

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: P312117

Luminaire Tested: **14FCZ2-44-UNV-L83050-RDP-CA08-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: P312117  
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-CA08-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC 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**

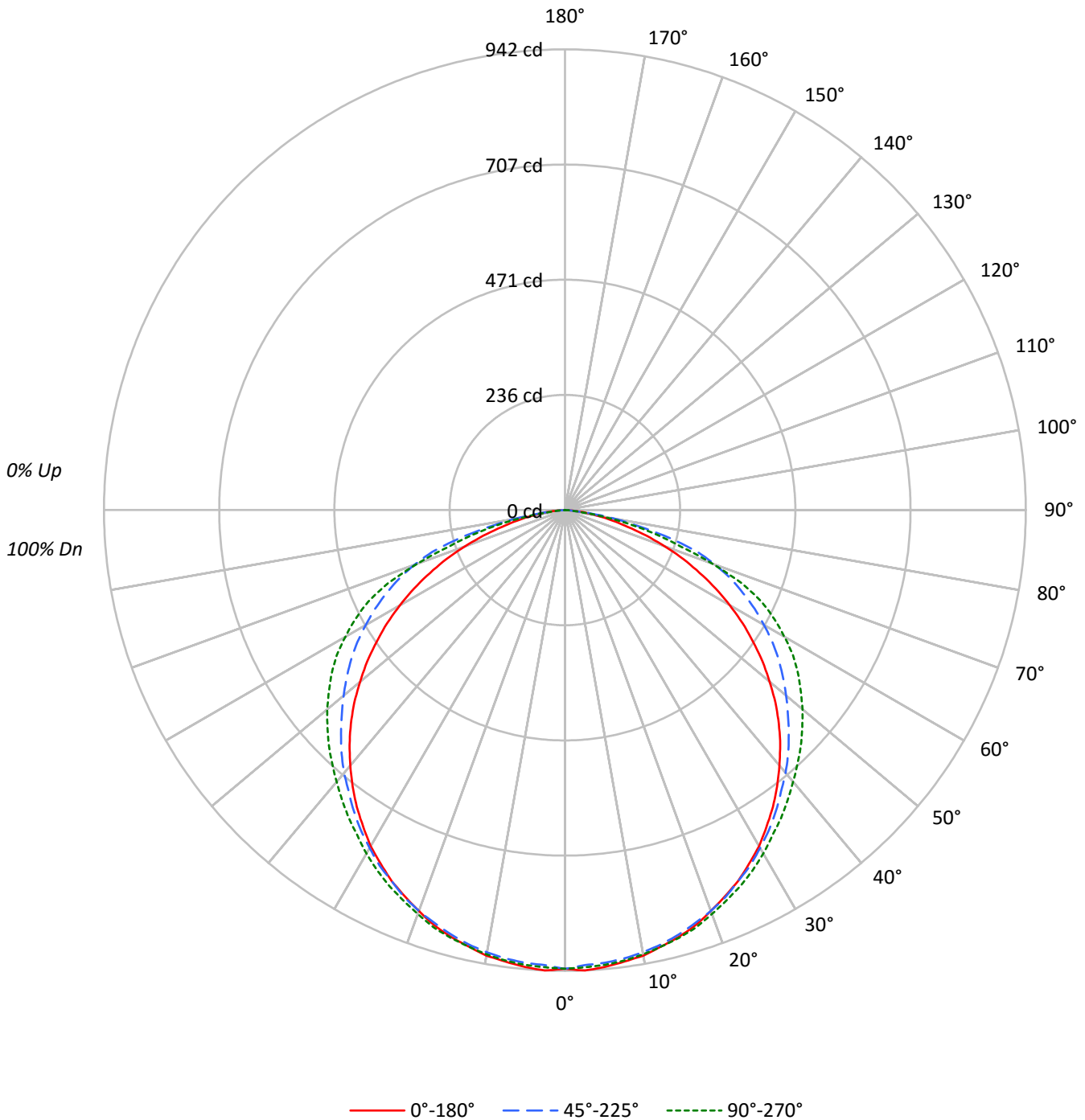
Lumens per Lamp: N/A  
Luminaire Lumens: 2800.0 lumens  
Efficiency: N/A  
Efficacy: 71.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 39.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	2524	2524	2524
5°	2533	2509	2521
10°	2527	2509	2521
15°	2515	2503	2521
20°	2498	2498	2517
25°	2486	2486	2518
30°	2466	2479	2520
35°	2435	2470	2528
40°	2396	2465	2550
45°	2354	2463	2595
50°	2288	2471	2654
55°	2205	2502	2728
60°	2094	2530	2788
65°	1935	2561	2826
70°	1720	2580	2528
75°	1386	2319	2023
80°	1085	1626	1322
85°	741	472	337



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.8	3.2
10°-20°	254.7	9.1
20°-30°	387.8	13.8
30°-40°	472.3	16.9
40°-50°	501.1	17.9
50°-60°	472.9	16.9
60°-70°	381.8	13.6
70°-80°	207.1	7.4
80°-90°	33.5	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°	731.2	26.1
0°-40°	1203.5	43.0
0°-60°	2177.5	77.8
0°-90°	2800.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2800.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	938	936	929	936	933	89
15°	903	901	898	905	905	255
25°	837	835	837	846	848	385
35°	741	745	752	767	770	463
45°	619	627	647	671	682	476
55°	470	490	533	568	582	420
65°	304	341	402	435	444	301
75°	133	195	223	201	195	146
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°	937.8	937.8	937.8	937.8	937.8
2.5°	942.2	937.8	931.2	937.8	935.6
5°	937.8	935.6	929.0	935.6	933.4
7.5°	931.2	931.2	924.7	929.0	929.0
10°	924.7	922.5	918.1	924.7	922.5
12.5°	913.7	911.6	909.4	915.9	913.7
15°	902.8	900.6	898.4	905.0	905.0
17.5°	889.7	887.5	885.3	894.1	894.1
20°	872.2	872.2	872.2	881.0	878.8
22.5°	854.7	854.7	856.9	865.7	863.5
25°	837.2	835.0	837.2	846.0	848.2
27.5°	815.4	817.6	819.7	828.5	830.7
30°	793.5	795.7	797.9	808.8	811.0
32.5°	767.3	771.7	776.0	789.1	789.1
35°	741.1	745.4	752.0	767.3	769.5
37.5°	712.6	717.0	725.8	743.2	747.6
40°	682.0	688.6	701.7	719.2	725.8
42.5°	651.4	660.2	675.5	695.1	703.9
45°	618.6	627.4	647.1	671.1	682.0
47.5°	583.7	594.6	618.6	649.2	658.0
50°	546.5	561.8	590.2	623.0	633.9
52.5°	509.3	526.8	561.8	596.8	607.7
55°	470.0	489.7	533.4	568.4	581.5
57.5°	430.6	452.5	502.8	539.9	553.1
60°	389.1	415.3	470.0	507.2	518.1
62.5°	347.6	378.2	437.2	474.4	483.1
65°	303.9	341.0	402.2	435.0	443.8
67.5°	262.3	306.0	367.2	391.3	391.3
70°	218.6	266.7	327.9	334.5	321.3
72.5°	174.9	229.5	284.2	260.1	249.2
75°	133.3	194.6	223.0	201.1	194.6
77.5°	100.6	157.4	157.4	144.3	139.9
80°	70.0	120.2	104.9	91.8	85.3
82.5°	45.9	67.8	54.6	43.7	37.2
85°	24.0	26.2	15.3	13.1	10.9
87.5°	8.7	4.4	2.2	4.4	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)