

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: P311985

Luminaire Tested: **14FCZ2-44-UNV-L83050-HRP-CP250-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: P311985  
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: 14FCZ2-44-UNV-L83050-HRP-CP250-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"  
POLYCARB 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**

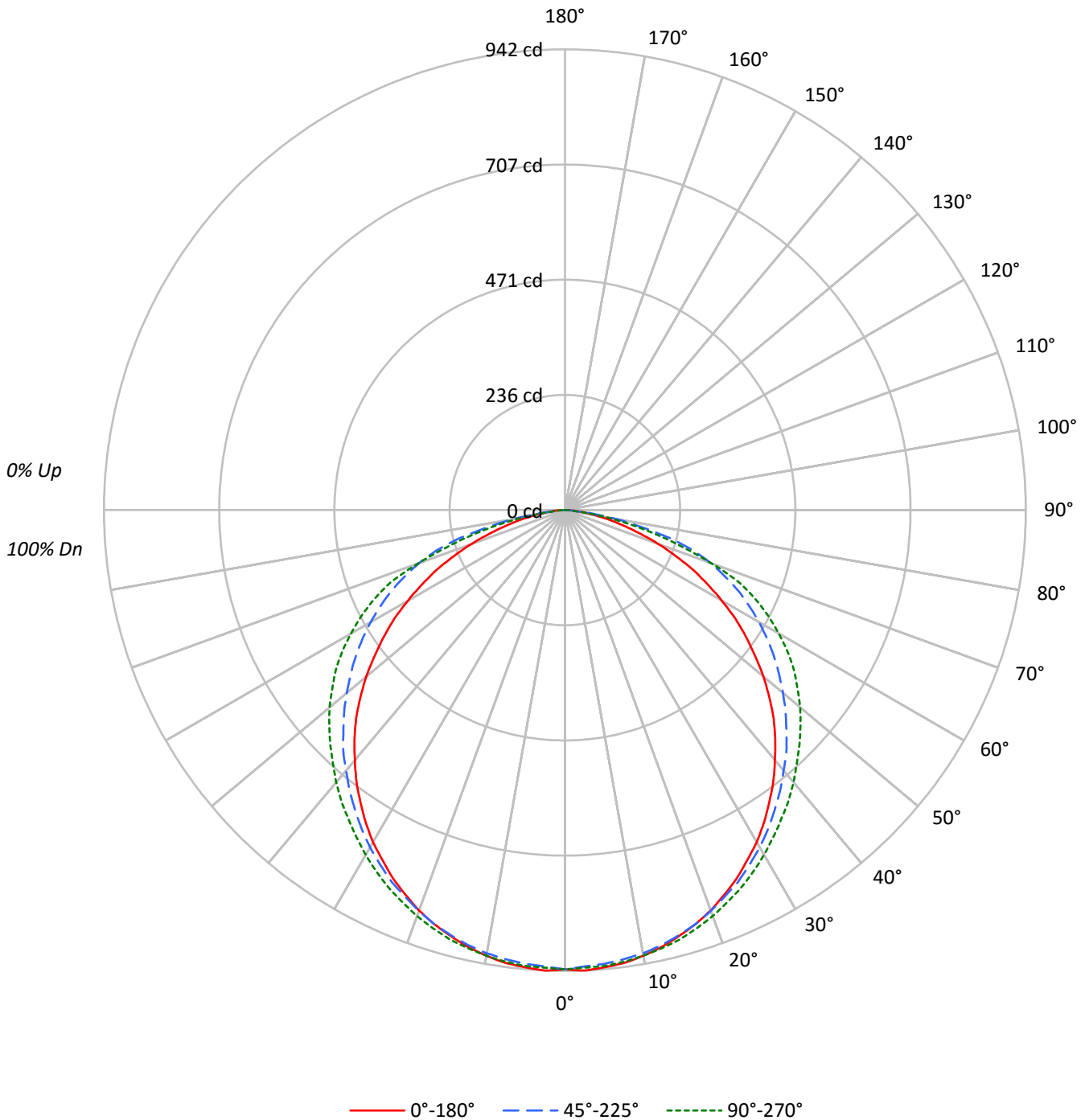
Lumens per Lamp: N/A  
Luminaire Lumens: 2765.0 lumens  
Efficiency: N/A  
Efficacy: 72.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.2  
Input Voltage (V): NR  
Input Current (A<sub>in</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	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°	2527	2527	2527
5°	2534	2515	2527
10°	2528	2514	2528
15°	2512	2507	2531
20°	2495	2497	2530
25°	2468	2489	2530
30°	2437	2475	2529
35°	2394	2456	2533
40°	2346	2444	2553
45°	2296	2435	2581
50°	2217	2435	2628
55°	2121	2448	2684
60°	1993	2466	2719
65°	1838	2492	2735
70°	1601	2496	2518
75°	1319	2323	2034
80°	1037	1671	1361
85°	806	645	321



