

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: P307231

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CP125-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: P307231
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-CP125-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
POLYCARB 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: 3219.0 lumens
Efficiency: N/A
Efficacy: 80.5 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

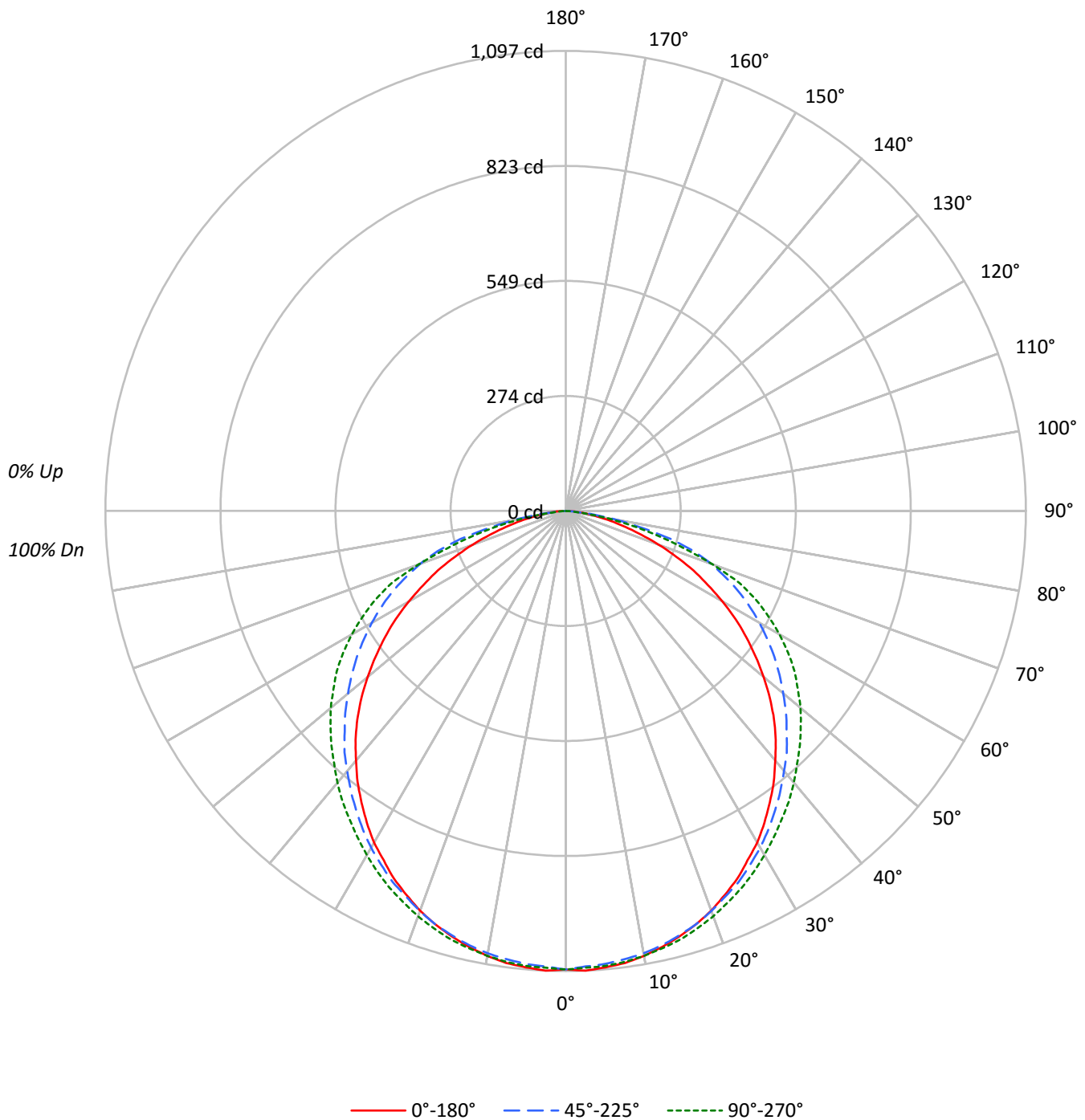
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2942	2942	2942
5°	2950	2928	2942
10°	2943	2926	2943
15°	2924	2919	2947
20°	2904	2907	2945
25°	2873	2897	2945
30°	2837	2881	2944
35°	2786	2860	2949
40°	2731	2845	2973
45°	2673	2835	3005
50°	2581	2835	3059
55°	2470	2849	3125
60°	2321	2871	3165
65°	2140	2900	3184
70°	1864	2907	2931
75°	1537	2704	2367
80°	1207	1945	1584
85°	939	750	374



