

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: P392549

Luminaire Tested: **MWL-3-00-25-UNV-L940-EDD**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P392549  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-565-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: MWL-3-00-25-UNV-L940-EDD  
Description: MWL 3FT MEDICAL LED FIXTURE  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2289.6 lumens  
Efficiency: N/A  
Efficacy: 92.1 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 3' x H: 0.42')  
CIE Type: Direct

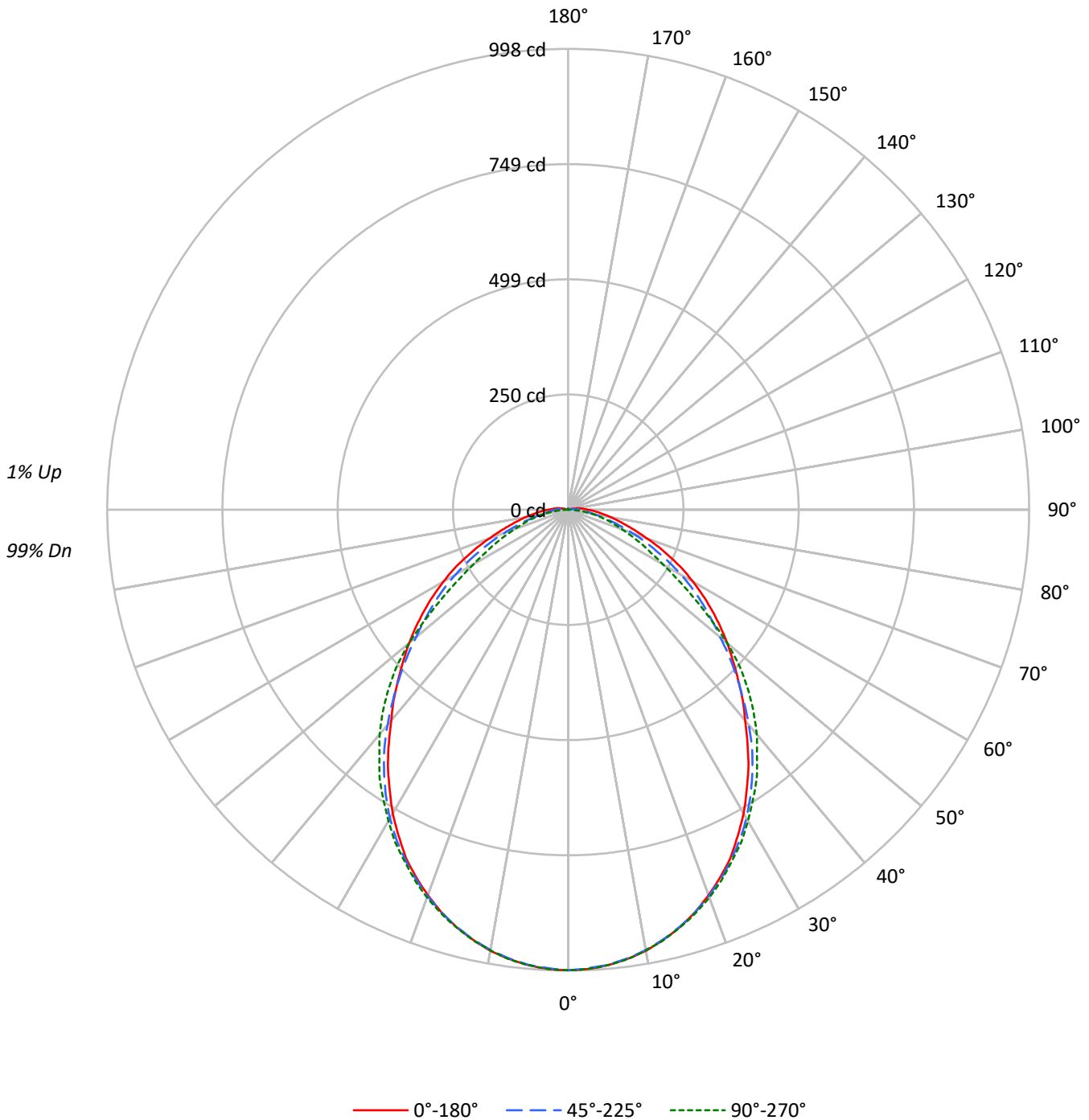
Input Watts (W): 24.846  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	110	110	110	106	106	106	101	101	101	99				
1	109	105	101	97	106	102	99	96	98	95	92	94	92	89	90	88	86	84				
2	100	92	86	81	98	91	85	80	87	82	78	83	79	76	80	77	74	72				
3	92	82	74	68	89	80	73	68	77	71	66	75	69	65	72	68	64	62				
4	85	73	65	59	82	72	64	58	69	63	57	67	61	57	65	60	56	54				
5	78	66	58	51	76	65	57	51	63	56	50	61	54	50	59	53	49	47				
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	42				
7	67	55	46	40	66	54	46	40	52	45	40	51	44	39	49	43	39	37				
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	45	40	35	33				
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				

