

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: P307353

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-CA125-W2A-U-4500K**

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: P307353
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-29-UNV-L82765-RDP-CA125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" ACRYLIC SHEET
Light Source: (168) 4500K 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: 1820.0 lumens
Efficiency: N/A
Efficacy: 75.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

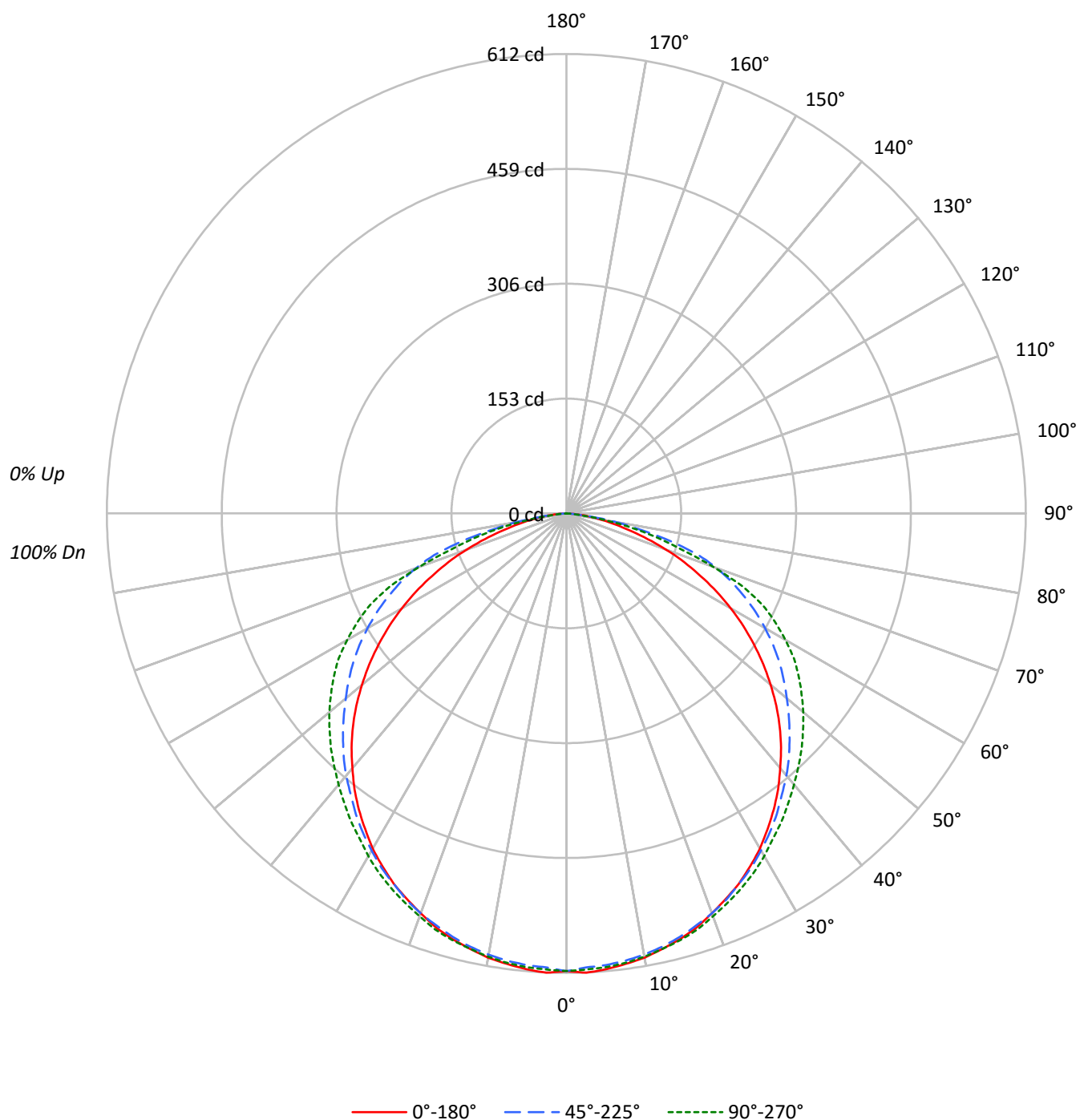
Input Watts (W): 24.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1640	1640	1640
5°	1647	1631	1639
10°	1642	1631	1638
15°	1635	1627	1639
20°	1623	1623	1636
25°	1616	1616	1637
30°	1603	1611	1638
35°	1582	1606	1643
40°	1557	1602	1657
45°	1530	1601	1687
50°	1487	1606	1725
55°	1433	1627	1773
60°	1361	1644	1813
65°	1258	1664	1836
70°	1118	1677	1644
75°	901	1507	1315
80°	705	1057	859
85°	482	306	219



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	3.2
10°-20°	165.5	9.1
20°-30°	252.1	13.8
30°-40°	307.0	16.9
40°-50°	325.7	17.9
50°-60°	307.4	16.9
60°-70°	248.2	13.6
70°-80°	134.6	7.4
80°-90°	21.8	1.2
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°	475.3	26.1
0°-40°	782.3	43.0
0°-60°	1415.4	77.8
0°-90°	1820.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1820.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	610	610	610	610	610	
5°	610	608	604	608	607	58
15°	587	585	584	588	588	166
25°	544	543	544	550	551	251
35°	482	484	489	499	500	301
45°	402	408	421	436	443	310
55°	306	318	347	369	378	273
65°	198	222	261	283	288	196
75°	87	126	145	131	126	95
85°	16	17	10	8	7	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	609.6	609.6	609.6	609.6	609.6
2.5°	612.4	609.6	605.3	609.6	608.1
5°	609.6	608.1	603.9	608.1	606.7
7.5°	605.3	605.3	601.0	603.9	603.9
10°	601.0	599.6	596.8	601.0	599.6
12.5°	593.9	592.5	591.1	595.4	593.9
15°	586.8	585.4	584.0	588.3	588.3
17.5°	578.3	576.9	575.5	581.1	581.1
20°	566.9	566.9	566.9	572.6	571.2
22.5°	555.6	555.6	557.0	562.7	561.3
25°	544.2	542.8	544.2	549.9	551.3
27.5°	530.0	531.4	532.8	538.5	539.9
30°	515.8	517.2	518.6	525.7	527.2
32.5°	498.7	501.6	504.4	512.9	512.9
35°	481.7	484.5	488.8	498.7	500.2
37.5°	463.2	466.1	471.7	483.1	485.9
40°	443.3	447.6	456.1	467.5	471.7
42.5°	423.4	429.1	439.1	451.8	457.5
45°	402.1	407.8	420.6	436.2	443.3
47.5°	379.4	386.5	402.1	422.0	427.7
50°	355.2	365.2	383.6	405.0	412.1
52.5°	331.1	342.4	365.2	387.9	395.0
55°	305.5	318.3	346.7	369.4	378.0
57.5°	279.9	294.1	326.8	351.0	359.5
60°	252.9	270.0	305.5	329.6	336.8
62.5°	225.9	245.8	284.2	308.3	314.0
65°	197.5	221.7	261.4	282.8	288.4
67.5°	170.5	198.9	238.7	254.3	254.3
70°	142.1	173.3	213.1	217.4	208.9
72.5°	113.7	149.2	184.7	169.1	162.0
75°	86.7	126.5	144.9	130.7	126.5
77.5°	65.4	102.3	102.3	93.8	90.9
80°	45.5	78.1	68.2	59.7	55.4
82.5°	29.8	44.0	35.5	28.4	24.2
85°	15.6	17.1	9.9	8.5	7.1
87.5°	5.7	2.8	1.4	2.8	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)