

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: P312121

Luminaire Tested: **14FCZ2-44-UNV-L83050-RDP-CA125-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: P312121
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-44-UNV-L83050-RDP-CA125-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" ACRYLIC 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: 2658.0 lumens
Efficiency: N/A
Efficacy: 69.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

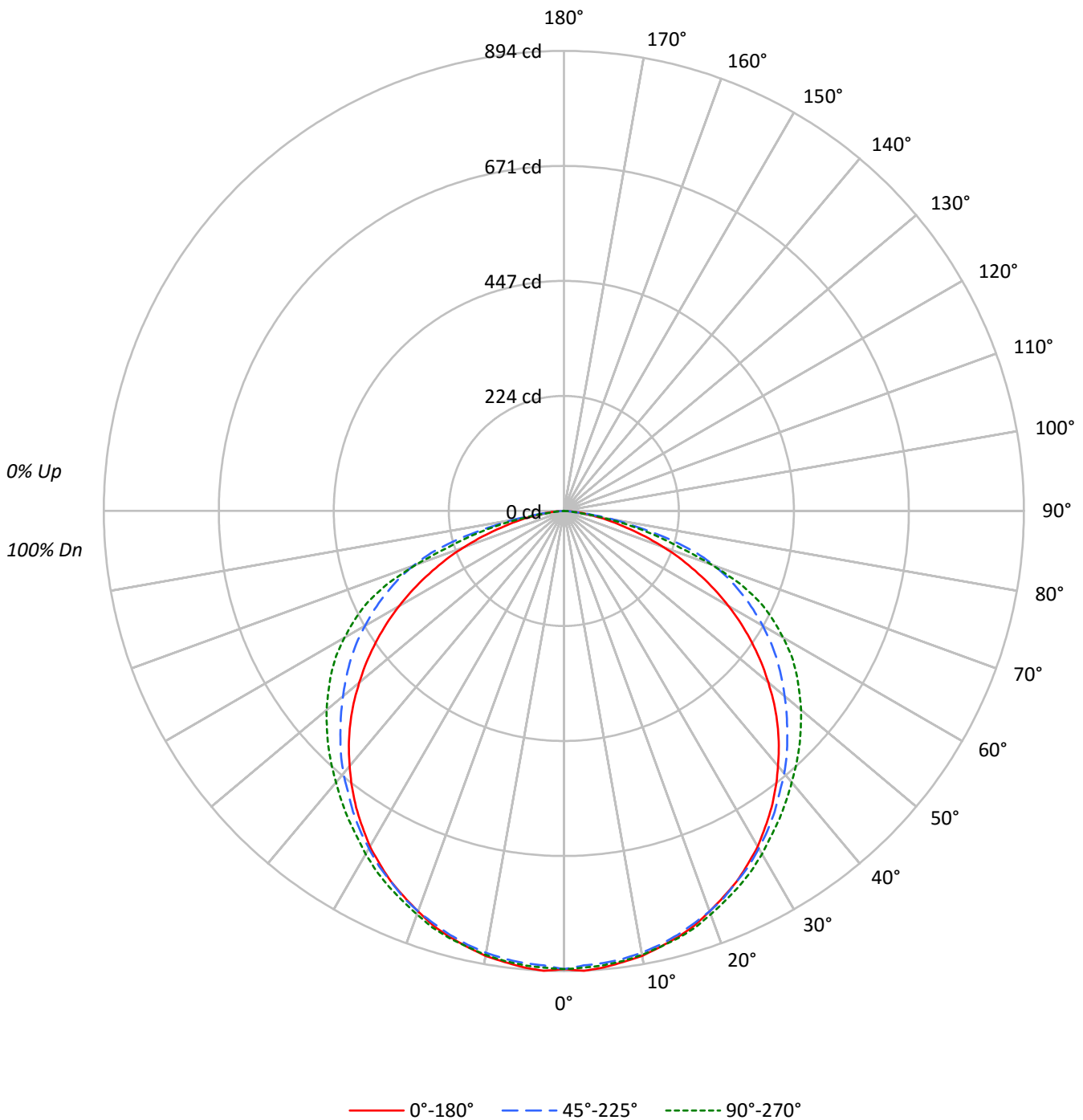
Input Watts (W): 38.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2396	2396	2396
5°	2405	2382	2394
10°	2399	2382	2393
15°	2388	2376	2393
20°	2371	2371	2389
25°	2360	2360	2391
30°	2341	2353	2392
35°	2311	2345	2399
40°	2274	2340	2420
45°	2235	2337	2464
50°	2172	2346	2519
55°	2093	2375	2590
60°	1988	2401	2647
65°	1836	2431	2683
70°	1633	2449	2400
75°	1316	2201	1920
80°	1029	1543	1254
85°	704	448	321



