

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: P183518

Luminaire Tested: **MB-WS-3L35-1D-UNV-4-STD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P183518  
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-3L35-1D-UNV-4-STD  
Description: CORELITE MINIGATOR SUSPENDED DIRECT-INDIRECT LED LUMINAIRE, 4 FOOT.  
WaveStream WITH FROSTED LENS. 65% UP / 35% DOWN.  
Light Source: (336)3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

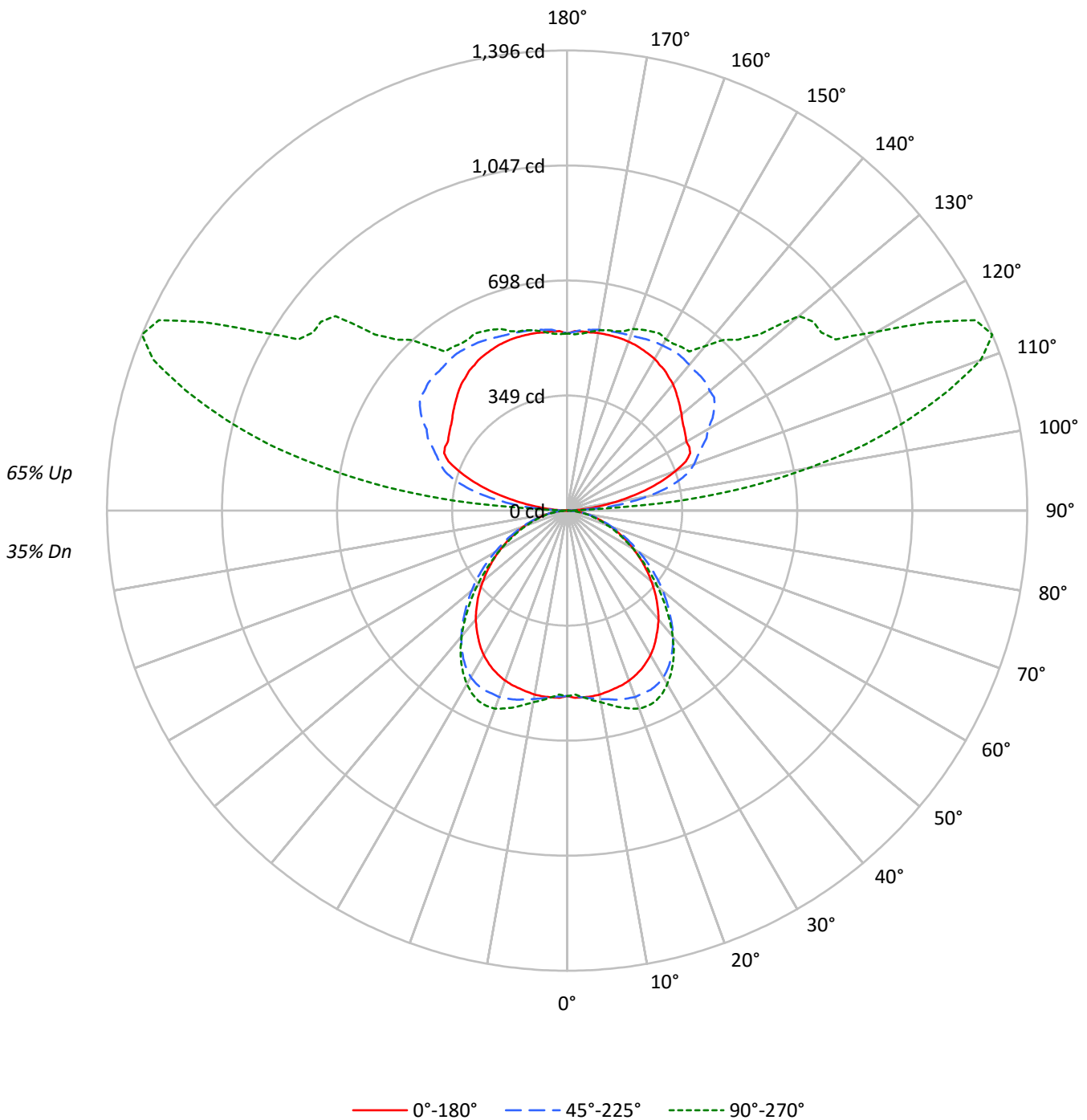
Lumens per Lamp: N/A  
Luminaire Lumens: 5004.9 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.48 / 1.47  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 3.58' x H: 0.21')  
CIE Type: Semi-Indirect

Input Watts (W): 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	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°	4508	4508	4508
5°	4549	4405	4360
10°	4563	4385	4372
15°	4563	4414	4459
20°	4583	4432	4533
25°	4573	4411	4474
30°	4527	4322	4257
35°	4422	4118	3948
40°	4301	3833	3552
45°	4114	3470	3113
50°	3884	3108	2676
55°	3642	2722	2260
60°	3368	2313	1889
65°	3106	1925	1527
70°	2811	1550	1200
75°	2492	1182	908
80°	2109	810	610
85°	1623	453	294



