



Test Report for Hayward Industries, Inc.
Report No. EX0020-2 Issue 3

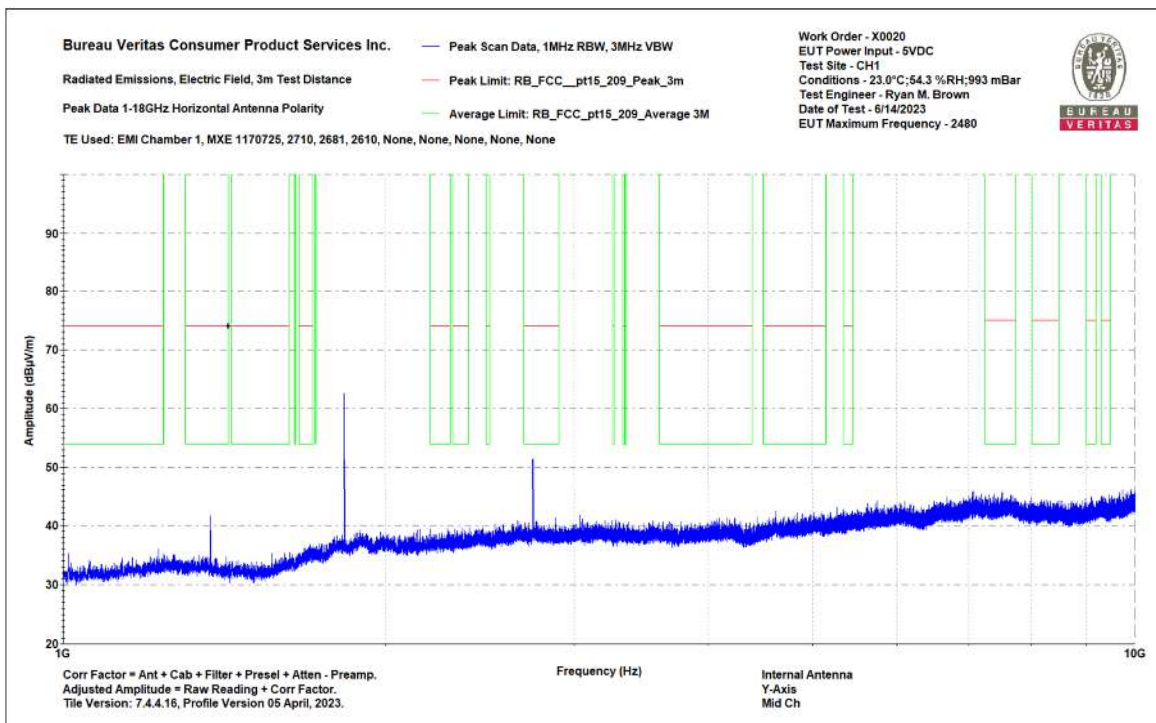


Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
1-10GHz Horizontal Data
Notes:
Internal Antenna
Y-Axis
Mid Ch

Work Order - X0020
EUT Power Input - 5VDC
Test Site - CH1
Conditions - 23.0°C; 54.3 %RH; 993 mBar
Test Engineer - Ryan M. Brown
Date of Test - 6/14/2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2745.2	43.3	37.45	8.2	51.5	45.65	74	-22.5	PASS	-22.5	54	-8.35	PASS	-8.35	176	314
4234.9	32.2	29.75	9.1	41.3	38.85	74	-32.7	PASS	--	54	-15.15	PASS	--	181	128
5458.9	29.8	29.39	11.5	41.3	40.89	74	-32.7	PASS	--	54	-13.11	PASS	--	125	95
9112	31.6	26.9	13.2	44.8	40.1	74	-29.2	PASS	--	54	-13.9	PASS	--	139	53

1-10GHz Horizontal Data Table



1-10GHz Horizontal Plot



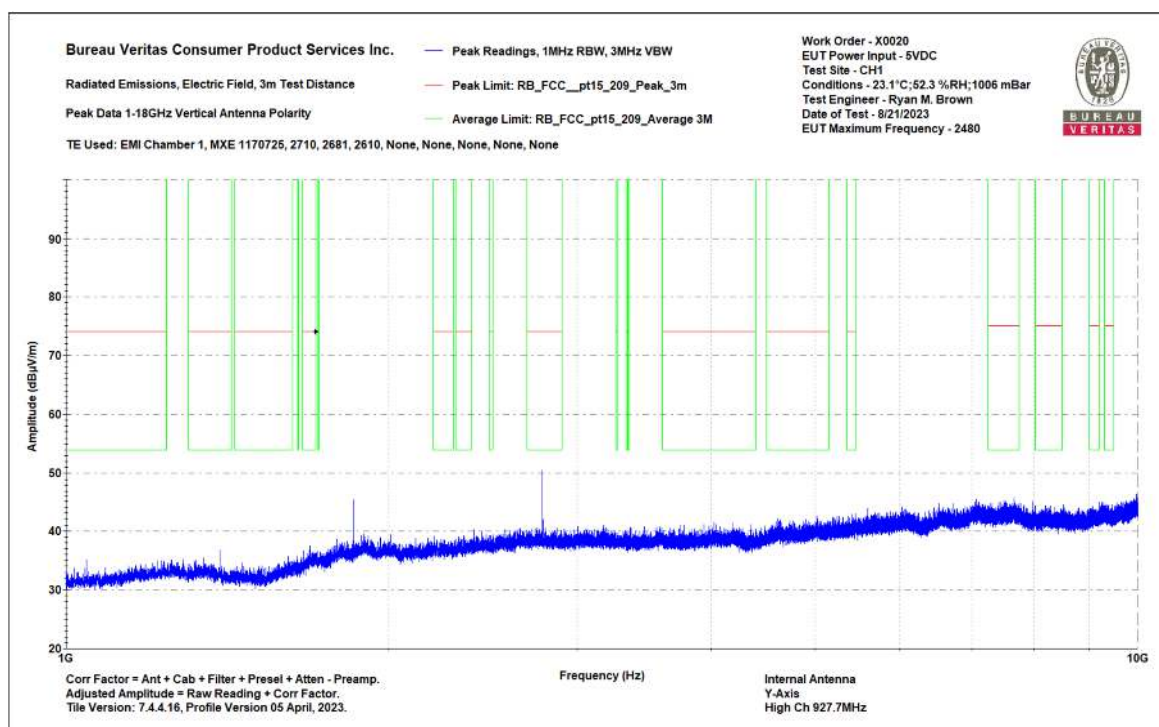
Test Report for Hayward Industries, Inc.
Report No. EX0020-2 Issue 3



Results for High Channel

Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance 1-10GHz Vertical Data Notes: Internal Antenna Y-Axis High Ch 927.7MHz								Work Order - X0020 EUT Power Input - 5VDC Test Site - CH1 Conditions - 23.1°C; 52.3 %RH; 1006 mBar Test Engineer - Ryan M. Brown Date of Test - 8/21/2023							
Frequency (MHz)	Raw Peak (dBμV)	Raw RMS Average (dBμV)	Correction Factor (dB/m)	Adjusted Peak (dBμV/m)	Adjusted RMS Average (dBμV/m)	Peak Limit FCC 15.209 (dBμV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBμV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2783.1	42.4	39.81	8.1	50.5	47.91	74	-23.5	PASS	-23.5	54	-6.09	PASS	-6.09	200	289
3337.9	30.2	29.7	8	38.2	37.7	74	-35.8	PASS	--	54	-16.3	PASS	--	158	102
4022.6	32.4	28	8	40.4	36	74	-33.6	PASS	--	54	-18	PASS	--	100	95

1-10GHz Vertical Data Table



1-10GHz Vertical Plot



Test Report for Hayward Industries, Inc.
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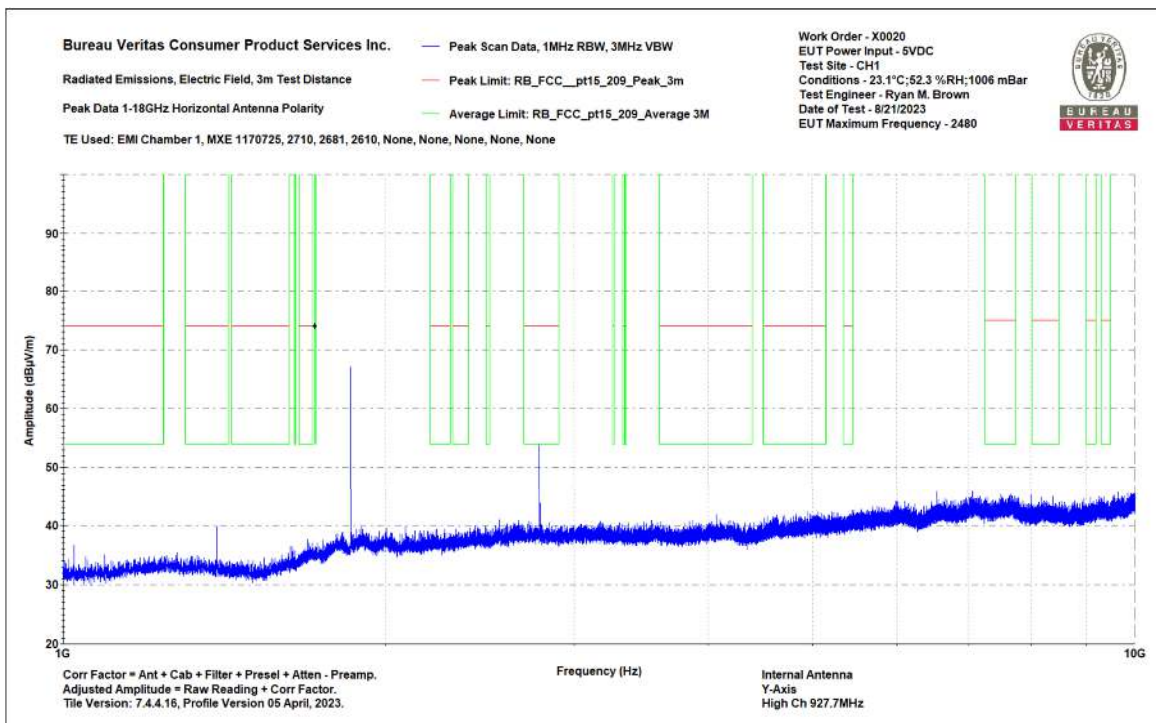


Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
1-10GHz Horizontal Data
Notes:
Internal Antenna
Y-Axis
High Ch 927.7MHz

Work Order - X0020
EUT Power Input - 5VDC
Test Site - CH1
Conditions - 23.1°C; 52.3 %RH; 1006 mBar
Test Engineer - Ryan M. Brown
Date of Test - 8/21/2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2783.2	45.8	42.26	8.1	53.9	50.36	74	-20.1	PASS	-20.1	54	-3.64	PASS	-3.64	200	12
3335.8	29.5	29.5	8	37.5	37.5	74	-36.5	PASS	--	54	-16.5	PASS	--	119	214
4070.8	32.8	32.8	9	41.8	41.8	74	-32.2	PASS	--	54	-12.2	PASS	--	175	1
9091.9	31.6	31.6	13.2	44.8	44.8	74	-29.2	PASS	--	54	-9.2	PASS	--	100	171

1-10GHz Horizontal Data Table



1-10GHz Horizontal Plot



Test Report for Hayward Industries, Inc.
Report No. EX0020-2 Issue 3

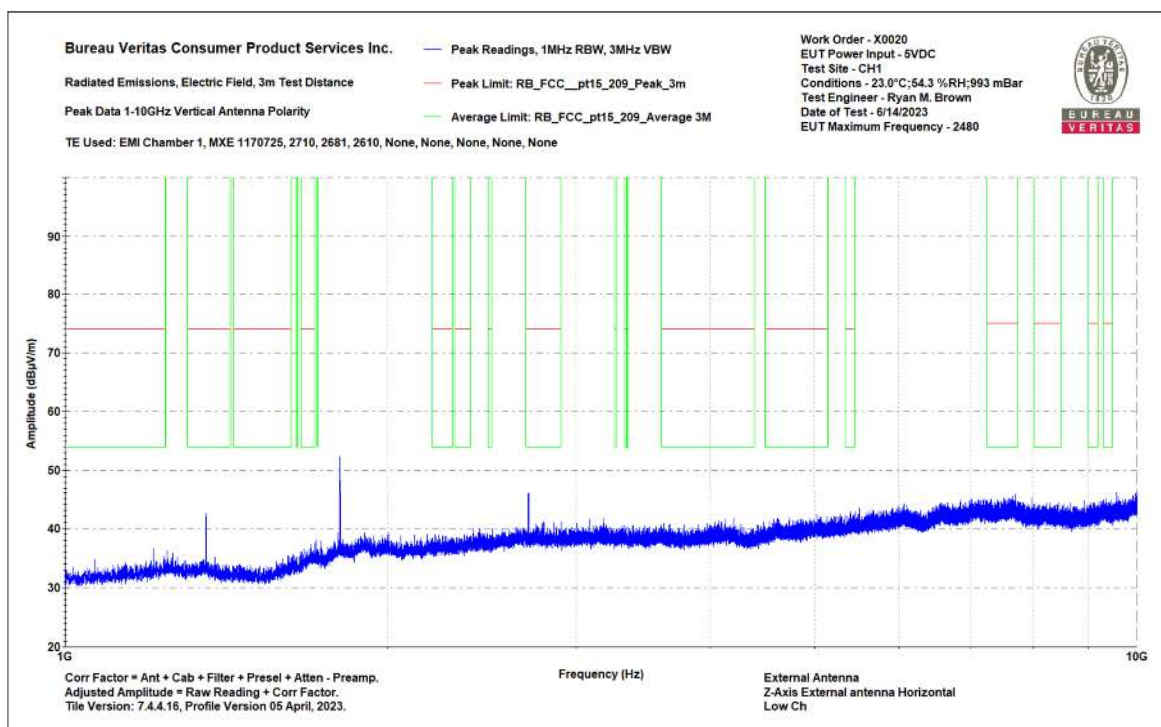


External Antenna

Results for Low Channel

Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance 1-10GHz Vertical Data Notes: External Antenna Z-Axis External antenna Horizontal Low Ch						Work Order - X0020 EUT Power Input - 5VDC Test Site - CH1 Conditions - 23.0°C;54.3 %RH;993 mBar Test Engineer - Ryan M. Brown Date of Test - 6/14/2023									
Frequency (MHz)	Raw Peak (dBμV)	Raw RMS Average (dBμV)	Correction Factor (dB/m)	Adjusted Peak (dBμV/m)	Adjusted RMS Average (dBμV/m)	Peak Limit FCC 15.209 (dBμV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBμV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimut (degrees)
2706.6	38.2	38.2	7.8	46	46	74	-28	PASS	-28	54	-8	PASS	-8	100	6
3336.4	29.8	29.8	8	37.8	37.8	74	-36.2	PASS	--	54	-16.2	PASS	--	184	1
4203.7	32.2	32.2	9.4	41.6	41.6	74	-32.4	PASS	--	54	-12.4	PASS	--	200	307

