

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: P312302

Luminaire Tested: **14FCZ2-20-UNV-L83050-S-CP125-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: P312302  
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-CP125-W2A-U-4000K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS, 0.125" POLYCARB 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**

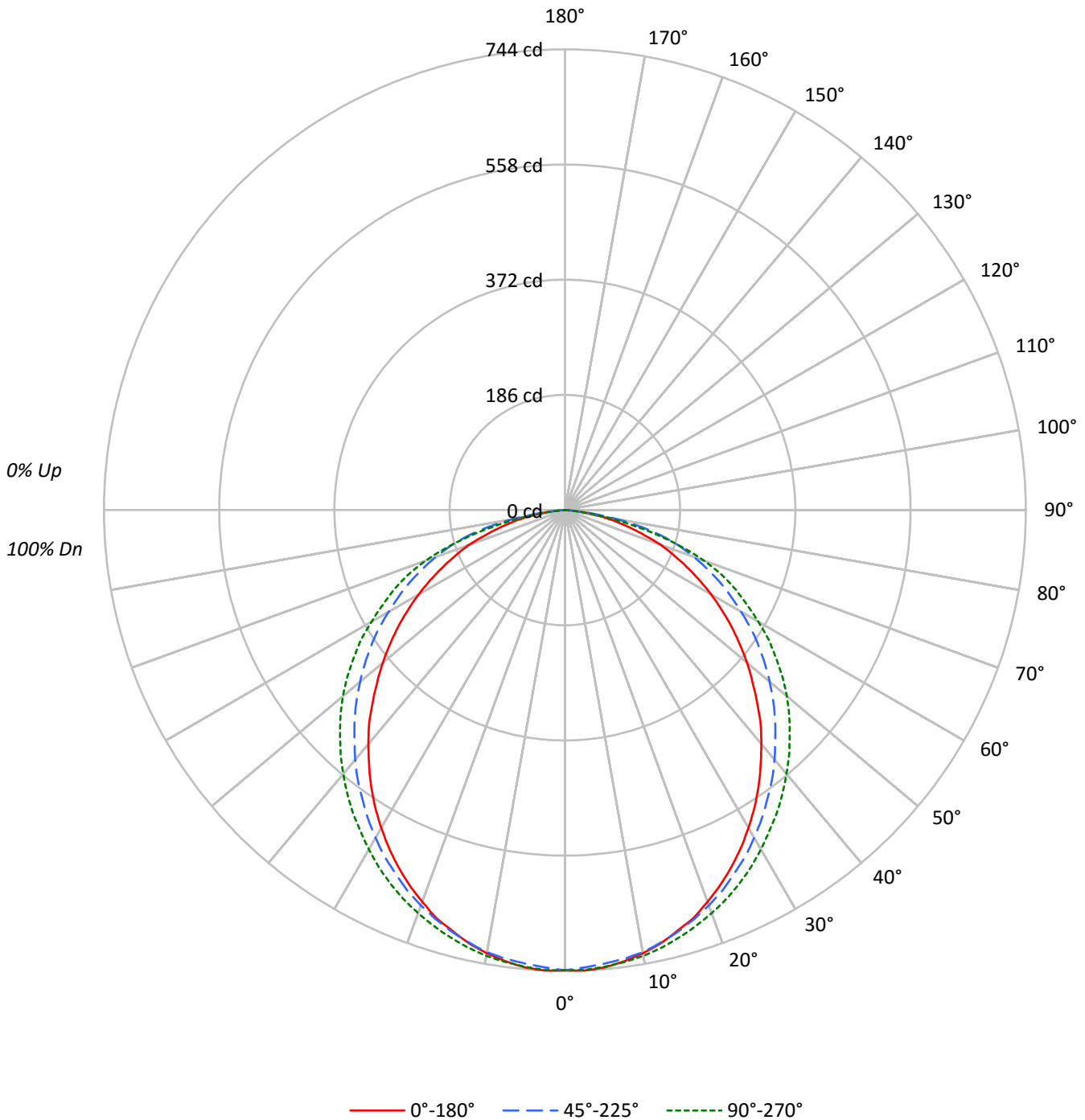
Lumens per Lamp: N/A  
Luminaire Lumens: 2082.0 lumens  
Efficiency: N/A  
Efficacy: 123.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.9  
Input Voltage (V): NR  
Input Current (A<sub>in</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°	2000	2000	2000
5°	2002	1985	1999
10°	1986	1980	1997
15°	1958	1964	1990
20°	1927	1945	1984
25°	1888	1922	1977
30°	1841	1899	1966
35°	1790	1872	1960
40°	1733	1850	1955
45°	1670	1827	1952
50°	1608	1806	1958
55°	1540	1792	1952
60°	1467	1767	1939
65°	1380	1762	1939
70°	1300	1746	1884
75°	1127	1706	1609
80°	911	1376	1072
85°	605	479	318



