

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: P307035

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-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: P307035
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-25-UNV-L82765-HRP-CA125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 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: 1673.0 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

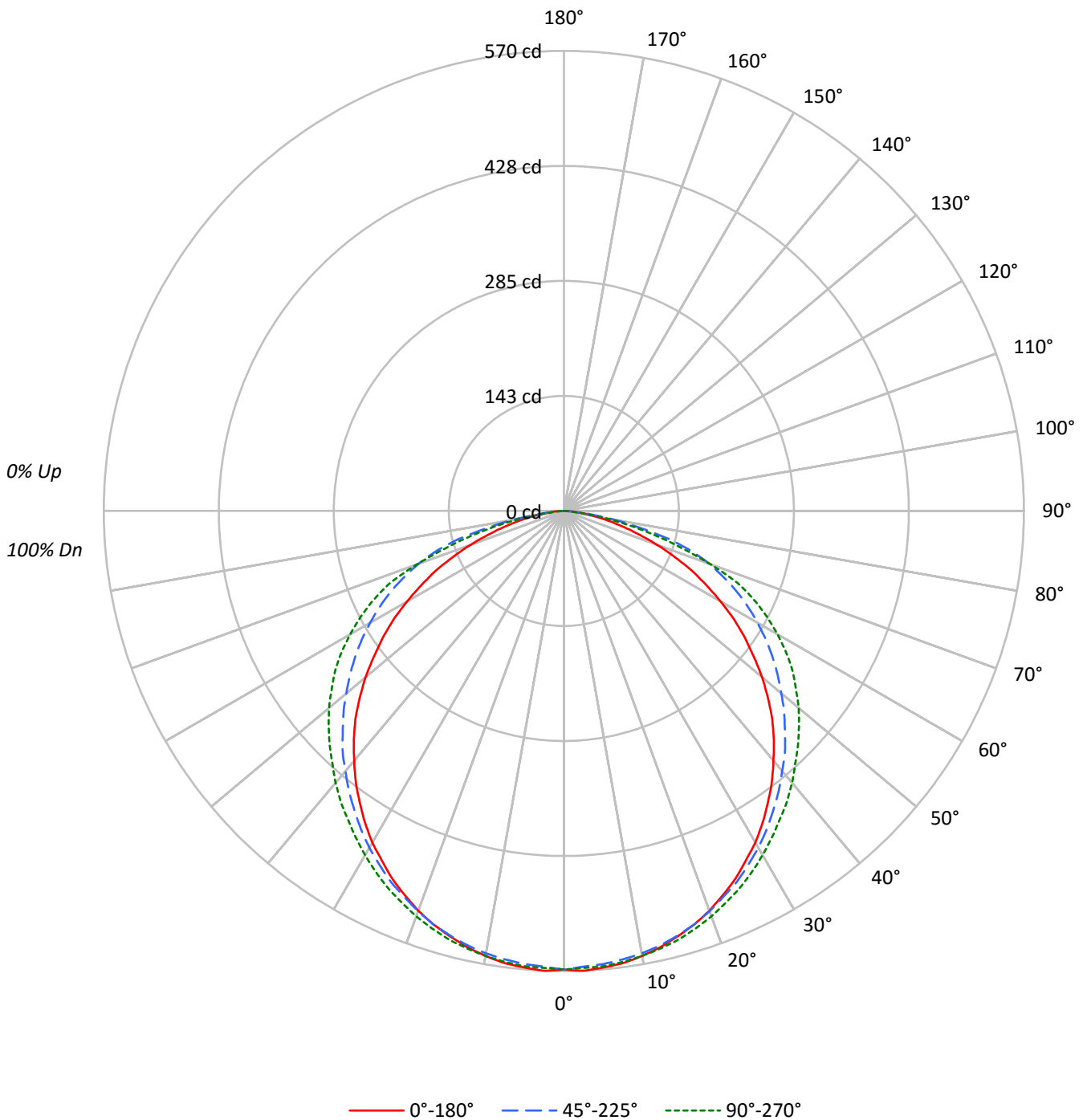
Input Watts (W): 19.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1529	1529	1529
5°	1533	1522	1529
10°	1529	1521	1529
15°	1520	1517	1531
20°	1509	1511	1531
25°	1493	1506	1531
30°	1474	1497	1530
35°	1448	1486	1533
40°	1419	1479	1545
45°	1389	1474	1561
50°	1341	1473	1590
55°	1284	1481	1624
60°	1206	1492	1645
65°	1112	1507	1655
70°	969	1511	1523
75°	799	1406	1231
80°	628	1010	823
85°	488	389	195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.8	3.2
10°-20°	154.3	9.2
20°-30°	234.4	14.0
30°-40°	284.0	17.0
40°-50°	299.3	17.9
50°-60°	279.4	16.7
60°-70°	223.3	13.3
70°-80°	122.8	7.3
80°-90°	21.7	1.3
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°	442.5	26.5
0°-40°	726.5	43.4
0°-60°	1305.2	78.0
0°-90°	1673.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1673.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	568	566	563	567	566	54
15°	546	546	544	550	550	154
25°	503	504	507	514	516	232
35°	441	445	452	464	467	276
45°	365	372	387	405	410	281
55°	274	287	316	338	346	244
65°	175	197	237	256	260	172
75°	77	110	135	122	118	83
85°	16	20	13	8	6	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	568.2	568.2	568.2	568.2	568.2
2.5°	570.3	568.7	565.0	568.2	566.6
5°	567.6	566.1	563.4	567.1	566.1
7.5°	565.0	562.9	560.3	564.5	563.4
10°	559.7	558.2	556.6	560.3	559.7
12.5°	553.4	552.9	551.3	555.5	555.0
15°	545.5	545.5	544.5	549.7	549.7
17.5°	537.1	536.6	537.1	542.9	542.4
20°	527.1	527.1	527.7	534.5	534.5
22.5°	515.0	515.6	517.1	525.5	525.0
25°	502.9	504.0	507.1	514.5	515.6
27.5°	488.2	490.8	494.5	503.5	504.5
30°	474.5	476.1	481.9	490.3	492.4
32.5°	458.2	461.4	467.7	477.1	479.8
35°	440.8	445.1	452.4	464.0	466.6
37.5°	423.5	427.2	437.2	449.3	454.0
40°	404.0	410.3	420.9	434.5	439.8
42.5°	385.1	391.4	405.6	419.8	424.5
45°	365.1	371.9	387.2	404.6	410.3
47.5°	343.0	350.9	370.4	388.8	395.1
50°	320.4	330.4	351.9	372.5	379.8
52.5°	296.7	309.3	334.1	355.6	362.5
55°	273.6	287.2	315.6	337.7	346.2
57.5°	249.9	264.6	296.7	322.0	326.7
60°	224.1	242.0	277.2	299.3	305.6
62.5°	198.9	219.4	257.2	278.3	283.6
65°	174.7	196.8	236.7	256.2	259.9
67.5°	148.4	174.7	214.1	232.0	233.1
70°	123.1	153.6	192.0	200.4	193.6
72.5°	98.4	131.0	166.2	159.4	153.6
75°	76.8	109.9	135.2	121.5	118.4
77.5°	56.8	90.0	96.8	89.4	83.6
80°	40.5	71.0	65.2	55.8	53.1
82.5°	27.9	44.7	35.8	27.9	24.2
85°	15.8	20.0	12.6	7.9	6.3
87.5°	6.8	4.7	2.6	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)