

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: P307341

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-CA08-W2A-U-3000K**

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: P307341  
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: 14FCZ2-29-UNV-L82765-RDP-CA08-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET  
Light Source: (168) 3000K 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**

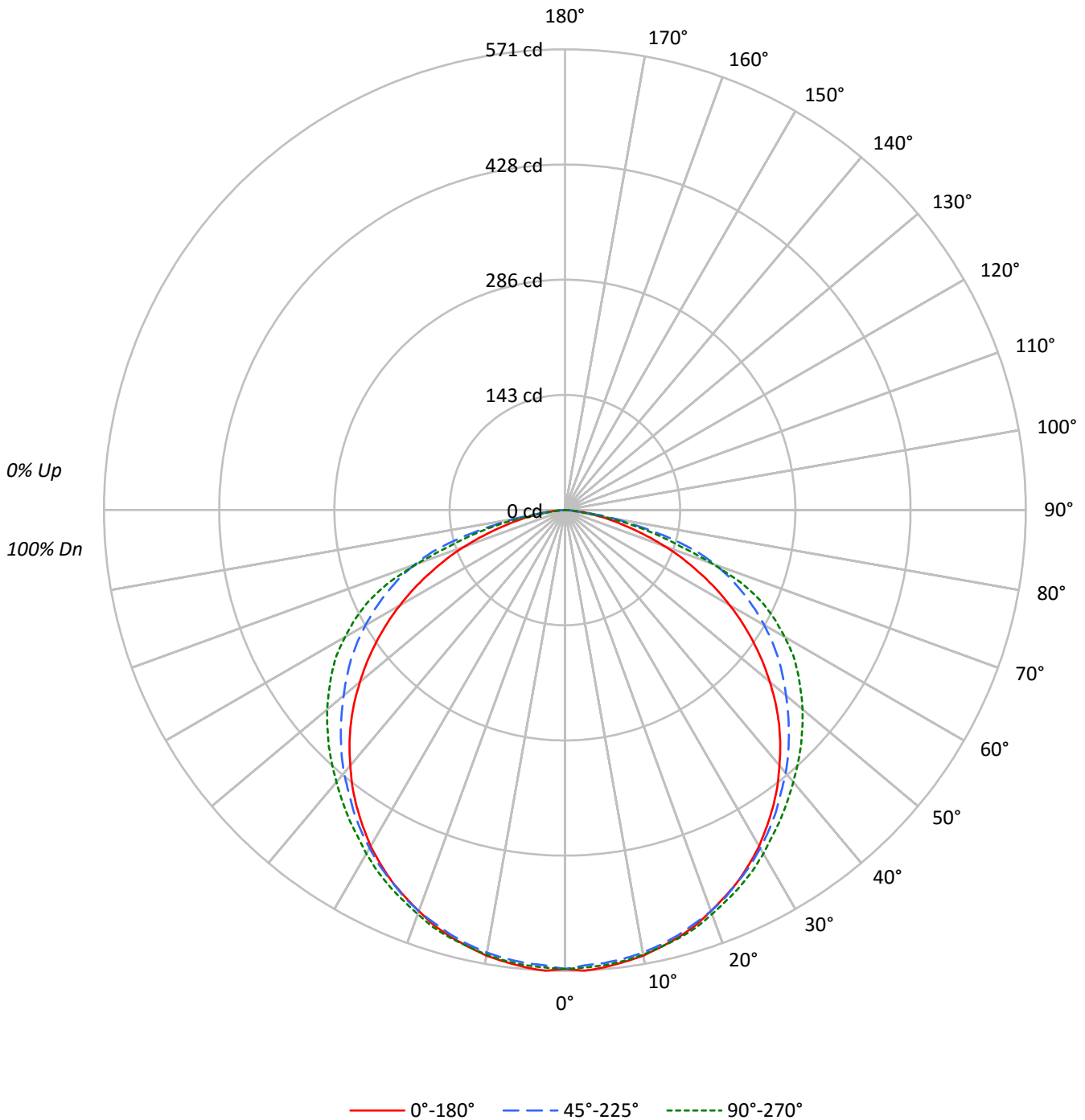
Lumens per Lamp: N/A  
Luminaire Lumens: 1698.0 lumens  
Efficiency: N/A  
Efficacy: 71.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.6  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	1530	1530	1530
5°	1536	1522	1529
10°	1532	1521	1529
15°	1525	1518	1529
20°	1515	1515	1526
25°	1507	1507	1527
30°	1495	1504	1528
35°	1476	1498	1533
40°	1453	1495	1546
45°	1428	1493	1574
50°	1387	1498	1609
55°	1337	1518	1654
60°	1270	1534	1691
65°	1174	1553	1713
70°	1043	1564	1533
75°	841	1406	1227
80°	657	986	801
85°	451	287	204



