

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: P307433

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CA08-W2A-U-4000K**

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: P307433
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-39-UNV-L82765-RDP-CA08-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 4000K 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: 2381.0 lumens
Efficiency: N/A
Efficacy: 70.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

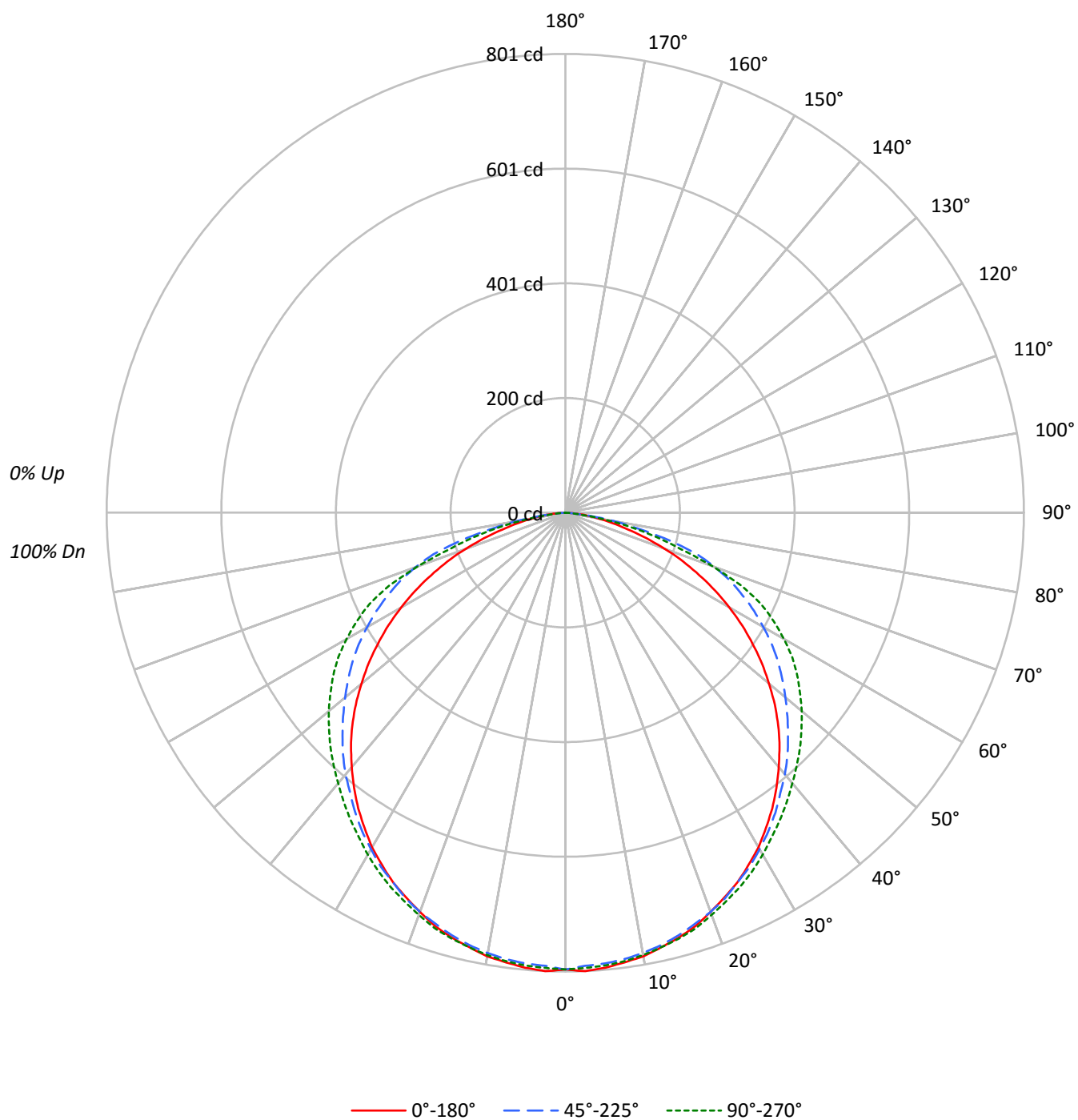
Input Watts (W): 33.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2146	2146	2146
5°	2154	2134	2144
10°	2149	2133	2143
15°	2139	2128	2144
20°	2124	2124	2140
25°	2114	2114	2141
30°	2097	2108	2143
35°	2070	2101	2149
40°	2037	2096	2168
45°	2002	2094	2207
50°	1945	2101	2257
55°	1875	2128	2320
60°	1781	2151	2371
65°	1645	2178	2403
70°	1463	2194	2150
75°	1179	1971	1720
80°	922	1382	1124
85°	630	401	287



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.5	3.2
10°-20°	216.6	9.1
20°-30°	329.7	13.8
30°-40°	401.6	16.9
40°-50°	426.1	17.9
50°-60°	402.2	16.9
60°-70°	324.7	13.6
70°-80°	176.1	7.4
80°-90°	28.5	1.2
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°	621.8	26.1
0°-40°	1023.4	43.0
0°-60°	1851.7	77.8
0°-90°	2381.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2381.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	798	798	798	798	798	
5°	798	796	790	796	794	76
15°	768	766	764	770	770	217
25°	712	710	712	719	721	328
35°	630	634	640	652	654	394
45°	526	534	550	571	580	405
55°	400	416	454	483	494	357
65°	258	290	342	370	377	256
75°	113	165	190	171	165	124
85°	20	22	13	11	9	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	797.5	797.5	797.5	797.5	797.5
2.5°	801.2	797.5	791.9	797.5	795.6
5°	797.5	795.6	790.0	795.6	793.7
7.5°	791.9	791.9	786.3	790.0	790.0
10°	786.3	784.4	780.7	786.3	784.4
12.5°	777.0	775.2	773.3	778.9	777.0
15°	767.7	765.9	764.0	769.6	769.6
17.5°	756.6	754.7	752.8	760.3	760.3
20°	741.7	741.7	741.7	749.1	747.3
22.5°	726.8	726.8	728.7	736.1	734.3
25°	711.9	710.1	711.9	719.4	721.2
27.5°	693.4	695.2	697.1	704.5	706.4
30°	674.8	676.6	678.5	687.8	689.6
32.5°	652.5	656.2	659.9	671.1	671.1
35°	630.2	633.9	639.5	652.5	654.3
37.5°	606.0	609.7	617.1	632.0	635.7
40°	580.0	585.5	596.7	611.6	617.1
42.5°	553.9	561.4	574.4	591.1	598.6
45°	526.1	533.5	550.2	570.7	580.0
47.5°	496.3	505.6	526.1	552.1	559.5
50°	464.7	477.7	501.9	529.8	539.1
52.5°	433.1	448.0	477.7	507.5	516.8
55°	399.7	416.4	453.6	483.3	494.5
57.5°	366.2	384.8	427.5	459.1	470.3
60°	330.9	353.2	399.7	431.3	440.6
62.5°	295.6	321.6	371.8	403.4	410.8
65°	258.4	290.0	342.0	369.9	377.4
67.5°	223.1	260.2	312.3	332.7	332.7
70°	185.9	226.8	278.8	284.4	273.3
72.5°	148.7	195.2	241.7	221.2	211.9
75°	113.4	165.4	189.6	171.0	165.4
77.5°	85.5	133.8	133.8	122.7	119.0
80°	59.5	102.2	89.2	78.1	72.5
82.5°	39.0	57.6	46.5	37.2	31.6
85°	20.4	22.3	13.0	11.2	9.3
87.5°	7.4	3.7	1.9	3.7	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)