

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: P307657

Luminaire Tested: **14FCZ2-35-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: P307657
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: 14FCZ2-35-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: 3290.0 lumens
Efficiency: N/A
Efficacy: 111.1 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

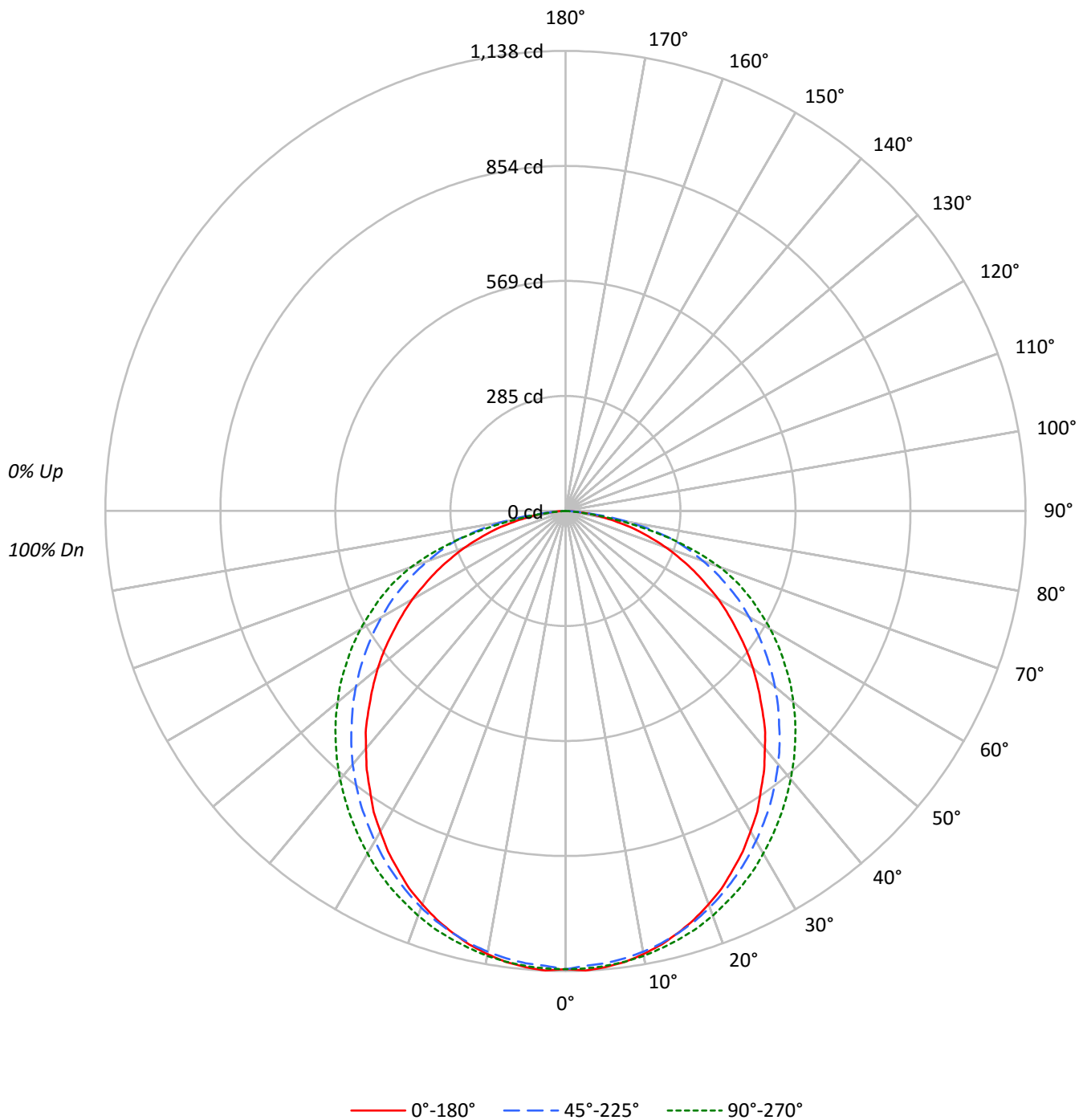
Input Watts (W): 29.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3050	3050	3050
5°	3060	3034	3052
10°	3041	3025	3053
15°	3009	3010	3051
20°	2964	2989	3050
25°	2908	2960	3047
30°	2845	2929	3041
35°	2769	2904	3039
40°	2695	2876	3044
45°	2613	2845	3060
50°	2537	2832	3080
55°	2440	2822	3108
60°	2353	2827	3151
65°	2233	2835	3200
70°	2095	2857	3198
75°	1900	2883	2890
80°	1557	2490	2058
85°	1155	1176	475



