

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: P312574

Luminaire Tested: **22FCZ2-44HE-UNV-L83050-HRP-CA125-W2A-U-5000K**

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: P312574
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-L83050-HRP-CA125-W2A-U-5000K
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 5000K 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: 3384.0 lumens
Efficiency: N/A
Efficacy: 86.8 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

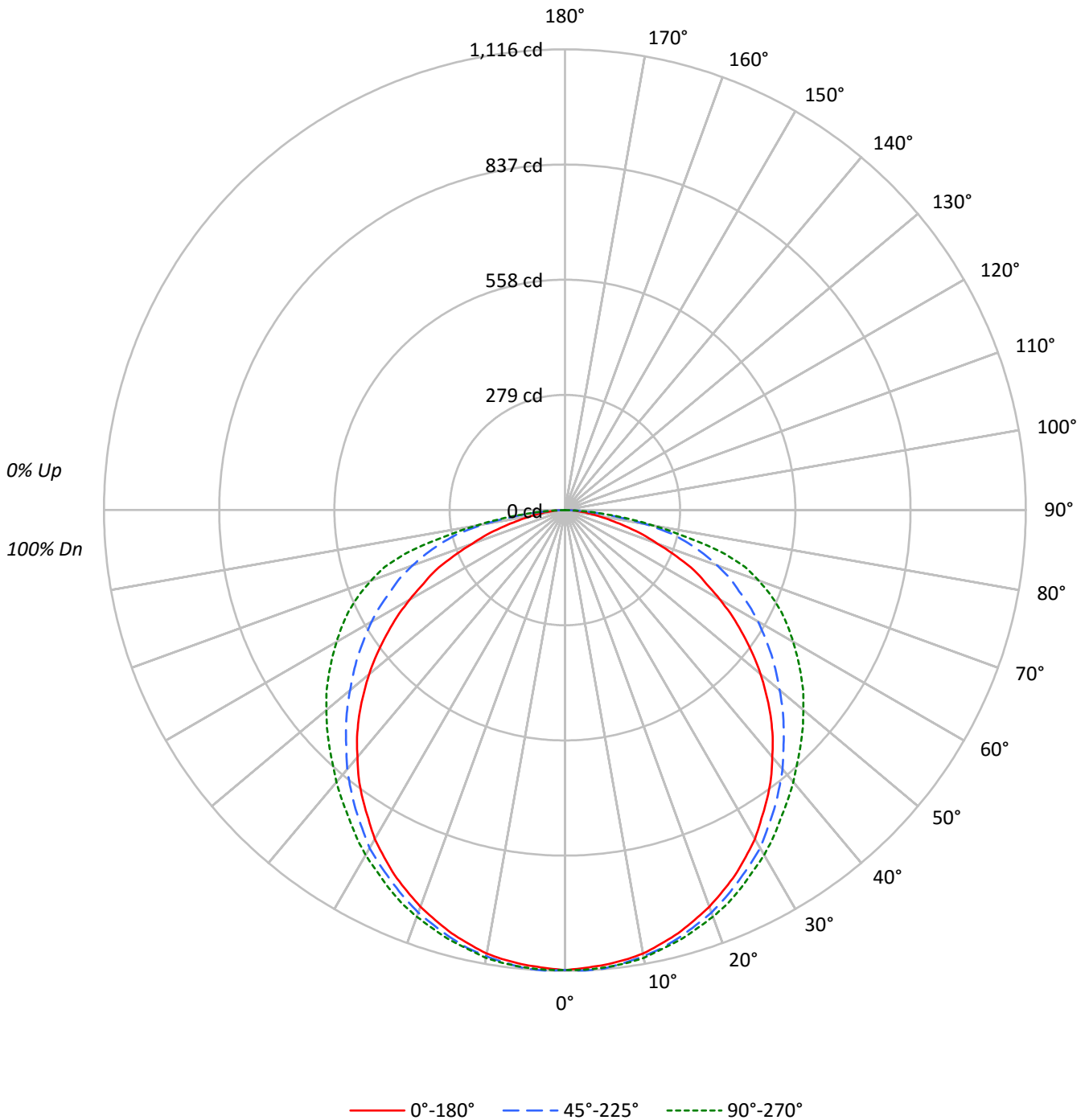
Input Watts (W): 39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2999	2999	2999
5°	2987	3010	3004
10°	2981	2998	3010
15°	2956	2985	3003
20°	2928	2971	3001
25°	2897	2947	2998
30°	2859	2939	2998
35°	2805	2903	2994
40°	2745	2879	3022
45°	2681	2852	3071
50°	2592	2842	3154
55°	2474	2864	3275
60°	2332	2907	3435
65°	2202	2963	3670
70°	1881	3091	3930
75°	1576	3218	4084
80°	1291	3110	3408
85°	1121	2306	2504



