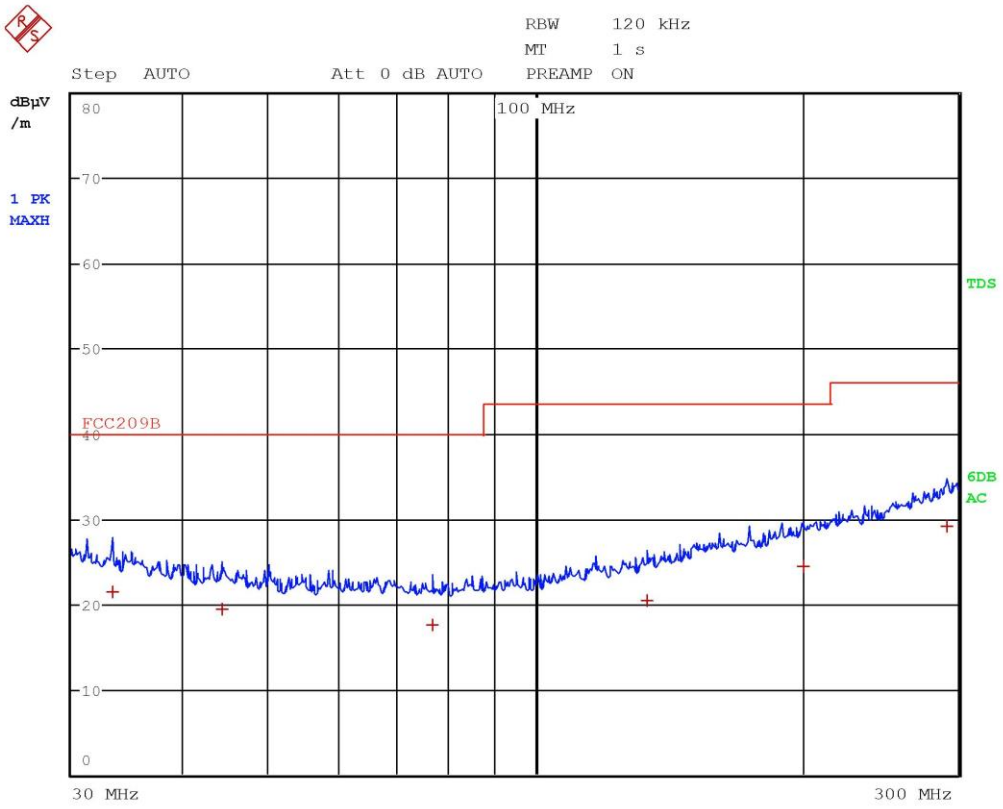
Segalla 19090502

EDIT PEAK LIST (Final Measurement Results)

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

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Quasi Peak	31.04 MHz	22.29	-17.70
1 Quasi Peak	44.2 MHz	19.45	-20.54
1 Quasi Peak	64.68 MHz	18.23	-21.76
1 Quasi Peak	133.76 MHz	20.58	-22.93
1 Quasi Peak	195.24 MHz	24.04	-19.47
1 Quasi Peak	292.72 MHz	29.25	-16.76

Segalla 19090502



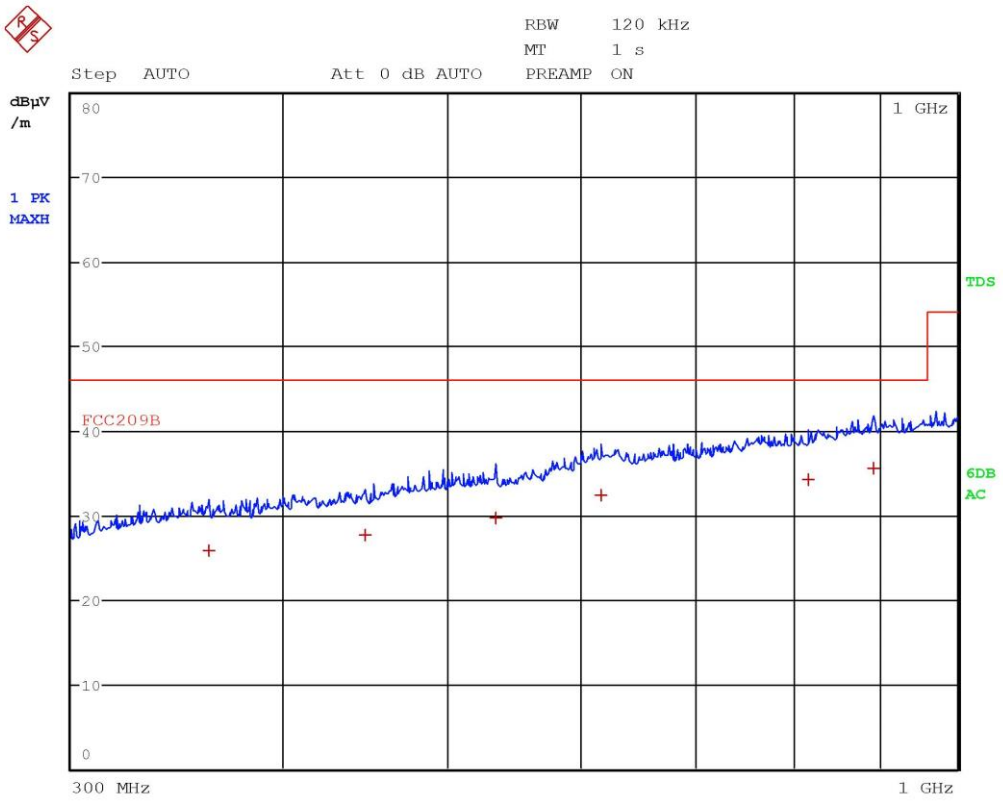
Segalla 19090503

EDIT PEAK LIST (Final Measurement Results)

