Engineering Test Report No. 2302675-01		
Report Date	November 16, 2023	
Manufacturer Name	The Chamberlain Group LLC	
Manufacturer Address	300 Windsor Dr Oak Brook, IL 60523	
Product Name Brand/Model No.	JHDC22X1BMC, JHDC22X4BMC, TDC22X1BMC, TDC22X4BMC	
Date Received	November 6, 2023	
Test Dates	November 9, 2023 through November 16, 2023	
Specifications	FCC "Code of Federal Regulations" Title 47 Part 15, Subpart B Innovation, Science, and Economic Development Canada, ICES-003	
Test Facility	Elite Electronic Engineering, Inc. 1516 Centre Circle, Downers Grove, IL 60515	FCC Reg. Number: 269750 IC Reg. Number: 2987A CAB Identifier: US0107
Signature		
Tested by	Javier Cardenas	
Signature		
Approved by	Raymond J. Klouda, Registered Professional Engineer of Illinois – 44894	
PO Number	4900093280	

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1. Report Revision History

Revision	Date	Description
–	20 NOV 2023	Initial Release of Engineering Test Report No. 2302675-01

2. Introduction

This document presents the results of a series of electromagnetic compatibility (EMC) tests that were performed on two (2) Yeti Phase 2 Commercial Door Operators (hereinafter referred to as the Equipment Under Test (EUT)).

The EUTs were identified as follows:

EUT Identification	
EUT #1	
Description	Commercial door operator
Model/Part No.	JHDC22X1BMC [1]
Serial No.	NA
Size of EUT	10” x 22” x 12”
Number of Interconnection Wires	3
Type of Interconnection Wires	Twisted pair for safety sensor (Qty 2) Harness for Wall Mounted Control
Highest Internal Frequency of the EUT	2.4GHz
EUT #2	
Description	Commercial door operator
Model/Part No.	JHDC22X4BMC [2]
Serial No.	NA
Size of EUT	10” x 22” x 12”
Number of Interconnection Wires	3
Type of Interconnection Wires	Twisted pair for safety sensor (Qty 2) Harness for Wall Mounted Control
Highest Internal Frequency of the EUT	2.4GHz
Notes: 1 – This report also covers Model No. TDC22X1BMC by similarity 2 – This report also covers Model No. TDC22X4BMC by similarity	

The EUTs listed above were used throughout the test series.

3. Power Input

The EUT, Model No JHDC22X1BMC obtained 115V 60Hz power via a 3 wire, 2-meter, unshielded power cord.

The EUT, Model No JHDC22X4BMC obtained 480V 60Hz power via a 3 wire, 2-meter, unshielded power cord.

4. Grounding

The EUTs were connected to ground through the third wire of the input power cord.

5. Support Equipment

The EUTs were submitted for testing along with the following support equipment:

Description	Model #	S/N
Photoelectric Safety Sensors	CPS-U	---
Floor Level Wall Controller	DCWALLCTL	---

6. Interconnect Leads

The following interconnect cables were submitted with the test item:

Item	Description
Twisted Pairs (Qty 2)	Twisted pair for safety sensor
4 Wires	Harness for Wall Mounted Control

7. Modifications Made to the EUT

No modifications were made to the EUTs during the testing.

8. Modes of Operation

The EMC tests were performed with the EUTs operating in one or more of the test modes described below. See the specific test section for the applicable test modes.

8.1. Idle

This mode was achieved by applying power to the device.

8.2. "Run Forever"

This mode was achieved by applying power to the EUTs. The EUTs were configured to have the motor running continuously.

9. Test Specifications

The tests were performed to selected portions of, and in accordance with the following test specifications:

- Federal Communications Commission "Code of Federal Regulations", Title 47, Chapter I, Subchapter A, Part 15, Subpart B
- ICES-003, Issue 7, October 15, 2020, “Information Technology Equipment (including Digital Apparatus)”
- RSS-Gen, Issue 5, February 2021, Amendment 2, “General Requirements for Compliance of Radio Apparatus”
- ANSI C63.4-2014, "American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz"

10. Test Plan

No test plan was provided. Instructions were provided by personnel from The Chamberlain Group LLC and used in conjunction with the FCC "Code of Federal Regulations" Title 47 Part 15, Subpart B, Innovation, Science, and Economic Development Canada, ICES-003, and ANSI C63.4-2014 specifications.

11. Deviation, Additions to, or Exclusions from Test Specifications

There were no deviations, additions to, or exclusions from the test specifications during this test series.

12. Laboratory Conditions

The following were the laboratory conditions while the EMC tests were performed:

Ambient Parameters	Value
Temperature	22°C
Relative Humidity	25%
Atmospheric Pressure	1025.3mb

13. Summary

The following EMC tests were performed, and the results are shown below:

Test Description	Test Requirements	Test Methods	Equipment Class	EUT S/N	Results
RF Conducted Emissions (AC Mains)	FCC 15B 15.107 ISED ICES-003, Section 3.2.1	ANSI C63.4:2014	A	NA	Conforms
RF Radiated Emissions	FCC 15B 15.109 ISED ICES-003, Section 3.2.2	ANSI C63.4:2014	A	NA	Conforms

14. Sample Calculations

For Powerline Conducted Emissions:

The resultant voltage level (VL) is a summation in decibels (dB) of the receiver meter reading (MTR) and the cable loss factor (CF).

Formula 1: VL (dBµV) = MTR (dBµV) + CF (dB).

For Radiated Emissions:

The resultant field strength (FS) is a summation in decibels (dB) of the receiver meter reading (MTR), the antenna correction factor (AF), and the cable loss factor (CF). If an external preamplifier is used, the total is reduced by its gain (-PA). If a distance correction (DC) is required, it is added to the total.

Formula 1: FS (dBµV/m) = MTR (dBµV) + AF (dB/m) + CF (dB) + (- PA (dB)) + DC (dB)

To convert the Field Strength dBµV/m term to µV/m, the dBµV/m is first divided by 20. The Base 10 AntiLog is taken of this quotient. The result is the Field Strength value in µV/m terms.

Formula 2: FS (µV/m) = AntiLog [(FS (dBµV/m))/20]

15. Statement of Conformity

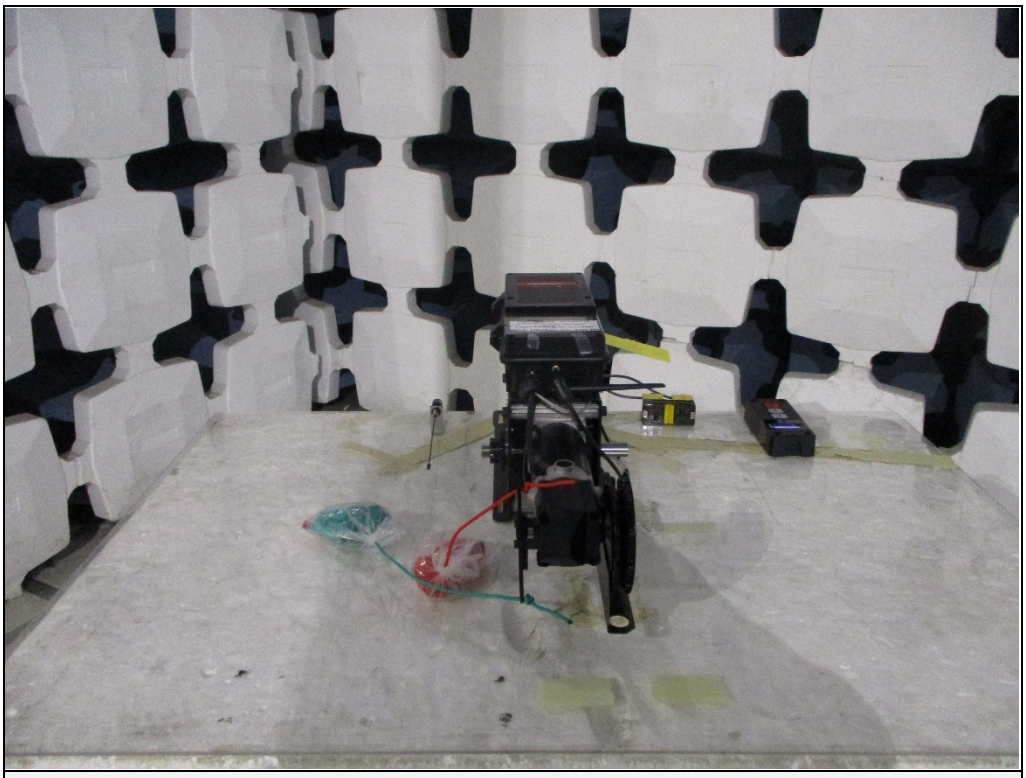
The The Chamberlain Group LLC Yeti Phase 2 Commercial Door Operators, Model No. JHDC22X1BMC, JHDC22X4BMC, TDC22X1BMC and TDC22X4BMC, did fully conform to the selected requirements of FCC "Code of Federal Regulations" Title 47 Part 15, Subpart B and Innovation, Science, and Economic Development Canada, ICES-003.

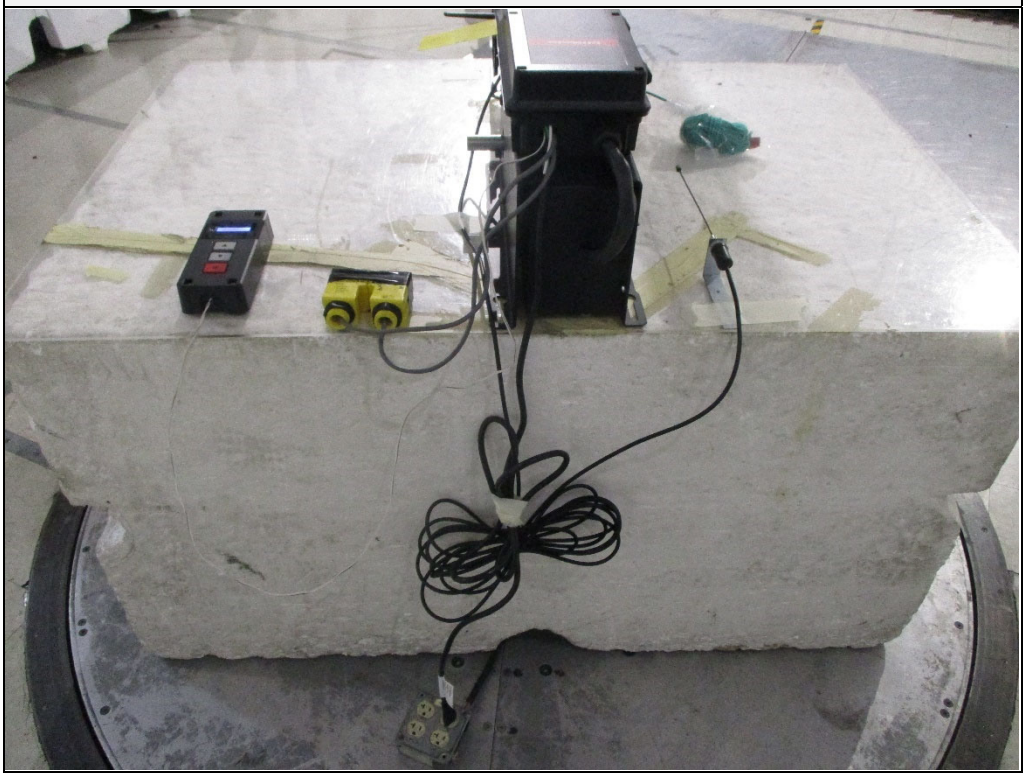
16. Certification

Elite Electronic Engineering Incorporated certifies that the information contained in this report was obtained under conditions which meet or exceed those specified in the FCC "Code of Federal Regulations" Title 47 Part

15, Subpart B and Innovation, Science, and Economic Development Canada, ICES-003 test specifications. The data presented in this test report pertains to the EUTs as received by the customer on the test date specified. Any electrical or mechanical modifications made to the EUTs subsequent to the specified test date will serve to invalidate the data and void this certification.

