

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: P308798

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-CP125-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: P308798  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-39HE-UNV-L82765-CP125-W2A-U-2700K  
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS, 0.125" POLYCARB SHEET  
Light Source: (168) 3000K 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**

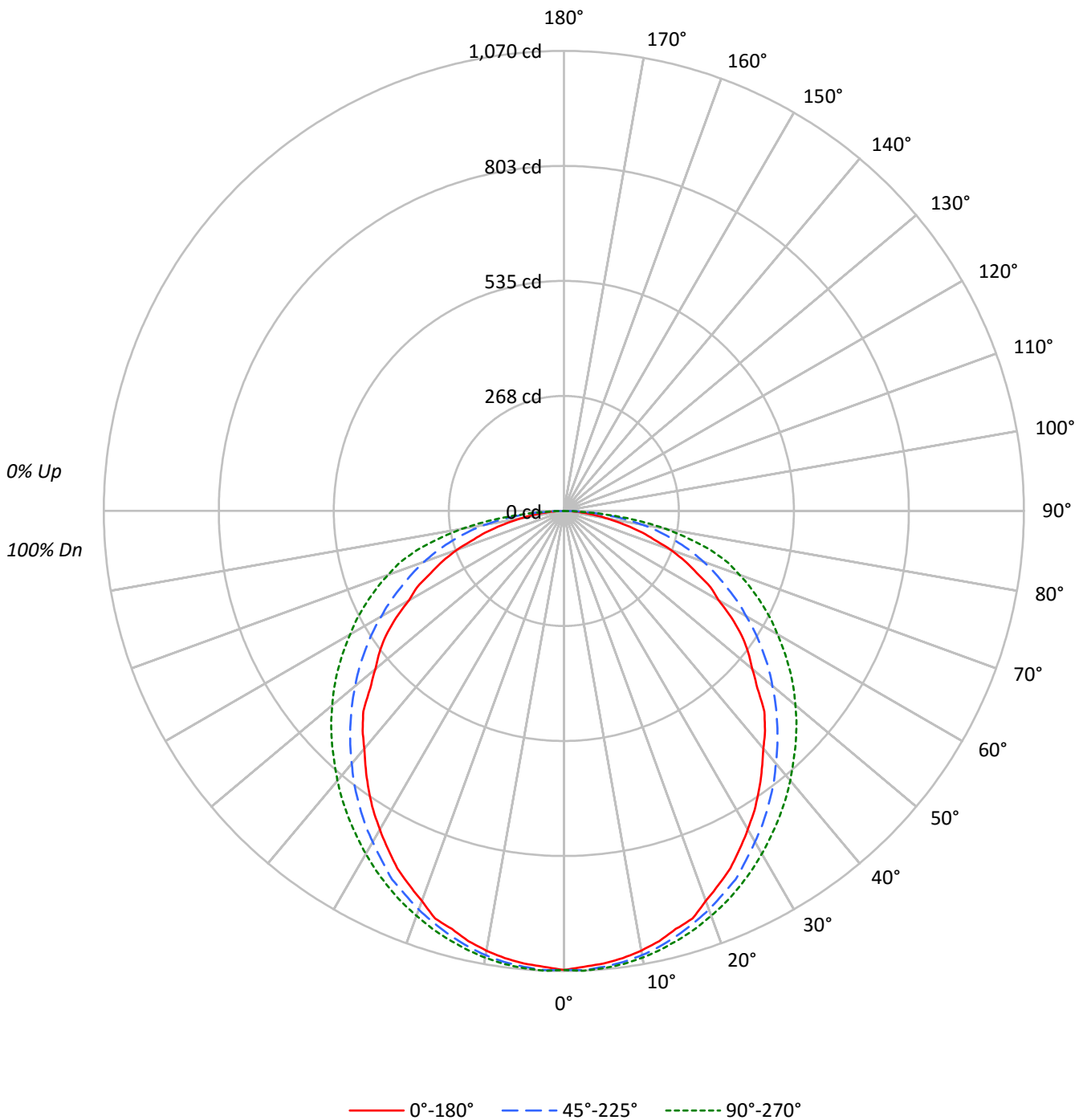
Lumens per Lamp: N/A  
Luminaire Lumens: 3181.0 lumens  
Efficiency: N/A  
Efficacy: 98.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 32.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2872	2872	2872
5°	2854	2875	2883
10°	2837	2866	2883
15°	2804	2846	2876
20°	2764	2825	2869
25°	2721	2807	2866
30°	2659	2763	2862
35°	2601	2731	2866
40°	2535	2695	2877
45°	2509	2671	2903
50°	2396	2651	2945
55°	2372	2643	3007
60°	2237	2638	3089
65°	2171	2656	3228
70°	2084	2719	3426
75°	1900	2802	3688
80°	1629	2903	3729
85°	1315	2773	3196



