

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: P183453

Luminaire Tested: **MB-WS-3L30-1D-UNV-4-STD-DM8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P183453  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26969)  
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-DM8  
Description: CORELITE MINIGATOR SUSPENDED DIRECT-INDIRECT LED LUMINAIRE, 4 FOOT.  
WaveStream WITH FROSTED LENS. 80% UP / 20% DOWN.  
Light Source: (336)3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4688.1 lumens  
Efficiency: N/A  
Efficacy: 101.3 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 3.58' x H: 0.21')  
CIE Type: Semi-Indirect

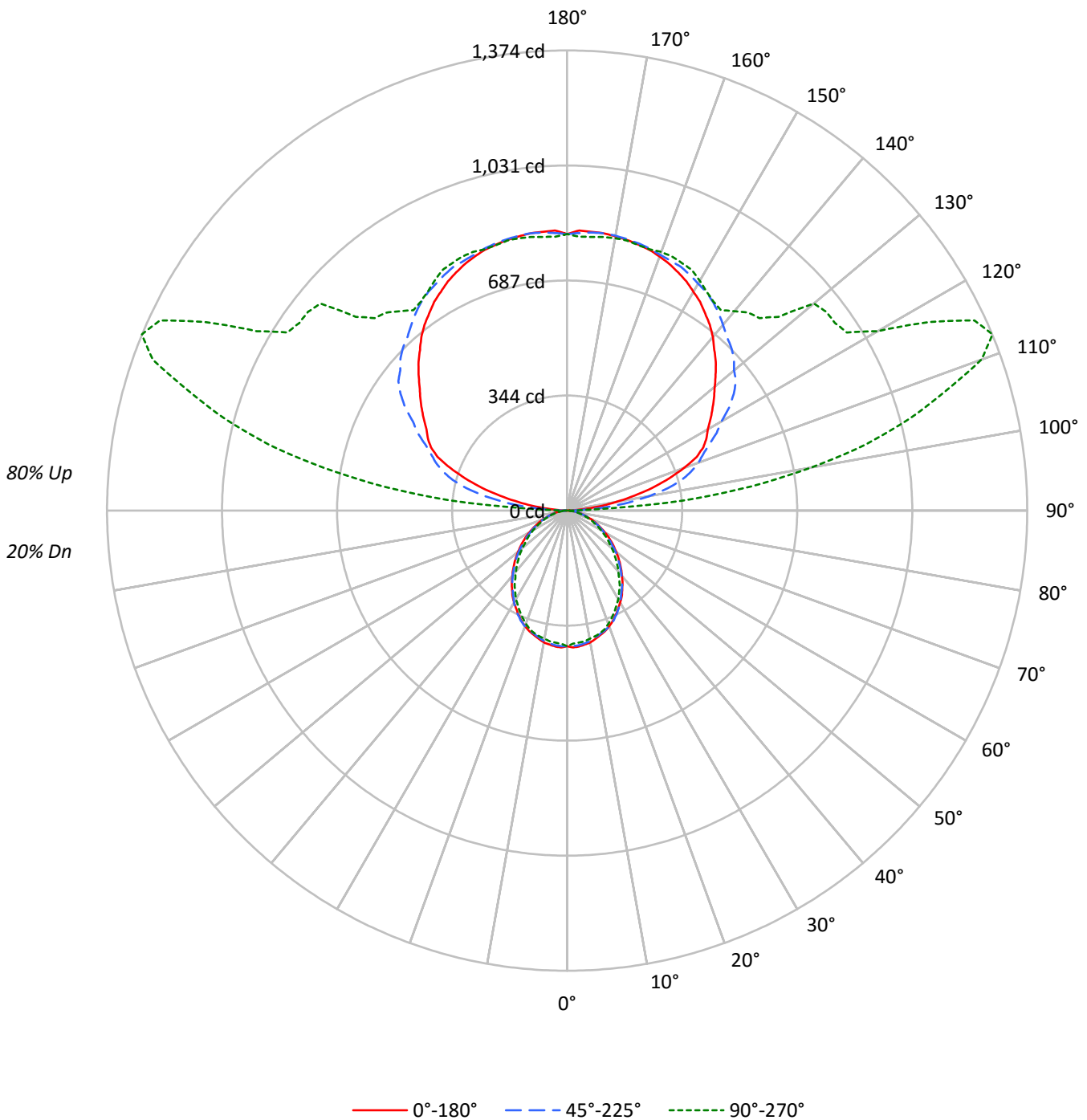
Input Watts (W): 46.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	91	87	83	80	81	77	74	71	58	57	55	41	40	39	26	25	24	17
2	83	76	70	65	73	67	63	59	51	48	45	36	34	33	23	22	21	15
3	76	67	60	55	67	59	54	49	45	41	38	32	30	28	20	19	18	12
4	69	59	52	46	61	53	46	41	40	36	32	29	26	24	18	17	15	11
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	16	15	13	9
6	58	47	39	34	51	42	35	31	32	28	24	23	20	18	15	13	12	8
7	54	42	35	29	47	38	31	27	29	24	21	21	18	16	13	12	10	7
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	12	11	9	7
9	46	35	28	23	41	31	25	21	24	20	17	18	15	12	11	10	8	6
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	10	9	8	5