17. Photographs of EUT



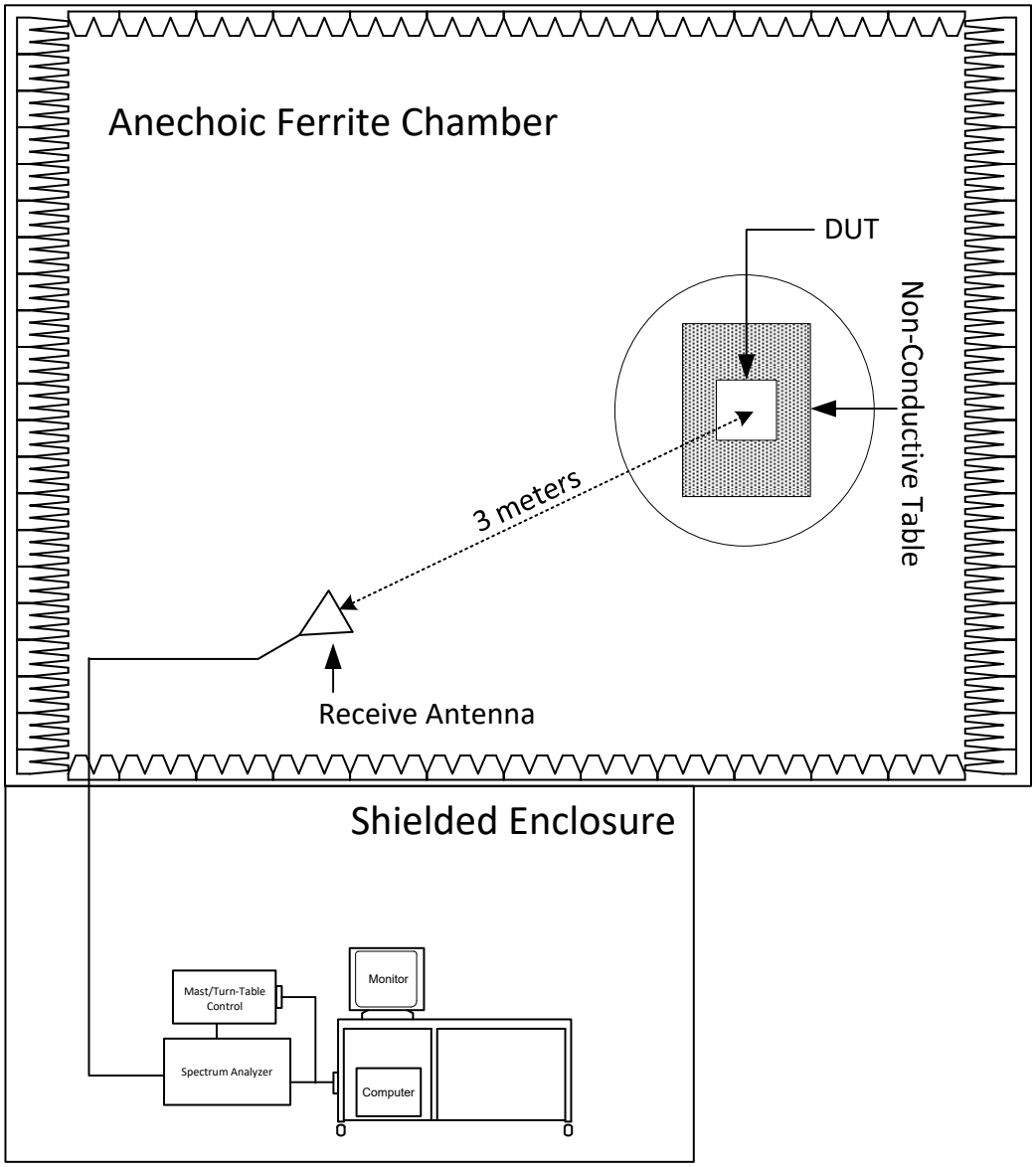


18. Equipment List

Eq ID	Equipment Description	Manufacturer	Model No.	Serial No.	Frequency Range	Cal Date	Due Date
APW3	PREAMPLIFIER	PLANAR ELECTRONICS	PE2-35-120-5R0-10-12	PL2924	1GHZ-20GHZ	3/10/2023	3/10/2024
CDZ4	LAB WORKSTATION	ELITE	LWS-10		WINDOWS 10	CNR	
CDZ5	LAB WORKSTATION	ELITE	LWS-10		WINDOWS 10	CNR	
GRB0	1MHZ, LISN SIGNAL CHECKER	ELITE	LISNCHKR1M	1	1MHZ	12/6/2022	12/6/2024
NTA4	BILOG ANTENNA	TESEQ	6112D	46660	20-2000GHZ	10/26/2022	10/26/2024
NWQ0	DOUBLE RIDGED WAVEGUIDE ANTENNA	ETS LINDGREN	3117	66657	1GHZ-18GHZ	6/13/2022	6/13/2024
PLF2	CISPR16 50UH LISN	ELITE	CISPR16/70A	002	.15-30MHz	4/10/2023	4/10/2024
PLF4	CISPR16 50UH LISN	ELITE	CISPR16/70A	003	.15-30MHz	4/10/2023	4/10/2024
RBG0	EMI ANALYZER	ROHDE & SCHWARZ	ESW44	101533	10HZ-44GHZ	11/7/2022	12/7/2023
RBG3	EMI ANALYZER	ROHDE & SCHWARZ	ESW44	101592	2HZ-44GHZ	11/11/2022	12/11/2023
RBG4	EMI ANALYZER	ROHDE & SCHWARZ	ESW44	103007	2HZ-44GHZ	12/8/2022	12/8/2023
SCB1	PROGRAMABLE POWER SUPPLY	CALIFORNIA INSTRUMENTS	CSW5550-208/156-321-ELF	1513A01938		NOTE 1	
SCB2	PROGRAMABLE POWER SUPPLY	CALIFORNIA INSTRUMENTS	CSW5550-208/156-321-ELF	1513A02092		NOTE 1	
T1EJ	10DB 25W ATTENUATOR	WEINSCHEL	46-10-34	CD6790	DC-18GHZ	1/12/2022	1/12/2024
T2SA	20DB 25W ATTENUATOR	WEINSCHEL	46-20-34	CD5015	DC-18GHZ	1/21/2022	1/21/2024
VBR8	CISPR EN FCC CE VOLTAGE.exe					N/A	
VBV2	CISPR EN FCC ICES RE.EXE	ELITE	CISPR EN FCC ICES RE.EXE	---	---	N/A	
XLQK	5W, 50 OHM TERMINATION	JFW INDUSTRIES	50T-052	---	DC-2GHZ	1/5/2022	1/5/2024

N/A: Not Applicable I/O: Initial Only CNR: Calibration Not Required
NOTE 1: For the purpose of this test, the equipment was calibrated over the specified frequency range, pulse rate, or modulation prior to the test or monitored by a calibrated instrument.

19. Block Diagram of Test Setup



Radiated Measurements Test Setup

20. RF Conducted Emissions (AC Mains)

EUT Information	
Manufacturer	The Chamberlain Group LLC
Product	Yeti Phase 2 Commercial Door Operators
Model No.	JHDC22X1BMC and JHDC22X4BMC
Serial No.	NA
Mode	Idle and "Run Forever"

Test Site Information	
Setup Format	Tabletop
Height of Support	NA
Type of Test Site	Shielded Chamber
Test Site Used	R23P
Note	None

Measurement Uncertainty	
Measurement Type	Expanded Measurement Uncertainty
Conducted disturbance (mains port) (150 kHz – 30 MHz)	2.7

Requirements
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150kHz to 30MHz shall not exceed the limits in the following table.

Conducted Emissions Class A Limits		
Frequency (MHz)	Conducted limit (dBµV)	
	Quasi-Peak	Average
0.15 – 0.5	79	66
0.5 – 30	73	60
Note 1: The lower limit shall apply at the transition frequencies. Note 2: If the levels measured using the QP detector meet both the QP and the Average limits, the EUT is considered to have met both requirements and measurements do not need to be performed using the Average detector.		

Procedure
The interference on each power lead of the EUT was measured by connecting the measuring equipment to the appropriate meter terminal of the Line Impedance Stabilization Network (LISN). The meter terminal of the LISN not under test was terminated with 50 ohms. 1) The EUT was operated in the Idle mode. 2) Measurements were first made on the Test Item Voltage high line. 3) The frequency range from 150kHz to 30MHz was broken up into smaller frequency sub-bands. 4) Conducted emissions measurements were taken on the first frequency sub-band using a peak detector. 5) The data thus obtained was then searched by the computer for the highest levels. Any emissions levels that were within 10dB of the average limit were then measured again using both a quasi-peak detector and an average detector. (If no peak readings were within 10dB of the average limit, quasi-peak and average readings were taken on the highest emissions levels measured during the peak detector scan.) 6) Steps (4) and (5) were repeated for the remainder of the frequency sub-bands until the entire frequency range from 150kHz to 30MHz was investigated. The peak trace was automatically plotted. The plot also shows quasi-peak and average readings that were taken on discrete frequencies. A table showing the quasi-peak and average readings was also generated. This tabular data compares the quasi-peak and average conducted emissions to the applicable conducted emissions limits. The resultant voltage level (VL) is a summation in decibels (dB) of the receiver meter reading (MTR) and the cable loss factor (CF). Formula 1: VL (dBµV) = MTR (dBµV) + CF (dB) 7) Steps (3) through (6) were repeated on the Test Item Voltage return line. 8) Steps (2) through (7) were repeated with the EUT operated in the "Run Forever" mode.

Test Setup for RF Conducted Emissions (AC Mains)

Test Setup for RF Conducted Emissions (AC Mains)

FCC Part 15 Subpart B Conducted Emissions Test

Significant Emissions Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	Idle
Line Tested	:	Line
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-10
Notes	:	120VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 08:02:14 AM
Data Filter	:	Up to 80 maximum levels detected with 6 dB level excursion threshold over 10 dB margin below limit

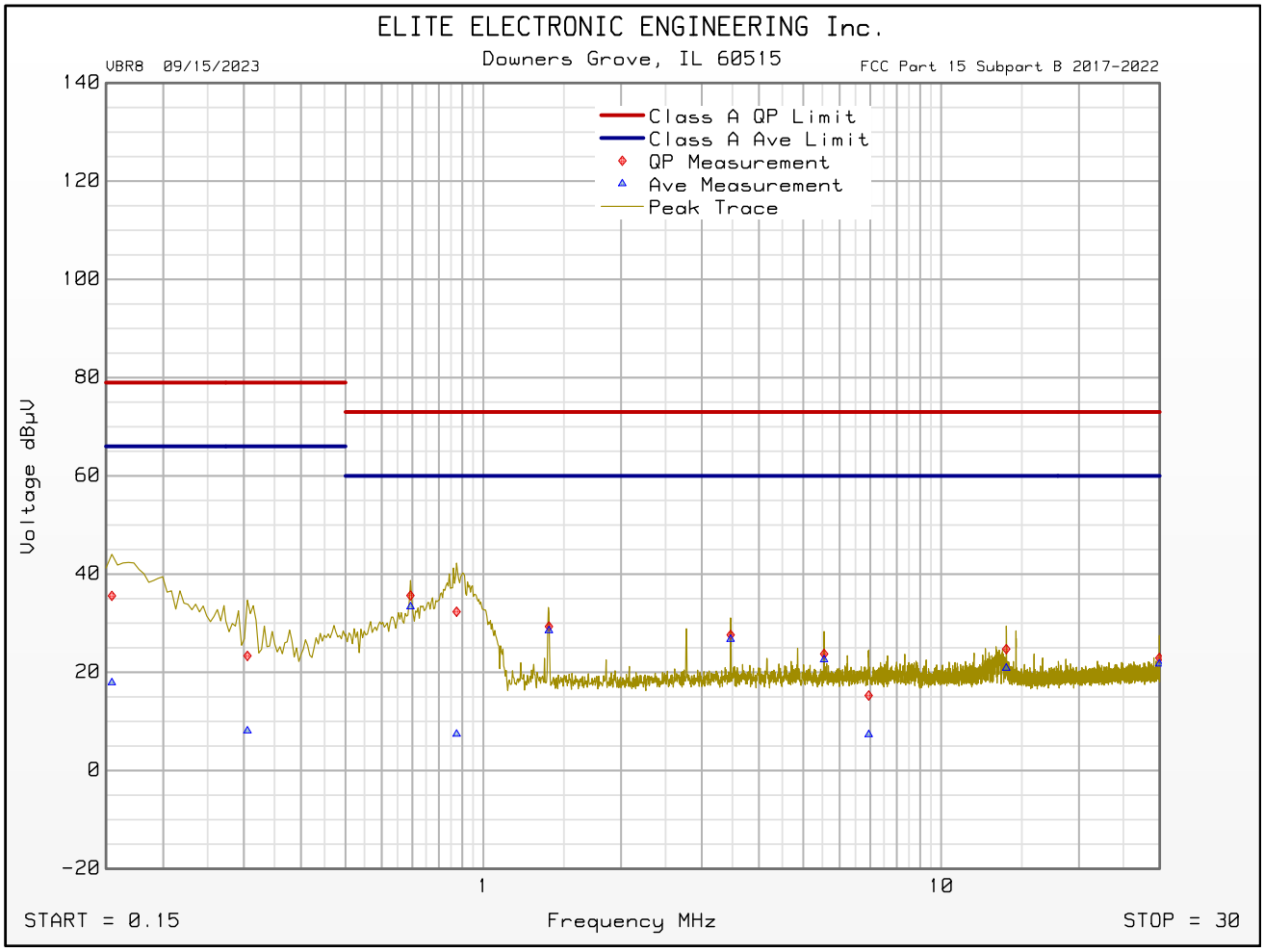
Freq MHz	Quasi-peak Level dBµV	Quasi-peak Limit dBµV	Excessive Quasi-peak Emissions	Average Level dBµV	Average Limit dBµV	Excessive Average Emissions
0.155	35.6	79.0		17.9	66.0	
0.306	23.4	79.0		8.1	66.0	
0.694	35.6	73.0		33.4	60.0	
0.875	32.3	73.0		7.4	60.0	
1.391	29.3	73.0		28.5	60.0	
3.469	27.6	73.0		26.7	60.0	
5.551	23.7	73.0		22.6	60.0	
6.946	15.3	73.0		7.3	60.0	
13.869	24.7	73.0		20.9	60.0	
29.949	22.9	73.0		21.7	60.0	

FCC Part 15 Subpart B Conducted Emissions Test

Cumulative Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	Idle
Line Tested	:	Line
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-10
Notes	:	120VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 08:02:14 AM



Emissions Meet QP Limit
Emissions Meet Ave Limit

FCC Part 15 Subpart B Conducted Emissions Test

Significant Emissions Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	Idle
Line Tested	:	Neutral
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-10
Notes	:	120VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 07:51:48 AM
Data Filter	:	Up to 80 maximum levels detected with 6 dB level excursion threshold over 10 dB margin below limit

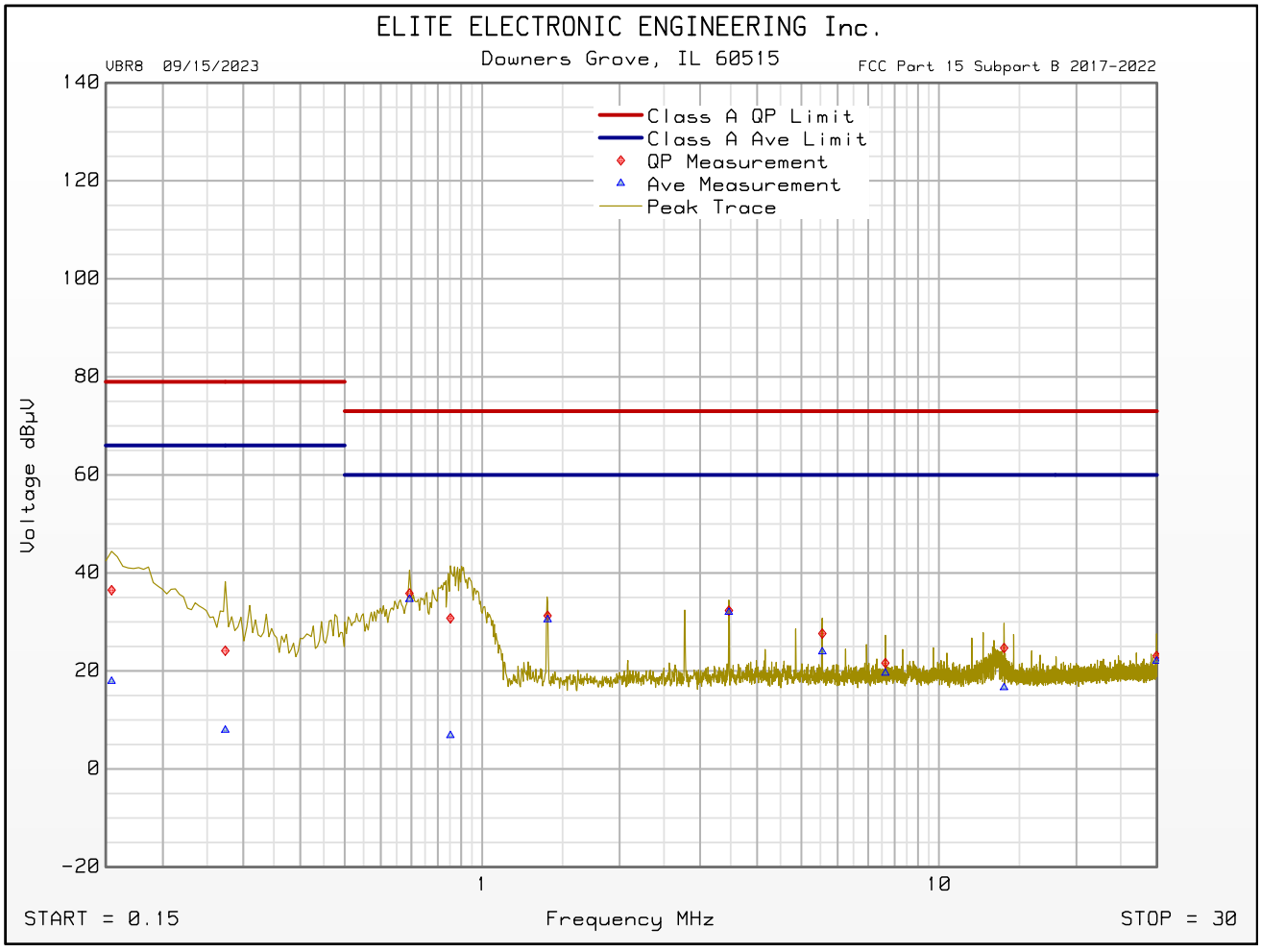
Freq MHz	Quasi-peak Level dBµV	Quasi-peak Limit dBµV	Excessive Quasi-peak Emissions	Average Level dBµV	Average Limit dBµV	Excessive Average Emissions
0.155	36.5	79.0		17.9	66.0	
0.274	24.1	79.0		7.9	66.0	
0.694	35.8	73.0		34.6	60.0	
1.391	31.3	73.0		30.5	60.0	
3.469	32.3	73.0		32.0	60.0	
5.555	27.6	73.0		23.9	60.0	
7.635	21.6	73.0		19.6	60.0	
13.887	24.7	73.0		16.6	60.0	
29.949	23.1	73.0		22.0	60.0	

FCC Part 15 Subpart B Conducted Emissions Test

Cumulative Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	Idle
Line Tested	:	Neutral
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-10
Notes	:	120VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 07:51:48 AM



Emissions Meet QP Limit
Emissions Meet Ave Limit

FCC Part 15 Subpart B Conducted Emissions Test

Significant Emissions Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X4BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	Idle
Line Tested	:	Line
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-1
Notes	:	480VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 10:49:01 AM
Data Filter	:	Up to 80 maximum levels detected with 6 dB level excursion threshold over 1 dB margin below limit