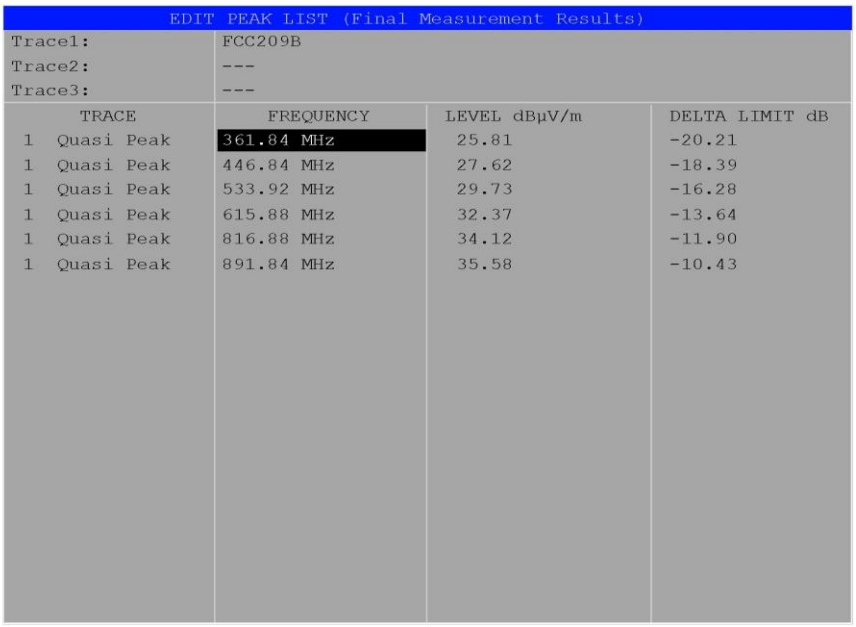
Trace1:	FCC209B
Trace2:	---
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Quasi Peak	33.32 MHz	21.35	-18.64
1 Quasi Peak	44.36 MHz	19.44	-20.55
1 Quasi Peak	76.68 MHz	17.62	-22.37
1 Quasi Peak	133.44 MHz	20.40	-23.11
1 Quasi Peak	200.56 MHz	24.52	-18.99
1 Quasi Peak	291.36 MHz	29.18	-16.83

Segalla 19090503



Segalla 19090504

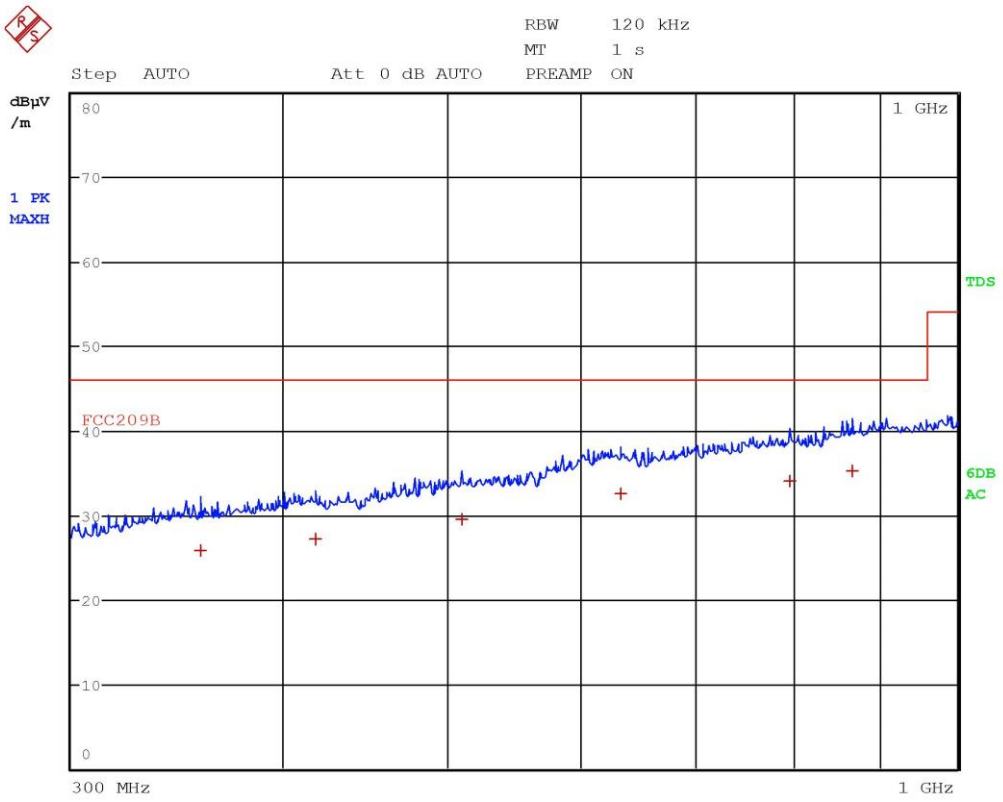


EDIT PEAK LIST (Final Measurement Results)

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

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Quasi Peak	361.84 MHz	25.81	-20.21
1 Quasi Peak	446.84 MHz	27.62	-18.39
1 Quasi Peak	533.92 MHz	29.73	-16.28
1 Quasi Peak	615.88 MHz	32.37	-13.64
1 Quasi Peak	816.88 MHz	34.12	-11.90
1 Quasi Peak	891.84 MHz	35.58	-10.43

