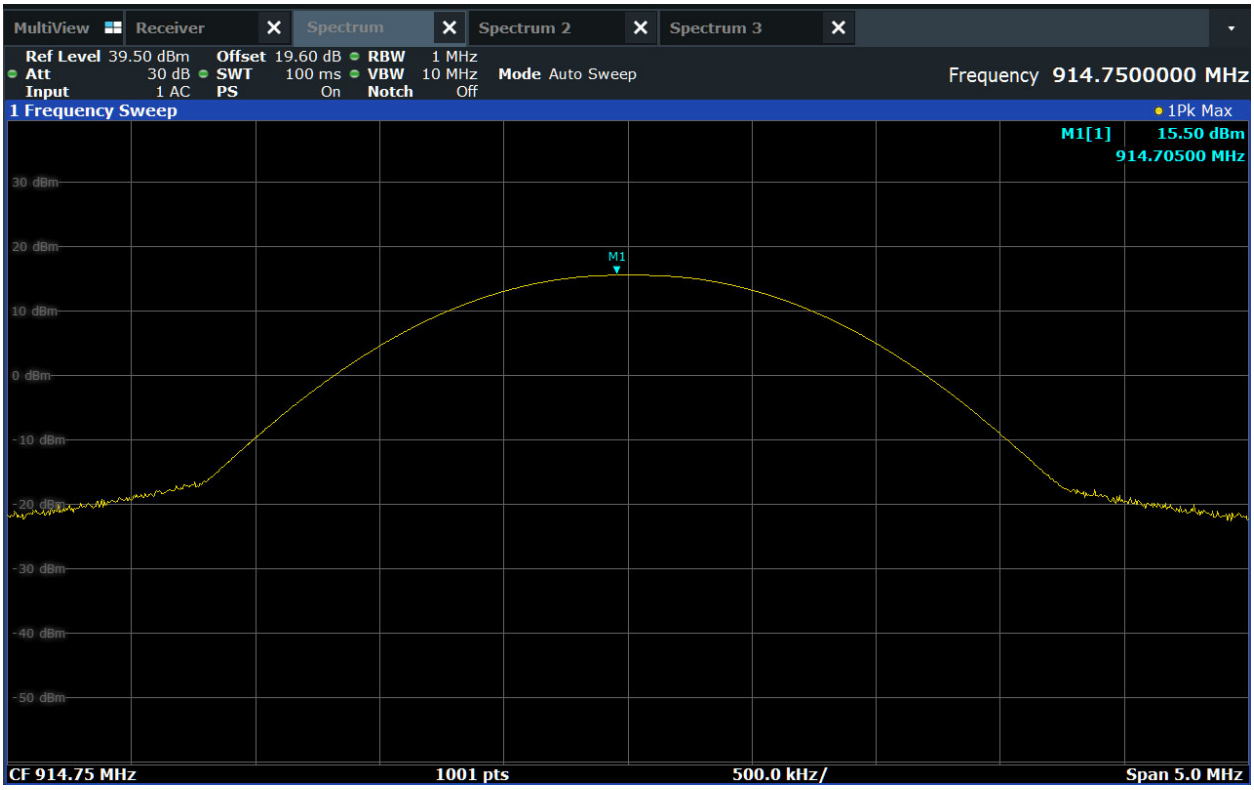
Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Conducted Sample
Mode	Tx @ 914.75MHz
Frequency Tested	2440MHz
Result	Output Power = 35.5mW (15.5dBm)
Notes	None

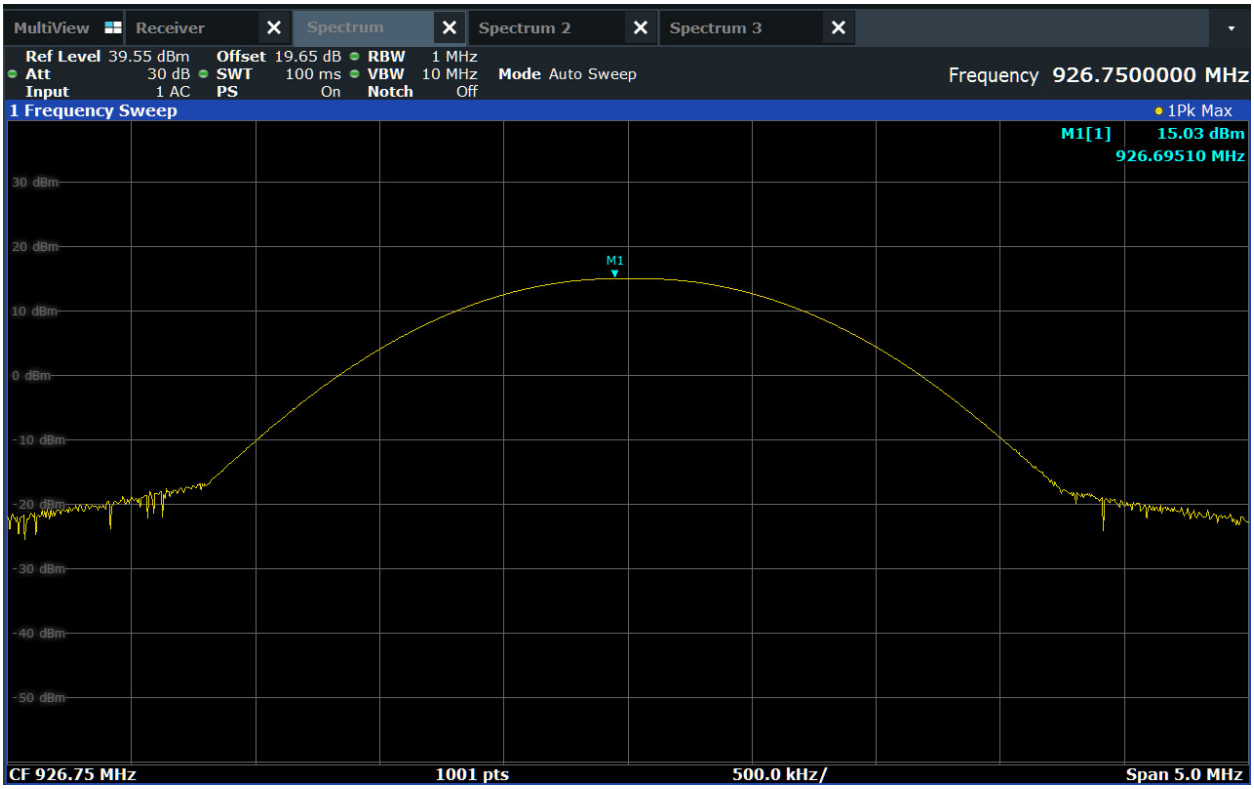


Maximum Peak Output Power

Manufacturer : The Chamberlain Group LLC
Model Number : 900-15607-11
Serial Number : Radiated Sample
Mode : Tx @ 914.75MHz
Line Tested : Antenna Port
Parameters : Conducted Output Power
Date : 3/21/2025 11:52:00 AM
Notes : None

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Conducted Sample
Mode	Tx @ 926.75MHz
Frequency Tested	2480MHz
Result	Output Power = 31.8mW (15.03dBm)
Notes	None



Maximum Peak Output Power

Manufacturer : The Chamberlain Group LLC
Model Number : 900-15607-11
Serial Number : Radiated Sample
Mode : Tx @ 926.75MHz
Line Tested : Antenna Port
Parameters : Conducted Output Power
Date : 3/21/2025 11:52:53 AM
Notes : None

TRACE1 : Function plot of Max Hold Peak

24. Effective Isotropic Radiated Power (EIRP)

EUT Information	
Manufacturer	The Chamberlain Group LLC
Product	Vulcan – 900-15607 Rev F
Model No.	900-15607-11 2200SA 2200M C1000LA 2310M
Serial No.	Radiated Sample
Mode	Tx @ 902.25MHz Tx @ 914.75MHz Tx @ 926.75MHz

Test Setup Details	
Setup Format	Tabletop
Measurement Method	Radiated
Type of Test Site	Semi-Anechoic Chamber
Test Site Used	R21F
Type of Antennas Used	Below 1GHz: Bilog (or equivalent) Above 1GHz: Double-ridged waveguide (or equivalent)
Notes	None

Measurement Uncertainty	
Measurement Type	Expanded Measurement Uncertainty
Radiated disturbance (electric field strength on an open area test site or alternative test site) (30 MHz – 1000 MHz)	4.3
Radiated disturbance (electric field strength on an open area test site or alternative test site) (1 GHz – 6 GHz)	3.1

Requirements
The output power shall not exceed 4W (36dBm).

Procedure
The EUT was placed on the non-conductive stand and set to transmit. A bilog antenna was placed at a test distance of 3 meters from the EUT. The resolution bandwidth (RBW) of the spectrum analyzer was set to greater than the 6dB bandwidth. The EUT was maximized for worst case emissions (or maximum output power) at the measuring antenna. The maximum meter reading was recorded. The peak power output was measured for the low, middle, and high channels. The equivalent power was determined from the field intensity levels measured at 3 meters using the substitution method. To determine the emission power, a dipole antenna was then set in place of the EUT and connected to a calibrated signal generator. The output of the signal generator was adjusted to match the received level at the spectrum analyzer. The signal level was recorded. The reading was then corrected to compensate for cable loss (and antenna gain for all measurements above 1GHz), as required. The peak power output was calculated for low, middle, and high hopping frequencies.

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Tx @ 902.25MHz Tx @ 914.75MHz Tx @ 926.75MHz
Result	Max EIRP = 91.2mW (19.6dBm)
Notes	None

Freq (MHz)	Ant Pol	Wide BW Meter Reading (dBµV)	Matched Sig Gen Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
902.25	H	83.5	17.2	2.2	1.6	17.7	36.0	-18.3
	V	77.6	11.5	2.2	1.6	12.0	36.0	-24.0
914.75	H	84.5	18.2	2.2	1.6	18.7	36.0	-17.3
	V	78.1	12.0	2.2	1.6	12.5	36.0	-23.5
926.75	H	85.0	19.1	2.2	1.7	19.6	36.0	-16.4
	V	78.9	13.5	2.2	1.7	14.0	36.0	-22.0

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200SA
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Result	Max EIRP = 24.5mW (13.9dBm)

Freq (MHz)	Ant Pol	Wide BW Meter Reading (dBµV)	Matched Sig Gen Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
926.75	H	83.8	13.4	2.2	1.7	13.9	36.0	-22.1
	V	74.9	8.2	2.2	1.7	8.7	36.0	-27.3

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200M
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Result	Max EIRP = 8.1mW (9.1dBm)

Freq (MHz)	Ant Pol	Wide BW Meter Reading (dBµV)	Matched Sig Gen Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
926.75	H	79.0	8.6	2.2	1.7	9.1	36.0	-26.9
	V	70.6	3.8	2.2	1.7	4.3	36.0	-31.7

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	C1000LA
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Result	Max EIRP = 8.9mW (9.5dBm)

Freq (MHz)	Ant Pol	Wide BW Meter Reading (dBµV)	Matched Sig Gen Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
926.75	H	79.4	9.0	2.2	1.7	9.5	36.0	-26.5
	V	69.8	3.1	2.2	1.7	3.6	36.0	-32.4

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2310M
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Result	Max EIRP = 6.3mW (8.0dBm)

Freq (MHz)	Ant Pol	Wide BW Meter Reading (dBµV)	Matched Sig Gen Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
926.75	H	77.9	7.5	2.2	1.7	8.0	36.0	-28.0
	V	68.8	2.1	2.2	1.7	2.6	36.0	-33.4

25. Duty Cycle Factor Measurements

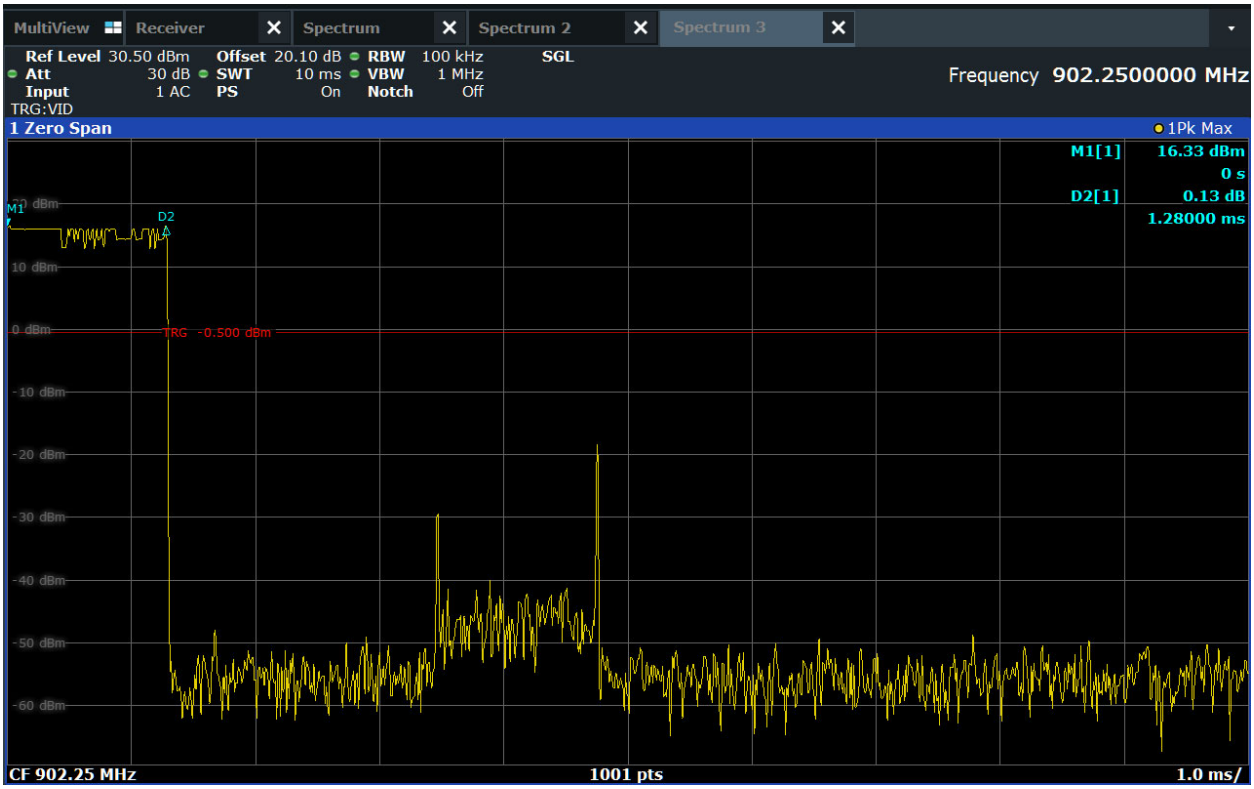
EUT Information	
Manufacturer	The Chamberlain Group LLC
Product	Vulcan – 900-15607 Rev F
Model No.	900-15607-11 2200SA 2200M C1000LA 2310M
Serial No.	Conducted Sample
Mode	Hopping

Test Setup Details	
Setup Format	Tabletop
Measurement Method	Antenna Conducted
Type of Test Site	Elite Test Bench
Type of Antennas Used	Double-Ridged Waveguide (or equivalent)
Notes	None

Measurement Uncertainty	
Measurement Type	Expanded Measurement Uncertainty
Radiated disturbance (electric field strength on an open area test site or alternative test site) (30 MHz – 1000 MHz)	4.3
Radiated disturbance (electric field strength on an open area test site or alternative test site) (1 GHz – 6 GHz)	3.1

Procedure
The duty cycle factor is used to convert peak detected readings to average readings when pulsed modulation is employed. This factor is computed from the time domain trace of the pulse modulation signal. With the transmitter set up to transmit for maximum pulse density, the time domain trace is displayed on the spectrum analyzer. This trace is obtained by tuning center frequency to the transmitter frequency and then setting a zero span width with 2msec/div. The amplitude settings are adjusted so that the on/off transitions clear the 4th division from the bottom of the display. The markers are set at the beginning and end of the "on-time". The trace is recorded. Next the spectrum analyzer center frequency is set to the transmitter frequency with a zero span width and 10msec/div. This shows if the word is longer than 100msec or shorter than 100msec. If the word period is less than 100msec, the display is set to show at least one word. The on-time and off-time are then measured. The on-time is total time signal level exceeds the 4th division. Off-time is time under for the word period. The duty cycle is then computed as $\left(\frac{On\ Time}{Word\ Period}\right)$, where $Word\ Period\ =\ 100ms$.

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Conducted Sample
Mode	Hopping
Frequency Tested	902.25MHz
Result	On Time = 1.28ms
Notes	None

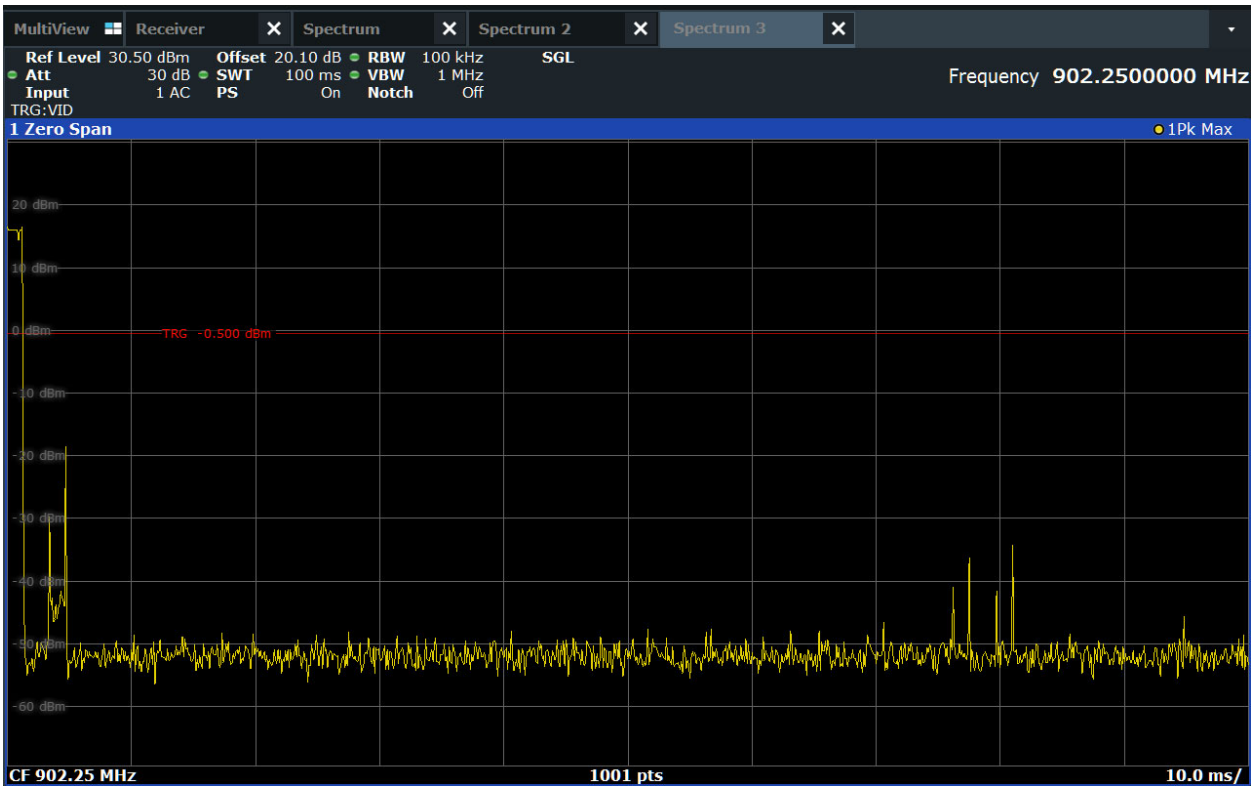


Duty Cycle

Manufacturer : The Chamberlain Group LLC
Model Number : 900-15607-11
Serial Number : Radiated Sample
Mode : Tx Hopping
Line Tested : Antenna Port
Parameters : Duty Cycle - Pulse Length
Date : 3/21/2025 12:55:58 PM
Notes : None

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Conducted Sample
Mode	Hopping
Frequency Tested	902.25MHz
Result	Duty Cycle Correction Factor= -37.924dB
Notes	Duty Cycle Factor Calculation: 1 × 1.27ms = 1.27ms $\text{Duty Cycle Factor} = 20\log\left(\frac{1.28\text{ms}}{100\text{ms}}\right) = -37.9dB$