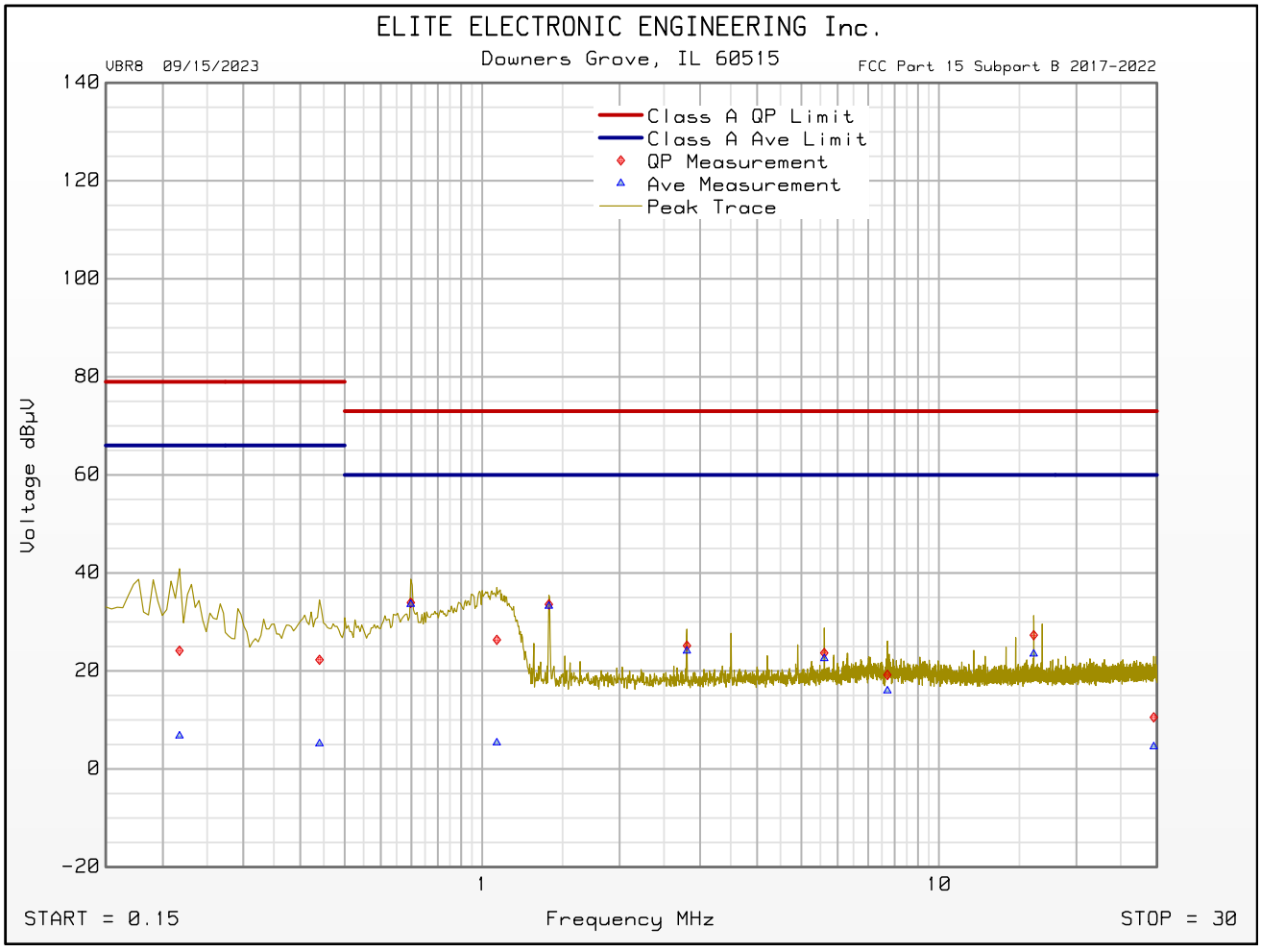
Freq MHz	Quasi-peak Level dBµV	Quasi-peak Limit dBµV	Excessive Quasi-peak Emissions	Average Level dBµV	Average Limit dBµV	Excessive Average Emissions
0.218	24.1	79.0		6.8	66.0	
0.441	22.3	79.0		5.2	66.0	
0.698	33.9	73.0		33.6	60.0	
1.077	26.4	73.0		5.4	60.0	
1.400	33.6	73.0		33.2	60.0	
2.807	25.1	73.0		24.1	60.0	
5.609	23.7	73.0		22.5	60.0	
7.711	19.2	73.0		16.0	60.0	
16.123	27.3	73.0		23.5	60.0	
29.522	10.5	73.0		4.6	60.0	

FCC Part 15 Subpart B Conducted Emissions Test

Cumulative Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X4BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	Idle
Line Tested	:	Line
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-1
Notes	:	480VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 10:49:01 AM



Emissions Meet QP Limit
Emissions Meet Ave Limit

FCC Part 15 Subpart B Conducted Emissions Test

Significant Emissions Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X4BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	Idle
Line Tested	:	Neutral
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-1
Notes	:	480VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 10:37:41 AM
Data Filter	:	Up to 80 maximum levels detected with 6 dB level excursion threshold over 1 dB margin below limit

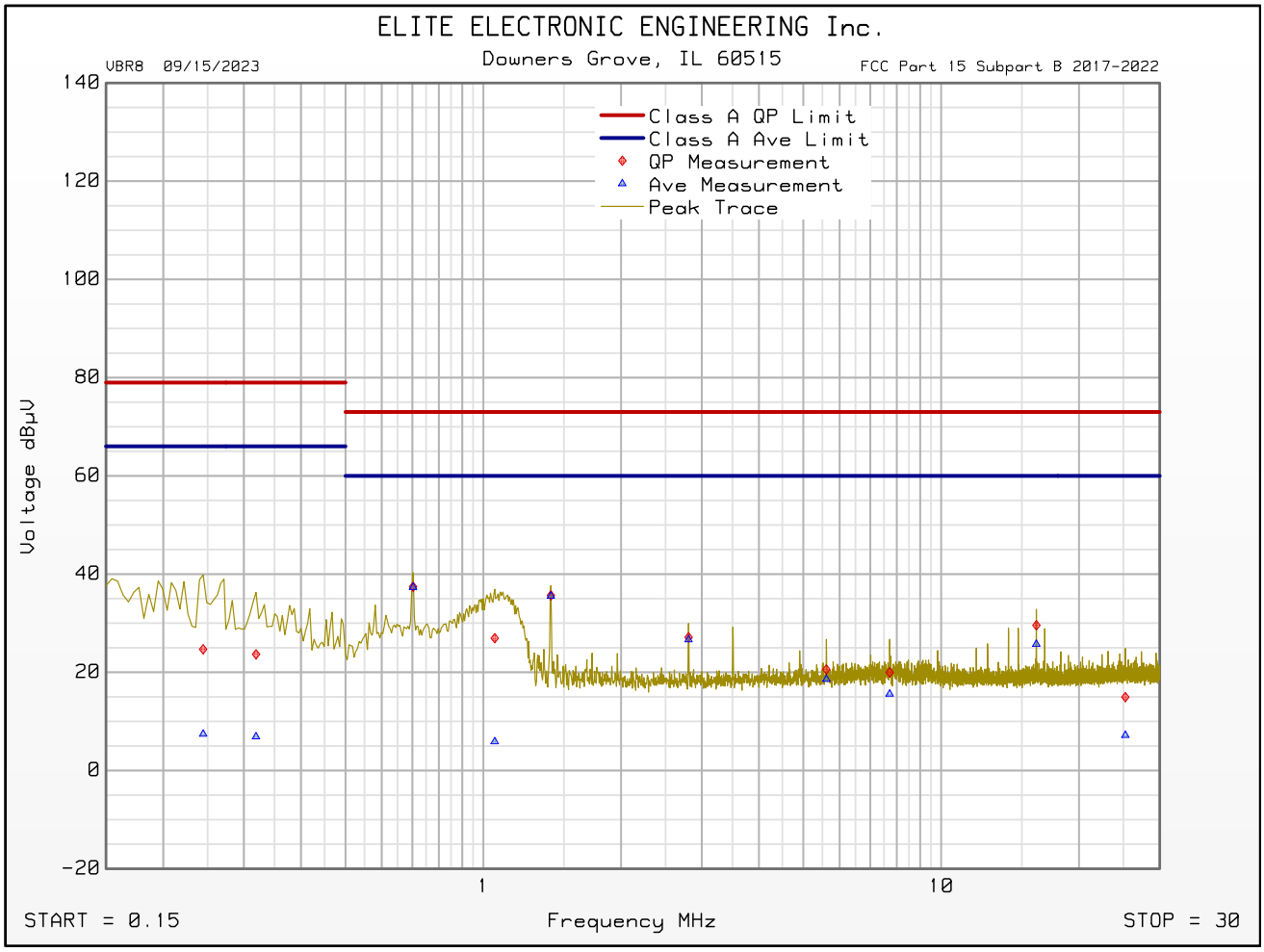
Freq MHz	Quasi-peak Level dBµV	Quasi-peak Limit dBµV	Excessive Quasi-peak Emissions	Average Level dBµV	Average Limit dBµV	Excessive Average Emissions
0.245	24.7	79.0		7.4	66.0	
0.319	23.7	79.0		6.9	66.0	
0.703	37.4	73.0		37.3	60.0	
1.059	26.9	73.0		5.9	60.0	
1.405	35.7	73.0		35.5	60.0	
2.807	27.1	73.0		26.7	60.0	
5.614	20.6	73.0		18.6	60.0	
7.716	20.0	73.0		15.6	60.0	
16.137	29.6	73.0		25.8	60.0	
25.238	15.0	73.0		7.2	60.0	

FCC Part 15 Subpart B Conducted Emissions Test

Cumulative Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X4BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	Idle
Line Tested	:	Neutral
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-1
Notes	:	480VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 10:37:41 AM



Emissions Meet QP Limit
Emissions Meet Ave Limit

FCC Part 15 Subpart B Conducted Emissions Test

Significant Emissions Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Line Tested	:	Line
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-1
Notes	:	120VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 08:52:39 AM
Data Filter	:	Up to 80 maximum levels detected with 6 dB level excursion threshold over 1 dB margin below limit

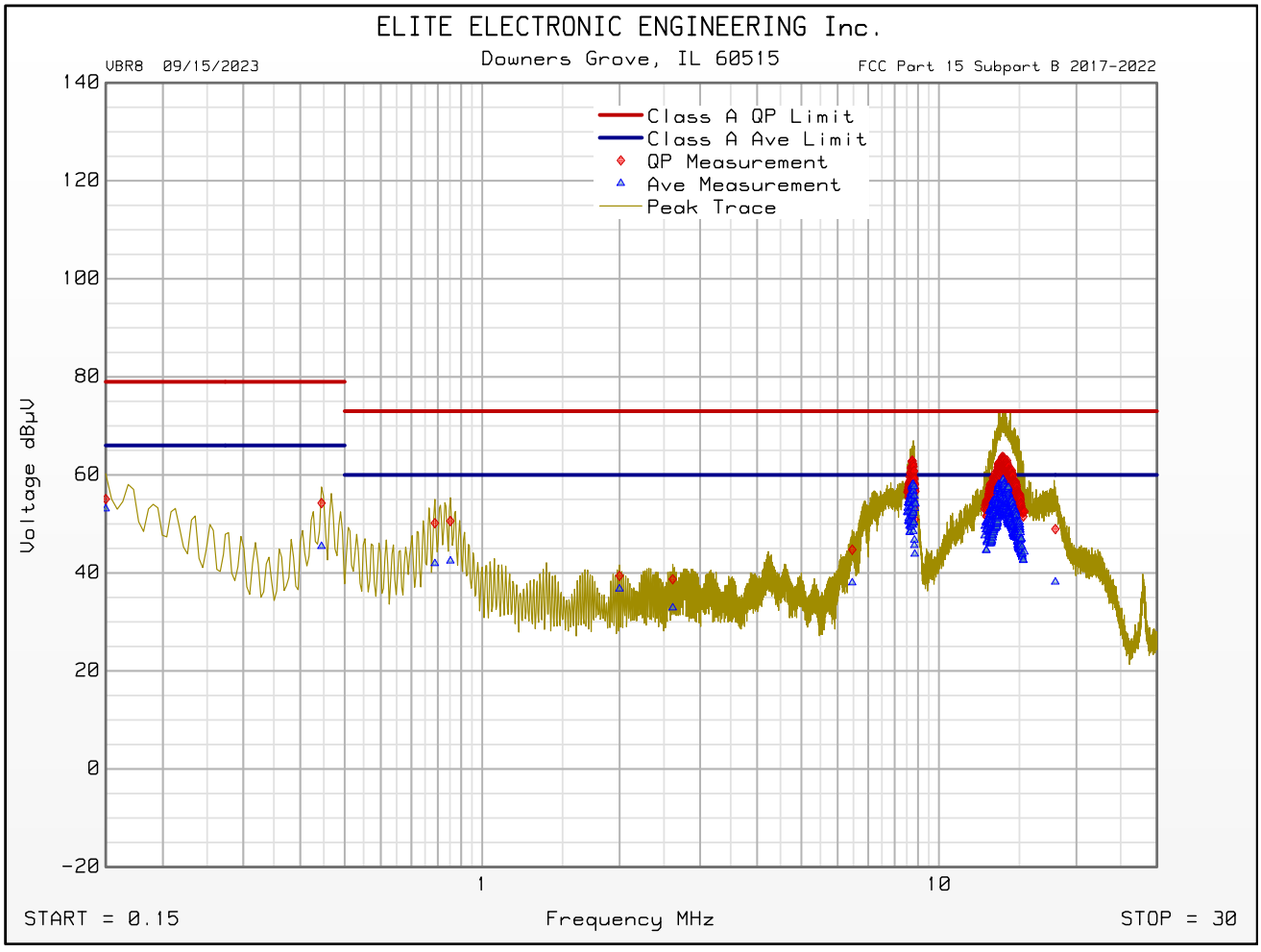
Freq MHz	Quasi-peak Level dBµV	Quasi-peak Limit dBµV	Excessive Quasi-peak Emissions	Average Level dBµV	Average Limit dBµV	Excessive Average Emissions
0.150	55.1	79.0		53.1	66.0	
0.445	54.3	79.0		45.4	66.0	
0.788	50.2	73.0		41.9	60.0	
0.852	50.6	73.0		42.5	60.0	
1.999	39.4	73.0		36.7	60.0	
2.614	38.7	73.0		32.9	60.0	
6.460	44.8	73.0		38.0	60.0	
8.737	62.9	73.0		57.9	60.0	
13.824	63.6	73.0		59.1	60.0	
17.979	48.9	73.0		38.1	60.0	

FCC Part 15 Subpart B Conducted Emissions Test

Cumulative Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Line Tested	:	Line
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-1
Notes	:	120VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 08:52:39 AM



Emissions Meet QP Limit
Emissions Meet Ave Limit

FCC Part 15 Subpart B Conducted Emissions Test

Significant Emissions Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Line Tested	:	Neutral
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-1
Notes	:	120VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 09:20:09 AM
Data Filter	:	Up to 80 maximum levels detected with 6 dB level excursion threshold over 1 dB margin below limit

