

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: P311872

Luminaire Tested: **14FCZ2-25-UNV-L83050-HRP-CA125-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: P311872  
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: 14FCZ2-25-UNV-L83050-HRP-CA125-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" 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**

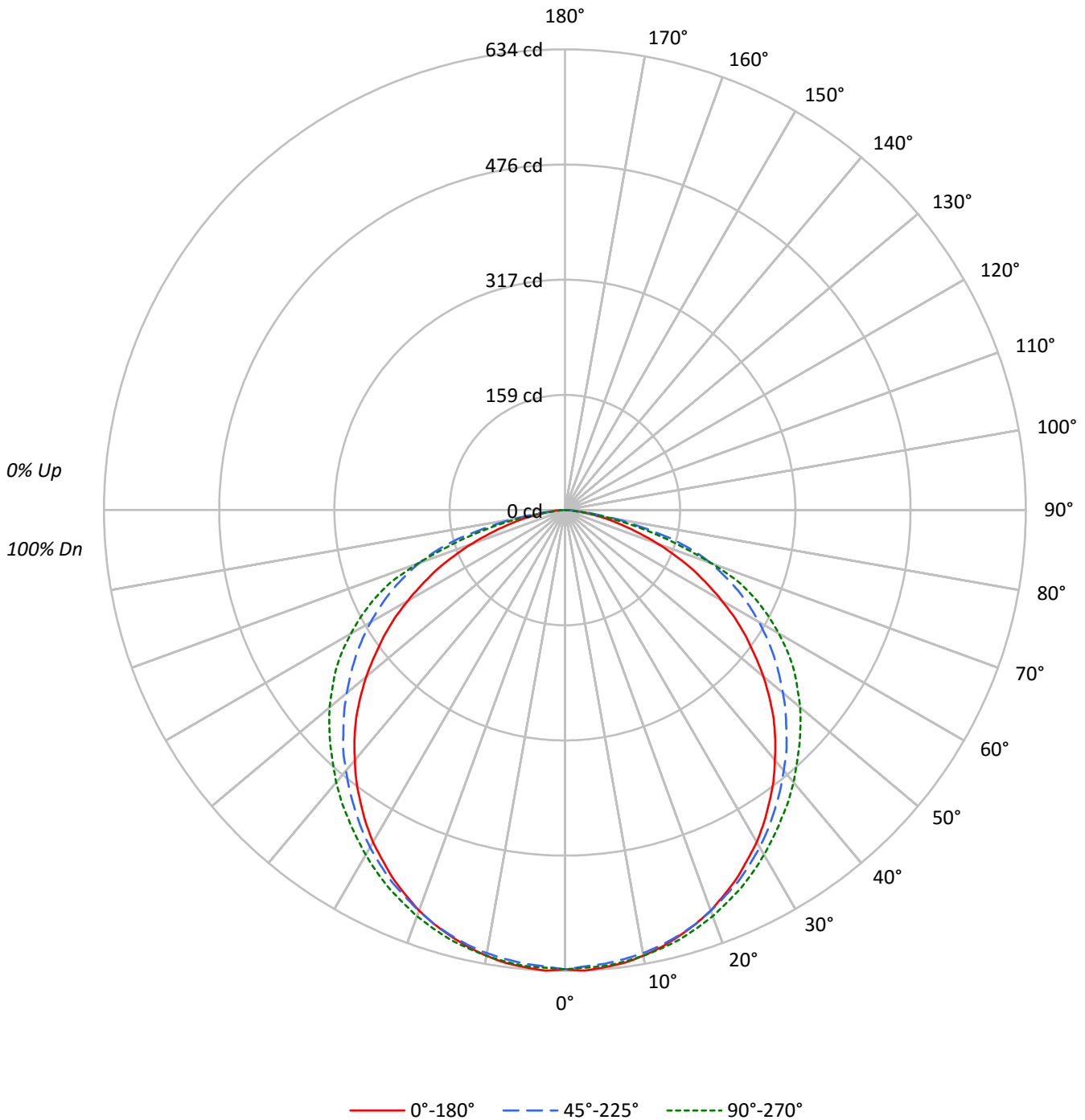
Lumens per Lamp: N/A  
Luminaire Lumens: 1861.0 lumens  
Efficiency: N/A  
Efficacy: 92.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 20.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	1701	1701	1701
5°	1706	1693	1701
10°	1701	1692	1701
15°	1690	1687	1704
20°	1679	1681	1703
25°	1661	1675	1703
30°	1640	1665	1702
35°	1611	1653	1705
40°	1579	1645	1718
45°	1545	1639	1737
50°	1492	1639	1769
55°	1428	1647	1807
60°	1342	1660	1830
65°	1237	1677	1841
70°	1077	1681	1694
75°	888	1564	1369
80°	699	1125	916
85°	543	432	216



