

*FCC PART 15, SUBPART B and C
TEST REPORT**for***DOOR CHIME BUTTON****MODELS: SW-ATT-DB-B, SW-ATT-DB-N, SW-ATT-DB-Z**

Prepared for

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DATE: MAY 24, 2016

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GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government.

Device Tested: Door Chime Button
Models: SW-ATT-DB-B, SW-ATT-DB-N, SW-ATT-DB-Z
S/N: N/A

Product Description: The EUT is designed to integrate with the AT&T Digital Life security system. The EUT is used to ring the door chime and send a power-up message to the security system.

Modifications: The EUT was not modified in order to meet the specifications.

Customer: Nortek Security & Controls, LLC
1950 Camino Vida Roble, Suite 150
Carlsbad, California 92008

Test Dates: May 18, 19, and 23, 2016

Test Specifications: Emissions requirements
CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.249

Test Procedure: ANSI C63.4, ANSI C63.10

Test Deviations: The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

<i>TEST</i>	DESCRIPTION	RESULTS
1	Spurious Radiated RF Emissions, 10 kHz – 9300 MHz (Transmitter, Receiver, and Digital portion)	Complies with the Class B limits of CFR Title 47, Part 15 Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, section 15.205, 15.209 and 15.249 Highest reading in relation to spec limit: 33.10 dBuV @ 6.250 MHz (*U = 2.86 dB)
2	Conducted RF Emissions, 150 kHz to 30 MHz	Complies with the Class B limits of CFR Title 47, Part 15 Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, section 15.207 Highest reading in relation to spec limit: 90.27 dBuV @ 911.78 MHz (*U = 4.54 dB)

1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the Door Chime Button, Models: SW-ATT-DB-B, SW-ATT-DB-N, SW-ATT-DB-Z. The emissions measurements were performed according to the measurement procedure described in ANSI C63.4 and ANSI C63.10. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.249.



2. ADMINISTRATIVE DATA

2.1 Location of Testing

The emissions tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California 92823.

2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

2.3 Cognizant Personnel

Nortek Security & Controls, LLC

Josh Hansen Regulatory Engineer

Compatible Electronics Inc.

Kyle Fujimoto Test Engineer

James Ross Test Engineer

2.4 Date Test Sample was Received

The test sample was received on May 18, 2016.

2.5 Disposition of the Test Sample

The test sample has not been returned to Nortek Security & Controls, LLC as of the date of this test report.

2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
LISN	Line Impedance Stabilization Network
N/A	Not Applicable
Tx	Transmit
Rx	Receive

3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this emissions Test Report.

SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules – Radio frequency devices (including digital devices) – Intentional Radiators
FCC Title 47, Part 15 Subpart B	FCC Rules – Radio frequency devices (including digital devices) – Unintentional Radiators
EN 50147-2: 1997	Anechoic chambers. Alternative test site suitability with respect to site attenuation
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
ANSI C63.10 2013	American National Standard for Testing Unlicensed Wireless Devices

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration – Emissions

The Door Chime Button, Models: SW-ATT-DB-B, SW-ATT-DB-N, SW-ATT-DB-Z (EUT) was setup in a tabletop configuration. The EUT was connected to a doorbell and a transformer. The EUT was checked in all three orthogonal axis. The EUT was continuously transmitting a data stream during transmitter tests and continuously receiving during receiver tests.

The different model numbers correspond to the different covers used for the EUT. The SW-ATT-DB-B is the bronze cover, the SW-ATT-DB-N is the nickel cover, and the SW-ATT-DB-Z is the zinc cover. All three covers were tested.

The X orientation is when the EUT is parallel to the ground. The Y orientation is when the EUT is perpendicular to the ground mounted vertically. The Z orientation is when the EUT is perpendicular to the ground mounted horizontally.

The input voltage was varied $\pm 15\%$; the transmitting signal amplitude and frequency did not vary.

The final radiated as well as the conducted data for the EUT as was taken in the mode described above. Please see Appendix E for the data sheets.

4.1.1 Cable Construction and Termination

- Cable 1** This is a 1-meter, unshielded, round cable that connects the EUT to the doorbell. The cable is hardwired into both ends of the cable. This cable was not bundled.
- Cable 2** This is a 1-meter, unshielded, round cable that connects the EUT to the transformer. The cable is hardwired into both ends of the cable. This cable was not bundled.
- Cable 3** This is a 1-meter, unshielded, round cable that connects the transformer to the doorbell. The cable is hardwired into both ends of the cable. This cable was not bundled.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT**5.1 EUT and Accessory List**

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
DOOR CHIME BUTTON	NORTEK SECURITY & CONTROLS, LLC	SW-ATT-DB-B, SW-ATT-DB-N, SW-ATT-DB-Z	N/A	EF400146
DOORBELL	HEATHZENITH	WD-1BASE	NONE	N/A
TRANSFORMER	HEATHZENITH	EM57580	NONE	N/A

5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CAL. CYCLE
GENERAL TEST EQUIPMENT USED IN LAB D					
TDK TestLab	TDK RF Solutions, Inc.	9.22	700145	N/A	N/A
Computer	Hewlett Packard	p6716f	MXX1030PX0	N/A	N/A
LCD Monitor	Hewlett Packard	52031a	3CQ046N3MG	N/A	N/A
EMI Receiver, 20 Hz – 26.5 GHz	Agilent Technologies	N9038A	MY51100115	April 3, 2015	1 Year
RF RADIATED EMISSIONS TEST EQUIPMENT					
CombiLog Antenna	Com-Power	AC-220	61060	September 3, 2015	1 Year
Preamplifier	Com-Power	PAM-118A	551024	May 12, 2016	1 Year
Loop Antenna	Com-Power	AL-130	17089	February 6, 2015	2 Year
Horn Antenna	Com-Power	AH-118	071175	February 26, 2016	2 Year
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A
System Controller	Sunol Sciences Corporation	SC110V	112213-1	N/A	N/A
Turntable	Sunol Sciences Corporation	2011VS	N/A	N/A	N/A
Antenna-Mast	Sunol Sciences Corporation	TWR95-4	112213-3	N/A	N/A
RF CONDUCTED EMISSIONS TEST EQUIPMENT					
LISN	Com-Power	LI-215A	191951	June 9, 2015	1 Year
Transient Limiter	Com-Power	252A910	N/A	October 14, 2015	1 Year

6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 and 7.1 of this report for emissions test location.

6.2 EUT Mounting, Bonding and Grounding

For frequencies 1 GHz and below: The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

For frequencies above 1 GHz: The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 1.5 meters above the ground plane.

The EUT was not grounded.

7. CHARACTERISTICS OF THE TRANSMITTER

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

7.1 Channel Number and Frequencies

There are four operating channels and the EUT uses GFSK modulation.

Channel 1 = 911.78 MHz

Channel 2 = 913.28 MHz

Channel 3 = 918.28 MHz

Channel 4 = 919.78 MHz

7.2 Antenna

The antenna is made up of an integrated PCB antenna which is located on the PCB.

8. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

8.1 RF Emissions

8.1.1 Conducted Emissions Test

The EMI Receiver was used as a measuring meter. A quasi-peak and/or average reading was taken only where indicated in the data sheets. A transient limiter was used for the protection of the EMI Receiver input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the EMI Receiver. The output of the second LISN was terminated by a 50-ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding, and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI 63:4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by computer software. The final qualification data is located in Appendix E.

The EUT was tested at 120 VAC. The six highest emissions are listed in Table 1.0.

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, Section 15.207 for conducted emissions. Please see Appendix E for the data sheets.

8.1.2 Radiated Emissions Test

The EMI Receiver was used as the measuring meter. A built-in, internal preamplifier was used to increase the sensitivity of the instrument. The EMI Receiver was initially used with the Analyzer mode feature activated. In this mode, the EMI receiver can then record the actual frequency to be measured. This final reading is then taken accurately in the EMI Receiver mode, which takes into account the cable loss, amplifier gain and antenna factors, so that a true reading is compared to the true limit. A quasi-peak reading was taken only for those readings, which are marked accordingly on the data sheets. The effective measurement bandwidth used for the radiated emissions test was according to the frequency measured (200 Hz for 10 kHz to 150 kHz, 9 kHz for 150 kHz to 30 MHz, 120 kHz for 30 MHz to 1 GHz and 1 MHz for 1 GHz to 9.3 GHz).

For emissions above 1 GHz, the RMS average detector function was used to average the emissions.

The EMI test chamber of Compatible Electronics, Inc. was used for radiated emissions testing. This test site is in full compliance with ANSI C63.4, EN 50147-2 and CISPR 22. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results.

The EUT was tested at a 3-meter test distance. The six highest emissions are listed in Table 2.0.

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
10 kHz to 150 kHz	200 Hz	Loop Antenna
150 kHz to 30 MHz	9 kHz	Loop Antenna
30 MHz to 1 GHz	120 kHz	CombiLog Antenna
1 GHz to 9.3 GHz	1 MHz	Horn Antenna

Test Results:

The EUT complies with the **Class B** limits of **CFR** Title 47, Part 15, Subpart B; and Subpart C sections 15.205, 15.209 and 15.249 for radiated emissions.

8.1.3 RF Emissions Test Results

Table 1.0 CONDUCTED EMISSION RESULTS
Door Chime Button
Models: SW-ATT-DB-B, SW-ATT-DB-N, SW-ATT-DB-Z

Frequency MHz	Average Corrected Reading* dBuV	Average Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
6.250 (WL)	33.10	50.00	-16.90
0.154 (WL)	38.11	55.63	-17.52
0.162 (WL)	37.73	55.40	-17.67
4.974 (WL)	27.97	46.00	-18.03
0.178 (WL)	35.00	54.44	-19.44
5.082 (WL)	28.47	50.00	-21.53

Table 2.0 RADIATED EMISSION RESULTS
Door Chime Button
Models: SW-ATT-DB-B, SW-ATT-DB-N, SW-ATT-DB-Z

Frequency MHz	EMI Reading (dBuV)	Specification Limit (dBuV)	Delta (Cor. Reading – Spec. Limit) dB
911.78 (Z-Axis) (H)	90.27	93.98	-3.71
913.28 (Z-Axis) (V)	89.56	93.98	-4.42
911.78 (Z-Axis) (V)	89.53	93.98	-4.45
919.78 (X-Axis) (H)	89.29	93.98	-4.69
913.28 (X-Axis) (V)	89.26	93.98	-4.72
919.78 (X-Axis) (H)	88.54	93.98	-5.44

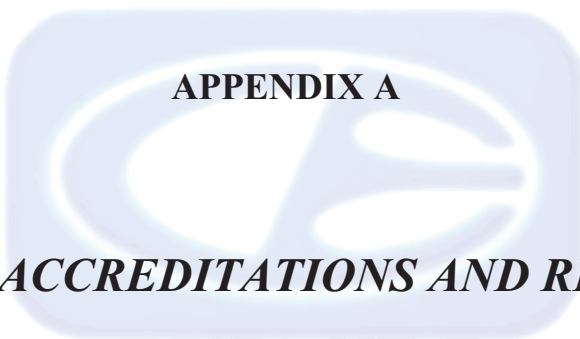
Notes:

- * The complete emissions data is given in Appendix E of this report.
- (BL) Black Lead
- (WL) White Lead
- (V) Vertical
- (H) Horizontal

9. CONCLUSIONS

The Door Chime Button, Models: SW-ATT-DB-B, SW-ATT-DB-N, SW-ATT-DB-Z, as tested, meets all of the specification limits defined in FCC Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.249.





APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

LABORATORY ACCREDITATIONS AND RECOGNITIONS



For US, Canada, Australia/New Zealand, Japan, Taiwan, Korea, and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025. Please follow the link to the NIST/NVLAP site for each of our facilities' NVLAP certificate and scope of accreditation

NVLAP listing links

[Agoura Division](#) / [Brea Division](#) / [Silverado/Lake Forest Division](#)

.Quote from ISO-ILAC-IAF Communiqué on 17025:

"A laboratory's fulfilment of the requirements of ISO/IEC 17025:2005 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025:2005 (Section 4) are written in language relevant to laboratory operations and meet the principles of ISO 9001:2008 Quality Management Systems — Requirements."



ANSI listing [CETCB](#)



Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for EMC under the US/EU Mutual Recognition Agreement (MRA).

US/EU MRA list [NIST MRA site](#)



Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for Taiwan/BSMI under the US/APEC (Asia-Pacific Economic Cooperation) Mutual Recognition Agreement (MRA).

APEC MRA list [NIST MRA site](#)

We are also listed for IT products by the following country/agency:



VCCI Support member: Please visit http://www.vcci.jp/vcci_e/



FCC Listing, from FCC OET site

[FCC test lab search](http://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm) <https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm>



Compatible Electronics IC listing can be found at:

<http://www.ic.gc.ca/eic/site/ic1.nsf/eng/home>

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC Subpart B and FCC 15.249 specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modifications were made to the EUT during the testing.



APPENDIX C

***ADDITIONAL MODELS COVERED
UNDER THIS REPORT***

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Door Chime Button

Models: SW-ATT-DB-B, SW-ATT-DB-N, SW-ATT-DB-Z

S/N: N/A

There are no additional models covered under this report.



APPENDIX D

DIAGRAMS AND CHARTS

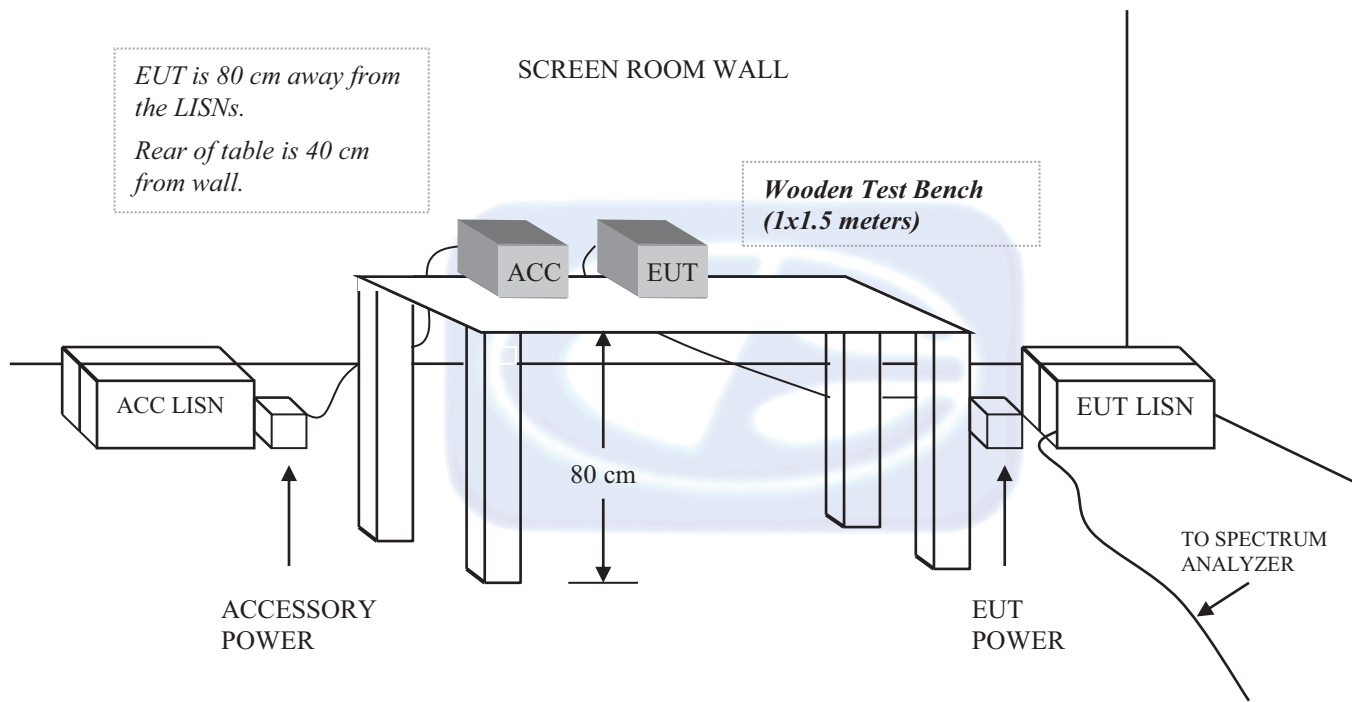
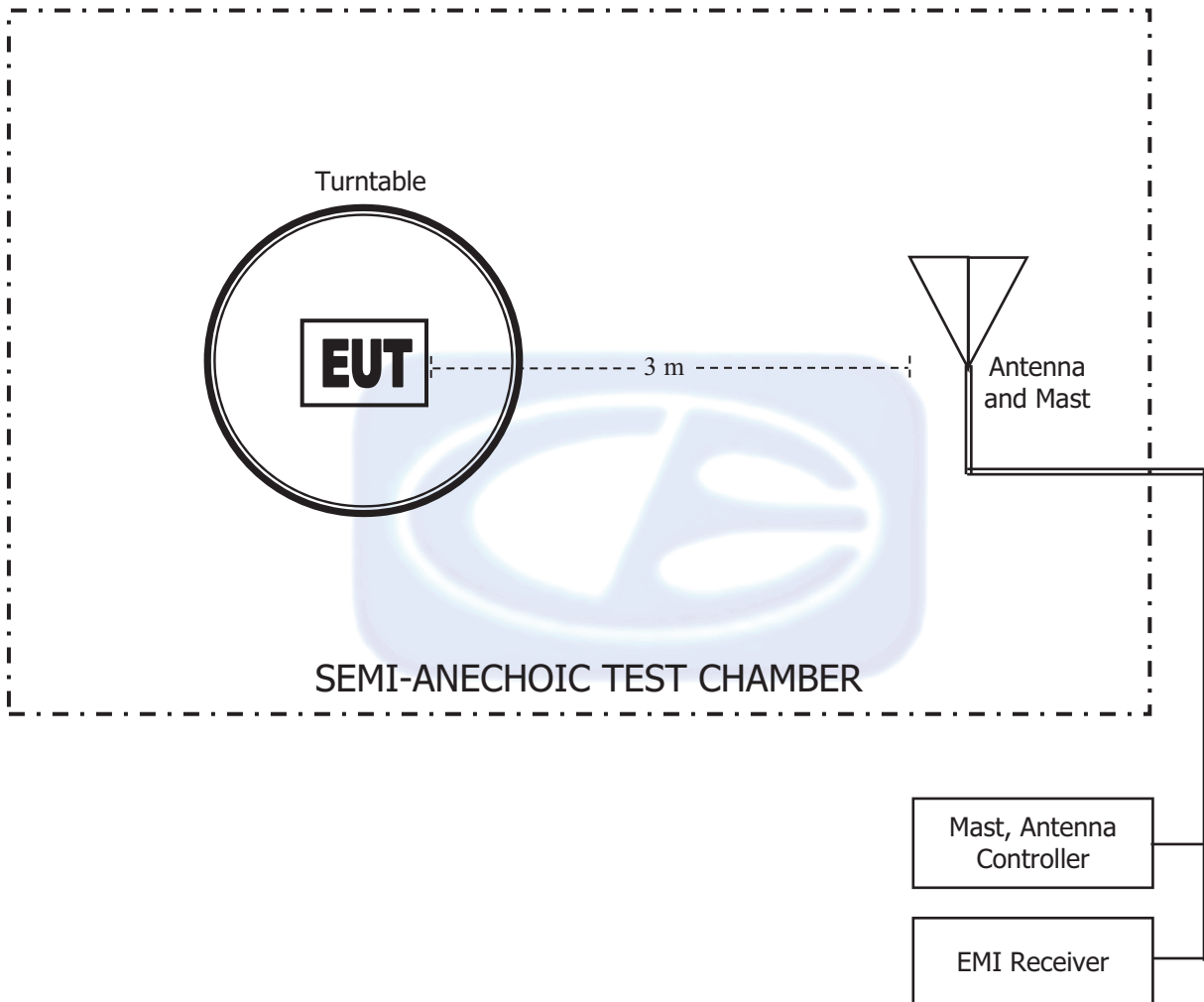
FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

FIGURE 2: LAYOUT OF THE SEMI-ANECHOIC TEST CHAMBER



COM-POWER AL-130**LOOP ANTENNA**

S/N: 17089

CALIBRATION DATE: FEBRUARY 6, 2015

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-33.18	18.32
0.01	-34.10	17.40
0.02	-38.65	12.85
0.03	-39.28	12.22
0.04	-40.09	11.41
0.05	-40.85	10.65
0.06	-40.88	10.62
0.07	-41.07	10.43
0.08	-41.04	10.46
0.09	-41.19	10.31
0.1	-41.20	10.30
0.2	-41.52	9.98
0.3	-41.53	9.97
0.4	-41.42	10.08
0.5	-41.53	9.97
0.6	-41.53	9.97
0.7	-41.43	10.07
0.8	-41.23	10.27
0.9	-41.13	10.37
1	-41.14	10.36
2	-40.80	10.70
3	-40.66	10.84
4	-40.61	10.89
5	-40.33	11.17
6	-40.53	10.97
7	-40.47	11.03
8	-40.48	11.02
9	-39.93	11.57
10	-39.81	11.69
15	-43.35	8.15
20	-39.16	12.34
25	-40.24	11.26
30	-43.18	8.32

COM-POWER AC-220**COMBILOG ANTENNA****S/N: 61060****CALIBRATION DATE: SEPTEMBER 3, 2015**

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	24.00	200	13.00
35	24.30	250	15.30
40	25.40	300	18.20
45	21.50	350	17.90
50	22.50	400	18.60
60	15.40	450	19.80
70	12.70	500	21.60
80	11.10	550	22.40
90	13.40	600	23.70
100	13.80	650	24.30
120	15.40	700	24.00
125	15.40	750	24.50
140	13.10	800	24.30
150	17.20	850	26.30
160	13.20	900	26.90
175	14.20	950	26.00
180	14.30	1000	25.60

COM POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: FEBRUARY 26, 2016

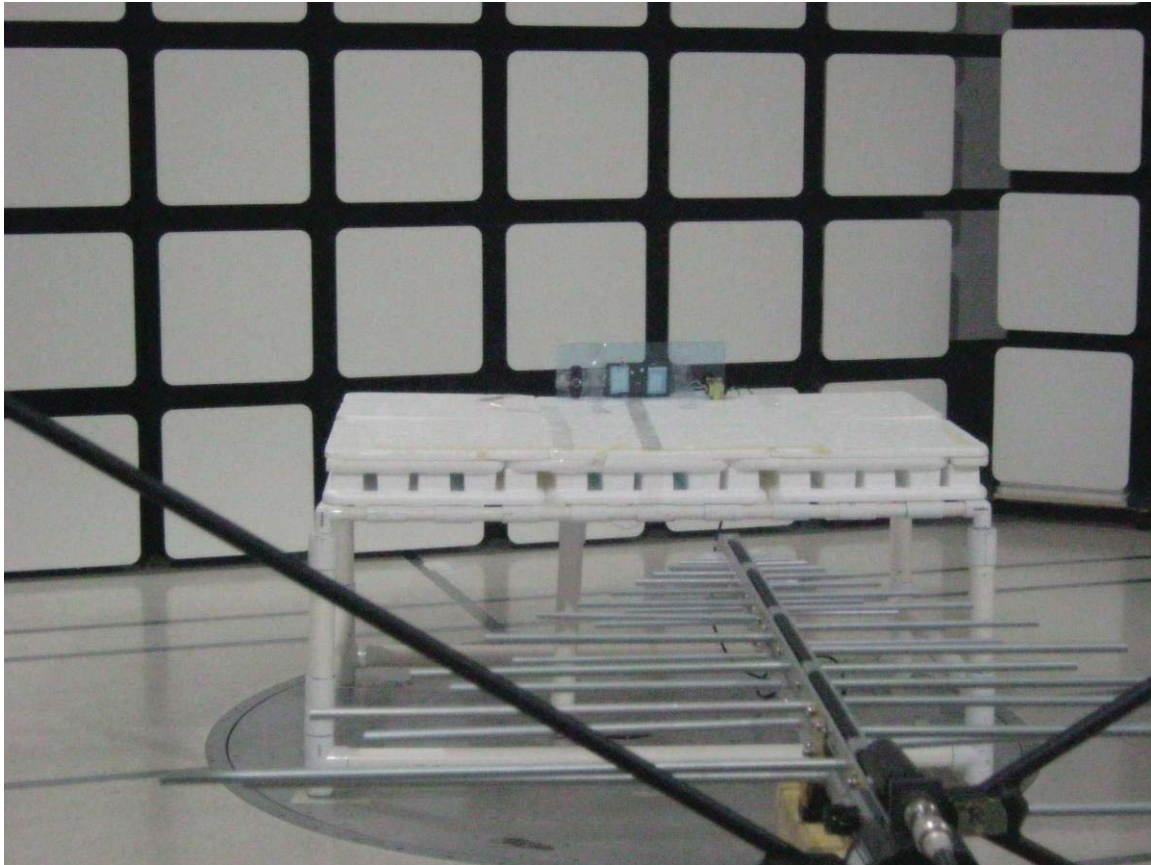
FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	23.93	10.0	39.33
1.5	25.54	10.5	39.64
2.0	28.09	11.0	41.04
2.5	30.21	11.5	44.29
3.0	30.15	12.0	41.22
3.5	30.17	12.5	41.50
4.0	31.90	13.0	41.62
4.5	33.51	13.5	40.63
5.0	33.87	14.0	39.94
5.5	35.08	14.5	41.84
6.0	34.81	15.0	42.69
6.5	34.26	15.5	39.03
7.0	36.33	16.0	39.07
7.5	37.03	16.5	41.40
8.0	37.56	17.0	43.18
8.5	40.07	17.5	47.01
9.0	38.92	18.0	46.48
9.5	38.21		

COM-POWER PA-118**PREAMPLIFIER**

S/N: 551024

CALIBRATION DATE: MAY 12, 2016

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	39.84	6.0	39.05
1.1	39.40	6.5	38.94
1.2	39.58	7.0	39.25
1.3	39.68	7.5	39.09
1.4	39.91	8.0	39.01
1.5	39.78	8.5	38.60
1.6	39.50	9.0	38.64
1.7	39.81	9.5	39.67
1.8	39.89	10.0	39.30
1.9	39.94	11.0	39.15
2.0	39.57	12.0	39.24
2.5	40.39	13.0	39.49
3.0	40.63	14.0	39.44
3.5	40.80	15.0	39.94
4.0	40.86	16.0	40.09
4.5	39.94	17.0	40.06
5.0	34.47	18.0	39.76
5.5	39.32		



FRONT VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-B
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