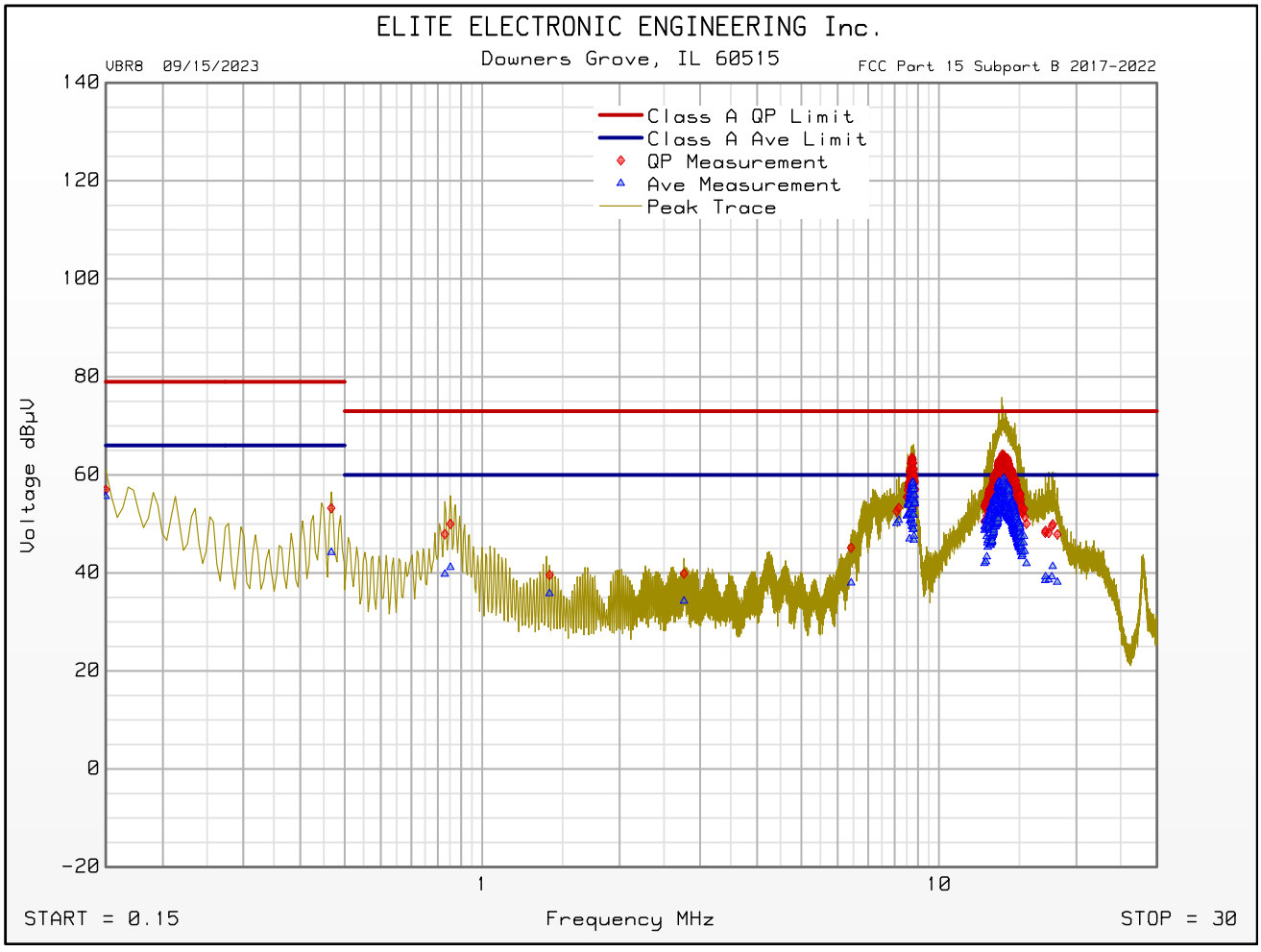
Freq MHz	Quasi-peak Level dBµV	Quasi-peak Limit dBµV	Excessive Quasi-peak Emissions	Average Level dBµV	Average Limit dBµV	Excessive Average Emissions
0.150	57.0	79.0		55.6	66.0	
0.468	53.2	79.0		44.2	66.0	
0.829	47.9	73.0		39.8	60.0	
0.852	50.0	73.0		41.2	60.0	
1.405	39.6	73.0		35.8	60.0	
2.767	39.9	73.0		34.3	60.0	
6.424	45.2	73.0		38.0	60.0	
8.742	63.5	73.0		58.5	60.0	
13.846	64.1	73.0		59.0	60.0	
13.869	63.8	73.0		59.4	60.0	
18.159	47.9	73.0		38.1	60.0	

FCC Part 15 Subpart B Conducted Emissions Test

Cumulative Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Line Tested	:	Neutral
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-1
Notes	:	120VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 09:20:09 AM



Emissions Meet QP Limit
Emissions Meet Ave Limit

FCC Part 15 Subpart B Conducted Emissions Test

Significant Emissions Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X4BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Line Tested	:	Line
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-1
Notes	:	480VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 11:12:04 AM
Data Filter	:	Up to 80 maximum levels detected with 6 dB level excursion threshold over 1 dB margin below limit

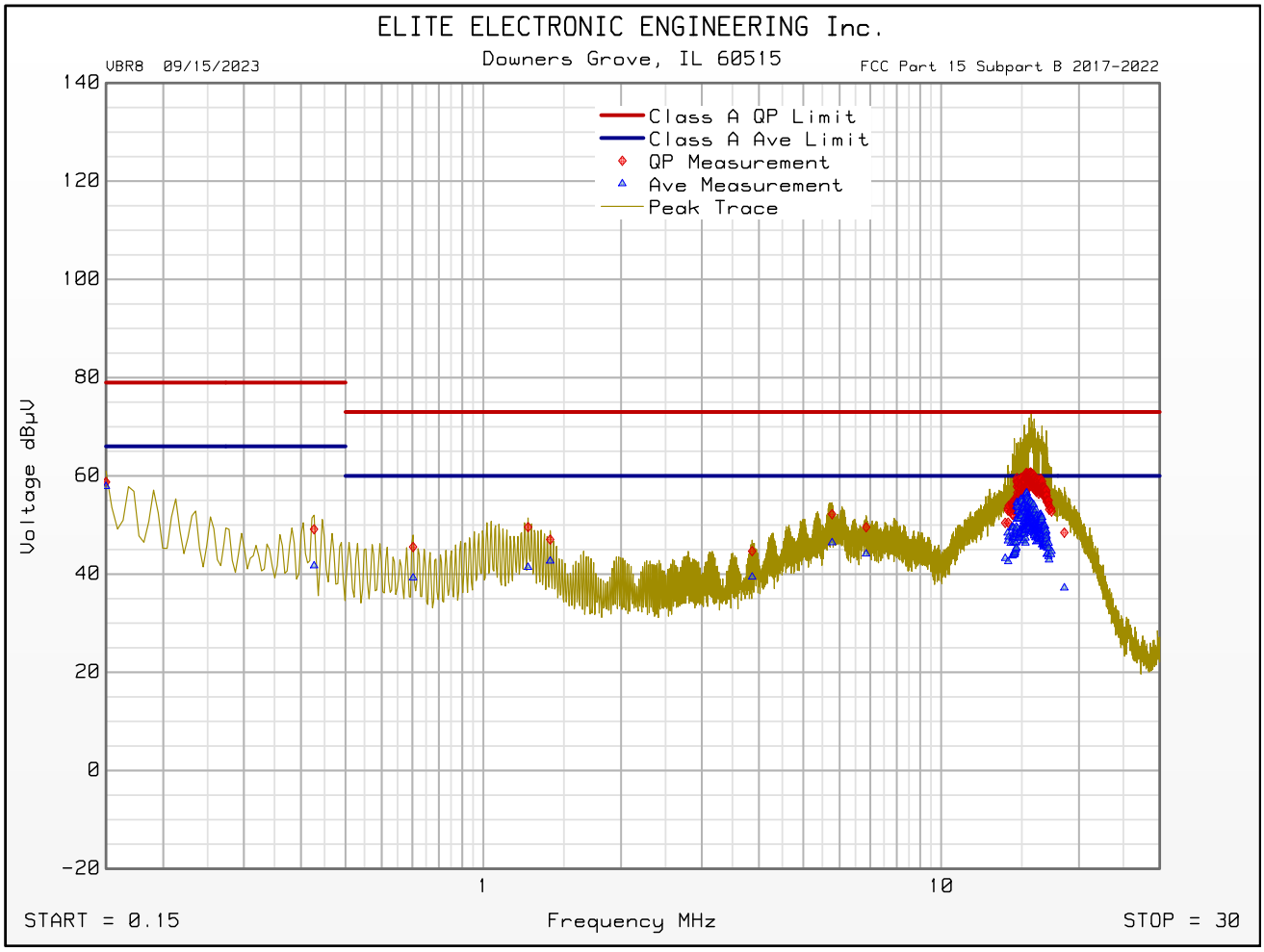
Freq MHz	Quasi-peak Level dBµV	Quasi-peak Limit dBµV	Excessive Quasi-peak Emissions	Average Level dBµV	Average Limit dBµV	Excessive Average Emissions
0.150	58.7	79.0		57.9	66.0	
0.427	49.1	79.0		41.7	66.0	
0.703	45.5	73.0		39.2	60.0	
1.253	49.6	73.0		41.4	60.0	
1.400	47.0	73.0		42.7	60.0	
3.865	44.7	73.0		39.4	60.0	
5.776	52.2	73.0		46.4	60.0	
6.856	49.5	73.0		44.1	60.0	
15.678	60.7	73.0		54.9	60.0	
18.578	48.4	73.0		37.2	60.0	

FCC Part 15 Subpart B Conducted Emissions Test

Cumulative Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X4BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Line Tested	:	Line
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-1
Notes	:	480VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 11:12:04 AM



Emissions Meet QP Limit
Emissions Meet Ave Limit

FCC Part 15 Subpart B Conducted Emissions Test

Significant Emissions Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X4BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Line Tested	:	Neutral
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-1
Notes	:	480VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 11:51:41 AM
Data Filter	:	Up to 80 maximum levels detected with 6 dB level excursion threshold over 1 dB margin below limit

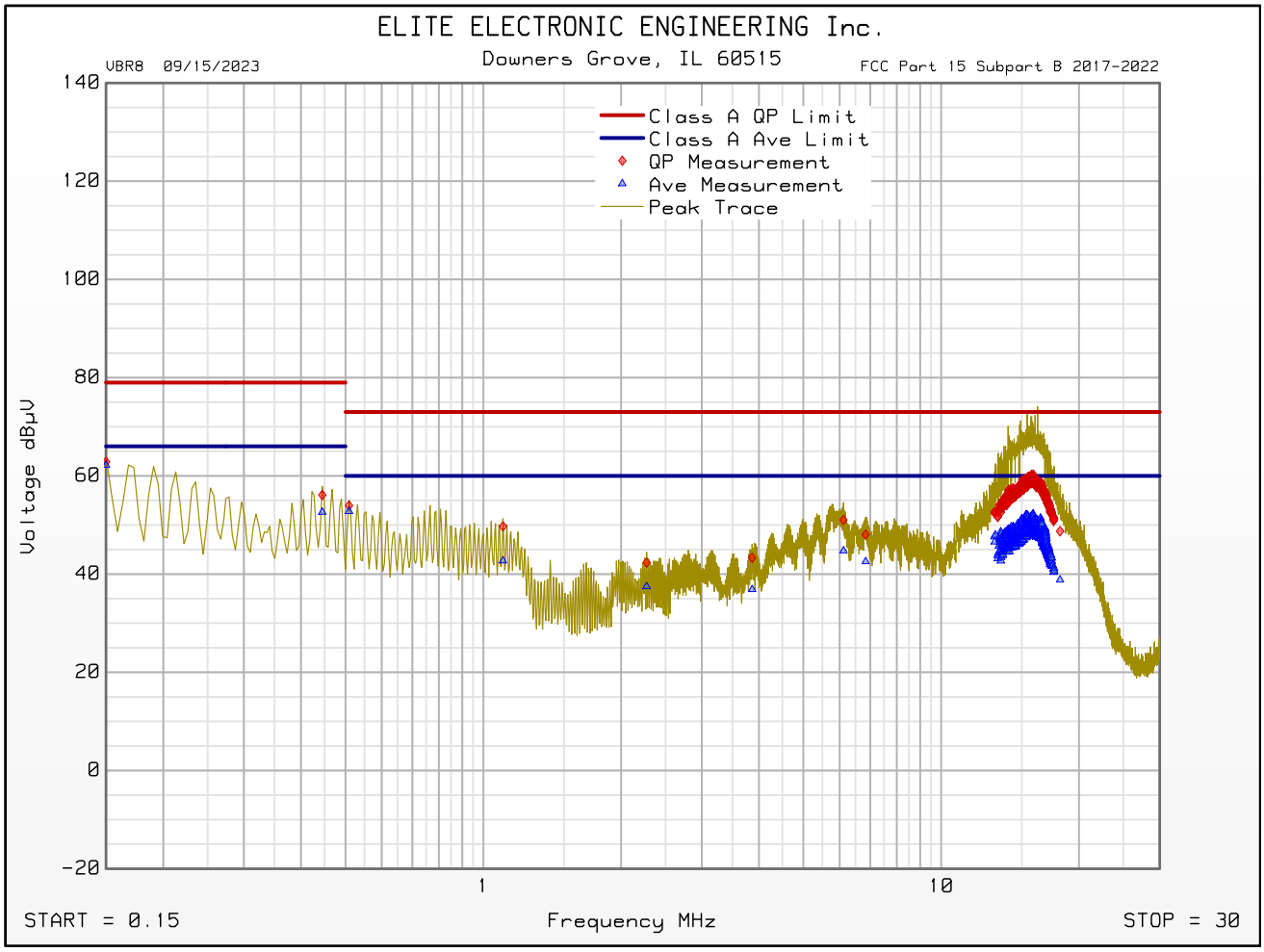
Freq MHz	Quasi-peak Level dBµV	Quasi-peak Limit dBµV	Excessive Quasi-peak Emissions	Average Level dBµV	Average Limit dBµV	Excessive Average Emissions
0.150	62.9	79.0		62.2	66.0	
0.445	56.1	79.0		52.6	66.0	
0.509	53.9	73.0		52.8	60.0	
1.104	49.7	73.0		42.7	60.0	
2.273	42.3	73.0		37.5	60.0	
3.865	43.3	73.0		36.9	60.0	
6.118	51.0	73.0		44.8	60.0	
6.838	48.1	73.0		42.6	60.0	
15.894	60.2	73.0		52.1	60.0	
18.186	48.7	73.0		38.8	60.0	

FCC Part 15 Subpart B Conducted Emissions Test

Cumulative Data

VBR8 09/15/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X4BMC
DUT Revision	:	NA
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Line Tested	:	Neutral
Scan Step Time [ms]	:	30
Meas. Threshold [dB]	:	-1
Notes	:	480VAC
Test Engineer	:	J. Cardenas
Limit	:	Class A
Test Date	:	Nov 16, 2023 11:51:41 AM



Emissions Meet QP Limit
Emissions Meet Ave Limit

21. RF Radiated Emissions

EUT Information	
Manufacturer	The Chamberlain Group LLC
Product	Yeti Phase 2 Commercial Door Operators
Model No.	JHDC22X1BMC
Serial No.	NA
Mode	Idle and "Run Forever"

Test Site Information	
Setup Format	Tabletop
Height of Support	NA
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)
Highest Internal Frequency	2.4GHz
Highest Measurement Frequency	13GHz
Notes	The cables were manually maximized during the preliminary emissions sweeps. The cable arrangement which resulted in the worst-case emissions was utilized. JHDC22X1BMC powered at 120VAC was determined to be the worst case.

