

Test report

Number T251-0784/22

Project file: C20220683

Date: 2022-11-02

Pages: 93

Product: Wine climate cabinet

Type reference: VCS5297TPG

Ratings: Uin: 120 V; 60 Hz
Protection class: I

Trademark: GORENJE, ASKO, ATAG, HISENSE

Applicant: Gorenje gospodinjski aparati d.o.o.
Partizanska cesta 12, SI-3320 Velenje, Slovenia

Manufacturer: Gorenje gospodinjski aparati d.o.o.
Partizanska cesta 12, SI-3320 Velenje, Slovenia

Place of manufacture: Gorenje gospodinjski aparati d.o.o.
Partizanska cesta 12, SI-3320 Velenje, Slovenia

Summary of testing

Testing method: ANSI C63.10:2013 (Clause 6.3, 6.4, 6.5, 6.6, 6.9)

Testing location: SIQ Ljubljana
Mašera-Spasičeva ulica 10, SI-1000 Ljubljana, Slovenia

Remarks: Date of receipt of test items: 2022-03-25
Number of items tested: 2022-04-25 - 2022-09-23
Date of performance of tests: Click or tap here to enter text.
The test results presented in this report relate only to the items tested.
The product complies with the requirements of the testing methods.

Tested by: Luka Cvajnar

Approved by: Marjan Mak

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1 GENERAL

History sheet			
Date	Report No.	Change	Revision
2022-11-02	T251-0784/22	Initial Test Report issued.	--

Environmental conditions:

Ambient temperature: 15 °C to 35 °C

Relative humidity: 30 % to 60 %

Atmospheric pressure: 860 mbar to 1060 mbar

1.1 Equipment under test

Wine climate cabinet

Type: VCS5297TPG

FCC ID: 2A4DNVCS5297TPG

IC: 28329-GORVCS5297

Contains FCC ID: SARHISENSEMW13

Cointains IC: 27123-MW13

General product information

Operating mode	Single antenna
Operating temperature range	10 °C to +43 °C
Operating frequency range	5786 - 5814 MHz
Modulation type:	CW
Number of channels	29
Antenna type	Integral antenna
Manufacturer	SHINKI
Product	Proximity sensor wc70
Type	819089(HXJ-RD58-A1)
Hardware version :	MW13-MB-V1.00A
Firmware version :	S1679.6.02.02.00

Proximity sensor can detect movement and ignore the walking by situation. So you can just put your hands in front of the sensor to test. If you put your hands in front and swing back and forth, the sensor will not change the status of it's ST port (the status is maintained at 5V). But if you put your hands in front and hold for 1 second, or keep hands close to the sensor for more than 1 second, then the ST port of the sensor will change from 5V to 0V. And the change will be detected by the UI board.

The proximity sensor has the function of random frequency selection. Each time it is powered on, the frequency is selected randomly, and the frequency is between 5.786-5.814 Mhz.

Tested channels

Lowest	5786 MHz
Middle	5800 MHz
Highest	5814 MHz

Copy of marking plate:

The artwork below may be only a draft.

gorenje		Gorenje gospodinjski aparati, d.o.o. Partizanska cesta 12 SI-3320 Velenje, SLOVENIA info@gorenje.com	
TYPE: VCS5297TPG		MODEL:	
ART.N°: 740494 / 01		SER. N°:	
WINE CLIMATE CABINET			
120 V ~ 60 Hz		0.8 A	
Volume:		19,1 cu.ft.	
Refrigerant: R 600a		50 g	
Climate class:		SN,N,ST,T	
FCC ID: 2A4DNVCS5297TPG			
IC: 28329-GORVCS5297			
Contains FCC ID: SARHISENSEMW13			
Contains IC: 27123-MW13			
		MADE IN SLOVENIA	
		TN740494	



1.2 Occupied bandwidth measurement

Fundamental frequency	Minimum resolution bandwidth
9 kHz to 30 MHz	1 kHz
30 to 1000 MHz	10 kHz
1000 MHz to 40 GHz	100 kHz

1.3 Quasi-peak detector

Frequency range	Bandwidth (-6dB)
10 Hz to 20 kHz	Full range (wideband)
10 kHz to 150 kHz	200 Hz
150 kHz to 30 MHz	9 kHz
30 MHz to 1 GHz	120 kHz

1.4 Peak, rms, and average detectors

Frequency range	Bandwidth (-6dB)
10 Hz to 20 kHz	10, 100, 1000 Hz
10 kHz to 150 kHz	1 and 10 kHz
150 kHz to 30 MHz	1 and 10 kHz
30 MHz to 1 GHz	10 and 100 kHz
1 GHz to 40 GHz	0.1, 1.0 and 10 MHz

2 LIMITS

2.1 Intentional Radiators

2.1.1 Section 15.207, RSS Gen (Clause 8.8.); Conducted emission limits:

CLASS B limits:

Frequency Range (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 to 0.5	66 – 56*	56 – 46*
0.5 to 5.0	56	46
5.0 to 30.0	60	50

* Decreases with the logarithm of the frequency.

The shown limits in table shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

- For carrier current systems containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.
- For all other carrier current systems: 1000 μV within the frequency band 535-1705 kHz, as measured using a 50 μH/50 ohms LISN.
- Carrier current systems operating below 30 MHz are also subject to the radiated emission limits as appropriate.

2.1.2 Section 15.209, RSS Gen(Claue 8.9); Radiated emission limits:

CLASS B limits:

Frequency Range (MHz)	Limits (dBμV/m)		Test distance (m)
0,009 to 0,490	$20 \cdot \log(2400/F(\text{kHz}))$	Quasi Peak	300
0,490 to 1,705	$20 \cdot \log(24000/F(\text{kHz}))$	Quasi Peak	30
1,705 to 30,0	29.5	Quasi Peak	30
30 to 88	40**	Quasi Peak	3
88 to 216	43.5**	Quasi Peak	3
216 to 960	46**	Quasi Peak	3
960 to 1000	54	Quasi Peak	3
above 1000	54	Average	3
above 1000	74	Peak	3

** Except as provided in paragraph below, fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz.

Perimeter protection systems may operate in the 54-72 MHz and 76-88 MHz bands under the provisions of this section. The use of such perimeter protection systems is limited to industrial, business and commercial applications.

NOTE: For special limits refer to standard

3 ALL TEST EQUIPMENT AND THEIR DESCRIPTION

3.1 General information

Description	Model No.	SIQ No.	Last calibration	Calibrated until	Calibration period	Used
Rohde-Schwarz, Spectrum analyzer	FSV 40	/	2021-04	2022-10	18 months	X
Rohde-Schwarz, RFI receiver	ESU8	105187	2022-08	2024-02	18 months	
Rohde-Schwarz, RFI receiver	ESU26	106897	2022-01	2023-07	18 months	X
Comtest Engineering, Semi Anechoic Chamber SAC 1	SAC 3m	NPS001	2022-04	2025-04	36 months	X
Rohde & Schwarz, Ultra Broadband Antenna	HL562E (SN 109843)	109063	2020-07	2023-07	36 months	
Rohde & Schwarz, Horn Antenna	HF907 (SN 102494)	109064	2020-08	2023-08	36 months	
Comtest Engineering, Semi Anechoic Chamber SAC 2	SAC 3m	NPS002	2022-04	2025-04	36 months	X
Rohde & Schwarz, Ultra Broadband Antenna	HL562E (SN 100842)	109056	2020-07	2023-07	36 months	X
Rohde & Schwarz, Horn Antenna	HF907 (SN 102508)	109057	2020-08	2023-08	36 months	X
Horn Antenna, EMCO	3116	/	2021-10	2024-10	36 months	X
Maturo, Turn table (2 m diameter)	TT 2.0 SI	/	N/A	N/A	N/A	X
Maturo, Bore-sight antenna mast	BAM-4.0-P	/	N/A	N/A	N/A	X
Maturo, Multi-channel positioning equipment	Maturo NCD	/	N/A	N/A	N/A	X
Schwarzbeck Active loop antenna	FMZB 1519B	/	2021-04	2022-10	18 months	X
Rohde-Schwarz, AMN	ENV216	/	2021-08	2023-02	18 months	X
PMI Low noise amplifier	PEC-42-1G-40G	/	2022-04	2023-10	18 months	X

3.2 Other instrument information and auxiliary equipment

Description	Model No.	Bandwidth	Detector functions	Antenna factors	Cable loss	Range
Rohde-Schwarz, AMN	ENV216	/	/	/	/	9 kHz – 30 MHz
Rohde & Schwarz, Artificial main network	ESH 2-Z5	/	/	/	/	9 kHz – 30 MHz
Rohde-Schwarz, RFI receiver	ESU8	200Hz, 9kHz, 120kHz, 1MHz	Peak, Q-peak, Average	/	/	20 Hz – 8 GHz
Rohde-Schwarz, EMI receiver	ESW	200Hz, 9kHz, 120kHz, 1MHz	Peak, Q-peak, Average	/	/	20 Hz – 8 GHz
Rohde-Schwarz, RFI receiver	ESU26	200Hz, 9kHz, 120kHz, 1MHz	Peak, Q-peak, Average	/	/	20 Hz – 26.5 GHz
Comtest Engineering, Semi Anechoic Chamber SAC 1	SAC 3m	/	/	/	/	30 MHz – 18 GHz
Rohde & Schwarz, Ultra Broadband Antenna	HL562E (SN 109843)	/	/	See section 3.2.2	/	30 MHz – 6 GHz
Rohde & Schwarz, Horn Antenna	HF907 (SN 102494)	/	/	See section 3.2.2	/	0.8 GHz – 18 GHz
Comtest Engineering, Semi Anechoic Chamber SAC 2	SAC 3m	/	/	/	/	30 MHz – 18 GHz
Rohde & Schwarz, Ultra Broadband Antenna	HL562E (SN 100842)	/	/	See section 3.2.2	/	30 MHz – 6 GHz
Rohde & Schwarz, Horn Antenna	HF907 (SN 102508)	/	/	See section 3.2.2	/	0.8 GHz – 18 GHz
Horn Antenna, EMCO	3116	/	/	See section 3.2.2	/	18 GHz – 40 GHz
Schwarzbeck Active loop antenna	FMZB 1519B	/		See section 3.2.2	/	9 kHz – 30 MHz



3.2.1 Cable loss and attenuation of radiated emission

3.2.1.1 Conducted emission cable (SIQ-K115)

Frequency (9kHz-30MHz)	Cable length (meters)	Loss (dB)
0.009000	4	0.0
0.010000	4	0.0
0.020000	4	0.0
0.030000	4	0.0
0.040000	4	0.0
0.050000	4	0.0
0.060000	4	0.0
0.070000	4	0.0
0.080000	4	0.0
0.090000	4	0.0
0.100000	4	0.0
0.200000	4	0.1
0.300000	4	0.0
0.400000	4	0.0
0.500000	4	0.0
0.600000	4	0.0
0.700000	4	0.0
0.800000	4	0.0
0.900000	4	0.0
1.000000	4	0.0
2.000000	4	0.1
3.000000	4	0.1
4.000000	4	0.1
5.000000	4	0.1
6.000000	4	0.1
7.000000	4	0.2
8.000000	4	0.2
9.000000	4	0.2
10.000000	4	0.2
20.000000	4	0.3
30.000000	4	0.3

3.2.1.2 Radiated emission attenuation

SAC1		SAC2	
Frequency (30 MHz – 6 GHz)	Attenuation (dB)	Frequency (30 MHz – 6 GHz)	Attenuation (dB)
30,00	0,40	30,00	0,41
35,00	0,43	35,00	0,44
40,00	0,46	40,00	0,47
45,00	0,49	45,00	0,50
50,00	0,52	50,00	0,53
55,00	0,55	55,00	0,55
60,00	0,57	60,00	0,58
65,00	0,59	65,00	0,60
70,00	0,62	70,00	0,63
75,00	0,64	75,00	0,65
80,00	0,66	80,00	0,67
85,00	0,68	85,00	0,70
90,00	0,71	90,00	0,72
95,00	0,73	95,00	0,73
100,00	0,75	100,00	0,76
125,00	0,84	125,00	0,85
150,00	0,93	150,00	0,94
175,00	1,00	175,00	1,01
200,00	1,07	200,00	1,09
225,00	1,14	225,00	1,18
250,00	1,20	250,00	1,23
275,00	1,27	275,00	1,31
300,00	1,33	300,00	1,38
325,00	1,37	325,00	1,48
350,00	1,43	350,00	1,51
375,00	1,49	375,00	1,58
400,00	1,54	400,00	1,62
425,00	1,59	425,00	1,69
450,00	1,65	450,00	1,74
475,00	1,68	475,00	1,82
500,00	1,72	500,00	1,85
525,00	1,79	525,00	1,93
550,00	1,85	550,00	1,98
575,00	1,85	575,00	2,03
600,00	1,95	600,00	2,05
625,00	1,97	625,00	2,16
650,00	2,00	650,00	2,15
675,00	2,05	675,00	2,33
700,00	2,10	700,00	2,25
725,00	2,13	725,00	2,30
750,00	2,19	750,00	2,34
775,00	2,21	775,00	2,44
800,00	2,27	800,00	2,50
825,00	2,31	825,00	2,56
850,00	2,34	850,00	2,55
875,00	2,36	875,00	2,56
900,00	2,41	900,00	2,63
925,00	2,43	925,00	2,70
950,00	2,54	950,00	2,76
975,00	2,52	975,00	2,78
1000,00	2,55	1000,00	2,84
1050,00	2,59	1050,00	2,87
1100,00	2,69	1100,00	2,96
1150,00	2,74	1150,00	3,14
1200,00	2,84	1200,00	3,08



1250,00	2,88	1250,00	3,16
1300,00	2,98	1300,00	3,33
1350,00	3,11	1350,00	3,38
1400,00	3,12	1400,00	3,33
1450,00	3,20	1450,00	3,56
1500,00	3,25	1500,00	3,57
1600,00	3,39	1600,00	3,71
1650,00	3,42	1650,00	3,70
1700,00	3,60	1700,00	3,78
1750,00	3,53	1750,00	3,81
1800,00	3,59	1800,00	3,93
1850,00	3,66	1850,00	4,07
1900,00	3,67	1900,00	4,00
1950,00	3,72	1950,00	4,18
2000,00	3,77	2000,00	4,08
2050,00	3,91	2050,00	4,16
2100,00	3,87	2100,00	4,26
2150,00	3,89	2150,00	4,27
2200,00	3,99	2200,00	4,31
2250,00	3,99	2250,00	4,39
2300,00	4,02	2300,00	4,49
2350,00	4,10	2350,00	4,55
2400,00	4,20	2400,00	4,57
2450,00	4,40	2450,00	4,62
2500,00	4,20	2500,00	4,74
2550,00	4,24	2550,00	4,72
2600,00	4,30	2600,00	4,84
2650,00	4,37	2650,00	4,77
2700,00	4,40	2700,00	4,81
2750,00	4,47	2750,00	4,90
2800,00	4,50	2800,00	5,00
2850,00	4,52	2850,00	4,98
2900,00	4,59	2900,00	5,06
2950,00	4,77	2950,00	5,07
3000,00	4,65	3000,00	5,15
3050,00	4,72	3050,00	5,23
3100,00	4,78	3100,00	5,34
3150,00	4,80	3150,00	5,25
3200,00	4,83	3200,00	5,33
3250,00	4,91	3250,00	5,38
3300,00	4,98	3300,00	5,48
3350,00	4,87	3350,00	5,48
3400,00	4,98	3400,00	5,52
3450,00	5,01	3450,00	5,76
3500,00	5,14	3500,00	5,55
3550,00	5,18	3550,00	5,60
3600,00	5,15	3600,00	5,64
3650,00	5,20	3650,00	5,78
3700,00	5,29	3700,00	5,74
3750,00	5,40	3750,00	5,86
3800,00	5,33	3800,00	5,82
3850,00	5,32	3850,00	5,88
3900,00	5,37	3900,00	5,89
3950,00	5,41	3950,00	5,95
4000,00	5,65	4000,00	6,02
4050,00	5,84	4050,00	6,07
4100,00	5,69	4100,00	6,01
4150,00	5,65	4150,00	6,10
4200,00	5,71	4200,00	6,17

4250,00	5,65	4250,00	6,19
4300,00	5,75	4300,00	6,27
4350,00	5,59	4350,00	6,32
4400,00	5,96	4400,00	6,41
4450,00	5,81	4450,00	6,53
4500,00	6,02	4500,00	6,51
4550,00	5,93	4550,00	6,46
4600,00	5,90	4600,00	6,61
4650,00	6,03	4650,00	6,82
4700,00	5,96	4700,00	6,60
4750,00	6,47	4750,00	6,63
4800,00	6,07	4800,00	6,78
4850,00	6,36	4850,00	6,69
4900,00	6,05	4900,00	6,77
4950,00	6,81	4950,00	6,95
5000,00	6,25	5000,00	6,96
5050,00	6,41	5050,00	6,88
5100,00	6,67	5100,00	6,92
5150,00	6,65	5150,00	6,99
5200,00	6,31	5200,00	6,98
5250,00	7,40	5250,00	7,05
5300,00	6,48	5300,00	7,26
5350,00	6,68	5350,00	7,22
5400,00	7,07	5400,00	7,44
5450,00	6,86	5450,00	7,19
5500,00	6,65	5500,00	7,29
5550,00	6,71	5550,00	7,32
5600,00	6,72	5600,00	7,48
5650,00	6,69	5650,00	7,37
5700,00	6,87	5700,00	7,43
5750,00	6,89	5750,00	7,35
5800,00	6,92	5800,00	7,52
5850,00	6,90	5850,00	7,48
5900,00	6,89	5900,00	7,53
5950,00	6,95	5950,00	7,58
6000,00	7,00	6000,00	7,69



Frequency (1 GHz – 40 GHz)	Attenuation (dB)
1006,354025	0,8
1056,671726	0,8
1109,505312	0,8
1164,980578	0,8
1223,229607	0,9
1284,391087	0,9
1348,610641	0,9
1416,041173	0,9
1486,843232	1,0
1561,185394	1,0
1639,244663	1,0
1721,206896	1,0
1807,267241	1,1
1897,630603	1,1
1992,512134	1,1
2092,137740	1,2
2196,744627	1,2
2306,581859	1,2
2421,910951	1,3
2543,006499	1,3
2670,156824	1,3
2803,664665	1,4
2943,847898	1,4
3091,040293	1,4
3245,592308	1,5
3407,871923	1,5
3578,265520	1,5
3757,178796	1,6
3945,037735	1,6
4142,289622	1,7
4349,404103	1,7
4566,874308	1,8
4795,218024	1,8
5034,978925	1,9
5286,727871	1,9
5551,064265	2,0
5828,617478	2,0
6120,048352	2,1
6426,050770	2,1
6747,353308	2,2
7084,720973	2,4
7438,957022	2,4
7810,904873	2,5
8201,450117	2,5
8611,522623	2,6
9042,098754	2,7
9494,203692	2,8
9968,913876	2,8
10467,359570	2,9
10990,727549	3,1
11540,263926	3,1
12117,277122	3,2
12723,140978	3,3
13359,298027	3,4
14027,262929	3,6
14728,626075	3,8
15465,057379	3,9
16238,310248	3,9

17050,225760	4,1
17902,737048	4,2
18797,873901	5,0
19737,767596	4,8
20724,655975	4,7
21760,888774	4,8
22848,933213	4,9
23991,379873	5,3
25190,948867	5,4
26450,496311	5,8
27773,021126	5,9
29161,672182	6,5
30619,755791	6,2
32150,743581	6,6
33758,280760	8,5
35446,194798	7,3
37218,504538	8,5
39079,429765	7,5
40000,000000	8,1

3.2.2 Antenna factors

3.2.2.1 Antenna FMZB 1519

Frequency (MHz)	Antenna factor FMZB 1519 B
0,01	20,66
0,01	20,38
0,02	19,31
0,03	19,05
0,04	18,93
0,05	18,87
0,06	18,82
0,07	18,79
0,08	18,76
0,09	18,74
0,10	18,72
0,11	18,71
0,12	18,69
0,13	18,68
0,14	18,67
0,15	18,66
0,20	18,63
0,30	18,59
0,40	18,56
0,50	18,54
0,60	18,53
0,70	18,51
0,80	18,50
0,90	18,50
1,00	18,49
2,00	18,43
3,00	18,40
4,00	18,37
5,00	18,35
6,00	18,26
7,00	18,21
8,00	18,14
9,00	18,07
10,00	17,99
11,00	17,91
12,00	17,84
13,00	17,77
14,00	17,71
15,00	17,66
16,00	17,61
17,00	17,57
18,00	17,53
19,00	17,51
20,00	17,49
21,00	17,49
22,00	17,50
23,00	17,53
24,00	17,56
25,00	17,59
26,00	17,64

27,00	17,70
28,00	17,77
29,00	17,85
30,00	17,94



Frequency (MHz)	Antenna factor HL562E (SN 100843)	Antenna factor HL562E (SN 100842)
30,00	18,86	18,95
31,00	18,27	18,43
32,00	17,68	17,88
33,00	17,11	17,33
34,00	16,57	16,79
35,00	16,00	16,23
36,00	15,41	15,67
37,00	14,84	15,10
38,00	14,25	14,53
39,00	13,65	13,94
40,00	13,04	13,34
41,00	12,40	12,72
42,00	11,77	12,07
43,00	11,09	11,42
44,00	10,41	10,72
45,00	9,71	10,02
46,00	9,00	9,30
47,00	8,28	8,58
48,00	7,57	7,84
49,00	6,87	7,13
50,00	6,22	6,44
51,00	5,60	5,81
52,00	5,07	5,26
53,00	4,64	4,83
54,00	4,35	4,54
55,00	4,19	4,41
56,00	4,17	4,45
57,00	4,30	4,59
58,00	4,54	4,79
59,00	4,84	5,07
60,00	5,17	5,38
61,00	5,50	5,66
62,00	5,79	5,88
63,00	6,06	6,15
64,00	6,33	6,53
65,00	6,59	6,89
66,00	6,85	7,18
67,00	7,09	7,41
68,00	7,32	7,63
69,00	7,55	7,82
70,00	7,75	7,99
71,00	7,93	8,15
72,00	8,10	8,27
73,00	8,24	8,37
74,00	8,38	8,48
75,00	8,51	8,63
76,00	8,62	8,78
77,00	8,74	8,90
78,00	8,85	9,00
79,00	8,96	9,09
80,00	9,05	9,18
81,00	9,14	9,24
82,00	9,21	9,29
83,00	9,27	9,36
84,00	9,33	9,41
85,00	9,39	9,46
86,00	9,43	9,51

87,00	9,48	9,57
88,00	9,49	9,60
89,00	9,52	9,63
90,00	9,54	9,68
91,00	9,57	9,73
92,00	9,60	9,77
93,00	9,63	9,82
94,00	9,66	9,87
95,00	9,70	9,92
96,00	9,74	9,97
97,00	9,79	10,03
98,00	9,85	10,10
99,00	9,92	10,18
100,00	9,99	10,25
101,00	10,05	10,33
102,00	10,16	10,42
103,00	10,23	10,50
104,00	10,32	10,58
105,00	10,40	10,65
106,00	10,48	10,73
107,00	10,53	10,79
108,00	10,55	10,84
109,00	10,55	10,87
110,00	10,54	10,89
111,00	10,53	10,91
112,00	10,54	10,93
113,00	10,54	10,94
114,00	10,53	10,93
115,00	10,52	10,90
116,00	10,49	10,87
117,00	10,48	10,84
118,00	10,44	10,78
119,00	10,38	10,72
120,00	10,32	10,63
121,00	10,26	10,52
122,00	10,21	10,41
123,00	10,16	10,30
124,00	10,02	10,26
125,00	10,06	10,21
126,00	10,01	10,10
127,00	9,93	9,98
128,00	9,71	9,86
129,00	9,74	9,89
130,00	9,70	9,87
131,00	9,61	9,78
132,00	9,52	9,68
133,00	9,44	9,58
134,00	9,35	9,47
135,00	9,25	9,36
136,00	9,16	9,26
137,00	9,07	9,16
138,00	8,97	9,05
139,00	8,88	8,95
140,00	8,79	8,85
141,00	8,70	8,74
142,00	8,60	8,65
143,00	8,51	8,55
144,00	8,42	8,46
145,00	8,34	8,38
146,00	8,26	8,31
147,00	8,18	8,23



148,00	8,11	8,17
149,00	8,04	8,11
150,00	7,97	8,06
151,00	7,92	8,02
152,00	7,88	8,00
153,00	7,84	7,97
154,00	7,82	7,98
155,00	7,83	8,03
156,00	7,87	8,07
157,00	7,88	8,05
158,00	7,89	8,05
159,00	7,88	8,06
160,00	7,87	8,08
161,00	7,88	8,12
162,00	7,89	8,14
163,00	7,91	8,17
164,00	7,94	8,19
165,00	7,98	8,22
166,00	8,03	8,24
167,00	8,09	8,24
168,00	8,14	8,37
169,00	8,21	8,46
170,00	8,31	8,54
171,00	8,39	8,64
172,00	8,48	8,71
173,00	8,59	8,81
174,00	8,76	8,92
175,00	8,95	9,06
176,00	9,17	9,23
177,00	9,37	9,42
178,00	9,42	9,50
179,00	9,24	9,39
180,00	8,88	9,09
181,00	8,48	8,70
182,00	8,16	8,37
183,00	7,94	8,14
184,00	7,82	8,01
185,00	7,74	7,93
186,00	7,70	7,89
187,00	7,69	7,89
188,00	7,69	7,91
189,00	7,72	7,97
190,00	7,78	8,05
191,00	7,81	8,01
192,00	7,78	7,97
193,00	7,77	7,97
194,00	7,80	8,01
195,00	7,85	8,07
196,00	7,91	8,14
197,00	7,98	8,21
198,00	8,05	8,26
199,00	8,14	8,25
200,00	8,22	8,49
202,00	8,41	8,65
204,00	8,56	8,77
206,00	8,68	8,88
208,00	8,79	8,98
210,00	8,85	9,06
212,00	8,84	9,02
214,00	8,80	8,96
216,00	8,67	8,83