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.5	3.2
10°-20°	297.0	9.2
20°-30°	451.0	14.0
30°-40°	546.4	17.0
40°-50°	575.8	17.9
50°-60°	537.6	16.7
60°-70°	429.6	13.3
70°-80°	236.4	7.3
80°-90°	41.7	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°	851.5	26.5
0°-40°	1397.9	43.4
0°-60°	2511.3	78.0
0°-90°	3219.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3219.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1093	1093	1093	1093	1093	
5°	1092	1089	1084	1091	1089	104
15°	1050	1050	1048	1058	1058	296
25°	968	970	976	990	992	445
35°	848	856	870	893	898	531
45°	702	716	745	778	790	540
55°	526	553	607	650	666	470
65°	336	379	456	493	500	331
75°	148	212	260	234	228	159
85°	30	38	24	15	12	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1093.2	1093.2	1093.2	1093.2	1093.2
2.5°	1097.2	1094.2	1087.1	1093.2	1090.2
5°	1092.2	1089.1	1084.1	1091.2	1089.1
7.5°	1087.1	1083.1	1078.0	1086.1	1084.1
10°	1077.0	1074.0	1070.9	1078.0	1077.0
12.5°	1064.8	1063.8	1060.8	1068.9	1067.9
15°	1049.7	1049.7	1047.6	1057.8	1057.8
17.5°	1033.5	1032.5	1033.5	1044.6	1043.6
20°	1014.2	1014.2	1015.2	1028.4	1028.4
22.5°	991.0	992.0	995.0	1011.2	1010.2
25°	967.7	969.7	975.8	989.9	992.0
27.5°	939.3	944.4	951.5	968.7	970.7
30°	913.0	916.1	927.2	943.4	947.4
32.5°	881.6	887.7	899.9	918.1	923.1
35°	848.2	856.3	870.5	892.8	897.8
37.5°	814.8	821.9	841.1	864.4	873.5
40°	777.4	789.5	809.8	836.1	846.2
42.5°	740.9	753.1	780.4	807.7	816.9
45°	702.5	715.6	745.0	778.4	789.5
47.5°	660.0	675.1	712.6	748.0	760.2
50°	616.4	635.7	677.2	716.6	730.8
52.5°	570.9	595.2	642.8	684.3	697.4
55°	526.4	552.7	607.3	649.8	666.0
57.5°	480.8	509.1	570.9	619.5	628.6
60°	431.2	465.6	533.4	575.9	588.1
62.5°	382.6	422.1	495.0	535.5	545.6
65°	336.1	378.6	455.5	492.9	500.0
67.5°	285.4	336.1	412.0	446.4	448.4
70°	236.9	295.6	369.5	385.7	372.5
72.5°	189.3	252.0	319.9	306.7	295.6
75°	147.8	211.6	260.1	233.8	227.7
77.5°	109.3	173.1	186.2	172.1	160.9
80°	77.9	136.6	125.5	107.3	102.2
82.5°	53.6	86.0	68.8	53.6	46.6
85°	30.4	38.5	24.3	15.2	12.1
87.5°	13.2	9.1	5.1	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)