

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: P183460

Luminaire Tested: **MB-WS-5L35-1D-UNV-4-STD-DM8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P183460  
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-5L35-1D-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)3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7161.0 lumens  
Efficiency: N/A  
Efficacy: 90.4 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

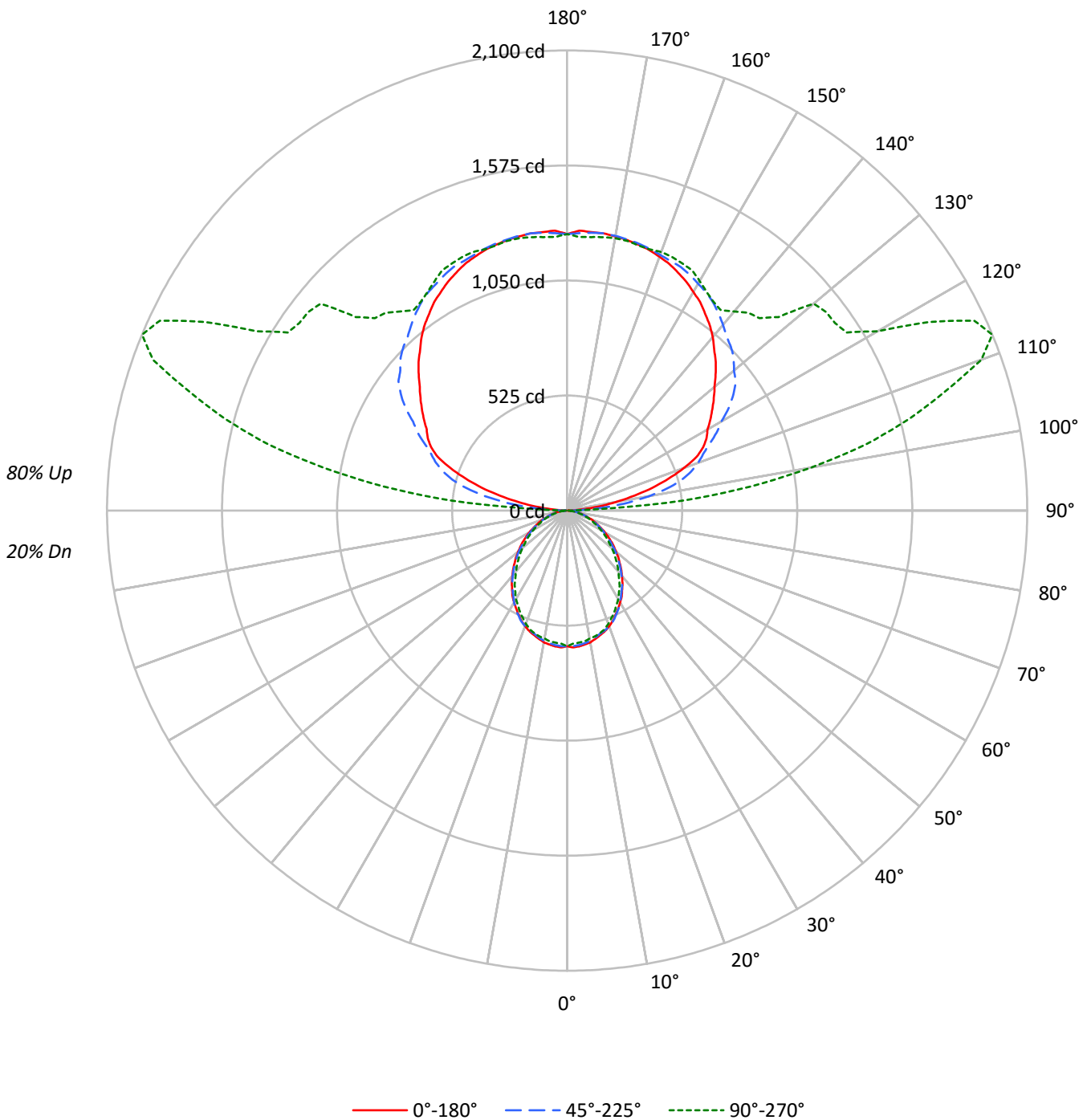
Input Watts (W): 79.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4960	4960	4960
5°	4977	4774	4638
10°	4916	4570	4395
15°	4797	4322	4179
20°	4688	4134	3901
25°	4511	3874	3579
30°	4330	3579	3268
35°	4114	3262	2940
40°	3877	2958	2588
45°	3638	2640	2286
50°	3390	2342	1987
55°	3157	2037	1727
60°	2892	1739	1458
65°	2621	1471	1195
70°	2385	1200	961
75°	2050	919	725
80°	1797	653	480
85°	1430	399	253



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.2	0.8
10°-20°	164.1	2.3
20°-30°	239.0	3.3
30°-40°	269.4	3.8
40°-50°	255.9	3.6
50°-60°	210.7	2.9
60°-70°	148.2	2.1
70°-80°	83.5	1.2
80°-90°	27.6	0.4
90°-100°	280.9	3.9
100°-110°	856.8	12.0
110°-120°	1027.5	14.3
120°-130°	949.8	13.3
130°-140°	835.7	11.7
140°-150°	715.0	10.0
150°-160°	562.3	7.9
160°-170°	355.1	5.0
170°-180°	121.0	1.7
0°-30°	461.3	6.4
0°-40°	730.8	10.2
0°-60°	1197.4	16.7
0°-90°	1456.8	20.3
90°-120°	2165.2	30.2
90°-150°	4665.7	65.2
90°-180°	5704.0	79.7
0°-180°	7161.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	619	619	619	619	619	
5°	622	613	616	613	605	59
15°	588	582	582	582	579	166
25°	524	518	527	513	510	241
35°	438	441	435	423	418	274
45°	340	343	334	320	314	263
55°	245	248	236	225	222	219
65°	156	158	150	141	138	155
75°	81	84	78	75	72	87
85°	26	29	26	23	20	26
90°	3	9	6	3	0	6
95°	78	101	184	458	539	96
105°	403	412	541	1345	1616	422
115°	685	685	714	1402	2050	668
125°	809	861	927	1302	1492	725
135°	959	985	1057	1161	1241	739
145°	1097	1106	1161	1158	1164	688
155°	1198	1189	1227	1236	1244	553
165°	1256	1250	1261	1253	1253	355
175°	1276	1270	1273	1264	1253	122
180°	1261	1261	1261	1261	1261	