218,00	8,40	8,56
220,00	8,28	8,41
222,00	8,43	8,55
224,00	8,69	8,79
226,00	8,91	9,04
228,00	9,09	9,21
230,00	9,25	9,36
232,00	9,39	9,48
234,00	9,52	9,60
236,00	9,68	9,71
238,00	9,76	9,82
240,00	9,83	9,91
242,00	9,83	9,93
244,00	9,83	9,94
246,00	9,86	9,97
248,00	9,91	10,01
250,00	10,00	10,03
252,00	10,04	10,16
254,00	10,13	10,25
256,00	10,22	10,34
258,00	10,31	10,42
260,00	10,39	10,51
262,00	10,48	10,60
264,00	10,50	10,61
266,00	10,54	10,63
268,00	10,61	10,70
270,00	10,67	10,77
272,00	10,73	10,82
274,00	10,79	10,89
276,00	10,85	10,95
278,00	10,92	11,02
280,00	11,00	11,07
282,00	11,08	11,16
284,00	11,14	11,23
286,00	11,20	11,28
288,00	11,26	11,33
290,00	11,30	11,37
292,00	11,37	11,40
294,00	11,43	11,44
296,00	11,46	11,49
298,00	11,52	11,54
300,00	11,64	11,65
302,00	11,77	11,82
304,00	11,81	11,91
306,00	11,83	11,93
308,00	11,87	11,95
310,00	11,91	11,99
312,00	11,97	12,03
314,00	12,02	12,12
316,00	12,09	12,20
318,00	12,16	12,26
320,00	12,21	12,33
322,00	12,27	12,39
324,00	12,34	12,46
326,00	12,38	12,49
328,00	12,39	12,48
330,00	12,41	12,49
332,00	12,46	12,57
334,00	12,54	12,67
336,00	12,58	12,65
338,00	12,66	12,69



340,00	12,72	12,78
342,00	12,76	12,82
344,00	12,81	12,87
346,00	12,87	12,93
348,00	12,93	12,99
350,00	13,01	13,05
352,00	13,09	13,13
354,00	13,17	13,20
356,00	13,23	13,27
358,00	13,28	13,34
360,00	13,32	13,38
362,00	13,38	13,41
364,00	13,44	13,44
366,00	13,49	13,49
368,00	13,55	13,55
370,00	13,63	13,64
372,00	13,73	13,75
374,00	13,78	13,80
376,00	13,82	13,83
378,00	13,85	13,87
380,00	13,89	13,90
382,00	13,93	13,95
384,00	14,00	14,02
386,00	14,06	14,09
388,00	14,13	14,14
390,00	14,22	14,17
392,00	14,23	14,27
394,00	14,29	14,33
396,00	14,35	14,40
398,00	14,41	14,47
400,00	14,45	14,50
402,00	14,50	14,51
404,00	14,54	14,51
406,00	14,57	14,52
408,00	14,62	14,56
410,00	14,68	14,63
412,00	14,73	14,74
414,00	14,79	14,86
416,00	14,84	14,94
418,00	14,86	14,98
420,00	14,88	14,99
422,00	14,89	15,01
424,00	14,93	15,04
426,00	14,97	15,07
428,00	15,01	15,11
430,00	15,06	15,16
432,00	15,11	15,20
434,00	15,16	15,26
436,00	15,21	15,28
438,00	15,26	15,36
440,00	15,31	15,40
442,00	15,36	15,45
444,00	15,41	15,49
446,00	15,47	15,54
448,00	15,54	15,60
450,00	15,57	15,66
452,00	15,62	15,70
454,00	15,66	15,73
456,00	15,72	15,78
458,00	15,79	15,84
460,00	15,89	15,95

462,00	15,99	16,10
464,00	16,08	16,19
466,00	16,12	16,20
468,00	16,15	16,21
470,00	16,16	16,22
472,00	16,16	16,22
474,00	16,17	16,23
476,00	16,19	16,25
478,00	16,22	16,28
480,00	16,27	16,31
482,00	16,31	16,36
484,00	16,37	16,41
486,00	16,45	16,48
488,00	16,50	16,59
490,00	16,55	16,63
492,00	16,60	16,68
494,00	16,63	16,72
496,00	16,64	16,75
498,00	16,65	16,78
500,00	16,66	16,77
502,00	16,67	16,77
504,00	16,66	16,77
506,00	16,65	16,75
508,00	16,65	16,73
510,00	16,66	16,73
512,00	16,69	16,78
514,00	16,75	16,88
516,00	16,84	16,96
518,00	16,89	17,00
520,00	16,91	16,99
522,00	16,92	16,97
524,00	16,92	16,95
526,00	16,93	16,95
528,00	16,94	16,97
530,00	16,95	16,99
532,00	16,97	17,00
534,00	16,98	17,01
536,00	17,00	17,02
538,00	17,01	17,04
540,00	17,04	17,06
542,00	17,06	17,09
544,00	17,10	17,11
546,00	17,14	17,18
548,00	17,17	17,21
550,00	17,20	17,25
552,00	17,25	17,29
554,00	17,30	17,34
556,00	17,33	17,39
558,00	17,36	17,44
560,00	17,39	17,47
562,00	17,42	17,51
564,00	17,45	17,52
566,00	17,47	17,54
568,00	17,51	17,57
570,00	17,57	17,63
572,00	17,64	17,69
574,00	17,75	17,79
576,00	17,86	17,90
578,00	17,96	17,99
580,00	18,02	18,04
582,00	18,04	18,07



584,00	18,04	18,08
586,00	18,04	18,08
588,00	18,04	18,09
590,00	18,04	18,09
592,00	18,06	18,10
594,00	18,07	18,10
596,00	18,08	18,11
598,00	18,10	18,13
600,00	18,13	18,15
602,00	18,17	18,18
604,00	18,20	18,20
606,00	18,23	18,22
608,00	18,26	18,24
610,00	18,28	18,24
612,00	18,31	18,25
614,00	18,33	18,27
616,00	18,35	18,34
618,00	18,36	18,35
620,00	18,37	18,36
622,00	18,38	18,37
624,00	18,39	18,37
626,00	18,40	18,37
628,00	18,40	18,37
630,00	18,41	18,37
632,00	18,43	18,39
634,00	18,43	18,42
636,00	18,45	18,45
638,00	18,48	18,47
640,00	18,52	18,51
642,00	18,57	18,57
644,00	18,65	18,66
646,00	18,73	18,79
648,00	18,79	18,93
650,00	18,86	19,08
652,00	18,91	19,17
654,00	18,96	19,22
656,00	18,98	19,19
658,00	18,99	19,17
660,00	18,99	19,13
662,00	18,99	19,10
664,00	18,98	19,09
666,00	18,98	19,08
668,00	18,99	19,08
670,00	19,01	19,09
672,00	19,00	19,10
674,00	19,00	19,11
676,00	18,99	19,13
678,00	19,00	19,14
680,00	19,02	19,16
682,00	19,04	19,19
684,00	19,07	19,21
686,00	19,09	19,24
688,00	19,10	19,26
690,00	19,12	19,28
692,00	19,14	19,30
694,00	19,15	19,34
696,00	19,18	19,38
698,00	19,20	19,42
700,00	19,22	19,44
702,00	19,25	19,44
704,00	19,28	19,44

706,00	19,30	19,44
708,00	19,35	19,45
710,00	19,40	19,46
712,00	19,46	19,48
714,00	19,51	19,49
716,00	19,55	19,51
718,00	19,59	19,56
720,00	19,63	19,61
722,00	19,70	19,68
724,00	19,78	19,76
726,00	19,86	19,84
728,00	19,94	19,93
730,00	20,02	20,04
732,00	20,06	20,12
734,00	20,08	20,16
736,00	20,07	20,15
738,00	20,04	20,09
740,00	20,01	20,05
742,00	19,99	19,99
744,00	19,98	19,97
746,00	19,97	19,94
748,00	19,95	19,94
750,00	19,94	19,93
752,00	19,93	19,92
754,00	19,93	19,93
756,00	19,95	19,94
758,00	19,95	19,96
760,00	19,98	19,97
762,00	20,00	19,98
764,00	20,02	19,99
766,00	20,04	20,01
768,00	20,09	20,02
770,00	20,13	20,04
772,00	20,18	20,06
774,00	20,22	20,10
776,00	20,22	20,17
778,00	20,24	20,20
780,00	20,25	20,22
782,00	20,27	20,24
784,00	20,27	20,24
786,00	20,28	20,24
788,00	20,28	20,23
790,00	20,30	20,24
792,00	20,31	20,25
794,00	20,32	20,25
796,00	20,32	20,26
798,00	20,35	20,29
800,00	20,39	20,32
802,00	20,43	20,39
804,00	20,48	20,45
806,00	20,52	20,56
808,00	20,57	20,65
810,00	20,66	20,77
812,00	20,74	20,87
814,00	20,80	20,94
816,00	20,83	20,95
818,00	20,84	20,96
820,00	20,85	20,93
822,00	20,84	20,90
824,00	20,81	20,89
826,00	20,82	20,86



828,00	20,81	20,86
830,00	20,81	20,87
832,00	20,82	20,86
834,00	20,84	20,86
836,00	20,85	20,86
838,00	20,86	20,87
840,00	20,86	20,88
842,00	20,85	20,88
844,00	20,85	20,90
846,00	20,84	20,91
848,00	20,86	20,93
850,00	20,89	20,93
852,00	20,91	20,94
854,00	20,94	20,95
856,00	20,96	20,96
858,00	20,98	20,98
860,00	21,01	20,99
862,00	21,04	21,02
864,00	21,08	21,05
866,00	21,12	21,09
868,00	21,14	21,12
870,00	21,14	21,14
872,00	21,16	21,19
874,00	21,19	21,23
876,00	21,23	21,28
878,00	21,25	21,31
880,00	21,29	21,34
882,00	21,33	21,36
884,00	21,37	21,38
886,00	21,40	21,41
888,00	21,45	21,43
890,00	21,49	21,44
892,00	21,51	21,45
894,00	21,55	21,46
896,00	21,58	21,46
898,00	21,61	21,48
900,00	21,65	21,51
902,00	21,70	21,55
904,00	21,76	21,61
906,00	21,83	21,70
908,00	21,90	21,78
910,00	21,95	21,87
912,00	21,98	21,92
914,00	21,98	21,94
916,00	21,97	21,93
918,00	21,96	21,90
920,00	21,94	21,88
922,00	21,92	21,84
924,00	21,88	21,80
926,00	21,85	21,79
928,00	21,82	21,77
930,00	21,81	21,77
932,00	21,80	21,78
934,00	21,79	21,77
936,00	21,79	21,75
938,00	21,78	21,74
940,00	21,80	21,73
942,00	21,80	21,74
944,00	21,82	21,75
946,00	21,84	21,75
948,00	21,86	21,76

950,00	21,88	21,77
952,00	21,91	21,78
954,00	21,93	21,80
956,00	21,96	21,80
958,00	22,00	21,81
960,00	22,03	21,81
962,00	22,07	21,81
964,00	22,12	21,83
966,00	22,15	21,86
968,00	22,16	21,95
970,00	22,16	22,00
972,00	22,18	22,01
974,00	22,20	22,01
976,00	22,23	22,02
978,00	22,26	22,03
980,00	22,29	22,04
982,00	22,32	22,07
984,00	22,35	22,09
986,00	22,39	22,13
988,00	22,42	22,15
990,00	22,43	22,20
992,00	22,42	22,27
994,00	22,44	22,36
996,00	22,46	22,42
998,00	22,48	22,47
1000,00	22,52	22,54

3.2.2.3 Antenna HF907

Frequency (GHz)	Antenna factor HF907 (SN 102494)	Antenna factor HF907 (SN 102508)
1.00	24,3	24,26
1.01	24,4	24,28
1.02	24,4	24,30
1.03	24,4	24,31
1.04	24,4	24,33
1.05	24,4	24,34
1.06	24,4	24,33
1.07	24,4	24,34
1.08	24,4	24,35
1.09	24,4	24,36
1.10	24,4	24,35
1.11	24,4	24,37
1.12	24,4	24,39
1.13	24,4	24,39
1.14	24,4	24,39
1.15	24,4	24,38
1.16	24,4	24,38
1.17	24,3	24,35
1.18	24,3	24,33
1.19	24,3	24,33
1.20	24,3	24,30
1.21	24,2	24,29
1.22	24,2	24,29
1.23	24,2	24,29
1.24	24,3	24,32
1.25	24,3	24,35
1.26	24,4	24,40
1.27	24,5	24,48
1.28	24,5	24,53
1.29	24,6	24,60
1.30	24,7	24,68
1.31	24,8	24,73
1.32	24,8	24,78
1.33	24,9	24,84
1.34	24,9	24,87
1.35	24,9	24,88
1.36	24,9	24,90
1.37	24,9	24,92
1.38	24,9	24,93
1.39	24,9	24,94
1.40	25,0	24,96
1.41	25,0	25,01
1.42	25,1	25,06
1.43	25,1	25,12
1.44	25,2	25,21
1.45	25,3	25,32
1.46	25,4	25,44
1.47	25,5	25,55
1.48	25,6	25,65
1.49	25,7	25,76
1.50	25,8	25,85
1.51	25,9	25,93
1.52	26,0	25,99
1.53	26,1	26,06
1.54	26,1	26,11
1.55	26,2	26,14

1.56	26,3	26,16
1.57	26,3	26,20
1.58	26,4	26,23
1.59	26,4	26,24
1.60	26,4	26,25
1.61	26,4	26,27
1.62	26,4	26,28
1.63	26,4	26,29
1.64	26,4	26,29
1.65	26,4	26,32
1.66	26,4	26,36
1.67	26,4	26,38
1.68	26,4	26,41
1.69	26,4	26,45
1.70	26,4	26,49
1.71	26,5	26,52
1.72	26,5	26,53
1.73	26,5	26,59
1.74	26,5	26,63
1.75	26,6	26,66
1.76	26,6	26,73
1.77	26,6	26,79
1.78	26,7	26,87
1.79	26,7	26,94
1.80	26,8	26,99
1.81	26,8	27,07
1.82	26,9	27,12
1.83	26,9	27,15
1.84	27,0	27,18
1.85	27,0	27,19
1.86	27,1	27,22
1.87	27,1	27,23
1.88	27,2	27,24
1.89	27,2	27,30
1.90	27,3	27,35
1.91	27,4	27,42
1.92	27,5	27,50
1.93	27,6	27,60
1.94	27,7	27,74
1.95	27,9	27,85
1.96	28,0	27,97
1.97	28,1	28,09
1.98	28,2	28,21
1.99	28,3	28,30
2.00	28,4	28,36
2.01	28,5	28,42
2.02	28,5	28,48
2.03	28,5	28,50
2.04	28,5	28,48
2.05	28,5	28,48
2.06	28,5	28,48
2.07	28,4	28,41
2.08	28,4	28,37
2.09	28,3	28,32
2.10	28,3	28,26
2.11	28,2	28,19
2.12	28,1	28,13
2.13	28,1	28,08
2.14	28,1	28,06
2.15	28,0	28,03
2.16	28,0	28,03



2.17	28,0	28,06
2.18	28,1	28,08
2.19	28,1	28,11
2.20	28,1	28,14
2.21	28,2	28,18
2.22	28,2	28,22
2.23	28,2	28,24
2.24	28,2	28,25
2.25	28,3	28,27
2.26	28,3	28,28
2.27	28,3	28,28
2.28	28,3	28,28
2.29	28,3	28,30
2.30	28,3	28,31
2.31	28,3	28,32
2.32	28,3	28,35
2.33	28,3	28,39
2.34	28,3	28,41
2.35	28,4	28,45
2.36	28,4	28,48
2.37	28,4	28,51
2.38	28,5	28,55
2.39	28,5	28,58
2.40	28,5	28,63
2.41	28,6	28,68
2.42	28,6	28,73
2.43	28,7	28,80
2.44	28,8	28,87
2.45	28,8	28,94
2.46	28,9	29,02
2.47	29,0	29,10
2.48	29,1	29,16
2.49	29,1	29,21
2.50	29,2	29,25
2.51	29,2	29,30
2.52	29,2	29,31
2.53	29,3	29,33
2.54	29,3	29,35
2.55	29,3	29,38
2.56	29,4	29,41
2.57	29,4	29,44
2.58	29,4	29,48
2.59	29,5	29,54
2.60	29,5	29,60
2.61	29,6	29,65
2.62	29,6	29,70
2.63	29,7	29,76
2.64	29,7	29,79
2.65	29,8	29,81
2.66	29,8	29,83
2.67	29,8	29,83
2.68	29,8	29,81
2.69	29,8	29,78
2.70	29,7	29,74
2.71	29,7	29,69
2.72	29,6	29,63
2.73	29,6	29,57
2.74	29,5	29,53
2.75	29,5	29,48
2.76	29,4	29,44
2.77	29,4	29,42

2.78	29,4	29,40
2.79	29,4	29,40
2.80	29,4	29,42
2.81	29,4	29,44
2.82	29,5	29,48
2.83	29,5	29,52
2.84	29,6	29,57
2.85	29,6	29,61
2.86	29,6	29,65
2.87	29,7	29,71
2.88	29,7	29,75
2.89	29,8	29,78
2.90	29,8	29,82
2.91	29,8	29,87
2.92	29,9	29,92
2.93	29,9	29,97
2.94	30,0	30,03
2.95	30,1	30,11
2.96	30,2	30,20
2.97	30,2	30,28
2.98	30,3	30,36
2.99	30,4	30,48
3.00	30,5	30,60
3.05	31,0	31,13
3.10	31,5	31,58
3.15	31,7	31,70
3.20	31,7	31,71
3.25	31,7	31,69
3.30	31,7	31,68
3.35	31,8	31,74
3.40	31,7	31,74
3.45	31,8	31,81
3.50	31,9	31,91
3.55	31,9	31,95
3.60	32,0	32,06
3.65	32,2	32,30
3.70	32,4	32,51
3.75	32,5	32,60
3.80	32,8	32,79
3.85	33,0	33,02
3.90	32,9	32,90
3.95	32,8	32,72
4.00	32,9	32,82
4.05	33,1	33,00
4.10	33,1	33,08
4.15	33,2	33,15
4.20	33,5	33,48
4.25	33,8	33,80
4.30	33,9	33,97
4.35	33,8	33,91
4.40	33,7	33,76
4.45	33,7	33,70
4.50	33,6	33,57
4.55	33,4	33,40
4.60	33,4	33,29
4.65	33,5	33,37
4.70	33,7	33,57
4.75	33,8	33,71
4.80	34,0	33,87
4.85	34,1	34,07
4.90	34,3	34,27



4.95	34,4	34,33
5.00	34,3	34,25
5.05	34,1	34,11
5.10	34,0	33,99
5.15	33,9	33,90
5.20	33,9	33,82
5.25	33,9	33,83
5.30	34,0	33,91
5.35	34,2	34,07
5.40	34,3	34,22
5.45	34,4	34,33
5.50	34,4	34,41
5.55	34,4	34,40
5.60	34,3	34,31
5.65	34,2	34,21
5.70	34,1	34,11
5.75	34,1	34,03
5.80	34,1	34,06
5.85	34,3	34,18
5.90	34,4	34,34
5.95	34,5	34,45
6.00	34,6	34,55
6.05	34,8	34,69
6.10	34,8	34,76
6.15	34,8	34,75
6.20	34,7	34,69
6.25	34,7	34,64
6.30	34,7	34,66
6.35	34,8	34,73
6.40	34,8	34,78
6.45	34,9	34,87
6.50	35,1	35,02
6.55	35,2	35,16
6.60	35,3	35,24
6.65	35,3	35,20
6.70	35,2	35,15
6.75	35,3	35,15
6.80	35,3	35,18
6.85	35,2	35,17
6.90	35,2	35,17
6.95	35,4	35,32
7.00	35,6	35,50
7.05	35,6	35,60
7.10	35,7	35,64
7.15	35,7	35,68
7.20	35,8	35,73
7.25	35,7	35,65
7.30	35,6	35,55
7.35	35,6	35,52
7.40	35,7	35,60
7.45	35,8	35,71
7.50	35,9	35,81
7.55	36,0	35,94
7.60	36,2	36,14
7.65	36,3	36,29
7.70	36,3	36,31
7.75	36,2	36,26
7.80	36,2	36,24
7.85	36,2	36,24
7.90	36,2	36,19
7.95	36,1	36,16

8.00	36,2	36,20
8.05	36,3	36,31
8.10	36,4	36,42
8.15	36,4	36,50
8.20	36,5	36,59
8.25	36,5	36,64
8.30	36,5	36,62
8.35	36,5	36,62
8.40	36,5	36,58
8.45	36,4	36,54
8.50	36,4	36,53
8.55	36,5	36,55
8.60	36,6	36,65
8.65	36,7	36,72
8.70	36,7	36,80
8.75	36,8	36,90
8.80	36,9	37,00
8.85	36,9	37,03
8.90	36,9	36,96
8.95	36,8	36,92
9.00	36,8	36,88
9.05	36,8	36,84
9.10	36,7	36,81
9.15	36,8	36,82
9.20	36,9	36,90
9.25	37,0	36,99
9.30	37,0	37,07
9.35	37,1	37,11
9.40	37,1	37,14
9.45	37,2	37,18
9.50	37,1	37,14
9.55	37,0	37,06
9.60	37,0	37,00
9.65	37,0	37,00
9.70	37,0	37,02
9.75	37,0	37,05
9.80	37,0	37,06
9.85	37,1	37,13
9.90	37,2	37,20
9.95	37,2	37,23
10.00	37,2	37,20
10.05	37,2	37,19
10.10	37,2	37,18
10.15	37,2	37,16
10.20	37,1	37,12
10.25	37,1	37,09
10.30	37,1	37,10
10.35	37,2	37,16
10.40	37,2	37,18
10.45	37,2	37,18
10.50	37,2	37,20
10.55	37,2	37,22
10.60	37,2	37,21
10.65	37,2	37,18
10.70	37,1	37,15
10.75	37,1	37,15
10.80	37,2	37,16
10.85	37,2	37,19
10.90	37,2	37,24
10.95	37,3	37,28
11.00	37,3	37,34



11.05	37,3	37,36
11.10	37,3	37,35
11.15	37,3	37,34
11.20	37,3	37,34
11.25	37,3	37,31
11.30	37,2	37,33
11.35	37,2	37,31
11.40	37,3	37,33
11.45	37,3	37,38
11.50	37,4	37,45
11.55	37,4	37,48
11.60	37,4	37,50
11.65	37,4	37,52
11.70	37,4	37,52
11.75	37,4	37,51
11.80	37,4	37,48
11.85	37,4	37,47
11.90	37,4	37,50
11.95	37,4	37,54
12.00	37,5	37,57
12.05	37,5	37,59
12.10	37,5	37,64
12.15	37,6	37,69
12.20	37,6	37,72
12.25	37,6	37,69
12.30	37,6	37,67
12.35	37,6	37,67
12.40	37,6	37,69
12.45	37,6	37,70
12.50	37,7	37,72
12.55	37,7	37,76
12.60	37,8	37,79
12.65	37,8	37,86
12.70	37,9	37,92
12.75	37,9	37,92
12.80	37,9	37,95
12.85	38,0	37,99
12.90	38,0	38,04
12.95	38,1	38,05
13.00	38,1	38,09
13.05	38,2	38,16
13.10	38,3	38,23
13.15	38,3	38,29
13.20	38,5	38,39
13.25	38,5	38,48
13.30	38,6	38,54
13.35	38,6	38,60
13.40	38,7	38,66
13.45	38,8	38,72
13.50	38,8	38,78
13.55	38,9	38,85
13.60	39,0	38,92
13.65	39,1	39,02
13.70	39,2	39,13
13.75	39,4	39,27
13.80	39,5	39,37
13.85	39,6	39,48
13.90	39,7	39,61
13.95	39,8	39,73
14.00	39,9	39,82
14.05	39,9	39,85

14.10	40,0	39,92
14.15	40,0	40,00
14.20	40,1	40,10
14.25	40,2	40,18
14.30	40,3	40,26
14.35	40,3	40,38
14.40	40,4	40,51
14.45	40,5	40,62
14.50	40,5	40,70
14.55	40,6	40,77
14.60	40,6	40,82
14.65	40,7	40,89
14.70	40,7	40,93
14.75	40,7	40,94
14.80	40,7	40,91
14.85	40,7	40,96
14.90	40,8	40,97
14.95	40,7	40,97
15.00	40,8	40,97
15.05	40,8	40,98
15.10	40,8	41,00
15.15	40,9	41,08
15.20	40,9	41,11
15.25	40,9	41,13
15.30	40,9	41,16
15.35	40,9	41,18
15.40	40,9	41,19
15.45	40,9	41,18
15.50	40,9	41,16
15.55	40,9	41,15
15.60	40,8	41,14
15.65	40,9	41,14
15.70	40,9	41,14
15.75	40,9	41,16
15.80	40,9	41,18
15.85	41,0	41,21
15.90	41,1	41,26
15.95	41,1	41,29
16.00	41,1	41,31
16.05	41,2	41,33
16.10	41,2	41,37
16.15	41,2	41,40
16.20	41,2	41,43
16.25	41,3	41,46
16.30	41,3	41,48
16.35	41,4	41,52
16.40	41,5	41,58
16.45	41,5	41,64
16.50	41,6	41,70
16.55	41,7	41,77
16.60	41,8	41,86
16.65	41,9	41,92
16.70	42,0	42,03
16.75	42,1	42,15
16.80	42,2	42,26
16.85	42,3	42,33
16.90	42,4	42,45
16.95	42,5	42,55
17.00	42,5	42,63
17.05	42,5	42,74
17.10	42,5	42,81



