

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: P308522

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-RDP-CA125-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: P308522  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
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-RDP-CA125-W2A-U-4000K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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**

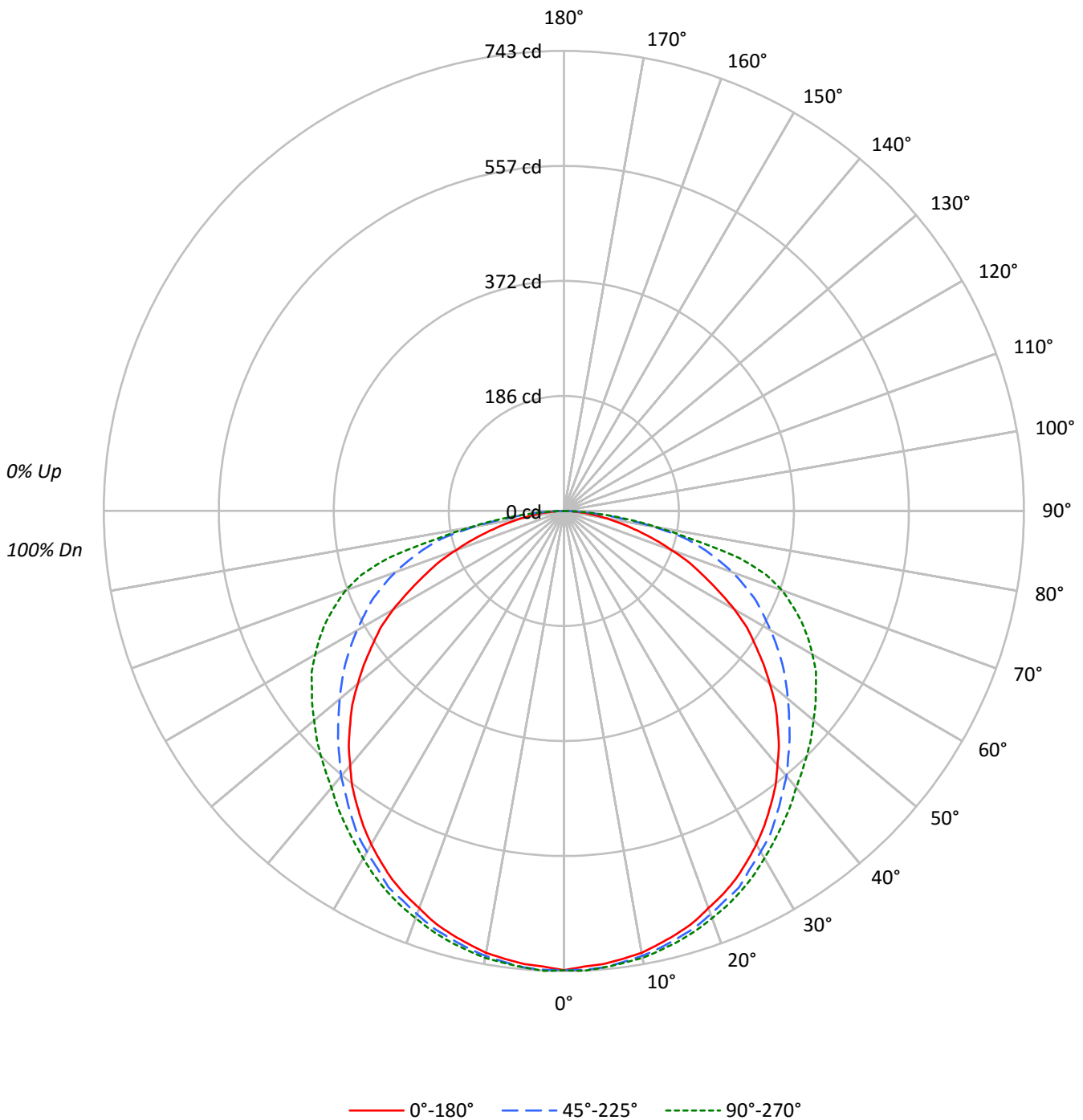
Lumens per Lamp: N/A  
Luminaire Lumens: 2361.0 lumens  
Efficiency: N/A  
Efficacy: 72.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 32.8  
Input Voltage (V): NR  
Input Current (A<sub>in</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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1996	1996	1996
5°	1985	1999	1999
10°	1979	1993	2003
15°	1969	1989	2003
20°	1955	1985	2004
25°	1949	1991	2011
30°	1932	1975	2013
35°	1911	1968	2026
40°	1885	1965	2050
45°	1858	1963	2115
50°	1818	1978	2203
55°	1768	2021	2330
60°	1710	2075	2496
65°	1592	2179	2699
70°	1462	2282	2952
75°	1282	2402	3052
80°	1103	2287	2396
85°	966	1661	1825



