

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: P307181

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CP125-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: P307181  
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: 14FCZ2-39-UNV-L82765-HRP-CP125-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"  
POLYCARB 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: 2750.0 lumens  
Efficiency: N/A  
Efficacy: 81.6 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

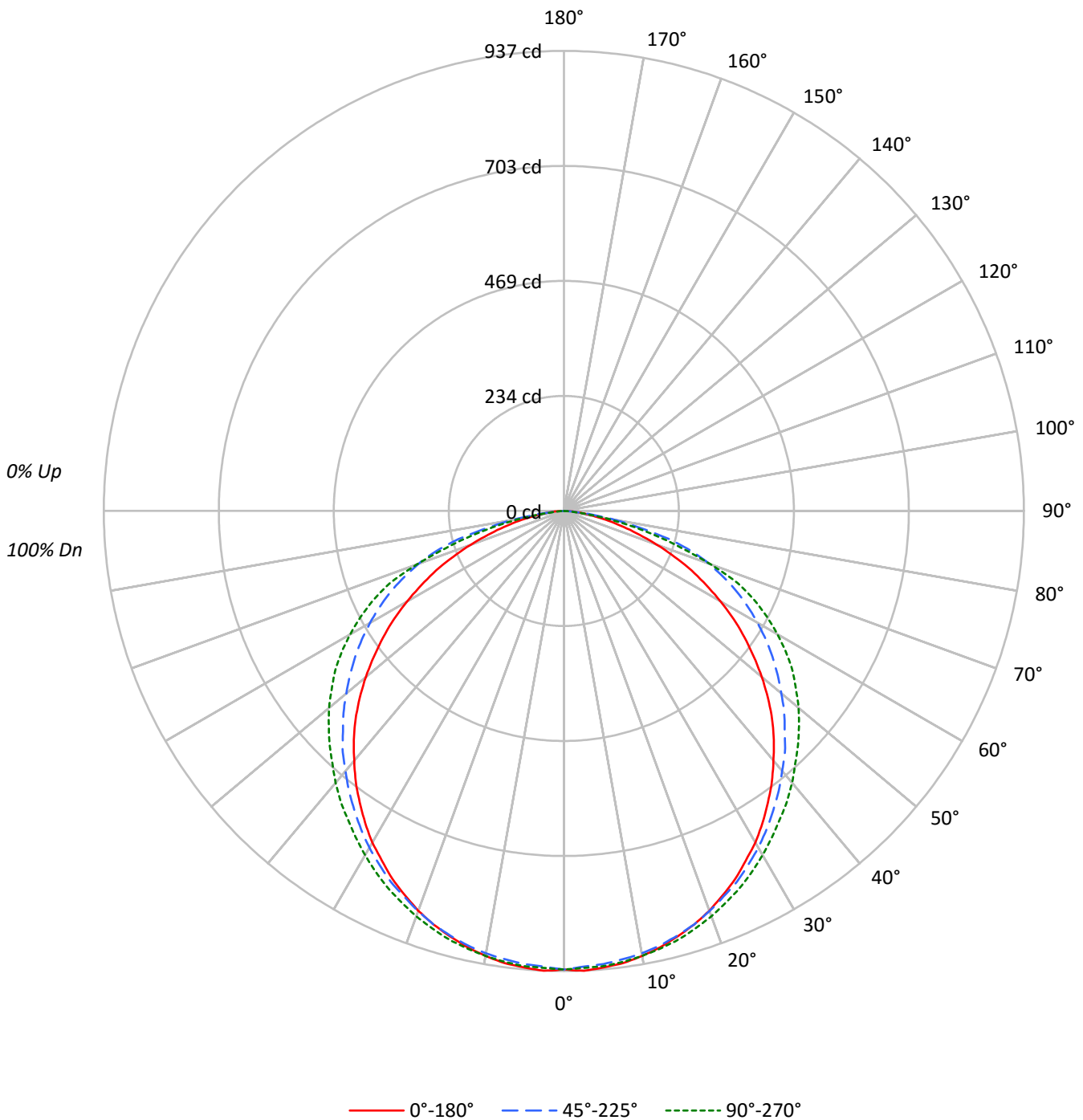
Input Watts (W): 33.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				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°	2513	2513	2513
5°	2520	2502	2514
10°	2514	2500	2514
15°	2498	2493	2517
20°	2481	2484	2516
25°	2455	2475	2516
30°	2424	2461	2515
35°	2380	2443	2520
40°	2333	2430	2539
45°	2284	2422	2567
50°	2205	2422	2614
55°	2110	2434	2670
60°	1983	2453	2704
65°	1828	2478	2720
70°	1592	2483	2504
75°	1313	2310	2023
80°	1032	1661	1353
85°	800	642	321



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.4	3.2
10°-20°	253.7	9.2
20°-30°	385.3	14.0
30°-40°	466.8	17.0
40°-50°	491.9	17.9
50°-60°	459.2	16.7
60°-70°	367.0	13.3
70°-80°	201.9	7.3
80°-90°	35.7	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°	727.4	26.5
0°-40°	1194.2	43.4
0°-60°	2145.4	78.0
0°-90°	2750.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2750.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	934	934	934	934	934	
5°	933	930	926	932	930	89
15°	897	897	895	904	904	253
25°	827	828	834	846	847	381
35°	725	732	744	763	767	453
45°	600	611	636	665	674	462
55°	450	472	519	555	569	401
65°	287	323	389	421	427	283
75°	126	181	222	200	195	136
85°	26	33	21	13	10	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	933.9	933.9	933.9	933.9	933.9
2.5°	937.4	934.8	928.7	933.9	931.3
5°	933.0	930.5	926.1	932.2	930.5
7.5°	928.7	925.3	920.9	927.9	926.1
10°	920.1	917.5	914.9	920.9	920.1
12.5°	909.7	908.8	906.2	913.2	912.3
15°	896.7	896.7	895.0	903.6	903.6
17.5°	882.9	882.0	882.9	892.4	891.5
20°	866.5	866.5	867.3	878.6	878.6
22.5°	846.6	847.4	850.0	863.9	863.0
25°	826.7	828.4	833.6	845.7	847.4
27.5°	802.5	806.8	812.9	827.6	829.3
30°	780.0	782.6	792.1	805.9	809.4
32.5°	753.2	758.4	768.7	784.3	788.6
35°	724.6	731.6	743.7	762.7	767.0
37.5°	696.1	702.2	718.6	738.5	746.3
40°	664.1	674.5	691.8	714.3	722.9
42.5°	633.0	643.4	666.7	690.1	697.8
45°	600.1	611.4	636.4	665.0	674.5
47.5°	563.8	576.8	608.8	639.0	649.4
50°	526.6	543.1	578.5	612.2	624.3
52.5°	487.7	508.5	549.1	584.6	595.8
55°	449.7	472.1	518.8	555.2	569.0
57.5°	410.7	435.0	487.7	529.2	537.0
60°	368.4	397.8	455.7	492.0	502.4
62.5°	326.9	360.6	422.9	457.4	466.1
65°	287.1	323.4	389.1	421.1	427.2
67.5°	243.9	287.1	351.9	381.3	383.1
70°	202.3	252.5	315.6	329.5	318.2
72.5°	161.7	215.3	273.3	262.0	252.5
75°	126.3	180.7	222.2	199.8	194.6
77.5°	93.4	147.9	159.1	147.0	137.5
80°	66.6	116.7	107.2	91.7	87.3
82.5°	45.8	73.5	58.8	45.8	39.8
85°	25.9	32.9	20.8	13.0	10.4
87.5°	11.2	7.8	4.3	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)