

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: P307160

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CA08-W2A-U-2700K**

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: P307160  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-39-UNV-L82765-HRP-CA08-W2A-U-2700K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET  
Light Source: (168) 2700K 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**

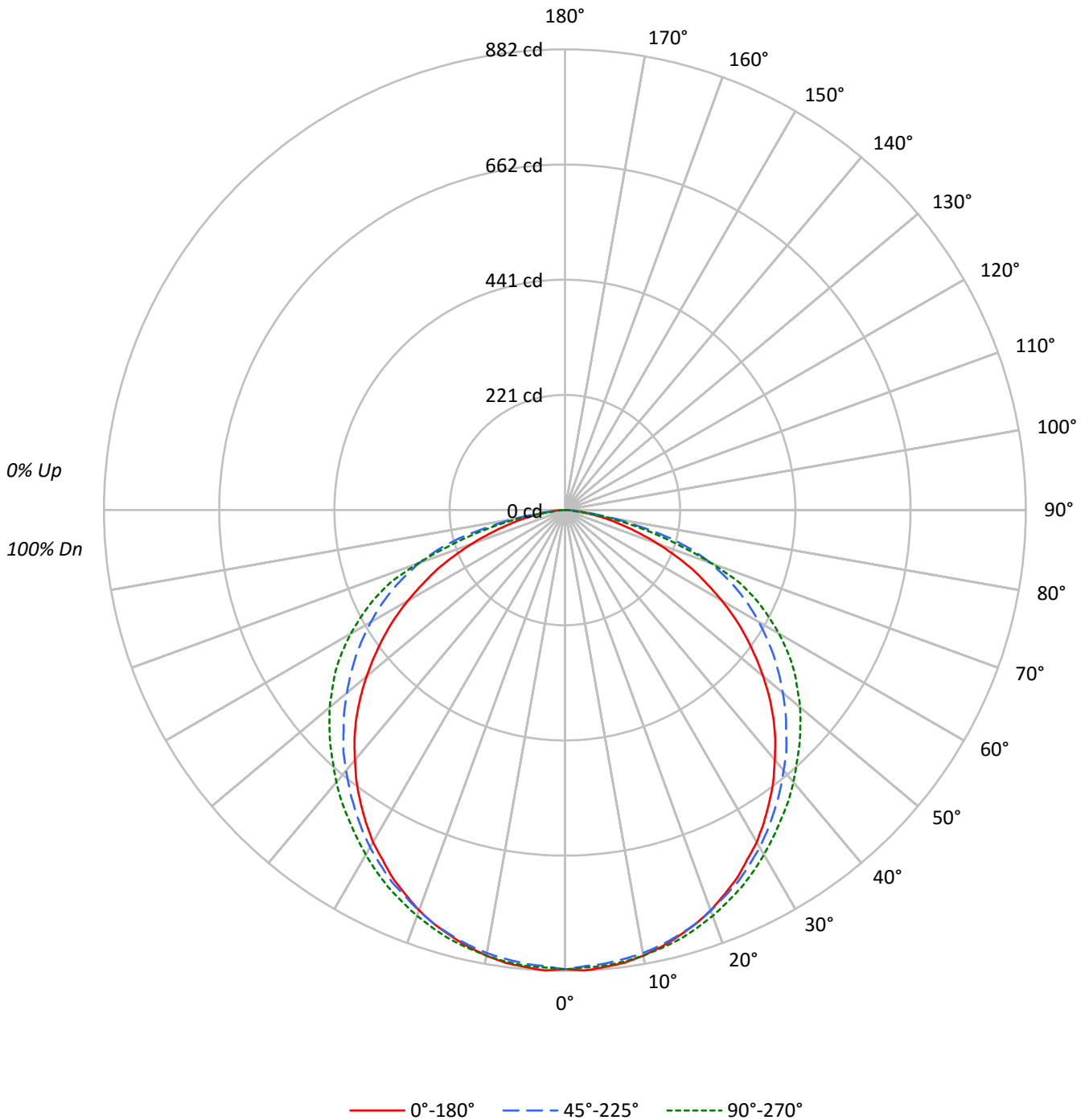
Lumens per Lamp: N/A  
Luminaire Lumens: 2588.0 lumens  
Efficiency: N/A  
Efficacy: 77.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	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	38	31	26	37	30	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2365	2365	2365
5°	2372	2354	2365
10°	2366	2353	2366
15°	2351	2347	2369
20°	2335	2337	2368
25°	2310	2329	2368
30°	2281	2316	2367
35°	2240	2299	2371
40°	2196	2287	2390
45°	2149	2280	2416
50°	2075	2279	2460
55°	1985	2291	2512
60°	1866	2308	2545
65°	1720	2332	2560
70°	1498	2337	2356
75°	1235	2174	1904
80°	972	1564	1274
85°	753	602	303



