

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Code of Federal Regulations 47 Part 15 – Radio Frequency Devices

Subpart C – Intentional Radiators
Section 15.249
Operation within the bands 902 - 928 MHz,
2400 – 2483.5 MHz, 5725 – 5875 MHz,
and 24.0 – 24.5 GHz

&

Section 15.207

AC line conducted limits for intentional radiators

THE FOLLOWING MEETS THE ABOVE TEST SPECIFICATION

Formal Name: Specialty Chair Platform (SCP) 630 Wireless Basestation

Kind of Equipment: Transceiver

FCC ID Number: U399A408T2

Frequency Range: 2405 - 2480 MHz

Test Configuration: Connected to the SCP 630 Machine Control Board via a LIN network

Model Number(s): 9A40800T

Model(s) Tested: 9A40800T

Serial Number(s): Prototype

Date of Tests: May 28 & 29, 2013

Test Conducted For: Midmark Corporation

60 Vista Drive

Versailles, OH 45380, USA

NOTICE: "This test report relates only to the items tested and must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government". Please see the "Description of Test Sample" page listed inside of this report.

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Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

SIGNATURE PAGE

Tested By:

Craig Brandt Test Engineer

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Reviewed By:

William Stumpf OATS Manager

Approved By:

Brian Mattson General Manager



Company: Midmark Corporation Model Tested: 9A40800T

Model Tested: 9A408 Report Number: 19071 Project Number: 5915

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National Institute of Standards and Technology United States Department of Commerce

Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Certificate of Accreditation to ISO/IEC 17025:2005 ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009). is accredited by the National Voluntary Laboratory Accreditation Program for specific services,

D.L.S. Electronic Systems, Inc.

Wheeling, IL

NVLAP LAB CODE: 100276-0

listed on the Scope of Accreditation, for:

2012-10-01 through 2013-09-30



Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

1.0 Summary of Test Report

It was determined that the Midmark Corporation SCP 630 Wireless Basestation, Model 9A40800T, complies with the requirements of CFR 47 Part 15 Subpart C Section 15.249.

Subpart C Section 15.249 and 15.207 Applicable Technical Requirements Tested:

Section	Description	Procedure	Note	Compliant?
15.215(c)	20 dB Emission Bandwidth	ANSI C63.4-2009 & ANSI C63.10-2009	1	Yes
15.205	Band Edge Measurement Near a Restricted Band	ANSI C63.4-2009 & ANSI C63.10-2009	1	Yes
15.35(c)	Duty Cycle Correction for Pulsed operation	ANSI C63.4-2009 & ANSI C63.10-2009	1	Informative
15.249 & 15.205 / 15.209	Field Strength of Emissions Fundamental and Spurious	ANSI C63.4-2009 & ANSI C63.10-2009	1	Yes
15.207	AC Line Conducted Emissions	ANSI C63.4-2009	2	Yes

Note 1: Radiated emission measurement. Note 2: AC line conducted measurement.

2.0 Introduction

On May 28 & 29, 2013 the SCP 630 Wireless Basestation, Model 9A40800T, as provided from Midmark Corporation was tested to the requirements of CFR 47 Part 15 Subpart C Section 15.249. To meet these requirements, the procedures contained within this report were performed by personnel of D.L.S Electronic Systems, Inc.

3.0 Test Facilities

D.L.S. Electronic Systems, Inc. is a full service EMC/Safety Testing Laboratory accredited to ISO 17025. NVLAP Certificate and Scope can be viewed at http://www.dlsemc.com/certificate. Our facilities are registered with the FCC, Industry Canada, and VCCI.

Wisconsin Test Facility:

D.L.S. Electronic Systems, Inc. 166 S. Carter Street Genoa City, Wisconsin 53128

Wheeling Test Facility:
D.L.S. Electronic Systems, Inc.
1250 Peterson Drive
Wheeling H. 60000

Wheeling, IL 60090



Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

4.0 Description of Test Sample

Description:

Wireless basestation intended to communicate with a remote hand and/or foot pendant.

Type of Equipment / Frequency Range:

Transmitter/Receiver connected to the SCP 630 Machine Control Board via a LIN network / 2405 - 2480 MHz

Physical Dimensions of Equipment Under Test:

Length: 3 in x Width: 2 in x Height: 1 in (the size of the transceiver in the base of the Specialty Chair Platform)

Power Source:

120V / 60Hz

Internal Frequencies:

16 MHz

Transmit / Receive Frequencies Used For Test Purpose:

2405, 2445, 2480 MHz

Type of Modulation(s) / Antenna Type:

O-QPSK / Omni directional, stud mount, unity gain, MMCX connector - not user serviceable

Description of Circuit Board(s) / Part Number:

D	015 0006 00
Basestation	015-2086-00



Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

5.0 Test Equipment

A list of the equipment used can be found in the table below. All primary equipment was calibrated against known reference standards with a verified traceable path to NIST.