Segalla 19090504



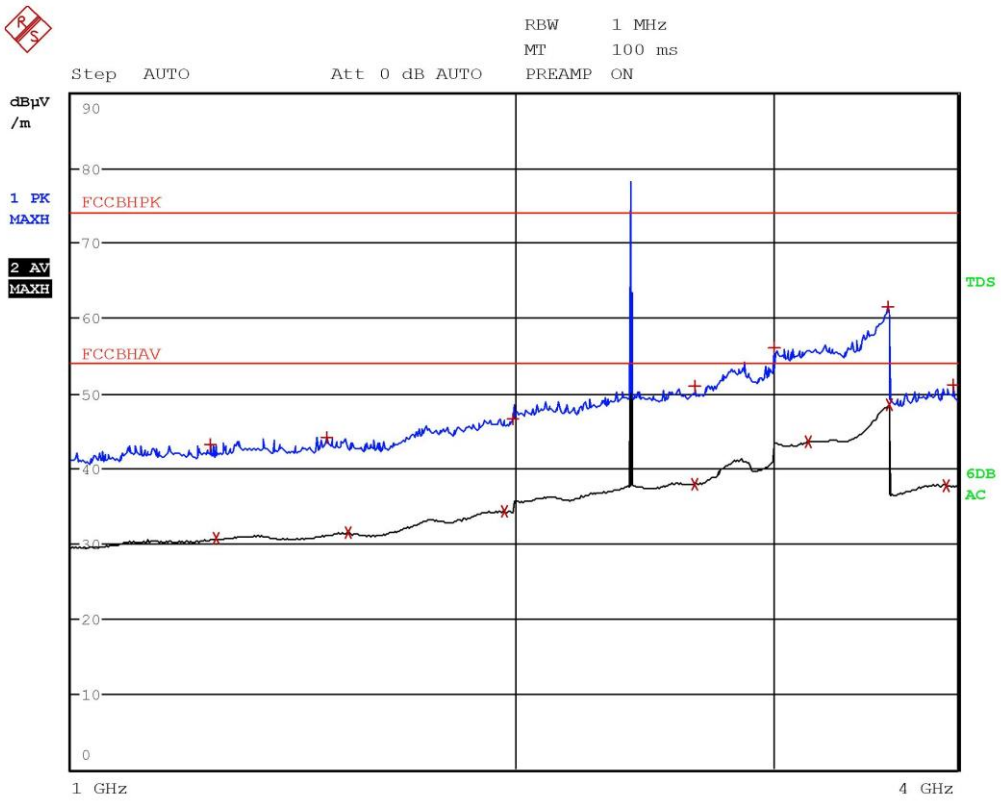
Segalla 19090505

EDIT PEAK LIST (Final Measurement Results)

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

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Quasi Peak	357.28 MHz	25.75	-20.26
1 Quasi Peak	417.64 MHz	27.22	-18.79
1 Quasi Peak	509.48 MHz	29.49	-16.52
1 Quasi Peak	632.56 MHz	32.48	-13.53
1 Quasi Peak	796.24 MHz	34.04	-11.97
1 Quasi Peak	867.56 MHz	35.21	-10.80

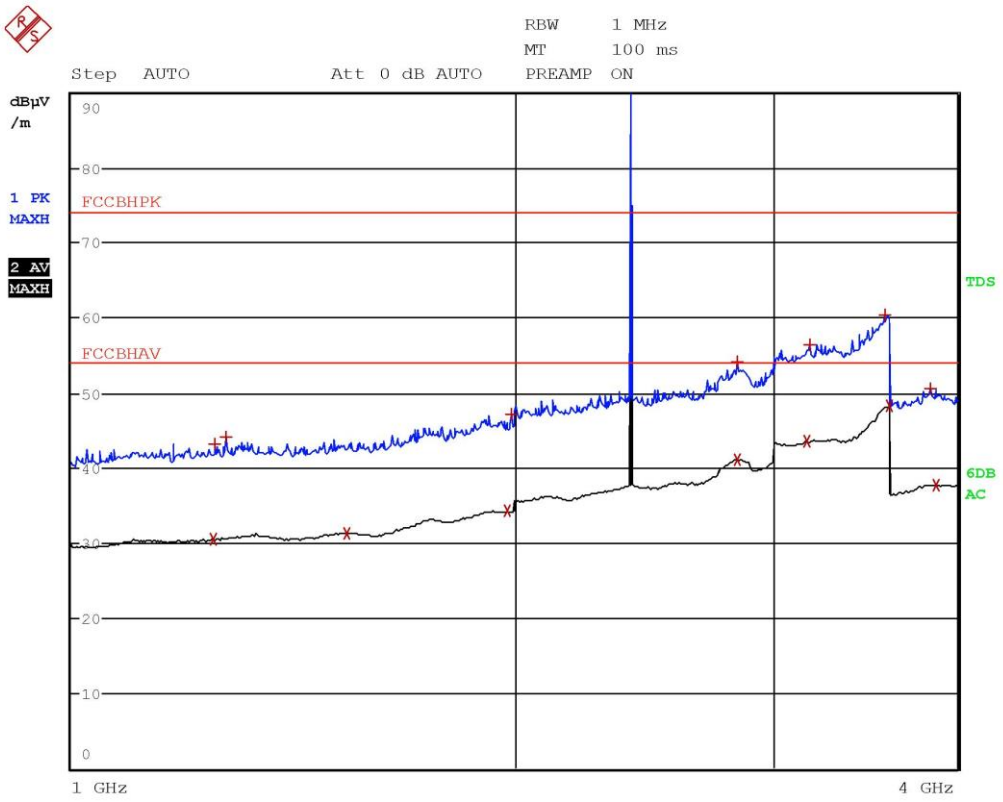
Segalla 19090505



Segalla 19090506

EDIT PEAK LIST (Prescan Results)			
Trace1:	FCCBHPK		
Trace2:	FCCBHAV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	1.2432 GHz	43.29	-30.68
2 Average	1.2552 GHz	30.68	-23.29
1 Max Peak	1.49 GHz	44.16	-29.82
2 Average	1.5404 GHz	31.46	-22.51
2 Average	1.9688 GHz	34.34	-19.63
1 Max Peak	1.996 GHz	46.56	-27.41
1 Max Peak	2.6508 GHz	50.91	-23.06
2 Average	2.652 GHz	37.93	-16.04
1 Max Peak	3.0052 GHz	56.14	-17.83
2 Average	3.164 GHz	43.65	-10.32
1 Max Peak	3.5868 GHz	61.52	-12.45
2 Average	3.5948 GHz	48.40	-5.57
2 Average	3.9252 GHz	37.75	-16.22
1 Max Peak	3.9728 GHz	51.23	-22.74

