



FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
 IC: N/A

Uplink out-of-band/out-of-block low channel CW



15:33:57 12.12.2022

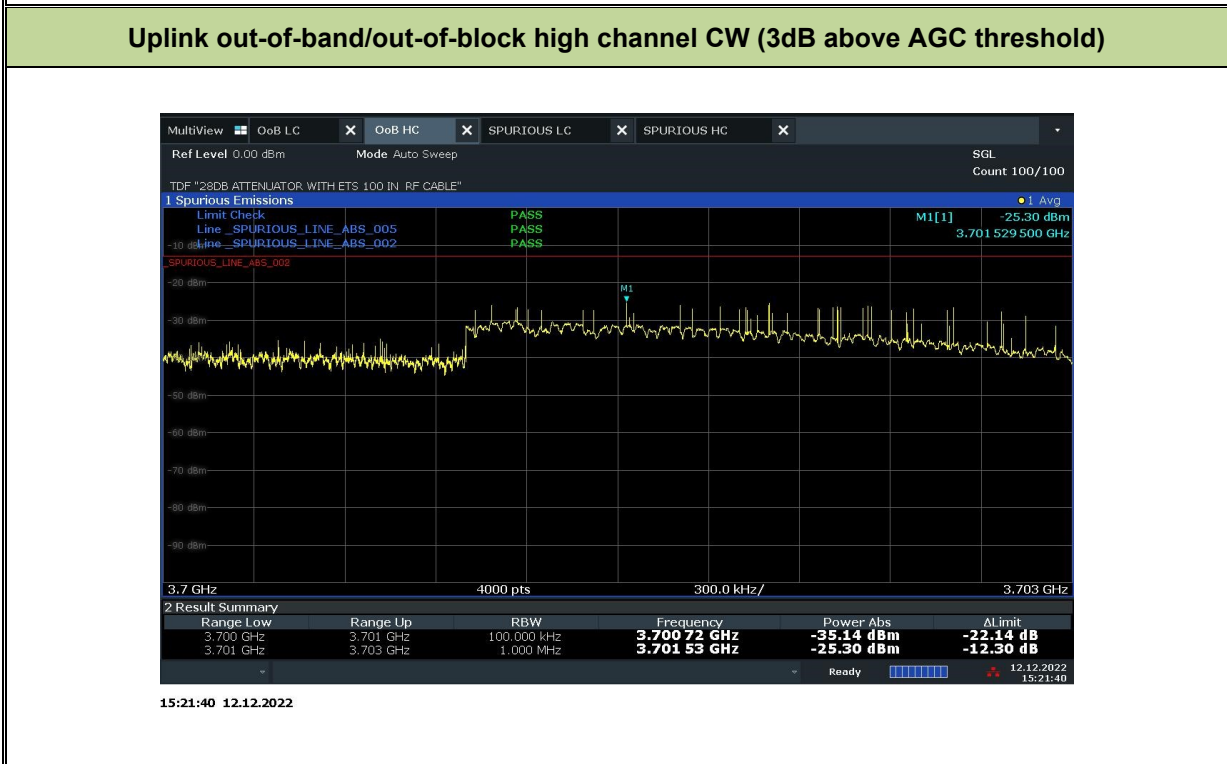
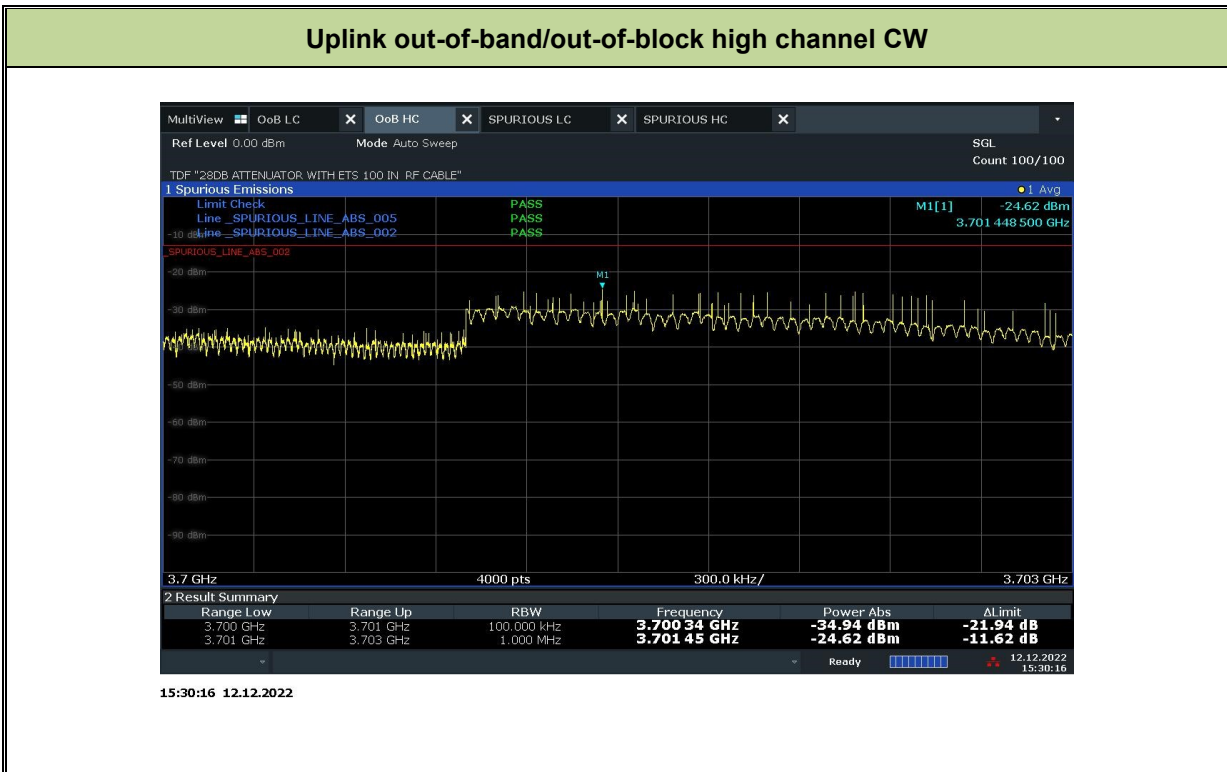
Uplink out-of-band/out-of-block low channel CW (3dB above AGC threshold)



15:50:39 12.12.2022



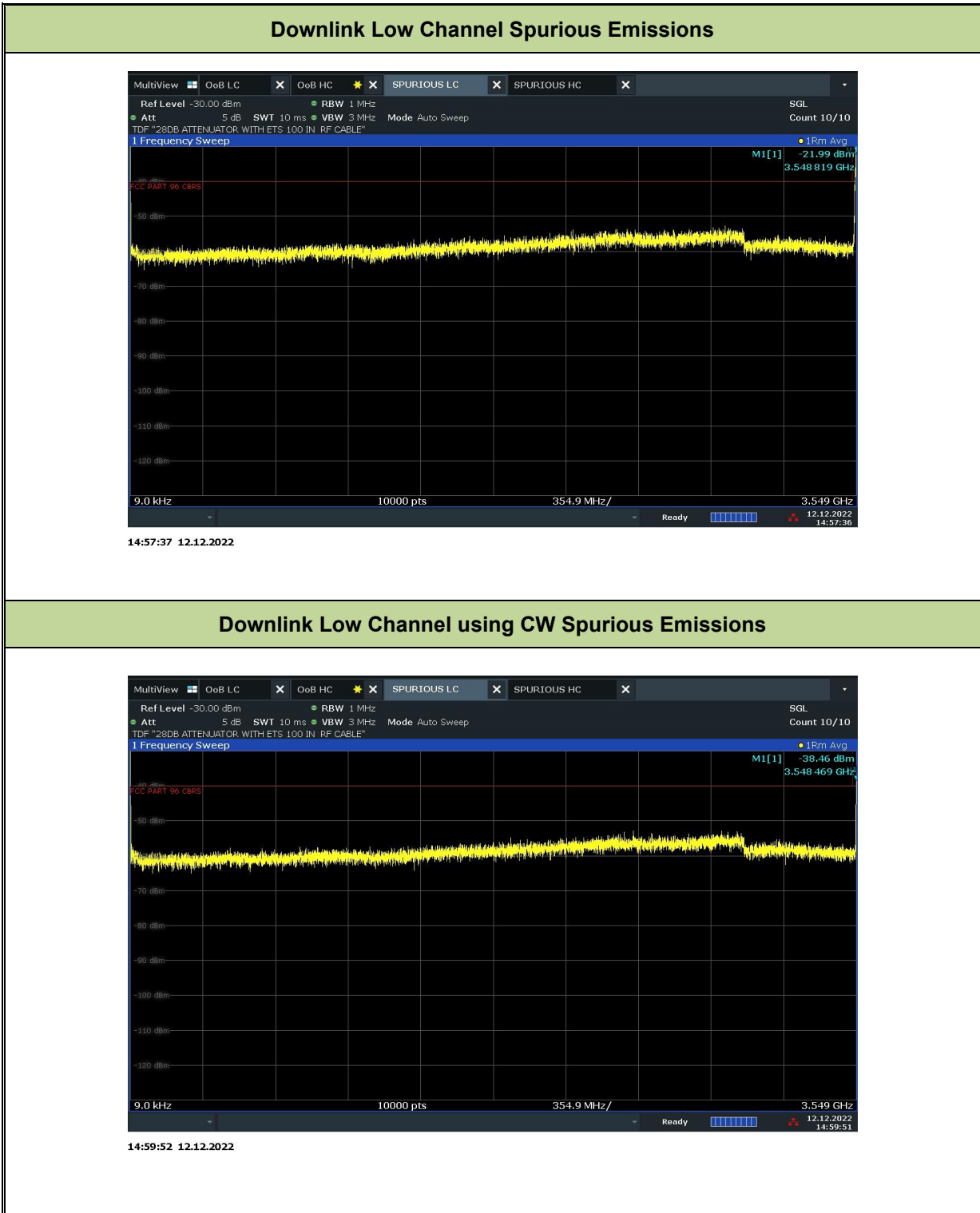
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
 IC: N/A





FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

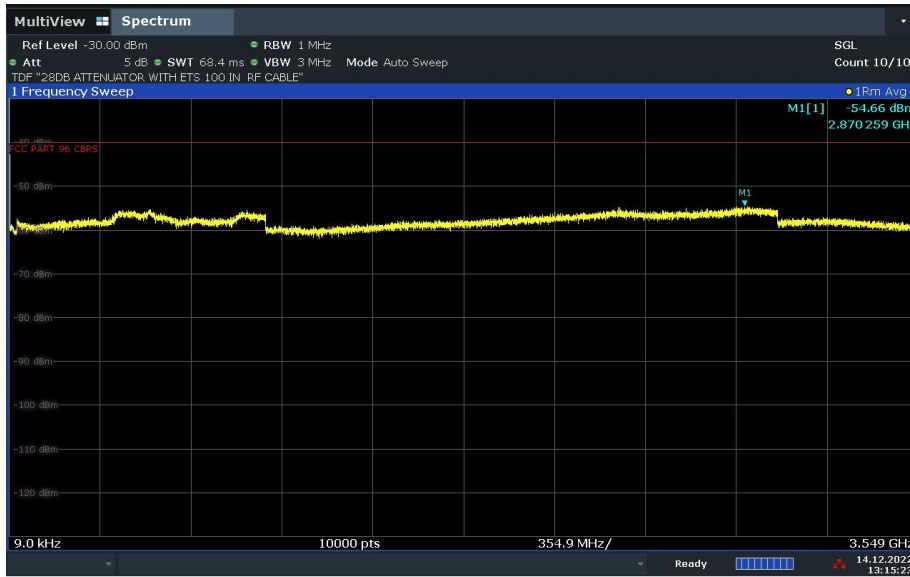
2.5.9 Test Plots (9kHz to lower band/block edge frequency minus 1 MHz)





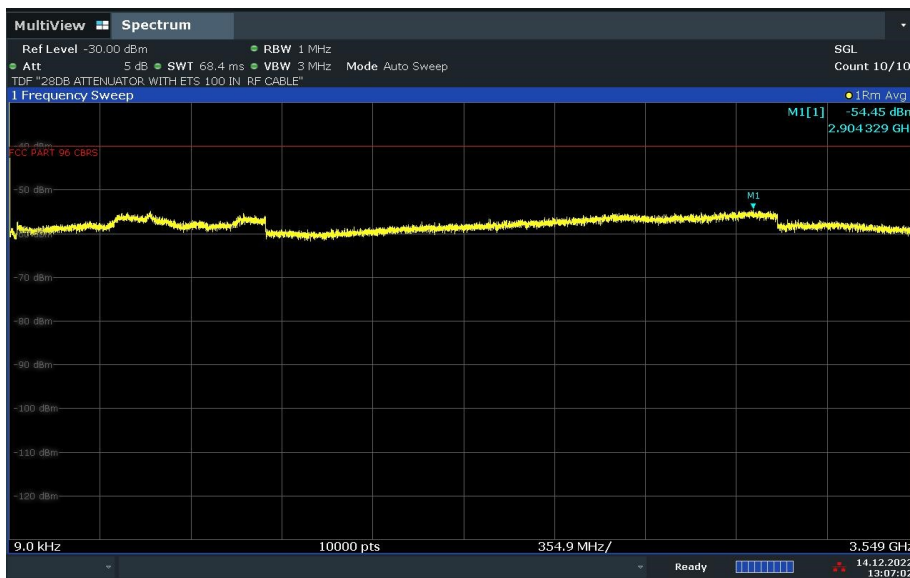
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Downlink Mid Channel Spurious Emissions