D.L.S. Wisconsin – Site 3

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Dates	Cal Due Dates
			1000 MHz		Dates	Dates
Receiver	Rohde & Schwarz	ESI 40	837808/005	20 Hz – 40 GHz	7-23-12	7-23-13
Antenna	EMCO	3104C	97014785	20 MHz – 200 MHz	8-22-12	8-22-14
Antenna	EMCO	3146	97024895	200 MHz – 1 GHz	9-6-12	9-6-14
		Additio	onal 1-18 GHz			
Preamp	Ciao	CA118-4010	101	1GHz-18GHz	2-26-13	2-26-14
Horn Antenna	EMCO	3115	9903-5731	1-18GHz	6-29-11	6-29-13
Filter- High- Pass	Q-Microwave	100462	1	4.2GHz-18GHz	5-18-13	5-18-14
		Additio	nal 18-26 GHz			
Preamp	Miteq	AMF-8B- 180265-40- 10P-H/S	438727	18GHz-26GHz	8-13-12	8-13-13
Horn Antenna	EMCO	3116	2549	18 – 40GHz	9-6-12	9-6-14
High Pass Filter	Planar	CL22500- 9000-CD-SS	PF1230/0728	15-40 GHz	8-13-12	8-13-13
		Additional A	C Line Condu	icted		
LISN	Solar	9252-50-R- 24-BNC	927106	9 kHz – 30 MHz	5-24-13	5-24-14
Filter- High- Pass	Solar	7930-120	885566	120 kHz – 30 MHz	1-7-13	1-7-14
Limiter	Electro-Metrics	EM-7600	707	9 kHz – 30 MHz	1-7-13	1-7-14



Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

6.0 Test Arrangements

Emissions Measurement Arrangement:

All radiated emission measurements were performed at D.L.S. Electronic Systems, Inc. and set up according to ANSI C63.4-2009 and ANSI C63.10-2009, unless otherwise noted. Description of procedures and measurements can be found in Appendix B – Measurement Data. See Appendix A for additional photos of the test set up.

Unless otherwise noted, the bandwidth of the measuring receiver / analyzer used during testing is shown below.

Frequency Range	Bandwidth (-6 dB)
10 to 150 kHz	200 Hz
150 kHz to 30 MHz	9 kHz
30 MHz to 1 GHz	120 kHz
Above 1 GHz	1 MHz

7.0 Test Conditions

Test Conditions recorded during test:

Temperature and Humidity:

70°F at 51% RH

Supply Voltage:

8 Volts DC supplied from host powered with 120 V 60 Hz

8.0 Modifications Made To EUT For Compliance

None noted at time of test.

9.0 Additional Descriptions

Continuous transmit at Low, Mid, and High channels



Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

10.0 Results

Measurements were performed in accordance with ANSI C63.4-2009 and ANSI C63.10-2009. Graphical and tabular data can be found in Appendix B at the end of this report.

11.0 Conclusion

The SCP 630 Wireless Basestation, Model 9A40800T, as provided from Midmark Corporation tested on May 28 & 29, 2013 **meets** the requirements of CFR 47 Part 15 Subpart C Section 15.249.



Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

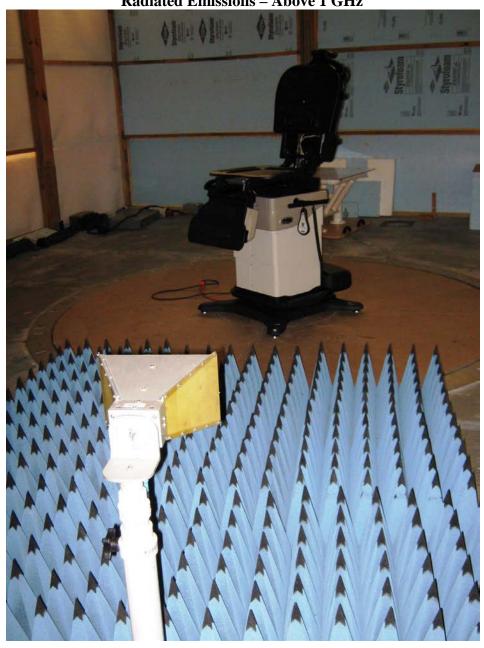
Appendix A – Test Photos

Photo Information and Test Setup:

Item 0: Specialty Chair Platform 630 Wireless Basestation, Model 9A40800T

Item 1: 1.5 meter, non-shielded AC power cord.

