

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: P308480

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CA125-W2A-U-5500K**

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: P308480  
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: 22FCZ2-34HE-UNV-L82765-RDP-CA125-W2A-U-5500K  
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**

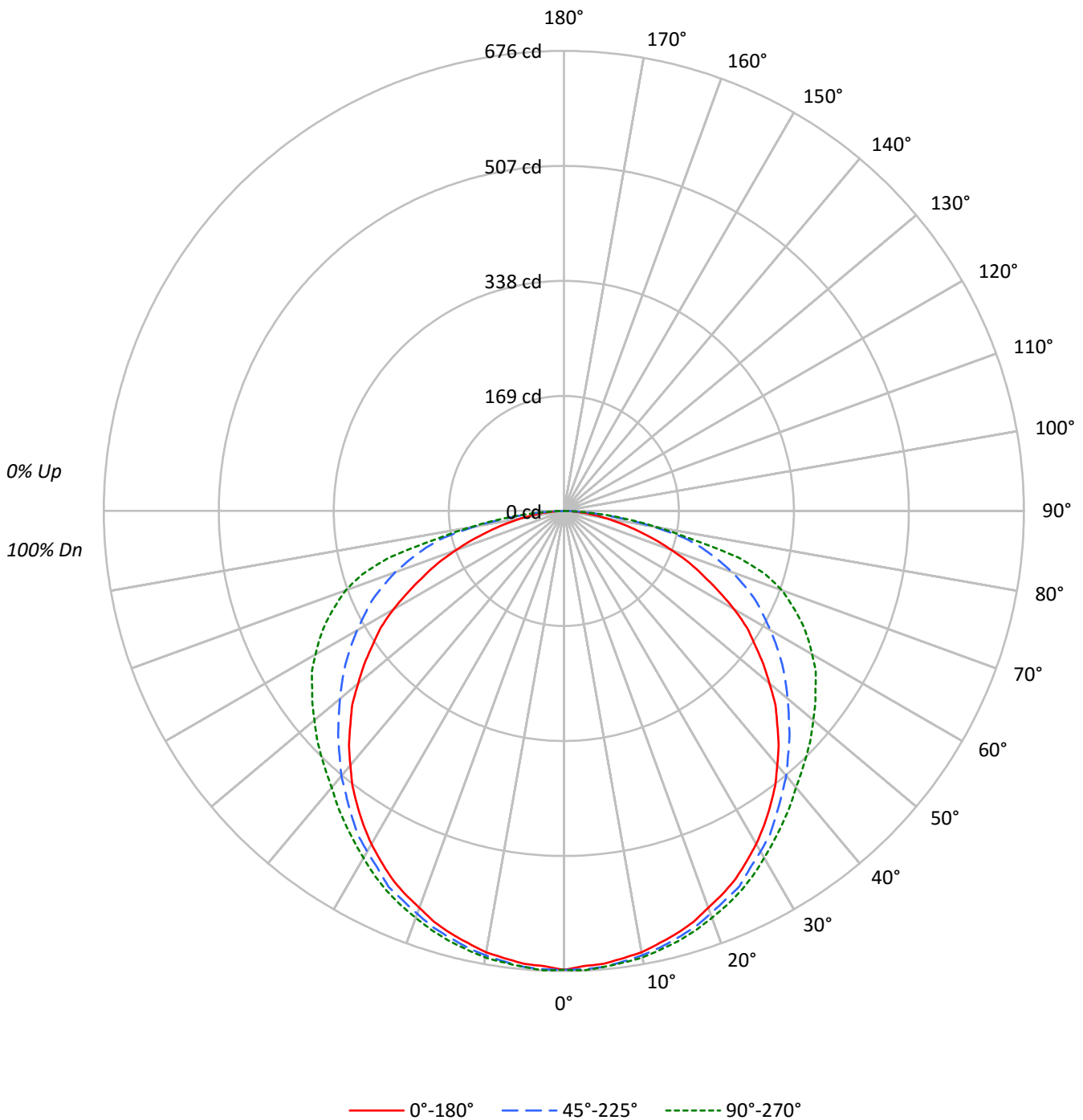
Lumens per Lamp: N/A  
Luminaire Lumens: 2146.0 lumens  
Efficiency: N/A  
Efficacy: 75.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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