13:15:24 14.12.2022

Downlink Mid Channel using CW Spurious Emissions

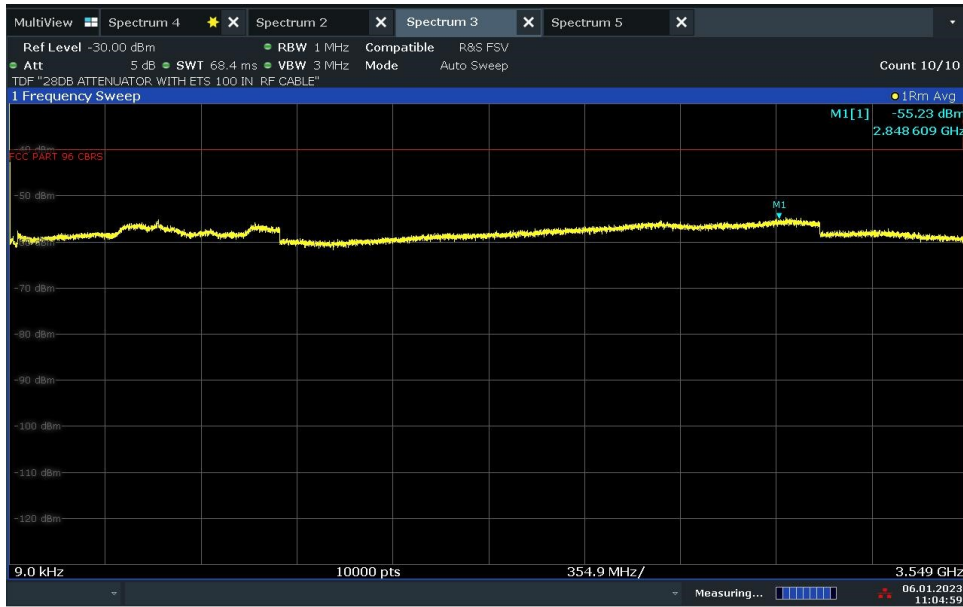


13:07:03 14.12.2022



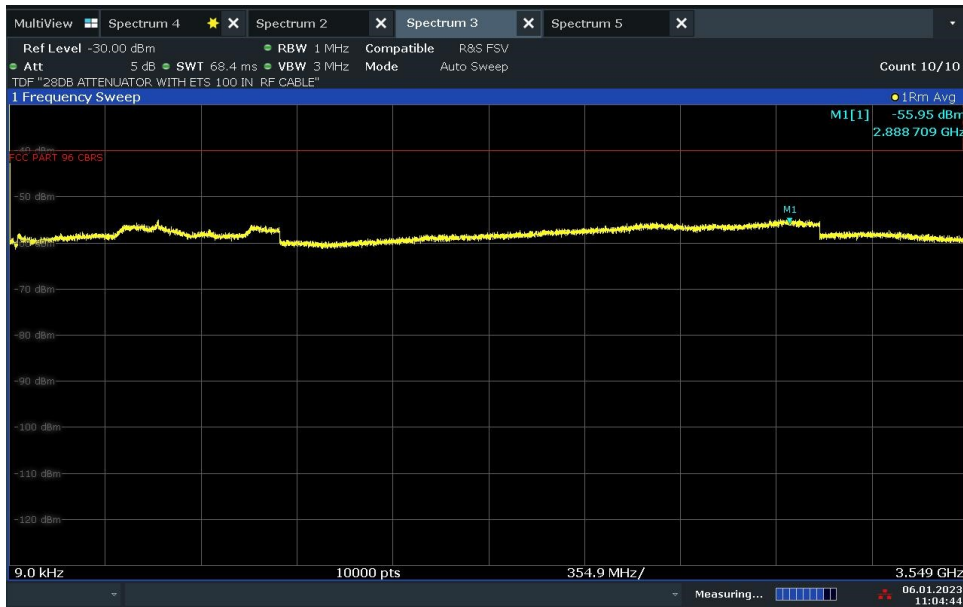
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Downlink High Channel Spurious Emissions



11:05:00 06.01.2023

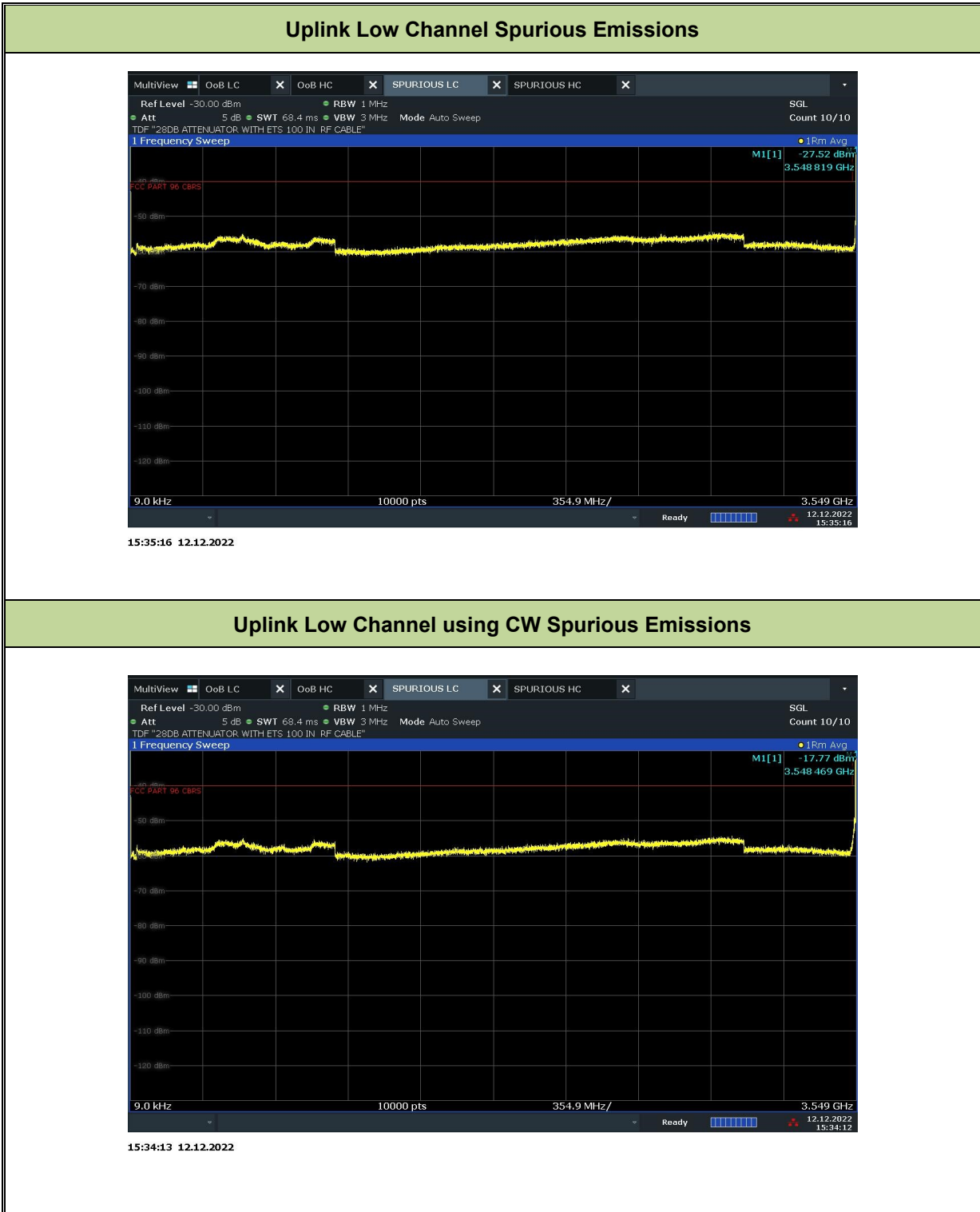
Downlink High Channel using CW Spurious Emissions



11:04:45 06.01.2023



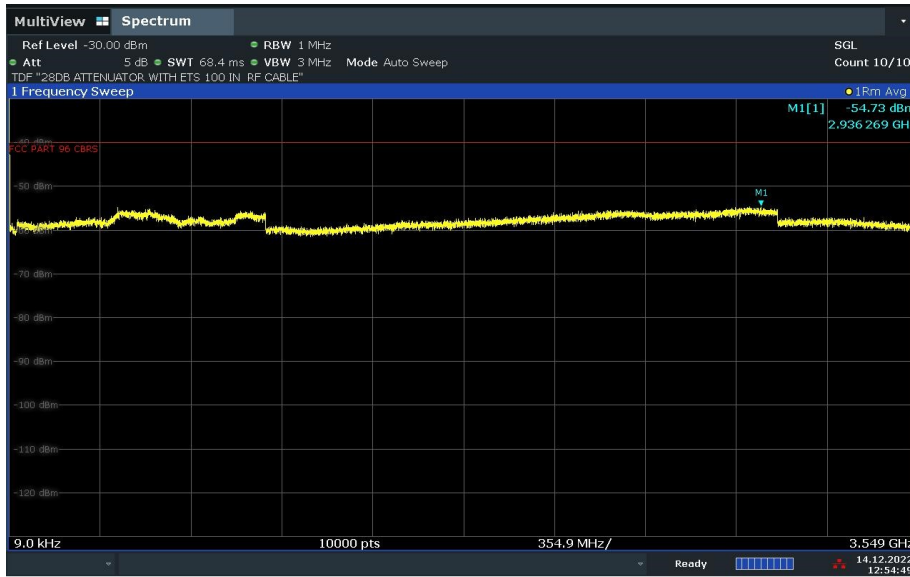
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A





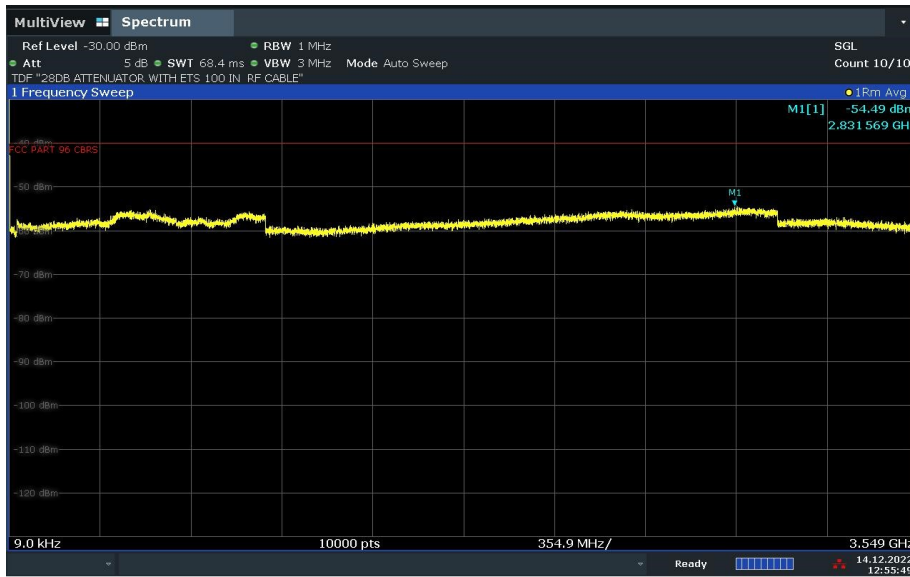
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Uplink Mid Channel Spurious Emissions



12:54:49 14.12.2022

Uplink Mid Channel using CW Spurious Emissions

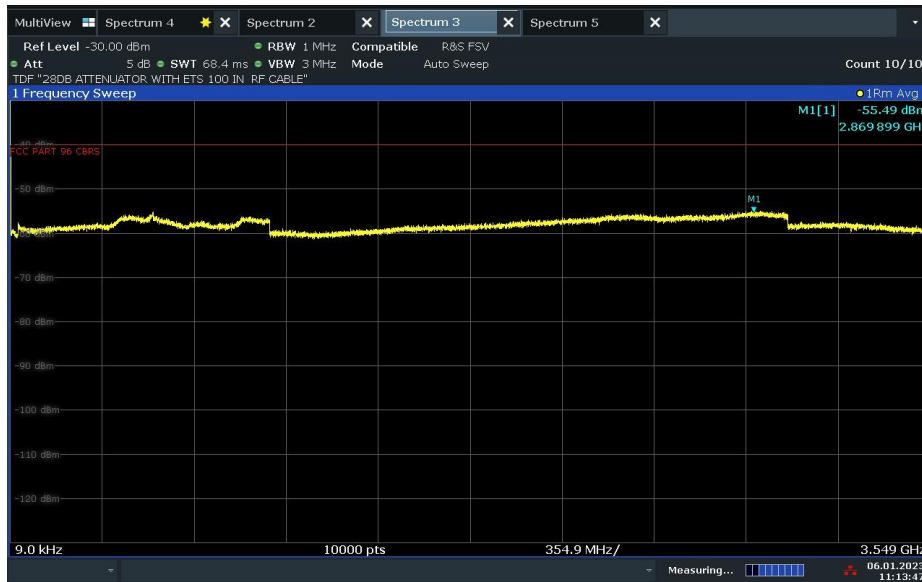


12:55:50 14.12.2022



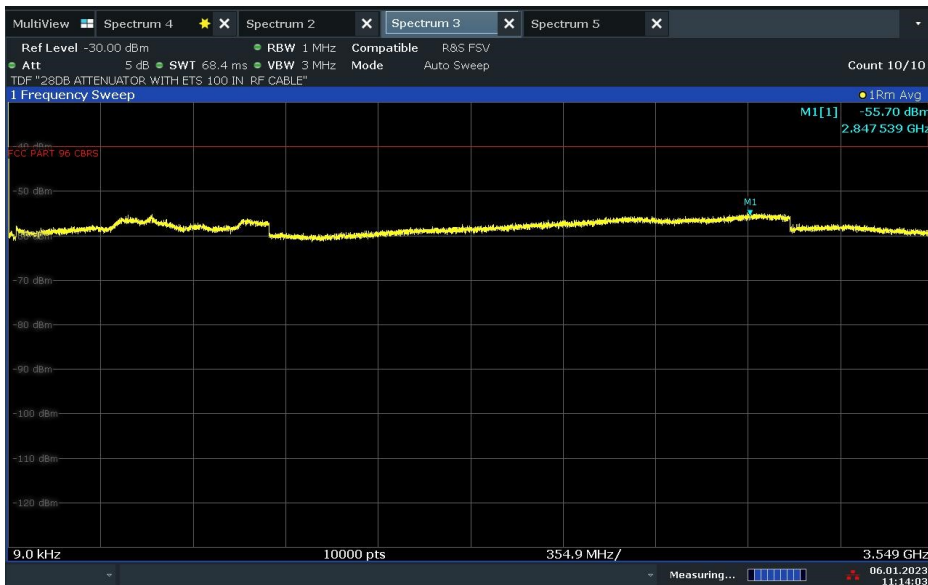
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Uplink High Channel Spurious Emissions



