

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: P307511

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CP250-W2A-U-2700K**

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: P307511
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-44-UNV-L82765-RDP-CP250-W2A-U-2700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 2700K 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: 2271.0 lumens
Efficiency: N/A
Efficacy: 59.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

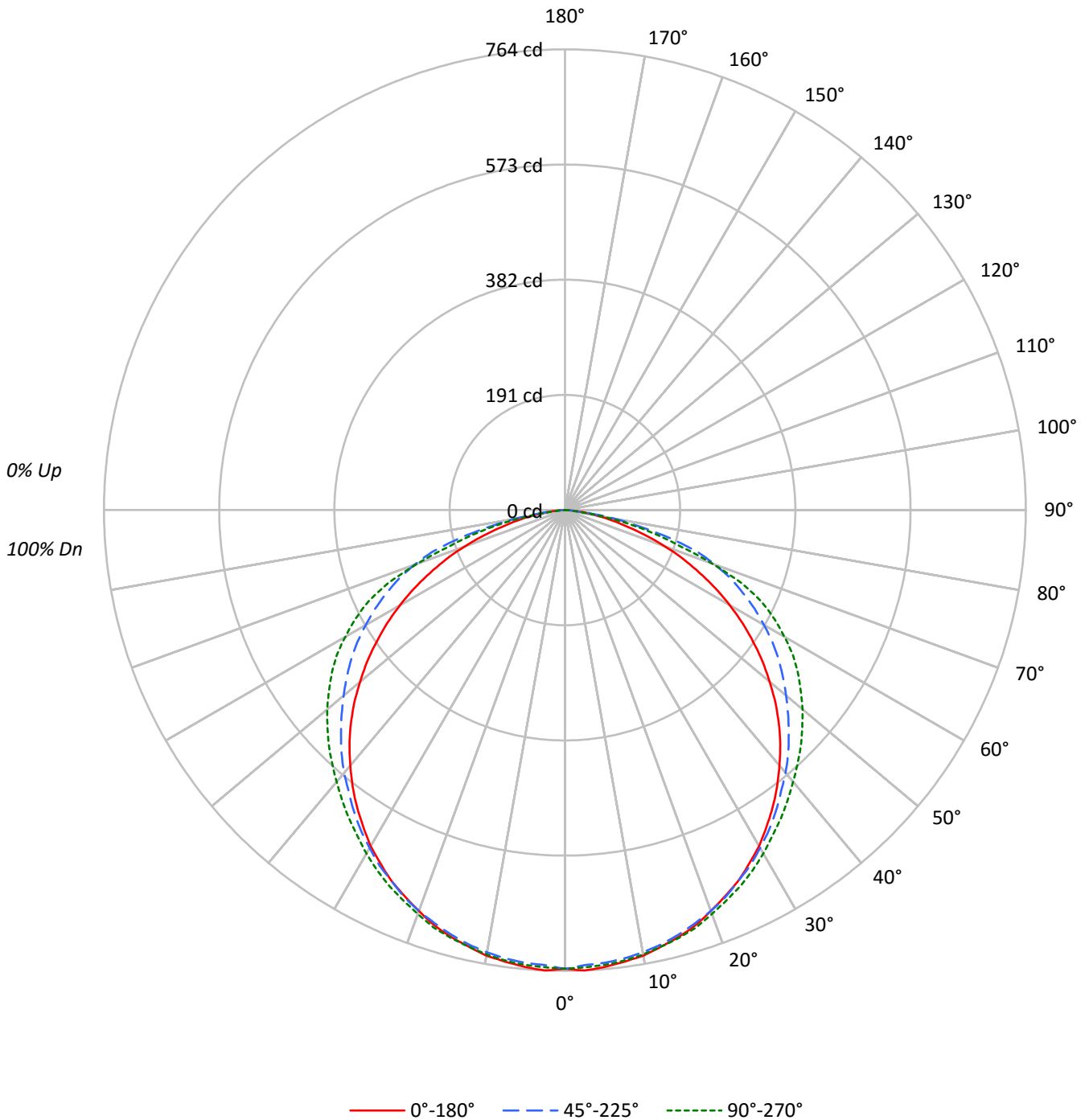
Input Watts (W): 38.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2047	2047	2047
5°	2055	2035	2045
10°	2049	2035	2044
15°	2040	2030	2045
20°	2026	2026	2041
25°	2016	2016	2042
30°	2000	2011	2044
35°	1974	2004	2050
40°	1943	1999	2068
45°	1910	1997	2105
50°	1855	2004	2153
55°	1788	2030	2213
60°	1699	2052	2261
65°	1569	2077	2292
70°	1395	2092	2050
75°	1125	1880	1641
80°	879	1319	1071
85°	602	383	275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.0	3.2
10°-20°	206.6	9.1
20°-30°	314.5	13.8
30°-40°	383.1	16.9
40°-50°	406.4	17.9
50°-60°	383.6	16.9
60°-70°	309.7	13.6
70°-80°	168.0	7.4
80°-90°	27.2	1.2
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°	593.1	26.1
0°-40°	976.1	43.0
0°-60°	1766.1	77.8
0°-90°	2271.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2271.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	761	759	754	759	757	72
15°	732	730	729	734	734	207
25°	679	677	679	686	688	313
35°	601	605	610	622	624	376
45°	502	509	525	544	553	386
55°	381	397	433	461	472	341
65°	246	277	326	353	360	244
75°	108	158	181	163	158	118
85°	20	21	12	11	9	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	760.6	760.6	760.6	760.6	760.6
2.5°	764.2	760.6	755.3	760.6	758.8
5°	760.6	758.8	753.5	758.8	757.1
7.5°	755.3	755.3	750.0	753.5	753.5
10°	750.0	748.2	744.7	750.0	748.2
12.5°	741.1	739.3	737.6	742.9	741.1
15°	732.2	730.5	728.7	734.0	734.0
17.5°	721.6	719.8	718.1	725.2	725.2
20°	707.4	707.4	707.4	714.5	712.7
22.5°	693.2	693.2	695.0	702.1	700.3
25°	679.1	677.3	679.1	686.1	687.9
27.5°	661.3	663.1	664.9	672.0	673.7
30°	643.6	645.4	647.1	656.0	657.8
32.5°	622.3	625.9	629.4	640.1	640.1
35°	601.0	604.6	609.9	622.3	624.1
37.5°	578.0	581.5	588.6	602.8	606.4
40°	553.2	558.5	569.1	583.3	588.6
42.5°	528.4	535.4	547.9	563.8	570.9
45°	501.8	508.9	524.8	544.3	553.2
47.5°	473.4	482.3	501.8	526.6	533.7
50°	443.2	455.7	478.7	505.3	514.2
52.5°	413.1	427.3	455.7	484.0	492.9
55°	381.2	397.2	432.6	461.0	471.6
57.5°	349.3	367.0	407.8	437.9	448.6
60°	315.6	336.9	381.2	411.3	420.2
62.5°	281.9	306.7	354.6	384.7	391.8
65°	246.4	276.6	326.2	352.8	359.9
67.5°	212.8	248.2	297.9	317.4	317.4
70°	177.3	216.3	265.9	271.3	260.6
72.5°	141.8	186.2	230.5	211.0	202.1
75°	108.2	157.8	180.8	163.1	157.8
77.5°	81.6	127.7	127.7	117.0	113.5
80°	56.7	97.5	85.1	74.5	69.1
82.5°	37.2	55.0	44.3	35.5	30.1
85°	19.5	21.3	12.4	10.6	8.9
87.5°	7.1	3.5	1.8	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)