

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: P392462

Luminaire Tested: **MWL-2-00-17-UNV-L940-EDD**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P392462
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-565-29)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MWL-2-00-17-UNV-L940-EDD
Description: MWL 2FT MEDICAL LED FIXTURE
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

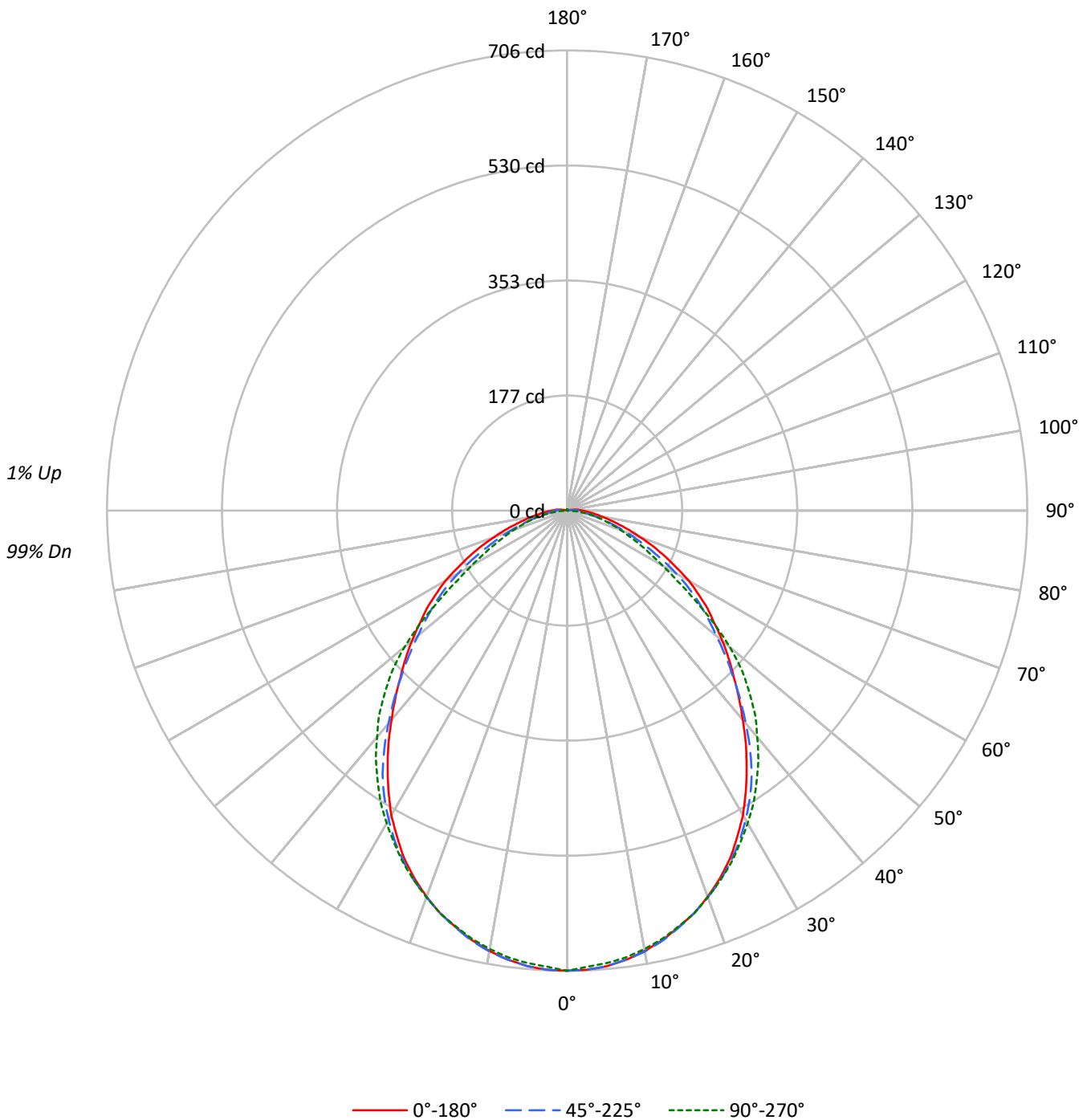
Lumens per Lamp: N/A
Luminaire Lumens: 1599.0 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 2' x H: 0.42')
CIE Type: Direct

Input Watts (W): 16.766
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	101	101	101	99
1	109	105	101	98	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	93	87	81	98	91	85	80	87	82	78	84	80	76	81	77	75	72
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	72	68	64	62
4	85	74	66	59	83	72	65	59	70	63	58	67	62	57	65	60	56	54
5	79	66	58	52	76	65	57	51	63	56	51	61	55	50	59	54	50	48
6	73	60	52	46	71	59	51	45	57	50	45	56	49	45	54	48	44	42
7	68	55	47	41	66	54	46	41	52	45	40	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34
9	59	46	39	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9119	9119	9119
5°	8933	8463	8309
10°	8679	7830	7618
15°	8377	7207	6966
20°	8055	6619	6362
25°	7668	6053	5791
30°	7181	5469	5237
35°	6607	4872	4698
40°	6015	4188	4160
45°	5468	3545	3611
50°	5002	2975	2991
55°	4570	2504	2214
60°	4099	2013	1603
65°	3484	1504	1187
70°	2868	1080	882
75°	2302	727	624
80°	1865	452	406
85°	1595	351	174



