

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: P308523

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-RDP-CA125-W2A-U-4500K**

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: P308523  
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-4500K  
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**

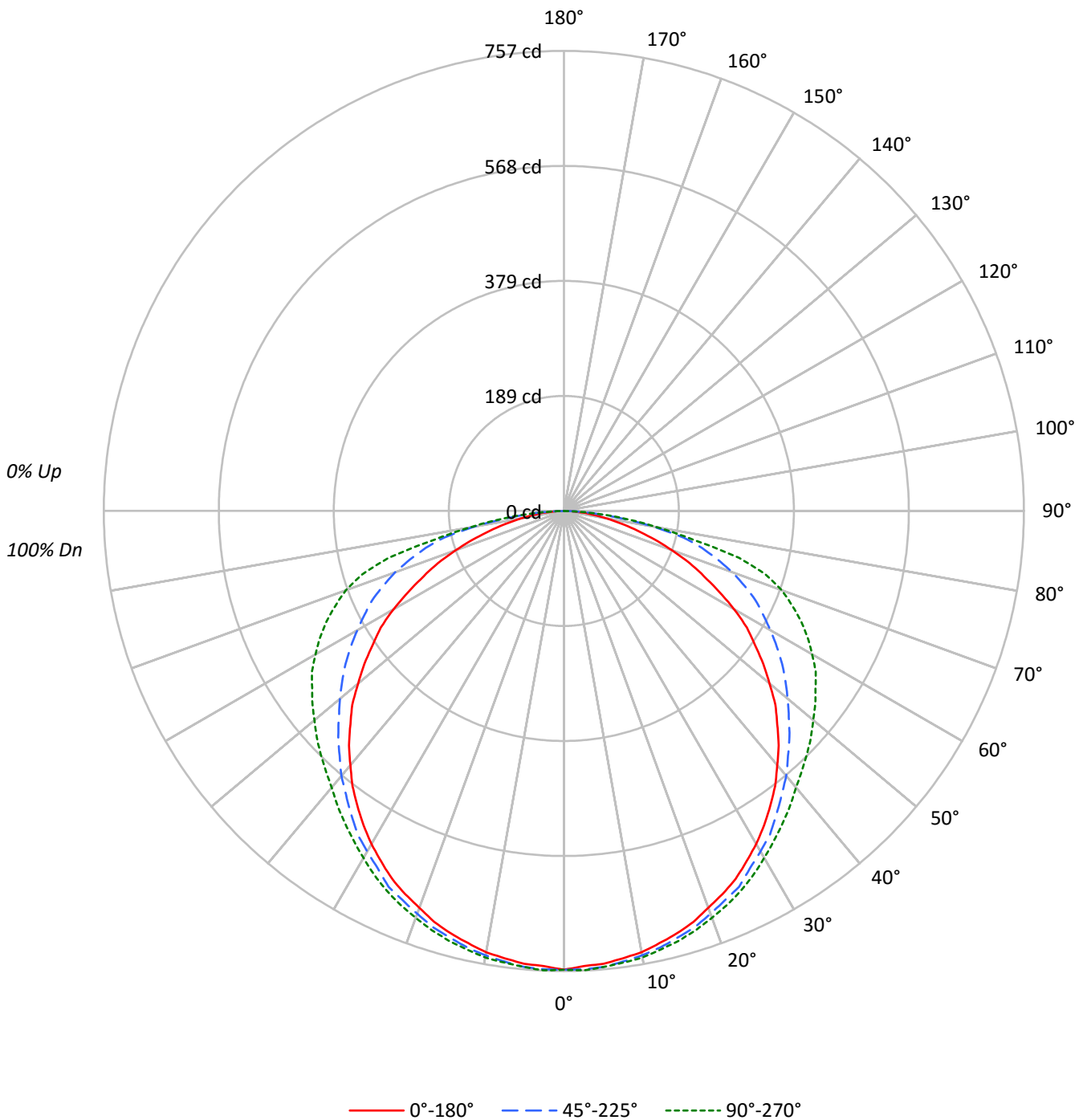
Lumens per Lamp: N/A  
Luminaire Lumens: 2403.0 lumens  
Efficiency: N/A  
Efficacy: 72.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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