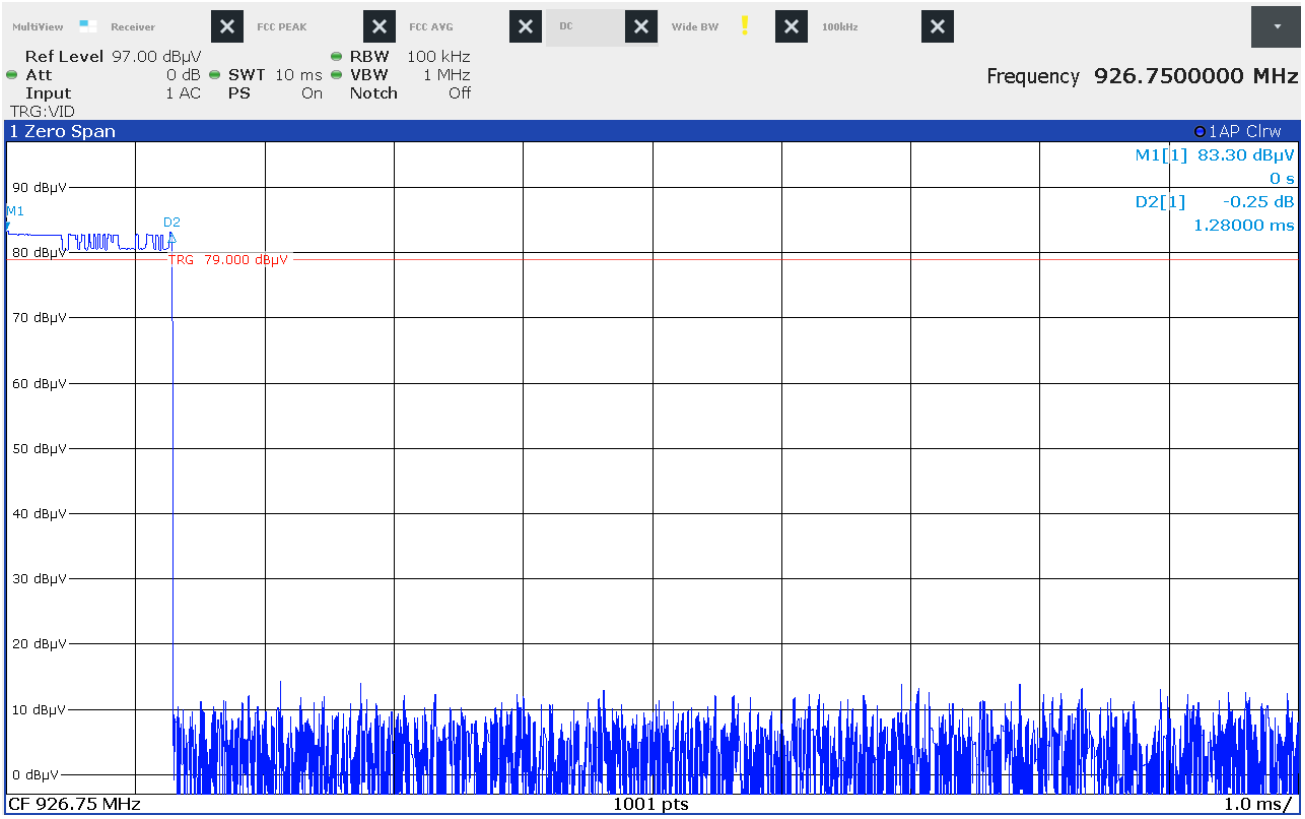


Duty Cycle

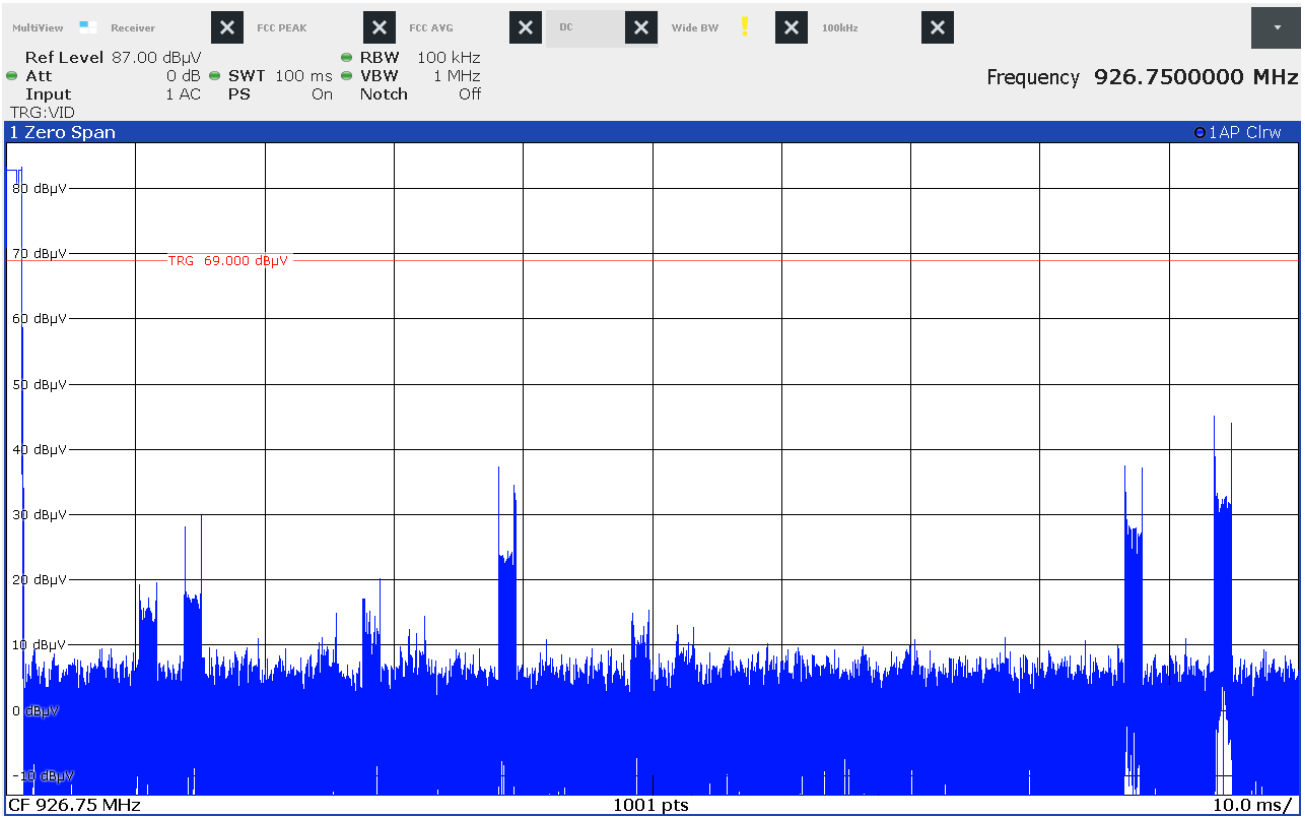
Manufacturer : The Chamberlain Group LLC
Model Number : 900-15607-11
Serial Number : Radiated Sample
Mode : Tx Hopping
Line Tested : Antenna Port
Parameters : Duty Cycle - 100msec
Date : 3/21/2025 12:56:28 PM
Notes : None

TRACE1 : Function plot of Max Hold Peak

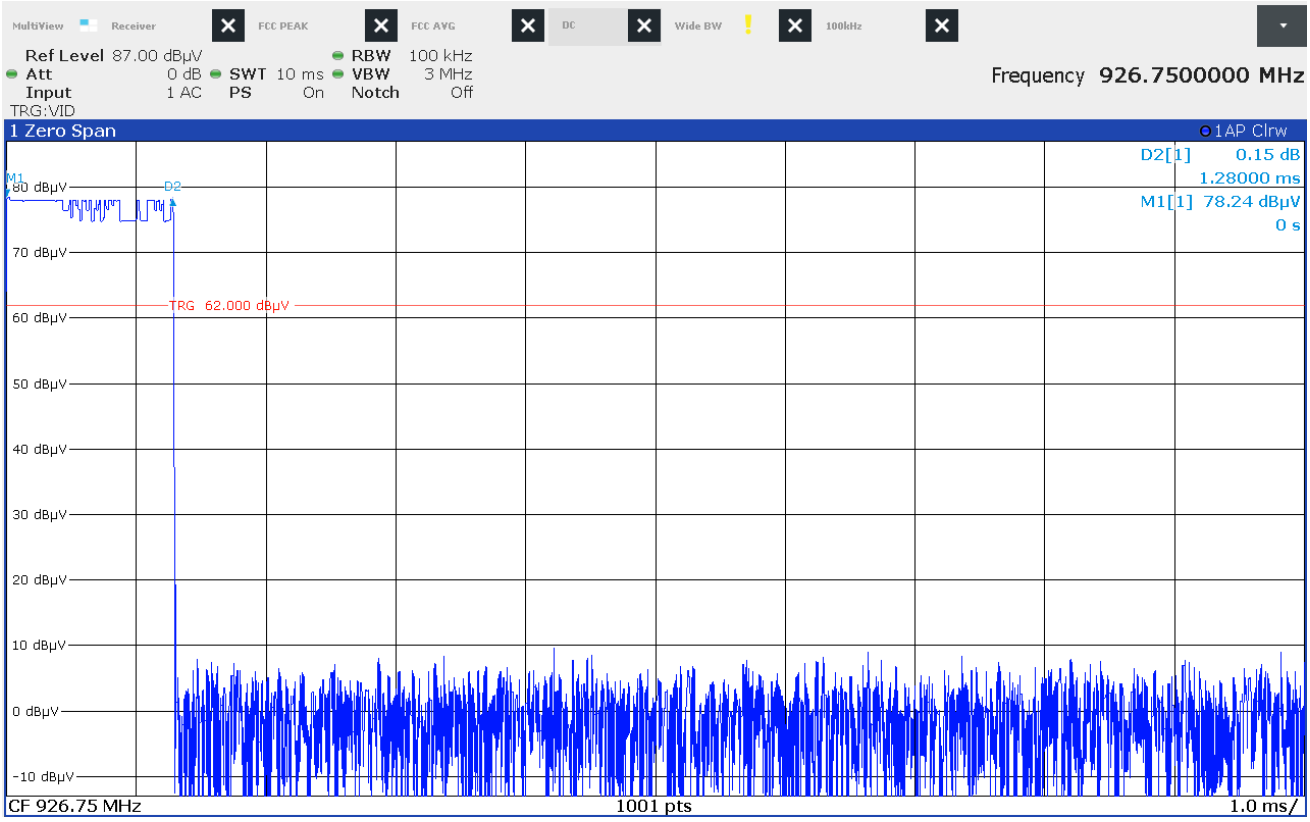
Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200SA
Serial No.	Radiated Sample
Mode	Hopping
Frequency Tested	902.25MHz
Result	On Time = 1.28ms
Notes	None



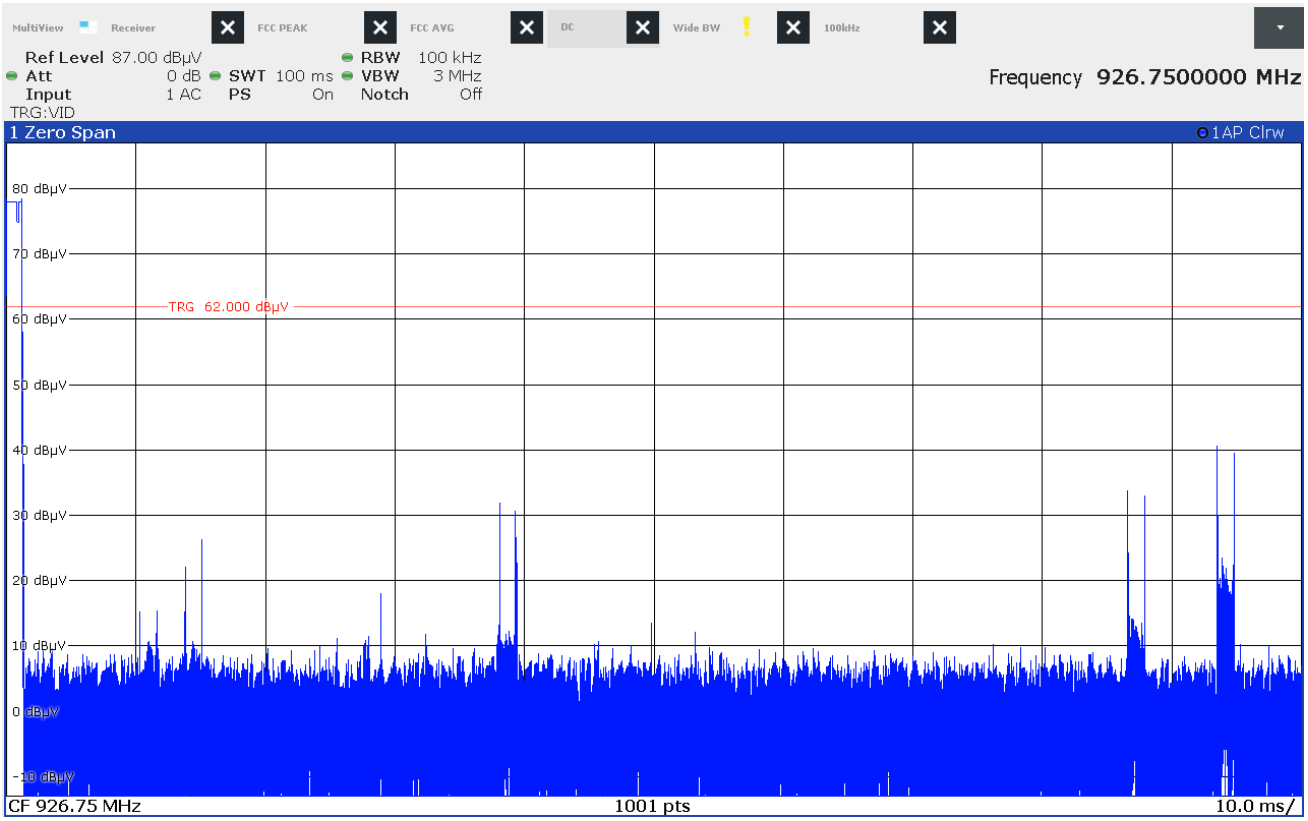
Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200SA
Serial No.	Radiated Sample
Mode	Hopping
Frequency Tested	902.25MHz
Result	Duty Cycle Correction Factor= -37.924dB
Notes	Duty Cycle Factor Calculation: 1 × 1.27ms = 1.27ms $\text{Duty Cycle Factor} = 20\log\left(\frac{1.28\text{ms}}{100\text{ms}}\right) = -37.9dB$



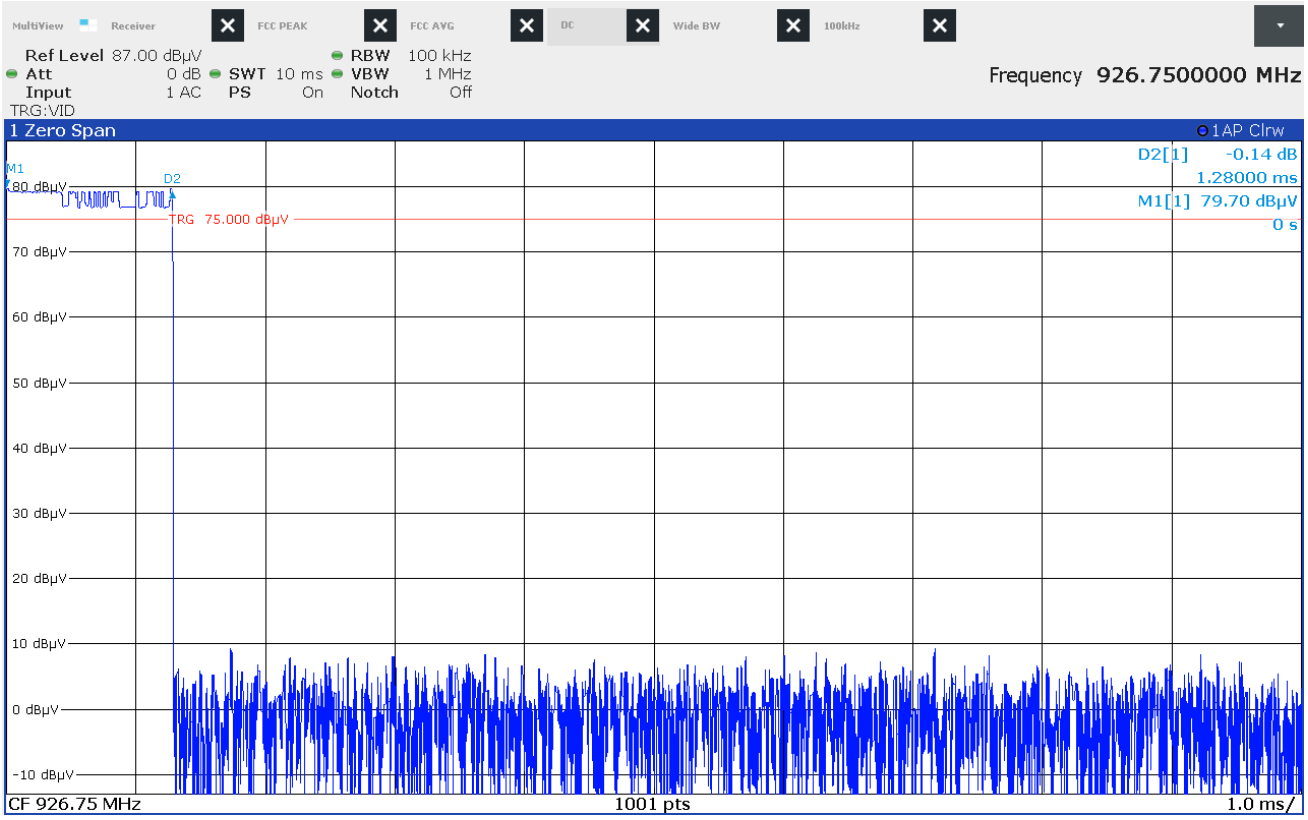
Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200M
Serial No.	Radiated Sample
Mode	Hopping
Frequency Tested	902.25MHz
Result	On Time = 1.28ms
Notes	None



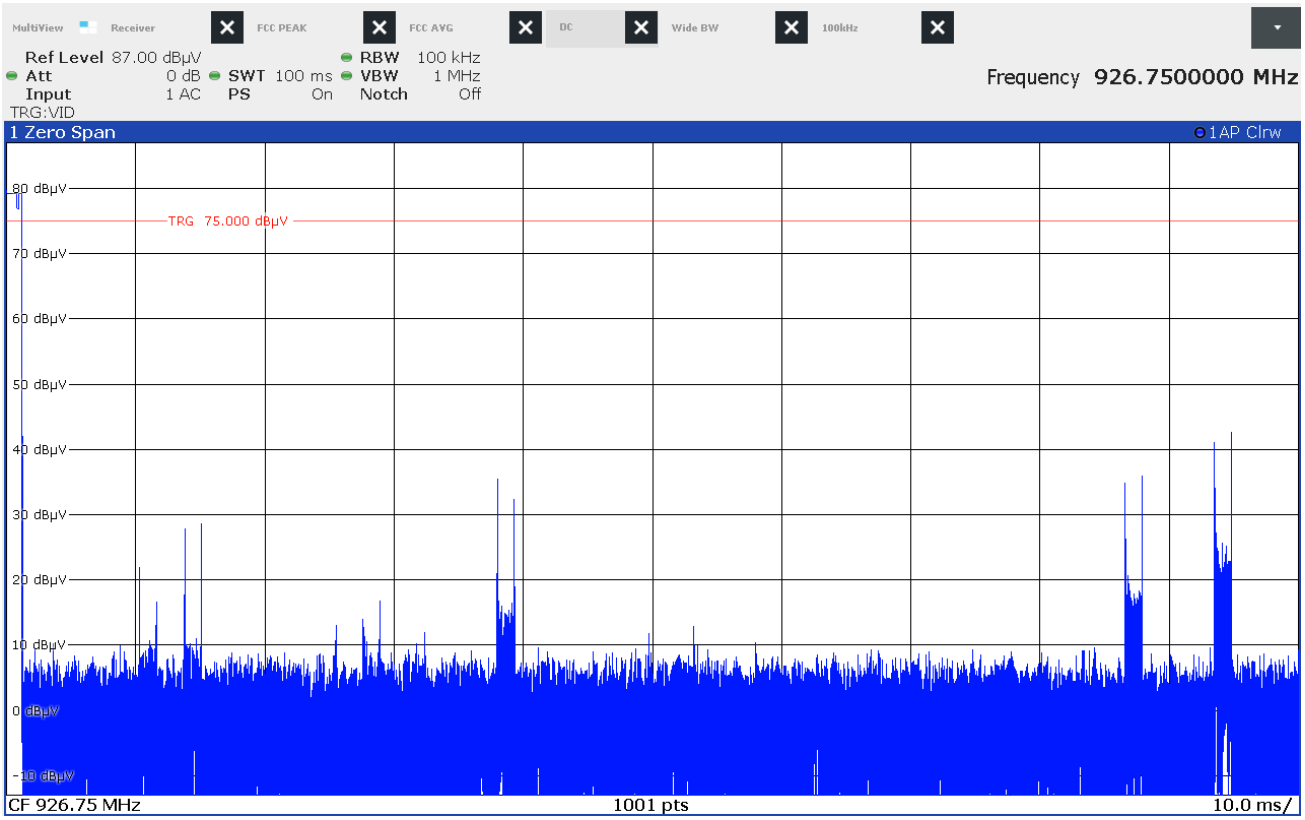
Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200M
Serial No.	Radiated Sample
Mode	Hopping
Frequency Tested	902.25MHz
Result	Duty Cycle Correction Factor= -37.924dB
Notes	Duty Cycle Factor Calculation: 1 × 1.27ms = 1.27ms $\text{Duty Cycle Factor} = 20\log\left(\frac{1.28\text{ms}}{100\text{ms}}\right) = -37.9dB$