TEST NUMBER: P183460

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	619.2	619.2	619.2	619.2	619.2
2.5°	625.0	616.3	619.2	616.3	607.7
5°	622.1	613.4	616.3	613.4	604.8
7.5°	616.3	607.7	610.6	607.7	601.9
10°	610.6	601.9	604.8	599.0	593.3
12.5°	599.0	593.3	593.3	587.5	587.5
15°	587.5	581.8	581.8	581.8	578.9
17.5°	576.0	567.4	573.1	573.1	567.4
20°	561.6	553.0	561.6	555.8	550.1
22.5°	544.3	538.6	547.2	535.7	529.9
25°	524.2	518.4	527.0	512.6	509.8
27.5°	504.0	501.1	506.9	492.5	486.7
30°	483.8	481.0	483.8	472.3	466.6
32.5°	463.7	460.8	457.9	446.4	440.6
35°	437.8	440.6	434.9	423.4	417.6
37.5°	414.7	417.6	411.8	397.4	388.8
40°	388.8	394.6	385.9	371.5	362.9
42.5°	365.8	368.6	360.0	345.6	339.8
45°	339.8	342.7	334.1	319.7	313.9
47.5°	316.8	319.7	311.0	296.6	290.9
50°	290.9	293.8	285.1	270.7	265.0
52.5°	267.8	270.7	259.2	247.7	241.9
55°	244.8	247.7	236.2	224.6	221.8
57.5°	221.8	224.6	213.1	204.5	198.7
60°	198.7	201.6	190.1	181.4	178.6
62.5°	175.7	178.6	169.9	161.3	158.4
65°	155.5	158.4	149.8	141.1	138.2
67.5°	135.4	138.2	129.6	123.8	121.0
70°	118.1	118.1	112.3	106.6	103.7
72.5°	97.9	100.8	95.0	89.3	86.4
75°	80.6	83.5	77.8	74.9	72.0
77.5°	66.2	69.1	63.4	60.5	57.6
80°	51.8	54.7	49.0	46.1	43.2
82.5°	37.4	40.3	37.4	34.6	31.7
85°	25.9	28.8	25.9	23.0	20.2
87.5°	11.5	17.3	11.5	11.5	8.6
90°	2.9	8.6	5.8	2.9	0.0
92.5°	28.8	40.3	60.5	103.7	112.3
95°	77.8	100.8	184.3	457.9	538.6
97.5°	146.9	172.8	282.2	717.1	846.7
100°	224.6	250.6	380.2	944.6	1128.9
102.5°	313.9	334.1	469.4	1154.9	1396.8
105°	403.2	411.8	541.4	1344.9	1615.7
107.5°	486.7	492.5	593.3	1488.9	1808.6
110°	567.4	558.7	636.5	1546.5	2010.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	639.3	625.0	671.0	1503.3	2099.5
115°	685.4	685.4	714.2	1402.5	2050.5
117.5°	717.1	737.3	768.9	1350.7	1863.3
120°	740.1	792.0	812.1	1330.5	1635.8
122.5°	774.7	838.1	875.5	1313.3	1512.0
125°	809.3	861.1	927.3	1301.7	1491.8
127.5°	843.8	878.4	970.5	1298.9	1488.9
130°	878.4	907.2	993.6	1247.0	1468.8
132.5°	918.7	947.5	1031.0	1157.7	1307.5
135°	959.0	984.9	1056.9	1160.6	1241.3
137.5°	993.6	1013.7	1077.1	1160.6	1224.0
140°	1033.9	1048.3	1105.9	1137.6	1186.5
142.5°	1068.5	1080.0	1134.7	1137.6	1152.0
145°	1097.3	1105.9	1160.6	1157.7	1163.5
147.5°	1128.9	1131.8	1180.8	1183.7	1183.7
150°	1152.0	1152.0	1195.2	1209.6	1209.6
152.5°	1177.9	1172.1	1212.5	1226.9	1235.5
155°	1198.1	1189.4	1226.9	1235.5	1244.1
157.5°	1218.2	1209.6	1232.6	1247.0	1252.8
160°	1232.6	1224.0	1241.3	1249.9	1255.7
162.5°	1247.0	1235.5	1252.8	1247.0	1249.9
165°	1255.7	1249.9	1261.4	1252.8	1252.8
167.5°	1264.3	1261.4	1267.2	1261.4	1261.4
170°	1270.1	1267.2	1272.9	1264.3	1261.4
172.5°	1275.8	1270.1	1275.8	1264.3	1258.5
175°	1275.8	1270.1	1272.9	1264.3	1252.8
177.5°	1278.7	1267.2	1267.2	1255.7	1249.9
180°	1261.4	1261.4	1261.4	1261.4	1261.4

(END OF REPORT)