

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: P308790

Luminaire Tested: **22FCZ2-39HE-UNV-L82765-CA125-W2A-U-3000K**

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: P308790  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-39HE-UNV-L82765-CA125-W2A-U-3000K  
Description: 2'X2' TROFFER LED MODULE, RIBBED 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**

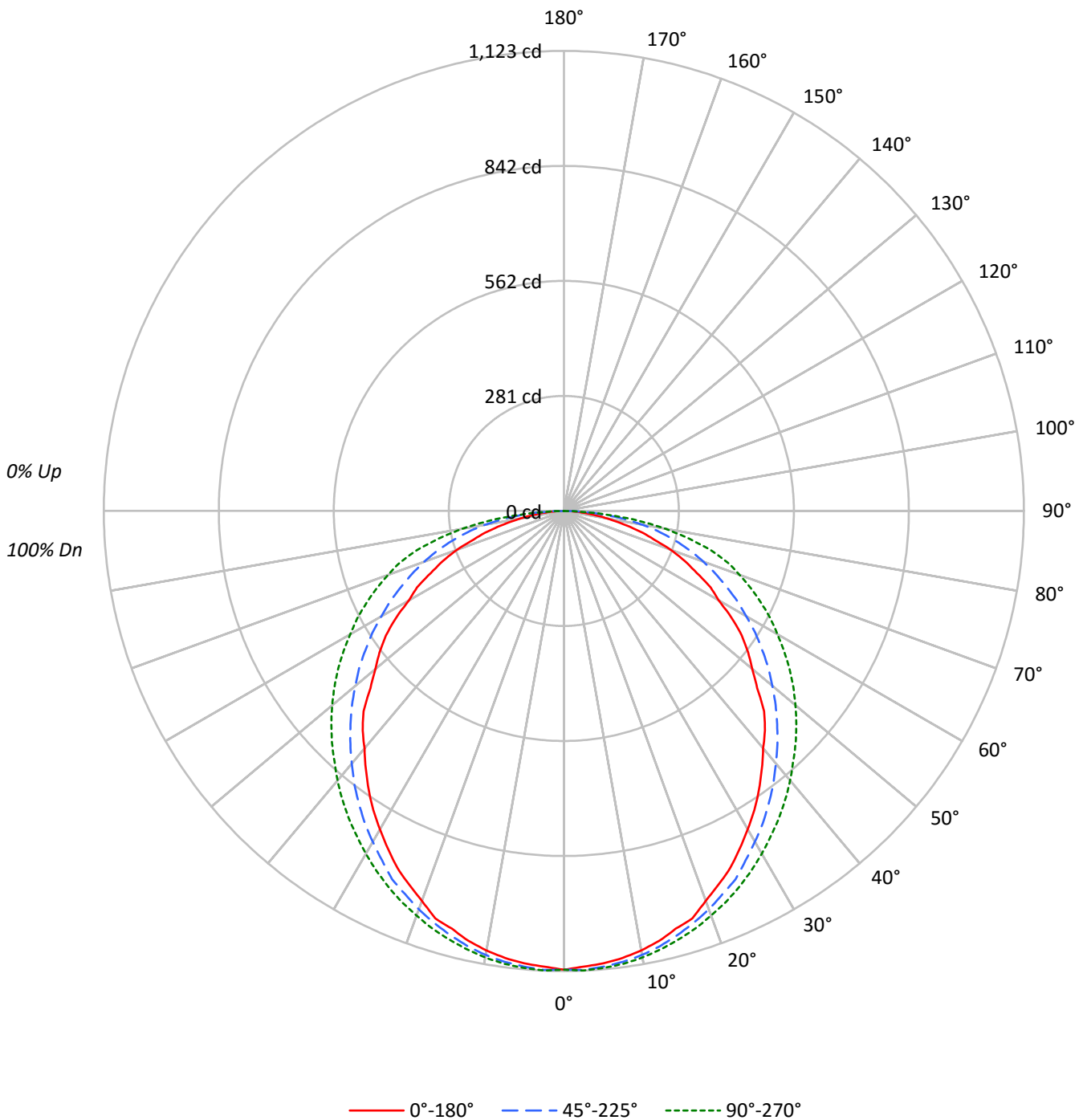
Lumens per Lamp: N/A  
Luminaire Lumens: 3337.0 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 32.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	100	96	92	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	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	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
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	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3013	3013	3013
5°	2994	3016	3024
10°	2976	3007	3024
15°	2941	2986	3017
20°	2900	2964	3009
25°	2855	2945	3007
30°	2789	2898	3003
35°	2728	2865	3007
40°	2659	2828	3019
45°	2632	2802	3045
50°	2514	2781	3089
55°	2487	2772	3155
60°	2347	2768	3240
65°	2278	2786	3386
70°	2186	2852	3594
75°	1993	2939	3869
80°	1708	3044	3910
85°	1380	2908	3353