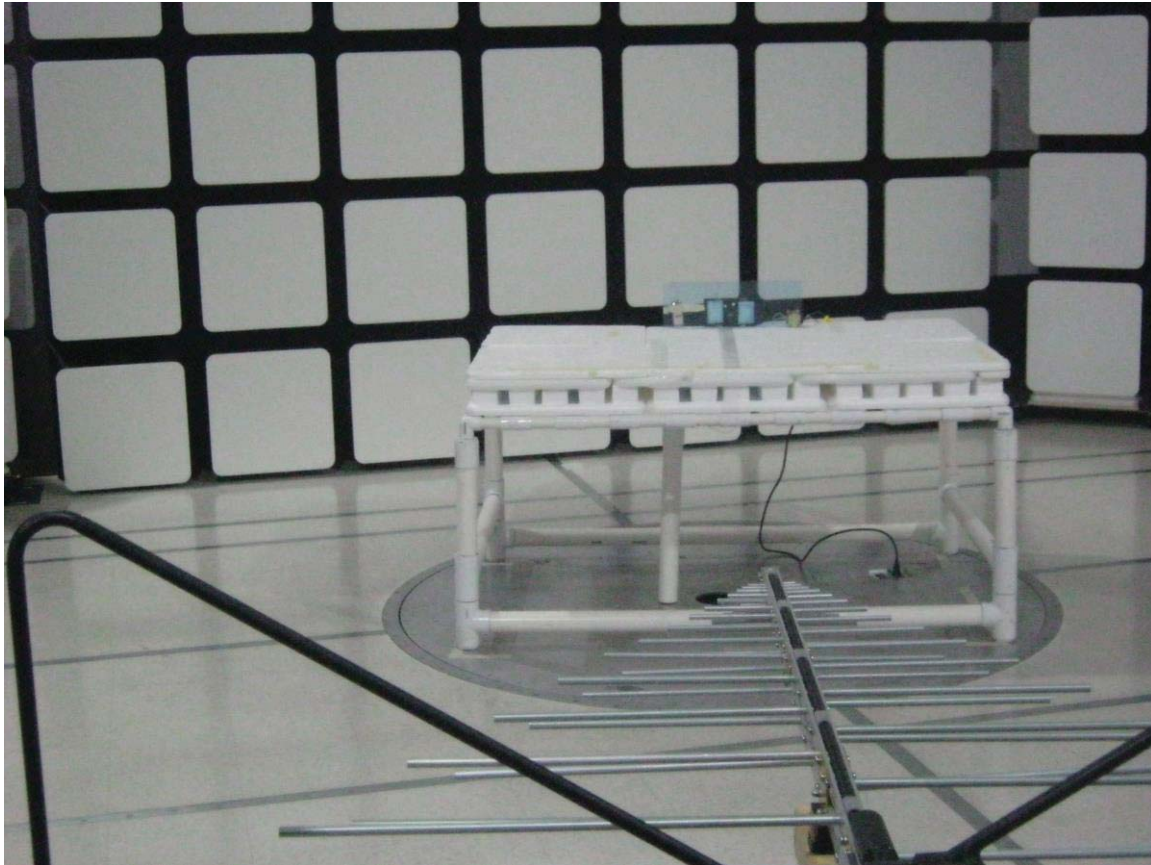
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-B
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

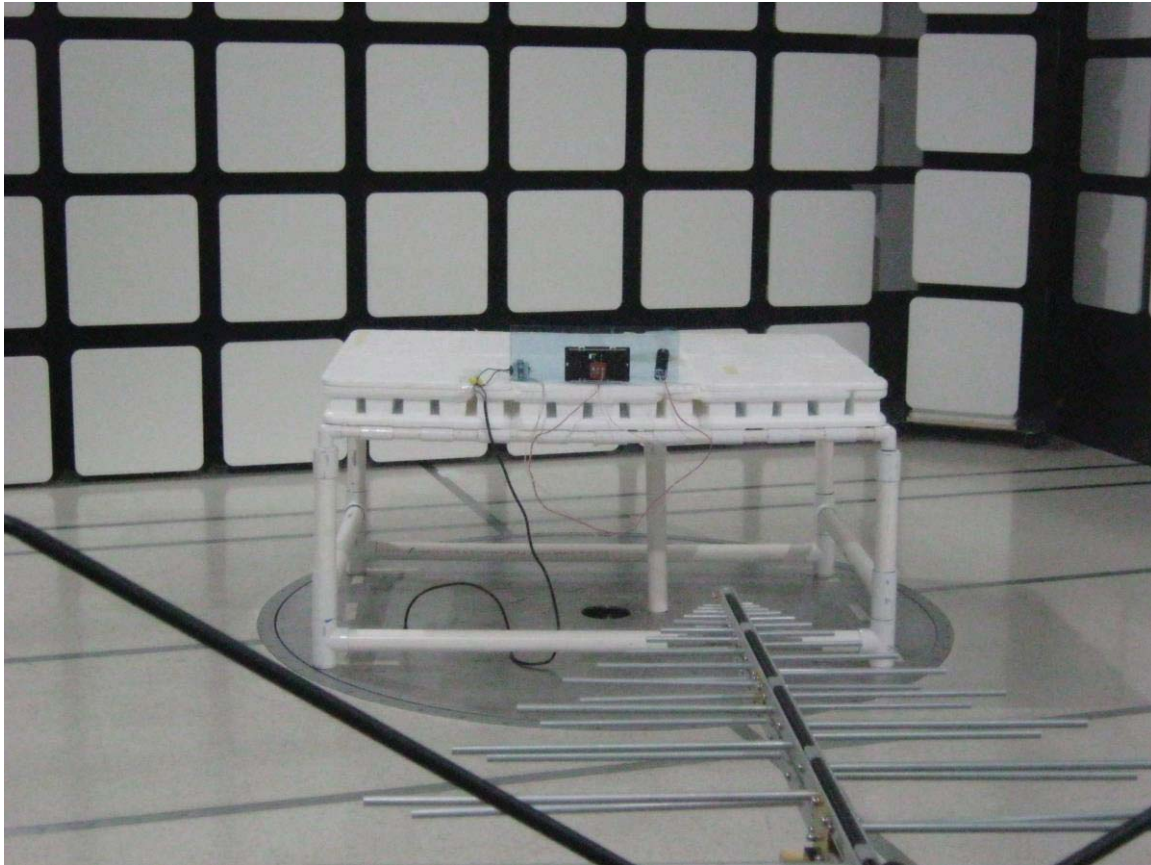
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



FRONT VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-N
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

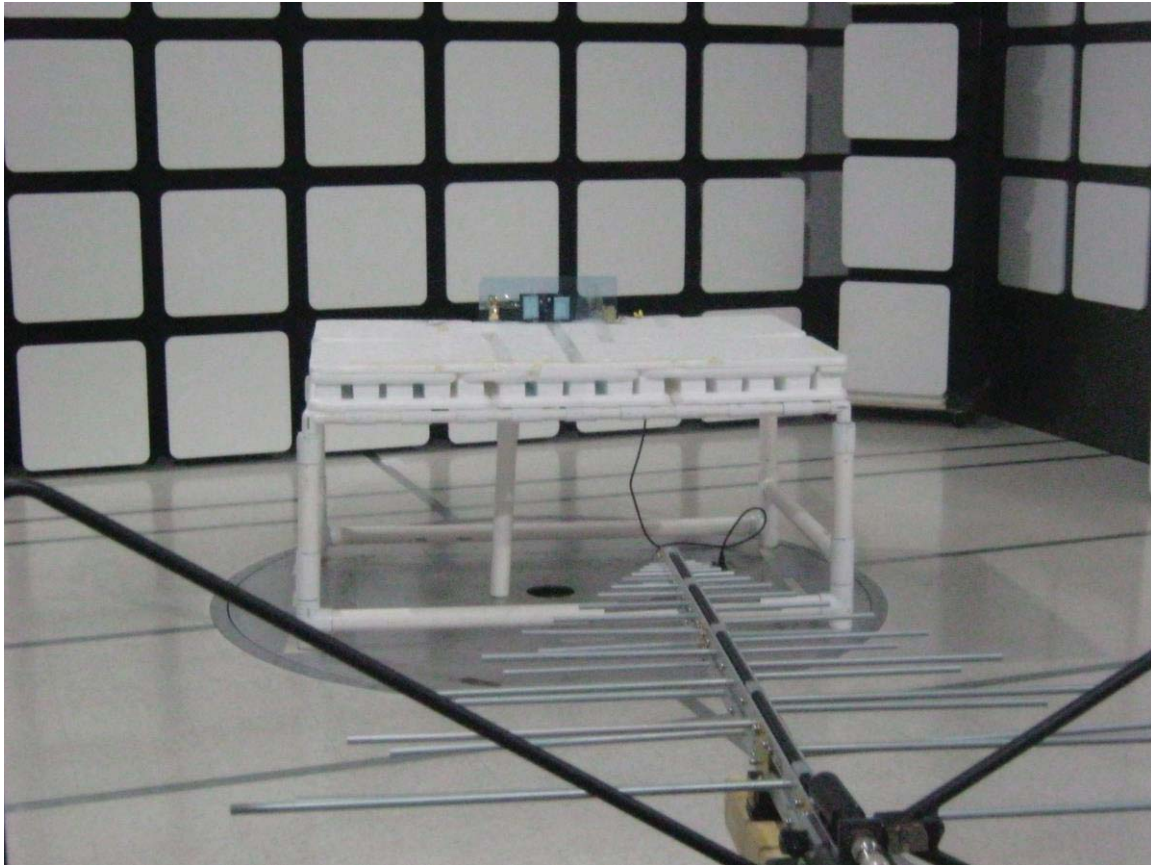
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-N
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

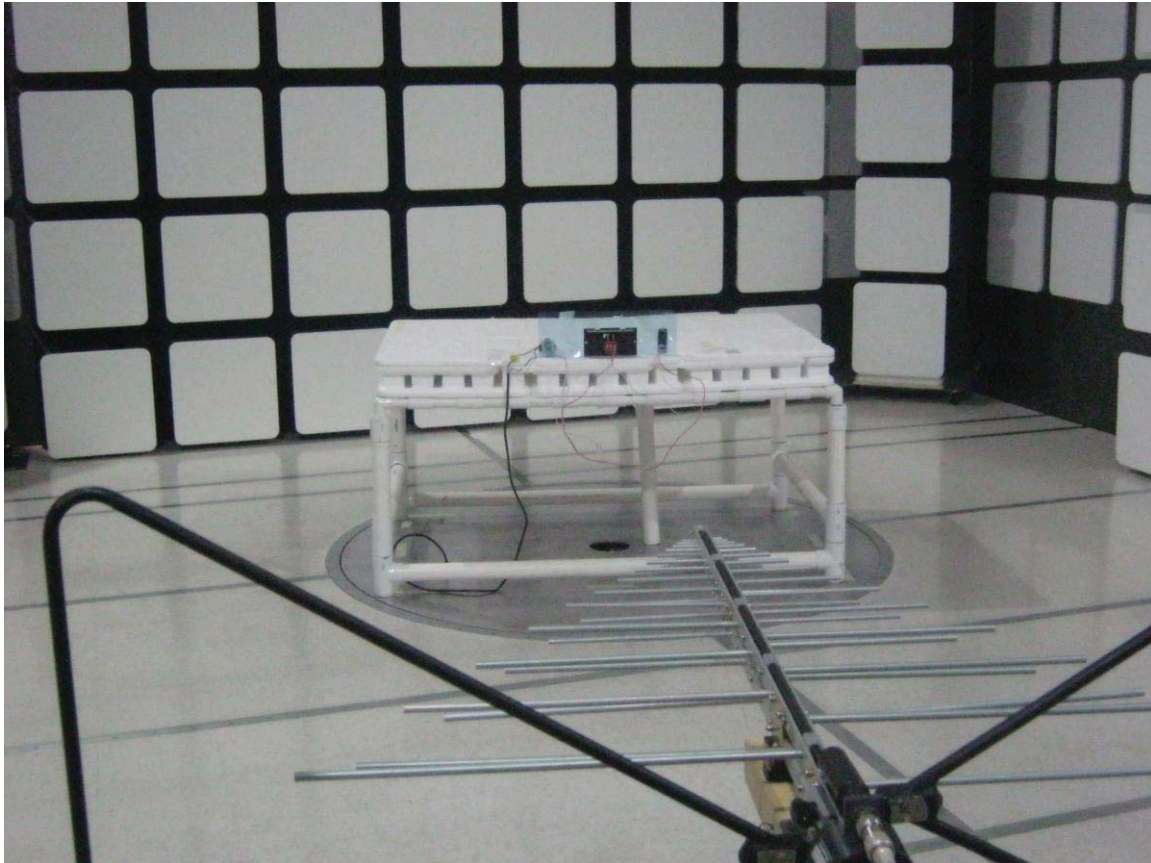


FRONT VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-Z

FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

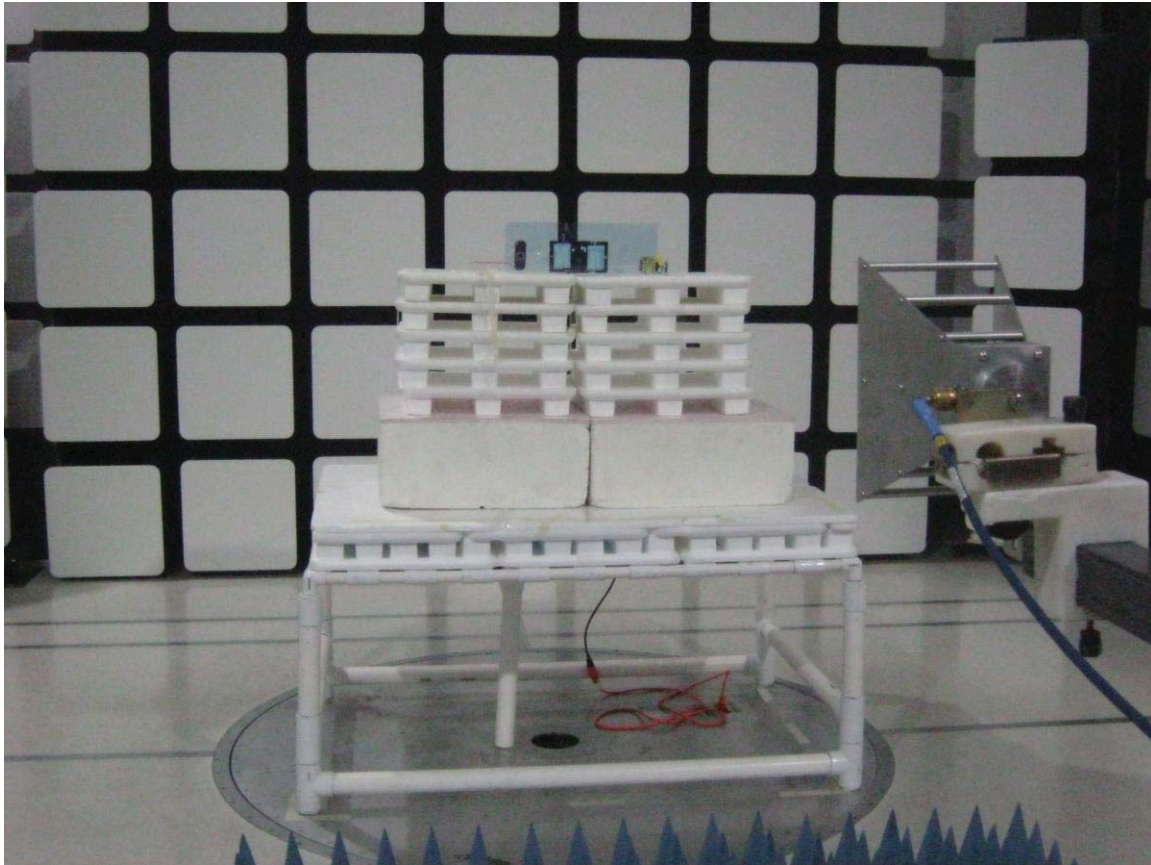


REAR VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-Z

FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

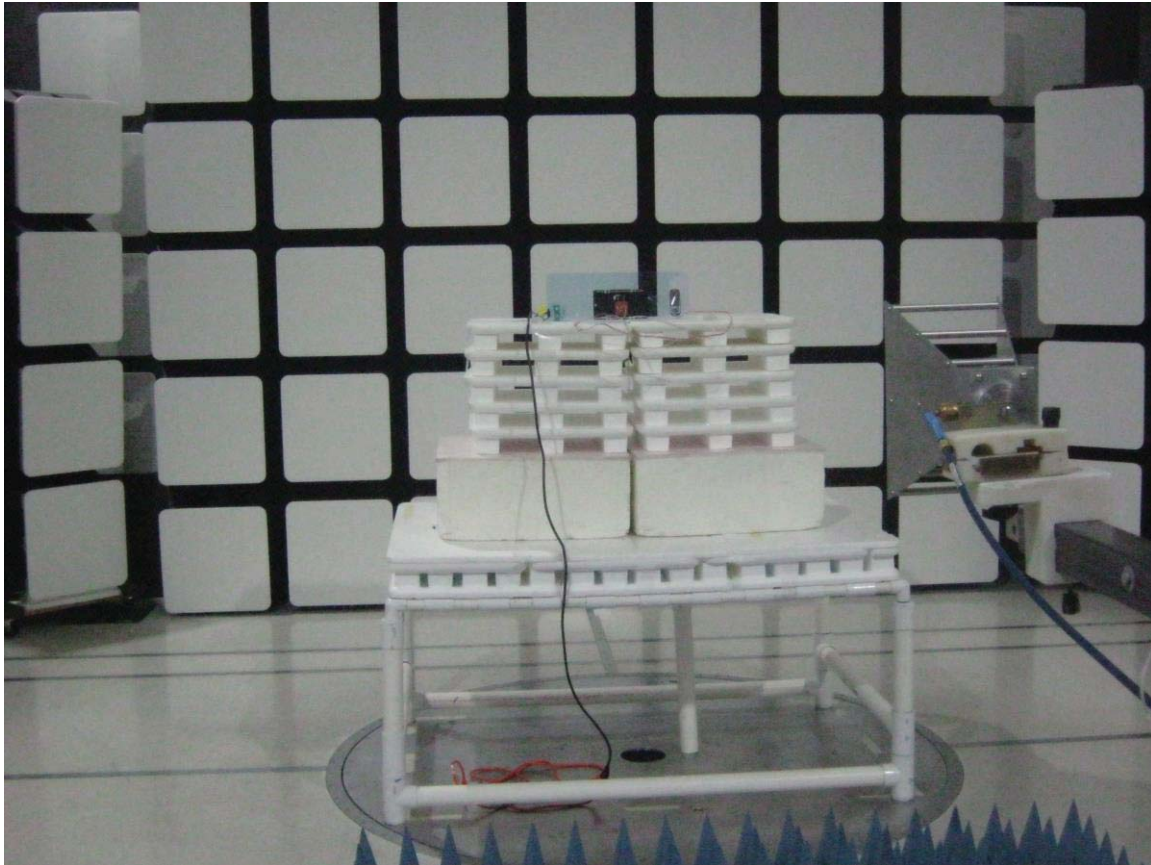


FRONT VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-B

FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

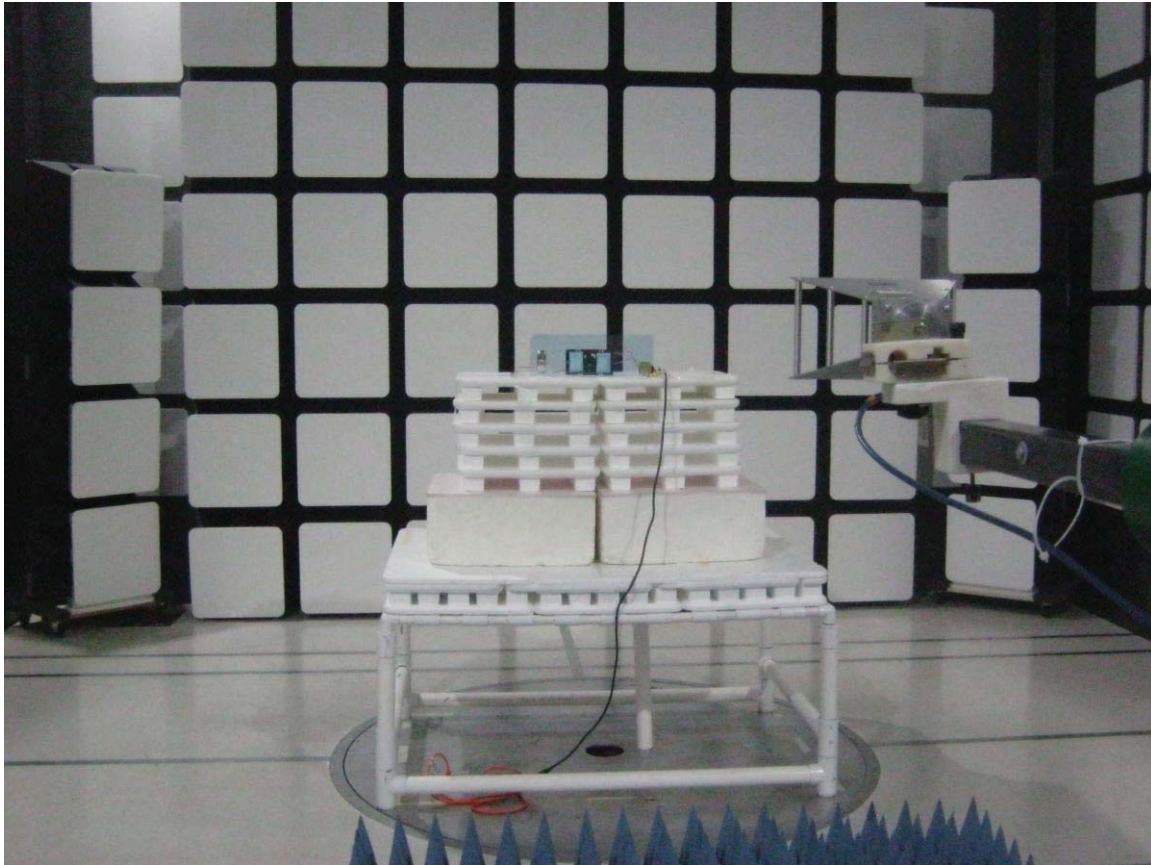
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-B
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

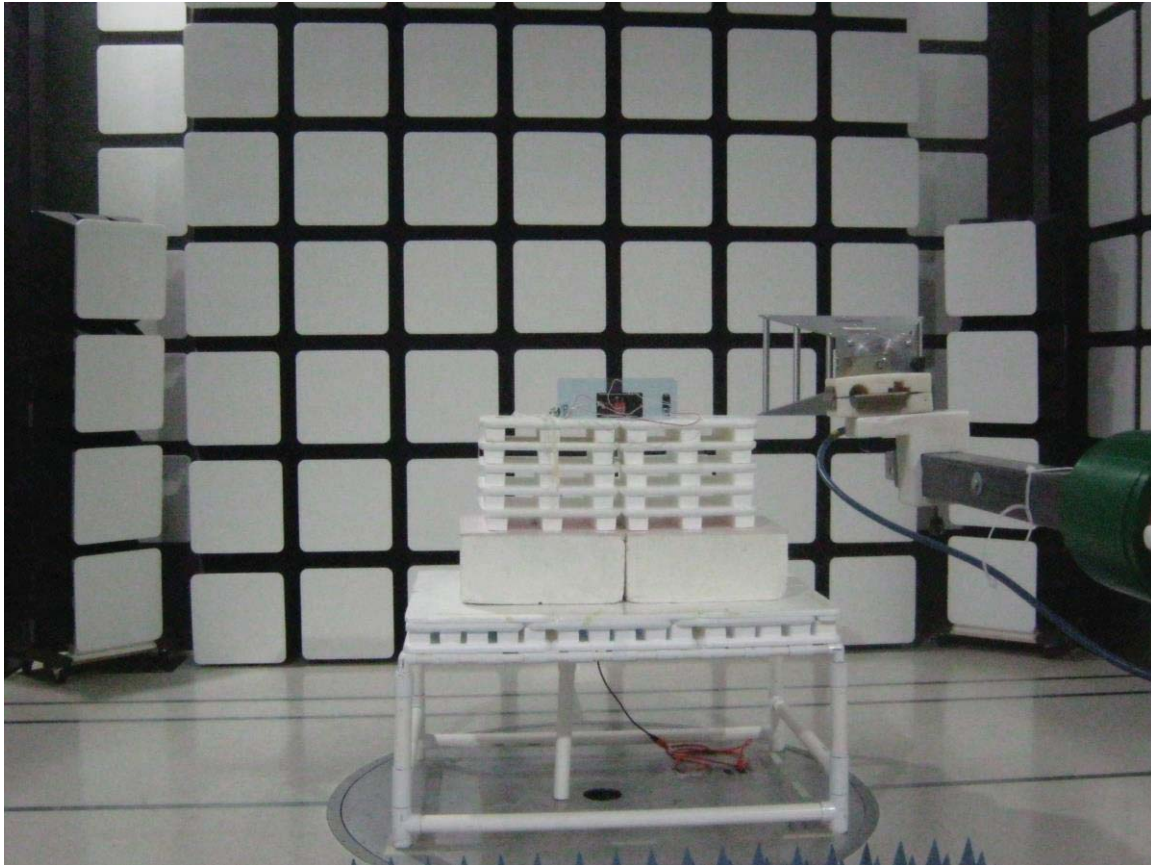
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



FRONT VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-N
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