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.8	3.2
10°-20°	171.7	9.2
20°-30°	260.7	14.0
30°-40°	315.9	17.0
40°-50°	332.9	17.9
50°-60°	310.8	16.7
60°-70°	248.4	13.3
70°-80°	136.7	7.3
80°-90°	24.1	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°	492.2	26.5
0°-40°	808.2	43.4
0°-60°	1451.8	78.0
0°-90°	1861.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1861.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	631	630	627	631	630	60
15°	607	607	606	612	612	171
25°	559	561	564	572	574	258
35°	490	495	503	516	519	307
45°	406	414	431	450	456	312
55°	304	320	351	376	385	272
65°	194	219	263	285	289	191
75°	85	122	150	135	132	92
85°	18	22	14	9	7	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	632.0	632.0	632.0	632.0	632.0
2.5°	634.3	632.6	628.5	632.0	630.2
5°	631.4	629.7	626.7	630.8	629.7
7.5°	628.5	626.2	623.2	627.9	626.7
10°	622.6	620.9	619.1	623.2	622.6
12.5°	615.6	615.0	613.3	618.0	617.4
15°	606.8	606.8	605.7	611.5	611.5
17.5°	597.5	596.9	597.5	603.9	603.3
20°	586.4	586.4	586.9	594.6	594.6
22.5°	572.9	573.5	575.2	584.6	584.0
25°	559.4	560.6	564.1	572.3	573.5
27.5°	543.1	546.0	550.1	560.0	561.2
30°	527.8	529.6	536.0	545.4	547.7
32.5°	509.7	513.2	520.2	530.8	533.7
35°	490.4	495.1	503.3	516.1	519.1
37.5°	471.1	475.2	486.3	499.8	505.0
40°	449.4	456.4	468.2	483.4	489.2
42.5°	428.4	435.4	451.2	467.0	472.2
45°	406.1	413.7	430.7	450.0	456.4
47.5°	381.5	390.3	412.0	432.5	439.5
50°	356.4	367.5	391.5	414.3	422.5
52.5°	330.0	344.1	371.6	395.6	403.2
55°	304.3	319.5	351.1	375.7	385.1
57.5°	278.0	294.4	330.0	358.1	363.4
60°	249.3	269.2	308.4	333.0	340.0
62.5°	221.2	244.0	286.2	309.6	315.4
65°	194.3	218.9	263.3	285.0	289.1
67.5°	165.0	194.3	238.2	258.1	259.2
70°	136.9	170.9	213.6	223.0	215.3
72.5°	109.4	145.7	184.9	177.3	170.9
75°	85.4	122.3	150.4	135.2	131.7
77.5°	63.2	100.1	107.7	99.5	93.0
80°	45.1	79.0	72.6	62.0	59.1
82.5°	31.0	49.7	39.8	31.0	26.9
85°	17.6	22.2	14.0	8.8	7.0
87.5°	7.6	5.3	2.9	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)