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.3	3.2
10°-20°	241.8	9.1
20°-30°	368.1	13.8
30°-40°	448.3	16.9
40°-50°	475.7	17.9
50°-60°	448.9	16.9
60°-70°	362.5	13.6
70°-80°	196.6	7.4
80°-90°	31.8	1.2
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°	694.1	26.1
0°-40°	1142.5	43.0
0°-60°	2067.1	77.8
0°-90°	2658.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2658.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	890	890	890	890	890	
5°	890	888	882	888	886	85
15°	857	855	853	859	859	242
25°	795	793	795	803	805	366
35°	704	708	714	728	730	440
45°	587	596	614	637	647	452
55°	446	465	506	540	552	399
65°	288	324	382	413	421	286
75°	127	185	212	191	185	138
85°	23	25	14	12	10	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	890.2	890.2	890.2	890.2	890.2
2.5°	894.4	890.2	884.0	890.2	888.2
5°	890.2	888.2	881.9	888.2	886.1
7.5°	884.0	884.0	877.8	881.9	881.9
10°	877.8	875.7	871.6	877.8	875.7
12.5°	867.4	865.3	863.3	869.5	867.4
15°	857.0	855.0	852.9	859.1	859.1
17.5°	844.6	842.5	840.4	848.7	848.7
20°	828.0	828.0	828.0	836.3	834.2
22.5°	811.4	811.4	813.5	821.8	819.7
25°	794.8	792.7	794.8	803.1	805.2
27.5°	774.0	776.1	778.2	786.5	788.6
30°	753.3	755.3	757.4	767.8	769.9
32.5°	728.4	732.5	736.7	749.1	749.1
35°	703.5	707.6	713.8	728.4	730.4
37.5°	676.5	680.6	688.9	705.5	709.7
40°	647.4	653.7	666.1	682.7	688.9
42.5°	618.4	626.7	641.2	659.9	668.2
45°	587.3	595.6	614.2	637.1	647.4
47.5°	554.1	564.4	587.3	616.3	624.6
50°	518.8	533.3	560.3	591.4	601.8
52.5°	483.5	500.1	533.3	566.5	576.9
55°	446.2	464.8	506.3	539.5	552.0
57.5°	408.8	429.6	477.3	512.6	525.0
60°	369.4	394.3	446.2	481.4	491.8
62.5°	329.9	359.0	415.0	450.3	458.6
65°	288.4	323.7	381.8	413.0	421.3
67.5°	249.0	290.5	348.6	371.4	371.4
70°	207.5	253.2	311.3	317.5	305.0
72.5°	166.0	217.9	269.8	246.9	236.6
75°	126.6	184.7	211.7	190.9	184.7
77.5°	95.5	149.4	149.4	137.0	132.8
80°	66.4	114.1	99.6	87.2	80.9
82.5°	43.6	64.3	51.9	41.5	35.3
85°	22.8	24.9	14.5	12.5	10.4
87.5°	8.3	4.2	2.1	4.2	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)