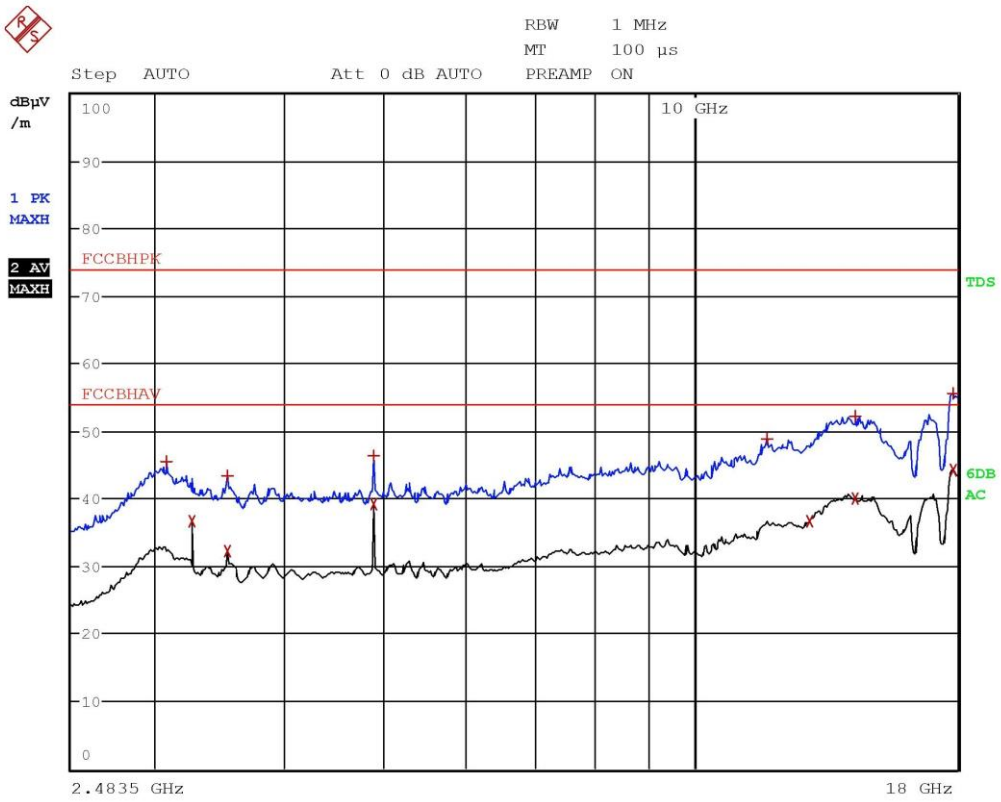
EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
2 Average	3.2027 GHz	39.51	-14.46
1 Max Peak	3.2027 GHz	45.32	-28.65
2 Average	3.5259 GHz	32.42	-21.55
1 Max Peak	3.9899 GHz	45.32	-28.65
1 Max Peak	4.8035 GHz	49.17	-24.80
2 Average	4.8039 GHz	43.67	-10.30
2 Average	7.2067 GHz	34.83	-19.14
1 Max Peak	7.2415 GHz	44.07	-29.90
2 Average	11.8007 GHz	36.86	-17.11
1 Max Peak	14.1039 GHz	51.94	-22.03
2 Average	14.1047 GHz	40.51	-13.47
2 Average	17.7711 GHz	44.14	-9.83
1 Max Peak	17.9395 GHz	55.55	-18.42

Gandini 17199513-Vert-Tx Fmin



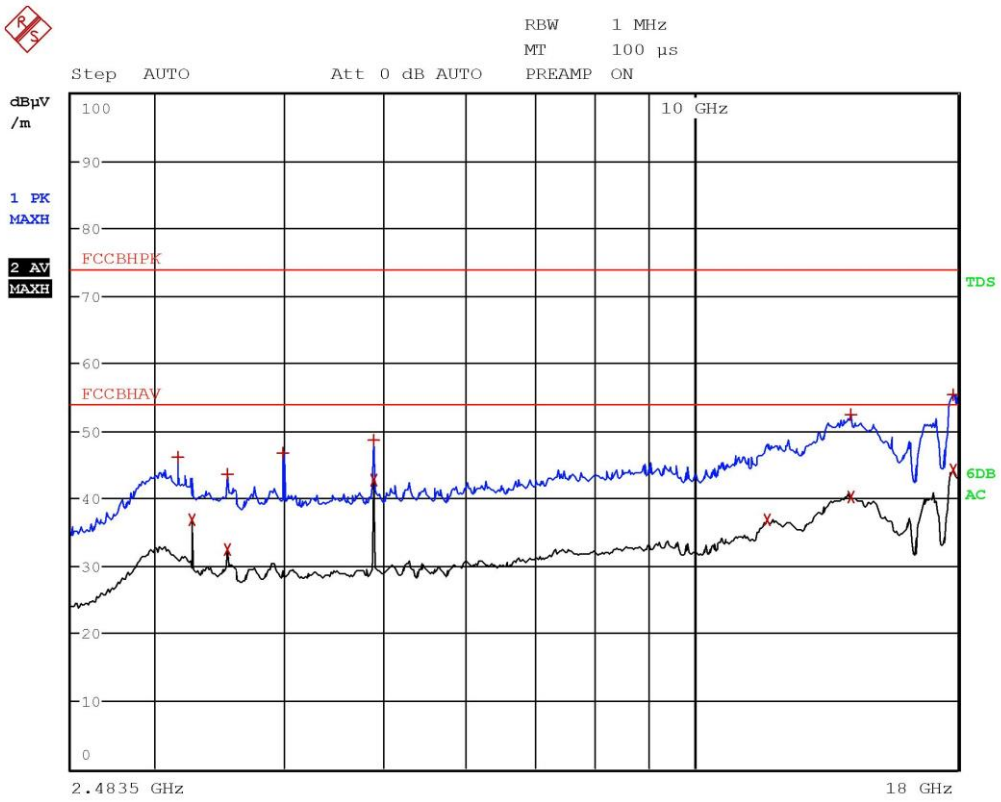
Gandini 17199514-Horiz-Tx Fmid

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	3.0763 GHz	45.38	-28.59
2 Average	3.2535 GHz	36.61	-17.36
2 Average	3.5259 GHz	32.34	-21.63
1 Max Peak	3.5259 GHz	43.47	-30.51
1 Max Peak	4.8795 GHz	46.31	-27.66
2 Average	4.8799 GHz	39.13	-14.84
1 Max Peak	11.7735 GHz	48.78	-25.19
2 Average	12.9355 GHz	36.73	-17.24
2 Average	14.3067 GHz	40.09	-13.88
1 Max Peak	14.3139 GHz	52.10	-21.87
1 Max Peak	17.8331 GHz	55.59	-18.38
2 Average	17.8379 GHz	44.28	-9.69

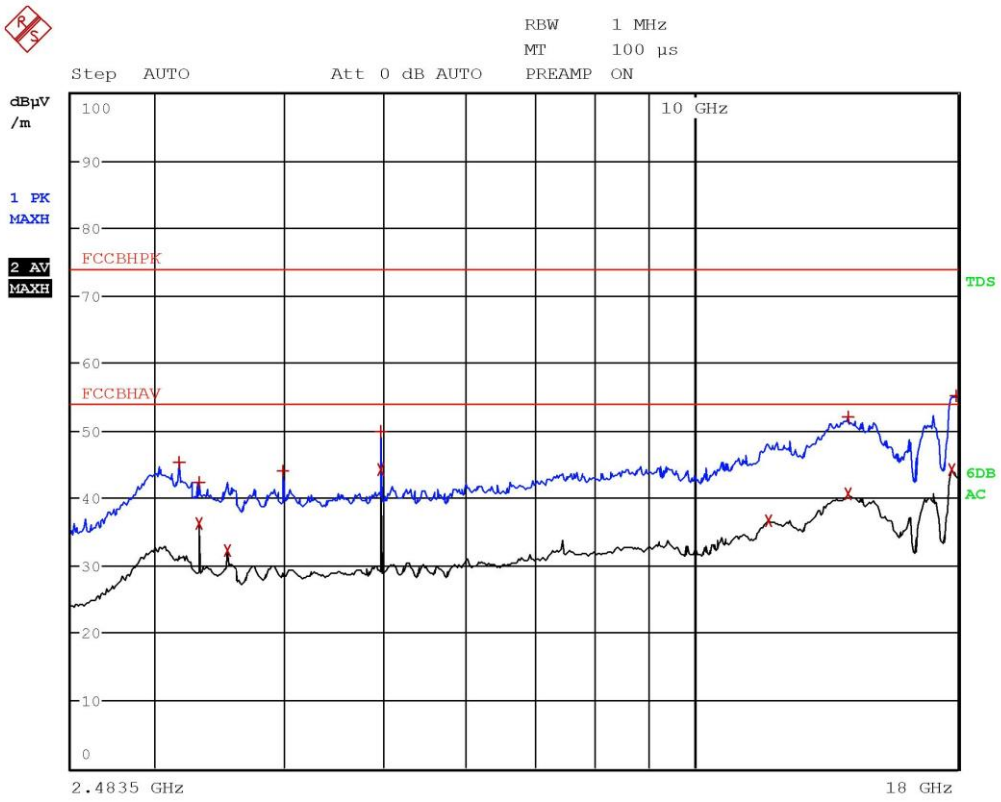
Gandini 17199514-Horiz-Tx Fmid



Gandini 17199515-Vert-Tx Fmid

EDIT PEAK LIST (Prescan Results)			
Trace1:	FCCBHPK		
Trace2:	FCCBHAV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	3.1547 GHz	46.19	-27.78
2 Average	3.2535 GHz	36.95	-17.02
2 Average	3.5259 GHz	32.53	-21.44
1 Max Peak	3.5259 GHz	43.67	-30.30
1 Max Peak	3.9855 GHz	46.65	-27.32
1 Max Peak	4.8795 GHz	48.61	-25.36
2 Average	4.8803 GHz	42.81	-11.16
2 Average	11.7735 GHz	36.92	-17.05
2 Average	14.1759 GHz	40.33	-13.65
1 Max Peak	14.2067 GHz	52.35	-21.62
1 Max Peak	17.8047 GHz	55.42	-18.55
2 Average	17.8327 GHz	44.20	-9.77

Gandini 17199515-Vert-Tx Fmid



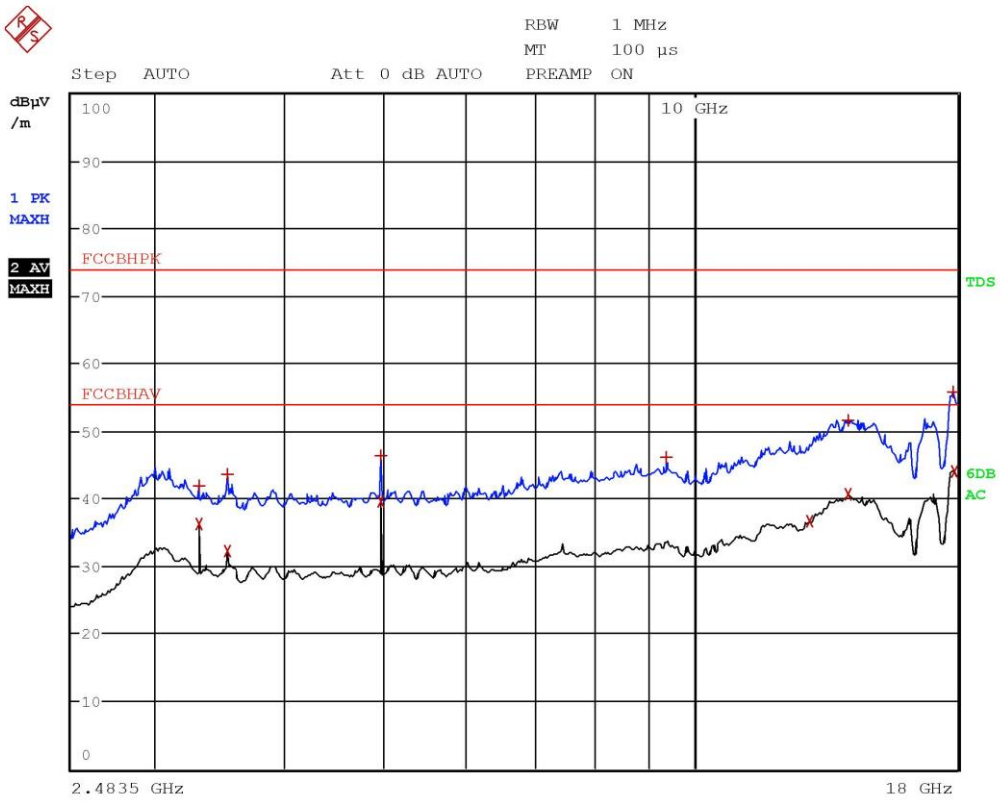
Gandini 17199516-Vert-Tx Fmax

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE		FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1	Max Peak	3.1567 GHz	45.24	-28.73
2	Average	3.3067 GHz	36.23	-17.74
1	Max Peak	3.3067 GHz	42.32	-31.65
2	Average	3.5259 GHz	32.30	-21.67
1	Max Peak	3.9883 GHz	43.96	-30.01
1	Max Peak	4.9595 GHz	49.79	-24.18
2	Average	4.9599 GHz	44.13	-9.84
2	Average	11.8075 GHz	36.69	-17.28
1	Max Peak	14.0899 GHz	52.04	-21.93
2	Average	14.1039 GHz	40.65	-13.32
2	Average	17.7679 GHz	44.17	-9.80
1	Max Peak	17.9539 GHz	55.10	-18.87