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.2	3.2
10°-20°	238.8	9.2
20°-30°	362.6	14.0
30°-40°	439.3	17.0
40°-50°	463.0	17.9
50°-60°	432.2	16.7
60°-70°	345.4	13.3
70°-80°	190.0	7.3
80°-90°	33.6	1.3
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°	684.5	26.5
0°-40°	1123.9	43.4
0°-60°	2019.0	78.0
0°-90°	2588.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2588.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	879	879	879	879	879	
5°	878	876	872	877	876	83
15°	844	844	842	850	850	238
25°	778	780	784	796	798	358
35°	682	688	700	718	722	427
45°	565	575	599	626	635	435
55°	423	444	488	522	536	378
65°	270	304	366	396	402	266
75°	119	170	209	188	183	128
85°	24	31	20	12	10	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	878.9	878.9	878.9	878.9	878.9
2.5°	882.2	879.7	874.0	878.9	876.5
5°	878.1	875.6	871.6	877.3	875.6
7.5°	874.0	870.8	866.7	873.2	871.6
10°	865.9	863.4	861.0	866.7	865.9
12.5°	856.1	855.3	852.9	859.4	858.6
15°	843.9	843.9	842.3	850.4	850.4
17.5°	830.9	830.1	830.9	839.8	839.0
20°	815.4	815.4	816.2	826.8	826.8
22.5°	796.7	797.5	800.0	813.0	812.2
25°	778.0	779.6	784.5	795.9	797.5
27.5°	755.2	759.3	765.0	778.8	780.4
30°	734.0	736.5	745.4	758.5	761.7
32.5°	708.8	713.7	723.5	738.1	742.2
35°	682.0	688.5	699.9	717.8	721.8
37.5°	655.1	660.8	676.3	695.0	702.3
40°	625.0	634.8	651.0	672.2	680.3
42.5°	595.7	605.5	627.4	649.4	656.7
45°	564.8	575.4	599.0	625.8	634.8
47.5°	530.6	542.8	572.9	601.4	611.2
50°	495.6	511.1	544.4	576.2	587.6
52.5°	459.0	478.5	516.8	550.1	560.7
55°	423.2	444.3	488.3	522.5	535.5
57.5°	386.6	409.3	459.0	498.0	505.4
60°	346.7	374.3	428.9	463.0	472.8
62.5°	307.6	339.4	397.9	430.5	438.6
65°	270.2	304.4	366.2	396.3	402.0
67.5°	229.5	270.2	331.2	358.9	360.5
70°	190.4	237.6	297.0	310.1	299.5
72.5°	152.2	202.6	257.2	246.6	237.6
75°	118.8	170.1	209.1	188.0	183.1
77.5°	87.9	139.2	149.7	138.3	129.4
80°	62.7	109.9	100.9	86.3	82.2
82.5°	43.1	69.2	55.3	43.1	37.4
85°	24.4	30.9	19.5	12.2	9.8
87.5°	10.6	7.3	4.1	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)