

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: P307115

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-CA08-W2A-U-2700K**

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: P307115
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-35-UNV-L82765-HRP-CA08-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 2700K 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: 2345.0 lumens
Efficiency: N/A
Efficacy: 79.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

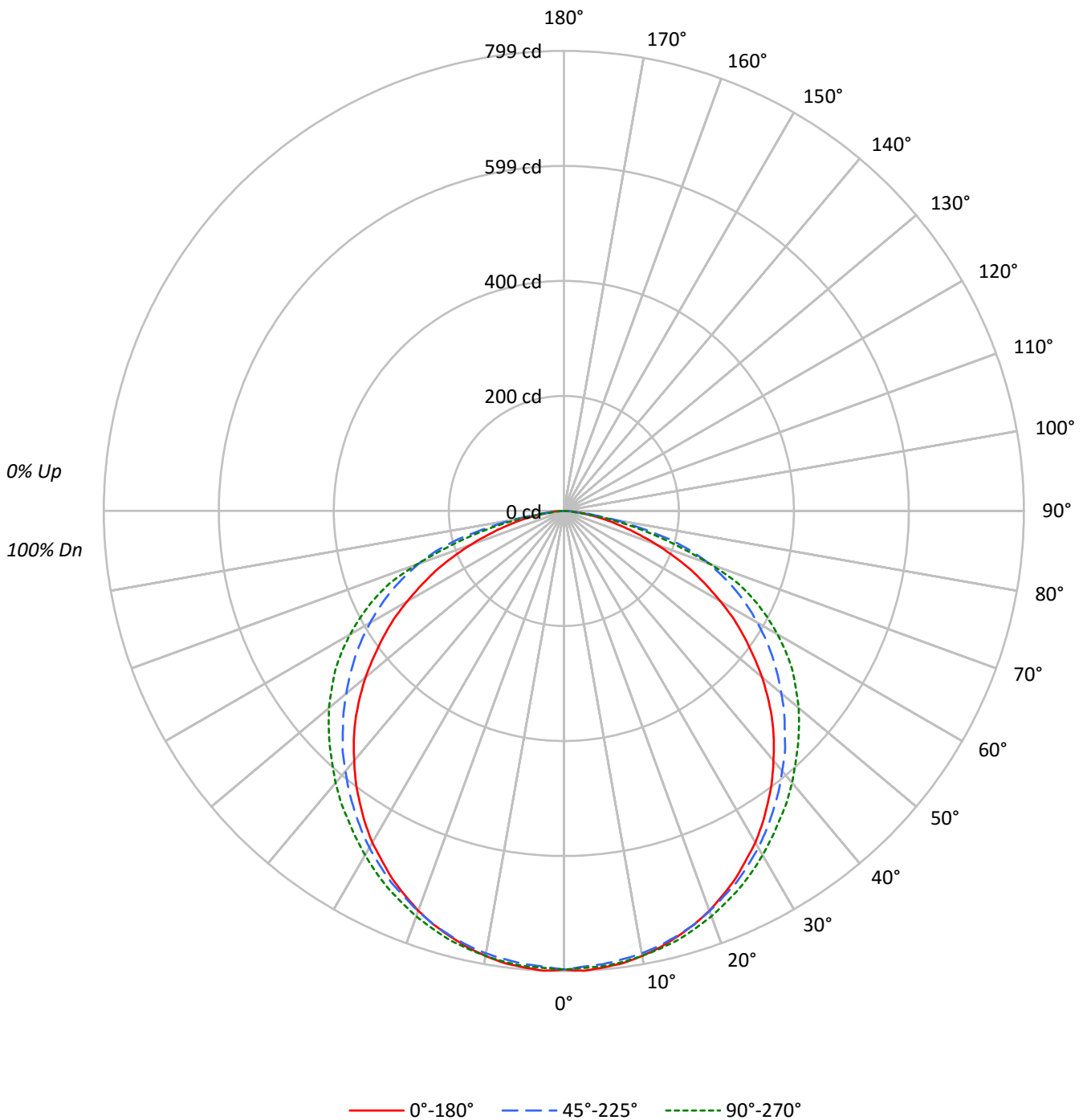
Input Watts (W): 29.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2143	2143	2143
5°	2149	2133	2143
10°	2144	2132	2144
15°	2130	2126	2147
20°	2116	2118	2145
25°	2093	2110	2146
30°	2067	2099	2145
35°	2030	2083	2149
40°	1989	2072	2166
45°	1947	2065	2189
50°	1880	2065	2229
55°	1799	2076	2276
60°	1690	2091	2306
65°	1559	2113	2320
70°	1357	2117	2135
75°	1120	1970	1725
80°	880	1416	1155
85°	682	546	272



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.4	3.2
10°-20°	216.3	9.2
20°-30°	328.5	14.0
30°-40°	398.1	17.0
40°-50°	419.5	17.9
50°-60°	391.6	16.7
60°-70°	313.0	13.3
70°-80°	172.2	7.3
80°-90°	30.4	1.3
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°	620.3	26.5
0°-40°	1018.3	43.4
0°-60°	1829.4	78.0
0°-90°	2345.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2345.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	796	796	796	796	796	
5°	796	793	790	795	793	76
15°	765	765	763	771	771	216
25°	705	706	711	721	723	325
35°	618	624	634	650	654	387
45°	512	521	543	567	575	394
55°	383	403	442	473	485	342
65°	245	276	332	359	364	241
75°	108	154	190	170	166	116
85°	22	28	18	11	9	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	796.4	796.4	796.4	796.4	796.4
2.5°	799.3	797.1	791.9	796.4	794.2
5°	795.6	793.4	789.7	794.9	793.4
7.5°	791.9	789.0	785.3	791.2	789.7
10°	784.6	782.4	780.2	785.3	784.6
12.5°	775.7	775.0	772.8	778.7	777.9
15°	764.7	764.7	763.2	770.6	770.6
17.5°	752.9	752.1	752.9	761.0	760.2
20°	738.9	738.9	739.6	749.2	749.2
22.5°	721.9	722.6	724.8	736.6	735.9
25°	704.9	706.4	710.8	721.2	722.6
27.5°	684.3	688.0	693.1	705.7	707.2
30°	665.1	667.3	675.4	687.2	690.2
32.5°	642.3	646.7	655.5	668.8	672.5
35°	617.9	623.8	634.1	650.4	654.1
37.5°	593.6	598.8	612.8	629.7	636.4
40°	566.3	575.2	589.9	609.1	616.5
42.5°	539.8	548.6	568.5	588.4	595.1
45°	511.7	521.3	542.7	567.0	575.2
47.5°	480.8	491.8	519.1	544.9	553.8
50°	449.1	463.1	493.3	522.1	532.4
52.5°	415.9	433.6	468.2	498.5	508.1
55°	383.4	402.6	442.4	473.4	485.2
57.5°	350.3	370.9	415.9	451.3	457.9
60°	314.1	339.2	388.6	419.6	428.4
62.5°	278.7	307.5	360.6	390.1	397.4
65°	244.8	275.8	331.8	359.1	364.3
67.5°	207.9	244.8	300.1	325.2	326.7
70°	172.5	215.3	269.1	280.9	271.4
72.5°	137.9	183.6	233.0	223.4	215.3
75°	107.7	154.1	189.5	170.3	165.9
77.5°	79.6	126.1	135.7	125.4	117.2
80°	56.8	99.5	91.4	78.2	74.5
82.5°	39.1	62.7	50.1	39.1	33.9
85°	22.1	28.0	17.7	11.1	8.8
87.5°	9.6	6.6	3.7	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)