1-10GHz Vertical Data Table



1-10GHz Vertical Plot



Test Report for Hayward Industries, Inc.
Report No. EX0020-2 Issue 3

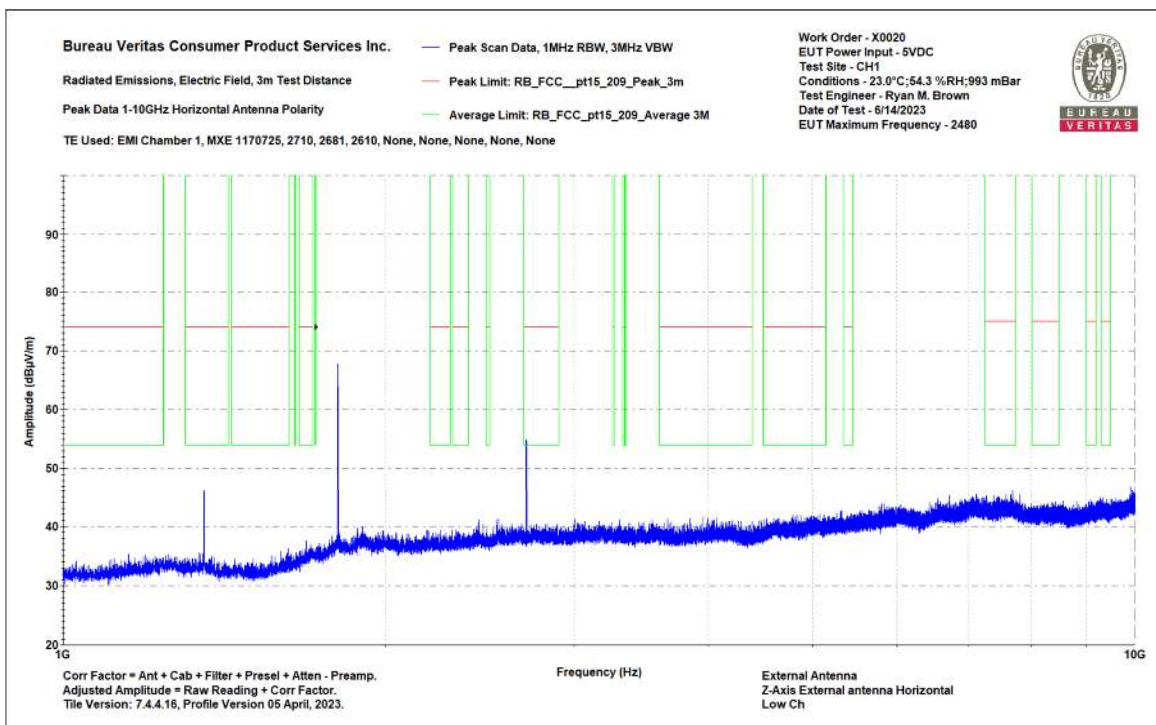


Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
1-10GHz Horizontal Data
Notes:
External Antenna
Z-Axis External antenna Horizontal
Low Ch

Work Order - X0020
EUT Power Input - 5VDC
Test Site - CH1
Conditions - 23.0°C;54.3 %RH;993 mBar
Test Engineer - Ryan M. Brown
Date of Test - 6/14/2023

Frequency (MHz)	Raw Peak (dBuV)	Raw RMS Average (dBuV)	Correction Factor (dB/m)	Adjusted Peak (dBuV/m)	Adjusted RMS Average (dBuV/m)	Peak Limit FCC 15.209 (dBuV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBuV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2706.7	47	32.02	7.8	54.8	39.82	74	-19.2	PASS	-19.2	54	-14.18	PASS	--	200	84
3956.5	32.6	32.6	9	41.6	41.6	74	-32.4	PASS	--	54	-12.4	PASS	-12.4	110	85
9100	31.3	28.2	13.2	44.5	41.4	74	-29.5	PASS	--	54	-12.6	PASS	--	106	41

1-10GHz Horizontal Data Table



1-10GHz Horizontal Plot



Test Report for Hayward Industries, Inc. Report No. EX0020-2 Issue 3



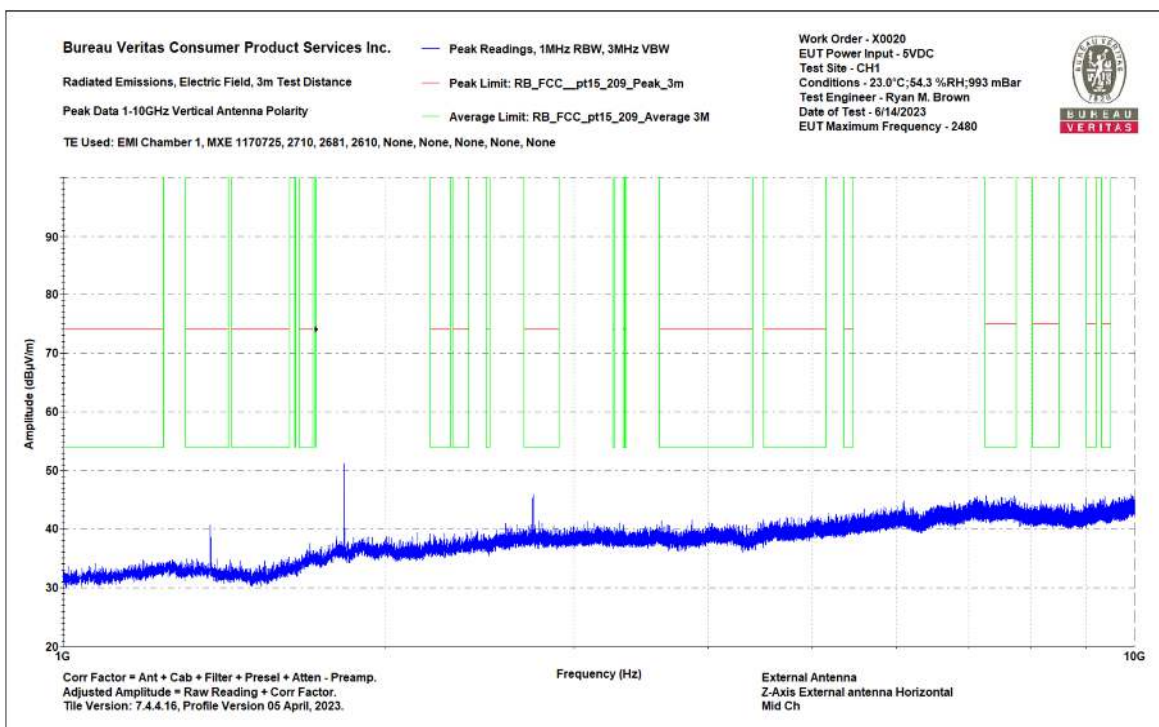
Mid Channel

Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
1-10GHz Vertical Data
Notes:
External Antenna
Z-Axis External antenna Horizontal
Mid Ch

Work Order - X0020
EUT Power Input - 5VDC
Test Site - CH1
Conditions - 23.0°C; 54.3 %RH; 993 mBar
Test Engineer - Ryan M. Brown
Date of Test - 6/14/2023

Frequency (MHz)	Raw Peak (dBμV)	Raw RMS Average (dBμV)	Correction Factor (dB/m)	Adjusted Peak (dBμV/m)	Adjusted RMS Average (dBμV/m)	Peak Limit FCC 15.209 (dBμV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBμV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2744.9	37.5	37.5	8.2	45.7	45.7	74	-28.3	PASS	-28.3	54	-8.3	PASS	-8.3	100	25
3338.8	29.3	29.3	8	37.3	37.3	74	-36.7	PASS	--	54	-16.7	PASS	--	155	123
3862.6	32.6	32.6	8.8	41.4	41.4	74	-32.6	PASS	--	54	-12.6	PASS	--	200	282
5457	29.4	29.4	11.5	40.9	40.9	74	-33.1	PASS	--	54	-13.1	PASS	--	134	134
9003.1	32	32	13.1	45.1	45.1	74	-28.9	PASS	--	54	-8.9	PASS	--	200	318

1-10GHz Vertical Data Table



1-10GHz Vertical Plot



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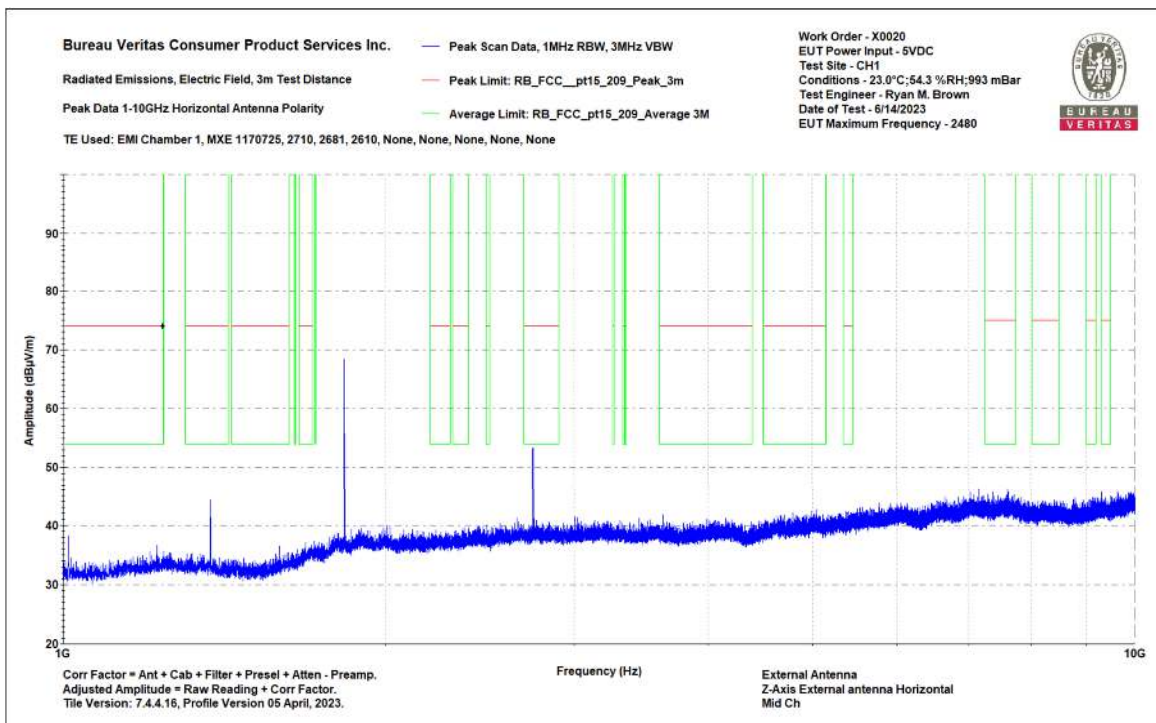


Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
1-10GHz Horizontal Data
Notes:
External Antenna
Z-Axis External antenna Horizontal
Mid Ch

Work Order - X0020
EUT Power Input - 5VDC
Test Site - CH1
Conditions - 23.0°C; 54.3 %RH; 993 mBar
Test Engineer - Ryan M. Brown
Date of Test - 6/14/2023

Frequency (MHz)	Raw Peak (dBµV)	Raw RMS Average (dBµV)	Correction Factor (dB/m)	Adjusted Peak (dBµV/m)	Adjusted RMS Average (dBµV/m)	Peak Limit FCC 15.209 (dBµV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBµV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2744.9	45.1	37.15	8.2	53.3	45.35	74	-20.7	PASS	-20.7	54	-8.65	PASS	-8.65	186	95
3338.9	31.5	31.5	8	39.5	39.5	74	-34.5	PASS	--	54	-14.5	PASS	--	161	33
3628.5	33.3	33.3	8.5	41.8	41.8	74	-32.2	PASS	--	54	-12.2	PASS	--	148	56
9133.6	31.4	31.4	13.2	44.6	44.6	74	-29.4	PASS	--	54	-9.4	PASS	--	176	194

1-10GHz Horizontal Data Table



1-10GHz Horizontal Plot



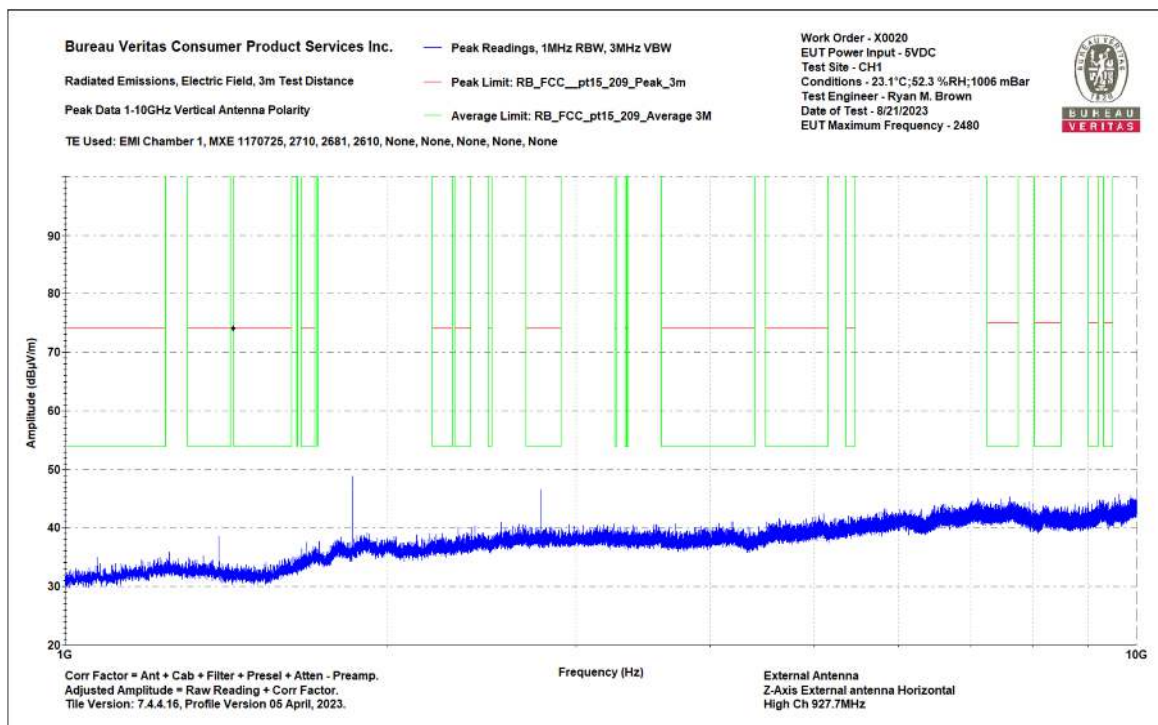
Test Report for Hayward Industries, Inc.
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High Channel

