

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: P307082

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CA125-W2A-U-4000K**

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: P307082  
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: 14FCZ2-29-UNV-L82765-HRP-CA125-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET  
Light Source: (168) 4000K 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: 2114.0 lumens  
Efficiency: N/A  
Efficacy: 87.7 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

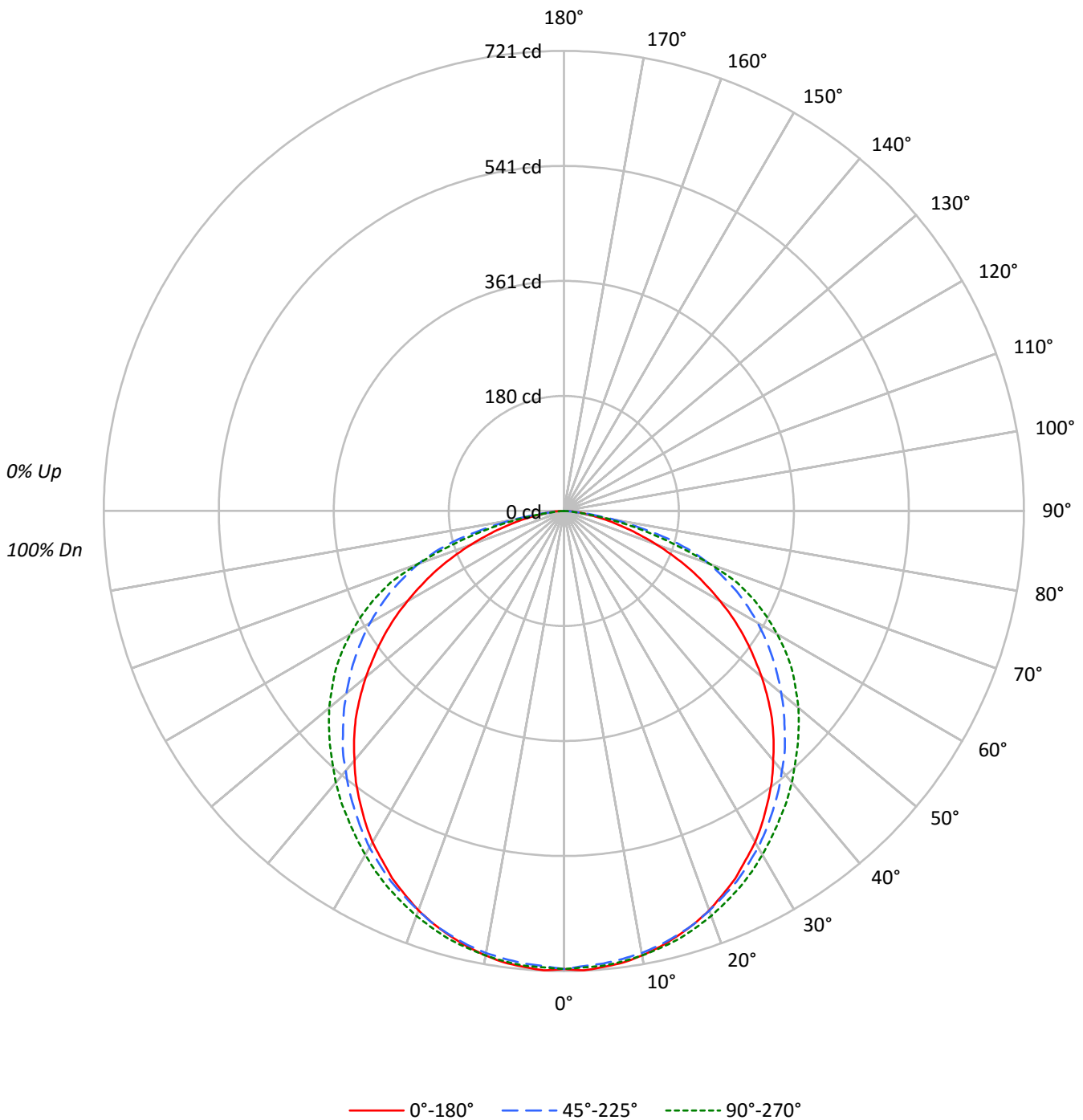
Input Watts (W): 24.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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CATALOG NUMBER: 14FC22-29-UNV-L82765-HRP-CA125-W2A-U-4000K

