

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: P307118

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-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: P307118  
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-4000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 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**

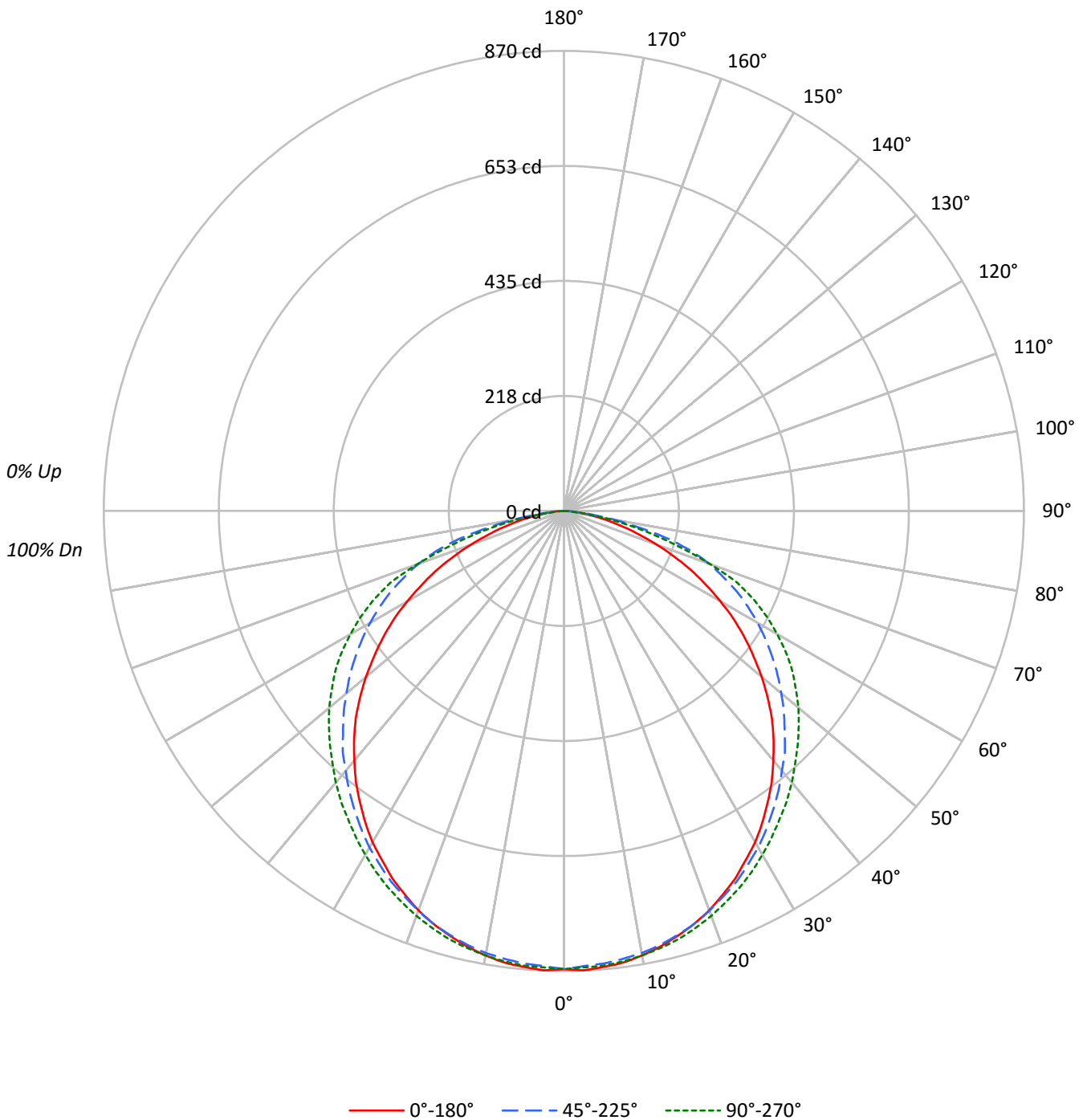
Lumens per Lamp: N/A  
Luminaire Lumens: 2551.0 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.8  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2331	2331	2331
5°	2338	2321	2331
10°	2332	2319	2332
15°	2317	2313	2335
20°	2302	2304	2334
25°	2277	2296	2334
30°	2248	2283	2333
35°	2208	2266	2337
40°	2164	2254	2356
45°	2119	2247	2381
50°	2045	2246	2425
55°	1957	2258	2476
60°	1839	2275	2509
65°	1696	2299	2523
70°	1477	2304	2323
75°	1218	2144	1877
80°	958	1542	1255
85°	744	596	296



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.0	3.2
10°-20°	235.3	9.2
20°-30°	357.4	14.0
30°-40°	433.0	17.0
40°-50°	456.3	17.9
50°-60°	426.0	16.7
60°-70°	340.5	13.3
70°-80°	187.3	7.3
80°-90°	33.1	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°	674.8	26.5
0°-40°	1107.8	43.4
0°-60°	1990.1	78.0
0°-90°	2551.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2551.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	866	863	859	865	863	82
15°	832	832	830	838	838	235
25°	767	768	773	784	786	353
35°	672	679	690	708	712	421
45°	557	567	590	617	626	428
55°	417	438	481	515	528	372
65°	266	300	361	391	396	262
75°	117	168	206	185	180	126
85°	24	30	19	12	10	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	866.3	866.3	866.3	866.3	866.3
2.5°	869.5	867.1	861.5	866.3	863.9
5°	865.5	863.1	859.1	864.7	863.1
7.5°	861.5	858.3	854.3	860.7	859.1
10°	853.5	851.1	848.7	854.3	853.5
12.5°	843.9	843.1	840.7	847.1	846.3
15°	831.8	831.8	830.2	838.3	838.3
17.5°	819.0	818.2	819.0	827.8	827.0
20°	803.8	803.8	804.6	815.0	815.0
22.5°	785.3	786.1	788.5	801.4	800.6
25°	766.9	768.5	773.3	784.5	786.1
27.5°	744.4	748.4	754.0	767.7	769.3
30°	723.5	726.0	734.8	747.6	750.8
32.5°	698.7	703.5	713.1	727.6	731.6
35°	672.2	678.6	689.9	707.5	711.5
37.5°	645.7	651.4	666.6	685.0	692.3
40°	616.1	625.7	641.7	662.6	670.6
42.5°	587.2	596.8	618.5	640.1	647.3
45°	556.7	567.1	590.4	616.9	625.7
47.5°	523.0	535.0	564.7	592.8	602.4
50°	488.5	503.8	536.6	567.9	579.2
52.5°	452.4	471.7	509.4	542.3	552.7
55°	417.1	438.0	481.3	515.0	527.8
57.5°	381.0	403.5	452.4	490.9	498.1
60°	341.7	369.0	422.7	456.4	466.1
62.5°	303.2	334.5	392.3	424.3	432.4
65°	266.3	300.0	361.0	390.7	396.3
67.5°	226.2	266.3	326.5	353.8	355.4
70°	187.7	234.2	292.8	305.6	295.2
72.5°	150.0	199.7	253.5	243.1	234.2
75°	117.1	167.7	206.2	185.3	180.5
77.5°	86.6	137.2	147.6	136.4	127.5
80°	61.8	108.3	99.5	85.0	81.0
82.5°	42.5	68.2	54.5	42.5	36.9
85°	24.1	30.5	19.3	12.0	9.6
87.5°	10.4	7.2	4.0	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)