

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: P307197

Luminaire Tested: **14FCZ2-39-UNV-L82765-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: P307197  
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-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**

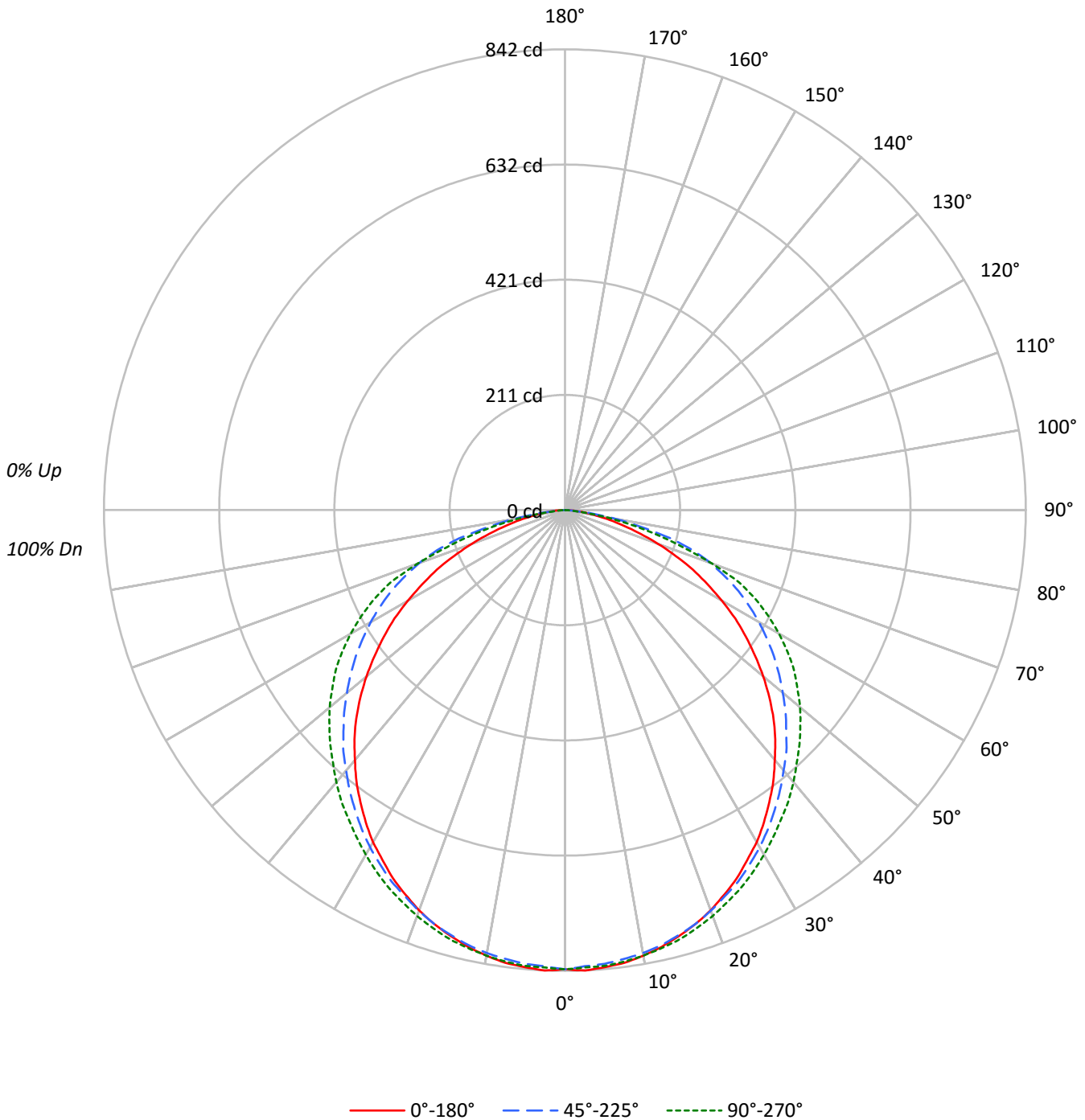
Lumens per Lamp: N/A  
Luminaire Lumens: 2471.0 lumens  
Efficiency: N/A  
Efficacy: 74.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 33.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	2258	2258	2258
5°	2265	2248	2259
10°	2259	2246	2259
15°	2245	2240	2262
20°	2230	2232	2261
25°	2205	2224	2261
30°	2178	2211	2260
35°	2139	2195	2264
40°	2096	2184	2282
45°	2052	2176	2307
50°	1981	2176	2349
55°	1895	2187	2399
60°	1781	2204	2429
65°	1643	2227	2444
70°	1430	2231	2249
75°	1179	2076	1817
80°	927	1492	1216
85°	719	574	287



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.4	3.2
10°-20°	228.0	9.2
20°-30°	346.2	14.0
30°-40°	419.5	17.0
40°-50°	442.0	17.9
50°-60°	412.6	16.7
60°-70°	329.8	13.3
70°-80°	181.5	7.3
80°-90°	32.0	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°	653.6	26.5
0°-40°	1073.1	43.4
0°-60°	1927.7	78.0
0°-90°	2471.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2471.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	838	836	832	838	836	80
15°	806	806	804	812	812	227
25°	743	744	749	760	762	342
35°	651	657	668	685	689	407
45°	539	549	572	598	606	415
55°	404	424	466	499	511	361
65°	258	291	350	378	384	254
75°	113	162	200	180	175	122
85°	23	30	19	12	9	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	839.2	839.2	839.2	839.2	839.2
2.5°	842.3	839.9	834.5	839.2	836.8
5°	838.4	836.1	832.2	837.6	836.1
7.5°	834.5	831.4	827.5	833.7	832.2
10°	826.7	824.4	822.1	827.5	826.7
12.5°	817.4	816.6	814.3	820.5	819.7
15°	805.8	805.8	804.2	812.0	812.0
17.5°	793.3	792.5	793.3	801.9	801.1
20°	778.6	778.6	779.3	789.4	789.4
22.5°	760.7	761.5	763.8	776.2	775.4
25°	742.8	744.4	749.0	759.9	761.5
27.5°	721.1	724.9	730.4	743.6	745.1
30°	700.9	703.2	711.7	724.2	727.3
32.5°	676.8	681.4	690.8	704.7	708.6
35°	651.1	657.3	668.2	685.3	689.2
37.5°	625.5	630.9	645.7	663.6	670.6
40°	596.7	606.1	621.6	641.8	649.6
42.5°	568.8	578.1	599.1	620.0	627.0
45°	539.2	549.3	571.9	597.5	606.1
47.5°	506.6	518.3	547.0	574.2	583.5
50°	473.2	488.0	519.8	550.1	561.0
52.5°	438.2	456.9	493.4	525.3	535.4
55°	404.0	424.2	466.2	498.8	511.3
57.5°	369.1	390.8	438.2	475.5	482.5
60°	331.0	357.4	409.5	442.1	451.4
62.5°	293.7	324.0	380.0	411.0	418.8
65°	258.0	290.6	349.7	378.4	383.8
67.5°	219.1	258.0	316.2	342.7	344.2
70°	181.8	226.9	283.6	296.0	285.9
72.5°	145.3	193.5	245.5	235.4	226.9
75°	113.4	162.4	199.7	179.5	174.8
77.5°	83.9	132.9	143.0	132.1	123.5
80°	59.8	104.9	96.3	82.4	78.5
82.5°	41.2	66.0	52.8	41.2	35.7
85°	23.3	29.5	18.6	11.7	9.3
87.5°	10.1	7.0	3.9	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)