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

	0°	45°	90°
0°	8590	8590	8590
5°	8457	7989	7871
10°	8280	7414	7204
15°	8041	6853	6584
20°	7747	6307	6004
25°	7422	5770	5437
30°	6994	5237	4904
35°	6520	4672	4399
40°	5998	4082	3881
45°	5561	3490	3350
50°	5162	2939	2745
55°	4758	2480	2044
60°	4324	2031	1493
65°	3848	1566	1133
70°	3287	1157	832
75°	2855	795	609
80°	2630	519	392
85°	2505	380	167



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.8	4.1
10°-20°	263.5	11.5
20°-30°	384.4	16.8
30°-40°	433.8	18.9
40°-50°	405.7	17.7
50°-60°	319.9	14.0
60°-70°	208.9	9.1
70°-80°	107.7	4.7
80°-90°	45.6	2.0
90°-100°	17.3	0.8
100°-110°	3.2	0.1
110°-120°	1.2	0.1
120°-130°	1.1	0.0
130°-140°	1.1	0.0
140°-150°	1.0	0.0
150°-160°	0.7	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	741.8	32.4
0°-40°	1175.6	51.3
0°-60°	1901.2	83.0
0°-90°	2263.4	98.9
90°-120°	21.7	0.9
90°-150°	24.9	1.1
90°-180°	26.0	1.1
0°-180°	2289.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	990	992	989	989	990	94
15°	936	936	935	936	936	263
25°	832	831	835	841	839	381
35°	680	682	695	708	712	424
45°	520	513	517	539	550	402
55°	380	371	355	347	331	340
65°	245	240	210	180	175	243
75°	130	114	96	82	87	140
85°	66	53	39	26	21	59
90°	43	39	27	14	0	24
95°	30	28	16	2	1	22
105°	6	3	1	1	1	8
115°	2	2	1	1	1	2
125°	2	2	1	1	1	2
135°	2	2	2	1	1	1
145°	2	2	2	2	1	1
155°	2	2	2	1	1	1
165°	2	1	2	2	2	0
175°	1	1	2	2	2	0
180°	2	2	2	2	2	



