

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: P307221

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CA125-W2A-U-5700K**

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: P307221
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-5700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 5700K 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: 3275.0 lumens
Efficiency: N/A
Efficacy: 83.1 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

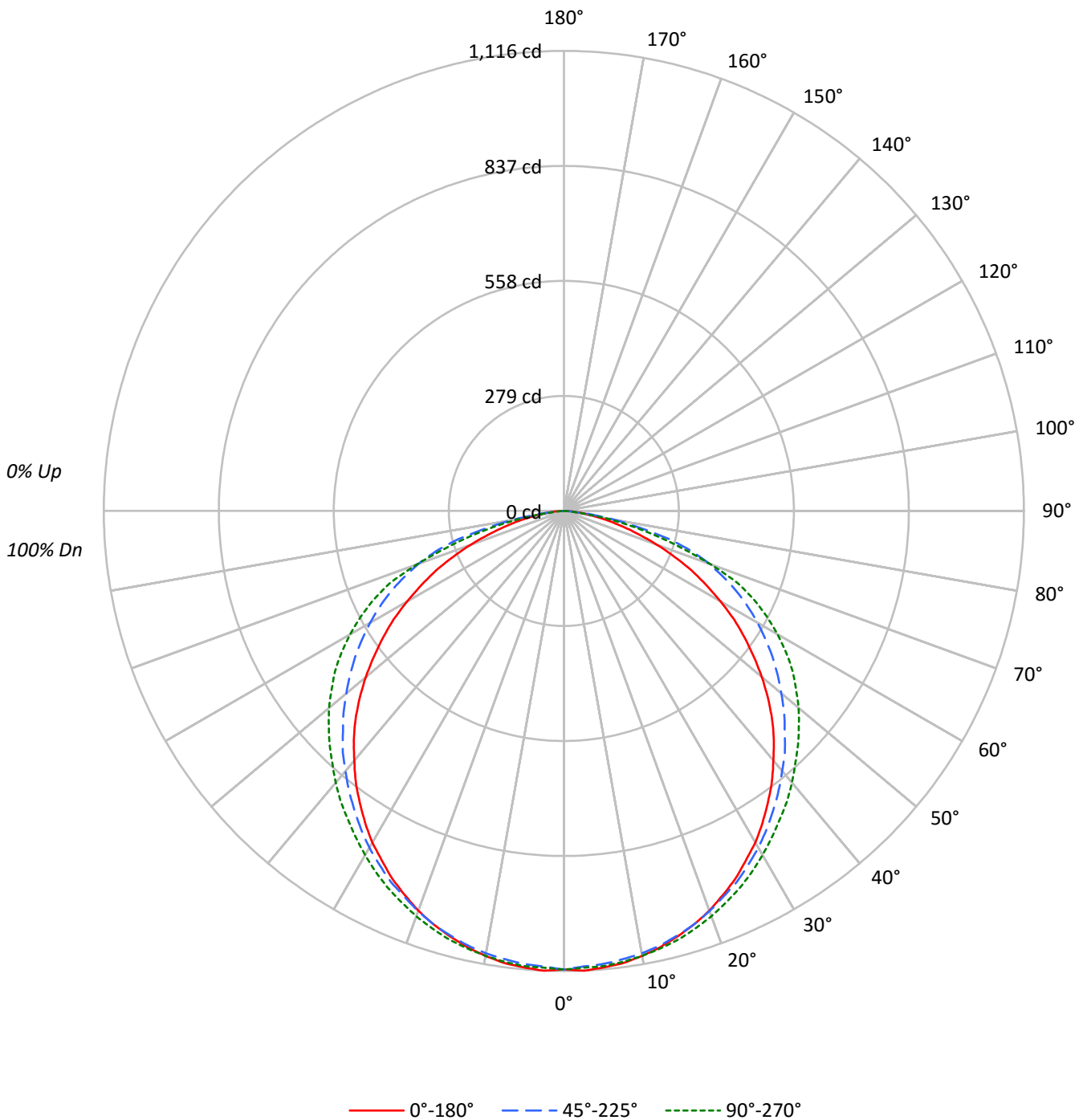
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2993	2993	2993
5°	3002	2979	2993
10°	2994	2977	2994
15°	2975	2969	2998
20°	2955	2958	2996
25°	2923	2947	2996
30°	2886	2931	2995
35°	2835	2909	3001
40°	2778	2894	3024
45°	2720	2884	3057
50°	2626	2884	3113
55°	2512	2899	3179
60°	2361	2921	3220
65°	2177	2951	3239
70°	1896	2958	2982
75°	1564	2752	2409
80°	1229	1979	1612
85°	954	763	383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.3	3.2
10°-20°	302.1	9.2
20°-30°	458.8	14.0
30°-40°	555.9	17.0
40°-50°	585.8	17.9
50°-60°	546.9	16.7
60°-70°	437.1	13.3
70°-80°	240.5	7.3
80°-90°	42.5	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°	866.3	26.5
0°-40°	1422.2	43.4
0°-60°	2555.0	78.0
0°-90°	3275.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3275.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1111	1108	1103	1110	1108	106
15°	1068	1068	1066	1076	1076	301
25°	984	987	993	1007	1009	453
35°	863	871	886	908	914	540
45°	715	728	758	792	803	550
55°	536	562	618	661	678	478
65°	342	385	463	502	509	337
75°	150	215	265	238	232	162
85°	31	39	25	15	12	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1112.2	1112.2	1112.2	1112.2	1112.2
2.5°	1116.3	1113.2	1106.0	1112.2	1109.1
5°	1111.2	1108.1	1102.9	1110.1	1108.1
7.5°	1106.0	1101.9	1096.8	1105.0	1102.9
10°	1095.7	1092.6	1089.6	1096.8	1095.7
12.5°	1083.4	1082.3	1079.3	1087.5	1086.5
15°	1067.9	1067.9	1065.9	1076.2	1076.2
17.5°	1051.4	1050.4	1051.4	1062.8	1061.7
20°	1031.9	1031.9	1032.9	1046.3	1046.3
22.5°	1008.2	1009.2	1012.3	1028.8	1027.8
25°	984.5	986.6	992.7	1007.2	1009.2
27.5°	955.7	960.8	968.0	985.5	987.6
30°	928.9	932.0	943.3	959.8	963.9
32.5°	897.0	903.2	915.5	934.0	939.2
35°	863.0	871.2	885.6	908.3	913.5
37.5°	829.0	836.2	855.8	879.5	888.7
40°	790.9	803.3	823.9	850.6	860.9
42.5°	753.8	766.2	794.0	821.8	831.1
45°	714.7	728.1	757.9	791.9	803.3
47.5°	671.4	686.9	725.0	761.0	773.4
50°	627.2	646.7	689.0	729.1	743.5
52.5°	580.8	605.5	653.9	696.2	709.5
55°	535.5	562.3	617.9	661.1	677.6
57.5°	489.2	518.0	580.8	630.3	639.5
60°	438.7	473.7	542.7	586.0	598.3
62.5°	389.3	429.4	503.6	544.8	555.1
65°	341.9	385.2	463.4	501.5	508.7
67.5°	290.4	341.9	419.1	454.2	456.2
70°	241.0	300.7	375.9	392.4	379.0
72.5°	192.6	256.4	325.4	312.0	300.7
75°	150.4	215.2	264.7	237.9	231.7
77.5°	111.2	176.1	189.5	175.1	163.7
80°	79.3	139.0	127.7	109.2	104.0
82.5°	54.6	87.5	70.0	54.6	47.4
85°	30.9	39.1	24.7	15.4	12.4
87.5°	13.4	9.3	5.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)