17.15	42,6	42,89
17.20	42,6	42,96
17.25	42,7	43,04
17.30	42,8	43,13
17.35	42,8	43,18
17.40	42,9	43,27
17.45	43,0	43,35
17.50	43,1	43,43
17.55	43,1	43,49
17.60	43,2	43,57
17.65	43,3	43,66
17.70	43,3	43,72
17.75	43,4	43,80
17.80	43,5	43,88
17.85	43,5	43,96
17.90	43,7	44,06
17.95	43,8	44,14
18.00	43,9	44,26

3.2.2.4 Horn Antenna EMCO 3116

Frequency (GHz)	Antenna factor EMCO 3116
18.000	44.86
18.100	44.88
18.200	44.94
18.300	44.97
18.400	44.95
18.500	44.86
18.600	44.90
18.700	45.04
18.800	45.11
18.900	45.20
19.000	45.23
19.100	45.24
19.200	45.07
19.300	45.01
19.400	45.02
19.500	45.07
19.600	44.96
19.700	44.94
19.800	45.00
19.900	44.83
20.000	44.72
20.100	44.70
20.200	44.68
20.300	44.53
20.400	44.44
20.500	44.48
20.600	44.54
20.700	44.37
20.800	44.25
20.900	44.36
21.000	44.42
21.100	44.35
21.200	44.38
21.300	44.34
21.400	44.30
21.500	44.20
21.600	44.22
21.700	44.25
21.800	44.31
21.900	44.31
22.000	44.44
22.100	44.67
22.200	44.68
22.300	44.68
22.400	44.87
22.500	44.79
22.600	44.68
22.700	44.84
22.800	44.91
22.900	44.84
23.000	44.95
23.100	44.97
23.200	45.14
23.300	45.20
23.400	45.35
23.500	45.45



23.600	45.55
23.700	45.70
23.800	45.75
23.900	45.77
24.000	45.83
24.100	45.85
24.200	45.73
24.300	45.92
24.400	45.83
24.500	45.81
24.600	45.98
24.700	46.12
24.800	46.23
24.900	46.34
25.000	46.36
25.100	46.43
25.200	46.53
25.300	46.49
25.400	46.33
25.500	46.40
25.600	46.34
25.700	46.12
25.800	46.27
25.900	46.19
26.000	46.16
26.100	46.33
26.200	46.32
26.300	46.55
26.400	46.70
26.500	46.68
26.600	46.76
26.700	46.70
26.800	46.57
26.900	46.74
27.000	46.56
27.100	46.40
27.200	46.60
27.300	46.61
27.400	46.69
27.500	46.71
27.600	46.82
27.700	46.84
27.800	46.85
27.900	47.02
28.000	47.07
28.100	47.02
28.200	46.99
28.300	47.02
28.400	47.06
28.500	46.94
28.600	46.88
28.700	47.06
28.800	47.00
28.900	46.96
29.000	47.03
29.100	46.94
29.200	46.95
29.300	46.86
29.400	46.90
29.500	47.05
29.600	46.90

29.700	46.80
29.800	46.95
29.900	46.79
30.000	46.78
30.100	46.76
30.200	46.78
30.300	46.76
30.400	46.80
30.500	46.90
30.600	46.99
30.700	46.97
30.800	46.99
30.900	47.06
31.000	47.18
31.100	47.26
31.200	47.28
31.300	47.32
31.400	47.35
31.500	47.47
31.600	47.54
31.700	47.64
31.800	47.69
31.900	47.74
32.000	47.93
32.100	48.23
32.200	48.17
32.300	48.32
32.400	48.51
32.500	48.50
32.600	48.56
32.700	48.80
32.800	48.90
32.900	49.28
33.000	49.46
33.100	49.76
33.200	49.83
33.300	50.07
33.400	50.49
33.500	50.68
33.600	50.81
33.700	50.89
33.800	51.11
33.900	51.15
34.000	51.22
34.100	51.46
34.200	51.56
34.300	51.79
34.400	51.81
34.500	51.93
34.600	52.17
34.700	52.19
34.800	52.45
34.900	52.66
35.000	52.59
35.100	52.55
35.200	52.41
35.300	52.30
35.400	52.27
35.500	52.05
35.600	52.00
35.700	51.94



35.800	51.94
35.900	51.68
36.000	51.64
36.100	51.51
36.200	51.28
36.300	51.18
36.400	51.29
36.500	51.19
36.600	51.05
36.700	50.78
36.800	50.80
36.900	50.68
37.000	50.57
37.100	50.65
37.200	50.76
37.300	50.73
37.400	50.86
37.500	50.98
37.600	51.16
37.700	51.29
37.800	51.57
37.900	51.58
38.000	51.98
38.100	52.34
38.200	52.34
38.300	52.66
38.400	52.86
38.500	52.96
38.600	53.24
38.700	53.66
38.800	53.81
38.900	53.92
39.000	54.09
39.100	54.02
39.200	53.93
39.300	53.75
39.400	53.75
39.500	53.62
39.600	53.36
39.700	53.54
39.800	53.28
39.900	53.27
40.000	53.34

4 CONVERSION FACTORS AND ALL OTHER FORMULAS

Unit	Conversion unit	Formula of conversion
dB μ V	dB μ V/m	dB μ V/m = dB μ V + AF
μ V/m	dB μ V/m	dB μ V/m = 20log(X(μ V/m)/1 μ V)

	Test distance stated in standard	Test distance of measurement	Conversion factor
Class B	3 m	3 m	/
Class A	10 m	3 m	20dB/decade



5 GENERAL AND SPECIAL CONDITIONS DESCRIPTION

5.1 General condition description

Interconnect and power cabling (or wiring)

5.1.1 Test arrangement for conducted emissions

Interconnecting cables that hang closer than 40 cm to the ground-plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω . LISN can be placed on top of, or immediately beneath, reference ground-plane.

All other equipment powered from additional LISN(s).

Multiple outlet strip can be used for multiple power cords of non-EUT equipment.

LISN at least 80 cm from nearest part of EUT chassis.

Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use.

Non-EUT components of EUT system being tested.

Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop.

Rear of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground-plane.

5.1.2 Test arrangement for conducted emissions- floor-standing equipment

Excess I/O cables shall be bundled in the center. If bundling is not possible, the cables shall be arranged in serpentine fashion. Bundling shall not exceed 40 cm in length.

Excess power cords shall be bundled in the center or shortened to appropriate length.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. If bundling is not possible, the cable shall be arranged in serpentine fashion.

EUT and all cables shall be insulated, if required, from the ground-plane by up to 12 mm of insulating material.

EUT connected to one LISN. LISN can be placed on top of, or immediately beneath, the ground-plane.

All other equipment powered from a second LISN or additional LISN(s).

Multiple outlet strip can be used for multiple power cords of non-EUT equipment.

5.1.3 Test arrangement for radiated emissions tabletop equipment

Interconnecting cables that hang closer than 40 cm to the ground-plane shall be folded back and forth in the center, forming a bundle 30 to 40 cm long.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated if required using the correct terminating impedance. The total length shall not exceed 1 m.

If LISNs are kept in the test setup for radiated emissions, it is preferred that they be installed under the ground-plane with the receptacle flush with the ground-plane.

Cables of hand-operated devices, such as keyboards, mice, etc., shall be placed as for normal use.

Non-EUT components of EUT system being tested.

Rear of EUT, including peripherals, shall all be aligned and flush with rear of tabletop.

No vertical conducting plane used.

Power cords drape to the floor and are routed over to receptacle.

5.1.4 Test arrangement for radiated emissions floor-standing equipment

Excess I/O cables shall be bundled in center. If bundling is not possible, the cables shall be arranged in serpentine fashion. Bundling not to exceed 40 cm in length.

Excess power cords shall be bundled in the center or shortened to appropriate length.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. If bundling is not possible, the cable shall be arranged in a serpentine fashion.

EUT and all cables shall be insulated, if required, from the ground-plane by up to 12 mm of insulating material.

If LISNs are kept in the test setup for radiated emissions, it is preferred that they be installed under the ground-plane with the receptacle flush with the ground plane.



Overhead cable trays and suspended ceilings

5.1.5 Test arrangement for floor-standing equipment

Only one vertical riser may be used where typical of system under test.

Excess power cord shall be bundled in the center or shortened to appropriate length.

EUT and cables shall be insulated from ground-plane by up to 12 mm. Where the manual has specified or there exists a code of practice for installation of the EUT, the test arrangement shall allow the use of this practice for the tests.

Power cords being measured connected to one LISN. All other system power cords powered through other LISN(s). A multiple receptacle strip may be used for other power cords.

For *conducted* tests, the LISNs may be placed on top of or immediately beneath and bonded directly to the ground-plane. For *radiated* tests, the LISN(s), if used, should be installed under, with the receptacle flush with the ground-plane.

5.1.6 Placement and manipulation of interconnect cabling (or wiring) of tabletop equipment

LISN(s) may have to be positioned to the side of the table to meet the criterion that the LISN receptacle shall be 80 cm away from the EUT. LISN(s) may be above ground-plane only for conducted emission measurements.

Accessories, such as ac power adapter, if typically table-mounted, shall occupy peripheral positions as is applicable.

Accessories, which are typically floor-mounted, shall occupy a floor position directly below the portion of the EUT to which they are typically connected. T

Table length may be extended beyond 1.5 m with peripherals aligned with the back edge. The table depth may be extended beyond 1 m. The 40 cm distance to the vertical conducting plane shall be maintained for conducted emission testing.

Placement of wall-mounted equipment

5.1.7 Test configuration/arrangement for combination floor-standing and tabletop equipment

Interconnecting cables that hang closer than 40 cm to the ground-plane shall be folded back and forth in the center, forming a bundle 30 to 40 cm long.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated if required using the correct terminating impedance.

If LISNs are kept in the test setup for radiated emissions, it is preferred that they be installed under the ground-plane with the receptacle flush with the ground-plane.

Cables of hand-operated devices, such as keyboards, mice, etc., have to be placed as for normal use.

Non-EUT components of EUT system being tested.

I/O cable to floor-standing unit drapes to the ground-plane and shortened or excess bundled. Cables not reaching the metal ground-plane are draped to the height of the connector or 40 cm, whichever is lower.

Power cords and signal cables shall drape to the floor. No extension cords shall be used to the power receptacles.

The floor-standing unit can be placed under the table if its height permits.

5.2 Special condition description

If for some reason the above measurement conditions can't be met, the description below should be used as an appropriate measurement condition and placement.

(Description is written additionally as the measurements differ – all is within test procedure)



6 MEASUREMENT UNCERTAINTY

The following measurement uncertainty levels have been estimated for tests performed on the product, as specified in ETSI TR 100 028-2 and C63.23. This represents an expanded uncertainty expressed at 95% confidence level using a coverage factor $k=2$.

Measurements	U_{LAB}	$U_{\text{ETSI TR 100 028-2}}$	$U_{\text{C63.23}}$
AC Line Conducted Emission	3.2 dB	/	$\pm 4,13$
Spurious emission 30 – 300 MHz	4.2 dB	± 6	/
Spurious emission 300 – 1000 MHz	4.4 dB	± 6	/
Spurious emission 1 GHz – 40 GHz	5.1 dB	± 6	
Occupied bandwidth (99% emission bandwidth)	< 2%	$\pm 5\%$	/

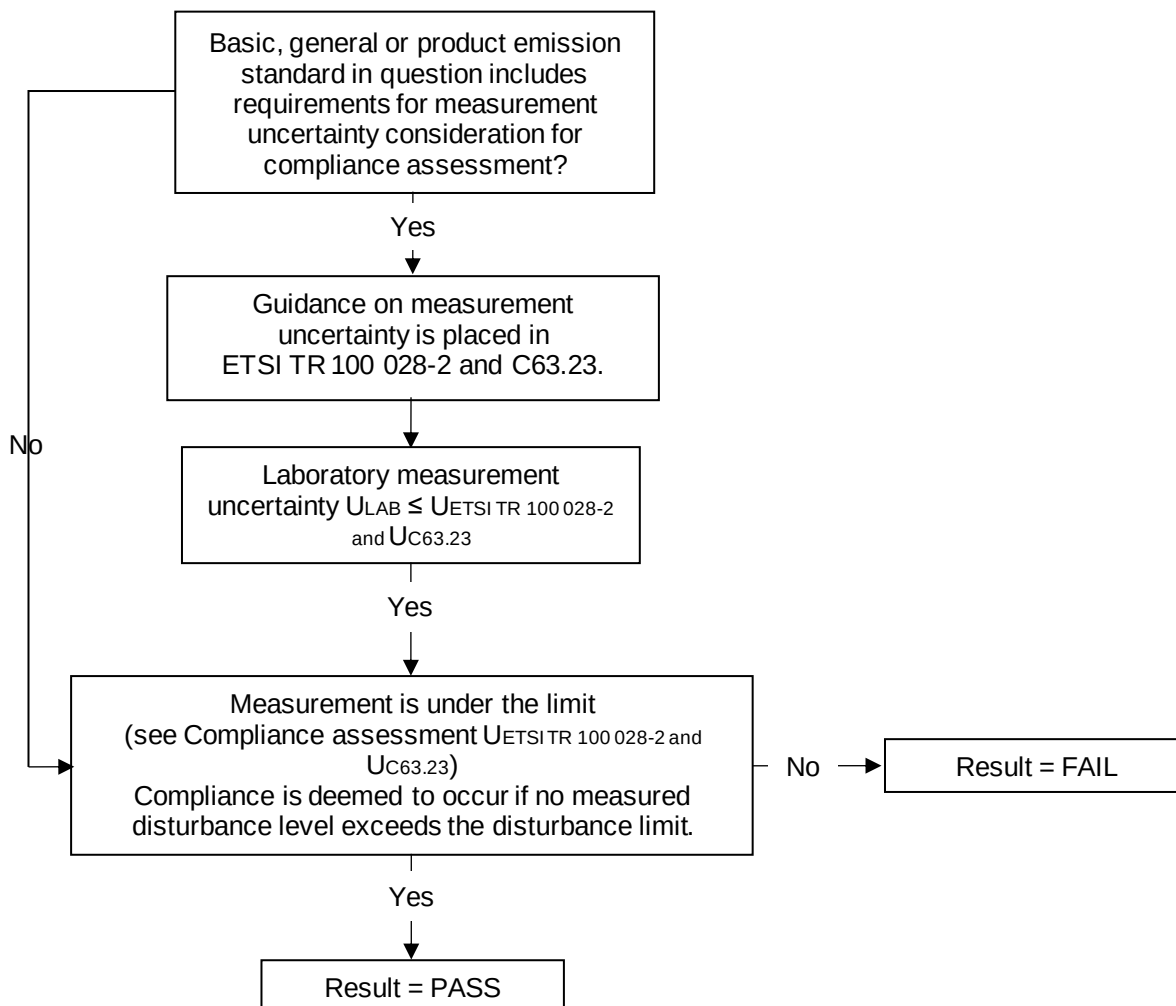
Note: Measurement uncertainty calculated in accordance with ETSI TR 100 028-2 and C63.23.

6.1 Application of decision rule

Application of decision rule and statement of conformity is defined in document TN023 Decision rule and measurement uncertainty.

As a general rule Pass/Fail decisions are based on simple acceptance rule and acceptance limits chosen based on simple acceptance ($w = 0$, $AL = TL$) except if a decision rule is governed by particular standard or guidance document.

Decision rule:





7 TEST SUMMARY

STANDARDS (details on first page)	Tested	Sample	
	yes pass	no	pass not
ANSI C63.10-2013 (Clause 6.3, 6.4, 6.5, 6.6, 6.9); The product also complies with: 47 CFR Part 15, Subpart C: (§15.203, §15.207 (a), §15.205; §15.209; §15.215; §15.249;) RSS-210 Issue 10 (Clause 7.2), RSS-Gen, Issue 5 (Clause 6.7, 8.8, 8.9)	☒	☐	☒

Test	Section within the report	47 CFR Part 15	RSS 210, Issue 10 (*1) or RSS-Gen, Issue 5 (*2)	Conclusion
Antenna requirement	8.1	15.203	-	PASS
Conducted emission	8.2	15.207	8.8 (*2)	N/A
Radiated emission	8.3	15.205, 15.209, 15.249(a)	8.9 (*2), 8.10(*2), 7.2 (*1)	PASS
99% Bandwidth	8.4	-	6.7 (*2)	PASS
20 dB Bandwidth	8.5	15.215(c)	-	PASS
*Note: Radiated measurements performed in laboratory recognized by ISED Canada: – CAB identifier: SI0001 – ISED#: 21434				

7.1 Operating voltages/frequencies used for testing

Section	Test	Operating conditions
8.1	Conducted emission	120 V; 60 Hz
8.2	Radiated emission	120 V; 60 Hz
8.3	99% Bandwidth	120 V; 60 Hz
8.4	20 dB Emission bandwidth	120 V; 60 Hz

8 EMISSION TESTS

8.1 47 CFR § 15.203 Antenna requirements

Requirement

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.

Conclusion:

PASS

Note: Device has integrated internal antenna.

8.2 47 CFR § 15.207, RSS Gen (Clause 8.8.)
Conducted emission measurement (intentional radiator)

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

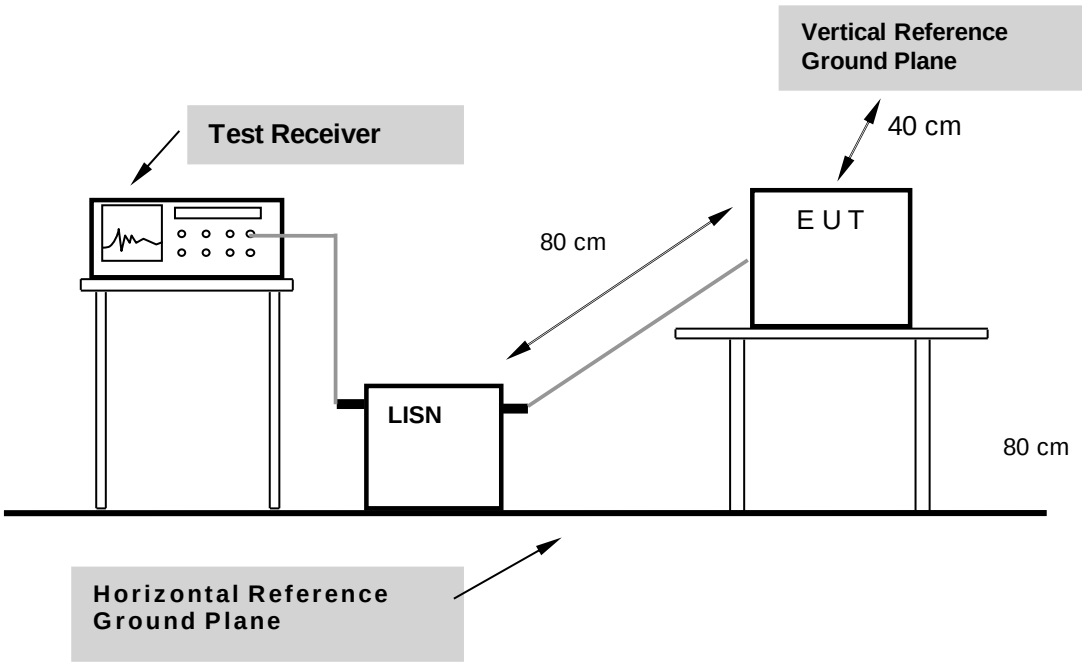
Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15–0.5	66 to 56*	56 to 46
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

8.2.1 Test procedure

EMI test receiver was set to investigate from 150 kHz to 30 MHz with the 9 kHz RBW. During conducted emission EUT was connected to a LISN and maximum emissions was recorded in the QP and average detection mode.

Test setup



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

8.2.2 Test equipment

Description	Model No.	SIQ No.	Last calibration	Calibrated until	Calibration period	Used
Rohde-Schwarz, EMI receiver	ESR7	/	2022-01	2023-07	18 months	
Rohde-Schwarz, RFI receiver	ESU8	105187	2022-08	2024-02	18 months	X
Rohde-Schwarz, RFI receiver	ESU26	106897	2022-01	2023-07	18 months	
Rohde & Schwarz, Artificial main network	ESH2-Z5	106899	2021-08	2023-02	18 months	
Rohde & Schwarz, Artificial main network	ENV216	109818	2021-08	2023-02	18 months	X
TESEQ, Impedance Stabilization Network	ISN T800	106947	2022-04	2023-10	18 months	/



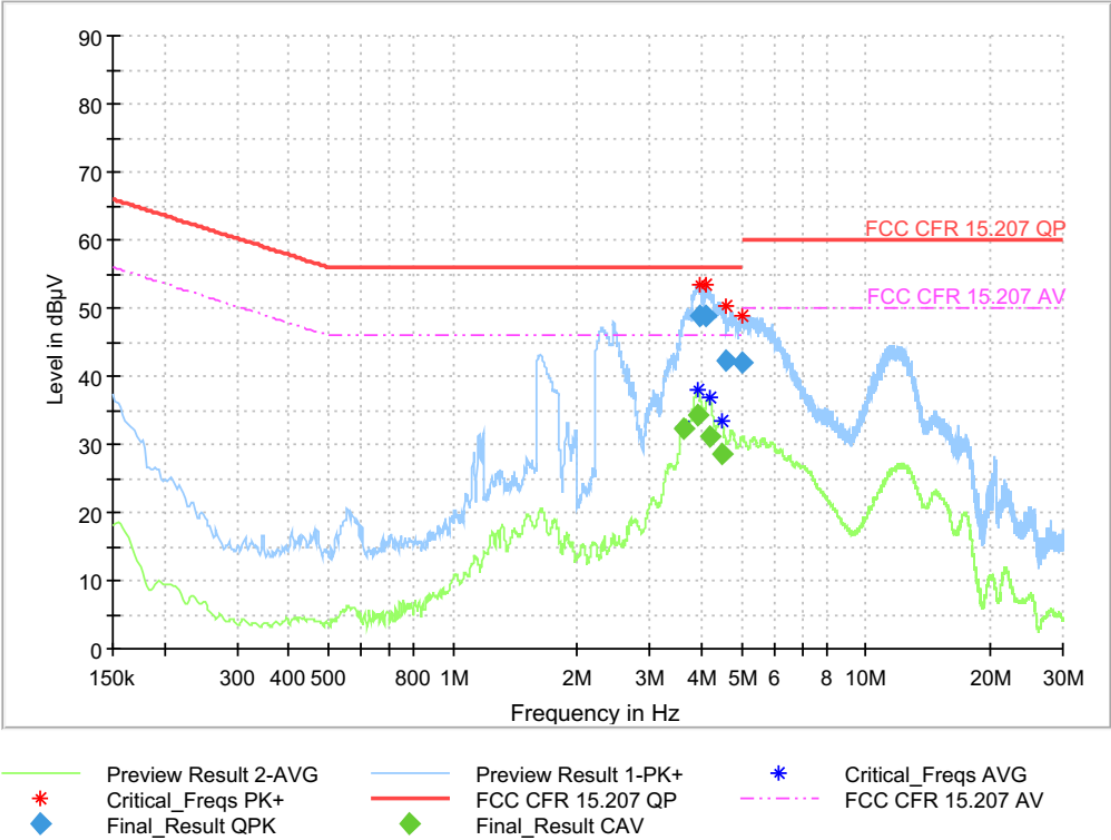
8.2.3 Test results

EUT Information

EUT:Wine climate cabinet

Operating mode:Uin: 120 V / 60 Hz, proximity sensor turned on

Lines:Line L and N



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
3.941250	48.79	---	56.00	7.21	2000.0	9.000	L1	ON	9.8
4.114500	48.77	---	56.00	7.23	2000.0	9.000	N	ON	9.8
3.896250	---	34.36	46.00	11.64	2000.0	9.000	N	ON	9.8
4.564500	42.32	---	56.00	13.68	2000.0	9.000	N	ON	9.8
3.601500	---	32.19	46.00	13.81	2000.0	9.000	N	ON	9.8
4.994250	42.10	---	56.00	13.90	2000.0	9.000	N	ON	9.8
4.173000	---	31.02	46.00	14.98	2000.0	9.000	N	ON	9.8
4.463250	---	28.65	46.00	17.35	2000.0	9.000	N	ON	9.8

8.3 47 CFR § 15.205, § 15.209, § 15.249 RSS Gen (Clause 8.9& 8.10) and RSS 210 (Clause 7.2)

Radiated emission measurement (intentional radiator)