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.2	3.4
10°-20°	199.7	9.6
20°-30°	299.6	14.4
30°-40°	357.4	17.2
40°-50°	369.4	17.7
50°-60°	337.3	16.2
60°-70°	265.4	12.7
70°-80°	154.5	7.4
80°-90°	28.5	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°	569.5	27.4
0°-40°	926.8	44.5
0°-60°	1633.6	78.5
0°-90°	2082.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2082.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	743	743	743	743	743	
5°	741	739	735	741	740	70
15°	703	704	705	714	714	198
25°	636	639	647	663	666	293
35°	545	552	570	592	597	341
45°	439	453	480	507	513	339
55°	328	346	382	410	416	294
65°	217	240	277	298	304	215
75°	108	134	164	161	155	115
85°	20	28	16	12	10	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	743.2	743.2	743.2	743.2	743.2
2.5°	744.3	742.2	739.1	744.3	743.2
5°	741.2	739.1	735.0	741.2	740.1
7.5°	735.0	732.9	730.9	737.0	736.0
10°	726.7	725.7	724.7	731.9	730.9
12.5°	716.4	716.4	715.4	723.6	723.6
15°	703.0	704.0	705.0	714.3	714.3
17.5°	690.6	689.6	692.7	703.0	704.0
20°	673.0	675.1	679.2	691.6	692.7
22.5°	655.5	657.6	664.8	677.2	680.3
25°	635.9	639.0	647.2	662.7	665.8
27.5°	615.2	619.4	630.7	647.2	650.3
30°	592.5	598.7	611.1	629.7	632.8
32.5°	569.8	576.0	591.5	610.1	614.2
35°	545.0	552.3	569.8	591.5	596.7
37.5°	519.2	528.5	549.2	570.8	577.0
40°	493.4	503.8	526.5	549.2	556.4
42.5°	467.6	477.9	502.7	528.5	535.8
45°	438.7	453.2	480.0	506.8	513.0
47.5°	410.8	426.3	456.3	483.1	491.4
50°	384.0	399.5	431.5	459.4	467.6
52.5°	356.1	372.7	406.7	435.6	442.8
55°	328.3	345.8	381.9	409.8	416.0
57.5°	300.4	319.0	356.1	383.0	390.2
60°	272.5	292.1	328.3	355.1	360.3
62.5°	244.6	265.3	302.5	326.2	331.4
65°	216.8	239.5	276.7	298.3	304.5
67.5°	189.9	212.6	248.8	269.4	274.6
70°	165.2	185.8	221.9	237.4	239.5
72.5°	134.2	160.0	195.1	203.4	198.2
75°	108.4	134.2	164.1	161.0	154.8
77.5°	82.6	108.4	128.0	117.7	109.4
80°	58.8	84.6	88.8	73.3	69.2
82.5°	38.2	58.8	49.5	38.2	31.0
85°	19.6	27.9	15.5	12.4	10.3
87.5°	6.2	4.1	2.1	2.1	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)