

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: P308300

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-HRP-CA125-W2A-U-5500K**

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: P308300
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-5500K
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: 3203.0 lumens
Efficiency: N/A
Efficacy: 83.8 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

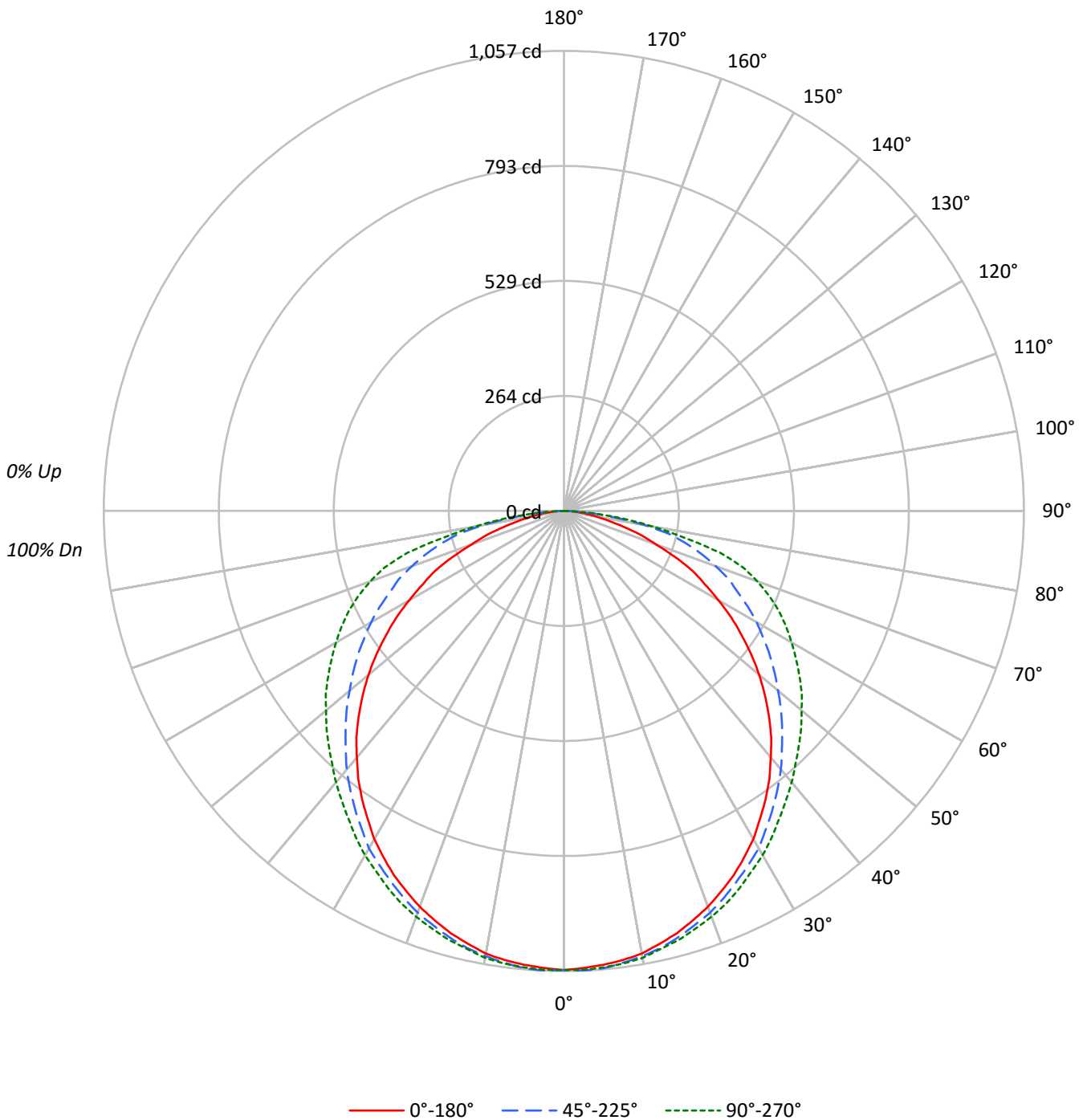
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2838	2838	2838
5°	2827	2849	2844
10°	2821	2838	2849
15°	2798	2826	2843
20°	2771	2812	2841
25°	2742	2790	2838
30°	2706	2781	2838
35°	2655	2748	2834
40°	2598	2726	2860
45°	2538	2699	2907
50°	2453	2690	2986
55°	2342	2711	3100
60°	2208	2751	3251
65°	2084	2805	3473
70°	1781	2925	3720
75°	1492	3046	3866
80°	1221	2943	3225
85°	1059	2183	2371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.0	3.1
10°-20°	285.9	8.9
20°-30°	433.3	13.5
30°-40°	523.3	16.3
40°-50°	549.8	17.2
50°-60°	517.3	16.2
60°-70°	431.3	13.5
70°-80°	285.8	8.9
80°-90°	76.2	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°	819.2	25.6
0°-40°	1342.5	41.9
0°-60°	2409.7	75.2
0°-90°	3203.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3203.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1055	1055	1055	1055	1055	
5°	1047	1049	1055	1055	1053	99
15°	1004	1008	1014	1018	1020	283
25°	923	929	940	952	956	425
35°	808	816	836	855	863	505
45°	667	677	709	746	764	514