11:13:48 06.01.2023

Uplink High Channel using CW Spurious Emissions

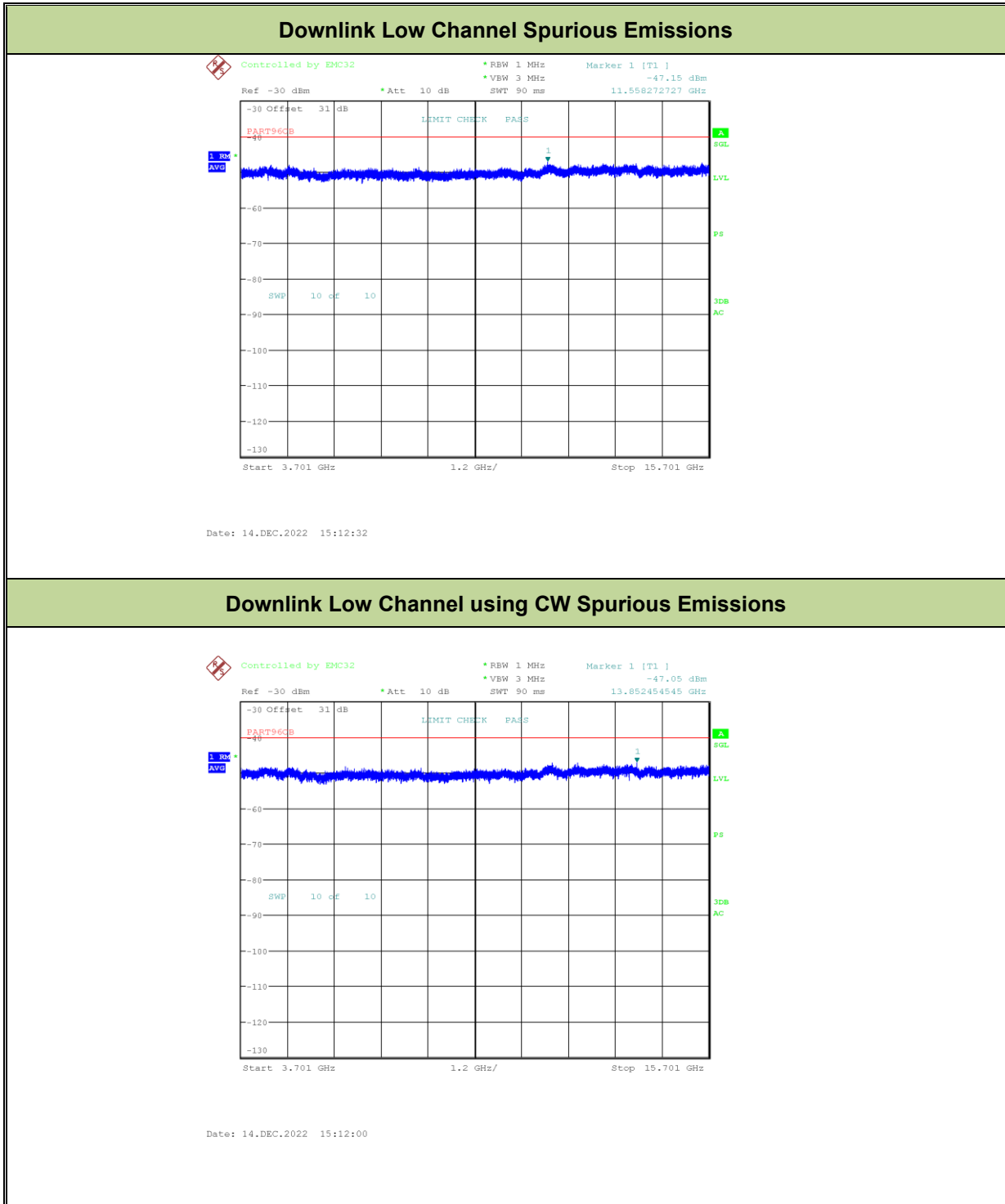


11:14:03 06.01.2023



FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

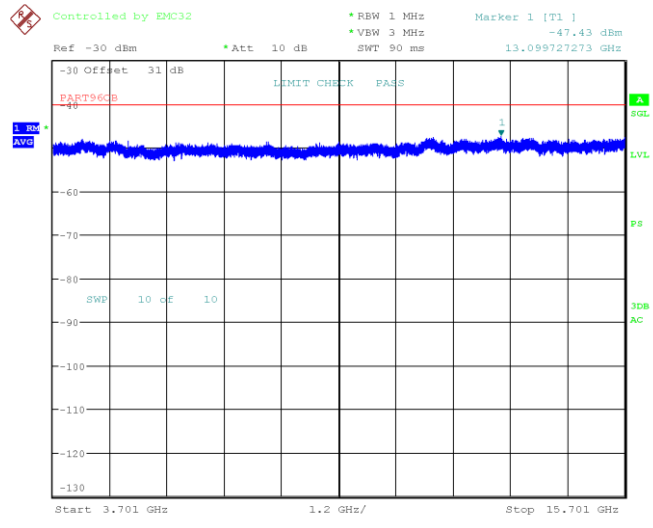
2.5.10 Test Plots Conducted Spurious Emissions (Upper band/block edge frequency plus 1 MHz to 15.7GHz)





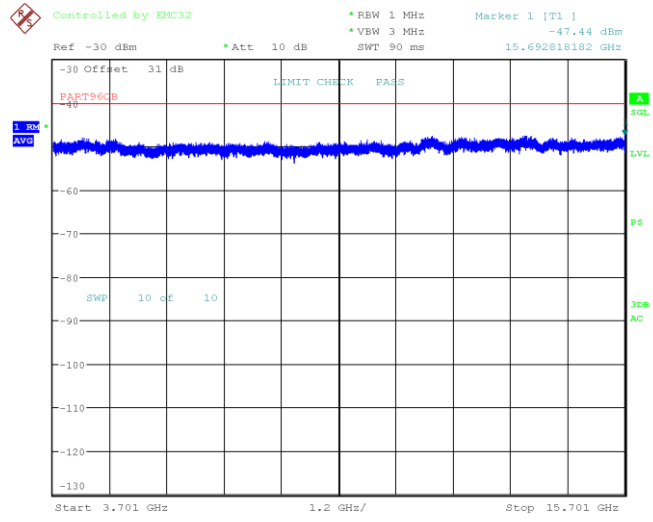
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Downlink Mid Channel Spurious Emissions



Date: 14.DEC.2022 15:09:16

Downlink Mid Channel using CW Spurious Emissions

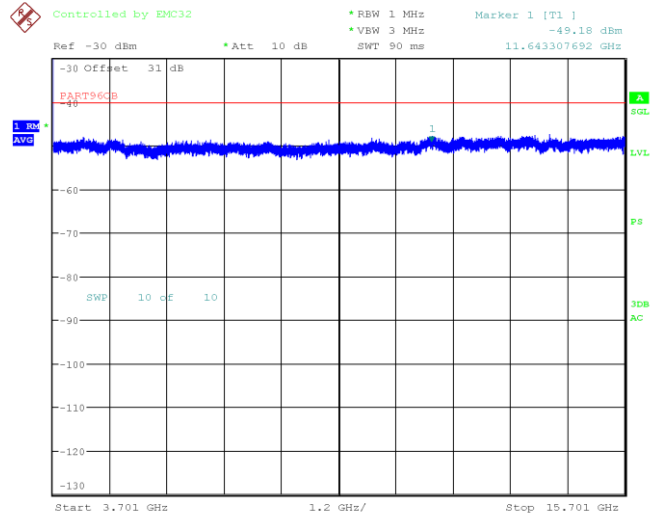


Date: 14.DEC.2022 15:09:51



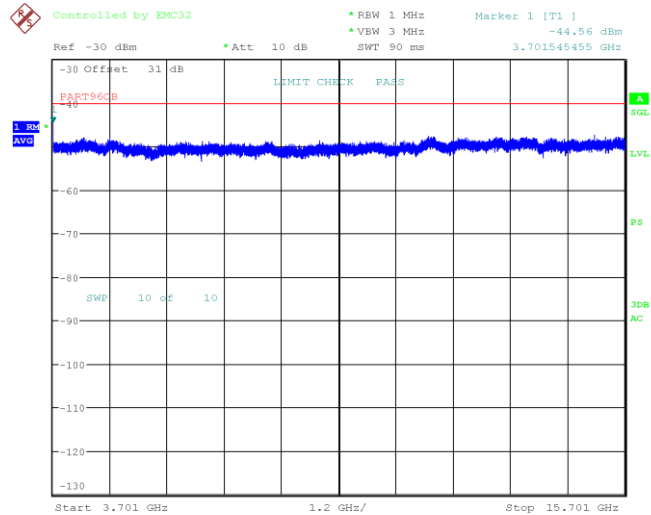
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Downlink High Channel Spurious Emissions



Date: 14.DEC.2022 15:08:43

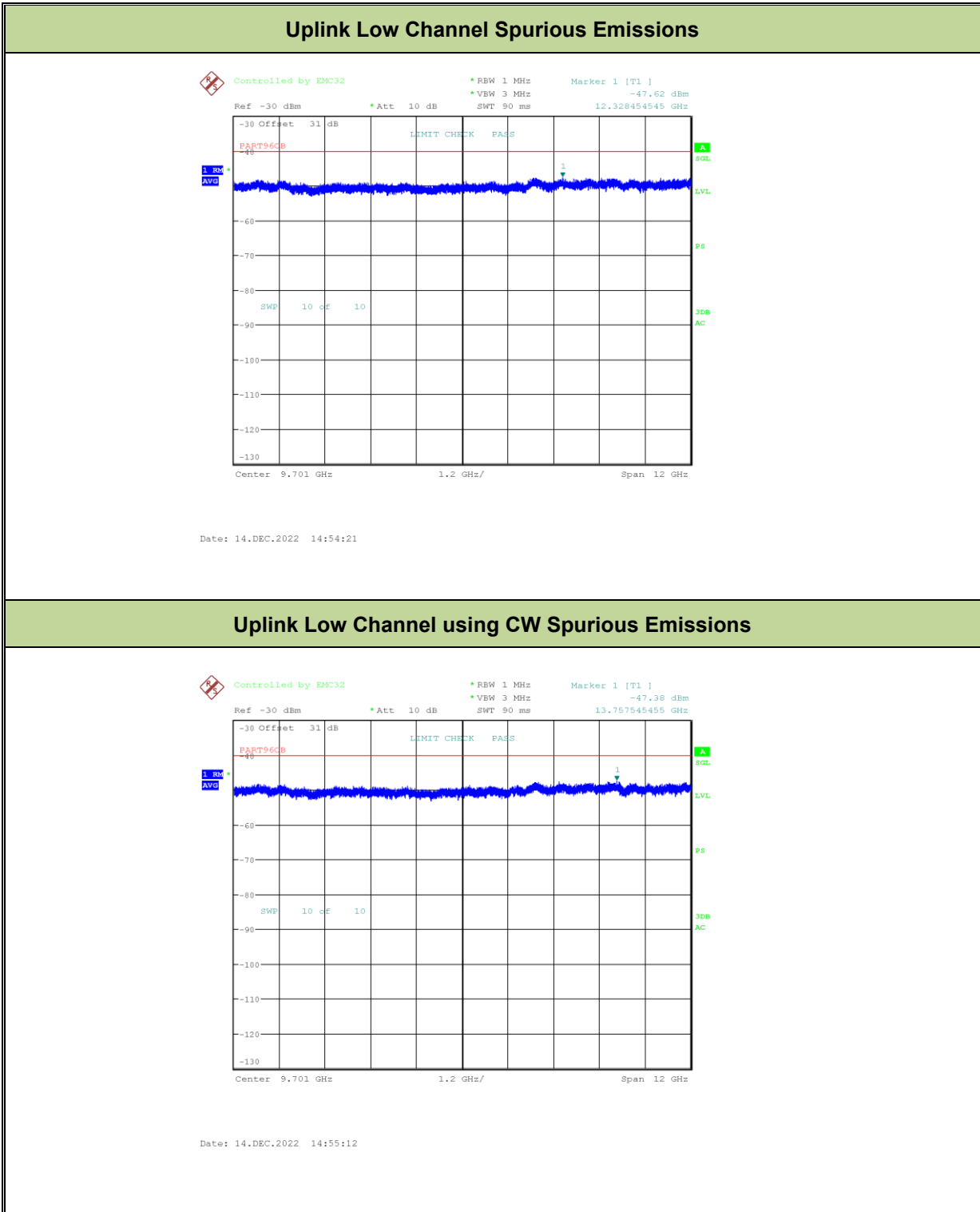
Downlink High Channel using CW Spurious Emissions



Date: 14.DEC.2022 15:06:26



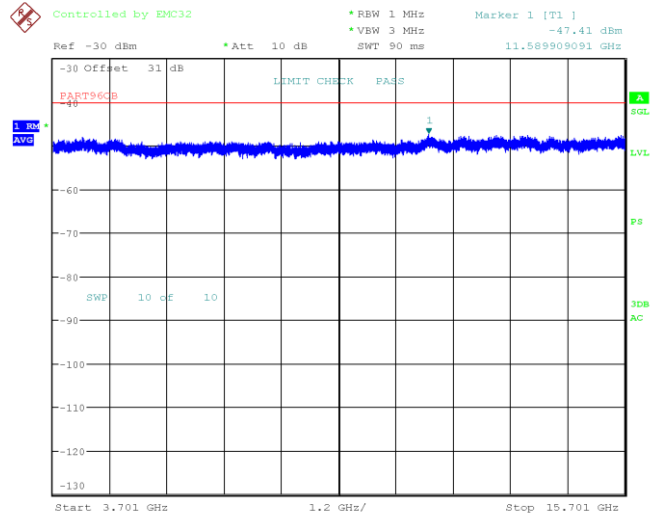
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A