Bureau Veritas Consumer Product Services Inc. Radiated Emissions Electric Field 3m Distance 1-10GHz Vertical Data Notes: External Antenna Z-Axis External antenna Horizontal High Ch								Work Order - X0020 EUT Power Input - 5VDC Test Site - CH1 Conditions - 23.1°C;54.3 %RH;1006 mBar Test Engineer - Ryan M. Brown Date of Test - 8/21/2023							
Frequency (MHz)	Raw Peak (dBμV)	Raw RMS Average (dBμV)	Correction Factor (dB/m)	Adjusted Peak (dBμV/m)	Adjusted RMS Average (dBμV/m)	Peak Limit FCC 15.209 (dBμV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBμV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2783.2	38.6	38.6	8.1	46.7	46.7	74	-27.3	PASS	-27.3	54	-7.3	PASS	-7.3	100	79
4184.6	31.6	27.3	9.4	41	36.7	74	-33	PASS	--	54	-17.3	PASS	--	200	335
9196.6	31.1	31.1	13.4	44.5	44.5	74	-29.5	PASS	--	54	-9.5	PASS	--	200	302

1-10GHz Vertical Data Table



1-10GHz Vertical Plot



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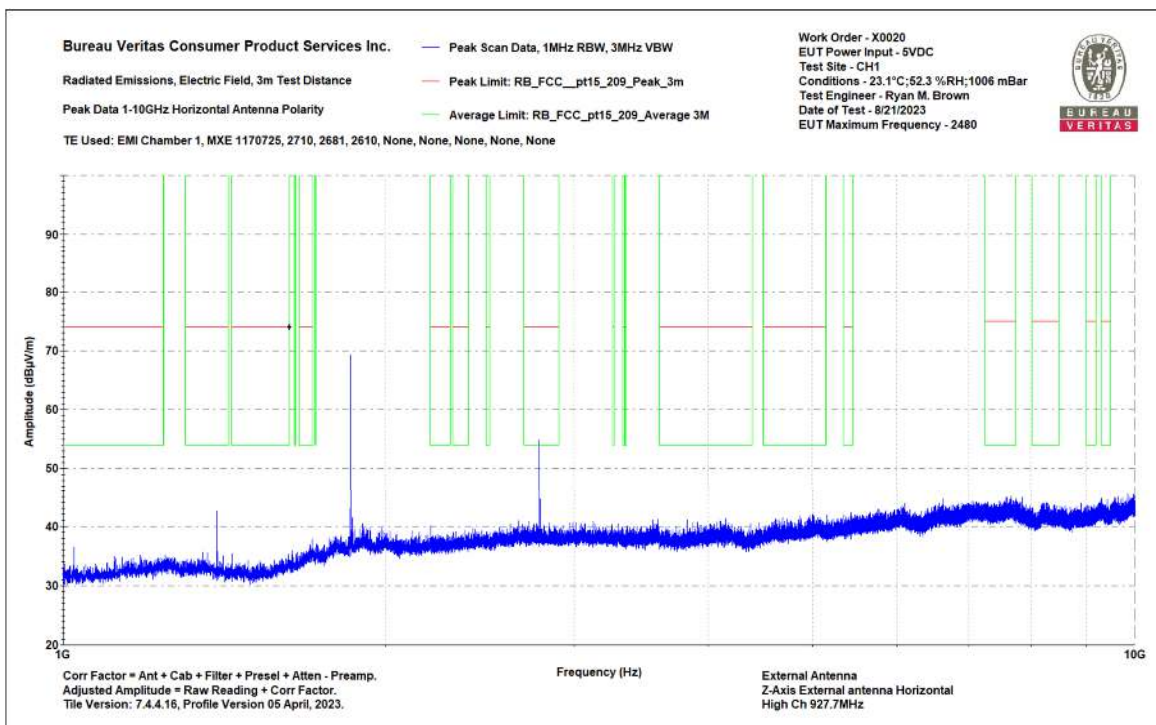


Bureau Veritas Consumer Product Services Inc.
Radiated Emissions Electric Field 3m Distance
1-10GHz Horizontal Data
Notes:
External Antenna
Z-Axis External antenna Horizontal
High Ch

Work Order - X0020
EUT Power Input - 5VDC
Test Site - CH1
Conditions - 23.1°C; 52.3 %RH; 1006 mBar
Test Engineer - Ryan M. Brown
Date of Test - 8/21/2023

Frequency (MHz)	Raw Peak (dBμV)	Raw RMS Average (dBμV)	Correction Factor (dB/m)	Adjusted Peak (dBμV/m)	Adjusted RMS Average (dBμV/m)	Peak Limit FCC 15.209 (dBμV/m)	Peak Margin (dB)	Peak Result (Pass/Fail)	Peak Worst Margin (dB)	Average Limit FCC 15.209 (dBμV/m)	Average Margin (dB)	Average Result (Pass/Fail)	Average Worst Margin (dB)	Antenna Height (cm)	EUT Azimuth (degrees)
2783.1	46.7	40.01	8.1	54.8	48.11	74	-19.2	PASS	-19.2	54	-5.89	PASS	-5.89	151	321
4153.8	31.9	31.9	9.3	41.2	41.2	74	-32.8	PASS	--	54	-12.8	PASS	--	191	61
5457.8	29.1	29.1	11.5	40.6	40.6	74	-33.4	PASS	--	54	-13.4	PASS	--	125	199

1-10GHz Horizontal Data Table



1-10GHz Horizontal Plot

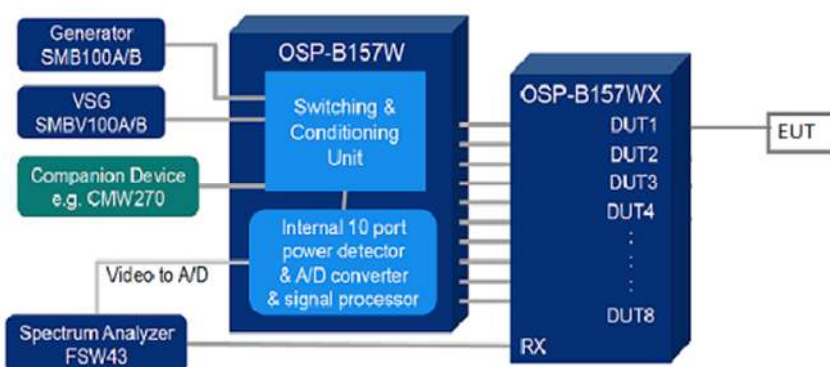
4.3 NUMBER OF HOPPING FREQUENCIES

4.3.1 LIMIT OF HOPPING FREQUENCY USED

For frequency hopping systems operating in the 902–928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies.

4.3.2 TEST SETUP

SCHEMATIC RF-CABLING



4.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Asset No.	Model No.	Serial No.	Last Cal.	Next Cal.
Cable	Carlisle	2595	UTIFLEX	N/A	1/17/2023	1/17/2024
Signal Analyzer	Rohde-Schwarz	2200	FSV 40	101551	10/09/2023	10/09/2024
OSP-B157W8	Rohde-Schwarz	2558	OSP_B157W8	100955	8/26/2021	2/26/2024
10dB Attenuator	Min Circuits	10dB-01-Brown	N/A	N/A	2/13/23	2/13/24

4.3.4 TEST PROCEDURES

In accordance with ANSI C63.10-2013 Section 7.8.3.

4.3.5 DEVIATION FROM TEST STANDARD

No deviation.

4.3.6 TEST RESULTS

There are 50 hopping frequencies in hopping mode.



Test Report for Hayward Industries, Inc.
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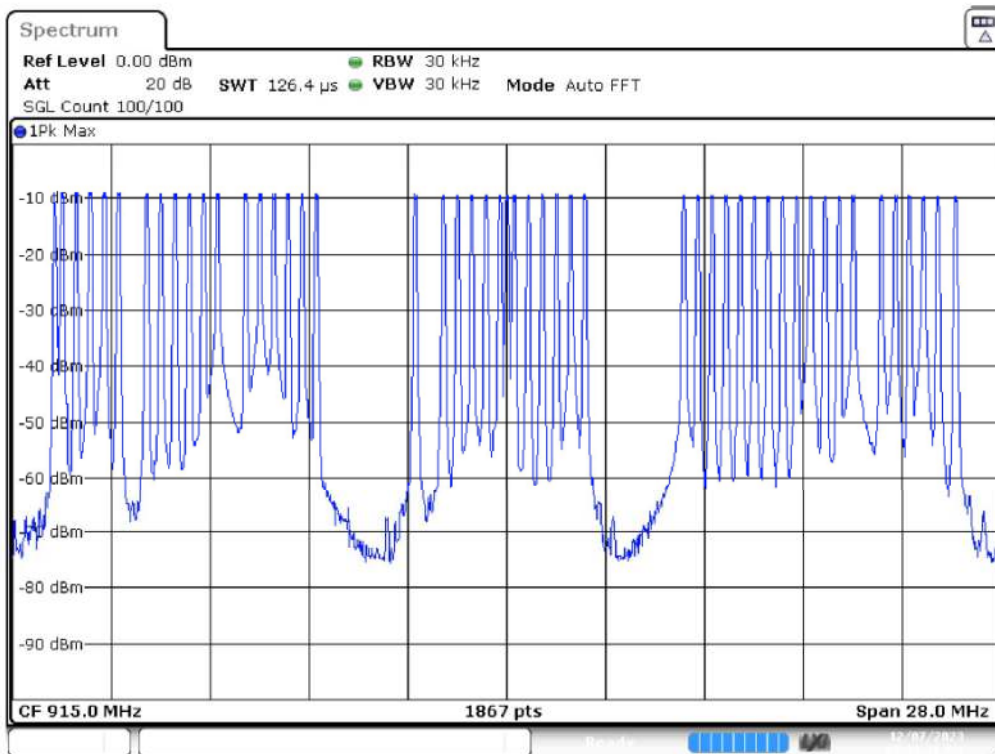
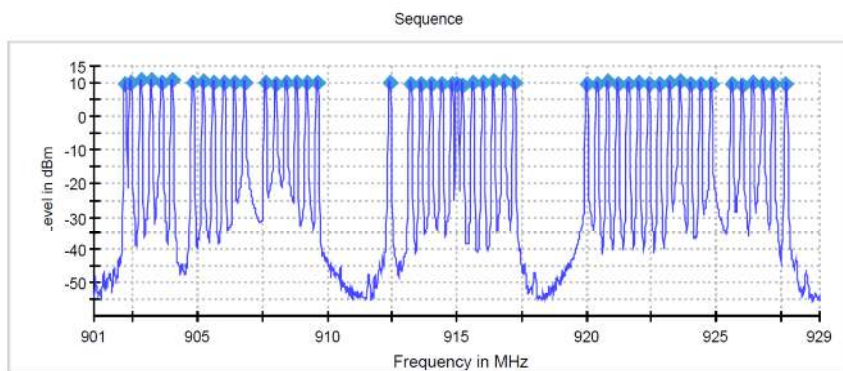


External Antenna

Test Date: 12/7/2023

Channels

Channels	Limit Min	Limit Max	Result
50	50	---	PASS



Date: 7 DEC 2023 09:32:22



Test Report for Hayward Industries, Inc.
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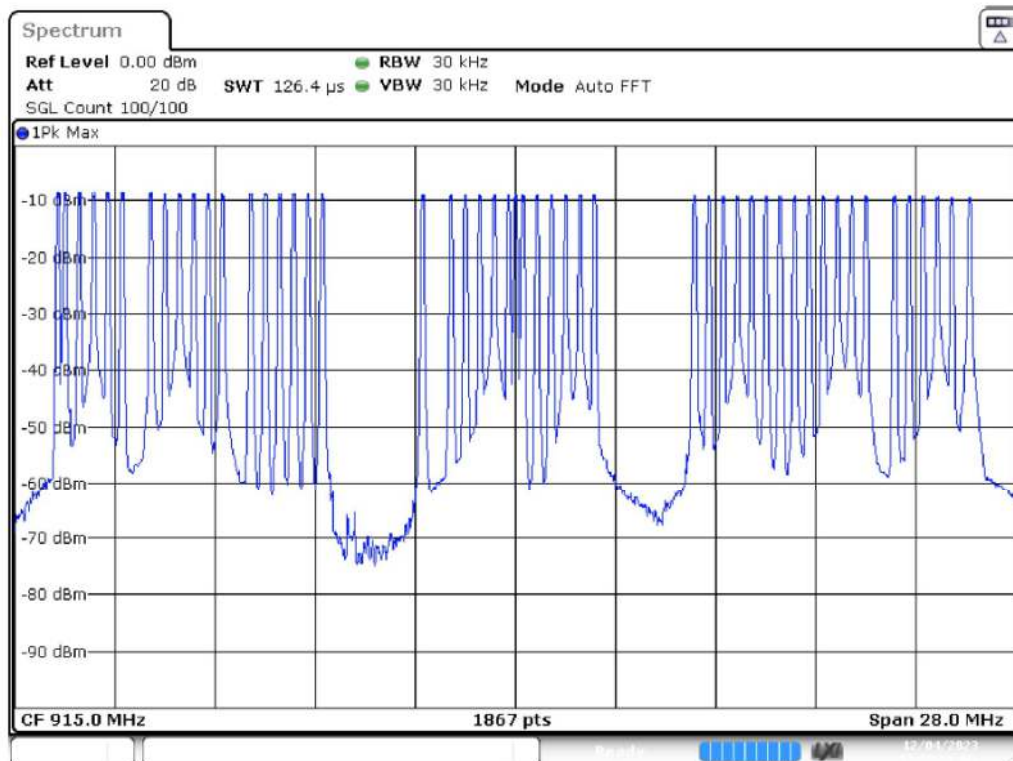
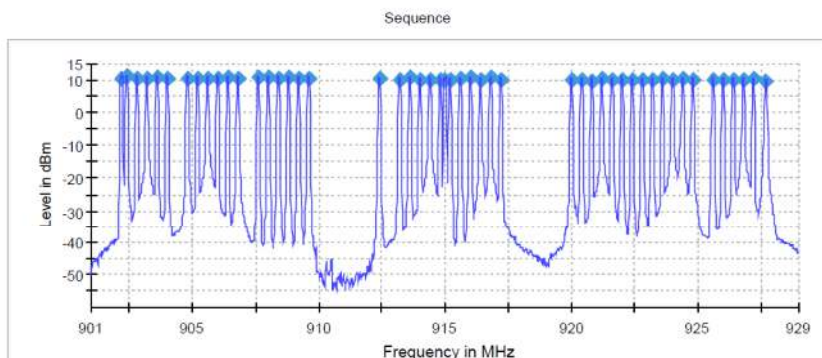


Internal Antenna

Test Date: 12/4/2023

Channels

Channels	Limit Min	Limit Max	Result
50	50	---	PASS



Date: 4 DEC 2023 11:59:39



4.4 DWELL TIME ON EACH CHANNEL

4.4.1 LIMIT OF DWELL TIME USED

For frequency hopping systems operating in the 902–928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period.

