

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: P307245

Luminaire Tested: **14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-4500K**

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: P307245
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-CP250-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.250"
POLYCARB SHEET
Light Source: (168) 4500K 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: 2972.0 lumens
Efficiency: N/A
Efficacy: 76.2 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

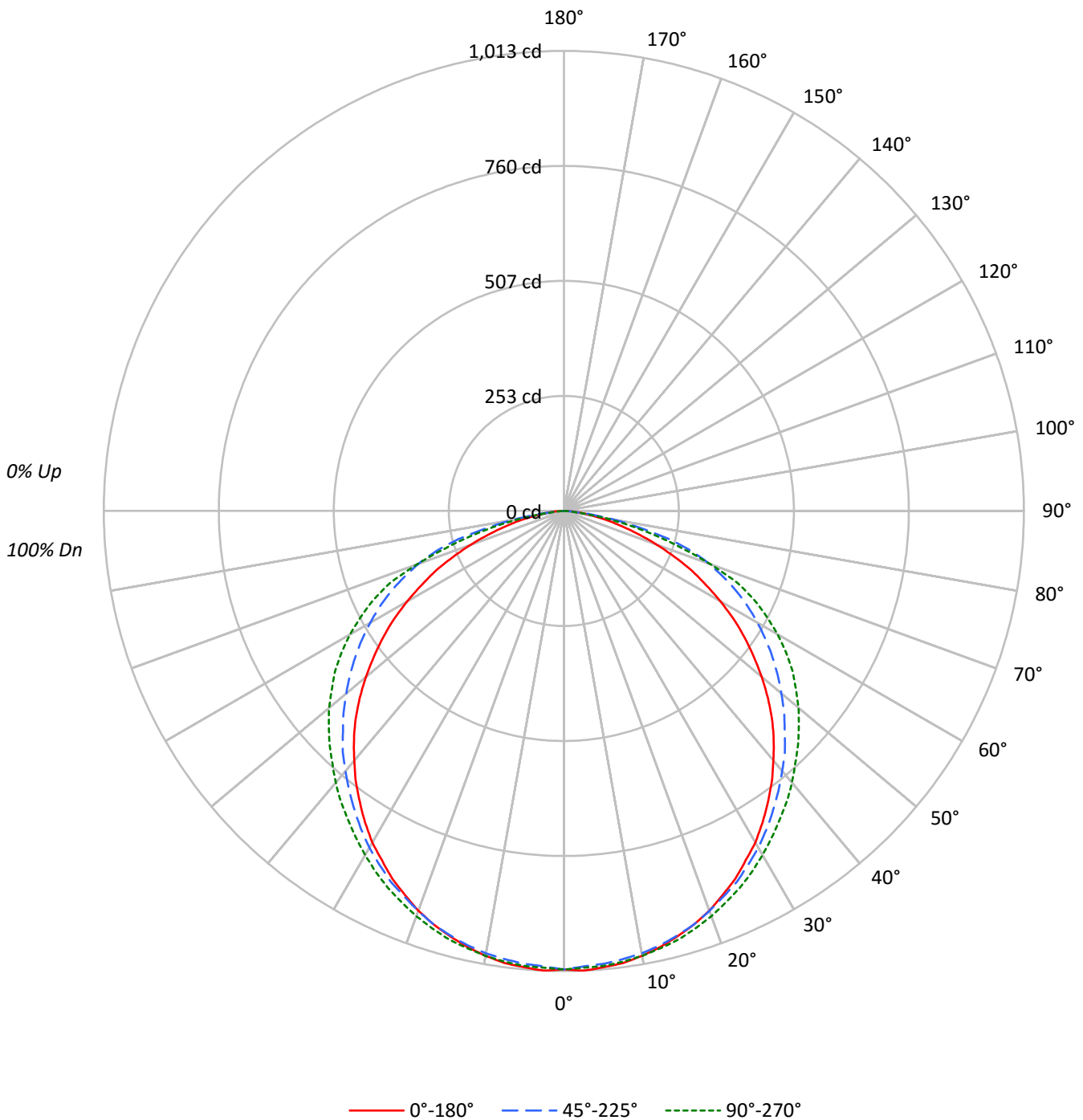
Input Watts (W): 39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307245