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.8	3.2
10°-20°	154.4	9.1
20°-30°	235.2	13.8
30°-40°	286.4	16.9
40°-50°	303.9	17.9
50°-60°	286.8	16.9
60°-70°	231.6	13.6
70°-80°	125.6	7.4
80°-90°	20.3	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°	443.4	26.1
0°-40°	729.8	43.0
0°-60°	1320.5	77.8
0°-90°	1698.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1698.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	569	569	569	569	569	
5°	569	567	563	567	566	54
15°	548	546	545	549	549	154
25°	508	506	508	513	514	234
35°	449	452	456	465	467	281
45°	375	380	392	407	414	289
55°	285	297	324	345	353	255
65°	184	207	244	264	269	183
75°	81	118	135	122	118	88
85°	15	16	9	8	7	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	568.7	568.7	568.7	568.7	568.7
2.5°	571.4	568.7	564.7	568.7	567.4
5°	568.7	567.4	563.4	567.4	566.1
7.5°	564.7	564.7	560.7	563.4	563.4
10°	560.7	559.4	556.8	560.7	559.4
12.5°	554.1	552.8	551.5	555.4	554.1
15°	547.5	546.2	544.8	548.8	548.8
17.5°	539.5	538.2	536.9	542.2	542.2
20°	528.9	528.9	528.9	534.2	532.9
22.5°	518.3	518.3	519.7	525.0	523.6
25°	507.7	506.4	507.7	513.0	514.4
27.5°	494.5	495.8	497.1	502.4	503.7
30°	481.2	482.5	483.9	490.5	491.8
32.5°	465.3	468.0	470.6	478.6	478.6
35°	449.4	452.0	456.0	465.3	466.6
37.5°	432.2	434.8	440.1	450.7	453.4
40°	413.6	417.6	425.5	436.1	440.1
42.5°	395.0	400.3	409.6	421.6	426.9
45°	375.2	380.5	392.4	407.0	413.6
47.5°	353.9	360.6	375.2	393.7	399.0
50°	331.4	340.7	357.9	377.8	384.4
52.5°	308.9	319.5	340.7	361.9	368.5
55°	285.0	296.9	323.5	344.7	352.6
57.5°	261.2	274.4	304.9	327.4	335.4
60°	236.0	251.9	285.0	307.6	314.2
62.5°	210.8	229.3	265.1	287.7	293.0
65°	184.3	206.8	243.9	263.8	269.1
67.5°	159.1	185.6	222.7	237.3	237.3
70°	132.6	161.7	198.8	202.8	194.9
72.5°	106.1	139.2	172.3	157.8	151.1
75°	80.9	118.0	135.2	122.0	118.0
77.5°	61.0	95.4	95.4	87.5	84.8
80°	42.4	72.9	63.6	55.7	51.7
82.5°	27.8	41.1	33.1	26.5	22.5
85°	14.6	15.9	9.3	8.0	6.6
87.5°	5.3	2.7	1.3	2.7	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)