4.4.2 TEST SETUP

Refer to section 4.3.2 of this report.

4.4.3 TEST INSTRUMENTS

Refer to section 4.3.3 of this report.

4.4.4 TEST PROCEDURES

In accordance with ANSI C63.10-2013 Section 7.8.4.

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 TEST RESULTS

	Frequency (MHz)	Number of Pulses in 20sec	Pulse Width (ms)	Total Dwell Time (ms)	Max Limit (ms)	Verdict
External Antenna	902.2	2	5.4375	10.875	400.0	Pass
	915	4	19.3438	77.3752	400.0	Pass
	927.7	4	19.3438	77.3752	400.0	Pass
Internal Antenna	902.2	2	5.4375	10.875	400.0	Pass
	915	4	19.3438	77.3752	400.0	Pass
	927.7	4	19.3438	77.3752	400.0	Pass

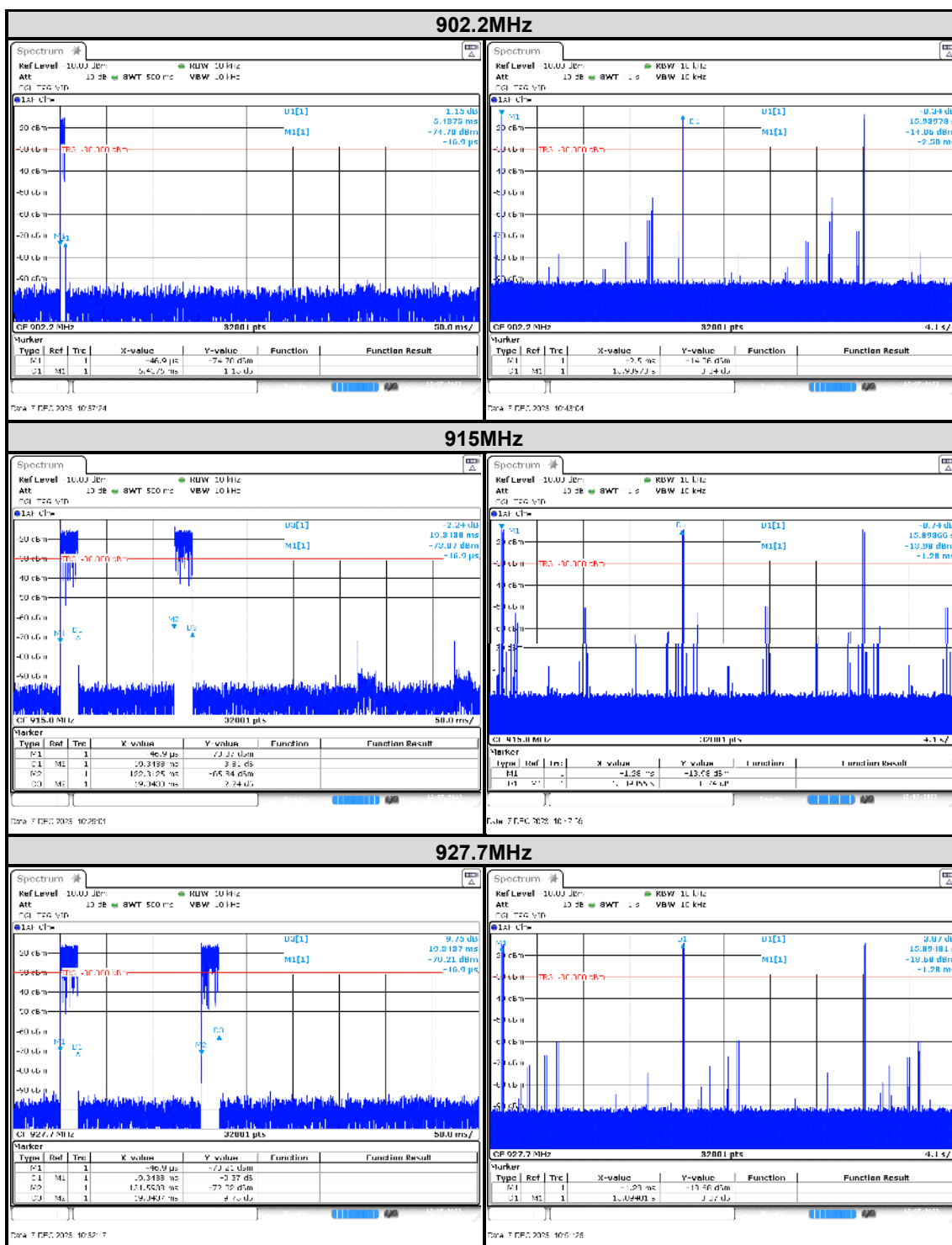


Test Report for Hayward Industries, Inc.
Report No. EX0020-2 Issue 3



External Antenna

Test Date: 12/7/2023



Bureau Veritas Consumer Product
Services Inc.

One Distribution Center Circle, #1
Littleton, MA

Tel.: (978) 486-8880
Fax: (978) 486-8828

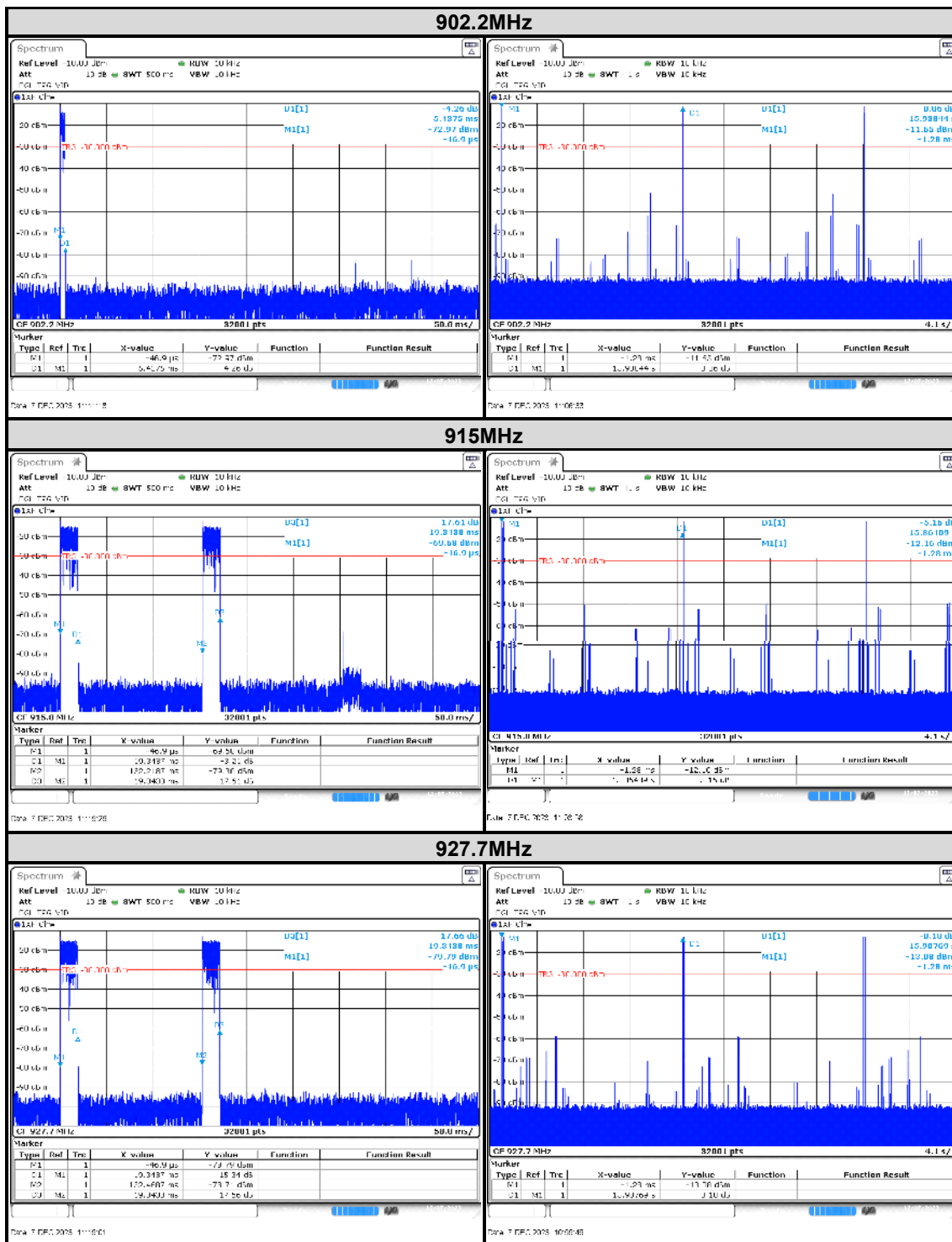


Test Report for Hayward Industries, Inc.
Report No. EX0020-2 Issue 3



Internal Antenna

Test Date: 12/7/2023



Bureau Veritas Consumer Product
Services Inc.

One Distribution Center Circle, #1
Littleton, MA

Tel.: (978) 486-8880
Fax: (978) 486-8828



4.5 CHANNEL BANDWIDTH (20DB) AND OCCUPIED BANDWIDTH (99%)

4.5.1 LIMITS OF CHANNEL BANDWIDTH

The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz. 99% Occupied Bandwidth is for reporting purposes.

4.5.2 TEST SETUP

Refer to section 4.3.2 of this report.

4.5.3 TEST INSTRUMENTS

Refer to section 4.3.3 of this report.

4.5.4 TEST PROCEDURE

20dB bandwidth: In accordance with ANSI C63.10-2013 Section 6.9.2.

99% OBW: In accordance with RSS-Gen Issue 5 Section 6.7.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 TEST RESULTS



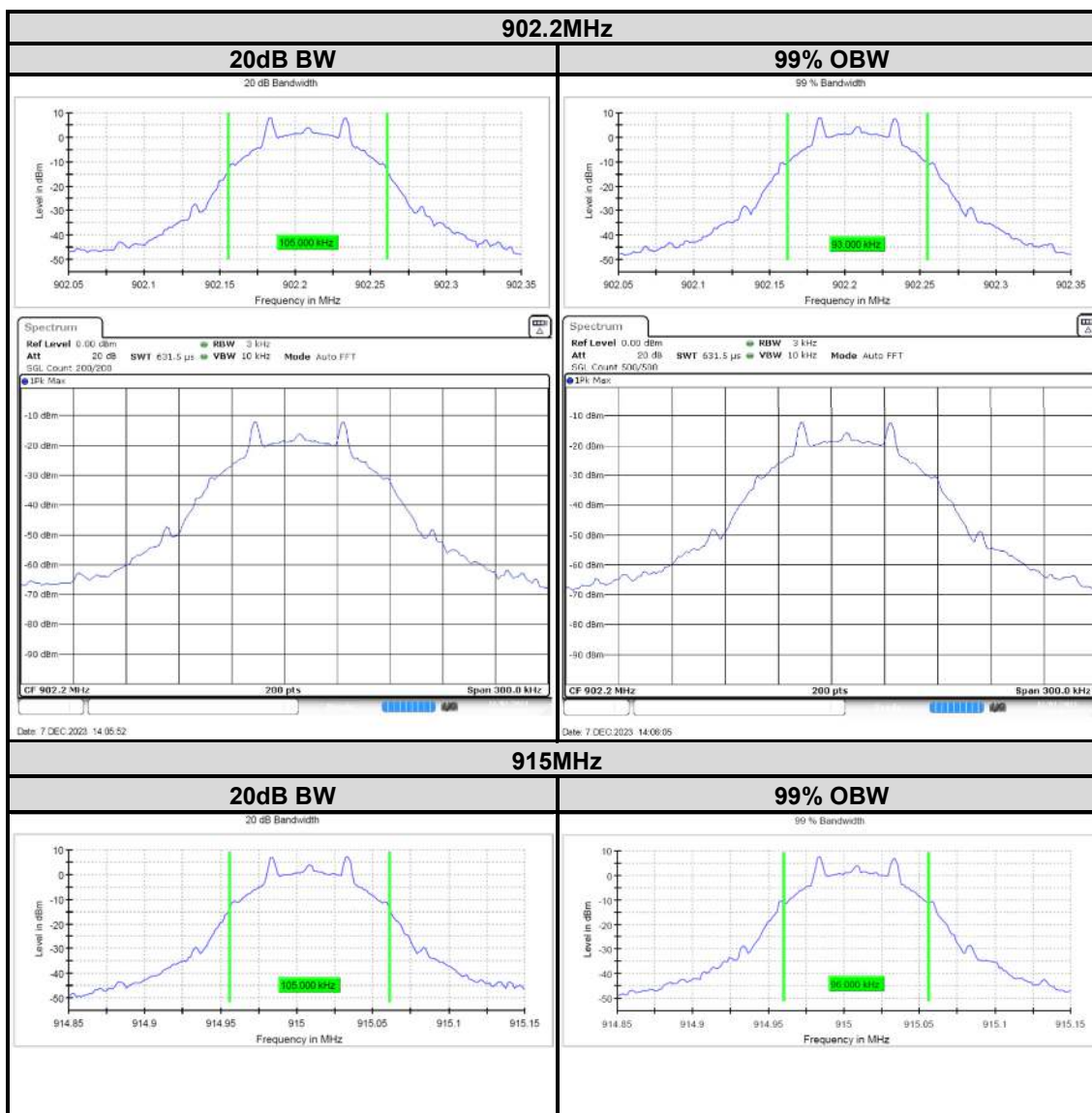
Test Report for Hayward Industries, Inc.
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External Antenna