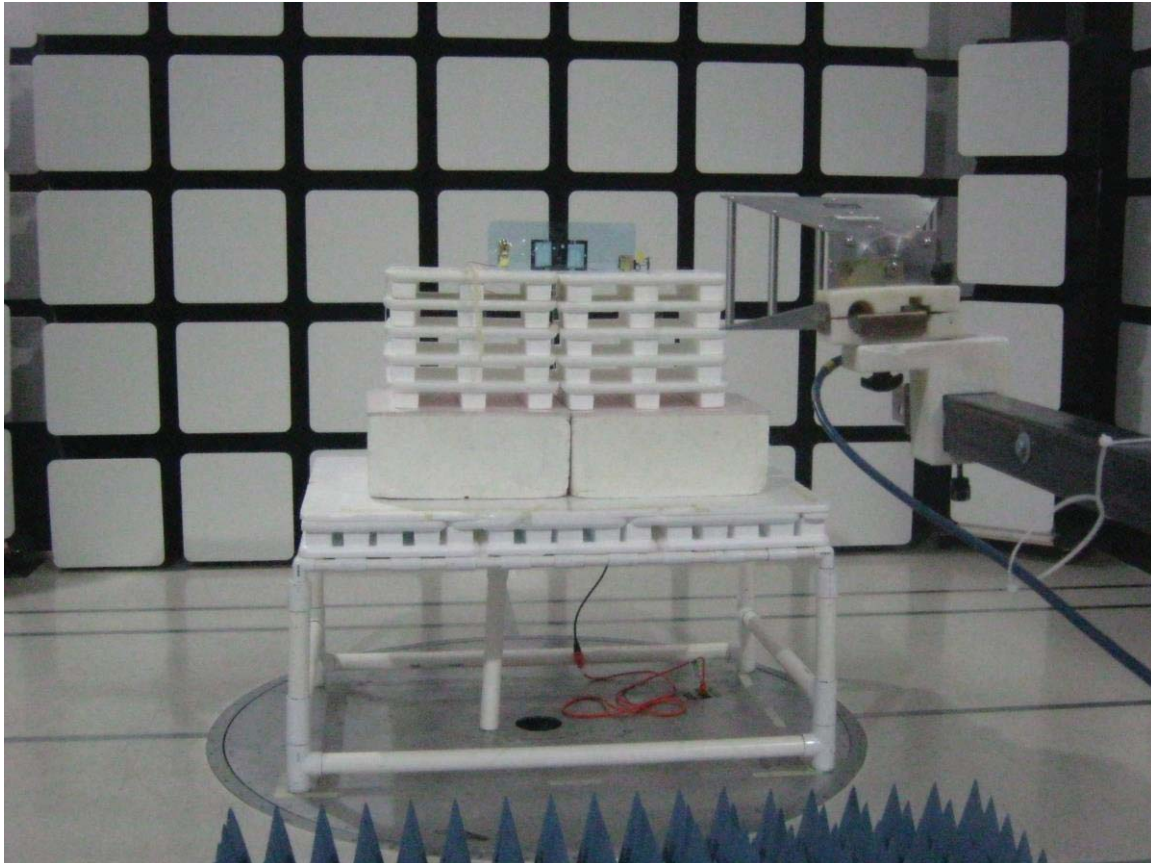
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-N
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

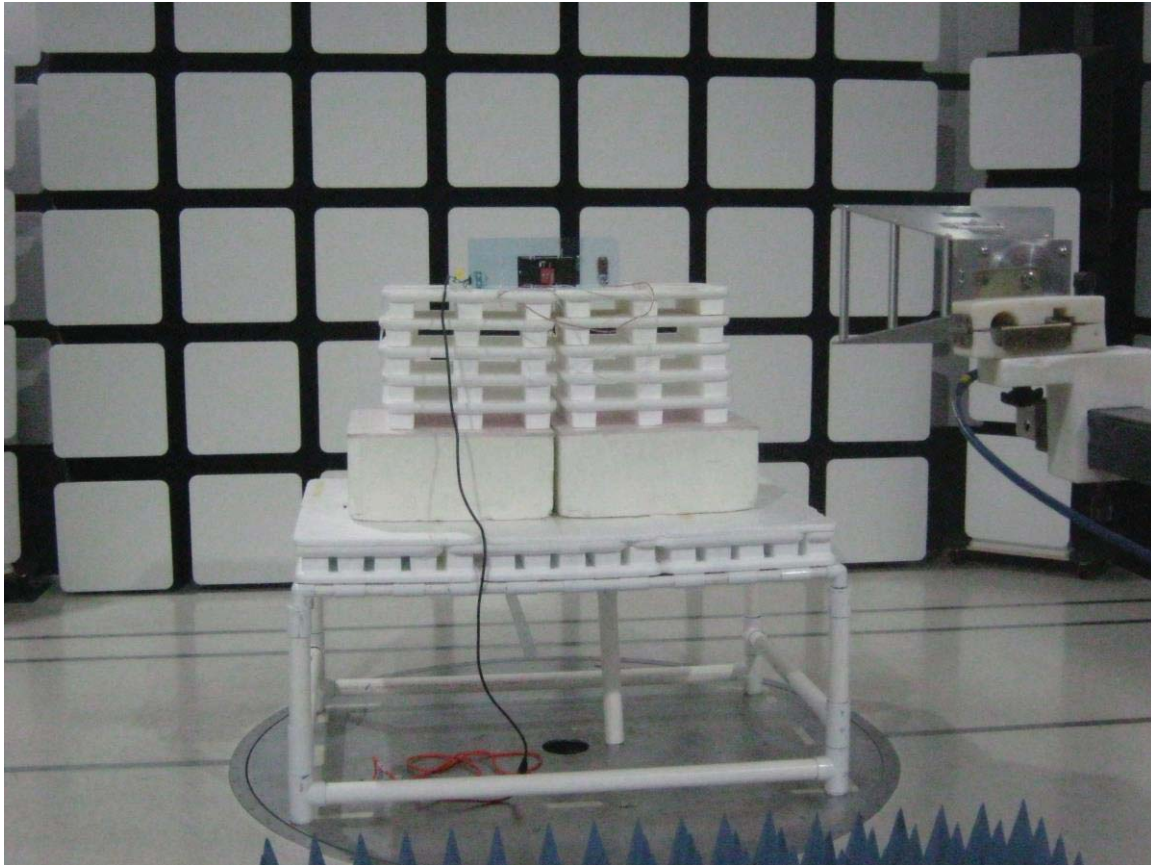
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



FRONT VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-Z
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-Z
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

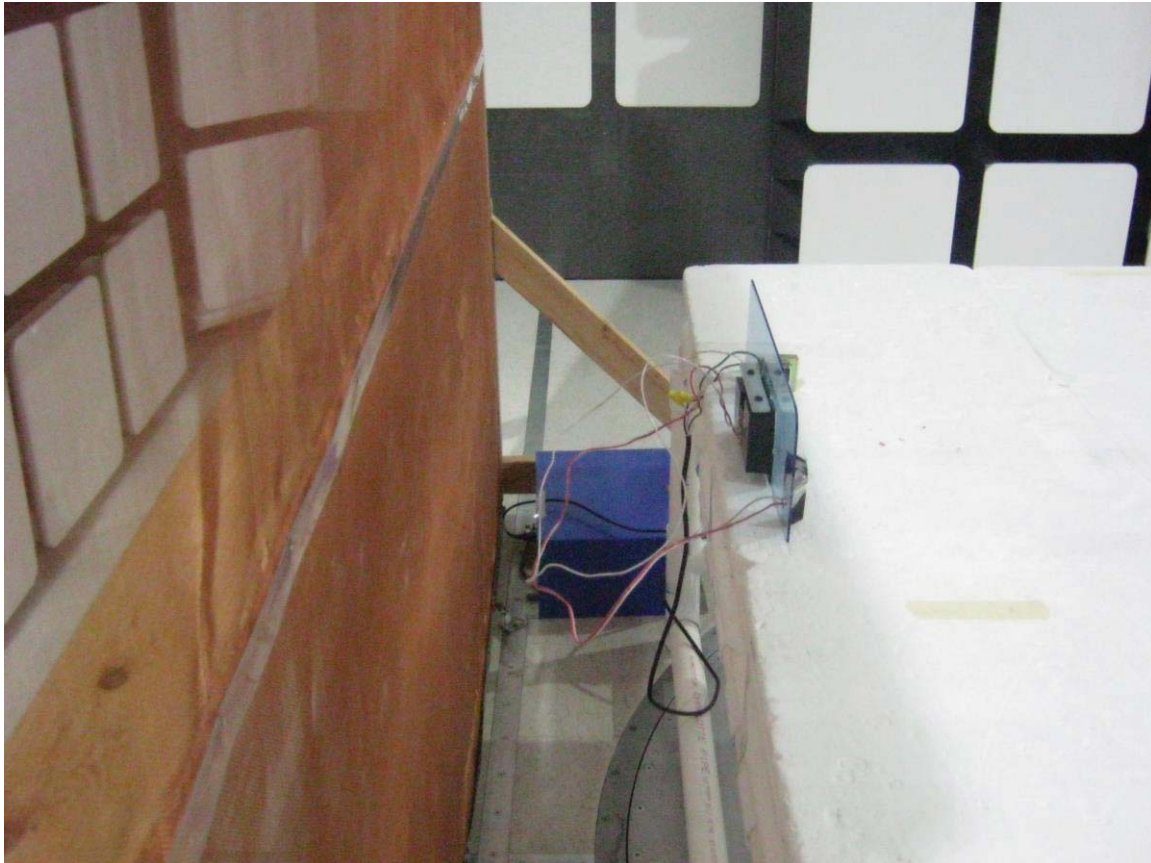
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



FRONT VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-B
FCC SUBPART B AND C – CONDUCTED EMISSIONS

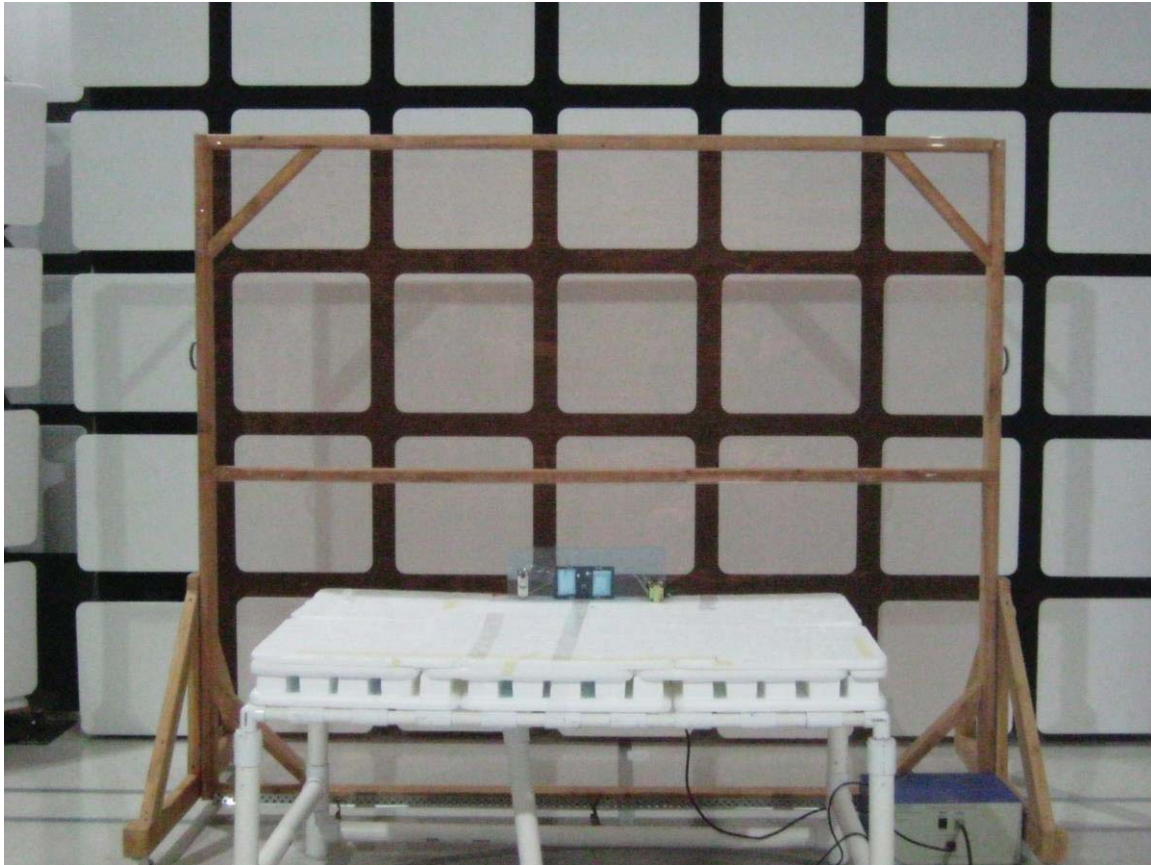
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-B
FCC SUBPART B AND C – CONDUCTED EMISSIONS

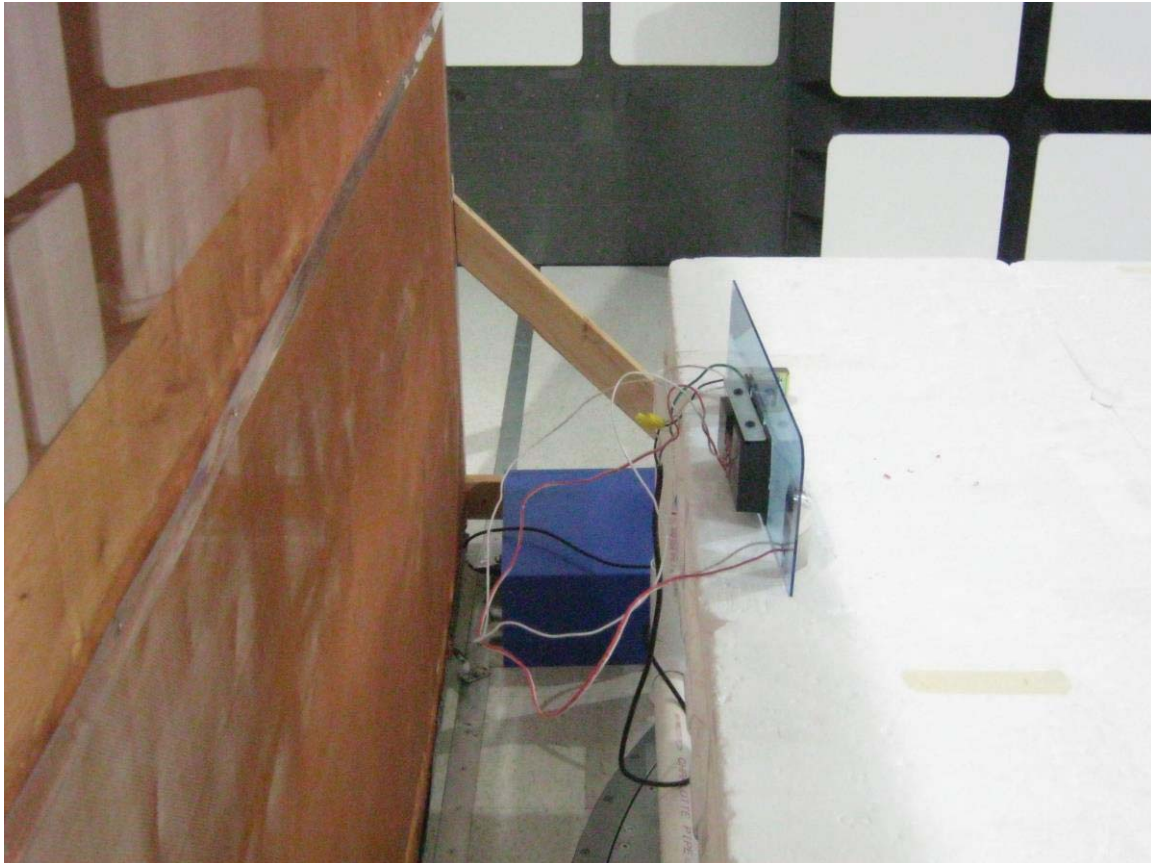
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



FRONT VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-N
FCC SUBPART B AND C – CONDUCTED EMISSIONS

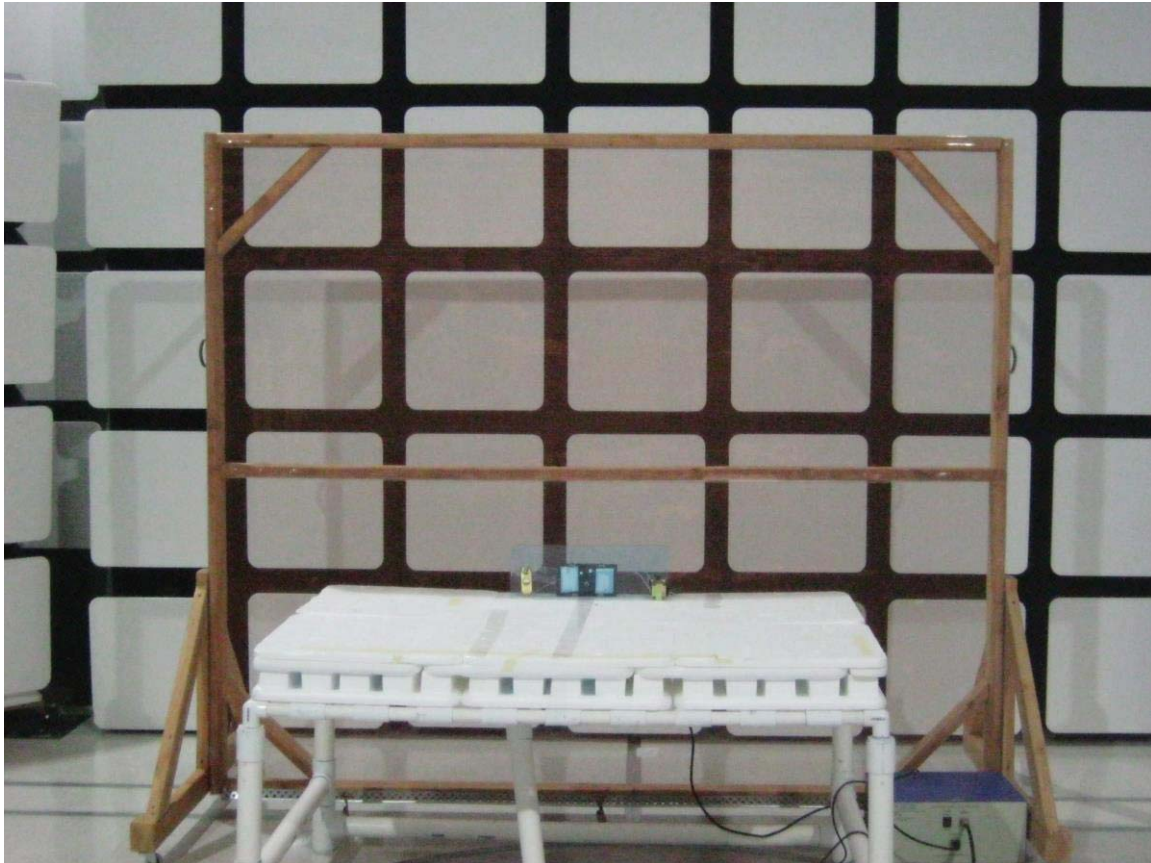
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-N
FCC SUBPART B AND C – CONDUCTED EMISSIONS

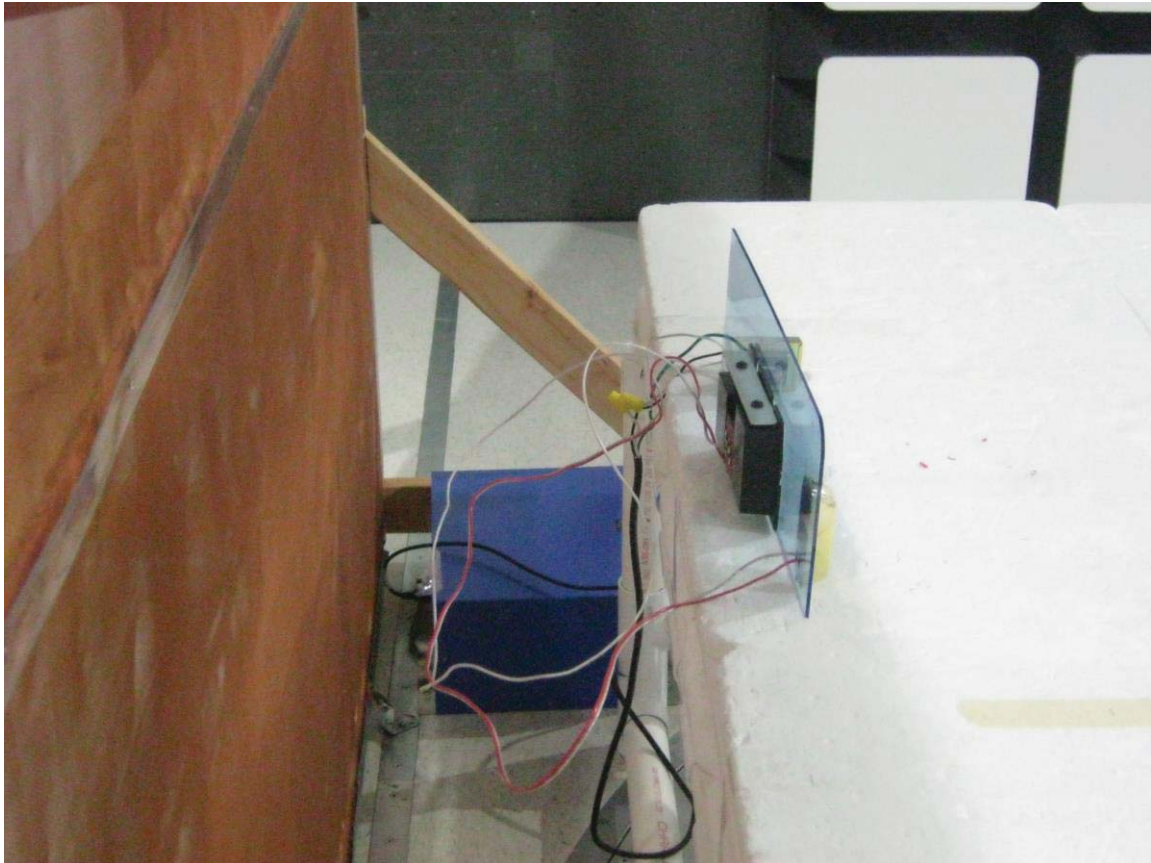
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



FRONT VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-Z
FCC SUBPART B AND C – CONDUCTED EMISSIONS

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

NORTEK SECURITY & CONTROLS, LLC
DOOR CHIME BUTTON
MODEL: SW-ATT-DB-Z
FCC SUBPART B AND C – CONDUCTED EMISSIONS

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

APPENDIX E

DATA SHEETS

***RADIATED EMISSIONS
DATA SHEETS***

FCC 15.249Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-BDate: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto**Fundamental Readings - High Channel**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
919.78	86.36	V	93.98	-7.63	Peak	157.50	100.00	X-Axis
								Vertical Polarization
919.78	88.54	H	93.98	-5.44	Peak	178.75	127.17	X-Axis
								Horizontal Polarization
919.78	84.44	V	93.98	-9.54	Peak	355.00	129.80	Y-Axis
								Vertical Polarization
919.78	88.04	H	93.98	-5.94	Peak	193.00	113.98	Y-Axis
								Horizontal Polarization
919.78	87.01	V	93.98	-6.97	Peak	154.25	101.20	Z-Axis
								Vertical Polarization
919.78	86.26	H	93.98	-7.72	Peak	201.25	196.91	Z-Axis
								Horizontal Polarization

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	47.79	V	73.98	-26.19	Peak	194.50	160.07	
1823.56	30.87	V	53.98	-23.11	Avg	194.50	160.07	
2735.34	54.67	V	73.98	-19.31	Peak	143.00	153.32	
2735.34	36.40	V	53.98	-17.58	Avg	143.00	153.32	
3647.12	57.45	V	73.98	-16.53	Peak	209.25	142.64	
3647.12	39.93	V	53.98	-14.05	Avg	209.25	142.64	
4558.90	52.72	V	73.98	-21.26	Peak	146.25	142.91	
4558.90	38.26	V	53.98	-15.72	Avg	146.25	124.91	
5470.68	50.85	V	73.98	-23.13	Peak	175.00	138.88	
5470.68	38.96	V	53.98	-15.02	Avg	175.00	138.88	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	49.49	V	73.98	-24.49	Peak	183.75	133.86	
1823.56	31.72	V	53.98	-22.26	Avg	183.75	133.86	
2735.34	62.88	V	73.98	-11.10	Peak	147.50	150.70	
2735.34	42.87	V	53.98	-11.11	Avg	147.50	150.70	
3647.12	54.90	V	73.98	-19.08	Peak	183.25	109.44	
3647.12	37.35	V	53.98	-16.63	Avg	183.25	109.44	
4558.90	49.82	V	73.98	-24.16	Peak	289.75	112.58	
4558.90	36.60	V	53.98	-17.39	Avg	289.75	112.58	
5470.68	51.15	V	73.98	-22.83	Peak	103.75	112.58	
5470.68	38.98	V	53.98	-15.00	Avg	103.75	112.58	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	50.96	V	73.98	-23.02	Peak	182.50	161.92	
1823.56	33.05	V	53.98	-20.93	Avg	182.50	161.92	
2735.34	59.41	V	73.98	-14.57	Peak	218.00	181.80	
2735.34	40.43	V	53.98	-13.56	Avg	218.00	181.80	
3647.12	51.92	V	73.98	-22.07	Peak	358.00	156.19	
3647.12	37.12	V	53.98	-16.87	Avg	358.00	156.19	
4558.90	53.84	V	73.98	-20.14	Peak	186.25	176.61	
4558.90	38.23	V	53.98	-15.75	Avg	186.25	176.61	
5470.68	52.06	V	73.98	-21.92	Peak	149.25	157.74	
5470.68	39.60	V	53.98	-14.38	Avg	149.25	157.74	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	50.16	H	73.98	-23.82	Peak	161.75	142.28	
1823.56	33.02	H	53.98	-20.96	Avg	161.75	142.28	
2735.34	57.86	H	73.98	-16.12	Peak	170.50	115.83	
2735.34	38.86	H	53.98	-15.12	Avg	170.50	115.83	
3647.12	58.45	H	73.98	-15.53	Peak	235.50	121.32	
3647.12	40.18	H	53.98	-13.80	Avg	235.50	121.32	
4558.90	49.86	H	73.98	-24.12	Peak	149.50	130.88	
4558.90	36.39	H	53.98	-17.59	Avg	149.50	130.88	
5470.68	51.25	H	73.98	-22.73	Peak	71.25	133.56	
5470.68	39.03	H	53.98	-14.95	Avg	71.25	133.56	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	50.58	H	73.98	-23.40	Peak	180.25	183.89	
1823.56	30.52	H	53.98	-23.46	Avg	180.25	183.89	
2735.34	61.72	H	73.98	-12.26	Peak	189.00	229.20	
2735.34	41.29	H	53.98	-12.69	Avg	189.00	229.20	
3647.12	55.74	H	73.98	-18.24	Peak	194.25	261.50	
3647.12	38.56	H	53.98	-15.42	Avg	194.25	261.50	
4558.90	51.17	H	73.98	-22.81	Peak	174.25	229.62	
4558.90	37.11	H	53.98	-16.87	Avg	174.25	229.62	
5470.68	51.50	H	73.98	-22.48	Peak	135.50	161.08	
5470.68	39.08	H	53.98	-14.91	Avg	135.50	161.08	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	51.14	H	73.98	-22.84	Peak	131.25	197.92	
1823.56	32.72	H	53.98	-21.26	Avg	131.25	197.92	
2735.34	63.99	H	73.98	-9.99	Peak	151.00	209.68	
2735.34	43.12	H	53.98	-10.86	Avg	151.00	209.68	
3647.12	53.86	H	73.98	-20.12	Peak	215.75	188.25	
3647.12	36.76	H	53.98	-17.22	Avg	215.75	188.25	
4558.90	51.07	H	73.98	-22.91	Peak	204.75	198.40	
4558.90	36.87	H	53.98	-17.11	Avg	204.75	198.40	
5470.68	51.97	H	73.98	-22.01	Peak	13.75	201.62	
5470.68	38.96	H	53.98	-15.02	Avg	13.75	201.62	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	48.68	V	73.98	-25.30	Peak	190.25	100.25	
1826.56	31.54	V	53.98	-22.45	Avg	190.25	100.25	
2739.84	49.37	V	73.98	-24.61	Peak	335.00	125.25	
2739.84	33.33	V	53.98	-20.65	Avg	335.00	125.25	
3653.12	60.74	V	73.98	-13.24	Peak	196.50	143.35	
3653.12	42.82	V	53.98	-11.16	Avg	196.50	143.35	
4566.40	53.53	V	73.98	-20.45	Peak	355.00	204.50	
4566.40	38.10	V	53.98	-15.88	Avg	355.00	204.50	
5479.68	51.14	V	73.98	-22.84	Peak	147.50	248.58	
5479.68	39.01	V	53.98	-14.97	Avg	147.50	248.58	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	54.36	V	73.98	-19.62	Peak	132.00	189.32	
1826.56	34.45	V	53.98	-19.53	Avg	132.00	189.32	
2739.84	63.44	V	73.98	-10.54	Peak	181.50	120.37	
2739.84	43.76	V	53.98	-10.22	Avg	181.50	120.37	
3653.12	55.13	V	73.98	-18.85	Peak	175.25	156.55	
3653.12	38.17	V	53.98	-15.81	Avg	175.25	156.55	
4566.40	50.12	V	73.98	-23.86	Peak	149.25	115.00	
4566.40	36.59	V	53.98	-17.39	Avg	149.25	115.00	
5479.68	52.16	V	73.98	-21.82	Peak	147.50	248.58	
5479.68	40.18	V	53.98	-13.80	Avg	147.50	248.58	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	50.26	V	73.98	-23.72	Peak	200.25	106.25	
1826.56	33.59	V	53.98	-20.39	Avg	200.25	106.25	
2739.84	51.39	V	73.98	-22.59	Peak	330.00	130.25	
2739.84	35.69	V	53.98	-18.29	Avg	330.00	130.25	
3653.12	60.98	V	73.98	-13.00	Peak	199.75	136.00	
3653.12	43.57	V	53.98	-10.41	Avg	199.75	136.00	
4566.40	53.02	V	73.98	-20.96	Peak	345.00	214.50	
4566.40	37.59	V	53.98	-16.39	Avg	345.00	214.50	
5479.68	51.26	V	73.98	-22.72	Peak	148.50	245.00	
5479.68	39.59	V	53.98	-14.39	Avg	148.50	245.00	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
 Door Chime Button
 Model: SW-ATT-DB-B

