

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: P308568

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-RDP-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: P308568
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-44HE-UNV-L82765-RDP-CA125-W2A-U-4500K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" ACRYLIC SHEET
Light Source: (168) 3000K 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: 2696.0 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

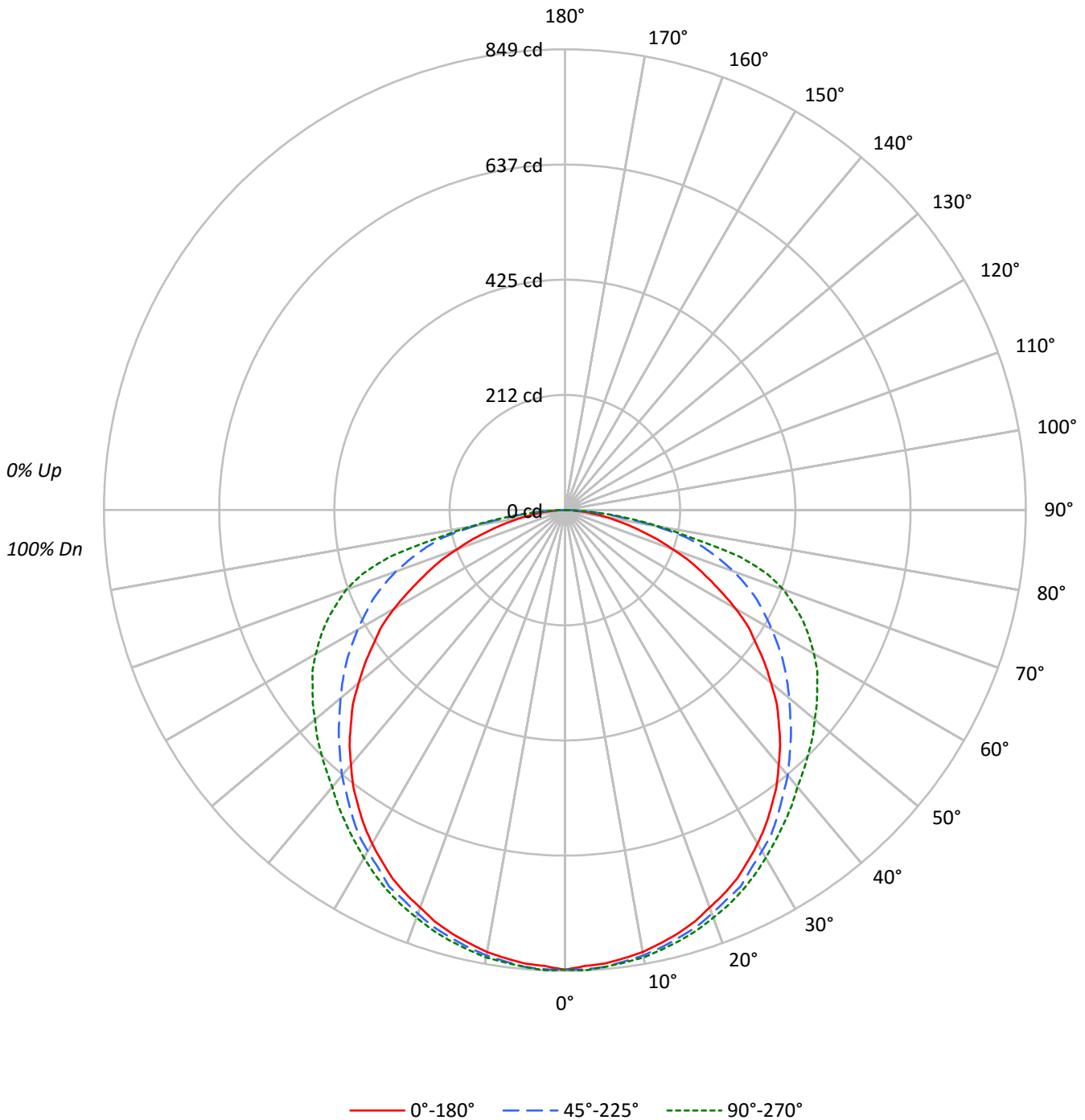
Input Watts (W): 37.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2279	2279	2279
5°	2266	2282	2282
10°	2260	2276	2287
15°	2249	2271	2288
20°	2232	2266	2289
25°	2226	2273	2297
30°	2206	2256	2299
35°	2183	2248	2313
40°	2153	2243	2341
45°	2121	2242	2415
50°	2076	2259	2516
55°	2019	2308	2661
60°	1953	2370	2850
65°	1819	2488	3081
70°	1670	2606	3371
75°	1464	2743	3485
80°	1260	2613	2735
85°	1102	1899	2081



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.1	3.0
10°-20°	230.0	8.5
20°-30°	350.9	13.0
30°-40°	428.5	15.9
40°-50°	458.1	17.0
50°-60°	442.2	16.4
60°-70°	380.7	14.1
70°-80°	257.6	9.6
80°-90°	68.0	2.5
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°	661.0	24.5
0°-40°	1089.5	40.4
0°-60°	1989.8	73.8
0°-90°	2696.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2696.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	839	841	845	845	845	80
15°	807	809	815	819	821	228
25°	750	754	766	770	774	345
35°	664	670	684	698	704	416
45°	557	567	589	619	635	430
55°	430	444	492	541	567	386
65°	286	313	391	452	484	284
75°	141	186	264	317	335	151
85°	36	50	62	64	67	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	846.9	846.9	846.9	846.9	846.9
2.5°	840.9	842.9	846.9	846.9	848.8
5°	838.9	840.9	844.9	844.9	844.9
7.5°	833.0	835.0	838.9	840.9	840.9
10°	827.0	829.0	833.0	835.0	836.9
12.5°	817.1	819.1	825.0	829.0	829.0
15°	807.2	809.2	815.1	819.1	821.1
17.5°	795.3	799.3	805.2	809.2	811.2
20°	779.4	783.4	791.3	797.3	799.3
22.5°	765.5	769.5	777.4	783.4	787.4
25°	749.7	753.6	765.5	769.5	773.5
27.5°	729.8	733.8	743.7	751.7	757.6
30°	710.0	714.0	725.9	735.8	739.8
32.5°	688.2	694.1	708.0	716.0	721.9
35°	664.4	670.3	684.2	698.1	704.1
37.5°	640.6	646.5	660.4	678.3	686.2
40°	612.8	620.8	638.6	662.4	666.4
42.5°	587.1	597.0	612.8	640.6	650.5
45°	557.3	567.2	589.0	618.8	634.6
47.5°	529.5	539.5	563.3	599.0	618.8
50°	495.8	509.7	539.5	581.1	600.9
52.5°	464.1	476.0	515.7	561.3	585.1
55°	430.4	444.3	491.9	541.4	567.2
57.5°	400.6	412.5	466.1	521.6	551.4
60°	362.9	378.8	440.3	499.8	529.5
62.5°	323.3	347.1	414.5	476.0	507.7
65°	285.6	313.4	390.7	452.2	483.9
67.5°	251.9	281.6	361.0	426.4	456.2
70°	212.2	249.9	331.2	394.7	428.4
72.5°	176.5	218.2	297.5	361.0	390.7
75°	140.8	186.4	263.8	317.3	335.2
77.5°	109.1	152.7	226.1	242.0	243.9
80°	81.3	121.0	168.6	170.6	176.5
82.5°	55.5	85.3	109.1	119.0	121.0
85°	35.7	49.6	61.5	63.5	67.4
87.5°	15.9	17.8	21.8	19.8	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)