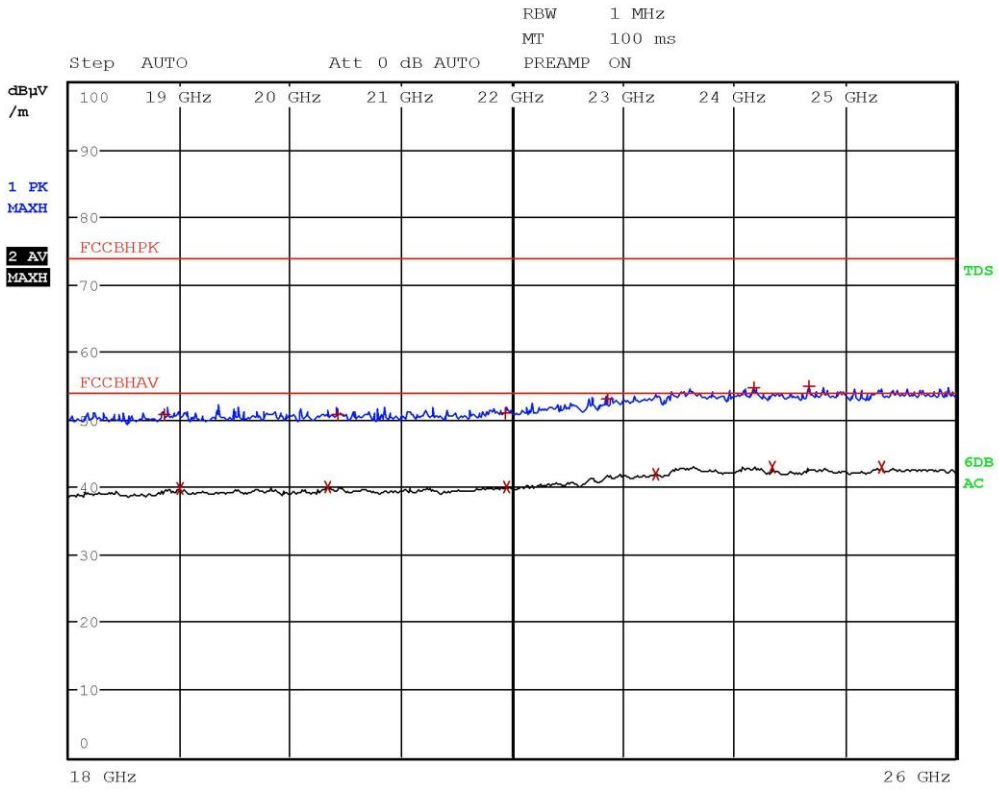
Gandini 17199516-Vert-Tx Fmax



Gandini 17199517-Horiz-Tx Fmax

EDIT PEAK LIST (Prescan Results)			
Trace1:	FCCBHPK		
Trace2:	FCCBHAV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
2 Average	3.3067 GHz	36.26	-17.71
1 Max Peak	3.3067 GHz	41.95	-32.02
1 Max Peak	3.5259 GHz	43.51	-30.46
2 Average	3.5259 GHz	32.20	-21.77
1 Max Peak	4.9595 GHz	46.28	-27.69
2 Average	4.9599 GHz	39.56	-14.41
1 Max Peak	9.3811 GHz	46.06	-27.92
2 Average	12.9375 GHz	36.71	-17.26
1 Max Peak	14.0915 GHz	51.63	-22.34
2 Average	14.1051 GHz	40.71	-13.26
1 Max Peak	17.8355 GHz	55.82	-18.15
2 Average	17.9067 GHz	44.08	-9.89

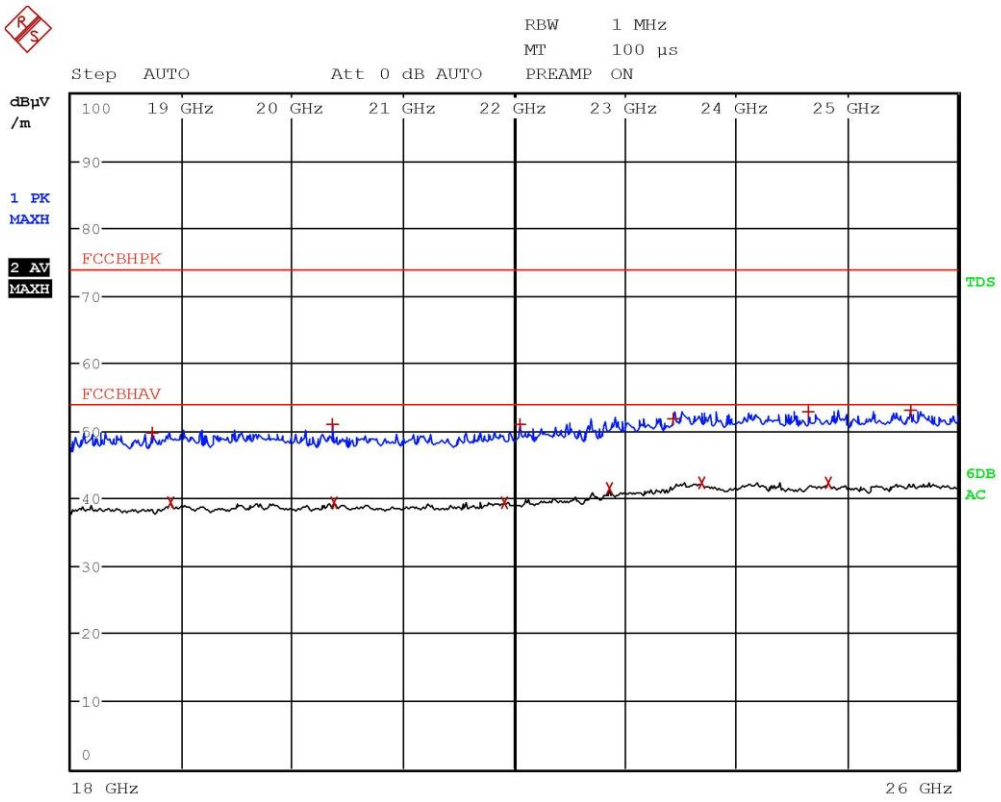
Gandini 17199517-Horiz-Tx Fmax



Gandini 17199518-Vert-Tx Fmax

EDIT PEAK LIST (Prescan Results)			
Trace1:	FCCBHPK		
Trace2:	FCCBHAV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	18.8532 GHz	50.74	-23.23
2 Average	19.002 GHz	39.80	-14.17
2 Average	20.3352 GHz	39.97	-14.00
1 Max Peak	20.4216 GHz	50.65	-23.32
1 Max Peak	21.9388 GHz	50.88	-23.09
2 Average	21.9492 GHz	39.99	-13.98
1 Max Peak	22.8532 GHz	53.00	-20.97
2 Average	23.2976 GHz	41.92	-12.05
1 Max Peak	24.184 GHz	54.73	-19.24
2 Average	24.352 GHz	43.03	-10.94
1 Max Peak	24.6848 GHz	54.87	-19.10
2 Average	25.3292 GHz	42.95	-11.02

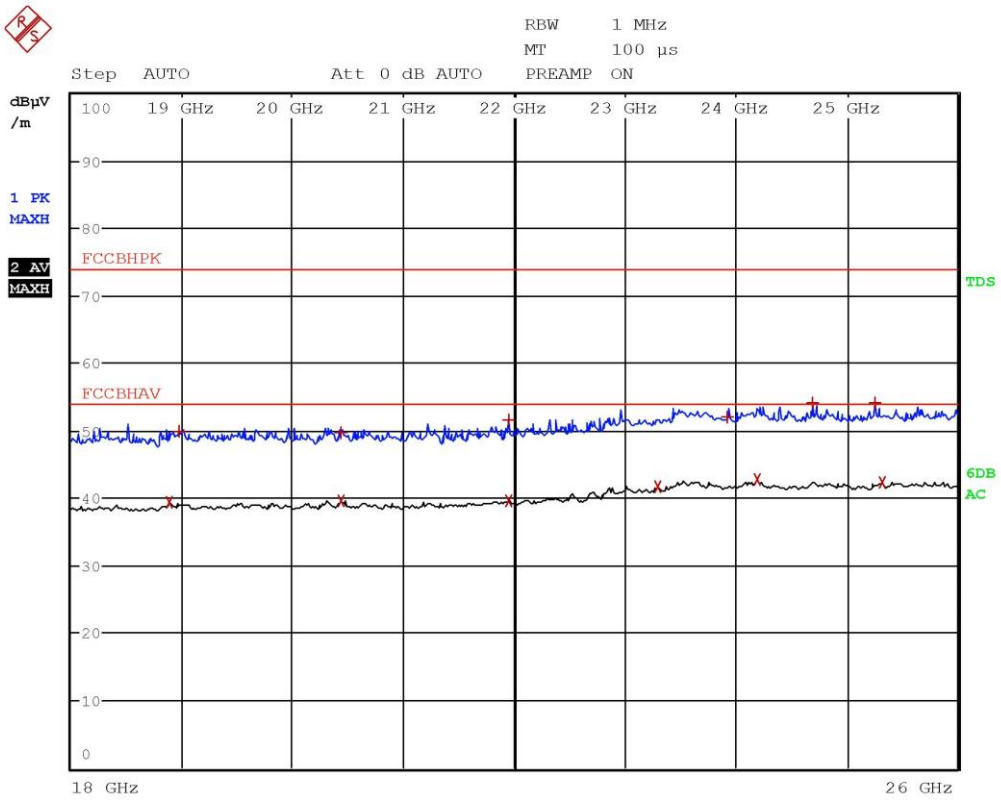
Gandini 17199518-Vert-Tx Fmax



Gandini 17199519-Horiz-Tx Fmax

EDIT PEAK LIST (Prescan Results)			
Trace1:	FCCBHPK		
Trace2:	FCCBHAV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	18.7336 GHz	49.75	-24.22
2 Average	18.8964 GHz	39.29	-14.68
1 Max Peak	20.3548 GHz	50.94	-23.03
2 Average	20.3652 GHz	39.30	-14.67
2 Average	21.9152 GHz	39.42	-14.55
1 Max Peak	22.056 GHz	50.87	-23.10
2 Average	22.856 GHz	41.41	-12.56
1 Max Peak	23.4296 GHz	51.73	-22.24
2 Average	23.688 GHz	42.34	-11.63
1 Max Peak	24.6572 GHz	52.93	-21.04
2 Average	24.8352 GHz	42.36	-11.62
1 Max Peak	25.5756 GHz	53.12	-20.85