Segalla 19090506



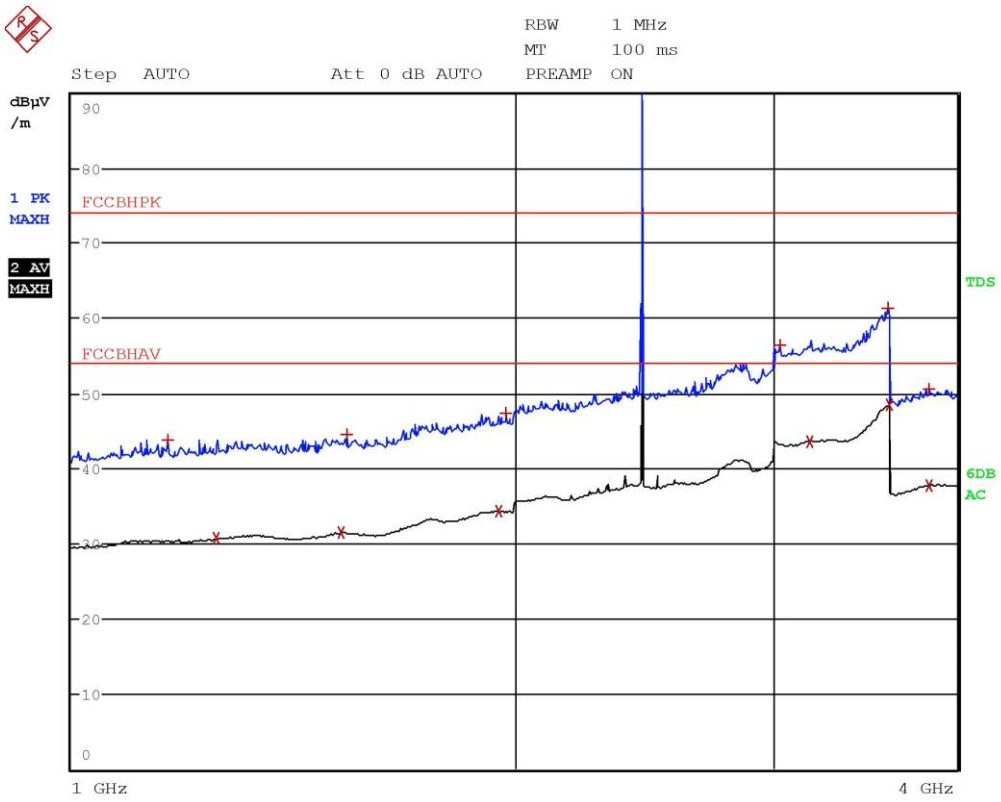
Segalla 19090507

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
2 Average	1.2476 GHz	30.56	-23.41
1 Max Peak	1.2516 GHz	43.26	-30.71
1 Max Peak	1.2732 GHz	44.17	-29.81
2 Average	1.5384 GHz	31.33	-22.65
2 Average	1.9764 GHz	34.23	-19.74
1 Max Peak	1.9908 GHz	47.15	-26.82
2 Average	2.832 GHz	41.10	-12.87
1 Max Peak	2.8372 GHz	54.15	-19.82
2 Average	3.1628 GHz	43.58	-10.39
1 Max Peak	3.174 GHz	56.51	-17.46
1 Max Peak	3.572 GHz	60.44	-13.53
2 Average	3.5992 GHz	48.35	-5.62
1 Max Peak	3.836 GHz	50.51	-23.46
2 Average	3.8672 GHz	37.70	-16.27

Segalla 19090507



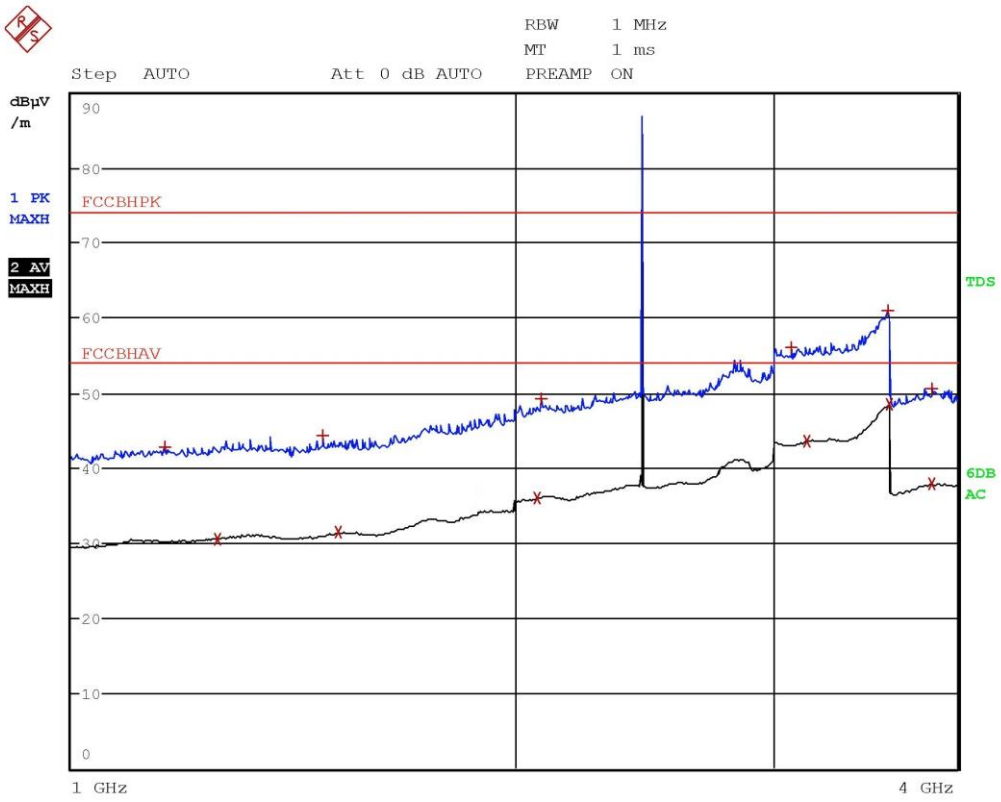
Segalla 19090508

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	1.1628 GHz	43.81	-30.16
2 Average	1.2544 GHz	30.63	-23.34
2 Average	1.5244 GHz	31.44	-22.53
1 Max Peak	1.5388 GHz	44.54	-29.43
2 Average	1.9512 GHz	34.37	-19.60
1 Max Peak	1.9728 GHz	47.38	-26.59
1 Max Peak	3.0316 GHz	56.52	-17.45
2 Average	3.172 GHz	43.65	-10.32
1 Max Peak	3.584 GHz	61.40	-12.57
2 Average	3.5992 GHz	48.43	-5.54
2 Average	3.8216 GHz	37.71	-16.26
1 Max Peak	3.822 GHz	50.52	-23.45