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.2	3.3
10°-20°	306.4	9.3
20°-30°	461.5	14.0
30°-40°	553.8	16.8
40°-50°	577.2	17.5
50°-60°	534.4	16.2
60°-70°	431.8	13.1
70°-80°	263.3	8.0
80°-90°	54.4	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°	875.2	26.6
0°-40°	1429.0	43.4
0°-60°	2540.6	77.2
0°-90°	3290.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3290.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1133	1133	1133	1133	1133	
5°	1133	1130	1123	1131	1130	108
15°	1080	1081	1081	1095	1095	304
25°	979	985	997	1022	1026	451
35°	843	856	884	916	925	528
45°	687	707	748	789	804	531
55°	520	547	602	648	662	466
65°	351	385	445	490	502	347
75°	183	223	277	282	278	192
85°	37	56	38	21	15	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1133.4	1133.4	1133.4	1133.4	1133.4
2.5°	1137.8	1134.1	1126.1	1134.1	1132.7
5°	1132.7	1129.7	1123.1	1131.2	1129.7
7.5°	1125.3	1122.4	1116.5	1126.1	1124.6
10°	1112.9	1111.4	1107.0	1118.0	1117.3
12.5°	1098.2	1097.5	1095.3	1107.7	1107.0
15°	1079.9	1080.6	1080.6	1095.3	1095.3
17.5°	1059.3	1060.8	1063.7	1079.9	1082.1
20°	1035.1	1038.0	1043.9	1062.3	1065.2
22.5°	1010.2	1012.4	1021.2	1043.2	1046.1
25°	979.4	985.2	997.0	1021.9	1026.3
27.5°	950.0	955.2	971.3	997.0	1004.3
30°	915.5	923.6	942.7	970.6	978.6
32.5°	882.5	891.3	913.3	945.6	952.9
35°	842.9	856.1	884.0	916.3	925.1
37.5°	807.0	819.4	851.0	886.2	896.5
40°	767.3	782.8	818.7	856.1	866.4
42.5°	730.7	745.3	784.2	822.4	836.3
45°	686.7	707.2	747.5	789.4	804.0
47.5°	646.3	666.8	713.1	757.8	771.0
50°	606.0	628.0	676.4	722.6	735.8
52.5°	564.1	587.6	639.7	685.9	701.3
55°	520.1	547.3	601.6	648.5	662.4
57.5°	478.3	506.2	564.1	611.8	625.8
60°	437.2	465.8	525.3	570.7	585.4
62.5°	391.7	425.5	487.1	531.9	542.9
65°	350.7	385.1	445.3	490.0	502.5
67.5°	307.4	344.8	404.9	446.0	457.8
70°	266.3	305.2	363.1	401.3	406.4
72.5°	222.3	261.9	320.6	344.8	344.8
75°	182.7	223.0	277.3	281.7	278.0
77.5°	139.4	184.1	219.3	210.5	201.7
80°	100.5	144.5	160.7	144.5	132.8
82.5°	67.5	104.9	96.8	77.0	68.2
85°	37.4	55.8	38.1	21.3	15.4
87.5°	13.9	12.5	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)