

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: P308118

Luminaire Tested: **22FCZ2-24HE-UNV-L82765-HRP-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: P308118  
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: 22FCZ2-24HE-UNV-L82765-HRP-CA125-W2A-U-4500K  
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**

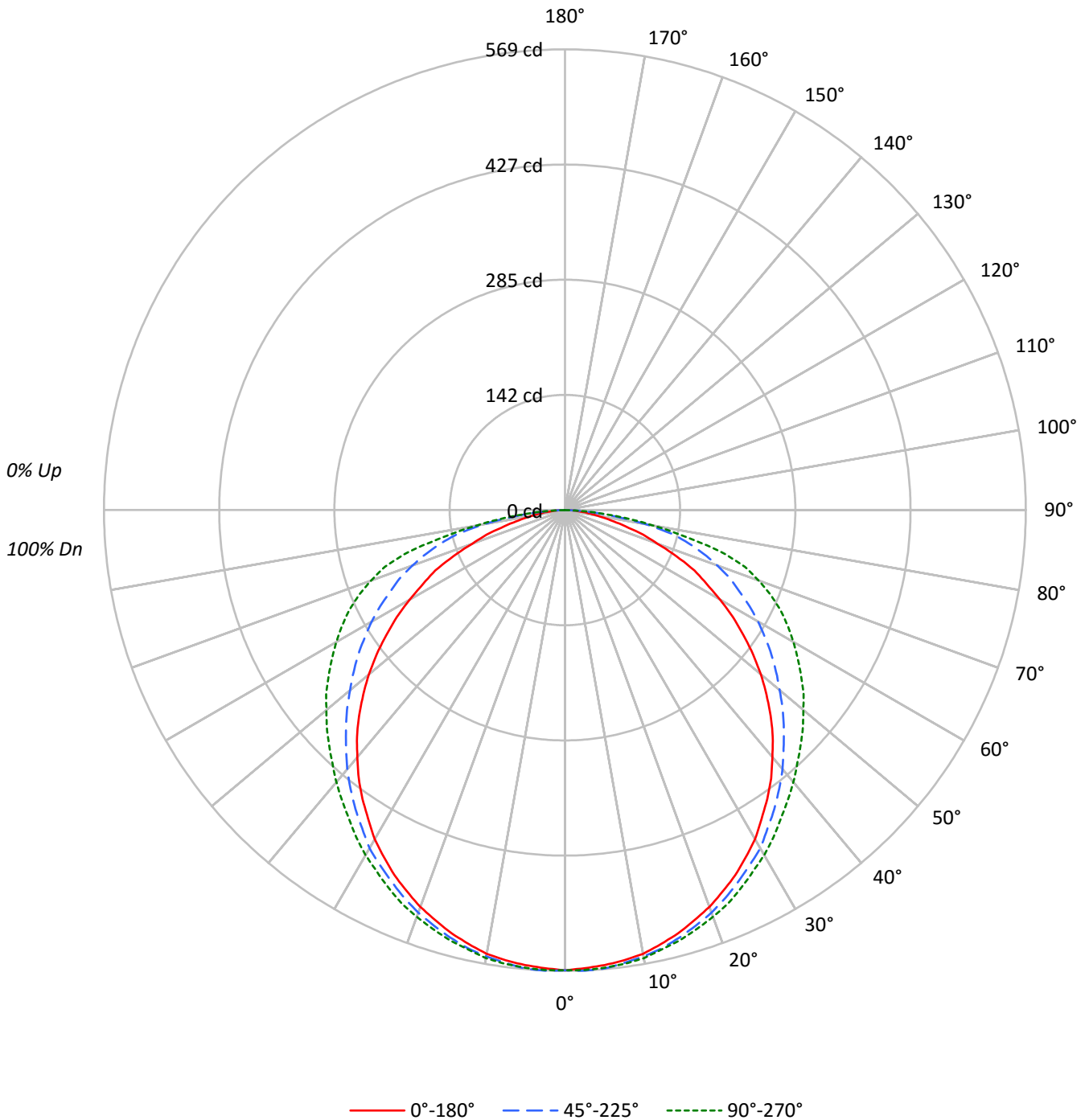
Lumens per Lamp: N/A  
Luminaire Lumens: 1726.0 lumens  
Efficiency: N/A  
Efficacy: 89.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



