

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: P308130

Luminaire Tested: **22FCZ2-24HE-UNV-L82765-HRP-CP125-W2A-U-5700K**

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: P308130  
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-CP125-W2A-U-5700K  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB 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**

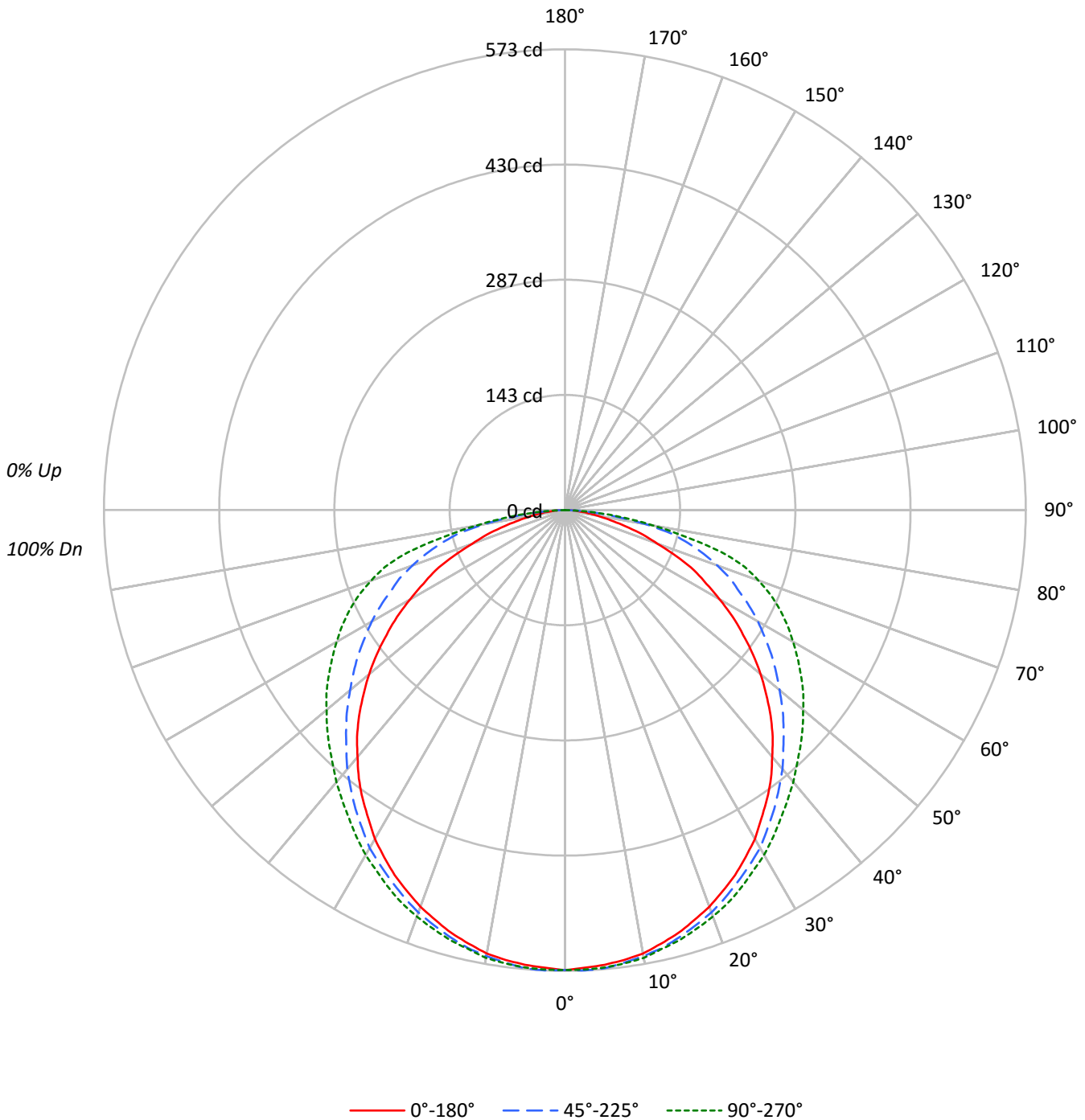
Lumens per Lamp: N/A  
Luminaire Lumens: 1737.0 lumens  
Efficiency: N/A  
Efficacy: 89.5 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



