

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: P307222

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CA125-W2A-U-6500K**

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: P307222
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-L82765-HRP-CA125-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 6500K 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: 3283.0 lumens
Efficiency: N/A
Efficacy: 82.1 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

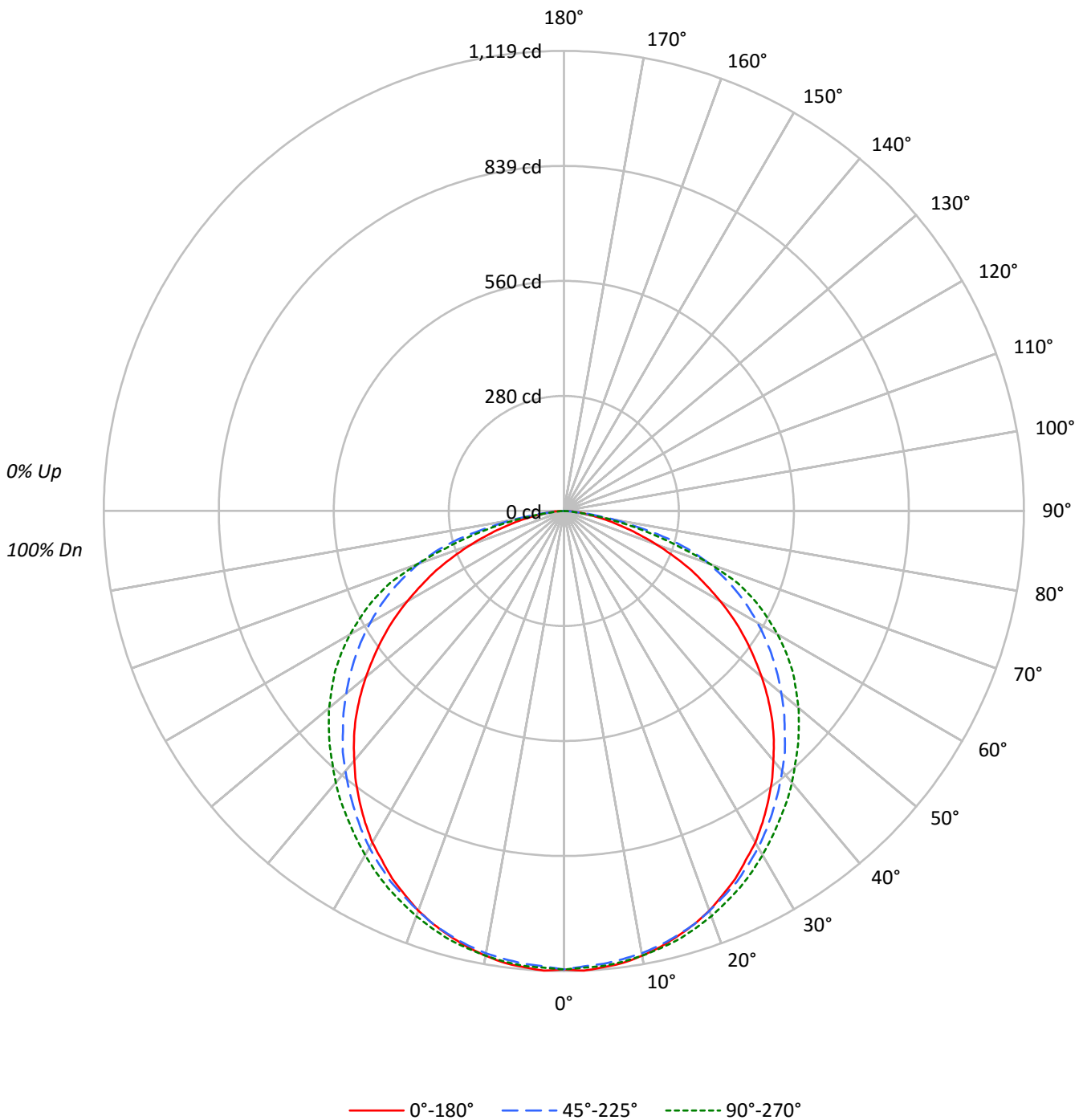
Input Watts (W): 40
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3000	3000	3000
5°	3009	2987	3001
10°	3001	2984	3001
15°	2982	2977	3005
20°	2962	2965	3004
25°	2930	2955	3004
30°	2893	2938	3003
35°	2842	2916	3008
40°	2785	2901	3032
45°	2726	2892	3064
50°	2632	2891	3120
55°	2518	2906	3187
60°	2367	2928	3228
65°	2182	2958	3247
70°	1901	2965	2989
75°	1567	2758	2415
80°	1232	1984	1616
85°	957	766	383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.6	3.2
10°-20°	302.9	9.2
20°-30°	460.0	14.0
30°-40°	557.3	17.0
40°-50°	587.3	17.9
50°-60°	548.3	16.7
60°-70°	438.1	13.3
70°-80°	241.1	7.3
80°-90°	42.6	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°	868.4	26.5
0°-40°	1425.7	43.4
0°-60°	2561.2	78.0
0°-90°	3283.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3283.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1115	1115	1115	1115	1115	
5°	1114	1111	1106	1113	1111	106
15°	1070	1070	1068	1079	1079	302
25°	987	989	995	1010	1012	454
35°	865	873	888	910	916	541