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.2	3.0
10°-20°	201.4	8.5
20°-30°	307.3	13.0
30°-40°	375.2	15.9
40°-50°	401.2	17.0
50°-60°	387.3	16.4
60°-70°	333.3	14.1
70°-80°	225.5	9.6
80°-90°	59.5	2.5
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°	578.9	24.5
0°-40°	954.1	40.4
0°-60°	1742.6	73.8
0°-90°	2361.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2361.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	742	742	742	742	742	
5°	735	736	740	740	740	70
15°	707	709	714	717	719	199
25°	656	660	670	674	677	302
35°	582	587	599	611	617	364
45°	488	497	516	542	556	377
55°	377	389	431	474	497	338
65°	250	274	342	396	424	249
75°	123	163	231	278	294	132
85°	31	43	54	56	59	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	741.6	741.6	741.6	741.6	741.6
2.5°	736.4	738.2	741.6	741.6	743.4
5°	734.7	736.4	739.9	739.9	739.9
7.5°	729.5	731.2	734.7	736.4	736.4
10°	724.3	726.0	729.5	731.2	732.9
12.5°	715.6	717.3	722.5	726.0	726.0
15°	706.9	708.6	713.8	717.3	719.1
17.5°	696.5	699.9	705.2	708.6	710.4
20°	682.6	686.1	693.0	698.2	699.9
22.5°	670.4	673.9	680.8	686.1	689.5
25°	656.5	660.0	670.4	673.9	677.4
27.5°	639.2	642.6	651.3	658.3	663.5
30°	621.8	625.3	635.7	644.4	647.8
32.5°	602.7	607.9	620.1	627.0	632.2
35°	581.8	587.1	599.2	611.4	616.6
37.5°	561.0	566.2	578.4	594.0	600.9
40°	536.7	543.6	559.3	580.1	583.6
42.5°	514.1	522.8	536.7	561.0	569.7
45°	488.1	496.7	515.8	541.9	555.8
47.5°	463.7	472.4	493.3	524.5	541.9
50°	434.2	446.4	472.4	508.9	526.3
52.5°	406.4	416.8	451.6	491.5	512.4
55°	376.9	389.1	430.7	474.2	496.7
57.5°	350.8	361.3	408.2	456.8	482.8
60°	317.8	331.7	385.6	437.7	463.7
62.5°	283.1	303.9	363.0	416.8	444.6
65°	250.1	274.4	342.2	396.0	423.8
67.5°	220.6	246.6	316.1	373.4	399.5
70°	185.8	218.8	290.1	345.6	375.2
72.5°	154.6	191.1	260.5	316.1	342.2
75°	123.3	163.3	231.0	277.9	293.5
77.5°	95.5	133.7	198.0	211.9	213.6
80°	71.2	105.9	147.6	149.4	154.6
82.5°	48.6	74.7	95.5	104.2	105.9
85°	31.3	43.4	53.8	55.6	59.1
87.5°	13.9	15.6	19.1	17.4	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)