

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: P392555

Luminaire Tested: **MWL-3-00-33-UNV-L840-EDD**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P392555
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-565-16)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MWL-3-00-33-UNV-L840-EDD
Description: MWL 3FT MEDICAL LED FIXTURE
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

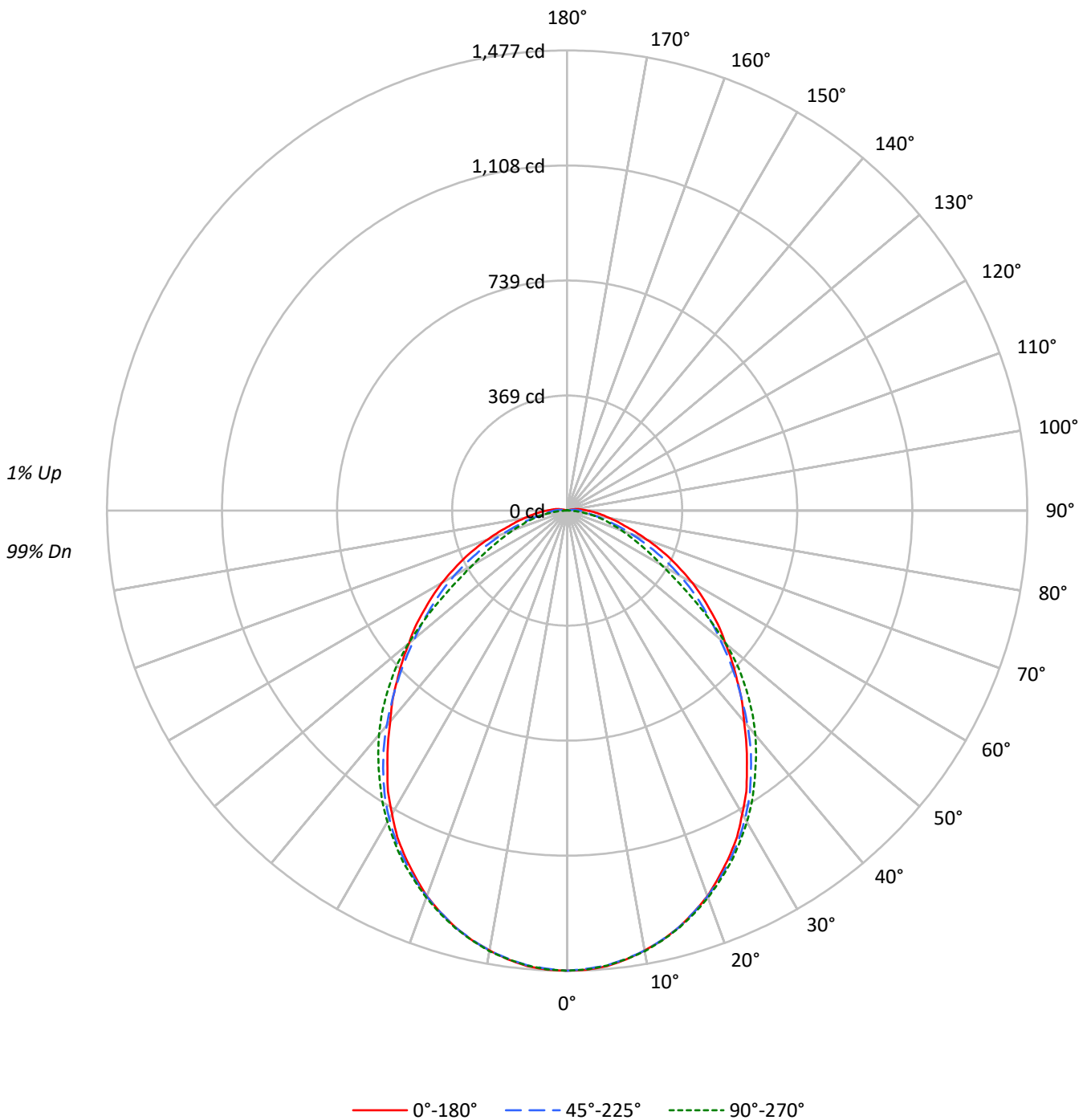
Lumens per Lamp: N/A
Luminaire Lumens: 3391.1 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 3' x H: 0.42')
CIE Type: Direct

Input Watts (W): 35.8
Input Voltage (V): NR
Input Current (A_{in}): 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	97	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°	12719	12719	12719
5°	12537	11830	11653
10°	12239	10980	10674
15°	11904	10156	9752
20°	11488	9340	8882
25°	10958	8544	8067
30°	10347	7751	7275
35°	9638	6917	6492
40°	8890	6044	5746
45°	8255	5174	4950
50°	7621	4368	4077
55°	7041	3673	3048
60°	6442	3006	2206
65°	5746	2339	1659
70°	4957	1716	1250
75°	4229	1188	907
80°	3856	766	580
85°	3742	562	246