8.3.1 Test instruments

Description	Model No.	SIQ No.	Last calibration	Calibrated until	Calibration period	Used
Rohde-Schwarz, Spectrum analyzer	FSV 40	/	2021-04	2022-10	18 months	X
Rohde-Schwarz, RFI receiver	ESU8	105187	2020-07	2022-07	24 months	
Rohde-Schwarz, RFI receiver	ESU26	106897	2021-01	2023-07	18 months	X
Comtest Engineering, Semi Anechoic Chamber SAC 1	SAC 3m	NPS001	2020-06	2023-06	36 months	X
Rohde & Schwarz, Ultra Broadband Antenna	HL562E (SN 109843)	109063	2020-07	2023-07	36 months	
Rohde & Schwarz, Horn Antenna	HF907 (SN 102494)	109064	2020-08	2023-08	36 months	
Comtest Engineering, Semi Anechoic Chamber SAC 2	SAC 3m	NPS002	2020-06	2023-06	36 months	X
Rohde & Schwarz, Ultra Broadband Antenna	HL562E (SN 100842)	109056	2020-07	2023-07	36 months	X
Rohde & Schwarz, Horn Antenna	HF907 (SN 102508)	109057	2020-08	2022-08	36 months	X
Horn Antenna, EMCO	3116	/	2021-10	2024-10	36 months	X
Maturo, Turn table (2 m diameter)	TT 2.0 SI	/	N/A	N/A	N/A	X
Maturo, Bore-sight antenna mast	BAM-4.0-P	/	N/A	N/A	N/A	X
Maturo, Multi-channel positioning equipment	Maturo NCD	/	N/A	N/A	N/A	X
Schwarzbeck Active loop antenna	FMZB 1519B	/	2021-04	2022-10	18 months	X
Rohde-Schwarz, AMN	ENV216	/	2021-08	2023-02	18 months	X
PMI Low noise amplifier	PEC-42-1G-40G	/	2022-4	2023-10	18 months	X

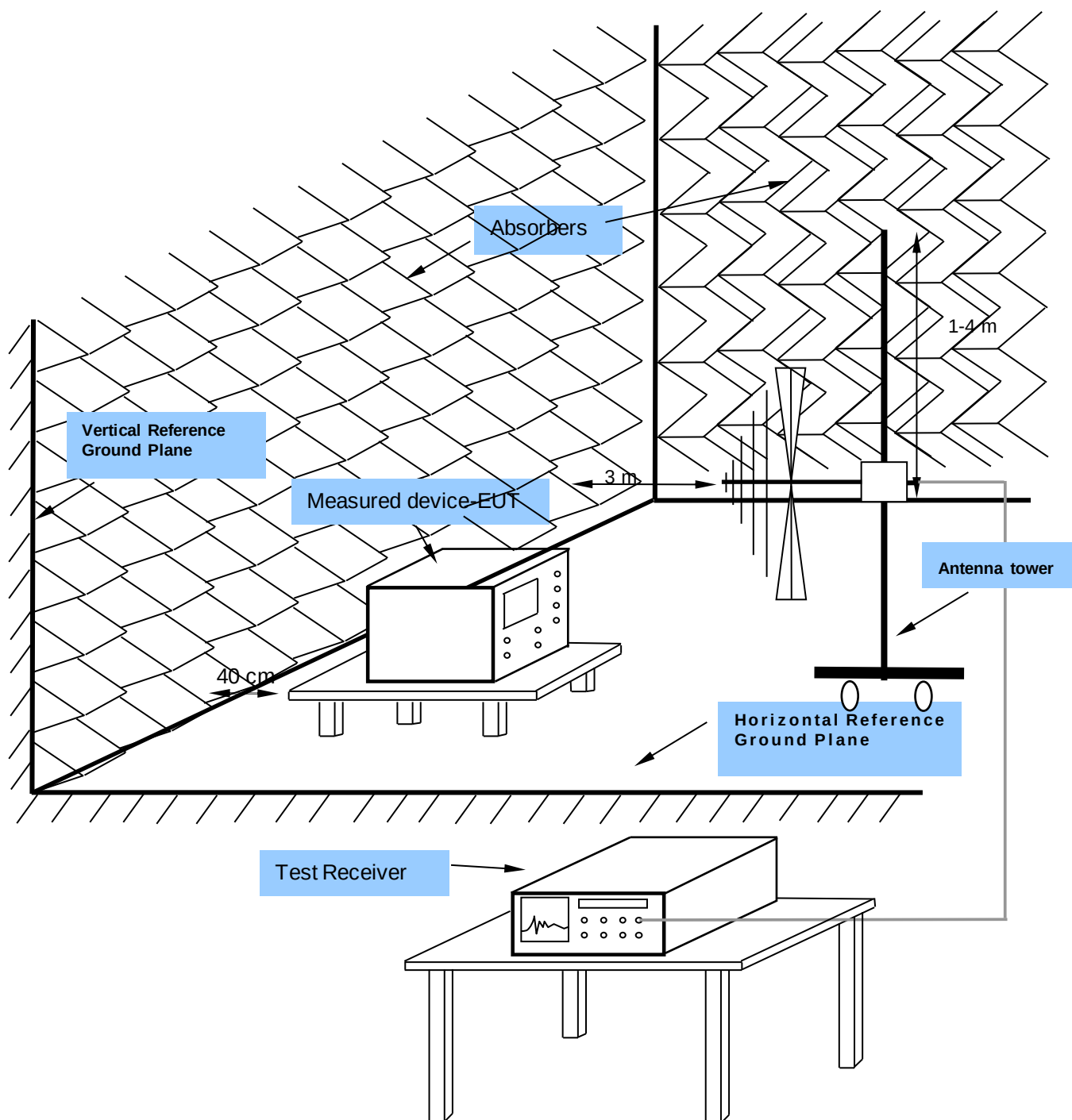


8.3.2 Test procedure

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground in an Anechoic Chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 m and 1 m away from the interference-receiving antenna, which was mounted on the top of variable-height antenna tower.
3. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the turn table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to PEAK and QUASI-PEAK Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. The highest points would be re-tested one by one using the quasi-peak method.

***Note: Limit lines marked as FCC Par 15.209 are inline also with RSS Gen requirements.**

8.3.3 Test setup



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.



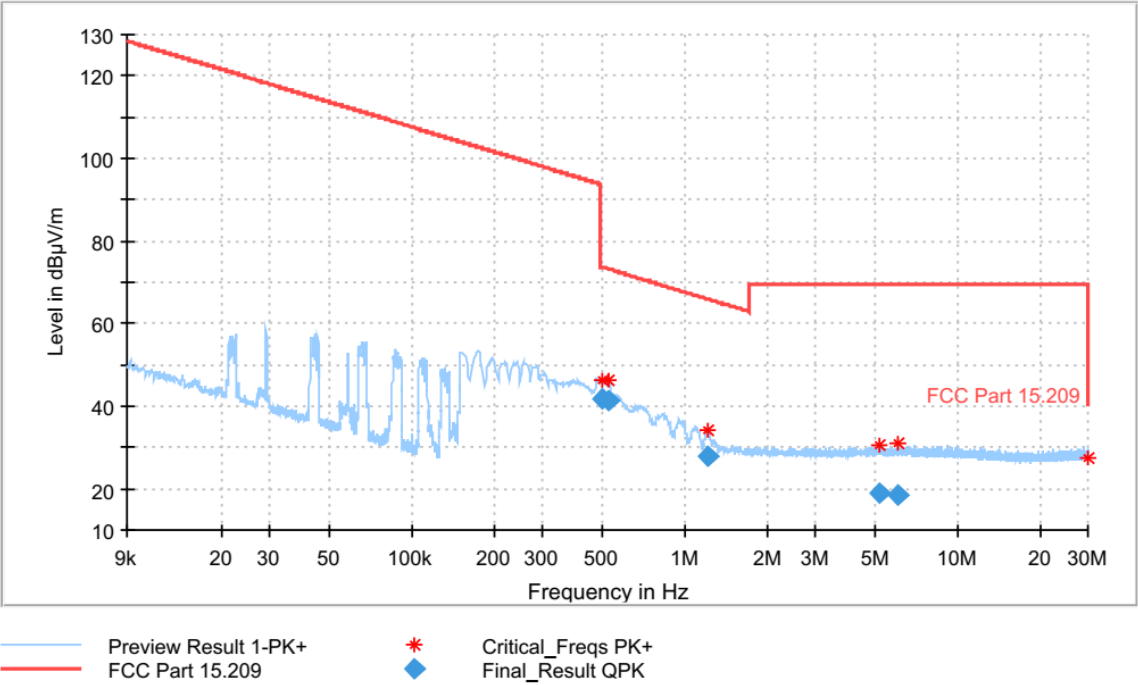
8.3.4 Test result

EUT Information

EUT:
Operating mode:

Wine climate cabinet
Proximity sensor, TX 5876 MHz

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
0.501000	41.79	73.61	31.82	100.0	H	3.0
0.528000	41.31	73.15	31.84	100.0	H	357.0
1.209750	27.95	65.97	38.02	100.0	H	339.0
5.194500	18.90	69.50	50.60	100.0	H	343.0
6.006750	18.73	69.50	50.77	100.0	H	108.0

EUT Information

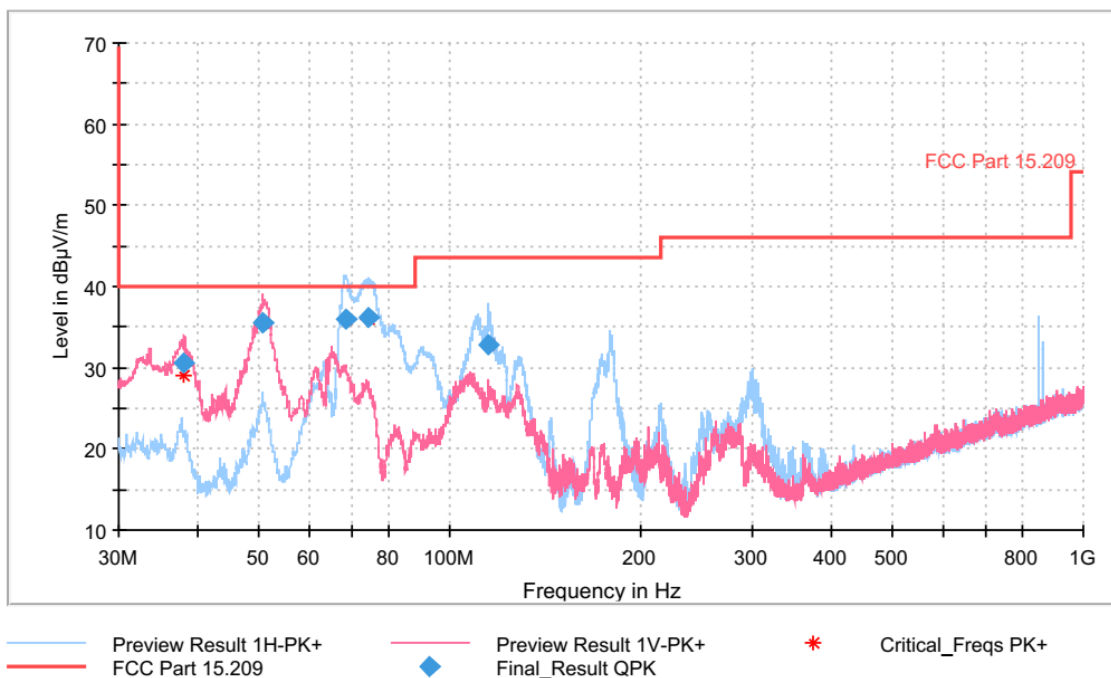
EUT:

Wine climate cabinet

Operating mode:

Proximity sensor, TX 5876 MHz

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	DET 2 (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
74.250000	36.14	---	40.00	3.86	222.0	H	350.0
68.340000	35.89	---	40.00	4.11	260.0	H	350.0
50.760000	35.58	---	40.00	4.42	100.0	V	357.0
50.790000	35.49	---	40.00	4.51	100.0	V	357.0
38.130000	30.69	---	40.00	9.31	100.0	V	15.0
115.320000	32.75	---	43.50	10.75	121.0	H	329.0

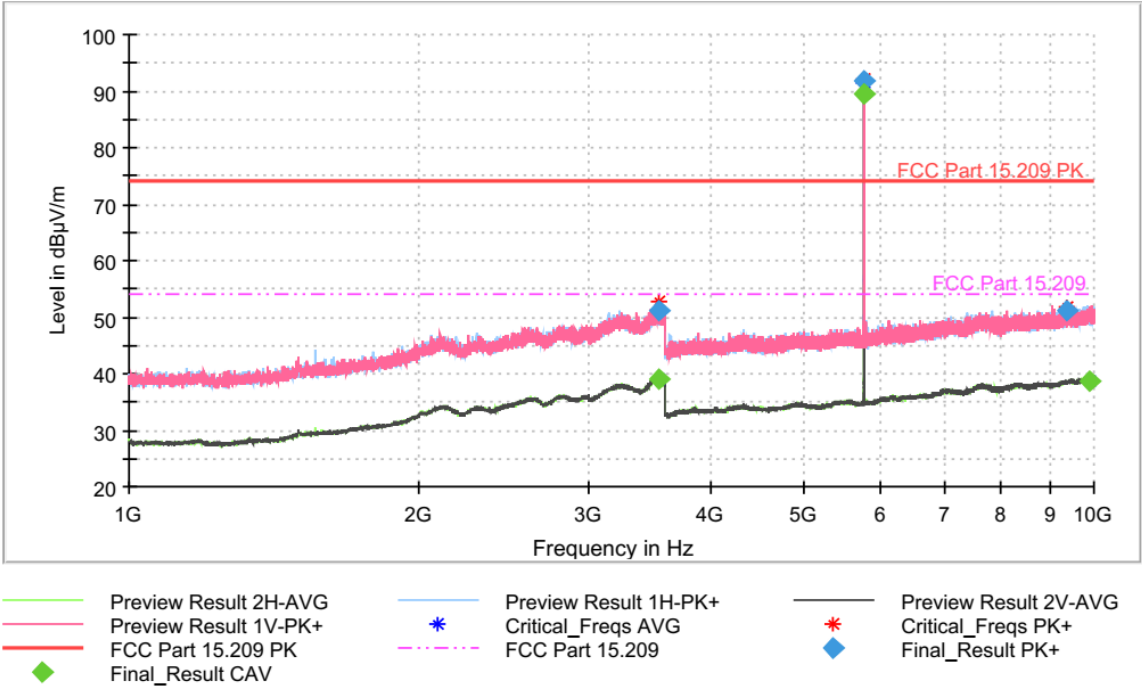


EUT Information

EUT:
Operating mode:

Wine climate cabinet
Proximity sensor, TX 5786 MHz

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
5786.000000	---	89.49	54.00	-35.49	172.0	H	0.0
5786.000000	91.80	---	74.00	-17.80	205.0	H	0.0
3542.500000	---	38.96	54.00	15.04	130.0	V	81.0
9900.000000	---	38.84	54.00	15.16	211.0	H	92.0
9362.250000	51.31	---	74.00	22.69	203.0	V	81.0
3541.250000	51.29	---	74.00	22.71	192.0	V	268.0

EUT Information

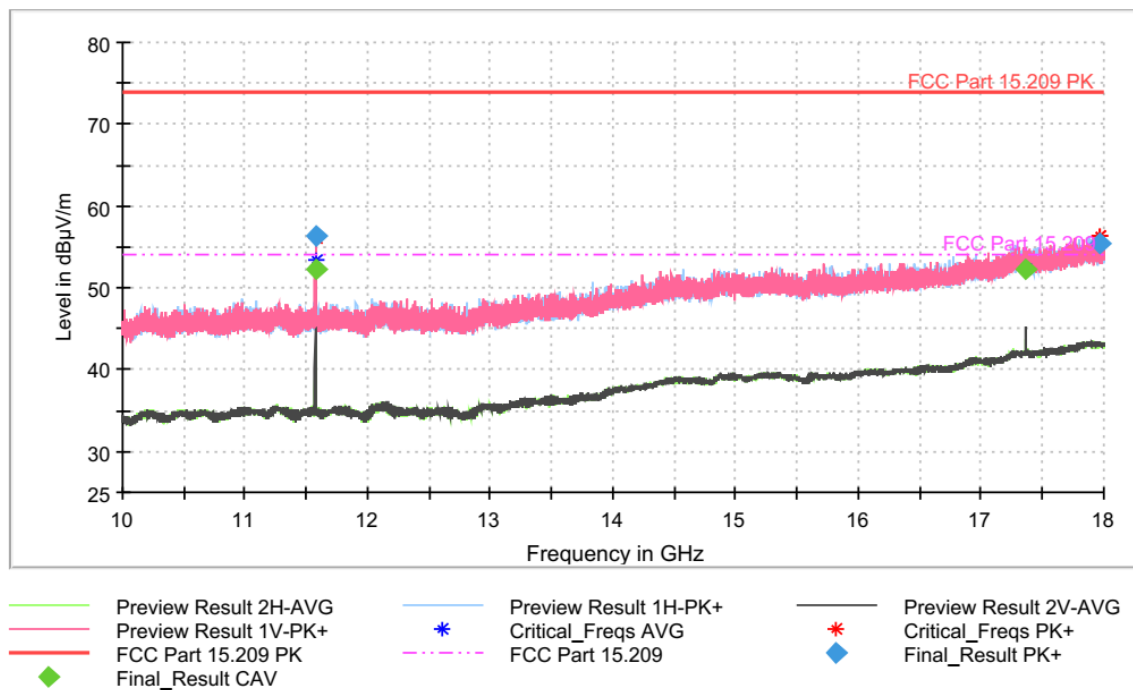
EUT:

Wine climate cabinet

Operating mode:

Proximity sensor, TX 5786 MHz

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
17358.000000	---	52.37	54.00	1.63	230.0	V	0.0
11572.000000	---	52.36	54.00	1.64	134.0	V	0.0
11571.750000	56.27	---	74.00	17.73	148.0	V	0.0
17973.500000	55.38	---	74.00	18.62	230.0	H	29.0

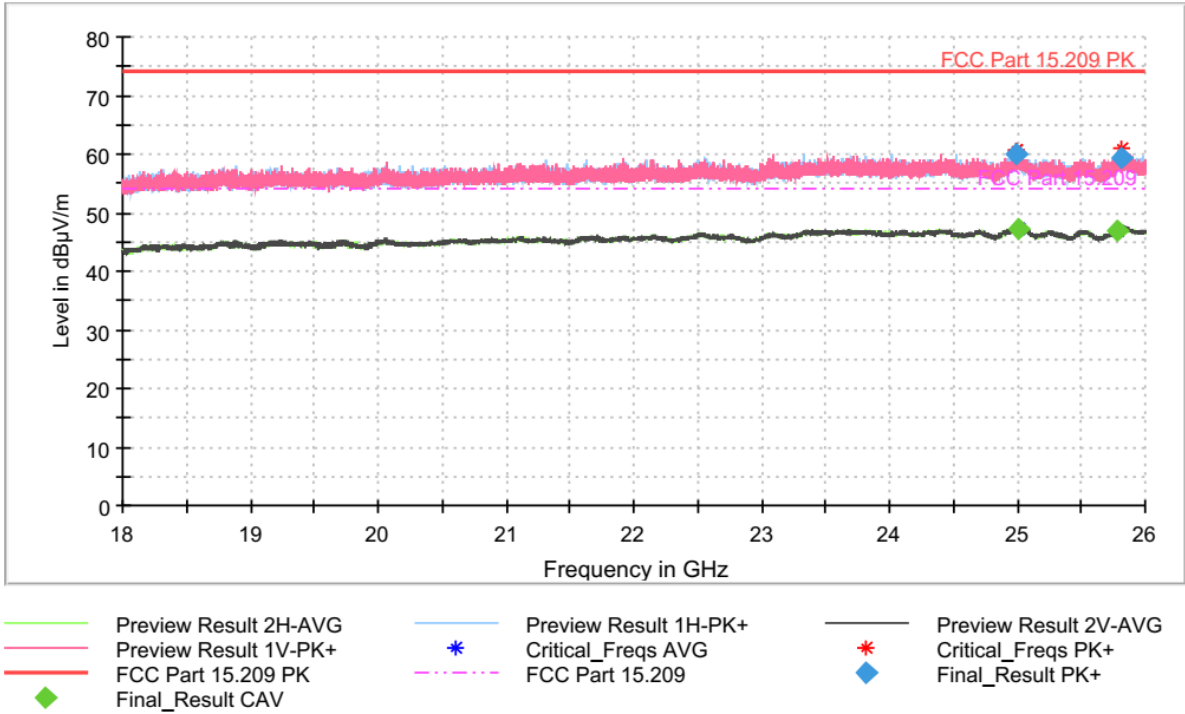


EUT Information

EUT:
Operating mode:

Wine climate cabinet
Proximity sensor, TX 5786 MHz

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
25002.500000	---	47.24	54.00	6.76	174.0	V	329.0
25789.000000	---	46.94	54.00	7.06	211.0	V	329.0
24984.000000	60.09	---	74.00	13.91	214.0	H	278.0
25814.500000	59.26	---	74.00	14.74	180.0	V	329.0

EUT Information

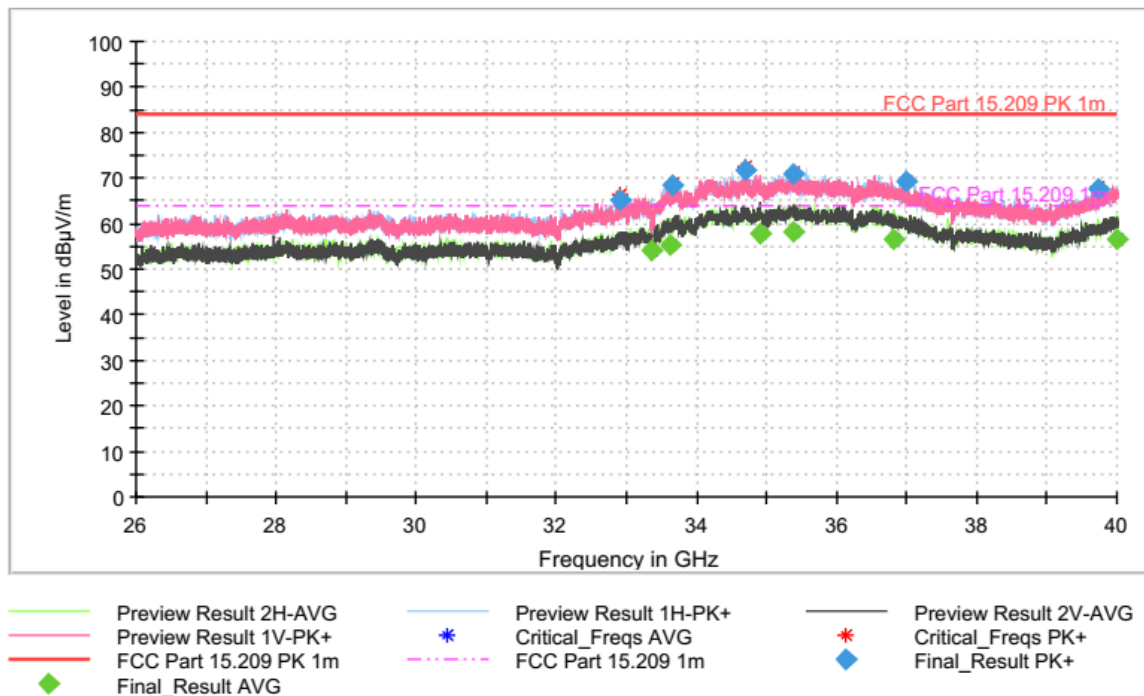
EUT:

Wine climate cabinet

Operating mode:

Proximity sensor, TX 5786 MHz

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
32918.000000	65.29	---	84.00	18.71	187.0	H	228.0
33348.000000	---	54.00	64.00	10.00	200.0	H	24.0
33627.000000	---	55.42	64.00	8.58	187.0	H	146.0
33662.000000	68.28	---	84.00	15.72	200.0	V	200.0
34695.000000	71.55	---	84.00	12.45	164.0	H	283.0
34917.000000	---	57.79	64.00	6.21	160.0	V	359.0
35378.000000	---	58.34	64.00	5.66	160.0	H	0.0
35392.000000	71.01	---	84.00	12.99	160.0	H	17.0
36810.000000	---	56.50	64.00	7.50	200.0	H	329.0
36988.000000	69.14	---	84.00	14.86	164.0	H	173.0
39729.000000	67.70	---	84.00	16.30	175.0	V	336.0
39989.000000	---	56.37	64.00	7.63	200.0	H	320.0

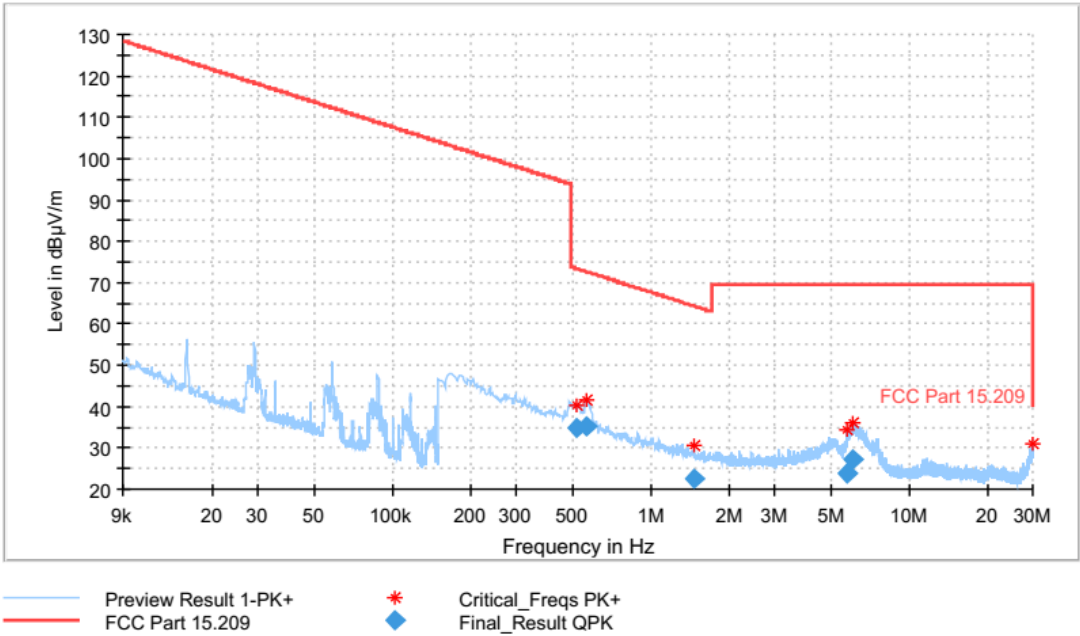


EUT Information

EUT
Supply
Operating mode:

Wine climate cabinet
Uin 120V/60Hz
Proximity sensor turned on, middle channel

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
0.559500	35.18	72.65	37.48	100.0	H	89.0
0.519000	34.64	73.30	38.67	100.0	H	89.0
1.473000	22.59	64.27	41.68	100.0	H	0.0
6.029250	27.10	69.50	42.40	100.0	H	89.0
5.761500	23.87	69.50	45.63	100.0	H	89.0

EUT Information

EUT

Supply

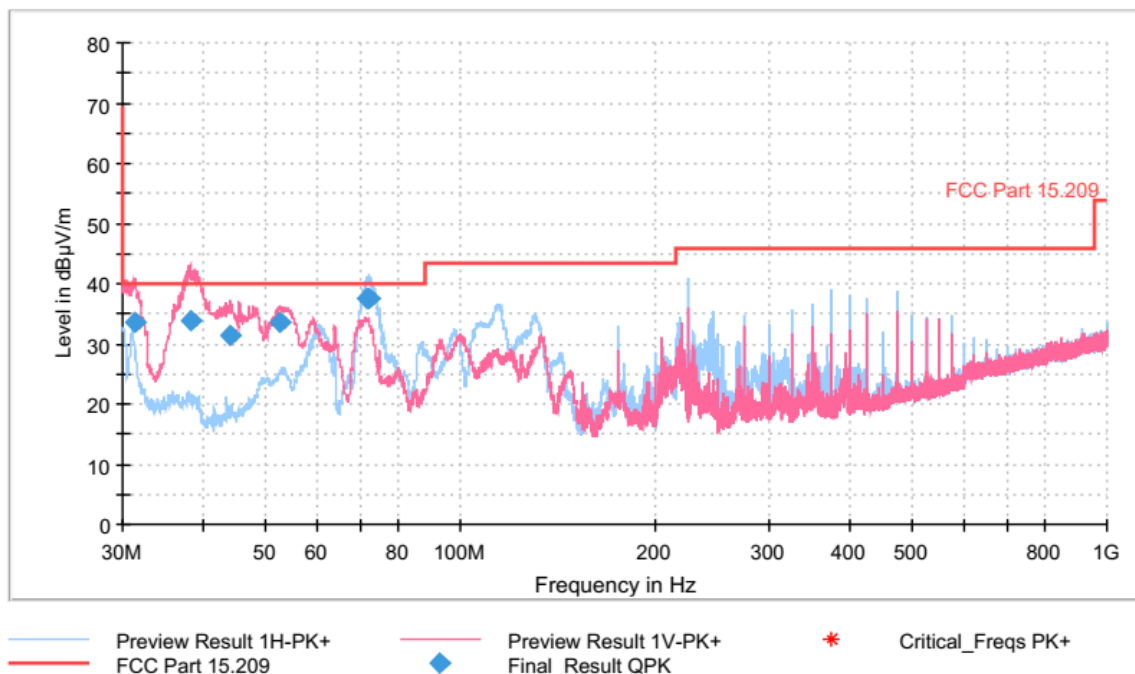
Operating mode:

Wine climate cabinet

Uin 120V/60Hz

Proximity sensor turned on, middle channel

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	DET 2 (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
71.760000	37.51	---	40.00	2.49	225.0	H	0.0
72.090000	37.46	---	40.00	2.54	225.0	H	0.0
38.160000	33.96	---	40.00	6.04	100.0	V	0.0
31.290000	33.44	---	40.00	6.56	100.0	V	0.0
52.710000	33.44	---	40.00	6.56	125.0	V	0.0
44.010000	31.42	---	40.00	8.58	125.0	V	0.0

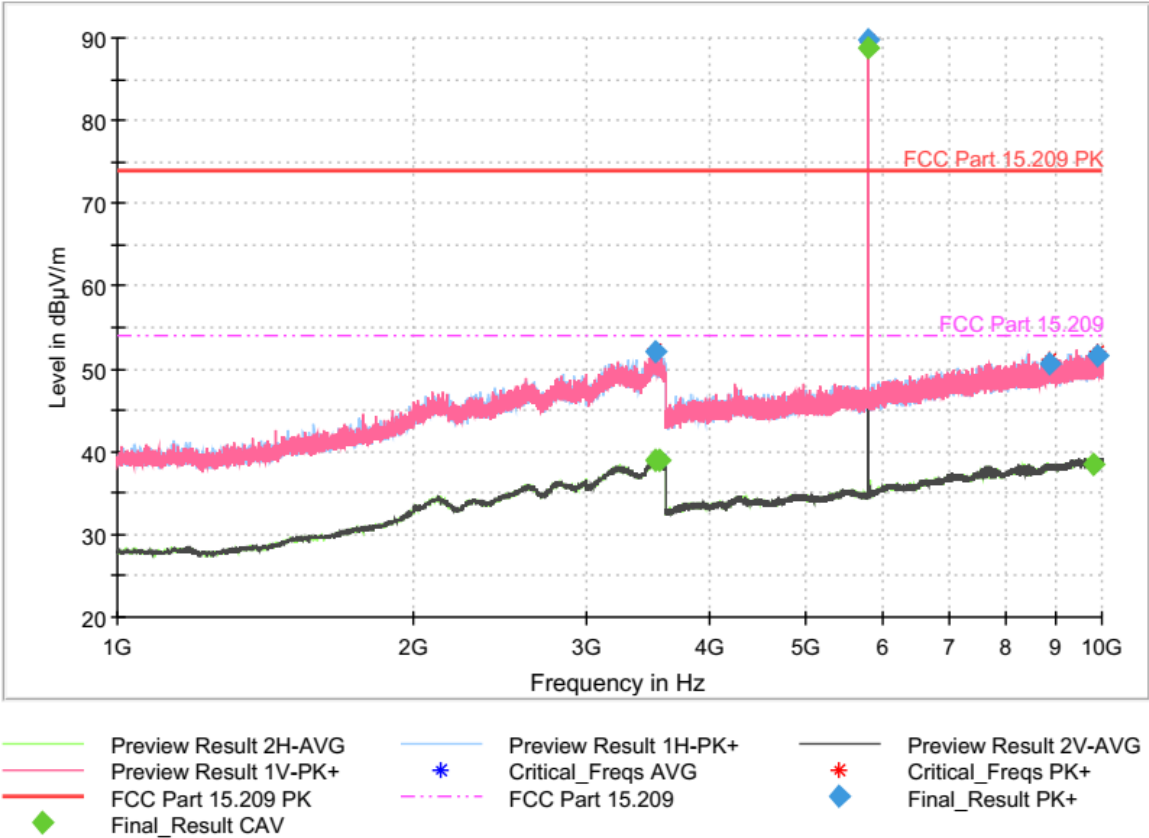


EUT Information

EUT
Supply
Operating mode:

Wine climate cabinet
Uin 120V/60Hz
Proximity sensor turned on, middle channel

Full Spectrum



Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
5800.000000	---	88.87	94.00	6.13	1000.0	1000.000	162.0	H	3.0
5800.000000	89.83	---	94.00	5.17	1000.0	1000.000	175.0	H	3.0
3548.250000	---	39.05	54.00	14.95	1000.0	1000.000	200.0	H	145.0
3522.250000	---	39.00	54.00	15.00	1000.0	1000.000	181.0	V	0.0
9816.000000	---	38.43	54.00	15.57	1000.0	1000.000	181.0	V	117.0
3524.250000	52.16	---	74.00	21.84	1000.0	1000.000	151.0	V	0.0
9895.250000	51.50	---	74.00	22.50	1000.0	1000.000	129.0	H	0.0
8848.000000	50.68	---	74.00	23.32	1000.0	1000.000	100.0	V	263.0

EUT Information

EUT

Supply

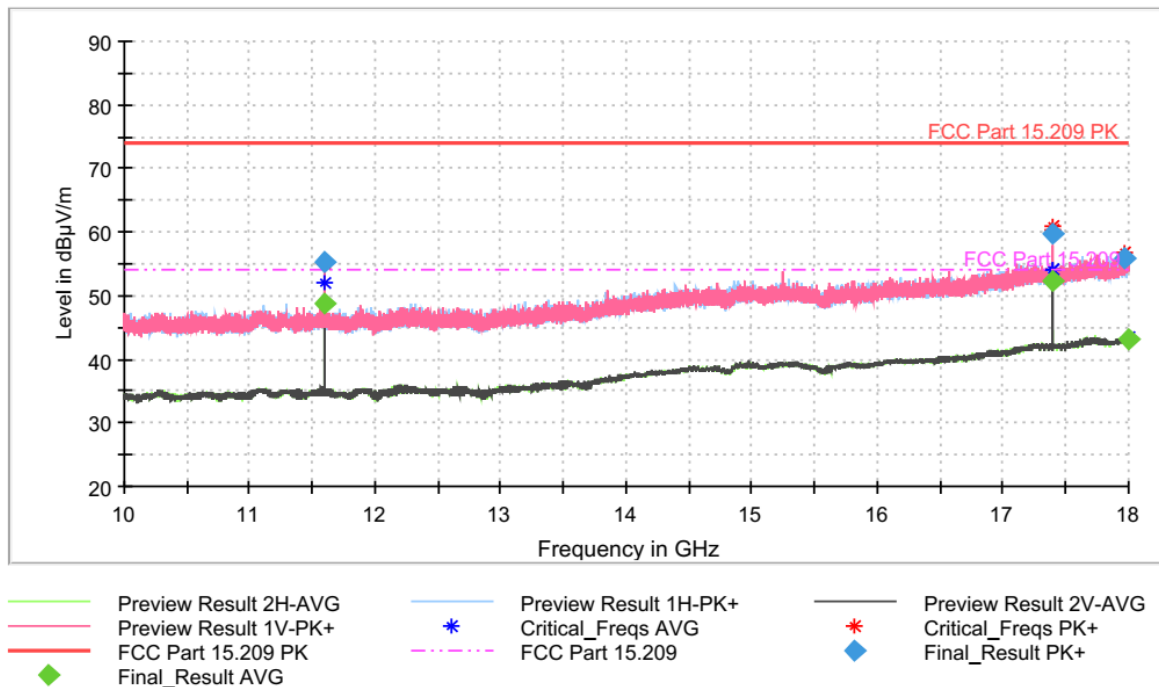
Operating mode:

Wine climate cabinet

Uin 120V/60Hz

Proximity sensor turned on, middle channel

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
11600.000000	---	48.81	54.00	5.19	151.0	V	334.0
11600.000000	55.16	---	74.00	18.84	145.0	V	334.0
17400.000000	---	52.43	54.00	1.57	143.0	V	0.0
17400.000000	59.72	---	74.00	14.28	145.0	V	0.0
17962.750000	55.84	---	74.00	18.16	160.0	H	276.0
17997.000000	---	43.23	54.00	10.77	169.0	H	276.0

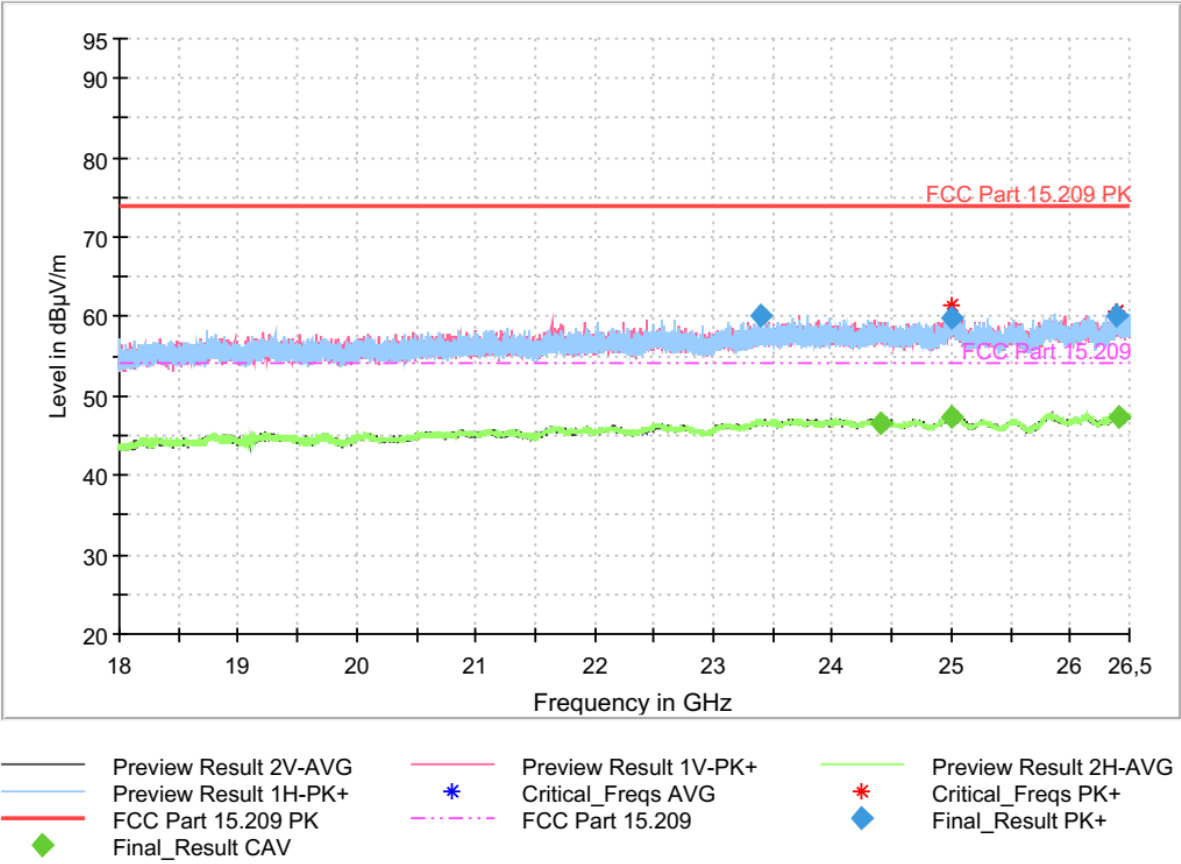


EUT Information

EUT
Supply
Operating mode:

Wine climate cabinet
Uin 120V/60Hz
Proximity sensor turned on, middle channel

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
23393.000000	60.13	74.00	13.87	1000.0	1000.000	139.0	H	0.0	11.6
24413.500000	---	54.00	7.38	1000.0	1000.000	100.0	V	269.0	11.7
24994.250000	---	54.00	6.66	1000.0	1000.000	122.0	H	354.0	12.0
24994.750000	59.86	74.00	14.14	1000.0	1000.000	100.0	H	179.0	12.0
26391.000000	60.16	74.00	13.84	1000.0	1000.000	162.0	V	6.0	12.1
26405.000000	---	54.00	6.58	1000.0	1000.000	200.0	V	0.0	12.1

EUT Information

EUT

Supply

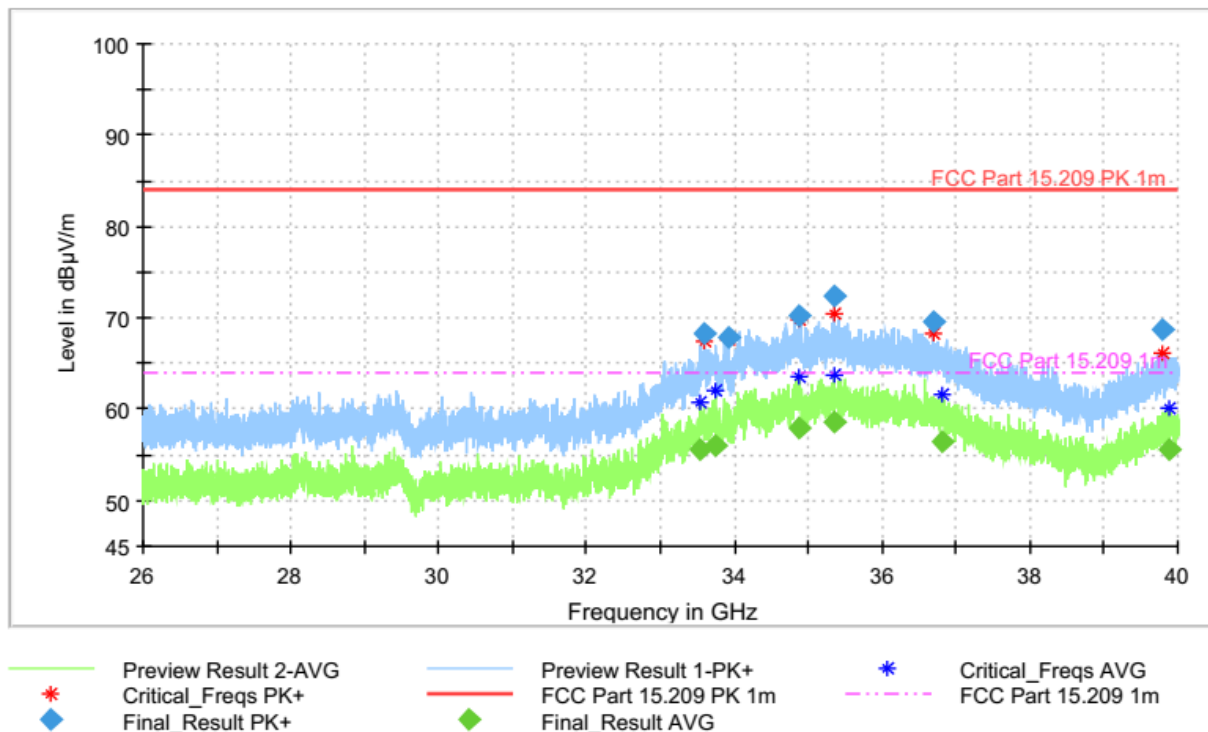
Operating mode:

Wine climate cabinet

Uin 120V/60Hz

Proximity sensor turned on, middle channel

Full Spectrum



Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
33549.000000	55.53	64.00	8.47	1000.0	1000.000	150.0	H	0.0
33593.000000	---	84.00	15.63	1000.0	1000.000	150.0	H	0.0
33741.000000	56.03	64.00	7.97	1000.0	1000.000	150.0	V	0.0
33921.000000	---	84.00	16.08	1000.0	1000.000	150.0	H	0.0
34865.000000	---	84.00	13.66	1000.0	1000.000	150.0	H	0.0
34874.000000	57.97	64.00	6.03	1000.0	1000.000	150.0	H	0.0
35341.000000	---	84.00	11.62	1000.0	1000.000	150.0	H	0.0
35343.000000	58.66	64.00	5.34	1000.0	1000.000	150.0	V	0.0
36707.000000	---	84.00	14.51	1000.0	1000.000	150.0	V	0.0
36810.000000	56.43	64.00	7.57	1000.0	1000.000	150.0	V	0.0
39792.000000	---	84.00	15.23	1000.0	1000.000	150.0	H	0.0
39887.000000	55.55	64.00	8.45	1000.0	1000.000	150.0	H	0.0

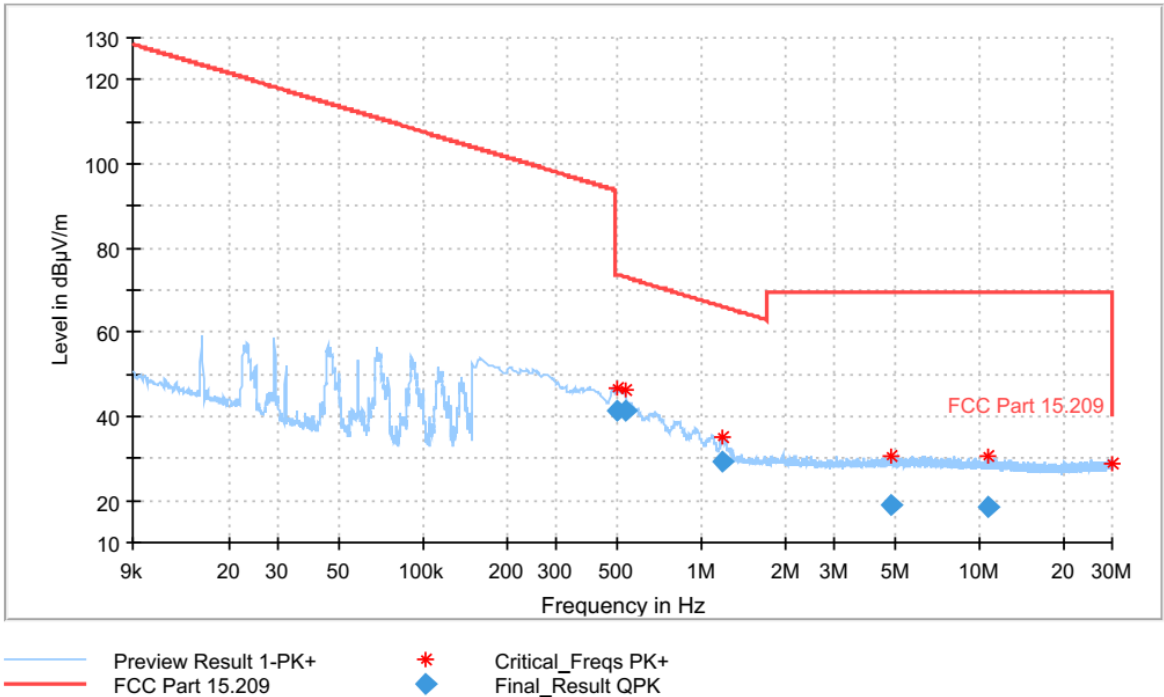


EUT Information

EUT:
Operating mode:

Wine climate cabinet
Proximity sensor, TX 5814 MHz

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
0.530250	41.43	73.12	31.69	100.0	H	0.0
0.498750	41.31	73.65	32.34	100.0	H	357.0
1.196250	29.15	66.07	36.92	100.0	H	355.0
4.791750	19.17	69.50	50.33	100.0	H	94.0
10.673250	18.31	69.50	51.19	100.0	H	325.0

EUT Information

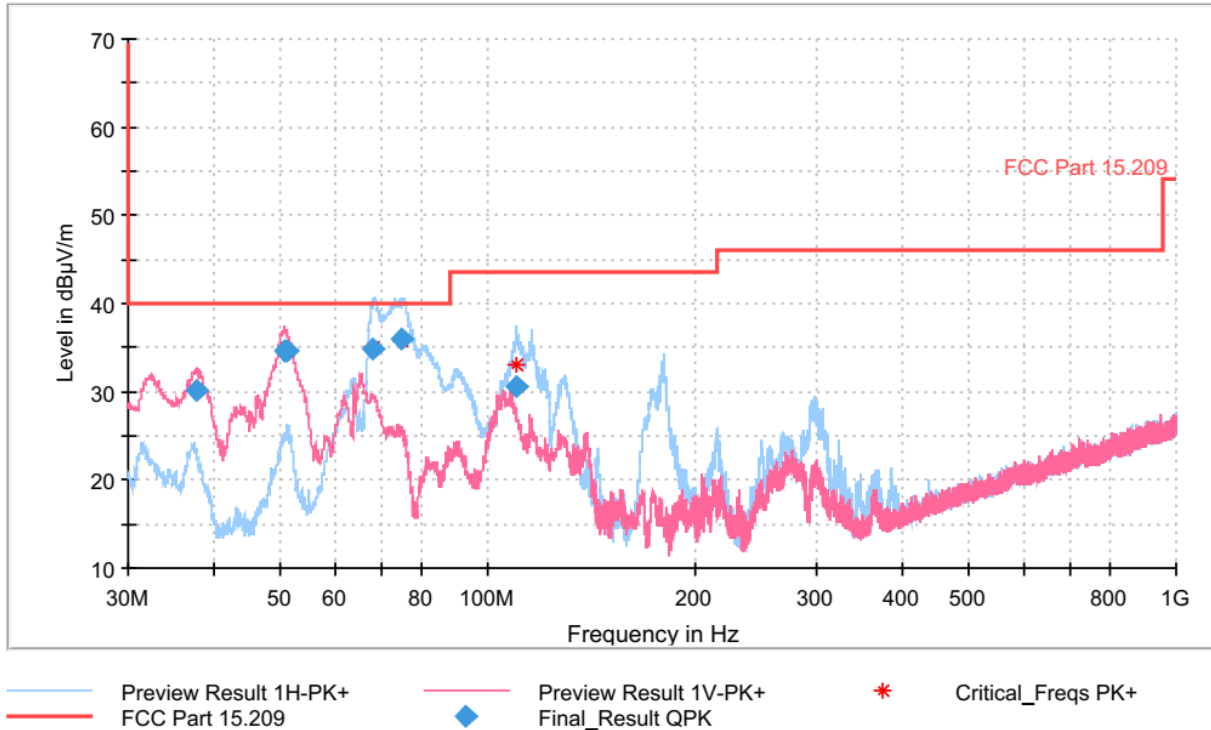
EUT:

Wine climate cabinet

Operating mode:

Proximity sensor, TX 5814 MHz

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	DET 2 (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
75.090000	35.86	---	40.00	4.14	230.0	H	353.0
68.220000	34.82	---	40.00	5.18	241.0	H	2.0
50.670000	34.63	---	40.00	5.37	100.0	V	13.0
51.000000	34.61	---	40.00	5.39	100.0	V	0.0
37.590000	30.24	---	40.00	9.76	100.0	V	23.0
110.310000	30.56	---	43.50	12.94	168.0	H	355.0