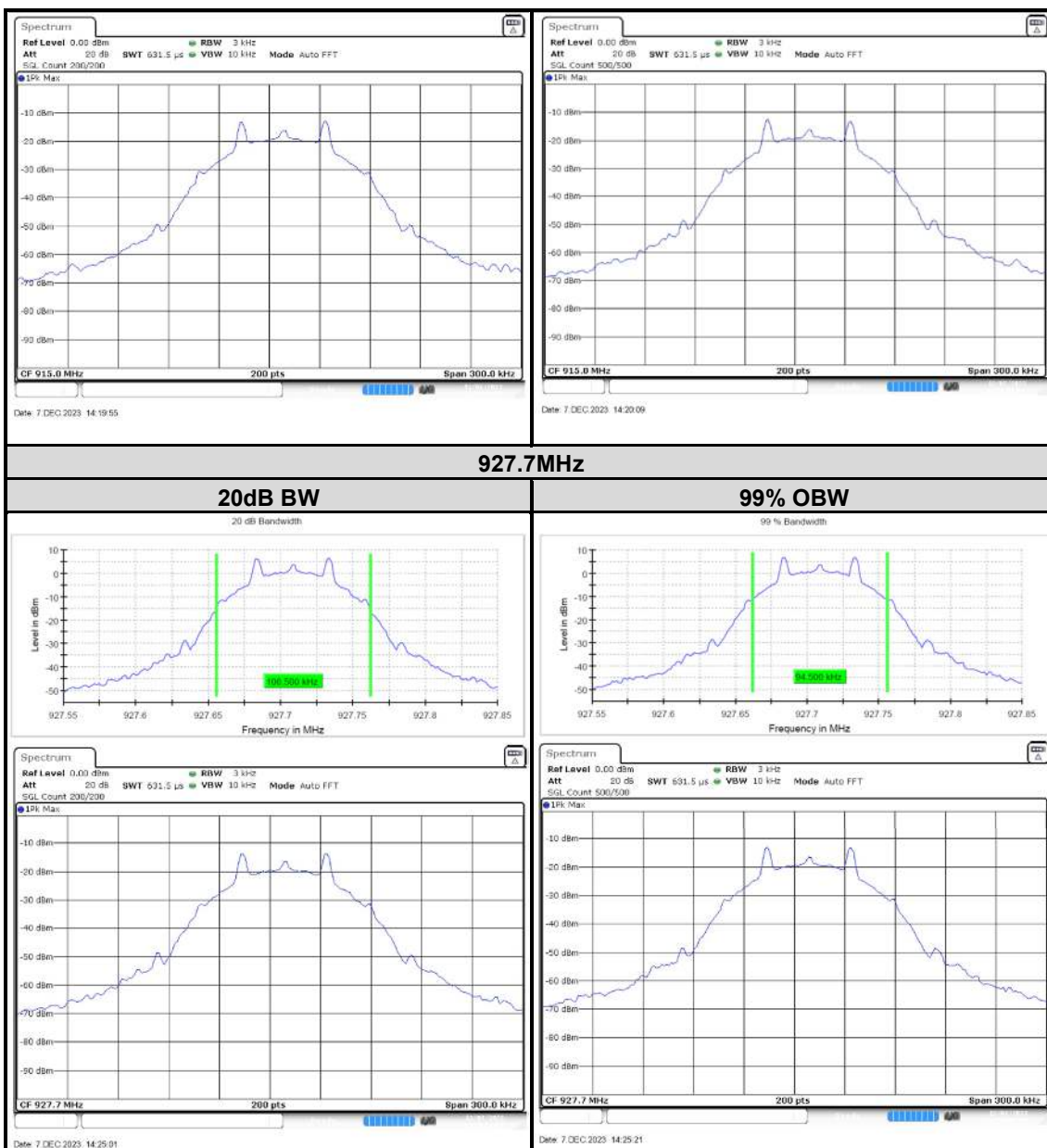
Test Date: 12/7/2023

CHANNEL FREQUENCY (MHz)	20dB BANDWIDTH (kHz)	99% Occupied Bandwidth (kHz)
902.2	105.0	93.0
915	105.0	96.0
927.7	106.5	94.5





Test Report for Hayward Industries, Inc.
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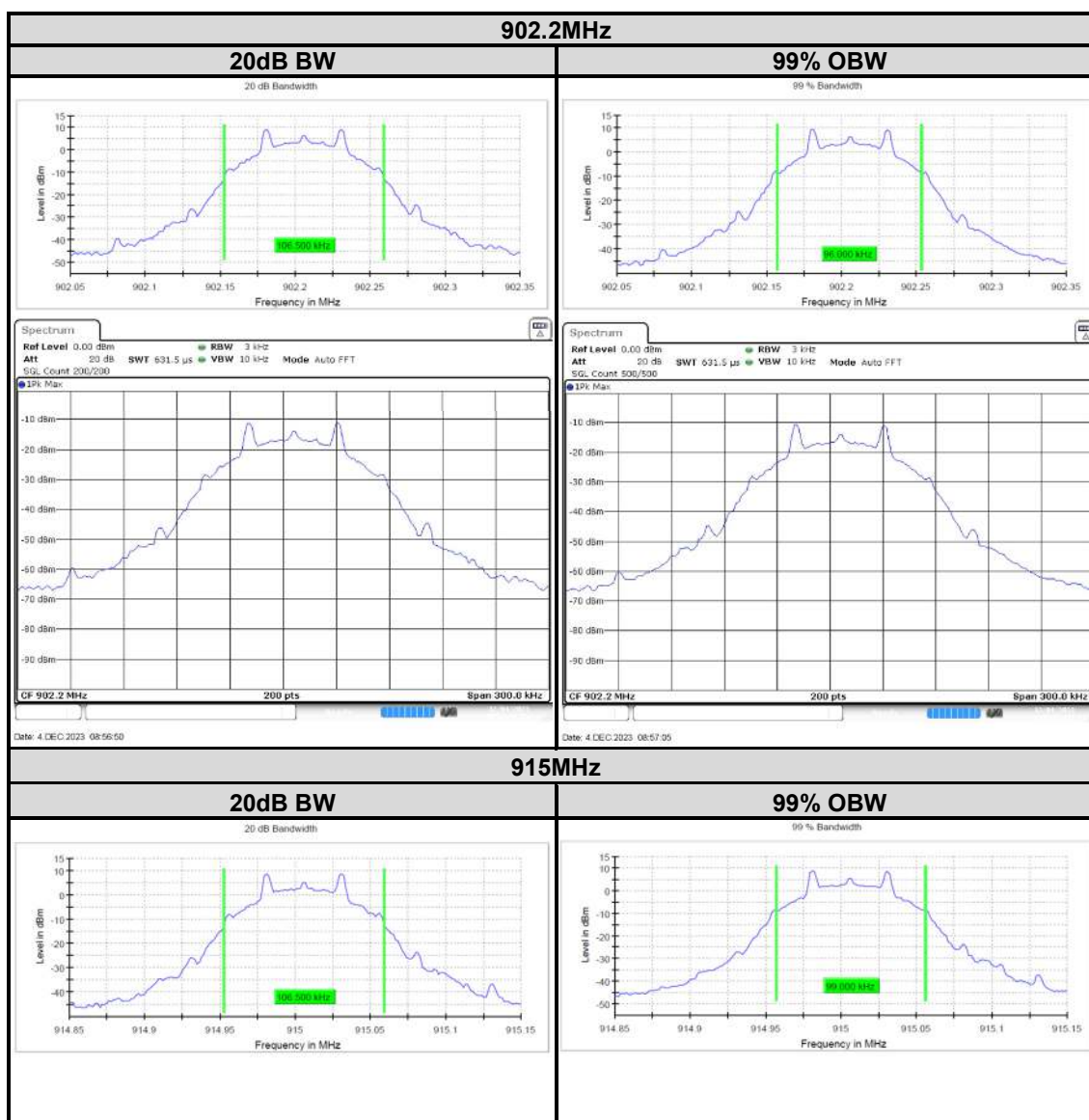
Test Report for Hayward Industries, Inc.
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Internal Antenna

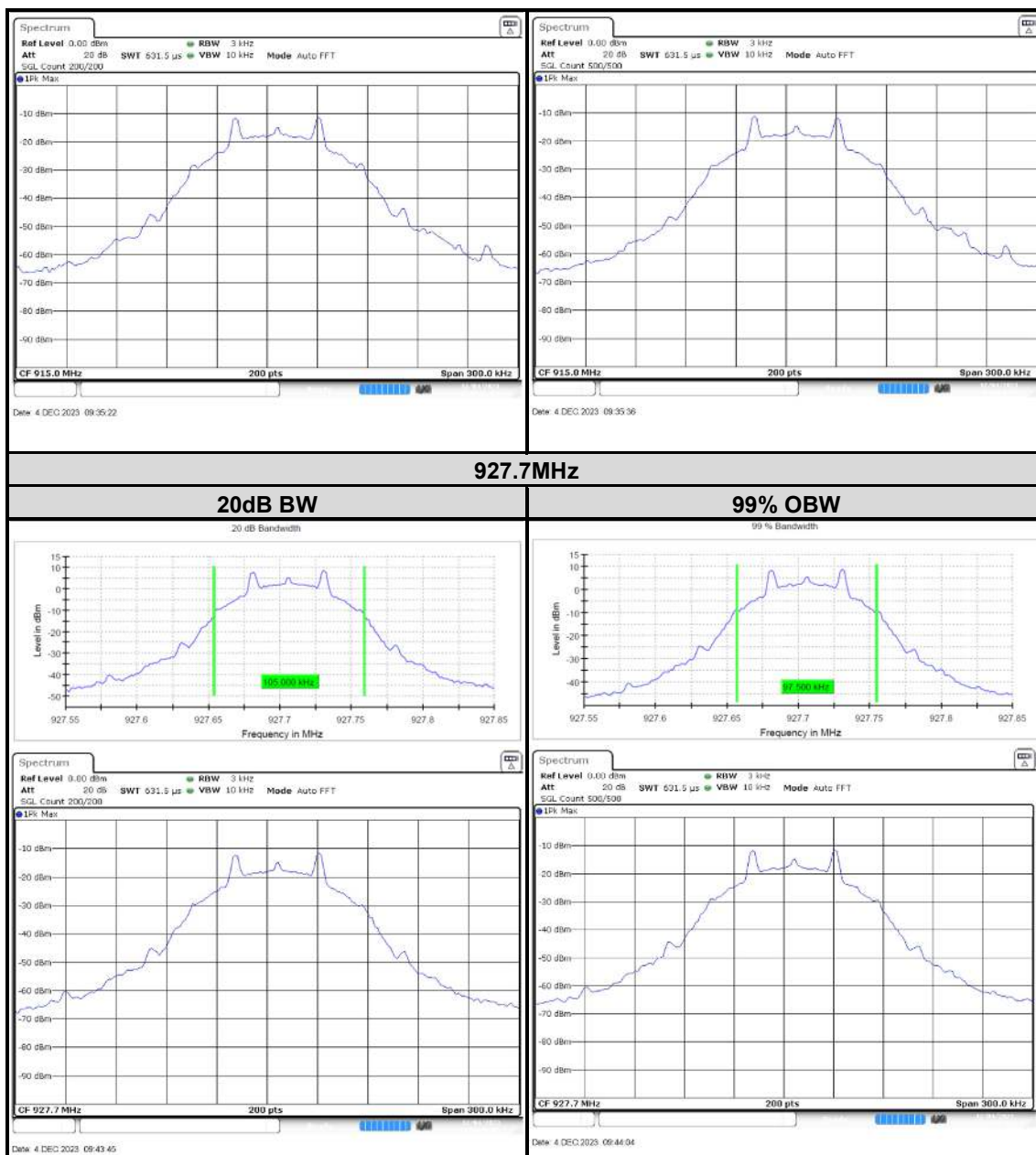
Test Date: 12/4/2023

CHANNEL FREQUENCY (MHz)	20dB BANDWIDTH (kHz)	99% Occupied Bandwidth (kHz)
902.2	106.5	96.0
915	106.5	99.0
927.7	105.0	97.5





Test Report for Hayward Industries, Inc.
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4.6 HOPPING CHANNEL SEPARATION

4.6.1 LIMIT OF HOPPING CHANNEL SEPARATION

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

4.6.2 TEST SETUP

Refer to section 4.3.2 of this report.

4.6.3 TEST INSTRUMENTS

Refer to section 4.3.3 of this report.

4.6.4 TEST PROCEDURES

In accordance with ANSI C63.10-2013 Section 7.8.2.