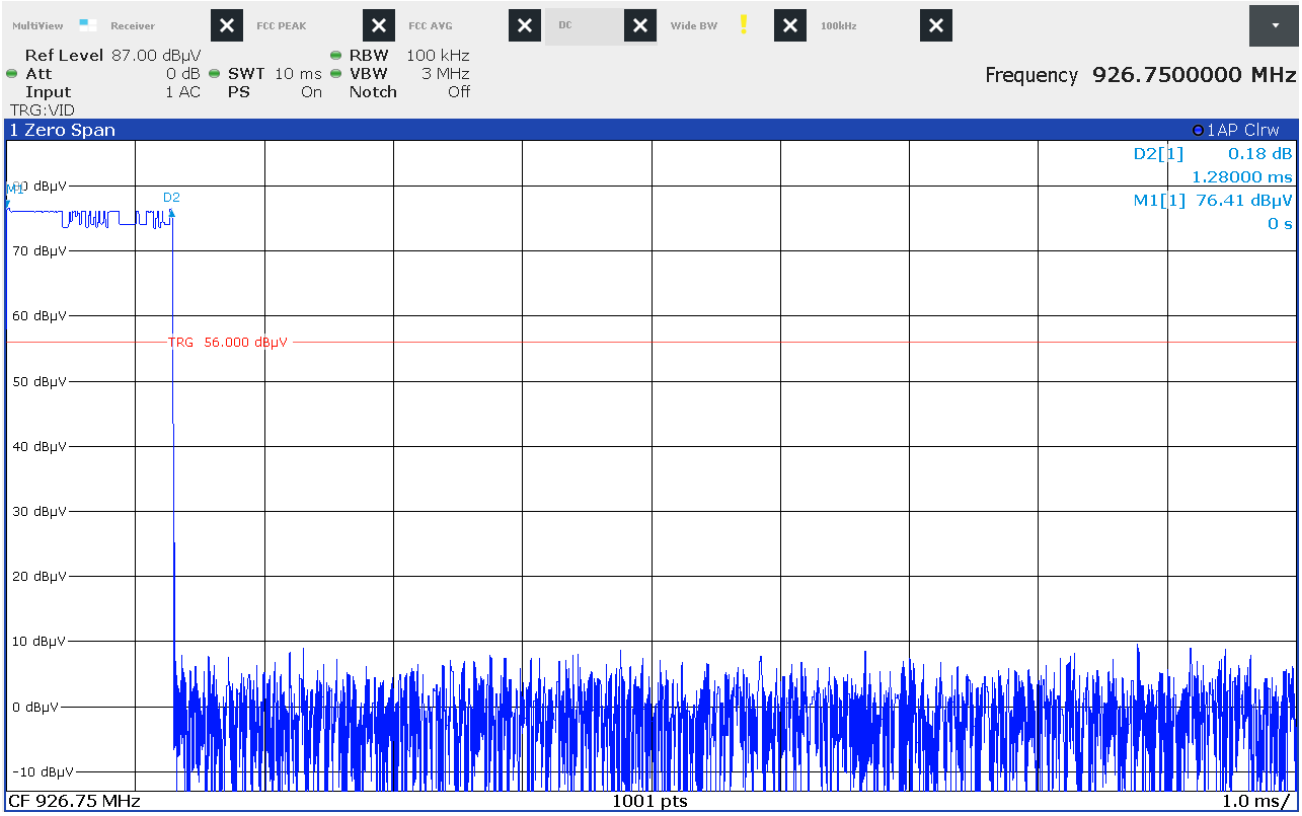
Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	C1000LA
Serial No.	Radiated Sample
Mode	Hopping
Frequency Tested	902.25MHz
Result	On Time = 1.28ms
Notes	None



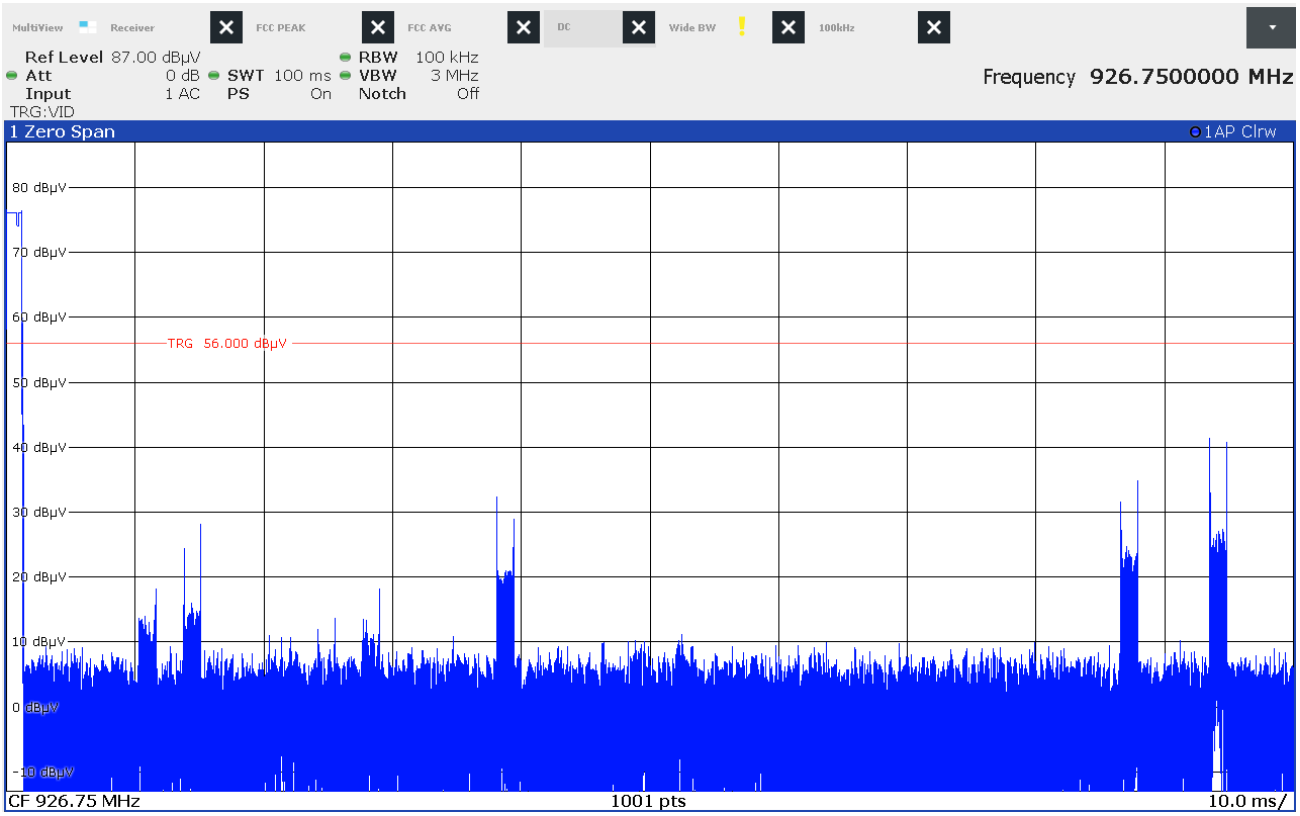
Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	C1000LA
Serial No.	Radiated Sample
Mode	Hopping
Frequency Tested	902.25MHz
Result	Duty Cycle Correction Factor= -37.924dB
Notes	Duty Cycle Factor Calculation: 1 × 1.27ms = 1.27ms $\text{Duty Cycle Factor} = 20\log\left(\frac{1.28\text{ms}}{100\text{ms}}\right) = -37.9dB$



Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2310M
Serial No.	Radiated Sample
Mode	Hopping
Frequency Tested	902.25MHz
Result	On Time = 1.28ms
Notes	None



Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2310M
Serial No.	Radiated Sample
Mode	Hopping
Frequency Tested	902.25MHz
Result	Duty Cycle Correction Factor= -37.924dB
Notes	Duty Cycle Factor Calculation: 1 × 1.27ms = 1.27ms $\text{Duty Cycle Factor} = 20\log\left(\frac{1.28\text{ms}}{100\text{ms}}\right) = -37.9dB$



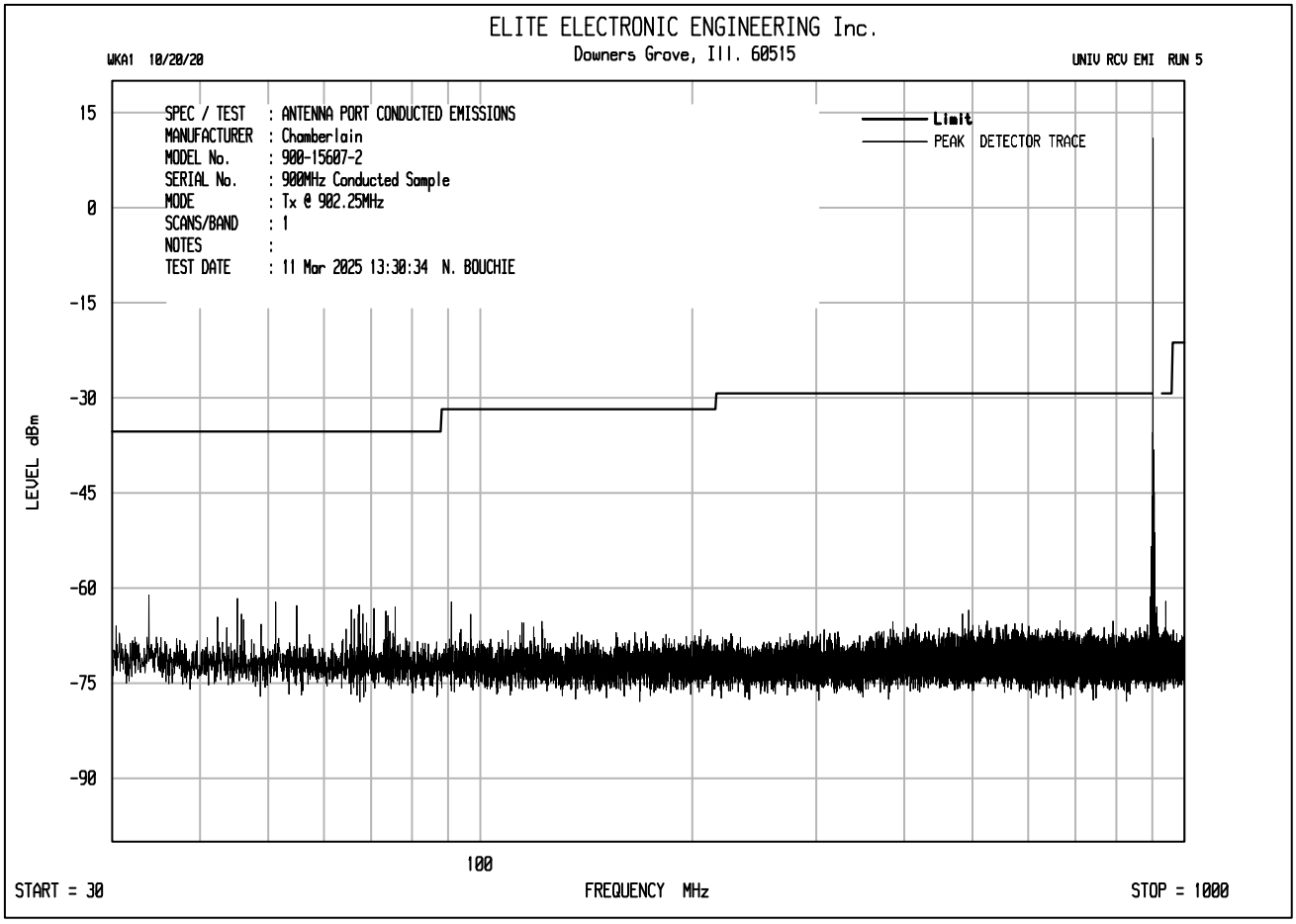
26. Antenna Conducted Spurious Emissions

EUT Information	
Manufacturer	The Chamberlain Group LLC
Product	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Conducted Sample
Mode	Tx @ 902.25MHz Tx @ 914.75MHz Tx @ 926.75MHz

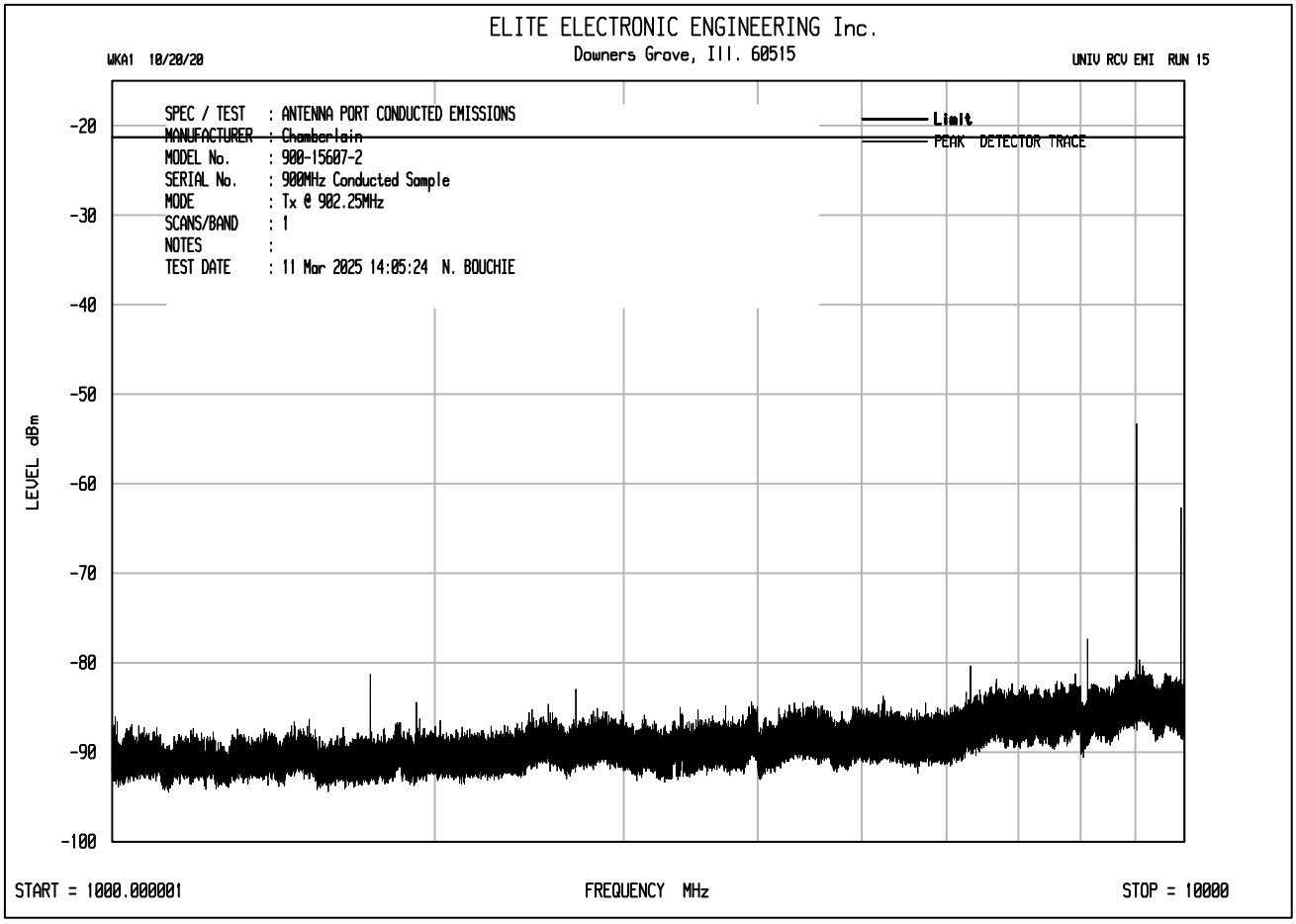
Test Setup Details	
Setup Format	Tabletop
Height of Support	N/A
Measurement Method	Antenna Conducted
Test Site Used	Elite Workbench
Notes	None

Procedure
The antenna port of the EUT was connected to the spectrum analyzer through a 20db attenuator. The resolution bandwidth (RBW) was set to 100kHz. The peak detector and 'Max-Hold' function were engaged. The emissions in the frequency range from 30MHz to 10GHz were observed and plotted separately with the EUT transmitting at low, middle, and high channels.

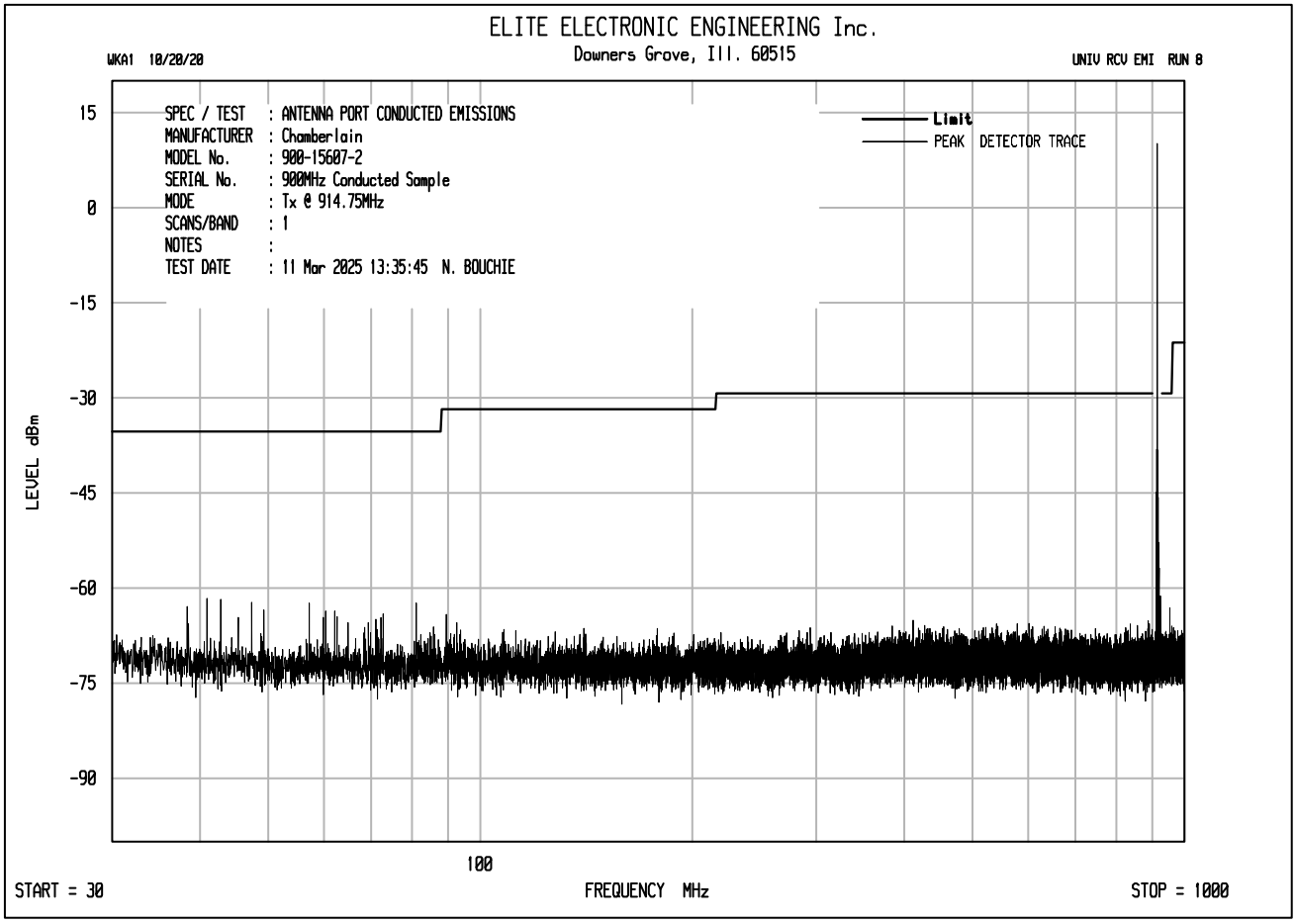
Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Conducted Sample
Mode	Tx @ 902.25MHz
Frequency Tested	902.25MHz
Result	Compliant
Notes	None



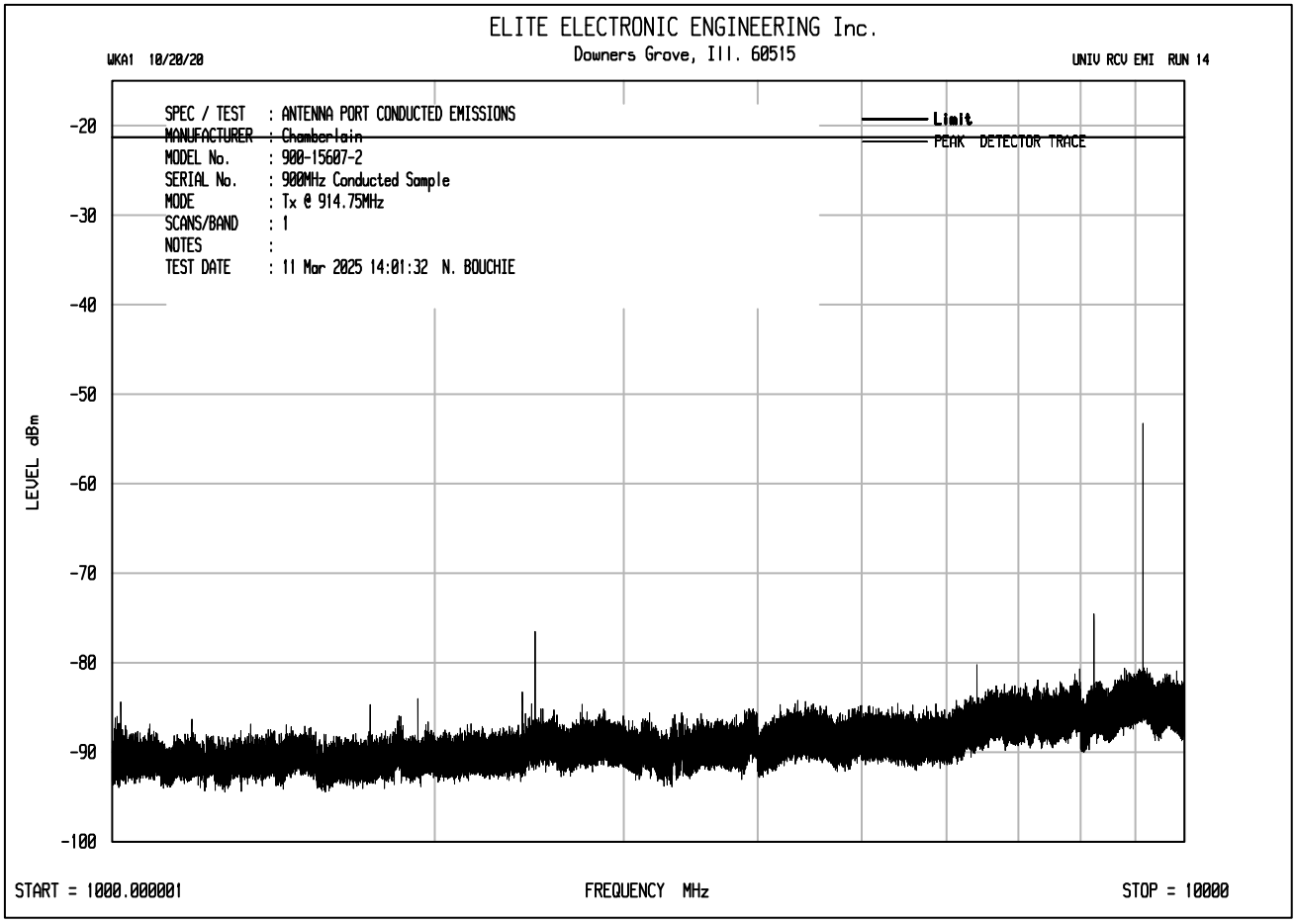
Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Conducted Sample
Mode	Tx @ 902.25MHz
Frequency Tested	902.25MHz
Result	Compliant
Notes	None