Segalla 19090508



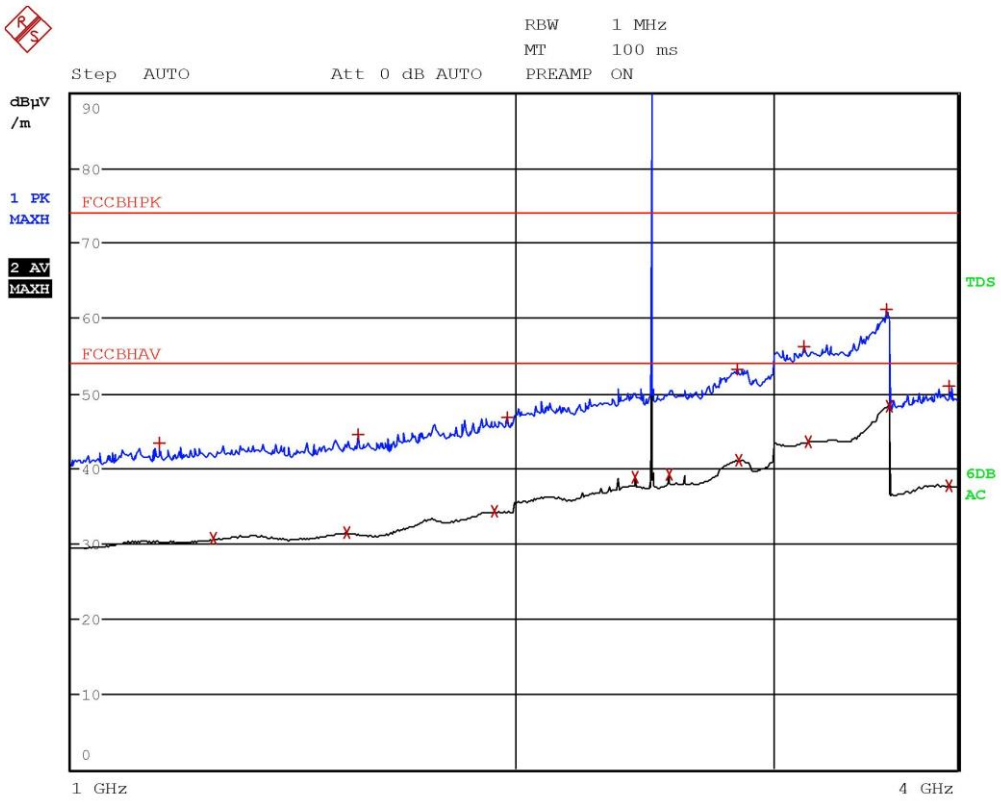
Segalla 19090509

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE		FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1	Max Peak	1.158 GHz	42.87	-31.10
2	Average	1.2564 GHz	30.62	-23.35
1	Max Peak	1.48 GHz	44.29	-29.68
2	Average	1.5196 GHz	31.41	-22.57
2	Average	2.0708 GHz	35.92	-18.05
1	Max Peak	2.0852 GHz	49.23	-24.74
1	Max Peak	3.0828 GHz	56.10	-17.87
2	Average	3.1592 GHz	43.59	-10.38
1	Max Peak	3.5904 GHz	60.94	-13.03
2	Average	3.592 GHz	48.41	-5.56
1	Max Peak	3.8424 GHz	50.53	-23.44
2	Average	3.8436 GHz	37.89	-16.08

Segalla 19090509



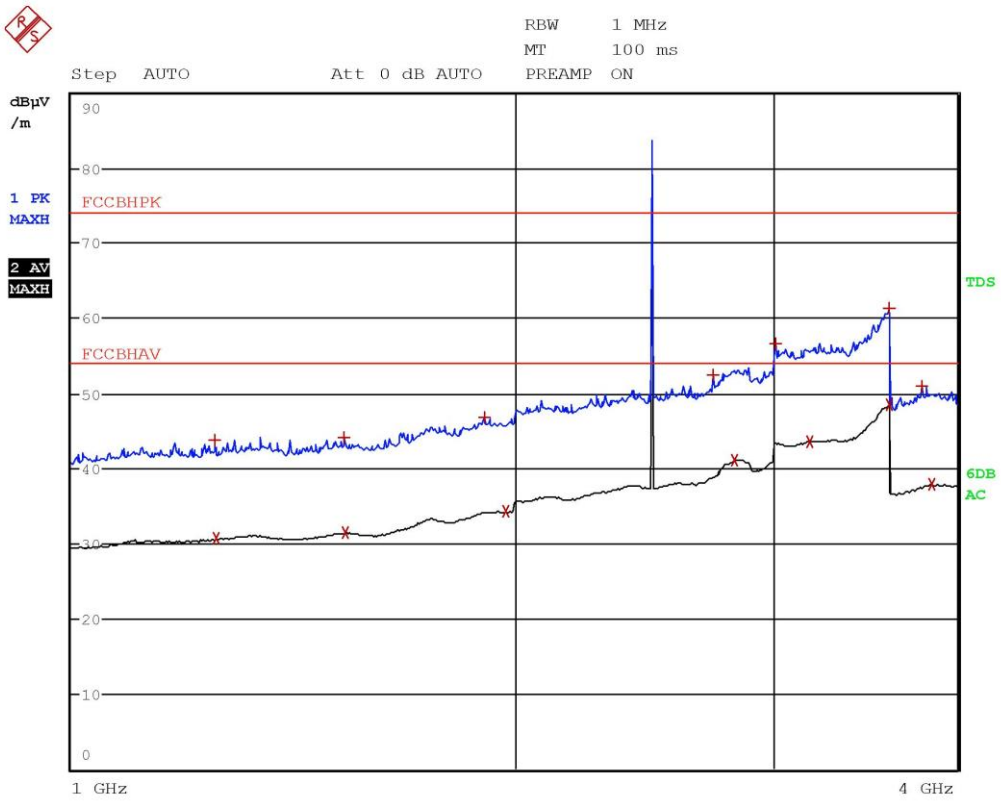
Segalla 19090510

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	1.1472 GHz	43.33	-30.64
2 Average	1.2488 GHz	30.68	-23.29
2 Average	1.5392 GHz	31.42	-22.55
1 Max Peak	1.566 GHz	44.54	-29.43
2 Average	1.9388 GHz	34.29	-19.68
1 Max Peak	1.9788 GHz	46.86	-27.11
2 Average	2.4172 GHz	38.80	-15.17
2 Average	2.5452 GHz	39.27	-14.70
1 Max Peak	2.8336 GHz	53.21	-20.76
2 Average	2.8428 GHz	41.05	-12.92
1 Max Peak	3.1456 GHz	56.22	-17.75
2 Average	3.1644 GHz	43.61	-10.36
1 Max Peak	3.5756 GHz	61.08	-12.89
2 Average	3.5984 GHz	48.36	-5.61
1 Max Peak	3.9468 GHz	50.88	-23.09
2 Average	3.9468 GHz	37.63	-16.34