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.6	3.1
10°-20°	302.1	8.9
20°-30°	457.8	13.5
30°-40°	552.8	16.3
40°-50°	580.9	17.2
50°-60°	546.6	16.2
60°-70°	455.7	13.5
70°-80°	302.0	8.9
80°-90°	80.5	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°	865.5	25.6
0°-40°	1418.4	41.9
0°-60°	2545.8	75.2
0°-90°	3384.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3384.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1114	1114	1114	1114	1114	
5°	1106	1108	1114	1114	1112	105
15°	1061	1065	1072	1076	1078	299
25°	976	982	993	1005	1010	449
35°	854	862	884	903	912	534
45°	704	715	749	788	807	543
55°	527	551	610	672	698	472
65°	346	376	465	542	576	337
75°	152	211	310	374	393	165
85°	36	56	75	81	81	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1114.3	1114.3	1114.3	1114.3	1114.3
2.5°	1110.0	1112.2	1116.4	1116.4	1114.3
5°	1105.8	1107.9	1114.3	1114.3	1112.2
7.5°	1099.4	1101.5	1105.8	1110.0	1107.9
10°	1090.8	1093.0	1097.2	1101.5	1101.5
12.5°	1075.9	1078.0	1086.6	1088.7	1088.7
15°	1060.9	1065.2	1071.6	1075.9	1078.0
17.5°	1041.7	1046.0	1054.5	1063.1	1063.1
20°	1022.5	1026.8	1037.5	1046.0	1048.1
22.5°	999.0	1005.4	1016.1	1026.8	1031.1
25°	975.6	982.0	992.6	1005.4	1009.7
27.5°	947.8	954.2	969.2	984.1	986.2
30°	920.1	926.5	945.7	958.5	964.9
32.5°	885.9	894.4	913.7	932.9	939.3
35°	853.9	862.4	883.8	903.0	911.5
37.5°	819.7	828.3	851.7	875.2	885.9
40°	781.3	792.0	819.7	845.3	860.3
42.5°	745.0	755.7	783.4	817.6	832.5
45°	704.5	715.1	749.3	787.7	806.9
47.5°	661.8	674.6	715.1	762.1	781.3
50°	619.1	634.0	678.8	732.2	753.5
52.5°	574.2	593.4	644.7	702.3	727.9
55°	527.3	550.8	610.5	672.4	698.0
57.5°	482.4	503.8	574.2	640.4	668.2
60°	433.3	461.1	540.1	608.4	638.3
62.5°	386.4	416.3	503.8	576.4	608.4
65°	345.8	375.7	465.4	542.2	576.4
67.5°	292.5	333.0	433.3	505.9	540.1
70°	239.1	294.6	392.8	467.5	499.5
72.5°	198.5	251.9	352.2	426.9	456.8
75°	151.6	211.3	309.5	373.6	392.8
77.5°	113.1	175.0	264.7	296.7	298.9
80°	83.3	134.5	200.7	211.3	219.9
82.5°	57.6	93.9	130.2	143.0	147.3
85°	36.3	55.5	74.7	81.1	81.1
87.5°	19.2	21.3	25.6	25.6	25.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)