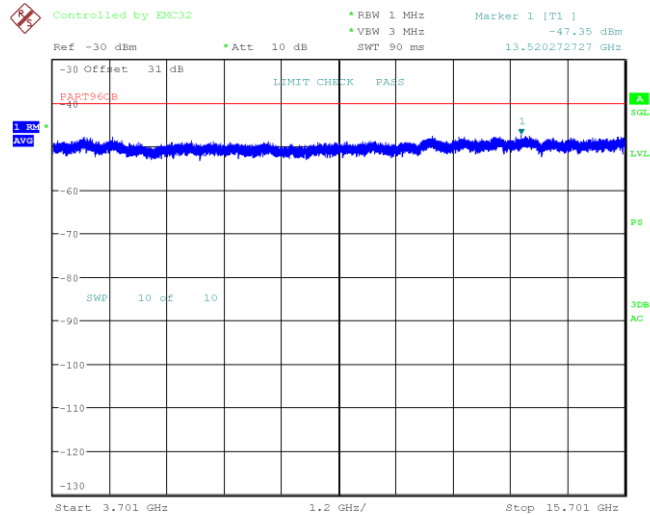
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Uplink Mid Channel Spurious Emissions



Date: 14.DEC.2022 14:59:57

Uplink Mid Channel using CW Spurious Emissions

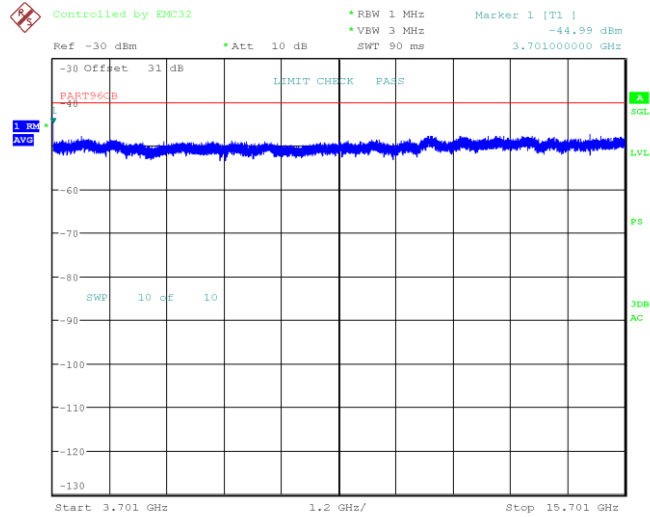


Date: 14.DEC.2022 14:59:26



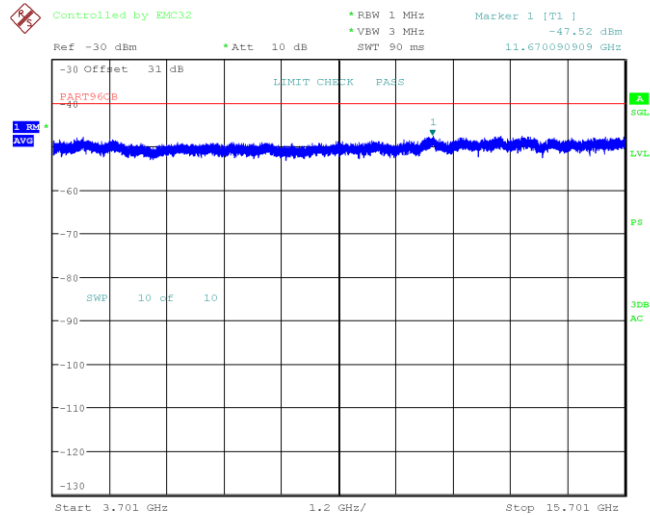
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Uplink High Channel Spurious Emissions



Date: 14.DEC.2022 15:04:05

Uplink High Channel using CW Spurious Emissions

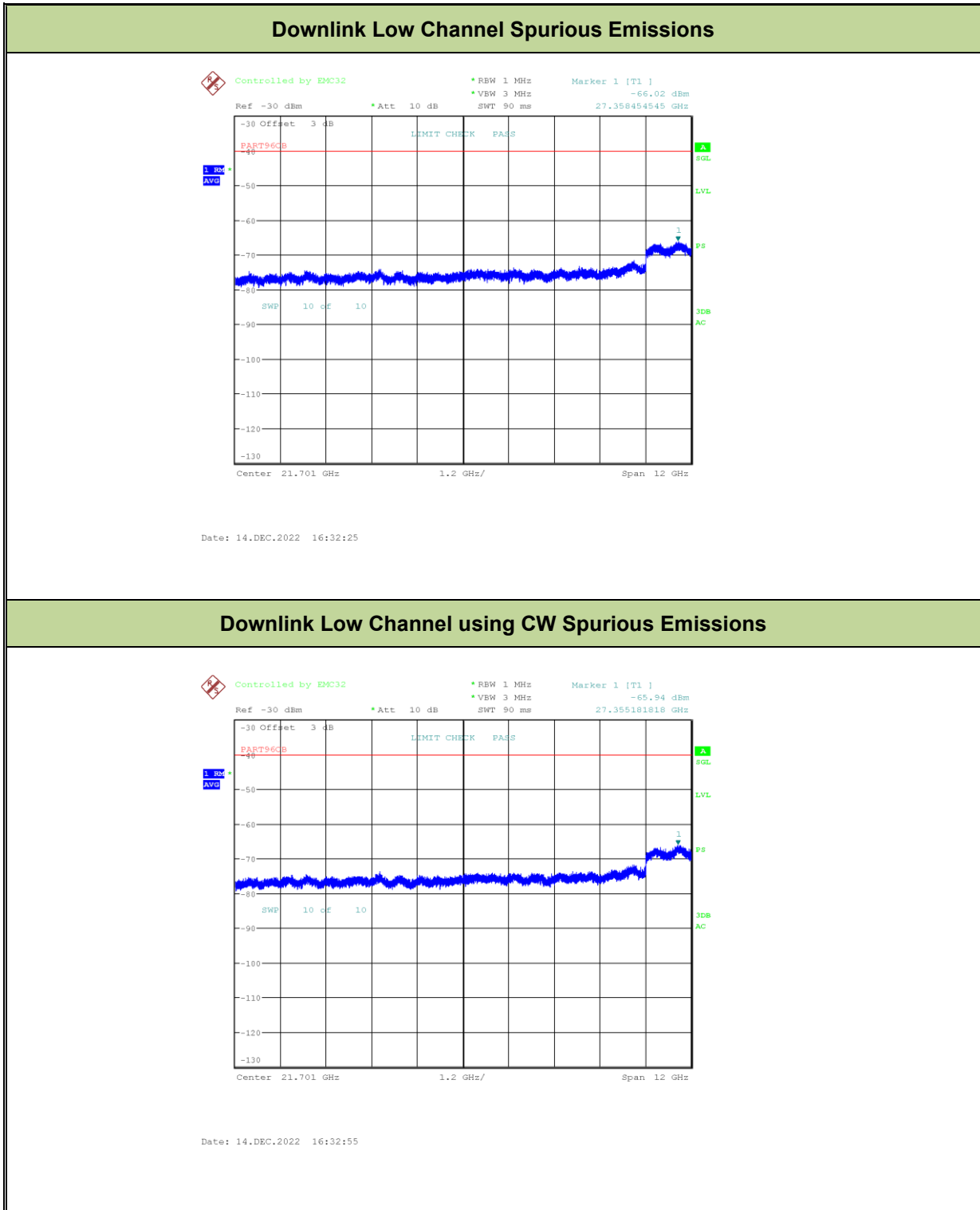


Date: 14.DEC.2022 15:04:27



FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

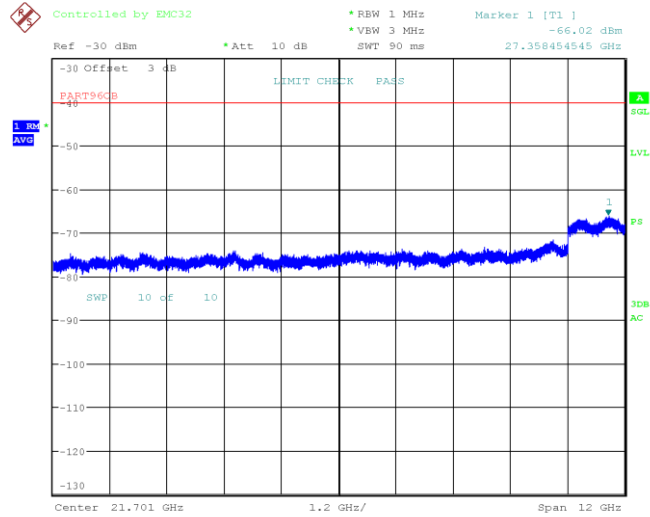
2.5.11 Test Plots Conducted Spurious Emissions (15.7GHz to 27.7GHz)





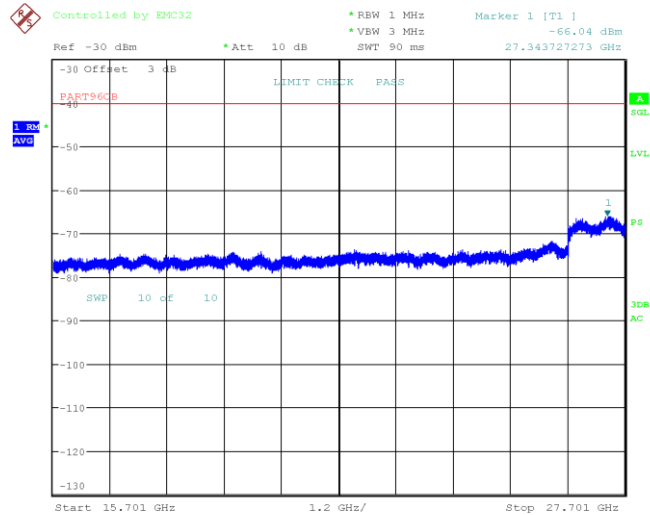
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Downlink Mid Channel Spurious Emissions



Date: 14.DEC.2022 16:32:25

Downlink Mid Channel using CW Spurious Emissions

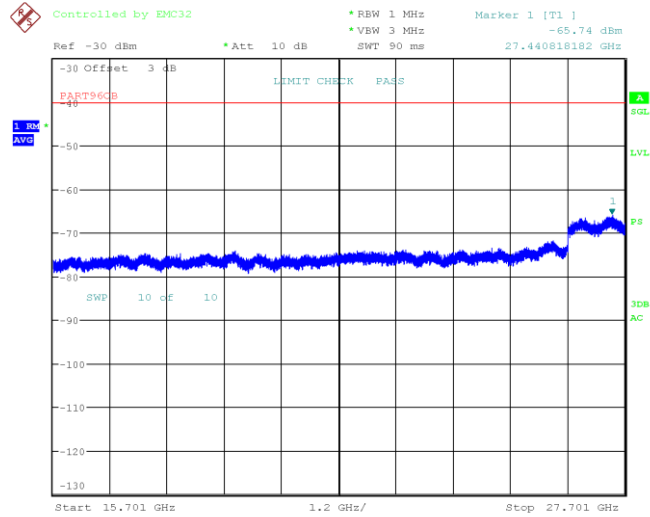


Date: 14.DEC.2022 16:45:02



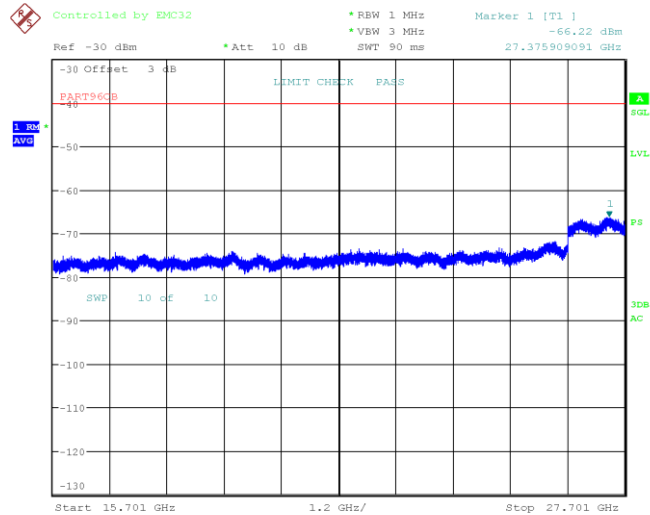
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Downlink High Channel Spurious Emissions



Date: 14.DEC.2022 16:51:06

Downlink High Channel using CW Spurious Emissions

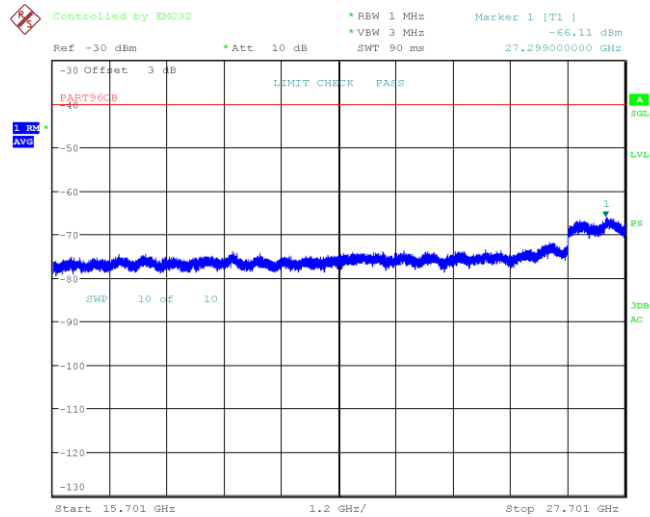


Date: 14.DEC.2022 16:50:33



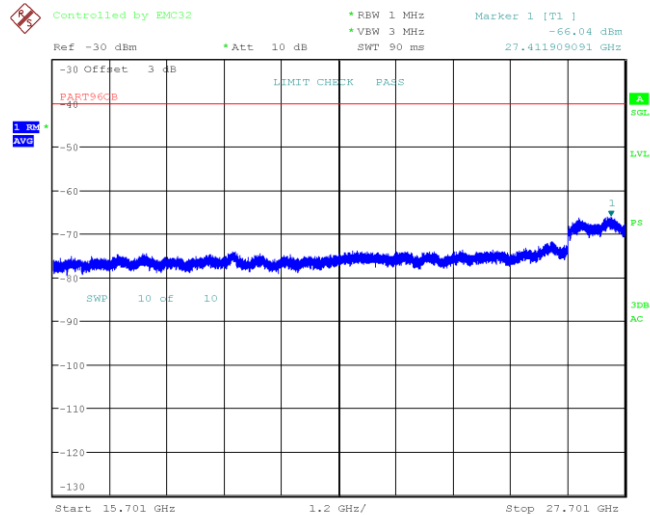
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Uplink Low Channel Spurious Emissions



