

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: P311970

Luminaire Tested: **14FCZ2-44-UNV-L83050-HRP-CA125-W2A-U-3000K**

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: P311970
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: 14FCZ2-44-UNV-L83050-HRP-CA125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 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: 2968.0 lumens
Efficiency: N/A
Efficacy: 77.7 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

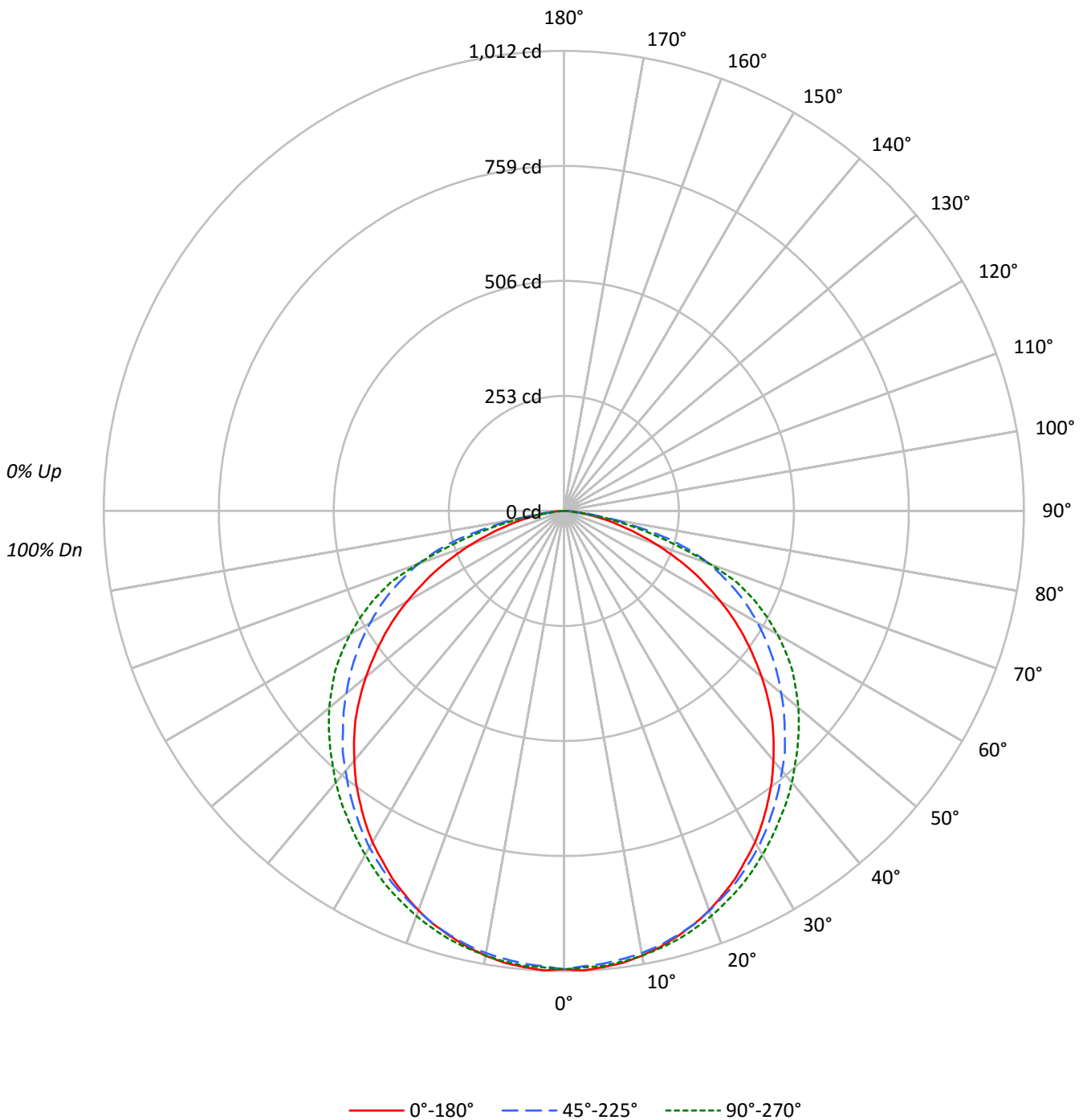
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2712	2712	2712
5°	2720	2700	2713
10°	2713	2698	2713
15°	2696	2691	2717
20°	2678	2681	2715
25°	2649	2671	2716
30°	2616	2656	2715
35°	2569	2637	2719
40°	2518	2623	2741
45°	2465	2614	2770
50°	2380	2614	2821
55°	2277	2627	2881
60°	2140	2647	2918
65°	1973	2674	2935
70°	1718	2680	2702
75°	1417	2494	2183
80°	1114	1793	1461
85°	865	692	346



