

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: P392458

Luminaire Tested: **MWL-2-00-13-UNV-L935-EDD**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P392458
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-565-30)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MWL-2-00-13-UNV-L935-EDD
Description: MWL 2FT MEDICAL LED FIXTURE
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

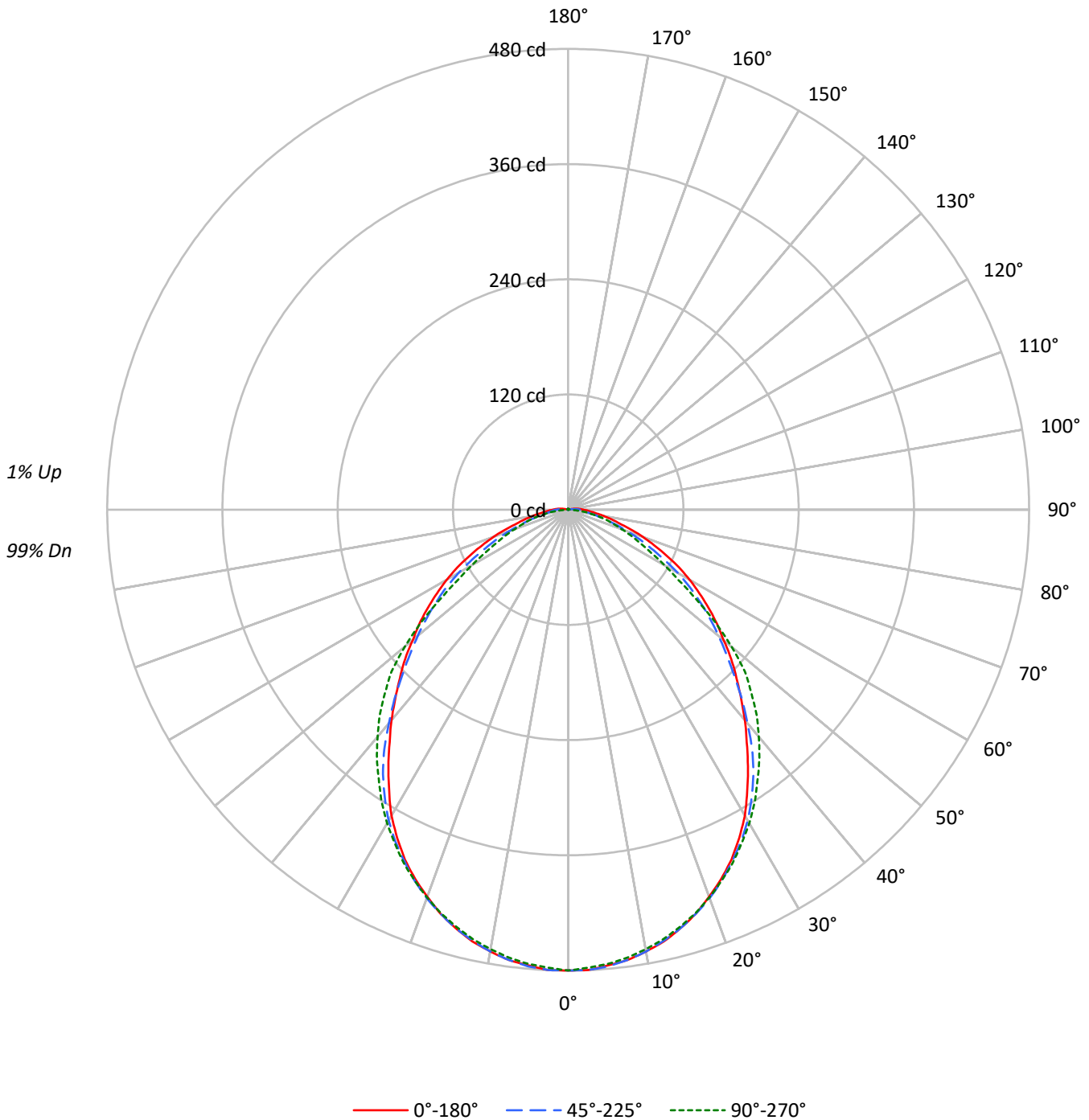
Lumens per Lamp: N/A
Luminaire Lumens: 1090.1 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.18 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 2' x H: 0.42')
CIE Type: Direct

Input Watts (W): 12.019
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	82	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	39	38
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34
9	59	46	38	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°	6199	6199	6199
5°	6068	5759	5662
10°	5912	5327	5182
15°	5718	4913	4744
20°	5480	4515	4330
25°	5225	4116	3942
30°	4899	3734	3567
35°	4490	3318	3189
40°	4108	2852	2830
45°	3746	2408	2462
50°	3400	2035	2034
55°	3100	1701	1509
60°	2772	1374	1097
65°	2381	1026	803
70°	1984	734	598
75°	1547	487	431
80°	1279	308	270
85°	1061	241	108



