

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: P307389

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CA08-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: P307389  
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: 14FCZ2-35-UNV-L82765-RDP-CA08-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" 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**

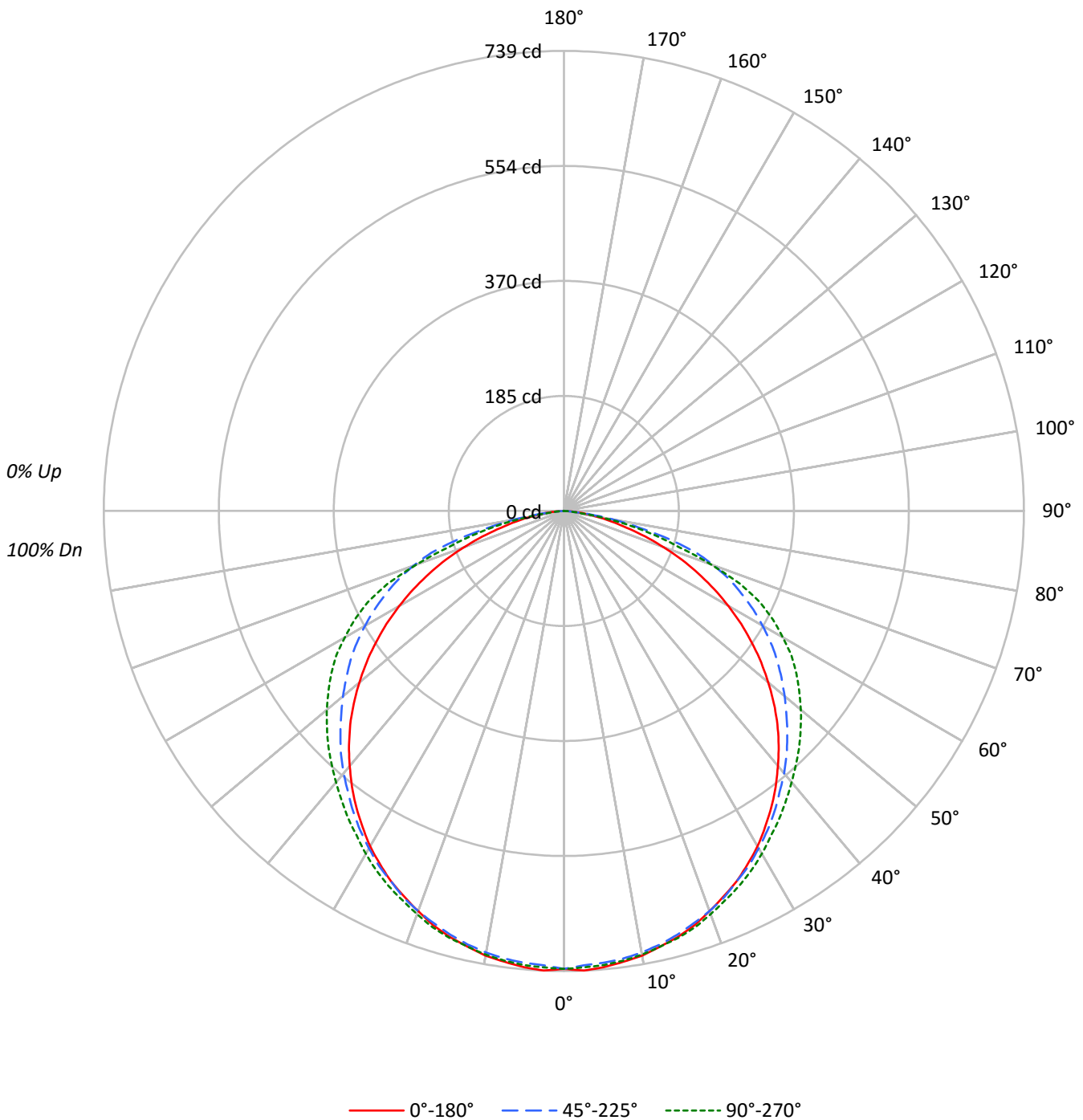
Lumens per Lamp: N/A  
Luminaire Lumens: 2196.0 lumens  
Efficiency: N/A  
Efficacy: 73.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 30.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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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**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°	1979	1979	1979
5°	1987	1968	1978
10°	1982	1968	1977
15°	1973	1963	1977
20°	1959	1959	1974
25°	1950	1950	1975
30°	1934	1945	1977
35°	1909	1938	1983
40°	1879	1933	1999
45°	1846	1931	2036
50°	1794	1938	2081
55°	1729	1962	2139
60°	1643	1984	2187
65°	1517	2009	2216
70°	1349	2024	1983
75°	1088	1818	1587
80°	851	1275	1037
85°	584	371	266



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.6	3.2
10°-20°	199.7	9.1
20°-30°	304.1	13.8
30°-40°	370.4	16.9
40°-50°	393.0	17.9
50°-60°	370.9	16.9
60°-70°	299.5	13.6
70°-80°	162.5	7.4
80°-90°	26.3	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°	573.5	26.1
0°-40°	943.9	43.0
0°-60°	1707.8	77.8
0°-90°	2196.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2196.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	736	736	736	736	736	
5°	736	734	729	734	732	70
15°	708	706	705	710	710	200
25°	657	655	657	664	665	302
35°	581	585	590	602	604	363
45°	485	492	508	526	535	374
55°	369	384	418	446	456	329
65°	238	268	316	341	348	236
75°	105	153	175	158	153	114
85°	19	21	12	10	9	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	735.5	735.5	735.5	735.5	735.5
2.5°	738.9	735.5	730.4	735.5	733.8
5°	735.5	733.8	728.6	733.8	732.1
7.5°	730.4	730.4	725.2	728.6	728.6
10°	725.2	723.5	720.1	725.2	723.5
12.5°	716.6	714.9	713.2	718.4	716.6
15°	708.1	706.4	704.6	709.8	709.8
17.5°	697.8	696.1	694.3	701.2	701.2
20°	684.1	684.1	684.1	690.9	689.2
22.5°	670.3	670.3	672.1	678.9	677.2
25°	656.6	654.9	656.6	663.5	665.2
27.5°	639.5	641.2	642.9	649.8	651.5
30°	622.3	624.1	625.8	634.3	636.1
32.5°	601.8	605.2	608.6	618.9	618.9
35°	581.2	584.6	589.8	601.8	603.5
37.5°	558.9	562.3	569.2	582.9	586.3
40°	534.9	540.0	550.3	564.1	569.2
42.5°	510.9	517.8	529.8	545.2	552.1
45°	485.2	492.0	507.5	526.3	534.9
47.5°	457.8	466.3	485.2	509.2	516.0
50°	428.6	440.6	462.9	488.6	497.2
52.5°	399.5	413.2	440.6	468.0	476.6
55°	368.6	384.0	418.3	445.8	456.0
57.5°	337.7	354.9	394.3	423.5	433.8
60°	305.2	325.7	368.6	397.8	406.3
62.5°	272.6	296.6	342.9	372.0	378.9
65°	238.3	267.5	315.5	341.2	348.0
67.5°	205.7	240.0	288.0	306.9	306.9
70°	171.4	209.2	257.2	262.3	252.0
72.5°	137.2	180.0	222.9	204.0	195.4
75°	104.6	152.6	174.9	157.7	152.6
77.5°	78.9	123.4	123.4	113.2	109.7
80°	54.9	94.3	82.3	72.0	66.9
82.5°	36.0	53.1	42.9	34.3	29.1
85°	18.9	20.6	12.0	10.3	8.6
87.5°	6.9	3.4	1.7	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)