

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: P312196

Luminaire Tested: **14FCZ2-29-UNV-L83050-CA125-W2A-U-3500K**

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: P312196
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
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-CA125-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 3500K 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: 2792.0 lumens
Efficiency: N/A
Efficacy: 117.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

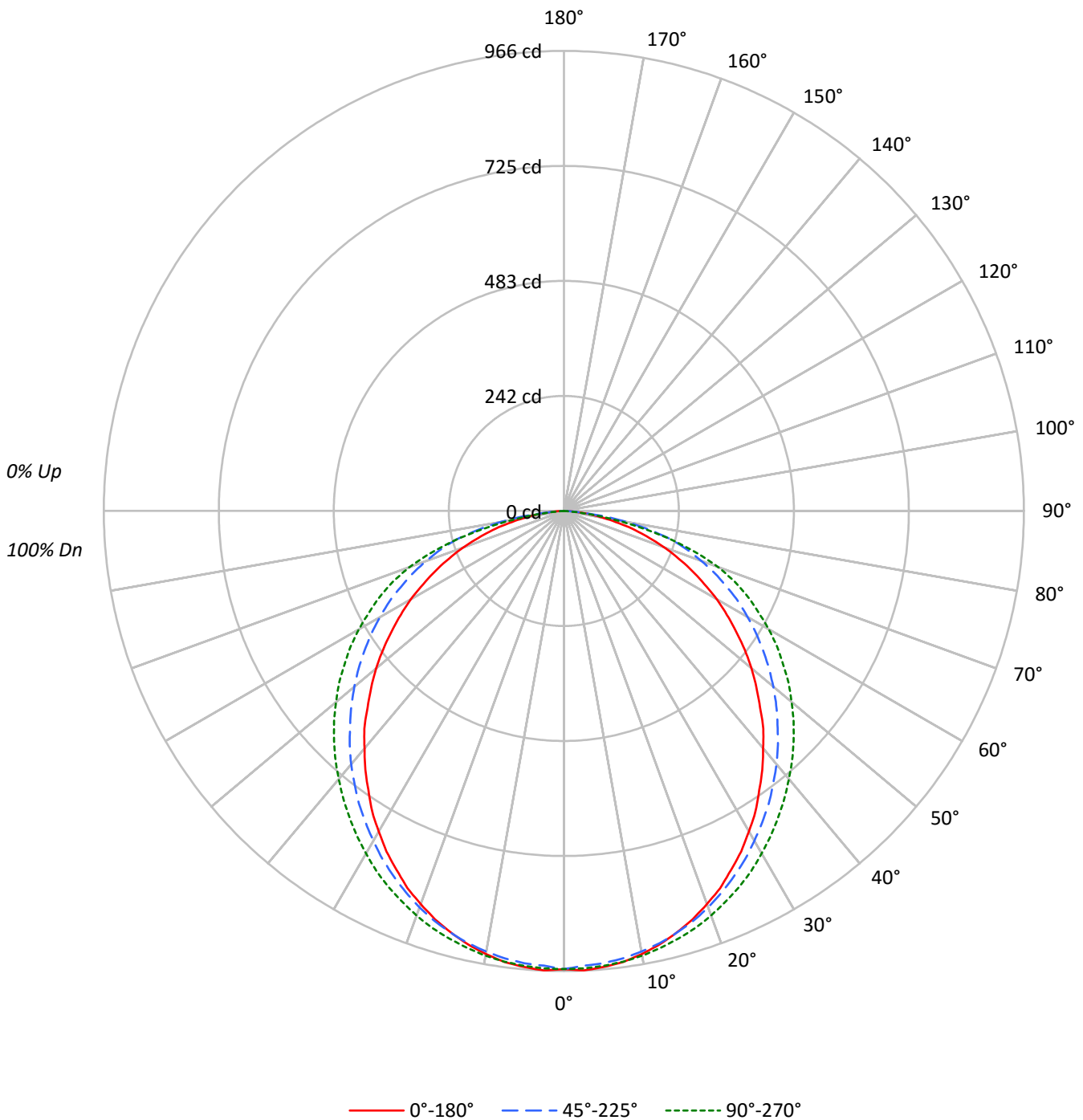
Input Watts (W): 23.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2588	2588	2588
5°	2596	2575	2590
10°	2581	2567	2591
15°	2553	2555	2589
20°	2515	2537	2589
25°	2468	2512	2586
30°	2414	2486	2581
35°	2350	2464	2579
40°	2288	2441	2583
45°	2218	2414	2597
50°	2153	2403	2614
55°	2071	2395	2638
60°	1997	2399	2674
65°	1895	2406	2716
70°	1778	2425	2714
75°	1612	2446	2453
80°	1322	2112	1746
85°	982	1000	404



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.0	3.3
10°-20°	260.0	9.3
20°-30°	391.7	14.0
30°-40°	470.0	16.8
40°-50°	489.9	17.5
50°-60°	453.5	16.2
60°-70°	366.4	13.1
70°-80°	223.4	8.0
80°-90°	46.1	1.7
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°	742.7	26.6
0°-40°	1212.7	43.4
0°-60°	2156.0	77.2
0°-90°	2792.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2792.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	961	959	953	960	959	91
15°	916	917	917	930	930	258
25°	831	836	846	867	871	383
35°	715	726	750	778	785	448
45°	583	600	634	670	682	450
55°	441	464	510	550	562	395
65°	298	327	378	416	426	294
75°	155	189	235	239	236	163
85°	32	47	32	18	13	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	961.9	961.9	961.9	961.9	961.9
2.5°	965.6	962.5	955.6	962.5	961.2
5°	961.2	958.7	953.1	960.0	958.7
7.5°	955.0	952.5	947.5	955.6	954.4
10°	944.4	943.2	939.4	948.8	948.2
12.5°	932.0	931.3	929.5	940.1	939.4
15°	916.4	917.0	917.0	929.5	929.5
17.5°	899.0	900.2	902.7	916.4	918.3
20°	878.4	880.9	885.9	901.5	904.0
22.5°	857.3	859.1	866.6	885.3	887.8
25°	831.1	836.1	846.1	867.2	871.0
27.5°	806.2	810.6	824.3	846.1	852.3
30°	777.0	783.8	800.0	823.6	830.5
32.5°	748.9	756.4	775.1	802.5	808.7
35°	715.3	726.5	750.2	777.6	785.0
37.5°	684.8	695.4	722.2	752.1	760.8
40°	651.2	664.3	694.8	726.5	735.2
42.5°	620.1	632.5	665.5	697.9	709.7
45°	582.7	600.1	634.4	669.9	682.3
47.5°	548.5	565.9	605.1	643.1	654.3
50°	514.2	532.9	574.0	613.2	624.4
52.5°	478.7	498.7	542.9	582.1	595.2
55°	441.4	464.4	510.5	550.3	562.2
57.5°	405.9	429.6	478.7	519.2	531.0
60°	371.0	395.3	445.8	484.4	496.8
62.5°	332.4	361.1	413.4	451.4	460.7
65°	297.6	326.8	377.9	415.9	426.5
67.5°	260.9	292.6	343.7	378.5	388.5
70°	226.0	259.0	308.2	340.5	344.9
72.5°	188.6	222.3	272.1	292.6	292.6
75°	155.0	189.3	235.3	239.1	235.9
77.5°	118.3	156.3	186.1	178.7	171.2
80°	85.3	122.6	136.3	122.6	112.7
82.5°	57.3	89.0	82.2	65.4	57.9
85°	31.8	47.3	32.4	18.1	13.1
87.5°	11.8	10.6	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)