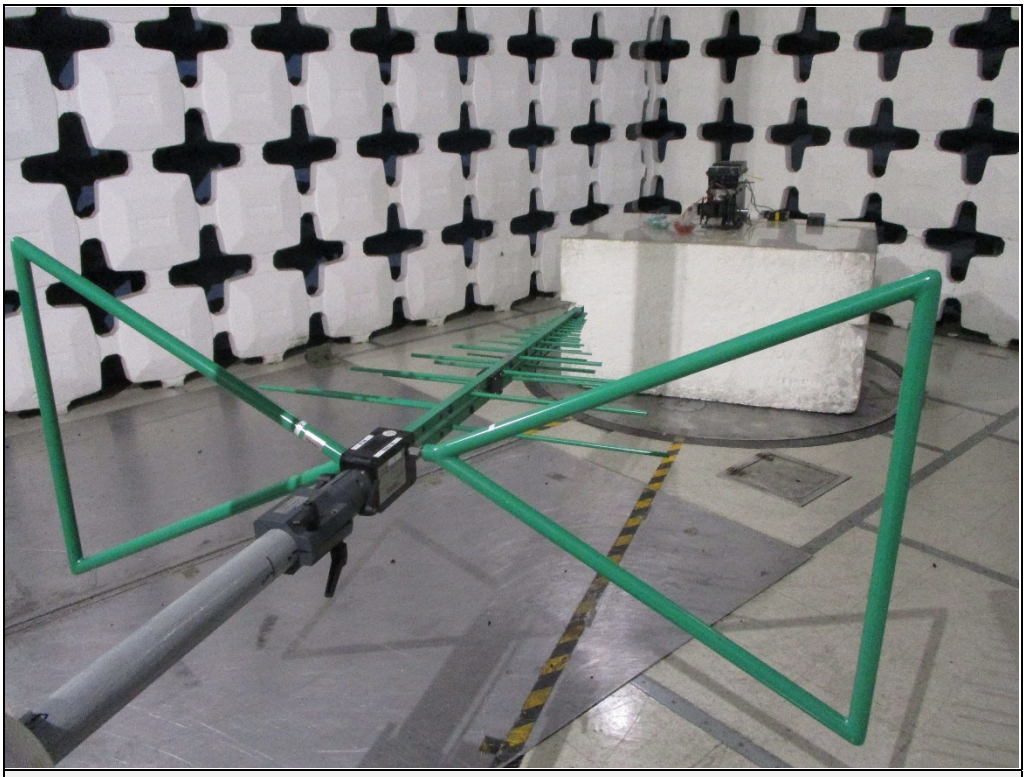
Measurement Uncertainty	
Measurement Type	Expanded Measurement Uncertainty
Radiated disturbance (electric field strength on an open area test site or alternative test site) (30 MHz – 1000 MHz)	4.3
Radiated disturbance (electric field strength on an open area test site or alternative test site) (1 GHz – 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
The field strength of radiated emissions from unintentional radiators at a distance of 10 meters shall not exceed the values in the following tables.

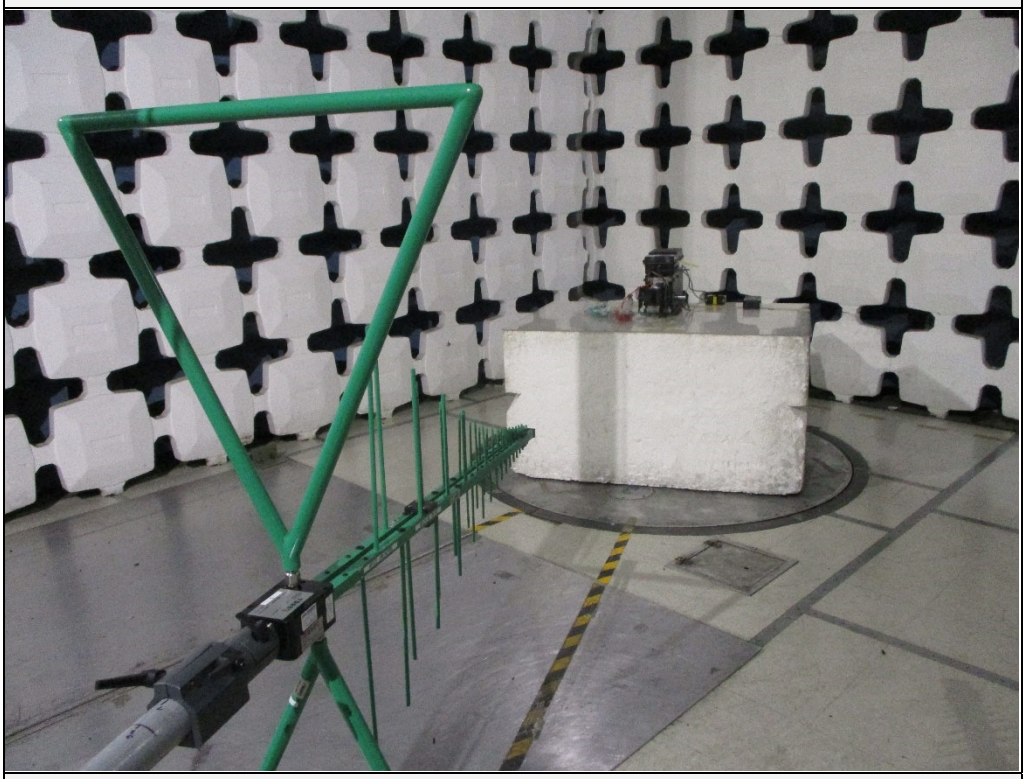
FCC Part 15 Class A Radiated Emissions Limits (30MHz to 1GHz)		
Frequency of Emission (MHz)	Field Strength (µV/m)	Field Strength (dBµV/m)
30 – 88	90	39
88 – 216	150	43.5
216 – 960	210	46.5
Above 960	300	49.5
FCC Part 15 Class A Radiated Emissions Limits (Above 1GHz)		
Frequency of Emission (MHz)	Peak Limit (dBµV/m)	Average Limit (dBµV/m)
Above 1000	69.5	49.5

ICES-003 Class A Radiated Emissions Limits (30MHz to 1GHz)		
Frequency Range (MHz)	Field Strength at 3 meters (dBµV/m)	Field Strength at 10 meters (dBµV/m)
30 – 88	50	40
88 – 216	54	43.5
216 – 230	56.9	46.4
230 – 960	57	47
960 – 1000	60	49.5
ICES-003 Class A Radiated Emissions Limits (At and Above 1GHz)		
Frequency Range (GHz)	Average (dBµV/m)	Peak (dBµV/m)
1 – F_M	60	80
F_M = highest measurement frequency		

Procedure
Since a quasi-peak detector and an average detector requires long integration times, it is not practical to automatically sweep through the quasi-peak and average levels. Therefore, radiated emissions from the EUT were first scanned using a peak detector and automatically plotted. The frequencies where significant emission levels were noted were then remeasured using the quasi-peak detector or average detector. The EUT and all peripheral equipment were placed on an 80cm high non-conductive stand. The broadband measuring antenna was positioned at a 3-meter distance from the EUT. The frequency range from 30MHz to 1GHz was investigated using a peak detector function with the bilog antenna at several heights, horizontal and vertical polarization, and with several different orientations of the EUT with respect to the antenna. The frequency range from 1GHz to 13GHz was investigated using a peak detector function with the double ridged waveguide antenna at several heights, horizontal and vertical polarization, and with several different orientations of the EUT with respect to the antenna. The maximum levels for each antenna polarization were plotted. The data was then processed by the computer to equivalent field intensity at 10 meters using linear extrapolation. A -10.5dB (-10.5dB = 20 * Log (3m/10m)) distance correction factor has automatically been applied to the plotted emissions data. Final radiated emissions were performed on all significant broadband and narrowband emissions found in the exploratory sweeps using the following methods: 1) Measurements from 30MHz to 1GHz were made using a quasi-peak detector and a broadband bilog antenna. Measurements above 1GHz were made using an average detector and a broadband double ridged waveguide antenna. 2) To ensure that maximum or worst case, emission levels were measured, the following steps were taken: a) The EUT was rotated so that all sides were exposed to the receiving antenna. b) Since the measuring antenna is linearly polarized, both horizontal and vertical field components were measured. c) The measuring antenna was raised and lowered from 1 to 4 meters for each antenna polarization to maximize the readings. d) For hand-held or body-worn devices, the EUT was rotated through three orthogonal axes to determine which orientation produces the highest emission relative to the limit. 3) Steps (b) through (d) were repeated with the EUT operated in the "Run Forever" mode.



Test Setup for Radiated Emissions: 30MHz to 1GHz, Horizontal Polarization



Test Setup for Radiated Emissions: 30MHz to 1GHz, Vertical Polarization

Test Setup for Radiated Emissions: Above 1GHz, Horizontal Polarization

Test Setup for Radiated Emissions: Above 1GHz, Vertical Polarization

FCC Part 15B Class A
Radiated RF Emissions Test

SW ID/Rev: VBV2 09/28/2023

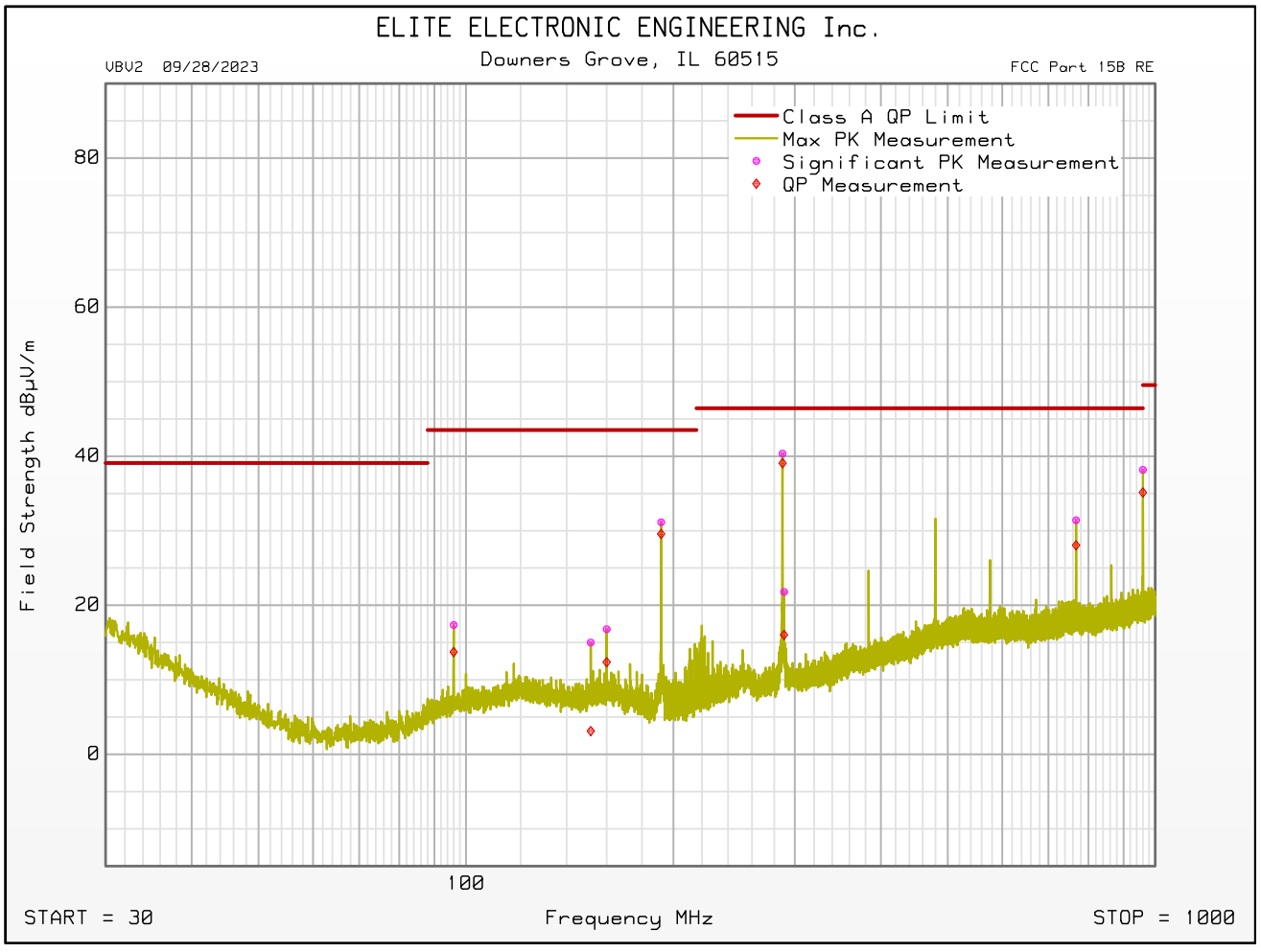
Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
Serial Number	:	NA
DUT Mode	:	Idle
Turntable Step Angle (°)	:	45
Mast Positions (cm)	:	120, 200, 340
Scan Type	:	Stepped Scan
Test RBW	:	120 kHz
Prelim Dwell Time (s)	:	0.0001
Notes	:	None
Test Engineer	:	J. Cardenas
Test Date	:	Nov 09, 2023 12:33:18 PM

Freq MHz	Peak Mtr Rdg dBuV	QP Mtr Rdg dBuV	Ant Fac dB/m	Amp Fac dB	Cbl Fac dB	Dist Corr dB	Peak Total dBµV/m	QP Total dBµV/m	QP Limit dBµV/m	QP Lim Mrg dB	Ant Pol	Mast Ht cm	Azim °	Excessive QP Level
31.380	5.1	-5.2	24.1	0.0	0.5	-10.5	19.3	9.0	39.1	-30.1	Vertical	200	225	
40.020	5.9	-1.9	19.3	0.0	0.5	-10.5	15.3	7.5	39.1	-31.6	Vertical	120	180	
58.140	6.8	-0.6	12.7	0.0	0.5	-10.5	9.6	2.1	39.1	-37.0	Vertical	200	225	
79.980	9.7	5.5	13.3	0.0	0.5	-10.5	13.0	8.9	39.1	-30.2	Vertical	120	180	
95.980	11.1	7.5	16.2	0.0	0.5	-10.5	17.4	13.7	43.5	-29.8	Horizontal	340	180	
151.720	7.6	-4.3	17.1	0.0	0.8	-10.5	15.0	3.1	43.5	-40.4	Horizontal	200	90	
160.000	9.2	4.8	17.2	0.0	0.8	-10.5	16.8	12.4	43.5	-31.1	Horizontal	200	135	
191.920	25.3	23.8	15.3	0.0	1.0	-10.5	31.1	29.6	43.5	-14.0	Horizontal	200	90	
287.940	30.9	29.6	18.9	0.0	1.0	-10.5	40.4	39.1	46.4	-7.4	Horizontal	120	135	
289.380	12.3	6.6	18.9	0.0	1.0	-10.5	21.8	16.0	46.4	-30.4	Horizontal	120	135	
383.940	17.6	15.3	21.2	0.0	1.4	-10.5	29.7	27.4	46.4	-19.0	Vertical	120	90	
479.700	19.8	16.6	23.9	0.0	1.5	-10.5	34.7	31.5	46.4	-14.9	Vertical	200	180	
767.820	14.2	10.8	25.8	0.0	1.9	-10.5	31.4	28.0	46.4	-18.4	Horizontal	120	45	
863.760	12.9	8.6	26.3	0.0	2.0	-10.5	30.8	26.5	46.4	-20.0	Vertical	340	180	
959.760	19.5	16.5	27.1	0.0	2.0	-10.5	38.2	35.1	46.4	-11.3	Horizontal	200	135	