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.9	3.2
10°-20°	302.2	9.1
20°-30°	454.9	13.6
30°-40°	545.9	16.4
40°-50°	570.6	17.1
50°-60°	531.7	15.9
60°-70°	436.1	13.1
70°-80°	293.9	8.8
80°-90°	95.7	2.9
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°	863.0	25.9
0°-40°	1408.9	42.2
0°-60°	2511.3	75.3
0°-90°	3337.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3337.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1120	1120	1120	1120	1120	
5°	1108	1112	1116	1118	1120	105
15°	1056	1062	1072	1081	1083	298
25°	962	968	992	1006	1013	442
35°	830	842	872	902	915	519
45°	692	696	736	781	800	528
55°	530	540	591	647	672	470
65°	358	374	438	502	532	356
75°	192	212	283	347	372	201
85°	45	64	94	110	109	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1119.6	1119.6	1119.6	1119.6	1119.6
2.5°	1113.2	1116.4	1121.2	1122.8	1122.8
5°	1108.4	1111.6	1116.4	1118.0	1119.6
7.5°	1100.4	1103.6	1110.0	1113.2	1114.8
10°	1089.2	1092.4	1100.4	1105.2	1106.8
12.5°	1074.9	1078.1	1087.6	1094.0	1095.6
15°	1055.7	1062.1	1071.7	1081.3	1082.9
17.5°	1042.9	1041.3	1054.1	1065.3	1068.5
20°	1012.6	1020.6	1034.9	1047.7	1050.9
22.5°	987.0	993.4	1012.6	1027.0	1033.3
25°	961.5	967.9	991.8	1006.2	1012.6
27.5°	929.5	939.1	961.5	982.2	990.2
30°	897.6	907.2	932.7	956.7	966.3
32.5°	865.6	876.8	904.0	929.5	940.7
35°	830.5	841.7	872.0	902.4	915.2
37.5°	793.8	808.2	840.1	873.6	888.0
40°	757.0	771.4	805.0	843.3	859.3
42.5°	726.7	733.1	771.4	812.9	828.9
45°	691.6	696.4	736.3	781.0	800.2
47.5°	640.5	658.0	701.1	750.7	769.8
50°	600.5	619.7	664.4	717.1	737.9
52.5°	567.0	579.8	629.3	682.0	705.9
55°	530.2	539.8	590.9	646.8	672.4
57.5°	485.5	503.1	554.2	611.7	637.3
60°	436.0	458.4	514.3	576.6	602.1
62.5°	404.1	416.9	477.5	539.8	568.6
65°	357.8	373.7	437.6	501.5	531.8
67.5°	319.4	335.4	400.9	464.8	495.1
70°	277.9	293.9	362.5	426.4	456.8
72.5°	230.0	252.3	324.2	388.1	420.0
75°	191.7	212.4	282.7	346.6	372.1
77.5°	148.5	175.7	241.2	293.9	313.0
80°	110.2	137.4	196.4	234.8	252.3
82.5°	75.1	102.2	146.9	175.7	185.3
85°	44.7	63.9	94.2	110.2	108.6
87.5°	20.8	27.2	38.3	38.3	36.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)