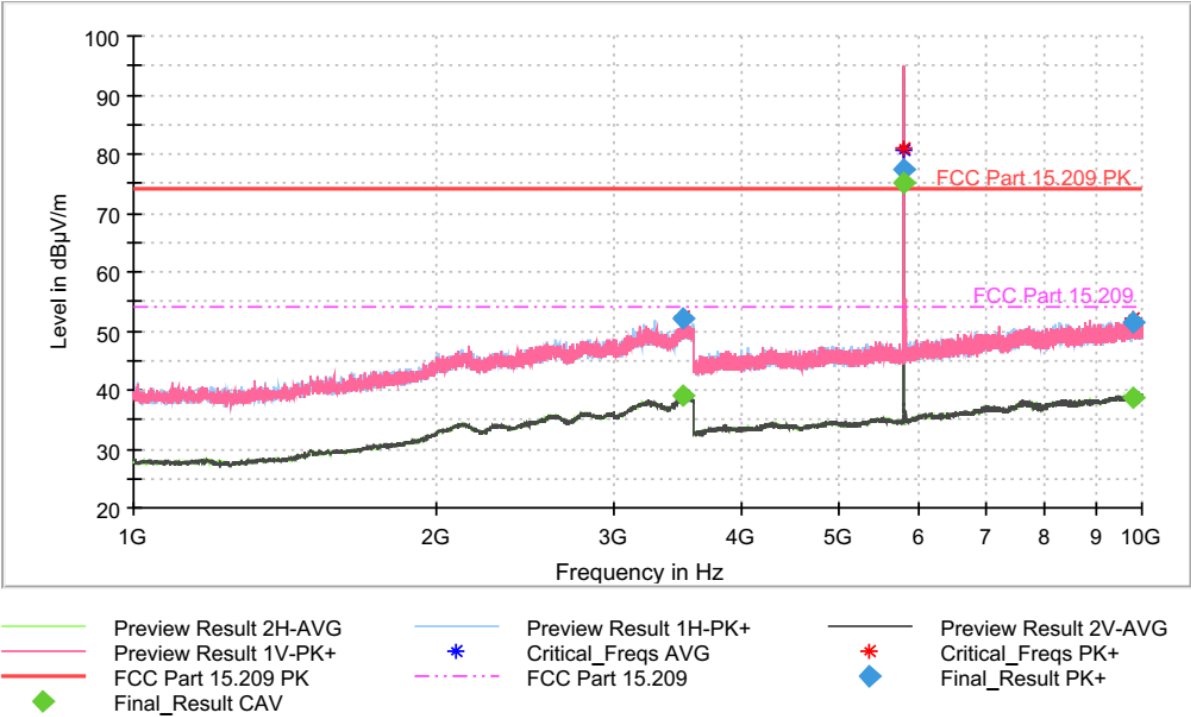


EUT Information

EUT:
Operating mode:

Wine climate cabinet
Proximity sensor, TX 5814 MHz

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
5814.000000	---	74.95	54.00	-20.95	155.0	V	279.0
5814.000000	77.47	---	74.00	-3.47	160.0	V	279.0
3516.500000	---	38.93	54.00	15.07	154.0	V	0.0
9821.500000	---	38.54	54.00	15.46	216.0	V	0.0
3509.750000	52.22	---	74.00	21.78	209.0	H	267.0
9818.250000	51.54	---	74.00	22.46	159.0	H	81.0

EUT Information

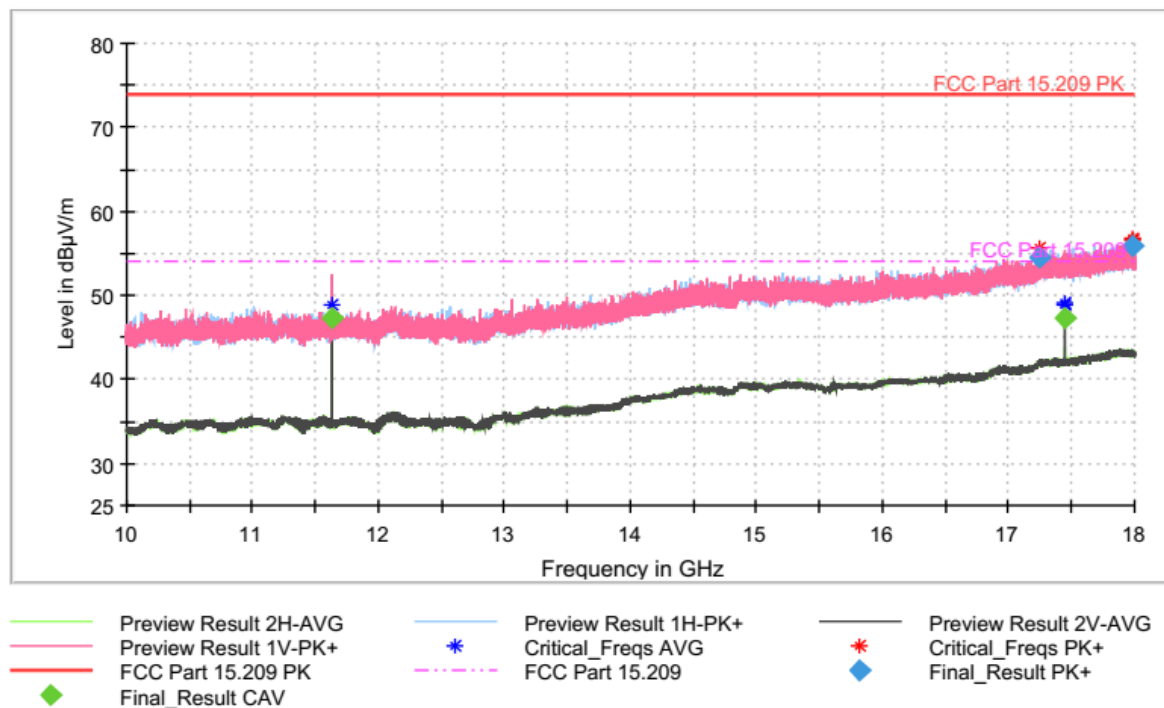
EUT:

Wine climate cabinet

Operating mode:

Proximity sensor, TX 5814 MHz

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
11628.000000	---	47.33	54.00	6.67	173.0	H	0.0
17442.250000	---	47.20	54.00	6.80	211.0	V	0.0
17989.000000	55.96	---	74.00	18.04	157.0	V	248.0
17249.000000	54.49	---	74.00	19.51	216.0	V	82.0

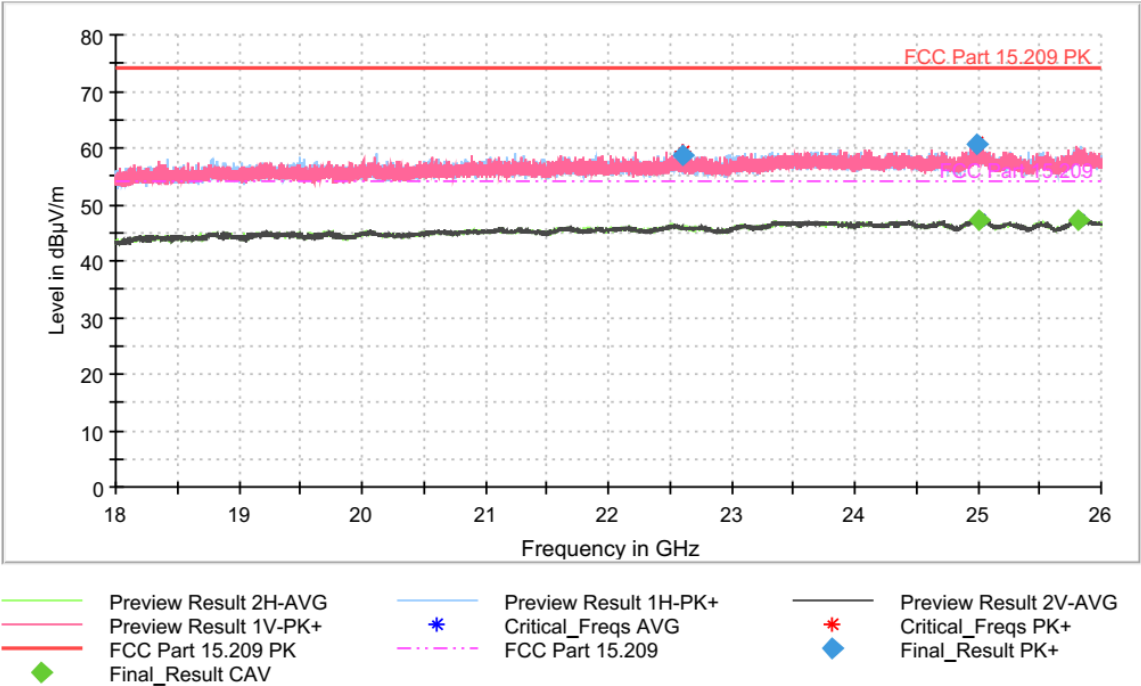


EUT Information

EUT:Wine climate cabinet

Operating mode:Proximity sensor, TX 5814 MHz

Full Spectrum



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
25014.250000	---	47.26	54.00	6.74	133.0	V	0.0
25811.000000	---	47.05	54.00	6.95	130.0	V	248.0
24986.750000	60.60	---	74.00	13.40	133.0	V	248.0
22611.500000	58.72	---	74.00	15.28	225.0	V	0.0

EUT Information

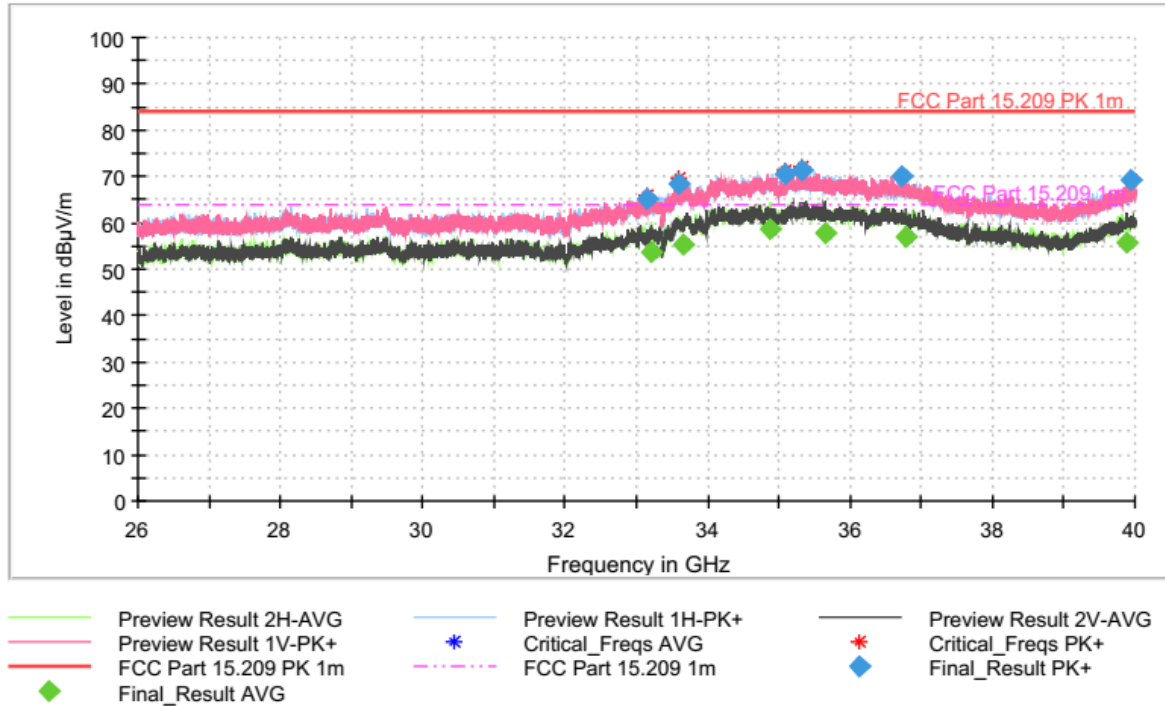
EUT:

Wine climate cabinet

Operating mode:

Proximity sensor, TX 5814 MHz

Full Spectrum



Final Result

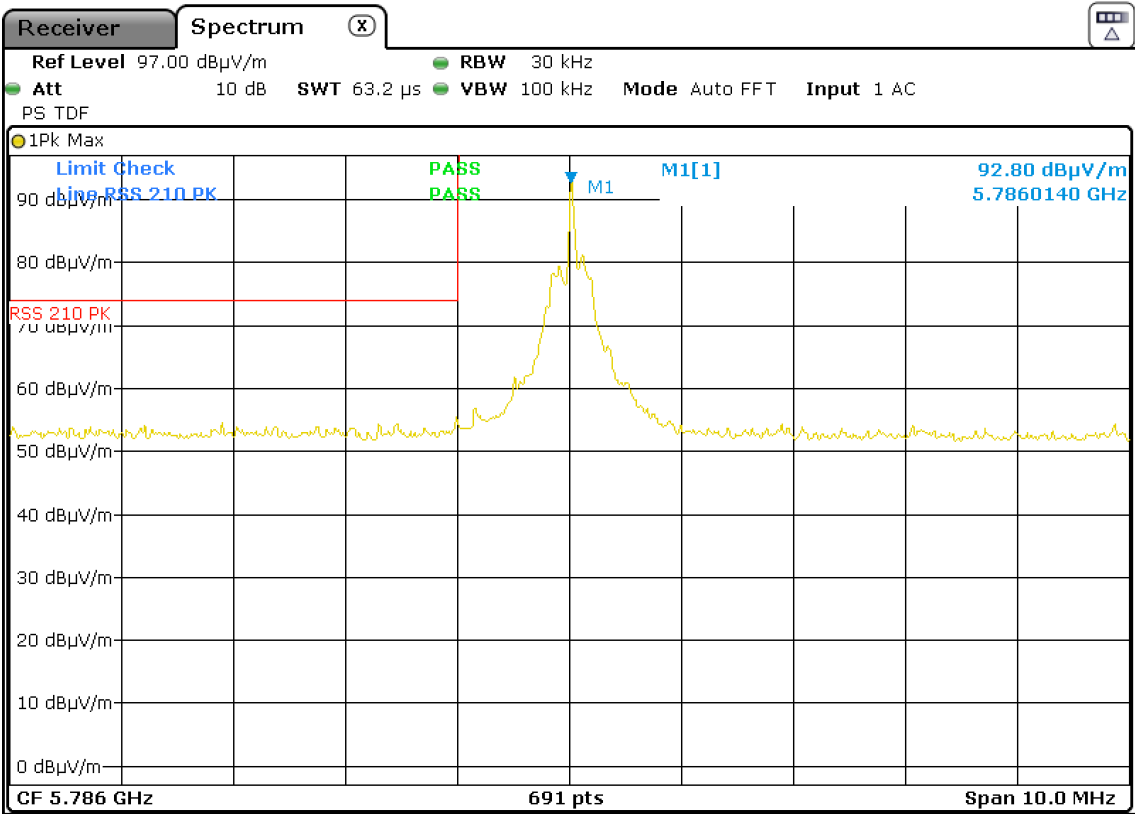
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
33160.000000	65.26	---	84.00	18.74	164.0	H	20.0
33207.000000	---	53.74	64.00	10.26	187.0	H	215.0
33599.000000	68.48	---	84.00	15.52	160.0	V	14.0
33644.000000	---	55.43	64.00	8.57	186.0	H	109.0
34888.000000	---	58.50	64.00	5.50	200.0	H	192.0
35095.000000	70.65	---	84.00	13.35	163.0	V	142.0
35329.000000	71.28	---	84.00	12.72	160.0	V	123.0
35647.000000	---	57.73	64.00	6.27	167.0	V	358.0
36733.000000	70.00	---	84.00	14.00	167.0	V	169.0
36786.000000	---	56.80	64.00	7.20	163.0	V	123.0
39882.000000	---	55.74	64.00	8.26	163.0	V	36.0
39928.000000	69.15	---	84.00	14.85	176.0	V	321.0



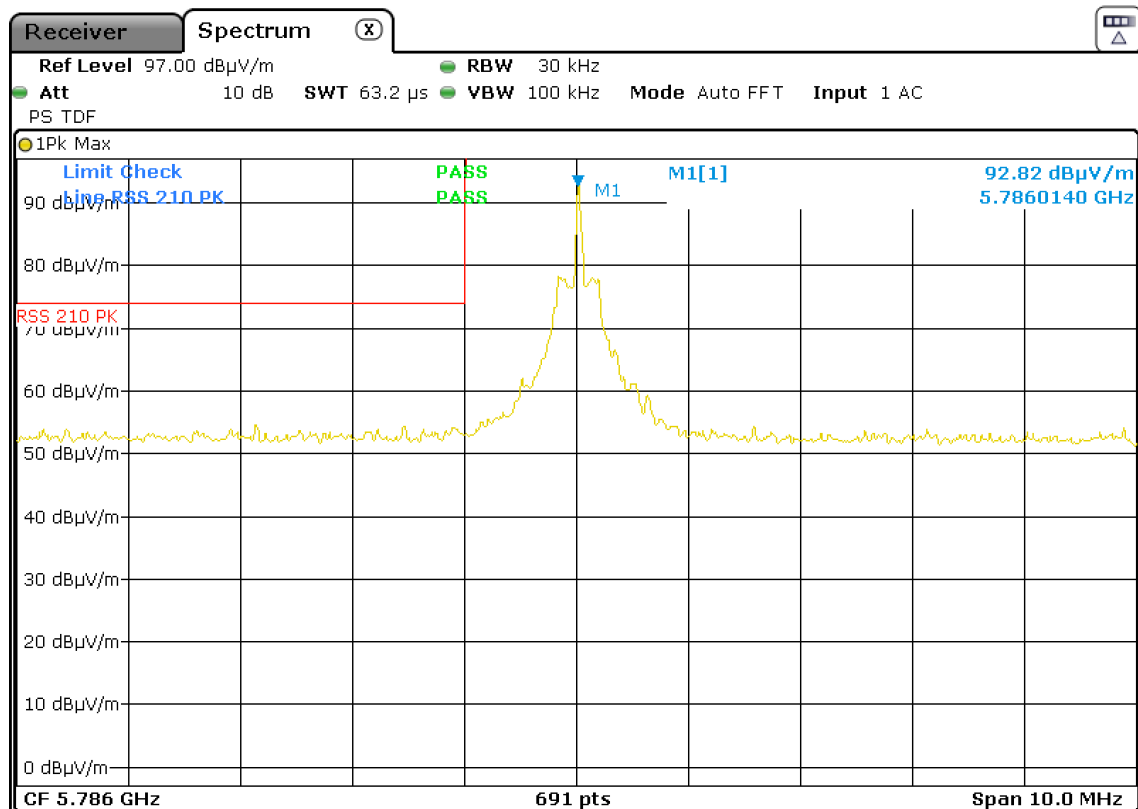
RSS 210 (Annex F)

EUT:
Supply:
Operating modes:
Antenna Polarization:

Wine climate cabinet
Uin: 120 V, 60 Hz
Proximity sensor turned on
Vertical



EUT: Wine climate cabinet
Supply: Uin: 120 V, 60 Hz
Operating modes: Proximity sensor turned on
Antenna Polarization: Horizontal



DUT Frequency (MHz)	Antenna polarization	Max Level (dBμV/m)	Limit (dBμV/m)	Result
5786	Vertical	92.80	94.00	PASS
5786	Horizontal	92.82	94.00	PASS



EUT:

Supply:

Operating modes:

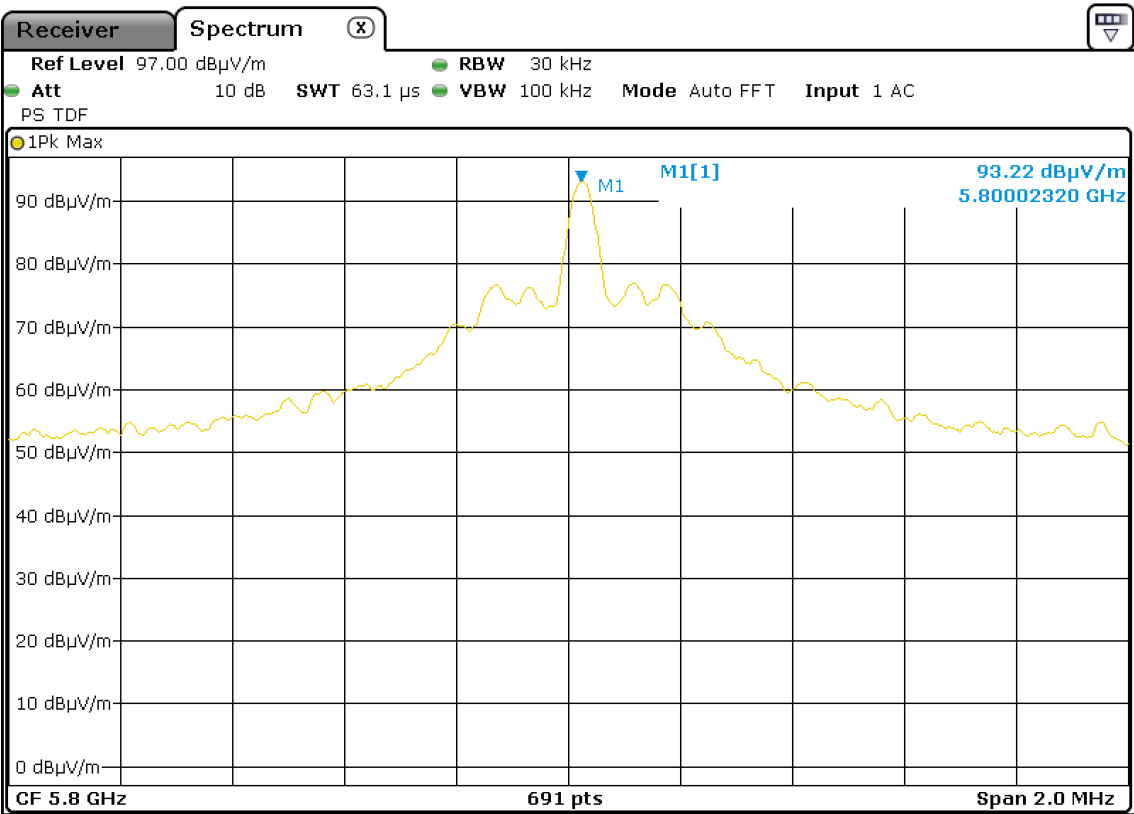
Antenna Polarization:

Wine climate cabinet

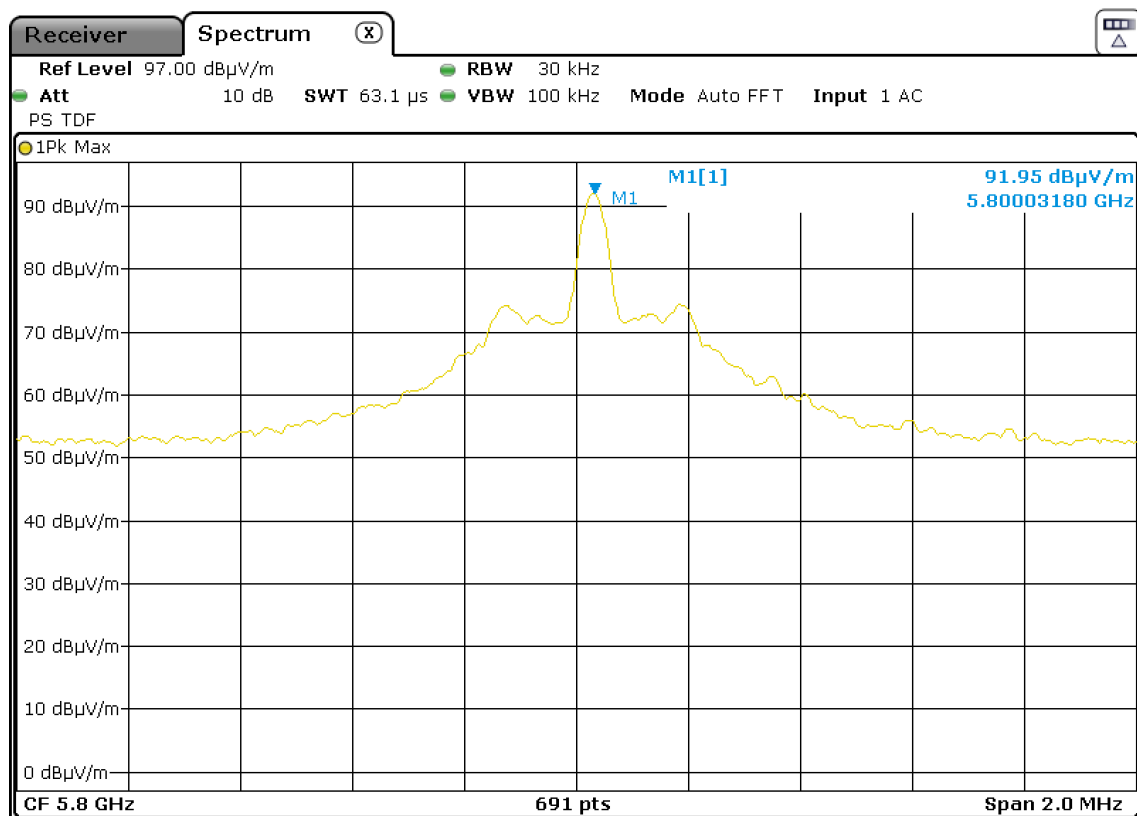
Uin: 120 V, 60 Hz

Proximity sensor turned on

Vertical



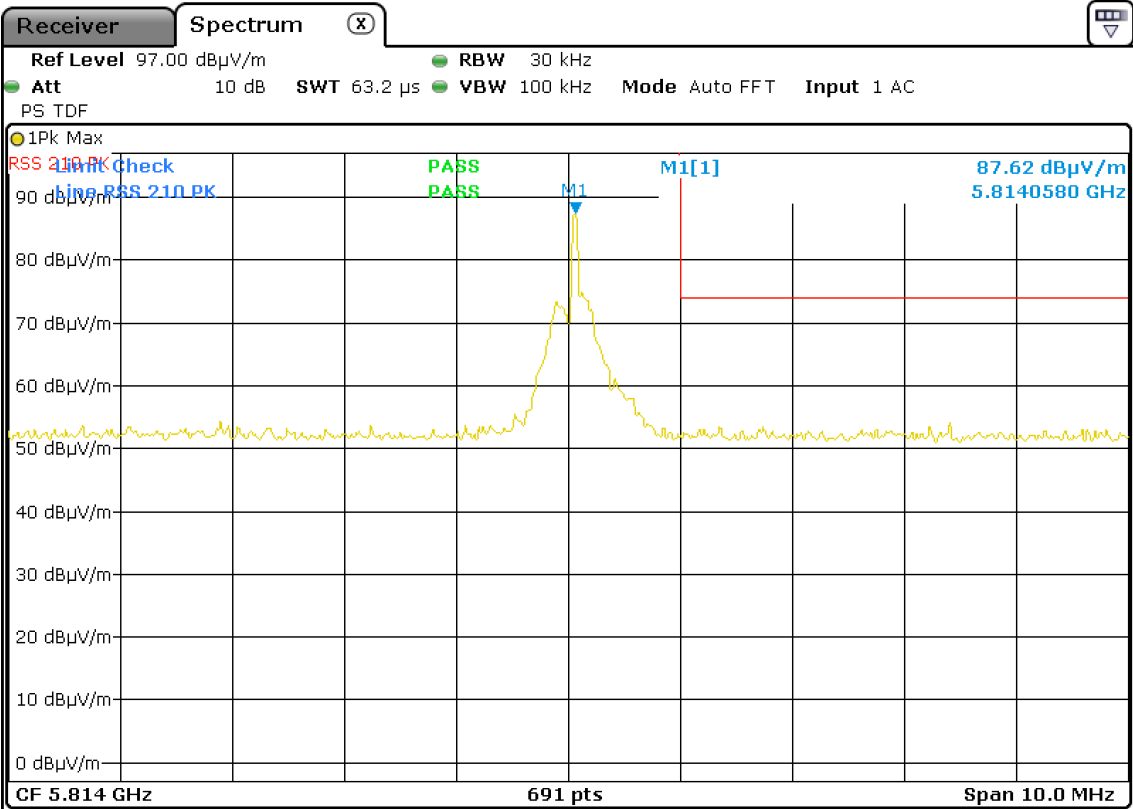
EUT: Wine climate cabinet
Supply: Uin: 120 V, 60 Hz
Operating modes: Proximity sensor turned on
Antenna Polarization: Horizontal



