

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: P392461

Luminaire Tested: **MWL-2-00-17-UNV-L935-EDD**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P392461
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-L935-EDD
Description: MWL 2FT MEDICAL LED FIXTURE
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

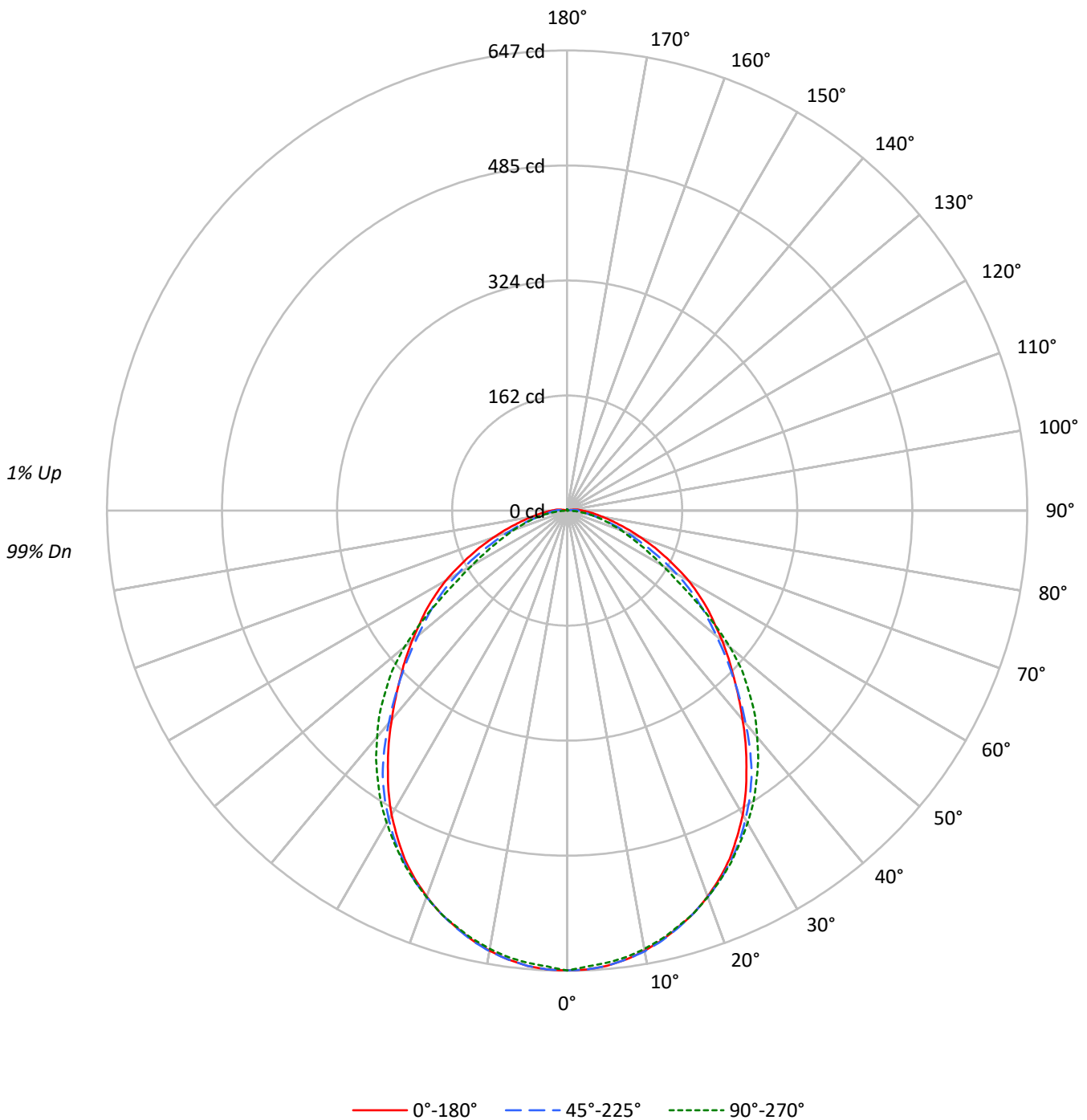
Lumens per Lamp: N/A
Luminaire Lumens: 1464.5 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 2' x H: 0.42')
CIE Type: Direct

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°	8352	8352	8352
5°	8180	7750	7610
10°	7949	7171	6978
15°	7673	6599	6380
20°	7377	6061	5826
25°	7022	5544	5303
30°	6576	5008	4797
35°	6049	4461	4302
40°	5509	3835	3809
45°	5007	3246	3307
50°	4580	2724	2738
55°	4184	2293	2027
60°	3753	1843	1467
65°	3190	1377	1087
70°	2625	988	807
75°	2109	666	572
80°	1705	414	372
85°	1464	322	160