Segalla 19090510



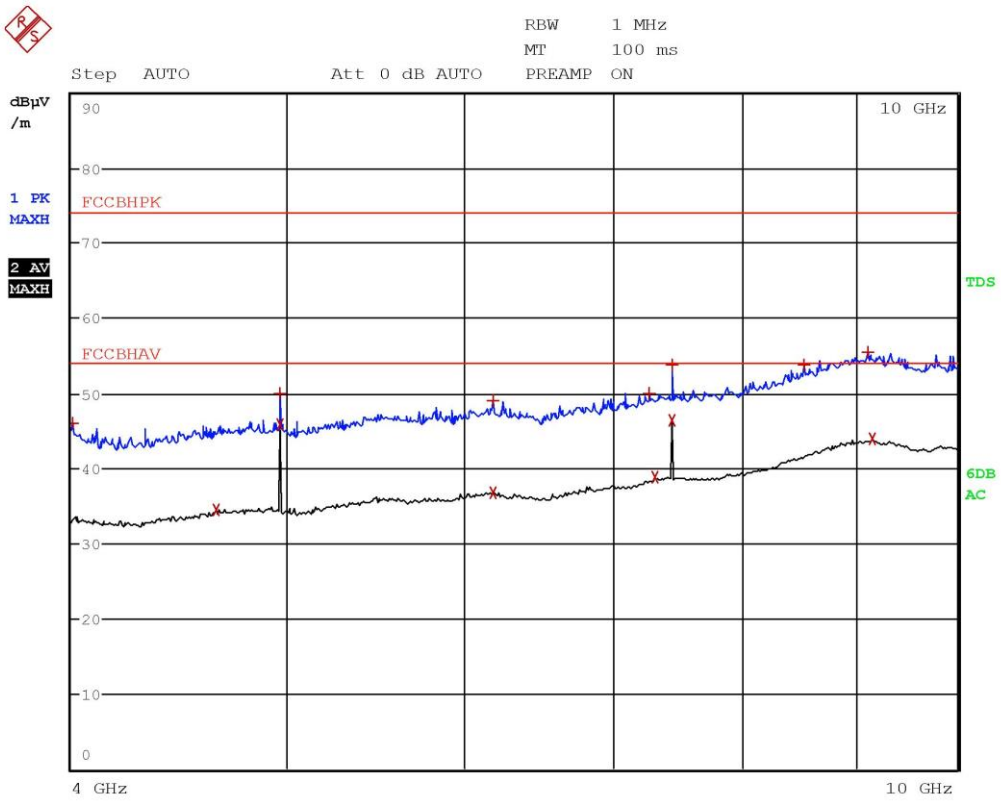
Segalla 19090511

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	1.2516 GHz	43.81	-30.16
2 Average	1.2548 GHz	30.68	-23.29
1 Max Peak	1.5304 GHz	44.08	-29.89
2 Average	1.5364 GHz	31.44	-22.53
1 Max Peak	1.9064 GHz	46.86	-27.11
2 Average	1.9732 GHz	34.35	-19.62
1 Max Peak	2.7312 GHz	52.55	-21.42
2 Average	2.822 GHz	41.21	-12.76
1 Max Peak	3.01 GHz	56.55	-17.42
2 Average	3.172 GHz	43.59	-10.38
2 Average	3.594 GHz	48.45	-5.52
1 Max Peak	3.596 GHz	61.33	-12.64
1 Max Peak	3.7868 GHz	50.97	-23.00
2 Average	3.8404 GHz	37.89	-16.08

