

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: P311976

Luminaire Tested: **14FCZ2-44-UNV-L83050-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: P311976
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-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: 3080.0 lumens
Efficiency: N/A
Efficacy: 80.4 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

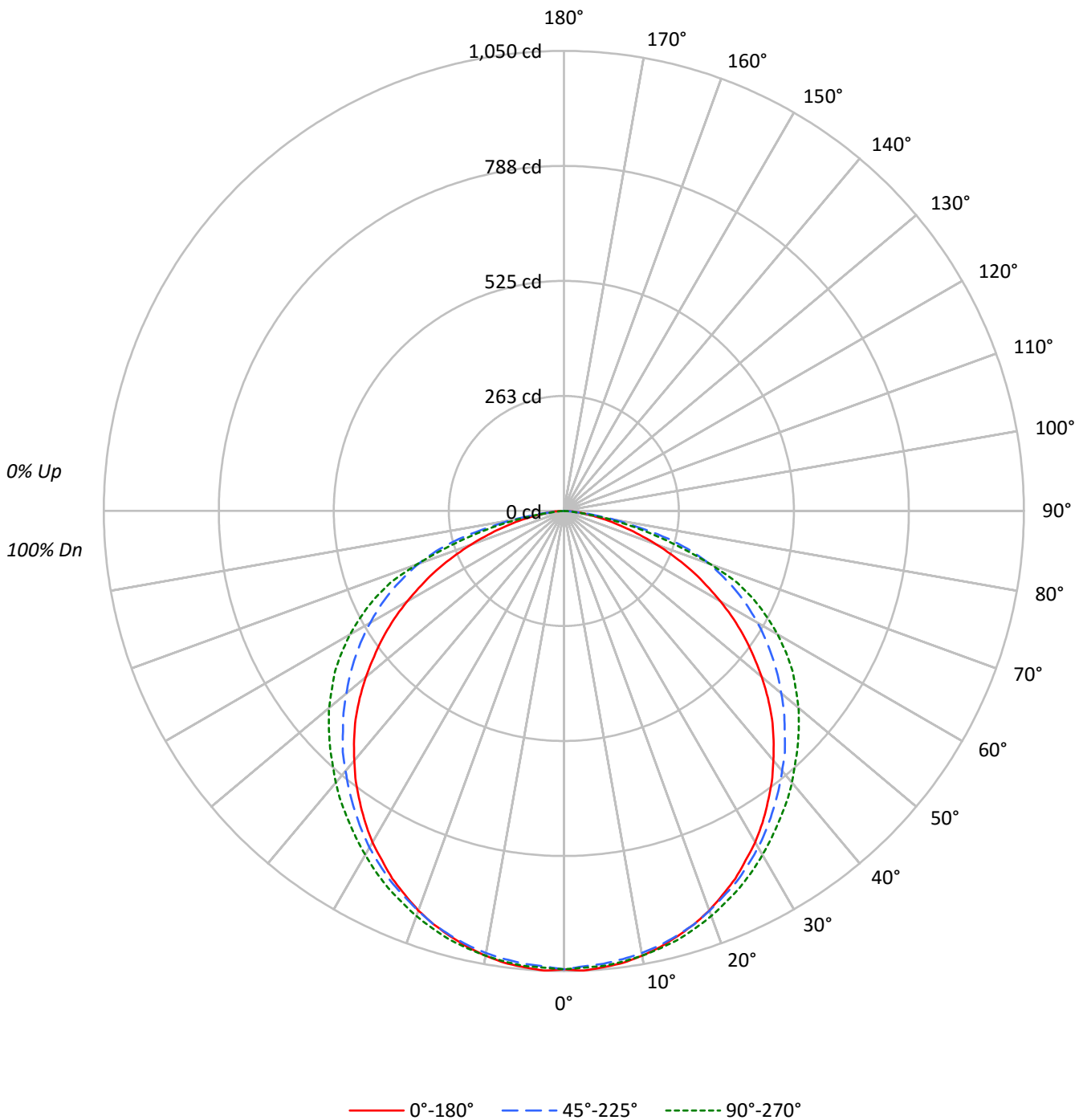
Input Watts (W): 38.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2815	2815	2815
5°	2823	2802	2815
10°	2816	2800	2816
15°	2798	2793	2820
20°	2779	2782	2818
25°	2749	2772	2818
30°	2715	2756	2817
35°	2666	2736	2822
40°	2613	2722	2844
45°	2558	2713	2875
50°	2469	2712	2928
55°	2363	2726	2990
60°	2221	2747	3028
65°	2047	2775	3046
70°	1783	2781	2804
75°	1470	2588	2266
80°	1156	1861	1516
85°	898	716	358



