

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: P308020

Luminaire Tested: **14FCZ2-44-UNV-L82765-S-CA08-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: P308020
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-CA08-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC 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: 4324.0 lumens
Efficiency: N/A
Efficacy: 110.3 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

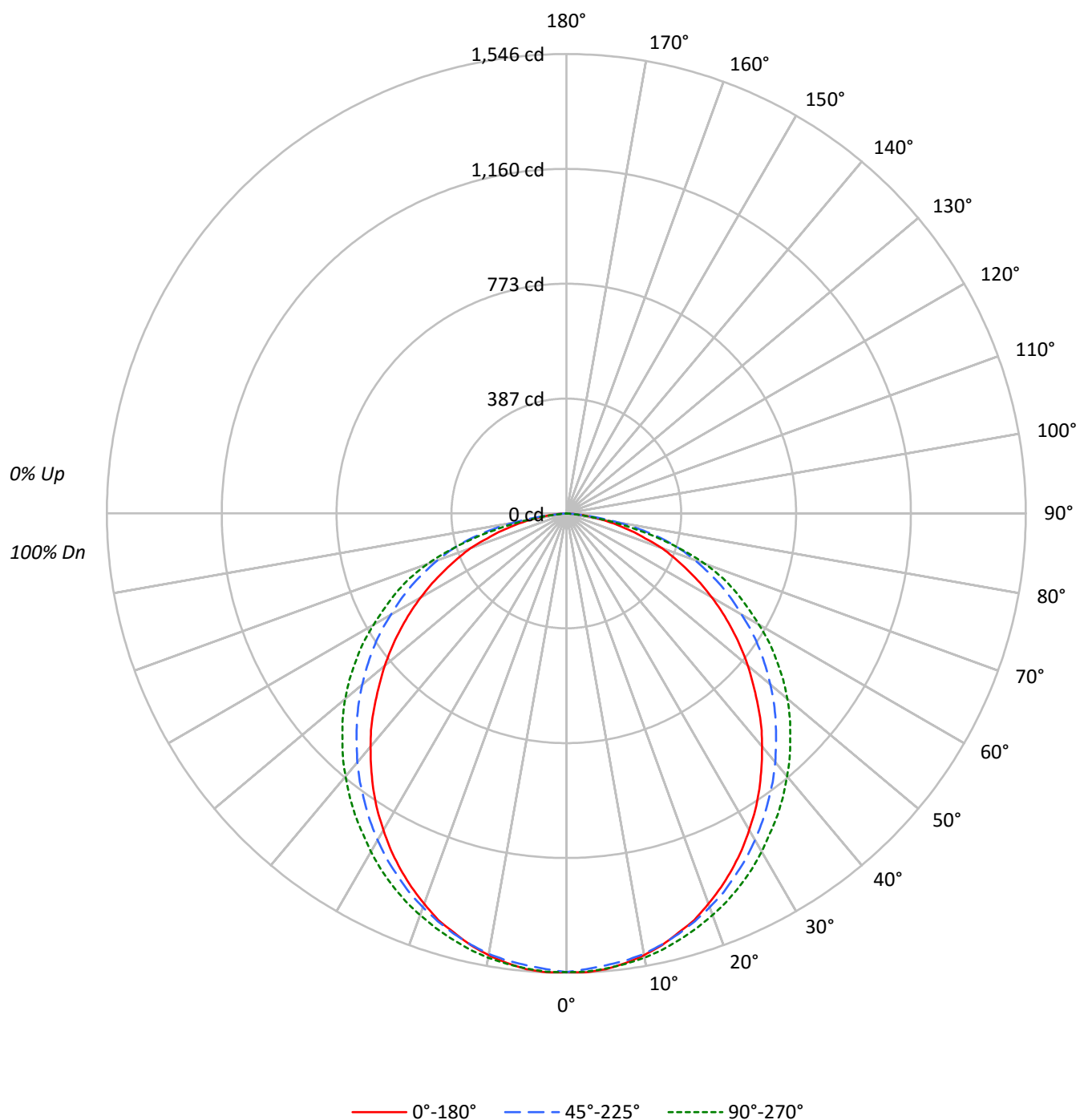
Input Watts (W): 39.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P308020