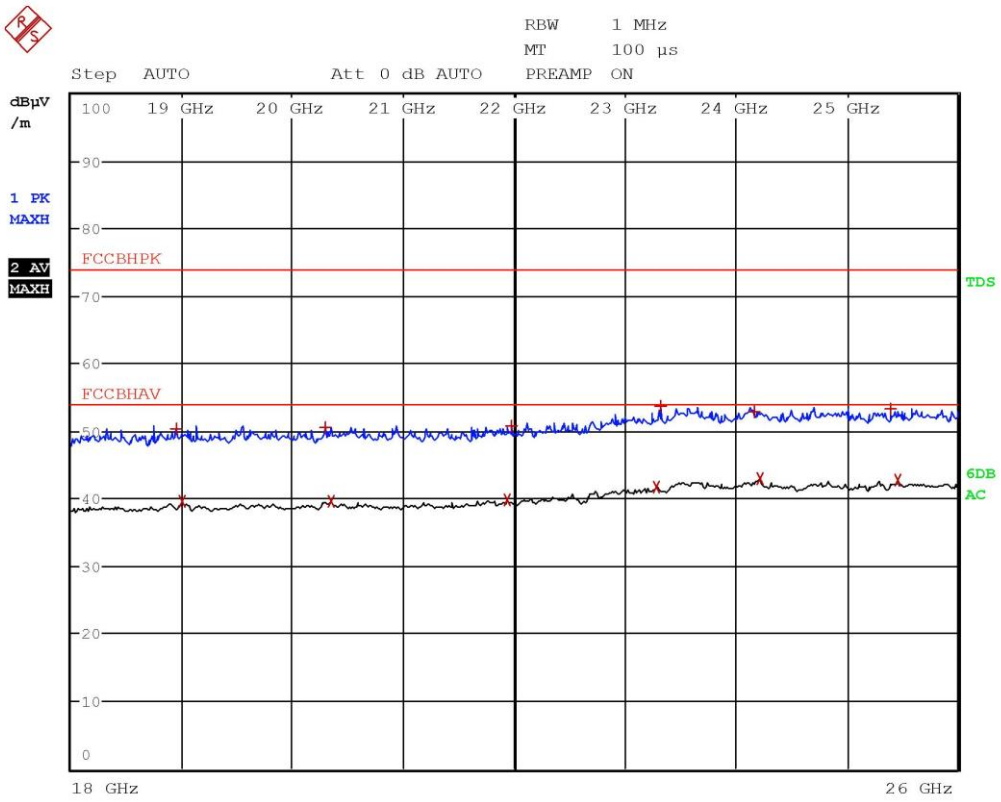
Gandini 17199519-Horiz-Tx Fmax



Gandini 17199520-Horiz-Tx Fmid

EDIT PEAK LIST (Prescan Results)			
Trace1:	FCCBHPK		
Trace2:	FCCBHAV		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
2 Average	18.8848 GHz	39.41	-14.56
1 Max Peak	18.978 GHz	49.84	-24.13
1 Max Peak	20.4328 GHz	49.67	-24.30
2 Average	20.436 GHz	39.58	-14.39
2 Average	21.9468 GHz	39.59	-14.38
1 Max Peak	21.9468 GHz	51.53	-22.45
2 Average	23.2884 GHz	41.67	-12.30
1 Max Peak	23.9212 GHz	51.94	-22.03
2 Average	24.188 GHz	42.67	-11.30
1 Max Peak	24.688 GHz	54.12	-19.85
1 Max Peak	25.262 GHz	54.07	-19.90
2 Average	25.3156 GHz	42.36	-11.61

Gandini 17199520-Horiz-Tx Fmid



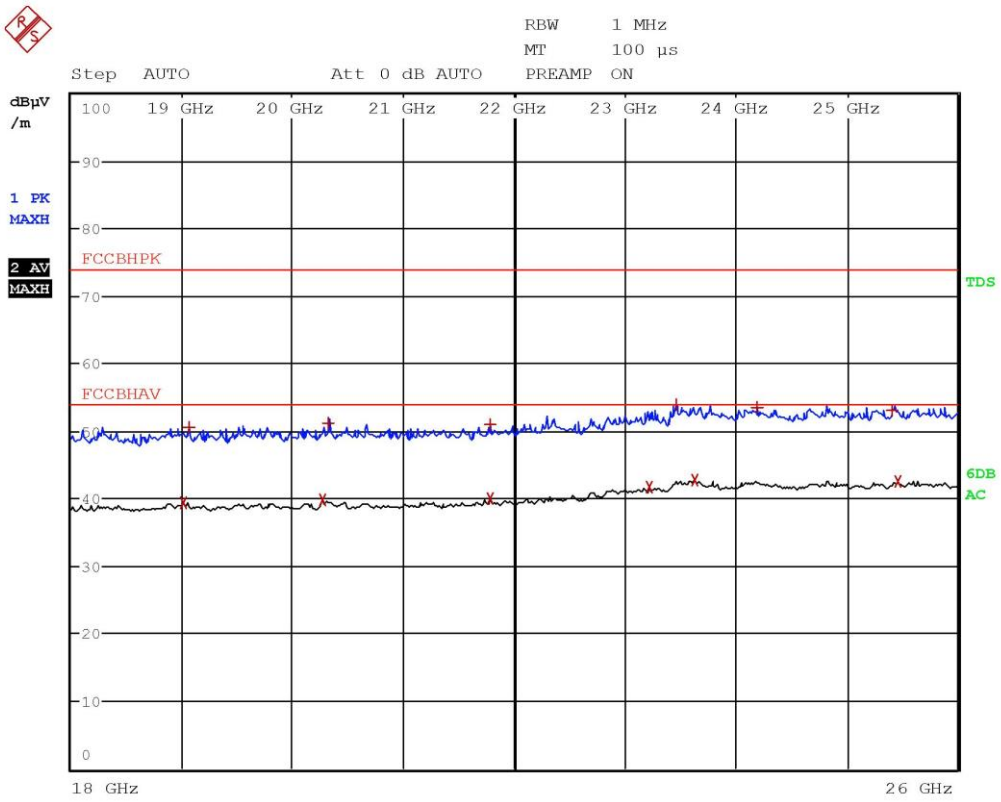
Gandini 17199521-Vert-Tx Fmid

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
1 Max Peak	18.9436 GHz	50.26	-23.71
2 Average	19.0032 GHz	39.63	-14.34
1 Max Peak	20.2972 GHz	50.58	-23.39
2 Average	20.3432 GHz	39.58	-14.39
2 Average	21.9328 GHz	39.80	-14.17
1 Max Peak	21.9712 GHz	50.80	-23.17
2 Average	23.282 GHz	41.73	-12.24
1 Max Peak	23.322 GHz	53.72	-20.26
1 Max Peak	24.1676 GHz	52.90	-21.07
2 Average	24.2176 GHz	42.99	-10.98
1 Max Peak	25.3936 GHz	53.16	-20.81
2 Average	25.4548 GHz	42.79	-11.18

Gandini 17199521-Vert-Tx Fmid



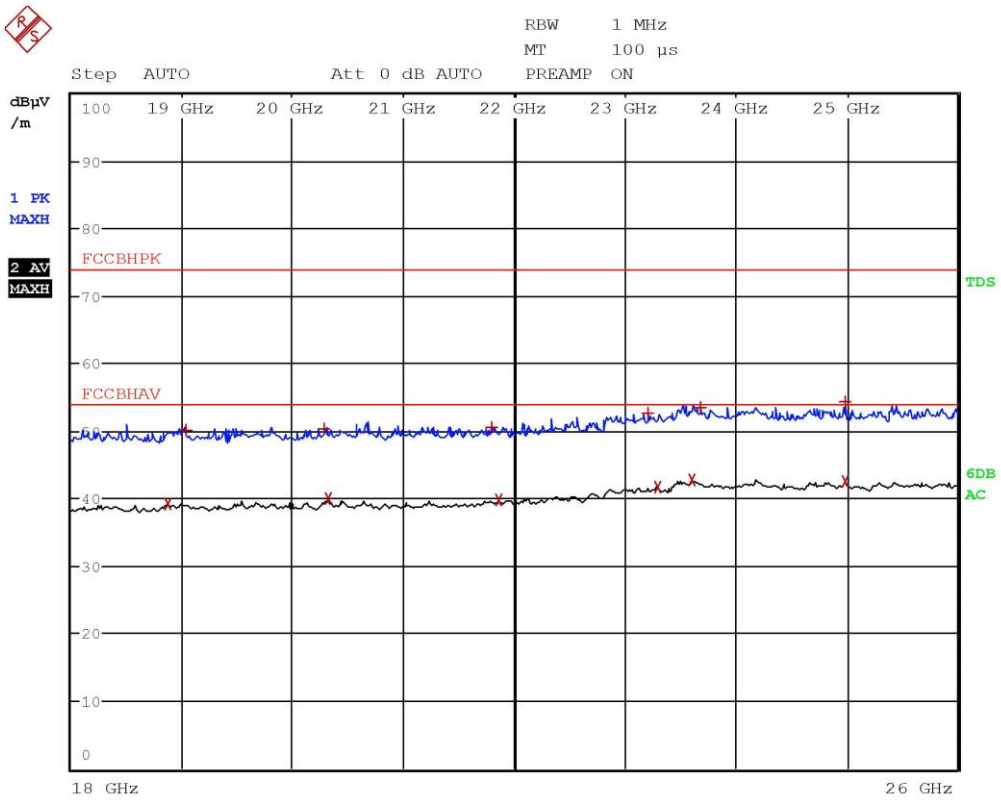
Gandini 17199522-Vert-Tx Fmin

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
2 Average	19.0084 GHz	39.36	-14.61
1 Max Peak	19.0612 GHz	50.45	-23.52
2 Average	20.2744 GHz	39.71	-14.26
1 Max Peak	20.3184 GHz	51.06	-22.91
1 Max Peak	21.7796 GHz	50.92	-23.05
2 Average	21.7812 GHz	40.02	-13.95
2 Average	23.2176 GHz	41.63	-12.34
1 Max Peak	23.4604 GHz	53.86	-20.11
2 Average	23.6232 GHz	42.67	-11.30
1 Max Peak	24.1872 GHz	53.38	-20.59
1 Max Peak	25.4084 GHz	53.04	-20.93
2 Average	25.4604 GHz	42.60	-11.38

Gandini 17199522-Vert-Tx Fmin



Gandini 17199523-Horiz-Tx Fmin

EDIT PEAK LIST (Prescan Results)

Trace1:	FCCBHPK
Trace2:	FCCBHAV
Trace3:	---

TRACE	FREQUENCY	LEVEL dBµV/m	DELTA LIMIT dB
2 Average	18.8688 GHz	39.22	-14.75
1 Max Peak	19.0408 GHz	50.00	-23.97
1 Max Peak	20.2868 GHz	50.27	-23.70
2 Average	20.3256 GHz	39.96	-14.01
1 Max Peak	21.7952 GHz	50.51	-23.46
2 Average	21.8616 GHz	39.74	-14.23
1 Max Peak	23.206 GHz	52.52	-21.45
2 Average	23.2948 GHz	41.68	-12.29
2 Average	23.6024 GHz	42.73	-11.24
1 Max Peak	23.6808 GHz	53.41	-20.56
2 Average	24.9828 GHz	42.53	-11.44
1 Max Peak	24.99 GHz	54.26	-19.71

Gandini 17199523-Horiz-Tx Fmin

Result: The requirements are met

11.4 DTS bandwidth

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- KDB 558074 D01 DTS Meas Guidance v04 cl. 8.1
- 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

CMC S108, CMC S136, CMC S164
Measurement uncertainty: See clause 7 of this test report

