

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: P308298

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-HRP-CA125-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: P308298
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-44HE-UNV-L82765-HRP-CA125-W2A-U-4500K
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 3000K 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: 3129.0 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

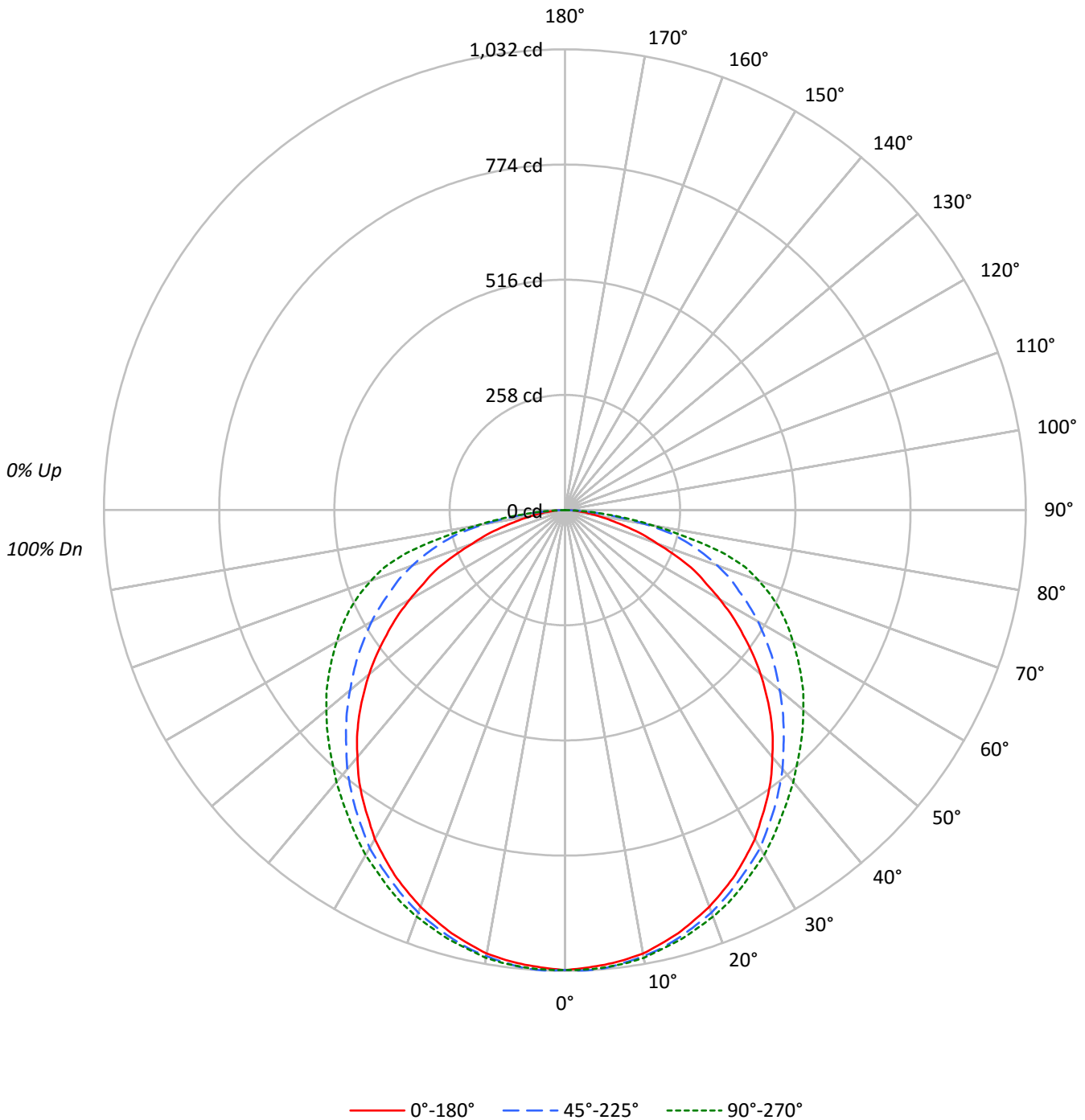
Input Watts (W): 37.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2773	2773	2773
5°	2762	2783	2778
10°	2756	2772	2783
15°	2733	2761	2777
20°	2708	2747	2775
25°	2678	2725	2772
30°	2643	2717	2772
35°	2594	2685	2769
40°	2538	2663	2794
45°	2479	2637	2839
50°	2396	2628	2917
55°	2287	2648	3028
60°	2157	2688	3176
65°	2036	2740	3393
70°	1740	2858	3634
75°	1457	2976	3776
80°	1193	2875	3150
85°	1037	2133	2316



