

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: P312123

Luminaire Tested: **14FCZ2-44-UNV-L83050-RDP-CA125-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: P312123  
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: 14FCZ2-44-UNV-L83050-RDP-CA125-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" 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**

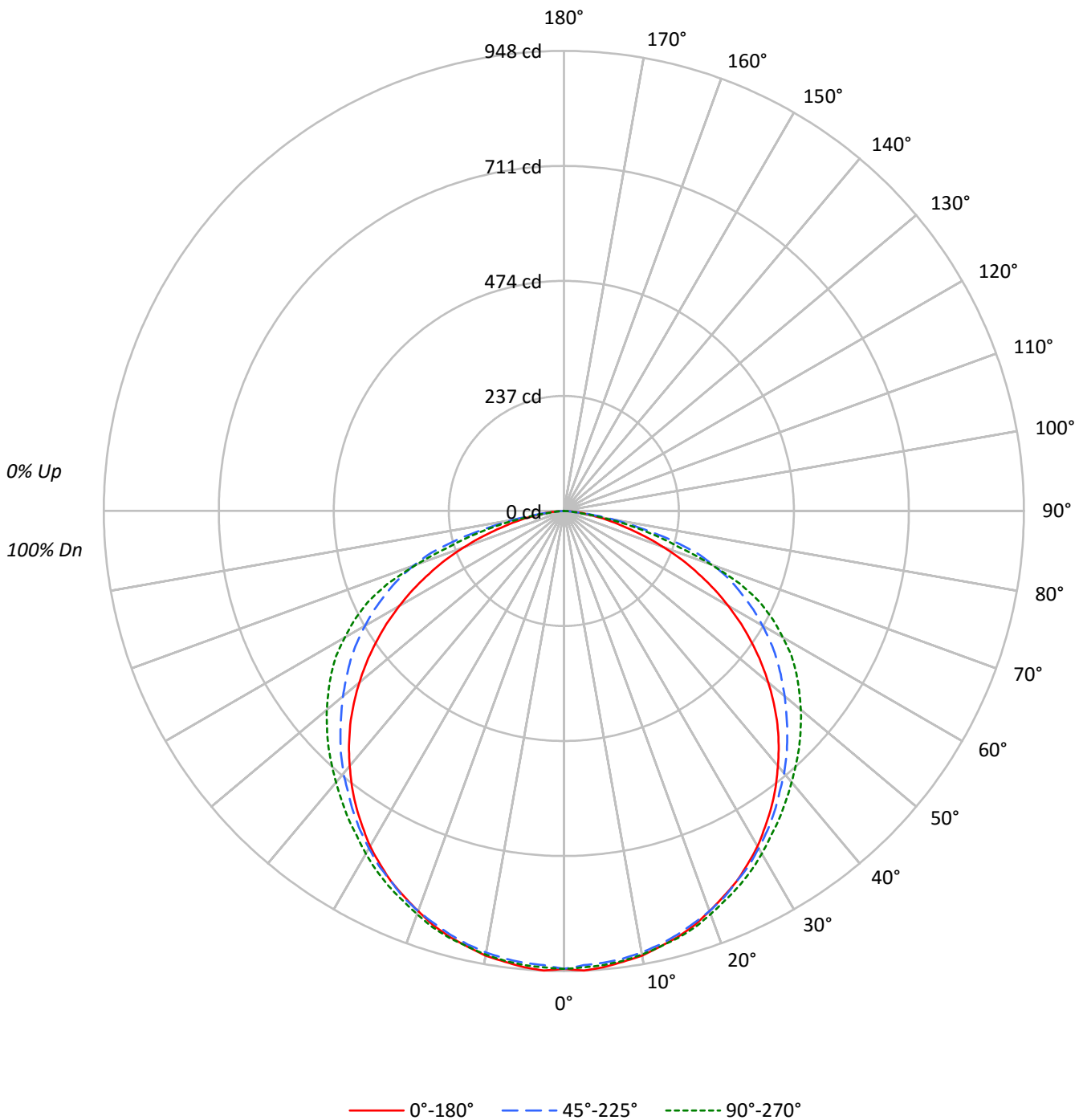
Lumens per Lamp: N/A  
Luminaire Lumens: 2817.0 lumens  
Efficiency: N/A  
Efficacy: 70.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 40.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	2539	2539	2539
5°	2549	2525	2537
10°	2542	2524	2536
15°	2530	2518	2537
20°	2513	2513	2532
25°	2501	2501	2534
30°	2481	2494	2535
35°	2449	2485	2543
40°	2410	2480	2565
45°	2369	2477	2611
50°	2302	2486	2670
55°	2218	2518	2745
60°	2107	2545	2805
65°	1947	2577	2843
70°	1730	2596	2544
75°	1395	2332	2035
80°	1091	1636	1330
85°	747	475	340



