

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: P183573

Luminaire Tested: **MB-WS-3L30-1D-UNV-4-STD-DM5**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P183573  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26966)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: MB-WS-3L30-1D-UNV-4-STD-DM5  
Description: CORELITE MINIGATOR SUSPENDED DIRECT-INDIRECT LED LUMINAIRE, 4 FOOT.  
WaveStream WITH FROSTED LENS. 50% UP / 50% DOWN.  
Light Source: (336)3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4501.4 lumens  
Efficiency: N/A  
Efficacy: 97.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.37 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 3.58' x H: 0.21')  
CIE Type: General Diffuse

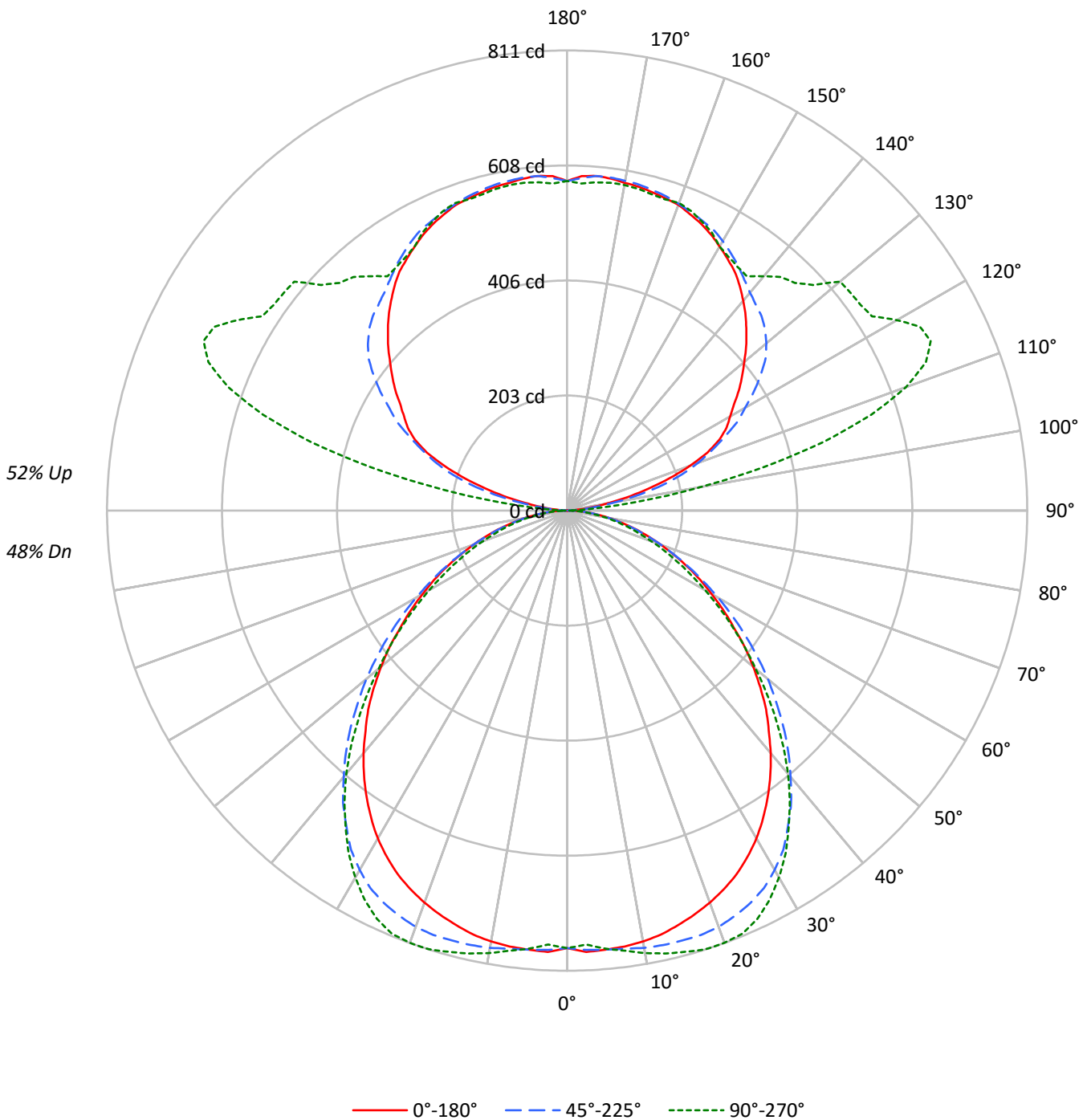
Input Watts (W): 46.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P183573

