

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: P307539

Luminaire Tested: **14FCZ2-20-UNV-L82765-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: P307539  
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: 14FCZ2-20-UNV-L82765-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**

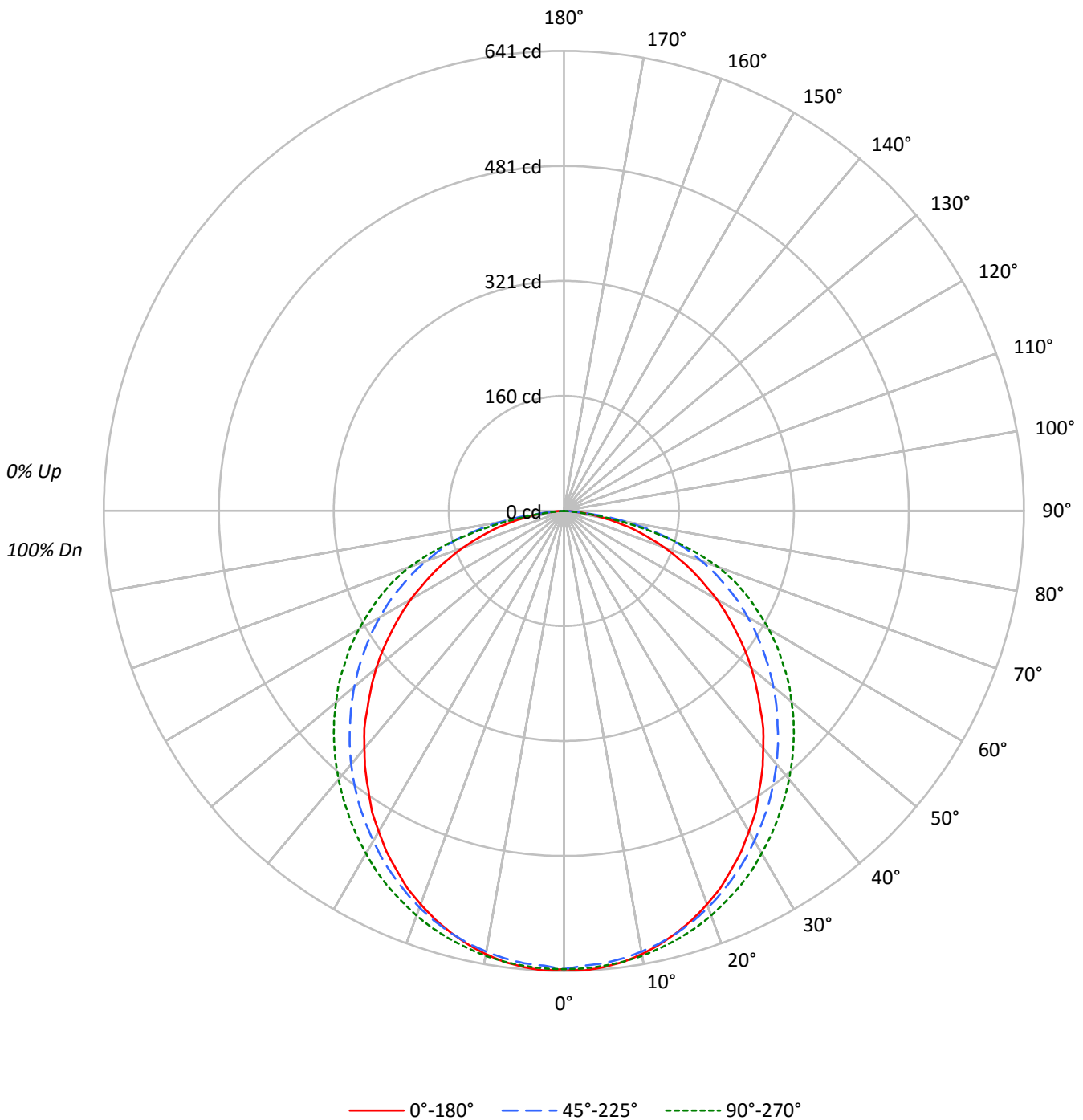
Lumens per Lamp: N/A  
Luminaire Lumens: 1853.0 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.4  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	1718	1718	1718
5°	1723	1709	1719
10°	1713	1704	1720
15°	1694	1696	1719
20°	1670	1684	1718
25°	1638	1667	1716
30°	1602	1650	1713
35°	1559	1636	1712
40°	1518	1620	1714
45°	1472	1602	1723
50°	1429	1595	1735
55°	1374	1590	1750
60°	1326	1592	1774
65°	1258	1597	1802
70°	1180	1609	1801
75°	1070	1624	1628
80°	877	1402	1159
85°	651	664	269



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.4	3.3
10°-20°	172.6	9.3
20°-30°	259.9	14.0
30°-40°	311.9	16.8
40°-50°	325.1	17.5
50°-60°	301.0	16.2
60°-70°	243.2	13.1
70°-80°	148.3	8.0
80°-90°	30.6	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°	492.9	26.6
0°-40°	804.8	43.4
0°-60°	1430.9	77.2
0°-90°	1853.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1853.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	638	638	638	638	638	
5°	638	636	633	637	636	61
15°	608	609	609	617	617	171
25°	552	555	562	576	578	254
35°	475	482	498	516	521	297
45°	387	398	421	445	453	299
55°	293	308	339	365	373	262
65°	198	217	251	276	283	195
75°	103	126	156	159	157	108
85°	21	31	22	12	9	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	638.4	638.4	638.4	638.4	638.4
2.5°	640.8	638.8	634.2	638.8	638.0
5°	638.0	636.3	632.6	637.1	636.3
7.5°	633.8	632.2	628.9	634.2	633.4
10°	626.8	626.0	623.5	629.7	629.3
12.5°	618.5	618.1	616.9	623.9	623.5
15°	608.2	608.6	608.6	616.9	616.9
17.5°	596.6	597.5	599.1	608.2	609.4
20°	583.0	584.7	588.0	598.3	599.9
22.5°	569.0	570.2	575.1	587.5	589.2
25°	551.6	554.9	561.5	575.6	578.0
27.5°	535.1	538.0	547.1	561.5	565.6
30°	515.6	520.2	530.9	546.6	551.2
32.5°	497.1	502.0	514.4	532.6	536.7
35°	474.7	482.2	497.9	516.1	521.0
37.5°	454.5	461.5	479.3	499.1	504.9
40°	432.2	440.9	461.1	482.2	488.0
42.5°	411.5	419.8	441.7	463.2	471.0
45°	386.7	398.3	421.0	444.6	452.8
47.5°	364.0	375.6	401.6	426.8	434.3
50°	341.3	353.7	381.0	407.0	414.4
52.5°	317.7	331.0	360.3	386.3	395.0
55°	292.9	308.2	338.8	365.3	373.1
57.5°	269.4	285.1	317.7	344.6	352.4
60°	246.3	262.4	295.8	321.5	329.7
62.5°	220.6	239.6	274.4	299.6	305.8
65°	197.5	216.9	250.8	276.0	283.0
67.5°	173.1	194.2	228.1	251.2	257.8
70°	150.0	171.9	204.5	226.0	228.9
72.5°	125.2	147.5	180.6	194.2	194.2
75°	102.9	125.6	156.2	158.7	156.6
77.5°	78.5	103.7	123.5	118.6	113.6
80°	56.6	81.4	90.5	81.4	74.8
82.5°	38.0	59.1	54.5	43.4	38.4
85°	21.1	31.4	21.5	12.0	8.7
87.5°	7.9	7.0	2.1	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)