FCC Part 15B Class A
Radiated RF Emissions Test

SW ID/Rev: VBV2 09/28/2023

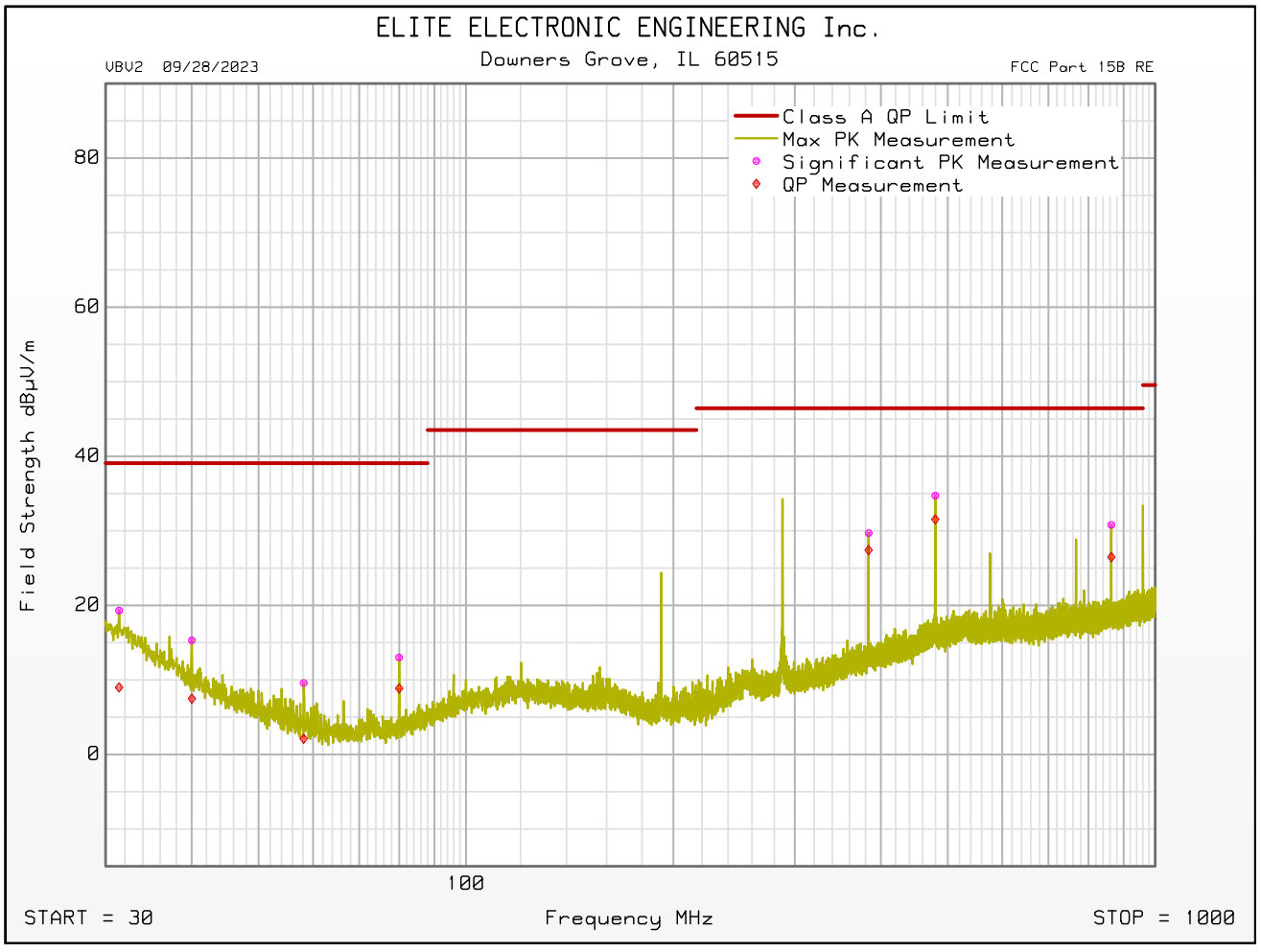
Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
Serial Number	:	NA
DUT Mode	:	Idle
Turntable Step Angle (°)	:	45
Mast Positions (cm)	:	120, 200, 340
Antenna Polarization	:	Horizontal
Scan Type	:	Stepped Scan
Test RBW	:	120 kHz
Prelim Dwell Time (s)	:	0.0001
Notes	:	None
Test Engineer	:	J. Cardenas
Test Date	:	Nov 09, 2023 12:33:18 PM



FCC Part 15B Class A
Radiated RF Emissions Test

SW ID/Rev: VBV2 09/28/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
Serial Number	:	NA
DUT Mode	:	Idle
Turntable Step Angle (°)	:	45
Mast Positions (cm)	:	120, 200, 340
Antenna Polarization	:	Vertical
Scan Type	:	Stepped Scan
Test RBW	:	120 kHz
Prelim Dwell Time (s)	:	0.0001
Notes	:	None
Test Engineer	:	J. Cardenas
Test Date	:	Nov 09, 2023 12:33:18 PM



FCC Part 15B Class A
Radiated RF Emissions Test

SW ID/Rev: VBV2 09/28/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
Serial Number	:	NA
DUT Mode	:	Idle
Turntable Step Angle (°)	:	45
Mast Positions (cm)	:	120, 200, 340
Scan Type	:	Stepped Scan
Test RBW	:	1 MHz
Prelim Dwell Time (s)	:	0.0001
Notes	:	None
Test Engineer	:	J. Cardenas
Test Date	:	Nov 09, 2023 10:33:24 AM

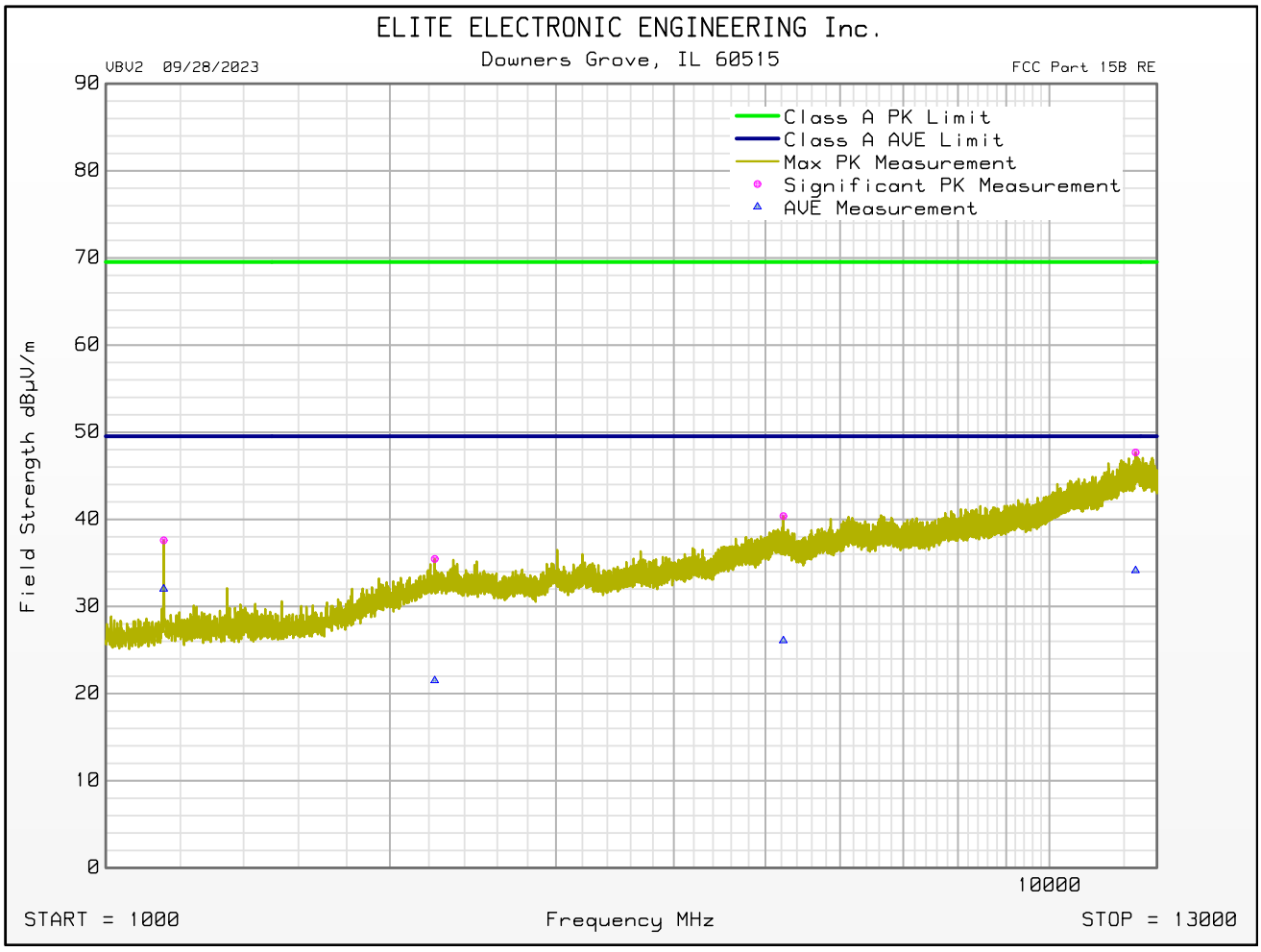
Freq MHz	Peak Mtr Rdg dBuV	Ant Fac dB/m	Amp Fac dB	Cbl Fac dB	Dist Corr dB	Peak Total dBµV/m	Peak Limit dBµV/m	Peak Lim Mrg dB	Ant Pol	Mast Ht cm	Azim °	Excessive Peak Level
1152.000	58.3	29.8	-42.3	2.2	-10.5	37.6	69.5	-31.9	Horizontal	340	315	
1344.000	54.8	29.6	-41.6	2.4	-10.5	34.8	69.5	-34.7	Vertical	200	135	
2231.500	49.6	33.8	-40.7	3.2	-10.5	35.5	69.5	-34.1	Horizontal	200	135	
3207.500	49.6	34.3	-40.8	4.0	-10.5	36.7	69.5	-32.8	Vertical	200	225	
5224.500	48.5	37.6	-40.4	5.1	-10.5	40.4	69.5	-29.2	Horizontal	340	90	
8241.500	47.8	38.5	-40.8	6.5	-10.5	41.5	69.5	-28.0	Vertical	200	135	
12341.500	48.6	41.9	-40.4	8.0	-10.5	47.7	69.5	-21.9	Horizontal	340	270	

Freq MHz	Average Mtr Rdg dBuV	Ant Fac dB/m	Amp Fac dB	Cbl Fac dB	Dist Corr dB	Average Total dBµV/m	Average Limit dBµV/m	Average Lim Mrg dB	Ant Pol	Mast Ht cm	Azim °	Excessive Average Level
1152.000	52.8	29.8	-42.3	2.2	-10.5	32.0	49.5	-17.5	Horizontal	340	315	
1344.000	47.7	29.6	-41.6	2.4	-10.5	27.7	49.5	-21.8	Vertical	200	135	
2231.500	35.6	33.8	-40.7	3.2	-10.5	21.5	49.5	-28.0	Horizontal	200	135	
3207.500	35.1	34.3	-40.8	4.0	-10.5	22.3	49.5	-27.3	Vertical	200	225	
5224.500	34.2	37.6	-40.4	5.1	-10.5	26.1	49.5	-23.5	Horizontal	340	90	
8241.500	34.5	38.5	-40.8	6.5	-10.5	28.2	49.5	-21.3	Vertical	200	135	
12341.500	35.1	41.9	-40.4	8.0	-10.5	34.1	49.5	-15.4	Horizontal	340	270	

FCC Part 15B Class A
Radiated RF Emissions Test

SW ID/Rev: VBV2 09/28/2023

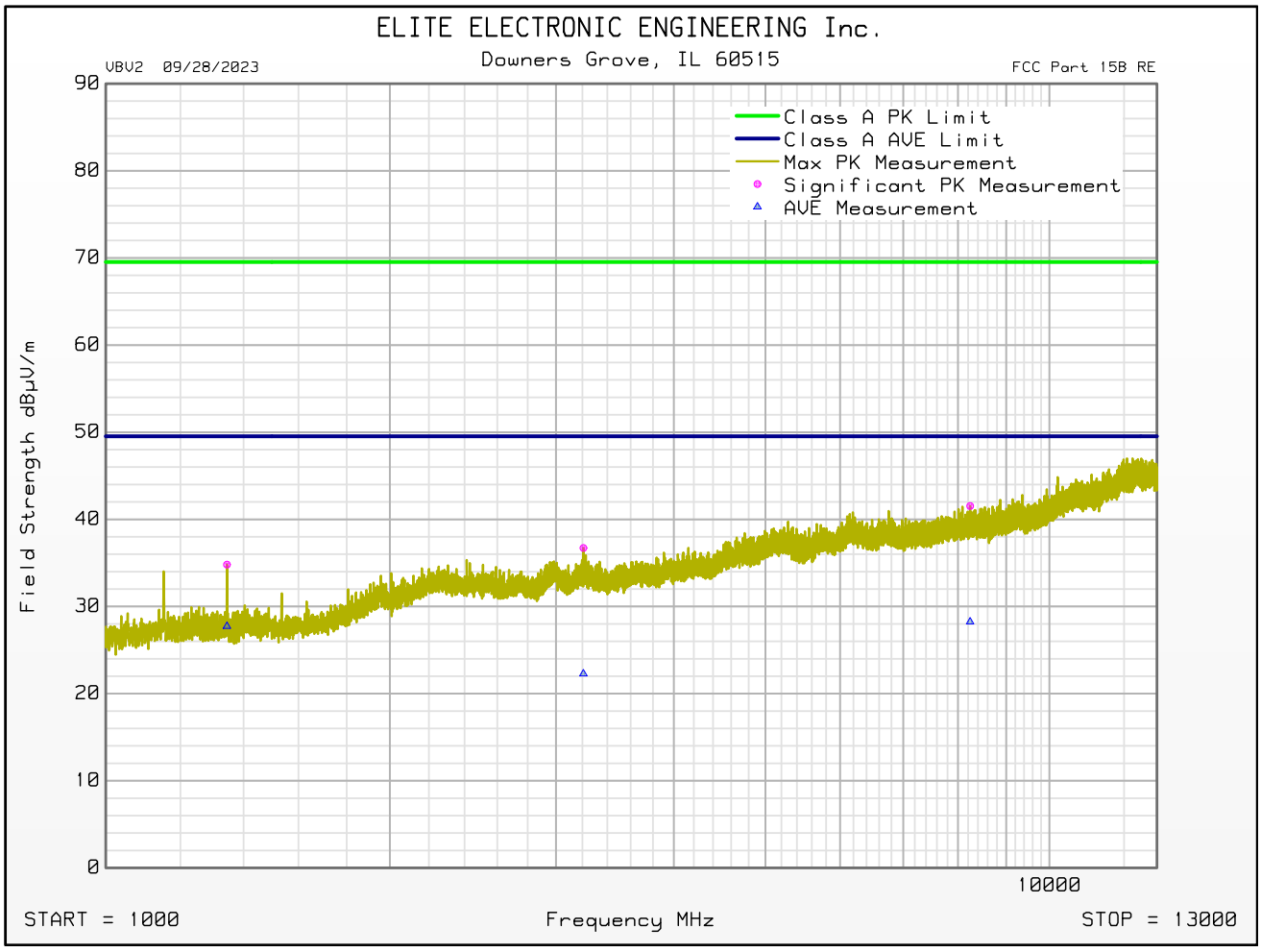
Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
Serial Number	:	NA
DUT Mode	:	Idle
Turntable Step Angle (°)	:	45
Mast Positions (cm)	:	120, 200, 340
Antenna Polarization	:	Horizontal
Scan Type	:	Stepped Scan
Test RBW	:	1 MHz
Prelim Dwell Time (s)	:	0.0001
Notes	:	None
Test Engineer	:	J. Cardenas
Test Date	:	Nov 09, 2023 10:33:24 AM



FCC Part 15B Class A
Radiated RF Emissions Test

SW ID/Rev: VBV2 09/28/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
Serial Number	:	NA
DUT Mode	:	Idle
Turntable Step Angle (°)	:	45
Mast Positions (cm)	:	120, 200, 340
Antenna Polarization	:	Vertical
Scan Type	:	Stepped Scan
Test RBW	:	1 MHz
Prelim Dwell Time (s)	:	0.0001
Notes	:	None
Test Engineer	:	J. Cardenas
Test Date	:	Nov 09, 2023 10:33:24 AM



