

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: P307180

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CP125-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: P307180
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-CP125-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
POLYCARB 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: 2691.0 lumens
Efficiency: N/A
Efficacy: 80.3 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

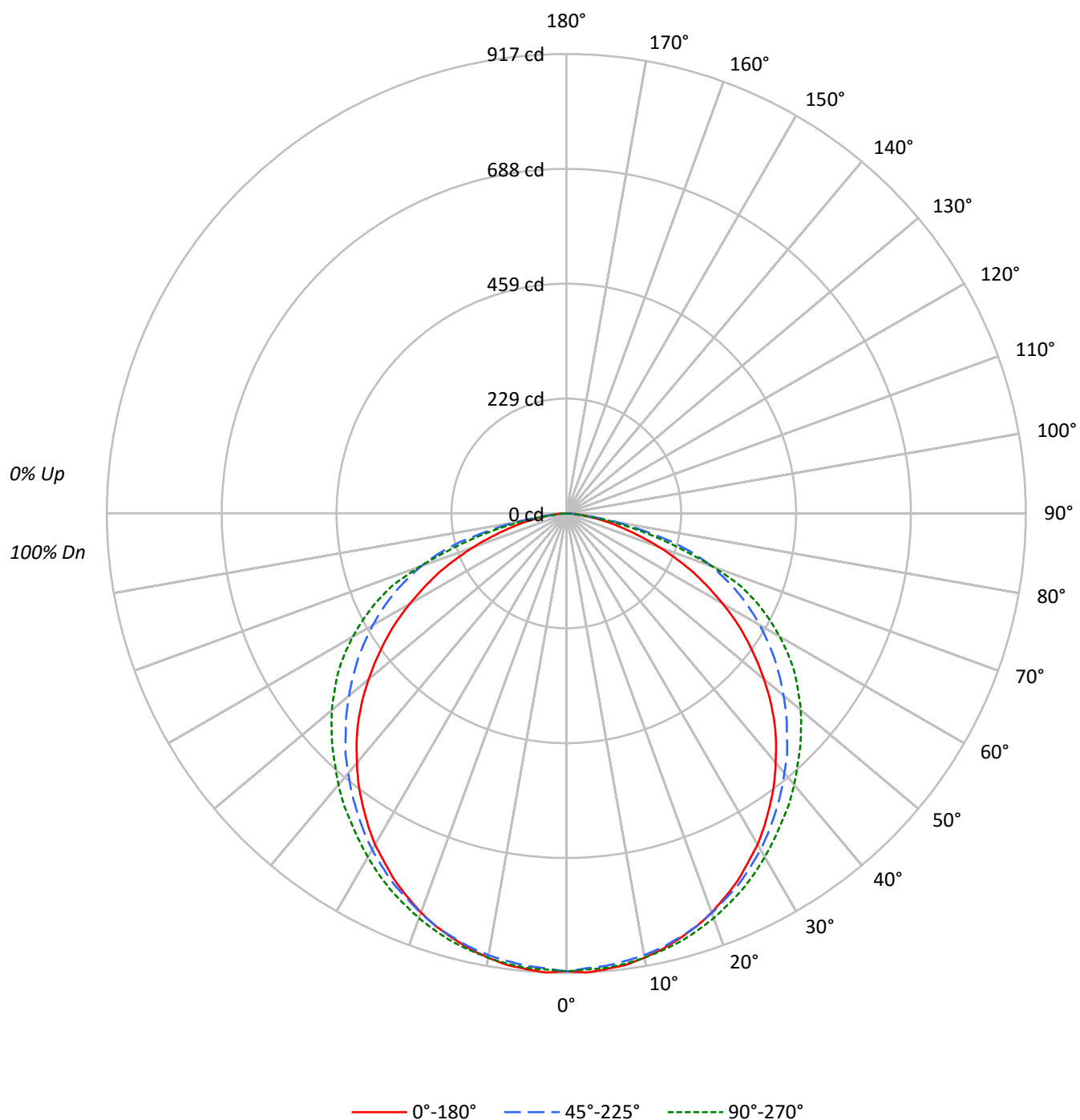
Input Watts (W): 33.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2459	2459	2459
5°	2466	2448	2459
10°	2460	2446	2460
15°	2445	2440	2464
20°	2428	2430	2462
25°	2402	2422	2462
30°	2372	2408	2461
35°	2329	2391	2466
40°	2283	2378	2485
45°	2235	2370	2512
50°	2157	2370	2557
55°	2064	2382	2612
60°	1940	2400	2646
65°	1789	2425	2662
70°	1558	2430	2450
75°	1284	2261	1980
80°	1010	1626	1325
85°	784	627	315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.5	3.2
10°-20°	248.3	9.2
20°-30°	377.0	14.0
30°-40°	456.8	17.0
40°-50°	481.4	17.9
50°-60°	449.4	16.7
60°-70°	359.1	13.3
70°-80°	197.6	7.3
80°-90°	34.9	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°	711.8	26.5
0°-40°	1168.6	43.4
0°-60°	2099.4	78.0
0°-90°	2691.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2691.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	914	914	914	914	914	
5°	913	910	906	912	910	87
15°	878	878	876	884	884	248
25°	809	811	816	828	829	372
35°	709	716	728	746	751	444
45°	587	598	623	651	660	452
55°	440	462	508	543	557	393
65°	281	316	381	412	418	277
75°	124	177	218	196	190	133
85°	25	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°	913.9	913.9	913.9	913.9	913.9
2.5°	917.3	914.7	908.8	913.9	911.3
5°	913.0	910.5	906.3	912.2	910.5
7.5°	908.8	905.4	901.2	908.0	906.3
10°	900.3	897.8	895.3	901.2	900.3
12.5°	890.2	889.3	886.8	893.6	892.7
15°	877.5	877.5	875.8	884.3	884.3
17.5°	864.0	863.1	864.0	873.3	872.4
20°	847.9	847.9	848.7	859.7	859.7
22.5°	828.4	829.3	831.8	845.3	844.5
25°	809.0	810.6	815.7	827.6	829.3
27.5°	785.3	789.5	795.4	809.8	811.5
30°	763.3	765.8	775.1	788.6	792.0
32.5°	737.0	742.1	752.3	767.5	771.7
35°	709.1	715.9	727.7	746.3	750.6
37.5°	681.2	687.1	703.2	722.6	730.3
40°	649.9	660.0	676.9	698.9	707.4
42.5°	619.4	629.6	652.4	675.3	682.9
45°	587.3	598.3	622.8	650.7	660.0
47.5°	551.7	564.4	595.7	625.3	635.5
50°	515.3	531.4	566.1	599.1	610.9
52.5°	477.2	497.6	537.3	572.0	583.0
55°	440.0	462.0	507.7	543.2	556.8
57.5°	401.9	425.6	477.2	517.9	525.5
60°	360.5	389.2	445.9	481.5	491.6
62.5°	319.9	352.9	413.8	447.6	456.1
65°	280.9	316.5	380.8	412.1	418.0
67.5°	238.6	280.9	344.4	373.2	374.9
70°	198.0	247.1	308.9	322.4	311.4
72.5°	158.2	210.7	267.4	256.4	247.1
75°	123.5	176.9	217.5	195.5	190.4
77.5°	91.4	144.7	155.7	143.9	134.5
80°	65.2	114.2	104.9	89.7	85.5
82.5°	44.8	71.9	57.5	44.8	38.9
85°	25.4	32.2	20.3	12.7	10.2
87.5°	11.0	7.6	4.2	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)