

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: P308494

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CP187-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: P308494  
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-CP187-W2A-U-3500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.187" 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: 1893.0 lumens  
Efficiency: N/A  
Efficacy: 68.3 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

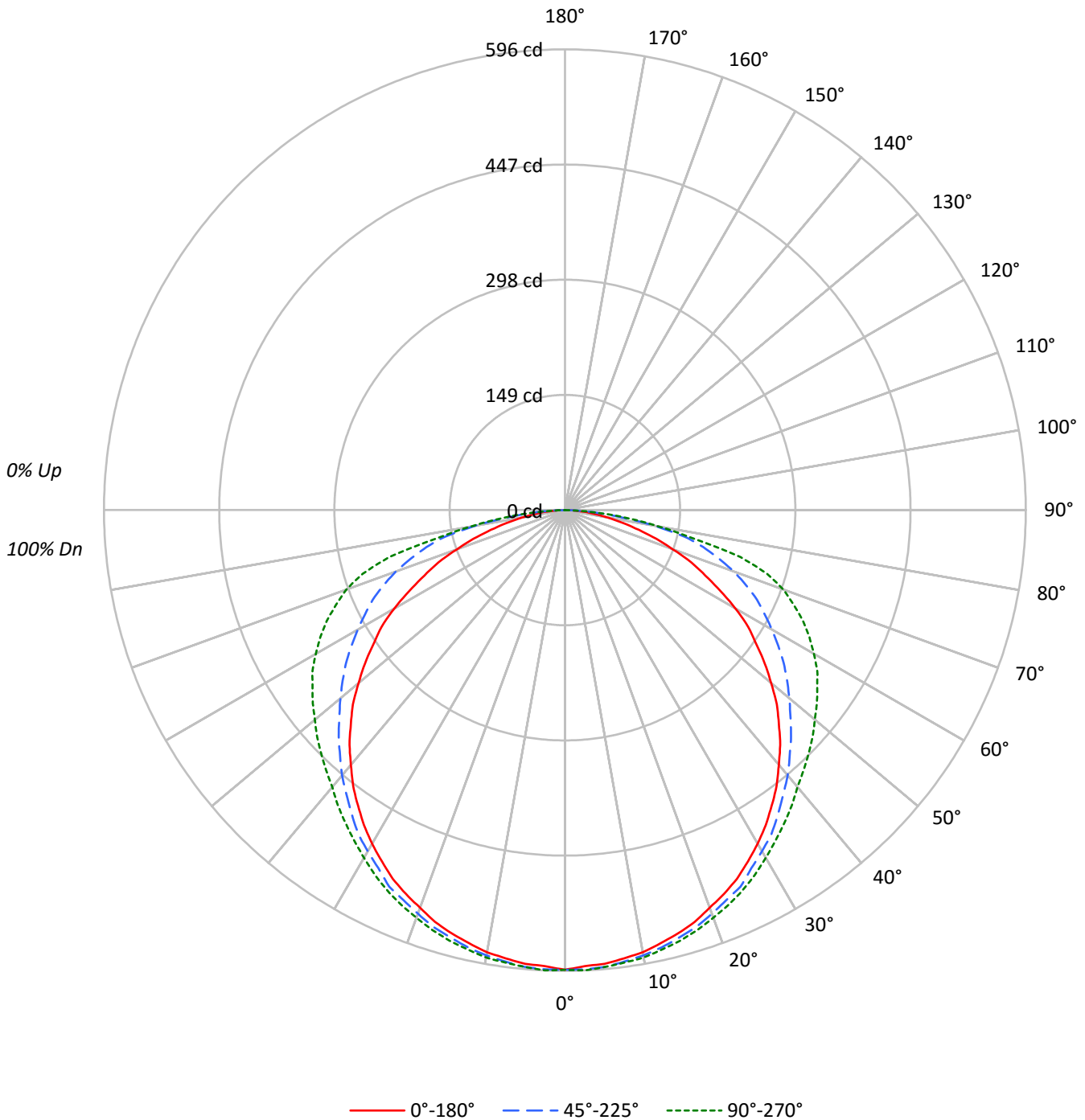
Input Watts (W): 27.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

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

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

	0°	45°	90°
0°	1600	1600	1600
5°	1591	1602	1602
10°	1587	1598	1606
15°	1579	1594	1606
20°	1567	1591	1607
25°	1563	1596	1613
30°	1549	1584	1614
35°	1532	1578	1624
40°	1512	1575	1644
45°	1489	1574	1696
50°	1457	1586	1766
55°	1418	1620	1869
60°	1371	1664	2001
65°	1277	1747	2164
70°	1172	1830	2367
75°	1028	1926	2446
80°	885	1835	1920
85°	775	1334	1460



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.2	3.0
10°-20°	161.5	8.5
20°-30°	246.4	13.0
30°-40°	300.9	15.9
40°-50°	321.7	17.0
50°-60°	310.5	16.4
60°-70°	267.3	14.1
70°-80°	180.8	9.6
80°-90°	47.7	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°	464.1	24.5
0°-40°	765.0	40.4
0°-60°	1397.2	73.8
0°-90°	1893.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1893.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	589	590	593	593	593	56
15°	567	568	572	575	576	160
25°	526	529	538	540	543	242
35°	466	471	480	490	494	292
45°	391	398	414	434	446	302
55°	302	312	345	380	398	271
65°	200	220	274	318	340	199
75°	99	131	185	223	235	106
85°	25	35	43	45	47	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	594.6	594.6	594.6	594.6	594.6
2.5°	590.4	591.8	594.6	594.6	596.0
5°	589.1	590.4	593.2	593.2	593.2
7.5°	584.9	586.3	589.1	590.4	590.4
10°	580.7	582.1	584.9	586.3	587.7
12.5°	573.7	575.1	579.3	582.1	582.1
15°	566.8	568.2	572.3	575.1	576.5
17.5°	558.4	561.2	565.4	568.2	569.6
20°	547.3	550.1	555.6	559.8	561.2
22.5°	537.5	540.3	545.9	550.1	552.8
25°	526.4	529.2	537.5	540.3	543.1
27.5°	512.5	515.2	522.2	527.8	532.0
30°	498.5	501.3	509.7	516.6	519.4
32.5°	483.2	487.4	497.1	502.7	506.9
35°	466.5	470.7	480.4	490.2	494.4
37.5°	449.8	454.0	463.7	476.3	481.8
40°	430.3	435.9	448.4	465.1	467.9
42.5°	412.2	419.2	430.3	449.8	456.8
45°	391.3	398.3	413.6	434.5	445.6
47.5°	371.8	378.8	395.5	420.6	434.5
50°	348.1	357.9	378.8	408.0	421.9
52.5°	325.9	334.2	362.1	394.1	410.8
55°	302.2	311.9	345.4	380.2	398.3
57.5°	281.3	289.7	327.3	366.2	387.1
60°	254.8	266.0	309.1	350.9	371.8
62.5°	227.0	243.7	291.0	334.2	356.5
65°	200.5	220.0	274.3	317.5	339.8
67.5°	176.9	197.7	253.4	299.4	320.3
70°	149.0	175.5	232.6	277.1	300.8
72.5°	123.9	153.2	208.9	253.4	274.3
75°	98.9	130.9	185.2	222.8	235.3
77.5°	76.6	107.2	158.8	169.9	171.3
80°	57.1	84.9	118.4	119.8	123.9
82.5°	39.0	59.9	76.6	83.6	84.9
85°	25.1	34.8	43.2	44.6	47.3
87.5°	11.1	12.5	15.3	13.9	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)