

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: P307747

Luminaire Tested: **14FCZ2-44-UNV-L82765-CA08-W2A-U-3500K**

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: P307747
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-3500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 3500K 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: 4059.0 lumens
Efficiency: N/A
Efficacy: 105.4 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

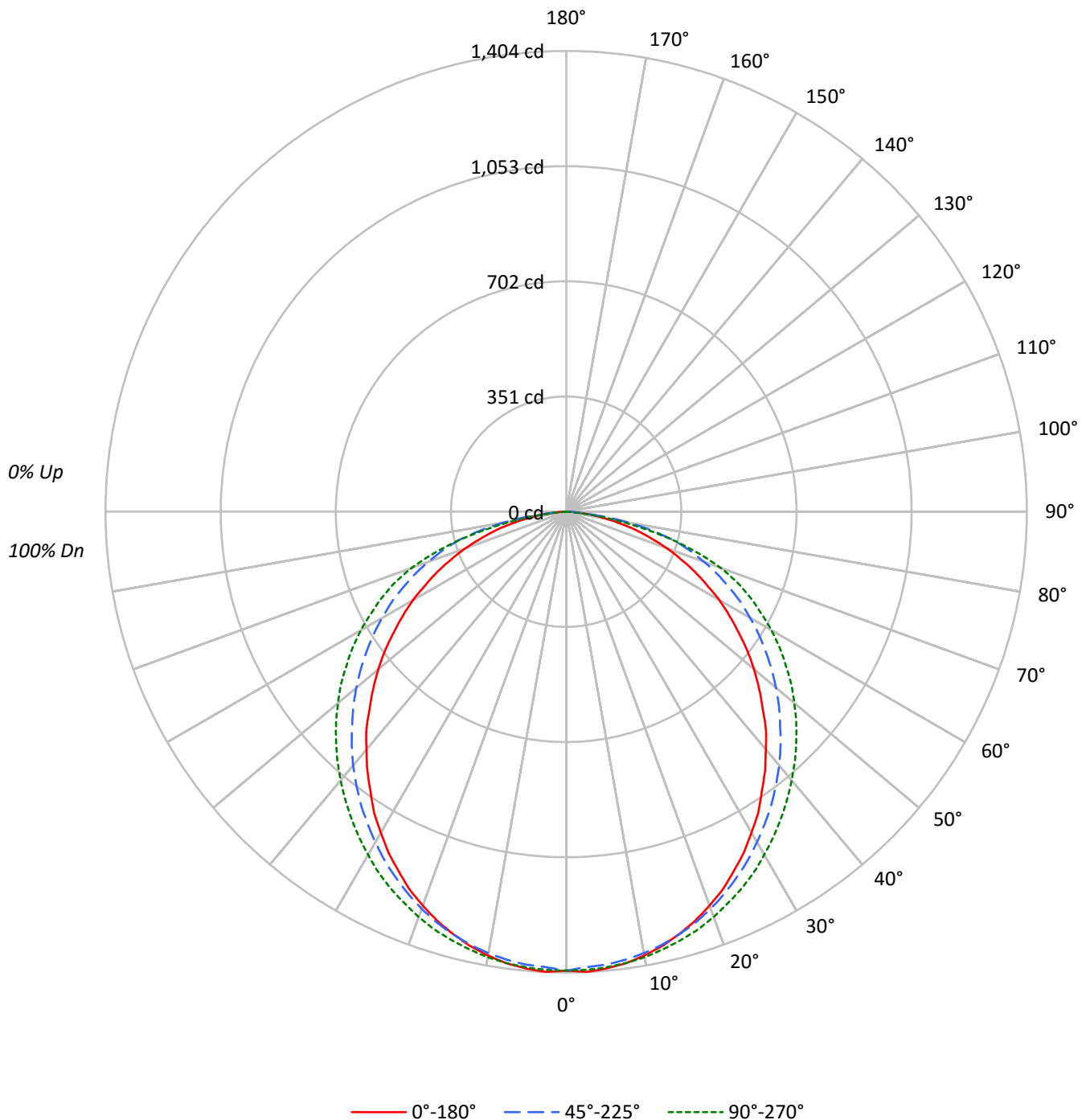
Input Watts (W): 38.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3763	3763	3763
5°	3775	3743	3765
10°	3752	3732	3766
15°	3712	3714	3765
20°	3657	3688	3763
25°	3588	3652	3760
30°	3510	3614	3752
35°	3416	3583	3749
40°	3326	3548	3755
45°	3224	3510	3775
50°	3130	3494	3800
55°	3011	3482	3834
60°	2903	3488	3887
65°	2755	3498	3948
70°	2585	3525	3945
75°	2344	3557	3566
80°	1922	3071	2538
85°	1426	1454	587