TEST NUMBER: P308523

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CA125-W2A-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P308523

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CA125-W2A-U-4500K

**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°	2031	2031	2031
5°	2020	2034	2034
10°	2014	2029	2038
15°	2004	2024	2039
20°	1989	2020	2040
25°	1984	2026	2047
30°	1967	2010	2049
35°	1945	2004	2061
40°	1919	1999	2087
45°	1890	1998	2153
50°	1850	2013	2242
55°	1800	2057	2372
60°	1741	2112	2540
65°	1621	2217	2746
70°	1488	2323	3004
75°	1305	2444	3106
80°	1124	2329	2438
85°	982	1692	1856



TEST NUMBER: P308523

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CA125-W2A-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.4	3.0
10°-20°	205.0	8.5
20°-30°	312.8	13.0
30°-40°	381.9	15.9
40°-50°	408.3	17.0
50°-60°	394.1	16.4
60°-70°	339.3	14.1
70°-80°	229.6	9.6
80°-90°	60.6	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°	589.2	24.5
0°-40°	971.1	40.4
0°-60°	1773.6	73.8
0°-90°	2403.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2403.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	755	755	755	755	755	
5°	748	750	753	753	753	71
15°	720	721	726	730	732	203
25°	668	672	682	686	689	308
35°	592	598	610	622	628	371
45°	497	506	525	552	566	383
55°	384	396	438	483	506	344
65°	255	279	348	403	431	253
75°	126	166	235	283	299	135
85°	32	44	55	57	60	36
90°	0	0	0	0	0	



TEST NUMBER: P308523

CATALOG NUMBER: 22FCZ2-39HE-UNV-L82765-RDP-CA125-W2A-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	754.8	754.8	754.8	754.8	754.8
2.5°	749.5	751.3	754.8	754.8	756.6
5°	747.8	749.5	753.1	753.1	753.1
7.5°	742.4	744.2	747.8	749.5	749.5
10°	737.1	738.9	742.4	744.2	746.0
12.5°	728.3	730.1	735.4	738.9	738.9
15°	719.5	721.2	726.5	730.1	731.8
17.5°	708.9	712.4	717.7	721.2	723.0
20°	694.7	698.3	705.3	710.6	712.4
22.5°	682.3	685.9	693.0	698.3	701.8
25°	668.2	671.7	682.3	685.9	689.4
27.5°	650.5	654.1	662.9	670.0	675.3
30°	632.9	636.4	647.0	655.8	659.4
32.5°	613.4	618.7	631.1	638.2	643.5
35°	592.2	597.5	609.9	622.2	627.5
37.5°	571.0	576.3	588.7	604.6	611.6
40°	546.2	553.3	569.2	590.4	594.0
42.5°	523.3	532.1	546.2	571.0	579.8
45°	496.7	505.6	525.0	551.5	565.7
47.5°	472.0	480.8	502.0	533.9	551.5
50°	441.9	454.3	480.8	517.9	535.6
52.5°	413.7	424.3	459.6	500.3	521.5
55°	383.6	396.0	438.4	482.6	505.6
57.5°	357.1	367.7	415.4	464.9	491.4
60°	323.5	337.6	392.4	445.5	472.0
62.5°	288.1	309.4	369.5	424.3	452.5
65°	254.6	279.3	348.2	403.0	431.3
67.5°	224.5	251.0	321.7	380.1	406.6
70°	189.1	222.7	295.2	351.8	381.8
72.5°	157.3	194.5	265.2	321.7	348.2
75°	125.5	166.2	235.1	282.8	298.7
77.5°	97.2	136.1	201.5	215.7	217.4
80°	72.5	107.8	150.3	152.0	157.3
82.5°	49.5	76.0	97.2	106.1	107.8
85°	31.8	44.2	54.8	56.6	60.1
87.5°	14.1	15.9	19.4	17.7	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)