

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: P307117

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-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: P307117  
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-3500K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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**

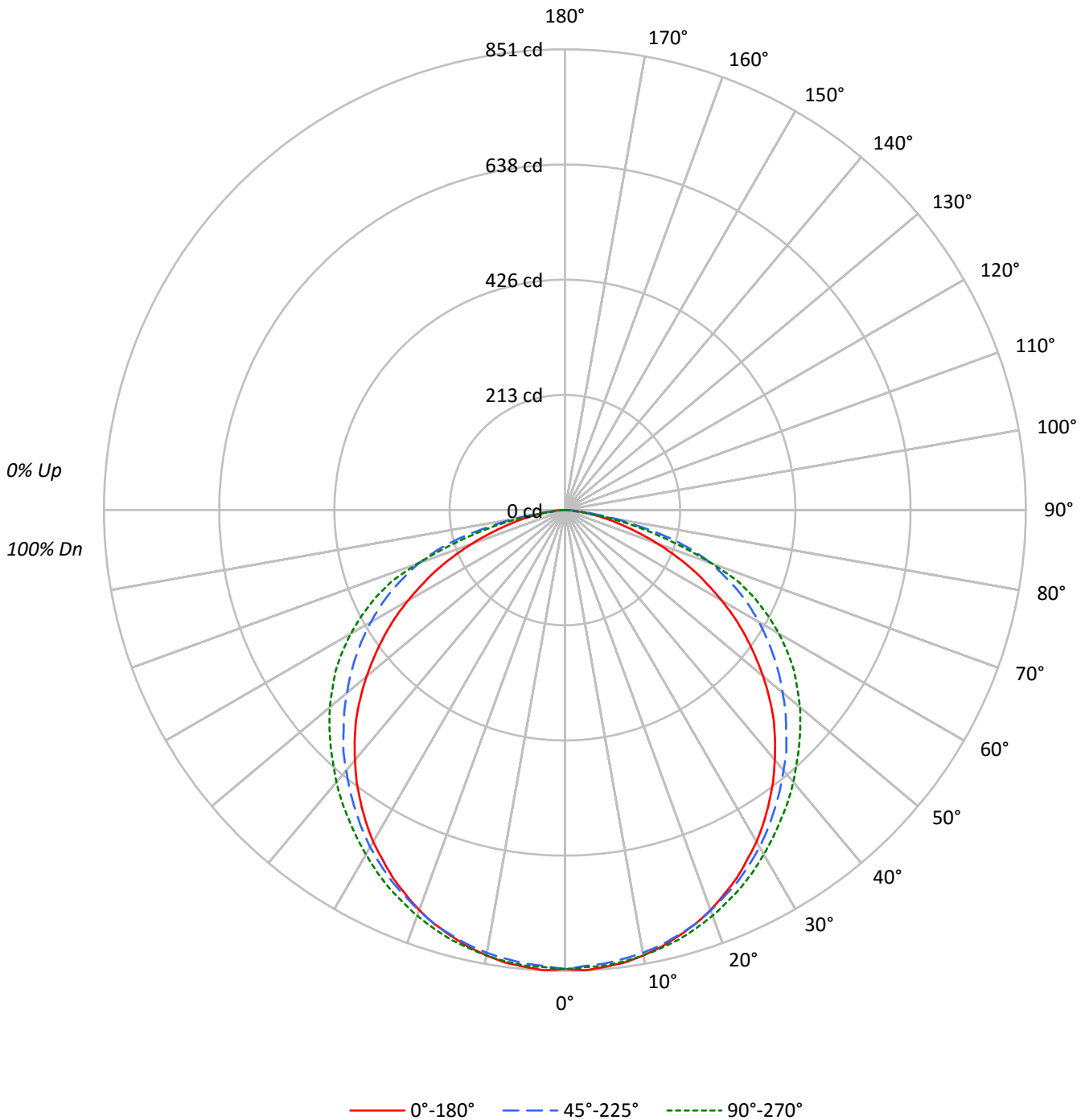
Lumens per Lamp: N/A  
Luminaire Lumens: 2496.0 lumens  
Efficiency: N/A  
Efficacy: 84.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	2281	2281	2281
5°	2288	2271	2281
10°	2282	2269	2282
15°	2267	2263	2285
20°	2252	2254	2283
25°	2228	2246	2284
30°	2200	2234	2283
35°	2161	2217	2287
40°	2118	2206	2305
45°	2073	2199	2330
50°	2001	2198	2372
55°	1915	2209	2423
60°	1800	2226	2454
65°	1659	2249	2469
70°	1445	2254	2272
75°	1192	2097	1836
80°	936	1508	1229
85°	726	580	290



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.2	3.2
10°-20°	230.3	9.2
20°-30°	349.7	14.0
30°-40°	423.7	17.0
40°-50°	446.5	17.9
50°-60°	416.8	16.7
60°-70°	333.1	13.3
70°-80°	183.3	7.3
80°-90°	32.4	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°	660.2	26.5
0°-40°	1083.9	43.4
0°-60°	1947.2	78.0
0°-90°	2496.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2496.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	848	848	848	848	848	
5°	847	844	841	846	844	81
15°	814	814	812	820	820	230
25°	750	752	757	768	769	345
35°	658	664	675	692	696	412
45°	545	555	578	604	612	419
55°	408	428	471	504	516	364
65°	261	294	353	382	388	257
75°	115	164	202	181	177	123
85°	24	30	19	12	9	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	847.7	847.7	847.7	847.7	847.7
2.5°	850.8	848.4	842.9	847.7	845.3
5°	846.9	844.5	840.6	846.1	844.5
7.5°	842.9	839.8	835.9	842.2	840.6
10°	835.1	832.7	830.4	835.9	835.1
12.5°	825.7	824.9	822.5	828.8	828.0
15°	813.9	813.9	812.3	820.2	820.2
17.5°	801.3	800.6	801.3	810.0	809.2
20°	786.4	786.4	787.2	797.4	797.4
22.5°	768.4	769.2	771.5	784.1	783.3
25°	750.3	751.9	756.6	767.6	769.2
27.5°	728.4	732.3	737.8	751.1	752.7
30°	707.9	710.3	718.9	731.5	734.6
32.5°	683.6	688.3	697.7	711.9	715.8
35°	657.7	664.0	675.0	692.3	696.2
37.5°	631.8	637.3	652.2	670.3	677.3
40°	602.8	612.2	627.9	648.3	656.1
42.5°	574.5	583.9	605.1	626.3	633.4
45°	544.7	554.9	577.7	603.6	612.2
47.5°	511.7	523.5	552.5	580.0	589.4
50°	478.0	492.9	525.1	555.7	566.7
52.5°	442.7	461.5	498.4	530.6	540.8
55°	408.1	428.5	470.9	503.9	516.4
57.5°	372.8	394.8	442.7	480.3	487.4
60°	334.4	361.0	413.6	446.6	456.0
62.5°	296.7	327.3	383.8	415.2	423.0
65°	260.6	293.5	353.2	382.2	387.7
67.5°	221.3	260.6	319.4	346.1	347.7
70°	183.7	229.2	286.5	299.0	288.8
72.5°	146.8	195.4	248.0	237.8	229.2
75°	114.6	164.0	201.7	181.3	176.6
77.5°	84.8	134.2	144.4	133.4	124.8
80°	60.4	106.0	97.3	83.2	79.3
82.5°	41.6	66.7	53.4	41.6	36.1
85°	23.5	29.8	18.8	11.8	9.4
87.5°	10.2	7.1	3.9	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)