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.2	4.1
10°-20°	127.1	11.7
20°-30°	185.8	17.0
30°-40°	209.5	19.2
40°-50°	194.6	17.9
50°-60°	152.7	14.0
60°-70°	96.6	8.9
70°-80°	47.6	4.4
80°-90°	19.8	1.8
90°-100°	6.8	0.6
100°-110°	0.8	0.1
110°-120°	0.9	0.1
120°-130°	0.8	0.1
130°-140°	0.7	0.1
140°-150°	0.6	0.1
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	358.0	32.8
0°-40°	567.5	52.1
0°-60°	914.8	83.9
0°-90°	1078.8	99.0
90°-120°	8.5	0.8
90°-150°	10.6	1.0
90°-180°	11.0	1.0
0°-180°	1090.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	480	480	480	480	480	
5°	476	477	477	476	475	45
15°	452	452	452	452	450	127
25°	402	402	404	406	406	185
35°	326	329	336	343	344	204
45°	248	245	244	260	270	191
55°	179	177	168	168	163	160
65°	113	108	95	84	83	112
75°	55	48	41	38	41	61
85°	24	24	18	12	9	23
90°	16	18	12	7	0	9
95°	11	12	7	0	0	8
105°	1	1	0	0	0	2
115°	1	1	1	1	1	1
125°	1	1	1	1	1	1
135°	1	1	1	1	1	1
145°	1	1	1	1	1	1
155°	1	1	1	1	1	0
165°	1	1	1	1	1	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	479.9	479.9	479.9	479.9	479.9
2.5°	479.9	479.9	479.9	478.1	477.4
5°	476.5	477.4	477.4	475.6	474.9
7.5°	473.1	473.1	473.1	471.5	470.6
10°	467.3	467.3	467.3	466.5	464.8
12.5°	460.6	460.6	459.8	459.0	458.1
15°	451.5	451.5	451.5	451.5	449.8
17.5°	441.5	441.5	441.5	441.5	440.6
20°	428.9	429.7	430.6	429.7	429.7
22.5°	416.4	416.4	418.1	418.9	418.1
25°	402.2	402.2	403.9	405.6	405.6
27.5°	385.5	386.4	389.7	391.4	391.4
30°	368.0	369.7	373.9	376.4	377.2
32.5°	347.1	349.6	355.5	360.5	361.3
35°	326.3	328.8	336.3	343.0	343.8
37.5°	305.5	306.2	314.6	324.6	327.1
40°	286.2	284.6	290.4	305.5	308.7
42.5°	266.2	263.7	267.8	283.7	290.4
45°	247.8	245.3	244.5	260.3	269.6
47.5°	230.3	226.2	223.7	236.2	249.6
50°	211.2	209.4	204.4	211.9	221.9
52.5°	195.3	192.8	186.1	189.4	193.6
55°	178.6	176.9	167.7	167.7	162.7
57.5°	161.9	160.2	150.2	144.4	136.0
60°	146.0	144.4	131.9	122.7	116.0
62.5°	130.2	126.8	112.7	101.0	97.6
65°	112.7	108.5	95.1	84.3	82.6
67.5°	96.8	90.9	80.1	70.1	70.9
70°	82.6	75.1	65.1	57.6	59.3
72.5°	68.4	60.1	52.6	46.8	49.3
75°	55.1	48.4	40.9	37.5	40.9
77.5°	45.9	39.3	31.7	29.2	32.5
80°	37.5	32.5	24.2	22.5	24.2
82.5°	30.0	27.5	20.0	15.9	16.7
85°	24.2	24.2	17.5	11.6	9.1
87.5°	20.0	20.9	15.0	9.1	2.5
90°	15.9	17.5	12.5	6.6	0.0
92.5°	13.4	15.0	10.0	3.4	0.0
95°	10.9	11.6	6.6	0.0	0.0
97.5°	8.4	7.5	3.4	0.0	0.0
100°	5.0	4.1	0.9	0.0	0.0
102.5°	2.5	1.6	0.0	0.0	0.0
105°	0.9	0.9	0.0	0.0	0.0
107.5°	0.9	0.9	0.9	0.0	0.0
110°	0.9	0.9	0.9	0.9	0.0



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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°	0.9	0.9	0.9	0.9	0.9
142.5°	0.9	0.9	0.9	0.9	0.9
145°	0.9	0.9	0.9	0.9	0.9
147.5°	0.9	0.9	0.9	0.9	0.9
150°	0.9	0.9	0.9	0.9	0.9
152.5°	0.9	0.9	0.9	0.9	0.9
155°	0.9	0.9	0.9	0.9	0.9
157.5°	0.9	0.9	0.9	0.9	0.9
160°	0.9	0.9	0.9	0.9	0.9
162.5°	0.9	0.9	0.9	0.9	0.9
165°	0.9	0.9	0.9	0.9	0.9
167.5°	0.9	0.9	0.9	0.9	0.9
170°	0.9	0.9	0.9	0.9	0.9
172.5°	0.9	0.9	0.9	0.9	0.9
175°	0.9	0.9	0.9	0.9	0.9
177.5°	0.9	0.9	0.9	0.9	0.9
180°	0.9	0.9	0.9	0.9	0.9

(END OF REPORT)