

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: P312054

Luminaire Tested: **14FCZ2-29-UNV-L83050-RDP-CP125-W2A-U-5000K**

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: P312054
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-L83050-RDP-CP125-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB SHEET
Light Source: (168) 5000K 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: 1862.0 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

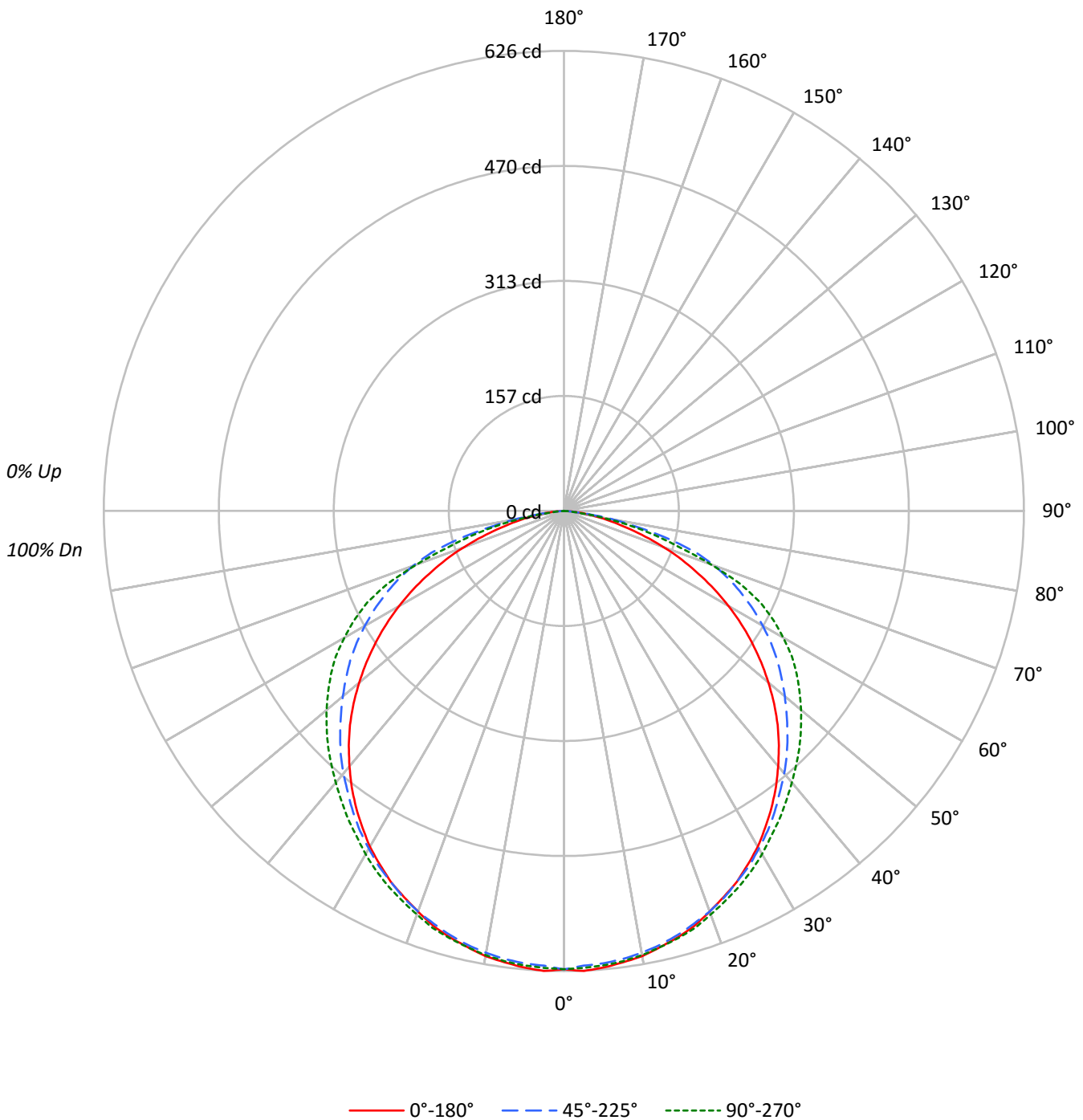
Input Watts (W): 25
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1678	1678	1678
5°	1685	1669	1677
10°	1680	1668	1676
15°	1673	1665	1677
20°	1661	1661	1674
25°	1653	1653	1675
30°	1640	1649	1676
35°	1619	1643	1681
40°	1593	1639	1695
45°	1566	1638	1726
50°	1521	1643	1765
55°	1466	1664	1814
60°	1393	1682	1854
65°	1287	1703	1879
70°	1144	1716	1681
75°	922	1542	1345
80°	721	1082	879
85°	494	315	225



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.0	3.2
10°-20°	169.4	9.1
20°-30°	257.9	13.8
30°-40°	314.1	16.9
40°-50°	333.2	17.9
50°-60°	314.5	16.9
60°-70°	253.9	13.6
70°-80°	137.8	7.4
80°-90°	22.3	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°	486.2	26.1
0°-40°	800.3	43.0
0°-60°	1448.1	77.8
0°-90°	1862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1862.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	624	624	624	624	624	
5°	624	622	618	622	621	59
15°	600	599	598	602	602	169
25°	557	555	557	563	564	256
35°	493	496	500	510	512	308
45°	411	417	430	446	454	317
55°	312	326	355	378	387	279
65°	202	227	268	289	295	200
75°	89	129	148	134	129	97
85°	16	17	10	9	7	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	623.6	623.6	623.6	623.6	623.6
2.5°	626.5	623.6	619.3	623.6	622.2
5°	623.6	622.2	617.8	622.2	620.7
7.5°	619.3	619.3	614.9	617.8	617.8
10°	614.9	613.5	610.5	614.9	613.5
12.5°	607.6	606.2	604.7	609.1	607.6
15°	600.4	598.9	597.5	601.8	601.8
17.5°	591.7	590.2	588.7	594.6	594.6
20°	580.0	580.0	580.0	585.8	584.4
22.5°	568.4	568.4	569.8	575.7	574.2
25°	556.8	555.3	556.8	562.6	564.0
27.5°	542.2	543.7	545.1	550.9	552.4
30°	527.7	529.1	530.6	537.9	539.3
32.5°	510.2	513.2	516.1	524.8	524.8
35°	492.8	495.7	500.1	510.2	511.7
37.5°	473.9	476.8	482.6	494.3	497.2
40°	453.6	457.9	466.6	478.3	482.6
42.5°	433.2	439.0	449.2	462.3	468.1
45°	411.4	417.2	430.3	446.3	453.6
47.5°	388.1	395.4	411.4	431.7	437.6
50°	363.4	373.6	392.5	414.3	421.6
52.5°	338.7	350.3	373.6	396.9	404.1
55°	312.5	325.6	354.7	378.0	386.7
57.5°	286.4	300.9	334.3	359.1	367.8
60°	258.8	276.2	312.5	337.3	344.5
62.5°	231.1	251.5	290.7	315.4	321.3
65°	202.1	226.8	267.5	289.3	295.1
67.5°	174.4	203.5	244.2	260.2	260.2
70°	145.4	177.3	218.1	222.4	213.7
72.5°	116.3	152.6	189.0	173.0	165.7
75°	88.7	129.4	148.3	133.7	129.4
77.5°	66.9	104.7	104.7	95.9	93.0
80°	46.5	80.0	69.8	61.1	56.7
82.5°	30.5	45.1	36.3	29.1	24.7
85°	16.0	17.4	10.2	8.7	7.3
87.5°	5.8	2.9	1.5	2.9	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)