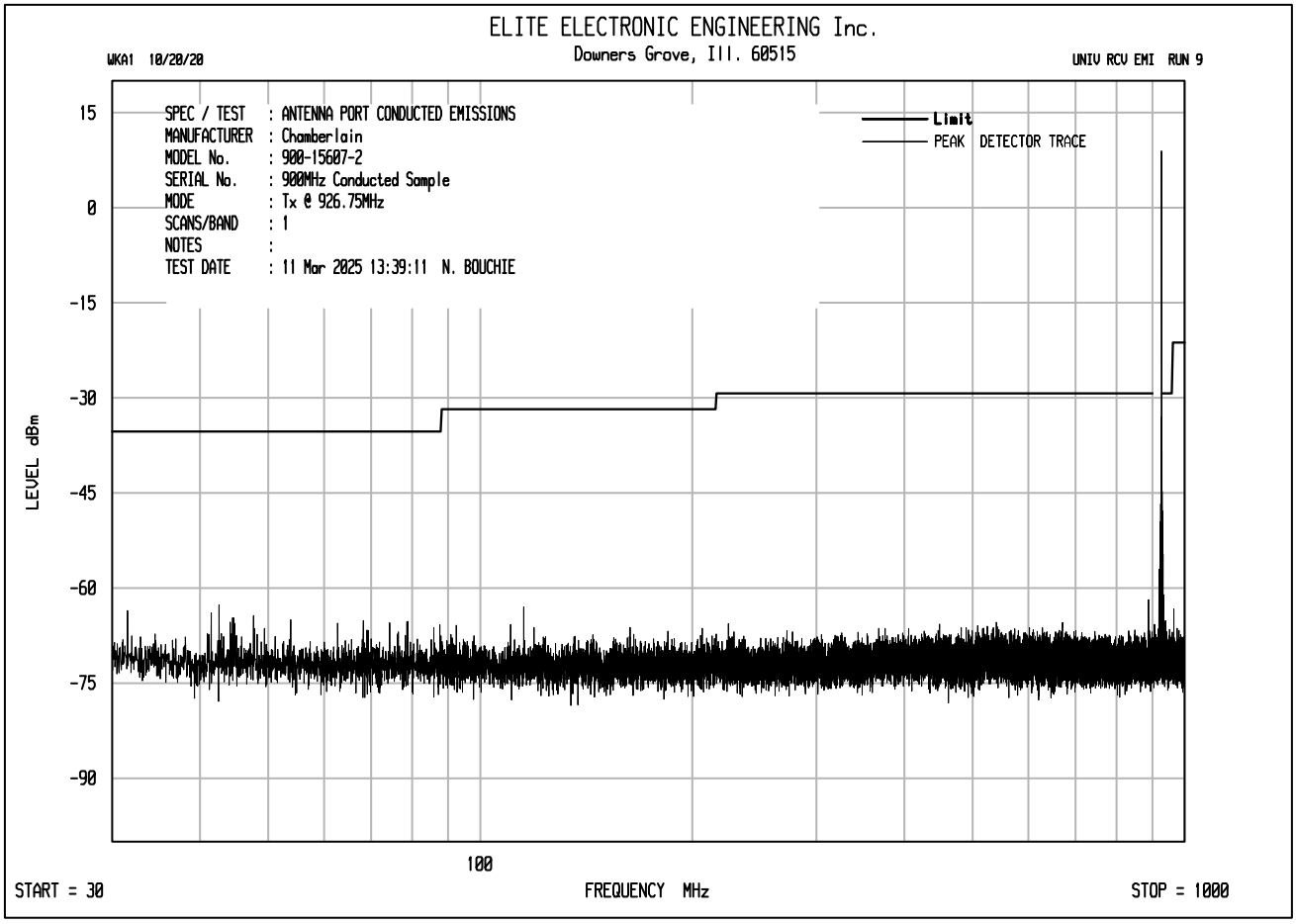
Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Conducted Sample
Mode	Tx @ 914.75MHz
Frequency Tested	914.75MHz
Result	Compliant
Notes	None



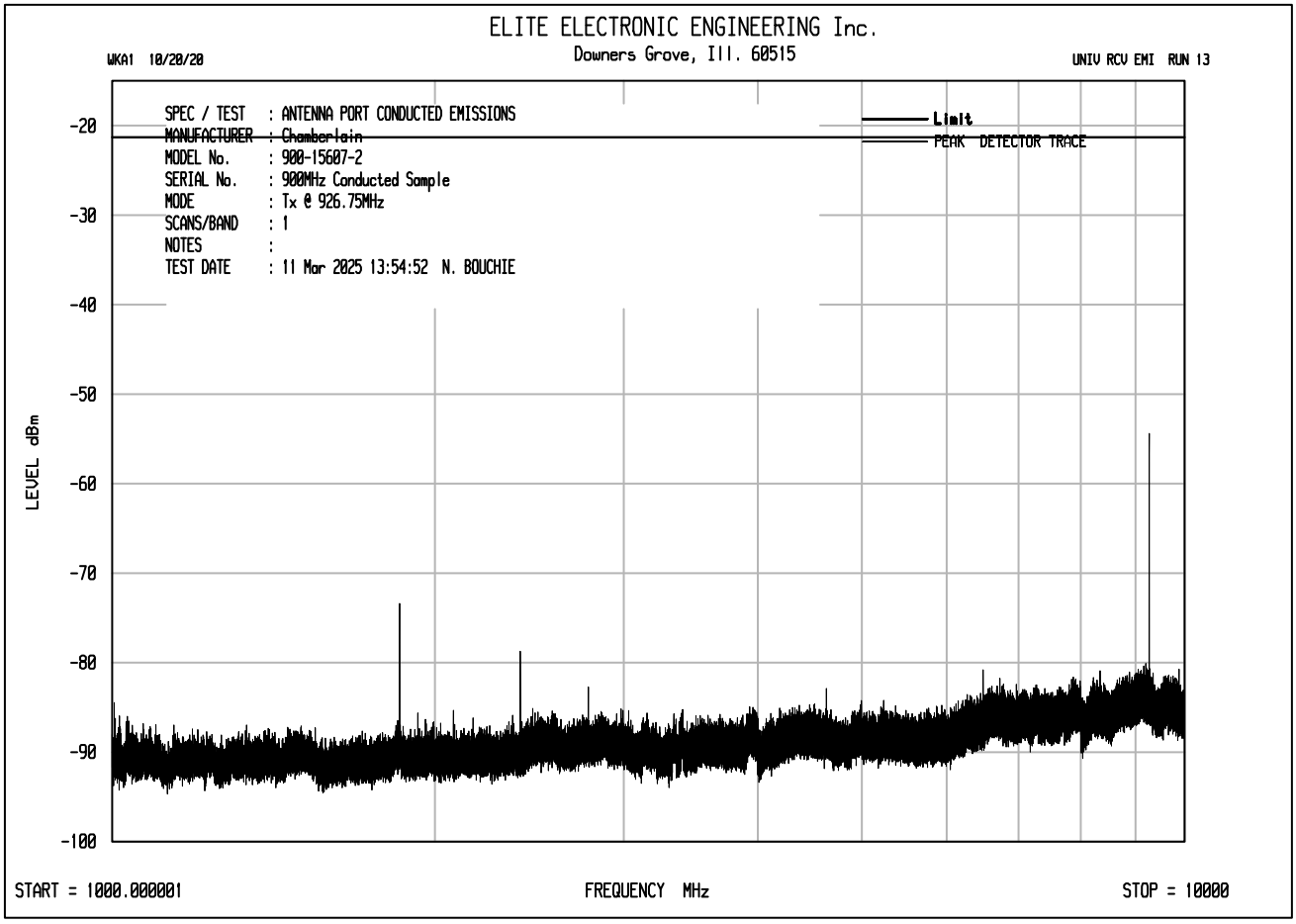
Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Conducted Sample
Mode	Tx @ 914.75MHz
Frequency Tested	914.75MHz
Result	Compliant
Notes	None



Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Conducted Sample
Mode	Tx @ 926.75MHz
Frequency Tested	926.75MHz
Result	Compliant
Notes	None



Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Conducted Sample
Mode	Tx @ 926.75MHz
Frequency Tested	926.75MHz
Result	Compliant
Notes	None



27. Spurious Radiated Emissions

EUT Information	
Manufacturer	The Chamberlain Group LLC
Product	Vulcan – 900-15607 Rev F
Model No.	900-15607-11 2200SA 2200M C1000LA 2310M
Serial No.	Radiated Sample
Mode	Tx @ 902.25MHz Tx @ 914.75MHz Tx @ 926.75MHz

Test Setup Details	
Setup Format	Tabletop
Type of Test Site	Semi-Anechoic Chamber
Test Site Used	Room 21
Type of Antennas Used	Below 1GHz: Bilog (or equivalent) Above 1GHz: Double-Ridged Waveguide (or equivalent)
Notes	None

Measurement Uncertainty	
Measurement Type	Expanded Measurement Uncertainty
Radiated disturbance (electric field strength on an open area test site or alternative test site) (30 MHz – 1000 MHz)	4.3
Radiated disturbance (electric field strength on an open area test site or alternative test site) (1 GHz – 6 GHz)	3.1
Radiated disturbance (electric field strength on an open area test site or alternative test site) (6 GHz – 18 GHz)	3.2
Radiated disturbance (electric field strength on an open area test site or alternative test site) (18 GHz – 26.5 GHz)	3.3
Radiated disturbance (electric field strength on an open area test site or alternative test site) (26.5 GHz – 40 GHz)	3.4

Requirements

Radiated Emissions in Non-Restricted Bands:

Per FCC 15.247, Section (d), and ISED RSS-247, Section 5.5, in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated emissions measurement. Attenuation below the general limits specified in §15.209(a) is not required.

Radiated Emissions in Restricted Bands:

Per 15.247, Section (d), radiated emissions which fall in the restricted bands, as defined in FCC 15.205, Section (a), must comply with the radiated emission limits specified in FCC 15.209, Section (a).

Per ISED RSS-247, Section 3.3, radiated emissions which fall in the restricted bands, as defined in ISED RSS-Gen, Section 8.10, must comply with the radiated emission limits specified in RSS-Gen, Section 8.9.

Procedure
Radiated measurements were performed in a 32ft. x 20ft. x 14ft. high shielded enclosure. The shielded enclosure prevents emissions from other sources, such as radio and TV stations, from interfering with the measurements. All power lines and signal lines entering the enclosure pass through filters on the enclosure wall. The powerline filters prevent extraneous signals from entering the enclosure on these leads. Preliminary radiated emissions tests were performed to determine the emission characteristics of the EUT. For the preliminary test, a broadband measuring antenna was positioned at a 3 meter distance from the EUT. The entire frequency range from 30MHz to 18.0GHz was investigated using a peak detector function. The final open field emission tests were then manually performed over the frequency range of 30MHz to 18.0GHz. 1) For all harmonics not in the restricted bands, the following procedure was used: a) The field strength of the fundamental was measured using a double ridged waveguide antenna. The waveguide antenna was positioned at a 3 meter distance from the EUT. The EUT was placed on a 1.5 meter high non-conductive stand. A peak detector with a resolution bandwidth of 100 kHz was used on the spectrum analyzer. b) The field strengths of all of the harmonics not in the restricted band were then measured using a double-ridged waveguide antenna. The waveguide antenna was positioned at a 3 meter distance from the EUT. The EUT was placed on a 1.5 meter high non-conductive stand. A peak detector with a resolution bandwidth of 100kHz was used on the spectrum analyzer. c) To ensure that maximum or worst case emission levels at the fundamental and harmonics were measured, the following steps were taken when measuring the fundamental emissions and the spurious emissions: i) The EUT was rotated so that all of its sides were exposed to the receiving antenna. ii) Since the measuring antenna is linearly polarized, both horizontal and vertical field components were measured. iii) The measuring antenna was raised and lowered for each antenna polarization to maximize the readings. iv) In instances where it was necessary to use a shortened cable between the measuring antenna and the spectrum analyzer, the measuring antenna was not raised or lowered to ensure maximized readings. Instead, the EUT was rotated through all axis to ensure the maximum readings were recorded for the EUT. d) All harmonics not in the restricted bands must be at least 20dB below levels measured at the fundamental. However, attenuation below the general limits specified in §15.209(a) is not required. 2) For all emissions in the restricted bands, the following procedure was used: a) The field strengths of all emissions below 1GHz were measured using a bi-log antenna. The bi-log antenna was positioned at a 3 meter distance from the EUT. The EUT was placed on an 80cm high non-conductive stand. A peak detector with a resolution bandwidth of 100 kHz was used on the spectrum analyzer. b) The field strengths of all emissions above 1GHz were measured using a double-ridged waveguide antenna. The waveguide antenna was positioned at a 3 meter distance from the EUT. The EUT was placed on a 1.5 meter high non-conductive stand. A peak detector with a resolution bandwidth of 1MHz was used on the spectrum analyzer. c) To ensure that maximum or worst case emission levels were measured, the following steps were taken when taking all measurements: i) The EUT was rotated so that all of its sides were exposed to the receiving antenna.

ii) Since the measuring antenna is linearly polarized, both horizontal and vertical field components were measured.

iii) The measuring antenna was raised and lowered for each antenna polarization to maximize the readings.

iv) In instances where it was necessary to use a shortened cable between the measuring antenna and the spectrum analyzer, the measuring antenna was not raised or lowered to ensure maximized readings. Instead, the EUT was rotated through all axis to ensure the maximum readings were recorded for the EUT.

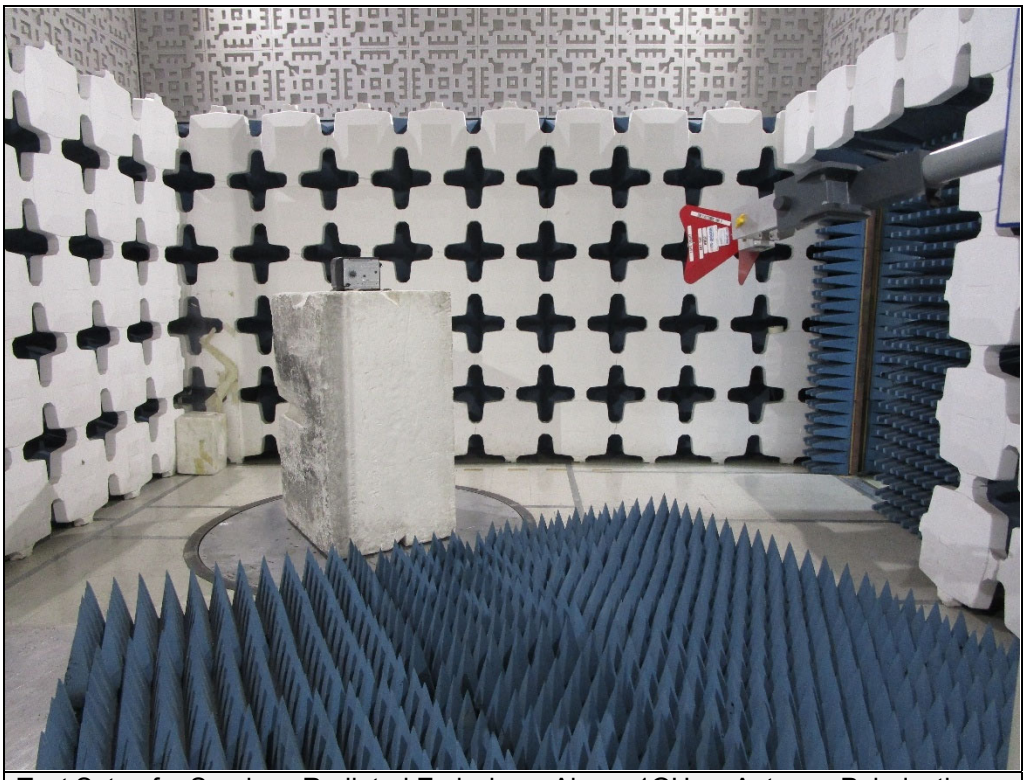
d) For all radiated emissions measurements below 1GHz, if the peak reading is below the limits listed in §15.209(a), no further measurements are required. If, however, the peak readings exceed the limits listed in §15.209(a), then the emissions are remeasured using a quasi-peak detector.

e) For all radiated emissions measurements above 1GHz, the peak readings must comply with the §15.35(b) limits. §15.35(b) states that when average radiated emissions measurements are specified, there also is a limit on the peak level of the radiated emissions. The limit on the peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. Therefore, all peak readings above 1GHz must be no greater than 20dB above the limits specified in §15.209(a).

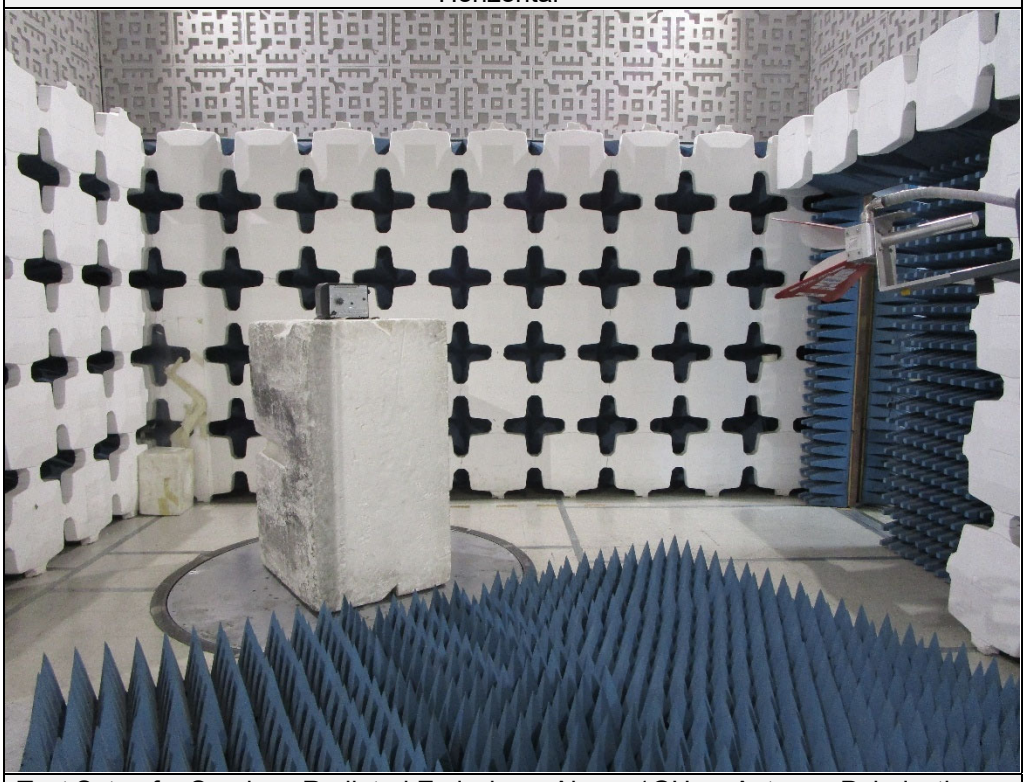
f) Next, for all radiated emissions measurements above 1GHz, the resolution bandwidth was set to 1MHz.. An average reading was taken.