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.3	3.2
10°-20°	256.2	9.1
20°-30°	390.1	13.8
30°-40°	475.2	16.9
40°-50°	504.1	17.9
50°-60°	475.8	16.9
60°-70°	384.2	13.6
70°-80°	208.4	7.4
80°-90°	33.7	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°	735.6	26.1
0°-40°	1210.8	43.0
0°-60°	2190.7	77.8
0°-90°	2817.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2817.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	944	944	944	944	944	
5°	944	941	935	941	939	90
15°	908	906	904	910	910	256
25°	842	840	842	851	853	388
35°	746	750	756	772	774	466
45°	622	631	651	675	686	479
55°	473	493	537	572	585	422
65°	306	343	405	438	446	303
75°	134	196	224	202	196	147
85°	24	26	15	13	11	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	943.5	943.5	943.5	943.5	943.5
2.5°	947.9	943.5	936.9	943.5	941.3
5°	943.5	941.3	934.7	941.3	939.1
7.5°	936.9	936.9	930.3	934.7	934.7
10°	930.3	928.1	923.7	930.3	928.1
12.5°	919.3	917.1	914.9	921.5	919.3
15°	908.3	906.1	903.9	910.5	910.5
17.5°	895.1	892.9	890.7	899.5	899.5
20°	877.5	877.5	877.5	886.3	884.1
22.5°	859.9	859.9	862.1	870.9	868.7
25°	842.3	840.1	842.3	851.1	853.3
27.5°	820.3	822.5	824.7	833.5	835.7
30°	798.3	800.5	802.7	813.7	815.9
32.5°	771.9	776.3	780.7	793.9	793.9
35°	745.6	749.9	756.5	771.9	774.1
37.5°	717.0	721.4	730.2	747.8	752.1
40°	686.2	692.8	706.0	723.6	730.2
42.5°	655.4	664.2	679.6	699.4	708.2
45°	622.4	631.2	651.0	675.2	686.2
47.5°	587.2	598.2	622.4	653.2	662.0
50°	549.8	565.2	593.8	626.8	637.8
52.5°	512.4	530.0	565.2	600.4	611.4
55°	472.8	492.6	536.6	571.8	585.0
57.5°	433.3	455.2	505.8	543.2	556.4
60°	391.5	417.9	472.8	510.2	521.2
62.5°	349.7	380.5	439.9	477.2	486.0
65°	305.7	343.1	404.7	437.7	446.5
67.5°	263.9	307.9	369.5	393.7	393.7
70°	219.9	268.3	329.9	336.5	323.3
72.5°	175.9	230.9	285.9	261.7	250.7
75°	134.2	195.7	224.3	202.3	195.7
77.5°	101.2	158.3	158.3	145.2	140.8
80°	70.4	121.0	105.6	92.4	85.8
82.5°	46.2	68.2	55.0	44.0	37.4
85°	24.2	26.4	15.4	13.2	11.0
87.5°	8.8	4.4	2.2	4.4	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)