FCC Part 15B Class A
Radiated RF Emissions Test

SW ID/Rev: VBV2 09/28/2023

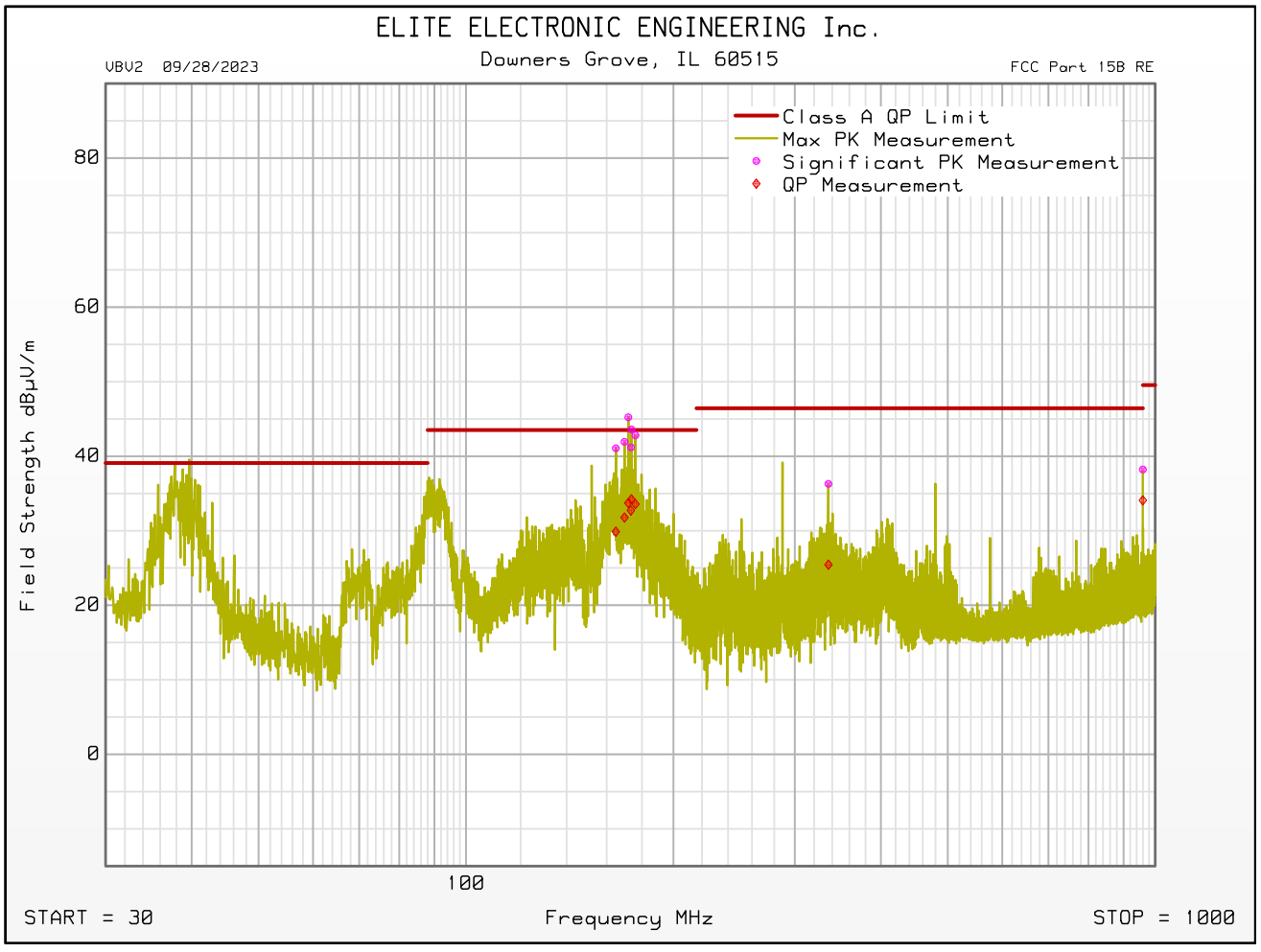
Manufacturer : The Chamberlain Group LLC
Model : JHDC22X1BMC
Serial Number : NA
DUT Mode : "Run Forever"
Turntable Step Angle (°): 45
Mast Positions (cm) : 120, 200, 340
Scan Type : Stepped Scan
Test RBW : 120 kHz
Prelim Dwell Time (s) : 0.0001
Notes : None
Test Engineer : J. Cardenas
Test Date : Nov 09, 2023 12:12:09 PM

Freq MHz	Peak Mtr Rdg dBuV	QP Mtr Rdg dBuV	Ant Fac dB/m	Amp Fac dB	Cbl Fac dB	Dist Corr dB	Peak Total dBµV/m	QP Total dBµV/m	QP Limit dBµV/m	QP Lim Mrg dB	Ant Pol	Mast Ht cm	Azim °	Excessive QP Level
38.100	39.0	24.0	20.3	0.0	0.5	-10.5	49.4	34.4	39.1	-4.7	Vertical	200	315	
39.600	41.3	27.1	19.6	0.0	0.5	-10.5	50.9	36.7	39.1	-2.3	Vertical	120	270	
40.740	40.6	24.7	19.0	0.0	0.5	-10.5	49.7	33.7	39.1	-5.4	Vertical	200	315	
54.180	36.0	26.7	13.6	0.0	0.5	-10.5	39.6	30.3	39.1	-8.8	Vertical	120	315	
55.380	36.2	26.0	13.2	0.0	0.5	-10.5	39.4	29.2	39.1	-9.9	Vertical	200	315	
55.860	38.1	27.4	13.1	0.0	0.5	-10.5	41.2	30.5	39.1	-8.6	Vertical	120	270	
164.980	33.9	22.7	16.8	0.0	0.9	-10.5	41.1	29.9	43.5	-13.6	Horizontal	200	315	
169.840	35.2	25.1	16.3	0.0	0.9	-10.5	41.9	31.8	43.5	-11.7	Horizontal	200	315	
172.000	38.7	27.2	16.1	0.0	0.9	-10.5	45.2	33.7	43.5	-9.8	Horizontal	340	270	
173.500	34.8	26.4	15.9	0.0	0.9	-10.5	41.2	32.7	43.5	-10.8	Horizontal	340	270	
173.800	37.3	27.9	15.9	0.0	0.9	-10.5	43.6	34.2	43.5	-9.3	Horizontal	200	270	
176.140	36.7	27.5	15.7	0.0	0.9	-10.5	42.8	33.6	43.5	-9.9	Horizontal	200	270	
335.640	25.7	14.9	19.8	0.0	1.2	-10.5	36.3	25.4	46.4	-21.0	Horizontal	120	135	
400.260	21.2	11.4	21.9	0.0	1.5	-10.5	34.1	24.3	46.4	-22.1	Vertical	340	0	
479.880	24.0	21.7	23.9	0.0	1.5	-10.5	38.9	36.6	46.4	-9.8	Vertical	200	0	
575.820	18.9	16.6	24.8	0.0	1.5	-10.5	34.7	32.4	46.4	-14.0	Vertical	200	315	
767.820	15.2	11.5	25.8	0.0	1.9	-10.5	32.5	28.7	46.4	-17.7	Vertical	120	45	
959.640	19.6	15.4	27.1	0.0	2.0	-10.5	38.2	34.1	46.4	-12.4	Horizontal	200	135	

FCC Part 15B Class A
Radiated RF Emissions Test

SW ID/Rev: VBV2 09/28/2023

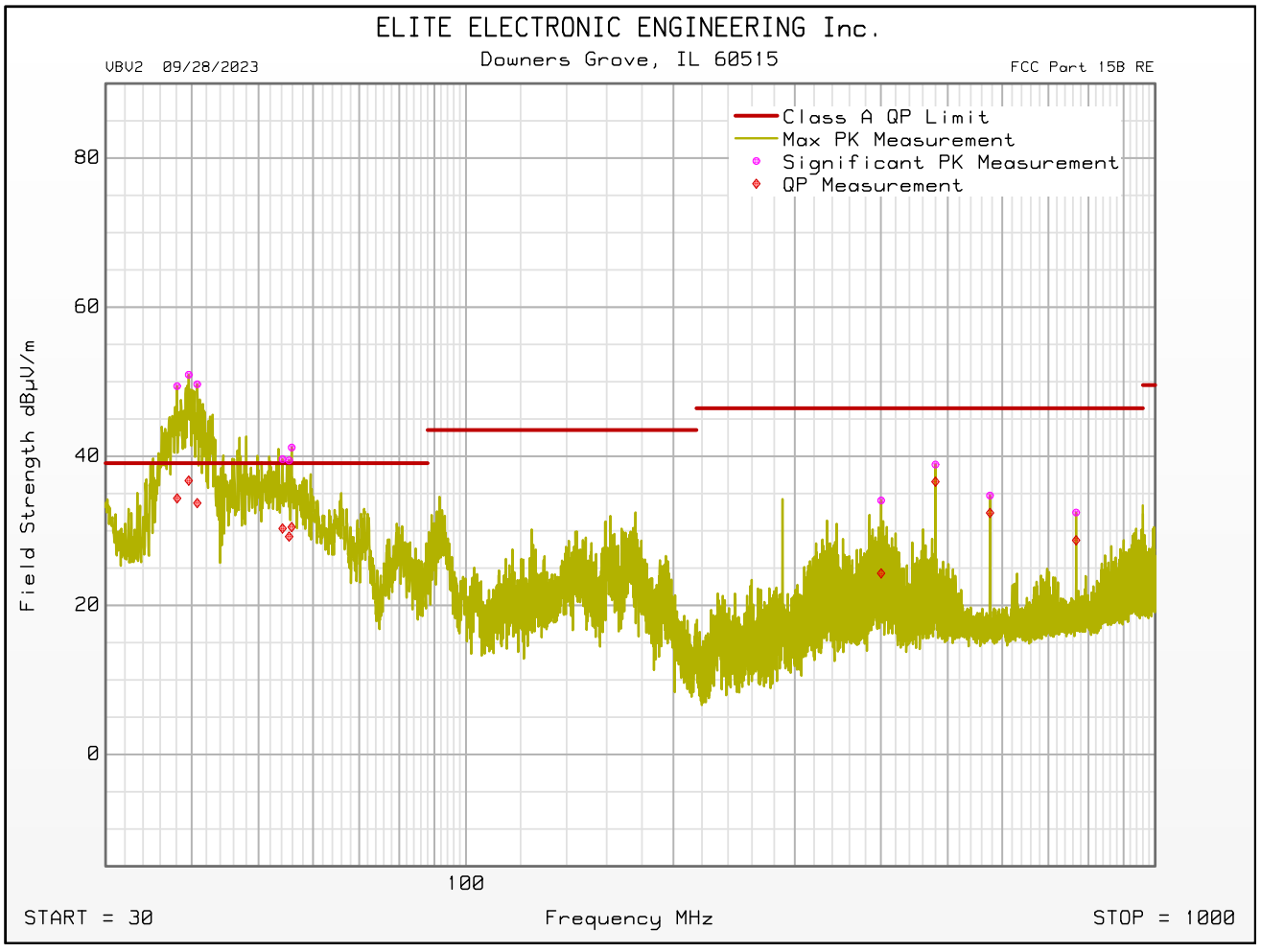
Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Turntable Step Angle (°)	:	45
Mast Positions (cm)	:	120, 200, 340
Antenna Polarization	:	Horizontal
Scan Type	:	Stepped Scan
Test RBW	:	120 kHz
Prelim Dwell Time (s)	:	0.0001
Notes	:	None
Test Engineer	:	J. Cardenas
Test Date	:	Nov 09, 2023 12:12:09 PM



FCC Part 15B Class A
Radiated RF Emissions Test

SW ID/Rev: VBV2 09/28/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Turntable Step Angle (°)	:	45
Mast Positions (cm)	:	120, 200, 340
Antenna Polarization	:	Vertical
Scan Type	:	Stepped Scan
Test RBW	:	120 kHz
Prelim Dwell Time (s)	:	0.0001
Notes	:	None
Test Engineer	:	J. Cardenas
Test Date	:	Nov 09, 2023 12:12:09 PM



FCC Part 15B Class A
Radiated RF Emissions Test

SW ID/Rev: VBV2 09/28/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Turntable Step Angle (°)	:	45
Mast Positions (cm)	:	120, 200, 340
Scan Type	:	Stepped Scan
Test RBW	:	1 MHz
Prelim Dwell Time (s)	:	0.0001
Notes	:	None
Test Engineer	:	J. Cardenas
Test Date	:	Nov 09, 2023 11:41:05 AM

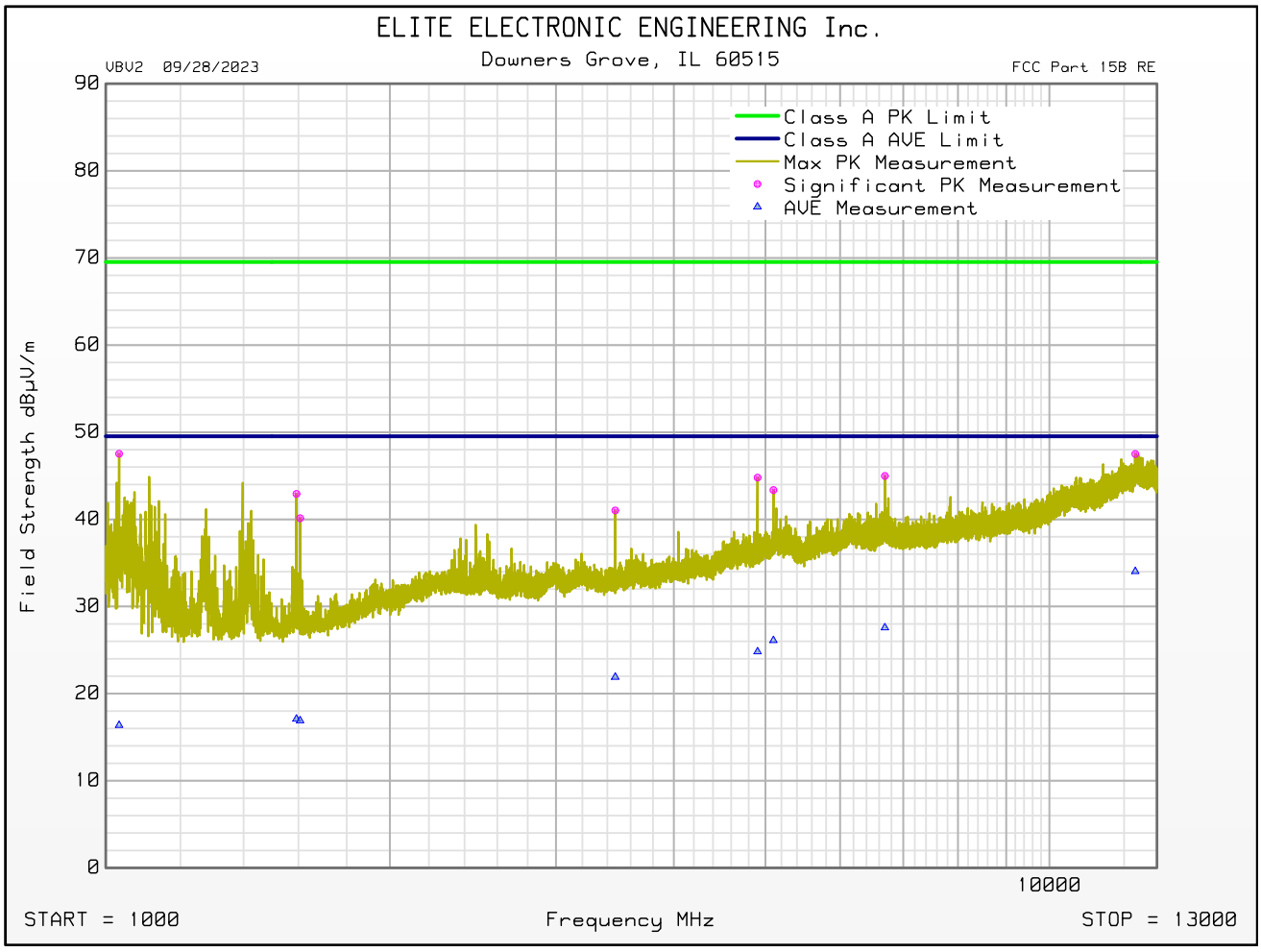
Freq MHz	Peak Mtr Rdg dBuV	Ant Fac dB/m	Amp Fac dB	Cbl Fac dB	Dist Corr dB	Peak Total dBµV/m	Peak Limit dBµV/m	Peak Lim Mrg dB	Ant Pol	Mast Ht cm	Azim °	Excessive Peak Level
1033.000	69.1	29.1	-42.2	2.0	-10.5	47.5	69.5	-22.0	Horizontal	120	135	
1072.500	72.7	29.2	-42.3	2.1	-10.5	51.2	69.5	-18.4	Vertical	340	90	
1081.000	72.0	29.2	-42.3	2.1	-10.5	50.5	69.5	-19.0	Vertical	340	90	
1592.500	62.6	29.3	-41.1	2.7	-10.5	42.9	69.5	-26.6	Horizontal	340	45	
1607.000	59.7	29.4	-41.1	2.7	-10.5	40.1	69.5	-29.4	Horizontal	340	45	
2347.500	55.9	33.7	-41.0	3.3	-10.5	41.5	69.5	-28.0	Vertical	200	315	
2516.500	55.4	33.8	-41.2	3.5	-10.5	41.0	69.5	-28.5	Vertical	200	225	
2547.000	54.7	33.9	-41.3	3.5	-10.5	40.5	69.5	-29.1	Vertical	340	225	
3466.500	53.7	34.0	-40.5	4.2	-10.5	41.0	69.5	-28.5	Horizontal	120	225	
4620.000	52.5	36.5	-40.7	4.8	-10.5	42.7	69.5	-26.9	Vertical	120	315	
4906.500	54.2	36.7	-40.6	5.0	-10.5	44.8	69.5	-24.7	Horizontal	340	315	
5099.000	51.6	37.7	-40.5	5.1	-10.5	43.4	69.5	-26.2	Horizontal	200	315	
6483.500	53.2	37.9	-40.6	5.8	-10.5	45.7	69.5	-23.8	Vertical	120	270	
6693.500	51.6	38.5	-40.5	5.9	-10.5	45.0	69.5	-24.6	Horizontal	200	315	
12331.000	48.5	41.9	-40.4	8.0	-10.5	47.5	69.5	-22.0	Horizontal	120	315	

