

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: P308474

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CA125-W2A-U-2700K**

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: P308474
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-CA125-W2A-U-2700K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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: 1894.0 lumens
Efficiency: N/A
Efficacy: 68.6 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

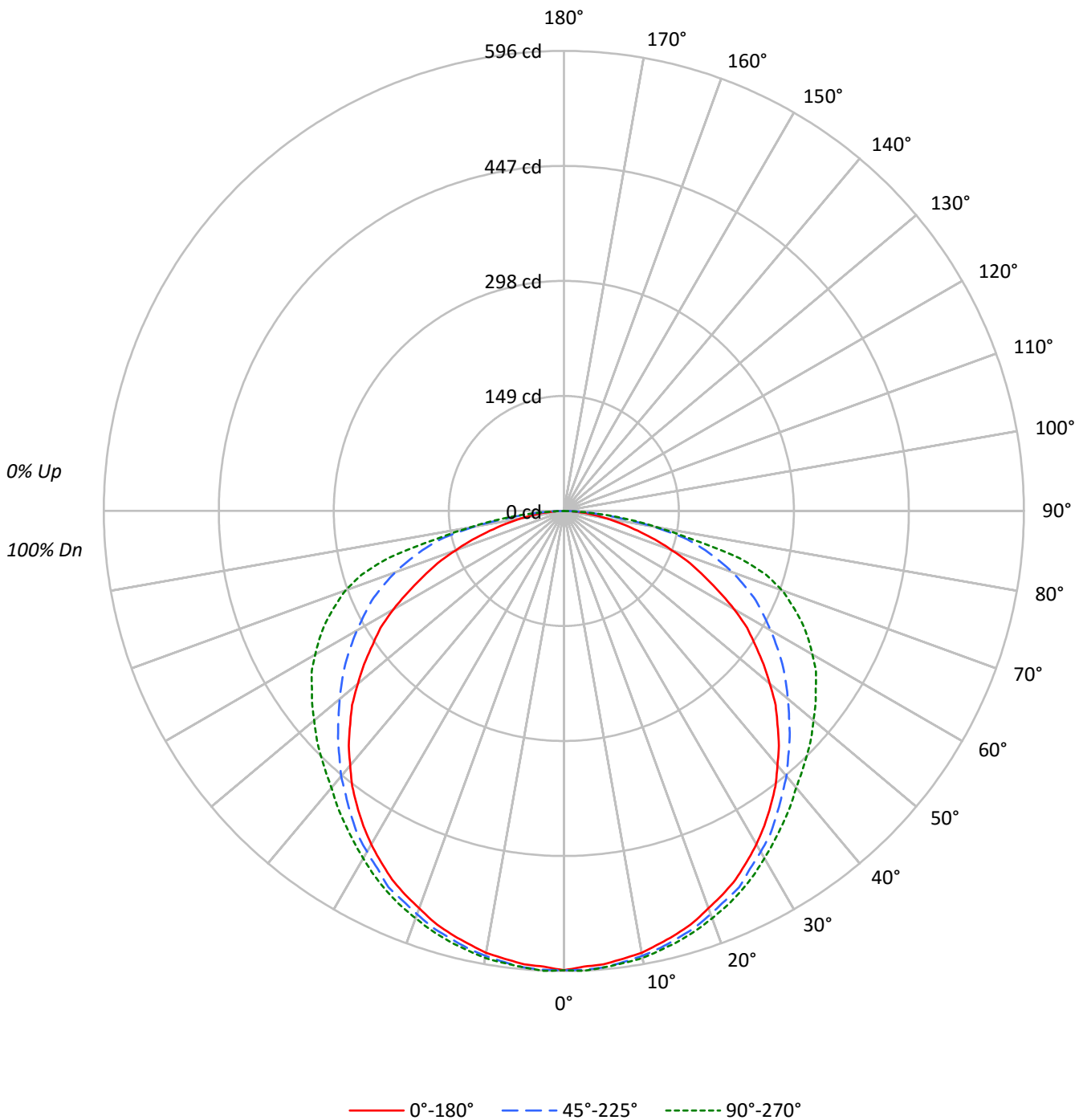
Input Watts (W): 27.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1601	1601	1601
5°	1592	1603	1603
10°	1588	1599	1607
15°	1580	1595	1607
20°	1568	1592	1608
25°	1564	1597	1613
30°	1550	1584	1615
35°	1533	1579	1625
40°	1512	1576	1644
45°	1490	1575	1697
50°	1458	1587	1768
55°	1418	1621	1870
60°	1372	1665	2002
65°	1277	1748	2165
70°	1173	1831	2368
75°	1028	1927	2449
80°	885	1835	1922
85°	775	1334	1463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.3	3.0
10°-20°	161.6	8.5
20°-30°	246.5	13.0
30°-40°	301.0	15.9
40°-50°	321.8	17.0
50°-60°	310.6	16.4
60°-70°	267.4	14.1
70°-80°	180.9	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°	464.4	24.5
0°-40°	765.4	40.4
0°-60°	1397.9	73.8
0°-90°	1894.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1894.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	589	591	594	594	594	56
15°	567	568	573	575	577	160
25°	527	530	538	541	543	242
35°	467	471	481	490	495	292
45°	392	398	414	435	446	302
55°	302	312	346	380	398	271
65°	201	220	274	318	340	200
75°	99	131	185	223	236	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°	594.9	594.9	594.9	594.9	594.9
2.5°	590.8	592.2	594.9	594.9	596.3
5°	589.4	590.8	593.5	593.5	593.5
7.5°	585.2	586.6	589.4	590.8	590.8
10°	581.0	582.4	585.2	586.6	588.0
12.5°	574.0	575.4	579.6	582.4	582.4
15°	567.1	568.5	572.6	575.4	576.8
17.5°	558.7	561.5	565.7	568.5	569.9
20°	547.6	550.4	555.9	560.1	561.5
22.5°	537.8	540.6	546.2	550.4	553.1
25°	526.7	529.5	537.8	540.6	543.4
27.5°	512.7	515.5	522.5	528.1	532.2
30°	498.8	501.6	509.9	516.9	519.7
32.5°	483.5	487.7	497.4	503.0	507.2
35°	466.8	470.9	480.7	490.4	494.6
37.5°	450.0	454.2	464.0	476.5	482.1
40°	430.5	436.1	448.6	465.4	468.1
42.5°	412.4	419.4	430.5	450.0	457.0
45°	391.5	398.5	413.8	434.7	445.9
47.5°	372.0	379.0	395.7	420.8	434.7
50°	348.3	358.1	379.0	408.2	422.2
52.5°	326.0	334.4	362.3	394.3	411.0
55°	302.3	312.1	345.5	380.4	398.5
57.5°	281.4	289.8	327.4	366.4	387.3
60°	255.0	266.1	309.3	351.1	372.0
62.5°	227.1	243.8	291.2	334.4	356.7
65°	200.6	220.1	274.5	317.7	340.0
67.5°	176.9	197.8	253.6	299.6	320.5
70°	149.1	175.6	232.7	277.3	301.0
72.5°	124.0	153.3	209.0	253.6	274.5
75°	98.9	131.0	185.3	222.9	235.5
77.5°	76.6	107.3	158.8	170.0	171.4
80°	57.1	85.0	118.4	119.8	124.0
82.5°	39.0	59.9	76.6	83.6	85.0
85°	25.1	34.8	43.2	44.6	47.4
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)