Date: 05/19/2016
 Lab: D
 Tested By: Kyle Fujimoto

Harmonics - Middle Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	51.92	H	73.98	-22.06	Peak	168.00	160.31	
1826.56	33.73	H	53.98	-20.25	Avg	168.00	160.31	
2739.84	52.15	H	73.98	-21.83	Peak	149.50	193.92	
2739.84	35.67	H	53.98	-18.31	Avg	149.50	193.92	
3653.12	62.53	H	73.98	-11.45	Peak	158.75	213.26	
3653.12	42.69	H	53.98	-11.30	Avg	158.75	213.26	
4566.40	50.83	H	73.98	-23.16	Peak	355.00	213.26	
4566.40	37.08	H	53.98	-16.90	Avg	355.00	213.26	
5479.68	51.42	H	73.98	-22.56	Peak	186.00	171.77	
5479.68	39.94	H	53.98	-14.04	Avg	186.00	171.77	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	55.70	H	73.98	-18.28	Peak	171.75	107.05	
1826.56	34.58	H	53.98	-19.40	Avg	171.75	107.05	
2739.84	62.80	H	73.98	-11.18	Peak	145.00	119.00	
2739.84	42.37	H	53.98	-11.61	Avg	145.00	119.00	
3653.12	52.46	H	73.98	-21.53	Peak	147.25	101.25	
3653.12	37.43	H	53.98	-16.55	Avg	147.25	101.25	
4566.40	54.19	H	73.98	-19.79	Peak	349.25	148.79	
4566.40	38.47	H	53.98	-15.52	Avg	349.25	148.79	
5479.68	51.99	H	73.98	-21.99	Peak	342.00	152.58	
5479.68	38.98	H	53.98	-15.00	Avg	342.00	152.58	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	54.62	H	73.98	-19.36	Peak	176.75	112.25	
1826.56	33.59	H	53.98	-20.39	Avg	176.75	112.25	
2739.84	62.41	H	73.98	-11.57	Peak	142.25	110.25	
2739.84	42.03	H	53.98	-11.95	Avg	142.25	110.25	
3653.12	53.45	H	73.98	-20.53	Peak	150.25	106.00	
3653.12	38.41	H	53.98	-15.57	Avg	150.25	106.00	
4566.40	55.26	H	73.98	-18.72	Peak	345.25	142.49	
4566.40	39.98	H	53.98	-14.00	Avg	345.25	142.49	
5479.68	52.26	H	73.98	-21.72	Peak	341.00	150.54	
5479.68	39.59	H	53.98	-14.39	Avg	341.00	150.54	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	49.06	V	73.98	-24.92	Peak	180.25	104.00	
1839.56	31.98	V	53.98	-22.00	Avg	180.25	104.00	
2759.34	50.98	V	73.98	-23.00	Peak	326.00	138.50	
2759.34	34.87	V	53.98	-19.11	Avg	326.00	138.50	
3679.12	62.45	V	73.98	-11.53	Peak	202.50	151.50	
3679.12	43.59	V	53.98	-10.39	Avg	202.50	151.50	
4598.90	53.85	V	73.98	-20.13	Peak	341.00	226.25	
4598.90	38.46	V	53.98	-15.52	Avg	341.00	226.25	
5518.68	52.16	V	73.98	-21.82	Peak	145.50	241.50	
5518.68	40.68	V	53.98	-13.30	Avg	145.50	241.50	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	53.29	V	73.98	-20.69	Peak	138.00	192.25	
1839.56	33.46	V	53.98	-20.52	Avg	138.00	192.25	
2759.34	62.57	V	73.98	-11.41	Peak	186.25	117.25	
2759.34	42.93	V	53.98	-11.05	Avg	186.25	117.25	
3679.12	56.29	V	73.98	-17.69	Peak	180.25	158.25	
3679.12	39.89	V	53.98	-14.09	Avg	180.25	158.25	
4598.90	49.46	V	73.98	-24.52	Peak	150.25	120.00	
4598.90	35.89	V	53.98	-18.09	Avg	150.25	120.00	
5518.68	52.69	V	73.98	-21.29	Peak	148.50	149.75	
5518.68	40.58	V	53.98	-13.40	Avg	148.50	149.75	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	51.03	V	73.98	-22.95	Peak	202.25	113.50	
1839.56	34.26	V	53.98	-19.72	Avg	202.25	113.50	
2759.34	54.59	V	73.98	-19.39	Peak	311.25	156.50	
2759.34	38.67	V	53.98	-15.31	Avg	311.25	156.50	
3679.12	61.02	V	73.98	-12.96	Peak	202.50	144.25	
3679.12	43.69	V	53.98	-10.29	Avg	202.50	144.25	
4598.90	53.65	V	73.98	-20.33	Peak	338.00	225.50	
4598.90	38.42	V	53.98	-15.56	Avg	338.00	225.50	
5518.68	50.12	V	73.98	-23.86	Peak	141.50	241.50	
5518.68	38.45	V	53.98	-15.53	Avg	141.50	241.50	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	50.93	H	73.98	-23.05	Peak	166.50	163.27	
1839.56	32.94	H	53.98	-21.04	Avg	166.50	163.27	
2759.34	51.16	H	73.98	-22.82	Peak	150.00	195.86	
2759.34	34.25	H	53.98	-19.73	Avg	150.00	195.86	
3679.12	62.09	H	73.98	-11.89	Peak	153.25	215.26	
3679.12	42.14	H	53.98	-11.84	Avg	153.25	215.26	
4598.90	50.47	H	73.98	-23.51	Peak	346.50	202.47	
4598.90	36.58	H	53.98	-17.40	Avg	346.50	202.47	
5518.68	52.36	H	73.98	-21.62	Peak	179.00	172.41	
5518.68	40.25	H	53.98	-13.73	Avg	179.00	172.41	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	55.03	H	73.98	-18.95	Peak	180.50	102.74	
1839.56	33.98	H	53.98	-20.00	Avg	180.50	102.74	
2759.34	63.15	H	73.98	-10.83	Peak	125.50	119.36	
2759.34	42.69	H	53.98	-11.29	Avg	125.50	119.36	
3679.12	53.14	H	73.98	-20.84	Peak	127.50	102.26	
3679.12	38.06	H	53.98	-15.92	Avg	127.50	102.26	
4598.90	54.17	H	73.98	-19.81	Peak	329.25	150.78	
4598.90	38.45	H	53.98	-15.53	Avg	329.25	150.78	
5518.68	50.45	H	73.98	-23.53	Peak	335.00	155.56	
5518.68	37.65	H	53.98	-16.33	Avg	335.00	155.56	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-B

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	53.16	H	73.98	-20.82	Peak	183.25	115.50	
1839.56	32.58	H	53.98	-21.40	Avg	183.25	115.50	
2759.34	61.48	H	73.98	-12.50	Peak	141.25	108.25	
2759.34	41.69	H	53.98	-12.29	Avg	141.25	108.25	
3679.12	51.69	H	73.98	-22.29	Peak	148.25	103.00	
3679.12	36.45	H	53.98	-17.53	Avg	148.25	103.00	
4598.90	55.99	H	73.98	-17.99	Peak	344.25	141.49	
4598.90	40.69	H	53.98	-13.29	Avg	344.25	141.49	
5518.68	51.26	H	73.98	-22.72	Peak	334.00	149.58	
5518.68	38.45	H	53.98	-15.53	Avg	334.00	149.58	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	48.69	V	73.98	-25.29	Peak	15.75	161.12	
1823.56	31.59	V	53.98	-22.39	Avg	195.75	161.12	
2735.34	54.87	V	73.98	-19.11	Peak	145.00	155.52	
2735.34	37.86	V	53.98	-16.12	Avg	145.00	155.52	
3647.12	58.69	V	73.98	-15.29	Peak	211.25	145.64	
3647.12	41.26	V	53.98	-12.72	Avg	211.25	145.64	
4558.90	53.15	V	73.98	-20.83	Peak	147.20	144.58	
4558.90	40.26	V	53.98	-13.72	Avg	147.20	144.58	
5470.68	51.26	V	73.98	-22.72	Peak	177.75	145.56	
5470.68	39.59	V	53.98	-14.39	Avg	177.75	145.56	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	50.26	V	73.98	-23.72	Peak	185.50	134.69	
1823.56	32.59	V	53.98	-21.39	Avg	185.50	134.69	
2735.34	63.02	V	73.98	-10.96	Peak	148.26	151.25	
2735.34	43.58	V	53.98	-10.40	Avg	148.26	151.25	
3647.12	55.69	V	73.98	-18.29	Peak	184.26	121.25	
3647.12	38.78	V	53.98	-15.20	Avg	184.26	121.25	
4558.90	50.36	V	73.98	-23.62	Peak	291.25	114.54	
4558.90	37.85	V	53.98	-16.13	Avg	291.25	114.54	
5470.68	52.26	V	73.98	-21.72	Peak	104.25	113.57	
5470.68	39.87	V	53.98	-14.11	Avg	104.25	113.57	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	51.02	V	73.98	-22.96	Peak	184.50	162.59	
1823.56	34.59	V	53.98	-19.39	Avg	184.50	162.59	
2735.34	60.45	V	73.98	-13.53	Peak	220.25	181.59	
2735.34	42.69	V	53.98	-11.29	Avg	220.25	181.59	
3647.12	52.69	V	73.98	-21.29	Peak	359.50	157.19	
3647.12	38.64	V	53.98	-15.34	Avg	359.50	157.19	
4558.90	55.69	V	73.98	-18.29	Peak	187.25	177.75	
4558.90	40.26	V	53.98	-13.72	Avg	187.25	177.75	
5470.68	52.16	V	73.98	-21.82	Peak	150.26	158.58	
5470.68	40.69	V	53.98	-13.29	Avg	150.26	158.58	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	50.32	H	73.98	-23.66	Peak	162.50	143.58	
1823.56	33.18	H	53.98	-20.80	Avg	162.50	143.58	
2735.34	58.69	H	73.98	-15.29	Peak	171.50	116.86	
2735.34	39.59	H	53.98	-14.39	Avg	171.50	116.86	
3647.12	59.59	H	73.98	-14.39	Peak	236.50	122.36	
3647.12	41.26	H	53.98	-12.72	Avg	236.50	122.36	
4558.90	50.26	H	73.98	-23.72	Peak	151.25	131.55	
4558.90	37.59	H	53.98	-16.39	Avg	151.25	131.55	
5470.68	52.56	H	73.98	-21.42	Peak	84.25	134.59	
5470.68	40.29	H	53.98	-13.69	Avg	84.25	134.59	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	50.63	H	73.98	-23.35	Peak	179.25	181.25	
1823.56	30.69	H	53.98	-23.29	Avg	179.25	181.25	
2735.34	62.59	H	73.98	-11.39	Peak	185.00	219.20	
2735.34	42.68	H	53.98	-11.30	Avg	185.00	219.20	
3647.12	56.02	H	73.98	-17.96	Peak	196.25	262.50	
3647.12	39.59	H	53.98	-14.39	Avg	196.25	262.50	
4558.90	52.59	H	73.98	-21.39	Peak	176.25	230.25	
4558.90	38.97	H	53.98	-15.01	Avg	176.25	230.25	
5470.68	52.69	H	73.98	-21.29	Peak	145.50	162.09	
5470.68	40.69	H	53.98	-13.29	Avg	145.50	162.09	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
 Door Chime Button
 Model: SW-ATT-DB-N

Date: 05/20/2016
 Lab: D
 Tested By: Kyle Fujimoto

Harmonics - Low Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	52.16	H	73.98	-21.82	Peak	132.25	198.96	
1823.56	33.58	H	53.98	-20.40	Avg	132.25	198.96	
2735.34	64.06	H	73.98	-9.92	Peak	152.00	219.64	
2735.34	44.98	H	53.98	-9.00	Avg	152.00	219.64	
3647.12	54.06	H	73.98	-19.92	Peak	214.75	186.55	
3647.12	37.59	H	53.98	-16.39	Avg	217.75	186.55	
4558.90	52.09	H	73.98	-21.89	Peak	215.25	202.55	
4558.90	37.59	H	53.98	-16.39	Avg	215.25	202.55	
5470.68	52.09	H	73.98	-21.89	Peak	18.50	203.45	
5470.68	39.68	H	53.98	-14.30	Avg	18.50	203.45	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	49.21	V	73.98	-24.77	Peak	192.25	102.29	
1826.56	32.56	V	53.98	-21.42	Avg	192.25	102.29	
2739.84	50.26	V	73.98	-23.72	Peak	330.00	126.25	
2739.84	34.59	V	53.98	-19.39	Avg	330.00	126.25	
3653.12	59.45	V	73.98	-14.53	Peak	197.50	142.35	
3653.12	41.26	V	53.98	-12.72	Avg	197.50	142.35	
4566.40	52.59	V	73.98	-21.39	Peak	345.00	194.50	
4566.40	37.15	V	53.98	-16.83	Avg	345.00	194.50	
5479.68	50.15	V	73.98	-23.83	Peak	146.50	247.58	
5479.68	38.25	V	53.98	-15.73	Avg	146.50	247.58	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	53.69	V	73.98	-20.29	Peak	131.00	190.32	
1826.56	35.56	V	53.98	-18.42	Avg	131.00	190.32	
2739.84	63.03	V	73.98	-10.95	Peak	179.25	125.69	
2739.84	43.18	V	53.98	-10.80	Avg	179.25	125.69	
3653.12	56.29	V	73.98	-17.69	Peak	176.25	178.50	
3653.12	39.54	V	53.98	-14.44	Avg	176.25	178.50	
4566.40	50.59	V	73.98	-23.39	Peak	145.00	110.36	
4566.40	37.06	V	53.98	-16.92	Avg	145.00	110.36	
5479.68	52.01	V	73.98	-21.97	Peak	145.50	246.52	
5479.68	40.03	V	53.98	-13.95	Avg	145.50	246.52	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	51.29	V	73.98	-22.69	Peak	201.25	104.36	
1826.56	34.59	V	53.98	-19.39	Avg	201.25	104.36	
2739.84	52.64	V	73.98	-21.34	Peak	345.00	125.29	
2739.84	37.06	V	53.98	-16.92	Avg	345.00	125.29	
3653.12	61.59	V	73.98	-12.39	Peak	198.75	137.25	
3653.12	44.56	V	53.98	-9.42	Avg	198.75	137.25	
4566.40	53.87	V	73.98	-20.11	Peak	341.00	214.53	
4566.40	36.89	V	53.98	-17.09	Avg	341.00	214.53	
5479.68	52.29	V	73.98	-21.69	Peak	152.25	242.25	
5479.68	40.68	V	53.98	-13.30	Avg	152.25	242.25	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	50.64	H	73.98	-23.34	Peak	166.00	150.25	
1826.56	32.75	H	53.98	-21.23	Avg	166.00	150.25	
2739.84	51.26	H	73.98	-22.72	Peak	148.50	192.25	
2739.84	34.59	H	53.98	-19.39	Avg	148.50	192.25	
3653.12	62.06	H	73.98	-11.92	Peak	154.50	212.50	
3653.12	42.19	H	53.98	-11.79	Avg	154.50	212.50	
4566.40	50.49	H	73.98	-23.49	Peak	341.00	211.25	
4566.40	36.58	H	53.98	-17.40	Avg	341.00	211.25	
5479.68	51.20	H	73.98	-22.78	Peak	184.50	167.52	
5479.68	39.72	H	53.98	-14.26	Avg	184.50	167.52	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	55.79	H	73.98	-18.19	Peak	176.75	123.25	
1826.56	34.69	H	53.98	-19.29	Avg	176.75	123.25	
2739.84	62.99	H	73.98	-10.99	Peak	146.00	121.25	
2739.84	42.56	H	53.98	-11.42	Avg	146.00	121.25	
3653.12	53.69	H	73.98	-20.29	Peak	145.25	102.26	
3653.12	38.47	H	53.98	-15.51	Avg	145.25	102.26	
4566.40	55.06	H	73.98	-18.92	Peak	351.25	150.47	
4566.40	39.57	H	53.98	-14.41	Avg	351.25	150.47	
5479.68	52.69	H	73.98	-21.29	Peak	345.25	155.59	
5479.68	39.57	H	53.98	-14.41	Avg	345.25	155.59	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	54.13	H	73.98	-19.85	Peak	179.75	108.45	
1826.56	33.09	H	53.98	-20.89	Avg	179.75	108.45	
2739.84	62.87	H	73.98	-11.11	Peak	144.25	112.25	
2739.84	42.69	H	53.98	-11.29	Avg	144.25	112.25	
3653.12	54.56	H	73.98	-19.42	Peak	151.25	107.25	
3653.12	39.58	H	53.98	-14.40	Avg	151.25	107.25	
4566.40	55.39	H	73.98	-18.59	Peak	344.25	143.58	
4566.40	40.29	H	53.98	-13.69	Avg	344.25	143.58	
5479.68	53.29	H	73.98	-20.69	Peak	342.25	152.24	
5479.68	40.54	H	53.98	-13.44	Avg	342.25	152.24	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	50.26	V	73.98	-23.72	Peak	194.25	103.59	
1839.56	33.58	V	53.98	-20.40	Avg	194.25	103.59	
2759.34	51.21	V	73.98	-22.77	Peak	331.00	128.25	
2759.34	35.58	V	53.98	-18.40	Avg	331.00	128.25	
3679.12	60.41	V	73.98	-13.57	Peak	198.25	143.25	
3679.12	42.59	V	53.98	-11.39	Avg	198.25	143.25	
4598.90	53.02	V	73.98	-20.96	Peak	345.50	195.50	
4598.90	38.29	V	53.98	-15.69	Avg	345.50	195.50	
5518.68	50.17	V	73.98	-23.81	Peak	147.50	248.59	
5518.68	38.29	V	53.98	-15.69	Avg	147.50	248.59	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	54.06	V	73.98	-19.92	Peak	132.00	191.32	
1839.56	36.89	V	53.98	-17.09	Avg	132.00	191.32	
2759.34	63.36	V	73.98	-10.62	Peak	181.25	126.58	
2759.34	43.89	V	53.98	-10.09	Avg	181.25	126.58	
3679.12	57.28	V	73.98	-16.70	Peak	177.25	179.50	
3679.12	40.59	V	53.98	-13.39	Avg	177.25	179.50	
4598.90	51.58	V	73.98	-22.40	Peak	146.00	111.25	
4598.90	38.26	V	53.98	-15.72	Avg	146.00	111.25	
5518.68	52.18	V	73.98	-21.80	Peak	147.50	247.58	
5518.68	41.59	V	53.98	-12.39	Avg	147.50	247.58	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	52.06	V	73.98	-21.92	Peak	202.25	105.47	
1839.56	35.98	V	53.98	-18.00	Avg	202.25	105.47	
2759.34	53.09	V	73.98	-20.89	Peak	340.00	128.57	
2759.34	37.89	V	53.98	-16.09	Avg	340.00	128.57	
3679.12	61.85	V	73.98	-12.13	Peak	197.50	126.58	
3679.12	45.59	V	53.98	-8.39	Avg	197.50	126.58	
4598.90	54.05	V	73.98	-19.93	Peak	343.00	215.59	
4598.90	37.85	V	53.98	-16.13	Avg	343.00	215.59	
5518.68	52.69	V	73.98	-21.29	Peak	154.25	247.56	
5518.68	41.85	V	53.98	-12.13	Avg	154.25	247.56	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	51.29	H	73.98	-22.69	Peak	181.50	152.24	
1839.56	33.87	H	53.98	-20.11	Avg	181.50	152.24	
2759.34	52.86	H	73.98	-21.12	Peak	150.50	193.25	
2759.34	36.89	H	53.98	-17.09	Avg	150.50	193.25	
3679.12	62.59	H	73.98	-11.39	Peak	157.25	215.50	
3679.12	44.58	H	53.98	-9.40	Avg	157.25	215.50	
4598.90	51.49	H	73.98	-22.49	Peak	345.00	215.25	
4598.90	37.58	H	53.98	-16.40	Avg	345.00	215.25	
5518.68	51.99	H	73.98	-21.99	Peak	183.50	165.50	
5518.68	40.85	H	53.98	-13.13	Avg	183.50	165.50	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	56.02	H	73.98	-17.96	Peak	178.75	125.75	
1839.56	35.69	H	53.98	-18.29	Avg	178.75	125.75	
2759.34	63.09	H	73.98	-10.89	Peak	145.00	125.25	
2759.34	43.98	H	53.98	-10.00	Avg	145.00	125.25	
3679.12	55.69	H	73.98	-18.29	Peak	147.25	132.28	
3679.12	40.59	H	53.98	-13.39	Avg	147.25	132.28	
4598.90	56.89	H	73.98	-17.09	Peak	355.25	155.47	
4598.90	41.26	H	53.98	-12.72	Avg	355.25	155.47	
5518.68	53.02	H	73.98	-20.96	Peak	340.25	156.57	
5518.68	40.69	H	53.98	-13.29	Avg	340.25	156.57	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-N

Date: 05/20/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	55.02	H	73.98	-18.96	Peak	180.75	111.25	
1839.56	34.59	H	53.98	-19.39	Avg	180.75	111.25	
2759.34	63.07	H	73.98	-10.91	Peak	145.25	113.25	
2759.34	43.98	H	53.98	-10.00	Avg	145.25	113.25	
3679.12	55.02	H	73.98	-18.96	Peak	152.25	112.29	
3679.12	40.59	H	53.98	-13.39	Avg	152.25	112.29	
4598.90	56.89	H	73.98	-17.09	Peak	345.25	145.59	
4598.90	42.58	H	53.98	-11.40	Avg	345.25	145.59	
5518.68	54.28	H	73.98	-19.70	Peak	348.25	156.25	
5518.68	41.59	H	53.98	-12.39	Avg	348.25	156.25	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	45.33	V	73.98	-28.65	Peak	118.25	153.44	
1823.56	29.51	V	53.98	-24.47	Avg	118.25	153.44	
2735.34	51.56	V	73.98	-22.42	Peak	186.00	151.83	
2735.34	35.25	V	53.98	-18.73	Avg	186.00	151.83	
3647.12	51.05	V	73.98	-22.93	Peak	172.50	139.35	
3647.12	36.33	V	53.98	-17.65	Avg	172.50	139.35	
4558.90	49.92	V	73.98	-24.06	Peak	95.75	191.59	
4558.90	36.62	V	53.98	-17.36	Avg	95.75	191.59	
5470.68	50.66	V	73.98	-23.32	Peak	157.00	163.00	
5470.68	38.90	V	53.98	-15.08	Avg	157.00	163.00	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	48.54	V	73.98	-25.44	Peak	180.75	100.10	
1823.56	31.58	V	53.98	-22.40	Avg	180.75	100.10	
2735.34	55.59	V	73.98	-18.39	Peak	183.00	155.95	
2735.34	37.38	V	53.98	-16.60	Avg	183.00	155.95	
3647.12	56.09	V	73.98	-17.89	Peak	305.50	173.74	
3647.12	39.00	V	53.98	-14.98	Avg	305.50	173.74	
4558.90	49.90	V	73.98	-24.08	Peak	359.75	169.86	
4558.90	37.14	V	53.98	-16.84	Avg	359.75	169.86	
5470.68	50.31	V	73.98	-23.67	Peak	197.75	174.94	
5470.68	39.34	V	53.98	-14.64	Avg	197.75	174.94	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	49.99	V	73.98	-23.99	Peak	176.00	150.16	
1823.56	32.50	V	53.98	-21.48	Avg	176.00	150.16	
2735.34	55.63	V	73.98	-18.35	Peak	205.75	179.05	
2735.34	37.61	V	53.98	-16.37	Avg	205.75	179.05	
3647.12	52.31	V	73.98	-21.68	Peak	231.00	163.83	
3647.12	36.19	V	53.98	-17.80	Avg	231.00	163.83	
4558.90	50.34	V	73.98	-23.64	Peak	297.50	140.19	
4558.90	36.53	V	53.98	-17.45	Avg	297.50	140.19	
5470.68	52.09	V	73.98	-21.89	Peak	199.75	171.23	
5470.68	39.26	V	53.98	-14.72	Avg	199.75	171.23	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	50.50	H	73.98	-23.48	Peak	161.00	162.22	
1823.56	32.03	H	53.98	-21.95	Avg	161.00	162.22	
2735.34	55.53	H	73.98	-18.45	Peak	145.50	174.28	
2735.34	38.14	H	53.98	-15.84	Avg	145.50	174.28	
3647.12	53.42	H	73.98	-20.56	Peak	168.75	187.71	
3647.12	37.24	H	53.98	-16.74	Avg	168.75	187.71	
4558.90	48.33	H	73.98	-25.65	Peak	187.50	110.88	
4558.90	36.52	H	53.98	-17.46	Avg	187.50	110.88	
5470.68	48.58	H	73.98	-25.40	Peak	355.00	163.00	
5470.68	38.97	H	53.98	-15.01	Avg	355.00	163.00	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
 Door Chime Button
 Model: SW-ATT-DB-Z

