

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: P308206

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-HRP-CA125-W2A-U-3500K**

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: P308206  
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: 22FCZ2-34HE-UNV-L82765-HRP-CA125-W2A-U-3500K  
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**

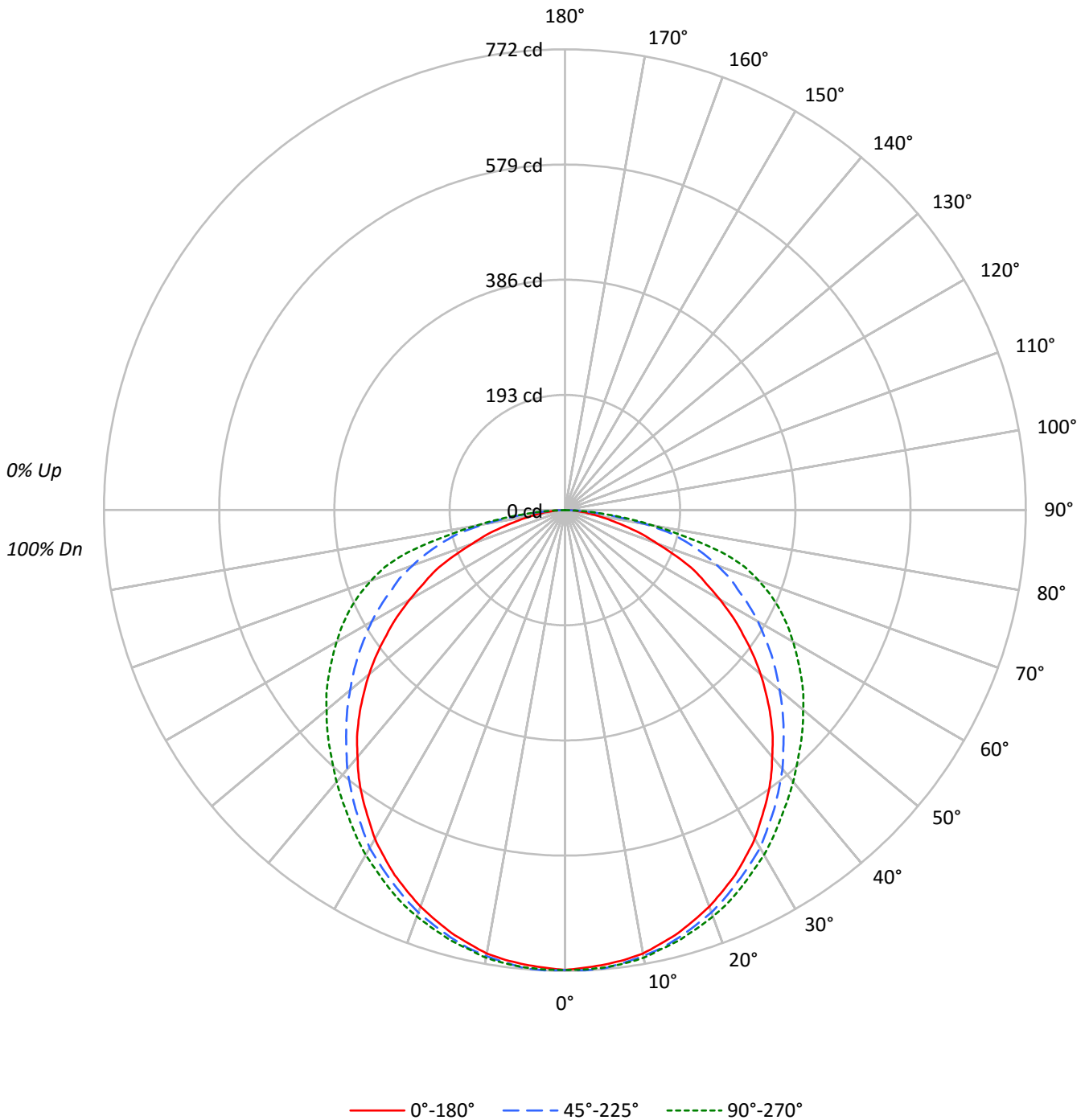
Lumens per Lamp: N/A  
Luminaire Lumens: 2340.0 lumens  
Efficiency: N/A  
Efficacy: 84.5 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.7  
Input Voltage (V): NR  
Input Current (A<sub>in</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: P308206

