

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: P307749

Luminaire Tested: **14FCZ2-44-UNV-L82765-CA08-W2A-U-4500K**

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: P307749
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
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-CA08-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 4500K 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: 4222.0 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

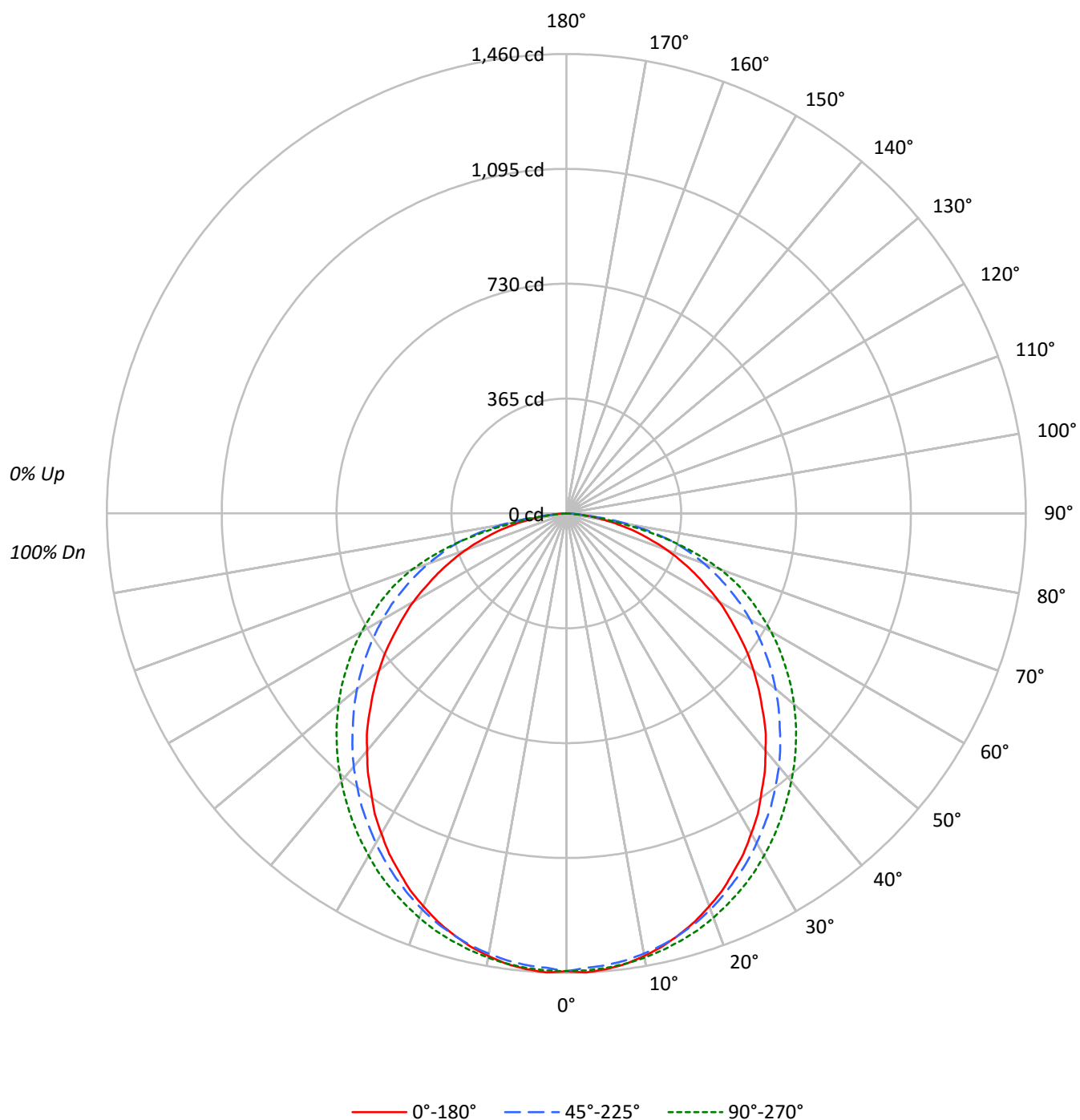
Input Watts (W): 39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3914	3914	3914
5°	3927	3893	3916
10°	3902	3882	3918
15°	3861	3863	3916
20°	3804	3836	3914
25°	3732	3799	3910
30°	3651	3759	3902
35°	3553	3727	3900
40°	3459	3691	3906
45°	3354	3651	3927
50°	3255	3634	3953
55°	3132	3622	3988
60°	3020	3628	4043
65°	2865	3638	4106
70°	2688	3666	4103
75°	2437	3700	3710
80°	1999	3195	2641
85°	1482	1513	611



