

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: P308032

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CA125-W2A-U-6500K**

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: P308032
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-6500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 6500K 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: 4374.0 lumens
Efficiency: N/A
Efficacy: 109.3 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

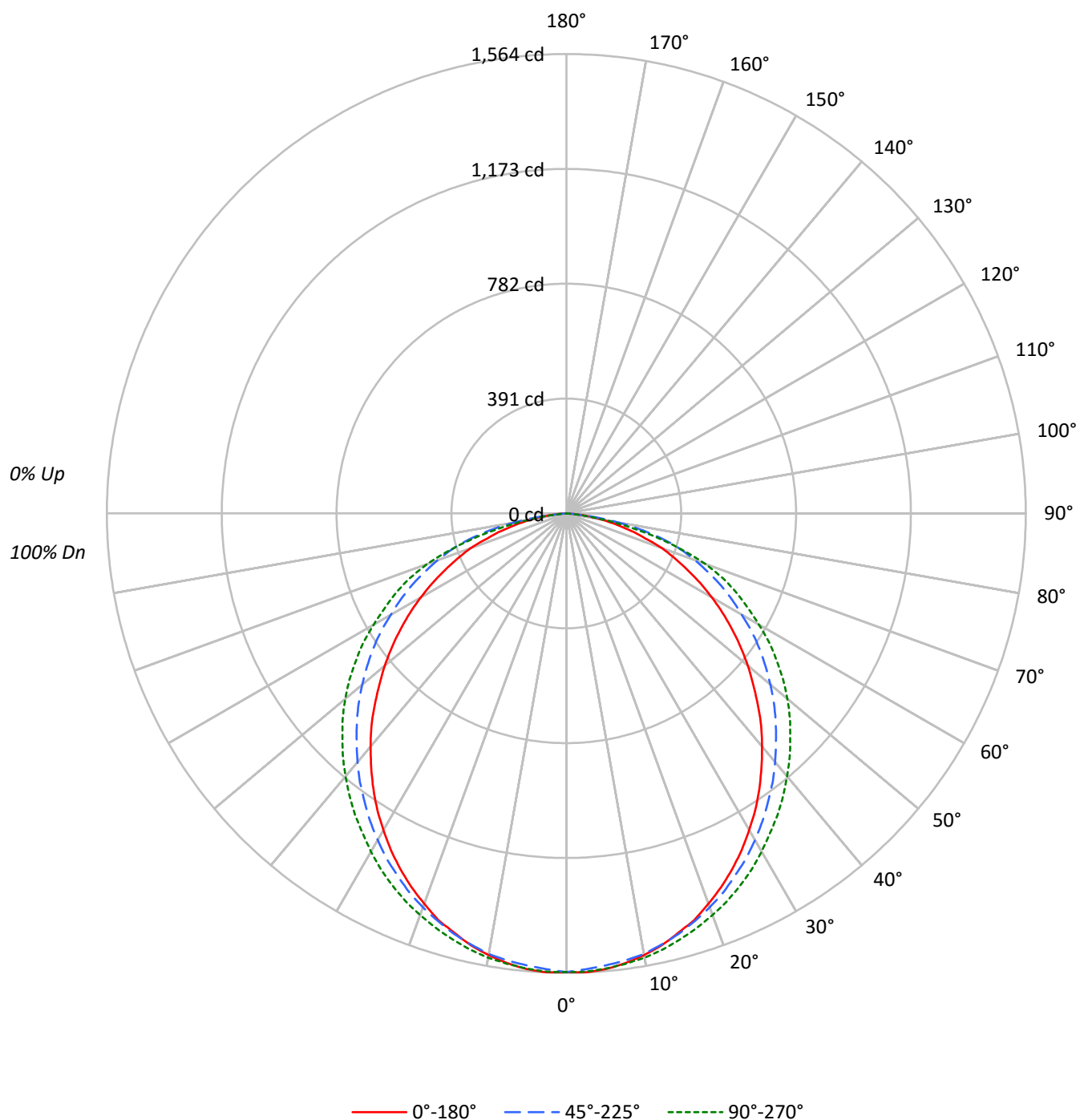
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4202	4202	4202
5°	4206	4171	4200
10°	4172	4160	4195
15°	4115	4126	4181
20°	4049	4086	4167
25°	3967	4037	4153
30°	3868	3989	4131
35°	3762	3933	4118
40°	3641	3885	4106
45°	3508	3838	4102
50°	3377	3795	4113
55°	3235	3765	4100
60°	3081	3711	4074
65°	2900	3701	4074
70°	2730	3669	3958
75°	2367	3585	3382
80°	1915	2890	2252
85°	1272	1003	670



