

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: CORELITE

Report Number: P183512

Luminaire Tested: **MB-WS-2L30-1D-UNV-4-STD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P183512  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26967)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: MB-WS-2L30-1D-UNV-4-STD  
Description: CORELITE MINIGATOR SUSPENDED DIRECT-INDIRECT LED LUMINAIRE, 4 FOOT.  
WaveStream WITH FROSTED LENS. 65% UP / 35% DOWN.  
Light Source: (336)3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

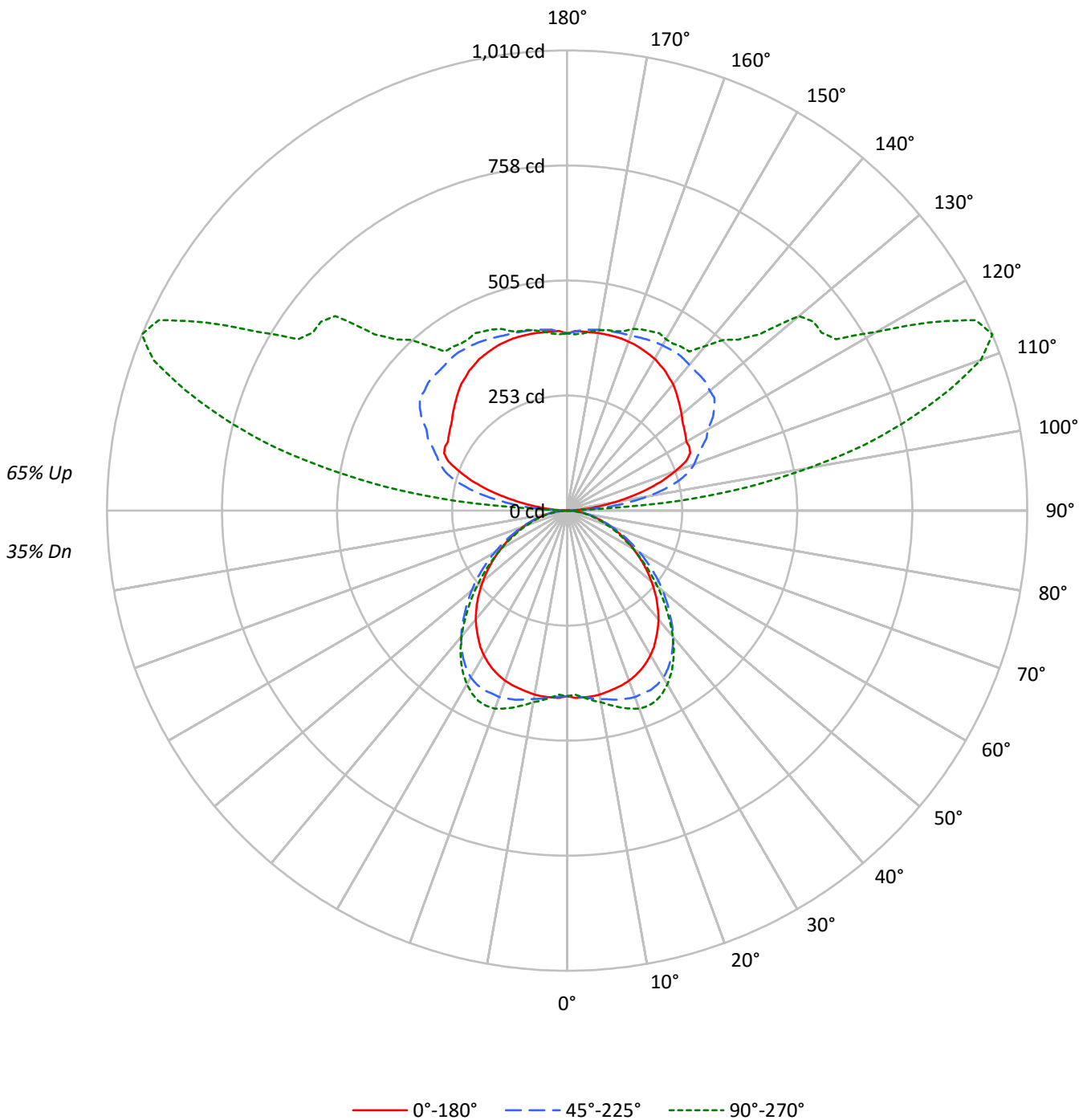
Lumens per Lamp: N/A  
Luminaire Lumens: 3622.1 lumens  
Efficiency: N/A  
Efficacy: 102.0 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.48 / 1.47  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 3.58' x H: 0.21')  
CIE Type: Semi-Indirect