Date: 14.DEC.2022 17:03:23

Uplink Low Channel using CW Spurious Emissions

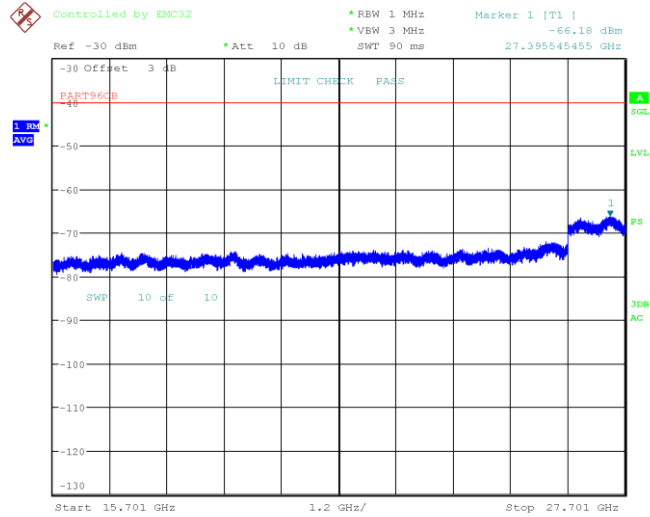


Date: 14.DEC.2022 17:04:05

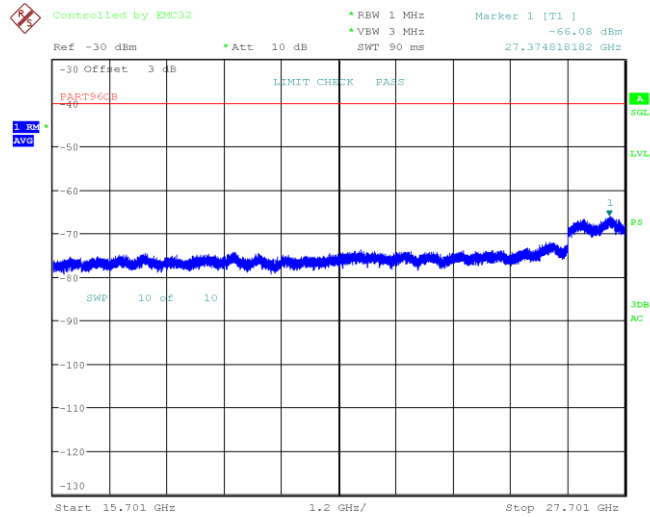


FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Uplink Mid Channel Spurious Emissions



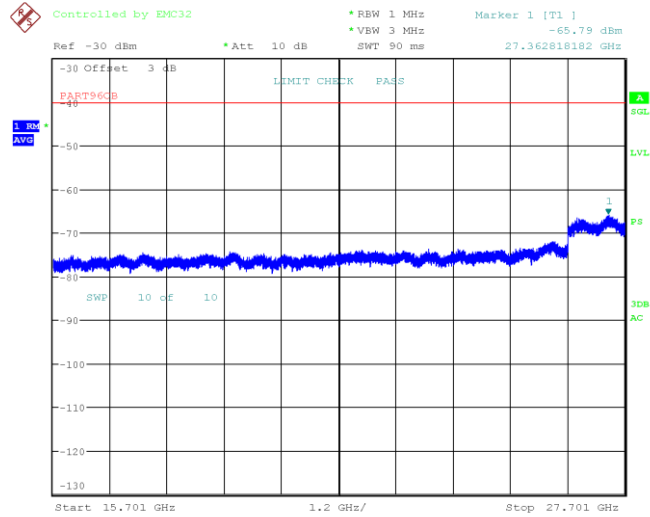
Uplink Mid Channel using CW Spurious Emissions





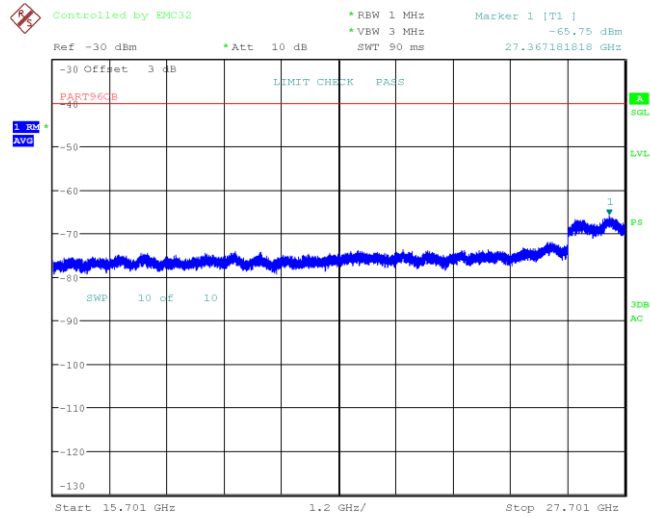
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Uplink High Channel Spurious Emissions



Date: 14.DEC.2022 16:55:48

Uplink High Channel using CW Spurious Emissions

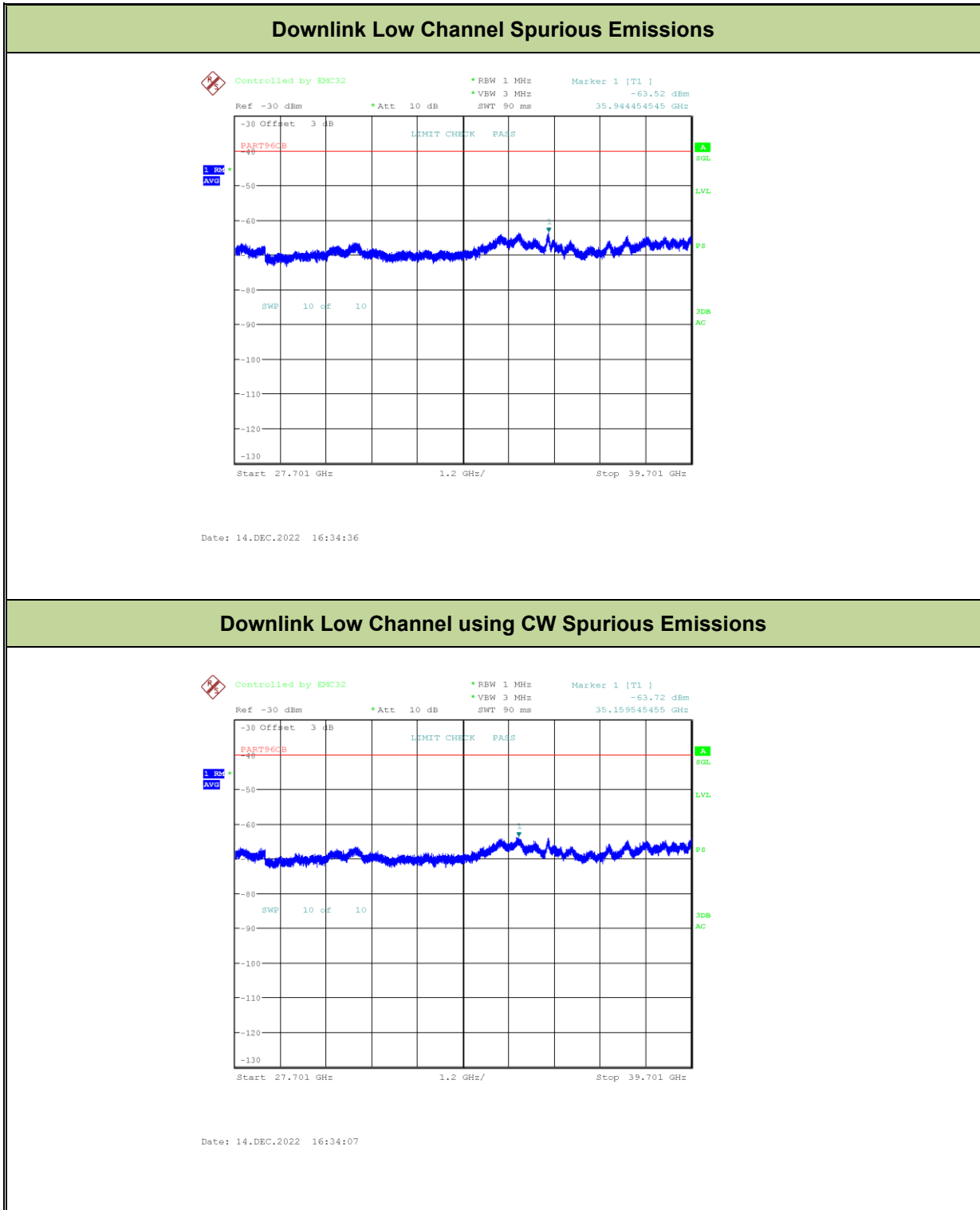


Date: 14.DEC.2022 16:56:19



FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

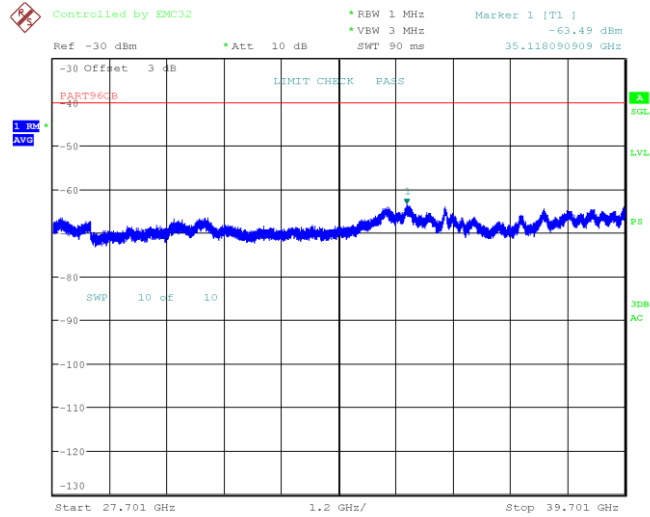
2.5.12 Test Plots (27.7GHz to 39.7GHz)





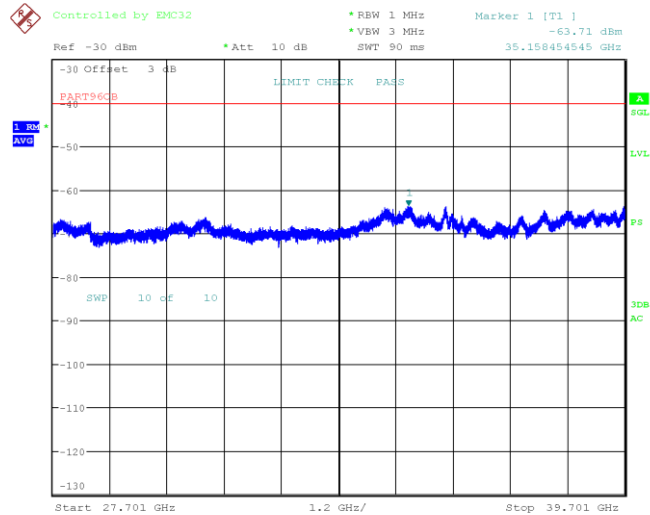
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Downlink Mid Channel Spurious Emissions



Date: 14.DEC.2022 16:36:30

Downlink Mid Channel using CW Spurious Emissions

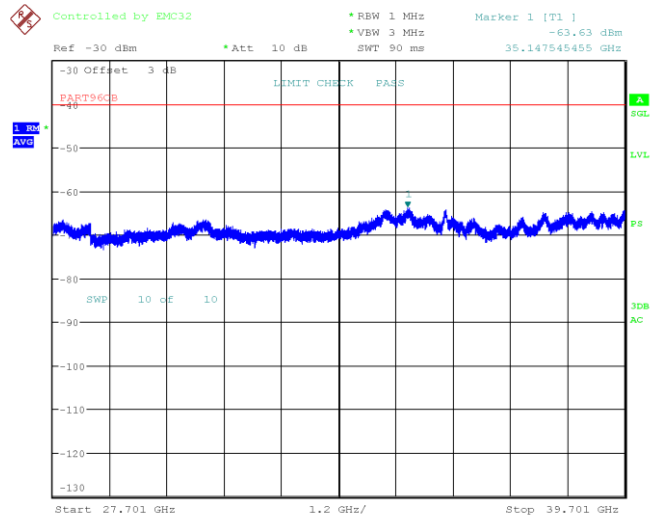


Date: 14.DEC.2022 16:37:00



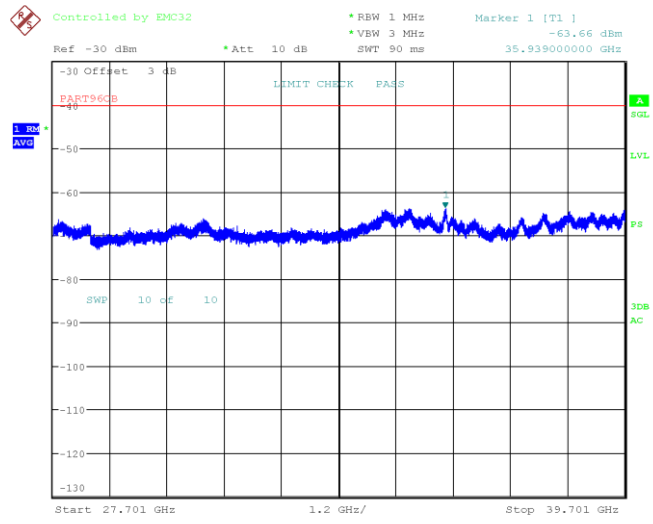
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Downlink High Channel Spurious Emissions



