

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: P308038

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CP125-W2A-U-5000K**

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: P308038
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: 14FCZ2-44-UNV-L82765-S-CP125-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" POLYCARB SHEET
Light Source: (168) 5000K 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: 4224.0 lumens
Efficiency: N/A
Efficacy: 107.8 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

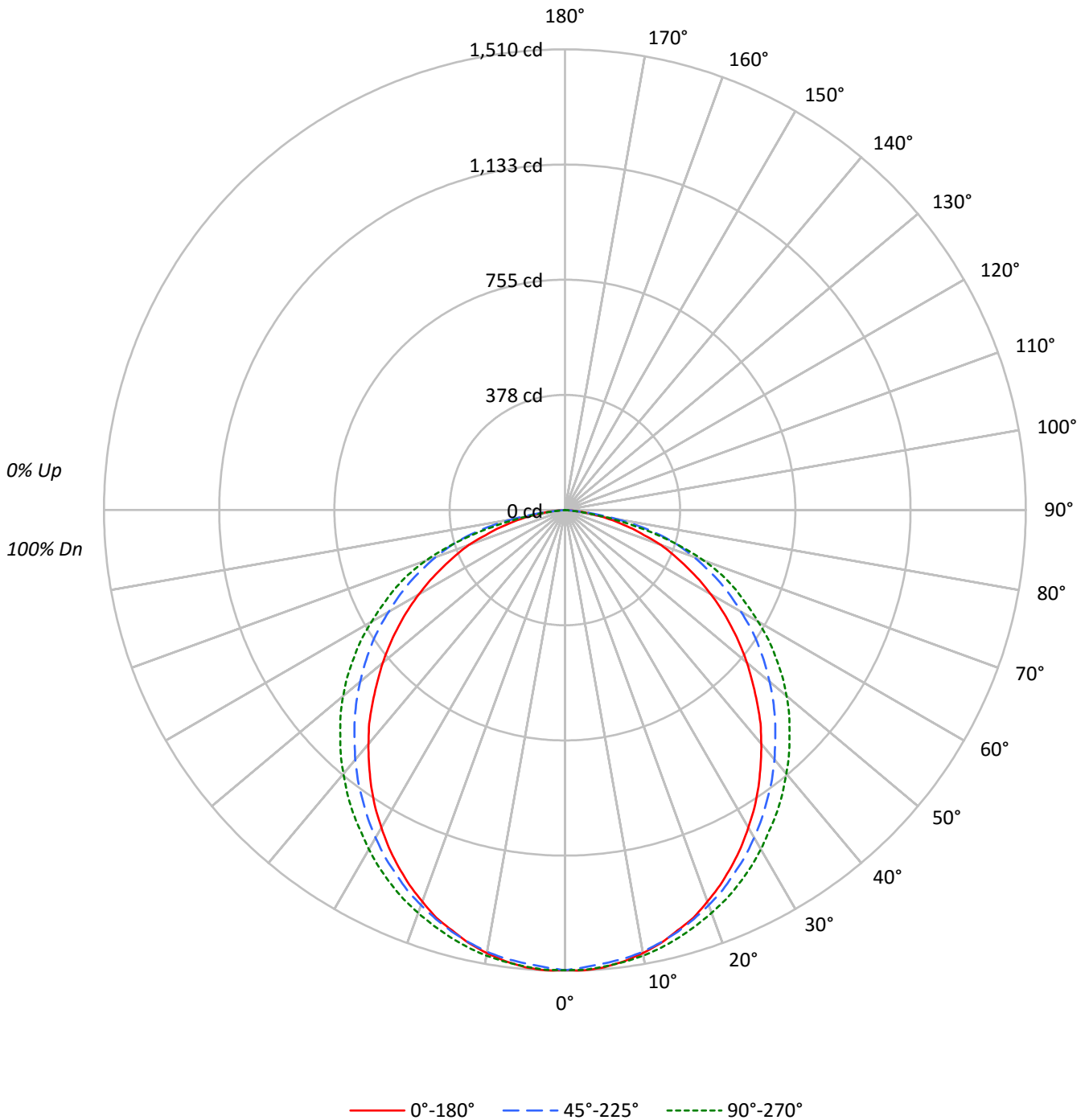
Input Watts (W): 39.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4058	4058	4058
5°	4062	4028	4056
10°	4029	4017	4052
15°	3973	3985	4038
20°	3910	3946	4024
25°	3831	3899	4011
30°	3735	3852	3989
35°	3633	3798	3977
40°	3517	3752	3965
45°	3387	3706	3961
50°	3262	3665	3972
55°	3125	3636	3960
60°	2976	3584	3934
65°	2800	3574	3934
70°	2637	3543	3823
75°	2286	3462	3266
80°	1850	2791	2174
85°	1229	969	645