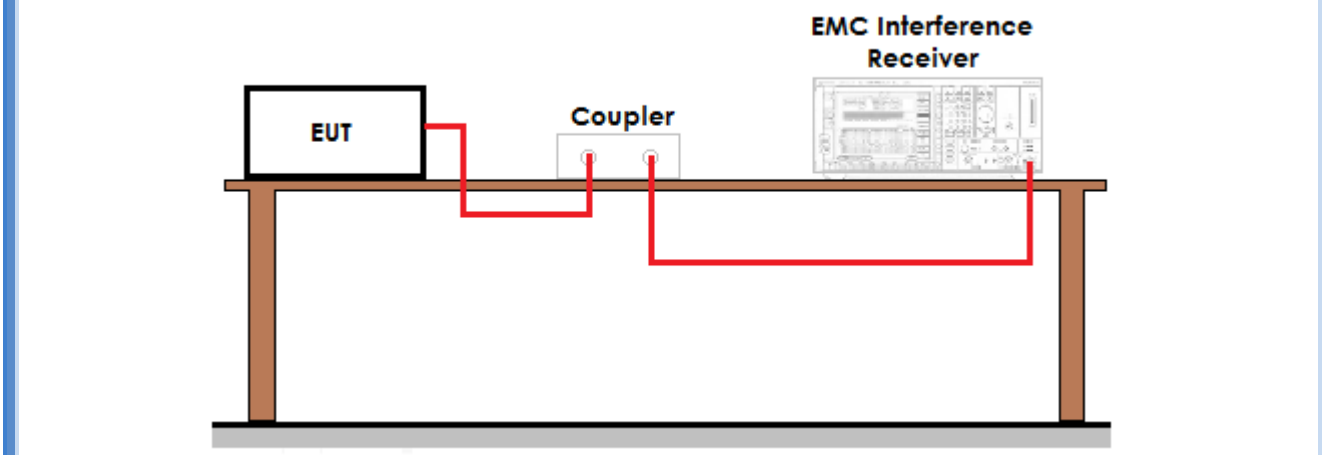
Test specification

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Environmental conditions

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

Setup

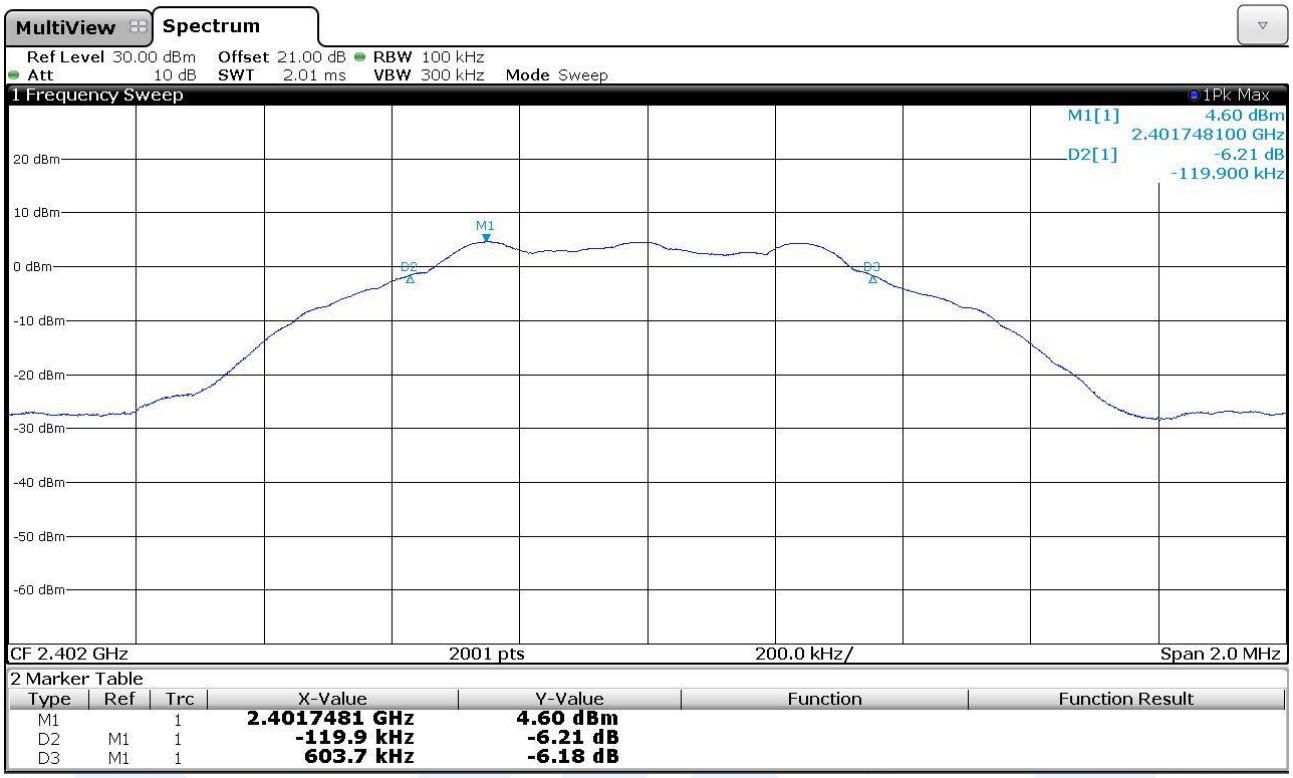


Result

Channel	*Graphs*	*6 dB bandwidth (kHz)*	*Limits (kHz)*	*Results*
Lowest	G17199520	723,6	At least 500	Complies
Medium	G17199530	720,6	At least 500	Complies
Highest	G17199527	721,9	At least 500	Complies

Graphs

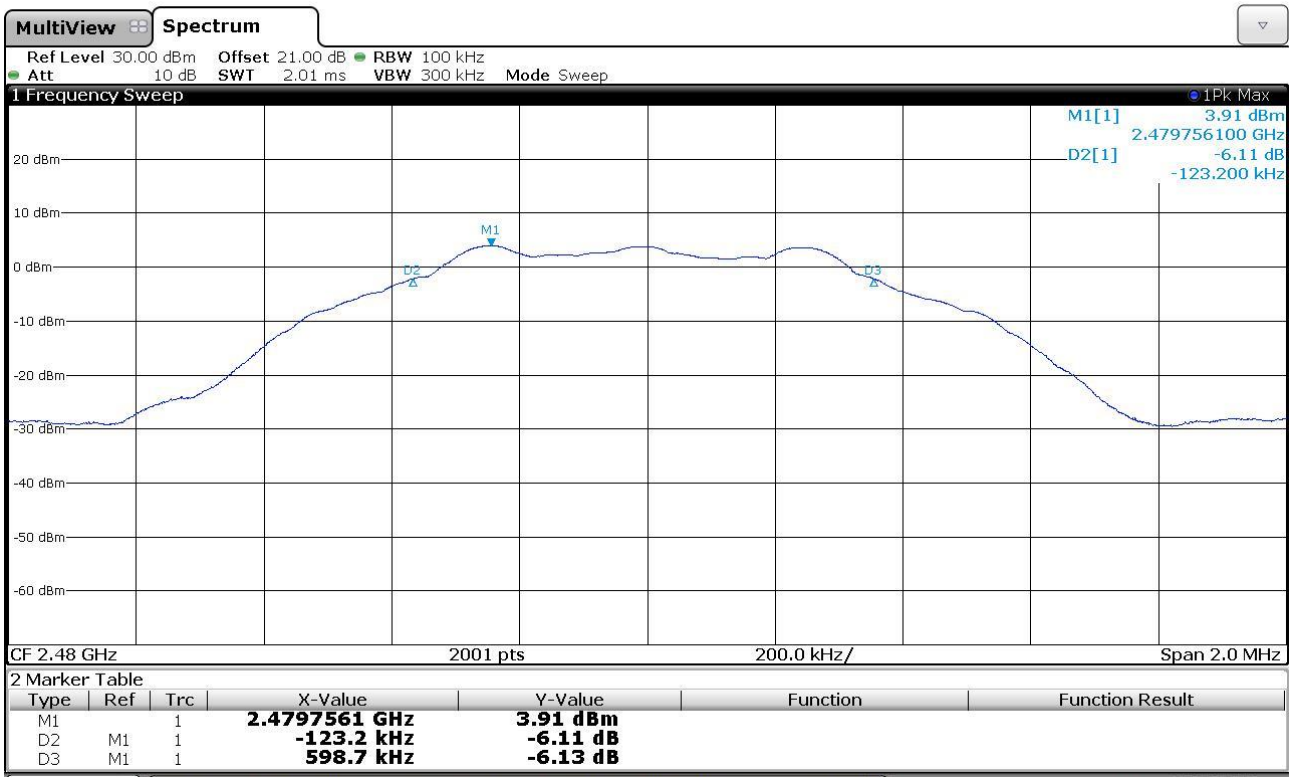
Gandini 17199520



2 Marker Table

Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1		1	**2.4017481 GHz**	**4.60 dBm**		
D2	M1	1	**-119.9 kHz**	**-6.21 dB**		
D3	M1	1	**603.7 kHz**	**-6.18 dB**		

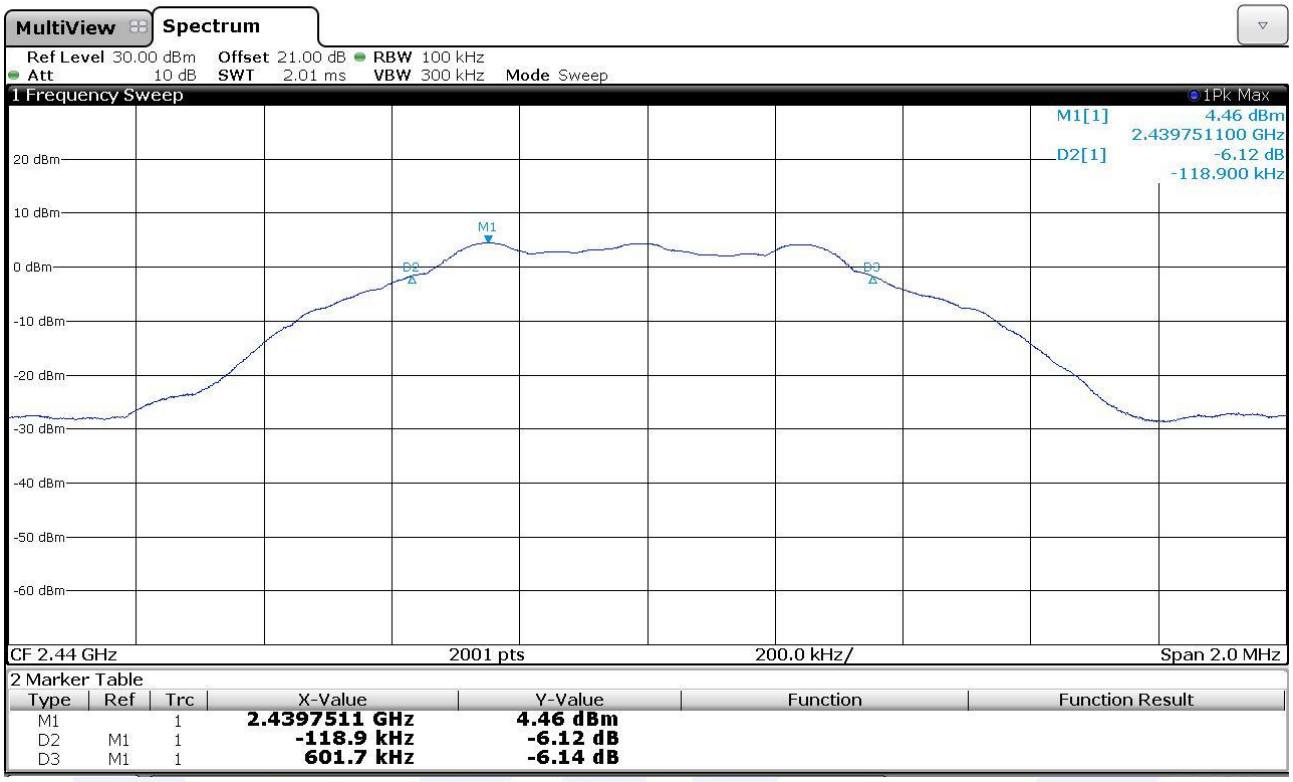
Gandini 17199527



2 Marker Table

Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1		1	**2.4797561 GHz**	**3.91 dBm**		
D2	M1	1	**-123.2 kHz**	**-6.11 dB**		
D3	M1	1	**598.7 kHz**	**-6.13 dB**		

