

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: P392548

Luminaire Tested: **MWL-3-00-25-UNV-L935-EDD**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P392548
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-L935-EDD
Description: MWL 3FT MEDICAL LED FIXTURE
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

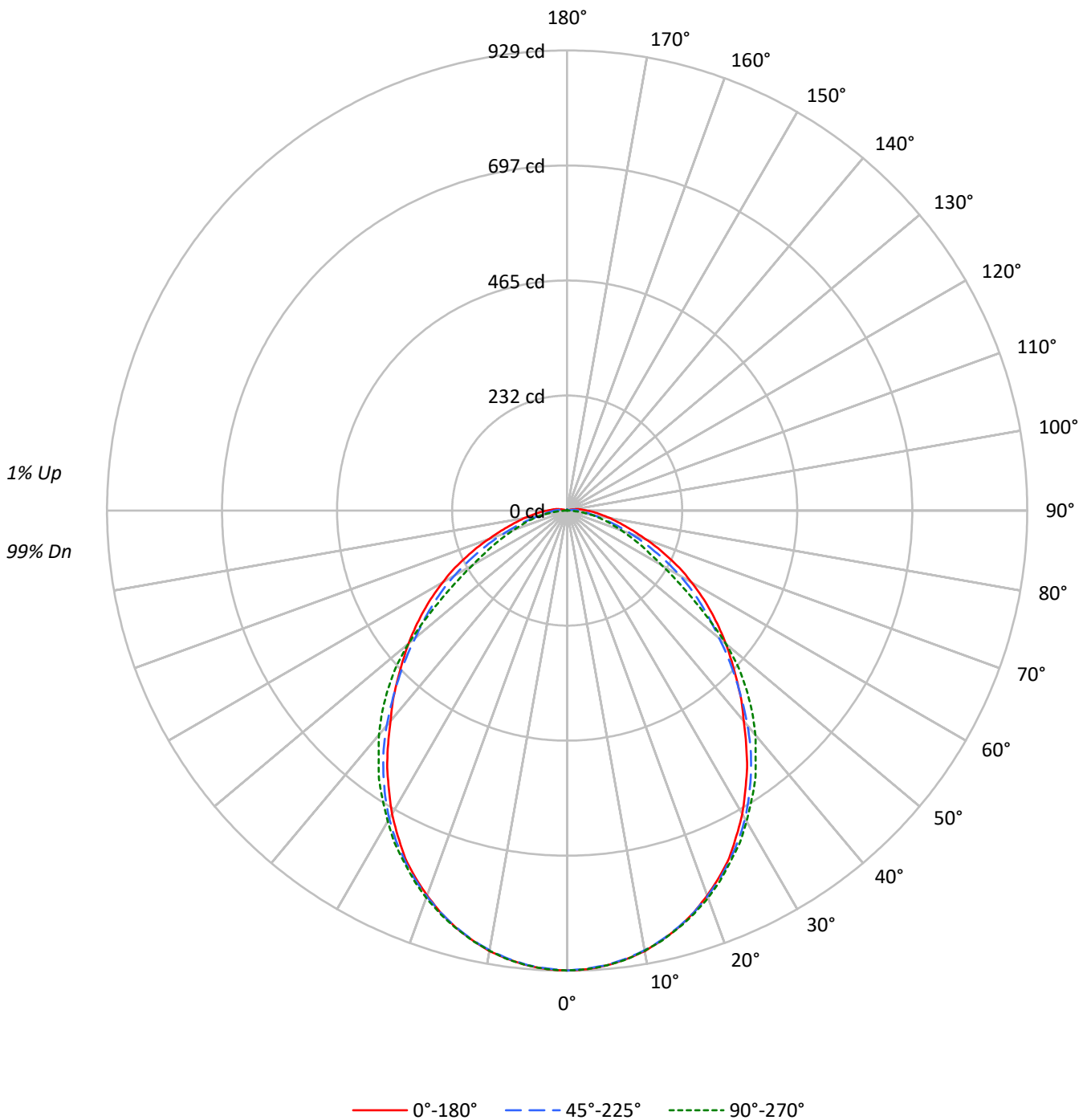
Lumens per Lamp: N/A
Luminaire Lumens: 2131.5 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 3' x H: 0.42')
CIE Type: Direct

Input Watts (W): 24.846
Input Voltage (V): NR
Input Current (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	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°	7996	7996	7996
5°	7872	7436	7326
10°	7708	6902	6706
15°	7485	6380	6130
20°	7212	5871	5589
25°	6908	5371	5061
30°	6510	4875	4565
35°	6069	4349	4095
40°	5584	3800	3613
45°	5177	3249	3119
50°	4806	2736	2556
55°	4430	2309	1903
60°	4026	1890	1390
65°	3583	1457	1055
70°	3060	1077	775
75°	2656	740	567
80°	2447	484	366
85°	2333	353	155



