

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: P308475

Luminaire Tested: **22FCZ2-34HE-UNV-L82765-RDP-CA125-W2A-U-3000K**

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: P308475
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-3000K
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: 1949.0 lumens
Efficiency: N/A
Efficacy: 71.1 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

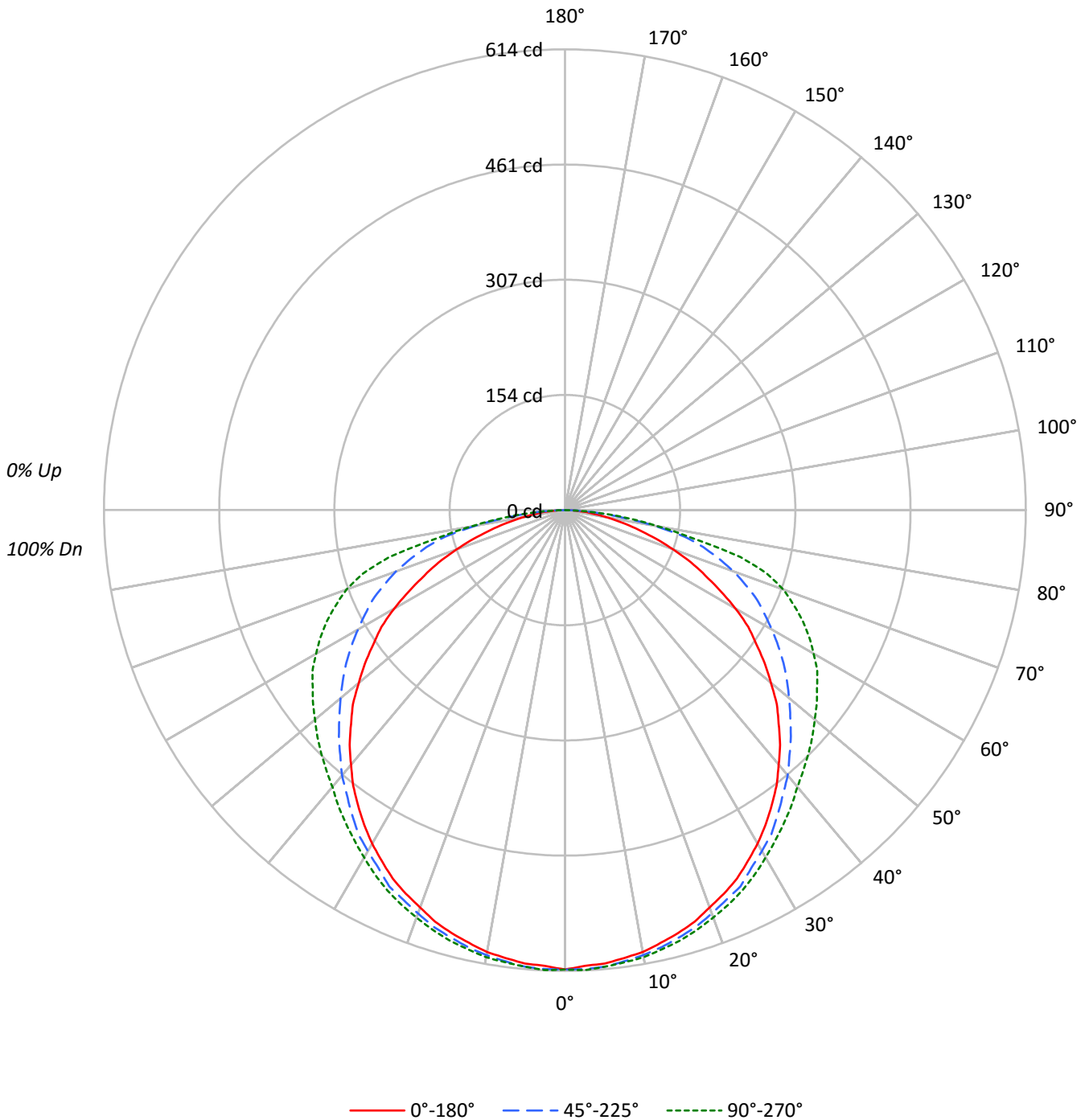
Input Watts (W): 27.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1647	1647	1647
5°	1638	1650	1650
10°	1634	1646	1653
15°	1626	1642	1654
20°	1614	1638	1655
25°	1609	1643	1660
30°	1595	1631	1662
35°	1578	1625	1672
40°	1556	1622	1692
45°	1533	1620	1746
50°	1500	1633	1819
55°	1460	1668	1924
60°	1412	1713	2060
65°	1315	1799	2227
70°	1207	1884	2437
75°	1058	1983	2519
80°	911	1889	1977
85°	797	1371	1504



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.9	3.0
10°-20°	166.3	8.5
20°-30°	253.7	13.0
30°-40°	309.8	15.9
40°-50°	331.2	17.0
50°-60°	319.7	16.4
60°-70°	275.2	14.1
70°-80°	186.2	9.6
80°-90°	49.1	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°	477.9	24.5
0°-40°	787.6	40.4
0°-60°	1438.5	73.8
0°-90°	1949.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1949.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	606	608	611	611	611	58
15°	584	585	589	592	594	165
25°	542	545	553	556	559	249
35°	480	485	495	505	509	301
45°	403	410	426	447	459	311
55°	311	321	356	391	410	279
65°	206	226	282	327	350	205
75°	102	135	191	229	242	109
85°	26	36	44	46	49	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	612.2	612.2	612.2	612.2	612.2
2.5°	607.9	609.3	612.2	612.2	613.6
5°	606.5	607.9	610.8	610.8	610.8
7.5°	602.2	603.6	606.5	607.9	607.9
10°	597.9	599.3	602.2	603.6	605.0
12.5°	590.7	592.1	596.4	599.3	599.3
15°	583.5	585.0	589.3	592.1	593.6
17.5°	574.9	577.8	582.1	585.0	586.4
20°	563.5	566.3	572.1	576.4	577.8
22.5°	553.4	556.3	562.0	566.3	569.2
25°	542.0	544.8	553.4	556.3	559.2
27.5°	527.6	530.5	537.7	543.4	547.7
30°	513.3	516.2	524.8	531.9	534.8
32.5°	497.5	501.8	511.9	517.6	521.9
35°	480.3	484.6	494.6	504.7	509.0
37.5°	463.1	467.4	477.4	490.3	496.1
40°	443.0	448.8	461.7	478.9	481.7
42.5°	424.4	431.6	443.0	463.1	470.3
45°	402.9	410.1	425.8	447.3	458.8
47.5°	382.8	390.0	407.2	433.0	447.3
50°	358.4	368.5	390.0	420.1	434.4
52.5°	335.5	344.1	372.8	405.8	423.0
55°	311.1	321.2	355.6	391.4	410.1
57.5°	289.6	298.2	336.9	377.1	398.6
60°	262.4	273.8	318.3	361.3	382.8
62.5°	233.7	250.9	299.7	344.1	367.0
65°	206.5	226.5	282.5	326.9	349.8
67.5°	182.1	203.6	260.9	308.3	329.8
70°	153.4	180.7	239.4	285.3	309.7
72.5°	127.6	157.7	215.1	260.9	282.5
75°	101.8	134.8	190.7	229.4	242.3
77.5°	78.9	110.4	163.4	174.9	176.4
80°	58.8	87.5	121.9	123.3	127.6
82.5°	40.1	61.7	78.9	86.0	87.5
85°	25.8	35.8	44.4	45.9	48.7
87.5°	11.5	12.9	15.8	14.3	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)