

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: P308131

Luminaire Tested: **22FCZ2-24HE-UNV-L82765-HRP-CP125-W2A-U-6500K**

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: P308131  
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-6500K  
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**

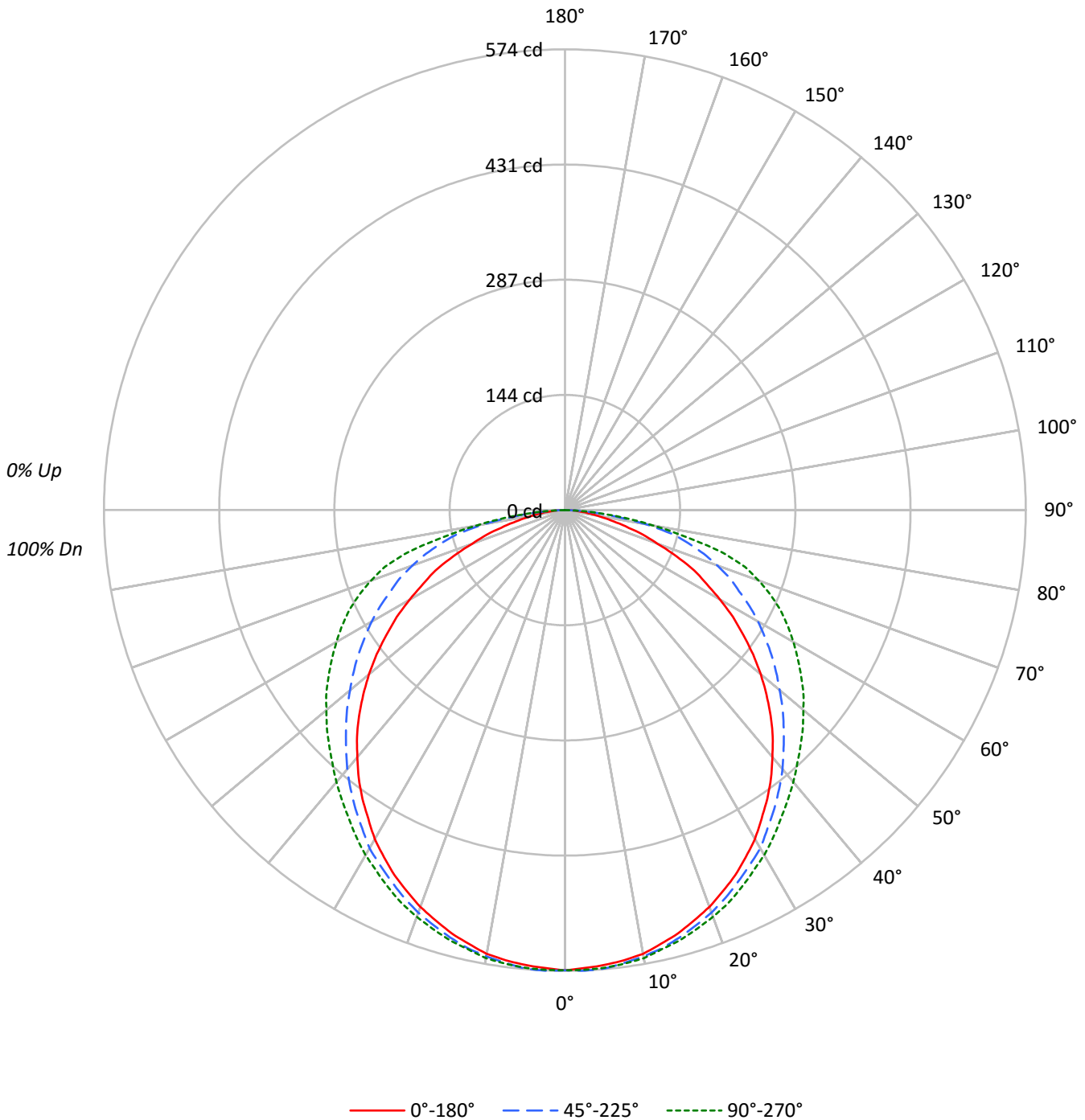
Lumens per Lamp: N/A  
Luminaire Lumens: 1741.0 lumens  
Efficiency: N/A  
Efficacy: 88.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1543	1543	1543
5°	1537	1549	1546
10°	1533	1542	1549
15°	1521	1536	1545
20°	1507	1529	1544
25°	1490	1516	1542
30°	1471	1512	1542
35°	1443	1494	1541
40°	1412	1481	1555
45°	1379	1467	1580
50°	1333	1462	1623
55°	1273	1474	1685
60°	1200	1496	1767
65°	1133	1524	1888
70°	968	1590	2022
75°	811	1655	2101
80°	663	1599	1753
85°	577	1186	1288