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-HRP-CA125-W2A-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P308206

CATALOG NUMBER: 22FC22-34HE-UNV-L82765-HRP-CA125-W2A-U-3500K

**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°	2073	2073	2073
5°	2065	2081	2078
10°	2061	2073	2081
15°	2044	2064	2077
20°	2025	2054	2076
25°	2003	2038	2073
30°	1977	2032	2073
35°	1940	2008	2071
40°	1898	1991	2090
45°	1854	1972	2124
50°	1792	1965	2182
55°	1711	1981	2265
60°	1613	2010	2376
65°	1522	2049	2538
70°	1301	2137	2718
75°	1090	2225	2824
80°	893	2151	2356
85°	775	1596	1732



TEST NUMBER: P308206

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-HRP-CA125-W2A-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.0	3.1
10°-20°	208.9	8.9
20°-30°	316.6	13.5
30°-40°	382.3	16.3
40°-50°	401.7	17.2
50°-60°	377.9	16.2
60°-70°	315.1	13.5
70°-80°	208.8	8.9
80°-90°	55.7	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°	598.5	25.6
0°-40°	980.8	41.9
0°-60°	1760.4	75.2
0°-90°	2340.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2340.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	770	770	770	770	770	
5°	765	766	770	770	769	73
15°	734	737	741	744	745	207
25°	675	679	686	695	698	311
35°	590	596	611	624	630	369
45°	487	494	518	545	558	375
55°	365	381	422	465	483	326
65°	239	260	322	375	399	233
75°	105	146	214	258	272	114
85°	25	38	52	56	56	29
90°	0	0	0	0	0	



TEST NUMBER: P308206

CATALOG NUMBER: 22FCZ2-34HE-UNV-L82765-HRP-CA125-W2A-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	770.5	770.5	770.5	770.5	770.5
2.5°	767.6	769.1	772.0	772.0	770.5
5°	764.6	766.1	770.5	770.5	769.1
7.5°	760.2	761.7	764.6	767.6	766.1
10°	754.3	755.8	758.7	761.7	761.7
12.5°	744.0	745.4	751.3	752.8	752.8
15°	733.6	736.6	741.0	744.0	745.4
17.5°	720.3	723.3	729.2	735.1	735.1
20°	707.1	710.0	717.4	723.3	724.8
22.5°	690.8	695.3	702.6	710.0	713.0
25°	674.6	679.0	686.4	695.3	698.2
27.5°	655.4	659.8	670.2	680.5	682.0
30°	636.2	640.6	653.9	662.8	667.2
32.5°	612.6	618.5	631.8	645.1	649.5
35°	590.4	596.4	611.1	624.4	630.3
37.5°	566.8	572.7	589.0	605.2	612.6
40°	540.3	547.6	566.8	584.5	594.9
42.5°	515.2	522.5	541.7	565.4	575.7
45°	487.1	494.5	518.1	544.7	558.0
47.5°	457.6	466.5	494.5	527.0	540.3
50°	428.1	438.4	469.4	506.3	521.1
52.5°	397.1	410.4	445.8	485.6	503.4
55°	364.6	380.8	422.2	465.0	482.7
57.5°	333.6	348.4	397.1	442.8	462.0
60°	299.7	318.8	373.5	420.7	441.4
62.5°	267.2	287.8	348.4	398.6	420.7
65°	239.1	259.8	321.8	374.9	398.6
67.5°	202.2	230.3	299.7	349.8	373.5
70°	165.3	203.7	271.6	323.3	345.4
72.5°	137.3	174.2	243.6	295.2	315.9
75°	104.8	146.1	214.0	258.3	271.6
77.5°	78.2	121.0	183.0	205.2	206.7
80°	57.6	93.0	138.8	146.1	152.0
82.5°	39.9	64.9	90.0	98.9	101.9
85°	25.1	38.4	51.7	56.1	56.1
87.5°	13.3	14.8	17.7	17.7	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)