Test Setup for Spurious Radiated Emissions, 30MHz – 1GHz – Antenna Polarization Horizontal

Test Setup for Spurious Radiated Emissions, 30MHz – 1GHz – Antenna Polarization Vertical



Test Setup for Spurious Radiated Emissions, Above 1GHz – Antenna Polarization Horizontal



Test Setup for Spurious Radiated Emissions, Above 1GHz – Antenna Polarization Vertical

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Tx @ 902.25MHz
Test Date	3/20/2025
Notes	Peak Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
2706.75	H	70.5		3.7	32.6	-39.5	67.3	2310.9	5000.0	-6.7
	V	68.1		3.7	32.6	-39.5	64.8	1736.9	5000.0	-9.2
3609.00	H	50.2	*	4.3	33.6	-38.9	49.2	288.5	5000.0	-24.8
	V	50.1	*	4.3	33.6	-38.9	49.1	284.9	5000.0	-24.9
4511.25	H	56.6		4.7	34.3	-38.9	56.7	684.7	5000.0	-17.3
	V	56.4		4.7	34.3	-38.9	56.4	664.5	5000.0	-17.5
5416.00	H	50.9		5.1	34.7	-39.0	51.7	384.9	5000.0	-22.3
	V	51.6		5.1	34.7	-39.0	52.5	419.6	5000.0	-21.5
8120.25	H	51.6		6.5	36.8	-39.0	55.9	622.7	5000.0	-18.1
	V	53.8		6.5	36.8	-39.0	58.1	801.3	5000.0	-15.9
9022.50	H	49.2	*	6.5	36.6	-38.9	53.5	471.4	5000.0	-20.5
	V	49.3	*	6.5	36.6	-38.9	53.6	477.4	5000.0	-20.4

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Tx @ 902.25MHz
Test Date	3/20/2025
Notes	Average Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBµV/m)	Average Total at 3m (µV/m)	Average Limit at 3m (µV/m)	Margin (dB)
2706.75	H	48.62		3.7	32.6	-39.5	-37.9	7.4	2.4	500.0	-46.5
	V	47.57		3.7	32.6	-39.5	-37.9	6.4	2.1	500.0	-47.6
3609.00	H	34.91	*	4.3	33.6	-38.9	-37.9	-4.0	0.6	500.0	-58.0
	V	34.86	*	4.3	33.6	-38.9	-37.9	-4.0	0.6	500.0	-58.0
4511.25	H	41.19		4.7	34.3	-38.9	-37.9	3.3	1.5	500.0	-50.6
	V	41.21		4.7	34.3	-38.9	-37.9	3.4	1.5	500.0	-50.6
5416.00	H	36.90		5.1	34.7	-39.0	-37.9	-0.2	1.0	500.0	-54.2
	V	39.16		5.1	34.7	-39.0	-37.9	2.1	1.3	500.0	-51.9
8120.25	H	35.90		6.5	36.8	-39.0	-37.9	2.3	1.3	500.0	-51.7
	V	38.40		6.5	36.8	-39.0	-37.9	4.8	1.7	500.0	-49.2
9022.50	H	34.53	*	6.5	36.6	-38.9	-37.9	0.9	1.1	500.0	-53.1
	V	34.78	*	6.5	36.6	-38.9	-37.9	1.1	1.1	500.0	-52.8

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Tx @ 902.25MHz
Test Date	3/20/2025
Notes	Peak Measurements in Non-Restricted Bands
Limits	Peak Harmonic Limits = (Peak Fundamental Reading) – 20dB $$386512.4\frac{\mu V}{m} - 20dB = \frac{386512.4}{10} = \mathbf{38651.2}\frac{\boldsymbol{\mu V}}{\boldsymbol{m}}$$

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
902.25	H	83.23		2.0	26.5	0.0	111.7	386512.4	NA	NA
	V	77.15		2.0	26.5	0.0	105.7	191939.1	NA	NA
1804.50	H	42.27		2.9	30.4	-39.8	35.8	62.0	38651.2	-55.9
	V	40.96		2.9	30.4	-39.8	34.5	53.3	38651.2	-57.2
6315.75	H	53.64		5.6	35.8	-39.0	56.0	630.6	38651.2	-35.7
	V	57.80		5.6	35.8	-39.0	60.2	1018.0	38651.2	-31.6
7218.00	H	40.69	*	6.1	36.3	-39.0	44.1	159.9	38651.2	-47.7
	V	38.73	*	6.1	36.3	-39.0	42.1	127.6	38651.2	-49.6
9924.75	H	52.60		7.0	37.2	-38.8	57.9	789.3	38651.2	-33.8
	V	53.86		7.0	37.2	-38.8	59.2	912.5	38651.2	-32.5

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Tx @ 914.75MHz
Test Date	3/20/2025
Notes	Peak Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
2744.25	H	72.4		3.7	32.6	-39.5	69.2	2896.3	5000.0	-4.7
	V	69.3		3.7	32.6	-39.5	66.1	2022.3	5000.0	-7.9
3659.00	H	49.8	*	4.3	33.6	-38.9	48.9	277.7	5000.0	-25.1
	V	49.2	*	4.3	33.6	-38.9	48.3	259.8	5000.0	-25.7
4573.75	H	57.2		4.7	34.3	-38.9	57.3	735.2	5000.0	-16.7
	V	55.8		4.7	34.3	-38.9	56.0	627.9	5000.0	-18.0
7318.00	H	49.6	*	6.2	36.3	-39.0	53.0	445.5	5000.0	-21.0
	V	49.8	*	6.2	36.3	-39.0	53.2	458.6	5000.0	-20.8
8232.75	H	54.5		6.5	36.8	-39.0	58.8	873.7	5000.0	-15.2
	V	52.1		6.5	36.8	-39.0	56.5	668.1	5000.0	-17.5
9147.50	H	50.0	*	6.6	36.7	-38.9	54.4	526.7	5000.0	-19.5
	V	50.0	*	6.6	36.7	-38.9	54.4	526.1	5000.0	-19.6

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Tx @ 914.75MHz
Test Date	3/20/2025
Notes	Average Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBµV/m)	Average Total at 3m (µV/m)	Average Limit at 3m (µV/m)	Margin (dB)
2744.25	H	49.41		3.7	32.6	-39.5	-37.9	8.3	2.6	500.0	-45.7
	V	48.13		3.7	32.6	-39.5	-37.9	7.0	2.2	500.0	-47.0
3659.00	H	34.62	*	4.3	33.6	-38.9	-37.9	-4.3	0.6	500.0	-58.2
	V	34.62	*	4.3	33.6	-38.9	-37.9	-4.3	0.6	500.0	-58.2
4573.75	H	41.53		4.7	34.3	-38.9	-37.9	3.7	1.5	500.0	-50.2
	V	40.60		4.7	34.3	-38.9	-37.9	2.8	1.4	500.0	-51.2
7318.00	H	34.22	*	6.2	36.3	-39.0	-37.9	-0.3	1.0	500.0	-54.3
	V	34.44	*	6.2	36.3	-39.0	-37.9	-0.1	1.0	500.0	-54.0
8232.75	H	38.73		6.5	36.8	-39.0	-37.9	5.2	1.8	500.0	-48.8
	V	37.70		6.5	36.8	-39.0	-37.9	4.1	1.6	500.0	-49.8
9147.50	H	35.31	*	6.6	36.7	-38.9	-37.9	1.8	1.2	500.0	-52.2
	V	35.36	*	6.6	36.7	-38.9	-37.9	1.8	1.2	500.0	-52.2

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Tx @ 914.75MHz
Test Date	3/20/2025
Notes	Peak Measurements in Non-Restricted Bands
Limits	Peak Harmonic Limits = (Peak Fundamental Reading) – 20dB $$430266.6\frac{\mu V}{m} - 20dB = \frac{430266.6}{10} = \mathbf{43026.7}\frac{\boldsymbol{\mu V}}{\boldsymbol{m}}$$

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
914.75	H	84.31		2.1	26.3	0.0	112.7	430266.6	NA	NA
	V	77.81		2.1	26.3	0.0	106.2	203581.2	NA	NA
1829.50	H	40.78	*	2.9	30.5	-39.7	34.5	53.2	43026.7	-58.2
	V	40.25	*	2.9	30.5	-39.7	34.0	50.0	43026.7	-58.7
5491.00	H	45.54		5.2	34.8	-39.0	46.5	211.2	43026.7	-46.2
	V	45.81		5.2	34.8	-39.0	46.8	217.9	43026.7	-45.9
6403.25	H	51.01		5.7	35.7	-39.0	53.4	465.5	43026.7	-39.3
	V	52.18		5.7	35.7	-39.0	54.5	532.6	43026.7	-38.1
10062.25	H	54.91		7.0	37.3	-38.8	60.4	1051.6	43026.7	-32.2
	V	54.25		7.0	37.3	-38.8	59.8	974.6	43026.7	-32.9

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	3/20/2025
Notes	Peak Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
2780.25	H	74.7		3.7	32.6	-39.5	71.5	3779.9	5000.0	-2.4
	V	73.3		3.7	32.6	-39.5	70.2	3221.0	5000.0	-3.8
3707.00	H	50.0	*	4.3	33.4	-38.9	48.9	277.2	5000.0	-25.1
	V	49.8	*	4.3	33.4	-38.9	48.6	269.9	5000.0	-25.4
4633.75	H	57.1		4.8	34.3	-38.9	57.3	733.3	5000.0	-16.7
	V	55.3		4.8	34.3	-38.9	55.4	589.9	5000.0	-18.6
7414.00	H	49.3	*	6.2	36.3	-39.0	52.8	436.0	5000.0	-21.2
	V	48.7	*	6.2	36.3	-39.0	52.2	409.7	5000.0	-21.7
8340.75	H	55.8		6.5	36.7	-39.0	60.0	1005.7	5000.0	-13.9
	V	55.7		6.5	36.7	-39.0	60.0	997.6	5000.0	-14.0

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	3/20/2025
Notes	Average Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBµV/m)	Average Total at 3m (µV/m)	Average Limit at 3m (µV/m)	Margin (dB)
2780.25	H	49.94		3.7	32.6	-39.5	-37.9	8.9	2.8	500.0	-45.1
	V	49.42		3.7	32.6	-39.5	-37.9	8.4	2.6	500.0	-45.6
3707.00	H	34.73	*	4.3	33.4	-38.9	-37.9	-4.3	0.6	500.0	-58.3
	V	34.77	*	4.3	33.4	-38.9	-37.9	-4.3	0.6	500.0	-58.3
4633.75	H	41.62		4.8	34.3	-38.9	-37.9	3.9	1.6	500.0	-50.1
	V	40.05		4.8	34.3	-38.9	-37.9	2.3	1.3	500.0	-51.7
7414.00	H	34.20	*	6.2	36.3	-39.0	-37.9	-0.2	1.0	500.0	-54.2
	V	34.81	*	6.2	36.3	-39.0	-37.9	0.4	1.0	500.0	-53.6
8340.75	H	37.38		6.5	36.7	-39.0	-37.9	3.7	1.5	500.0	-50.3
	V	37.68		6.5	36.7	-39.0	-37.9	4.0	1.6	500.0	-50.0

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	3/20/2025
Notes	Peak Measurements in Non-Restricted Bands
Limits	Peak Harmonic Limits = (Peak Fundamental Reading) – 20dB $472133.2\frac{\mu V}{m} - 20dB = \frac{472133.2}{10} = \mathbf{47213.3}\frac{\boldsymbol{\mu V}}{\boldsymbol{m}}$

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
926.75	H	84.76		2.1	26.7	0.0	113.5	472133.2	NA	NA
	V	78.69		2.1	26.7	0.0	107.4	234727.8	NA	NA
1853.50	H	41.82	*	3.0	30.6	-39.7	35.7	61.0	47213.3	-57.8
	V	40.90	*	3.0	30.6	-39.7	34.8	54.9	47213.3	-58.7
5563.00	H	46.23		5.2	34.9	-39.0	47.3	232.4	47213.3	-46.2
	V	44.10		5.2	34.9	-39.0	45.2	181.9	47213.3	-48.3
6487.25	H	48.64		5.7	35.7	-39.0	51.0	354.6	47213.3	-42.5
	V	50.49		5.7	35.7	-39.0	52.8	438.8	47213.3	-40.6
9267.50	H	49.41		6.6	36.7	-38.9	53.9	496.0	47213.3	-39.6
	V	50.74		6.6	36.7	-38.9	55.2	578.1	47213.3	-38.2

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200SA
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	July 16, 2025
Notes	Peak Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
2780.25	H	69.8		3.7	32.6	-39.5	66.6	2142.8	5000.0	-7.4
	V	69.8		3.7	32.6	-39.5	66.7	2160.2	5000.0	-7.3
3707.00	H	51.6		4.3	33.4	-38.9	50.5	334.0	5000.0	-23.5
	V	50.2		4.3	33.4	-38.9	49.1	285.6	5000.0	-24.9
4633.75	H	57.9		4.8	34.3	-38.9	58.1	803.1	5000.0	-15.9
	V	54.4		4.8	34.3	-38.9	54.5	533.1	5000.0	-19.4
7414.00	H	49.3	*	6.2	36.3	-39.0	52.8	435.0	5000.0	-21.2
	V	50.1	*	6.2	36.3	-39.0	53.6	480.8	5000.0	-20.3
8340.75	H	53.2		6.5	36.7	-39.0	57.4	743.8	5000.0	-16.6
	V	54.9		6.5	36.7	-39.0	59.2	910.9	5000.0	-14.8

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200SA
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	July 16, 2025
Notes	Average Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBµV/m)	Average Total at 3m (µV/m)	Average Limit at 3m (µV/m)	Margin (dB)
2780.25	H	69.01		3.7	32.6	-39.5	-37.9	28.0	25.0	500.0	-26.0
	V	69.16		3.7	32.6	-39.5	-37.9	28.1	25.4	500.0	-25.9
3707.00	H	46.48		4.3	33.4	-38.9	-37.9	7.4	2.4	500.0	-46.5
	V	41.95		4.3	33.4	-38.9	-37.9	2.9	1.4	500.0	-51.1
4633.75	H	55.32		4.8	34.3	-38.9	-37.9	17.6	7.6	500.0	-36.4
	V	49.29		4.8	34.3	-38.9	-37.9	11.5	3.8	500.0	-42.4
7414.00	H	38.88	*	6.2	36.3	-39.0	-37.9	4.5	1.7	500.0	-49.5
	V	40.16	*	6.2	36.3	-39.0	-37.9	5.8	1.9	500.0	-48.2
8340.75	H	44.23		6.5	36.7	-39.0	-37.9	10.6	3.4	500.0	-43.4
	V	44.06		6.5	36.7	-39.0	-37.9	10.4	3.3	500.0	-43.6

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200SA
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	July 16, 2025
Notes	Peak Measurements in Non-Restricted Bands
Limits	Peak Harmonic Limits = (Peak Fundamental Reading) – 20dB $$411210.8\frac{\mu V}{m} - 20dB = \frac{411210.8}{10} = \mathbf{41121.1}\frac{\boldsymbol{\mu V}}{\boldsymbol{m}}$$

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
926.75	H	83.56		2.1	26.7	0.0	112.3	411210.8	NA	NA
	V	74.67		2.1	26.7	0.0	103.4	147762.6	NA	NA
1853.50	H	42.64		3.0	30.6	-39.7	36.5	67.1	41121.1	-55.8
	V	42.87		3.0	30.6	-39.7	36.8	68.9	41121.1	-55.5
5563.00	H	48.16		5.2	34.9	-39.0	49.3	290.2	41121.1	-43.0
	V	46.51		5.2	34.9	-39.0	47.6	240.0	41121.1	-44.7
6487.25	H	51.56		5.7	35.7	-39.0	53.9	496.3	41121.1	-38.4
	V	50.88		5.7	35.7	-39.0	53.2	458.9	41121.1	-39.0
9267.50	H	40.88		6.6	36.7	-38.9	45.4	185.8	41121.1	-46.9
	V	42.32		6.6	36.7	-38.9	46.8	219.3	41121.1	-45.5

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200M
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	July 16, 2025
Notes	Peak Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
2780.25	H	73.3		3.7	32.6	-39.5	70.2	3239.6	5000.0	-3.8
	V	70.8		3.7	32.6	-39.5	67.6	2412.6	5000.0	-6.3
3707.00	H	52.3		4.3	33.4	-38.9	51.2	363.3	5000.0	-22.8
	V	50.7		4.3	33.4	-38.9	49.6	301.1	5000.0	-24.4
4633.75	H	57.8		4.8	34.3	-38.9	57.9	789.4	5000.0	-16.0
	V	55.4		4.8	34.3	-38.9	55.6	600.9	5000.0	-18.4
7414.00	H	49.3	*	6.2	36.3	-39.0	52.9	439.5	5000.0	-21.1
	V	49.4	*	6.2	36.3	-39.0	52.9	442.0	5000.0	-21.1
8340.75	H	54.2		6.5	36.7	-39.0	58.4	834.6	5000.0	-15.6
	V	55.2		6.5	36.7	-39.0	59.4	933.2	5000.0	-14.6

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200M
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	July 16, 2025
Notes	Average Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBµV/m)	Average Total at 3m (µV/m)	Average Limit at 3m (µV/m)	Margin (dB)
2780.25	H	72.89		3.7	32.6	-39.5	-37.9	31.8	39.1	500.0	-22.1
	V	70.22		3.7	32.6	-39.5	-37.9	29.2	28.7	500.0	-24.8
3707.00	H	46.06		4.3	33.4	-38.9	-37.9	7.0	2.2	500.0	-47.0
	V	42.69		4.3	33.4	-38.9	-37.9	3.6	1.5	500.0	-50.3
4633.75	H	55.36		4.8	34.3	-38.9	-37.9	17.6	7.6	500.0	-36.4
	V	52.40		4.8	34.3	-38.9	-37.9	14.6	5.4	500.0	-39.3
7414.00	H	38.63	*	6.2	36.3	-39.0	-37.9	4.2	1.6	500.0	-49.8
	V	39.01	*	6.2	36.3	-39.0	-37.9	4.6	1.7	500.0	-49.4
8340.75	H	50.36		6.5	36.7	-39.0	-37.9	16.7	6.8	500.0	-37.3
	V	51.85		6.5	36.7	-39.0	-37.9	18.2	8.1	500.0	-35.8

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200M
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	July 16, 2025
Notes	Peak Measurements in Non-Restricted Bands
Limits	Peak Harmonic Limits = (Peak Fundamental Reading) – 20dB $$230178.4\frac{\mu V}{m} - 20dB = \frac{230178.4}{10} = \mathbf{23017.8}\frac{\boldsymbol{\mu V}}{\boldsymbol{m}}$$

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
926.75	H	78.52		2.1	26.7	0.0	107.2	230178.4	NA	NA
	V	70.15		2.1	26.7	0.0	98.9	87814.1	NA	NA
1853.50	H	42.36		3.0	30.6	-39.7	36.3	64.9	23017.8	-51.0
	V	42.43		3.0	30.6	-39.7	36.3	65.5	23017.8	-50.9
5563.00	H	47.35		5.2	34.9	-39.0	48.4	264.4	23017.8	-38.8
	V	44.05		5.2	34.9	-39.0	45.1	180.8	23017.8	-42.1
6487.25	H	52.12		5.7	35.7	-39.0	54.5	529.3	23017.8	-32.8
	V	51.58		5.7	35.7	-39.0	53.9	497.4	23017.8	-33.3
9267.50	H	40.64		6.6	36.7	-38.9	45.1	180.7	23017.8	-42.1
	V	41.79		6.6	36.7	-38.9	46.3	206.3	23017.8	-41.0

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	C1000LA
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	July 16, 2025
Notes	Peak Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
2780.25	H	72.5		3.7	32.6	-39.5	69.3	2930.8	5000.0	-4.6
	V	70.0		3.7	32.6	-39.5	66.9	2210.5	5000.0	-7.1
3707.00	H	50.2		4.3	33.4	-38.9	49.0	283.3	5000.0	-24.9
	V	49.9		4.3	33.4	-38.9	48.7	273.1	5000.0	-25.3
4633.75	H	57.3		4.8	34.3	-38.9	57.5	746.1	5000.0	-16.5
	V	55.5		4.8	34.3	-38.9	55.7	609.2	5000.0	-18.3
7414.00	H	49.1	*	6.2	36.3	-39.0	52.6	428.0	5000.0	-21.4
	V	50.0	*	6.2	36.3	-39.0	53.5	474.7	5000.0	-20.5
8340.75	H	54.6		6.5	36.7	-39.0	58.9	877.9	5000.0	-15.1
	V	57.8		6.5	36.7	-39.0	62.0	1260.2	5000.0	-12.0

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	C1000LA
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	July 16, 2025
Notes	Average Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBµV/m)	Average Total at 3m (µV/m)	Average Limit at 3m (µV/m)	Margin (dB)
2780.25	H	71.95		3.7	32.6	-39.5	-37.9	30.9	35.1	500.0	-23.1
	V	69.20		3.7	32.6	-39.5	-37.9	28.1	25.5	500.0	-25.8
3707.00	H	42.76		4.3	33.4	-38.9	-37.9	3.7	1.5	500.0	-50.3
	V	41.69		4.3	33.4	-38.9	-37.9	2.6	1.4	500.0	-51.3
4633.75	H	54.93		4.8	34.3	-38.9	-37.9	17.2	7.2	500.0	-36.8
	V	51.88		4.8	34.3	-38.9	-37.9	14.1	5.1	500.0	-39.9
7414.00	H	42.63	*	6.2	36.3	-39.0	-37.9	8.2	2.6	500.0	-45.8
	V	43.32	*	6.2	36.3	-39.0	-37.9	8.9	2.8	500.0	-45.1
8340.75	H	49.45		6.5	36.7	-39.0	-37.9	15.8	6.1	500.0	-38.2
	V	51.87		6.5	36.7	-39.0	-37.9	18.2	8.1	500.0	-35.8

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	C1000LA
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	July 16, 2025
Notes	Peak Measurements in Non-Restricted Bands
Limits	Peak Harmonic Limits = (Peak Fundamental Reading) – 20dB $$239642.9\frac{\mu V}{m} - 20dB = \frac{239642.9}{10} = \mathbf{23964.3}\frac{\boldsymbol{\mu V}}{\boldsymbol{m}}$$