Gandini 17199530



Result: The requirements are met

11.5 Band edge

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247 (d)
- KDB 558074 D01 DTS Meas Guidance v04 cl. 11.1(a) and 12.1
- 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

CMC S108, CMC S136, CMC S164
Measurement uncertainty: See clause 7 of this test report

Test specification

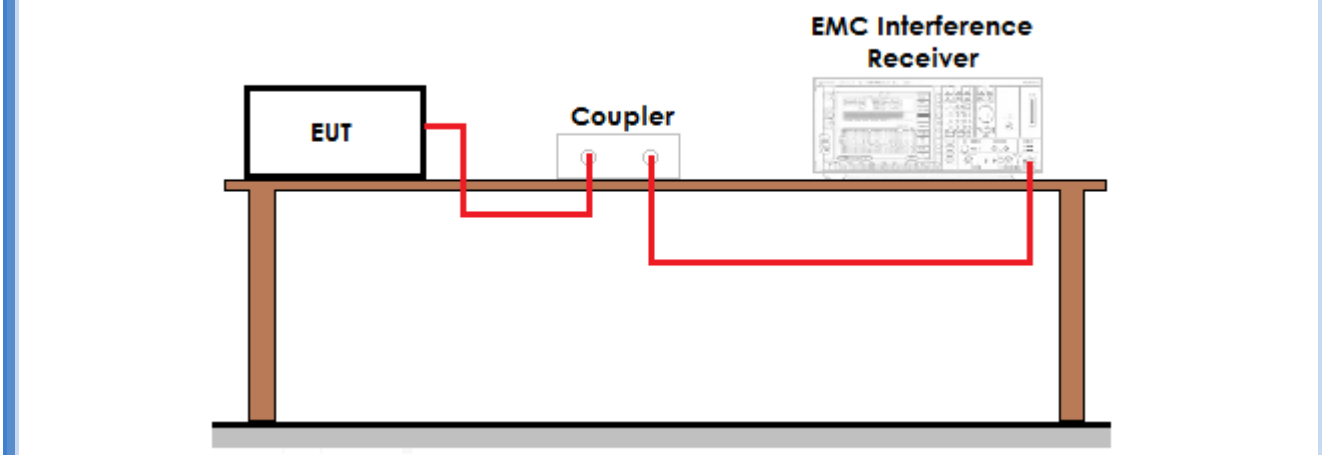
See FCC Part 15.247

Environmental conditions

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

Acceptance limits: operation within the band 2400 – 2483,5 MHz

Setup

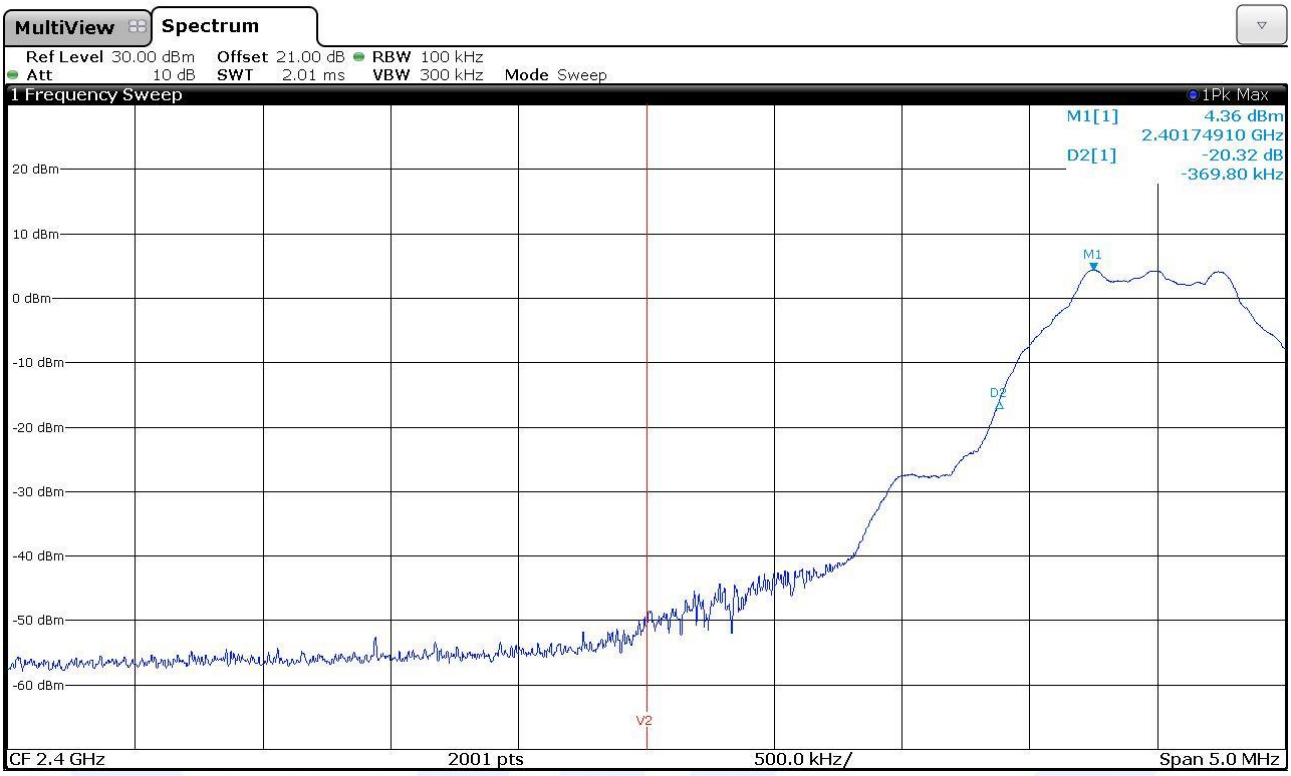


Result

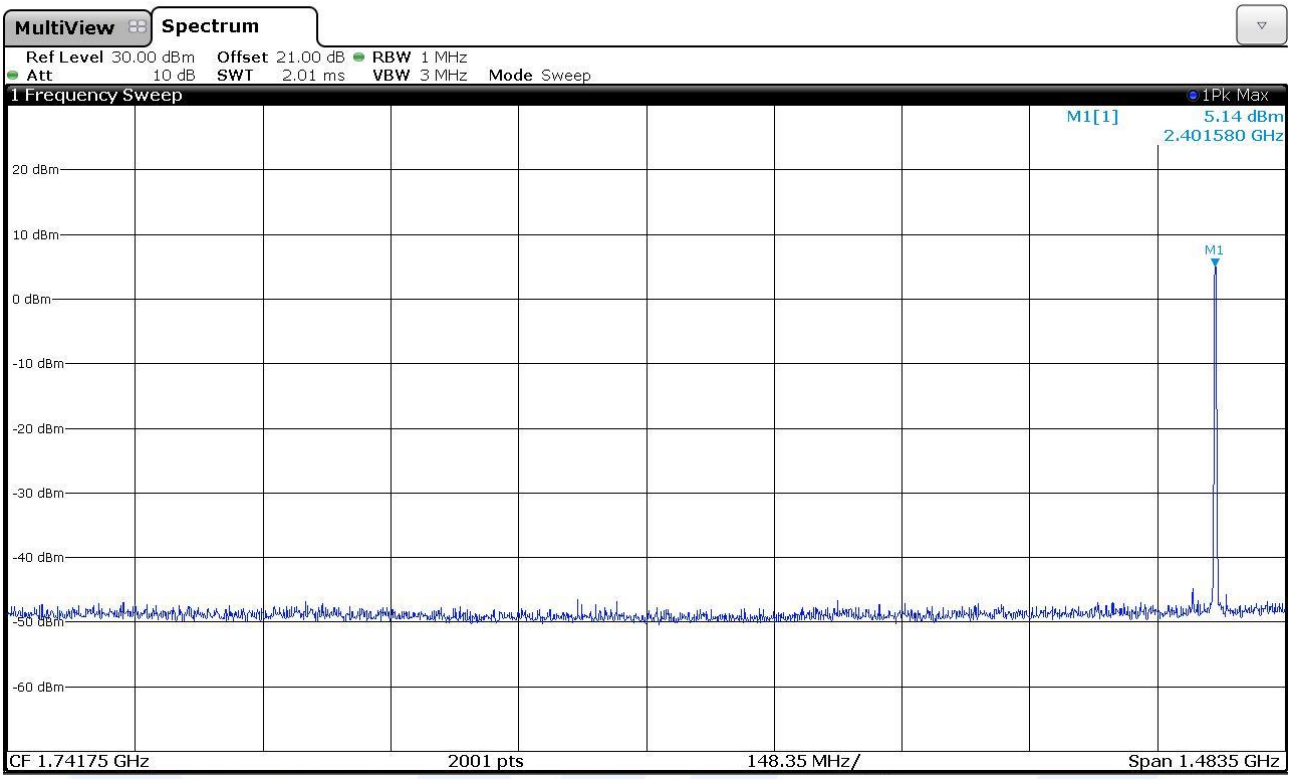
Channel	*Bandwidth*	*Graph(s)*	*Results*	
Lowest	100 kHz	G17199523	F_L: 2401,3793 MHz	Complies
	1 MHz	G17199524		
Highest	1 MHz	G17199526	F_H: 2480,6264 MHz	Complies
	100 kHz	G17199525		