Radiated Emissions – Above 1 GHz





Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Appendix A

Radiated Emissions – 30-1000 MHz - front





Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Appendix A

Radiated Emissions – 30-1000 MHz - back





Appendix A

166 South Carter, Genoa City, WI 53128

Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

AC Line Conducted Emissions





Appendix B – Measurement Data

1.0 Emission Bandwidth – 20 dB

Rule Part:

Section 15.215 (c)

Test Procedure:

ANSI C63.4-2009 and ANSI C63.10-2009

Company:

Model Tested:

Report Number:

Project Number:

Midmark Corporation

9A40800T

19071

5915

Limit:

Informative

Results:

Compliant

20 dB bandwidth: 2.9 MHz

Sample Equation(s):

None

Notes:

This was a radiated emissions measurement. The maximum field strength of the emission was determined and the bandwidth was measured from the points at 20 dB down from the modulated carrier. The resolution bandwidth of the spectrum analyzer was set to a value within 1% to 5% of the emission bandwidth.



Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Appendix B

Test Date: 05-28-2013

Company: Midmark Corporation

EUT: SCP 630 Wireless Basestation model 9A40800T

Test: Emission Bandwidth (20 dB)

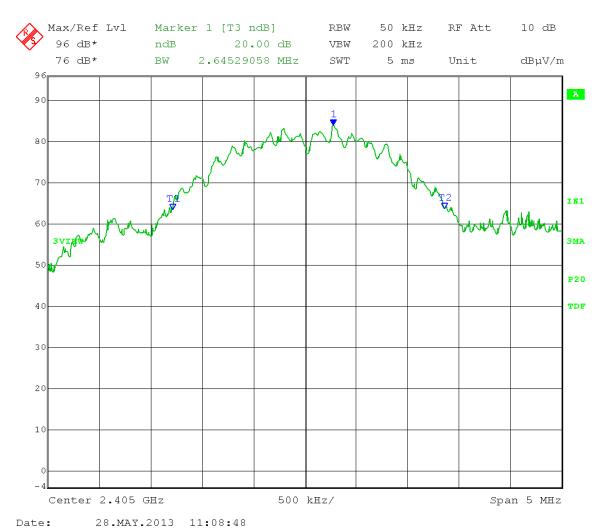
Operator: Craig B

Comment: RBW = 1-5% of emission bandwidth

 $VBW \ge 3 \times RBW$ Detector = Peak Sweep = auto couple

Comment: Low Channel: Frequency – 2.405 GHz

20 dB Bandwidth = 2.6 MHz



Dog 15



Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Test Date: 05-28-2013

Company: Midmark Corporation

EUT: SCP 630 Wireless Basestation model 9A40800T

Test: Emission Bandwidth (20 dB)

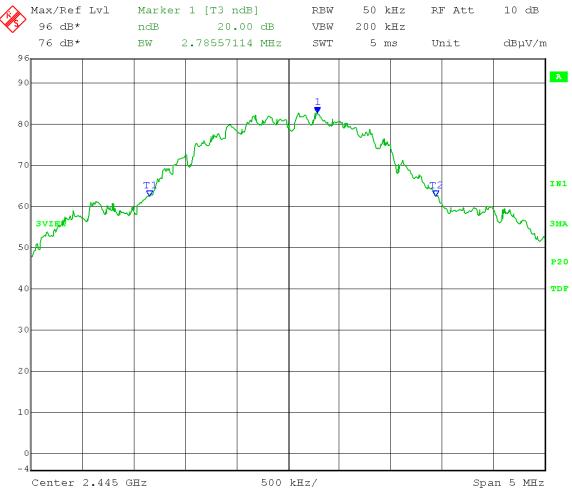
Operator: Craig B

Comment: RBW = 1-5% of emission bandwidth

 $VBW \ge 3 \times RBW$ Detector = Peak Sweep = auto couple

Comment: Mid Channel: Frequency – 2.445 GHz

20 dB Bandwidth = 2.8 MHz



Date: 28.MAY.2013 10:37:38



Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Test Date: 05-28-2013

Company: Midmark Corporation

EUT: SCP 630 Wireless Basestation model 9A40800T

Test: Emission Bandwidth (20 dB)