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 TEST RESULTS



Test Report for Hayward Industries, Inc.
Report No. EX0020-2 Issue 3

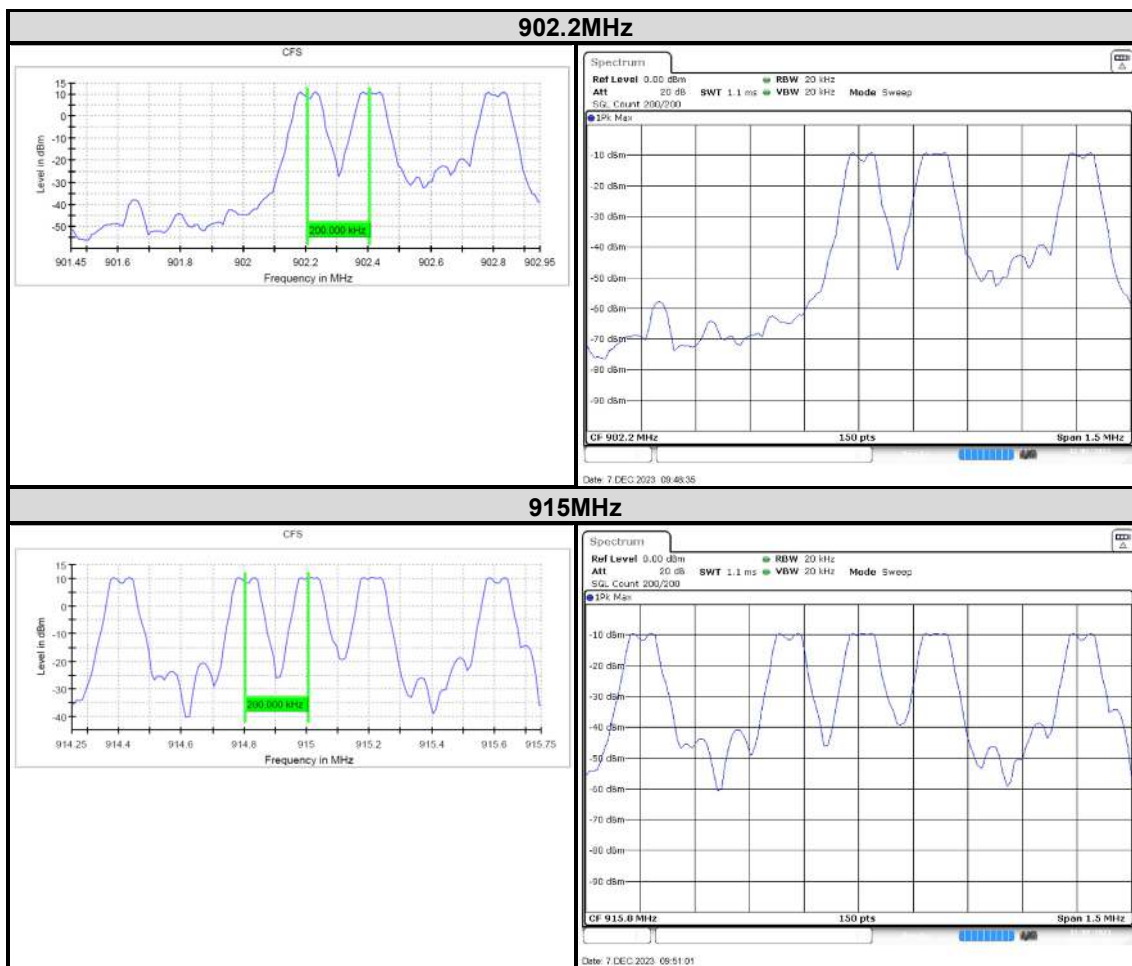


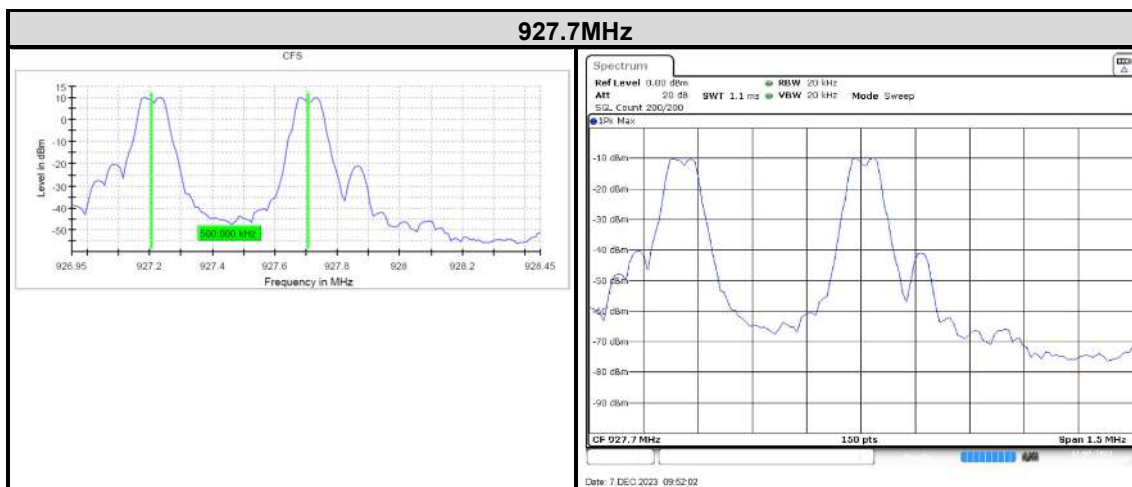
External Antenna

Test Date: 12/7/2023

FREQUENCY (MHz)	ADJACENT CHANNEL SEPARATION (KHz)	MINIMUM LIMIT (KHz)	PASS / FAIL
902.2	200.0	105.0	PASS
915	200.0	105.0	PASS
927.7	500.0	106.5	PASS

NOTE: The minimum limit is the 20dB bandwidth.



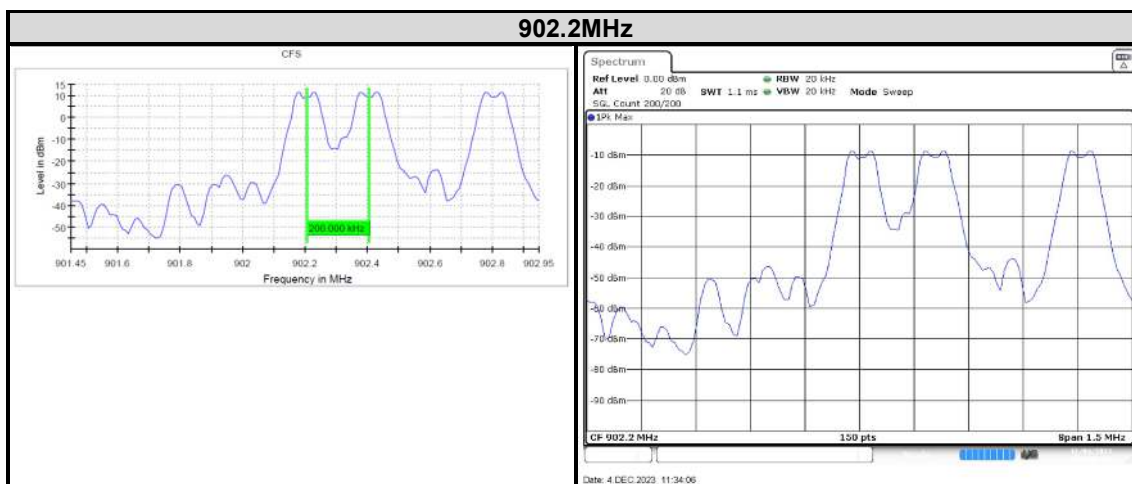


Internal Antenna

Test Date: 12/4/2023

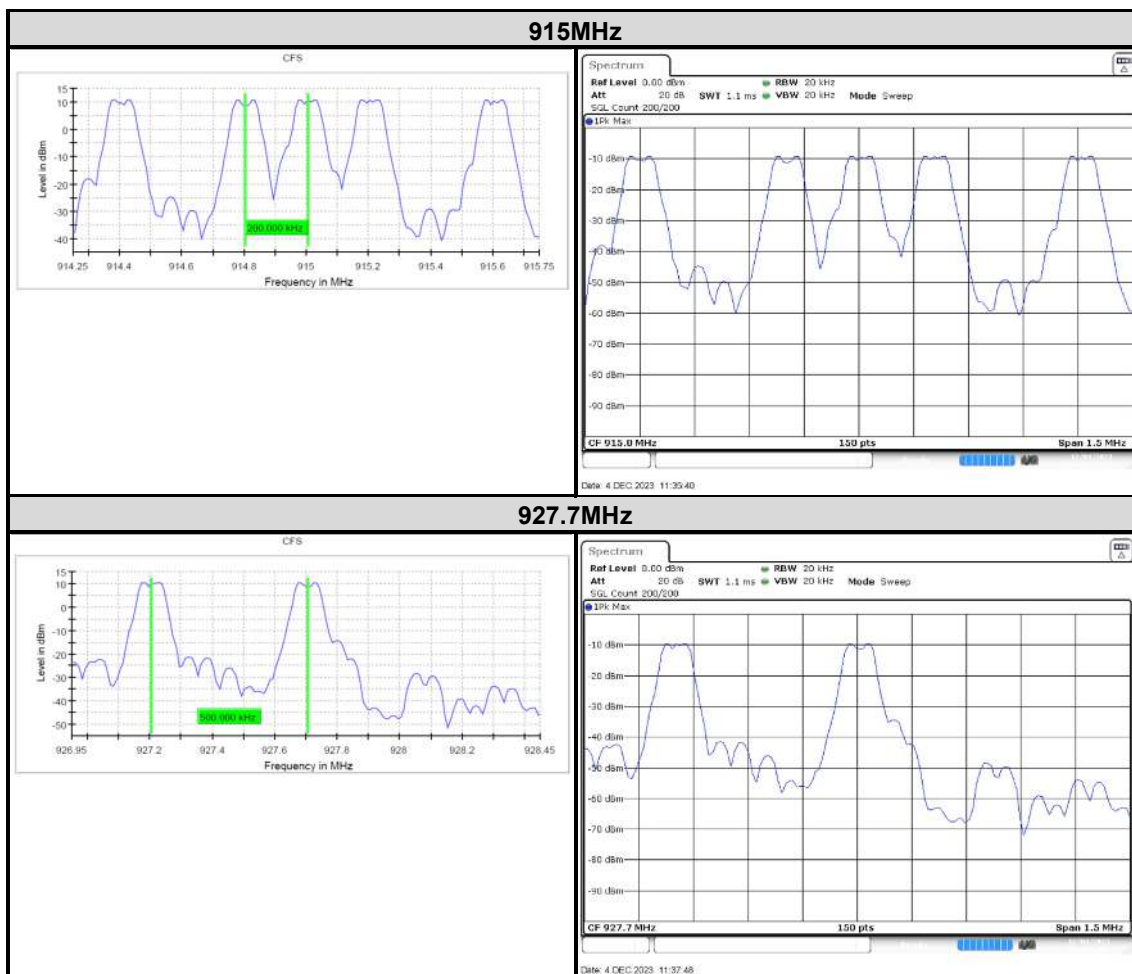
FREQUENCY (MHz)	ADJACENT CHANNEL SEPARATION (KHz)	MINIMUM LIMIT (KHz)	PASS / FAIL
902.2	200.0	106.5	PASS
915	200.0	106.5	PASS
927.7	500.0	105.0	PASS

NOTE: The minimum limit is the 20dB bandwidth.





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4.7 CONDUCTED PEAK OUTPUT POWER

4.7.1 LIMITS OF CONDUCTED PEAK OUTPUT POWER MEASUREMENT

For frequency hopping systems operating in the 902–928 MHz band: 1 watt for systems employing at least 50 hopping channels.

4.7.2 TEST SETUP

Refer to section 4.3.2 of this report.

4.7.3 TEST INSTRUMENTS

Refer to section 4.3.3 of this report.

4.7.4 TEST PROCEDURES

In accordance with ANSI C63.10-2013 Section 7.8.5.

4.7.5 DEVIATION FROM TEST STANDARD

No deviation.



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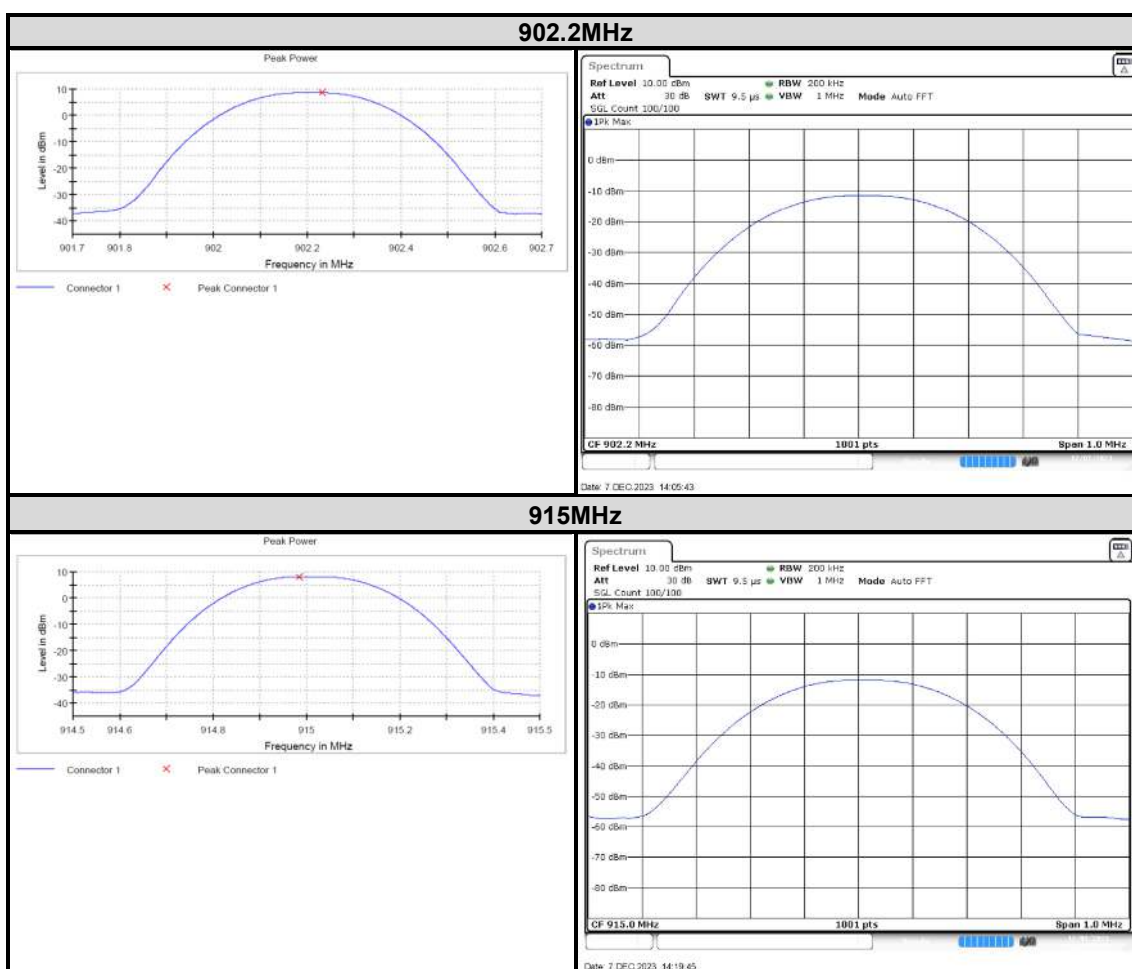


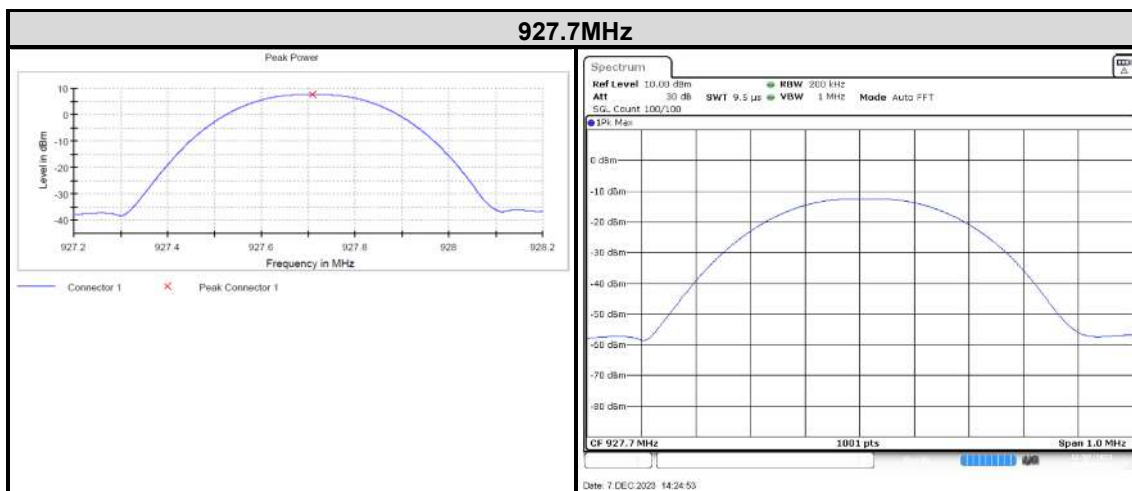
4.7.6 TEST RESULTS

External Antenna

Test date: 12/7/2023

CHANNEL FREQUENCY (MHz)	PEAK POWER (dBm)	PEAK POWER (mW)	PEAK POWER LIMIT (W)	PASS/FAIL
902.2	8.5	7.1	1.0	PASS
915	8.1	6.5	1.0	PASS
927.7	7.5	5.6	1.0	PASS