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

	0°	45°	90°
0°	3247	3247	3247
5°	3259	3126	3036
10°	3218	2991	2877
15°	3141	2830	2736
20°	3070	2707	2553
25°	2952	2536	2343
30°	2835	2343	2139
35°	2693	2135	1925
40°	2538	1936	1695
45°	2382	1728	1497
50°	2219	1534	1301
55°	2067	1333	1131
60°	1894	1138	955
65°	1716	962	783
70°	1561	785	630
75°	1343	601	474
80°	1176	428	315
85°	939	262	165



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.1	0.8
10°-20°	107.4	2.3
20°-30°	156.5	3.3
30°-40°	176.4	3.8
40°-50°	167.6	3.6
50°-60°	137.9	2.9
60°-70°	97.0	2.1
70°-80°	54.7	1.2
80°-90°	18.1	0.4
90°-100°	183.9	3.9
100°-110°	561.0	12.0
110°-120°	672.7	14.3
120°-130°	621.8	13.3
130°-140°	547.1	11.7
140°-150°	468.1	10.0
150°-160°	368.2	7.9
160°-170°	232.5	5.0
170°-180°	79.2	1.7
0°-30°	302.0	6.4
0°-40°	478.4	10.2
0°-60°	783.9	16.7
0°-90°	953.7	20.3
90°-120°	1417.5	30.2
90°-150°	3054.5	65.2
90°-180°	3734.0	79.6
0°-180°	4688.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	405	405	405	405	405	
5°	407	402	404	402	396	39
15°	385	381	381	381	379	109
25°	343	339	345	336	334	158
35°	287	288	285	277	273	179
45°	222	224	219	209	206	172
55°	160	162	155	147	145	143
65°	102	104	98	92	90	101
75°	53	55	51	49	47	57
85°	17	19	17	15	13	17
90°	2	6	4	2	0	4
95°	51	66	121	300	353	63
105°	264	270	354	880	1058	276
115°	449	449	468	918	1342	437
125°	530	564	607	852	977	475
135°	628	645	692	760	813	484
145°	718	724	760	758	762	450
155°	784	779	803	809	814	362
165°	822	818	826	820	820	232
175°	835	832	833	828	820	80
180°	826	826	826	826	826	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	405.4	405.4	405.4	405.4	405.4
2.5°	409.1	403.5	405.4	403.5	397.8
5°	407.3	401.6	403.5	401.6	395.9
7.5°	403.5	397.8	399.7	397.8	394.1
10°	399.7	394.1	395.9	392.2	388.4
12.5°	392.2	388.4	388.4	384.6	384.6
15°	384.6	380.9	380.9	380.9	379.0
17.5°	377.1	371.4	375.2	375.2	371.4
20°	367.7	362.0	367.7	363.9	360.1
22.5°	356.3	352.6	358.2	350.7	346.9
25°	343.1	339.4	345.0	335.6	333.7
27.5°	329.9	328.1	331.8	322.4	318.6
30°	316.8	314.9	316.8	309.2	305.4
32.5°	303.6	301.7	299.8	292.2	288.5