Input Watts (W): 35.5  
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



TEST NUMBER: P183512  
CATALOG NUMBER: MB-WS-2L30-1D-UNV-4-STD

### Luminous Intensity Polar Plot





TEST NUMBER: P183512

CATALOG NUMBER: MB-WS-2L30-1D-UNV-4-STD

**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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35
1	94	90	86	83	85	82	78	76	66	63	61	51	49	48	37	36	36	29
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30	25
3	78	69	62	56	71	63	57	52	51	46	43	39	36	34	29	27	26	21
4	72	61	53	48	64	56	49	44	45	40	36	35	32	29	26	24	22	18
5	66	54	46	41	59	49	43	37	40	35	31	31	28	25	23	21	19	16
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14
7	56	44	36	31	50	40	33	28	33	27	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	29	25	30	25	21	23	20	17	18	15	13	11
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11	9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3263	3263	3263
5°	3292	3188	3156
10°	3302	3173	3164
15°	3302	3195	3227
20°	3317	3208	3280
25°	3310	3192	3238
30°	3276	3128	3081
35°	3200	2980	2858
40°	3113	2774	2571
45°	2977	2512	2253
50°	2811	2250	1937
55°	2634	1970	1635
60°	2438	1675	1368
65°	2248	1393	1105
70°	2036	1122	869
75°	1806	855	658
80°	1526	587	441
85°	1176	329	213



TEST NUMBER: P183512

CATALOG NUMBER: MB-WS-2L30-1D-UNV-4-STD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.5	1.1
10°-20°	120.9	3.3
20°-30°	196.4	5.4
30°-40°	239.2	6.6
40°-50°	235.6	6.5
50°-60°	195.1	5.4
60°-70°	135.9	3.8
70°-80°	75.1	2.1
80°-90°	22.8	0.6
90°-100°	132.8	3.7
100°-110°	407.9	11.3
110°-120°	477.8	13.2
120°-130°	410.9	11.3
130°-140°	330.7	9.1
140°-150°	258.3	7.1
150°-160°	190.8	5.3
160°-170°	114.5	3.2
170°-180°	37.8	1.0
0°-30°	356.8	9.9
0°-40°	596.0	16.5
0°-60°	1026.7	28.3
0°-90°	1260.5	34.8
90°-120°	1018.6	28.1
90°-150°	2018.5	55.7
90°-180°	2362.0	65.2
0°-180°	3622.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	407	407	407	407	407	
5°	412	407	412	412	412	39
15°	404	409	430	443	447	114
25°	385	397	434	456	461	177
35°	341	358	397	406	406	213
45°	278	295	318	316	309	214
55°	204	218	228	217	210	183
65°	133	142	142	133	128	132
75°	71	74	72	67	65	75
85°	21	23	21	18	17	22
90°	0	3	1	1	1	3
95°	37	48	87	218	247	45
105°	184	194	254	647	779	192
115°	298	304	325	678	989	288
125°	314	352	394	585	681	281
135°	345	365	416	480	531	267
145°	375	385	422	431	438	234
155°	390	393	414	430	434	180
165°	396	397	406	407	407	112
175°	394	394	399	396	390	38
180°	389	389	389	389	389	



