

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: P308256

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-CA125-W2A-U-5700K**

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: P308256  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
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-HRP-CA125-W2A-U-5700K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC 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**

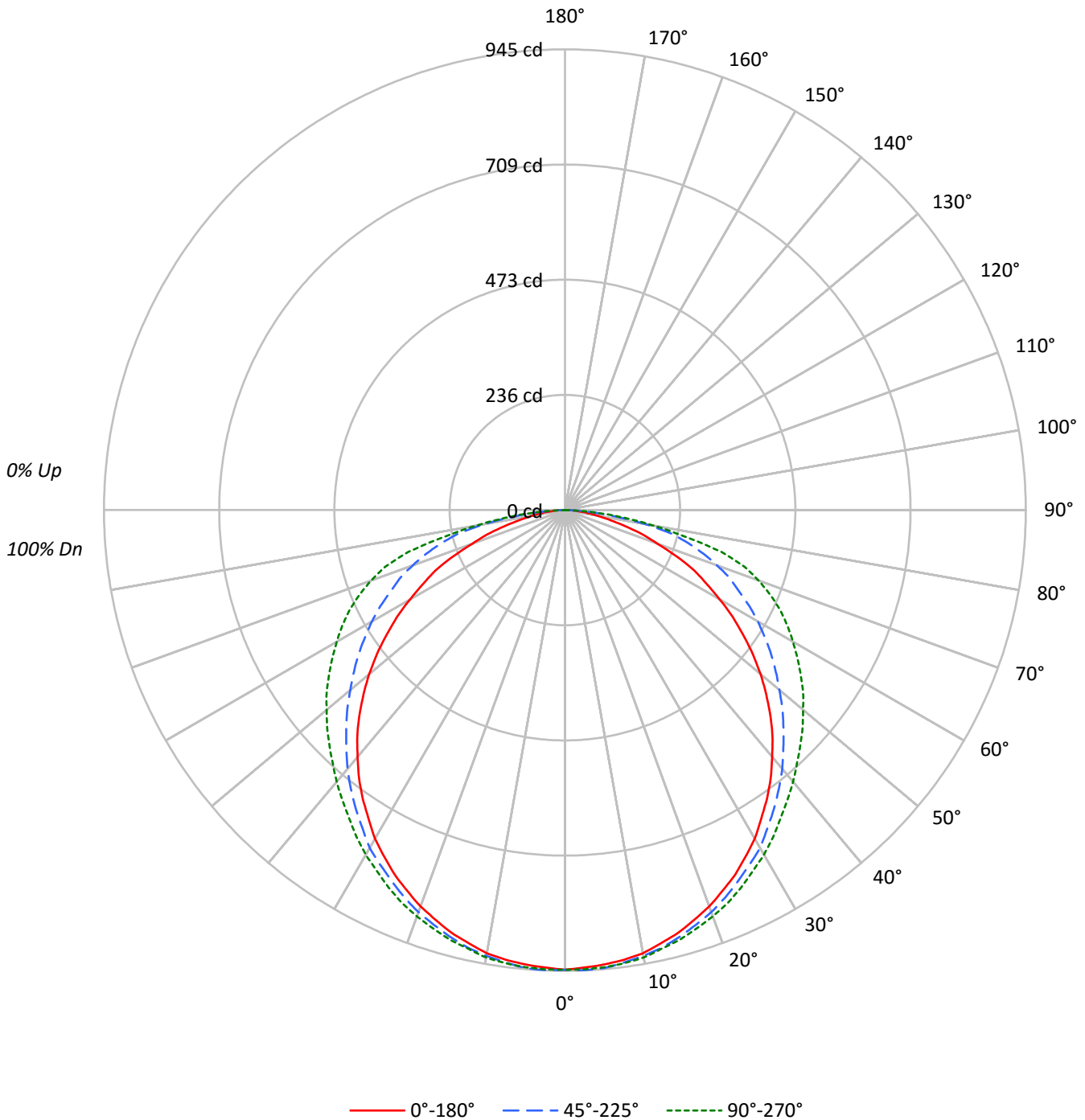
Lumens per Lamp: N/A  
Luminaire Lumens: 2863.0 lumens  
Efficiency: N/A  
Efficacy: 86.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	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	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
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	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	2537	2537	2537
5°	2527	2547	2542
10°	2522	2537	2546
15°	2501	2526	2541
20°	2477	2513	2540
25°	2451	2494	2537
30°	2419	2486	2536
35°	2373	2456	2533
40°	2322	2436	2557
45°	2268	2412	2598
50°	2193	2404	2669
55°	2093	2423	2771
60°	1973	2459	2906
65°	1863	2507	3105
70°	1592	2615	3325
75°	1333	2723	3455
80°	1091	2631	2882
85°	948	1951	2118



