

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: P307896

Luminaire Tested: **14FCZ2-29-UNV-L82765-S-CA125-W2A-U-5700K**

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: P307896
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CA125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS,0.125" ACRYLIC SHEET
Light Source: (168) 5700K 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: 2941.0 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

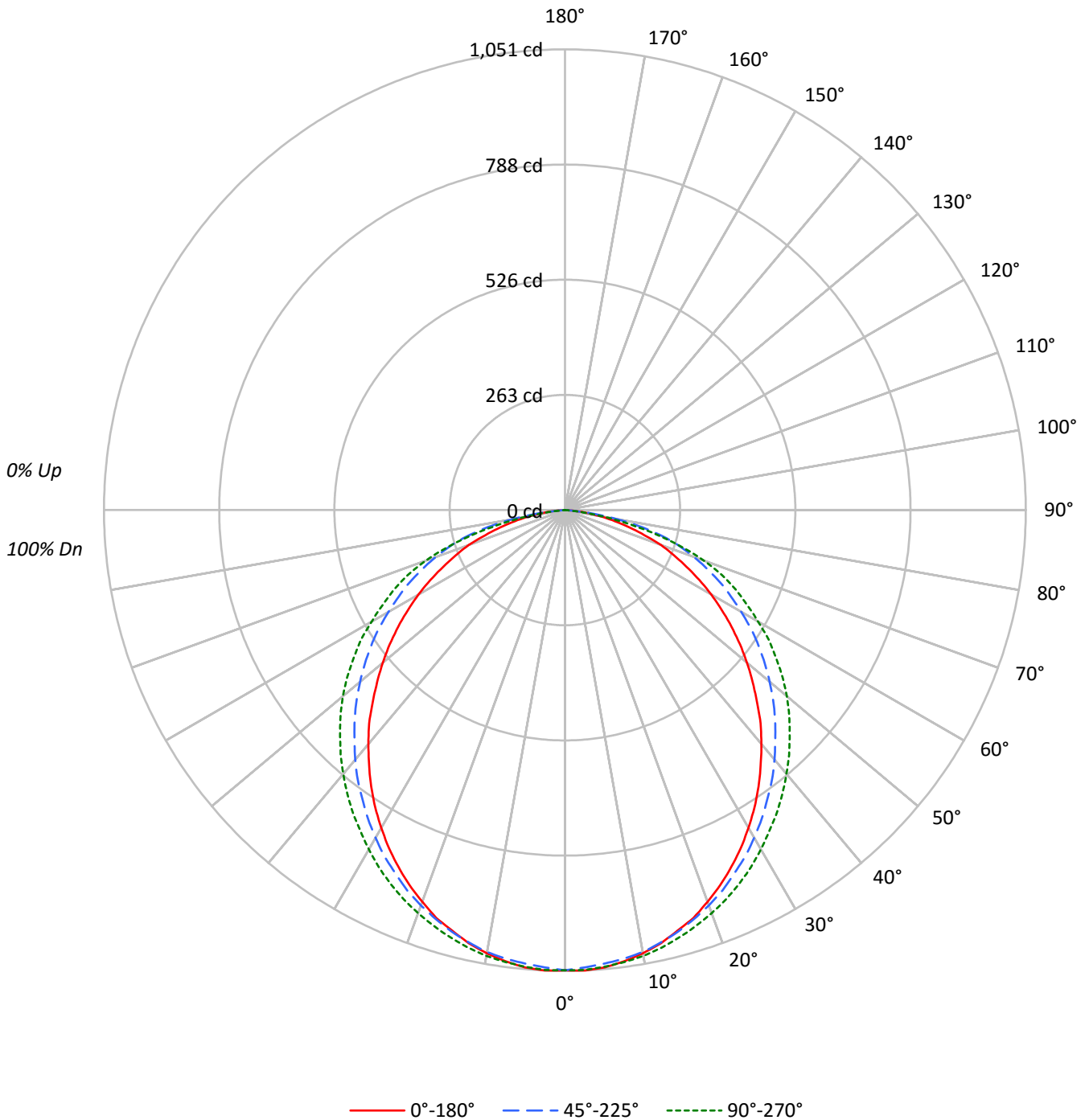
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2825	2825	2825
5°	2828	2804	2824
10°	2805	2797	2821
15°	2766	2774	2811
20°	2723	2748	2802
25°	2667	2715	2793
30°	2601	2682	2778
35°	2529	2644	2769
40°	2448	2612	2761
45°	2358	2581	2758
50°	2271	2552	2766
55°	2175	2531	2757
60°	2072	2496	2739
65°	1950	2488	2739
70°	1836	2467	2662
75°	1592	2411	2274
80°	1288	1943	1514
85°	855	676	451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.1	3.4
10°-20°	282.1	9.6
20°-30°	423.2	14.4
30°-40°	504.8	17.2
40°-50°	521.9	17.7
50°-60°	476.5	16.2
60°-70°	375.0	12.7
70°-80°	218.3	7.4
80°-90°	40.2	1.4
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°	804.4	27.4
0°-40°	1309.2	44.5
0°-60°	2307.6	78.5
0°-90°	2941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2941.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1047	1044	1038	1047	1046	99
15°	993	994	996	1009	1009	280
25°	898	903	914	936	940	414
35°	770	780	805	836	843	481
45°	620	640	678	716	725	479
