

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: P307202

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CP250-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: P307202
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-CP250-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB 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: 2721.0 lumens
Efficiency: N/A
Efficacy: 79.6 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

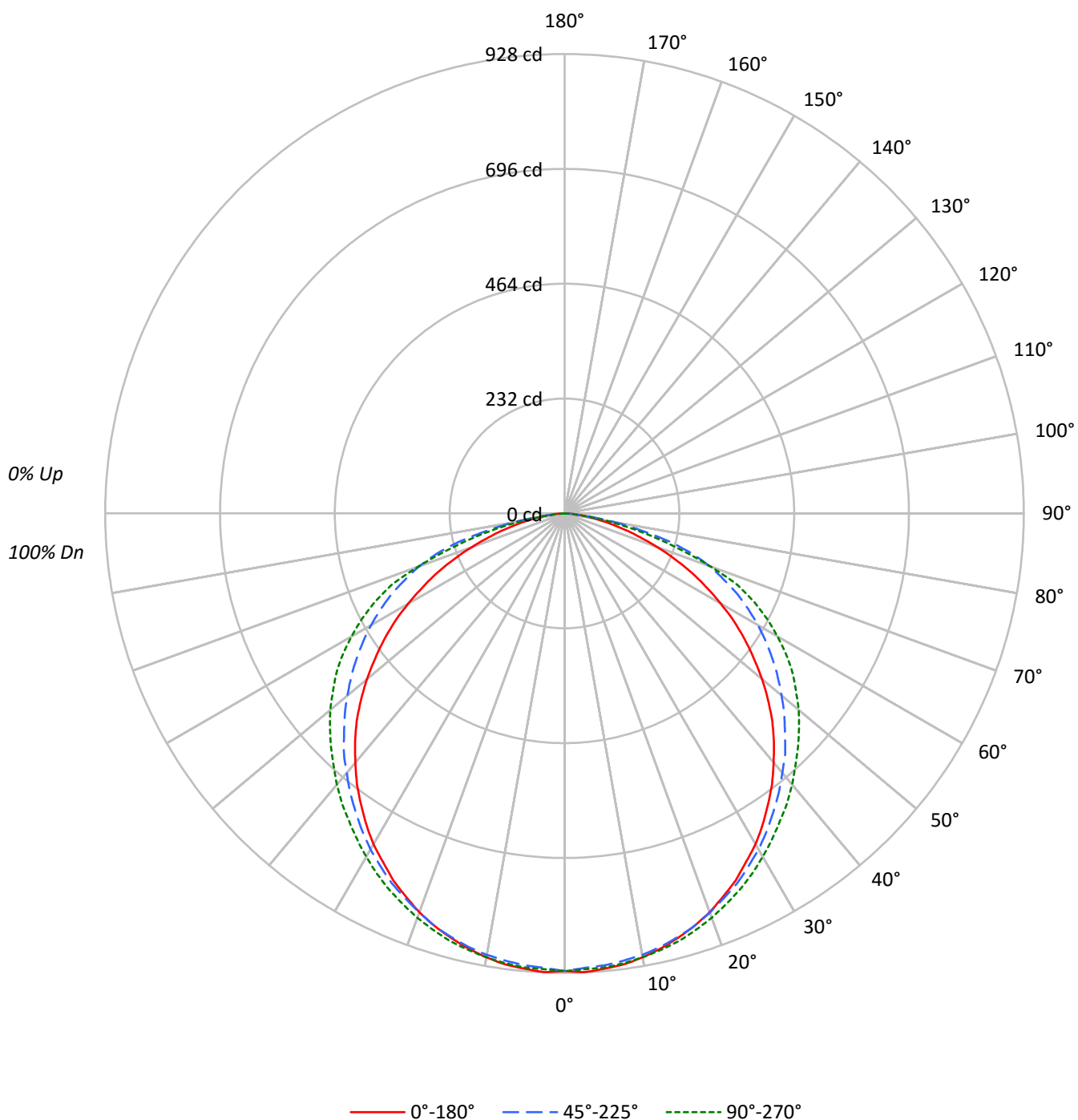
Input Watts (W): 34.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2487	2487	2487
5°	2494	2475	2487
10°	2488	2473	2488
15°	2472	2467	2491
20°	2455	2458	2489
25°	2429	2449	2490
30°	2398	2435	2489
35°	2355	2417	2493
40°	2308	2405	2513
45°	2260	2396	2540
50°	2182	2396	2586
55°	2087	2409	2641
60°	1962	2427	2675
65°	1809	2451	2691
70°	1575	2457	2478
75°	1299	2286	2001
80°	1021	1644	1339
85°	794	633	318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.5	3.2
10°-20°	251.0	9.2
20°-30°	381.2	14.0
30°-40°	461.9	17.0
40°-50°	486.7	17.9
50°-60°	454.4	16.7
60°-70°	363.1	13.3
70°-80°	199.8	7.3
80°-90°	35.3	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°	719.7	26.5
0°-40°	1181.6	43.4
0°-60°	2122.8	78.0
0°-90°	2721.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2721.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	924	924	924	924	924	
5°	923	921	916	922	921	88
15°	887	887	886	894	894	250
25°	818	820	825	837	838	377
35°	717	724	736	755	759	449
45°	594	605	630	658	667	457
55°	445	467	513	549	563	397
65°	284	320	385	417	423	280
75°	125	179	220	198	192	134
85°	26	32	20	13	10	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	924.1	924.1	924.1	924.1	924.1
2.5°	927.5	924.9	918.9	924.1	921.5
5°	923.2	920.6	916.4	922.4	920.6
7.5°	918.9	915.5	911.2	918.1	916.4
10°	910.4	907.8	905.2	911.2	910.4
12.5°	900.1	899.3	896.7	903.5	902.7
15°	887.3	887.3	885.6	894.1	894.1
17.5°	873.6	872.7	873.6	883.0	882.1
20°	857.3	857.3	858.2	869.3	869.3
22.5°	837.6	838.5	841.1	854.8	853.9
25°	818.0	819.7	824.8	836.8	838.5
27.5°	794.0	798.3	804.3	818.8	820.5
30°	771.8	774.3	783.7	797.4	800.9
32.5°	745.2	750.4	760.6	776.0	780.3
35°	717.0	723.9	735.8	754.7	758.9
37.5°	688.8	694.8	711.0	730.7	738.4
40°	657.1	667.4	684.5	706.7	715.3
42.5°	626.3	636.6	659.7	682.8	690.5
45°	593.8	604.9	629.7	658.0	667.4
47.5°	557.9	570.7	602.4	632.3	642.6
50°	521.1	537.3	572.4	605.8	617.8
52.5°	482.6	503.1	543.3	578.4	589.5
55°	444.9	467.2	513.4	549.3	563.0
57.5°	406.4	430.4	482.6	523.6	531.3
60°	364.5	393.6	450.9	486.8	497.1
62.5°	323.4	356.8	418.4	452.6	461.2
65°	284.1	320.0	385.0	416.7	422.7
67.5°	241.3	284.1	348.2	377.3	379.0
70°	200.2	249.8	312.3	326.0	314.9
72.5°	160.0	213.0	270.4	259.3	249.8
75°	124.9	178.8	219.9	197.6	192.5
77.5°	92.4	146.3	157.4	145.5	136.0
80°	65.9	115.5	106.1	90.7	86.4
82.5°	45.3	72.7	58.2	45.3	39.4
85°	25.7	32.5	20.5	12.8	10.3
87.5°	11.1	7.7	4.3	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)