

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: P312175

Luminaire Tested: **14FCZ2-25-UNV-L83050-CP125-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: P312175  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
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-CP125-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 0.125" 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

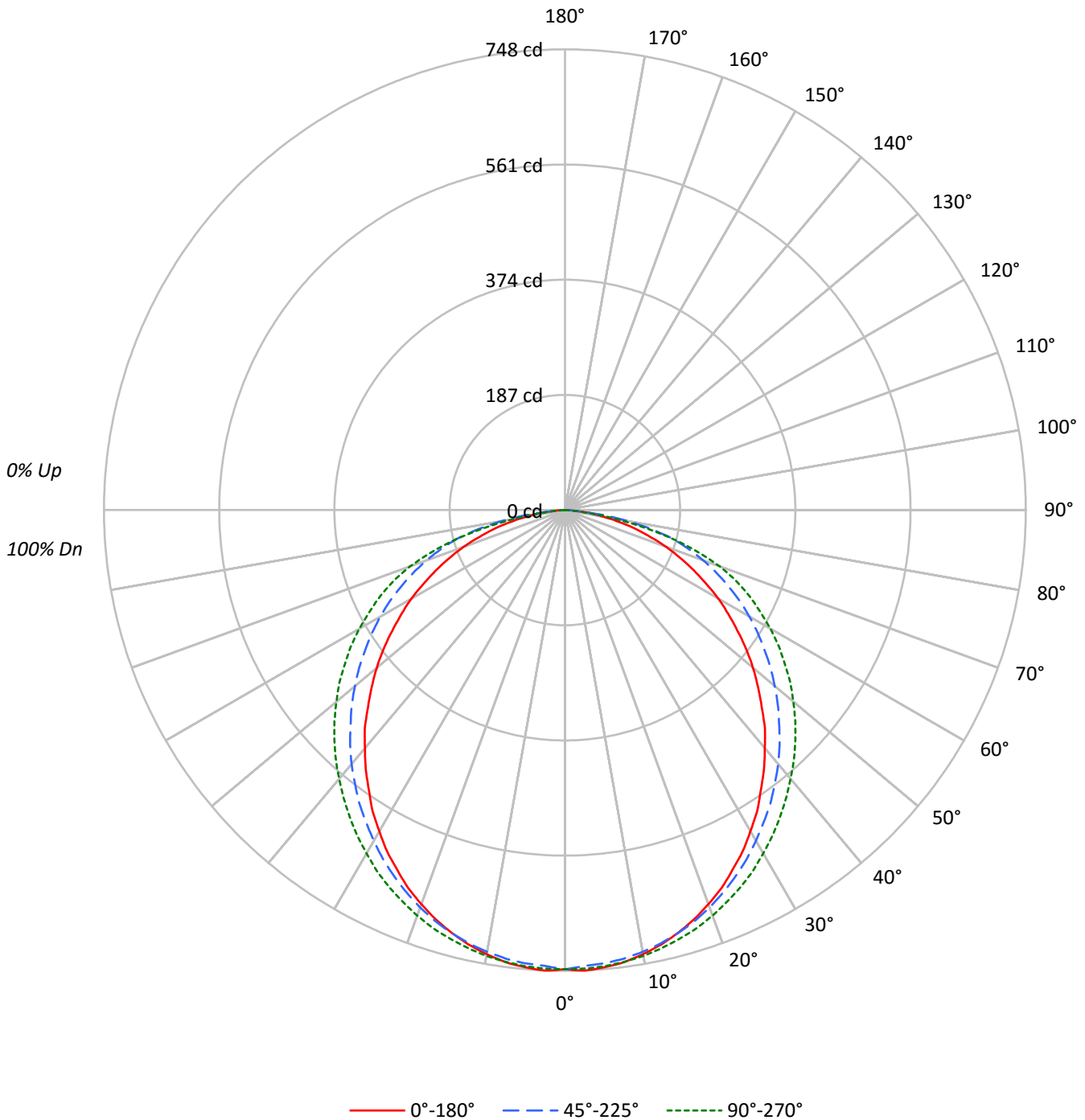
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2164.0 lumens  
Efficiency: N/A  
Efficacy: 110.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	2006	2006	2006
5°	2012	1995	2007
10°	2000	1990	2008
15°	1979	1980	2007
20°	1950	1966	2006
25°	1913	1947	2004
30°	1871	1927	2000
35°	1821	1910	1999
40°	1773	1892	2002
45°	1719	1871	2013
50°	1669	1863	2026
55°	1605	1856	2044
60°	1548	1859	2073
65°	1468	1865	2104
70°	1378	1880	2103
75°	1249	1896	1902
80°	1024	1638	1353
85°	760	775	312



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.5	3.3
10°-20°	201.5	9.3
20°-30°	303.6	14.0
30°-40°	364.3	16.8
40°-50°	379.7	17.5
50°-60°	351.5	16.2
60°-70°	284.0	13.1
70°-80°	173.2	8.0
80°-90°	35.8	1.7
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°	575.6	26.6
0°-40°	939.9	43.4
0°-60°	1671.1	77.2
0°-90°	2164.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2164.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	745	743	739	744	743	71
15°	710	711	711	720	720	200
25°	644	648	656	672	675	297
35°	554	563	581	603	608	347
45°	452	465	492	519	529	349
55°	342	360	396	427	436	307
65°	231	253	293	322	330	228
75°	120	147	182	185	183	126
85°	25	37	25	14	10	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	745.5	745.5	745.5	745.5	745.5
2.5°	748.4	746.0	740.7	746.0	745.0
5°	745.0	743.1	738.7	744.1	743.1
7.5°	740.2	738.3	734.4	740.7	739.7
10°	732.0	731.0	728.1	735.4	734.9
12.5°	722.3	721.9	720.4	728.6	728.1
15°	710.3	710.8	710.8	720.4	720.4
17.5°	696.8	697.7	699.7	710.3	711.7
20°	680.8	682.8	686.6	698.7	700.6
22.5°	664.4	665.9	671.7	686.2	688.1
25°	644.2	648.0	655.8	672.2	675.1
27.5°	624.9	628.3	638.9	655.8	660.6
30°	602.2	607.5	620.0	638.4	643.7
32.5°	580.5	586.3	600.7	622.0	626.8
35°	554.4	563.1	581.4	602.7	608.5
37.5°	530.8	539.0	559.7	582.9	589.6
40°	504.7	514.9	538.5	563.1	569.9
42.5°	480.6	490.2	515.8	540.9	550.1
45°	451.6	465.2	491.7	519.2	528.9
47.5°	425.1	438.6	469.0	498.5	507.1
50°	398.6	413.0	444.9	475.3	484.0
52.5°	371.1	386.5	420.8	451.2	461.3
55°	342.1	360.0	395.7	426.6	435.7
57.5°	314.6	332.9	371.1	402.4	411.6
60°	287.6	306.4	345.5	375.4	385.1
62.5°	257.7	279.9	320.4	349.8	357.1
65°	230.6	253.3	292.9	322.3	330.5
67.5°	202.2	226.8	266.4	293.4	301.1
70°	175.2	200.7	238.9	263.9	267.3
72.5°	146.2	172.3	210.9	226.8	226.8
75°	120.1	146.7	182.4	185.3	182.9
77.5°	91.7	121.1	144.3	138.5	132.7
80°	66.1	95.1	105.7	95.1	87.3
82.5°	44.4	69.0	63.7	50.7	44.9
85°	24.6	36.7	25.1	14.0	10.1
87.5°	9.2	8.2	2.4	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)