55°	464	488	540	579	588	415
65°	306	338	391	421	430	304
75°	153	190	232	228	219	163
85°	28	39	22	18	15	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1049.9	1049.9	1049.9	1049.9	1049.9
2.5°	1051.3	1048.4	1044.1	1051.3	1049.9
5°	1047.0	1044.1	1038.2	1047.0	1045.5
7.5°	1038.2	1035.3	1032.4	1041.1	1039.7
10°	1026.6	1025.1	1023.6	1033.8	1032.4
12.5°	1012.0	1012.0	1010.5	1022.2	1022.2
15°	993.0	994.5	995.9	1009.1	1009.1
17.5°	975.5	974.1	978.4	993.0	994.5
20°	950.7	953.6	959.5	977.0	978.4
22.5°	925.9	928.9	939.1	956.6	960.9
25°	898.2	902.6	914.3	936.2	940.5
27.5°	869.1	874.9	890.9	914.3	918.7
30°	837.0	845.7	863.2	889.5	893.9
32.5°	804.9	813.7	835.5	861.8	867.6
35°	769.9	780.1	804.9	835.5	842.8
37.5°	733.5	746.6	775.8	806.4	815.1
40°	697.0	711.6	743.7	775.8	786.0
42.5°	660.6	675.1	710.1	746.6	756.8
45°	619.7	640.1	678.1	716.0	724.7
47.5°	580.4	602.2	644.5	682.4	694.1
50°	542.4	564.3	609.5	648.9	660.6
52.5°	503.1	526.4	574.5	615.4	625.6
55°	463.7	488.5	539.5	578.9	587.6
57.5°	424.3	450.6	503.1	541.0	551.2
60°	385.0	412.7	463.7	501.6	508.9
62.5°	345.6	374.8	427.2	460.8	468.1
65°	306.2	338.3	390.8	421.4	430.2
67.5°	268.3	300.4	351.4	380.6	387.9
70°	233.3	262.5	313.5	335.4	338.3
72.5°	189.6	226.0	275.6	287.3	280.0
75°	153.1	189.6	231.9	227.5	218.7
77.5°	116.7	153.1	180.8	166.2	154.6
80°	83.1	119.6	125.4	103.5	97.7
82.5°	54.0	83.1	70.0	54.0	43.7
85°	27.7	39.4	21.9	17.5	14.6
87.5°	8.7	5.8	2.9	2.9	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)