

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: P308485

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CP125-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: P308485  
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-CP125-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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: 1977.0 lumens  
Efficiency: N/A  
Efficacy: 71.4 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

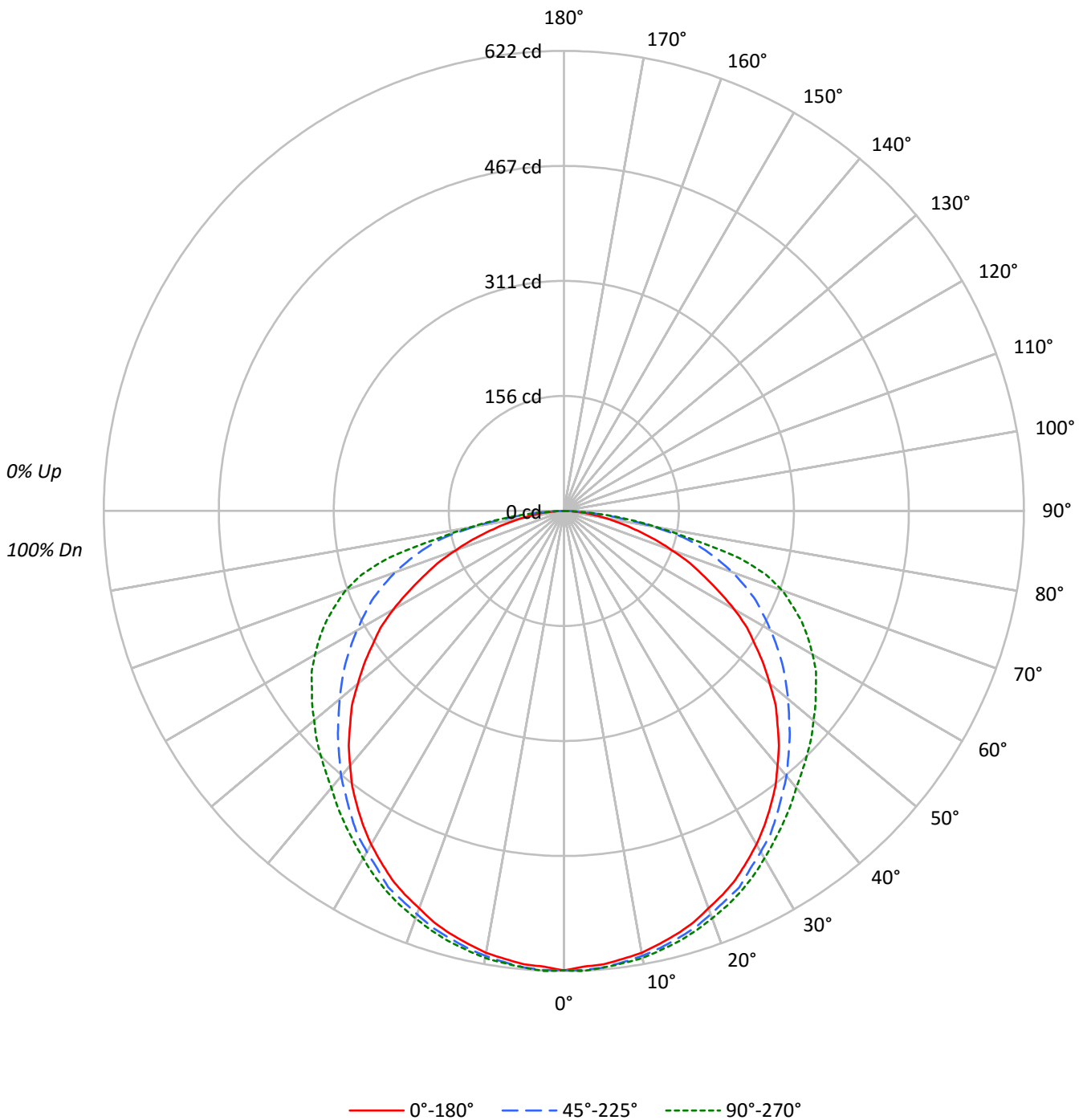
Input Watts (W): 27.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20																		
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	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	100	100	100	100	100	100	100	100	100	100																	
	1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82	82	82	82	82	82	82	82	82	82	82																	
	2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67	67	67	67	67	67	67	67	67	67	67																	
	3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55	55	55	55	55	55	55	55	55	55	55																	
	4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47	47	47	47	47	47	47	47	47	47	47																	
	5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40	40	40	40	40	40	40	40	40	40	40																	
	6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35	35	35	35	35	35	35	35	35	35	35																	
	7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31	31	31	31	31	31	31	31	31	31	31																	
	8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27	27	27	27	27	27	27	27	27	27	27																	
	9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24	24	24	24	24	24	24	24	24	24	24																	
	10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22	22	22	22	22	22	22	22	22	22	22																	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1671	1671	1671
5°	1662	1674	1674
10°	1657	1669	1677
15°	1649	1665	1677
20°	1637	1662	1678
25°	1632	1667	1684
30°	1618	1654	1686
35°	1600	1648	1696
40°	1579	1645	1717
45°	1555	1644	1771
50°	1522	1656	1845
55°	1481	1692	1951
60°	1432	1738	2090
65°	1333	1824	2260
70°	1224	1911	2471
75°	1074	2011	2556
80°	924	1915	2005
85°	809	1392	1525