Date: 05/19/2016
 Lab: D
 Tested By: Kyle Fujimoto

Harmonics - Low Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	48.81	H	73.98	-25.18	Peak	161.75	148.31	
1823.56	31.43	H	53.98	-22.55	Avg	161.75	148.31	
2735.34	55.96	H	73.98	-18.02	Peak	155.50	154.28	
2735.34	38.06	H	53.98	-15.92	Avg	155.50	154.28	
3647.12	53.20	H	73.98	-20.78	Peak	189.00	140.07	
3647.12	36.52	H	53.98	-17.46	Avg	189.00	140.07	
4558.90	51.20	H	73.98	-22.79	Peak	355.00	180.37	
4558.90	37.50	H	53.98	-16.48	Avg	355.00	180.37	
5470.68	51.77	H	73.98	-22.21	Peak	194.00	167.35	
5470.68	39.94	H	53.98	-14.04	Avg	194.00	167.35	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1823.56	48.00	H	73.98	-25.99	Peak	141.00	238.28	
1823.56	32.04	H	53.98	-21.95	Avg	141.00	238.28	
2735.34	57.38	H	73.98	-16.60	Peak	155.75	178.16	
2735.34	38.96	H	53.98	-15.02	Avg	155.75	178.16	
3647.12	53.97	H	73.98	-20.01	Peak	132.00	187.29	
3647.12	37.77	H	53.98	-16.22	Avg	132.00	187.29	
4558.90	50.08	H	73.98	-23.90	Peak	202.50	158.22	
4558.90	37.60	H	53.98	-16.38	Avg	202.50	158.22	
5470.68	51.77	H	73.98	-22.21	Peak	202.50	124.01	
5470.68	39.94	H	53.98	-14.04	Avg	202.50	124.01	
6382.46								No Emission
6382.46								Detected
7294.24								No Emission
7294.24								Detected
8206.02								No Emission
8206.02								Detected
9117.80								No Emission
9117.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	48.87	V	73.98	-25.12	Peak	190.00	177.74	
1826.56	31.53	V	53.98	-22.45	Avg	190.00	177.74	
2739.84	51.64	V	73.98	-22.34	Peak	158.00	173.86	
2739.84	34.11	V	53.98	-19.88	Avg	158.00	173.86	
3653.12	52.35	V	73.98	-21.63	Peak	243.50	158.10	
3653.12	36.65	V	53.98	-17.33	Avg	243.50	158.10	
4566.40	48.48	V	73.98	-25.50	Peak	70.25	162.22	
4566.40	36.40	V	53.98	-17.59	Avg	70.25	162.22	
5479.68								No Emission
5479.68								Detected
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-ZDate: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto**Harmonics - Middle Channel - Y-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	49.61	V	73.98	-24.37	Peak	183.50	165.68	
1826.56	32.02	V	53.98	-21.96	Avg	183.50	165.68	
2739.84	53.55	V	73.98	-20.43	Peak	160.50	158.94	
2739.84	35.37	V	53.98	-18.61	Avg	160.50	158.94	
3653.12	50.62	V	73.98	-23.36	Peak	200.25	156.79	
3653.12	36.27	V	53.98	-17.71	Avg	200.25	156.79	
4566.40	50.76	V	73.98	-23.22	Peak	109.75	160.43	
4566.40	34.65	V	53.98	-19.33	Avg	109.75	160.43	
5479.68	53.68	V	73.98	-20.30	Peak	187.25	151.83	
5479.68	39.54	V	53.98	-14.44	Avg	187.25	151.83	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	50.12	V	73.98	-23.86	Peak	164.50	135.77	
1826.56	31.98	V	53.98	-22.00	Avg	164.50	135.77	
2739.84	54.62	V	73.98	-19.36	Peak	151.25	151.05	
2739.84	37.04	V	53.98	-16.94	Avg	151.25	151.05	
3653.12	54.78	V	73.98	-19.20	Peak	293.50	121.62	
3653.12	37.50	V	53.98	-16.49	Avg	293.25	121.62	
4566.40	46.91	V	73.98	-27.07	Peak	95.00	125.55	
4566.40	36.36	V	53.98	-17.62	Avg	95.00	125.55	
5479.68	51.37	V	73.98	-22.61	Peak	252.75	121.62	
5479.68	38.98	V	53.98	-15.00	Avg	252.75	121.62	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	49.29	H	73.98	-24.69	Peak	124.50	113.55	
1826.56	32.33	H	53.98	-21.65	Avg	124.50	113.55	
2739.84	49.94	H	73.98	-24.04	Peak	84.25	179.11	
2739.84	32.58	H	53.98	-21.40	Avg	84.25	179.11	
3653.12	53.42	H	73.98	-20.57	Peak	204.75	177.20	
3653.12	37.61	H	53.98	-16.37	Avg	204.75	177.20	
4566.40	45.81	H	73.98	-28.18	Peak	69.50	190.22	
4566.40	36.33	H	53.98	-17.66	Avg	69.50	190.22	
5479.68								No Emission
5479.68								Detected
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	49.97	H	73.98	-24.01	Peak	167.75	147.35	
1826.56	32.06	H	53.98	-21.92	Avg	167.75	147.35	
2739.84	53.96	H	73.98	-20.02	Peak	153.75	186.28	
2739.84	36.36	H	53.98	-17.62	Avg	153.75	186.28	
3653.12	55.84	H	73.98	-18.14	Peak	112.75	129.74	
3653.12	37.72	H	53.98	-16.26	Avg	112.75	129.74	
4566.40	49.10	H	73.98	-24.88	Peak	253.25	129.68	
4566.40	36.46	H	53.98	-17.52	Avg	253.25	129.68	
5479.68	51.83	H	73.98	-22.15	Peak	181.25	159.35	
5479.68	39.32	H	53.98	-14.66	Avg	181.25	159.35	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
 Door Chime Button
 Model: SW-ATT-DB-Z

Date: 05/19/2016
 Lab: D
 Tested By: Kyle Fujimoto

Harmonics - Middle Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1826.56	48.69	H	73.98	-25.29	Peak	134.50	174.40	
1826.56	31.70	H	53.98	-22.28	Avg	134.50	174.40	
2739.84	52.34	H	73.98	-21.64	Peak	201.75	215.00	
2739.84	35.64	H	53.98	-18.34	Avg	201.75	215.00	
3653.12	53.81	H	73.98	-20.17	Peak	188.00	211.23	
3653.12	37.23	H	53.98	-16.75	Avg	188.00	211.23	
4566.40	50.01	H	73.98	-23.97	Peak	203.75	248.19	
4566.40	37.05	H	53.98	-16.93	Avg	203.75	248.19	
5479.68	51.32	H	73.98	-22.66	Peak	215.25	248.19	
5479.68	38.40	H	53.98	-15.58	Avg	215.25	248.19	
6392.96								No Emission
6392.96								Detected
7306.24								No Emission
7306.24								Detected
8219.52								No Emission
8219.52								Detected
9132.80								No Emission
9132.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	54.60	V	73.98	-19.38	Peak	162.00	189.32	
1839.56	34.98	V	53.98	-19.00	Avg	162.00	189.32	
2759.34	52.79	V	73.98	-21.19	Peak	194.00	173.98	
2759.34	35.64	V	53.98	-18.34	Avg	194.00	173.98	
3679.12	53.41	V	73.98	-20.57	Peak	198.75	128.79	
3679.12	37.33	V	53.98	-16.65	Avg	198.75	128.79	
4598.90	52.91	V	73.98	-21.08	Peak	139.50	203.47	
4598.90	37.76	V	53.98	-16.22	Avg	139.50	203.47	
5518.68	50.65	V	73.98	-23.33	Peak	214.75	196.31	
5518.68	36.07	V	53.98	-17.91	Avg	214.75	196.31	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	53.59	V	73.98	-20.39	Peak	177.75	143.95	
1839.56	34.69	V	53.98	-19.30	Avg	177.75	143.95	
2759.34	54.48	V	73.98	-19.50	Peak	186.50	127.29	
2759.34	37.36	V	53.98	-16.63	Avg	186.50	127.29	
3679.12	54.66	V	73.98	-19.33	Peak	237.50	147.11	
3679.12	37.14	V	53.98	-16.84	Avg	237.50	147.11	
4598.90	51.54	V	73.98	-22.44	Peak	207.75	164.13	
4598.90	36.77	V	53.98	-17.21	Avg	207.75	164.13	
5518.68	50.73	V	73.98	-23.26	Peak	164.00	148.67	
5518.68	39.02	V	53.98	-14.96	Avg	164.00	148.67	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	53.78	V	73.98	-20.20	Peak	28.75	266.94	
1839.56	35.79	V	53.98	-18.19	Avg	28.70	266.94	
2759.34	51.75	V	73.98	-22.23	Peak	226.25	241.26	
2759.34	35.05	V	53.98	-18.94	Avg	226.25	241.26	
3679.12	50.59	V	73.98	-23.39	Peak	220.25	213.02	
3679.12	35.94	V	53.98	-18.04	Avg	220.25	213.02	
4598.90	49.20	V	73.98	-24.78	Peak	30.50	230.52	
4598.90	36.57	V	53.98	-17.41	Avg	30.50	230.52	
5518.68	49.90	V	73.98	-24.08	Peak	176.50	149.74	
5518.68	39.11	V	53.98	-14.87	Avg	176.50	149.74	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	53.95	H	73.98	-20.03	Peak	146.25	192.13	
1839.56	34.82	H	53.98	-19.16	Avg	146.25	192.13	
2759.34	57.50	H	73.98	-16.48	Peak	206.50	149.20	
2759.34	39.00	H	53.98	-14.98	Avg	206.50	149.20	
3679.12	55.60	H	73.98	-18.38	Peak	208.25	174.76	
3679.12	39.20	H	53.98	-14.79	Avg	208.25	174.76	
4598.90	51.82	H	73.98	-22.16	Peak	194.50	140.79	
4598.90	38.06	H	53.98	-15.92	Avg	194.50	140.48	
5518.68	52.53	H	73.98	-21.46	Peak	200.50	189.74	
5518.68	37.83	H	53.98	-16.15	Avg	200.50	189.74	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
Door Chime Button
Model: SW-ATT-DB-Z

Date: 05/19/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel - Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	53.11	H	73.98	-20.87	Peak	130.25	130.64	
1839.56	34.20	H	53.98	-19.78	Avg	130.25	130.64	
2759.34	57.96	H	73.98	-16.02	Peak	151.00	136.43	
2759.34	39.85	H	53.98	-14.13	Avg	151.00	136.43	
3679.12	52.39	H	73.98	-21.59	Peak	192.25	211.65	
3679.12	37.43	H	53.98	-16.55	Avg	192.25	211.65	
4598.90	54.66	H	73.98	-19.32	Peak	200.75	221.68	
4598.90	38.84	H	53.98	-15.14	Avg	200.75	221.68	
5518.68	51.17	H	73.98	-22.81	Peak	129.75	225.69	
5518.68	39.41	H	53.98	-14.57	Avg	129.75	225.69	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

FCC 15.249

Nortek Security & Controls, LLC
 Door Chime Button
 Model: SW-ATT-DB-Z

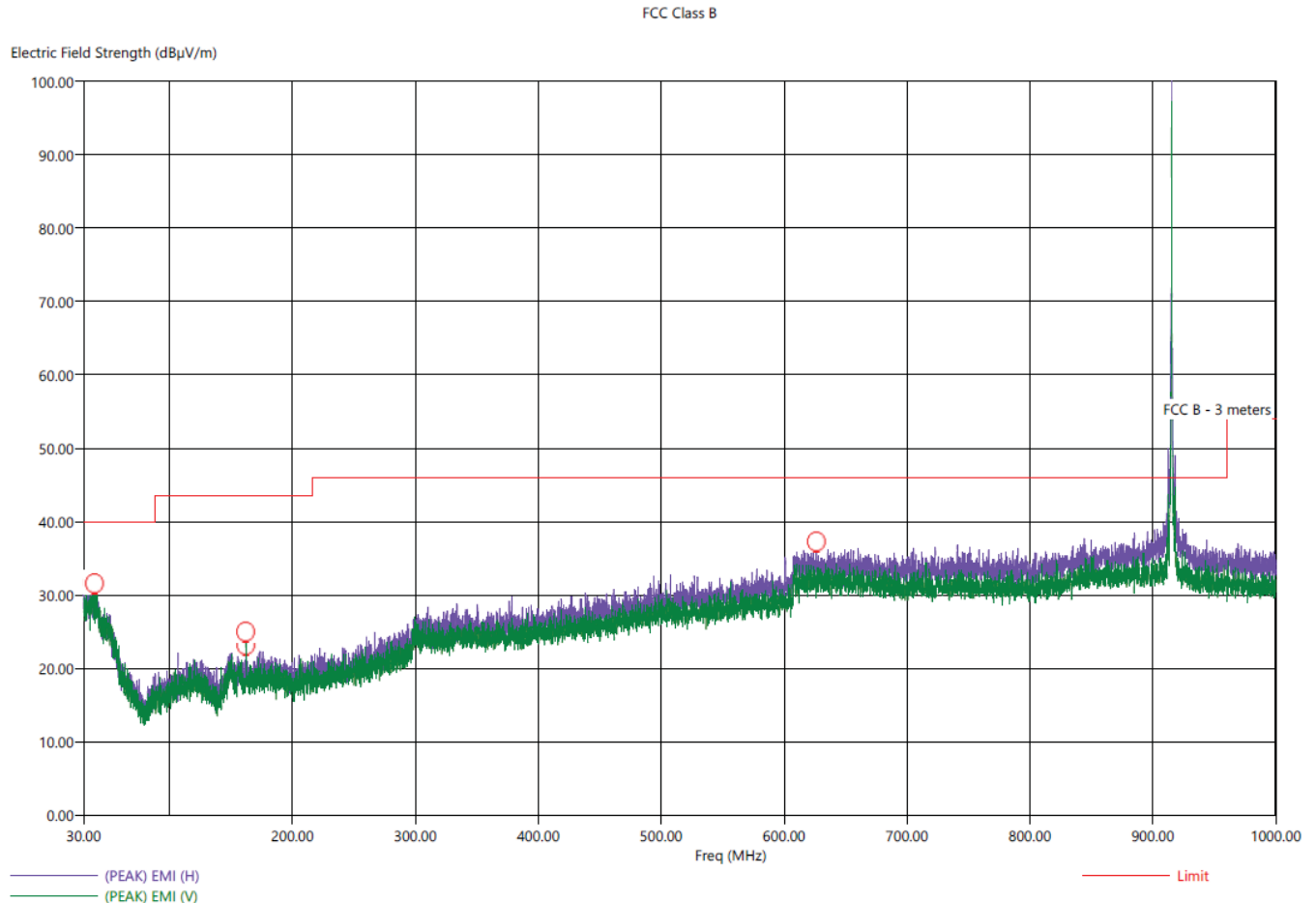
Date: 05/19/2016
 Lab: D
 Tested By: Kyle Fujimoto

Harmonics - High Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1839.56	56.70	H	73.98	-17.28	Peak	162.00	111.65	
1839.56	37.58	H	53.98	-16.40	Avg	162.00	111.65	
2759.34	55.23	H	73.98	-18.75	Peak	196.50	203.05	
2759.34	37.70	H	53.98	-16.28	Avg	196.50	203.05	
3679.12	55.49	H	73.98	-18.49	Peak	228.00	141.80	
3679.12	36.33	H	53.98	-17.65	Avg	228.00	141.80	
4598.90	50.32	H	73.98	-23.66	Peak	189.25	184.61	
4598.90	37.33	H	53.98	-16.65	Avg	189.25	184.61	
5518.68	50.55	H	73.98	-23.43	Peak	192.25	164.58	
5518.68	39.19	H	53.98	-14.79	Avg	192.25	164.58	
6438.46								No Emission
6438.46								Detected
7358.24								No Emission
7358.24								Detected
8278.02								No Emission
8278.02								Detected
9197.80								No Emission
9197.80								Detected

Title: Pre-Scan - FCC Class B
File: Agilent - Pre-Scan - FCC 15.249 - FCC Class B - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-B
Fixed Frequency Version

5/23/2016 10:39:44 AM
Sequence: Preliminary Scan



Note #1: The emission above the limit line is from the transmitter and subject of FCC 15.249 limits.

Note #2: The EUT was transmitting at the middle channel

Title: Radiated Final - FCC Class B
File: Agilent - Final Scan - FCC 15.249 - FCC Class B - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-B
Fixed Frequency Version

5/23/2016 11:07:07 AM
Sequence: Final Measurements

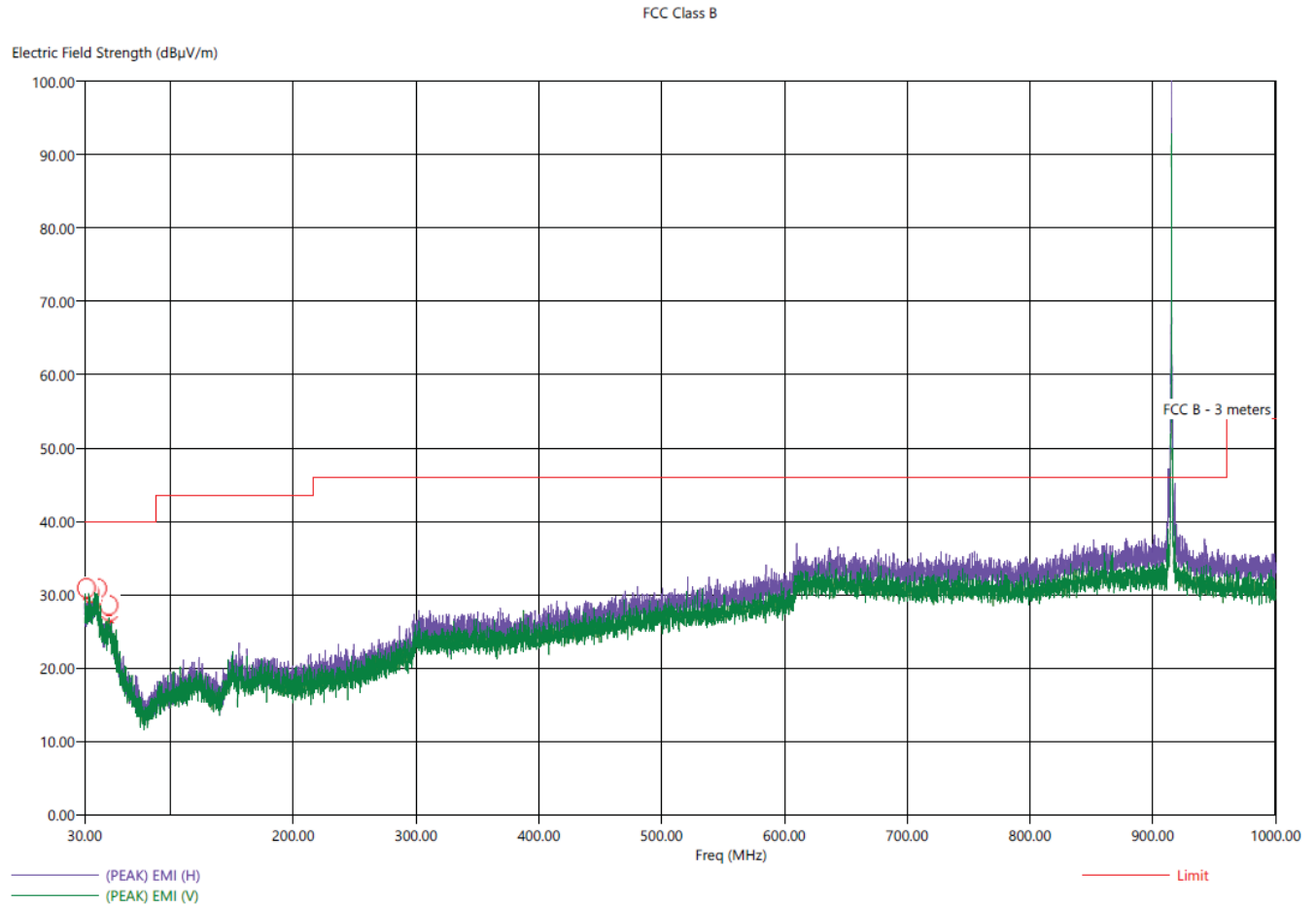
FCC Class B										
Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	TtBl Agl (deg)	Twr Ht (cm)
33.30	H	32.09	27.04	-7.91	-12.96	40.00	24.20	0.36	200.75	160.31
34.40	H	31.78	26.54	-8.22	-13.46	40.00	24.26	0.37	181.00	160.61
39.00	H	32.67	27.47	-7.33	-12.53	40.00	25.20	0.39	84.75	207.05
156.20	H	22.69	18.27	-20.81	-25.23	43.50	14.62	0.92	93.00	143.77
159.00	H	22.90	17.21	-20.60	-26.29	43.50	13.55	0.93	64.75	320.91
173.30	H	22.25	17.64	-21.25	-25.86	43.50	14.10	0.98	229.00	143.47

Note: The EUT was transmitting at the middle channel.



Title: Pre-Scan - FCC Class B
File: Agilent - Pre-Scan - FCC 15.249 - FCC Class B - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-N
Fixed Frequency Version

5/23/2016 9:23:30 AM
Sequence: Preliminary Scan



Note #1: The emission above the limit line is from the transmitter and subject of FCC 15.249 limits.

Note #2: The EUT was transmitting at the middle channel

Title: Radiated Final - FCC Class B
File: Agilent - Final Scan - FCC 15.249 - FCC Class B - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-N
Fixed Frequency Version

5/23/2016 9:33:30 AM
Sequence: Final Measurements

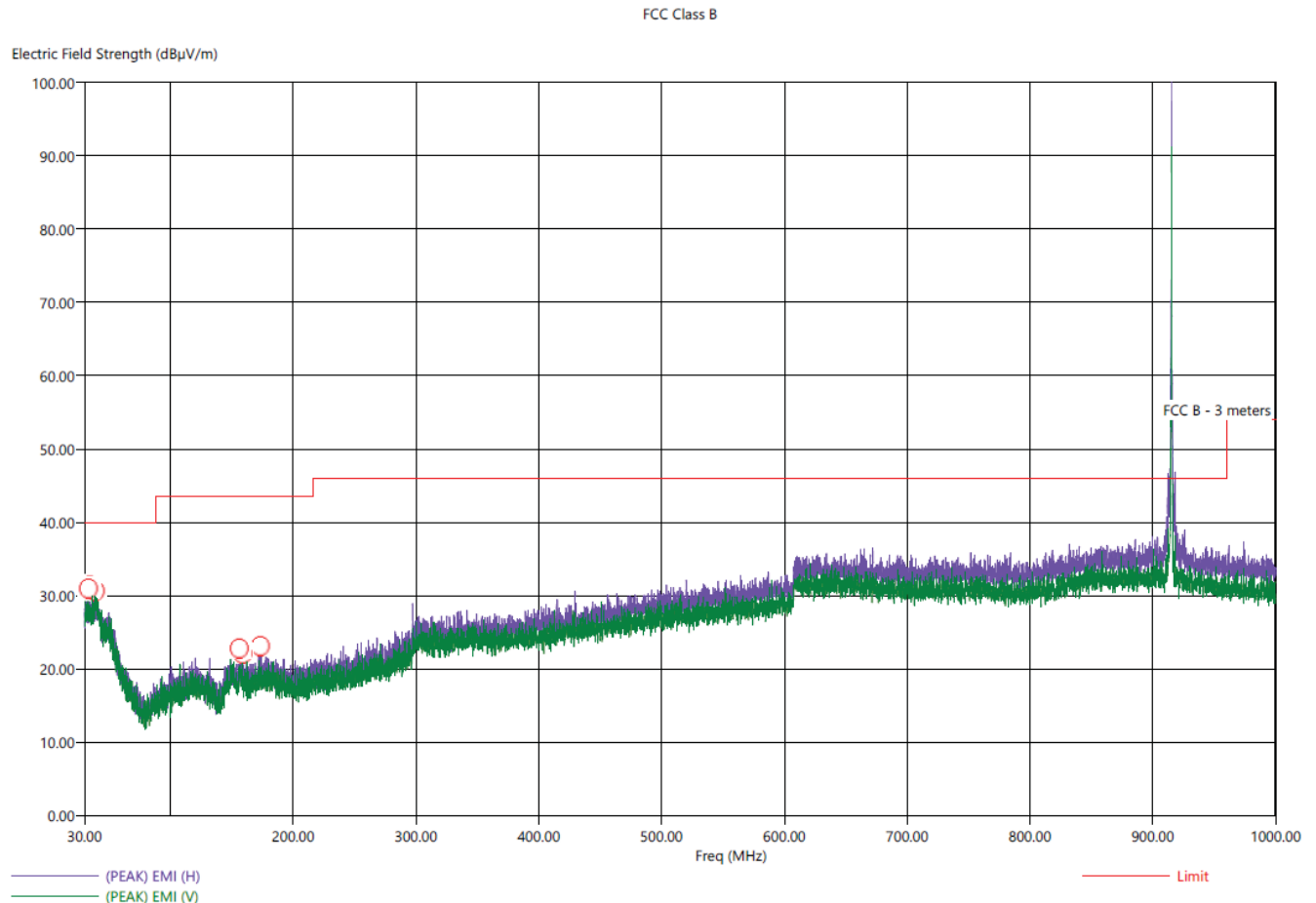
FCC Class B										
Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbl Aql (dca)	Twr Ht (cm)
33.30	H	31.75	26.97	-8.25	-13.03	40.00	24.20	0.36	283.50	240.07
34.40	H	31.65	26.34	-8.35	-13.66	40.00	24.25	0.37	100.75	240.49
39.00	H	31.98	27.10	-8.02	-12.90	40.00	25.19	0.39	183.25	291.05
156.20	H	23.54	17.92	-19.96	-25.58	43.50	14.63	0.92	164.75	192.85
159.00	H	22.58	17.13	-20.92	-26.37	43.50	13.54	0.93	253.50	210.04
173.30	H	23.25	17.52	-20.25	-25.98	43.50	14.10	0.98	74.75	207.35

Note: The EUT was transmitting at the middle channel.