55°	499	521	578	636	661	446
65°	327	356	440	513	546	318
75°	144	200	293	354	372	156
85°	34	52	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°	1054.7	1054.7	1054.7	1054.7	1054.7
2.5°	1050.7	1052.7	1056.7	1056.7	1054.7
5°	1046.6	1048.7	1054.7	1054.7	1052.7
7.5°	1040.6	1042.6	1046.6	1050.7	1048.7
10°	1032.5	1034.5	1038.5	1042.6	1042.6
12.5°	1018.3	1020.4	1028.4	1030.5	1030.5
15°	1004.2	1008.2	1014.3	1018.3	1020.4
17.5°	986.0	990.1	998.1	1006.2	1006.2
20°	967.8	971.9	982.0	990.1	992.1
22.5°	945.6	951.7	961.8	971.9	975.9
25°	923.4	929.4	939.5	951.7	955.7
27.5°	897.1	903.2	917.3	931.5	933.5
30°	870.8	876.9	895.1	907.2	913.3
32.5°	838.5	846.6	864.8	883.0	889.0
35°	808.2	816.3	836.5	854.7	862.8
37.5°	775.9	784.0	806.2	828.4	838.5
40°	739.5	749.6	775.9	800.1	814.3
42.5°	705.2	715.3	741.5	773.9	788.0
45°	666.8	676.9	709.2	745.6	763.8
47.5°	626.4	638.5	676.9	721.3	739.5
50°	586.0	600.1	642.5	693.0	713.2
52.5°	543.5	561.7	610.2	664.8	689.0
55°	499.1	521.3	577.9	636.5	660.7
57.5°	456.6	476.8	543.5	606.2	632.4
60°	410.2	436.4	511.2	575.8	604.1
62.5°	365.7	394.0	476.8	545.5	575.8
65°	327.3	355.6	440.5	513.2	545.5
67.5°	276.8	315.2	410.2	478.9	511.2
70°	226.3	278.8	371.8	442.5	472.8
72.5°	187.9	238.4	333.4	404.1	432.4
75°	143.5	200.0	293.0	353.6	371.8
77.5°	107.1	165.7	250.5	280.9	282.9
80°	78.8	127.3	189.9	200.0	208.1
82.5°	54.6	88.9	123.3	135.4	139.4
85°	34.3	52.5	70.7	76.8	76.8
87.5°	18.2	20.2	24.2	24.2	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)