

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P312166

Luminaire Tested: **14FCZ2-25-UNV-L83050-CA08-W2A-U-3500K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P312166
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-25-UNV-L83050-CA08-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 3500K TUNABLE CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2344.0 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

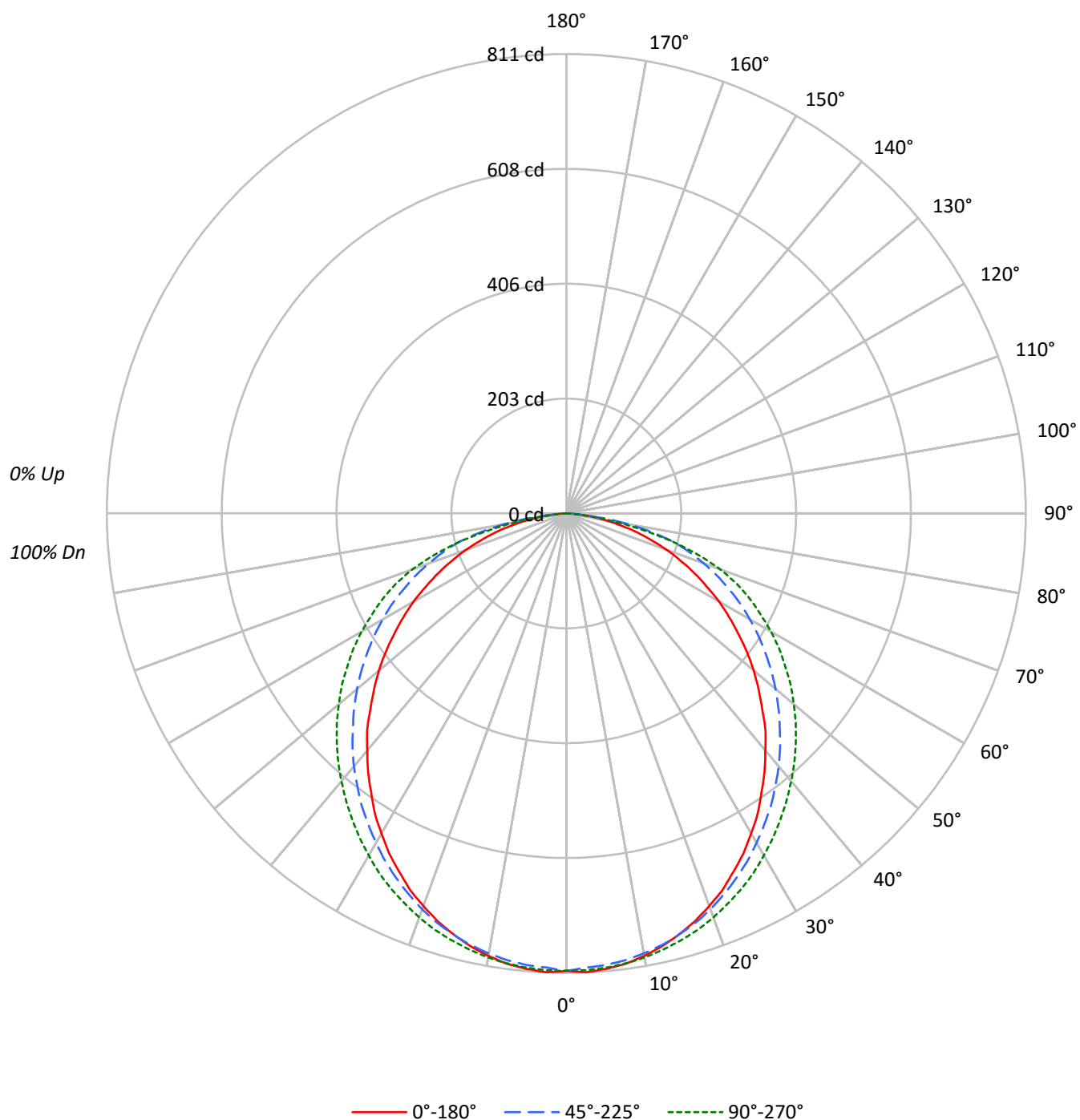
Input Watts (W): 19.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2173	2173	2173
5°	2180	2162	2174
10°	2167	2155	2175
15°	2143	2145	2174
20°	2112	2130	2173
25°	2072	2109	2171
30°	2027	2087	2166
35°	1973	2069	2165
40°	1920	2049	2168
45°	1862	2027	2180
50°	1807	2017	2195
55°	1739	2011	2214
60°	1676	2014	2245
65°	1591	2020	2280
70°	1493	2035	2279
75°	1353	2054	2060
80°	1110	1774	1466
85°	824	840	340



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.4	3.3
10°-20°	218.3	9.3
20°-30°	328.8	14.0
30°-40°	394.6	16.8
40°-50°	411.3	17.5
50°-60°	380.7	16.2
60°-70°	307.6	13.1
70°-80°	187.6	8.0
80°-90°	38.7	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	623.5	26.6
0°-40°	1018.1	43.4
0°-60°	1810.1	77.2
0°-90°	2344.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2344.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	808	808	808	808	808	
5°	807	805	800	806	805	77
15°	769	770	770	780	780	217
25°	698	702	710	728	731	322
35°	600	610	630	653	659	376
45°	489	504	533	562	573	378
55°	371	390	429	462	472	332
65°	250	274	317	349	358	247
75°	130	159	198	201	198	137
85°	27	40	27	15	11	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	807.5	807.5	807.5	807.5	807.5
2.5°	810.7	808.0	802.3	808.0	807.0
5°	807.0	804.9	800.2	805.9	804.9
7.5°	801.8	799.7	795.5	802.3	801.2
10°	792.9	791.8	788.7	796.5	796.0
12.5°	782.4	781.9	780.3	789.2	788.7
15°	769.4	769.9	769.9	780.3	780.3
17.5°	754.7	755.8	757.9	769.4	770.9
20°	737.5	739.6	743.8	756.8	758.9
22.5°	719.7	721.3	727.5	743.2	745.3
25°	697.8	701.9	710.3	728.1	731.2
27.5°	676.8	680.5	692.0	710.3	715.5
30°	652.3	658.0	671.6	691.5	697.2
32.5°	628.8	635.0	650.7	673.7	678.9
35°	600.5	609.9	629.8	652.8	659.1
37.5°	574.9	583.8	606.3	631.4	638.7
40°	546.7	557.7	583.3	609.9	617.3
42.5°	520.6	531.0	558.7	585.9	595.8
45°	489.2	503.8	532.6	562.4	572.8
47.5°	460.5	475.1	508.0	539.9	549.3
50°	431.7	447.4	481.9	514.8	524.2
52.5°	401.9	418.7	455.8	488.7	499.7
55°	370.6	389.9	428.6	462.0	472.0
57.5°	340.8	360.6	401.9	435.9	445.8
60°	311.5	331.9	374.2	406.6	417.1
62.5°	279.1	303.1	347.0	378.9	386.8
65°	249.8	274.4	317.3	349.1	358.0
67.5°	219.0	245.7	288.5	317.8	326.1
70°	189.7	217.4	258.7	285.9	289.6
72.5°	158.4	186.6	228.4	245.7	245.7
75°	130.1	158.9	197.6	200.7	198.1
77.5°	99.3	131.2	156.3	150.0	143.7
80°	71.6	103.0	114.5	103.0	94.6
82.5°	48.1	74.7	69.0	54.9	48.6
85°	26.7	39.7	27.2	15.2	11.0
87.5°	9.9	8.9	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)