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	4.2
10°-20°	170.8	11.7
20°-30°	249.8	17.1
30°-40°	281.7	19.2
40°-50°	261.3	17.8
50°-60°	205.2	14.0
60°-70°	129.4	8.8
70°-80°	63.9	4.4
80°-90°	26.6	1.8
90°-100°	9.2	0.6
100°-110°	1.2	0.1
110°-120°	0.9	0.1
120°-130°	0.8	0.1
130°-140°	0.7	0.1
140°-150°	0.9	0.1
150°-160°	0.7	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	481.4	32.9
0°-40°	763.1	52.1
0°-60°	1229.6	84.0
0°-90°	1449.5	99.0
90°-120°	11.3	0.8
90°-150°	13.8	0.9
90°-180°	15.0	1.0
0°-180°	1464.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	647	647	647	647	647	
5°	642	642	642	640	638	61
15°	606	606	606	606	605	171
25°	541	542	544	545	546	248
35°	440	441	452	460	464	275
45°	331	329	330	350	362	257
55°	241	238	226	224	219	215
65°	151	146	128	113	112	150
75°	75	64	56	50	54	81
85°	33	32	23	16	13	31
90°	22	24	16	9	0	12
95°	15	16	9	1	0	10
105°	1	1	1	1	1	2
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°	646.6	646.6	646.6	646.6	646.6
2.5°	645.8	645.8	645.8	643.3	641.6
5°	642.4	642.4	642.4	639.9	638.3
7.5°	636.6	636.6	636.6	634.9	633.3
10°	628.3	629.1	629.1	627.4	625.8
12.5°	618.3	619.0	619.0	617.4	616.5
15°	605.8	606.5	606.5	605.8	604.9
17.5°	593.2	593.2	593.2	594.0	593.2
20°	577.4	578.1	578.1	579.0	578.1
22.5°	559.8	560.6	562.4	562.4	562.4
25°	540.6	541.5	544.0	544.8	545.6
27.5°	517.3	520.6	524.0	525.6	526.5
30°	493.9	496.4	501.4	506.4	507.3
32.5°	467.3	470.5	478.0	484.8	487.3
35°	439.6	441.4	452.2	460.5	463.9
37.5°	412.1	411.3	422.1	437.1	441.4
40°	383.8	382.1	390.5	410.5	415.5
42.5°	357.1	355.4	359.6	382.1	391.3
45°	331.2	328.7	329.5	349.6	362.1
47.5°	307.9	303.7	301.2	316.2	333.8
50°	284.5	280.4	273.6	284.5	298.6
52.5°	261.1	258.6	249.5	254.5	259.5
55°	241.1	237.8	226.1	224.4	218.6
57.5°	218.6	216.9	202.8	193.5	182.7
60°	197.7	193.5	176.9	163.5	155.1
62.5°	172.7	170.2	151.9	135.1	131.9
65°	151.0	146.0	127.6	112.6	111.8
67.5°	130.1	121.8	106.0	93.5	94.3
70°	109.3	100.1	87.6	76.8	80.1
72.5°	91.8	80.9	70.9	62.6	65.9
75°	75.1	64.2	55.9	50.0	54.2
77.5°	61.7	52.6	42.5	40.0	43.4
80°	50.0	43.4	32.5	30.0	33.4
82.5°	40.9	37.5	27.5	20.9	22.5
85°	33.4	31.7	23.4	15.9	13.4
87.5°	26.7	27.5	19.2	12.5	3.4
90°	21.7	24.2	15.9	9.1	0.0
92.5°	17.5	20.0	13.4	4.1	0.0
95°	15.0	15.9	9.1	0.9	0.0
97.5°	10.9	10.9	4.1	0.0	0.0
100°	6.6	5.9	0.9	0.0	0.0
102.5°	3.4	1.6	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°	1.6	1.6	1.6	0.9	0.9
142.5°	1.6	1.6	1.6	0.9	0.9
145°	1.6	1.6	1.6	1.6	0.9
147.5°	1.6	1.6	1.6	1.6	0.9
150°	1.6	1.6	1.6	1.6	0.9
152.5°	1.6	1.6	1.6	1.6	0.9
155°	1.6	1.6	1.6	1.6	0.9
157.5°	1.6	1.6	1.6	1.6	0.9
160°	1.6	1.6	1.6	0.9	0.9
162.5°	1.6	1.6	1.6	0.9	0.9
165°	1.6	1.6	1.6	0.9	0.9
167.5°	1.6	1.6	0.9	0.9	0.9
170°	0.9	1.6	0.9	1.6	1.6
172.5°	0.9	0.9	0.9	1.6	1.6
175°	0.9	0.9	1.6	1.6	1.6
177.5°	0.9	0.9	1.6	1.6	1.6
180°	1.6	1.6	1.6	1.6	1.6

(END OF REPORT)