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.3	3.3
10°-20°	378.0	9.3
20°-30°	569.4	14.0
30°-40°	683.3	16.8
40°-50°	712.2	17.5
50°-60°	659.3	16.2
60°-70°	532.7	13.1
70°-80°	324.8	8.0
80°-90°	67.1	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°	1079.7	26.6
0°-40°	1763.0	43.4
0°-60°	3134.5	77.2
0°-90°	4059.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4059.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1398	1398	1398	1398	1398	
5°	1397	1394	1386	1396	1394	133
15°	1332	1333	1333	1351	1351	376
25°	1208	1216	1230	1261	1266	557
35°	1040	1056	1091	1130	1141	651
45°	847	872	922	974	992	655
55°	642	675	742	800	817	575
65°	433	475	549	605	620	428
75°	225	275	342	348	343	237
85°	46	69	47	26	19	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1398.3	1398.3	1398.3	1398.3	1398.3
2.5°	1403.8	1399.2	1389.3	1399.2	1397.4
5°	1397.4	1393.8	1385.7	1395.6	1393.8
7.5°	1388.4	1384.8	1377.5	1389.3	1387.5
10°	1373.0	1371.2	1365.8	1379.3	1378.4
12.5°	1354.9	1354.0	1351.3	1366.7	1365.8
15°	1332.3	1333.2	1333.2	1351.3	1351.3
17.5°	1306.9	1308.7	1312.4	1332.3	1335.0
20°	1277.1	1280.7	1287.9	1310.5	1314.2
22.5°	1246.3	1249.0	1259.9	1287.0	1290.6
25°	1208.3	1215.5	1230.0	1260.8	1266.2
27.5°	1172.1	1178.4	1198.3	1230.0	1239.0
30°	1129.5	1139.5	1163.0	1197.4	1207.4
32.5°	1088.8	1099.7	1126.8	1166.6	1175.7
35°	1039.9	1056.2	1090.6	1130.4	1141.3
37.5°	995.6	1011.0	1049.9	1093.3	1106.0
40°	946.7	965.7	1010.1	1056.2	1068.9
42.5°	901.5	919.6	967.5	1014.6	1031.8
45°	847.1	872.5	922.3	973.9	992.0
47.5°	797.4	822.7	879.7	934.9	951.2
50°	747.6	774.7	834.5	891.5	907.8
52.5°	696.0	725.0	789.2	846.2	865.3
55°	641.7	675.2	742.2	800.1	817.3
57.5°	590.1	624.5	696.0	754.8	772.0
60°	539.4	574.7	648.0	704.1	722.2
62.5°	483.3	524.9	601.0	656.2	669.8
65°	432.6	475.2	549.4	604.6	620.0
67.5°	379.2	425.4	499.6	550.3	564.8
70°	328.5	376.5	448.0	495.1	501.4
72.5°	274.2	323.1	395.5	425.4	425.4
75°	225.4	275.1	342.1	347.5	343.0
77.5°	172.0	227.2	270.6	259.8	248.9
80°	124.0	178.3	198.2	178.3	163.8
82.5°	83.3	129.4	119.5	95.0	84.2
85°	46.2	68.8	47.1	26.2	19.0
87.5°	17.2	15.4	4.5	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)