Graphs

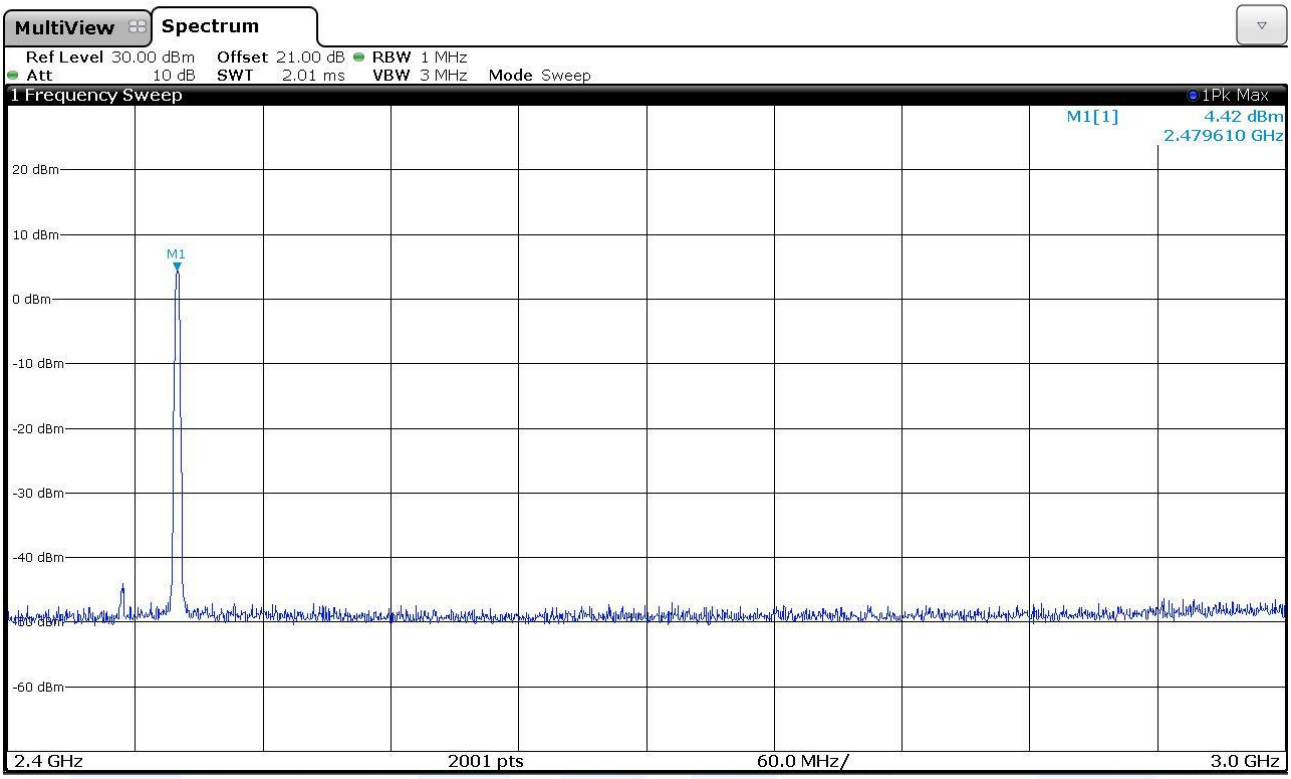
Gandini 17199523



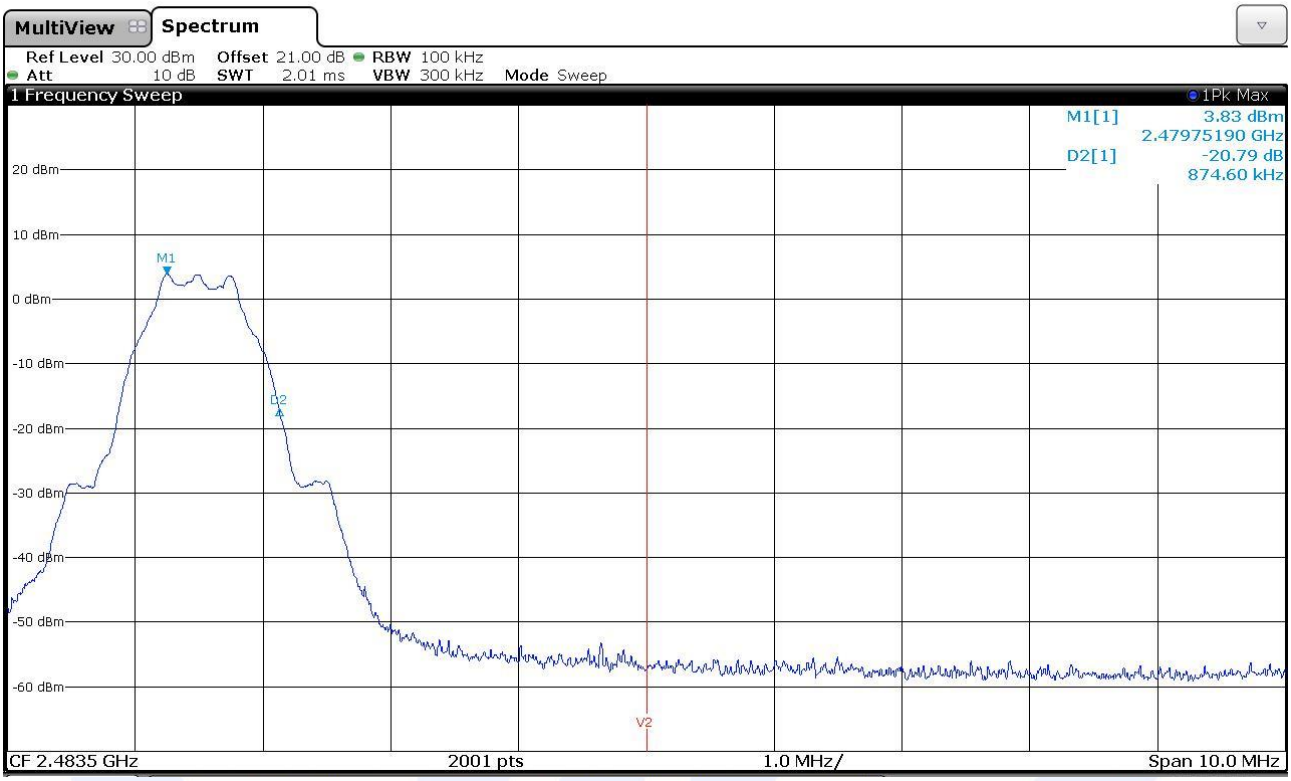
Gandini 17199524



Gandini 17199525



Gandini 17199526



Result: The requirements are met

11.6 Fundamental emission output power

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- KDB 558074 D01 DTS Meas Guidance v04 cl. 3.0 and 9
- 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

CMC S108, CMC S136, CMC S164
Measurement uncertainty: See clause 7 of this test report

Test specification

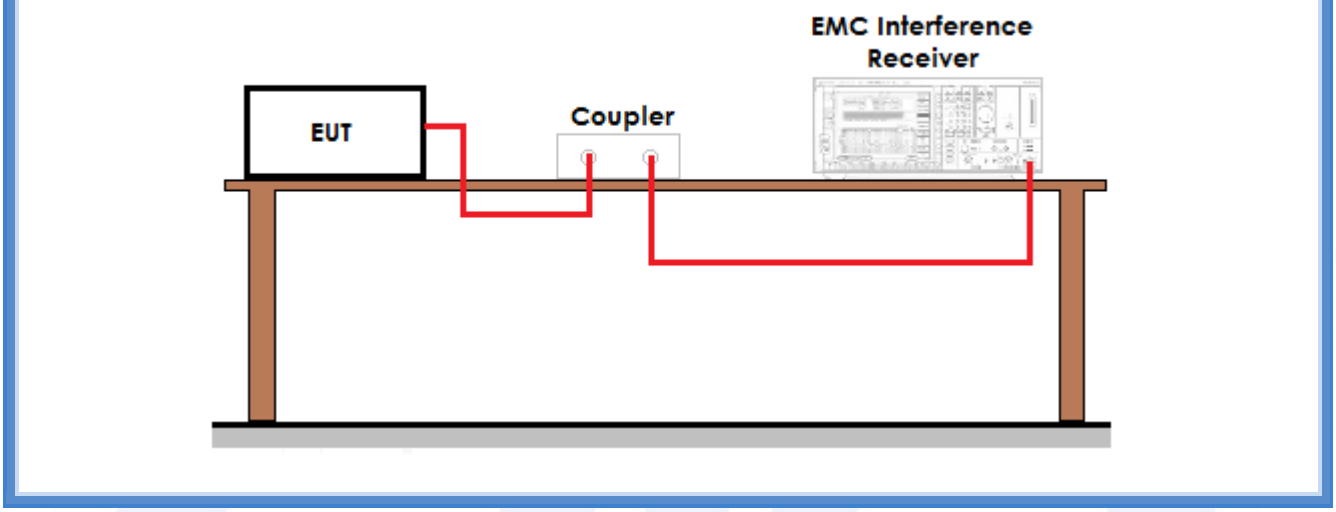
Port: Antenna

Environmental conditions

Temperature (°C)	*Atmospheric pressure (kPa)*	*Relative humidity (%)*
20	100	45

Acceptance limits: for systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt

Setup

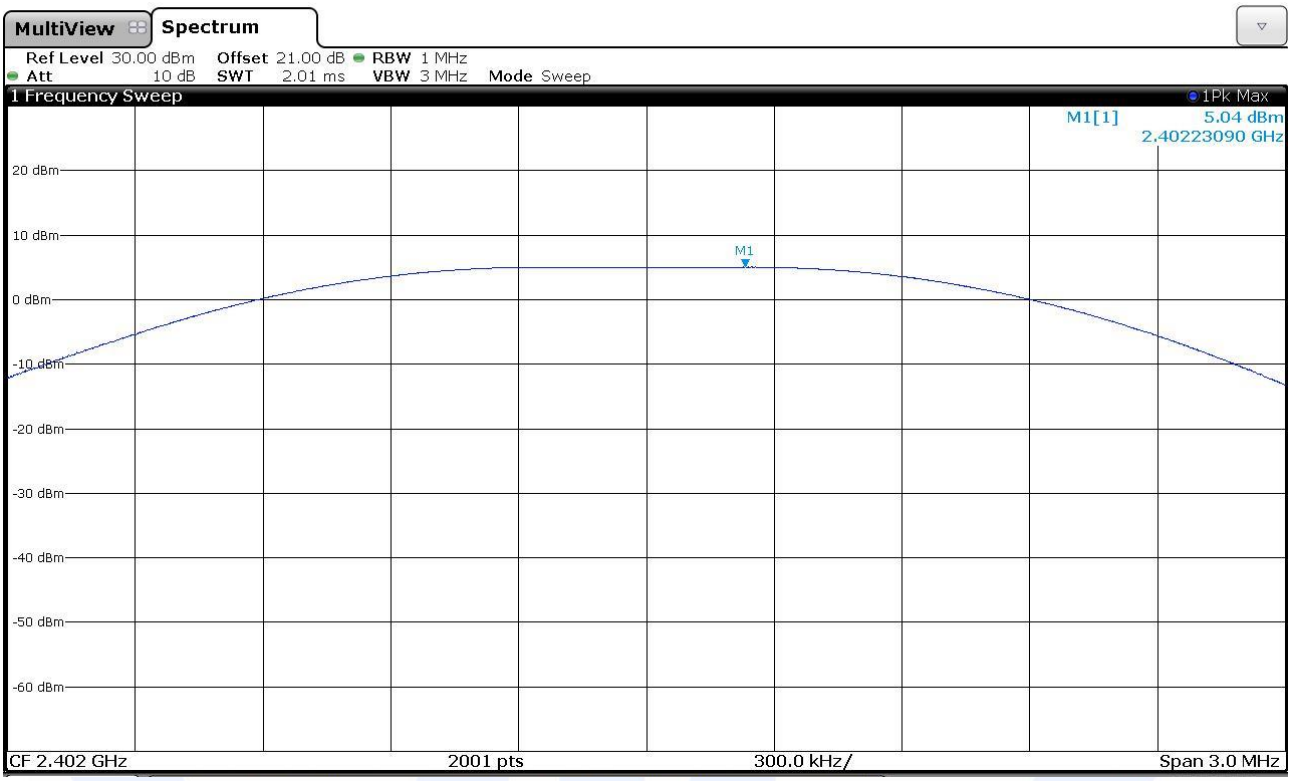


Result

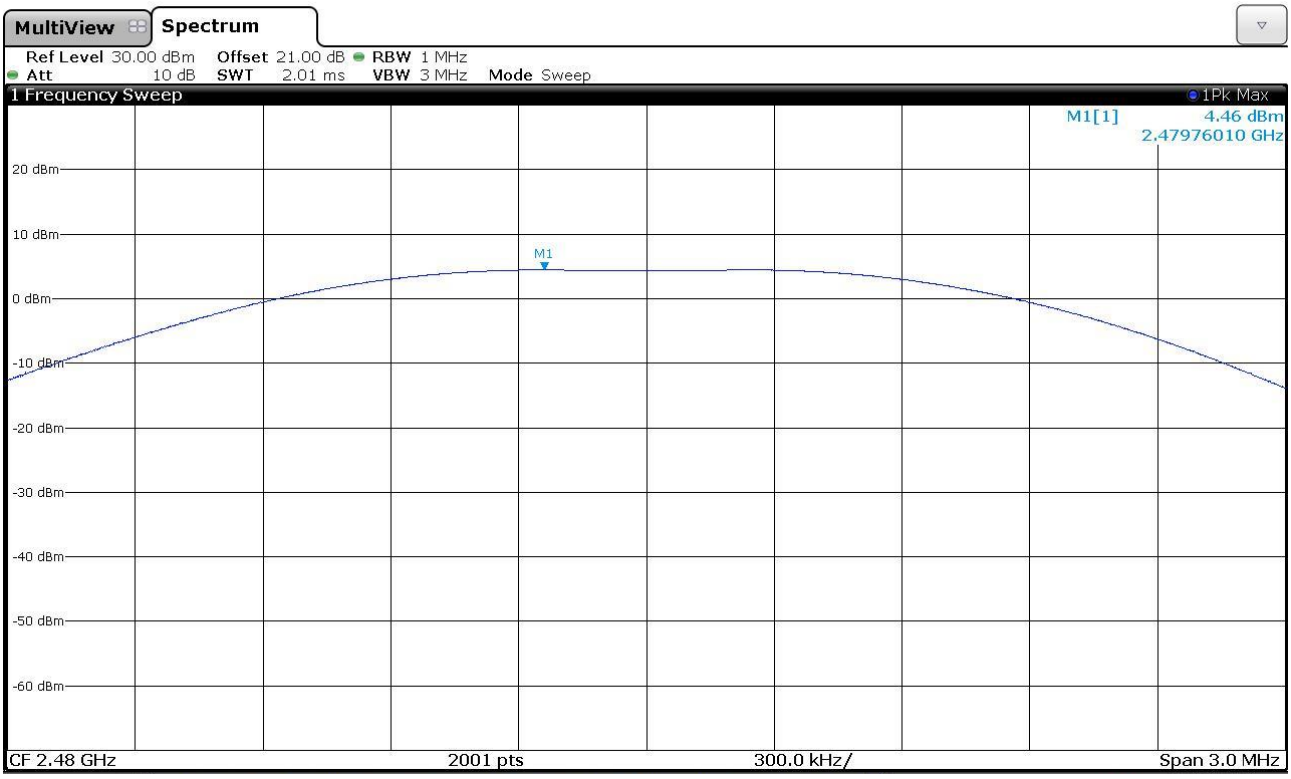
Frequency (MHz)	*Graphs*	*Conducted measured level (dBm)*	*Conducted power level (mW)*	*Calculated radiated level (dBµV/m)*
2402,2309	G17199521	5,04	3,19	98,97
2440,2459	G17199531	4,96	3,13	98,89
2479,7601	G17199528	4,46	2,79	98,39