CATALOG NUMBER: MB-WS-3L30-1D-UNV-4-STD-DM5

### Luminous Intensity Polar Plot





TEST NUMBER: P183573

CATALOG NUMBER: MB-WS-3L30-1D-UNV-4-STD-DM5

**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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48				48
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41				41
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39	35				35
3	81	72	64	59	74	66	60	55	56	51	48	47	43	40	38	36	33	29				29
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29	25				25
5	68	57	49	43	63	52	45	40	45	39	35	37	33	30	31	28	25	22				22
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22	19				19
7	58	46	38	32	53	43	36	30	36	31	27	31	26	23	25	22	20	17				17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18	15				15
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16	14				14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14	12				12

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

	0°	45°	90°
0°	6177	6177	6177
5°	6215	6018	5942
10°	6208	5913	5867
15°	6174	5827	5812
20°	6138	5747	5749
25°	6084	5613	5573
30°	5973	5411	5229
35°	5793	5091	4792
40°	5565	4698	4317
45°	5309	4260	3790
50°	4988	3794	3252
55°	4619	3300	2761
60°	4281	2811	2294
65°	3940	2333	1859
70°	3540	1873	1469
75°	3118	1426	1102
80°	2616	980	734
85°	1977	523	354



TEST NUMBER: P183573

CATALOG NUMBER: MB-WS-3L30-1D-UNV-4-STD-DM5

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.1	1.6
10°-20°	221.0	4.9
20°-30°	346.9	7.7
30°-40°	412.5	9.2
40°-50°	402.3	8.9
50°-60°	331.4	7.4
60°-70°	230.5	5.1
70°-80°	126.7	2.8
80°-90°	37.8	0.8
90°-100°	50.9	1.1
100°-110°	260.8	5.8
110°-120°	400.3	8.9
120°-130°	417.9	9.3
130°-140°	382.5	8.5
140°-150°	326.8	7.3
150°-160°	258.7	5.7
160°-170°	164.4	3.7
170°-180°	56.0	1.2
0°-30°	641.9	14.3
0°-40°	1054.5	23.4
0°-60°	1788.2	39.7
0°-90°	2183.2	48.5
90°-120°	712.0	15.8
90°-150°	1839.2	40.9
90°-180°	2318.0	51.5
0°-180°	4501.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	771	771	771	771	771	
5°	777	769	777	775	775	74
15°	756	758	784	801	805	214
25°	707	718	764	786	794	325
35°	616	632	679	682	681	385
45°	496	515	539	528	520	381
55°	358	375	383	366	354	322
65°	234	241	238	224	215	232
75°	123	126	121	113	109	130
85°	36	38	34	30	28	37
90°	0	2	2	2	2	3
95°	19	21	24	53	58	27
105°	147	147	174	381	468	156
115°	296	292	305	536	707	288
125°	370	392	417	558	632	330
135°	447	454	485	530	568	345
145°	515	517	526	520	524	321
155°	558	556	564	564	562	257
165°	581	581	584	579	577	164
175°	592	586	592	588	581	56
180°	581	581	581	581	581	