Date: 14.DEC.2022 16:52:17

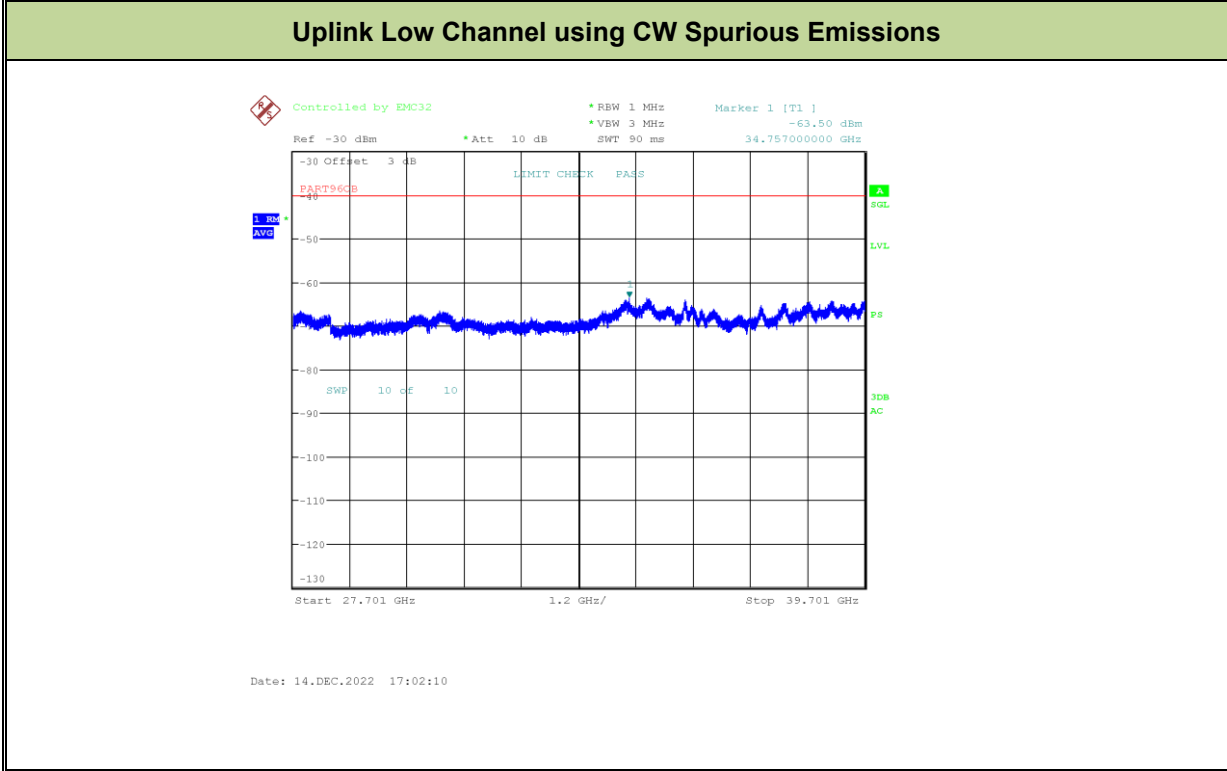
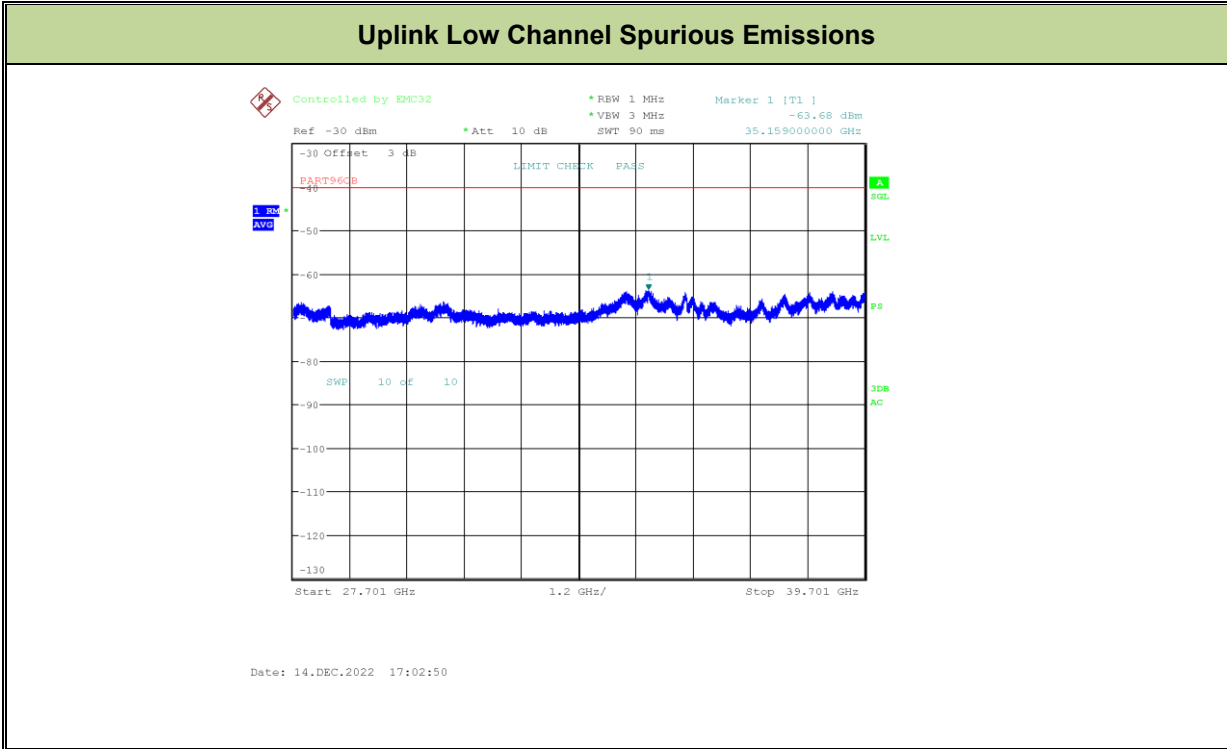
Downlink High Channel using CW Spurious Emissions



Date: 14.DEC.2022 16:52:40



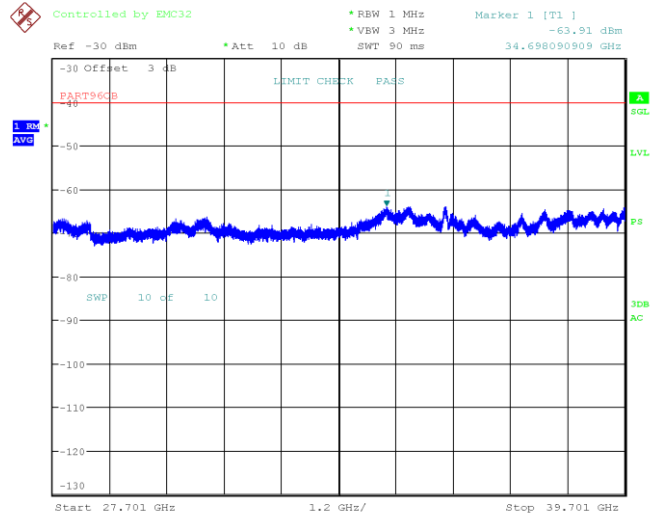
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A





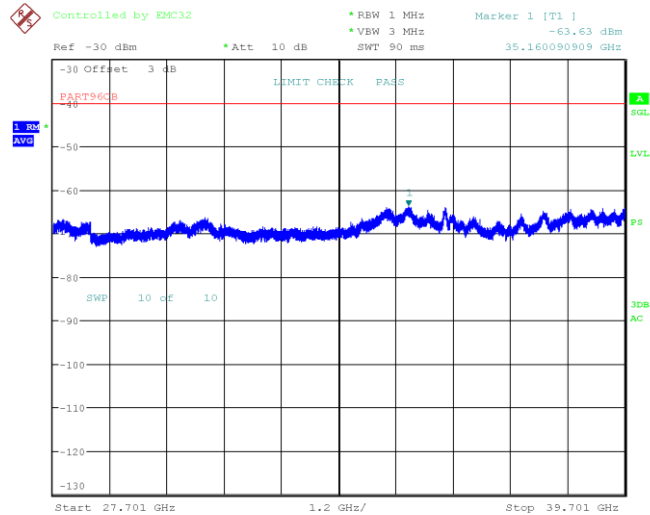
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Uplink Mid Channel Spurious Emissions



Date: 14.DEC.2022 16:59:20

Uplink Mid Channel using CW Spurious Emissions

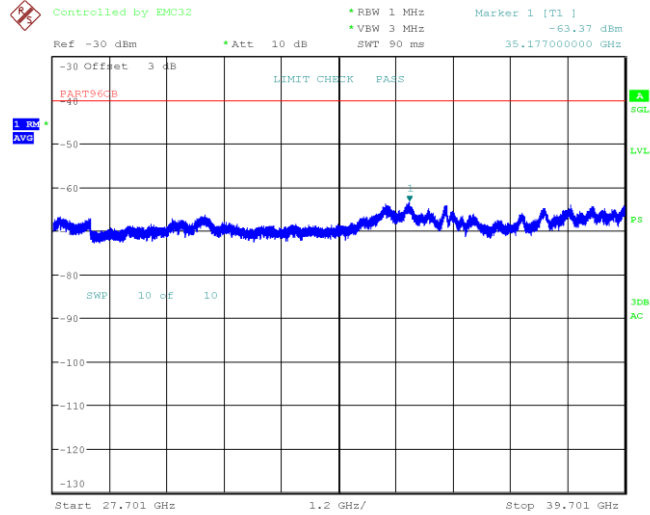


Date: 14.DEC.2022 17:00:00



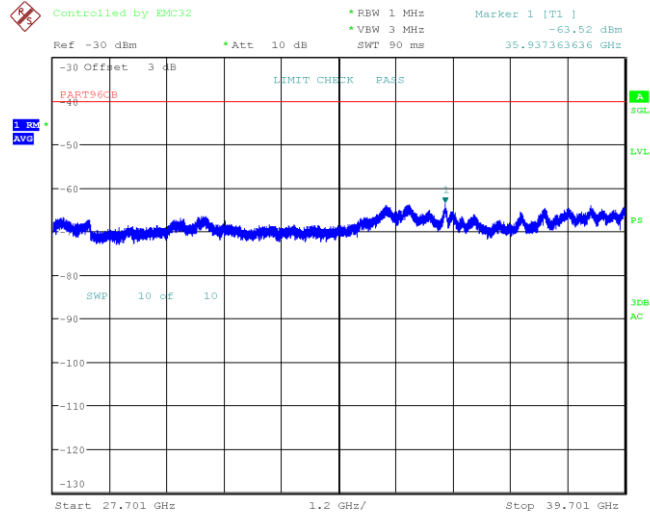
FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

Uplink High Channel Spurious Emissions



Date: 14.DEC.2022 16:55:02

Uplink High Channel using CW Spurious Emissions



Date: 14.DEC.2022 16:54:39



FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
IC: N/A

2.6 Spurious Emissions Radiated Measurements

2.6.1 Specification Reference

KDB935210 D05, Clause 3.8

2.6.2 Standard Applicable

This measurement is intended to produce test data necessary to demonstrate compliance to the radiated spurious emission requirements specified in Section 2.1053 of the FCC rules. This test is intended to capture any emissions that radiate directly from the case, cabinet, control circuits, etc., instead of via the antenna output port, and thus would not be captured in conducted spurious emission measurements. See KDB Publication 971168 for measurement procedure guidance.

2.6.3 Equipment Under Test and Modification State

Serial No: 110222000051 and 481222000175 / Test Configuration A and B

2.6.4 Date of Test/Initial of test personnel who performed the test

December 01, 2022 / MRG

2.6.5 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.6.6 Environmental Conditions

Test performed at TÜV SÜD America Inc. Mira Mesa facility.

Ambient Temperature	23.5 °C
Relative Humidity	41.1 %
ATM Pressure	100.3 kPa

2.6.7 Additional Observations

- This is a radiated test using per Section 7 of KDB Publication 971168 and Subclause 5.5 of ANSI C63.26-2015.
- Only the worst-case configuration (channel and/or bandwidth) presented in this test report.
- Measurement was done using EMC32 automated software. Reported level is the actual level with all the correction factors factored in. Correction Factor column is for informational purposes only.

2.6.8 Test Results

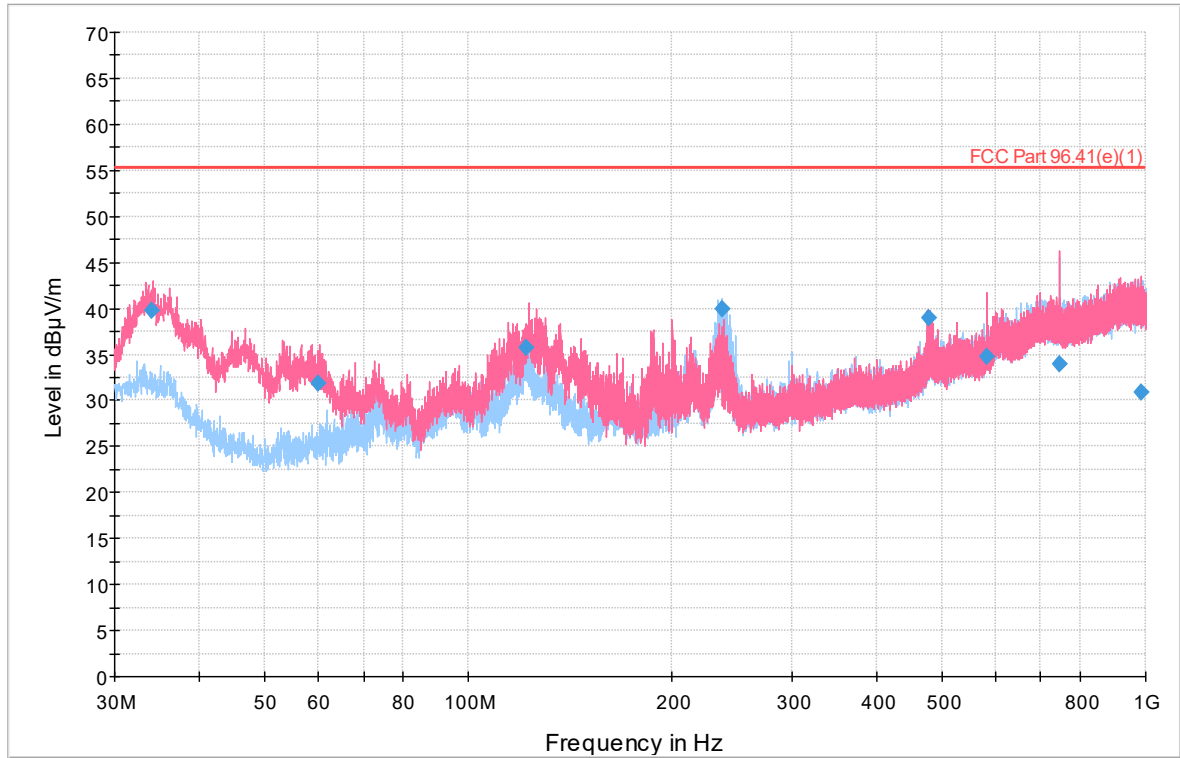
Compliant. See attached plots.



FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
 IC: N/A

2.6.9 Test Results Below 1GHz Downlink

Full Spectrum



— Preview Result 1H-PK+ [Preview Result 1H.Result:2]
 — Preview Result 1V-PK+ [Preview Result 1V.Result:2]
— FCC Part 96.41(e)(1) [.\EMI Radiated\]
 ◆ Final_Result QPK [Final_Result.Result:4]

Quasi Peak Data

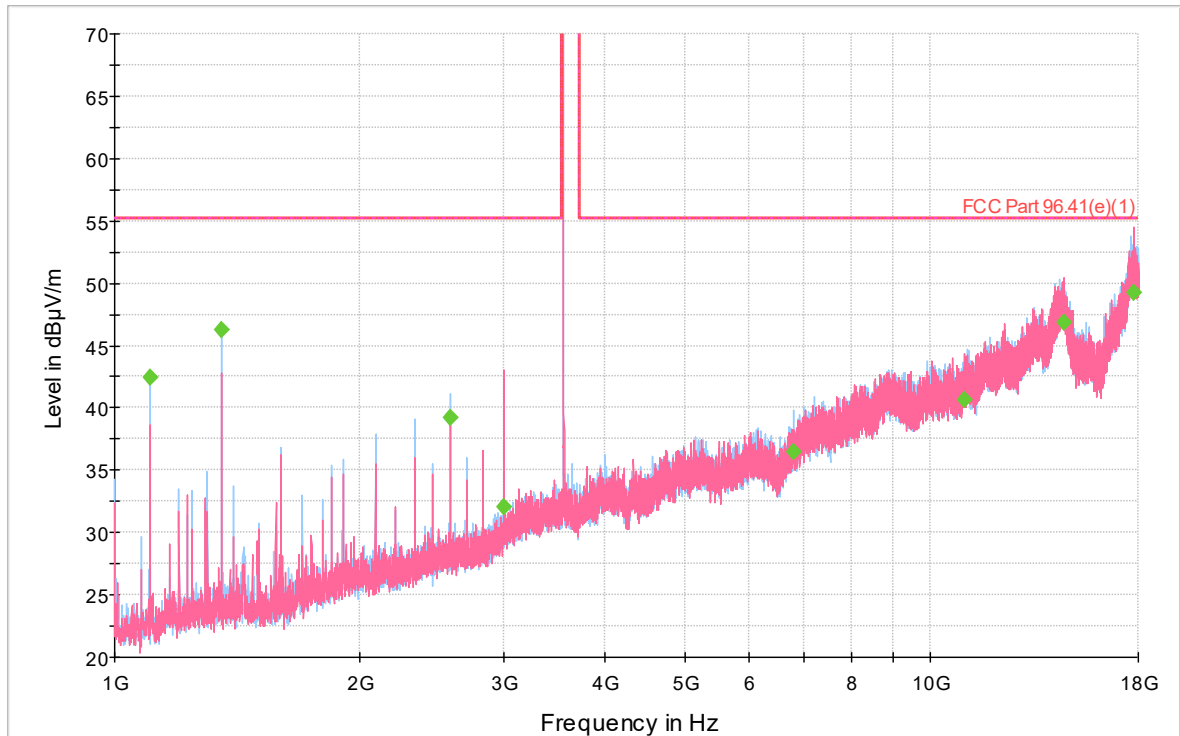
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	PoI	Azimuth (deg)	Corr. (dB)
33.978667	39.82	55.23	15.41	1000.0	120.000	117.0	V	242.0	20
59.928667	31.91	55.23	23.32	1000.0	120.000	114.0	V	2.0	13
121.821333	35.69	55.23	19.54	1000.0	120.000	107.0	V	180.0	14
236.735000	39.88	55.23	15.35	1000.0	120.000	109.0	H	172.0	19
478.189667	38.98	55.23	16.25	1000.0	120.000	176.0	V	207.0	25
581.064667	34.80	55.23	20.43	1000.0	120.000	108.0	V	43.0	26
747.096333	34.01	55.23	21.22	1000.0	120.000	100.0	V	33.0	28
986.627667	30.93	55.23	24.30	1000.0	120.000	323.0	V	90.0	30



FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
 IC: N/A

2.6.10 Test Results Above 1GHz Downlink

Full Spectrum



— Preview Result 1H-PK+ [Preview Result 1H.Result:2]
 — Preview Result 1V-PK+ [Preview Result 1V.Result:2]
- - - FCC Part 96.41(e)(1) [..\EMI Radiated\
◆ Final_Result AVG [Final_Result.Result:5]
 - - - FCC Part 96.41(e)(1) [..\EMI Radiated\

Average Data

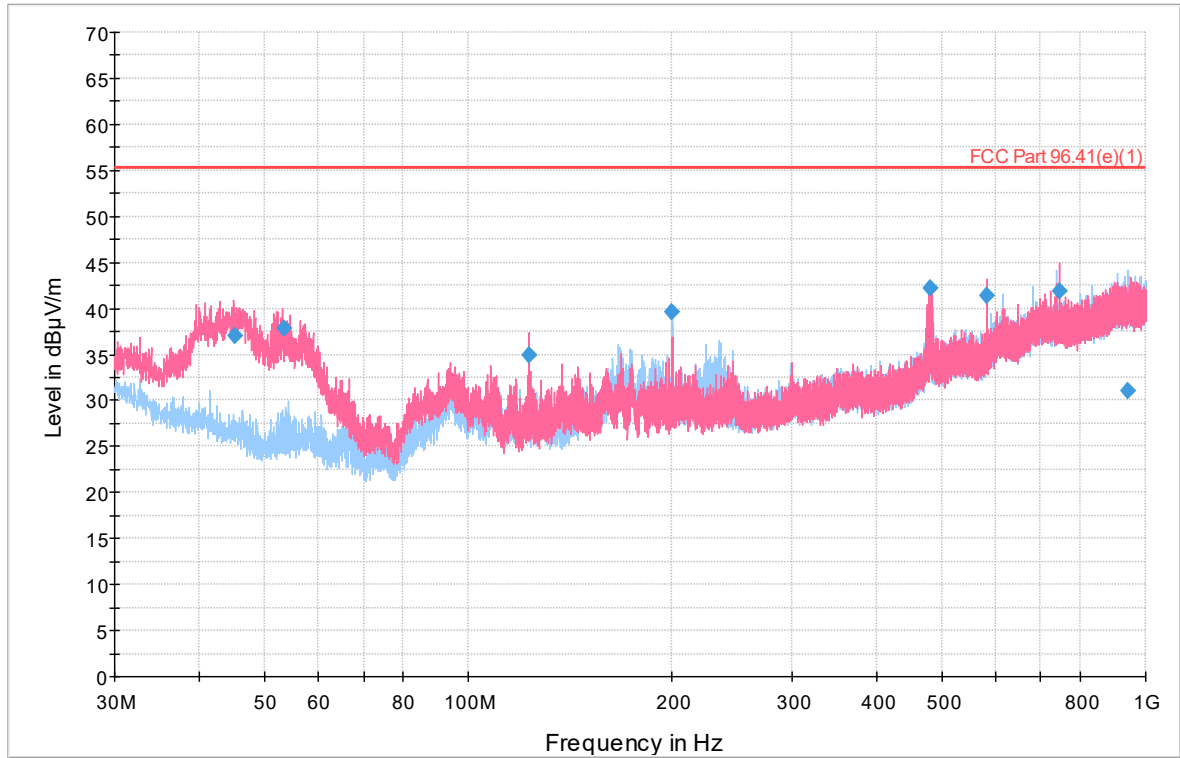
Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1106.000000	42.44	55.23	12.79	1000.0	1000.000	164.0	H	236.0	-9
1351.533333	46.27	55.23	8.96	1000.0	1000.000	205.0	H	178.0	-7
2580.633333	39.17	55.23	16.06	1000.0	1000.000	145.0	H	194.0	-2
2999.566667	32.05	55.23	23.18	1000.0	1000.000	335.0	V	17.0	-1
3551.433333	72.61	108.2	35.61	1000.0	1000.000	238.0	V	19.0	2
6799.433333	36.45	55.20	18.75	1000.0	1000.000	240.0	H	0.0	6
11035.03333	40.65	55.21	14.56	1000.0	1000.000	156.0	V	220.0	14
14579.00000	46.89	55.21	8.32	1000.0	1000.000	209.0	V	39.0	16
17746.13333	49.20	55.21	6.01	1000.0	1000.000	354.0	V	296.0	22



FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
 IC: N/A

2.6.11 Test Results Below 1GHz Uplink

Full Spectrum



— Preview Result 1H-PK+ [Preview Result 1H.Result:2]
 — Preview Result 1V-PK+ [Preview Result 1V.Result:2]
— FCC Part 96.41(e)(1) [.\EMI Radiated\]
 ◆ Final_Result QPK [Final_Result.Result4]

Quasi Peak Data

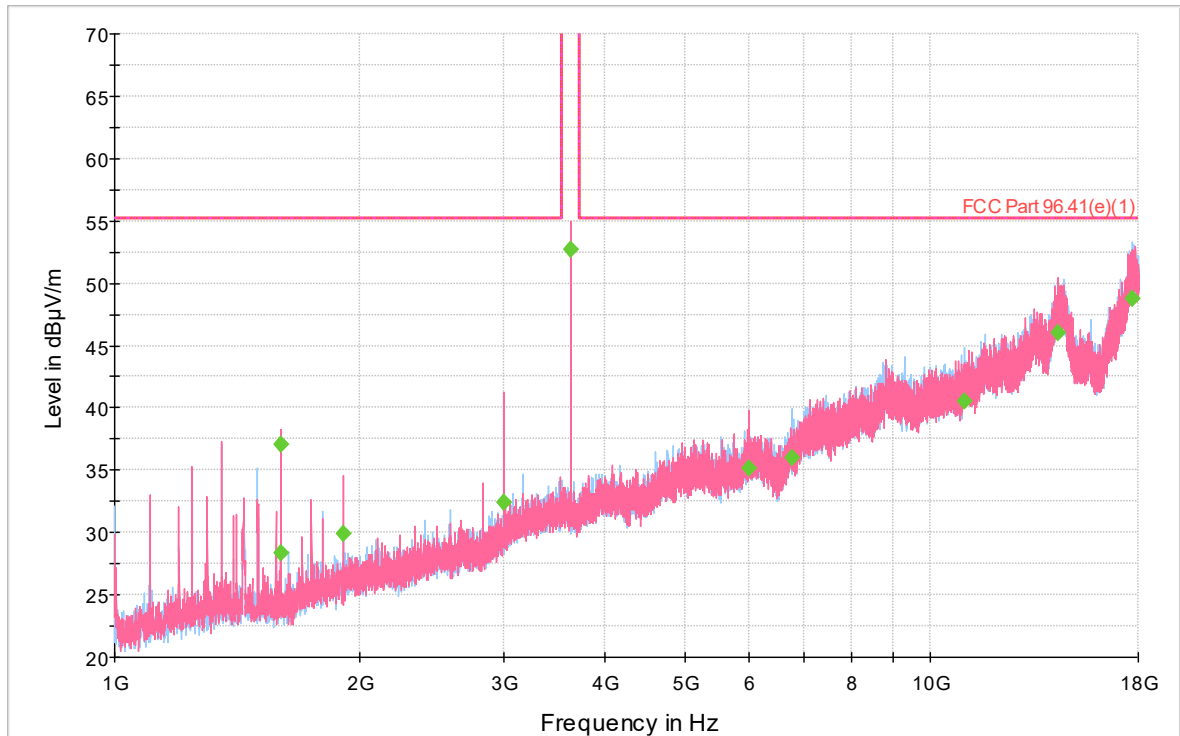
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	PoI	Azimuth (deg)	Corr. (dB)
45.075000	37.07	55.23	18.16	1000.0	120.000	115.0	V	3.0	15
53.453333	37.84	55.23	17.39	1000.0	120.000	100.0	V	329.0	14
122.893667	34.98	55.23	20.25	1000.0	120.000	109.0	V	91.0	14
200.008667	39.55	55.23	15.68	1000.0	120.000	162.0	H	273.0	17
481.449667	42.25	55.23	12.98	1000.0	120.000	174.0	V	210.0	25
580.992333	41.31	55.23	13.92	1000.0	120.000	116.0	V	324.0	26
747.064000	41.85	55.23	13.38	1000.0	120.000	269.0	V	335.0	28
941.467333	31.09	55.23	24.14	1000.0	120.000	389.0	H	152.0	31



FCC ID: NU: YETI44-1M34CNU and CU: YETI41-RECU
 IC: N/A

2.6.12 Test Results Above 1GHz Uplink

Full Spectrum



— Preview Result 1H-PK+ [Preview Result 1H.Result:2]
 — Preview Result 1V-PK+ [Preview Result 1V.Result:2]
— FCC Part 96.41(e)(1) [..\EMI Radiated\]
 — FCC Part 96.41(e)(1) [..\EMI Radiated\
◆ Final_Result AVG [Final_Result.Result:5]

Average Data

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1599.733333	28.39	55.23	26.84	1000.0	1000.000	147.0	V	334.0	-7
1600.133333	37.11	55.23	18.12	1000.0	1000.000	141.0	V	354.0	-7
1908.733333	29.96	55.23	25.27	1000.0	1000.000	147.0	V	280.0	-4
2999.966667	32.37	55.23	22.86	1000.0	1000.000	365.0	V	56.0	-1
3625.333333	52.68	108.2	55.54	1000.0	1000.000	205.0	V	20.0	2
6006.866667	35.18	55.20	20.03	1000.0	1000.000	175.0	V	20.0	4
6771.500000	35.97	55.20	19.23	1000.0	1000.000	142.0	H	162.0	5
11005.433333	40.49	55.21	14.72	1000.0	1000.000	131.0	H	5.0	14
14359.733333	45.99	55.21	9.22	1000.0	1000.000	325.0	V	18.0	16
17671.633333	48.80	55.21	6.41	1000.0	1000.000	306.0	H	155.0	22