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	3.2
10°-20°	273.8	9.2
20°-30°	415.8	14.0
30°-40°	503.8	17.0
40°-50°	530.9	17.9
50°-60°	495.7	16.7
60°-70°	396.1	13.3
70°-80°	218.0	7.3
80°-90°	38.5	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°	785.1	26.5
0°-40°	1288.9	43.4
0°-60°	2315.5	78.0
0°-90°	2968.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2968.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1008	1008	1008	1008	1008	
5°	1007	1004	1000	1006	1004	96
15°	968	968	966	975	975	273
25°	892	894	900	913	915	411
35°	782	790	803	823	828	489
45°	648	660	687	718	728	498
55°	485	510	560	599	614	433
65°	310	349	420	454	461	305
75°	136	195	240	216	210	147
85°	28	36	22	14	11	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1007.9	1007.9	1007.9	1007.9	1007.9
2.5°	1011.7	1008.9	1002.3	1007.9	1005.1
5°	1007.0	1004.2	999.5	1006.1	1004.2
7.5°	1002.3	998.6	993.9	1001.4	999.5
10°	993.0	990.2	987.4	993.9	993.0
12.5°	981.8	980.9	978.1	985.5	984.6
15°	967.8	967.8	966.0	975.3	975.3
17.5°	952.9	952.0	952.9	963.2	962.2
20°	935.2	935.2	936.1	948.2	948.2
22.5°	913.7	914.6	917.4	932.4	931.4
25°	892.2	894.1	899.7	912.8	914.6
27.5°	866.1	870.8	877.3	893.2	895.0
30°	841.8	844.6	854.9	869.8	873.6
32.5°	812.9	818.5	829.7	846.5	851.2
35°	782.1	789.6	802.6	823.2	827.8
37.5°	751.3	757.8	775.6	797.0	805.4
40°	716.8	728.0	746.6	770.9	780.2
42.5°	683.2	694.4	719.6	744.8	753.2
45°	647.7	659.8	686.9	717.7	728.0
47.5°	608.5	622.5	657.0	689.7	700.9
50°	568.4	586.1	624.4	660.8	673.8
52.5°	526.4	548.8	592.6	630.9	643.0
55°	485.3	509.6	560.0	599.2	614.1
57.5°	443.3	469.4	526.4	571.2	579.6
60°	397.6	429.3	491.8	531.0	542.2
62.5°	352.8	389.2	456.4	493.7	503.0
65°	309.9	349.0	420.0	454.5	461.0
67.5°	263.2	309.9	379.8	411.6	413.4
70°	218.4	272.5	340.6	355.6	343.4
72.5°	174.5	232.4	294.9	282.8	272.5
75°	136.3	195.1	239.9	215.6	210.0
77.5°	100.8	159.6	171.7	158.7	148.4
80°	71.9	126.0	115.7	98.9	94.3
82.5°	49.5	79.3	63.5	49.5	42.9
85°	28.0	35.5	22.4	14.0	11.2
87.5°	12.1	8.4	4.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)