TEST NUMBER: P183573

CATALOG NUMBER: MB-WS-3L30-1D-UNV-4-STD-DM5

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	771.1	771.1	771.1	771.1	771.1
2.5°	778.7	769.3	774.9	773.0	765.5
5°	776.8	769.3	776.8	774.9	774.9
7.5°	774.9	767.4	778.7	782.5	782.5
10°	771.1	765.5	782.5	788.1	791.9
12.5°	765.5	761.7	784.3	795.7	799.4
15°	756.1	757.9	784.3	801.3	805.1
17.5°	746.6	752.3	784.3	803.2	810.7
20°	735.3	742.9	780.6	803.2	810.7
22.5°	722.1	731.6	773.0	797.5	807.0
25°	707.0	718.4	763.6	786.2	793.8
27.5°	688.2	701.4	750.4	769.3	773.0
30°	667.4	680.6	731.6	744.7	746.6
32.5°	642.9	659.9	708.9	716.5	716.5
35°	616.5	631.6	678.8	682.5	680.6
37.5°	588.3	605.2	648.6	646.7	644.8
40°	558.1	575.1	612.8	609.0	605.2
42.5°	526.0	544.9	576.9	569.4	563.7
45°	495.9	514.7	539.2	527.9	520.4
47.5°	461.9	480.8	499.6	488.3	477.0
50°	428.0	445.0	461.9	443.1	433.7
52.5°	394.1	411.0	422.3	405.4	394.1
55°	358.2	375.2	382.7	365.8	354.5
57.5°	326.2	339.4	345.0	328.1	316.8
60°	294.1	305.4	307.3	292.2	280.9
62.5°	264.0	273.4	271.5	256.4	247.0
65°	233.8	241.3	237.6	224.4	214.9
67.5°	203.6	209.3	205.5	194.2	186.7
70°	175.3	181.0	175.3	164.0	158.4
72.5°	148.9	152.7	147.1	137.6	132.0
75°	122.6	126.3	120.7	113.1	109.4
77.5°	98.0	99.9	96.2	90.5	86.7
80°	75.4	77.3	73.5	69.8	66.0
82.5°	54.7	56.6	52.8	50.9	47.1
85°	35.8	37.7	33.9	30.2	28.3
87.5°	17.0	18.9	15.1	13.2	11.3
90°	0.0	1.9	1.9	1.9	1.9
92.5°	5.7	7.5	7.5	11.3	11.3
95°	18.9	20.7	24.5	52.8	58.4
97.5°	41.5	43.4	52.8	124.4	137.6
100°	69.8	73.5	88.6	211.2	239.5
102.5°	107.5	109.4	132.0	301.7	354.5
105°	147.1	147.1	173.5	380.9	467.6
107.5°	188.5	182.9	213.1	445.0	561.9
110°	230.0	222.5	245.1	488.3	635.4



TEST NUMBER: P183573

CATALOG NUMBER: MB-WS-3L30-1D-UNV-4-STD-DM5

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	267.7	258.3	275.3	514.7	684.4
115°	296.0	292.2	305.4	535.5	707.0
117.5°	316.8	322.4	337.5	550.5	701.4
120°	331.8	350.7	362.0	563.7	671.2
122.5°	348.8	375.2	390.3	560.0	637.3
125°	369.5	392.2	416.7	558.1	631.6
127.5°	388.4	403.5	441.2	560.0	629.7
130°	407.3	420.5	458.2	546.8	627.9
132.5°	428.0	437.4	473.2	527.9	588.3
135°	446.8	454.4	484.6	529.8	567.5
137.5°	465.7	469.5	492.1	531.7	558.1
140°	482.7	484.6	501.5	518.5	539.2
142.5°	499.6	501.5	512.8	514.7	520.4
145°	514.7	516.6	526.0	520.4	524.2
147.5°	526.0	527.9	537.4	529.8	529.8
150°	537.4	537.4	548.7	541.1	537.4
152.5°	548.7	546.8	558.1	552.4	552.4
155°	558.1	556.2	563.7	563.7	561.9
157.5°	565.6	563.7	569.4	573.2	571.3
160°	573.2	571.3	575.1	575.1	576.9
162.5°	576.9	576.9	580.7	575.1	575.1
165°	580.7	580.7	584.5	578.8	576.9
167.5°	584.5	584.5	588.3	582.6	580.7
170°	586.4	586.4	590.1	584.5	582.6
172.5°	590.1	588.3	592.0	586.4	582.6
175°	592.0	586.4	592.0	588.3	580.7
177.5°	590.1	584.5	586.4	580.7	576.9
180°	580.7	580.7	580.7	580.7	580.7

(END OF REPORT)