**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°	1932	1932	1932
5°	1938	1923	1932
10°	1933	1922	1933
15°	1920	1917	1935
20°	1907	1909	1934
25°	1887	1903	1934
30°	1863	1892	1933
35°	1830	1878	1937
40°	1793	1868	1952
45°	1756	1862	1973
50°	1695	1862	2009
55°	1622	1871	2052
60°	1524	1885	2079
65°	1405	1904	2091
70°	1224	1909	1924
75°	1010	1776	1555
80°	793	1277	1040
85°	614	494	247



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.0	3.2
10°-20°	195.0	9.2
20°-30°	296.2	14.0
30°-40°	358.9	17.0
40°-50°	378.2	17.9
50°-60°	353.0	16.7
60°-70°	282.1	13.3
70°-80°	155.2	7.3
80°-90°	27.4	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°	559.2	26.5
0°-40°	918.0	43.4
0°-60°	1649.2	78.0
0°-90°	2114.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2114.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	717	715	712	717	715	68
15°	689	689	688	695	695	195
25°	636	637	641	650	652	293
35°	557	562	572	586	590	349
45°	461	470	489	511	518	355
55°	346	363	399	427	437	309
65°	221	249	299	324	328	217
75°	97	139	171	154	150	104
85°	20	25	16	10	8	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	717.9	717.9	717.9	717.9	717.9
2.5°	720.6	718.6	713.9	717.9	715.9
5°	717.3	715.3	711.9	716.6	715.3
7.5°	713.9	711.3	708.0	713.3	711.9
10°	707.3	705.3	703.3	708.0	707.3
12.5°	699.3	698.6	696.7	702.0	701.3
15°	689.3	689.3	688.0	694.7	694.7
17.5°	678.7	678.0	678.7	686.0	685.4
20°	666.1	666.1	666.7	675.4	675.4
22.5°	650.8	651.5	653.4	664.1	663.4
25°	635.5	636.8	640.8	650.1	651.5
27.5°	616.9	620.2	624.9	636.2	637.5
30°	599.6	601.6	608.9	619.5	622.2
32.5°	579.0	583.0	591.0	602.9	606.2
35°	557.1	562.4	571.7	586.3	589.6
37.5°	535.1	539.8	552.4	567.7	573.7
40°	510.5	518.5	531.8	549.1	555.7
42.5°	486.6	494.6	512.5	530.5	536.4
45°	461.3	470.0	489.3	511.2	518.5
47.5°	433.4	443.4	468.0	491.2	499.2
50°	404.8	417.5	444.7	470.6	479.9
52.5°	374.9	390.9	422.1	449.4	458.0
55°	345.7	363.0	398.8	426.8	437.4
57.5°	315.8	334.4	374.9	406.8	412.8
60°	283.2	305.8	350.3	378.2	386.2
62.5°	251.3	277.2	325.1	351.7	358.3
65°	220.7	248.6	299.1	323.7	328.4
67.5°	187.5	220.7	270.6	293.2	294.5
70°	155.6	194.1	242.6	253.3	244.6
72.5°	124.3	165.5	210.1	201.4	194.1
75°	97.1	138.9	170.8	153.6	149.6
77.5°	71.8	113.7	122.3	113.0	105.7
80°	51.2	89.7	82.4	70.5	67.1
82.5°	35.2	56.5	45.2	35.2	30.6
85°	19.9	25.3	16.0	10.0	8.0
87.5°	8.6	6.0	3.3	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)