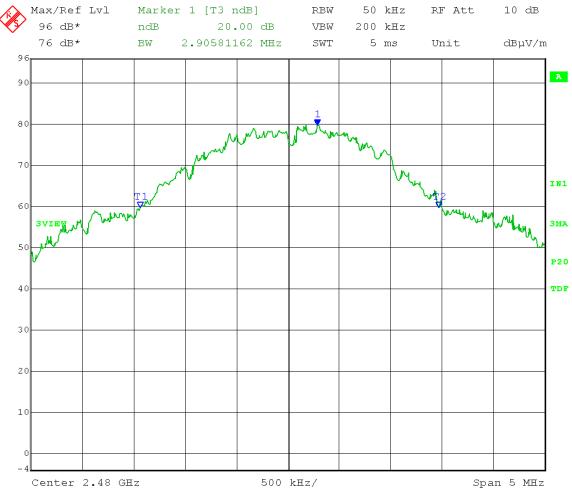
Operator: Craig B

Comment: RBW = 1-5% of emission bandwidth

 $VBW \ge 3 \times RBW$ Detector = Peak Sweep = auto couple

Comment: High Channel: Frequency – 2.475 GHz

20 dB Bandwidth = 2.9 MHz



Date: 28.MAY.2013 10:33:24



Sample Equation(s):

None

See below

Notes:

Company: Midmark Corporation Model Tested: 9A40800T

Report Number: 19071 Project Number: 5915

Appendix B

2.0	Band Edge Measurement
	Rule Part:
	15.205
	Test Procedure:
	ANSI C63.4-2009 and ANSI C63.10-2009
	Limit:
	15.205 / 15.209
	Results:
	Compliant



Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Appendix B

Test Methodology

Compliance for the lower band-edge was determined using the radiated marker-delta method as outlined in ANSI C63.10 section 6.9.3. The radiated field strength of the fundamental emission was first determined and then the marker-delta method was used to determine the field strength of the band-edge emissions.

Lower Band-Edge Marker Delta Method

(Vertical measured worst-case)

Frequency (MHz)	Antenna Polarity (H/V)	Fundamental Field Strength (dBµV/m)	Duty Cycle Correction (dB)	Delta- Marker (dB)	Band-Edge Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2405 (Peak)	V	92.9	N/A	-38.12	54.78	74	19.22
2405 (Avg)	V	92.9	-9.45	-38.12	45.33	54	8.67



Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Test Date: 05-28-2013

Company: Midmark Corporation

SCP 630 Wireless Basestation EUT:

Lower Band-Edge Radiated – Marker Delta Method Test:

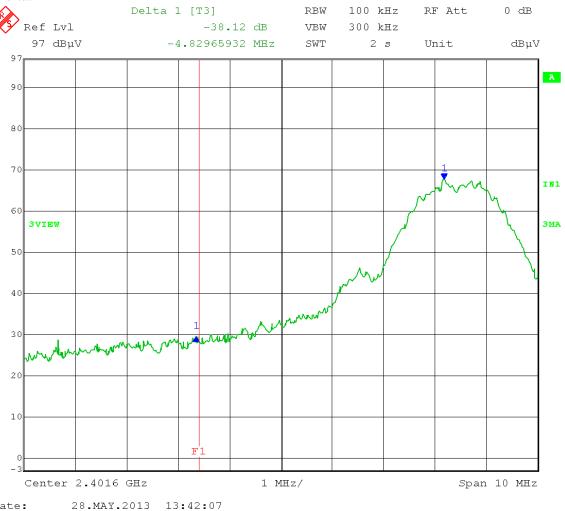
FCC Part 15.249 and FCC Part 15.205 Rule part:

Operator: Craig B

Low Channel: Frequency – 2.405 GHz Comment:

F1 = lower band edge = 2.4 GHz

Marker Delta:



Date:



Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Appendix B

Test Methodology

Compliance for the upper band-edge was determined using the radiated marker-delta method as outlined in ANSI C63.10 section 6.9.3. The radiated field strength of the fundamental emission was first determined and then the marker-delta method was used to determine the field strength of the band-edge emissions.

Upper Band-Edge Marker Delta Method (Vertical measured worst-case)

			Duty	Delta-	Band-Edge		
Frequency	Antenna Polarity	Fundamental Field	Cycle	Marker	Field	Limit	Margin
(MHz)	(H/V)	Strength (dBµV/m)	Correction	(dB)	Strength	$(dB\mu V/m)$	(dB)
	(11/1)		(dB)		$(dB\mu V/m)$		
2480 (Peak)	V	90.3	N/A	-35.04	55.26	74	18.74
2480 (Avg)	V	90.3	-9.45	-35.04	45.81	54	8.19



Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Test Date: 05-28-2013

Company: Midmark Corporation

EUT: SCP 630 Wireless Basestation

Test: Upper Band-Edge Radiated – Marker Delta Method

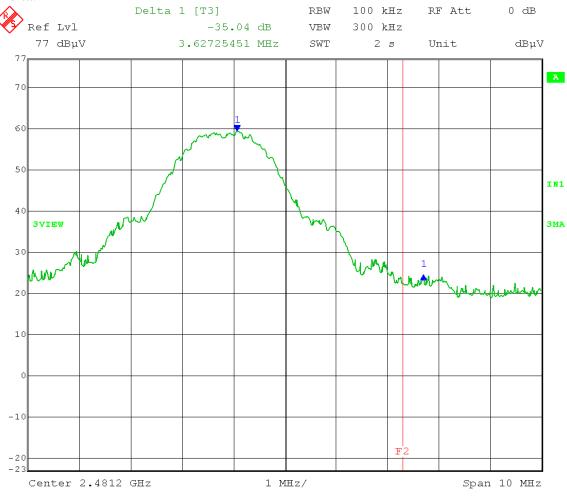
Rule part: FCC Part 15.249 and FCC Part 15.205

Operator: Craig B

Comment: High Channel: Frequency – 2.480 GHz

F2 = upper band edge = 2.4835 GHz

Marker Delta:



Date: 28.MAY.2013 13:58:13



Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Appendix B

3.0 **Duty Cycle Correction**

Rule Part:

15.35 (c)

Test Procedure:

ANSI C63.4-2009 and ANSI C63.10-2009

Limit:

Informative

Results:

Duty Cycle Correction: 9.45 dB

Sample Equation(s):

Total on Time = 33.663 ms during 100 ms Sweep $20 \log (33.663 / 100) = -9.4569$

Duty Cycle Correction Factor = 9.45 dB

Notes:

Duty Cycle Correction was measured and calculated with unit transmitting in a special test mode in which the duty cycle is greater than what would be used during normal operation.



Company: Midmark Corporation

Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Appendix B

Test Date: 05-28-2013

Company: Midmark Corporation

EUT: SCP 630 Wireless Basestation

Test: Duty Cycle – worst case (special test mode)

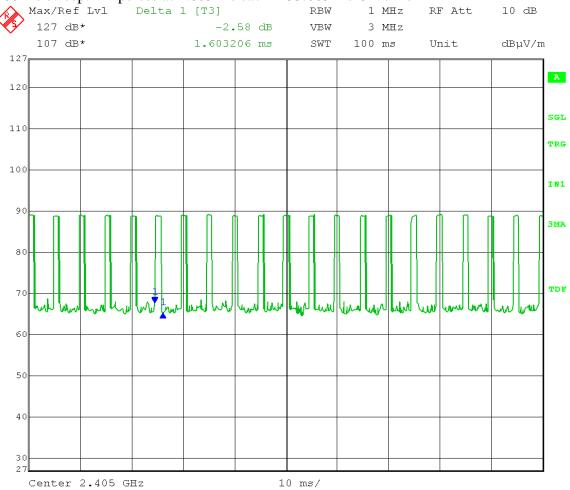
Operator: Craig B

Comment: Total on Time = 33.663 ms during 100 ms Sweep

 $20 \log (33.663 / 100) = -9.4569$

Duty Cycle Correction Factor = 9.45 dB

100 ms sweep: 21 pulses at 1.603 ms each = 33.663 ms ON time



Date: 28.MAY.2013 09:35:14



Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

Appendix B

4.0 Field Strength of Emissions – Fundamental and Spurious

Rule Part:

15.249 including 15.205

Test Procedure:

ANSI C63.4-2009 and ANSI C63.10-2009

Limit:

15.249 (a)

Results:

Compliant

Sample Equation(s):

Final Corrected = Total Level - Duty Cycle Correction Margin = Limit - Final Corrected Level = Total Level - System Loss - Antenna Factor

Notes:

Tested at a 3 meter distance 30 MHz to 26 GHz. All other emissions at least 20 dB below the limit. Compliance is shown by measurement with a peak detector and applying a duty cycle corrected value to the average limit (see above equations).



Company: Midmark Corporation

Model Tested: 9A40800T

Report Number: 19071 Project Number: 5915

Radiated Fundamental and Spurious Emissions – 30 MHz to 25 GHz Tested at a 3 meter distance

EUT: SCP 630 Wireless Basestation

Manufacturer: Midmark Corporation **Operating Condition:** 70 deg F; 51% R.H.

