

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: P392552

Luminaire Tested: **MWL-3-00-28-UNV-L840-EDD**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P392552
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-565-17)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MWL-3-00-28-UNV-L840-EDD
Description: MWL 3FT MEDICAL LED FIXTURE
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

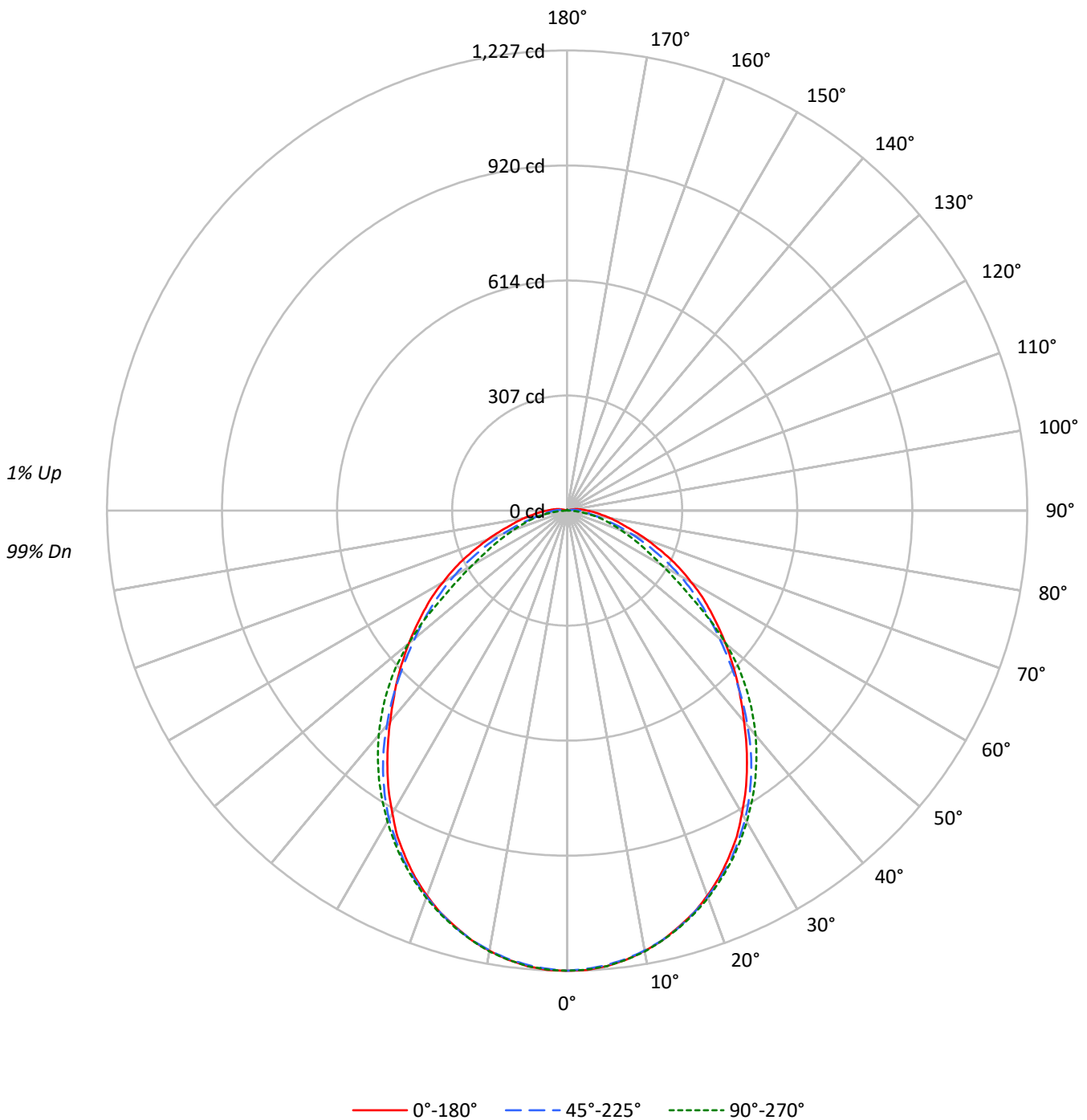
Lumens per Lamp: N/A
Luminaire Lumens: 2816.1 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 3' x H: 0.42')
CIE Type: Direct