Segalla 19090511



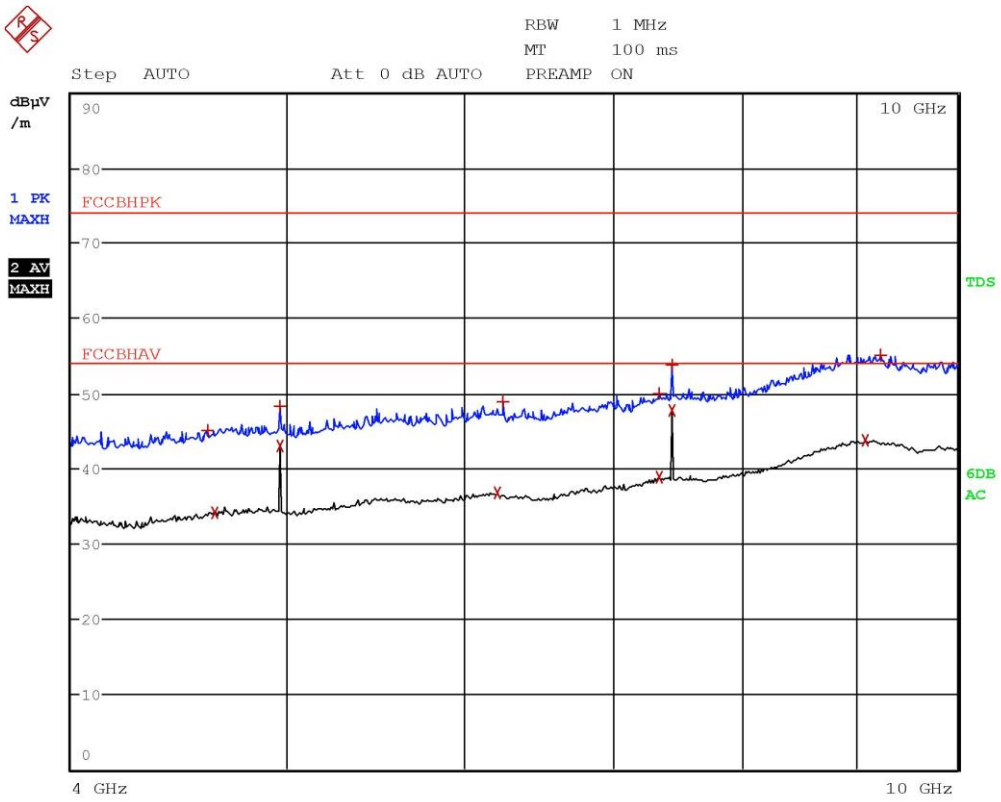
Segalla 19090512

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	4.0064 GHz	46.09	-27.88
2 Average	4.6444 GHz	34.42	-19.55
2 Average	4.960 GHz	45.81	-8.16
1 Max Peak	4.9604 GHz	50.04	-23.93
2 Average	6.1824 GHz	36.84	-17.13
1 Max Peak	6.1836 GHz	49.07	-24.90
1 Max Peak	7.2708 GHz	50.09	-23.88
2 Average	7.3124 GHz	38.92	-15.05
1 Max Peak	7.4404 GHz	53.77	-20.20
2 Average	7.4408 GHz	46.43	-7.54
1 Max Peak	8.5312 GHz	53.87	-20.10
1 Max Peak	9.1112 GHz	55.46	-18.51
2 Average	9.1564 GHz	43.89	-10.08

Segalla 19090512



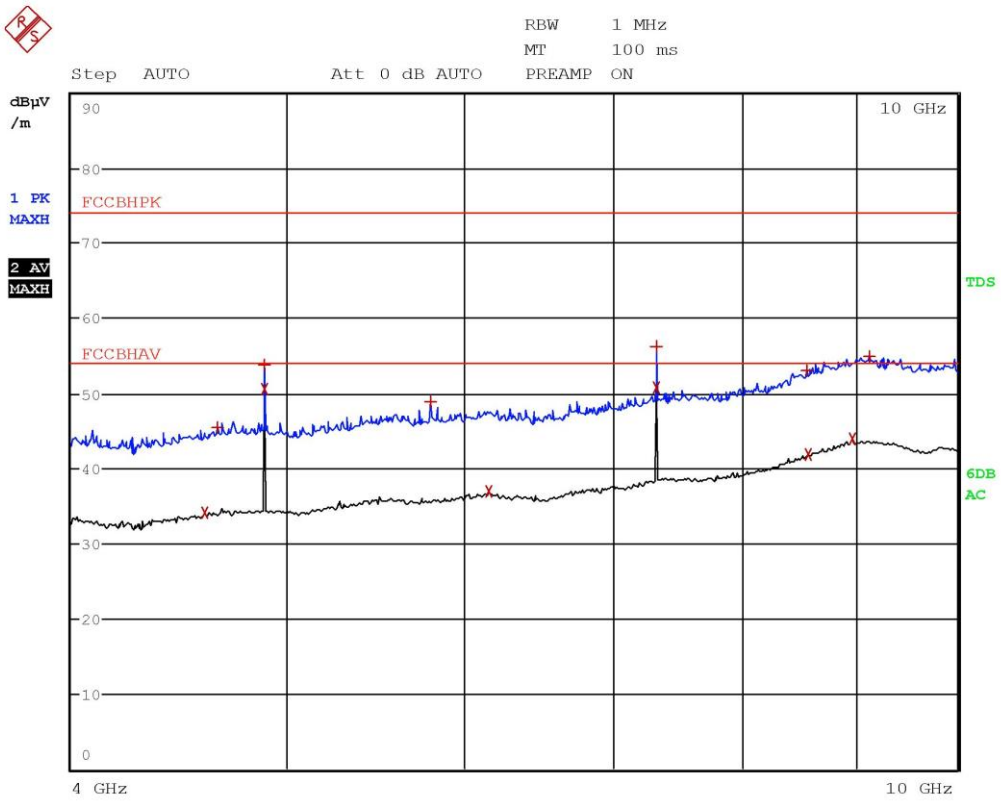
Segalla 19090513

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	4.6028 GHz	45.14	-28.83
2 Average	4.642 GHz	34.17	-19.80
2 Average	4.960 GHz	43.07	-10.90
1 Max Peak	4.9604 GHz	48.29	-25.68
2 Average	6.2164 GHz	36.77	-17.20
1 Max Peak	6.2524 GHz	48.78	-25.19
2 Average	7.3504 GHz	38.88	-15.10
1 Max Peak	7.3508 GHz	50.02	-23.95
2 Average	7.4412 GHz	47.67	-6.30
1 Max Peak	7.4416 GHz	53.86	-20.11
2 Average	9.0852 GHz	43.74	-10.23
1 Max Peak	9.2356 GHz	55.11	-18.86

