

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: P307173

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CA125-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: P307173
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-CA125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" 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: 2855.0 lumens
Efficiency: N/A
Efficacy: 84.2 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

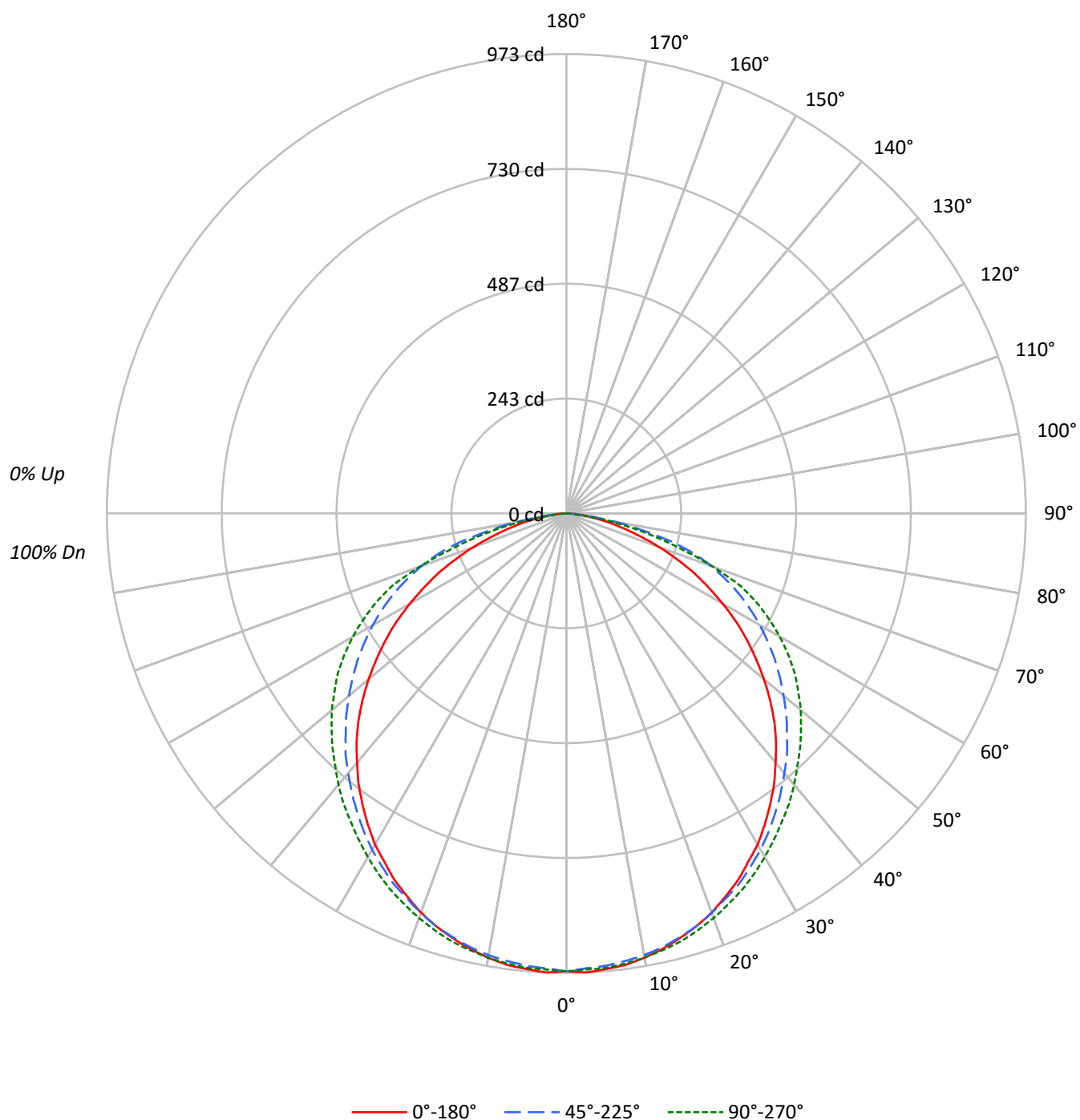
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2609	2609	2609
5°	2617	2597	2609
10°	2610	2595	2610
15°	2594	2589	2614
20°	2576	2578	2612
25°	2548	2570	2612
30°	2516	2555	2611
35°	2471	2536	2616
40°	2422	2523	2636
45°	2371	2514	2665
50°	2289	2514	2714
55°	2190	2527	2771
60°	2058	2546	2807
65°	1898	2572	2824
70°	1653	2578	2600
75°	1363	2399	2100
80°	1071	1725	1406
85°	831	664	333



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.8	3.2
10°-20°	263.4	9.2
20°-30°	400.0	14.0
30°-40°	484.7	17.0
40°-50°	510.7	17.9
50°-60°	476.8	16.7
60°-70°	381.0	13.3
70°-80°	209.6	7.3
80°-90°	37.0	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°	755.2	26.5
0°-40°	1239.8	43.4
0°-60°	2227.3	78.0
0°-90°	2855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2855.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	969	966	962	968	966	92
15°	931	931	929	938	938	263
25°	858	860	865	878	880	395
35°	752	760	772	792	796	471
45°	623	635	661	690	700	479
55°	467	490	539	576	591	417
65°	298	336	404	437	444	293
75°	131	188	231	207	202	141
85°	27	34	22	14	11	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	969.6	969.6	969.6	969.6	969.6
2.5°	973.2	970.5	964.2	969.6	966.9
5°	968.7	966.0	961.5	967.8	966.0
7.5°	964.2	960.6	956.1	963.3	961.5
10°	955.2	952.5	949.8	956.1	955.2
12.5°	944.4	943.5	940.8	948.0	947.1
15°	931.0	931.0	929.2	938.2	938.2
17.5°	916.6	915.7	916.6	926.5	925.6
20°	899.5	899.5	900.4	912.1	912.1
22.5°	878.9	879.8	882.5	896.9	896.0
25°	858.3	860.0	865.4	878.0	879.8
27.5°	833.1	837.6	843.9	859.1	860.9
30°	809.8	812.5	822.3	836.7	840.3
32.5°	781.9	787.3	798.1	814.3	818.8
35°	752.3	759.5	772.1	791.8	796.3
37.5°	722.7	729.0	746.0	766.7	774.8
40°	689.5	700.2	718.2	741.5	750.5
42.5°	657.2	667.9	692.2	716.4	724.5
45°	623.0	634.7	660.7	690.4	700.2
47.5°	585.3	598.8	632.0	663.4	674.2
50°	546.7	563.8	600.6	635.6	648.2
52.5°	506.3	527.9	570.1	606.9	618.6
55°	466.8	490.2	538.7	576.4	590.7
57.5°	426.4	451.6	506.3	549.4	557.5
60°	382.4	413.0	473.1	510.8	521.6
62.5°	339.4	374.4	439.0	474.9	483.9
65°	298.1	335.8	404.0	437.2	443.5
67.5°	253.2	298.1	365.4	395.9	397.7
70°	210.1	262.1	327.7	342.0	330.4
72.5°	167.9	223.5	283.7	272.0	262.1
75°	131.1	187.6	230.7	207.4	202.0
77.5°	97.0	153.5	165.2	152.6	142.7
80°	69.1	121.2	111.3	95.2	90.7
82.5°	47.6	76.3	61.0	47.6	41.3
85°	26.9	34.1	21.5	13.5	10.8
87.5°	11.7	8.1	4.5	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)