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
926.75	H	78.87		2.1	26.7	0.0	107.6	239642.9	NA	NA
	V	69.46		2.1	26.7	0.0	98.2	81108.2	NA	NA
1853.50	H	39.87		3.0	30.6	-39.7	33.8	48.8	23964.3	-53.8
	V	40.48		3.0	30.6	-39.7	34.4	52.3	23964.3	-53.2
5563.00	H	47.85		5.2	34.9	-39.0	48.9	280.1	23964.3	-38.6
	V	42.99		5.2	34.9	-39.0	44.1	160.0	23964.3	-43.5
6487.25	H	52.04		5.7	35.7	-39.0	54.4	524.5	23964.3	-33.2
	V	52.64		5.7	35.7	-39.0	55.0	562.0	23964.3	-32.6
9267.50	H	40.16		6.6	36.7	-38.9	44.7	171.0	23964.3	-42.9
	V	42.37		6.6	36.7	-38.9	46.9	220.5	23964.3	-40.7

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2310M
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	July 16, 2025
Notes	Peak Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
2780.25	H	73.9		3.7	32.6	-39.5	70.7	3443.4	5000.0	-3.2
	V	70.3		3.7	32.6	-39.5	67.2	2282.9	5000.0	-6.8
3707.00	H	51.3		4.3	33.4	-38.9	50.1	320.8	5000.0	-23.9
	V	50.6		4.3	33.4	-38.9	49.5	298.0	5000.0	-24.5
4633.75	H	57.6		4.8	34.3	-38.9	57.8	776.8	5000.0	-16.2
	V	55.6		4.8	34.3	-38.9	55.7	610.6	5000.0	-18.3
7414.00	H	49.1	*	6.2	36.3	-39.0	52.6	425.6	5000.0	-21.4
	V	49.3	*	6.2	36.3	-39.0	52.8	437.5	5000.0	-21.2
8340.75	H	53.6		6.5	36.7	-39.0	57.9	784.2	5000.0	-16.1
	V	57.4		6.5	36.7	-39.0	61.6	1209.1	5000.0	-12.3

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2310M
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	July 16, 2025
Notes	Average Measurements in the Restricted Bands

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	CBL Fac (dB)	Ant Fac (dB/m)	Pre Amp (dB)	Duty Cycle Factor (dB)	Average Total at 3m (dBµV/m)	Average Total at 3m (µV/m)	Average Limit at 3m (µV/m)	Margin (dB)
2780.25	H	73.47		3.7	32.6	-39.5	-37.9	32.4	41.8	500.0	-21.6
	V	69.40		3.7	32.6	-39.5	-37.9	28.3	26.1	500.0	-25.6
3707.00	H	43.16		4.3	33.4	-38.9	-37.9	4.1	1.6	500.0	-49.9
	V	42.86		4.3	33.4	-38.9	-37.9	3.8	1.6	500.0	-50.2
4633.75	H	55.12		4.8	34.3	-38.9	-37.9	17.4	7.4	500.0	-36.6
	V	52.60		4.8	34.3	-38.9	-37.9	14.8	5.5	500.0	-39.1
7414.00	H	38.91	*	6.2	36.3	-39.0	-37.9	4.5	1.7	500.0	-49.5
	V	38.60	*	6.2	36.3	-39.0	-37.9	4.2	1.6	500.0	-49.8
8340.75	H	49.23		6.5	36.7	-39.0	-37.9	15.6	6.0	500.0	-38.4
	V	53.76		6.5	36.7	-39.0	-37.9	20.1	10.1	500.0	-33.9

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2310M
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Test Date	July 16, 2025
Notes	Peak Measurements in Non-Restricted Bands
Limits	Peak Harmonic Limits = (Peak Fundamental Reading) – 20dB $$200939.1\frac{\mu V}{m} - 20dB = \frac{200939.1}{10} = \mathbf{20093.9}\frac{\boldsymbol{\mu V}}{\boldsymbol{m}}$$

Freq (MHz)	Ant Pol	Meter Reading (dBµV)	Ambient	Cable Factor (dB)	Antenna Factor (dB/m)	Pre Amp (dB)	Peak Total at 3m (dBµV/m)	Peak Total at 3m (µV/m)	Peak Limit at 3m (µV/m)	Margin (dB)
926.75	H	77.34		2.1	26.7	0.0	106.1	200939.1	NA	NA
	V	68.13		2.1	26.7	0.0	96.9	69592.8	NA	NA
1853.50	H	41.74		3.0	30.6	-39.7	35.6	60.5	20093.9	-50.4
	V	41.13	*	3.0	30.6	-39.7	35.0	56.4	20093.9	-51.0
5563.00	H	48.22		5.2	34.9	-39.0	49.3	292.2	20093.9	-36.7
	V	44.32		5.2	34.9	-39.0	45.4	186.5	20093.9	-40.6
6487.25	H	52.52		5.7	35.7	-39.0	54.9	554.3	20093.9	-31.2
	V	52.82		5.7	35.7	-39.0	55.2	573.8	20093.9	-30.9
9267.50	H	40.51		6.6	36.7	-38.9	45.0	178.0	20093.9	-41.1
	V	42.93		6.6	36.7	-38.9	47.4	235.2	20093.9	-38.6

28. Band-Edge Compliance

EUT Information	
Manufacturer	The Chamberlain Group LLC
Product	Vulcan – 900-15607 Rev F
Model No.	900-15607-11 2200SA 2200M C1000LA 2310M
Serial No.	Radiated Sample
Mode	Tx @ 902.25MHz Tx @ 926.75MHz Hopping

Test Setup Details	
Setup Format	Tabletop
Height of Support	N/A
Measurement Method	Antenna Conducted
Type of Test Site	Tabletop
Test Site Used	Elite Workbench
Type of Antennas Used	N/A

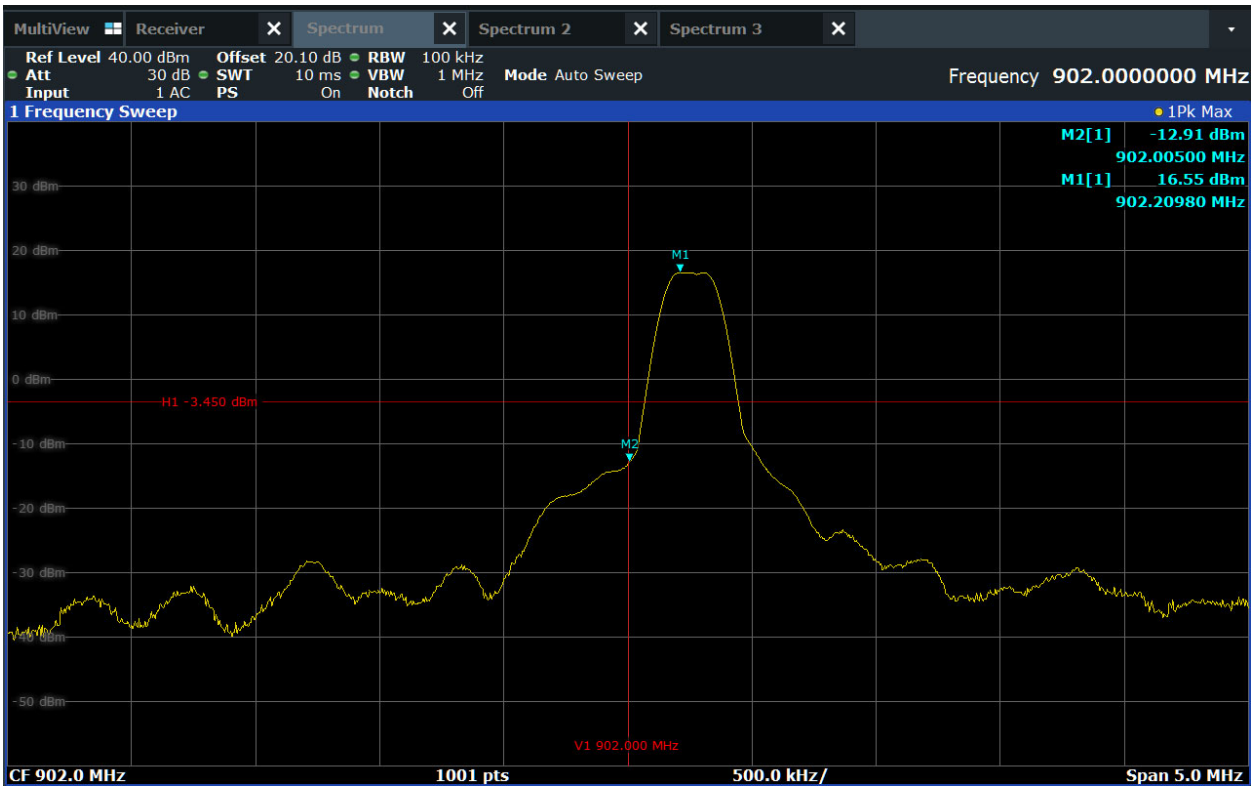
Measurement Uncertainty	
Measurement Type	Expanded Measurement Uncertainty
Radiated disturbance (electric field strength on an open area test site or alternative test site) (30 MHz – 1000 MHz)	4.3
Radiated disturbance (electric field strength on an open area test site or alternative test site) (1 GHz – 6 GHz)	3.1

Procedure

1) Low Band Edge:
   a) The antenna port of the EUT was connected to the spectrum analyzer through a 20db attenuator.
   b) The EUT was set to transmit continuously at the channel closest to the low band-edge.
   c) To determine the band edge compliance, the following spectrum analyzer settings were used:
      - Center Frequency = 2400MHz (low band-edge frequency).
      - Span = Wide enough to capture the peak level of the emission operating on the channel closest to the band-edge, as well as any modulation products which fall outside of the authorized band of operation.
      - Resolution Bandwidth (RBW) = ≥ 1% of the span.
      - ‘Max-Hold' function was engaged.
   d) The analyzer was allowed to scan until the envelope of the transmitter bandwidth was defined.
   e) The marker was set on the peak of the in-band emissions. A display line was placed 20dB down from the peak of the in-band emissions. All emissions which fall outside of the authorized band of operation must be below the 20dB down display line. (All emissions to the left of the center frequency (band-edge) must be below the display line.)
   f) The analyzer's display was then screenshot and saved.

Procedure
2) High Band Edge: a) The EUT was set up inside the test chamber on a non-conductive stand and set to transmit continuously at the channel closest to the high band-edge. b) A broadband measuring antenna was placed at a test distance of 3 meters from the EUT. The antenna was connected to the input of a spectrum analyzer. c) The center frequency of the analyzer was set to the high band edge (2483.5MHz). d) The Resolution Bandwidth was set to 1MHz. e) To ensure that the maximum or worst case emission level was measured, the following steps were taken: o The EUT was rotated so that all of its sides were exposed to the receiving antenna. o Since the measuring antenna is linearly polarized, both horizontal and vertical field components were measured. o The EUT was rotated so that all of its sides were exposed to the receiving antenna. o The measuring antenna was raised and lowered from 1 to 4 meters for each antenna polarization to maximize the readings. o The highest measured peak reading and the highest measured average reading were recorded.

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Tx @ 902.25MHz
Frequency Tested	902.25MHz
Notes	Low Band Edge – Low Channel

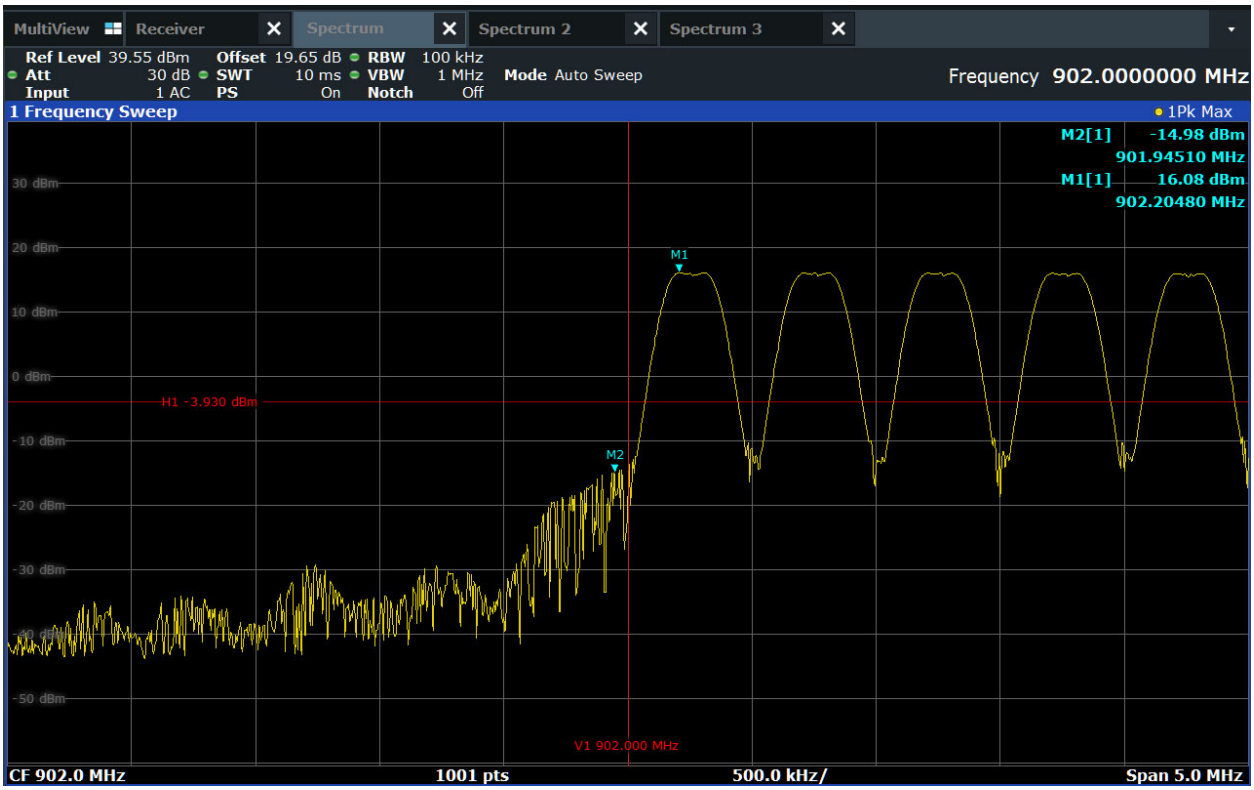


Band edge Compliance

Manufacturer : The Chamberlain Group LLC
Model Number : 900-15607-11
Serial Number : Radiated Sample
Mode : Tx @ 902.25MHz
Line Tested : Antenna Port
Parameters : Low Band edge
Date : 3/21/2025 1:01:24 PM
Notes : None

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Hopping – 902.25MHz
Notes	Low Band Edge – Low Channel

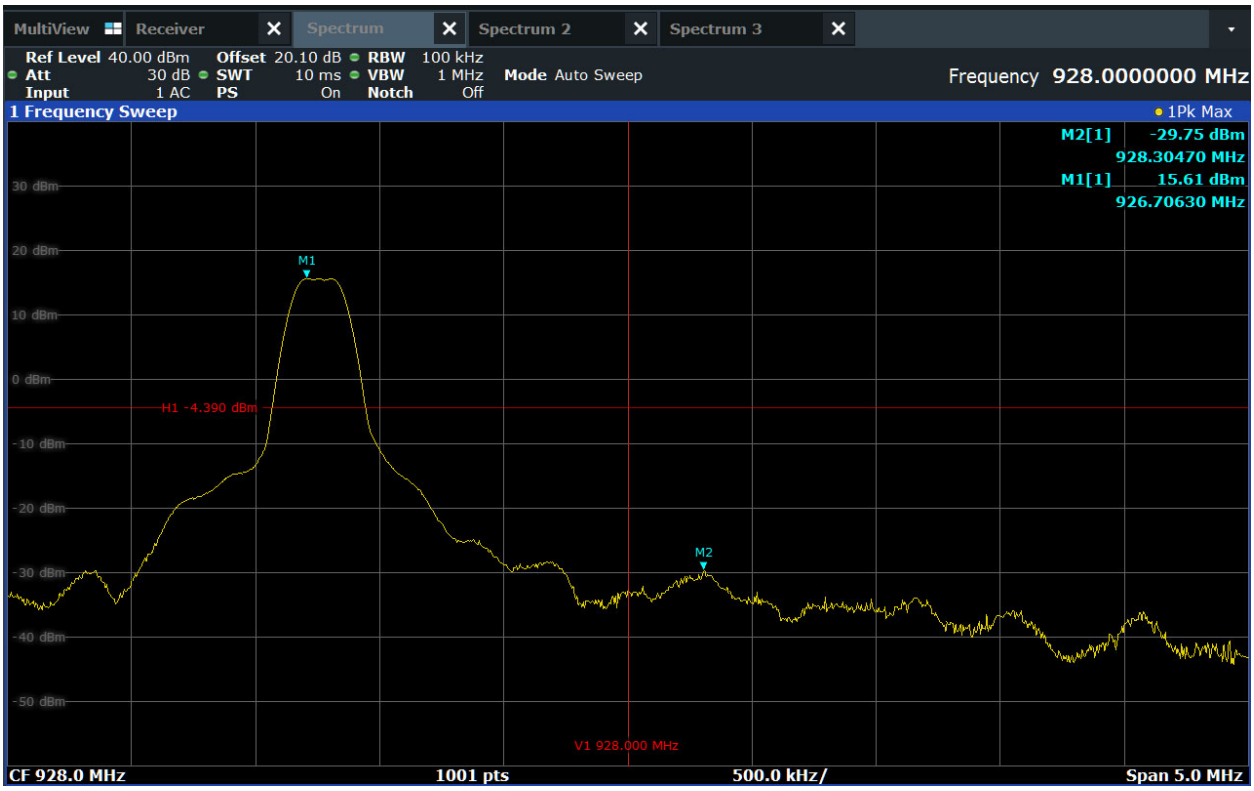


Band edge Compliance

Manufacturer : The Chamberlain Group LLC
Model Number : 900-15607-11
Serial Number : Radiated Sample
Mode : Hopping - 902.25MHz
Line Tested : Antenna Port
Parameters : Low Band edge
Date : 3/21/2025 12:06:15 PM
Notes : None

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Frequency Tested	926.75MHz
Notes	High Band Edge – High Channel

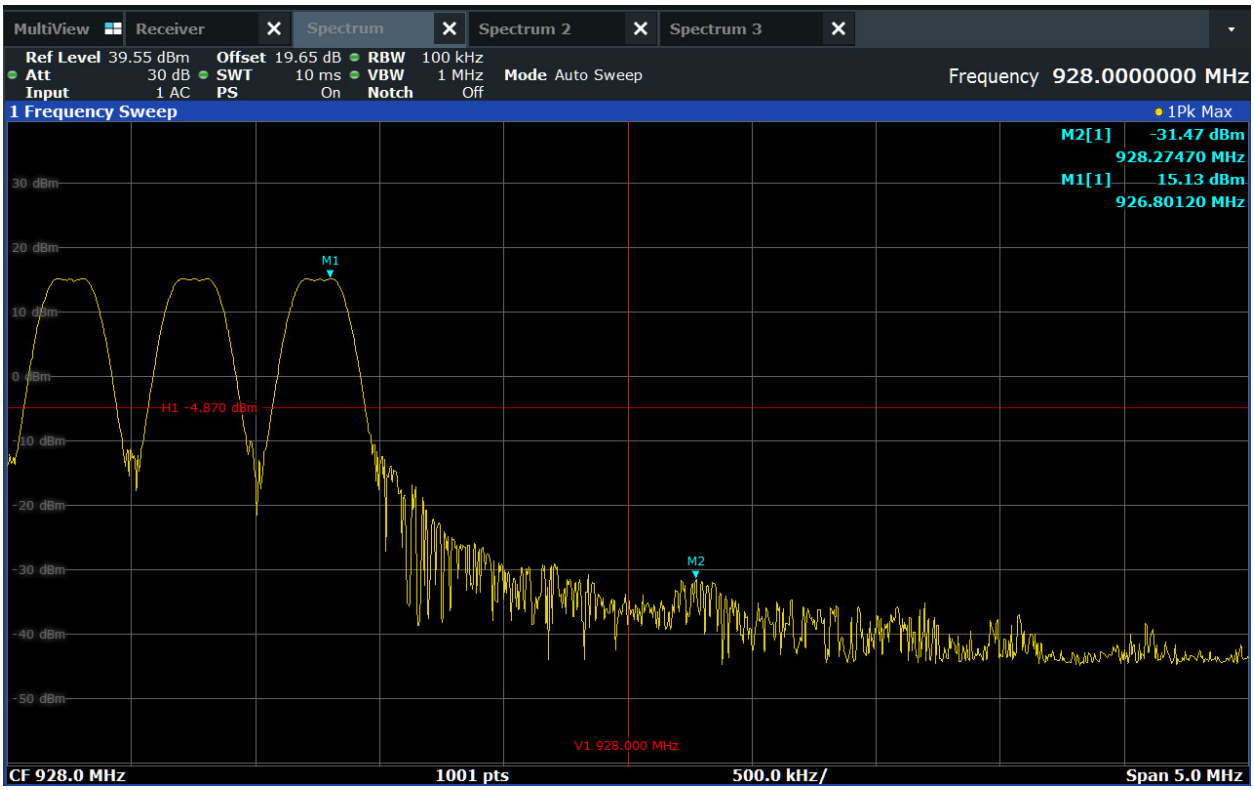


Band edge Compliance

Manufacturer : The Chamberlain Group LLC
Model Number : 900-15607-11
Serial Number : Radiated Sample
Mode : Tx @ 926.75MHz
Line Tested : Antenna Port
Parameters : High Band edge
Date : 3/21/2025 1:02:47 PM
Notes : None

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	900-15607-11
Serial No.	Radiated Sample
Mode	Hopping – 926.75MHz
Notes	High Band Edge – High Channel

