

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: P308031

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CA125-W2A-U-5700K**

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: P308031
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-CA125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS,0.125" ACRYLIC SHEET
Light Source: (168) 5700K 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: 4363.0 lumens
Efficiency: N/A
Efficacy: 110.7 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

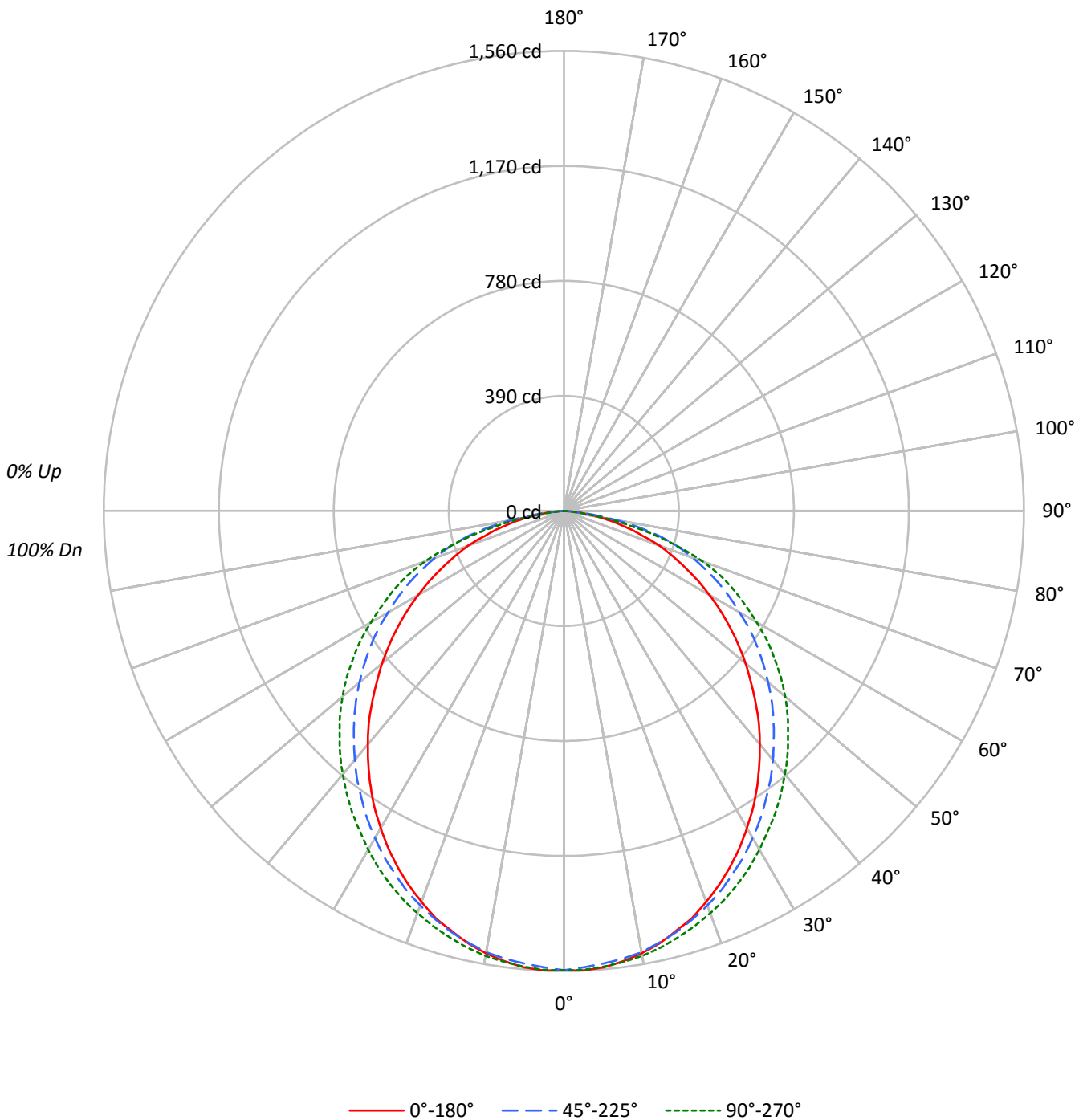
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4191	4191	4191
5°	4196	4160	4190
10°	4161	4150	4185
15°	4104	4116	4170
20°	4039	4076	4157
25°	3956	4027	4143
30°	3858	3979	4121
35°	3752	3923	4107
40°	3632	3875	4096
45°	3499	3828	4091
50°	3369	3785	4102
55°	3227	3755	4090
60°	3074	3702	4063
65°	2893	3691	4063
70°	2723	3659	3949
75°	2361	3577	3374
80°	1911	2882	2245
85°	1269	1000	667



