

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: P308302

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-HRP-CA125-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: P308302
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-6500K
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: 3220.0 lumens
Efficiency: N/A
Efficacy: 82.8 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

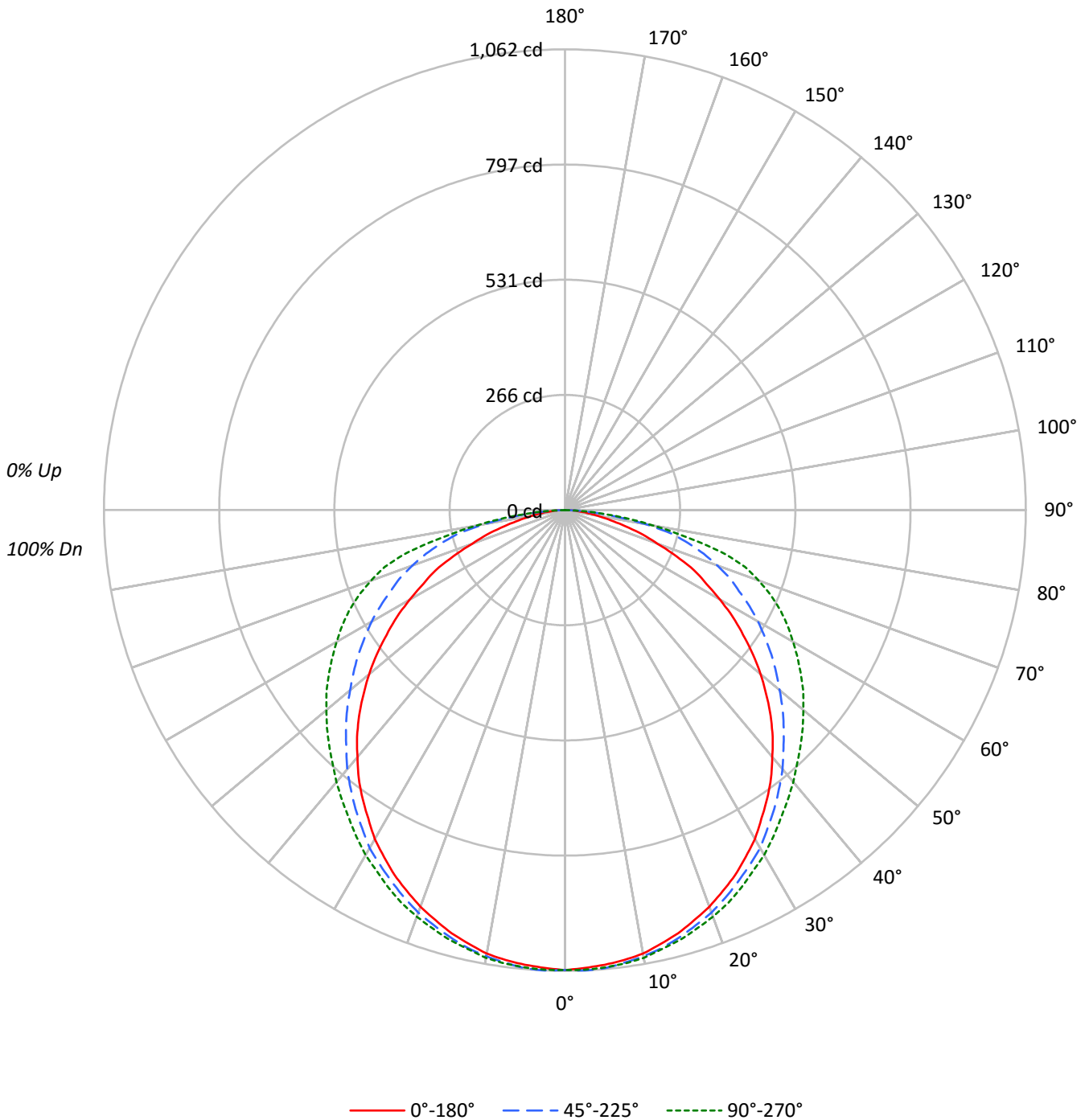
Input Watts (W): 38.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	2853	2853	2853
5°	2842	2864	2859
10°	2836	2853	2864
15°	2812	2841	2858
20°	2786	2827	2856
25°	2756	2804	2853
30°	2720	2796	2853
35°	2669	2762	2849
40°	2611	2740	2876
45°	2551	2713	2922
50°	2466	2704	3002
55°	2354	2725	3116
60°	2219	2766	3268
65°	2096	2819	3492
70°	1790	2940	3740
75°	1499	3062	3885
80°	1227	2958	3242
85°	1065	2195	2384



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	3.1
10°-20°	287.5	8.9
20°-30°	435.6	13.5
30°-40°	526.0	16.3
40°-50°	552.8	17.2
50°-60°	520.1	16.2
60°-70°	433.6	13.5
70°-80°	287.3	8.9
80°-90°	76.6	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°	823.6	25.6
0°-40°	1349.6	41.9
0°-60°	2422.5	75.2
0°-90°	3220.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3220.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1052	1054	1060	1060	1058	100
15°	1010	1014	1020	1024	1026	285
25°	928	934	944	957	961	427
35°	812	821	841	859	867	508
45°	670	680	713	750	768	516
55°	502	524	581	640	664	449
65°	329	358	443	516	548	320
75°	144	201	294	356	374	157
85°	34	53	71	77	77	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1060.3	1060.3	1060.3	1060.3	1060.3
2.5°	1056.2	1058.3	1062.3	1062.3	1060.3
5°	1052.2	1054.2	1060.3	1060.3	1058.3
7.5°	1046.1	1048.1	1052.2	1056.2	1054.2
10°	1038.0	1040.0	1044.1	1048.1	1048.1
12.5°	1023.7	1025.8	1033.9	1035.9	1035.9
15°	1009.5	1013.6	1019.7	1023.7	1025.8
17.5°	991.2	995.3	1003.4	1011.6	1011.6
20°	973.0	977.0	987.2	995.3	997.3
22.5°	950.6	956.7	966.9	977.0	981.1
25°	928.3	934.4	944.5	956.7	960.8
27.5°	901.9	908.0	922.2	936.4	938.4
30°	875.5	881.6	899.8	912.0	918.1
32.5°	843.0	851.1	869.4	887.7	893.7
35°	812.5	820.6	840.9	859.2	867.3
37.5°	780.0	788.1	810.5	832.8	843.0
40°	743.4	753.6	780.0	804.4	818.6
42.5°	708.9	719.1	745.5	778.0	792.2
45°	670.3	680.5	713.0	749.5	767.8
47.5°	629.7	641.9	680.5	725.2	743.4
50°	589.1	603.3	645.9	696.7	717.0
52.5°	546.4	564.7	613.4	668.3	692.7
55°	501.7	524.1	580.9	639.8	664.2
57.5°	459.1	479.4	546.4	609.4	635.8
60°	412.3	438.7	513.9	578.9	607.3
62.5°	367.7	396.1	479.4	548.4	578.9
65°	329.1	357.5	442.8	515.9	548.4
67.5°	278.3	316.9	412.3	481.4	513.9
70°	227.5	280.3	373.7	444.8	475.3
72.5°	188.9	239.7	335.2	406.2	434.7
75°	144.2	201.1	294.5	355.5	373.7
77.5°	107.7	166.6	251.9	282.3	284.4
80°	79.2	128.0	190.9	201.1	209.2
82.5°	54.8	89.4	123.9	136.1	140.2
85°	34.5	52.8	71.1	77.2	77.2
87.5°	18.3	20.3	24.4	24.4	24.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)