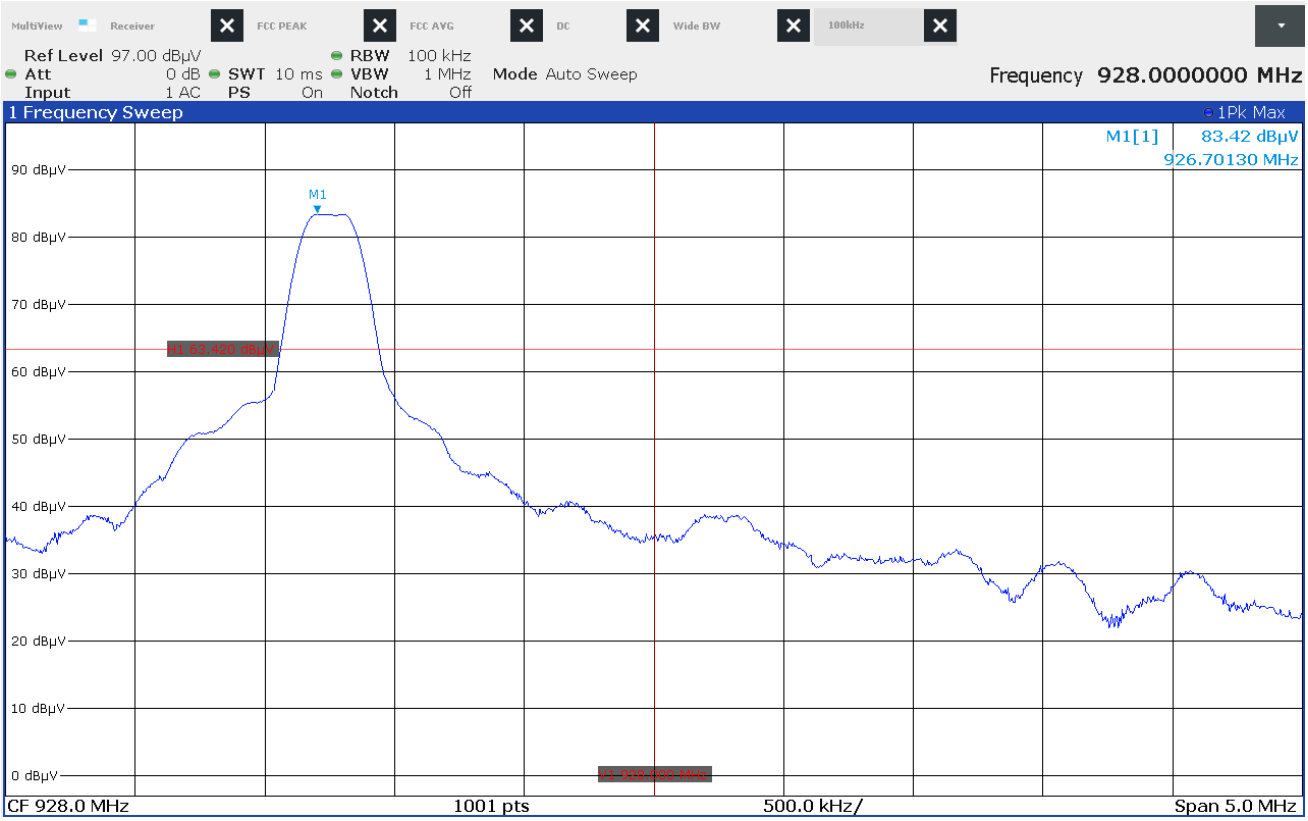


Band edge Compliance

Manufacturer : The Chamberlain Group LLC
Model Number : 900-15607-11
Serial Number : Radiated Sample
Mode : Hopping - 926.75MHz
Line Tested : Antenna Port
Parameters : High Band edge
Date : 3/21/2025 12:08:07 PM
Notes : None

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200SA
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Notes	High Band Edge – High Channel

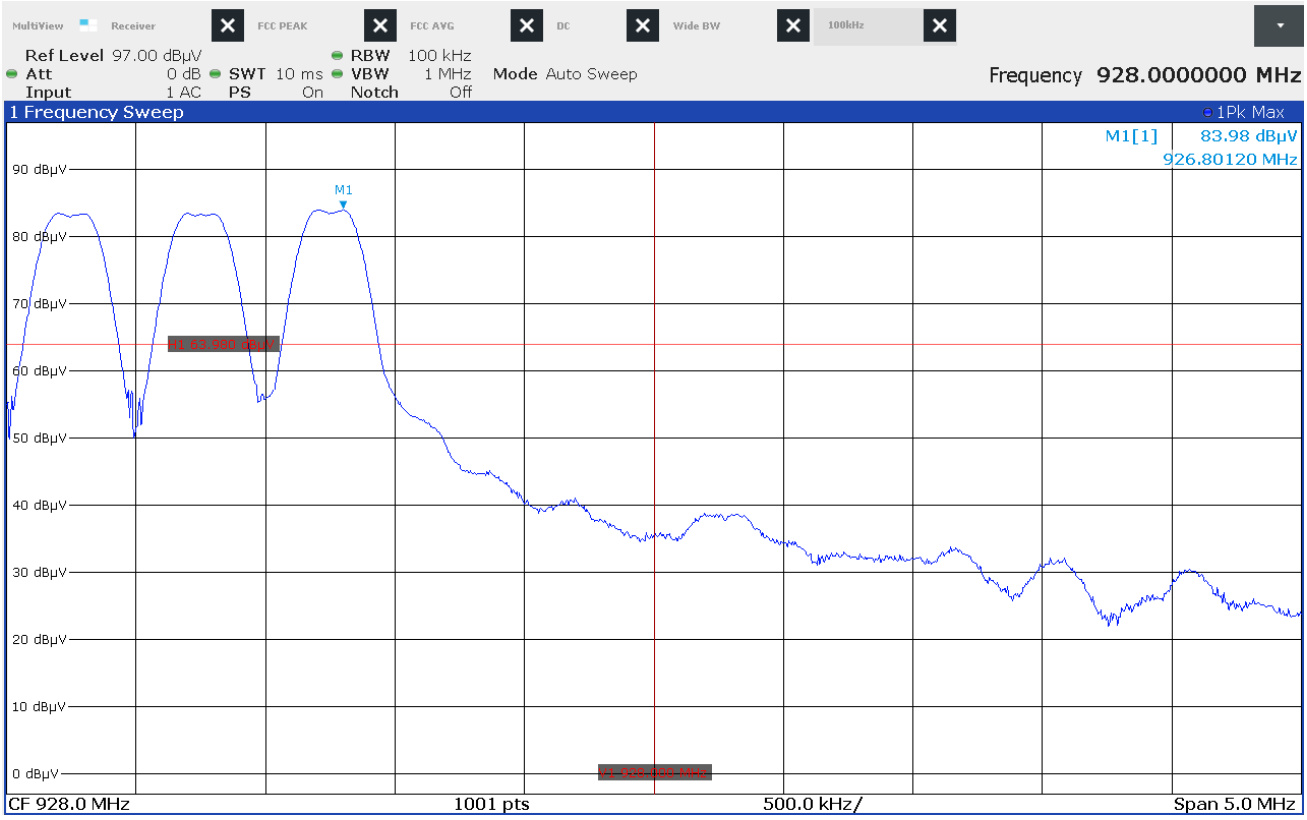


Band Edge Compliance

Manufacturer : Chamberlain
Model Number : 2200SA
Serial Number :
Mode : Tx @ 926.75MHz
Parameters : High Band Edge
Date : 7/10/2025 3:17:46 PM
Notes : Horizontal Polarization

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200SA
Serial No.	Radiated Sample
Mode	Hopping – 926.75MHz
Notes	High Band Edge – High Channel

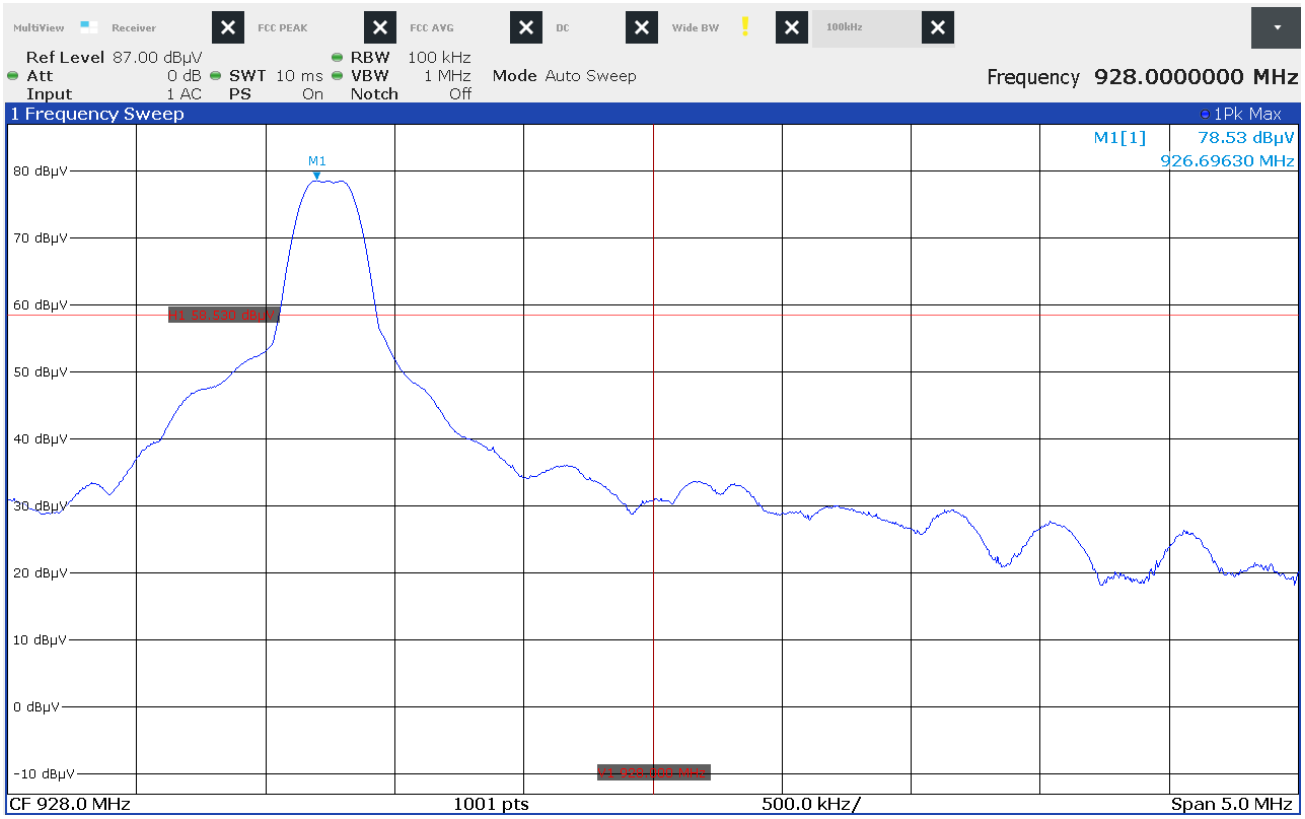


Band Edge Compliance

Manufacturer : Chamberlain
Model Number : 2200SA
Serial Number :
Mode : Hopping - 926.75MHz
Parameters : High Band Edge
Date : 7/10/2025 3:21:28 PM
Notes : Horizontal Polarization

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200M
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Notes	High Band Edge – High Channel

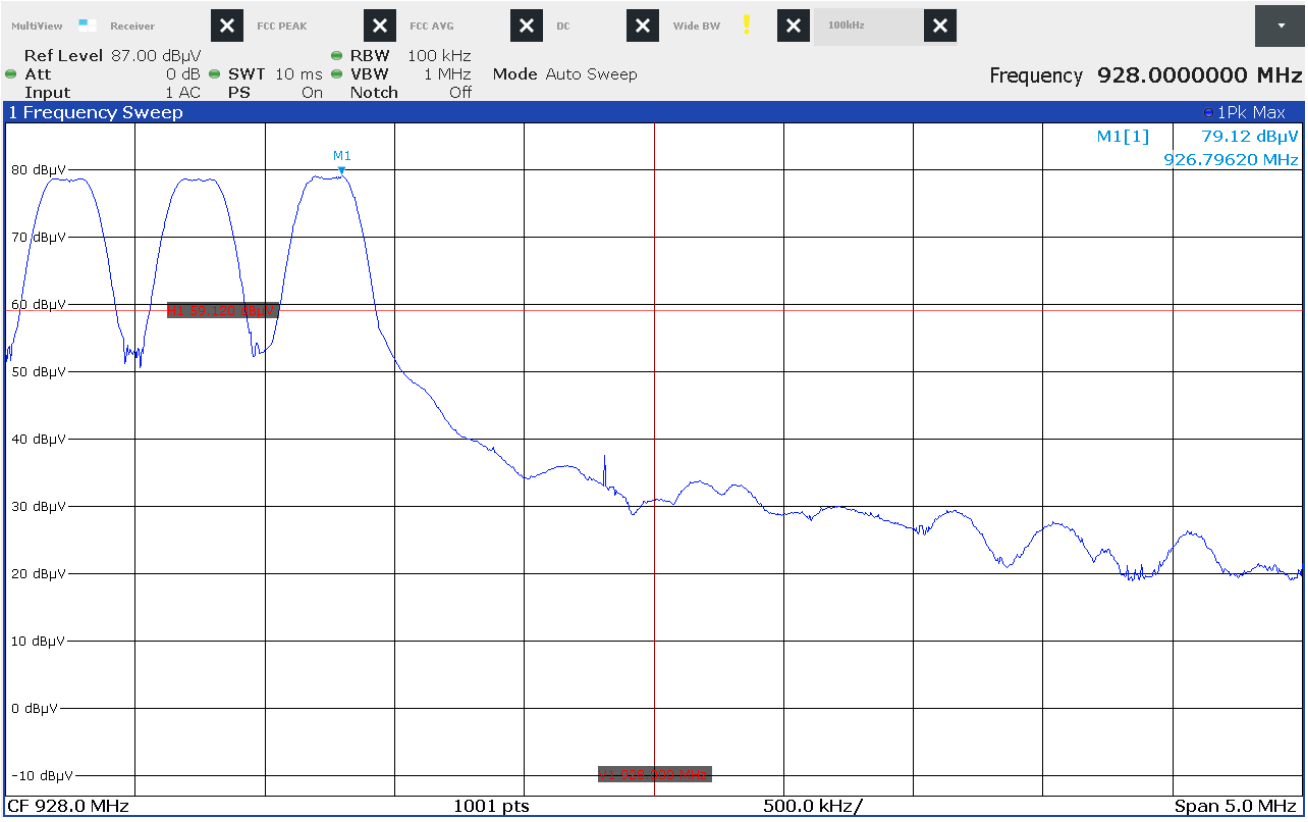


Band Edge Compliance

Manufacturer : Chamberlain
Model Number : 2200M
Serial Number :
Mode : Tx @ 926.75MHz
Parameters : High Band Edge
Date : 7/11/2025 10:26:30 AM
Notes :

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2200M
Serial No.	Radiated Sample
Mode	Hopping – 926.75MHz
Notes	High Band Edge – High Channel

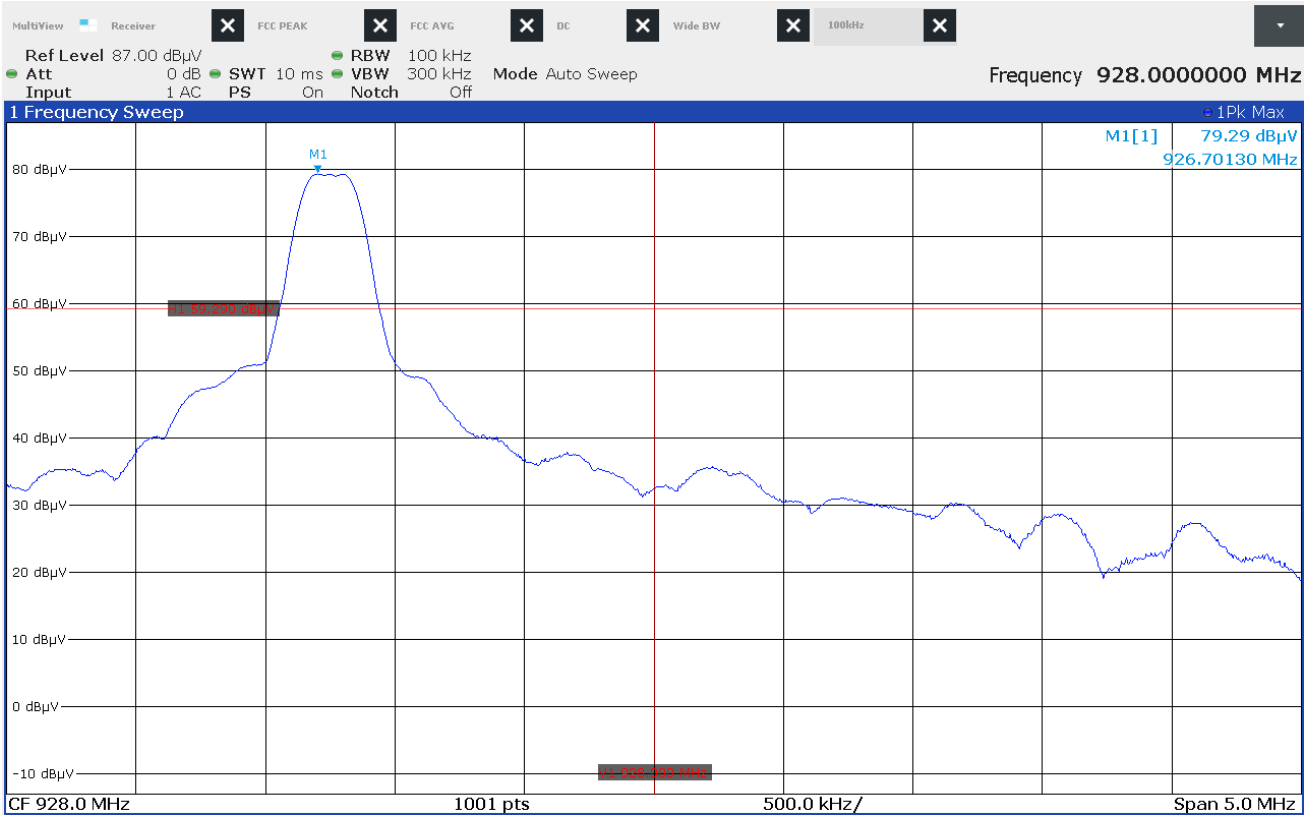


Band Edge Compliance

Manufacturer : Chamberlain
Model Number : 2200M
Serial Number :
Mode : Hopping - 926.75MHz
Parameters : High Band Edge
Date : 7/11/2025 10:34:33 AM
Notes :

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	C1000LA
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Notes	High Band Edge – High Channel

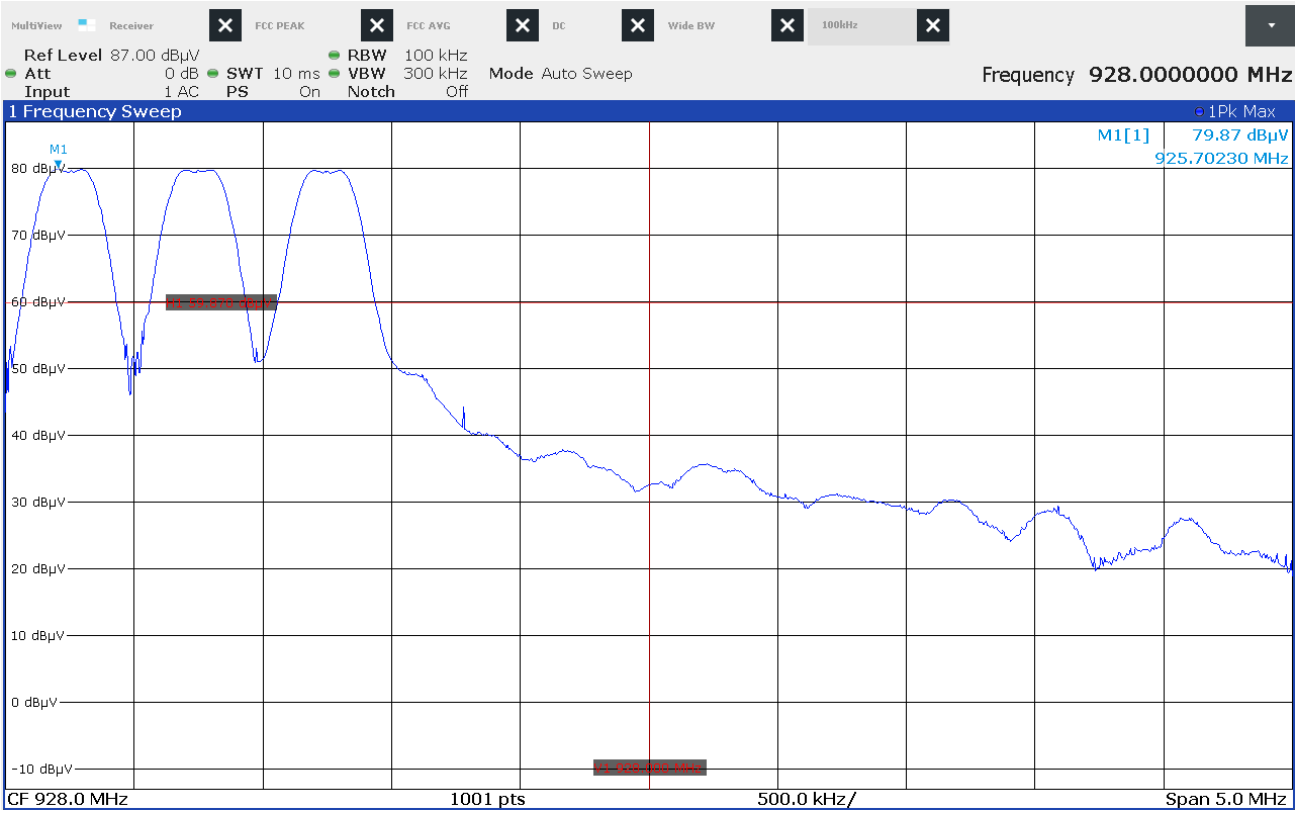


Band Edge Compliance

Manufacturer : Chamberlain
Model Number : C1000LA
Serial Number :
Mode : Tx @ 926.75MHz
Parameters : High Band Edge
Date : 7/11/2025 1:28:38 PM
Notes :