45°	716	730	760	794	805	551
55°	537	564	619	663	679	479
65°	343	386	465	503	510	337
75°	151	216	265	238	232	162
85°	31	39	25	16	12	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1114.9	1114.9	1114.9	1114.9	1114.9
2.5°	1119.1	1116.0	1108.7	1114.9	1111.8
5°	1113.9	1110.8	1105.6	1112.9	1110.8
7.5°	1108.7	1104.6	1099.4	1107.7	1105.6
10°	1098.4	1095.3	1092.2	1099.4	1098.4
12.5°	1086.0	1085.0	1081.9	1090.1	1089.1
15°	1070.5	1070.5	1068.5	1078.8	1078.8
17.5°	1054.0	1053.0	1054.0	1065.4	1064.3
20°	1034.4	1034.4	1035.4	1048.9	1048.9
22.5°	1010.7	1011.7	1014.8	1031.3	1030.3
25°	986.9	989.0	995.2	1009.6	1011.7
27.5°	958.0	963.2	970.4	987.9	990.0
30°	931.2	934.3	945.6	962.1	966.3
32.5°	899.2	905.4	917.7	936.3	941.5
35°	865.1	873.4	887.8	910.5	915.7
37.5°	831.0	838.3	857.9	881.6	890.9
40°	792.8	805.2	825.9	852.7	863.0
42.5°	755.7	768.1	795.9	823.8	833.1
45°	716.4	729.9	759.8	793.9	805.2
47.5°	673.1	688.6	726.8	762.9	775.3
50°	628.7	648.3	690.6	730.9	745.3
52.5°	582.2	607.0	655.5	697.9	711.3
55°	536.8	563.7	619.4	662.8	679.3
57.5°	490.4	519.3	582.2	631.8	641.1
60°	439.8	474.9	544.0	587.4	599.8
62.5°	390.2	430.5	504.8	546.1	556.4
65°	342.7	386.1	464.6	502.7	510.0
67.5°	291.1	342.7	420.2	455.3	457.3
70°	241.6	301.4	376.8	393.3	379.9
72.5°	193.0	257.1	326.2	312.8	301.4
75°	150.7	215.8	265.3	238.5	232.3
77.5°	111.5	176.5	189.9	175.5	164.1
80°	79.5	139.4	128.0	109.4	104.3
82.5°	54.7	87.7	70.2	54.7	47.5
85°	31.0	39.2	24.8	15.5	12.4
87.5°	13.4	9.3	5.2	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)