

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: P312295

Luminaire Tested: **14FCZ2-20-UNV-L83050-S-CA125-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: P312295  
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: 14FCZ2-20-UNV-L83050-S-CA125-W2A-U-3000K  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS,0.125" 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**

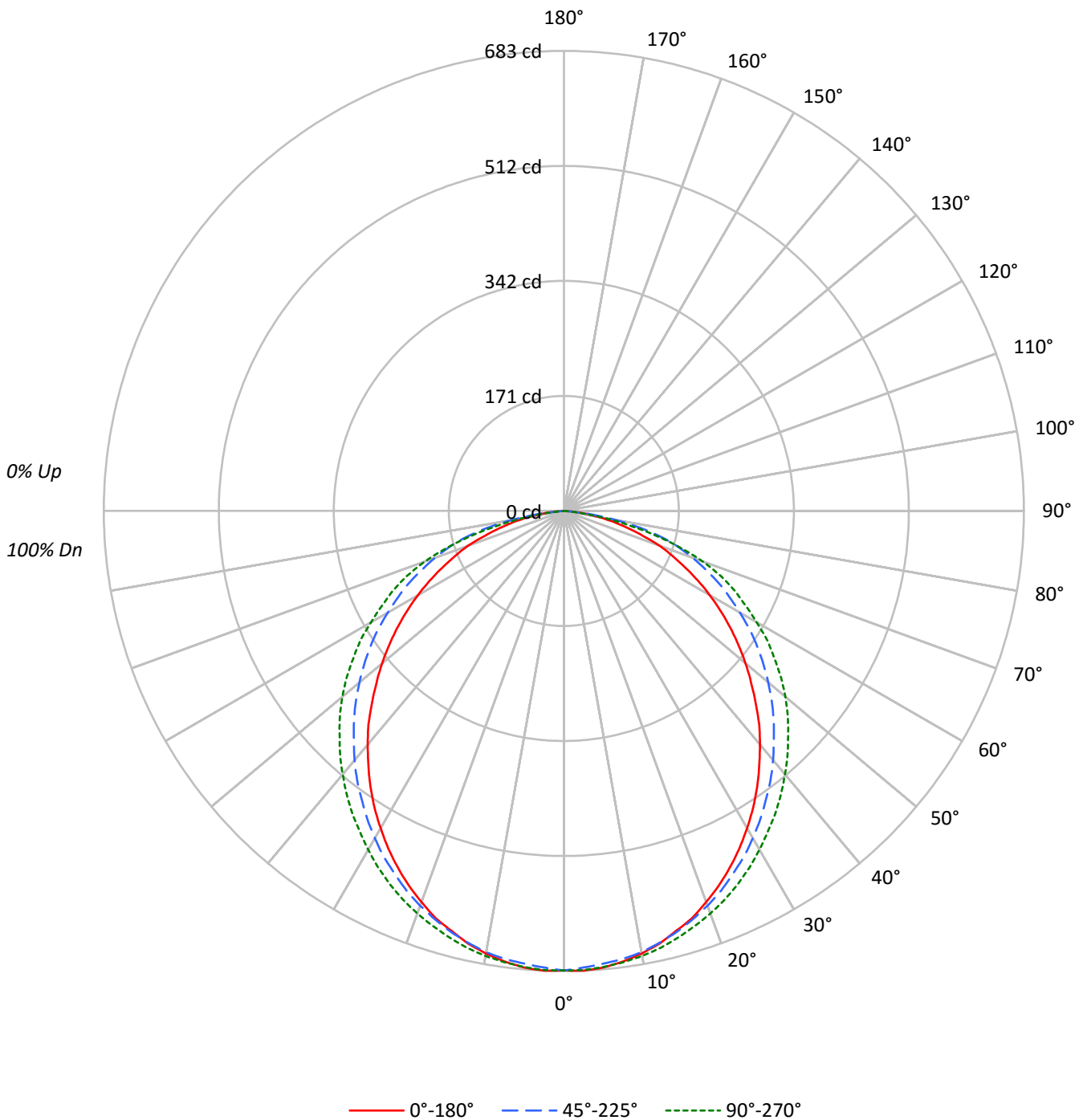
Lumens per Lamp: N/A  
Luminaire Lumens: 1911.0 lumens  
Efficiency: N/A  
Efficacy: 115.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.5  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	1836	1836	1836
5°	1838	1822	1835
10°	1823	1817	1833
15°	1797	1803	1827
20°	1769	1786	1821
25°	1733	1764	1814
30°	1690	1743	1805
35°	1644	1718	1799
40°	1591	1697	1794
45°	1533	1677	1792
50°	1476	1658	1797
55°	1414	1645	1791
60°	1346	1622	1780
65°	1267	1617	1780
70°	1193	1603	1729
75°	1035	1567	1477
80°	837	1263	984
85°	556	438	293