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.4	3.1
10°-20°	255.6	8.9
20°-30°	387.3	13.5
30°-40°	467.7	16.3
40°-50°	491.5	17.2
50°-60°	462.4	16.2
60°-70°	385.5	13.5
70°-80°	255.5	8.9
80°-90°	68.1	2.4
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°	732.3	25.6
0°-40°	1200.0	41.9
0°-60°	2153.9	75.2
0°-90°	2863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2863.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	943	943	943	943	943	
5°	936	937	943	943	941	89
15°	898	901	907	910	912	253
25°	825	831	840	851	854	380
35°	722	730	748	764	771	452
45°	596	605	634	666	683	459
55°	446	466	516	569	591	399
65°	293	318	394	459	488	285
75°	128	179	262	316	332	139
85°	31	47	63	69	69	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	942.8	942.8	942.8	942.8	942.8
2.5°	939.1	940.9	944.6	944.6	942.8
5°	935.5	937.3	942.8	942.8	940.9
7.5°	930.1	931.9	935.5	939.1	937.3
10°	922.9	924.7	928.3	931.9	931.9
12.5°	910.2	912.1	919.3	921.1	921.1
15°	897.6	901.2	906.6	910.2	912.1
17.5°	881.3	885.0	892.2	899.4	899.4
20°	865.1	868.7	877.7	885.0	886.8
22.5°	845.2	850.6	859.7	868.7	872.3
25°	825.4	830.8	839.8	850.6	854.3
27.5°	801.9	807.3	819.9	832.6	834.4
30°	778.4	783.8	800.1	810.9	816.3
32.5°	749.5	756.7	773.0	789.2	794.7
35°	722.4	729.6	747.7	764.0	771.2
37.5°	693.5	700.7	720.6	740.5	749.5
40°	661.0	670.0	693.5	715.2	727.8
42.5°	630.3	639.3	662.8	691.7	704.4
45°	596.0	605.0	633.9	666.4	682.7
47.5°	559.9	570.7	605.0	644.8	661.0
50°	523.8	536.4	574.3	619.5	637.5
52.5°	485.8	502.1	545.4	594.2	615.9
55°	446.1	466.0	516.5	568.9	590.6
57.5°	408.2	426.2	485.8	541.8	565.3
60°	366.6	390.1	456.9	514.7	540.0
62.5°	326.9	352.2	426.2	487.6	514.7
65°	292.6	317.9	393.7	458.7	487.6
67.5°	247.4	281.7	366.6	428.0	456.9
70°	202.3	249.2	332.3	395.5	422.6
72.5°	168.0	213.1	298.0	361.2	386.5
75°	128.2	178.8	261.9	316.1	332.3
77.5°	95.7	148.1	223.9	251.0	252.8
80°	70.4	113.8	169.8	178.8	186.0
82.5°	48.8	79.5	110.2	121.0	124.6
85°	30.7	47.0	63.2	68.6	68.6
87.5°	16.3	18.1	21.7	21.7	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)