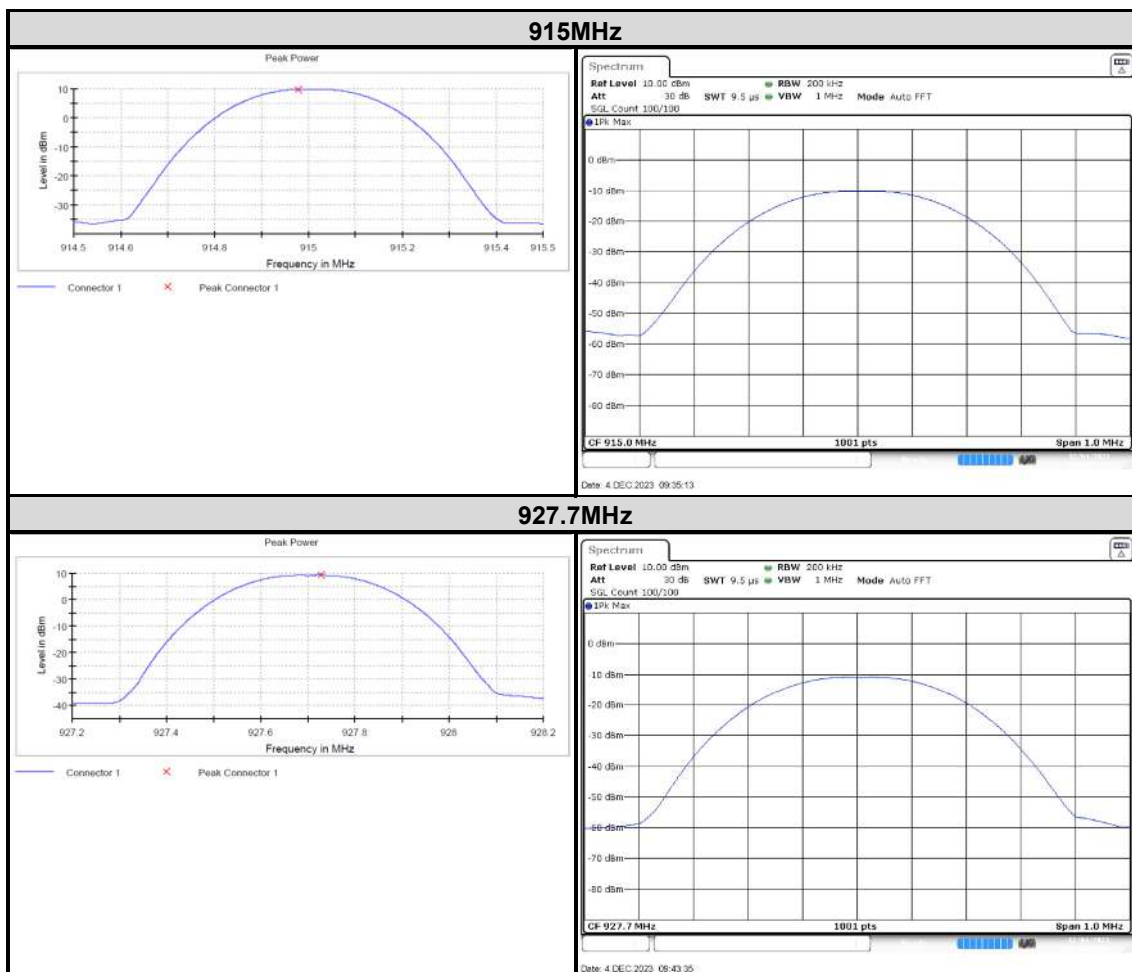


Internal Antenna

Test date: 12/4/2023

CHANNEL FREQUENCY (MHz)	PEAK POWER (dBm)	PEAK POWER (mW)	PEAK POWER LIMIT (W)	PASS/FAIL
902.2	10.0	10.0	1.0	PASS
915	9.7	9.3	1.0	PASS
927.7	9.2	8.3	1.0	PASS







4.8 OUT OF BAND EMISSION MEASUREMENT

4.8.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

20dB below the highest level of the fundamental in 100 kHz RBW.

4.8.2 TEST SETUP

Refer to section 4.3.2 of this report.

4.8.3 TEST INSTRUMENT

Refer to section 4.3.3 of this report.

4.8.4 TEST PROCEDURE

For conducted band-edge: In accordance with ANSI C63.10-2013 Section 7.8.6.

For conducted spurious: In accordance with ANSI C63.10-2013 Section 7.8.8.

4.8.5 DEVIATION FROM TEST STANDARD

No deviation.

4.8.6 TEST RESULTS



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External Antenna

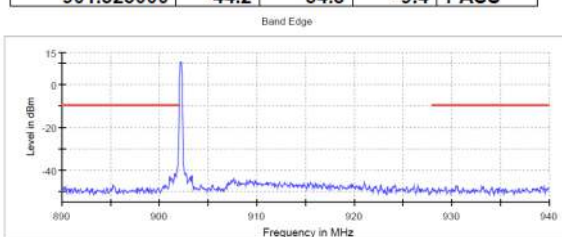
Test date: 12/7/2023

Low Channel Band Edge – Single Channel

In-band Peak: 10.6dBm

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
901.975000	-32.7	23.3	-9.4	PASS
901.925000	-37.6	28.2	-9.4	PASS
901.875000	-39.3	29.9	-9.4	PASS
901.825000	-40.7	31.3	-9.4	PASS
901.625000	-41.8	32.4	-9.4	PASS
901.575000	-41.8	32.4	-9.4	PASS
901.775000	-42.0	32.6	-9.4	PASS
901.675000	-42.2	32.8	-9.4	PASS
901.725000	-43.1	33.7	-9.4	PASS
901.075000	-43.2	33.8	-9.4	PASS
901.025000	-43.4	34.0	-9.4	PASS
901.525000	-43.9	34.5	-9.4	PASS
901.275000	-44.0	34.6	-9.4	PASS
901.375000	-44.2	34.8	-9.4	PASS
901.325000	-44.2	34.8	-9.4	PASS



Limit Sum Level Fail

Spectrum

Ref Level 0.00 dBm

Att 20 dB

SWT 56.0 us

RBW 100 kHz

VBW 300 kHz

Mode Auto FFT

100/100

100/100

100/100

100/100

100/100

100/100

100/100

100/100

100/100

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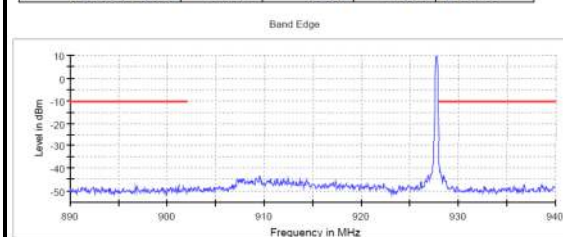
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High Channel Band Edge – Single Channel

In-band Peak: 9.6dBm

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
928.025000	-39.3	28.9	-10.4	PASS
928.075000	-41.5	31.1	-10.4	PASS
928.175000	-41.5	31.1	-10.4	PASS
928.125000	-41.9	31.5	-10.4	PASS
928.475000	-43.3	32.9	-10.4	PASS
928.525000	-43.4	33.0	-10.4	PASS
928.225000	-43.6	33.2	-10.4	PASS
928.275000	-43.9	33.5	-10.4	PASS
928.325000	-44.4	34.0	-10.4	PASS
928.425000	-44.6	34.2	-10.4	PASS
928.575000	-45.4	35.0	-10.4	PASS
928.725000	-45.8	35.4	-10.4	PASS
928.675000	-45.9	35.5	-10.4	PASS
928.625000	-46.1	35.7	-10.4	PASS
928.375000	-46.3	35.9	-10.4	PASS



Limit Sum Level Fail

Spectrum

Ref Level 0.00 dBm

Att 20 dB

SWT 56.0 us

RBW 100 kHz

VBW 300 kHz

Mode Auto FFT

100/100

100/100

100/100

100/100

100/100

100/100

100/100

100/100

100/100

100/100

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Date: 7 DEC 2023 14:25:31



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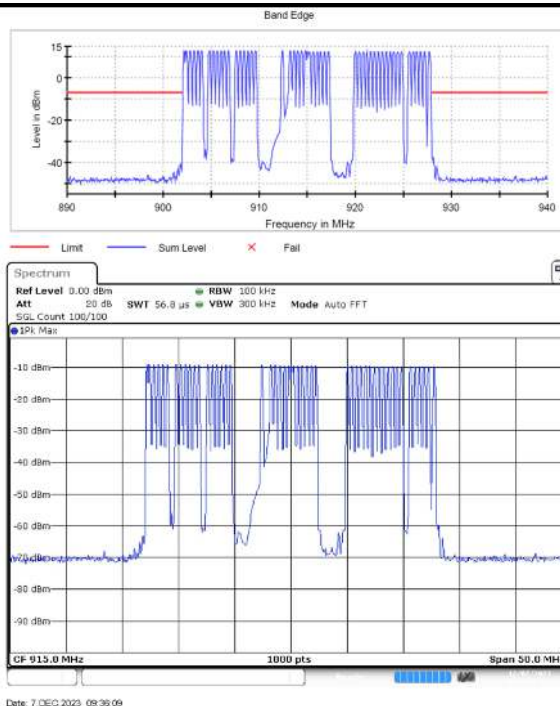


Band Edge – Hopping

In-band Peak: 13dBm

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
928.075000	-37.9	30.9	-7.0	PASS
928.125000	-38.1	31.1	-7.0	PASS
928.025000	-39.1	32.1	-7.0	PASS
928.175000	-40.9	33.9	-7.0	PASS
901.825000	-41.2	34.2	-7.0	PASS
901.775000	-41.5	34.5	-7.0	PASS
901.975000	-41.5	34.5	-7.0	PASS
928.225000	-41.8	34.8	-7.0	PASS
928.475000	-42.0	35.0	-7.0	PASS
901.875000	-42.1	35.1	-7.0	PASS
928.425000	-42.2	35.2	-7.0	PASS
901.525000	-43.3	36.3	-7.0	PASS
901.575000	-43.7	36.7	-7.0	PASS
901.925000	-43.7	36.7	-7.0	PASS
901.725000	-43.9	36.9	-7.0	PASS

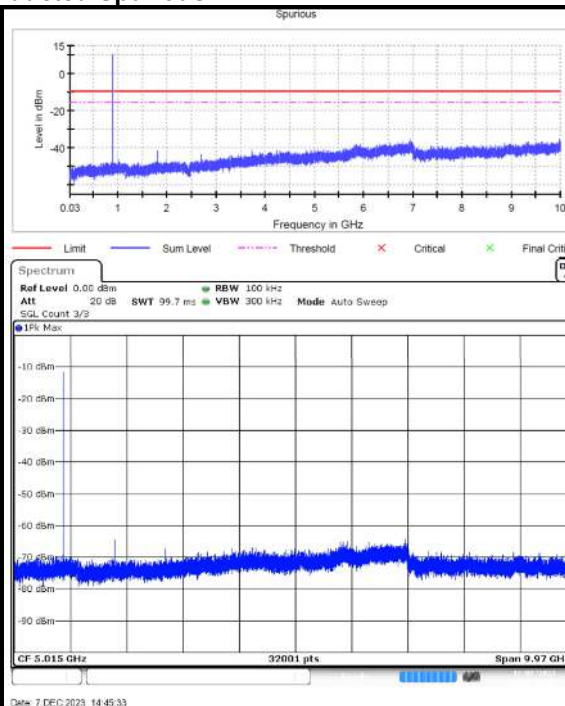


Low Channel Conducted Spurious

In-band Peak: 10.3dBm at 902.192MHz

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
901.880410	-25.2	15.5	-9.7
9989.874535	-35.7	26.0	-9.7
6955.350614	-35.7	26.0	-9.7
9992.055405	-36.3	26.6	-9.7
9349.322052	-36.4	26.7	-9.7
6959.089247	-36.4	26.7	-9.7
9643.427862	-36.5	26.8	-9.7
9318.478329	-36.9	27.2	-9.7
9984.889691	-37.0	27.3	-9.7
9746.863379	-37.0	27.3	-9.7
9935.975907	-37.0	27.3	-9.7
9827.243992	-37.0	27.3	-9.7
6927.622418	-37.1	27.4	-9.7
6968.435830	-37.1	27.4	-9.7
6992.425393	-37.2	27.5	-9.7

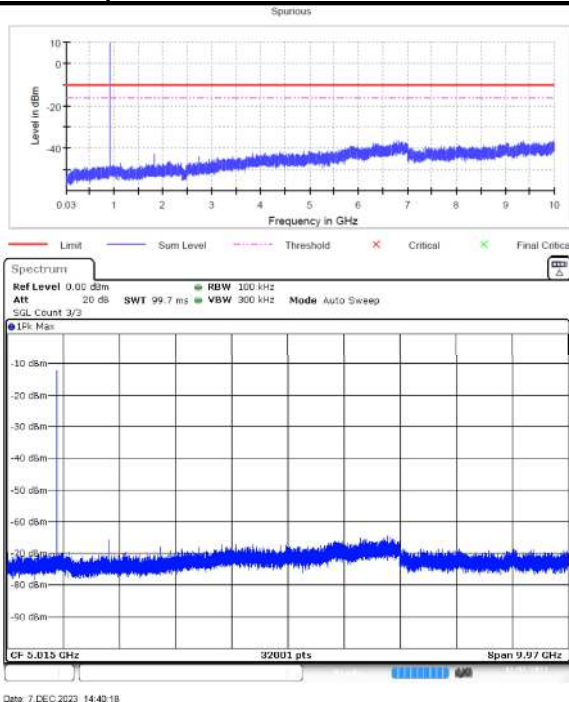


Mid Channel Conducted Spurious

In-band Peak: 9.8dBm at 914.966MHz

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
6780.569513	-36.2	26.0	-10.2
9969.935158	-36.5	26.3	-10.2
6828.548639	-36.5	26.3	-10.2
9368.015218	-36.5	26.3	-10.2
9913.232555	-36.6	26.4	-10.2
9333.744414	-36.8	26.6	-10.2
6716.701197	-36.9	26.7	-10.2
6882.135715	-36.9	26.7	-10.2
9367.703666	-37.0	26.8	-10.2
9571.147620	-37.1	26.9	-10.2
9890.489203	-37.2	27.0	-10.2
9994.236274	-37.2	27.0	-10.2
9963.392550	-37.2	27.0	-10.2
9942.518515	-37.2	27.0	-10.2
6904.567514	-37.2	27.0	-10.2