Title: Pre-Scan - FCC Class B
File: Agilent - Pre-Scan - FCC 15.249 - FCC Class B - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-Z
Fixed Frequency Version

5/23/2016 7:45:35 AM
Sequence: Preliminary Scan



Note #1: The emission above the limit line is from the transmitter and subject of FCC 15.249 limits.

Note #2: The EUT was transmitting at the middle channel

Title: Radiated Final - FCC Class B
File: Agilent - Final Scan - FCC 15.249 - FCC Class B - 30 MHz to 1000 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-Z
Fixed Frequency Version

5/23/2016 7:55:54 AM
Sequence: Final Measurements

FCC Class B										
Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbl Aql (deci)	Twr Ht (cm)
33.30	H	31.42	26.29	-8.58	-13.71	40.00	24.19	0.36	119.50	368.79
34.40	H	31.51	26.24	-8.49	-13.76	40.00	24.25	0.37	270.50	143.59
39.00	H	32.18	27.19	-7.82	-12.81	40.00	25.22	0.39	226.75	398.88
156.20	H	20.33	15.74	-23.17	-27.76	43.50	14.72	0.92	280.25	207.89
159.00	H	22.86	16.76	-20.64	-26.74	43.50	13.51	0.93	115.75	254.76
173.30	H	22.19	17.20	-21.31	-26.30	43.50	14.08	0.98	270.75	112.43

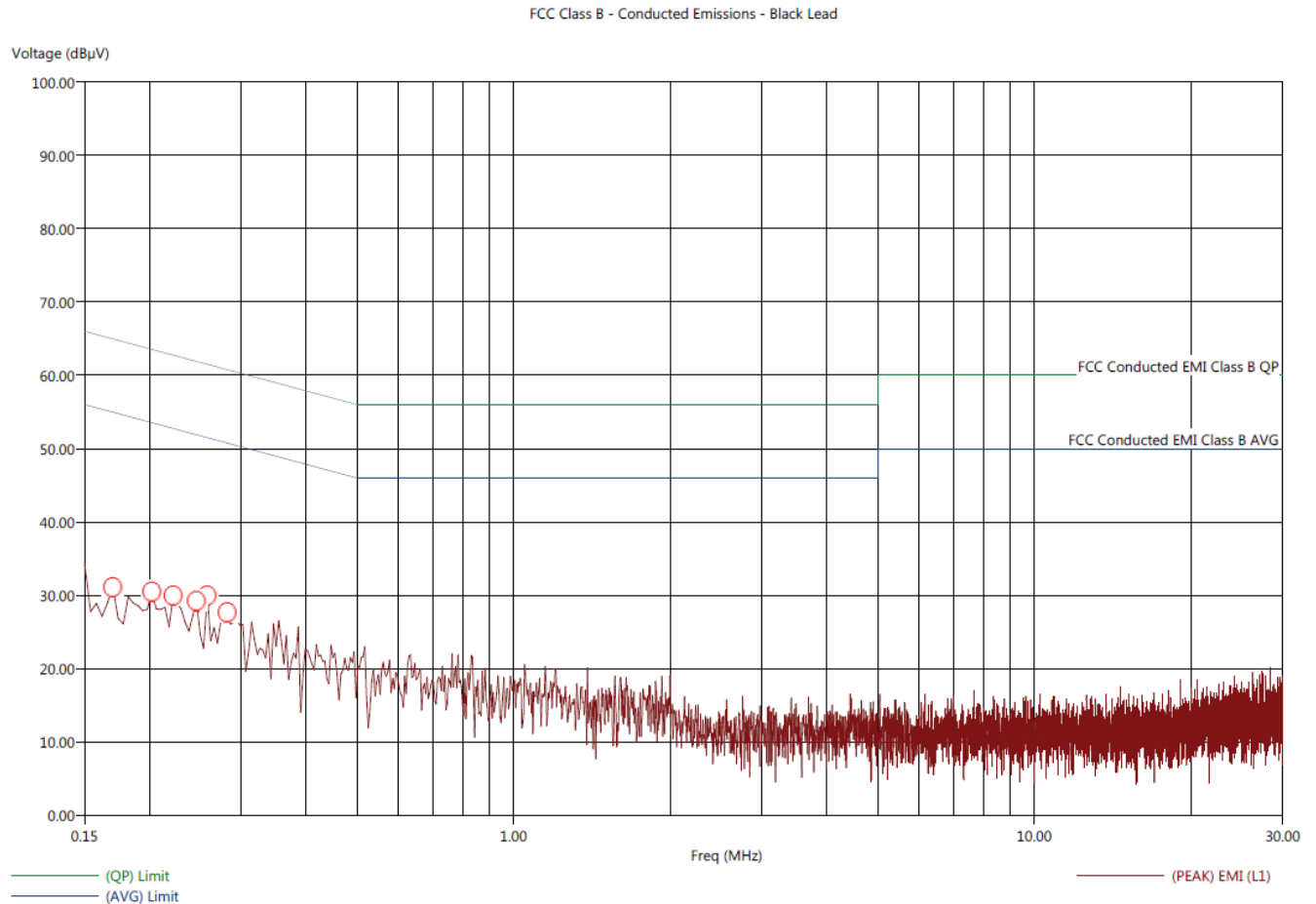
Note: The EUT was transmitting at the middle channel.



***CONDUCTED EMISSIONS
DATA SHEETS***

Title: FCC Class B - Conducted Emissions - Black Lead
File: Agilent - Pre-Scan - Conducted - FCC 15.249 - Black Lead - FCC Class B - 150 kHz to 30 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-B
Fixed Frequency Version

5/23/2016 1:55:31 PM
Sequence: Preliminary Scan



Note: The EUT was transmitting at the middle channel.

Title: FCC Class B - Conducted Emissions - Black Lead
File: Agilent - Final Scan - Conducted - FCC 15.249 - Black Lead - FCC Class B - 150 kHz to 30 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-B
Fixed Frequency Version

5/23/2016 1:57:07 PM
Sequence: Final Measurements

FCC Class B - Conducted Emissions - Black Lead

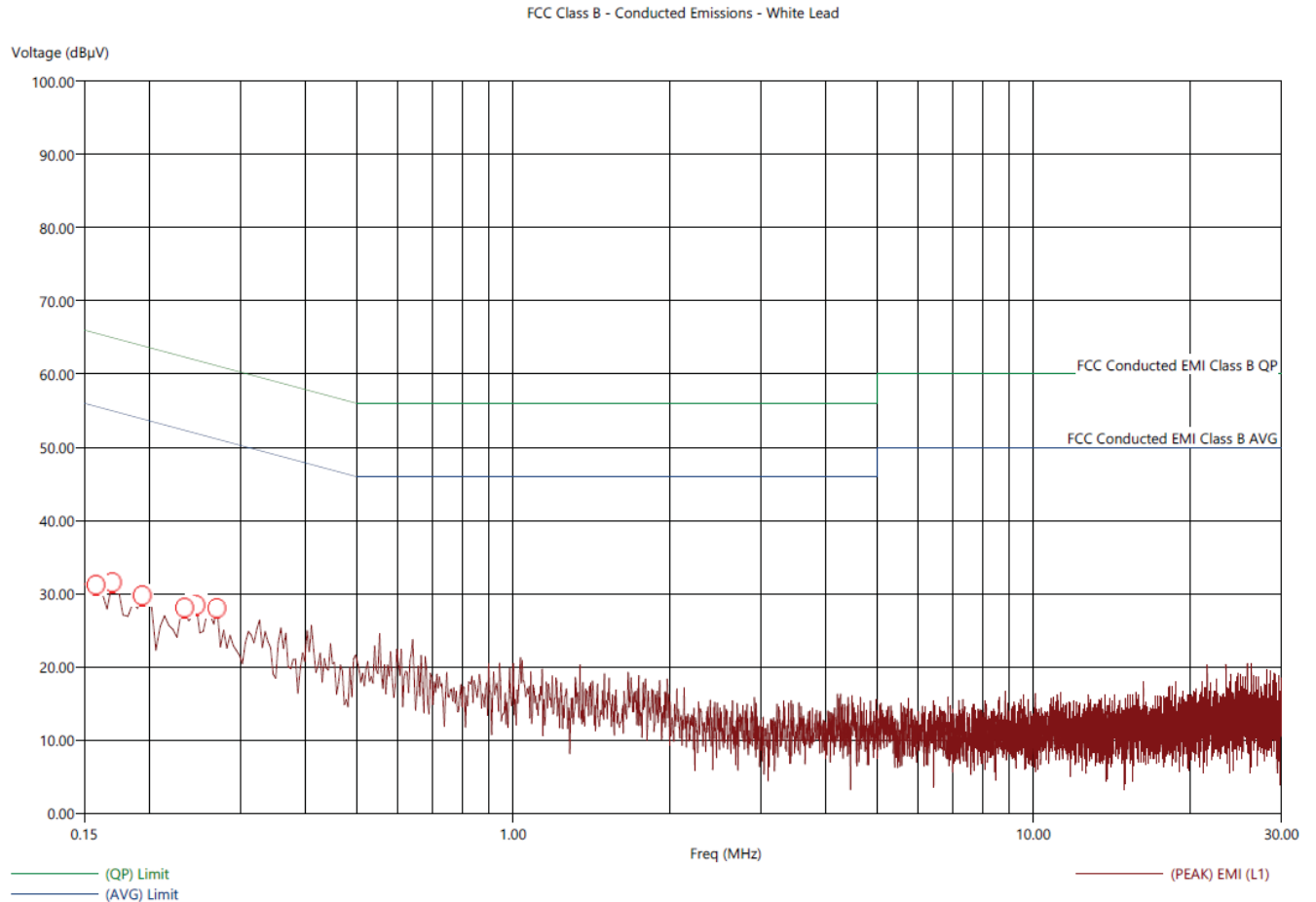
Freq (MHz)	(PEAK) EMI (dBμV)	(AVG) EMI (dBμV)	(PEAK) Margin AVL (dB)	(AVG) Margin AVL (dB)	(AVG) Limit (dBμV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.17	34.48	20.08	-20.51	-34.91	54.99	0.07	0.44	9.83
0.20	33.95	18.97	-19.81	-34.79	53.76	0.08	0.36	9.83
0.22	31.55	18.41	-21.44	-34.58	52.99	0.08	0.31	9.83
0.25	31.92	18.19	-20.15	-33.88	52.07	0.08	0.25	9.83
0.26	32.96	21.49	-18.37	-29.84	51.33	0.08	0.20	9.83
0.28	30.60	20.73	-20.11	-29.98	50.71	0.08	0.16	9.83

Note: The EUT was transmitting at the middle channel.



Title: FCC Class B - Conducted Emissions - White Lead
File: Agilent - Pre-Scan - Conducted - FCC 15.249 - White Lead - FCC Class B - 150 kHz to 30 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Version
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-B
Fixed Frequency Version

5/23/2016 1:52:26 PM
Sequence: Preliminary Scan



Note: The EUT was transmitting at the middle channel.

Title: FCC Class B - Conducted Emissions - White Lead
File: Agilent - Final Scan - Conducted - FCC 15.249 - White Lead - FCC Class B - 150 kHz to 30 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-B
Fixed Frequency Version

5/23/2016 1:54:04 PM
Sequence: Final Measurements

FCC Class B - Conducted Emissions - White Lead

Freq (MHz)	(PEAK) EMI (dBµV)	(AVG) EMI (dBµV)	(PEAK) Margin AVL (dB)	(AVG) Margin AVL (dB)	(AVG) Limit (dBµV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.158	31.20	20.35	-24.68	-35.53	55.87	0.06	0.49	9.83
0.170	29.52	19.58	-25.53	-35.47	55.05	0.07	0.44	9.83
0.194	30.42	18.65	-23.57	-35.34	53.99	0.08	0.36	9.83
0.234	27.81	17.61	-24.67	-34.87	52.48	0.08	0.26	9.83
0.246	31.76	21.70	-19.91	-29.97	51.68	0.08	0.21	9.83
0.270	31.91	21.31	-19.27	-29.87	51.19	0.08	0.18	9.83

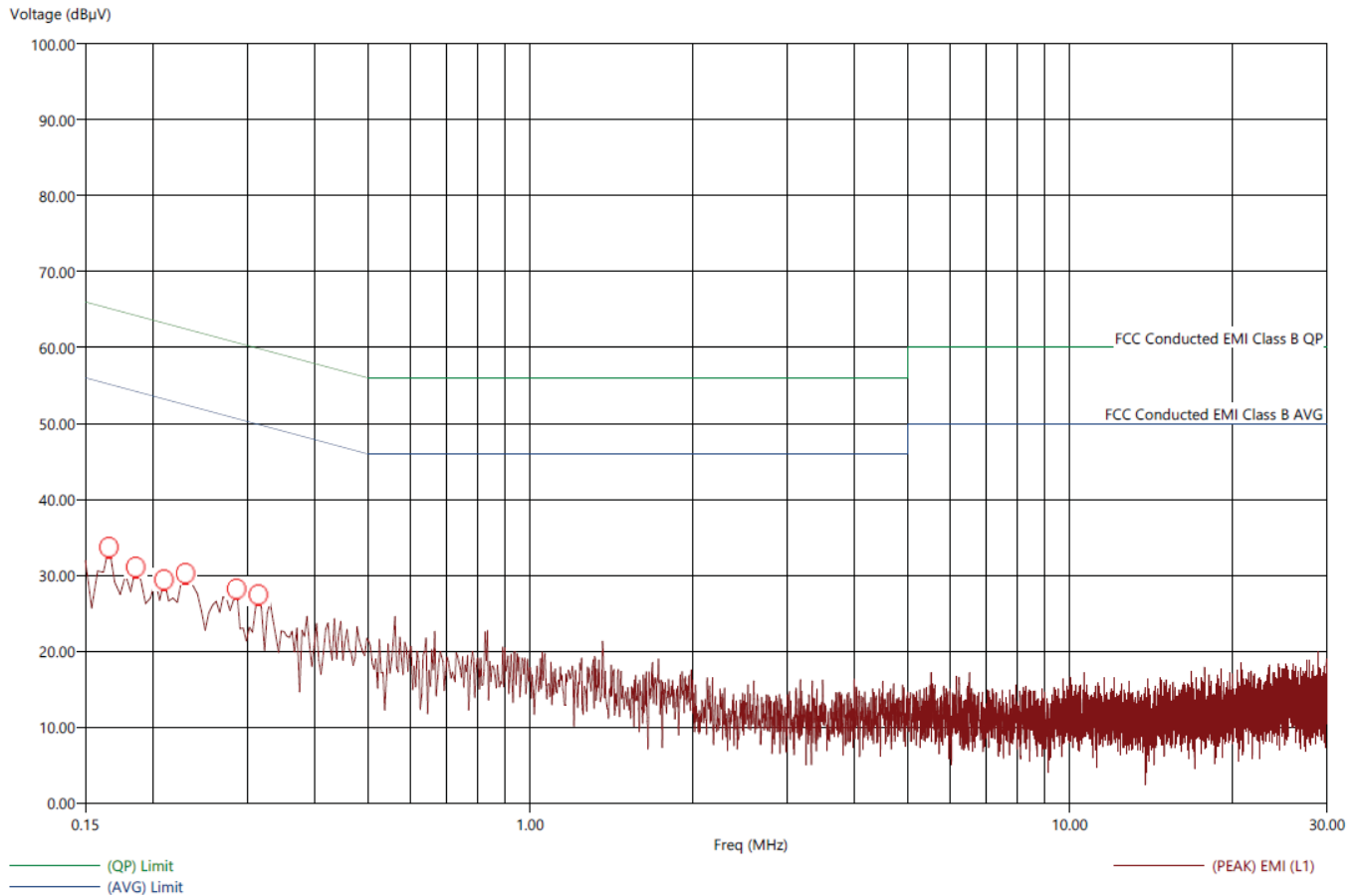
Note: The EUT was transmitting at the middle channel.



Title: FCC Class B - Conducted Emissions - Black Lead
File: Agilent - Pre-Scan - Conducted - FCC 15.249 - Black Lead - FCC Class B - 150 kHz to 30 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-N
Fixed Frequency Version

5/23/2016 2:24:55 PM
Sequence: Preliminary Scan

FCC Class B - Conducted Emissions - Black Lead



Note: The EUT was transmitting at the middle channel.

Title: FCC Class B - Conducted Emissions - Black Lead
File: Agilent - Final Scan - Conducted - FCC 15.249 - Black Lead - FCC Class B - 150 kHz to 30 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-N
Fixed Frequency Version

5/23/2016 2:36:33 PM
Sequence: Final Measurements

FCC Class B - Conducted Emissions - Black Lead

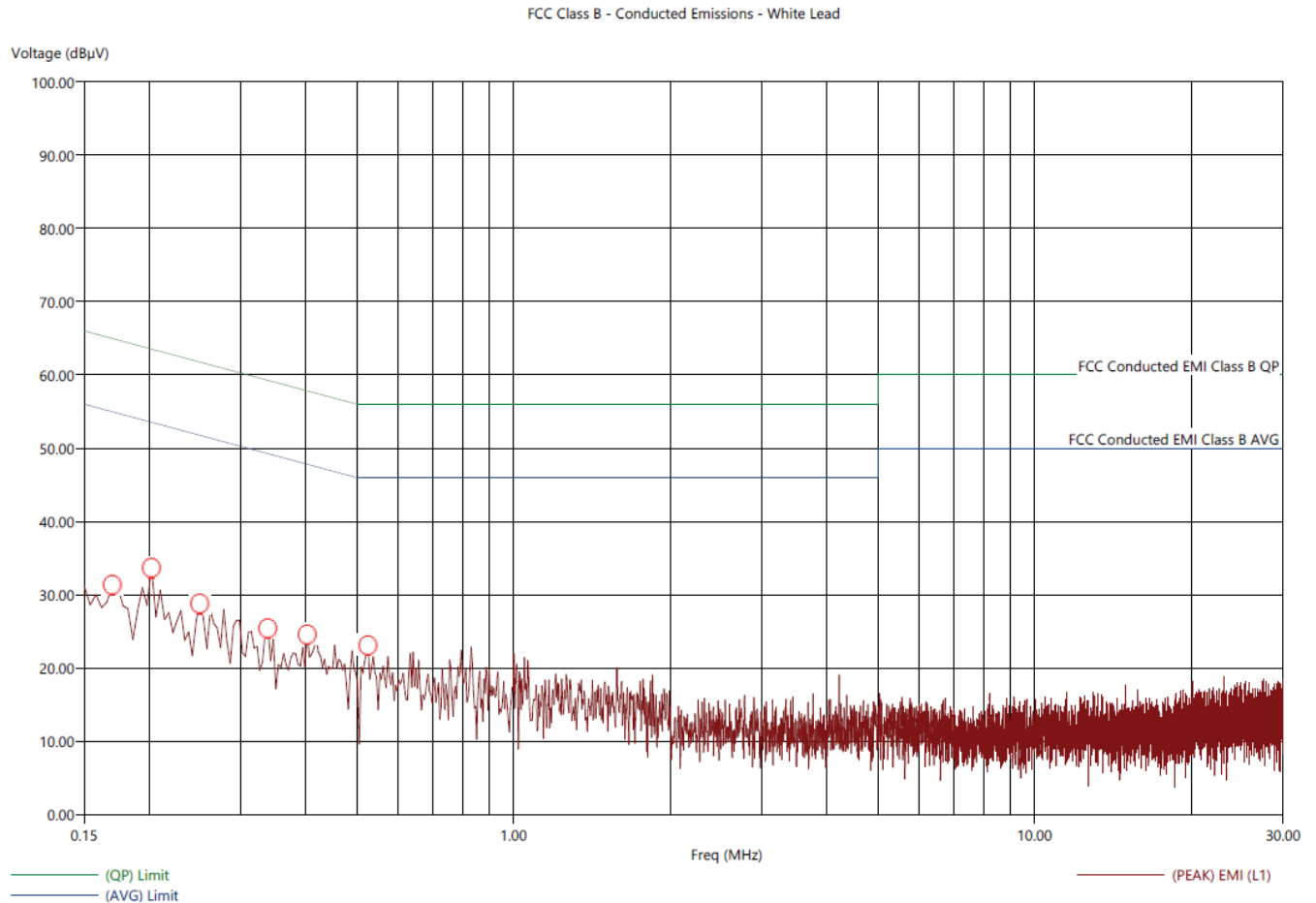
Freq (MHz)	(PEAK) EMI (dBµV)	(AVG) EMI (dBµV)	(PEAK) Margin AVL (dB)	(AVG) Margin AVL (dB)	(AVG) Limit (dBµV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.17	29.22	19.58	-25.71	-35.35	54.93	0.07	0.44	9.83
0.19	28.32	18.82	-25.74	-35.24	54.06	0.08	0.38	9.83
0.21	28.73	18.34	-24.72	-35.11	53.45	0.08	0.34	9.83
0.23	28.18	17.62	-24.34	-34.90	52.52	0.08	0.28	9.83
0.29	30.95	20.71	-19.43	-29.67	50.38	0.08	0.13	9.83
0.31	30.69	19.84	-19.39	-30.24	50.08	0.08	0.12	9.83

Note: The EUT was transmitting at the middle channel.



Title: FCC Class B - Conducted Emissions - White Lead
File: Agilent - Pre-Scan - Conducted - FCC 15.249 - White Lead - FCC Class B - 150 kHz to 30 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Version
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-N
Fixed Frequency Version

5/23/2016 2:11:11 PM
Sequence: Preliminary Scan



Note: The EUT was transmitting at the middle channel.

Title: FCC Class B - Conducted Emissions - White Lead
File: Agilent - Final Scan - Conducted - FCC 15.249 - White Lead - FCC Class B - 150 kHz to 30 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-N
Fixed Frequency Version

5/23/2016 2:12:57 PM
Sequence: Final Measurements

FCC Class B - Conducted Emissions - White Lead

Freq (MHz)	(PEAK) EMI (dBμV)	(AVG) EMI (dBμV)	(PEAK) Margin AVL (dB)	(AVG) Margin AVL (dB)	(AVG) Limit (dBμV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.170	32.78	19.70	-22.04	-35.12	54.82	0.07	0.42	9.83
0.202	32.15	18.46	-21.16	-34.85	53.31	0.08	0.32	9.83
0.250	31.99	17.85	-19.80	-33.94	51.80	0.08	0.22	9.83
0.338	30.53	19.21	-18.93	-30.25	49.46	0.08	0.06	9.84
0.402	27.39	17.08	-20.18	-30.49	47.57	0.08	0.04	9.84
0.526	26.32	15.10	-19.68	-30.90	46.00	0.08	0.02	9.84

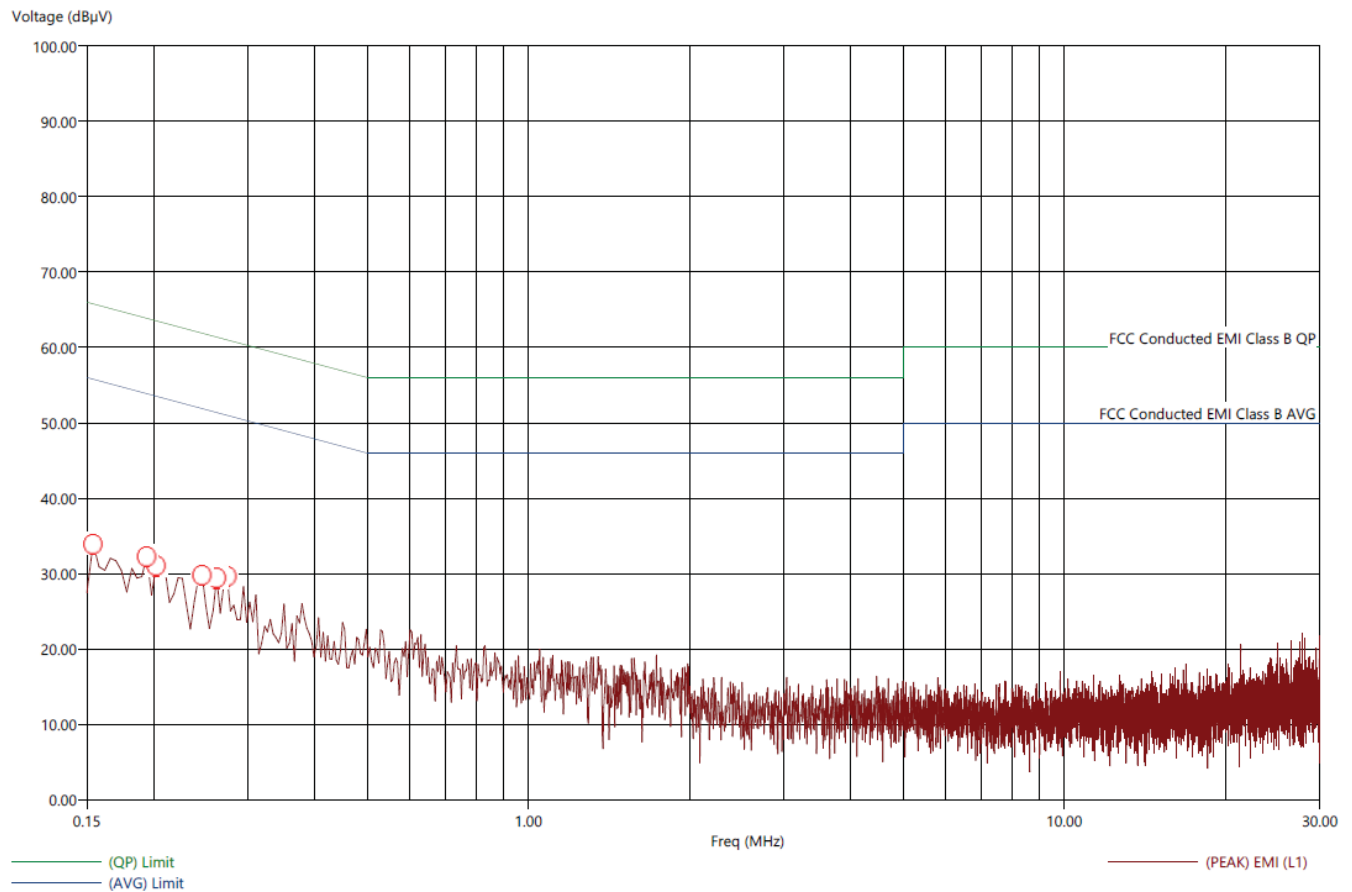
Note: The EUT was transmitting at the middle channel.



Title: FCC Class B - Conducted Emissions - Black Lead
File: Agilent - Pre-Scan - Conducted - FCC 15.249 - Black Lead - FCC Class B - 150 kHz to 30 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-Z
Fixed Frequency Version

5/23/2016 2:50:31 PM
Sequence: Preliminary Scan

FCC Class B - Conducted Emissions - Black Lead



Note: The EUT was transmitting at the middle channel.