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	C1000LA
Serial No.	Radiated Sample
Mode	Hopping – 926.75MHz
Notes	High Band Edge – High Channel

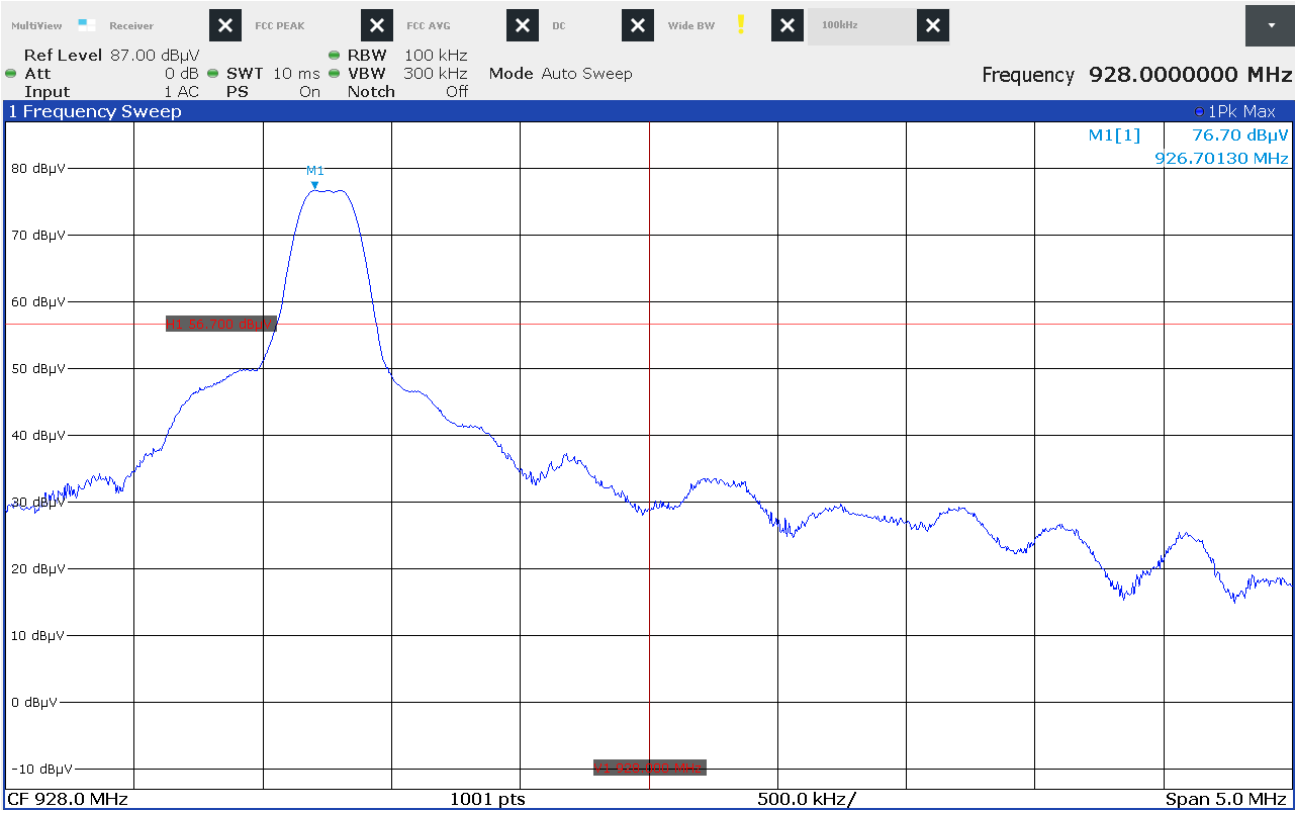


Band Edge Compliance

Manufacturer : Chamberlain
Model Number : C1000LA
Serial Number :
Mode : Hopping - 926.75MHz
Parameters : High Band Edge
Date : 7/11/2025 1:32:20 PM
Notes :

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2310M
Serial No.	Radiated Sample
Mode	Tx @ 926.75MHz
Notes	High Band Edge – High Channel

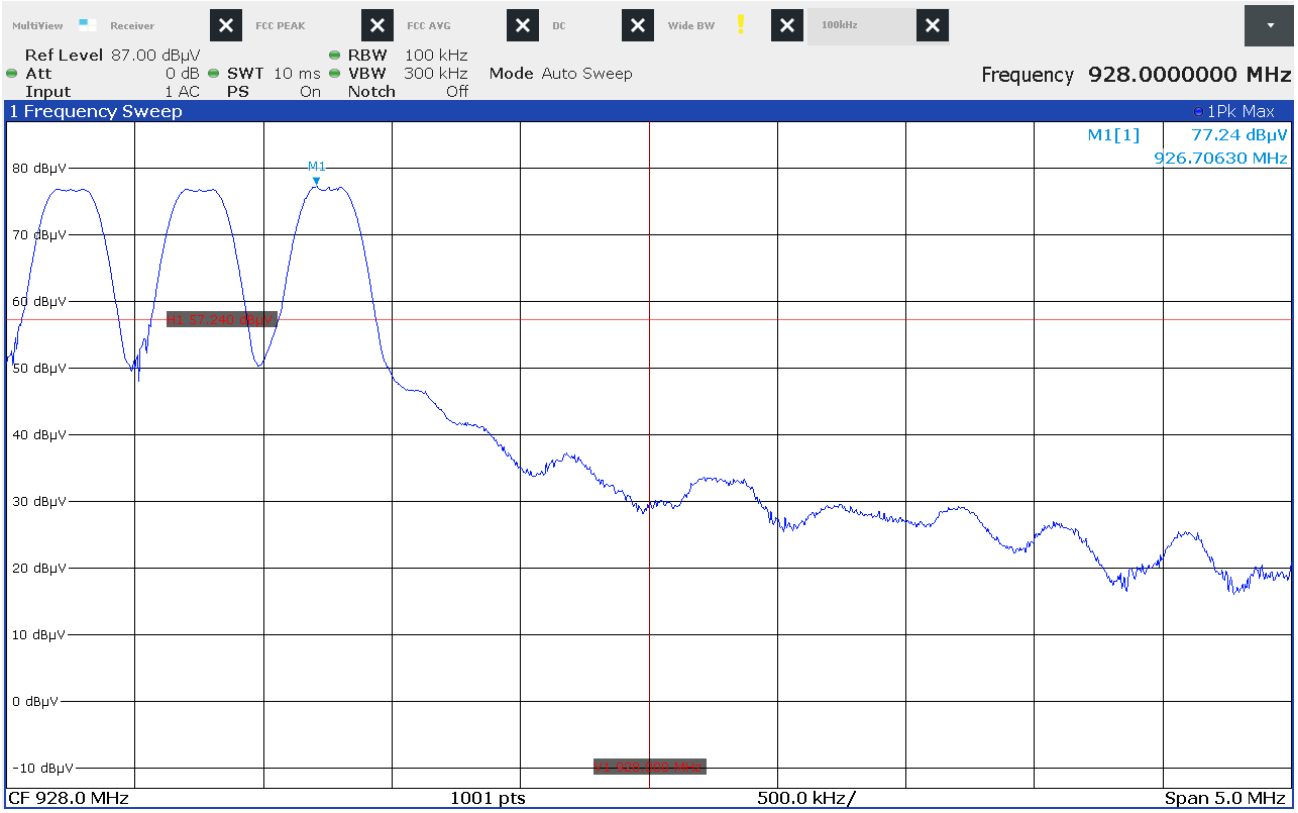


Band Edge Compliance

Manufacturer : Chamberlain
Model Number : 2310M
Serial Number :
Mode : Tx @ 926.75MHz
Parameters : High Band Edge
Date : 7/11/2025 2:39:19 PM
Notes :

TRACE1 : Function plot of Max Hold Peak

Test Details	
Manufacturer	The Chamberlain Group LLC
EUT	Vulcan – 900-15607 Rev F
Model No.	2310M
Serial No.	Radiated Sample
Mode	Hopping – 926.75MHz
Notes	High Band Edge – High Channel



Band Edge Compliance

Manufacturer : Chamberlain
Model Number : 2310M
Serial Number :
Mode : Hopping - 926.75MHz
Parameters : High Band Edge
Date : 7/11/2025 2:47:12 PM
Notes :

TRACE1 : Function plot of Max Hold Peak

29. Scope of Accreditation

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELITE ELECTRONIC ENGINEERING, INC.
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ELECTRICAL

Valid To: August 31, 2025 Certificate Number: 1786.01

In recognition of the successful completion of the A2LA Accreditation Program evaluation process, accreditation is granted to this laboratory to perform the following automotive electromagnetic compatibility and other electrical tests:

Test Technology:	Test Method(s)[1]:
Transient Immunity *(Max Voltage 60V/Max current 100A)*	ISO 7637-2 (including emissions); ISO 7637-3; ISO 16750-2:2012, Sections 4.6.3 and 4.6.4; CS-11979, Section 6.4; CS.00054, Section 5.9; EMC-CS-2009.1 (CI220); FMC1278 (CI220, CI221, CI222); GMW 3097, Section 3.5; SAE J1113-11; SAE J1113-12; ECE Regulation 10.06 Annex 10
Electrostatic Discharge (ESD) *(Up to +/-25kV)*	ISO 10605 (2001, 2008); CS-11979 Section 7.0; CS.00054, Section 5.10; EMC-CS-2009.1 (CI 280); FMC1278 (CI280); SAE J1113-13; GMW 3097 Section 3.6
Conducted Emissions	CISPR 25 (2002, 2008), Sections 6.2 and 6.3; CISPR 25 (2016), Sections 6.3 and 6.4; CS-11979, Section 5.1; CS.00054, Sections 5.6.1 and 5.6.2; GMW 3097, Section 3.3.2; EMC-CS-2009.1 (CE 420); FMC1278 (CE420, CE421, CE 430, CE440)

5202 Presidents Court, Suite 220 | Frederick, MD 21703-8515 | Phone: 301 644 3248 | Fax: 240 454 9449 | www.A2LA.org

Test Technology:	Test Method(s)[1]:
Radiated Emissions Anechoic *(Up to 6GHz)*	CISPR 25 (2002, 2008), Section 6.4; CISPR 25 (2016), Section 6.5; CS-11979, Section 5.3; CS.00054, Section 5.6.3; GMW 3097, Section 3.3.1; EMC-CS-2009.1 (RE 310); FMC1278 (RE310, RE320);
Vehicle Radiated Emissions	CISPR 12; CISPR 36; ICES-002; ECE Regulation 10.06 Annex 4; ECE Regulation 10.06 Annex 5
Bulk Current Injection (BCI) *(1 to 400MHz 500mA)*	ISO 11452-4; CS-11979, Section 6.1; CS.00054, Section 5.8.1; GMW 3097, Section 3.4.1; SAE J1113-4; EMC-CS-2009.1 (RI112); FMC1278 (RI112); ECE Regulation 10.06 Annex 9
Radiated Immunity Anechoic *(Up to 6GHz and 200V/m)* *(Including Radar Pulse 600V/m)*	ISO 11452-2; CS-11979, Section 6.2; CS.00054, Section 5.8.2; GMW 3097, Section 3.4.2; EMC-CS-2009.1 (RI114); FMC1278 (RI114); SAE J1113-21; ECE Regulation 10.06 Annex 9
Radiated Immunity Magnetic Field	ISO 11452-8; FMC 1278 (RI140)
Radiated Immunity Reverb *(360MHz to 6GHz and 100V/m)*	ISO/IEC 61000-4-21; GMW 3097, Section 3.4.3; EMC-CS-2009.1 (RI114); FMC1278 (RI114); ISO 11452-11
Radiated Immunity *(Portable Transmitters)* *(Up to 6GHz and 20W)*	ISO 11452-9; EMC-CS-2009.1 (RI115); FMC1278 (RI115); GMW 3097, Sec 3.4.4
Vehicle Radiated Immunity (ALSE)	ISO 11451-2; ECE Regulation 10.06 Annex 6
Vehicle Product Specific EMC Standards	EN 14982; EN ISO 13309; ISO 13766; EN 50498; EC Regulation No. 2015/208; EN 55012
Electrical Loads	ISO 16750-2
Stripline	ISO 11452-5
Transverse Electromagnetic (TEM) Cell	ISO 11452-3

Test Technology:	Test Method(s)[1]:
Emissions	
Radiated and Conducted (3m Semi-anechoic chamber, up to 40 GHz)	47 CFR, FCC Part 15 B (using ANSI C63.4:2014); 47 CFR, FCC Part 18 (using FCC MP-5:1986); ICES-001; ICES-003; ICES-005; IEC/CISPR 11, Ed. 4.1 (2004-06); AS/NZS CISPR 11 (2004); IEC/CISPR 11 Ed 5 (2009-05) + A1 (2010); KN 11 (2008-5) with RRL Notice No. 2008-3 (May 20, 2008); CISPR 11; EN 55011; KS C 9811; CNS 13803 (1997, 2003); CISPR 14-1; EN 55014-1; AS/NZS CISPR 14.1; CISPR 16-2-1 (2008); CISPR 16-2-1; KS C 9814-1; KN 14-1; IEC/CISPR 22 (1997); EN 55022 (1998) + A1(2000); EN 55022 (1998) + A1(2000) + A2(2003); EN 55022 (2006); IEC/CISPR 22 (2008-09); AS/NZS CISPR 22 (2004); AS/NZS CISPR 22, 3rd Edition (2006); KN 22 (up to 6 GHz); CNS 13438 (up to 6 GHz); VCCI V-3 (up to 6 GHz); CISPR 32; EN 55032; KS C 9832; KN 32; ECE Regulation 10.06 Annex 7 (Broadband); ECE Regulation 10.06 Annex 8 (Narrowband); ECE Regulation 10.06 Annex 13 (Conducted); ECE Regulation 10.06 Annex 14 (Conducted)
Cellular Radiated Spurious Emissions	ETSI TS 151 010-1 GSM; 3GPP TS 51.010-1, Sec 12; ETSI TS 134 124 UMTS; 3GPP TS 34.124; ETSI TS 136 124 LTE; E-UTRA; 3GPP TS 36.124
Current Harmonics	IEC 61000-3-2; IEC 61000-3-12; EN 61000-3-2; KN 61000-3-2; KS C 9610-3-2; ECE Regulation 10.06 Annex 11
Flicker and Fluctuations	IEC 61000-3-3; IEC 61000-3-11; EN 61000-3-3; KN 61000-3-3; KS C 9610-3-3; ECE Regulation 10.06 Annex 12
Immunity	
Electrostatic Discharge	IEC 61000-4-2, Ed. 1.2 (2001); IEC 61000-4-2 (1995) + A1(1998) + A2(2000); EN 61000-4-2 (1995); EN 61000-4-2 (2009-05); KN 61000-4-2 (2008-5); RRL Notice No. 2008-4 (May 20, 2008); IEC 61000-4-2; EN 61000-4-2; KN 61000-4-2; KS C 9610-4-2; IEEE C37.90.3 2001
Radiated Immunity	IEC 61000-4-3 (1995) + A1(1998) + A2(2000); IEC 61000-4-3, Ed. 3.0 (2006-02); IEC 61000-4-3, Ed. 3.2 (2010); KN 61000-4-3 (2008-5); RRL Notice No. 2008-4 (May 20, 2008); IEC 61000-4-3; EN 61000-4-3; KN 61000-4-3; KS C 9610-4-3; IEEE C37.90.2 2004

Test Technology:	Test Method(s)[1]:
Immunity (cont'd)	
Electrical Fast Transient/Burst	IEC 61000-4-4, Ed. 2.0 (2004-07); IEC 61000-4-4, Ed. 2.1 (2011); IEC 61000-4-4 (1995) + A1(2000) + A2(2001); KN 61000-4-4 (2008-5); RRL Notice No. 2008-5 (May 20, 2008); IEC 61000-4-4; EN 61000-4-4; KN 61000-4-4; KS C 9610-4-4; ECE Regulation 10.06 Annex 15
Surge	IEC 61000-4-5 (1995) + A1(2000); IEC 61000-4-5, Ed 1.1 (2005-11); EN 61000-4-5 (1995) + A1(2001); KN 61000-4-5 (2008-5); RRL Notice No. 2008-4 (May 20, 2008); IEC 61000-4-5; EN 61000-4-5; KN 61000-4-5; KS C 9610-4-5; IEEE C37.90.1 2012; IEEE STD C62.41.2 2002; ECE Regulation 10.06 Annex 16
Conducted Immunity	IEC 61000-4-6 (1996) + A1(2000); IEC 61000-4-6, Ed 2.0 (2006-05); IEC 61000-4-6 Ed. 3.0 (2008); KN 61000-4-6 (2008-5); RRL Notice No. 2008-4 (May 20, 2008); EN 61000-4-6 (1996) + A1(2001); IEC 61000-4-6; EN 61000-4-6; KN 61000-4-6; KS C 9610-4-6
Power Frequency Magnetic Field Immunity (*Down to 3 A/m*)	IEC 61000-4-8 (1993) + A1(2000); IEC 61000-4-8 (2009); EN 61000-4-8 (1994) + A1(2000); KN 61000-4-8 (2008-5); RRL Notice No. 2008-4 (May 20, 2008); IEC 61000-4-8; EN 61000-4-8; KN 61000-4-8; KS C 9610-4-8
Voltage Dips, Short Interrupts, and Line Voltage Variations	IEC 61000-4-11, Ed. 2 (2004-03); KN 61000-4-11 (2008-5); RRL Notice No. 2008-4 (May 20, 2008); IEC 61000-4-11; EN 61000-4-11; KN 61000-4-11; KS C 9610-4-11
Ring Wave	IEC 61000-4-12, Ed. 2 (2006-09); EN 61000-4-12:2006; IEC 61000-4-12; EN 61000-4-12; KN 61000-4-12; IEEE STD C62.41.2 2002

Test Technology:	**Test Method(s)[1]:**
Generic and Product Specific EMC Standards	IEC/EN 61000-6-1; AS/NZS 61000-6-1; KN 61000-6-1; KS C 9610-6-1; IEC/EN 61000-6-2; AS/NZS 61000-6-2; KN 61000-6-2; KS C 9610-6-2; IEC/EN 61000-6-3; AS/NZS 61000-6-3; KN 61000-6-3; KS C 9610-6-3; IEC/EN 61000-6-4; AS/NZS 61000-6-4; KN 61000-6-4; KS C 9610-6-4; EN 50130-4; EN 61326-1; EN 50121-3-2; EN 12895; EN 50270; EN 50491-1; EN 50491-2; EN 50491-3; EN 55015; EN 60730-1; EN 60945; IEC 60533; EN 61326-2-6; EN 61800-3; IEC/CISPR 14-2; EN 55014-2; AS/NZS CISPR 14.2; KN 14-2; KS C 9814-2; IEC/CISPR 24; AS/NZS CISPR 24; EN 55024; KN 24; IEC/CISPR 35; AS/NZS CISPR 35; EN 55035; KN 35; KS C 9835; IEC 60601-1-2; JIS T0601-1-2
TxRx EMC Requirements	EN 301 489-1; EN 301 489-3; EN 301 489-9; EN 301 489-17; EN 301 489-19; EN 301 489-20
European Radio Test Standards	ETSI EN 300 086-1; ETSI EN 300 086-2; ETSI EN 300 113-1; ETSI EN 300 113-2; ETSI EN 300 220-1; ETSI EN 300 220-2; ETSI EN 300 220-3-1; ETSI EN 300 220-3-2; ETSI EN 300 330-1; ETSI EN 300 330-2; ETSI EN 300 440-1; ETSI EN 300 440-2; ETSI EN 300 422-1; ETSI EN 300 422-2; ETSI EN 300 328; ETSI EN 301 893; ETSI EN 301 511; ETSI EN 301 908-1; ETSI EN 908-2; ETSI EN 908-13; ETSI EN 303 413; ETSI EN 302 502; EN 303 340; EN 303 345-2; EN 303 345-3; EN 303 345-4
Canadian Radio Tests	RSS-102 measurement (RF Exposure Evaluation); RSS-102 measurement (Nerve Stimulation); SPR-002; RSS-111; RSS-112; RSS-117; RSS-119; RSS-123; RSS-125; RSS-127; RSS-130; RSS-131; RSS-132; RSS-133; RSS-134; RSS-135; RSS-137; RSS-139; RSS-140; RSS-141; RSS-142; RSS-170; RSS-181; RSS-182; RSS-191; RSS-192; RSS-194; RSS-195; RSS-196; RSS-197; RSS-199; RSS-210; RSS-211; RSS-213; RSS-215; RSS-216; RSS-220; RSS-222; RSS-236; RSS-238; RSS-243; RSS-244; RSS-247; RSS-248; RSS-251; RSS-252; RSS-287; RSS-288; RSS-310; RSS-GEN
Mexico Radio Tests	IFT-008-2015; NOM-208-SCFI-2016
Japan Radio Tests	Radio Law No. 131, Ordinance of MPT No. 37, 1981, MIC Notification No. 88:2004, Table No. 22-11; ARIB STD-T66, Regulation 18
Taiwan Radio Tests	LP-0002 (July 15, 2020)