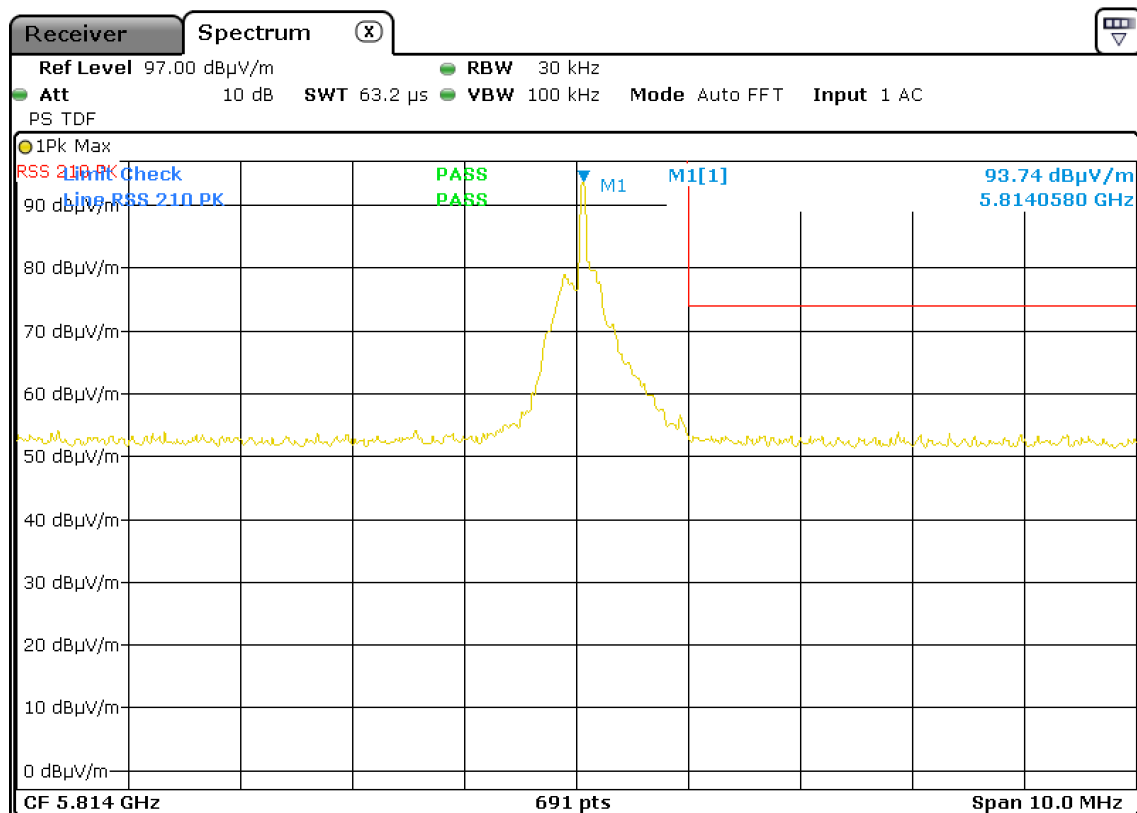
DUT Frequency (MHz)	Antenna polarization	Max Level (dBμV/m)	Limit (dBμV/m)	Result
5800	Vertical	93.22	94.00	PASS
5800	Horizontal	91.95	94.00	PASS



EUT: Wine climate cabinet
Supply: Uin: 120 V, 60 Hz
Operating modes: Proximity sensor turned on
Antenna Polarization: Vertical



EUT: Wine climate cabinet
Supply: Uin: 120 V, 60 Hz
Operating modes: Proximity sensor turned on
Antenna Polarization: Horizontal



DUT Frequency (MHz)	Antenna polarization	Max Level (dBμV/m)	Limit (dBμV/m)	Result
5814	Vertical	87.62	94.00	PASS
5814	Horizontal	93.74	94.00	PASS

8.4 RSS Gen (clause 6.7) Occupied bandwidth

8.4.1 Test instruments

Description	Model No.	SIQ No.	Last calibration	Calibrated until	Calibration period	Used
Rohde-Schwarz, Spectrum analyzer	FSV 40	/	2021-04	2022-10	18 months	X
Rohde-Schwarz, RFI receiver	ESU8	105187	2020-07	2022-07	24 months	
Rohde-Schwarz, RFI receiver	ESU26	106897	2021-01	2023-07	18 months	X
Comtest Engineering, Semi Anechoic Chamber SAC 1	SAC 3m	NPS001	2020-06	2023-06	36 months	X
Rohde & Schwarz, Ultra Broadband Antenna	HL562E (SN 109843)	109063	2020-07	2023-07	36 months	
Rohde & Schwarz, Horn Antenna	HF907 (SN 102494)	109064	2020-08	2023-08	36 months	
Comtest Engineering, Semi Anechoic Chamber SAC 2	SAC 3m	NPS002	2020-06	2023-06	36 months	X
Rohde & Schwarz, Ultra Broadband Antenna	HL562E (SN 100842)	109056	2020-07	2023-07	36 months	X
Rohde & Schwarz, Horn Antenna	HF907 (SN 102508)	109057	2020-08	2023-08	36 months	X
Horn Antenna, EMCO	3116	/	2021-10	2024-10	36 months	X
Maturo, Turn table (2 m diameter)	TT 2.0 SI	/	N/A	N/A	N/A	X
Maturo, Bore-sight antenna mast	BAM-4.0-P	/	N/A	N/A	N/A	X
Maturo, Multi-channel positioning equipment	Maturo NCD	/	N/A	N/A	N/A	X
Schwarzbeck Active loop antenna	FMZB 1519B	/	2021-04	2022-10	18 months	X

8.4.2 Test procedure

The emission bandwidth ($\times$ dB) is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated $\times$ dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least $3\times$ the resolution bandwidth.

When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth, as calculated or measured.

- The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
- The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.
- The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the occupied bandwidth (OBW) and video bandwidth (VBW) shall be approximately $3\times$ RBW.

Note: Video averaging is not permitted.

A peak, or peak hold, may be used in place of the sampling detector as this may produce a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold may be necessary to determine the occupied bandwidth if the device is not transmitting continuously.

The trace data points are recovered and are directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded.

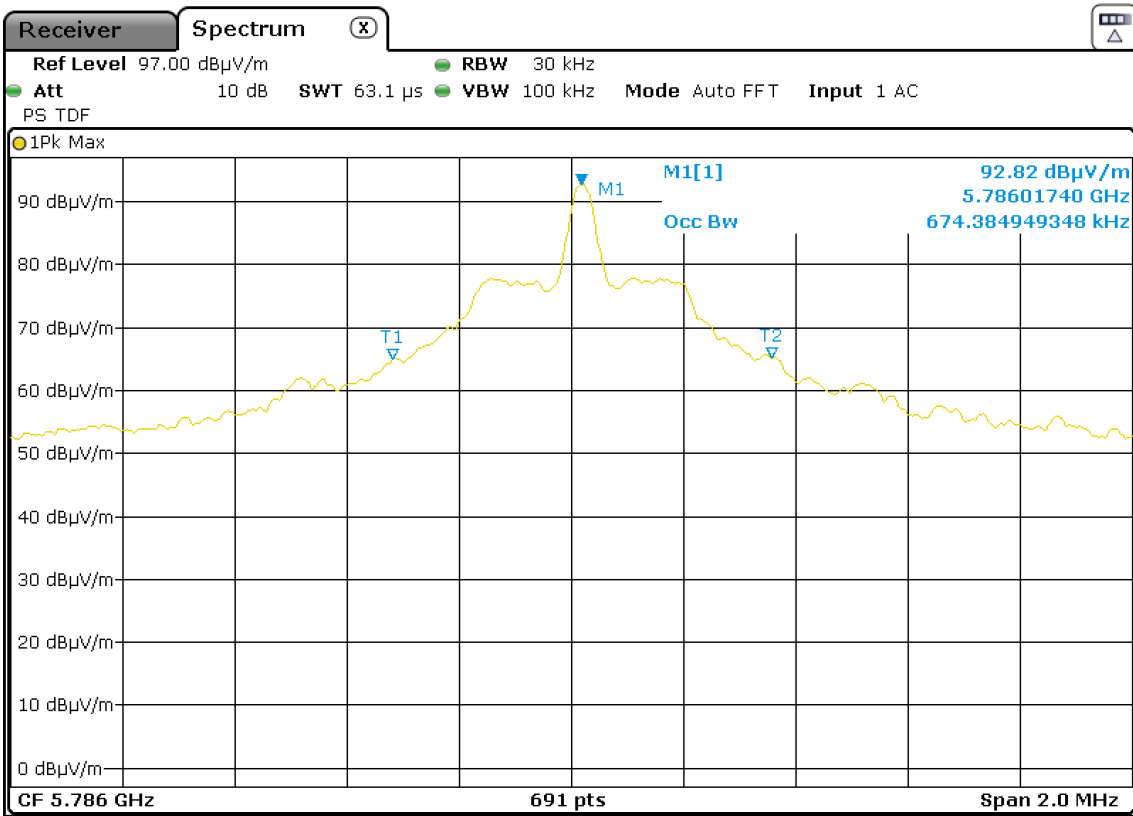
The difference between the two recorded frequencies is the 99% occupied bandwidth.



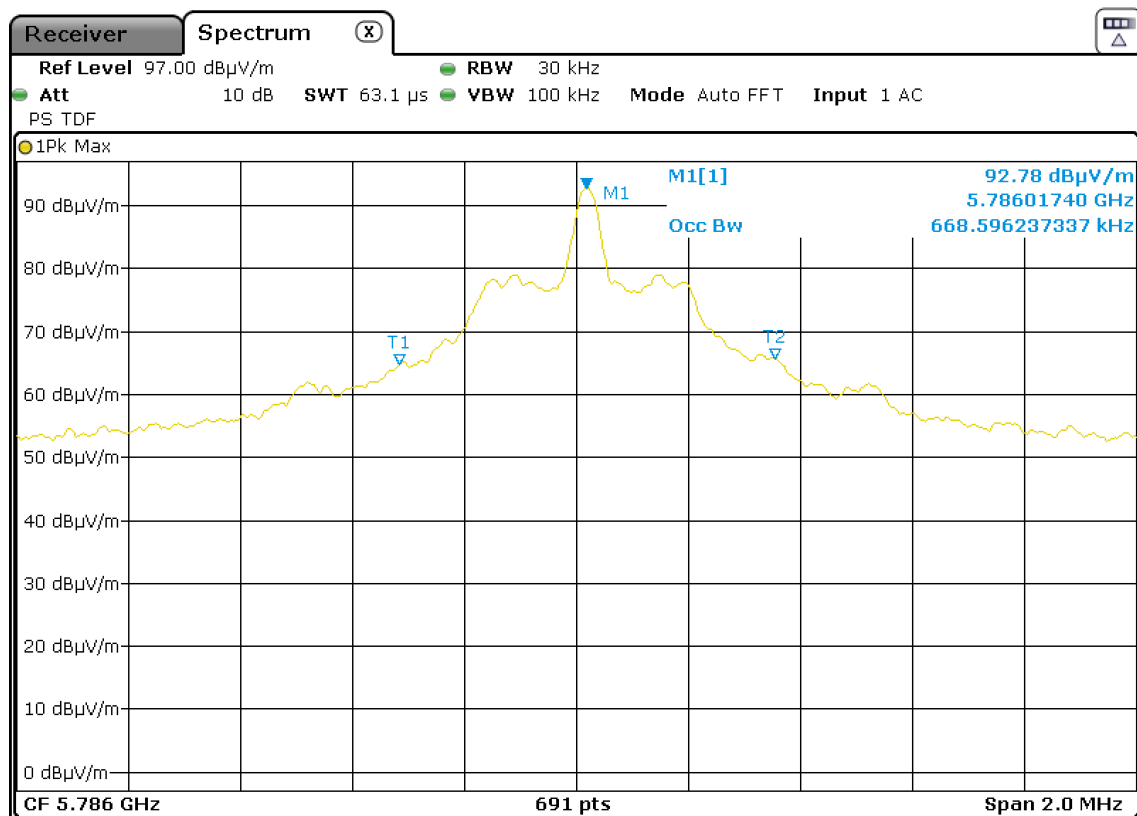
8.4.3 Test results

EUT:
Supply:
Operating modes:
Antenna Polarization:

Wine climate cabinet
Uin: 120 V, 60 Hz
Proximity sensor turned on
Vertical



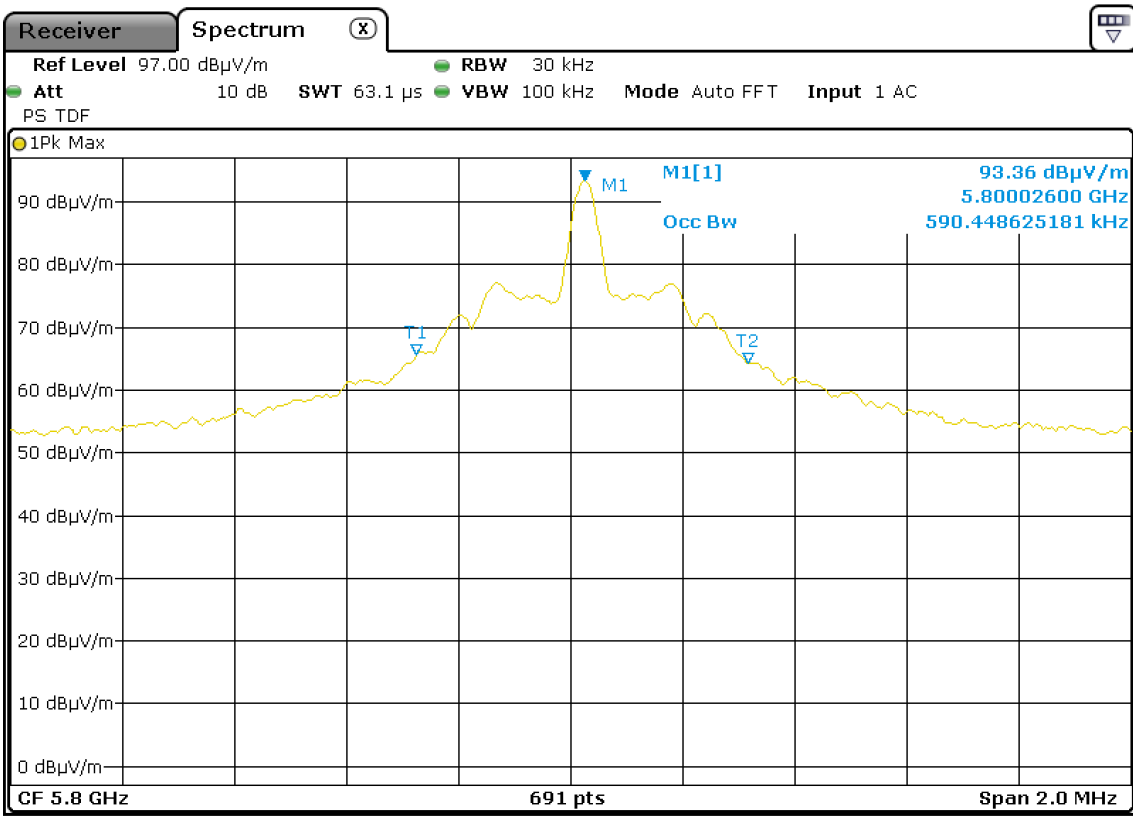
EUT: Wine climate cabinet
Supply: Uin: 120 V, 60 Hz
Operating modes: Proximity sensor turned on
Antenna Polarization: Horizontal



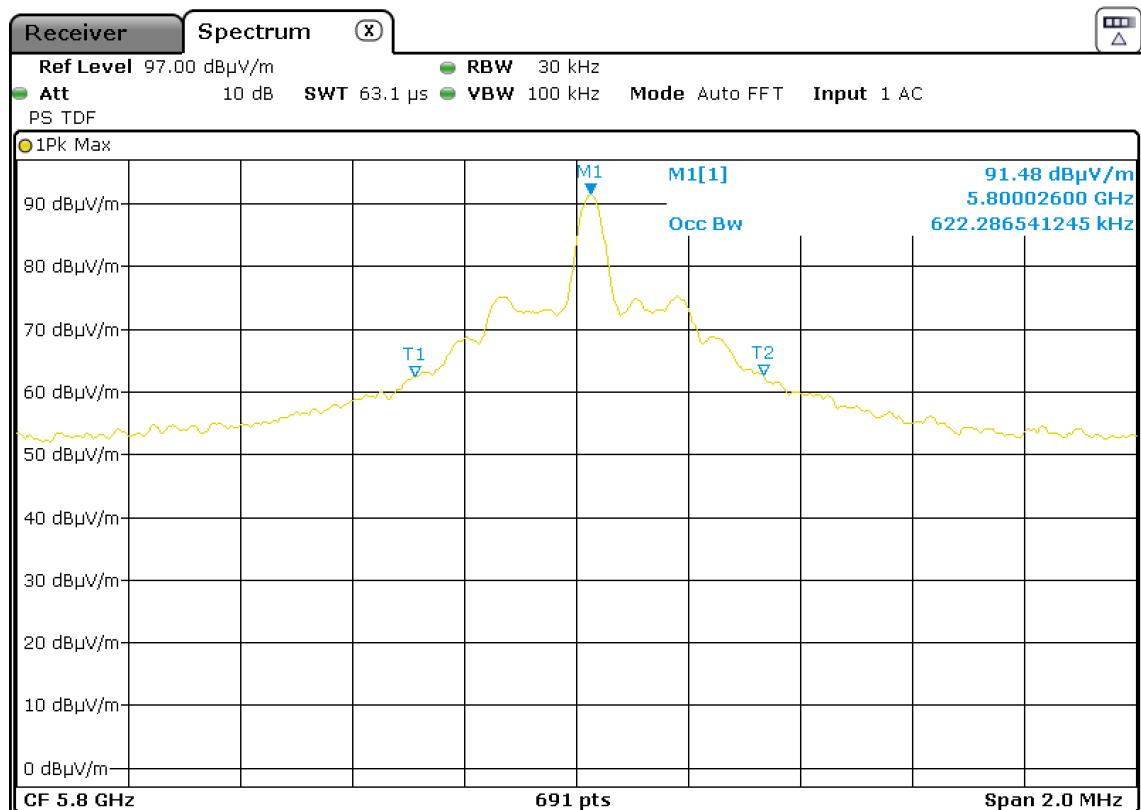
DUT Frequency (MHz)	Antenna polarization	Occupied bandwidth 99% (kHz)	Result
5786	Vertical	674.38	PASS
5786	Horizontal	668.59	PASS



EUT: Wine climate cabinet
Supply: Uin: 120 V, 60 Hz
Operating modes: Proximity sensor turned on
Antenna Polarization: Vertical



EUT: Wine climate cabinet
Supply: Uin: 120 V, 60 Hz
Operating modes: Proximity sensor turned on
Antenna Polarization: Horizontal

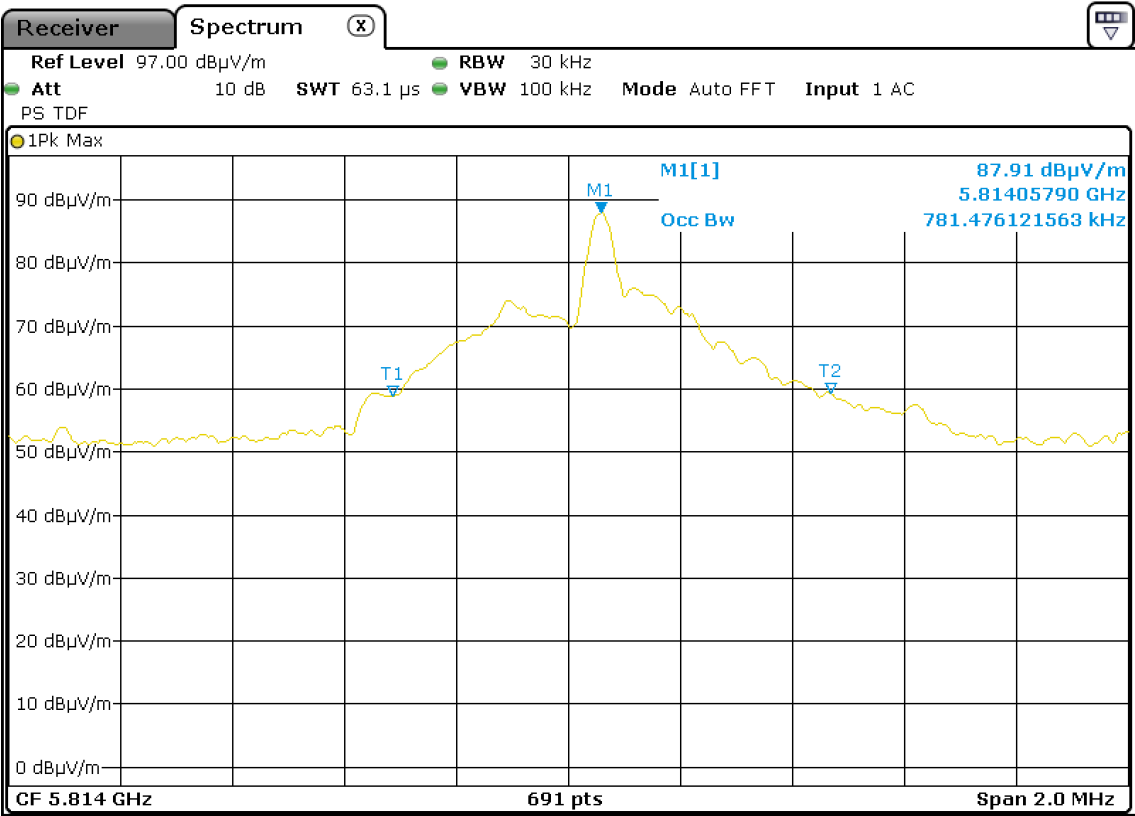


DUT Frequency (MHz)	Antenna polarization	Occupied bandwidth 99% (kHz)	Result
5800	Vertical	590.44	PASS
5800	Horizontal	622.28	PASS