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.6	3.3
10°-20°	393.2	9.3
20°-30°	592.3	14.0
30°-40°	710.7	16.8
40°-50°	740.8	17.5
50°-60°	685.8	16.2
60°-70°	554.1	13.1
70°-80°	337.9	8.0
80°-90°	69.7	1.7
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°	1123.1	26.6
0°-40°	1833.8	43.4
0°-60°	3260.3	77.2
0°-90°	4222.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4222.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1454	1454	1454	1454	1454	
5°	1454	1450	1441	1452	1450	138
15°	1386	1387	1387	1406	1406	391
25°	1257	1264	1279	1311	1317	579
35°	1082	1099	1134	1176	1187	678
45°	881	908	959	1013	1032	681
55°	668	702	772	832	850	598
65°	450	494	571	629	645	445
75°	234	286	356	362	357	246
85°	48	72	49	27	20	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1454.5	1454.5	1454.5	1454.5	1454.5
2.5°	1460.1	1455.4	1445.1	1455.4	1453.6
5°	1453.6	1449.8	1441.3	1451.7	1449.8
7.5°	1444.1	1440.4	1432.8	1445.1	1443.2
10°	1428.1	1426.3	1420.6	1434.7	1433.8
12.5°	1409.3	1408.4	1405.5	1421.5	1420.6
15°	1385.8	1386.7	1386.7	1405.5	1405.5
17.5°	1359.4	1361.3	1365.1	1385.8	1388.6
20°	1328.3	1332.1	1339.6	1363.2	1366.9
22.5°	1296.3	1299.2	1310.5	1338.7	1342.5
25°	1256.8	1264.3	1279.4	1311.4	1317.0
27.5°	1219.1	1225.7	1246.4	1279.4	1288.8
30°	1174.9	1185.2	1209.7	1245.5	1255.9
32.5°	1132.5	1143.8	1172.1	1213.5	1222.9
35°	1081.7	1098.6	1134.4	1175.8	1187.1
37.5°	1035.6	1051.6	1092.0	1137.2	1150.4
40°	984.7	1004.5	1050.6	1098.6	1111.8
42.5°	937.7	956.5	1006.4	1055.3	1073.2
45°	881.2	907.5	959.3	1013.0	1031.8
47.5°	829.4	855.8	915.1	972.5	989.4
50°	777.6	805.9	868.0	927.3	944.2
52.5°	724.0	754.1	820.9	880.2	900.0
55°	667.5	702.3	772.0	832.2	850.1
57.5°	613.8	649.6	724.0	785.1	803.0
60°	561.1	597.8	674.1	732.4	751.3
62.5°	502.7	546.0	625.1	682.5	696.7
65°	450.0	494.2	571.4	628.9	644.9
67.5°	394.5	442.5	519.7	572.4	587.4
70°	341.7	391.6	466.0	515.0	521.5
72.5°	285.3	336.1	411.4	442.5	442.5
75°	234.4	286.2	355.9	361.5	356.8
77.5°	178.9	236.3	281.5	270.2	258.9
80°	129.0	185.5	206.2	185.5	170.4
82.5°	86.6	134.6	124.3	98.8	87.6
85°	48.0	71.5	49.0	27.3	19.8
87.5°	17.9	16.0	4.7	4.7	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)