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.3	3.1
10°-20°	155.4	8.9
20°-30°	235.5	13.5
30°-40°	284.4	16.3
40°-50°	298.9	17.2
50°-60°	281.2	16.2
60°-70°	234.5	13.5
70°-80°	155.4	8.9
80°-90°	41.4	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°	445.3	25.6
0°-40°	729.7	41.9
0°-60°	1309.8	75.2
0°-90°	1741.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1741.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	573	573	573	573	573	
5°	569	570	573	573	572	54
15°	546	548	551	554	555	154
25°	502	505	511	517	520	231
35°	439	444	455	465	469	275
45°	362	368	386	405	415	279
55°	271	283	314	346	359	243
65°	178	193	239	279	296	173
75°	78	109	159	192	202	85
85°	19	29	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°	573.3	573.3	573.3	573.3	573.3
2.5°	571.1	572.2	574.4	574.4	573.3
5°	568.9	570.0	573.3	573.3	572.2
7.5°	565.6	566.7	568.9	571.1	570.0
10°	561.2	562.3	564.5	566.7	566.7
12.5°	553.5	554.6	559.0	560.1	560.1
15°	545.8	548.0	551.3	553.5	554.6
17.5°	536.0	538.1	542.5	546.9	546.9
20°	526.1	528.3	533.8	538.1	539.2
22.5°	514.0	517.3	522.8	528.3	530.5
25°	501.9	505.2	510.7	517.3	519.5
27.5°	487.6	490.9	498.6	506.3	507.4
30°	473.4	476.6	486.5	493.1	496.4
32.5°	455.8	460.2	470.1	479.9	483.2
35°	439.3	443.7	454.7	464.6	469.0
37.5°	421.7	426.1	438.2	450.3	455.8
40°	402.0	407.5	421.7	434.9	442.6
42.5°	383.3	388.8	403.1	420.6	428.3
45°	362.4	367.9	385.5	405.3	415.1
47.5°	340.5	347.1	367.9	392.1	402.0
50°	318.5	326.2	349.2	376.7	387.7
52.5°	295.4	305.3	331.7	361.3	374.5
55°	271.3	283.4	314.1	346.0	359.1
57.5°	248.2	259.2	295.4	329.5	343.8
60°	222.9	237.2	277.9	313.0	328.4
62.5°	198.8	214.2	259.2	296.5	313.0
65°	177.9	193.3	239.4	279.0	296.5
67.5°	150.5	171.3	222.9	260.3	277.9
70°	123.0	151.6	202.1	240.5	257.0
72.5°	102.1	129.6	181.2	219.7	235.0
75°	78.0	108.7	159.2	192.2	202.1
77.5°	58.2	90.1	136.2	152.7	153.8
80°	42.8	69.2	103.2	108.7	113.1
82.5°	29.7	48.3	67.0	73.6	75.8
85°	18.7	28.6	38.4	41.7	41.7
87.5°	9.9	11.0	13.2	13.2	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)