Title: FCC Class B - Conducted Emissions - Black Lead
File: Agilent - Final Scan - Conducted - FCC 15.249 - Black Lead - FCC Class B - 150 kHz to 30 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-Z
Fixed Frequency Version

5/23/2016 2:52:09 PM
Sequence: Final Measurements

FCC Class B - Conducted Emissions - Black Lead

Freq (MHz)	(PEAK) EMI (dBµV)	(AVG) EMI (dBµV)	(PEAK) Margin AVL (dB)	(AVG) Margin AVL (dB)	(AVG) Limit (dBµV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.15	34.34	20.73	-21.35	-34.96	55.69	0.06	0.49	9.83
0.19	32.53	19.10	-21.35	-34.78	53.87	0.08	0.37	9.83
0.20	32.27	18.80	-21.32	-34.79	53.59	0.08	0.35	9.83
0.25	32.01	18.39	-20.14	-33.76	52.14	0.08	0.25	9.83
0.26	32.18	21.32	-19.15	-30.01	51.33	0.08	0.20	9.83
0.27	30.59	20.96	-20.30	-29.93	50.90	0.08	0.17	9.83

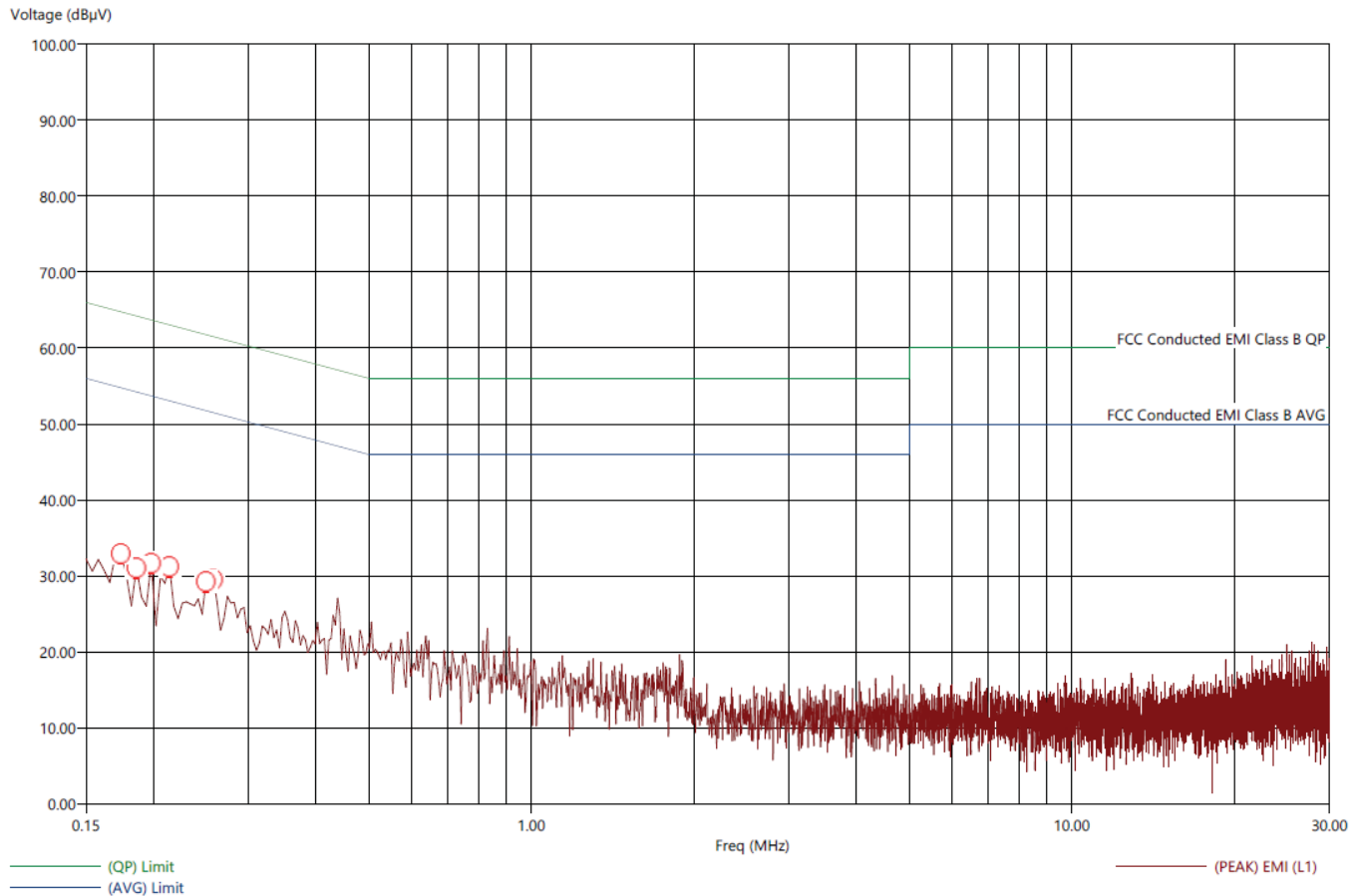
Note: The EUT was transmitting at the middle channel.



Title: FCC Class B - Conducted Emissions - White Lead
File: Agilent - Pre-Scan - Conducted - FCC 15.249 - White Lead - FCC Class B - 150 kHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Version
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-Z
Fixed Frequency Version

5/23/2016 2:56:56 PM
Sequence: Preliminary Scan

FCC Class B - Conducted Emissions - White Lead



Note: The EUT was transmitting at the middle channel.

Title: FCC Class B - Conducted Emissions - White Lead
File: Agilent - Final Scan - Conducted - FCC 15.249 - White Lead - FCC Class B - 150 kHz to 30 MHz.set
Operator: Kyle Fujimoto
EUT Type: Door Chime Button
EUT Condition: The EUT is continuously transmitting - Y-Axis Worst Case
Comments: Company: Nortek Security & Controls, LLC
Model: SW-ATT-DB-Z
Fixed Frequency Version

5/11/2016 11:33:57 AM
Sequence: Final Measurements

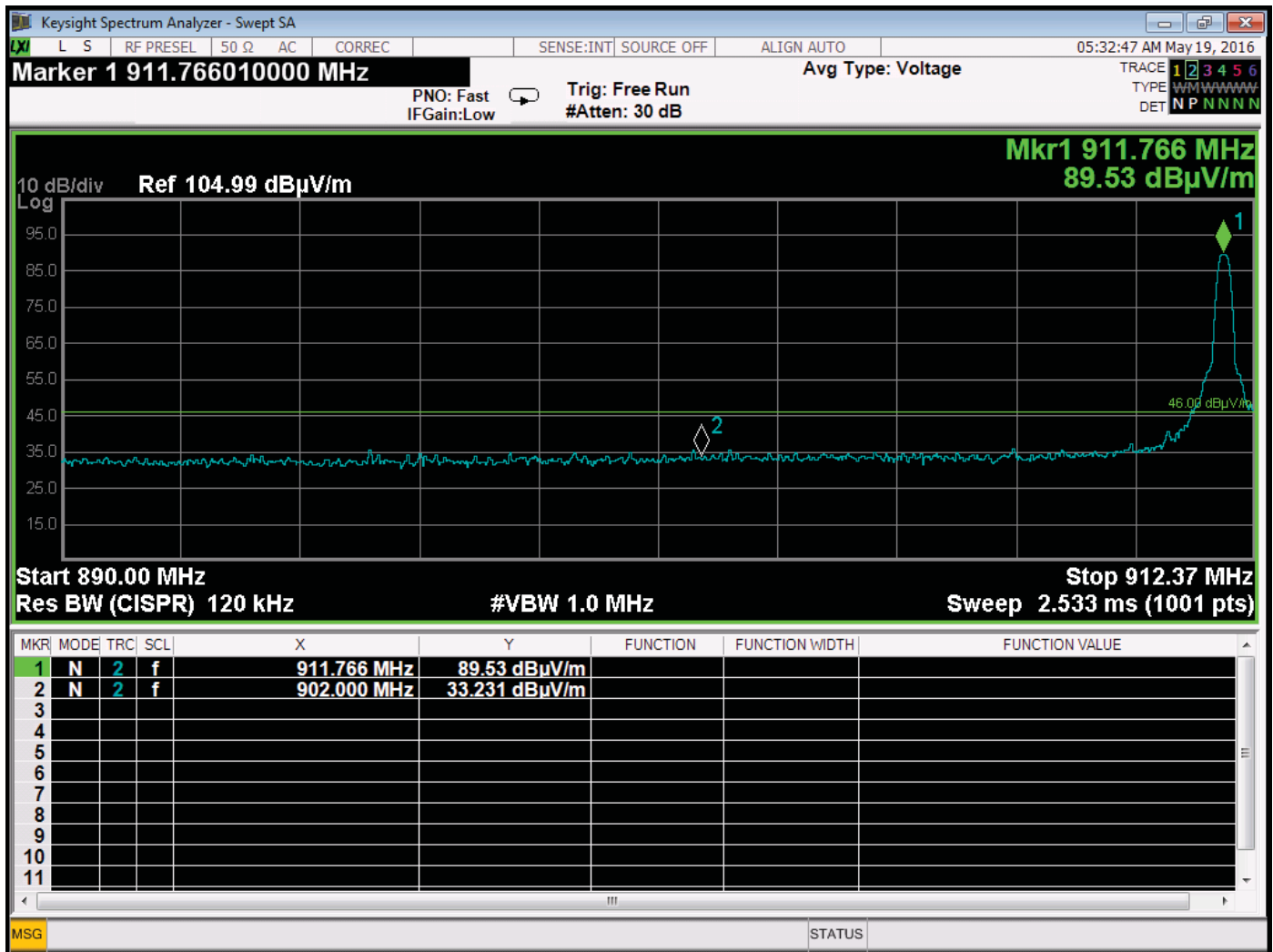
FCC Class B - Conducted Emissions - White Lead

Freq (MHz)	(PEAK) EMI (dBμV)	(AVG) EMI (dBμV)	(PEAK) Margin AVL (dB)	(AVG) Margin AVL (dB)	(AVG) Limit (dBμV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.154	49.10	38.11	-6.53	-17.52	55.63	0.06	0.47	9.83
0.162	48.73	37.73	-6.67	-17.67	55.40	0.06	0.46	9.83
0.178	46.21	35.00	-8.23	-19.44	54.44	0.07	0.39	9.83
4.974	38.05	27.97	-7.95	-18.03	46.00	0.22	0.04	9.92
5.082	38.70	28.47	-11.30	-21.53	50.00	0.22	0.04	9.92
6.250	41.76	33.10	-8.24	-16.90	50.00	0.27	0.04	9.96

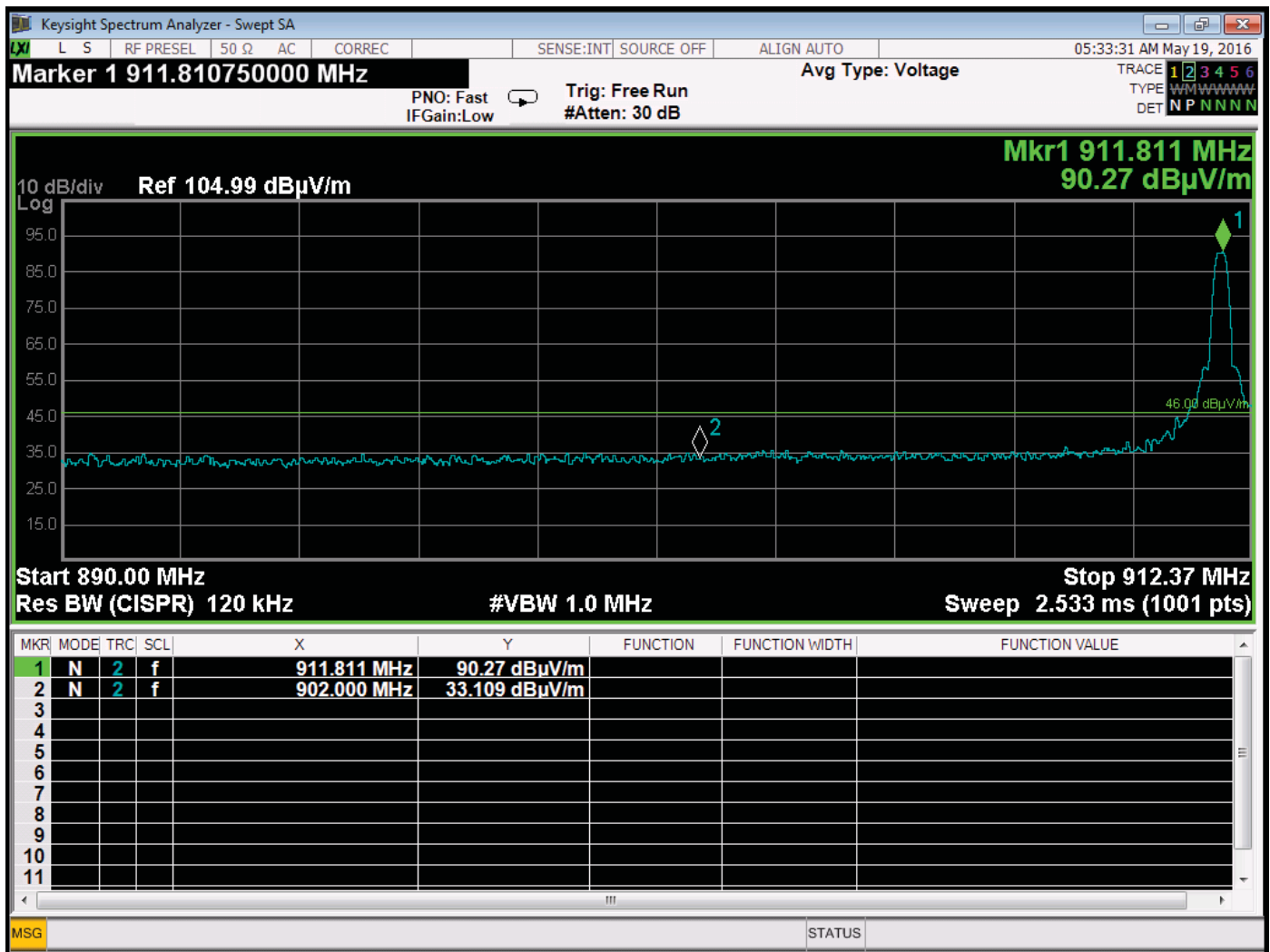
Note: The EUT was transmitting at the middle channel.



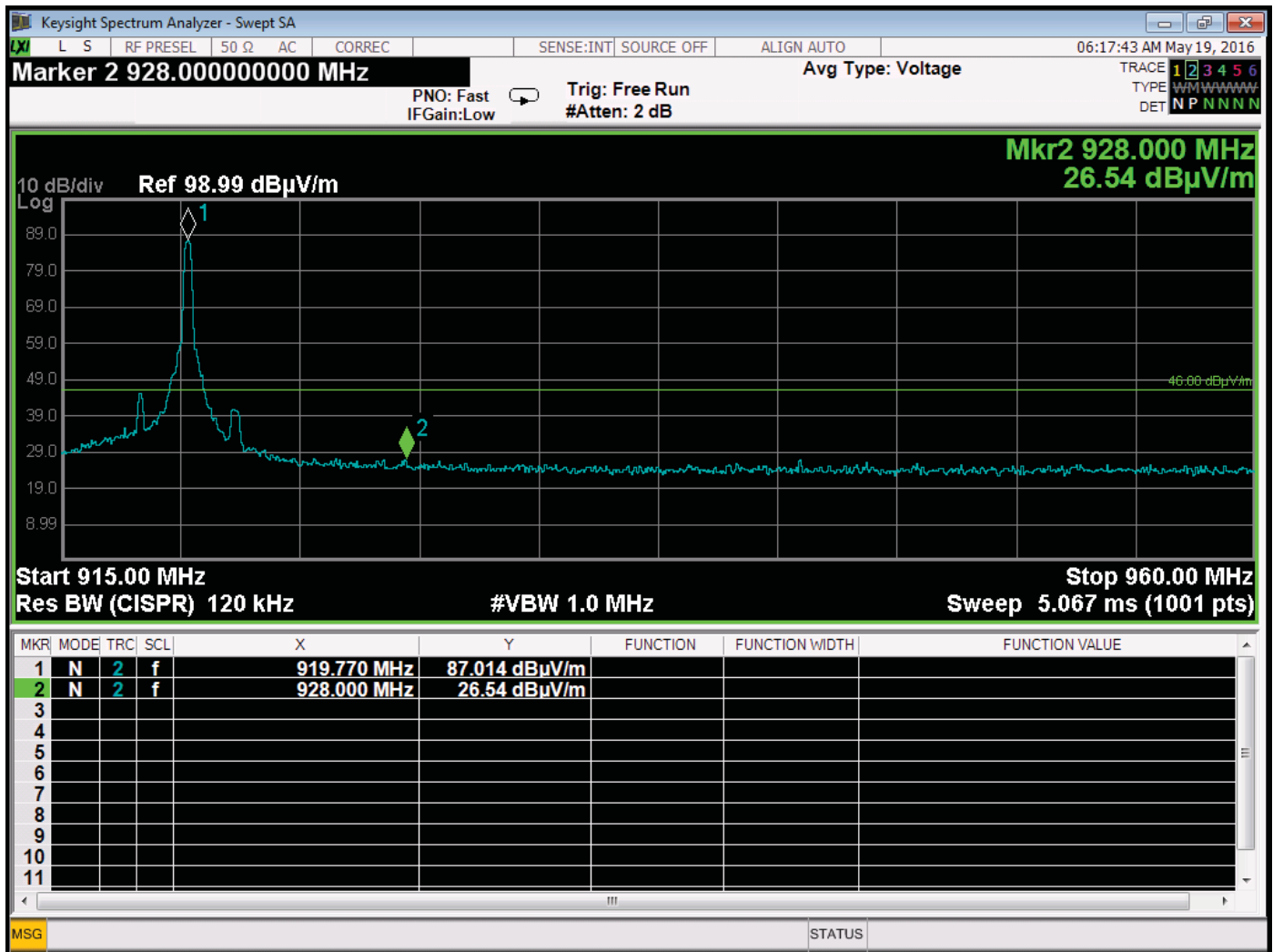
***BAND EDGES
DATA SHEETS***



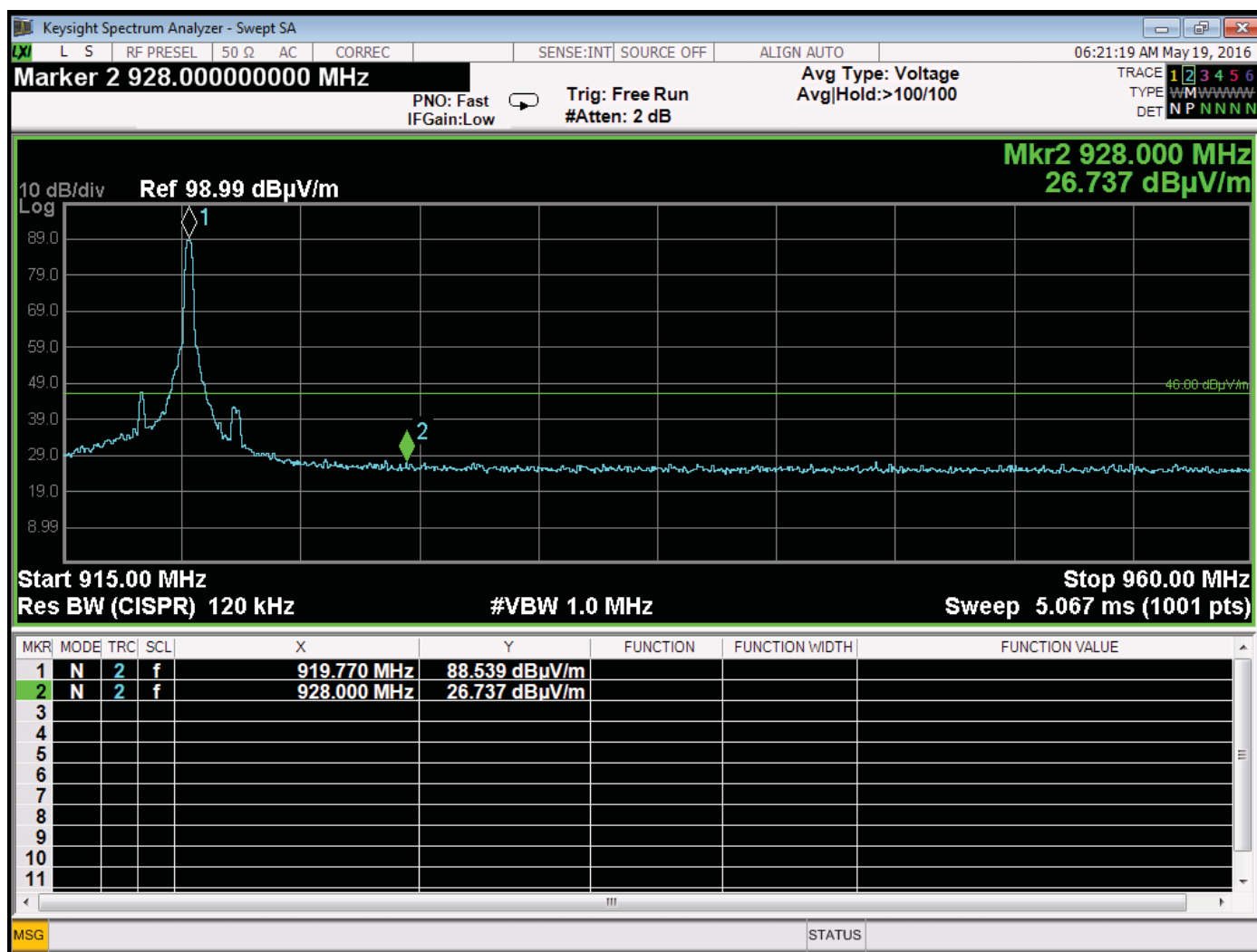
Band Edge – Vertical Polarization – Low Channel – Model: SW-ATT-DB-B – Z-Axis Worst Case



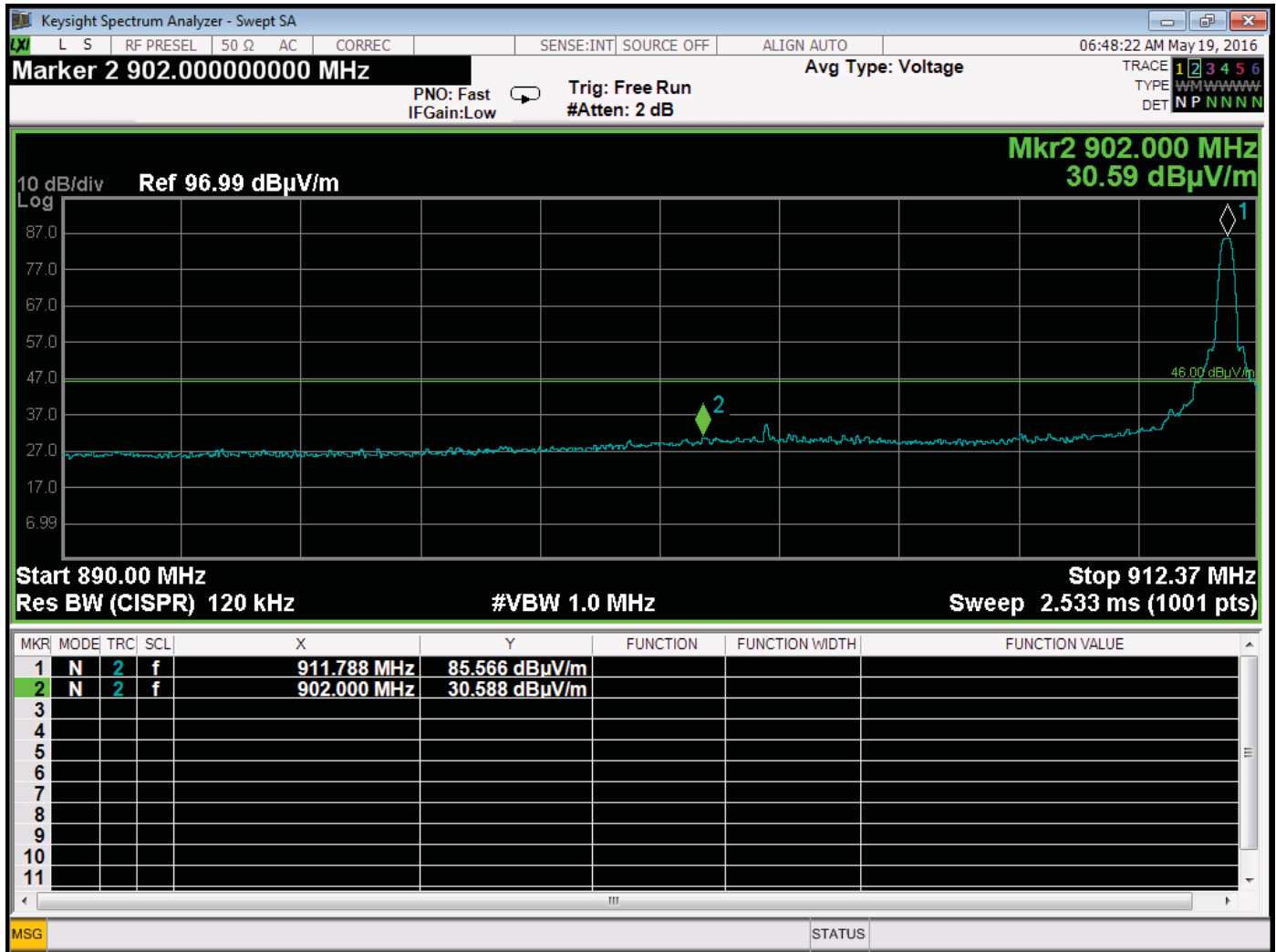
Band Edge – Horizontal Polarization – Low Channel – Model: SW-ATT-DB-B – Z-Axis Worst Case