Input Watts (W): 28.3
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	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°	10566	10566	10566
5°	10411	9819	9689
10°	10174	9119	8875
15°	9876	8440	8100
20°	9534	7767	7384
25°	9102	7115	6700
30°	8579	6448	6039
35°	8009	5754	5410
40°	7390	5018	4780
45°	6854	4290	4128
50°	6333	3623	3386
55°	5838	3044	2504
60°	5303	2503	1841
65°	4741	1935	1393
70°	4100	1434	1028
75°	3506	972	745
80°	3246	632	491
85°	3093	474	199



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	4.1
10°-20°	324.2	11.5
20°-30°	472.8	16.8
30°-40°	533.8	19.0
40°-50°	498.7	17.7
50°-60°	393.1	14.0
60°-70°	256.8	9.1
70°-80°	132.6	4.7
80°-90°	56.2	2.0
90°-100°	21.4	0.8
100°-110°	3.8	0.1
110°-120°	1.5	0.1
120°-130°	1.5	0.1
130°-140°	1.4	0.0
140°-150°	1.2	0.0
150°-160°	0.9	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	912.5	32.4
0°-40°	1446.3	51.4
0°-60°	2338.2	83.0
0°-90°	2783.7	98.9
90°-120°	26.7	0.9
90°-150°	30.7	1.1
90°-180°	32.0	1.1
0°-180°	2816.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1227	1227	1227	1227	1227	
5°	1219	1219	1216	1217	1219	116
15°	1149	1151	1151	1153	1152	324
25°	1020	1023	1030	1034	1034	469
35°	836	839	856	871	875	522
45°	641	629	636	661	678	495
55°	466	456	436	427	405	417
65°	302	293	259	218	215	299
75°	160	138	117	100	106	174
85°	81	65	49	32	25	73
90°	53	48	33	17	1	30
95°	37	35	20	3	1	27
105°	7	3	1	1	1	10
115°	2	2	2	1	1	2
125°	2	2	2	1	1	2
135°	2	2	2	2	1	2
145°	2	2	2	2	1	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°	1227	1227	1227	1227	1227
2.5°	1226	1226	1223	1224	1225
5°	1219	1219	1216	1217	1219
7.5°	1208	1208	1206	1207	1208
10°	1192	1192	1191	1192	1194
12.5°	1174	1174	1173	1174	1174
15°	1149	1151	1151	1153	1152
17.5°	1124	1125	1124	1127	1127
20°	1093	1095	1096	1099	1099
22.5°	1059	1061	1063	1068	1067
25°	1020	1023	1030	1034	1034
27.5°	980	983	990	996	997
30°	932	938	950	957	958
32.5°	886	891	904	916	917
35°	836	839	856	871	875
37.5°	785	786	804	825	829
40°	734	732	748	774	782
42.5°	686	679	693	721	731
45°	641	629	636	661	678
47.5°	595	584	581	602	620
50°	551	539	530	543	554
52.5°	507	496	482	484	481
55°	466	456	436	427	405
57.5°	426	417	392	368	344
60°	382	377	348	311	292
62.5°	342	336	303	262	248
65°	302	293	259	218	215
67.5°	261	252	220	184	181
70°	225	211	183	151	153
72.5°	191	171	150	124	129
75°	160	138	117	100	106
77.5°	137	112	91	79	87
80°	117	92	71	60	66
82.5°	96	77	59	42	45
85°	81	65	49	32	25
87.5°	66	56	41	24	7
90°	53	48	33	17	1
92.5°	44	40	27	10	1
95°	37	35	20	3	1
97.5°	29	27	13	1	1
100°	22	19	5	1	1
102.5°	15	11	1	1	1
105°	7	3	1	1	1
107.5°	2	2	1	1	1
110°	2	2	1	1	1



TEST NUMBER: P392552

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2	2	1	1	1
115°	2	2	2	1	1
117.5°	2	2	2	1	1
120°	2	2	2	1	1
122.5°	2	2	2	1	1
125°	2	2	2	1	1
127.5°	2	2	2	1	1
130°	2	2	2	1	1
132.5°	2	2	2	1	1
135°	2	2	2	2	1
137.5°	2	2	2	2	1
140°	2	2	2	2	1
142.5°	2	2	2	2	1
145°	2	2	2	2	1
147.5°	2	2	2	2	1
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)