

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: P307166

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CA08-W2A-U-5500K**

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: P307166
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-39-UNV-L82765-HRP-CA08-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5500K 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: 2932.0 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

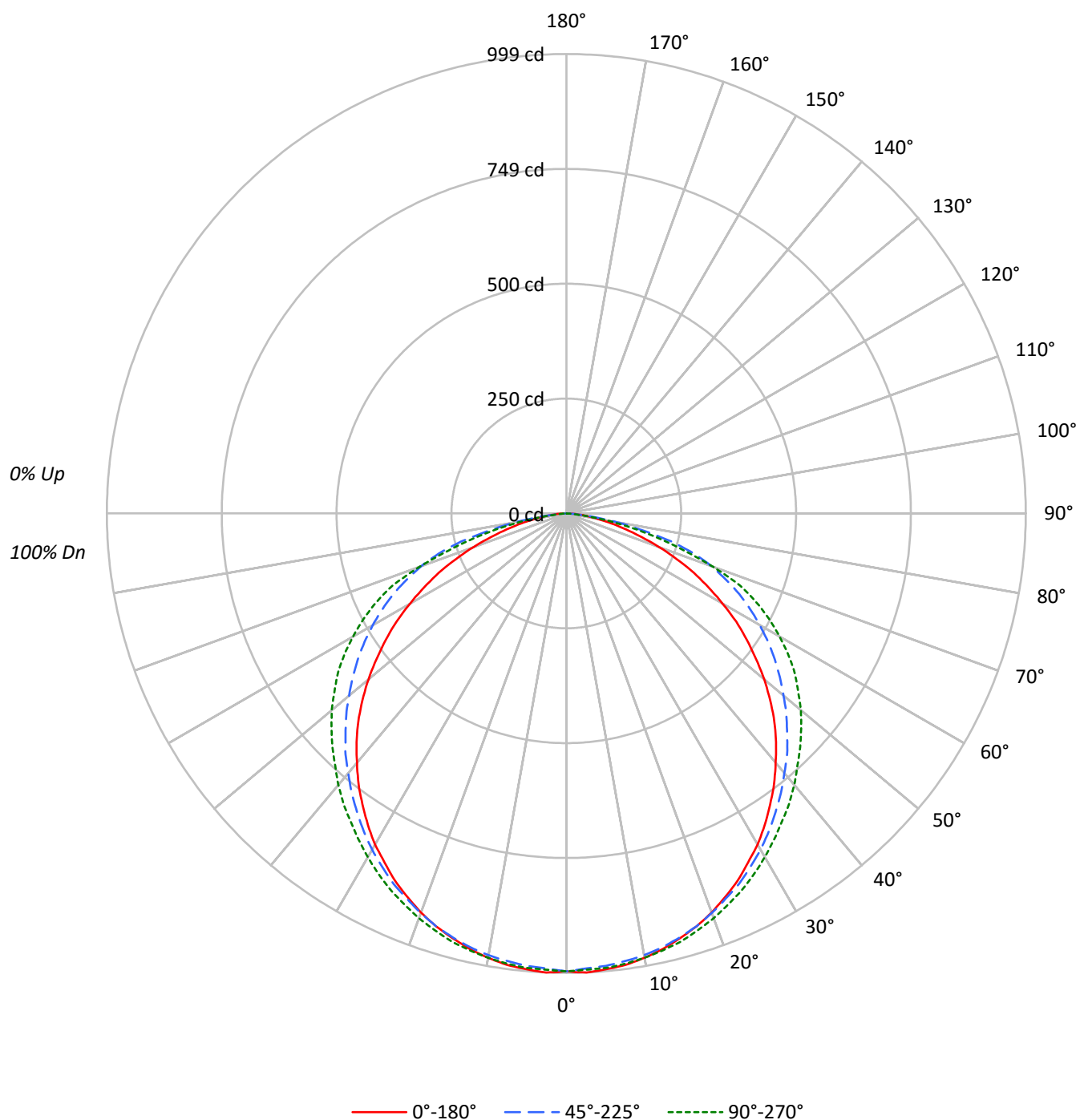
Input Watts (W): 34.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	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	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2679	2679	2679
5°	2687	2667	2680
10°	2681	2665	2681
15°	2664	2658	2684
20°	2645	2648	2682
25°	2617	2639	2683
30°	2584	2624	2682
35°	2538	2605	2687
40°	2487	2591	2708
45°	2435	2582	2737
50°	2351	2582	2787
55°	2249	2595	2846
60°	2114	2615	2883
65°	1949	2642	2900
70°	1697	2648	2670
75°	1399	2463	2156
80°	1100	1771	1443
85°	855	682	343



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.3	3.2
10°-20°	270.5	9.2
20°-30°	410.8	14.0
30°-40°	497.7	17.0
40°-50°	524.5	17.9
50°-60°	489.6	16.7
60°-70°	391.3	13.3
70°-80°	215.3	7.3
80°-90°	38.0	1.3
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°	775.5	26.5
0°-40°	1273.3	43.4
0°-60°	2287.4	78.0
0°-90°	2932.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2932.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	996	996	996	996	996	
5°	995	992	987	994	992	95
15°	956	956	954	964	964	270
25°	881	883	889	902	904	406
35°	773	780	793	813	818	483
45°	640	652	679	709	719	492
55°	479	503	553	592	607	428
65°	306	345	415	449	456	301
75°	135	193	237	213	207	145
85°	28	35	22	14	11	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	995.7	995.7	995.7	995.7	995.7
2.5°	999.4	996.6	990.2	995.7	993.0
5°	994.8	992.0	987.4	993.9	992.0
7.5°	990.2	986.5	981.9	989.3	987.4
10°	981.0	978.2	975.4	981.9	981.0
12.5°	969.9	969.0	966.2	973.6	972.7
15°	956.1	956.1	954.2	963.5	963.5
17.5°	941.3	940.4	941.3	951.5	950.5
20°	923.8	923.8	924.7	936.7	936.7
22.5°	902.6	903.5	906.3	921.0	920.1
25°	881.4	883.2	888.8	901.7	903.5
27.5°	855.6	860.2	866.6	882.3	884.2
30°	831.6	834.4	844.5	859.3	863.0
32.5°	803.0	808.6	819.6	836.2	840.8
35°	772.6	780.0	792.9	813.2	817.8
37.5°	742.2	748.6	766.2	787.4	795.7
40°	708.1	719.1	737.6	761.5	770.8
42.5°	674.9	685.9	710.8	735.7	744.0
45°	639.8	651.8	678.6	709.0	719.1
47.5°	601.1	615.0	649.1	681.3	692.4
50°	561.5	579.0	616.8	652.8	665.7
52.5°	520.0	542.1	585.4	623.2	635.2
55°	479.4	503.4	553.2	591.9	606.7
57.5°	437.9	463.7	520.0	564.2	572.5
60°	392.8	424.1	485.9	524.6	535.7
62.5°	348.5	384.5	450.8	487.7	496.9
65°	306.1	344.8	414.9	449.0	455.5
67.5°	260.0	306.1	375.2	406.6	408.4
70°	215.7	269.2	336.5	351.3	339.3
72.5°	172.4	229.6	291.3	279.4	269.2
75°	134.6	192.7	236.9	213.0	207.4
77.5°	99.6	157.7	169.6	156.7	146.6
80°	71.0	124.5	114.3	97.7	93.1
82.5°	48.9	78.4	62.7	48.9	42.4
85°	27.7	35.0	22.1	13.8	11.1
87.5°	12.0	8.3	4.6	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)