

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: P307172

Luminaire Tested: **14FCZ2-39-UNV-L82765-HRP-CA125-W2A-U-4000K**

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: P307172
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-4000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 4000K 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: 2805.0 lumens
Efficiency: N/A
Efficacy: 83.2 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

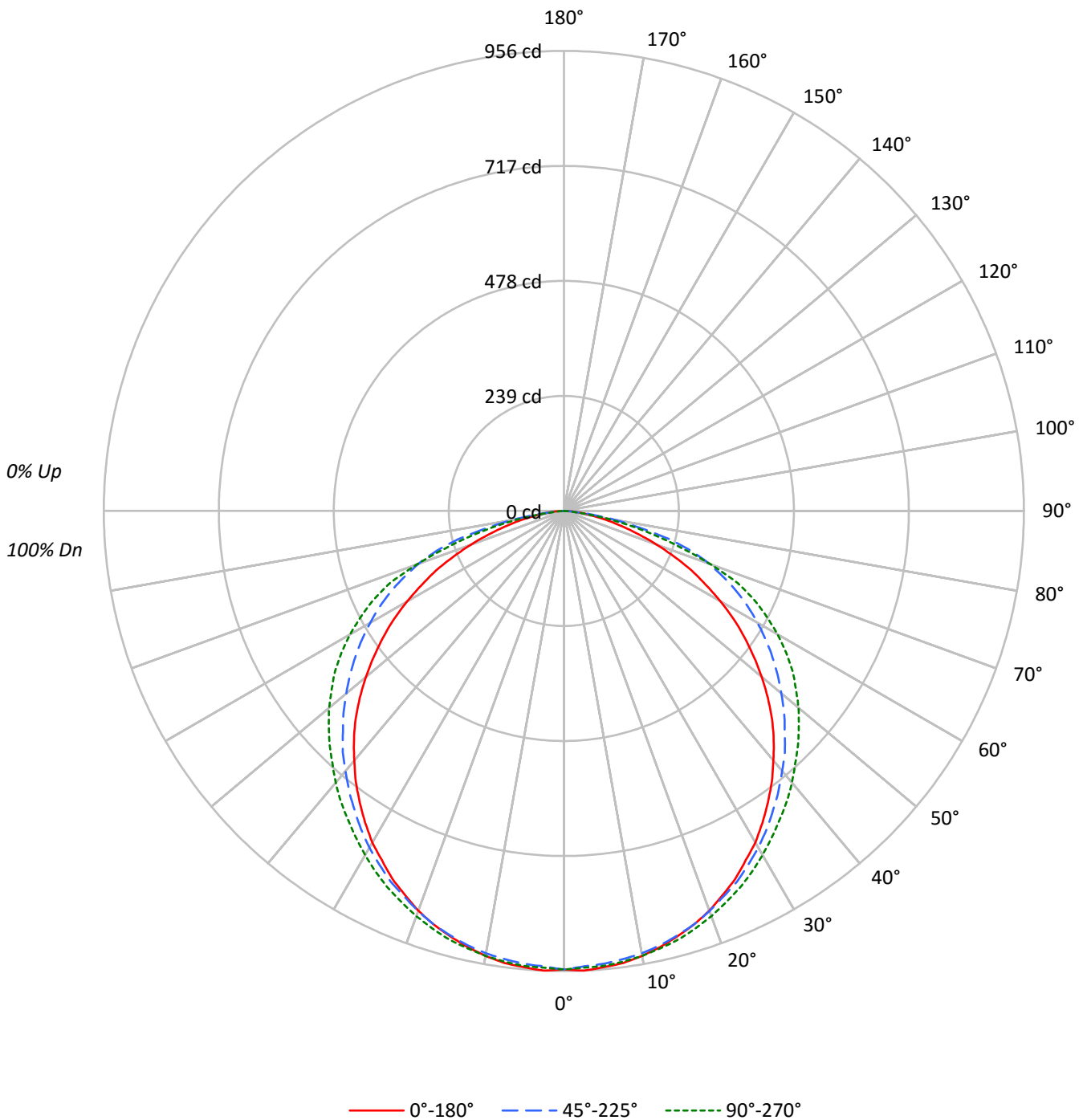
Input Watts (W): 33.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2563	2563	2563
5°	2571	2552	2564
10°	2564	2550	2564
15°	2548	2543	2568
20°	2531	2533	2566
25°	2504	2525	2567
30°	2472	2510	2565
35°	2428	2492	2570
40°	2380	2479	2590
45°	2329	2471	2618
50°	2249	2470	2666
55°	2152	2483	2723
60°	2022	2502	2758
65°	1864	2527	2774
70°	1624	2533	2554
75°	1339	2357	2064
80°	1052	1695	1381
85°	818	655	327



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.2	3.2
10°-20°	258.8	9.2
20°-30°	393.0	14.0
30°-40°	476.2	17.0
40°-50°	501.8	17.9
50°-60°	468.4	16.7
60°-70°	374.3	13.3
70°-80°	206.0	7.3
80°-90°	36.4	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°	741.9	26.5
0°-40°	1218.1	43.4
0°-60°	2188.3	78.0
0°-90°	2805.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2805.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	953	953	953	953	953	
5°	952	949	945	951	949	90
15°	915	915	913	922	922	258
25°	843	845	850	863	864	388
35°	739	746	758	778	782	462
45°	612	624	649	678	688	471
55°	459	482	529	566	580	409
65°	293	330	397	430	436	288
75°	129	184	227	204	198	139
85°	26	34	21	13	11	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	952.6	952.6	952.6	952.6	952.6
2.5°	956.1	953.5	947.3	952.6	949.9
5°	951.7	949.1	944.7	950.8	949.1
7.5°	947.3	943.8	939.4	946.4	944.7
10°	938.5	935.8	933.2	939.4	938.5
12.5°	927.9	927.0	924.4	931.4	930.5
15°	914.7	914.7	912.9	921.7	921.7
17.5°	900.6	899.7	900.6	910.3	909.4
20°	883.8	883.8	884.7	896.1	896.1
22.5°	863.5	864.4	867.0	881.1	880.3
25°	843.2	845.0	850.3	862.6	864.4
27.5°	818.5	822.9	829.1	844.1	845.9
30°	795.6	798.2	807.9	822.1	825.6
32.5°	768.2	773.5	784.1	800.0	804.4
35°	739.1	746.2	758.5	778.0	782.4
37.5°	710.0	716.2	733.0	753.3	761.2
40°	677.4	688.0	705.6	728.6	737.4
42.5°	645.6	656.2	680.0	703.9	711.8
45°	612.1	623.6	649.2	678.3	688.0
47.5°	575.1	588.3	620.9	651.8	662.4
50°	537.2	553.9	590.1	624.5	636.8
52.5°	497.5	518.6	560.1	596.3	607.7
55°	458.7	481.6	529.2	566.3	580.4
57.5°	419.0	443.7	497.5	539.8	547.7
60°	375.7	405.7	464.8	501.9	512.5
62.5°	333.4	367.8	431.3	466.6	475.4
65°	292.8	329.9	396.9	429.5	435.7
67.5°	248.7	292.8	359.0	389.0	390.7
70°	206.4	257.6	321.9	336.1	324.6
72.5°	164.9	219.6	278.7	267.3	257.6
75°	128.8	184.3	226.7	203.7	198.5
77.5°	95.3	150.8	162.3	149.9	140.2
80°	67.9	119.1	109.4	93.5	89.1
82.5°	46.7	75.0	60.0	46.7	40.6
85°	26.5	33.5	21.2	13.2	10.6
87.5°	11.5	7.9	4.4	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)