TEST NUMBER: P308480

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-RDP-CA125-W2A-U-5500K

### Luminous Intensity Polar Plot





TEST NUMBER: P308480

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-RDP-CA125-W2A-U-5500K

**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°	1814	1814	1814
5°	1804	1817	1817
10°	1799	1812	1820
15°	1790	1807	1821
20°	1777	1804	1822
25°	1772	1809	1828
30°	1756	1795	1830
35°	1737	1789	1841
40°	1714	1786	1863
45°	1688	1784	1923
50°	1652	1798	2002
55°	1607	1837	2118
60°	1555	1886	2268
65°	1447	1980	2453
70°	1329	2074	2683
75°	1166	2183	2774
80°	1003	2080	2177
85°	877	1510	1658



TEST NUMBER: P308480

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-RDP-CA125-W2A-U-5500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.8	3.0
10°-20°	183.1	8.5
20°-30°	279.3	13.0
30°-40°	341.1	15.9
40°-50°	364.7	17.0
50°-60°	352.0	16.4
60°-70°	303.0	14.1
70°-80°	205.0	9.6
80°-90°	54.1	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°	526.2	24.5
0°-40°	867.2	40.4
0°-60°	1583.9	73.8
0°-90°	2146.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2146.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	668	669	672	672	672	63
15°	642	644	649	652	654	181
25°	597	600	609	612	616	275
35°	529	534	545	556	560	331
45°	444	452	469	492	505	342
55°	343	354	392	431	452	307
65°	227	249	311	360	385	226
75°	112	148	210	253	267	120
85°	28	40	49	50	54	32
90°	0	0	0	0	0	



TEST NUMBER: P308480

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-RDP-CA125-W2A-U-5500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	674.1	674.1	674.1	674.1	674.1
2.5°	669.4	670.9	674.1	674.1	675.7
5°	667.8	669.4	672.5	672.5	672.5
7.5°	663.0	664.6	667.8	669.4	669.4
10°	658.3	659.9	663.0	664.6	666.2
12.5°	650.4	652.0	656.7	659.9	659.9
15°	642.5	644.1	648.8	652.0	653.6
17.5°	633.1	636.2	640.9	644.1	645.7
20°	620.4	623.6	629.9	634.6	636.2
22.5°	609.4	612.5	618.8	623.6	626.7
25°	596.7	599.9	609.4	612.5	615.7
27.5°	581.0	584.1	592.0	598.3	603.1
30°	565.2	568.3	577.8	585.7	588.8
32.5°	547.8	552.5	563.6	569.9	574.6
35°	528.9	533.6	544.6	555.7	560.4
37.5°	509.9	514.6	525.7	539.9	546.2
40°	487.8	494.1	508.3	527.3	530.4
42.5°	467.3	475.2	487.8	509.9	517.8
45°	443.6	451.5	468.9	492.5	505.2
47.5°	421.5	429.4	448.3	476.8	492.5
50°	394.7	405.7	429.4	462.6	478.3
52.5°	369.4	378.9	410.5	446.8	465.7
55°	342.6	353.6	391.5	431.0	451.5
57.5°	318.9	328.4	371.0	415.2	438.9
60°	288.9	301.5	350.5	397.8	421.5
62.5°	257.3	276.3	329.9	378.9	404.1
65°	227.3	249.4	311.0	359.9	385.2
67.5°	200.5	224.2	287.3	339.4	363.1
70°	168.9	198.9	263.6	314.2	341.0
72.5°	140.5	173.7	236.8	287.3	311.0
75°	112.1	148.4	210.0	252.6	266.8
77.5°	86.8	121.6	180.0	192.6	194.2
80°	64.7	96.3	134.2	135.8	140.5
82.5°	44.2	67.9	86.8	94.7	96.3
85°	28.4	39.5	48.9	50.5	53.7
87.5°	12.6	14.2	17.4	15.8	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)