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.1	3.4
10°-20°	418.5	9.6
20°-30°	627.8	14.4
30°-40°	748.9	17.2
40°-50°	774.2	17.7
50°-60°	706.8	16.2
60°-70°	556.2	12.7
70°-80°	323.8	7.4
80°-90°	59.7	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°	1193.4	27.4
0°-40°	1942.2	44.5
0°-60°	3423.3	78.5
0°-90°	4363.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4363.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1558	1558	1558	1558	1558	
5°	1553	1549	1540	1553	1551	147
15°	1473	1475	1478	1497	1497	416
25°	1332	1339	1356	1389	1395	613
35°	1142	1157	1194	1240	1250	714
45°	919	950	1006	1062	1075	710
55°	688	725	800	859	872	615
65°	454	502	580	625	638	451
75°	227	281	344	338	324	241
85°	41	58	32	26	22	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1557.5	1557.5	1557.5	1557.5	1557.5
2.5°	1559.7	1555.4	1548.9	1559.7	1557.5
5°	1553.2	1548.9	1540.2	1553.2	1551.0
7.5°	1540.2	1535.9	1531.6	1544.5	1542.4
10°	1522.9	1520.7	1518.6	1533.7	1531.6
12.5°	1501.3	1501.3	1499.1	1516.4	1516.4
15°	1473.2	1475.3	1477.5	1496.9	1496.9
17.5°	1447.2	1445.0	1451.5	1473.2	1475.3
20°	1410.4	1414.7	1423.4	1449.4	1451.5
22.5°	1373.6	1378.0	1393.1	1419.1	1425.6
25°	1332.5	1339.0	1356.3	1388.8	1395.3
27.5°	1289.3	1297.9	1321.7	1356.3	1362.8
30°	1241.7	1254.7	1280.6	1319.6	1326.1
32.5°	1194.1	1207.1	1239.5	1278.5	1287.1
35°	1142.2	1157.3	1194.1	1239.5	1250.3
37.5°	1088.1	1107.6	1150.8	1196.3	1209.2
40°	1034.0	1055.7	1103.2	1150.8	1166.0
42.5°	979.9	1001.6	1053.5	1107.6	1122.7
45°	919.4	949.7	1005.9	1062.1	1075.1
47.5°	861.0	893.4	956.1	1012.4	1029.7
50°	804.7	837.2	904.2	962.6	979.9
52.5°	746.3	780.9	852.3	912.9	928.0
55°	687.9	724.7	800.4	858.8	871.8
57.5°	629.5	668.4	746.3	802.6	817.7
60°	571.1	612.2	687.9	744.1	755.0
62.5°	512.7	555.9	633.8	683.6	694.4
65°	454.3	501.9	579.7	625.2	638.1
67.5°	398.0	445.6	521.3	564.6	575.4
70°	346.1	389.4	465.1	497.5	501.9
72.5°	281.2	335.3	408.8	426.2	415.3
75°	227.1	281.2	344.0	337.5	324.5
77.5°	173.1	227.1	268.2	246.6	229.3
80°	123.3	177.4	186.0	153.6	144.9
82.5°	80.0	123.3	103.8	80.0	64.9
85°	41.1	58.4	32.4	26.0	21.6
87.5°	13.0	8.7	4.3	4.3	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)