

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: P307168

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CA08-W2A-U-6500K**

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: P307168
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-6500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 6500K 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: 2948.0 lumens
Efficiency: N/A
Efficacy: 84.7 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

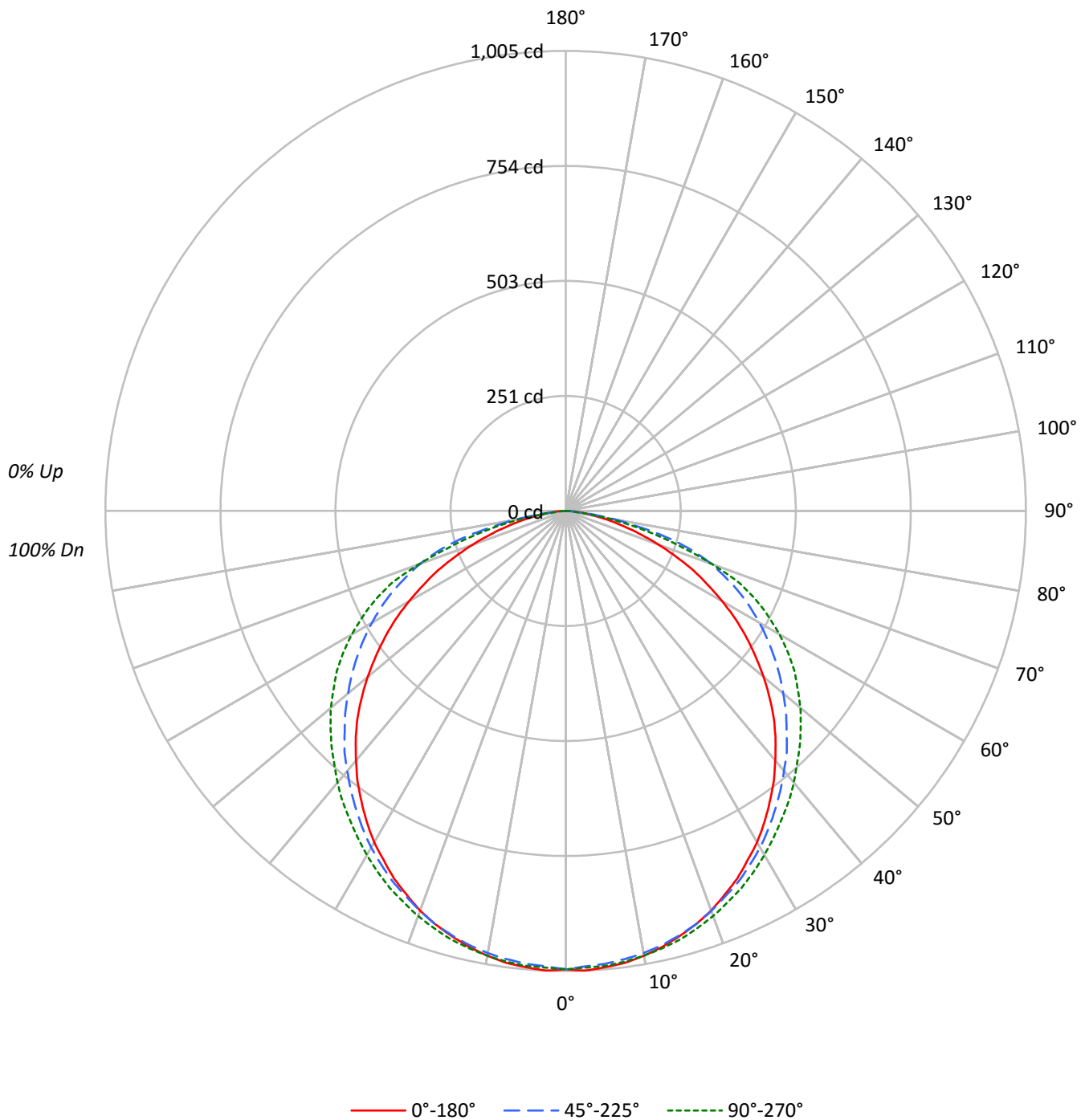
Input Watts (W): 34.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2694	2694	2694
5°	2702	2682	2694
10°	2695	2680	2695
15°	2678	2673	2699
20°	2660	2663	2697
25°	2631	2653	2697
30°	2598	2638	2696
35°	2552	2619	2701
40°	2501	2605	2722
45°	2448	2597	2752
50°	2363	2596	2802
55°	2261	2609	2862
60°	2125	2629	2899
65°	1960	2656	2916
70°	1707	2662	2684
75°	1407	2477	2169
80°	1106	1781	1450
85°	858	685	343



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.8	3.2
10°-20°	272.0	9.2
20°-30°	413.0	14.0
30°-40°	500.4	17.0
40°-50°	527.3	17.9
50°-60°	492.3	16.7
60°-70°	393.4	13.3
70°-80°	216.5	7.3
80°-90°	38.2	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°	779.8	26.5
0°-40°	1280.2	43.4
0°-60°	2299.9	78.0
0°-90°	2948.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2948.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	1000	997	993	999	997	95
15°	961	961	959	969	969	271
25°	886	888	894	907	908	408
35°	777	784	797	818	822	486
45°	643	655	682	713	723	495
55°	482	506	556	595	610	430
65°	308	347	417	451	458	303
75°	135	194	238	214	209	146
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°	1001.2	1001.2	1001.2	1001.2	1001.2
2.5°	1004.9	1002.1	995.6	1001.2	998.4
5°	1000.2	997.4	992.8	999.3	997.4
7.5°	995.6	991.9	987.3	994.7	992.8
10°	986.3	983.5	980.8	987.3	986.3
12.5°	975.2	974.3	971.5	978.9	978.0
15°	961.3	961.3	959.4	968.7	968.7
17.5°	946.5	945.5	946.5	956.7	955.7
20°	928.9	928.9	929.8	941.8	941.8
22.5°	907.5	908.5	911.2	926.1	925.1
25°	886.2	888.1	893.6	906.6	908.5
27.5°	860.3	864.9	871.4	887.1	889.0
30°	836.2	838.9	849.1	864.0	867.7
32.5°	807.4	813.0	824.1	840.8	845.4
35°	776.8	784.2	797.2	817.6	822.2
37.5°	746.2	752.7	770.3	791.7	800.0
40°	711.9	723.1	741.6	765.7	775.0
42.5°	678.6	689.7	714.7	739.7	748.1
45°	643.3	655.4	682.3	712.9	723.1
47.5°	604.4	618.3	652.6	685.1	696.2
50°	564.5	582.2	620.2	656.3	669.3
52.5°	522.8	545.1	588.6	626.6	638.7
55°	482.0	506.1	556.2	595.1	610.0
57.5°	440.3	466.3	522.8	567.3	575.7
60°	394.9	426.4	488.5	527.5	538.6
62.5°	350.4	386.6	453.3	490.4	499.7
65°	307.8	346.7	417.1	451.4	457.9
67.5°	261.4	307.8	377.3	408.8	410.7
70°	216.9	270.7	338.4	353.2	341.1
72.5°	173.3	230.8	292.9	280.9	270.7
75°	135.3	193.7	238.2	214.1	208.6
77.5°	100.1	158.5	170.6	157.6	147.4
80°	71.4	125.1	114.9	98.3	93.6
82.5°	49.1	78.8	63.0	49.1	42.6
85°	27.8	35.2	22.2	13.9	11.1
87.5°	12.1	8.3	4.6	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)