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.4	3.4
10°-20°	419.6	9.6
20°-30°	629.4	14.4
30°-40°	750.8	17.2
40°-50°	776.1	17.7
50°-60°	708.6	16.2
60°-70°	557.6	12.7
70°-80°	324.6	7.4
80°-90°	59.8	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°	1196.4	27.4
0°-40°	1947.2	44.5
0°-60°	3431.9	78.5
0°-90°	4374.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4374.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1561	1561	1561	1561	1561	
5°	1557	1553	1544	1557	1555	148
15°	1477	1479	1481	1501	1501	417
25°	1336	1342	1360	1392	1399	615
35°	1145	1160	1197	1243	1254	716
45°	922	952	1008	1065	1078	712
55°	690	726	802	861	874	617
65°	455	503	581	627	640	452
75°	228	282	345	338	325	242
85°	41	59	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°	1561.4	1561.4	1561.4	1561.4	1561.4
2.5°	1563.6	1559.3	1552.8	1563.6	1561.4
5°	1557.1	1552.8	1544.1	1557.1	1554.9
7.5°	1544.1	1539.8	1535.4	1548.4	1546.3
10°	1526.7	1524.6	1522.4	1537.6	1535.4
12.5°	1505.1	1505.1	1502.9	1520.2	1520.2
15°	1476.9	1479.0	1481.2	1500.7	1500.7
17.5°	1450.8	1448.7	1455.2	1476.9	1479.0
20°	1414.0	1418.3	1427.0	1453.0	1455.2
22.5°	1377.1	1381.4	1396.6	1422.7	1429.2
25°	1335.9	1342.4	1359.8	1392.3	1398.8
27.5°	1292.5	1301.2	1325.1	1359.8	1366.3
30°	1244.8	1257.8	1283.9	1322.9	1329.4
32.5°	1197.1	1210.1	1242.7	1281.7	1290.4
35°	1145.1	1160.2	1197.1	1242.7	1253.5
37.5°	1090.8	1110.4	1153.7	1199.3	1212.3
40°	1036.6	1058.3	1106.0	1153.7	1168.9
42.5°	982.4	1004.1	1056.1	1110.4	1125.5
45°	921.7	952.0	1008.4	1064.8	1077.8
47.5°	863.1	895.7	958.6	1014.9	1032.3
50°	806.7	839.3	906.5	965.1	982.4
52.5°	748.2	782.9	854.5	915.2	930.4
55°	689.6	726.5	802.4	861.0	874.0
57.5°	631.1	670.1	748.2	804.6	819.8
60°	572.5	613.7	689.6	746.0	756.9
62.5°	514.0	557.3	635.4	685.3	696.1
65°	455.4	503.1	581.2	626.7	639.8
67.5°	399.0	446.7	522.7	566.0	576.9
70°	347.0	390.4	466.3	498.8	503.1
72.5°	281.9	336.1	409.9	427.2	416.4
75°	227.7	281.9	344.8	338.3	325.3
77.5°	173.5	227.7	268.9	247.2	229.9
80°	123.6	177.8	186.5	154.0	145.3
82.5°	80.2	123.6	104.1	80.2	65.1
85°	41.2	58.6	32.5	26.0	21.7
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)