

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: P307562

Luminaire Tested: **14FCZ2-20-UNV-L82765-CP250-W2A-U-5500K**

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: P307562  
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-CP250-W2A-U-5500K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB SHEET  
Light Source: (168) 5500K 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**

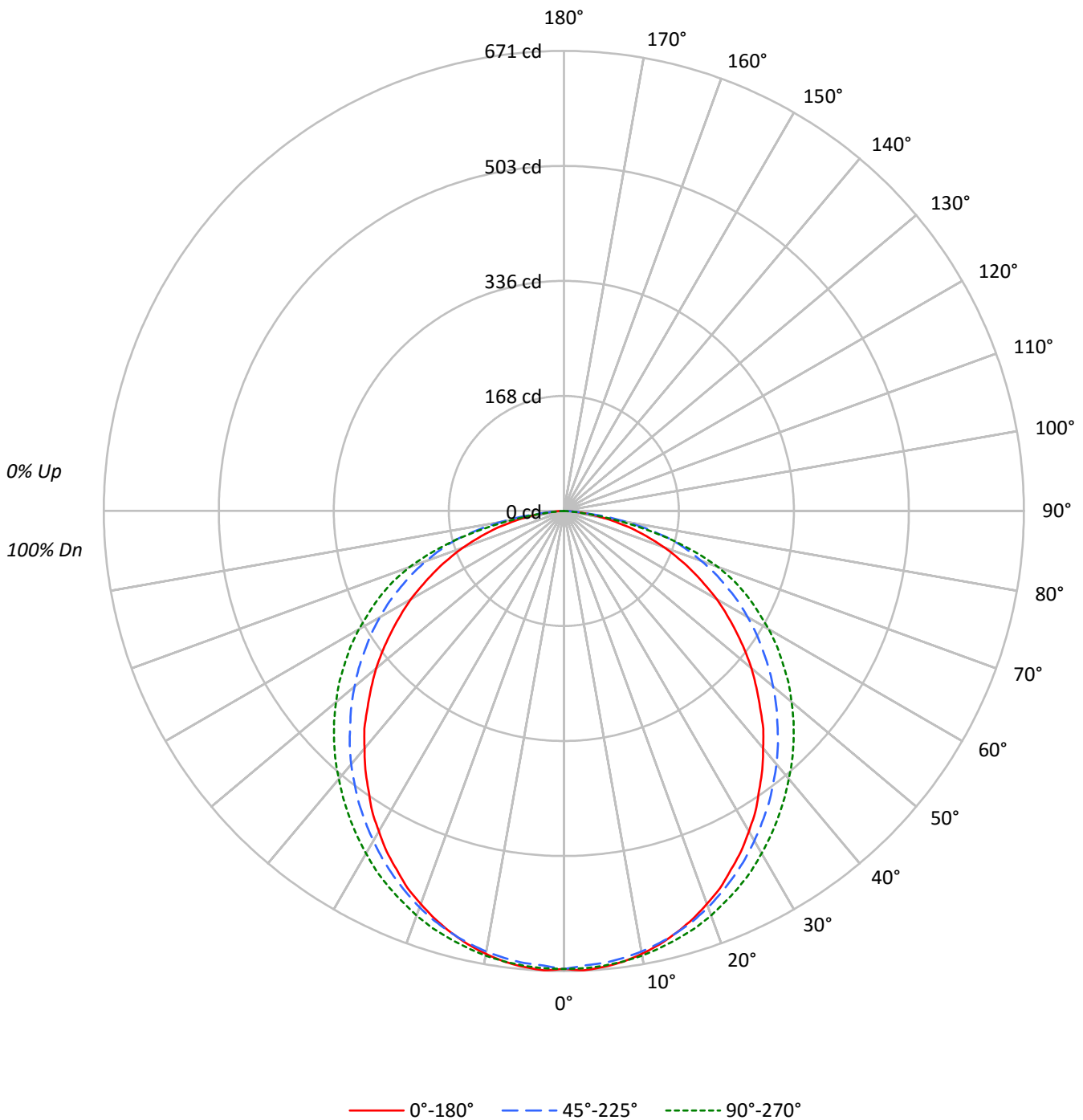
Lumens per Lamp: N/A  
Luminaire Lumens: 1939.0 lumens  
Efficiency: N/A  
Efficacy: 114.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	1798	1798	1798
5°	1803	1788	1798
10°	1792	1783	1799
15°	1773	1774	1798
20°	1747	1762	1798
25°	1714	1745	1796
30°	1677	1726	1792
35°	1632	1712	1791
40°	1588	1695	1794
45°	1540	1677	1803
50°	1495	1669	1816
55°	1438	1663	1832
60°	1387	1666	1857
65°	1316	1671	1886
70°	1234	1684	1884
75°	1120	1699	1704
80°	917	1468	1213
85°	682	695	281