Test Site: Site 3 **Operator:** Craig B

Test Specification: FCC Part 15.249

Comment: Transmit frequency: Low channel: 2.405 GHz

Date: 05-28-2013

Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Duty Cycle Correction (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
2.405	Max Peak	Vert	62.69	28.70	1.5	0	92.9	114	21.1	1.00	225	Fundamental
2.405	Average	Vert	62.69	28.70	1.5	-9.45	83.4	94	10.6	1.00	225	Fundamental
2.405	Max Peak	Horz	60.88	28.70	1.5	0	91.1	114	22.9	1.50	135	Fundamental
2.405	Average	Horz	60.88	28.70	1.5	-9.45	81.6	94	12.4	1.50	135	Fundamental
4.810	Max Peak	Vert	59.31	33.14	-36.2	0	56.3	74	17.8	1.40	270	Restricted Band
4.810	Average	Vert	59.31	33.14	-36.2	-9.45	46.8	54	7.2	1.40	270	Restricted Band
4.810	Max Peak	Horz	58.78	33.14	-36.2	0	55.7	74	18.3	1.60	120	Restricted Band
4.810	Average	Horz	58.78	33.14	-36.2	-9.45	46.3	54	7.7	1.60	120	Restricted Band
7.215	Max Peak	Vert	54.59	36.10	-33.5	0	57.2	74	16.8	1.40	270	Harmonic
7.215	Average	Vert	54.59	36.10	-33.5	-9.45	47.7	54	6.3	1.40	270	Harmonic
7.215	Max Peak	Horz	51.67	36.10	-33.5	0	54.3	74	19.7	1.30	85	Harmonic
7.215	Average	Horz	51.67	36.10	-33.5	-9.45	44.8	54	9.2	1.30	85	Harmonic



Company: Midmark Corporation

Model Tested: 9A40800T

Report Number: 19071 Project Number: 5915

Radiated Fundamental and Spurious Emissions – 30 MHz to 25 GHz Tested at a 3 meter distance

EUT: SCP 630 Wireless Basestation

Manufacturer: Midmark Corporation **Operating Condition:** 70 deg F; 51% R.H.

Test Site: Site 3 **Operator:** Craig B

Test Specification: FCC Part 15.249

Comment: Transmit frequency: Mid channel: 2.445 GHz

Date: 05-28-2013

Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Duty Cycle Correction (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
2.445	Max Peak	Vert	63.18	28.80	1.5	0	93.5	114	20.5	1.50	180	Fundamental
2.445	Average	Vert	63.18	28.80	1.5	-9.45	84.0	94	10.0	1.50	180	Fundamental
2.445	Max Peak	Horz	57.71	28.80	1.5	0	88.0	114	26.0	1.50	135	Fundamental
2.445	Average	Horz	57.71	28.80	1.5	-9.45	78.6	94	15.4	1.50	135	Fundamental
4.890	Max Peak	Vert	56.94	33.28	-36.2	0	54.0	74	20.0	1.50	290	Restricted Band
4.890	Average	Vert	56.94	33.28	-36.2	-9.45	44.6	54	9.4	1.50	290	Restricted Band
4.890	Max Peak	Horz	54.05	33.28	-36.2	0	51.1	74	22.9	1.60	125	Restricted Band
4.890	Average	Horz	54.05	33.28	-36.2	-9.45	41.7	54	12.3	1.60	125	Restricted Band
7.335	Max Peak	Vert	52.69	36.65	-33.0	0	56.3	74	17.7	1.30	270	Restricted Band
7.335	Average	Vert	52.69	36.65	-33.0	-9.45	46.9	54	7.1	1.30	270	Restricted Band
7.335	Max Peak	Horz	50.79	36.65	-33.0	0	54.4	74	19.6	1.60	290	Restricted Band
7.335	Average	Horz	50.79	36.65	-33.0	-9.45	45.0	54	9.0	1.60	290	Restricted Band



Company: Midmark Corporation

Model Tested: 9A40800T

Report Number: 19071 Project Number: 5915

Radiated Fundamental and Spurious Emissions – 30 MHz to 25 GHz Tested at a 3 meter distance

EUT: SCP 630 Wireless Basestation

Manufacturer:Midmark CorporationOperating Condition:70 deg F; 51% R.H.

Test Site: Site 3 **Operator:** Craig B

Test Specification: FCC Part 15.249

Comment: Transmit frequency: High channel: 2.480 GHz

Date: 05-28-2013

Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Duty Cycle Correction (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
2.480	Max Peak	Vert	59.96	28.88	1.5	0	90.3	114	23.7	1.50	180	Fundamental
2.480	Average	Vert	59.96	28.88	1.5	-9.45	80.9	94	13.1	1.50	180	Fundamental
2.480	Max Peak	Horz	56.20	28.88	1.5	0	86.6	114	27.4	1.50	135	Fundamental
2.480	Average	Horz	56.20	28.88	1.5	-9.45	77.1	94	16.9	1.50	135	Fundamental
4.960	Max Peak	Vert	55.85	33.44	-36.1	0	53.2	74	20.8	1.40	280	Restricted Band
4.960	Average	Vert	55.85	33.44	-36.1	-9.45	43.7	54	10.3	1.40	280	Restricted Band
4.960	Max Peak	Horz	54.15	33.44	-36.1	0	51.5	74	22.5	1.40	250	Restricted Band
4.960	Average	Horz	54.15	33.44	-36.1	-9.45	42.0	54	12.0	1.40	250	Restricted Band
7.440	Max Peak	Vert	48.90	36.73	-32.4	0	53.2	74	20.8	1.50	225	Restricted Band
7.440	Average	Vert	48.90	36.73	-32.4	-9.45	43.8	54	10.2	1.50	225	Restricted Band
7.440	Max Peak	Horz	49.32	36.73	-32.4	0	53.7	74	20.4	1.20	270	Restricted Band
7.440	Average	Horz	49.32	36.73	-32.4	-9.45	44.2	54	9.8	1.20	270	Restricted Band