TEST NUMBER: P183512

CATALOG NUMBER: MB-WS-2L30-1D-UNV-4-STD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	407.3	407.3	407.3	407.3	407.3
2.5°	411.5	407.3	408.7	408.7	404.4
5°	411.5	407.3	411.5	411.5	411.5
7.5°	411.5	408.7	415.8	418.6	420.0
10°	410.1	408.7	420.0	425.7	427.1
12.5°	407.3	408.7	424.3	434.2	437.1
15°	404.4	408.7	430.0	442.8	447.0
17.5°	401.6	407.3	432.8	449.8	455.5
20°	397.3	405.9	435.7	454.1	462.6
22.5°	391.7	401.6	434.2	455.5	464.0
25°	384.6	397.3	434.2	455.5	461.2
27.5°	376.1	390.2	430.0	449.8	452.7
30°	366.1	380.3	422.9	438.5	439.9
32.5°	354.8	371.8	411.5	422.9	424.3
35°	340.6	357.6	397.3	405.9	405.9
37.5°	326.4	344.8	380.3	384.6	384.6
40°	312.2	329.2	361.9	363.3	360.4
42.5°	295.2	312.2	340.6	340.6	334.9
45°	278.1	295.2	317.9	316.5	309.4
47.5°	259.7	276.7	296.6	290.9	283.8
50°	241.2	258.3	273.9	265.4	258.3
52.5°	222.8	239.8	251.2	241.2	234.1
55°	204.3	218.5	228.5	217.1	210.0
57.5°	185.9	198.7	205.8	194.4	187.3
60°	167.5	178.8	183.1	173.1	167.5
62.5°	150.4	160.4	161.8	151.8	146.2
65°	133.4	141.9	141.9	133.4	127.7
67.5°	116.4	123.5	122.0	114.9	110.7
70°	100.8	106.4	105.0	97.9	93.7
72.5°	85.1	89.4	88.0	82.3	79.5
75°	71.0	73.8	72.4	66.7	65.3
77.5°	56.8	59.6	58.2	53.9	51.1
80°	44.0	46.8	44.0	41.2	39.7
82.5°	31.2	34.1	32.6	29.8	28.4
85°	21.3	22.7	21.3	18.4	17.0
87.5°	9.9	11.4	9.9	7.1	7.1
90°	0.0	2.8	1.4	1.4	1.4
92.5°	14.2	19.9	27.0	45.4	31.2
95°	36.9	48.2	86.6	218.5	246.9
97.5°	69.5	80.9	134.8	347.7	403.0
100°	105.0	119.2	180.2	458.4	539.3
102.5°	143.3	157.5	220.0	559.1	669.8
105°	184.5	194.4	254.0	647.1	779.1
107.5°	220.0	228.5	279.6	712.4	878.4
110°	252.6	258.3	296.6	739.3	966.4



TEST NUMBER: P183512

CATALOG NUMBER: MB-WS-2L30-1D-UNV-4-STD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	282.4	282.4	309.4	722.3	1010.4
115°	298.0	303.7	325.0	678.3	989.1
117.5°	302.3	319.3	344.8	644.3	894.0
120°	302.3	339.2	356.2	623.0	784.8
122.5°	307.9	351.9	378.9	598.9	699.6
125°	313.6	351.9	394.5	584.7	681.2
127.5°	319.3	347.7	407.3	579.0	681.2
130°	327.8	351.9	408.7	543.5	664.1
132.5°	336.3	359.0	414.4	486.7	571.9
135°	344.8	364.7	415.8	479.7	530.7
137.5°	353.4	369.0	415.8	471.1	508.0
140°	361.9	374.6	417.2	445.6	471.1
142.5°	367.5	380.3	420.0	432.8	439.9
145°	374.6	384.6	421.5	431.4	438.5
147.5°	378.9	387.4	420.0	431.4	434.2
150°	384.6	390.2	418.6	435.7	434.2
152.5°	387.4	391.7	417.2	432.8	438.5
155°	390.2	393.1	414.4	430.0	434.2
157.5°	393.1	394.5	411.5	425.7	430.0
160°	394.5	395.9	408.7	420.0	424.3
162.5°	395.9	395.9	407.3	410.1	413.0
165°	395.9	397.3	405.9	407.3	407.3
167.5°	395.9	398.8	404.4	405.9	405.9
170°	395.9	398.8	403.0	401.6	401.6
172.5°	394.5	395.9	400.2	397.3	395.9
175°	394.5	394.5	398.8	395.9	390.2
177.5°	394.5	391.7	393.1	390.2	387.4
180°	388.8	388.8	388.8	388.8	388.8

(END OF REPORT)