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-S-CA08-W2A-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P308020

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-S-CA08-W2A-U-5000K

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°	4154	4154	4154
5°	4158	4123	4152
10°	4124	4112	4148
15°	4067	4079	4133
20°	4003	4040	4119
25°	3921	3991	4106
30°	3824	3944	4084
35°	3719	3888	4071
40°	3600	3841	4059
45°	3468	3794	4055
50°	3339	3751	4066
55°	3199	3721	4054
60°	3046	3669	4027
65°	2867	3659	4027
70°	2699	3626	3913
75°	2340	3544	3344
80°	1894	2858	2225
85°	1257	994	661



TEST NUMBER: P308020

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-S-CA08-W2A-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.8	3.4
10°-20°	414.8	9.6
20°-30°	622.2	14.4
30°-40°	742.2	17.2
40°-50°	767.3	17.7
50°-60°	700.5	16.2
60°-70°	551.3	12.7
70°-80°	320.9	7.4
80°-90°	59.1	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°	1182.7	27.4
0°-40°	1924.9	44.5
0°-60°	3392.7	78.5
0°-90°	4324.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4324.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1544	1544	1544	1544	1544	
5°	1539	1535	1526	1539	1537	146
15°	1460	1462	1464	1484	1484	412
25°	1321	1327	1344	1376	1383	608
35°	1132	1147	1183	1228	1239	708
45°	911	941	997	1053	1066	704
55°	682	718	793	851	864	610
65°	450	497	575	620	632	447
75°	225	279	341	334	322	239
85°	41	58	32	26	21	53
90°	0	0	0	0	0	



TEST NUMBER: P308020

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-S-CA08-W2A-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1543.6	1543.6	1543.6	1543.6	1543.6
2.5°	1545.7	1541.5	1535.0	1545.7	1543.6
5°	1539.3	1535.0	1526.4	1539.3	1537.2
7.5°	1526.4	1522.2	1517.9	1530.7	1528.6
10°	1509.3	1507.2	1505.0	1520.0	1517.9
12.5°	1487.9	1487.9	1485.7	1502.9	1502.9
15°	1460.0	1462.1	1464.3	1483.6	1483.6
17.5°	1434.3	1432.1	1438.5	1460.0	1462.1
20°	1397.8	1402.1	1410.7	1436.4	1438.5
22.5°	1361.4	1365.7	1380.7	1406.4	1412.8
25°	1320.6	1327.1	1344.2	1376.4	1382.8
27.5°	1277.8	1286.3	1309.9	1344.2	1350.6
30°	1230.6	1243.5	1269.2	1307.8	1314.2
32.5°	1183.4	1196.3	1228.4	1267.0	1275.6
35°	1132.0	1147.0	1183.4	1228.4	1239.2
37.5°	1078.4	1097.7	1140.5	1185.6	1198.4
40°	1024.8	1046.2	1093.4	1140.5	1155.6
42.5°	971.2	992.6	1044.1	1097.7	1112.7
45°	911.2	941.2	996.9	1052.6	1065.5
47.5°	853.3	885.4	947.6	1003.3	1020.5
50°	797.5	829.7	896.1	954.0	971.2
52.5°	739.6	773.9	844.7	904.7	919.7
55°	681.8	718.2	793.2	851.1	864.0
57.5°	623.9	662.5	739.6	795.4	810.4
60°	566.0	606.7	681.8	737.5	748.2
62.5°	508.1	551.0	628.2	677.5	688.2
65°	450.2	497.4	574.6	619.6	632.4
67.5°	394.5	441.6	516.7	559.6	570.3
70°	343.0	385.9	460.9	493.1	497.4
72.5°	278.7	332.3	405.2	422.3	411.6
75°	225.1	278.7	340.9	334.4	321.6
77.5°	171.5	225.1	265.8	244.4	227.3
80°	122.2	175.8	184.4	152.2	143.6
82.5°	79.3	122.2	102.9	79.3	64.3
85°	40.7	57.9	32.2	25.7	21.4
87.5°	12.9	8.6	4.3	4.3	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)