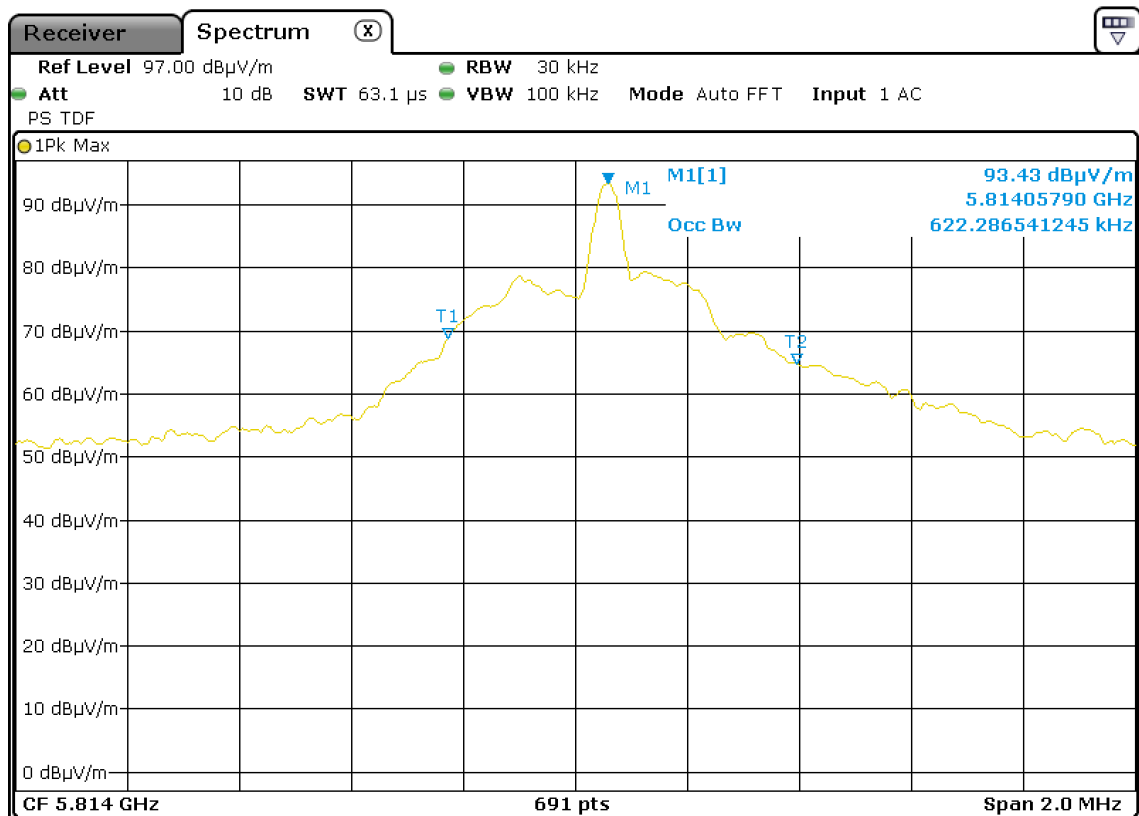


EUT:
Supply:
Operating modes:
Antenna Polarization:

Wine climate cabinet
Uin: 120 V, 60 Hz
Proximity sensor turned on
Vertical



EUT: Wine climate cabinet
Supply: Uin: 120 V, 60 Hz
Operating modes: Proximity sensor turned on
Antenna Polarization: Horizontal



DUT Frequency (MHz)	Antenna polarization	Occupied bandwidth 99% (kHz)	Result
5814	Vertical	781.47	PASS
5814	Horizontal	622.28	PASS



8.5 20 dB Emission Bandwidth (15.215 (c))

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

8.5.1 Test procedure

As per ANSI C63:10-2013:

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be approximately three times RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Steps a) through c) might require iteration to adjust within the specified tolerances.
- e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target “-xx dB down” requirement; that is, if the requirement calls for measuring the -20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the reference value.
- f) Set detection mode to peak and trace mode to max hold.
- g) Determine the reference value: Set the EUT to transmit an unmodulated carrier or modulated signal, as applicable. Allow the trace to stabilize. Set the spectrum analyser marker to the highest level of the displayed trace (this is the reference value).
- h) Determine the “-xx dB down amplitude” using $[(\text{reference value}) - xx]$. Alternatively, this calculation may be made by using the marker-delta function of the instrument.
- i) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and either clear the existing trace or start a new trace on the spectrum analyser and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j).
- j) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-xx dB down amplitude” determined in step h). If a marker is below this “-xx dB down amplitude” value, then it shall be as close as possible to this value. The occupied bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the “-xx dB down amplitude” determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.
- k) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

8.5.2 Test instruments

Description	Model No.	SIQ No.	Last calibration	Calibrated until	Calibration period	Used
Rohde-Schwarz, Spectrum analyzer	FSV 40	/	2021-04	2022-10	18 months	X
Rohde-Schwarz, RFI receiver	ESU8	105187	2020-07	2022-07	24 months	
Rohde-Schwarz, RFI receiver	ESU26	106897	2021-01	2023-07	18 months	X
Comtest Engineering, Semi Anechoic Chamber SAC 1	SAC 3m	NPS001	2020-06	2022-06	24 months	X
Rohde & Schwarz, Ultra Broadband Antenna	HL562E (SN 109843)	109063	2020-07	2022-07	24 months	
Rohde & Schwarz, Horn Antenna	HF907 (SN 102494)	109064	2020-08	2022-08	24 months	
Comtest Engineering, Semi Anechoic Chamber SAC 2	SAC 3m	NPS002	2020-06	2022-06	24 months	X
Rohde & Schwarz, Ultra Broadband Antenna	HL562E (SN 100842)	109056	2020-07	2022-07	24 months	X
Rohde & Schwarz, Horn Antenna	HF907 (SN 102508)	109057	2020-08	2022-08	24 months	X
Horn Antenna, EMCO	3116	/	2021-10	2024-10	36 months	X
Maturo, Turn table (2 m diameter)	TT 2.0 SI	/	N/A	N/A	N/A	X
Maturo, Bore-sight antenna mast	BAM-4.0-P	/	N/A	N/A	N/A	X
Maturo, Multi-channel positioning equipment	Maturo NCD	/	N/A	N/A	N/A	X
Schwarzbeck Active loop antenna	FMZB 1519B	/	2021-04	2022-10	18 months	X
Rohde-Schwarz, AMN	ENV216	/	2021-08	2023-02	18 months	X



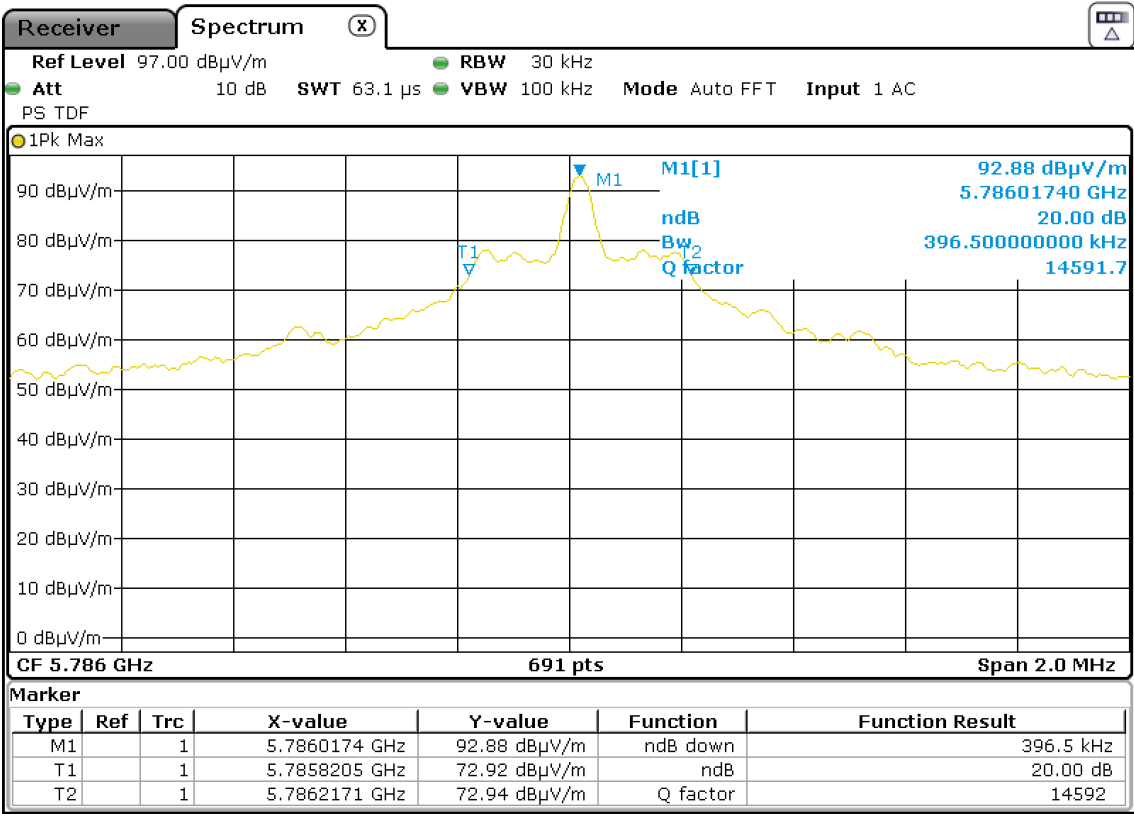
8.5.3 Test results

EUT:Wine climate cabinet

Supply:Uin: 120 V, 60 Hz

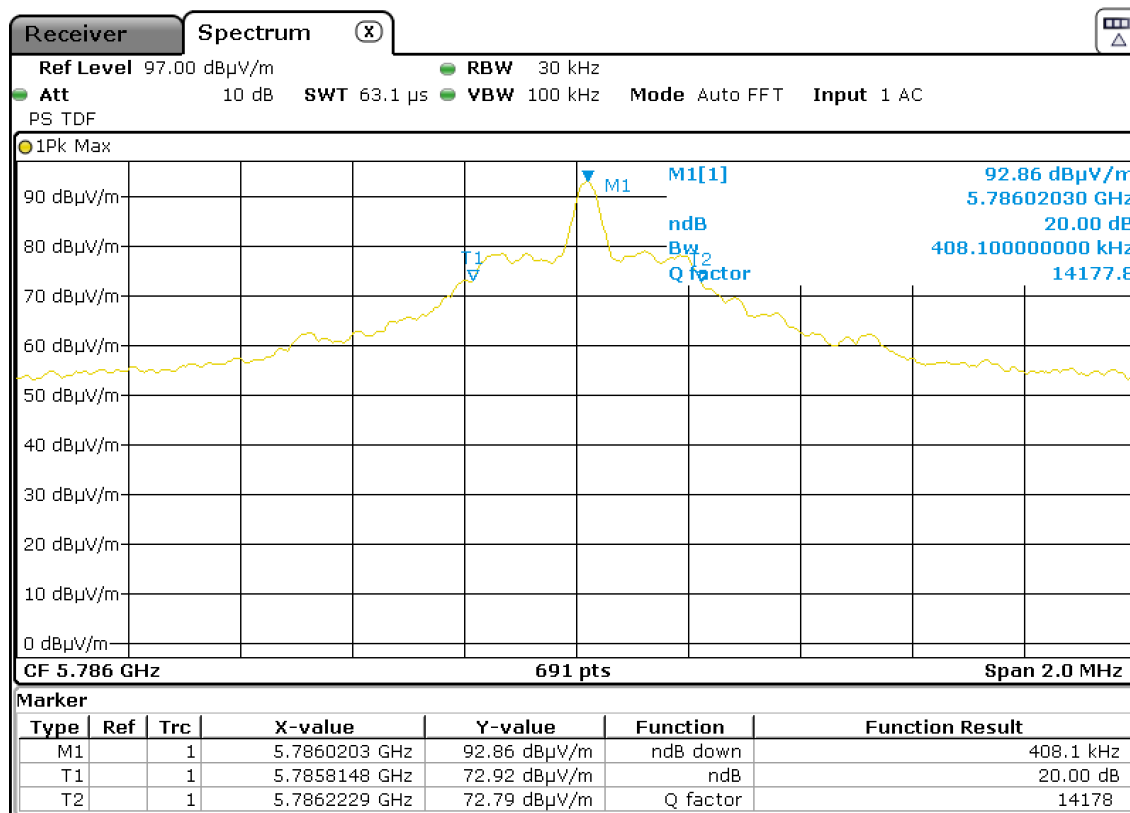
Operating modes:Proximity sensor turned on

Antenna Polarization:Vertical



DUT Frequency (MHz)	20 Db Bandwidth (kHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBμV/m)	Result
5786.01	396.50	5785.82	5786.21	92.88	PASS

EUT: Wine climate cabinet
Supply: Uin: 120 V, 60 Hz
Operating modes: Proximity sensor turned on
Antenna Polarization: Horizontal

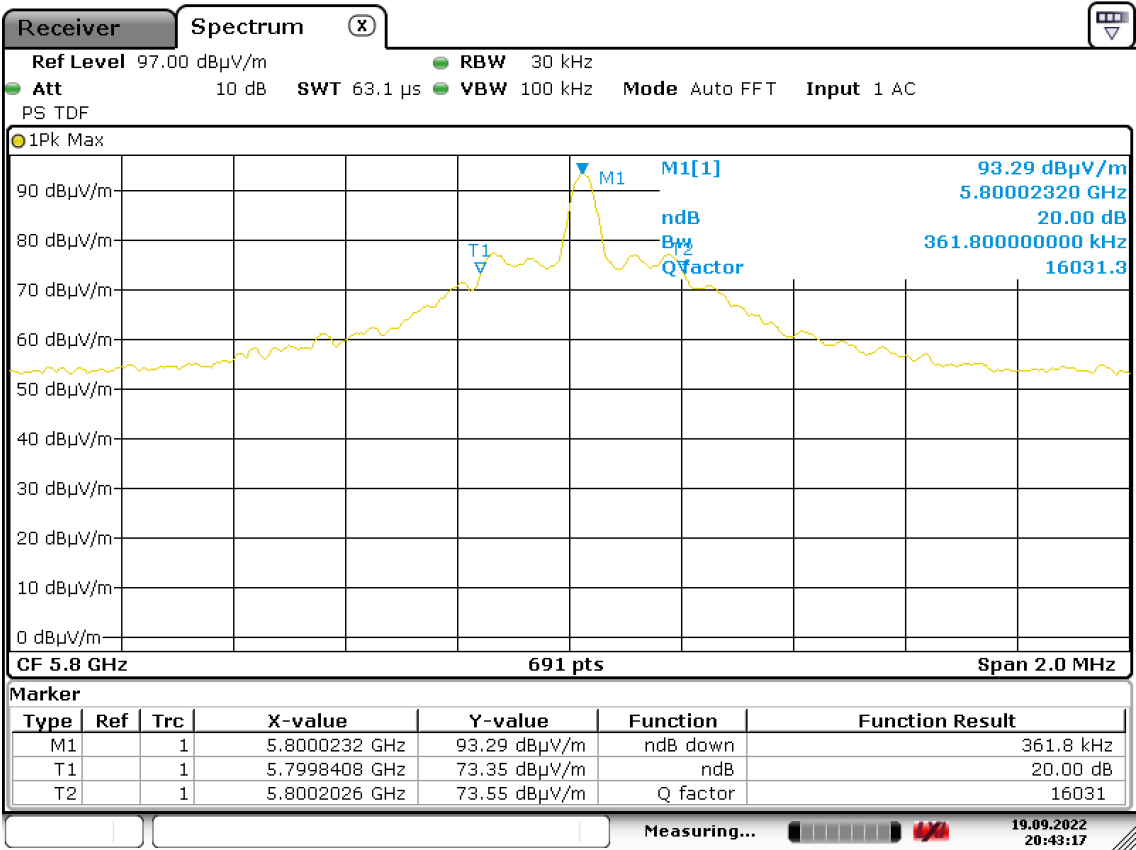


DUT Frequency (MHz)	20 Db Bandwidth (kHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBμV/m)	Result
5786.02	408.10	5785.81	5786.22	92.86	PASS



EUT:
Supply:
Operating modes:
Antenna Polarization:

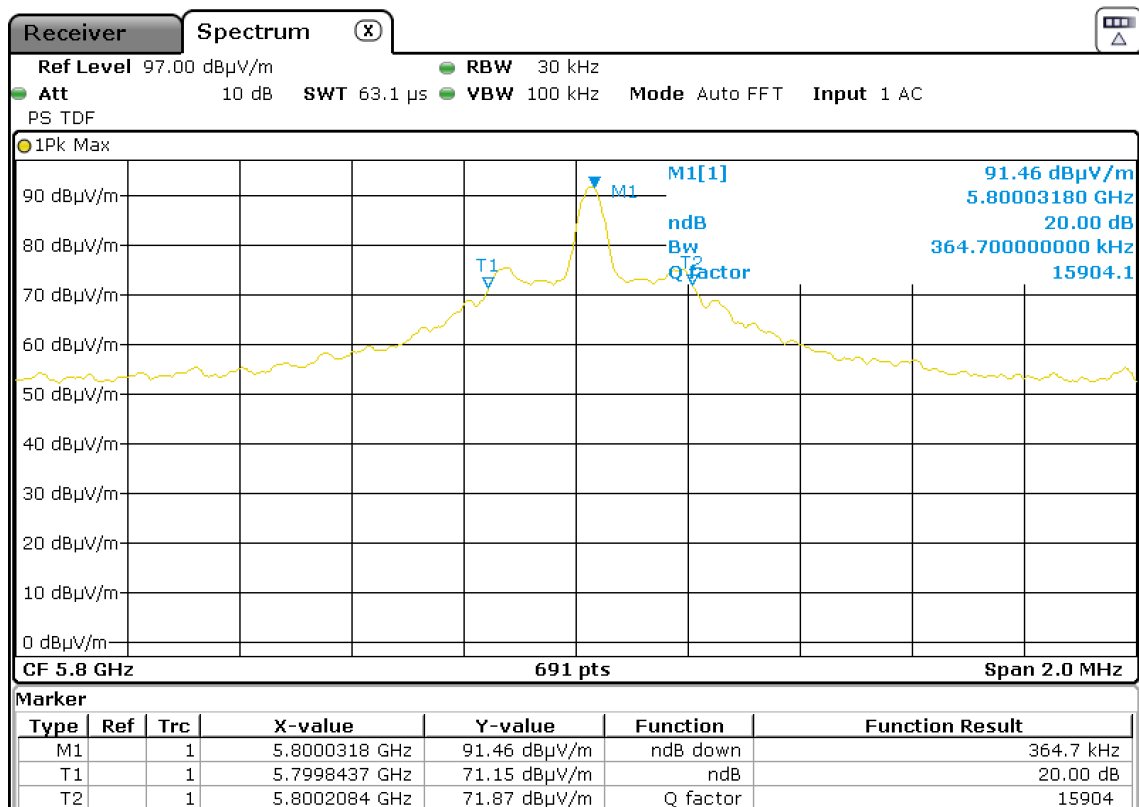
Wine climate cabinet
Uin: 120 V, 60 Hz
Proximity sensor turned on
Vertical



Date: 19.SEP.2022 20:43:17

DUT Frequency (MHz)	20 Db Bandwidth (kHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBµV/m)	Result
5800.02	361.80	5799.84	5800.20	93.29	PASS

EUT: Wine climate cabinet
Supply: Uin: 120 V, 60 Hz
Operating modes: Proximity sensor turned on
Antenna Polarization: Horizontal

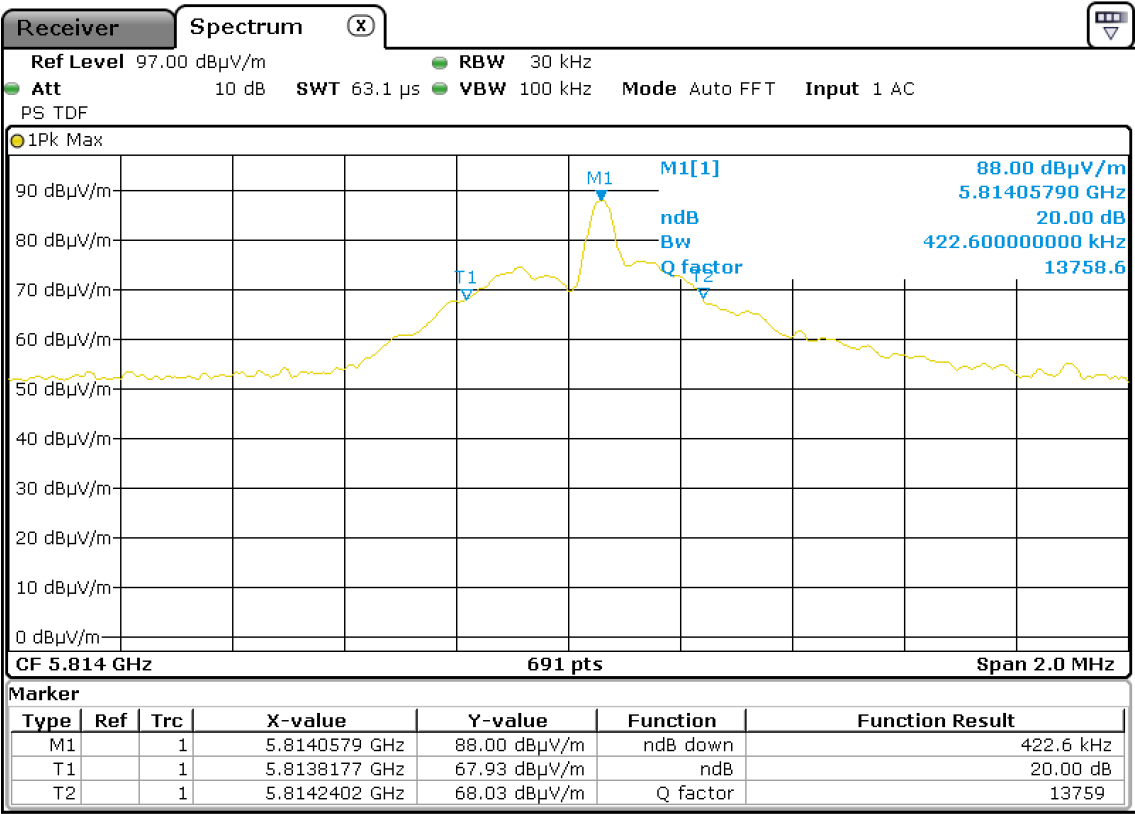


DUT Frequency (MHz)	20 Db Bandwidth (kHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBμV/m)	Result
5800.03	364.70	5799.84	5800.20	91.46	PASS



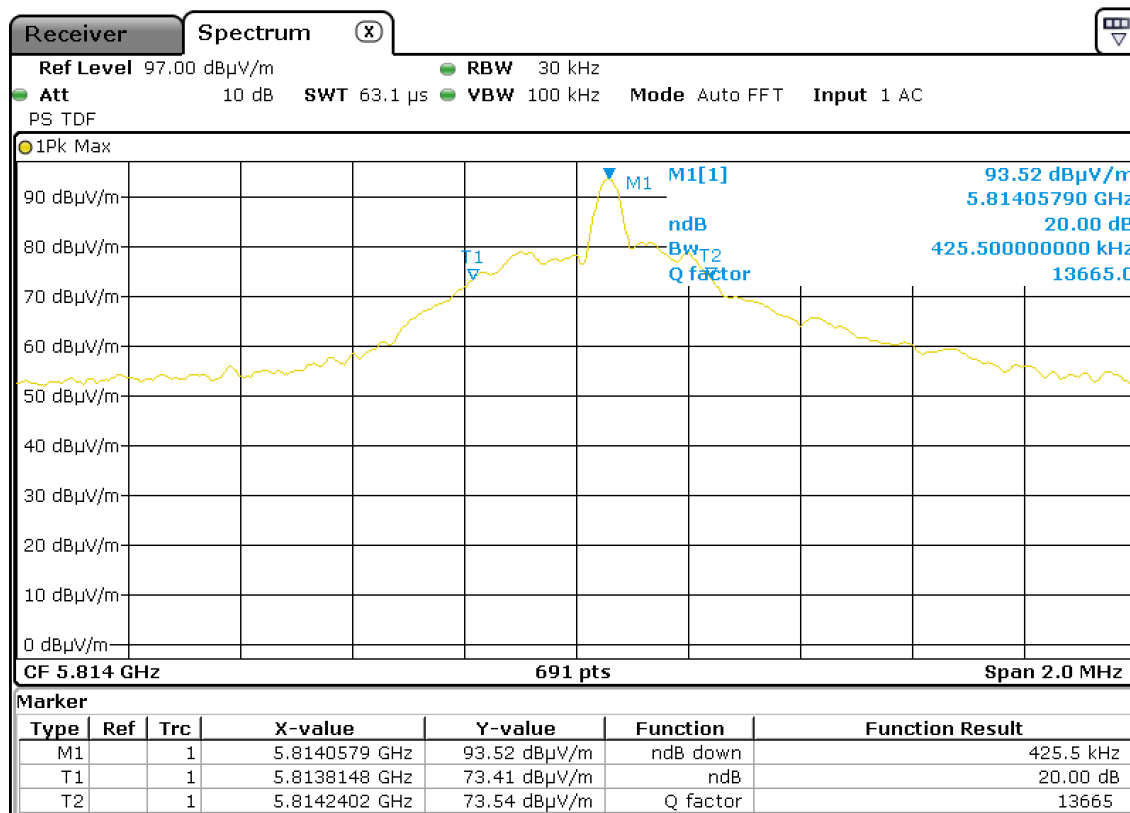
EUT:
Supply:
Operating modes:
Antenna Polarization:

Wine climate cabinet
Uin: 120 V, 60 Hz
Proximity sensor turned on
Vertical



DUT Frequency (MHz)	20 Db Bandwidth (kHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBμV/m)	Result
5814.05	422.60	5813.81	5814.24	88.00	PASS

EUT: Wine climate cabinet
Supply: Uin: 120 V, 60 Hz
Operating modes: Proximity sensor turned on
Antenna Polarization: Horizontal



DUT Frequency (MHz)	20 Db Bandwidth (kHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBμV/m)	Result
5814.05	425.50	5813.81	5814.24	93.52	PASS