TEST NUMBER: P308118

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-HRP-CA125-W2A-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P308118

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-HRP-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	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°	1530	1530	1530
5°	1524	1535	1532
10°	1520	1529	1535
15°	1507	1523	1532
20°	1493	1515	1531
25°	1477	1503	1529
30°	1458	1499	1529
35°	1431	1481	1527
40°	1400	1469	1541
45°	1367	1455	1566
50°	1322	1449	1609
55°	1262	1461	1670
60°	1189	1483	1752
65°	1123	1512	1872
70°	959	1576	2005
75°	804	1642	2083
80°	659	1585	1737
85°	571	1176	1278



TEST NUMBER: P308118

CATALOG NUMBER: 22FCZ2-24HE-UNV-L82765-HRP-CA125-W2A-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.9	3.1
10°-20°	154.1	8.9
20°-30°	233.5	13.5
30°-40°	282.0	16.3
40°-50°	296.3	17.2
50°-60°	278.8	16.2
60°-70°	232.5	13.5
70°-80°	154.0	8.9
80°-90°	41.0	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°	441.5	25.6
0°-40°	723.4	41.9
0°-60°	1298.5	75.2
0°-90°	1726.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1726.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	564	565	568	568	567	54
15°	541	543	547	549	550	153
25°	498	501	506	513	515	229
35°	436	440	451	461	465	272
45°	359	365	382	402	412	277
55°	269	281	311	343	356	241
65°	176	192	237	277	294	172
75°	77	108	158	190	200	84
85°	18	28	38	41	41	21
90°	0	0	0	0	0	



TEST NUMBER: P308118

CATALOG NUMBER: 22FC22-24HE-UNV-L82765-HRP-CA125-W2A-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	568.4	568.4	568.4	568.4	568.4
2.5°	566.2	567.3	569.4	569.4	568.4
5°	564.0	565.1	568.4	568.4	567.3
7.5°	560.7	561.8	564.0	566.2	565.1
10°	556.4	557.5	559.6	561.8	561.8
12.5°	548.8	549.8	554.2	555.3	555.3
15°	541.1	543.3	546.6	548.8	549.8
17.5°	531.3	533.5	537.9	542.2	542.2
20°	521.5	523.7	529.2	533.5	534.6
22.5°	509.6	512.8	518.3	523.7	525.9
25°	497.6	500.8	506.3	512.8	515.0
27.5°	483.4	486.7	494.3	501.9	503.0
30°	469.3	472.5	482.3	488.9	492.1
32.5°	451.9	456.2	466.0	475.8	479.1
35°	435.5	439.9	450.8	460.6	464.9
37.5°	418.1	422.5	434.4	446.4	451.9
40°	398.5	403.9	418.1	431.2	438.8
42.5°	380.0	385.4	399.6	417.0	424.6
45°	359.3	364.7	382.2	401.8	411.6
47.5°	337.5	344.1	364.7	388.7	398.5
50°	315.8	323.4	346.2	373.5	384.3
52.5°	292.9	302.7	328.8	358.2	371.3
55°	268.9	280.9	311.4	343.0	356.0
57.5°	246.1	257.0	292.9	326.6	340.8
60°	221.0	235.2	275.5	310.3	325.6
62.5°	197.1	212.3	257.0	294.0	310.3
65°	176.4	191.6	237.4	276.6	294.0
67.5°	149.2	169.9	221.0	258.0	275.5
70°	121.9	150.3	200.3	238.4	254.8
72.5°	101.3	128.5	179.7	217.8	233.0
75°	77.3	107.8	157.9	190.5	200.3
77.5°	57.7	89.3	135.0	151.3	152.4
80°	42.5	68.6	102.3	107.8	112.1
82.5°	29.4	47.9	66.4	72.9	75.1
85°	18.5	28.3	38.1	41.4	41.4
87.5°	9.8	10.9	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)