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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	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°	1539	1539	1539
5°	1533	1545	1542
10°	1530	1539	1545
15°	1517	1533	1541
20°	1503	1525	1541
25°	1487	1513	1539
30°	1468	1508	1539
35°	1440	1490	1537
40°	1409	1478	1551
45°	1376	1464	1576
50°	1330	1459	1619
55°	1270	1470	1681
60°	1197	1492	1763
65°	1130	1521	1883
70°	965	1586	2017
75°	809	1652	2096
80°	662	1596	1750
85°	574	1186	1284



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.2	3.1
10°-20°	155.1	8.9
20°-30°	235.0	13.5
30°-40°	283.8	16.3
40°-50°	298.2	17.2
50°-60°	280.6	16.2
60°-70°	233.9	13.5
70°-80°	155.0	8.9
80°-90°	41.3	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°	444.3	25.6
0°-40°	728.0	41.9
0°-60°	1306.8	75.2
0°-90°	1737.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1737.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	572	572	572	572	572	
5°	568	569	572	572	571	54
15°	545	547	550	552	553	154
25°	501	504	510	516	518	231
35°	438	443	454	464	468	274
45°	362	367	385	404	414	279
55°	271	283	313	345	358	242
65°	178	193	239	278	296	173
75°	78	108	159	192	202	84
85°	19	28	38	42	42	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	572.0	572.0	572.0	572.0	572.0
2.5°	569.8	570.9	573.1	573.1	572.0
5°	567.6	568.7	572.0	572.0	570.9
7.5°	564.3	565.4	567.6	569.8	568.7
10°	559.9	561.0	563.2	565.4	565.4
12.5°	552.3	553.3	557.7	558.8	558.8
15°	544.6	546.8	550.1	552.3	553.3
17.5°	534.7	536.9	541.3	545.7	545.7
20°	524.9	527.0	532.5	536.9	538.0
22.5°	512.8	516.1	521.6	527.0	529.2
25°	500.8	504.0	509.5	516.1	518.3
27.5°	486.5	489.8	497.5	505.1	506.2
30°	472.3	475.5	485.4	492.0	495.3
32.5°	454.7	459.1	469.0	478.8	482.1
35°	438.3	442.7	453.6	463.5	467.9
37.5°	420.8	425.1	437.2	449.3	454.7
40°	401.0	406.5	420.8	433.9	441.6
42.5°	382.4	387.9	402.1	419.7	427.3
45°	361.6	367.1	384.6	404.3	414.2
47.5°	339.7	346.3	367.1	391.2	401.0
50°	317.8	325.4	348.4	375.8	386.8
52.5°	294.8	304.6	330.9	360.5	373.6
55°	270.6	282.7	313.4	345.2	358.3
57.5°	247.6	258.6	294.8	328.7	343.0
60°	222.4	236.7	277.2	312.3	327.6
62.5°	198.3	213.7	258.6	295.8	312.3
65°	177.5	192.8	238.9	278.3	295.8
67.5°	150.1	170.9	222.4	259.7	277.2
70°	122.7	151.2	201.6	240.0	256.4
72.5°	101.9	129.3	180.8	219.1	234.5
75°	77.8	108.5	158.9	191.8	201.6
77.5°	58.1	89.9	135.9	152.3	153.4
80°	42.7	69.0	103.0	108.5	112.9
82.5°	29.6	48.2	66.8	73.4	75.6
85°	18.6	28.5	38.4	41.6	41.6
87.5°	9.9	11.0	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)