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	4.2
10°-20°	186.5	11.7
20°-30°	272.8	17.1
30°-40°	307.6	19.2
40°-50°	285.4	17.8
50°-60°	224.1	14.0
60°-70°	141.4	8.8
70°-80°	69.8	4.4
80°-90°	29.0	1.8
90°-100°	10.1	0.6
100°-110°	1.3	0.1
110°-120°	0.9	0.1
120°-130°	0.8	0.1
130°-140°	0.7	0.0
140°-150°	1.0	0.1
150°-160°	0.8	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	525.7	32.9
0°-40°	833.3	52.1
0°-60°	1342.8	84.0
0°-90°	1582.9	99.0
90°-120°	12.2	0.8
90°-150°	14.8	0.9
90°-180°	16.0	1.0
0°-180°	1599.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	706	706	706	706	706	
5°	702	702	702	699	697	66
15°	661	662	662	661	660	186
25°	590	591	594	595	596	271
35°	480	482	494	503	507	300
45°	362	359	360	382	395	280
55°	263	260	247	245	239	235
65°	165	159	139	123	122	164
75°	82	70	61	55	59	89
85°	36	35	26	17	15	33
90°	24	26	17	10	0	13
95°	16	17	10	1	0	11
105°	1	1	1	1	1	3
115°	1	1	1	1	1	1
125°	1	1	1	1	1	1
135°	1	1	1	1	1	1
145°	2	2	2	2	1	1
155°	2	2	2	2	1	1
165°	2	2	2	1	1	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°	706.0	706.0	706.0	706.0	706.0
2.5°	705.1	705.1	705.1	702.4	700.5
5°	701.5	701.5	701.5	698.7	696.9
7.5°	695.1	695.1	695.1	693.3	691.4
10°	686.0	686.9	686.9	685.1	683.2
12.5°	675.0	675.9	675.9	674.1	673.2
15°	661.4	662.3	662.3	661.4	660.5
17.5°	647.7	647.7	647.7	648.6	647.7
20°	630.4	631.3	631.3	632.2	631.3
22.5°	611.3	612.2	614.0	614.0	614.0
25°	590.3	591.2	593.9	594.9	595.8
27.5°	564.9	568.5	572.2	574.0	574.9
30°	539.4	542.1	547.6	553.0	553.9
32.5°	510.2	513.9	522.1	529.3	532.1
35°	480.1	482.0	493.8	502.9	506.6
37.5°	450.1	449.2	461.0	477.4	482.0
40°	419.1	417.3	426.4	448.3	453.7
42.5°	390.0	388.1	392.7	417.3	427.3
45°	361.7	359.0	359.9	381.8	395.4
47.5°	336.2	331.6	328.9	345.3	364.4
50°	310.7	306.1	298.8	310.7	326.2
52.5°	285.2	282.4	272.4	277.9	283.4
55°	263.3	259.7	246.9	245.1	238.7
57.5°	238.7	236.9	221.4	211.4	199.5
60°	215.9	211.4	193.2	178.6	169.5
62.5°	188.6	185.9	165.8	147.6	144.0
65°	164.9	159.4	139.4	123.0	122.1
67.5°	142.1	133.0	115.7	102.0	103.0
70°	119.4	109.3	95.7	83.8	87.5
72.5°	100.2	88.4	77.4	68.3	72.0
75°	82.0	70.2	61.0	54.7	59.2
77.5°	67.4	57.4	46.5	43.7	47.4
80°	54.7	47.4	35.5	32.8	36.4
82.5°	44.6	41.0	30.1	22.8	24.6
85°	36.4	34.6	25.5	17.3	14.6
87.5°	29.2	30.1	21.0	13.7	3.6
90°	23.7	26.4	17.3	10.0	0.0
92.5°	19.1	21.9	14.6	4.6	0.0
95°	16.4	17.3	10.0	0.9	0.0
97.5°	11.8	11.8	4.6	0.0	0.0
100°	7.3	6.4	0.9	0.0	0.0
102.5°	3.6	1.8	0.9	0.0	0.0
105°	0.9	0.9	0.9	0.9	0.9
107.5°	0.9	0.9	0.9	0.9	0.9
110°	0.9	0.9	0.9	0.9	0.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	0.9	0.9	0.9
115°	0.9	0.9	0.9	0.9	0.9
117.5°	0.9	0.9	0.9	0.9	0.9
120°	0.9	0.9	0.9	0.9	0.9
122.5°	0.9	0.9	0.9	0.9	0.9
125°	0.9	0.9	0.9	0.9	0.9
127.5°	0.9	0.9	0.9	0.9	0.9
130°	0.9	0.9	0.9	0.9	0.9
132.5°	0.9	0.9	0.9	0.9	0.9
135°	0.9	0.9	0.9	0.9	0.9
137.5°	0.9	0.9	0.9	0.9	0.9
140°	1.8	1.8	1.8	0.9	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	1.8	1.8	0.9
155°	1.8	1.8	1.8	1.8	0.9
157.5°	1.8	1.8	1.8	1.8	0.9
160°	1.8	1.8	1.8	0.9	0.9
162.5°	1.8	1.8	1.8	0.9	0.9
165°	1.8	1.8	1.8	0.9	0.9
167.5°	1.8	1.8	0.9	0.9	0.9
170°	0.9	1.8	0.9	1.8	1.8
172.5°	0.9	0.9	0.9	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)