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P307245

CATALOG NUMBER: 14FC22-44-UNV-L82765-HRP-CP250-W2A-U-4500K

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°	2716	2716	2716
5°	2724	2704	2716
10°	2717	2702	2717
15°	2700	2695	2721
20°	2682	2684	2719
25°	2653	2675	2719
30°	2619	2660	2718
35°	2573	2640	2723
40°	2521	2626	2745
45°	2468	2618	2774
50°	2382	2617	2825
55°	2280	2631	2885
60°	2143	2651	2922
65°	1976	2677	2940
70°	1721	2684	2706
75°	1418	2497	2187
80°	1116	1796	1463
85°	865	692	346



TEST NUMBER: P307245

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-HRP-CP250-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.6	3.2
10°-20°	274.2	9.2
20°-30°	416.4	14.0
30°-40°	504.5	17.0
40°-50°	531.6	17.9
50°-60°	496.3	16.7
60°-70°	396.6	13.3
70°-80°	218.3	7.3
80°-90°	38.5	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°	786.1	26.5
0°-40°	1290.6	43.4
0°-60°	2318.6	78.0
0°-90°	2972.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2972.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1009	1009	1009	1009	1009	
5°	1008	1006	1001	1007	1006	96
15°	969	969	967	977	977	274
25°	893	895	901	914	916	411
35°	783	791	804	824	829	490
45°	649	661	688	719	729	499
55°	486	510	561	600	615	434
65°	310	350	420	455	462	305
75°	136	195	240	216	210	147
85°	28	36	22	14	11	34
90°	0	0	0	0	0	



TEST NUMBER: P307245

CATALOG NUMBER: 14FC22-44-UNV-L82765-HRP-CP250-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1009.3	1009.3	1009.3	1009.3	1009.3
2.5°	1013.0	1010.2	1003.7	1009.3	1006.5
5°	1008.4	1005.6	1000.9	1007.4	1005.6
7.5°	1003.7	1000.0	995.3	1002.8	1000.9
10°	994.4	991.5	988.7	995.3	994.4
12.5°	983.1	982.2	979.4	986.9	985.9
15°	969.1	969.1	967.3	976.6	976.6
17.5°	954.2	953.2	954.2	964.4	963.5
20°	936.4	936.4	937.3	949.5	949.5
22.5°	914.9	915.9	918.7	933.6	932.7
25°	893.4	895.3	900.9	914.0	915.9
27.5°	867.3	871.9	878.5	894.4	896.2
30°	843.0	845.8	856.0	871.0	874.7
32.5°	814.0	819.6	830.8	847.6	852.3
35°	783.1	790.6	803.7	824.3	828.9
37.5°	752.3	758.8	776.6	798.1	806.5
40°	717.7	728.9	747.6	771.9	781.3
42.5°	684.1	695.3	720.5	745.8	754.2
45°	648.6	660.7	687.8	718.7	728.9
47.5°	609.3	623.3	657.9	690.6	701.8
50°	569.1	586.9	625.2	661.7	674.7
52.5°	527.1	549.5	593.4	631.8	643.9
55°	486.0	510.3	560.7	600.0	614.9
57.5°	443.9	470.1	527.1	571.9	580.4
60°	398.1	429.9	492.5	531.8	543.0
62.5°	353.3	389.7	457.0	494.4	503.7
65°	310.3	349.5	420.5	455.1	461.7
67.5°	263.5	310.3	380.4	412.1	414.0
70°	218.7	272.9	341.1	356.1	343.9
72.5°	174.8	232.7	295.3	283.2	272.9
75°	136.4	195.3	240.2	215.9	210.3
77.5°	100.9	159.8	172.0	158.9	148.6
80°	72.0	126.2	115.9	99.1	94.4
82.5°	49.5	79.4	63.5	49.5	43.0
85°	28.0	35.5	22.4	14.0	11.2
87.5°	12.1	8.4	4.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)