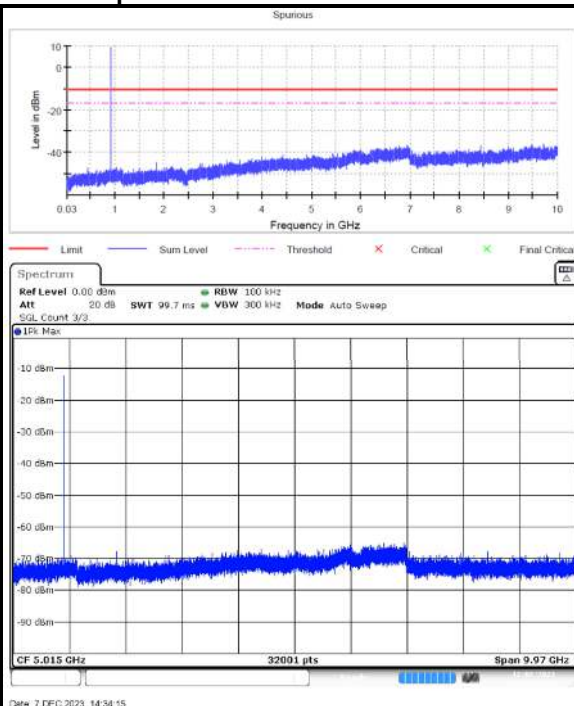


High Channel Conducted Spurious

In-band Peak: 9.5dBm at 927.739MHz

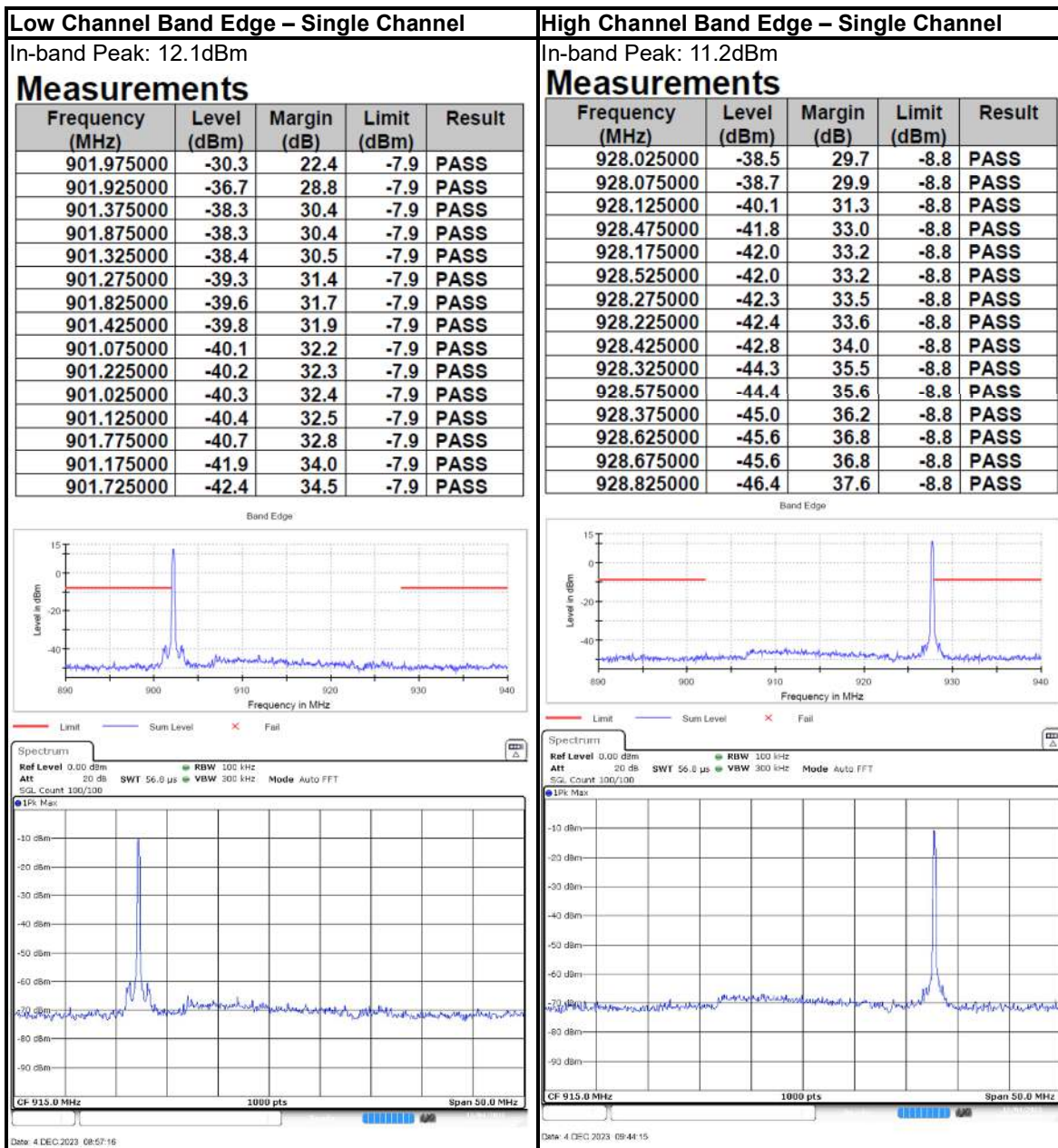
Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
928.050842	-17.8	7.3	-10.5
9707.296178	-35.9	25.4	-10.5
6942.576951	-36.5	26.0	-10.5
9480.174213	-36.5	26.0	-10.5
9480.485766	-36.8	26.3	-10.5
9961.211681	-36.9	26.4	-10.5
8437.718665	-37.0	26.5	-10.5
6782.127277	-37.0	26.5	-10.5
9493.882535	-37.0	26.5	-10.5
6781.815725	-37.1	26.6	-10.5
9430.948877	-37.1	26.6	-10.5
9366.457454	-37.1	26.6	-10.5
9002.563826	-37.2	26.7	-10.5
6976.224649	-37.3	26.8	-10.5
9337.171495	-37.3	26.8	-10.5



Internal Antenna

Test date: 12/4/2023





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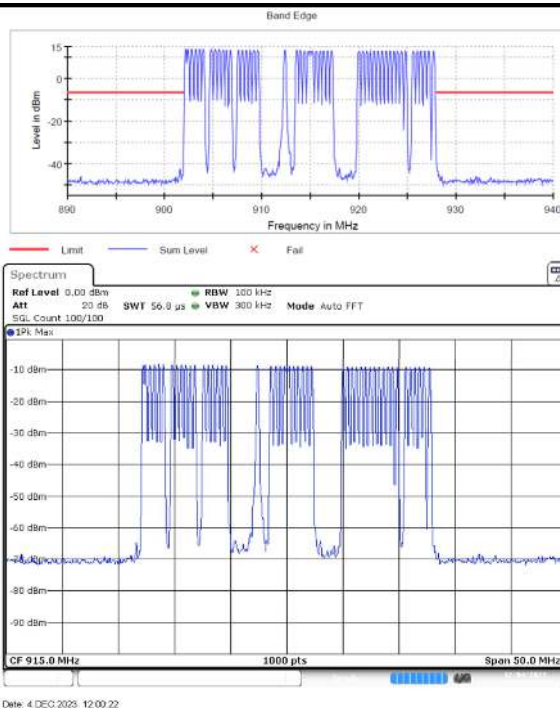


Band Edge – Hopping

In-band Peak: 13.5dBm

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
901.975000	-34.3	27.8	-6.5	PASS
901.625000	-42.9	36.4	-6.5	PASS
901.575000	-43.2	36.7	-6.5	PASS
928.125000	-43.8	37.3	-6.5	PASS
901.675000	-43.8	37.3	-6.5	PASS
928.025000	-43.8	37.3	-6.5	PASS
928.075000	-43.8	37.3	-6.5	PASS
901.875000	-45.3	38.8	-6.5	PASS
901.925000	-45.4	38.9	-6.5	PASS
928.225000	-45.5	39.0	-6.5	PASS
901.525000	-45.6	39.1	-6.5	PASS
928.175000	-45.9	39.4	-6.5	PASS
901.825000	-46.0	39.5	-6.5	PASS
928.275000	-46.1	39.6	-6.5	PASS
928.475000	-46.2	39.7	-6.5	PASS





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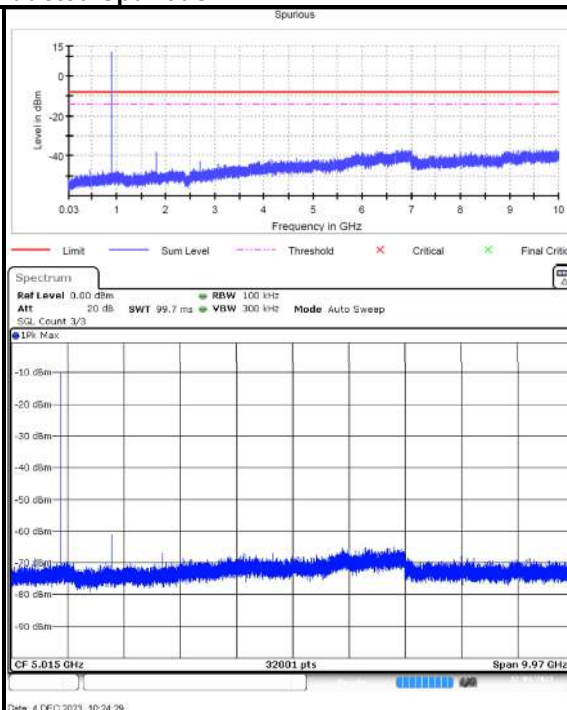


Low Channel Conducted Spurious

In-band Peak: 12dBm at 902.192MHz

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
901.880410	-23.3	15.3	-8.0
9941.583857	-36.5	28.5	-8.0
6805.182182	-36.6	28.6	-8.0
9937.533671	-36.7	28.7	-8.0
9937.222118	-36.7	28.7	-8.0
9552.766007	-36.9	28.9	-8.0
6941.019187	-36.9	28.9	-8.0
9199.153620	-37.0	29.0	-8.0
9274.549389	-37.1	29.1	-8.0
6722.932252	-37.2	29.2	-8.0
9672.402269	-37.2	29.2	-8.0
9550.273585	-37.2	29.2	-8.0
9820.078279	-37.3	29.3	-8.0
9314.116590	-37.3	29.3	-8.0
9820.389832	-37.3	29.3	-8.0

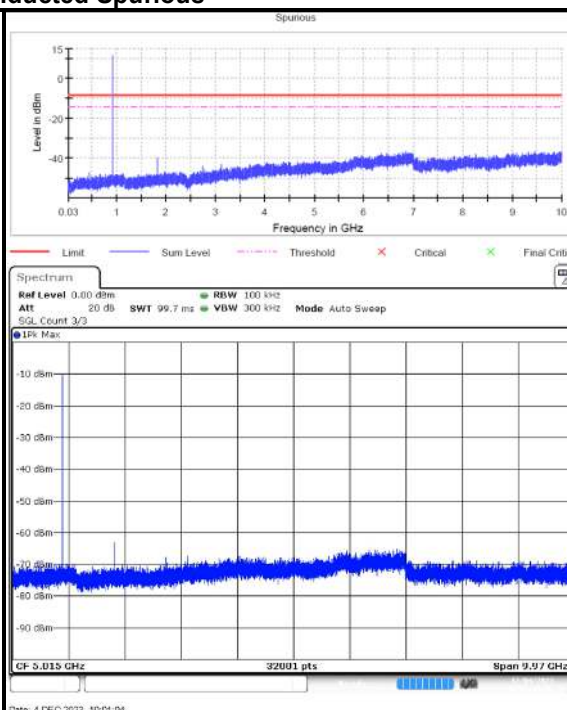


Mid Channel Conducted Spurious

In-band Peak: 11.6dBm at 914.966MHz

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
9460.546389	-36.6	28.2	-8.4
6841.010750	-36.7	28.3	-8.4
9339.975470	-36.8	28.4	-8.4
9995.794038	-36.9	28.5	-8.4
9853.725977	-37.0	28.6	-8.4
9339.663917	-37.0	28.6	-8.4
9944.387832	-37.0	28.6	-8.4
9952.488203	-37.0	28.6	-8.4
9959.030812	-37.1	28.7	-8.4
9658.382394	-37.1	28.7	-8.4
9987.070560	-37.2	28.8	-8.4
9619.126746	-37.2	28.8	-8.4
9964.327209	-37.2	28.8	-8.4
6783.373488	-37.2	28.8	-8.4
6888.366770	-37.2	28.8	-8.4





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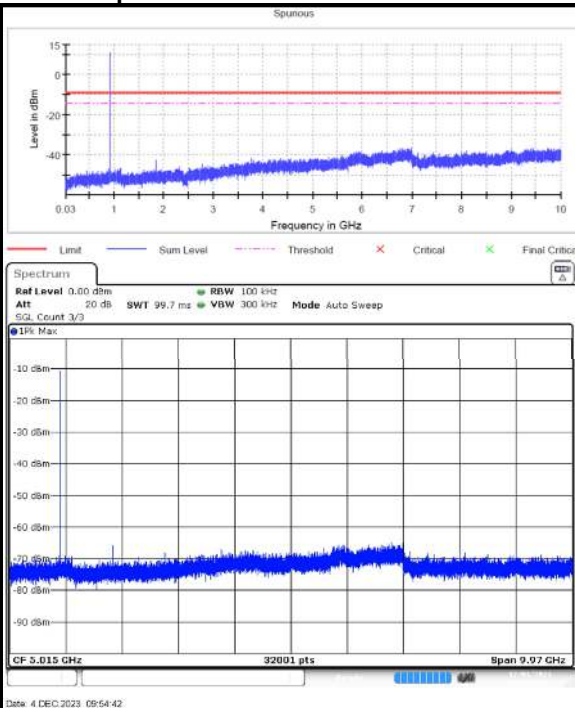


High Channel Conducted Spurious

In-band Peak: 11.3dBm at 927.739MHz

Pre Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
928.050842	-17.4	8.7	-8.7
6797.393363	-36.5	27.8	-8.7
6995.852473	-36.5	27.8	-8.7
9438.426143	-36.6	27.9	-8.7
9738.139902	-36.7	28.0	-8.7
9788.299897	-36.8	28.1	-8.7
9964.015656	-36.9	28.2	-8.7
9863.384113	-37.0	28.3	-8.7
9341.533233	-37.0	28.3	-8.7
9396.366520	-37.1	28.4	-8.7
6940.396081	-37.1	28.4	-8.7
6912.356333	-37.2	28.5	-8.7
6755.956845	-37.2	28.5	-8.7
6921.702916	-37.2	28.5	-8.7
9748.732696	-37.2	28.5	-8.7





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5 PHOTOGRAPHS OF THE TEST CONFIGURATIONS

Please refer to the Test Setup Photos exhibit.



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6 MODIFICATIONS TO THE EUT DURING TESTING

None.

---END---