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.4	3.4
10°-20°	183.3	9.6
20°-30°	275.0	14.4
30°-40°	328.0	17.2
40°-50°	339.1	17.7
50°-60°	309.6	16.2
60°-70°	243.6	12.7
70°-80°	141.8	7.4
80°-90°	26.1	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°	522.7	27.4
0°-40°	850.7	44.5
0°-60°	1499.4	78.5
0°-90°	1911.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1911.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	682	682	682	682	682	
5°	680	678	675	680	679	64
15°	645	646	647	656	656	182
25°	584	586	594	608	611	269
35°	500	507	523	543	548	313
45°	403	416	441	465	471	311
55°	301	317	351	376	382	269
65°	199	220	254	274	280	198
75°	100	123	151	148	142	106
85°	18	26	14	11	10	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	682.2	682.2	682.2	682.2	682.2
2.5°	683.1	681.2	678.4	683.1	682.2
5°	680.3	678.4	674.6	680.3	679.4
7.5°	674.6	672.7	670.8	676.5	675.6
10°	667.0	666.1	665.1	671.8	670.8
12.5°	657.6	657.6	656.6	664.2	664.2
15°	645.2	646.2	647.1	655.7	655.7
17.5°	633.9	632.9	635.8	645.2	646.2
20°	617.8	619.7	623.5	634.8	635.8
22.5°	601.7	603.6	610.2	621.6	624.4
25°	583.7	586.5	594.1	608.3	611.1
27.5°	564.7	568.5	578.9	594.1	596.9
30°	543.9	549.5	560.9	578.0	580.8
32.5°	523.0	528.7	542.9	560.0	563.8
35°	500.3	506.9	523.0	542.9	547.7
37.5°	476.6	485.1	504.1	524.0	529.6
40°	452.9	462.4	483.2	504.1	510.7
42.5°	429.2	438.7	461.4	485.1	491.7
45°	402.7	415.9	440.6	465.2	470.9
47.5°	377.1	391.3	418.8	443.4	451.0
50°	352.5	366.7	396.1	421.6	429.2
52.5°	326.9	342.0	373.3	399.8	406.5
55°	301.3	317.4	350.6	376.2	381.8
57.5°	275.7	292.8	326.9	351.5	358.2
60°	250.1	268.1	301.3	325.9	330.7
62.5°	224.6	243.5	277.6	299.4	304.1
65°	199.0	219.8	253.9	273.8	279.5
67.5°	174.3	195.2	228.3	247.3	252.0
70°	151.6	170.5	203.7	217.9	219.8
72.5°	123.2	146.9	179.1	186.7	181.9
75°	99.5	123.2	150.7	147.8	142.1
77.5°	75.8	99.5	117.5	108.0	100.4
80°	54.0	77.7	81.5	67.3	63.5
82.5°	35.1	54.0	45.5	35.1	28.4
85°	18.0	25.6	14.2	11.4	9.5
87.5°	5.7	3.8	1.9	1.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)