Company: Midmark Corporation Model Tested: 9A40800T

Report Number: 19071 Project Number: 5915

Appendix B

5.0 AC Line Conducted Emissions

Rule Part:		
15.207		
Test Procedure:		
ANSI C63.4-2009		
~		
Limit:		
15.207 (a)		
Results:		
Compliant		
Notes:		

The EUT was set to transmit continuously at its maximum power on the middle channel of the operating band.

FCC Part 15.207

Voltage Mains Test

EUT: SCP 630 Wireless Basestation model 9A40800T

Manufacturer: Midmark Corporation Operating Condition: 72 deg. F, 60% R.H.

Test Site: DLS OATS 3
Operator: Craig B

Test Specification: 120 V 60 Hz; Line Comment: Continuous Transmit
Date: 05-29-2013

SCAN TABLE: "Line Cond.Site3Final"

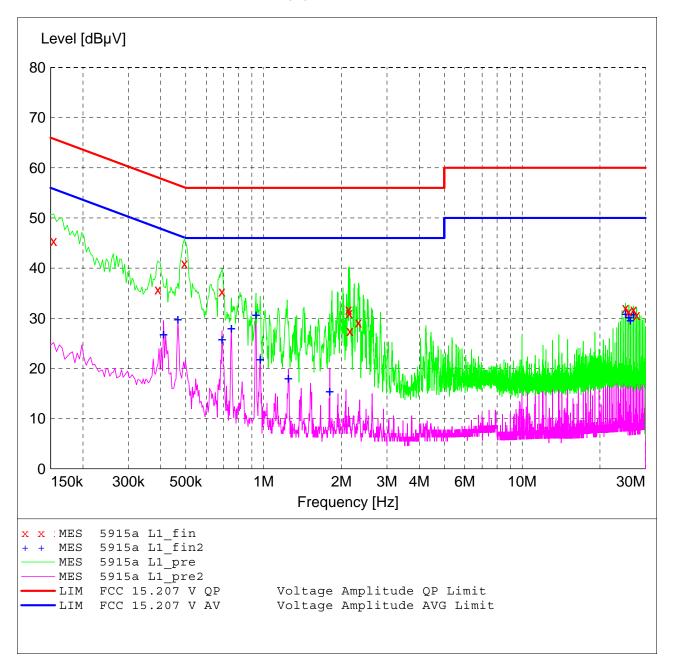
Short Description: Line Conducted Emissions

Start Stop Step Detector Meas. IF Transducer

LISN DLS#126

Frequency Frequency Width Time Bandw. 150.0 kHz 30.0 MHz 4.0 kHz QuasiPeak 5.0 s 9 kHz

CISPR AV



MEASUREMENT RESULT: "5915a L1_fin"

5/29/2013 1	:39PM				
Frequency	Level	Transd	Limit	Margin	Detector
MHz	dΒμV	dВ	dΒμV	dВ	
0.154000	45.40	14.2	66	20.4	QP
0.390000	35.80	11.9	58	22.3	QP
0.494000	41.00	11.6	56	15.1	QP
0.690000	35.40	11.2	56	20.6	QP
2.130000	31.80	11.0	56	24.2	QP
2.146000	31.10	11.0	56	24.9	QP
2.158000	27.50	11.0	56	28.5	QP
2.326000	29.20	11.0	56	26.8	QP
25.110000	32.10	12.2	60	27.9	QP
25.858000	31.40	12.3	60	28.6	QP
26.982000	31.80	12.3	60	28.2	QP
27.734000	30.70	12.4	60	29.3	QP

MEASUREMENT RESULT: "5915a L1_fin2"

5/29/2013 1:3	9PM				
Frequency	Level	Transd	Limit	Margin	Detector
MHz	dΒμV	dB	dΒμV	dB	
0.410000	26.90	11.8	48	20.7	CAV
0.466000	29.90	11.6	47	16.7	CAV
0.690000	25.90	11.2	46	20.1	CAV
0.750000	28.10	11.1	46	17.9	CAV
0.934000	30.80	11.1	46	15.2	CAV
0.970000	21.90	11.0	46	24.1	CAV
1.246000	18.10	11.0	46	27.9	CAV
1.802000	15.50	11.0	46	30.5	CAV
25.110000	31.00	12.2	50	19.0	CAV
25.858000	30.30	12.3	50	19.7	CAV
26.234000	29.70	12.3	50	20.3	CAV
26.982000	30.90	12.3	50	19.1	CAV

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Voltage Mains Test

EUT: SCP 630 Wireless Basestation model 9A40800T

Manufacturer: Midmark Corporation Operating Condition: 72 deg. F, 60% R.H.