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.4	3.4
10°-20°	405.2	9.6
20°-30°	607.8	14.4
30°-40°	725.0	17.2
40°-50°	749.5	17.7
50°-60°	684.3	16.2
60°-70°	538.5	12.7
70°-80°	313.5	7.4
80°-90°	57.8	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°	1155.4	27.4
0°-40°	1880.4	44.5
0°-60°	3314.2	78.5
0°-90°	4224.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4224.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1504	1500	1491	1504	1502	143
15°	1426	1428	1430	1449	1449	402
25°	1290	1296	1313	1344	1351	594
35°	1106	1120	1156	1200	1210	691
45°	890	919	974	1028	1041	687
55°	666	702	775	831	844	596
65°	440	486	561	605	618	437
75°	220	272	333	327	314	234
85°	40	56	31	25	21	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1507.9	1507.9	1507.9	1507.9	1507.9
2.5°	1510.0	1505.8	1499.5	1510.0	1507.9
5°	1503.7	1499.5	1491.1	1503.7	1501.6
7.5°	1491.1	1487.0	1482.8	1495.3	1493.2
10°	1474.4	1472.3	1470.2	1484.9	1482.8
12.5°	1453.4	1453.4	1451.4	1468.1	1468.1
15°	1426.2	1428.3	1430.4	1449.3	1449.3
17.5°	1401.1	1399.0	1405.3	1426.2	1428.3
20°	1365.5	1369.7	1378.1	1403.2	1405.3
22.5°	1329.9	1334.1	1348.7	1373.9	1380.1
25°	1290.1	1296.4	1313.1	1344.5	1350.8
27.5°	1248.2	1256.6	1279.6	1313.1	1319.4
30°	1202.1	1214.7	1239.8	1277.5	1283.8
32.5°	1156.1	1168.6	1200.0	1237.7	1246.1
35°	1105.8	1120.5	1156.1	1200.0	1210.5
37.5°	1053.4	1072.3	1114.2	1158.1	1170.7
40°	1001.1	1022.0	1068.1	1114.2	1128.8
42.5°	948.7	969.7	1019.9	1072.3	1086.9
45°	890.1	919.4	973.9	1028.3	1040.9
47.5°	833.5	864.9	925.7	980.1	996.9
50°	779.1	810.5	875.4	932.0	948.7
52.5°	722.5	756.0	825.2	883.8	898.5
55°	666.0	701.6	774.9	831.4	844.0
57.5°	609.4	647.1	722.5	777.0	791.6
60°	552.9	592.7	666.0	720.4	730.9
62.5°	496.3	538.2	613.6	661.8	672.3
65°	439.8	485.9	561.3	605.3	617.8
67.5°	385.4	431.4	504.7	546.6	557.1
70°	335.1	377.0	450.3	481.7	485.9
72.5°	272.3	324.6	395.8	412.6	402.1
75°	219.9	272.3	333.0	326.7	314.1
77.5°	167.5	219.9	259.7	238.8	222.0
80°	119.4	171.7	180.1	148.7	140.3
82.5°	77.5	119.4	100.5	77.5	62.8
85°	39.8	56.5	31.4	25.1	20.9
87.5°	12.6	8.4	4.2	4.2	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)