

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: P307226

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CP125-W2A-U-4000K**

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: P307226
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-4000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
POLYCARB SHEET
Light Source: (168) 4000K 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: 3074.0 lumens
Efficiency: N/A
Efficacy: 79.4 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

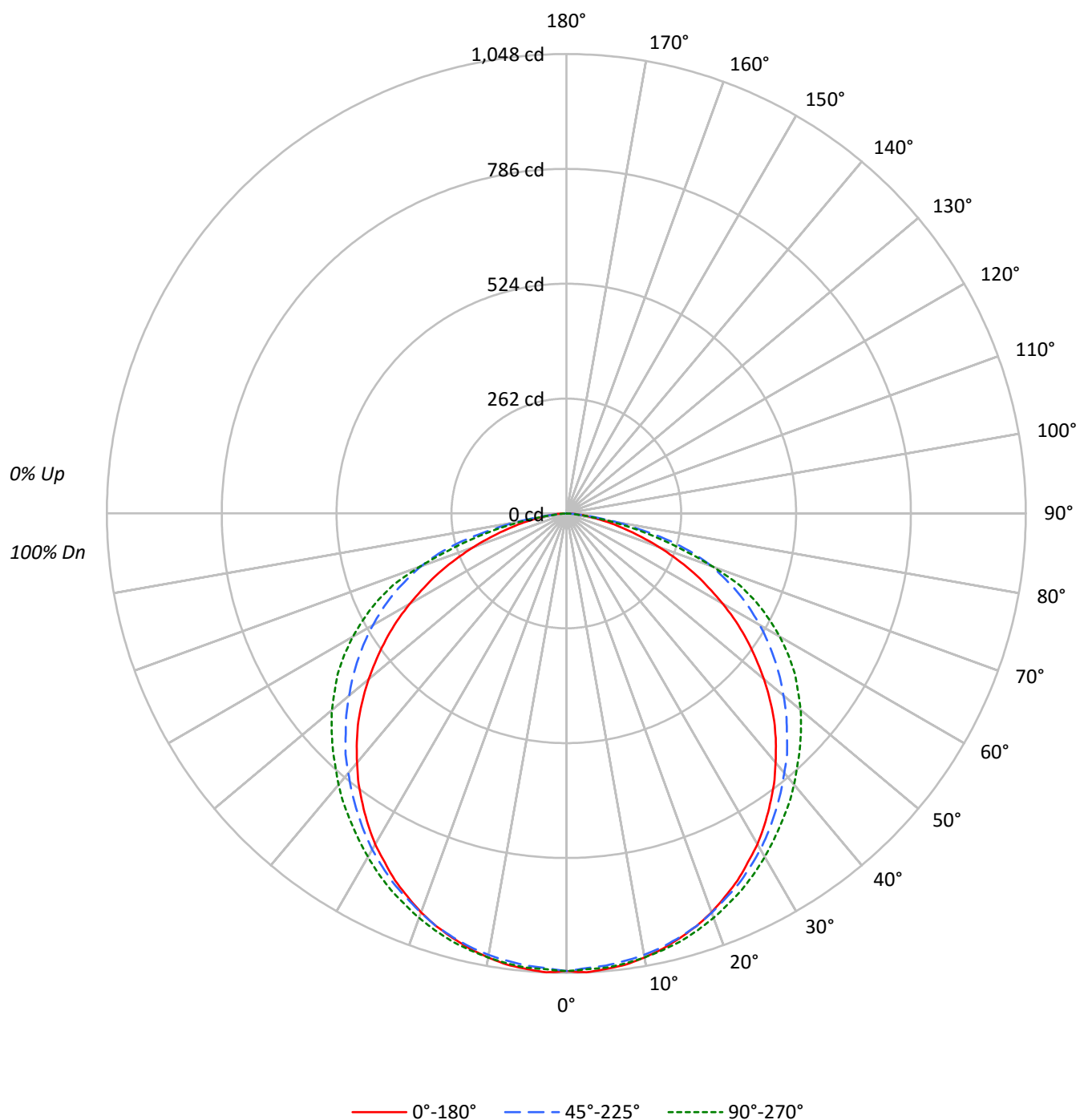
Input Watts (W): 38.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2809	2809	2809
5°	2817	2796	2810
10°	2810	2795	2810
15°	2793	2787	2814
20°	2773	2776	2812
25°	2744	2767	2813
30°	2709	2751	2811
35°	2661	2731	2817
40°	2608	2716	2839
45°	2553	2707	2869
50°	2465	2707	2922
55°	2358	2721	2984
60°	2216	2742	3023
65°	2043	2770	3040
70°	1780	2776	2799
75°	1467	2583	2261
80°	1153	1858	1512
85°	895	716	358



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.8	3.2
10°-20°	283.6	9.2
20°-30°	430.7	14.0
30°-40°	521.8	17.0
40°-50°	549.9	17.9
50°-60°	513.4	16.7
60°-70°	410.2	13.3
70°-80°	225.7	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°	813.1	26.5
0°-40°	1334.9	43.4
0°-60°	2398.2	78.0
0°-90°	3074.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3074.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1044	1044	1044	1044	1044	
5°	1043	1040	1035	1042	1040	99
15°	1002	1002	1000	1010	1010	283
25°	924	926	932	945	947	425
35°	810	818	831	853	857	507
45°	671	683	711	743	754	516
55°	503	528	580	621	636	449
65°	321	362	435	471	478	316
75°	141	202	248	223	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°	1043.9	1043.9	1043.9	1043.9	1043.9
2.5°	1047.8	1044.9	1038.1	1043.9	1041.0
5°	1043.0	1040.1	1035.2	1042.0	1040.1
7.5°	1038.1	1034.3	1029.4	1037.2	1035.2
10°	1028.5	1025.6	1022.7	1029.4	1028.5
12.5°	1016.9	1015.9	1013.0	1020.7	1019.8
15°	1002.4	1002.4	1000.4	1010.1	1010.1
17.5°	986.9	985.9	986.9	997.5	996.6
20°	968.5	968.5	969.5	982.1	982.1
22.5°	946.3	947.3	950.2	965.7	964.7
25°	924.1	926.0	931.8	945.4	947.3
27.5°	897.0	901.9	908.6	925.1	927.0
30°	871.9	874.8	885.4	900.9	904.8
32.5°	841.9	847.7	859.3	876.7	881.6
35°	810.0	817.8	831.3	852.6	857.4
37.5°	778.1	784.9	803.3	825.5	834.2
40°	742.4	754.0	773.3	798.4	808.1
42.5°	707.6	719.2	745.3	771.4	780.1
45°	670.8	683.4	711.4	743.3	754.0
47.5°	630.2	644.7	680.5	714.3	725.9
50°	588.7	607.0	646.7	684.4	697.9
52.5°	545.2	568.4	613.8	653.4	666.0
55°	502.6	527.8	580.0	620.6	636.0
57.5°	459.1	486.2	545.2	591.6	600.3
60°	411.8	444.6	509.4	550.0	561.6
62.5°	365.4	403.1	472.7	511.3	521.0
65°	320.9	361.5	435.0	470.7	477.5
67.5°	272.6	320.9	393.4	426.3	428.2
70°	226.2	282.3	352.8	368.3	355.7
72.5°	180.8	240.7	305.5	292.9	282.3
75°	141.1	202.0	248.4	223.3	217.5
77.5°	104.4	165.3	177.9	164.3	153.7
80°	74.4	130.5	119.9	102.5	97.6
82.5°	51.2	82.2	65.7	51.2	44.5
85°	29.0	36.7	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)