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	3.2
10°-20°	284.1	9.2
20°-30°	431.5	14.0
30°-40°	522.8	17.0
40°-50°	550.9	17.9
50°-60°	514.4	16.7
60°-70°	411.0	13.3
70°-80°	226.2	7.3
80°-90°	39.9	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°	814.7	26.5
0°-40°	1337.5	43.4
0°-60°	2402.8	78.0
0°-90°	3080.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3080.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1046	1046	1046	1046	1046	
5°	1045	1042	1037	1044	1042	99
15°	1004	1004	1002	1012	1012	283
25°	926	928	934	947	949	426
35°	812	819	833	854	859	508
45°	672	685	713	745	755	517
55°	504	529	581	622	637	450
65°	322	362	436	472	478	317
75°	141	202	249	224	218	152
85°	29	37	23	14	12	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1046.0	1046.0	1046.0	1046.0	1046.0
2.5°	1049.9	1047.0	1040.2	1046.0	1043.1
5°	1045.0	1042.1	1037.3	1044.0	1042.1
7.5°	1040.2	1036.3	1031.5	1039.2	1037.3
10°	1030.5	1027.6	1024.7	1031.5	1030.5
12.5°	1018.9	1017.9	1015.0	1022.7	1021.8
15°	1004.3	1004.3	1002.4	1012.1	1012.1
17.5°	988.8	987.9	988.8	999.5	998.5
20°	970.4	970.4	971.4	984.0	984.0
22.5°	948.2	949.1	952.0	967.5	966.6
25°	925.9	927.8	933.6	947.2	949.1
27.5°	898.8	903.6	910.4	926.9	928.8
30°	873.6	876.5	887.1	902.6	906.5
32.5°	843.6	849.4	861.0	878.4	883.3
35°	811.6	819.4	832.9	854.2	859.1
37.5°	779.6	786.4	804.8	827.1	835.8
40°	743.8	755.4	774.8	800.0	809.7
42.5°	708.9	720.6	746.7	772.9	781.6
45°	672.1	684.7	712.8	744.8	755.4
47.5°	631.5	646.0	681.8	715.7	727.3
50°	589.8	608.2	647.9	685.7	699.3
52.5°	546.2	569.5	615.0	654.7	667.3
55°	503.6	528.8	581.1	621.8	637.3
57.5°	460.0	487.2	546.2	592.7	601.4
60°	412.6	445.5	510.4	551.1	562.7
62.5°	366.1	403.9	473.6	512.3	522.0
65°	321.5	362.2	435.8	471.7	478.4
67.5°	273.1	321.5	394.2	427.1	429.0
70°	226.6	282.8	353.5	369.0	356.4
72.5°	181.1	241.2	306.0	293.5	282.8
75°	141.4	202.4	248.9	223.7	217.9
77.5°	104.6	165.6	178.2	164.6	154.0
80°	74.6	130.7	120.1	102.7	97.8
82.5°	51.3	82.3	65.9	51.3	44.6
85°	29.1	36.8	23.2	14.5	11.6
87.5°	12.6	8.7	4.8	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)