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IC: N/A

3 Test Equipment Used

3.1 List of absolute measuring and other principal items of test equipment

Asset ID Number	Test Equipment	Type	Serial Number	Manufacturer	Cal Due Date
Antenna Conducted Port Setup					
0618	ESG Vector Signal Generator	E4438C	MY49070886	Agilent	06/22/24
7611	Signal & Spectrum Analyzer	FSW26	102017	Rohde & Schwarz	02/09/23
6891	P-Series Power Meter	N1911A	MY45100905	Agilent	04/07/23
6892	50MHz Wideband Power Sensor	N1921A	SG45240281	Agilent	04/08/23
Radiated Emissions Setup					
1002	Bilog Antenna	3142C	00058717	ETS-Lindgren	10/21/23
1051	Double-ridged waveguide horn antenna	3115	9408-4329	EMCO	09/12/24
7611	Signal & Spectrum Analyzer	FSW26	102017	Rohde & Schwarz	02/09/23
1049	EMI Test Receiver	ESU40	100133	Rohde & Schwarz	09/21/23
46797	Preamplifier	PS-122	181925	Com Power	12/03/24
Miscellaneous					
43003	True RMS Multimeter	85 III	69880143	Fluke	11/19/22
7619	Barometer/Temperature/Humidity Transmitter	iBTHX-W	15250268	Omega	05/27/23
-	Test Software	EMC32	10.60.20	Rohde & Schwarz	-



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 IC: N/A

4 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

4.1 Conducted Antenna Port Measurement

	Input Quantity (Contribution) X_i	Value	Prob. Dist.	Divisor	$u_i(x)$	$u_i(x)^2$
1	Receiver reading	0.10 dB	Normal, k=1	1.000	0.10	0.01
2	Cable attenuation	1.00 dB	Normal, k=2	2.000	0.50	0.25
3	Receiver sinewave accuracy	0.08 dB	Normal, k=2	2.000	0.04	0.00
4	Receiver pulse amplitude	0.00 dB	Rectangular	1.732	0.00	0.00
5	Receiver pulse repetition rate	0.00 dB	Rectangular	1.732	0.00	0.00
6	Noise floor proximity	0.00 dB	Rectangular	1.732	0.00	0.00
7	Frequency interpolation	0.10 dB	Rectangular	1.732	0.06	0.00
8	Mismatch	0.07 dB	U-shaped	1.414	0.05	0.00
Combined standard uncertainty				Normal	0.52 dB	
Expanded uncertainty				Normal, k=2	1.03 dB	

4.2 Radiated Emissions Measurements - 30 MHz – 1000 MHz at a distance of 3 m

	Input Quantity (Contribution) X_i	Value	Prob. Dist.	Divisor	$u_i(x)$	$u_i(x)^2$
1	Receiver reading	0.10 dB	Normal, k=1	1.000	0.10	0.01
2	Attenuation: antenna-receiver	0.20 dB	Normal, k=2	2.000	0.10	0.01
3	Antenna factor AF	0.58 dB	Normal, k=2	2.000	0.29	0.08
4	Receiver sinewave accuracy	0.15 dB	Normal, k=2	2.000	0.08	0.01
5	Receiver pulse amplitude	1.50 dB	Rectangular	1.732	0.87	0.75
6	Receiver pulse repetition rate	1.50 dB	Rectangular	1.732	0.87	0.75
7	Noise floor proximity	0.50 dB	Rectangular	1.732	0.29	0.08
8	Mismatch: antenna-receiver	0.95 dB	U-shaped	1.414	0.67	0.45
9	AF frequency interpolation	0.30 dB	Rectangular	1.732	0.17	0.03
10	AF height deviations	0.10 dB	Rectangular	1.732	0.06	0.00
11	Directivity difference at 3 m	3.12 dB	Rectangular	1.732	1.80	3.24
12	Phase center location at 3 m	1.00 dB	Rectangular	1.732	0.58	0.33
13	Cross-polarization	0.90 dB	Rectangular	1.732	0.52	0.27



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 IC: N/A

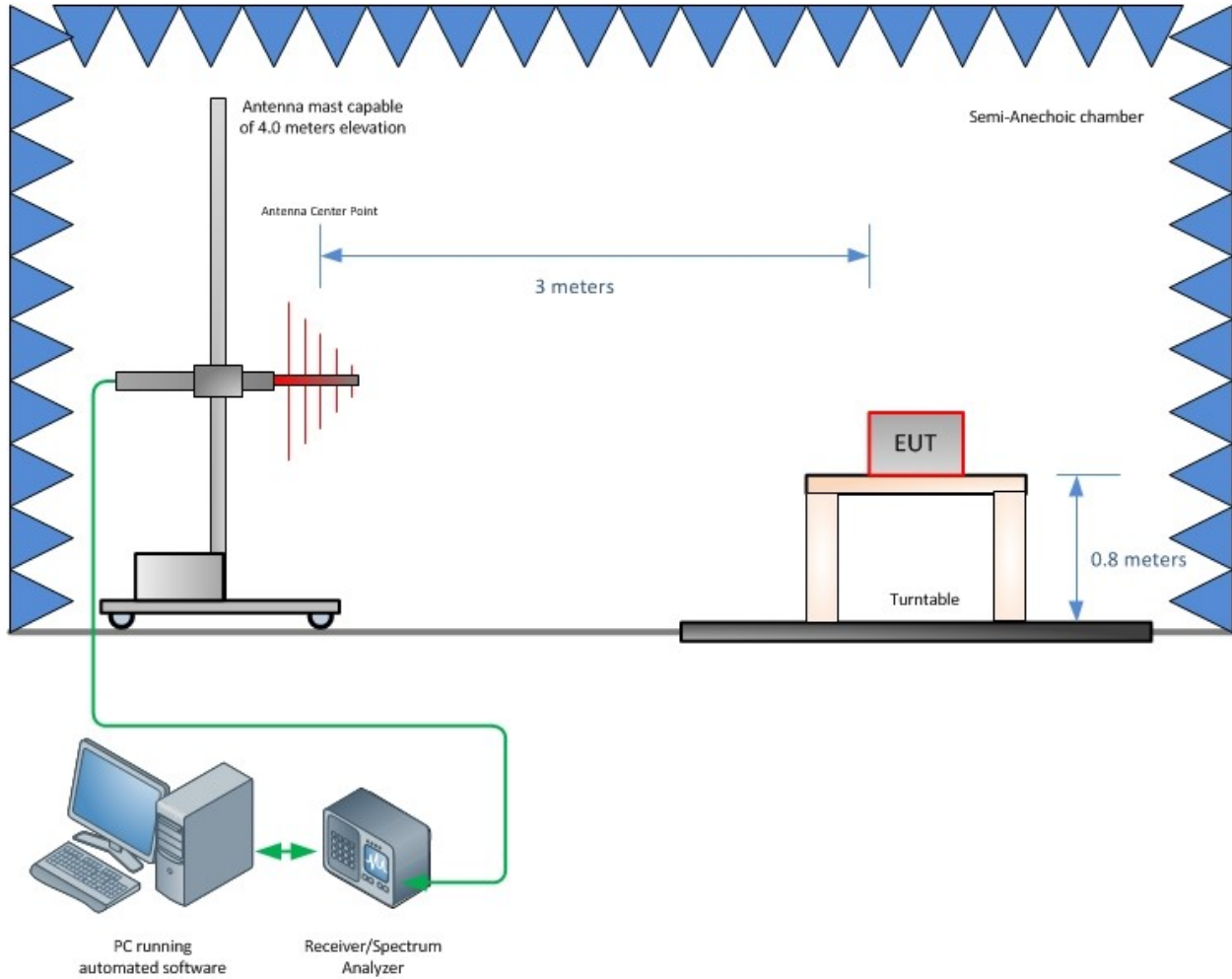
14	Balance	0.00	dB	Rectangular	1.732	0.00	0.00
15	Site imperfections	3.99	dB	Triangular	2.449	1.63	2.65
16	Separation distance at 3 m	0.30	dB	Rectangular	1.732	0.17	0.03
17	Effect of setup table material	0.57	dB	Rectangular	1.732	0.33	0.11
18	Table height at 3 m	0.10	dB	Normal, k=2	2.000	0.05	0.00
19	Near-field effects	0.00	dB	Triangular	2.449	0.00	0.00
20	Effect of ambient noise on OATS	0.00	dB				0.00
Combined standard uncertainty					Normal	2.97 dB	
Expanded uncertainty					Normal, k=2	5.94 dB	

4.3 Radiated Emissions Measurements – 1GHz – 18 GHz at a distance of 3 m

	Input Quantity (Contribution) X_i	Value	Prob. Dist.	Divisor	$u_i(x)$	$u_i(x)^2$	
1	Receiver reading	0.10	dB	Normal, k=1	1.000	0.10	0.01
2	Attenuation: antenna-receiver	0.20	dB	Normal, k=2	2.000	0.10	0.01
3	Antenna factor AF	0.75	dB	Normal, k=2	2.000	0.38	0.14
4	Receiver sinewave accuracy	0.45	dB	Normal, k=2	2.000	0.23	0.05
5	Receiver pulse amplitude	1.50	dB	Rectangular	1.732	0.87	0.75
6	Receiver pulse repetition rate	1.50	dB	Rectangular	1.732	0.87	0.75
7	Noise floor proximity	0.50	dB	Rectangular	1.732	0.29	0.08
8	Mismatch: antenna-receiver	0.95	dB	U-shaped	1.414	0.67	0.45
9	AF frequency interpolation	0.30	dB	Rectangular	1.732	0.17	0.03
10	AF height deviations	0.10	dB	Rectangular	1.732	0.06	0.00
11	Directivity difference at 3 m	3.12	dB	Rectangular	1.732	1.80	3.24
12	Phase center location at 3 m	1.00	dB	Rectangular	1.732	0.58	0.33
13	Cross-polarisation	0.90	dB	Rectangular	1.732	0.52	0.27
14	Balance	0.00	dB	Rectangular	1.732	0.00	0.00
15	Site imperfections	3.25	dB	Triangular	2.449	1.33	1.76
16	Separation distance at 3 m	0.30	dB	Rectangular	1.732	0.17	0.03
17	Effect of setup table material	0.77	dB	Rectangular	1.732	0.44	0.20
18	Table height at 3 m	0.10	dB	Normal, k=2	2.000	0.05	0.00
19	Near-field effects	0.00	dB	Triangular	2.449	0.00	0.00
20	Effect of ambient noise on OATS	0.00	dB				0.00
Combined standard uncertainty					Normal	2.85 dB	
Expanded uncertainty					Normal, k=2	5.70 dB	

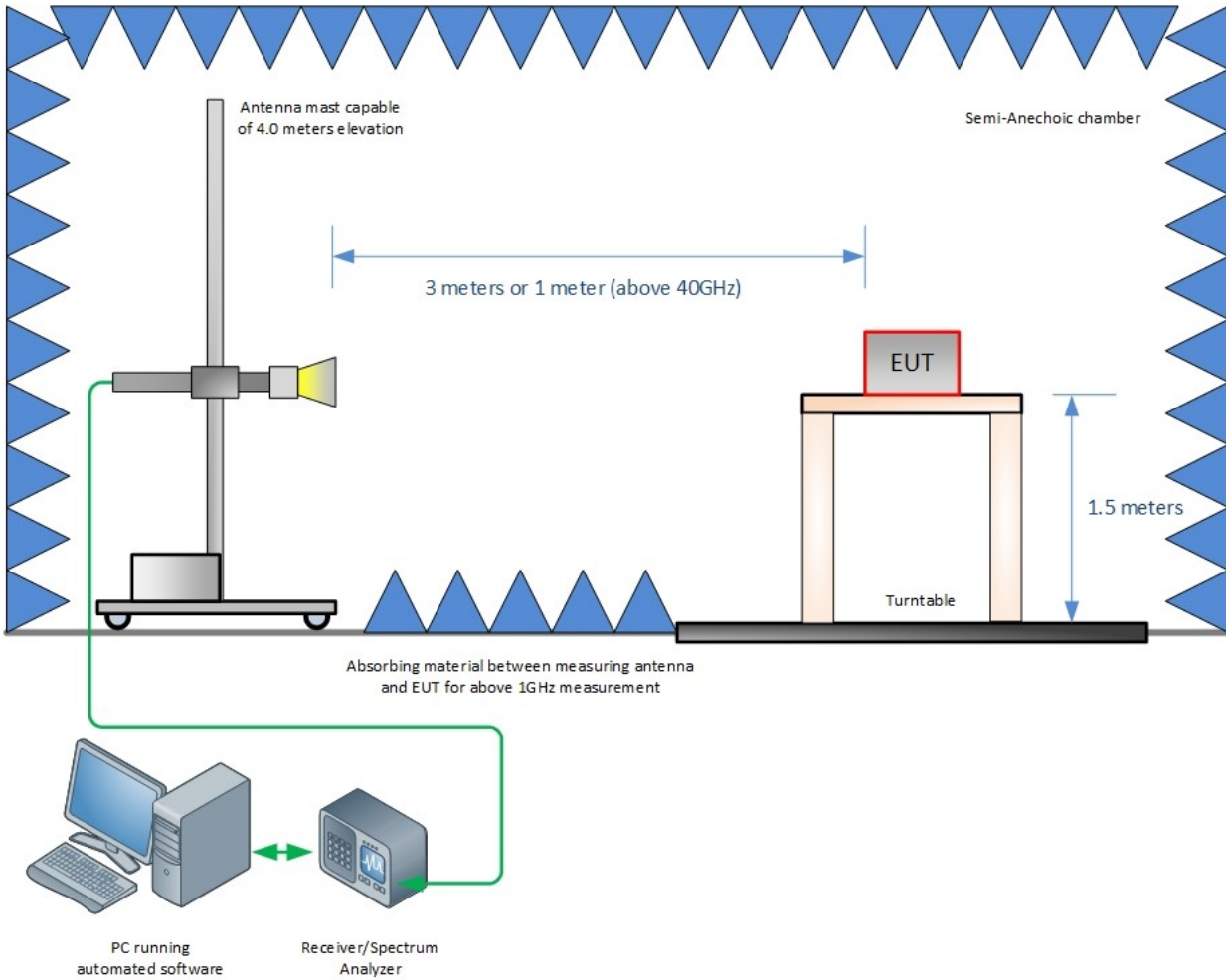
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IC: N/A

5 Test Set-up Diagrams



Radiated Emission Test Setup (30MHz to 1GHz)

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IC: N/A



Radiated Emission Test Setup (Above 1GHz)



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IC: N/A

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