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.5	1.1
10°-20°	167.1	3.3
20°-30°	271.4	5.4
30°-40°	330.5	6.6
40°-50°	325.6	6.5
50°-60°	269.6	5.4
60°-70°	187.8	3.8
70°-80°	103.7	2.1
80°-90°	31.5	0.6
90°-100°	183.5	3.7
100°-110°	563.7	11.3
110°-120°	660.2	13.2
120°-130°	567.8	11.3
130°-140°	456.9	9.1
140°-150°	357.0	7.1
150°-160°	263.6	5.3
160°-170°	158.2	3.2
170°-180°	52.3	1.0
0°-30°	493.0	9.9
0°-40°	823.6	16.5
0°-60°	1418.7	28.3
0°-90°	1741.7	34.8
90°-120°	1407.4	28.1
90°-150°	2789.1	55.7
90°-180°	3263.0	65.2
0°-180°	5004.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	563	563	563	563	563	
5°	569	563	569	569	569	54
15°	559	565	594	612	618	158
25°	531	549	600	629	637	245
35°	471	494	549	561	561	294
45°	384	408	439	437	428	296
55°	282	302	316	300	290	252
65°	184	196	196	184	176	183
75°	98	102	100	92	90	104
85°	29	31	29	26	24	30
90°	0	4	2	2	2	5
95°	51	67	120	302	341	62
105°	255	269	351	894	1076	265
115°	412	420	449	937	1367	397
125°	433	486	545	808	941	389
135°	476	504	574	663	733	368
145°	518	531	582	596	606	324
155°	539	543	573	594	600	249
165°	547	549	561	563	563	155
175°	545	545	551	547	539	52
180°	537	537	537	537	537	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	562.8	562.8	562.8	562.8	562.8
2.5°	568.6	562.8	564.7	564.7	558.8
5°	568.6	562.8	568.6	568.6	568.6
7.5°	568.6	564.7	574.5	578.4	580.4
10°	566.7	564.7	580.4	588.2	590.2
12.5°	562.8	564.7	586.3	600.0	603.9
15°	558.8	564.7	594.1	611.8	617.7
17.5°	554.9	562.8	598.0	621.6	629.4
20°	549.0	560.8	602.0	627.5	639.2
22.5°	541.2	554.9	600.0	629.4	641.2
25°	531.4	549.0	600.0	629.4	637.3
27.5°	519.6	539.2	594.1	621.6	625.5
30°	505.9	525.5	584.3	605.9	607.9
32.5°	490.2	513.7	568.6	584.3	586.3
35°	470.6	494.1	549.0	560.8	560.8
37.5°	451.0	476.5	525.5	531.4	531.4
40°	431.4	454.9	500.0	502.0	498.0
42.5°	407.8	431.4	470.6	470.6	462.8
45°	384.3	407.8	439.2	437.3	427.5
47.5°	358.8	382.4	409.8	402.0	392.2
50°	333.3	356.9	378.4	366.7	356.9
52.5°	307.8	331.4	347.1	333.3	323.5
55°	282.4	302.0	315.7	300.0	290.2
57.5°	256.9	274.5	284.3	268.6	258.8
60°	231.4	247.1	252.9	239.2	231.4
62.5°	207.8	221.6	223.5	209.8	202.0
65°	184.3	196.1	196.1	184.3	176.5
67.5°	160.8	170.6	168.6	158.8	152.9
70°	139.2	147.1	145.1	135.3	129.4
72.5°	117.6	123.5	121.6	113.7	109.8
75°	98.0	102.0	100.0	92.2	90.2
77.5°	78.4	82.4	80.4	74.5	70.6
80°	60.8	64.7	60.8	56.9	54.9
82.5°	43.1	47.1	45.1	41.2	39.2
85°	29.4	31.4	29.4	25.5	23.5
87.5°	13.7	15.7	13.7	9.8	9.8
90°	0.0	3.9	2.0	2.0	2.0
92.5°	19.6	27.5	37.3	62.7	43.1
95°	51.0	66.7	119.6	302.0	341.2
97.5°	96.1	111.8	186.3	480.4	556.9
100°	145.1	164.7	249.0	633.3	745.1
102.5°	198.0	217.7	303.9	772.6	925.5
105°	254.9	268.6	351.0	894.1	1076.5
107.5°	303.9	315.7	386.3	984.3	1213.7
110°	349.0	356.9	409.8	1021.6	1335.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	390.2	390.2	427.5	998.1	1396.1
115°	411.8	419.6	449.0	937.3	1366.7
117.5°	417.7	441.2	476.5	890.2	1235.3
120°	417.7	468.6	492.2	860.8	1084.3
122.5°	425.5	486.3	523.5	827.5	966.7
125°	433.3	486.3	545.1	807.9	941.2
127.5°	441.2	480.4	562.8	800.0	941.2
130°	452.9	486.3	564.7	751.0	917.7
132.5°	464.7	496.1	572.6	672.6	790.2
135°	476.5	503.9	574.5	662.8	733.3
137.5°	488.2	509.8	574.5	651.0	702.0
140°	500.0	517.7	576.5	615.7	651.0
142.5°	507.9	525.5	580.4	598.0	607.9
145°	517.7	531.4	582.4	596.1	605.9
147.5°	523.5	535.3	580.4	596.1	600.0
150°	531.4	539.2	578.4	602.0	600.0
152.5°	535.3	541.2	576.5	598.0	605.9
155°	539.2	543.1	572.6	594.1	600.0
157.5°	543.1	545.1	568.6	588.2	594.1
160°	545.1	547.1	564.7	580.4	586.3
162.5°	547.1	547.1	562.8	566.7	570.6
165°	547.1	549.0	560.8	562.8	562.8
167.5°	547.1	551.0	558.8	560.8	560.8
170°	547.1	551.0	556.9	554.9	554.9
172.5°	545.1	547.1	552.9	549.0	547.1
175°	545.1	545.1	551.0	547.1	539.2
177.5°	545.1	541.2	543.1	539.2	535.3
180°	537.3	537.3	537.3	537.3	537.3

(END OF REPORT)