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.2	3.3
10°-20°	180.6	9.3
20°-30°	272.0	14.0
30°-40°	326.4	16.8
40°-50°	340.2	17.5
50°-60°	314.9	16.2
60°-70°	254.5	13.1
70°-80°	155.2	8.0
80°-90°	32.0	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°	515.8	26.6
0°-40°	842.2	43.4
0°-60°	1497.3	77.2
0°-90°	1939.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1939.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	668	668	668	668	668	
5°	668	666	662	667	666	63
15°	636	637	637	646	646	179
25°	577	581	588	602	605	266
35°	497	505	521	540	545	311
45°	405	417	441	465	474	313
55°	306	322	354	382	390	275
65°	207	227	262	289	296	204
75°	108	131	163	166	164	113
85°	22	33	22	12	9	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	668.0	668.0	668.0	668.0	668.0
2.5°	670.6	668.4	663.7	668.4	667.6
5°	667.6	665.8	661.9	666.7	665.8
7.5°	663.2	661.5	658.0	663.7	662.8
10°	655.9	655.0	652.4	658.9	658.5
12.5°	647.2	646.8	645.5	652.9	652.4
15°	636.4	636.9	636.9	645.5	645.5
17.5°	624.3	625.2	626.9	636.4	637.7
20°	610.1	611.8	615.2	626.1	627.8
22.5°	595.4	596.7	601.8	614.8	616.5
25°	577.2	580.7	587.6	602.3	604.9
27.5°	559.9	562.9	572.4	587.6	591.9
30°	539.6	544.3	555.6	572.0	576.8
32.5°	520.1	525.3	538.3	557.3	561.6
35°	496.8	504.6	521.0	540.0	545.2
37.5°	475.6	482.9	501.5	522.3	528.3
40°	452.2	461.3	482.5	504.6	510.6
42.5°	430.6	439.3	462.2	484.7	492.9
45°	404.7	416.8	440.6	465.2	473.9
47.5°	380.9	393.0	420.3	446.6	454.4
50°	357.1	370.1	398.6	425.9	433.7
52.5°	332.5	346.3	377.0	404.3	413.3
55°	306.5	322.5	354.5	382.2	390.4
57.5°	281.9	298.3	332.5	360.6	368.8
60°	257.7	274.5	309.6	336.4	345.0
62.5°	230.9	250.8	287.1	313.5	319.9
65°	206.7	227.0	262.4	288.8	296.2
67.5°	181.2	203.2	238.7	262.9	269.8
70°	156.9	179.9	214.0	236.5	239.5
72.5°	131.0	154.4	188.9	203.2	203.2
75°	107.7	131.4	163.4	166.0	163.9
77.5°	82.1	108.5	129.3	124.1	118.9
80°	59.2	85.2	94.7	85.2	78.3
82.5°	39.8	61.8	57.1	45.4	40.2
85°	22.1	32.9	22.5	12.5	9.1
87.5°	8.2	7.4	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)