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	3.1
10°-20°	279.3	8.9
20°-30°	423.3	13.5
30°-40°	511.2	16.3
40°-50°	537.1	17.2
50°-60°	505.4	16.2
60°-70°	421.4	13.5
70°-80°	279.2	8.9
80°-90°	74.4	2.4
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°	800.3	25.6
0°-40°	1311.5	41.9
0°-60°	2354.0	75.2
0°-90°	3129.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3129.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1030	1030	1030	1030	1030	
5°	1022	1024	1030	1030	1028	97
15°	981	985	991	995	997	277
25°	902	908	918	930	934	415
35°	790	797	817	835	843	494
45°	651	661	693	728	746	502
55°	488	509	564	622	645	436
65°	320	347	430	501	533	311
75°	140	195	286	345	363	152
85°	34	51	69	75	75	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1030.3	1030.3	1030.3	1030.3	1030.3
2.5°	1026.4	1028.4	1032.3	1032.3	1030.3
5°	1022.4	1024.4	1030.3	1030.3	1028.4
7.5°	1016.5	1018.5	1022.4	1026.4	1024.4
10°	1008.6	1010.6	1014.6	1018.5	1018.5
12.5°	994.8	996.8	1004.7	1006.7	1006.7
15°	981.0	984.9	990.9	994.8	996.8
17.5°	963.2	967.2	975.1	983.0	983.0
20°	945.5	949.4	959.3	967.2	969.2
22.5°	923.8	929.7	939.5	949.4	953.4
25°	902.0	908.0	917.8	929.7	933.6
27.5°	876.4	882.3	896.1	909.9	911.9
30°	850.7	856.6	874.4	886.3	892.2
32.5°	819.1	827.0	844.8	862.6	868.5
35°	789.5	797.4	817.2	834.9	842.8
37.5°	758.0	765.8	787.6	809.3	819.1
40°	722.4	732.3	758.0	781.6	795.5
42.5°	688.9	698.7	724.4	756.0	769.8
45°	651.4	661.2	692.8	728.3	746.1
47.5°	611.9	623.7	661.2	704.7	722.4
50°	572.4	586.2	627.7	677.0	696.8
52.5°	531.0	548.7	596.1	649.4	673.1
55°	487.5	509.3	564.5	621.8	645.4
57.5°	446.1	465.8	531.0	592.2	617.8
60°	400.7	426.3	499.4	562.5	590.2
62.5°	357.3	384.9	465.8	532.9	562.5
65°	319.8	347.4	430.3	501.4	532.9
67.5°	270.4	307.9	400.7	467.8	499.4
70°	221.1	272.4	363.2	432.3	461.9
72.5°	183.6	232.9	325.7	394.8	422.4
75°	140.1	195.4	286.2	345.4	363.2
77.5°	104.6	161.9	244.8	274.4	276.3
80°	77.0	124.4	185.5	195.4	203.3
82.5°	53.3	86.8	120.4	132.2	136.2
85°	33.6	51.3	69.1	75.0	75.0
87.5°	17.8	19.7	23.7	23.7	23.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)