

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: P307559

Luminaire Tested: **14FCZ2-20-UNV-L82765-CP250-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: P307559  
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-4000K  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.250" POLYCARB 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**

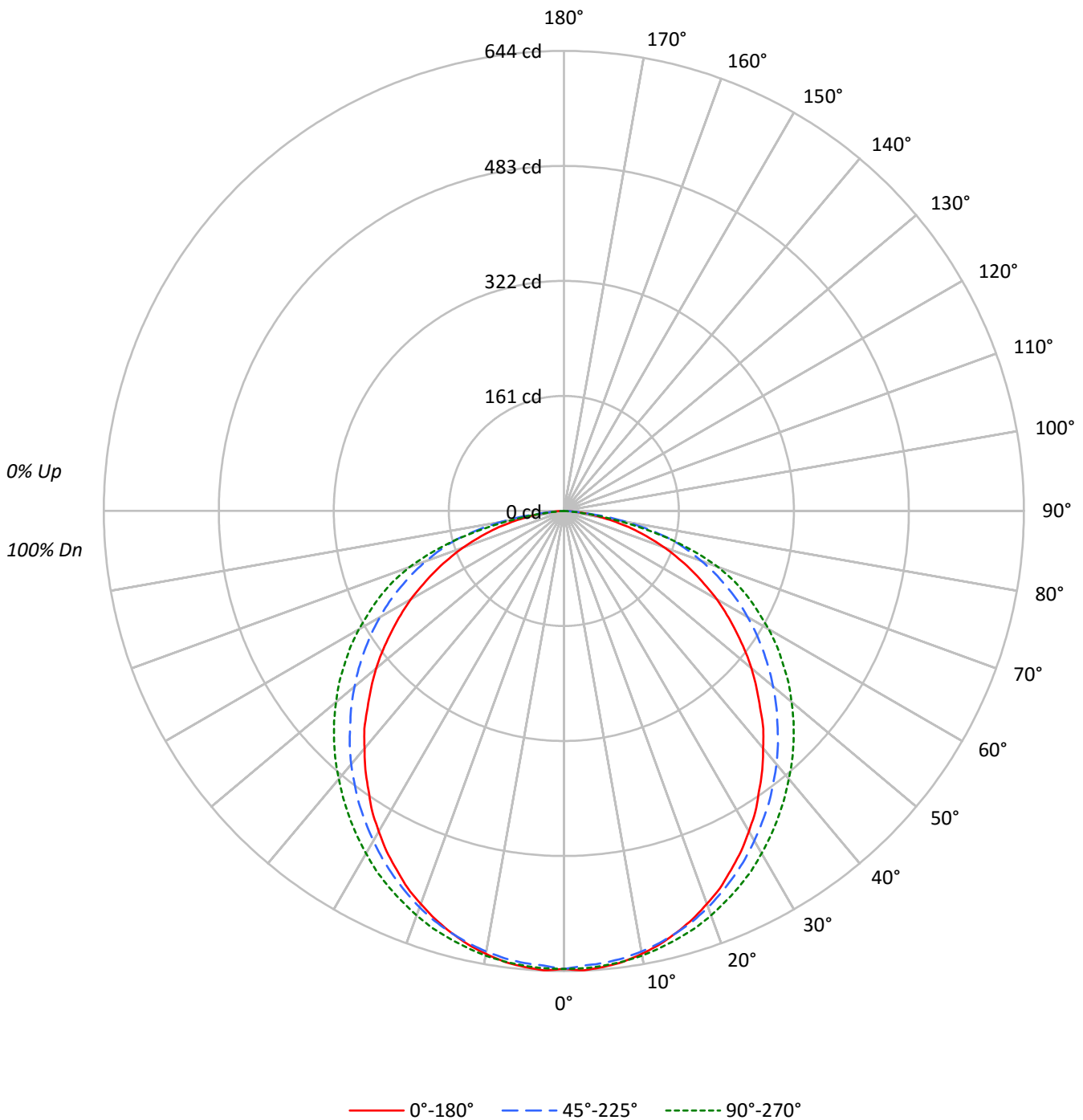
Lumens per Lamp: N/A  
Luminaire Lumens: 1861.0 lumens  
Efficiency: N/A  
Efficacy: 111.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.7  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	1725	1725	1725
5°	1731	1716	1726
10°	1720	1711	1727
15°	1702	1703	1726
20°	1677	1691	1725
25°	1645	1674	1724
30°	1609	1657	1720
35°	1566	1643	1719
40°	1525	1627	1722
45°	1478	1609	1731
50°	1435	1602	1742
55°	1380	1597	1758
60°	1331	1599	1782
65°	1263	1604	1810
70°	1185	1616	1809
75°	1074	1631	1635
80°	882	1409	1164
85°	655	667	269



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.7	3.3
10°-20°	173.3	9.3
20°-30°	261.1	14.0
30°-40°	313.3	16.8
40°-50°	326.5	17.5
50°-60°	302.3	16.2
60°-70°	244.2	13.1
70°-80°	148.9	8.0
80°-90°	30.7	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°	495.0	26.6
0°-40°	808.3	43.4
0°-60°	1437.1	77.2
0°-90°	1861.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1861.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	641	641	641	641	641	
5°	641	639	635	640	639	61
15°	611	611	611	620	620	172
25°	554	557	564	578	580	255
35°	477	484	500	518	523	299
45°	388	400	423	446	455	300
55°	294	310	340	367	375	264
65°	198	218	252	277	284	196
75°	103	126	157	159	157	108
85°	21	32	22	12	9	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	641.1	641.1	641.1	641.1	641.1
2.5°	643.6	641.5	637.0	641.5	640.7
5°	640.7	639.0	635.3	639.9	639.0
7.5°	636.6	634.9	631.6	637.0	636.1
10°	629.5	628.7	626.2	632.4	632.0
12.5°	621.2	620.8	619.5	626.6	626.2
15°	610.8	611.2	611.2	619.5	619.5
17.5°	599.2	600.0	601.7	610.8	612.1
20°	585.5	587.2	590.5	600.9	602.5
22.5°	571.4	572.7	577.6	590.1	591.7
25°	554.0	557.3	563.9	578.0	580.5
27.5°	537.4	540.3	549.4	563.9	568.1
30°	517.9	522.4	533.2	549.0	553.6
32.5°	499.2	504.2	516.6	534.9	539.0
35°	476.8	484.3	500.0	518.3	523.3
37.5°	456.5	463.5	481.4	501.3	507.1
40°	434.1	442.8	463.1	484.3	490.1
42.5°	413.3	421.6	443.6	465.2	473.1
45°	388.4	400.0	422.8	446.5	454.8
47.5°	365.6	377.2	403.3	428.7	436.1
50°	342.8	355.2	382.6	408.7	416.2
52.5°	319.1	332.4	361.8	388.0	396.7
55°	294.2	309.6	340.3	366.8	374.7
57.5°	270.6	286.3	319.1	346.1	354.0
60°	247.3	263.5	297.1	322.8	331.1
62.5°	221.6	240.7	275.5	300.8	307.1
65°	198.4	217.9	251.9	277.2	284.3
67.5°	173.9	195.0	229.1	252.3	258.9
70°	150.6	172.6	205.4	227.0	229.9
72.5°	125.7	148.1	181.3	195.0	195.0
75°	103.3	126.1	156.9	159.3	157.3
77.5°	78.8	104.2	124.1	119.1	114.1
80°	56.9	81.7	90.9	81.7	75.1
82.5°	38.2	59.3	54.8	43.6	38.6
85°	21.2	31.5	21.6	12.0	8.7
87.5°	7.9	7.1	2.1	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)