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.9	4.1
10°-20°	390.1	11.5
20°-30°	569.1	16.8
30°-40°	642.7	19.0
40°-50°	600.8	17.7
50°-60°	473.9	14.0
60°-70°	309.5	9.1
70°-80°	159.9	4.7
80°-90°	67.7	2.0
90°-100°	25.8	0.8
100°-110°	4.8	0.1
110°-120°	1.7	0.0
120°-130°	1.8	0.1
130°-140°	1.5	0.0
140°-150°	1.3	0.0
150°-160°	0.9	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	1098.2	32.4
0°-40°	1740.9	51.3
0°-60°	2815.6	83.0
0°-90°	3352.6	98.9
90°-120°	32.2	1.0
90°-150°	36.8	1.1
90°-180°	38.0	1.1
0°-180°	3391.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1477	1477	1477	1477	1477	
5°	1468	1468	1465	1465	1466	139
15°	1385	1385	1385	1386	1387	390
25°	1228	1233	1237	1245	1245	565
35°	1006	1011	1029	1050	1050	629
45°	772	760	767	797	813	597
55°	562	550	526	514	493	504
65°	366	354	313	264	256	362
75°	193	167	143	120	129	210
85°	98	79	58	38	31	88
90°	65	57	40	21	1	36
95°	44	42	25	3	1	33
105°	9	4	2	1	1	12
115°	3	2	2	1	1	3
125°	2	2	2	2	2	2
135°	2	2	2	2	2	2
145°	2	2	2	2	2	1
155°	2	2	2	2	2	1
165°	2	2	2	2	2	1
175°	1	2	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°	1477	1477	1477	1477	1477
2.5°	1475	1476	1472	1472	1474
5°	1468	1468	1465	1465	1466
7.5°	1453	1454	1451	1452	1452
10°	1434	1436	1434	1434	1436
12.5°	1412	1413	1411	1413	1413
15°	1385	1385	1385	1386	1387
17.5°	1352	1355	1352	1356	1356
20°	1317	1317	1318	1321	1322
22.5°	1273	1276	1279	1284	1284
25°	1228	1233	1237	1245	1245
27.5°	1181	1182	1192	1202	1200
30°	1124	1129	1142	1153	1154
32.5°	1070	1072	1089	1102	1105
35°	1006	1011	1029	1050	1050
37.5°	945	948	968	994	996
40°	883	882	901	931	940
42.5°	831	819	833	865	879
45°	772	760	767	797	813
47.5°	718	703	702	725	746
50°	663	649	639	655	667
52.5°	616	597	581	585	578
55°	562	550	526	514	493
57.5°	513	502	473	443	413
60°	464	453	418	374	350
62.5°	412	405	365	315	302
65°	366	354	313	264	256
67.5°	318	303	264	220	219
70°	272	255	219	182	186
72.5°	231	208	179	149	154
75°	193	167	143	120	129
77.5°	165	136	110	94	103
80°	139	112	86	72	78
82.5°	117	93	70	51	55
85°	98	79	58	38	31
87.5°	80	67	49	29	9
90°	65	57	40	21	1
92.5°	52	48	33	12	1
95°	44	42	25	3	1
97.5°	36	33	15	1	1
100°	27	23	7	1	1
102.5°	18	14	2	1	1
105°	9	4	2	1	1
107.5°	3	2	2	1	1
110°	3	2	2	1	1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3	2	2	1	1
115°	3	2	2	1	1
117.5°	2	2	2	1	1
120°	2	2	2	1	1
122.5°	2	2	2	2	2
125°	2	2	2	2	2
127.5°	2	2	2	2	2
130°	2	2	2	2	2
132.5°	2	2	2	2	2
135°	2	2	2	2	2
137.5°	2	2	2	2	2
140°	2	2	2	2	2
142.5°	2	2	2	2	2
145°	2	2	2	2	2
147.5°	2	2	2	2	2
150°	2	2	2	2	2
152.5°	2	2	2	2	2
155°	2	2	2	2	2
157.5°	2	2	2	2	2
160°	2	2	2	2	2
162.5°	2	2	2	2	2
165°	2	2	2	2	2
167.5°	2	2	2	2	2
170°	2	2	2	2	2
172.5°	1	2	2	2	2
175°	1	2	2	2	2
177.5°	1	2	2	2	2
180°	2	2	2	2	2

(END OF REPORT)