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.0	3.2
10°-20°	288.1	9.1
20°-30°	433.6	13.6
30°-40°	520.4	16.4
40°-50°	543.9	17.1
50°-60°	506.9	15.9
60°-70°	415.7	13.1
70°-80°	280.1	8.8
80°-90°	91.2	2.9
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°	822.7	25.9
0°-40°	1343.1	42.2
0°-60°	2393.9	75.3
0°-90°	3181.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3181.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1057	1060	1064	1066	1067	100
15°	1006	1012	1022	1031	1032	284
25°	916	923	946	959	965	421
35°	792	802	831	860	872	495
45°	659	664	702	744	763	504
55°	506	515	563	617	641	448
65°	341	356	417	478	507	339
75°	183	202	270	330	355	192
85°	43	61	90	105	104	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1067.3	1067.3	1067.3	1067.3	1067.3
2.5°	1061.2	1064.2	1068.8	1070.3	1070.3
5°	1056.6	1059.6	1064.2	1065.7	1067.3
7.5°	1049.0	1052.0	1058.1	1061.2	1062.7
10°	1038.3	1041.4	1049.0	1053.6	1055.1
12.5°	1024.6	1027.7	1036.8	1042.9	1044.4
15°	1006.4	1012.4	1021.6	1030.7	1032.2
17.5°	994.2	992.7	1004.8	1015.5	1018.5
20°	965.2	972.9	986.6	998.7	1001.8
22.5°	940.9	947.0	965.2	978.9	985.0
25°	916.5	922.6	945.5	959.2	965.2
27.5°	886.1	895.2	916.5	936.3	943.9
30°	855.6	864.8	889.1	912.0	921.1
32.5°	825.2	835.8	861.7	886.1	896.7
35°	791.7	802.3	831.3	860.2	872.4
37.5°	756.7	770.4	800.8	832.8	846.5
40°	721.7	735.4	767.3	803.9	819.1
42.5°	692.7	698.8	735.4	774.9	790.2
45°	659.2	663.8	701.9	744.5	762.8
47.5°	610.5	627.3	668.4	715.6	733.8
50°	572.4	590.7	633.3	683.6	703.4
52.5°	540.5	552.7	599.9	650.1	672.9
55°	505.5	514.6	563.3	616.6	641.0
57.5°	462.8	479.6	528.3	583.1	607.5
60°	415.6	436.9	490.2	549.6	574.0
62.5°	385.2	397.4	455.2	514.6	542.0
65°	341.0	356.3	417.2	478.1	507.0
67.5°	304.5	319.7	382.1	443.0	472.0
70°	264.9	280.1	345.6	406.5	435.4
72.5°	219.2	240.6	309.1	370.0	400.4
75°	182.7	202.5	269.5	330.4	354.7
77.5°	141.6	167.5	229.9	280.1	298.4
80°	105.1	130.9	187.3	223.8	240.6
82.5°	71.6	97.4	140.1	167.5	176.6
85°	42.6	60.9	89.8	105.1	103.5
87.5°	19.8	25.9	36.5	36.5	35.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)