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.7	3.0
10°-20°	168.7	8.5
20°-30°	257.3	13.0
30°-40°	314.2	15.9
40°-50°	336.0	17.0
50°-60°	324.3	16.4
60°-70°	279.1	14.1
70°-80°	188.9	9.6
80°-90°	49.8	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°	484.7	24.5
0°-40°	798.9	40.4
0°-60°	1459.2	73.8
0°-90°	1977.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1977.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	621	621	621	621	621	
5°	615	617	620	620	620	58
15°	592	593	598	601	602	167
25°	550	553	561	564	567	253
35°	487	492	502	512	516	305
45°	409	416	432	454	465	315
55°	316	326	361	397	416	283
65°	209	230	286	332	355	208
75°	103	137	193	233	246	111
85°	26	36	45	46	49	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	621.0	621.0	621.0	621.0	621.0
2.5°	616.6	618.1	621.0	621.0	622.5
5°	615.2	616.6	619.6	619.6	619.6
7.5°	610.8	612.3	615.2	616.6	616.6
10°	606.5	607.9	610.8	612.3	613.7
12.5°	599.2	600.6	605.0	607.9	607.9
15°	591.9	593.4	597.7	600.6	602.1
17.5°	583.2	586.1	590.5	593.4	594.8
20°	571.6	574.5	580.3	584.7	586.1
22.5°	561.4	564.3	570.1	574.5	577.4
25°	549.7	552.7	561.4	564.3	567.2
27.5°	535.2	538.1	545.4	551.2	555.6
30°	520.7	523.6	532.3	539.6	542.5
32.5°	504.7	509.0	519.2	525.0	529.4
35°	487.2	491.6	501.8	511.9	516.3
37.5°	469.8	474.1	484.3	497.4	503.2
40°	449.4	455.2	468.3	485.8	488.7
42.5°	430.5	437.8	449.4	469.8	477.0
45°	408.7	415.9	431.9	453.8	465.4
47.5°	388.3	395.6	413.0	439.2	453.8
50°	363.6	373.8	395.6	426.1	440.7
52.5°	340.3	349.0	378.1	411.6	429.0
55°	315.6	325.8	360.7	397.0	415.9
57.5°	293.8	302.5	341.8	382.5	404.3
60°	266.1	277.8	322.9	366.5	388.3
62.5°	237.1	254.5	304.0	349.0	372.3
65°	209.4	229.8	286.5	331.6	354.9
67.5°	184.7	206.5	264.7	312.7	334.5
70°	155.6	183.2	242.9	289.4	314.1
72.5°	129.4	160.0	218.2	264.7	286.5
75°	103.3	136.7	193.4	232.7	245.8
77.5°	80.0	112.0	165.8	177.4	178.9
80°	59.6	88.7	123.6	125.1	129.4
82.5°	40.7	62.5	80.0	87.3	88.7
85°	26.2	36.4	45.1	46.5	49.4
87.5°	11.6	13.1	16.0	14.5	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)