Graphs

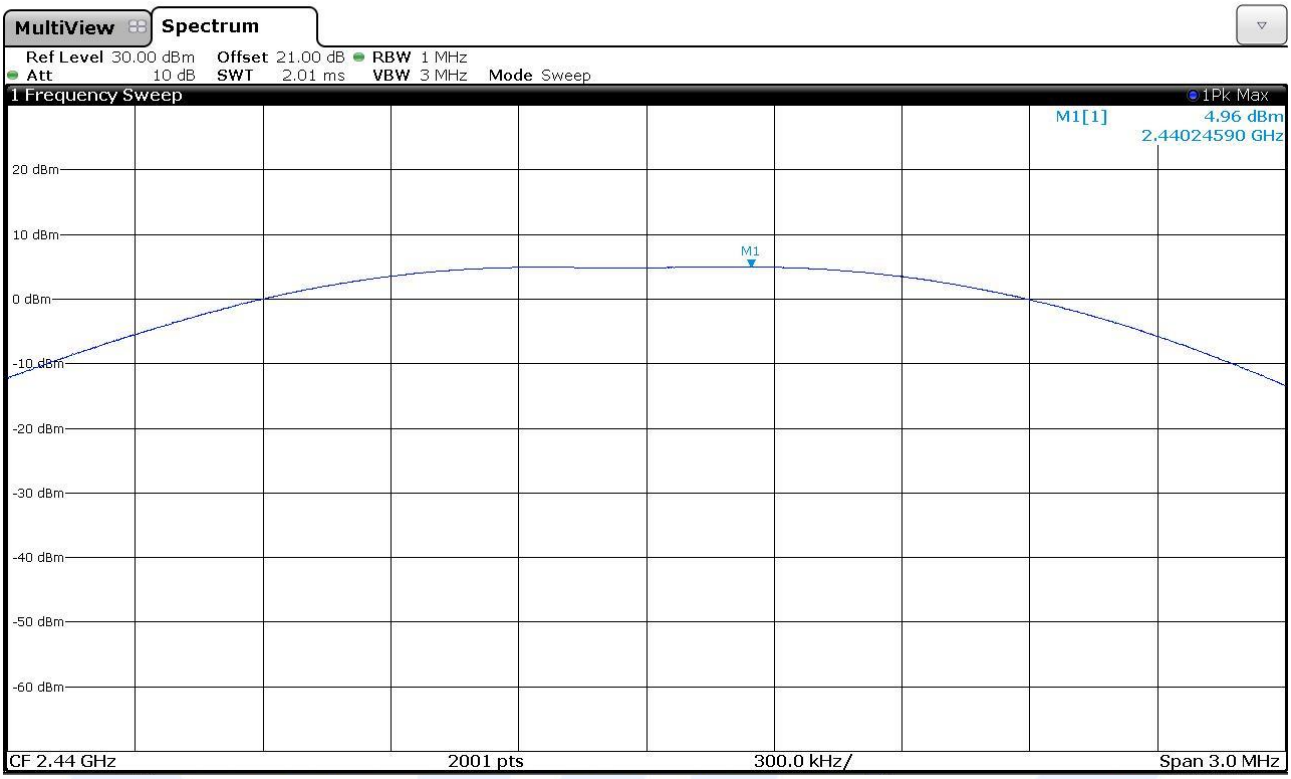
Gandini 17199521



Gandini 17199528



Gandini 17199531



Result: The requirements are met

11.7 Maximum power spectral density level in the fundamental emission

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- KDB 558074 D01 DTS Meas Guidance v04 cl. 10.2
- Internal procedure PM001
- See clause 4 of this test report

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 S108, CMC S136, CMC S164
Measurement uncertainty: See clause 7 of this test report

Test specification

Port: Antenna

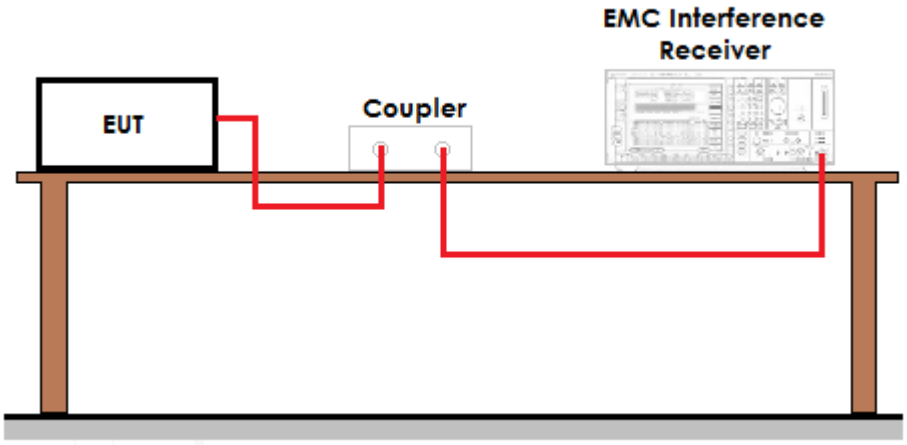
Environmental conditions

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

Acceptance limits:

Frequency Range	*Power Spectral Density*
2400 – 2483,5 MHz	8 dBm / 6,31 mW

Setup

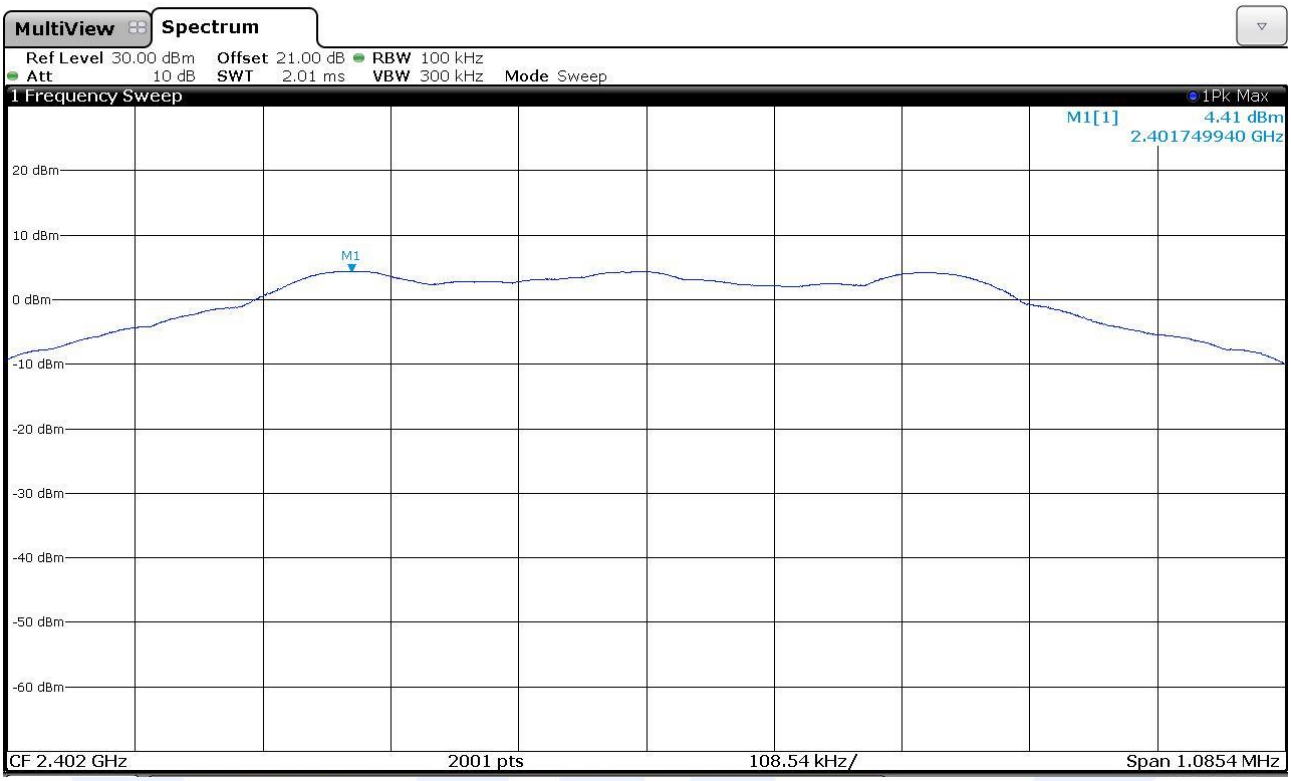


Result

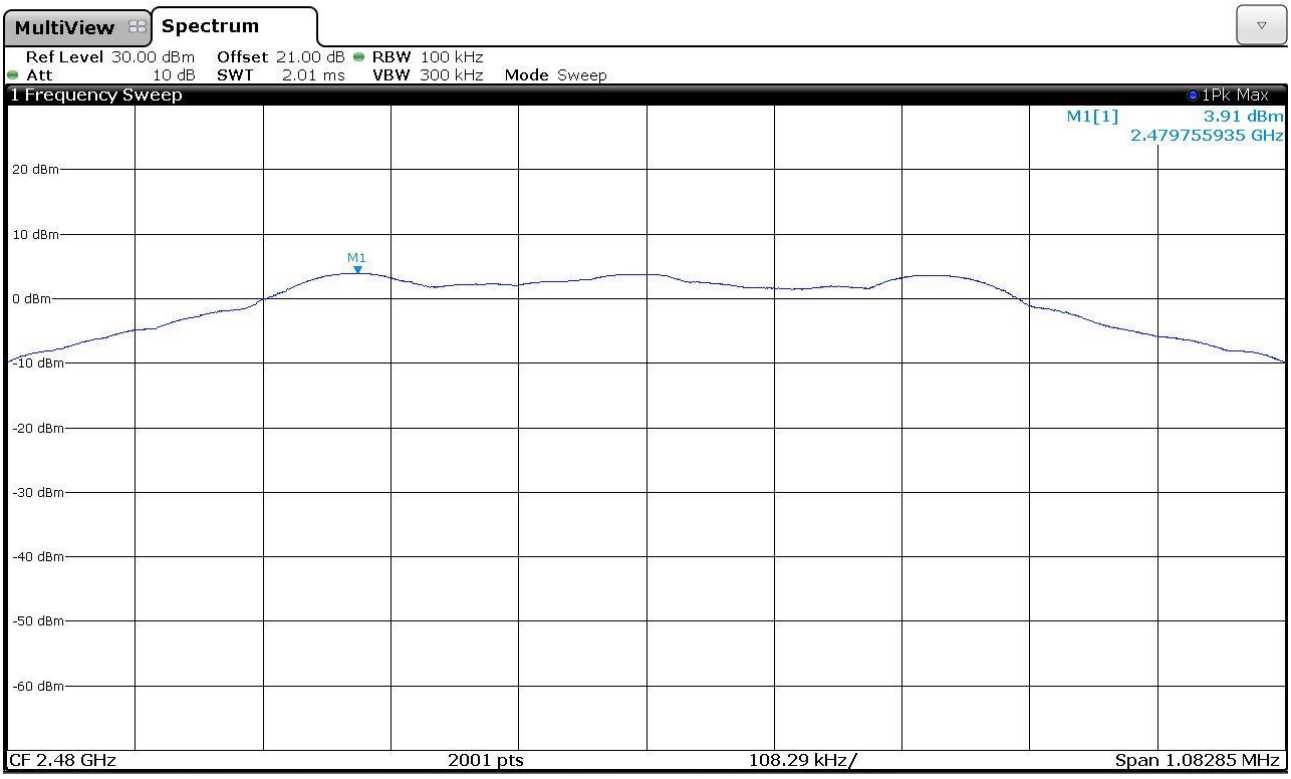
Frequency (MHz)	*Graphs*	*Measured PK level (dBm)*	*Power Spectral Density (mW)*	*Remarks*
2401,7499	G17199522	4,41	2,76	--
2439,7542	G17199532	4,45	2,79	--
2479,7559	G17199529	3,91	2,46	--