Freq MHz	Average Mtr Rdg dBuV	Ant Fac dB/m	Amp Fac dB	Cbl Fac dB	Dist Corr dB	Average Total dBµV/m	Average Limit dBµV/m	Average Lim Mrg dB	Ant Pol	Mast Ht cm	Azim °	Excessive Average Level
1033.000	37.9	29.1	-42.2	2.0	-10.5	16.4	49.5	-33.2	Horizontal	120	135	
1072.500	40.1	29.2	-42.3	2.1	-10.5	18.6	49.5	-30.9	Vertical	340	90	
1081.000	39.5	29.2	-42.3	2.1	-10.5	18.0	49.5	-31.6	Vertical	340	90	
1592.500	36.7	29.3	-41.1	2.7	-10.5	17.1	49.5	-32.5	Horizontal	340	45	
1607.000	36.5	29.4	-41.1	2.7	-10.5	16.9	49.5	-32.6	Horizontal	340	45	
2347.500	35.8	33.7	-41.0	3.3	-10.5	21.4	49.5	-28.1	Vertical	200	315	
2516.500	36.0	33.8	-41.2	3.5	-10.5	21.6	49.5	-27.9	Vertical	200	225	
2547.000	35.6	33.9	-41.3	3.5	-10.5	21.4	49.5	-28.2	Vertical	340	225	
3466.500	34.6	34.0	-40.5	4.2	-10.5	21.9	49.5	-27.6	Horizontal	120	225	
4620.000	34.1	36.5	-40.7	4.8	-10.5	24.3	49.5	-25.3	Vertical	120	315	
4906.500	34.2	36.7	-40.6	5.0	-10.5	24.8	49.5	-24.7	Horizontal	340	315	
5099.000	34.3	37.7	-40.5	5.1	-10.5	26.1	49.5	-23.4	Horizontal	200	315	
6483.500	34.1	37.9	-40.6	5.8	-10.5	26.7	49.5	-22.8	Vertical	120	270	
6693.500	34.2	38.5	-40.5	5.9	-10.5	27.6	49.5	-22.0	Horizontal	200	315	
12331.000	35.0	41.9	-40.4	8.0	-10.5	34.0	49.5	-15.5	Horizontal	120	315	

FCC Part 15B Class A
Radiated RF Emissions Test

SW ID/Rev: VBV2 09/28/2023

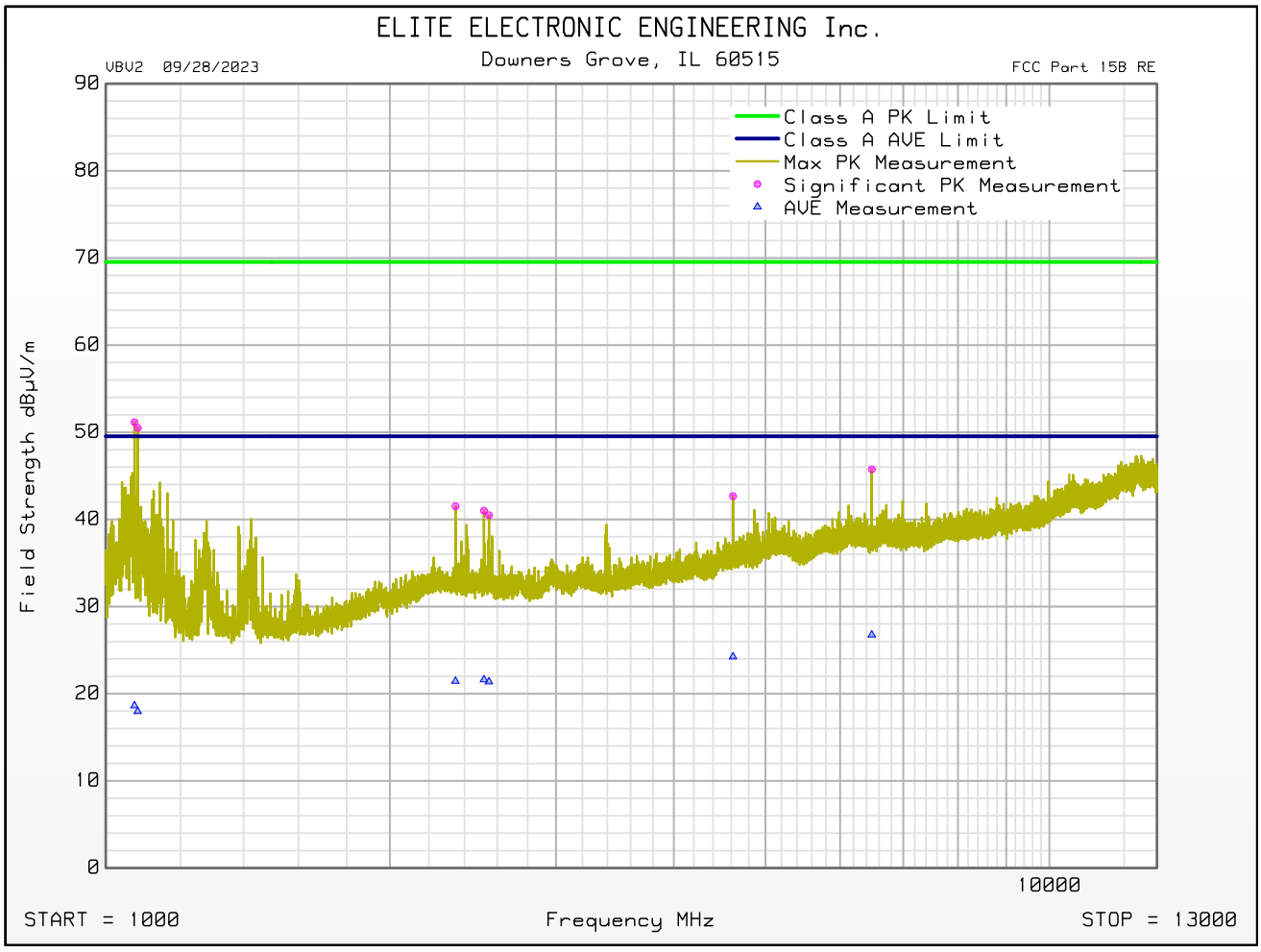
Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Turntable Step Angle (°)	:	45
Mast Positions (cm)	:	120, 200, 340
Antenna Polarization	:	Horizontal
Scan Type	:	Stepped Scan
Test RBW	:	1 MHz
Prelim Dwell Time (s)	:	0.0001
Notes	:	None
Test Engineer	:	J. Cardenas
Test Date	:	Nov 09, 2023 11:41:05 AM



FCC Part 15B Class A
Radiated RF Emissions Test

SW ID/Rev: VBV2 09/28/2023

Manufacturer	:	The Chamberlain Group LLC
Model	:	JHDC22X1BMC
Serial Number	:	NA
DUT Mode	:	"Run Forever"
Turntable Step Angle (°)	:	45
Mast Positions (cm)	:	120, 200, 340
Antenna Polarization	:	Vertical
Scan Type	:	Stepped Scan
Test RBW	:	1 MHz
Prelim Dwell Time (s)	:	0.0001
Notes	:	None
Test Engineer	:	J. Cardenas
Test Date	:	Nov 09, 2023 11:41:05 AM



22. Scope of Accreditation

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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Downers Grove, IL 60515
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Richard King (FCC/Commercial Team Leader) Phone: 630 495 9770 ext. 123
Email: reking@elitetest.com
Website: www.elitetest.com

ELECTRICAL

Valid To: June 30, 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)

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 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 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)

Test Technology:	Test Method(s)[1]:
Australia/New Zealand Radio Tests	AS/NZS 4268; Radiocommunications (Short Range Devices) Standard (2014)
Hong Kong Radio Tests	HKCA 1039 Issue 6; HKCA 1042; HKCA 1033 Issue 7; HKCA 1061; HKCA 1008; HKCA 1043; HKCA 1057; HKCA 1073
Korean Radio Test Standards	KN 301 489-1; KN 301 489-3; KN 301 489-9; KN 301 489-17; KN 301 489-52; KS X 3124; KS X 3125; KS X 3130; KS X 3126; KS X 3129
Vietnam Radio Test Standards	QCVN 47:2015/BTTTT; QCVN 54:2020/BTTTT; QCVN 55:2011/BTTTT; QCVN 65:2013/BTTTT; QCVN 73:2013/BTTTT; QCVN 74:2020/BTTTT; QCVN 112:2017/BTTTT; QCVN 117:2020//BTTTT
Vietnam EMC Test Standards	QCVN 18:2014/BTTTT; QCVN 86:2019/BTTTT; QCVN 96:2015/BTTTT; QCVN 118:2018/BTTTT
Unlicensed Radio Frequency Devices *(3 Meter Semi-Anechoic Room)*	47 CFR FCC Part 15C, 15D, 15E, 15F, 15G, 15H (using ANSI C63.10:2013, ANSI C63.17:2013 and FCC KDB 905462 D02 (v02))
Licensed Radio Service Equipment	47 CFR FCC Parts 20, 22, 24, 25, 27, 30, 73, 74, 80, 87, 90, 95, 96, 97, 101 (using ANSI/TIA-603-E, TIA-102.CAAA-E, ANSI C63.26:2015)
OTA (Over the Air) Performance GSM, GPRS, EGPRS UMTS (W-CDMA) LTE including CAT M1 A-GPS for UMTS/GSM LTS A-GPS, A-GLONASS, SIB8/SIB16 Large Device/Laptop/Tablet Testing Integrated Device Testing WiFi 802.11 a/b/g/n/a	CTIA Test Plan for Wireless Device Over-the-Air Performance (Method for Measurement for Radiated Power and Receiver Performance) V3.8.2; CTIA Test Plan for RF Performance Evaluation of WiFi Mobile Converged Devices V2.1.0

Test Technology:	Test Method(s)[1]:
Electrical Measurements and Simulation	
AC Voltage / Current (1mV to 5kV) 60 Hz (0.1V to 250V) up to 500 MHz (1µA to 150A) 60 Hz	FAA AC 150/5345-10H; FAA AC 150/5345-43J; FAA AC 150/5345-44K; FAA AC 150/5345-46E; FAA AC 150/5345-47C;
DC Voltage / Current (1mV to 15 kV) / (1µA to 10A)	FAA EB 67D
Power Factor / Efficiency / Crest Factor (Power to 30kW)	
Resistance (1mΩ to 4000MΩ)	
Surge (Up to 10 kV / 5 kA) (Combination Wave and Ring Wave)	

On the following products and materials:
Telecommunications Terminal Equipment (TTE), Radio Equipment, Network Equipment, Information Technology Equipment (ITE), Automotive Electronic Equipment, Automotive Hybrid Electronic Devices, Maritime Navigation and Radio Communication Equipment and Systems, Vehicles, Boats and Internal Combustion Engine Driven Devices, Automotive, Aviation, and General Lighting Products, Medical Electrical Equipment, Motors, Industrial, Scientific and Medical (ISM) Radio-Frequency Equipment, Household Appliances, Electric Tools, Low-voltage Switchgear and Control gear, Programmable Controllers, Electrical Equipment for Measurement, Control and Laboratory Use, Base Materials, Power and Data Transmission Cables and Connectors

[1] When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard measurement method, per part C., Section 1 of A2LA *R101 - General Requirements - Accreditation of ISO-IEC 17025 Laboratories*.

Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1[2]

Rule Subpart/Technology	Test Method	Maximum Frequency (MHz)
Unintentional Radiators Part 15B	ANSI C63.4:2014	40000
Industrial, Scientific, and Medical Equipment Part 18	FCC MP-5 (February 1986)	40000
Intentional Radiators Part 15C	ANSI C63.10:2013	40000

Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1[2]

Rule Subpart/Technology	Test Method	Maximum Frequency (MHz)
Unlicensed Personal Communication Systems Devices Part 15D	ANSI C63.17:2013	40000
U-NII without DFS Intentional Radiators Part 15E	ANSI C63.10:2013	40000
U-NII with DFS Intentional Radiators Part 15E	FCC KDB 905462 D02 (v02)	40000
UWB Intentional Radiators Part 15F	ANSI C63.10:2013	40000
BPL Intentional Radiators Part 15G	ANSI C63.10:2013	40000
White Space Device Intentional Radiators Part 15H	ANSI C63.10:2013	40000
Commercial Mobile Services (FCC Licensed Radio Service Equipment) Parts 22 (cellular), 24, 25 (below 3 GHz), and 27	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	40000
General Mobile Radio Services (FCC Licensed Radio Service Equipment) Parts 22 (non-cellular), 90 (below 3 GHz), 95, 97, and 101 (below 3 GHz)	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	40000
Citizens Broadband Radio Services (FCC Licensed Radio Service Equipment) Part 96	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	40000
Maritime and Aviation Radio Services Parts 80 and 87	ANSI/TIA-603-E; ANSI C63.26:2015	40000
Microwave and Millimeter Bands Radio Services Parts 25, 30, 74, 90 (above 3 GHz), 97 (above 3 GHz), and 101	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	40000

Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1[2]

Rule Subpart/Technology	Test Method	Maximum Frequency (MHz)
Broadcast Radio Services		
Parts 73 and 74 (below 3 GHz)	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	40000
Signal Boosters		
Part 20 (Wideband Consumer Signal Boosters, Provider-specific signal boosters, and Industrial Signal Boosters) Section 90.219	ANSI C63.26:2015	40000

[2] Accreditation does not imply acceptance to the FCC equipment authorization program. Please see the FCC website (https://apps.fcc.gov/oetcf/eas/) for a listing of FCC approved laboratories.

Accredited Laboratory

A2LA has accredited

ELITE ELECTRONIC ENGINEERING INC.

Downers Grove, IL

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 15th day of August 2023.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1786.01
Valid to June 30, 2025

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.