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.4	4.1
10°-20°	245.3	11.5
20°-30°	357.8	16.8
30°-40°	403.8	18.9
40°-50°	377.7	17.7
50°-60°	297.9	14.0
60°-70°	194.4	9.1
70°-80°	100.2	4.7
80°-90°	42.4	2.0
90°-100°	16.1	0.8
100°-110°	3.0	0.1
110°-120°	1.2	0.1
120°-130°	1.1	0.1
130°-140°	1.0	0.0
140°-150°	1.0	0.0
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	690.5	32.4
0°-40°	1094.3	51.3
0°-60°	1769.9	83.0
0°-90°	2106.9	98.8
90°-120°	20.3	1.0
90°-150°	23.4	1.1
90°-180°	25.0	1.2
0°-180°	2131.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	929	929	929	929	929	
5°	922	924	921	921	922	87
15°	871	871	870	872	872	245
25°	774	773	778	783	781	355
35°	634	635	647	659	662	395
45°	484	477	482	502	512	374
55°	354	345	331	323	308	316
65°	228	224	195	167	163	227
75°	121	106	89	76	81	131
85°	61	49	36	24	20	55
90°	40	36	26	13	0	22
95°	28	26	15	2	1	20
105°	5	2	1	1	1	7
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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	928.6	928.6	928.6	928.6	928.6
2.5°	926.8	928.6	925.2	926.0	926.8
5°	921.7	923.5	920.9	920.9	921.7
7.5°	913.3	914.2	912.4	913.3	914.2
10°	903.1	902.2	901.4	902.2	902.2
12.5°	887.8	887.0	887.0	888.7	888.7
15°	870.9	870.9	870.1	871.8	871.8
17.5°	850.6	850.6	850.6	853.1	853.1
20°	826.8	828.5	828.5	831.9	831.9
22.5°	801.4	803.0	804.7	807.3	808.1
25°	774.2	773.4	777.6	782.7	781.0
27.5°	740.3	745.4	749.6	754.7	755.6
30°	707.2	709.7	718.3	724.2	724.2
32.5°	669.1	674.2	683.5	692.8	692.8
35°	633.5	635.2	647.0	658.9	662.3
37.5°	593.6	595.3	608.9	623.3	625.0
40°	554.6	555.4	566.5	586.0	591.1
42.5°	520.7	514.7	523.2	545.3	552.9
45°	484.2	477.4	481.7	502.0	512.2
47.5°	450.3	441.8	440.9	456.2	469.8
50°	418.1	407.9	400.3	411.3	418.1
52.5°	385.8	375.7	364.7	367.2	361.2
55°	353.6	345.2	330.7	323.1	307.8
57.5°	322.2	315.5	297.6	279.8	261.2
60°	290.0	286.7	262.8	236.6	220.5
62.5°	260.3	254.4	228.9	198.5	188.3
65°	228.2	223.8	195.0	167.1	162.8
67.5°	198.5	189.9	166.2	137.4	137.4
70°	167.9	159.5	137.4	114.5	115.4
72.5°	143.3	130.6	111.9	93.3	96.6
75°	121.2	106.0	89.1	76.3	80.6
77.5°	102.6	84.8	69.5	59.4	64.5
80°	88.2	69.5	54.3	45.0	49.2
82.5°	72.1	58.5	44.1	32.2	33.9
85°	61.1	49.2	36.5	23.7	19.5
87.5°	50.0	42.4	30.5	18.6	6.0
90°	39.9	36.5	25.5	12.7	0.0
92.5°	32.2	30.5	20.4	7.6	0.9
95°	28.0	26.3	15.3	1.7	0.9
97.5°	22.1	20.4	9.3	0.9	0.9
100°	16.1	14.4	4.2	0.9	0.9
102.5°	11.0	8.5	0.9	0.9	0.9
105°	5.1	2.5	0.9	0.9	0.9
107.5°	1.7	1.7	0.9	0.9	0.9
110°	1.7	1.7	0.9	0.9	0.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.7	1.7	0.9	0.9	0.9
115°	1.7	1.7	0.9	0.9	0.9
117.5°	1.7	1.7	0.9	0.9	0.9
120°	1.7	1.7	0.9	0.9	0.9
122.5°	1.7	1.7	0.9	0.9	0.9
125°	1.7	1.7	0.9	0.9	0.9
127.5°	1.7	1.7	0.9	0.9	0.9
130°	1.7	1.7	0.9	0.9	0.9
132.5°	1.7	1.7	1.7	0.9	0.9
135°	1.7	1.7	1.7	0.9	0.9
137.5°	1.7	1.7	0.9	0.9	0.9
140°	1.7	1.7	1.7	1.7	0.9
142.5°	1.7	1.7	1.7	0.9	0.9
145°	1.7	1.7	1.7	1.7	0.9
147.5°	1.7	1.7	1.7	1.7	0.9
150°	1.7	1.7	1.7	1.7	0.9
152.5°	1.7	1.7	0.9	0.9	0.9
155°	1.7	1.7	1.7	0.9	0.9
157.5°	1.7	1.7	1.7	0.9	0.9
160°	1.7	1.7	1.7	1.7	0.9
162.5°	1.7	0.9	1.7	1.7	1.7
165°	1.7	0.9	1.7	1.7	1.7
167.5°	1.7	0.9	1.7	1.7	1.7
170°	0.9	0.9	1.7	1.7	1.7
172.5°	0.9	0.9	1.7	1.7	1.7
175°	0.9	0.9	1.7	1.7	1.7
177.5°	0.9	0.9	1.7	1.7	1.7
180°	1.7	1.7	1.7	1.7	1.7

(END OF REPORT)