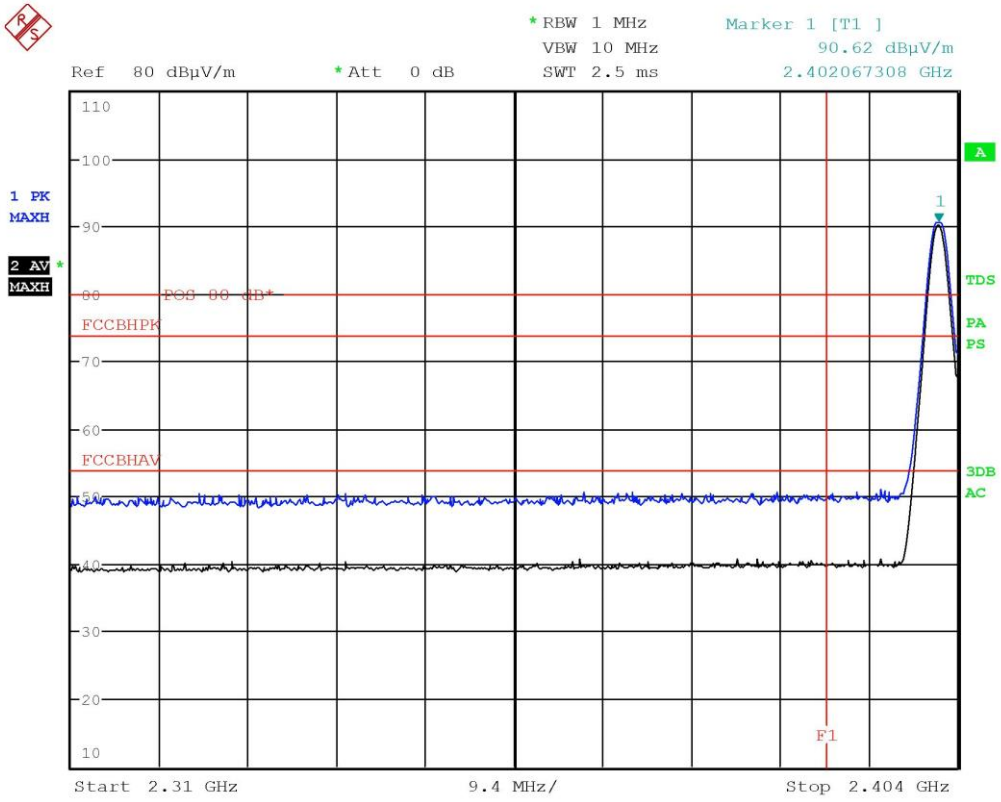
Graphs

Gandini 17199522



Gandini 17199529





Gandini 17199532

Result: The requirements are met

11.8 Spurious Emission

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
Antenna polarization: Horizontal (H) – Vertical (V)
EUT – Antenna distance: 3 m
EUT height about the floor: 80 cm
Detector AV + Peak

Environmental conditions

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

Acceptance limits

Acceptance limits for emissions in restricted frequency bands		
Frequency (MHz)	*AV limits [dB(µV/m)]*	*Peak limits [dB(µV/m)]*
> 1000	54	74

The restricted frequency bands are listed in the following table

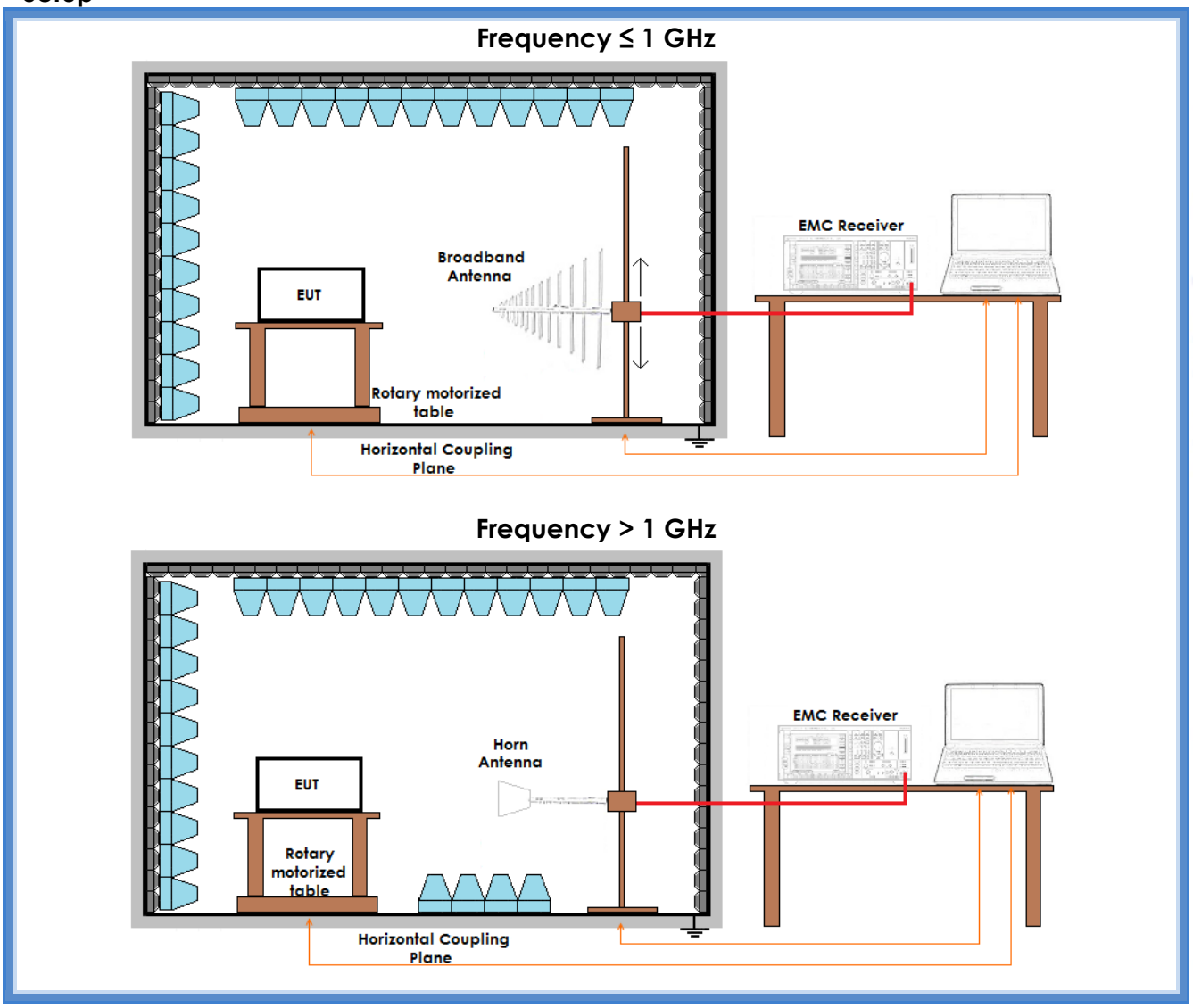
MHz	MHz	MHz	GHz
0,090 – 0,110	16,42 – 16,423	399,9 – 410	4,5 – 5,15
0,495 – 0,505	16,69475 – 16,69525	608 – 614	5,35 – 5,46
2,1735 – 2,1905	16,80425 – 16,80475	960 – 1240	7,25 – 7,75
4,125 – 4,128	25,5 – 25,67	1300 – 1427	8,025 – 8,5
4,17725 – 4,17775	37,5 – 38,25	1435 – 1626,5	9,0 – 9,2
4,20725 – 4,20775	73 – 74,6	1645,5 – 1646,5	9,3 – 9,5
6,215 – 6,218	74,8 – 75,2	1660 – 1710	10,6 – 12,7
6,26775 – 6,26825	108 – 121,94	1718,8 – 1722,2	13,25 – 13,4
6,31175 – 6,31225	123 – 138	2200 – 2300	14,47 – 14,5
8,291 – 8,294	149,9 – 150,05	2310 – 2390	15,35 – 16,2
8,362 – 8,366	156,52475 – 156,52525	2483,5 – 2500	17,7 – 21,4
8,37625 – 8,38675	156,7 – 156,9	2690 – 2900	22,01 – 23,12
8,41425 – 8,41475	162,0125 – 167,17	3260 – 3267	23,6 – 24,0
12,29 – 12,293	167,72 – 173,2	3332 – 3339	31,2 – 31,8
12,51975 – 12,52025	240 – 285	3345,8 – 3358	36,43 – 36,5
12,57675 – 12,57725	322 – 335,4	3600 – 4400	Above 38,6
13,36 – 13,41			

Acceptance limits for emissions in non-restricted frequency bands

The DTS rules specify that in any 100 kHz bandwidth outside of the authorized frequency band, the power shall be attenuated according to the following conditions:

a) If the maximum peak conducted output power procedure was used to demonstrate compliance as described in 9.1, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz
b) If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz.
c) In either case, attenuation to levels below the 15.209 general radiated emissions limits is not required

Setup



Result – AV detector

Harmonic	Lowest channel		Medium channel		Highest channel		Results
	Level (dBµV/m)	Limits (dBµV/m)	Level (dBµV/m)	Limits (dBµV/m)	Level (dBµV/m)	Limits (dBµV/m)	
II	43,67	54,00	42,81	54,00	44,13	54,00	Complies
III	34,83	54,00	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	Complies
IV	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	Complies
V	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	Complies
VI	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	Complies
VII	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	Complies
VIII	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	Complies
IX	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	Complies
X	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	More than 20 dB below limit	54,00	Complies

Remarks: EUT was tested in 3 orthogonal planes. The results in this table show the highest values. No spurious other then harmonics have been found. The results have been extrapolated to the specified distance using an extrapolation factor. For all harmonics it was considered the limit of 54 dBµV/m as a worse case.

Result – Peak detector

Harmonic	Lowest channel		Medium channel		Highest channel		Results
	Level (dBµV/m)	Limits (dBµV/m)	Level (dBµV/m)	Limits (dBµV/m)	Level (dBµV/m)	Limits (dBµV/m)	
II	49,17	74,00	48,65	74,00	49,59	74,00	Complies
III	44,07	74,00	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	Complies
IV	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	Complies
V	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	Complies
VI	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	Complies
VII	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	Complies
VIII	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	Complies
IX	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	Complies
X	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	More than 20 dB below limit	74,00	Complies

Remarks: EUT was tested in 3 orthogonal planes. The results in this table show the highest values. No spurious other then harmonics have been found. The results have been extrapolated to the specified distance using an extrapolation factor. For all harmonics it was considered the limit of 74 dBµV/m as a worse case.

Result: The requirements are met