Test Site: DLS OATS 3
Operator: Craig B

Test Specification: 120 V 60 Hz; Line 2 Comment: Continuous Transmit Date: 05-29-2013

SCAN TABLE: "Line Cond.Site3Final"

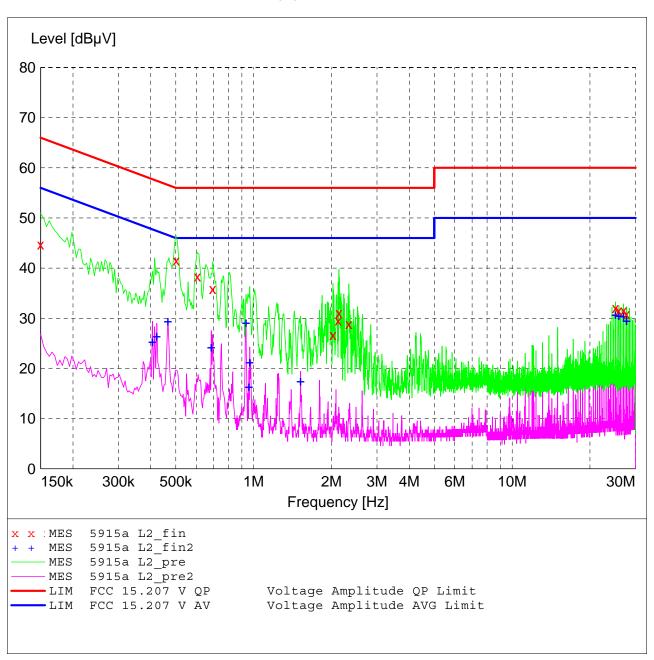
Short Description: Line Conducted Emissions

Start Stop Step Detector Meas. IF Transducer

LISN DLS#126

Frequency Frequency Width Time Bandw. 150.0 kHz 30.0 MHz 4.0 kHz QuasiPeak 5.0 s 9 kHz

CISPR AV



MEASUREMENT RESULT: "5915a L2_fin"

5/29/2013 1:4	5PM				
Frequency	Level	Transd	Limit	Margin	Detector
MHz	dΒμV	dВ	dΒμV	dВ	
0.150000	44.70	14.3	66	21.3	QP
0.502000	41.50	11.5	56	14.5	QP
0.606000	38.30	11.3	56	17.7	QP
0.694000	35.90	11.2	56	20.1	QP
2.026000	26.70	11.0	56	29.3	QP
2.126000	29.60	11.0	56	26.4	QP
2.138000	31.10	11.0	56	24.9	QP
2.334000	28.90	11.0	56	27.1	QP
25.106000	32.10	12.2	60	27.9	QP
25.858000	31.60	12.3	60	28.4	QP
26.982000	31.60	12.3	60	28.4	QP
27.730000	30.90	12.4	60	29.1	QP

MEASUREMENT RESULT: "5915a L2_fin2"

5/29/2013 1:4	5PM				
Frequency	Level	Transd	Limit	Margin	Detector
MHz	dΒμV	dB	dΒμV	dB	
0.406000	25.40	11.8	48	22.3	CAV
0.422000	26.50	11.8	47	20.9	CAV
0.466000	29.50	11.6	47	17.1	CAV
0.686000	24.30	11.2	46	21.7	CAV
0.934000	29.20	11.1	46	16.8	CAV
0.958000	16.40	11.0	46	29.6	CAV
0.966000	21.30	11.0	46	24.7	CAV
1.518000	17.50	11.0	46	28.5	CAV
25.106000	30.80	12.2	50	19.2	CAV
25.858000	30.60	12.3	50	19.4	CAV
26.982000	30.50	12.3	50	19.5	CAV
27.730000	29.60	12.4	50	20.4	CAV



Model Tested: 9A40800T Report Number: 19071 Project Number: 5915

END OF REPORT

Revision #	Date	Comments	By
1.0	05-31-2013	Preliminary Release	СВ
1.1	06-13-2013	Assembled with AC Line Conducted data	JS
1.2	06-17-2013	Added antenna note on page 6	JS
1.3	06-20-2013	Model number verified as 9A40800T	JS