

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: P312315

Luminaire Tested: **14FCZ2-25-UNV-L83050-S-CA08-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: P312315  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-25-UNV-L83050-S-CA08-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC 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

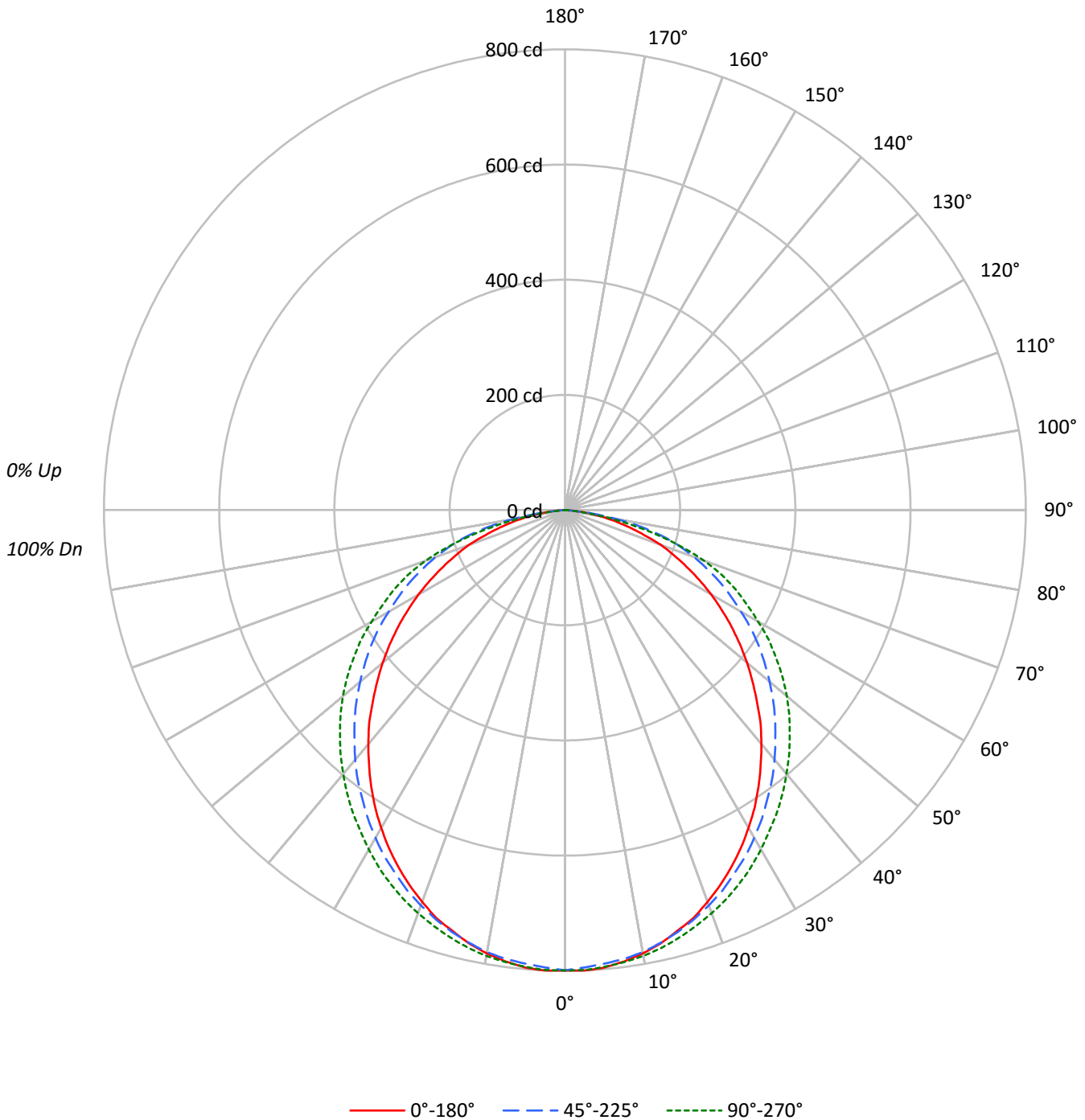
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2239.0 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2151	2151	2151
5°	2153	2135	2150
10°	2135	2129	2148
15°	2106	2112	2140
20°	2073	2092	2133
25°	2030	2067	2126
30°	1980	2042	2115
35°	1925	2013	2108
40°	1864	1989	2102
45°	1795	1964	2100
50°	1729	1942	2105
55°	1656	1927	2099
60°	1577	1900	2085
65°	1484	1894	2085
70°	1397	1878	2026
75°	1212	1835	1731
80°	981	1480	1153
85°	651	516	343



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.5	3.4
10°-20°	214.8	9.6
20°-30°	322.2	14.4
30°-40°	384.3	17.2
40°-50°	397.3	17.7
50°-60°	362.7	16.2
60°-70°	285.4	12.7
70°-80°	166.2	7.4
80°-90°	30.6	1.4
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°	612.4	27.4
0°-40°	996.7	44.5
0°-60°	1756.8	78.5
0°-90°	2239.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2239.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	799	799	799	799	799	
5°	797	795	790	797	796	76
15°	756	757	758	768	768	213
25°	684	687	696	713	716	315
35°	586	594	613	636	642	366
45°	472	487	516	545	552	364
55°	353	372	411	441	447	316
65°	233	258	298	321	328	231
75°	117	144	176	173	166	124
85°	21	30	17	13	11	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	799.3	799.3	799.3	799.3	799.3
2.5°	800.4	798.2	794.8	800.4	799.3
5°	797.1	794.8	790.4	797.1	796.0
7.5°	790.4	788.2	786.0	792.6	791.5
10°	781.5	780.4	779.3	787.1	786.0
12.5°	770.4	770.4	769.3	778.2	778.2
15°	756.0	757.1	758.2	768.2	768.2
17.5°	742.7	741.6	744.9	756.0	757.1
20°	723.8	726.0	730.5	743.8	744.9
22.5°	704.9	707.1	714.9	728.2	731.6
25°	683.8	687.2	696.0	712.7	716.0
27.5°	661.6	666.1	678.3	696.0	699.4
30°	637.2	643.9	657.2	677.2	680.5
32.5°	612.8	619.4	636.1	656.1	660.5
35°	586.1	593.9	612.8	636.1	641.6
37.5°	558.4	568.4	590.6	613.9	620.6
40°	530.6	541.7	566.2	590.6	598.4
42.5°	502.9	514.0	540.6	568.4	576.2
45°	471.8	487.3	516.2	545.1	551.7
47.5°	441.8	458.5	490.7	519.5	528.4
50°	413.0	429.6	464.0	494.0	502.9
52.5°	383.0	400.8	437.4	468.5	476.2
55°	353.0	371.9	410.7	440.7	447.4
57.5°	323.0	343.0	383.0	411.9	419.6
60°	293.1	314.2	353.0	381.9	387.4
62.5°	263.1	285.3	325.3	350.8	356.3
65°	233.1	257.5	297.5	320.8	327.5
67.5°	204.3	228.7	267.5	289.7	295.3
70°	177.6	199.8	238.7	255.3	257.5
72.5°	144.3	172.1	209.8	218.7	213.1
75°	116.6	144.3	176.5	173.2	166.5
77.5°	88.8	116.6	137.7	126.6	117.7
80°	63.3	91.0	95.5	78.8	74.4
82.5°	41.1	63.3	53.3	41.1	33.3
85°	21.1	30.0	16.7	13.3	11.1
87.5°	6.7	4.4	2.2	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)