35°	286.6	288.5	284.7	277.2	273.4
37.5°	271.5	273.4	269.6	260.2	254.5
40°	254.5	258.3	252.6	243.2	237.6
42.5°	239.4	241.3	235.7	226.3	222.5
45°	222.5	224.4	218.7	209.3	205.5
47.5°	207.4	209.3	203.6	194.2	190.4
50°	190.4	192.3	186.7	177.2	173.5
52.5°	175.3	177.2	169.7	162.1	158.4
55°	160.3	162.1	154.6	147.1	145.2
57.5°	145.2	147.1	139.5	133.9	130.1
60°	130.1	132.0	124.4	118.8	116.9
62.5°	115.0	116.9	111.2	105.6	103.7
65°	101.8	103.7	98.0	92.4	90.5
67.5°	88.6	90.5	84.8	81.1	79.2
70°	77.3	77.3	73.5	69.8	67.9
72.5°	64.1	66.0	62.2	58.4	56.6
75°	52.8	54.7	50.9	49.0	47.1
77.5°	43.4	45.3	41.5	39.6	37.7
80°	33.9	35.8	32.1	30.2	28.3
82.5°	24.5	26.4	24.5	22.6	20.7
85°	17.0	18.9	17.0	15.1	13.2
87.5°	7.5	11.3	7.5	7.5	5.7
90°	1.9	5.7	3.8	1.9	0.0
92.5°	18.9	26.4	39.6	67.9	73.5
95°	50.9	66.0	120.7	299.8	352.6
97.5°	96.2	113.1	184.8	469.5	554.3
100°	147.1	164.0	248.9	618.4	739.1
102.5°	205.5	218.7	307.3	756.1	914.4
105°	264.0	269.6	354.5	880.5	1057.7
107.5°	318.6	322.4	388.4	974.8	1184.0
110°	371.4	365.8	416.7	1012.5	1316.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	418.6	409.1	439.3	984.2	1374.5
115°	448.7	448.7	467.6	918.2	1342.4
117.5°	469.5	482.7	503.4	884.3	1219.9
120°	484.6	518.5	531.7	871.1	1070.9
122.5°	507.2	548.7	573.2	859.8	989.8
125°	529.8	563.7	607.1	852.2	976.6
127.5°	552.4	575.1	635.4	850.3	974.8
130°	575.1	593.9	650.5	816.4	961.6
132.5°	601.4	620.3	675.0	757.9	856.0
135°	627.8	644.8	692.0	759.8	812.6
137.5°	650.5	663.7	705.1	759.8	801.3
140°	676.9	686.3	724.0	744.7	776.8
142.5°	699.5	707.0	742.9	744.7	754.2
145°	718.3	724.0	759.8	757.9	761.7
147.5°	739.1	741.0	773.0	774.9	774.9
150°	754.2	754.2	782.5	791.9	791.9
152.5°	771.1	767.4	793.8	803.2	808.8
155°	784.3	778.7	803.2	808.8	814.5
157.5°	797.5	791.9	807.0	816.4	820.2
160°	807.0	801.3	812.6	818.3	822.0
162.5°	816.4	808.8	820.2	816.4	818.3
165°	822.0	818.3	825.8	820.2	820.2
167.5°	827.7	825.8	829.6	825.8	825.8
170°	831.5	829.6	833.4	827.7	825.8
172.5°	835.2	831.5	835.2	827.7	823.9
175°	835.2	831.5	833.4	827.7	820.2
177.5°	837.1	829.6	829.6	822.0	818.3
180°	825.8	825.8	825.8	825.8	825.8

(END OF REPORT)