

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: P308258

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-HRP-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: P308258  
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-CP125-W2A-U-2700K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. 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**

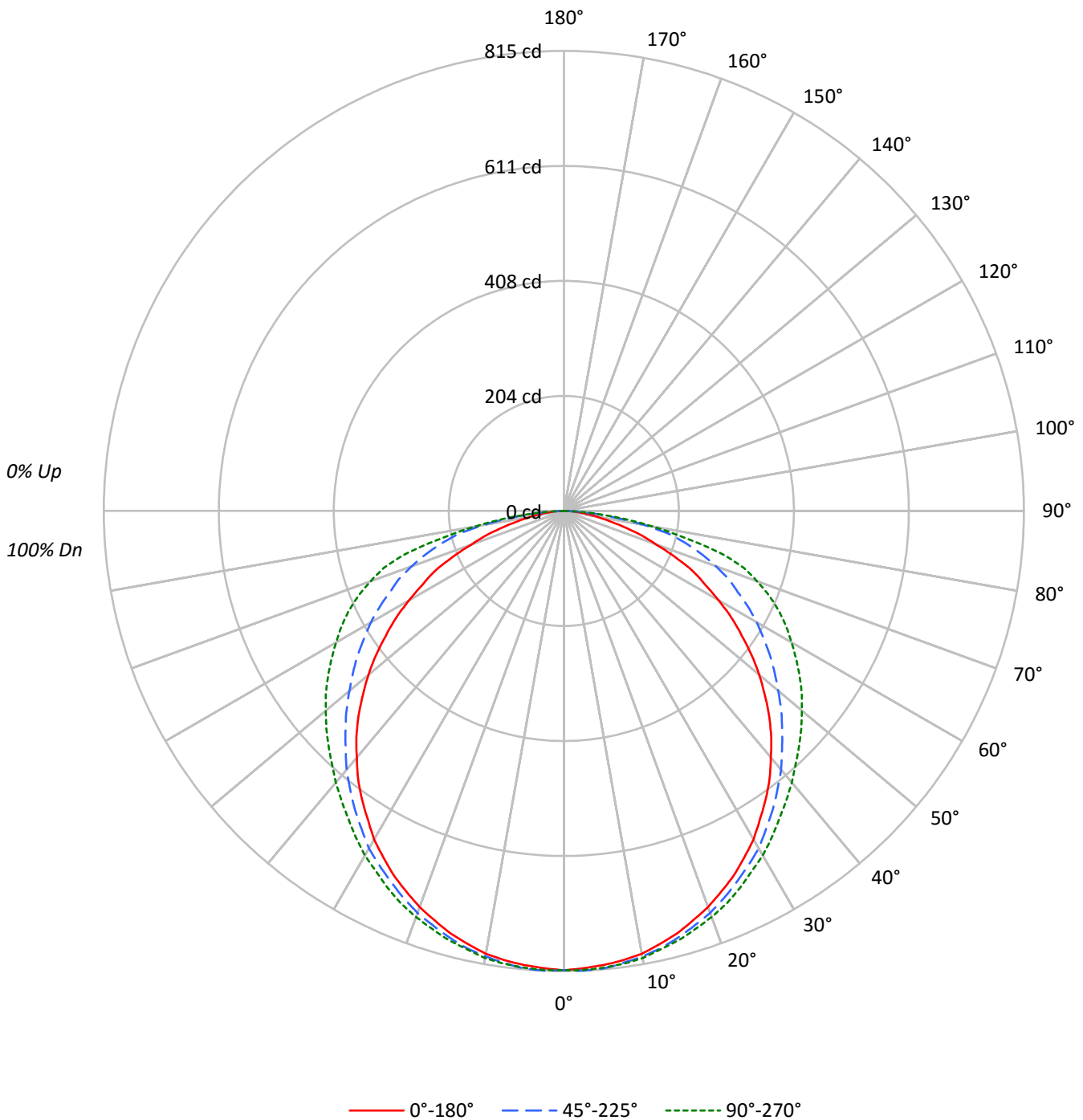
Lumens per Lamp: N/A  
Luminaire Lumens: 2471.0 lumens  
Efficiency: N/A  
Efficacy: 76.3 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 32.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	2190	2190	2190
5°	2181	2198	2194
10°	2176	2189	2198
15°	2158	2180	2193
20°	2138	2170	2192
25°	2115	2152	2189
30°	2087	2146	2189
35°	2048	2120	2187
40°	2004	2103	2207
45°	1958	2082	2242
50°	1892	2075	2303
55°	1806	2092	2391
60°	1703	2123	2509
65°	1608	2164	2680
70°	1374	2257	2869
75°	1151	2350	2982
80°	942	2270	2489
85°	818	1686	1828



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.1	3.1
10°-20°	220.6	8.9
20°-30°	334.3	13.5
30°-40°	403.7	16.3
40°-50°	424.2	17.2
50°-60°	399.1	16.2
60°-70°	332.8	13.5
70°-80°	220.5	8.9
80°-90°	58.8	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°	632.0	25.6
0°-40°	1035.7	41.9
0°-60°	1859.0	75.2
0°-90°	2471.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2471.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	807	809	814	814	812	77
15°	775	778	782	786	787	218
25°	712	717	725	734	737	328
35°	624	630	645	659	666	390
45°	514	522	547	575	589	396
55°	385	402	446	491	510	344
65°	252	274	340	396	421	246
75°	111	154	226	273	287	120
85°	26	40	55	59	59	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	813.7	813.7	813.7	813.7	813.7
2.5°	810.6	812.1	815.2	815.2	813.7
5°	807.4	809.0	813.7	813.7	812.1
7.5°	802.8	804.3	807.4	810.6	809.0
10°	796.5	798.1	801.2	804.3	804.3
12.5°	785.6	787.2	793.4	795.0	795.0
15°	774.7	777.8	782.5	785.6	787.2
17.5°	760.7	763.8	770.0	776.3	776.3
20°	746.6	749.8	757.6	763.8	765.4
22.5°	729.5	734.2	742.0	749.8	752.9
25°	712.4	717.0	724.8	734.2	737.3
27.5°	692.1	696.8	707.7	718.6	720.1
30°	671.8	676.5	690.5	699.9	704.6
32.5°	646.9	653.1	667.1	681.2	685.9
35°	623.5	629.7	645.3	659.4	665.6
37.5°	598.6	604.8	621.9	639.1	646.9
40°	570.5	578.3	598.6	617.3	628.2
42.5°	544.0	551.8	572.1	597.0	607.9
45°	514.4	522.2	547.1	575.2	589.2
47.5°	483.2	492.6	522.2	556.5	570.5
50°	452.0	463.0	495.7	534.7	550.2
52.5°	419.3	433.3	470.7	512.8	531.5
55°	385.0	402.2	445.8	491.0	509.7
57.5°	352.3	367.9	419.3	467.6	487.9
60°	316.4	336.7	394.4	444.2	466.1
62.5°	282.1	304.0	367.9	420.9	444.2
65°	252.5	274.3	339.8	395.9	420.9
67.5°	213.6	243.2	316.4	369.4	394.4
70°	174.6	215.1	286.8	341.4	364.7
72.5°	145.0	183.9	257.2	311.8	333.6
75°	110.7	154.3	226.0	272.8	286.8
77.5°	82.6	127.8	193.3	216.7	218.2
80°	60.8	98.2	146.5	154.3	160.6
82.5°	42.1	68.6	95.1	104.4	107.6
85°	26.5	40.5	54.6	59.2	59.2
87.5°	14.0	15.6	18.7	18.7	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)