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.9	3.2
10°-20°	255.1	9.2
20°-30°	387.4	14.0
30°-40°	469.4	17.0
40°-50°	494.6	17.9
50°-60°	461.7	16.7
60°-70°	369.0	13.3
70°-80°	203.0	7.3
80°-90°	35.8	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°	731.4	26.5
0°-40°	1200.7	43.4
0°-60°	2157.1	78.0
0°-90°	2765.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2765.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	939	939	939	939	939	
5°	938	936	931	937	936	89
15°	902	902	900	909	909	254
25°	831	833	838	850	852	383
35°	729	736	748	767	771	456
45°	603	615	640	669	678	464
55°	452	475	522	558	572	404
65°	289	325	391	423	430	284
75°	127	182	223	201	196	137
85°	26	33	21	13	10	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	939.0	939.0	939.0	939.0	939.0
2.5°	942.5	939.9	933.8	939.0	936.4
5°	938.1	935.5	931.2	937.3	935.5
7.5°	933.8	930.3	926.0	932.9	931.2
10°	925.1	922.5	919.9	926.0	925.1
12.5°	914.7	913.8	911.2	918.1	917.3
15°	901.6	901.6	899.9	908.6	908.6
17.5°	887.7	886.8	887.7	897.3	896.4
20°	871.2	871.2	872.1	883.4	883.4
22.5°	851.2	852.1	854.7	868.6	867.7
25°	831.2	832.9	838.2	850.3	852.1
27.5°	806.9	811.2	817.3	832.1	833.8
30°	784.2	786.9	796.4	810.3	813.8
32.5°	757.3	762.5	772.9	788.6	792.9
35°	728.6	735.6	747.7	766.9	771.2
37.5°	699.9	706.0	722.5	742.5	750.3
40°	667.7	678.2	695.6	718.2	726.9
42.5°	636.4	646.9	670.3	693.8	701.6
45°	603.4	614.7	639.9	668.6	678.2
47.5°	566.9	579.9	612.1	642.5	653.0
50°	529.5	546.0	581.7	615.6	627.7
52.5°	490.4	511.2	552.1	587.7	599.1
55°	452.1	474.7	521.7	558.2	572.1
57.5°	413.0	437.3	490.4	532.1	539.9
60°	370.4	399.9	458.2	494.7	505.2
62.5°	328.7	362.6	425.2	459.9	468.6
65°	288.7	325.2	391.3	423.4	429.5
67.5°	245.2	288.7	353.9	383.4	385.2
70°	203.5	253.9	317.3	331.3	320.0
72.5°	162.6	216.5	274.7	263.4	253.9
75°	126.9	181.7	223.4	200.8	195.6
77.5°	93.9	148.7	160.0	147.8	138.2
80°	66.9	117.4	107.8	92.2	87.8
82.5°	46.1	73.9	59.1	46.1	40.0
85°	26.1	33.0	20.9	13.0	10.4
87.5°	11.3	7.8	4.3	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)