

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: P307532

Luminaire Tested: **14FCZ2-20-UNV-L82765-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: P307532  
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-CA125-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE,RIBBED 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

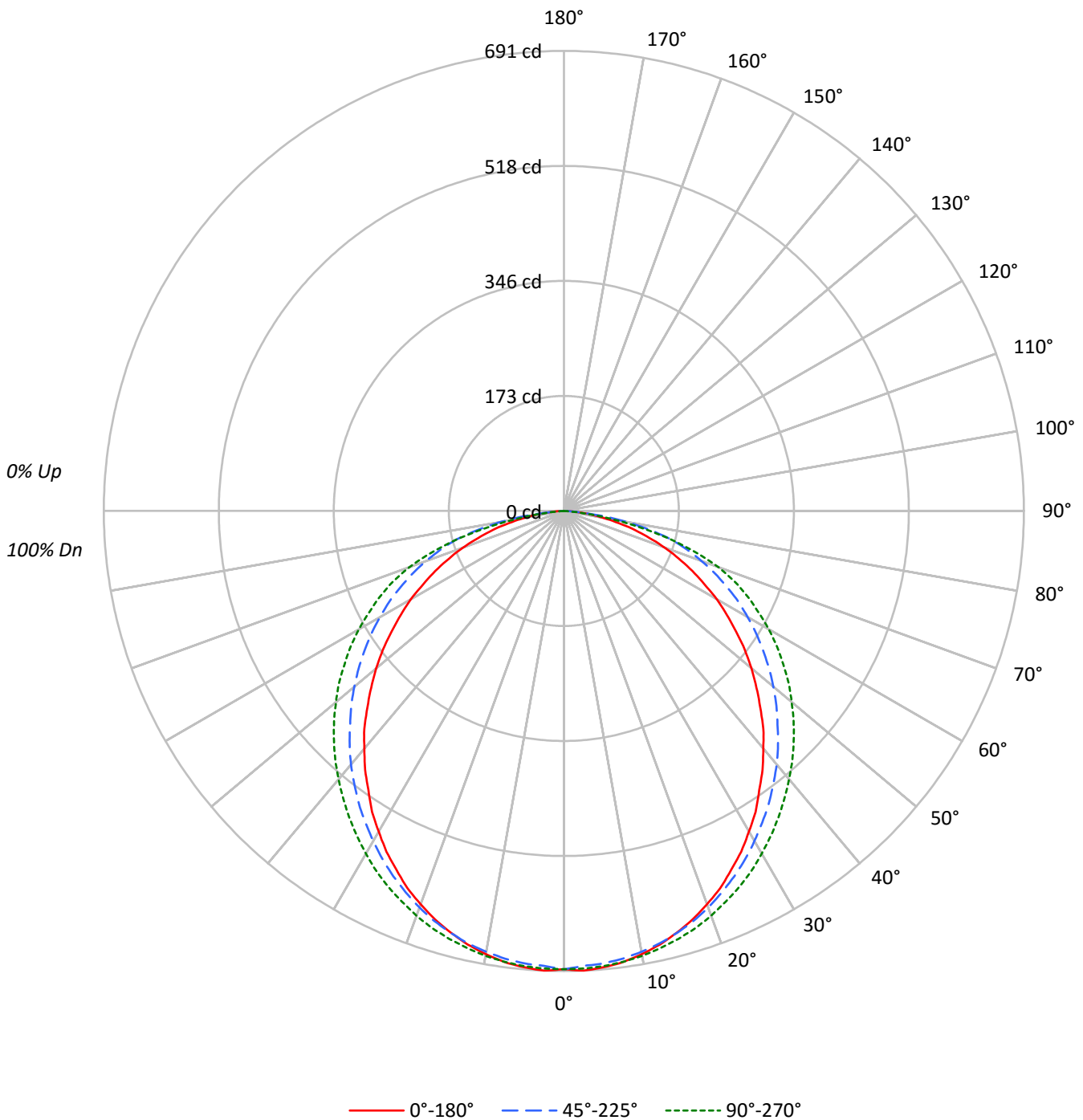
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1998.0 lumens  
Efficiency: N/A  
Efficacy: 119.6 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): 16.7  
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°	1852	1852	1852
5°	1858	1843	1853
10°	1847	1837	1854
15°	1827	1828	1853
20°	1800	1816	1853
25°	1766	1798	1851
30°	1728	1779	1847
35°	1682	1763	1846
40°	1637	1747	1848
45°	1587	1728	1858
50°	1541	1720	1870
55°	1482	1714	1887
60°	1429	1717	1913
65°	1356	1722	1943
70°	1272	1735	1942
75°	1153	1751	1755
80°	945	1512	1249
85°	701	716	290



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.1	3.3
10°-20°	186.1	9.3
20°-30°	280.3	14.0
30°-40°	336.3	16.8
40°-50°	350.6	17.5
50°-60°	324.5	16.2
60°-70°	262.2	13.1
70°-80°	159.9	8.0
80°-90°	33.0	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°	531.5	26.6
0°-40°	867.8	43.4
0°-60°	1542.9	77.2
0°-90°	1998.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1998.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	688	686	682	687	686	65
15°	656	656	656	665	665	185
25°	595	598	606	621	623	274
35°	512	520	537	556	562	321
45°	417	430	454	479	488	322
55°	316	332	365	394	402	283
65°	213	234	270	298	305	211
75°	111	135	168	171	169	116
85°	23	34	23	13	9	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	688.3	688.3	688.3	688.3	688.3
2.5°	691.0	688.8	683.9	688.8	687.9
5°	687.9	686.1	682.1	687.0	686.1
7.5°	683.4	681.6	678.1	683.9	683.0
10°	675.8	675.0	672.3	679.0	678.5
12.5°	666.9	666.5	665.2	672.7	672.3
15°	655.8	656.2	656.2	665.2	665.2
17.5°	643.3	644.2	646.0	655.8	657.1
20°	628.6	630.4	634.0	645.1	646.9
22.5°	613.5	614.8	620.2	633.5	635.3
25°	594.8	598.3	605.5	620.6	623.3
27.5°	576.9	580.1	589.9	605.5	609.9
30°	556.0	560.9	572.5	589.4	594.3
32.5°	536.0	541.3	554.7	574.3	578.7
35°	511.9	519.9	536.8	556.4	561.8
37.5°	490.1	497.6	516.8	538.2	544.4
40°	466.0	475.4	497.2	519.9	526.2
42.5°	443.7	452.6	476.3	499.4	507.9
45°	417.0	429.5	454.0	479.4	488.3
47.5°	392.5	405.0	433.0	460.2	468.2
50°	368.0	381.4	410.8	438.8	446.8
52.5°	342.6	356.9	388.5	416.6	425.9
55°	315.9	332.4	365.3	393.8	402.3
57.5°	290.5	307.4	342.6	371.6	380.0
60°	265.5	282.9	319.0	346.6	355.5
62.5°	237.9	258.4	295.8	323.0	329.7
65°	213.0	233.9	270.4	297.6	305.2
67.5°	186.7	209.4	245.9	270.9	278.0
70°	161.7	185.3	220.5	243.7	246.8
72.5°	135.0	159.0	194.7	209.4	209.4
75°	110.9	135.4	168.4	171.1	168.8
77.5°	84.6	111.8	133.2	127.9	122.5
80°	61.0	87.8	97.6	87.8	80.6
82.5°	41.0	63.7	58.8	46.8	41.4
85°	22.7	33.9	23.2	12.9	9.4
87.5°	8.5	7.6	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)