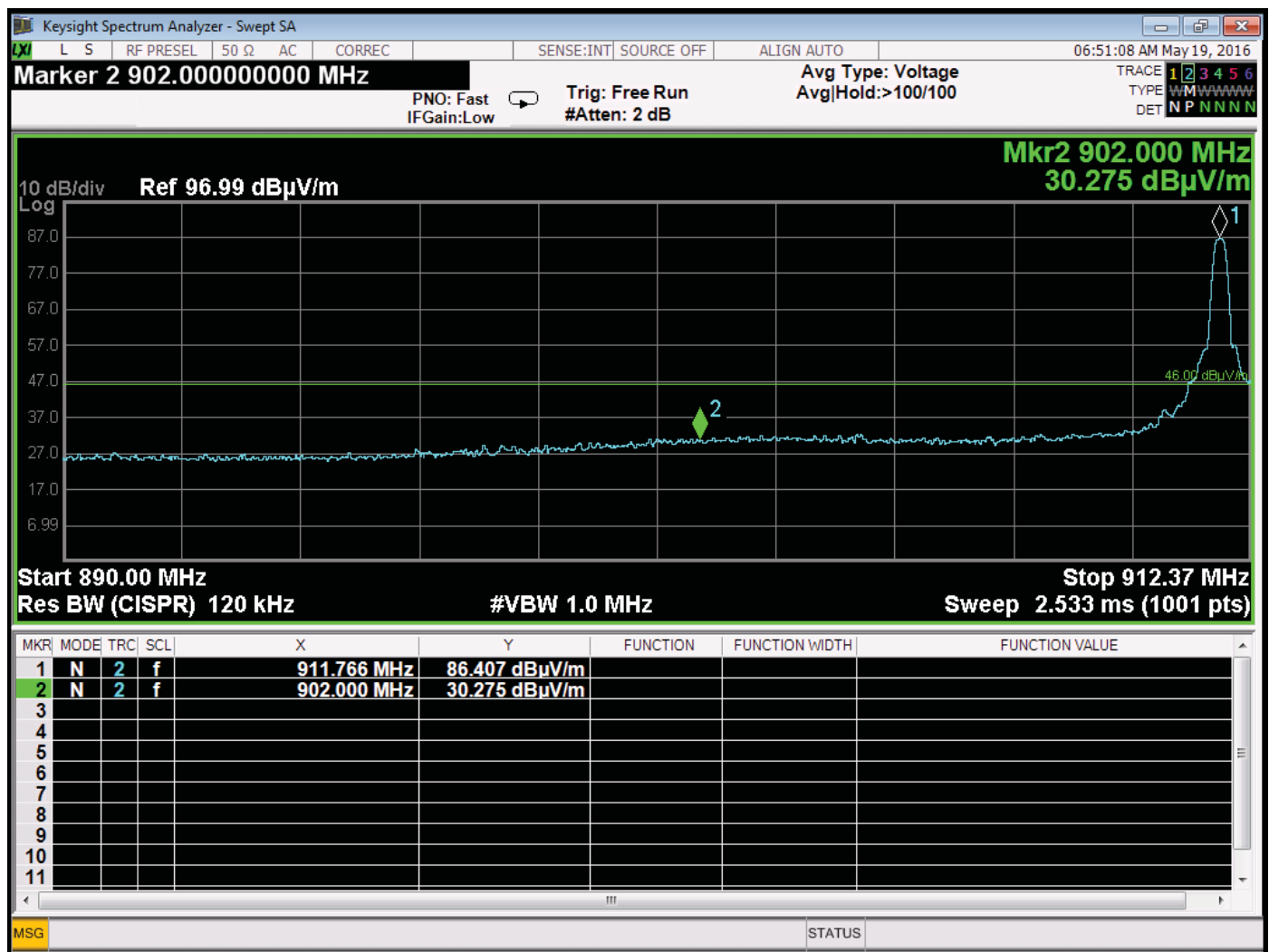
Band Edge – Vertical Polarization – High Channel – Model: SW-ATT-DB-B – Z-Axis Worst Case



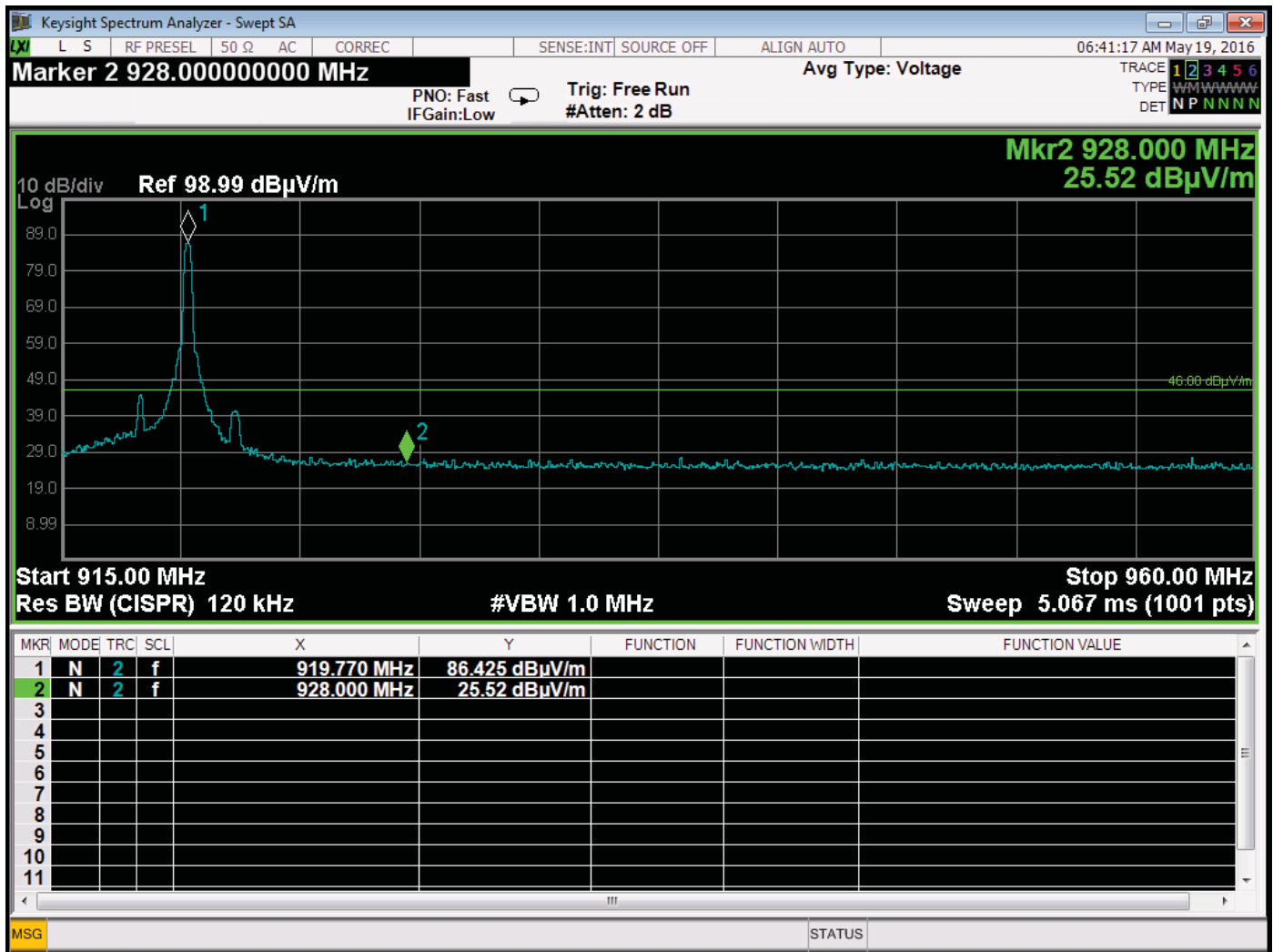
Band Edge – Horizontal Polarization – High Channel – Model: SW-ATT-DB-B – X-Axis Worst Case



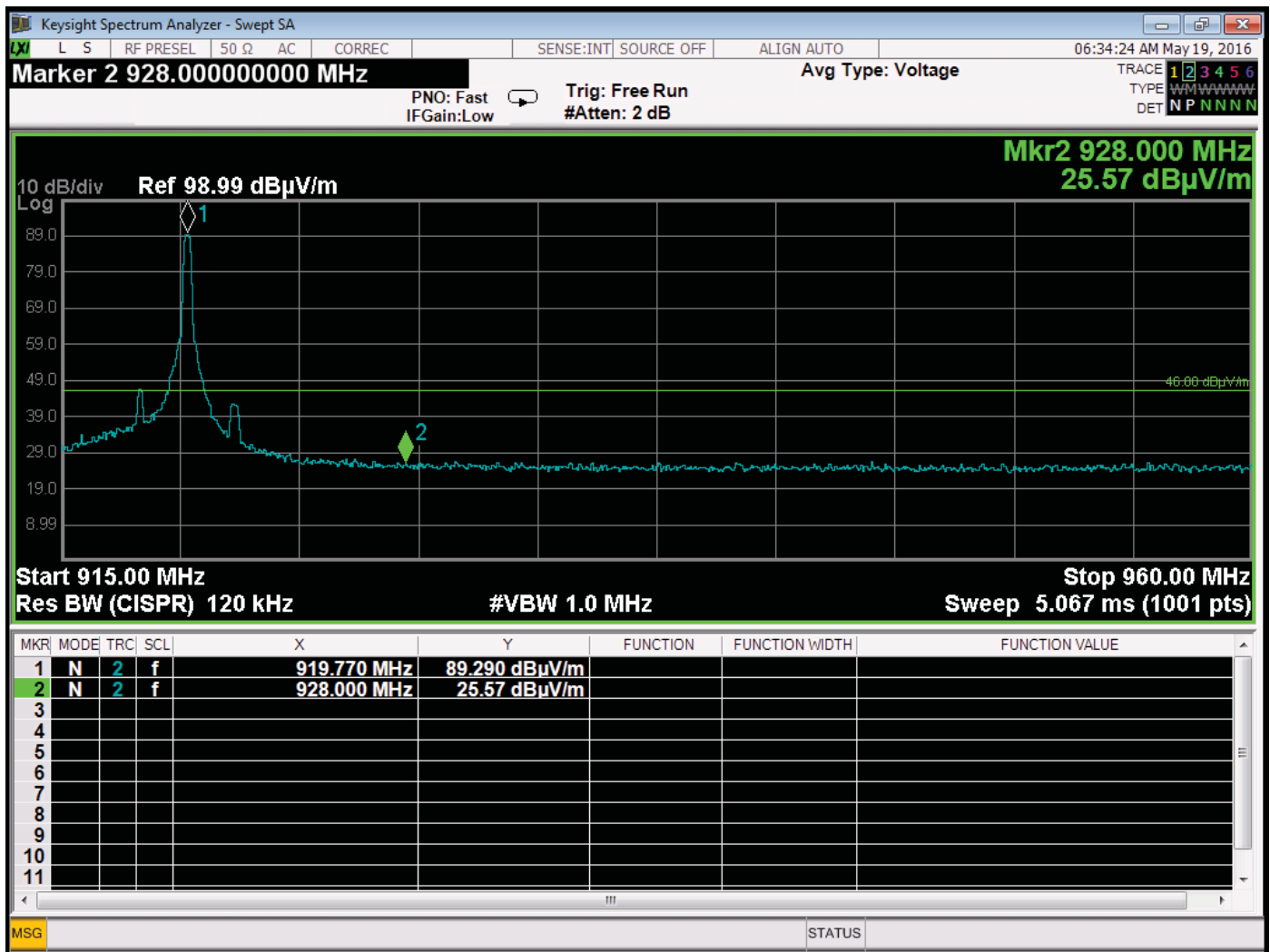
Band Edge – Vertical Polarization – Low Channel – Model: SW-ATT-DB-N – X-Axis Worst Case



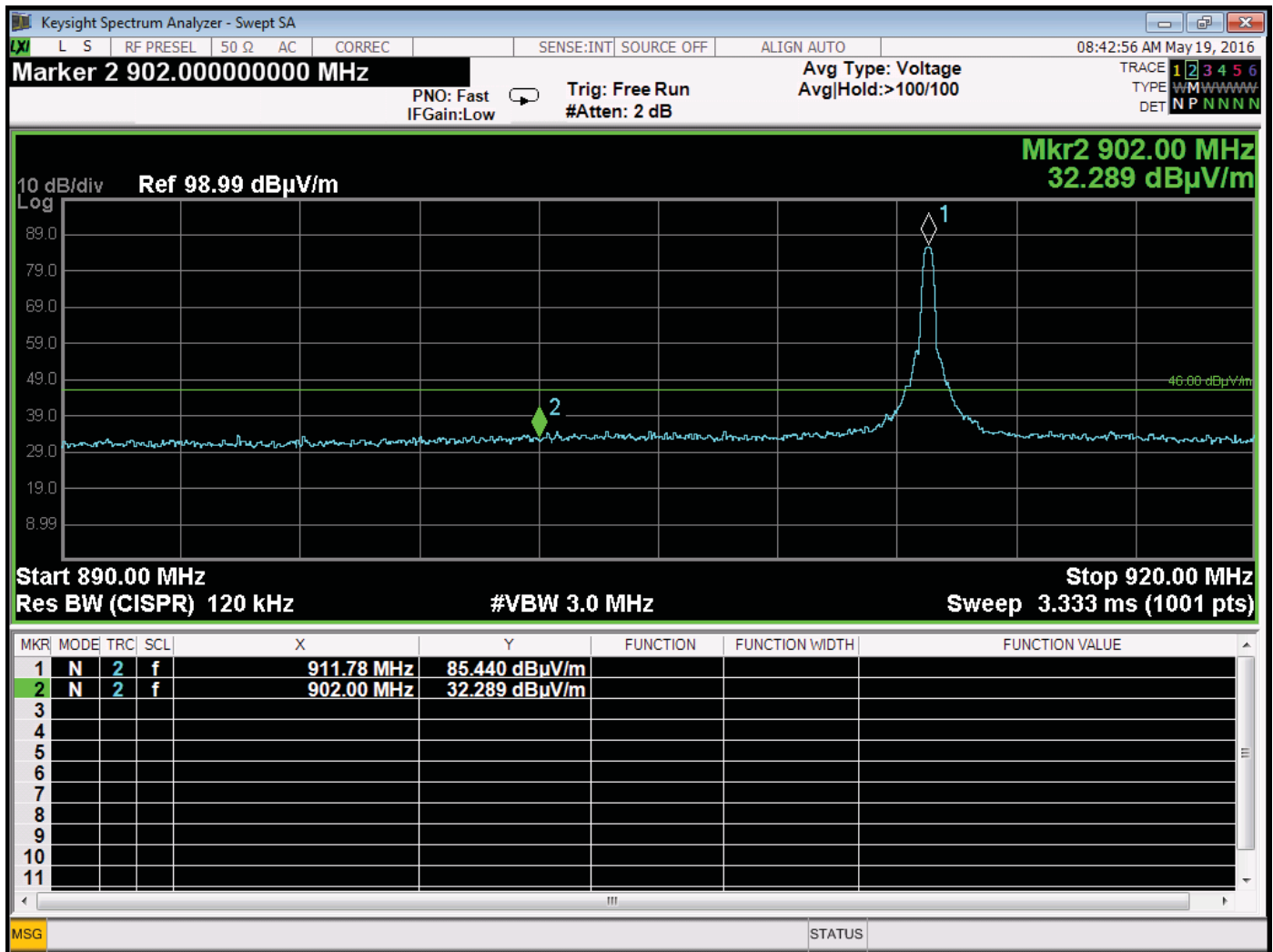
Band Edge – Horizontal Polarization – Low Channel – Model: SW-ATT-DB-N – X-Axis Worst Case



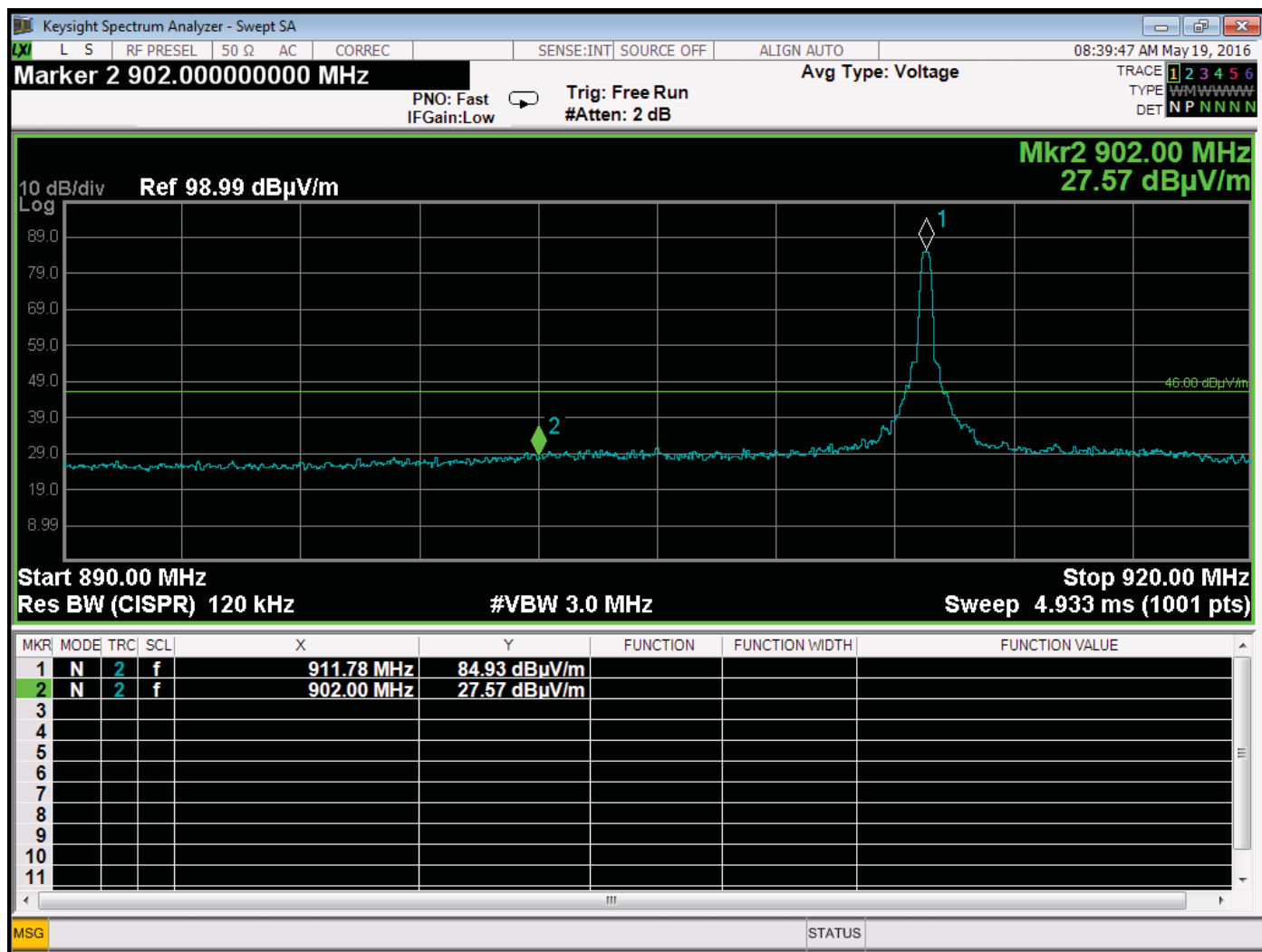
Band Edge – Vertical Polarization – High Channel – Model: SW-ATT-DB-N – X-Axis Worst Case



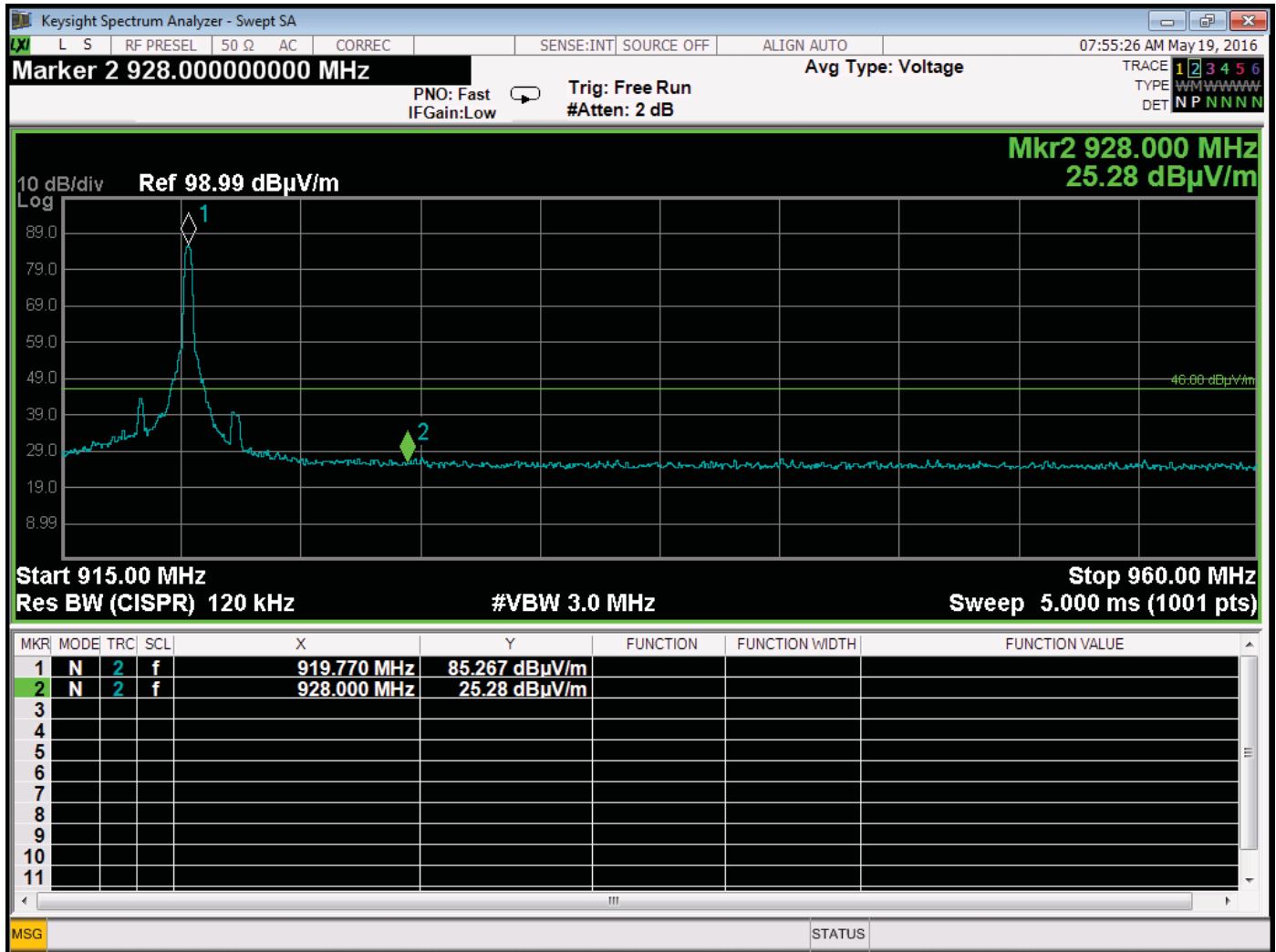
Band Edge – Horizontal Polarization – High Channel – Model: SW-ATT-DB-N – X-Axis Worst Case



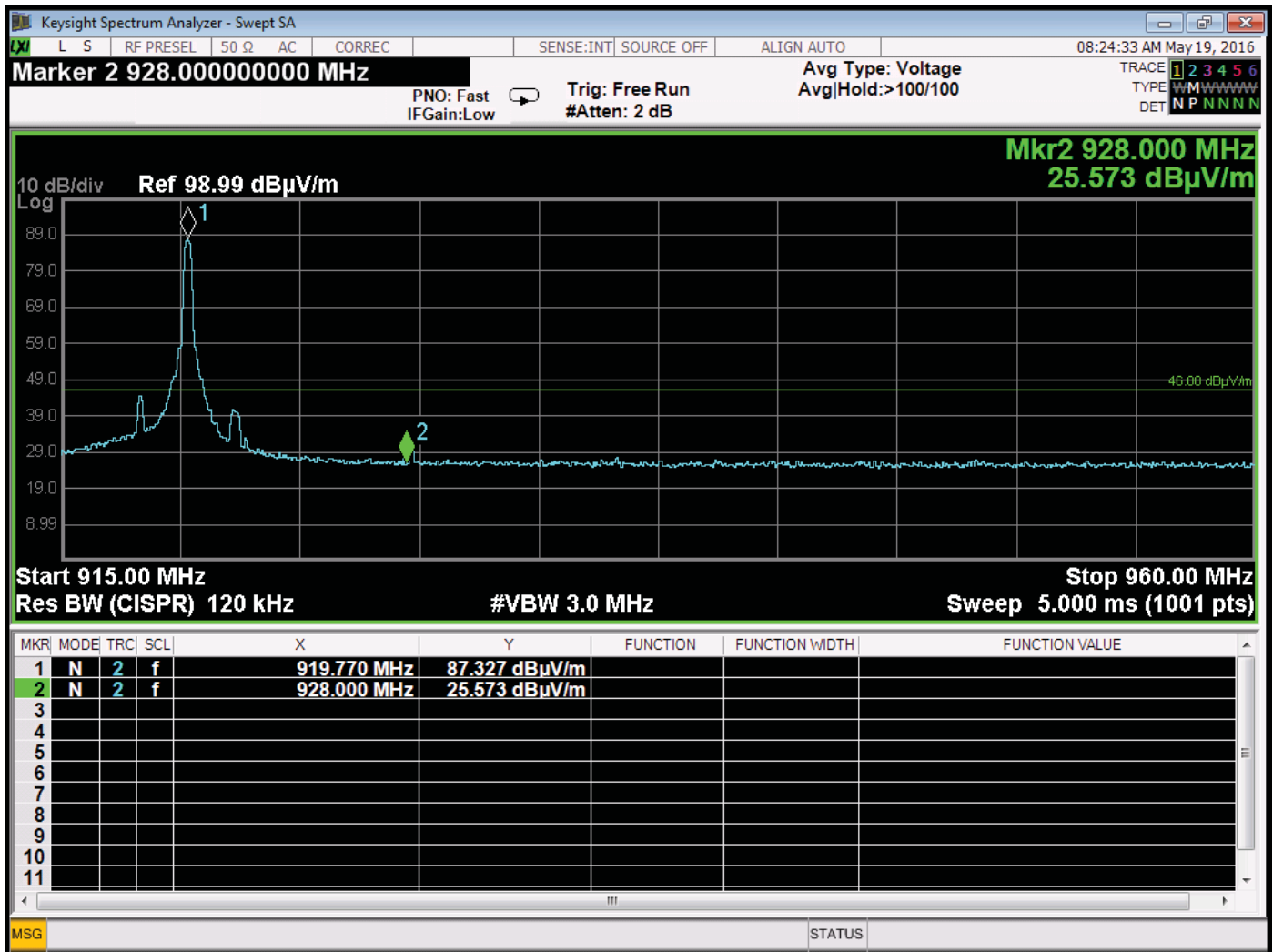
Band Edge – Vertical Polarization – Low Channel – Model: SW-ATT-DB-Z – X-Axis Worst Case



Band Edge – Horizontal Polarization – Low Channel – Model: SW-ATT-DB-Z – X-Axis Worst Case



Band Edge – Vertical Polarization – High Channel – Model: SW-ATT-DB-Z – Z-Axis Worst Case



Band Edge – Horizontal Polarization – High Channel – Model: SW-ATT-DB-Z – Z-Axis Worst Case