Segalla 19090513



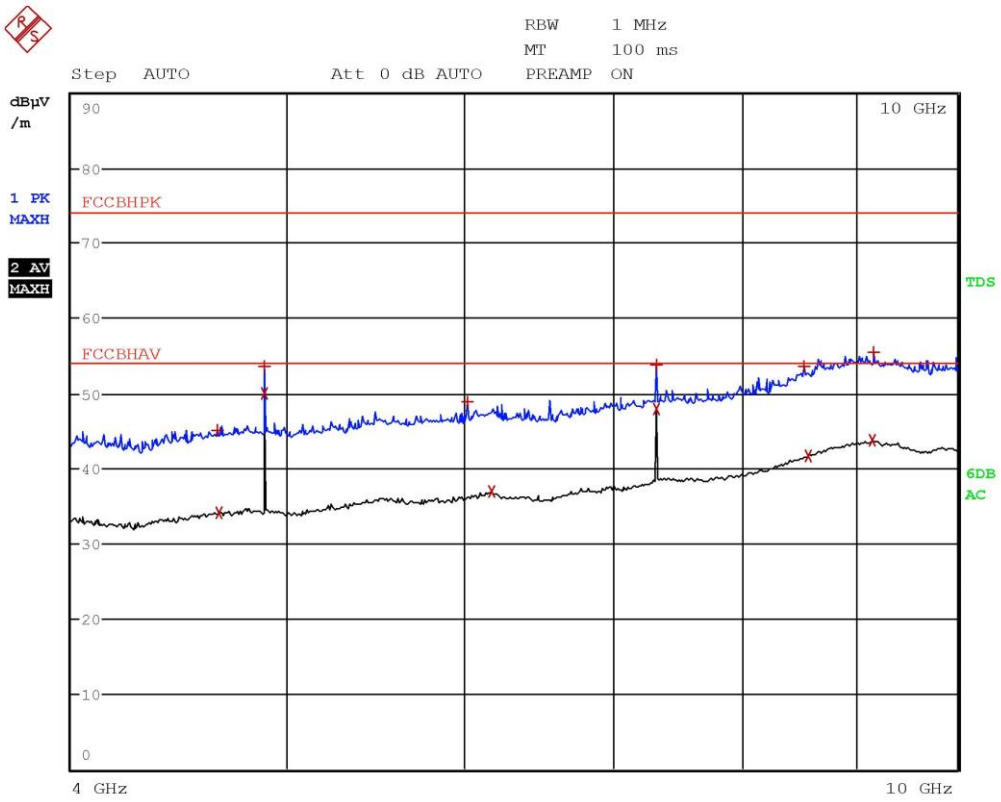
Segalla 19090514

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
2 Average	4.5928 GHz	34.15	-19.82
1 Max Peak	4.6508 GHz	45.42	-28.55
1 Max Peak	4.8816 GHz	53.83	-20.14
2 Average	4.882 GHz	50.52	-3.45
1 Max Peak	5.7988 GHz	48.89	-25.08
2 Average	6.1596 GHz	36.87	-17.10
1 Max Peak	7.3224 GHz	56.32	-17.65
2 Average	7.3228 GHz	50.67	-3.30
1 Max Peak	8.5644 GHz	52.98	-20.99
2 Average	8.574 GHz	41.89	-12.08
2 Average	8.9728 GHz	43.89	-10.08
1 Max Peak	9.1304 GHz	55.01	-18.96

Segalla 19090514



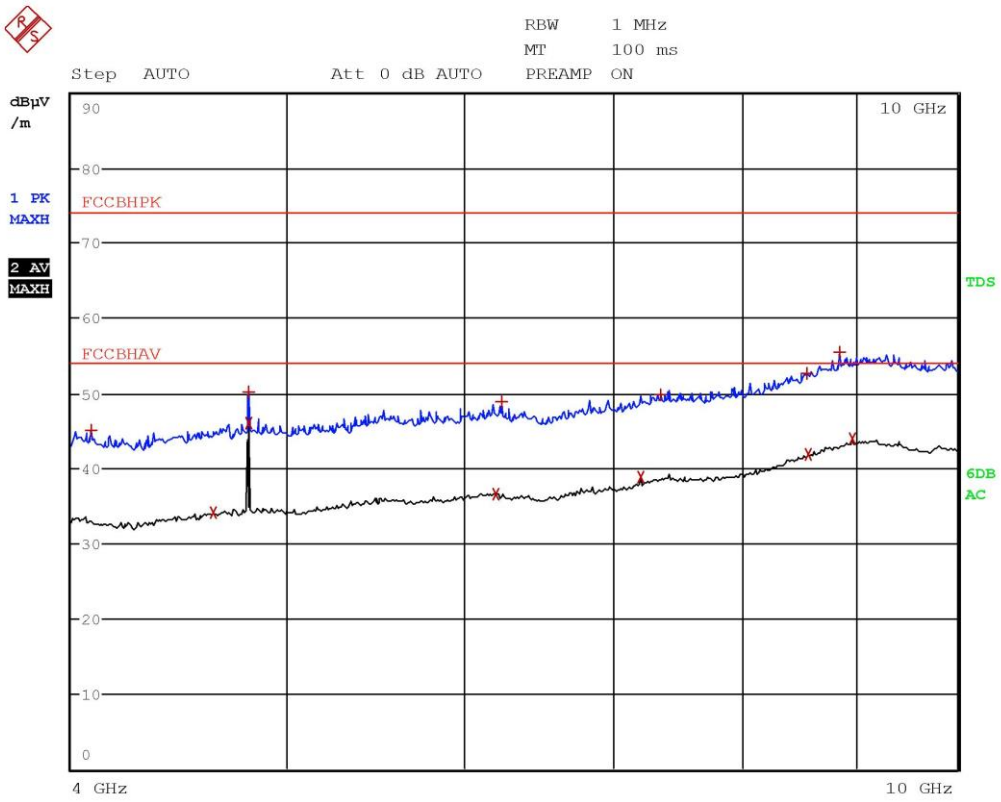
Segalla 19090515

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE		FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1	Max Peak	4.6512 GHz	45.12	-28.85
2	Average	4.6592 GHz	34.16	-19.81
1	Max Peak	4.8816 GHz	53.67	-20.30
2	Average	4.882 GHz	49.98	-4.00
1	Max Peak	6.0244 GHz	48.86	-25.12
2	Average	6.1808 GHz	36.95	-17.02
1	Max Peak	7.3228 GHz	53.80	-20.17
2	Average	7.3228 GHz	47.96	-6.01
1	Max Peak	8.5316 GHz	53.66	-20.32
2	Average	8.5696 GHz	41.77	-12.20
2	Average	9.152 GHz	43.81	-10.16
1	Max Peak	9.166 GHz	55.43	-18.54

Segalla 19090515



Segalla 19090516

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	4.0848 GHz	45.01	-28.97
2 Average	4.6348 GHz	34.09	-19.88
2 Average	4.802 GHz	46.03	-7.94
1 Max Peak	4.8024 GHz	50.24	-23.73
2 Average	6.2084 GHz	36.65	-17.32
1 Max Peak	6.2412 GHz	48.80	-25.17
2 Average	7.2032 GHz	38.93	-15.04
1 Max Peak	7.3544 GHz	49.83	-24.14
1 Max Peak	8.5556 GHz	52.66	-21.31
2 Average	8.5668 GHz	41.78	-12.19
1 Max Peak	8.8568 GHz	55.54	-18.43
2 Average	8.9692 GHz	43.88	-10.10

Segalla 19090516