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CATALOG NUMBER: MWL-3-00-25-UNV-L940-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	997.5	997.5	997.5	997.5	997.5
2.5°	995.7	997.5	993.8	994.7	995.7
5°	990.2	992.0	989.3	989.3	990.2
7.5°	981.1	982.0	980.2	981.1	982.0
10°	970.1	969.2	968.3	969.2	969.2
12.5°	953.7	952.8	952.8	954.7	954.7
15°	935.5	935.5	934.6	936.4	936.4
17.5°	913.7	913.7	913.7	916.4	916.4
20°	888.1	890.0	890.0	893.6	893.6
22.5°	860.9	862.7	864.5	867.2	868.1
25°	831.7	830.8	835.4	840.9	839.0
27.5°	795.3	800.8	805.3	810.8	811.7
30°	759.8	762.5	771.6	778.0	778.0
32.5°	718.8	724.2	734.3	744.3	744.3
35°	680.5	682.3	695.1	707.8	711.5
37.5°	637.7	639.5	654.1	669.6	671.4
40°	595.8	596.7	608.5	629.5	634.9
42.5°	559.3	552.9	562.1	585.7	593.9
45°	520.1	512.9	517.4	539.3	550.2
47.5°	483.7	474.6	473.7	490.1	504.7
50°	449.1	438.1	429.9	441.8	449.1
52.5°	414.5	403.5	391.7	394.4	388.0
55°	379.8	370.7	355.2	347.0	330.6
57.5°	346.1	338.8	319.7	300.6	280.6
60°	311.5	307.9	282.4	254.2	236.9
62.5°	279.7	273.3	246.0	213.2	202.3
65°	245.1	240.5	209.6	179.5	174.9
67.5°	213.2	204.1	178.6	147.6	147.6
70°	180.4	171.3	147.6	123.0	123.9
72.5°	154.0	140.3	120.3	100.2	103.9
75°	130.3	113.9	95.7	82.0	86.6
77.5°	110.2	91.1	74.7	63.8	69.2
80°	94.8	74.7	58.3	48.3	52.8
82.5°	77.4	62.9	47.4	34.6	36.4
85°	65.6	52.8	39.2	25.5	21.0
87.5°	53.8	45.6	32.8	20.0	6.4
90°	42.8	39.2	27.3	13.7	0.0
92.5°	34.6	32.8	21.9	8.2	0.9
95°	30.1	28.2	16.4	1.8	0.9
97.5°	23.7	21.9	10.0	0.9	0.9
100°	17.3	15.5	4.6	0.9	0.9
102.5°	11.8	9.1	0.9	0.9	0.9
105°	5.5	2.7	0.9	0.9	0.9
107.5°	1.8	1.8	0.9	0.9	0.9
110°	1.8	1.8	0.9	0.9	0.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.8	1.8	0.9	0.9	0.9
115°	1.8	1.8	0.9	0.9	0.9
117.5°	1.8	1.8	0.9	0.9	0.9
120°	1.8	1.8	0.9	0.9	0.9
122.5°	1.8	1.8	0.9	0.9	0.9
125°	1.8	1.8	0.9	0.9	0.9
127.5°	1.8	1.8	0.9	0.9	0.9
130°	1.8	1.8	0.9	0.9	0.9
132.5°	1.8	1.8	1.8	0.9	0.9
135°	1.8	1.8	1.8	0.9	0.9
137.5°	1.8	1.8	0.9	0.9	0.9
140°	1.8	1.8	1.8	1.8	0.9
142.5°	1.8	1.8	1.8	0.9	0.9
145°	1.8	1.8	1.8	1.8	0.9
147.5°	1.8	1.8	1.8	1.8	0.9
150°	1.8	1.8	1.8	1.8	0.9
152.5°	1.8	1.8	0.9	0.9	0.9
155°	1.8	1.8	1.8	0.9	0.9
157.5°	1.8	1.8	1.8	0.9	0.9
160°	1.8	1.8	1.8	1.8	0.9
162.5°	1.8	0.9	1.8	1.8	1.8
165°	1.8	0.9	1.8	1.8	1.8
167.5°	1.8	0.9	1.8	1.8	1.8
170°	0.9	0.9	1.8	1.8	1.8
172.5°	0.9	0.9	1.8	1.8	1.8
175°	0.9	0.9	1.8	1.8	1.8
177.5°	0.9	0.9	1.8	1.8	1.8
180°	1.8	1.8	1.8	1.8	1.8

(END OF REPORT)