

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: P307533

Luminaire Tested: **14FCZ2-20-UNV-L82765-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: P307533  
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: 14FCZ2-20-UNV-L82765-CA125-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 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

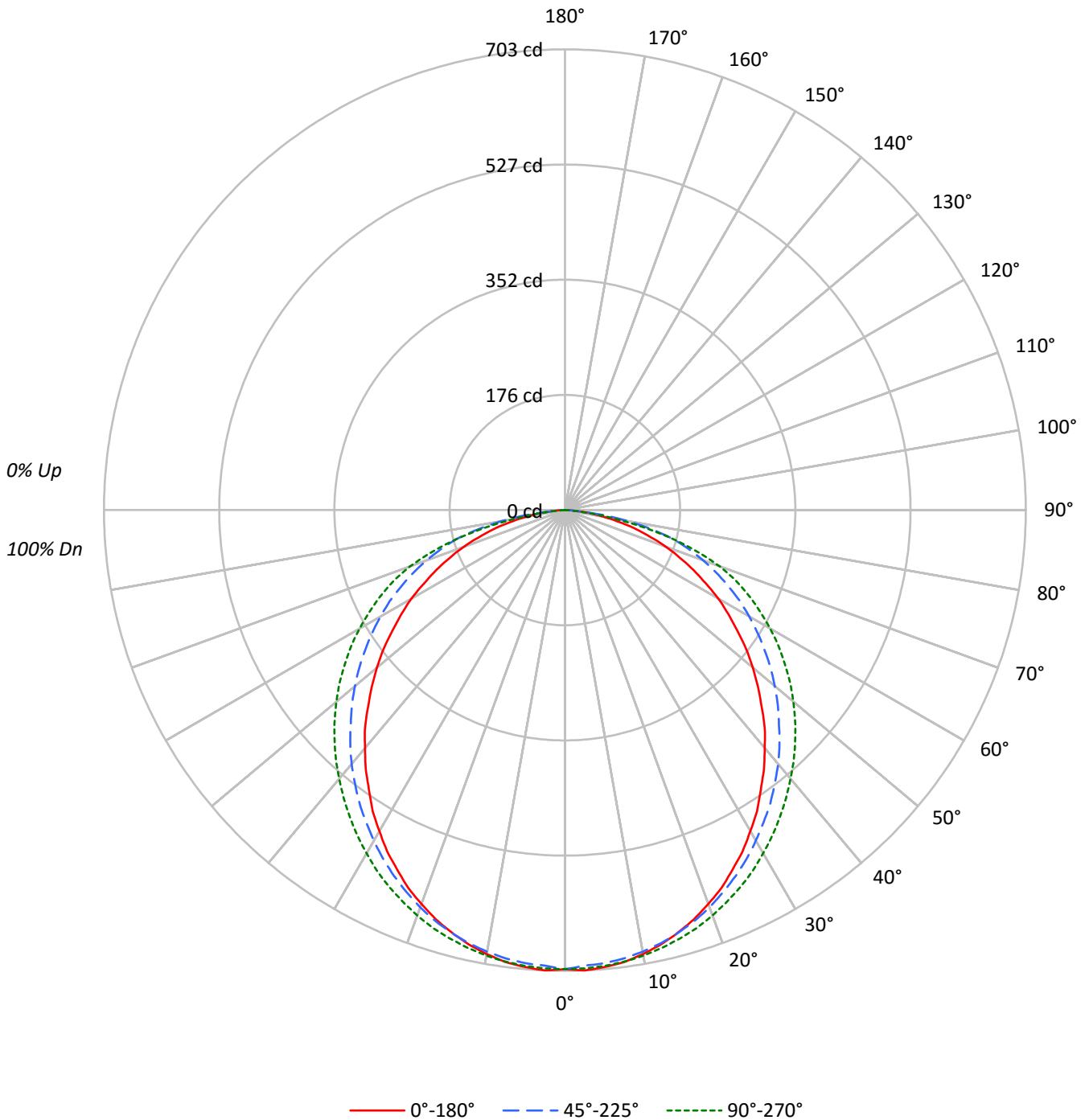
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2033.0 lumens  
Efficiency: N/A  
Efficacy: 121.0 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): 16.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	1885	1885	1885
5°	1891	1875	1886
10°	1879	1869	1887
15°	1859	1860	1886
20°	1832	1847	1885
25°	1797	1829	1883
30°	1758	1810	1879
35°	1711	1794	1878
40°	1666	1777	1881
45°	1615	1758	1891
50°	1567	1750	1904
55°	1508	1744	1920
60°	1454	1747	1947
65°	1380	1752	1977
70°	1295	1766	1976
75°	1174	1782	1786
80°	962	1539	1272
85°	713	729	293



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.3	3.3
10°-20°	189.3	9.3
20°-30°	285.2	14.0
30°-40°	342.2	16.8
40°-50°	356.7	17.5
50°-60°	330.2	16.2
60°-70°	266.8	13.1
70°-80°	162.7	8.0
80°-90°	33.6	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°	540.8	26.6
0°-40°	883.0	43.4
0°-60°	1569.9	77.2
0°-90°	2033.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2033.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	700	698	694	699	698	66
15°	667	668	668	677	677	188
25°	605	609	616	632	634	279
35°	521	529	546	566	572	326
45°	424	437	462	488	497	328
55°	321	338	372	401	409	288
65°	217	238	275	303	310	214
75°	113	138	171	174	172	119
85°	23	34	24	13	10	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	700.4	700.4	700.4	700.4	700.4
2.5°	703.1	700.8	695.8	700.8	699.9
5°	699.9	698.1	694.0	699.0	698.1
7.5°	695.4	693.6	689.9	695.8	694.9
10°	687.7	686.8	684.1	690.9	690.4
12.5°	678.6	678.2	676.8	684.5	684.1
15°	667.3	667.7	667.7	676.8	676.8
17.5°	654.6	655.5	657.3	667.3	668.6
20°	639.6	641.4	645.1	656.4	658.2
22.5°	624.2	625.6	631.0	644.6	646.4
25°	605.2	608.8	616.1	631.5	634.2
27.5°	587.0	590.2	600.2	616.1	620.6
30°	565.7	570.7	582.5	599.7	604.7
32.5°	545.3	550.8	564.4	584.3	588.9
35°	520.9	529.0	546.2	566.2	571.6
37.5°	498.6	506.4	525.8	547.6	554.0
40°	474.2	483.7	505.9	529.0	535.4
42.5°	451.5	460.6	484.6	508.2	516.8
45°	424.3	437.0	461.9	487.8	496.8
47.5°	399.4	412.1	440.6	468.3	476.4
50°	374.4	388.0	418.0	446.5	454.7
52.5°	348.6	363.1	395.3	423.9	433.4
55°	321.4	338.2	371.7	400.7	409.3
57.5°	295.6	312.8	348.6	378.1	386.7
60°	270.2	287.9	324.6	352.7	361.7
62.5°	242.1	262.9	301.0	328.7	335.5
65°	216.7	238.0	275.2	302.8	310.5
67.5°	189.9	213.1	250.2	275.6	282.9
70°	164.6	188.6	224.4	248.0	251.1
72.5°	137.4	161.8	198.1	213.1	213.1
75°	112.9	137.8	171.4	174.1	171.8
77.5°	86.1	113.8	135.5	130.1	124.7
80°	62.1	89.3	99.3	89.3	82.1
82.5°	41.7	64.8	59.8	47.6	42.2
85°	23.1	34.5	23.6	13.1	9.5
87.5°	8.6	7.7	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)