

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: P183579

Luminaire Tested: **MB-WS-4L35-1D-UNV-4-STD-DM5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183579
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-4L35-1D-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)3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5790.5 lumens
Efficiency: N/A
Efficacy: 90.9 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

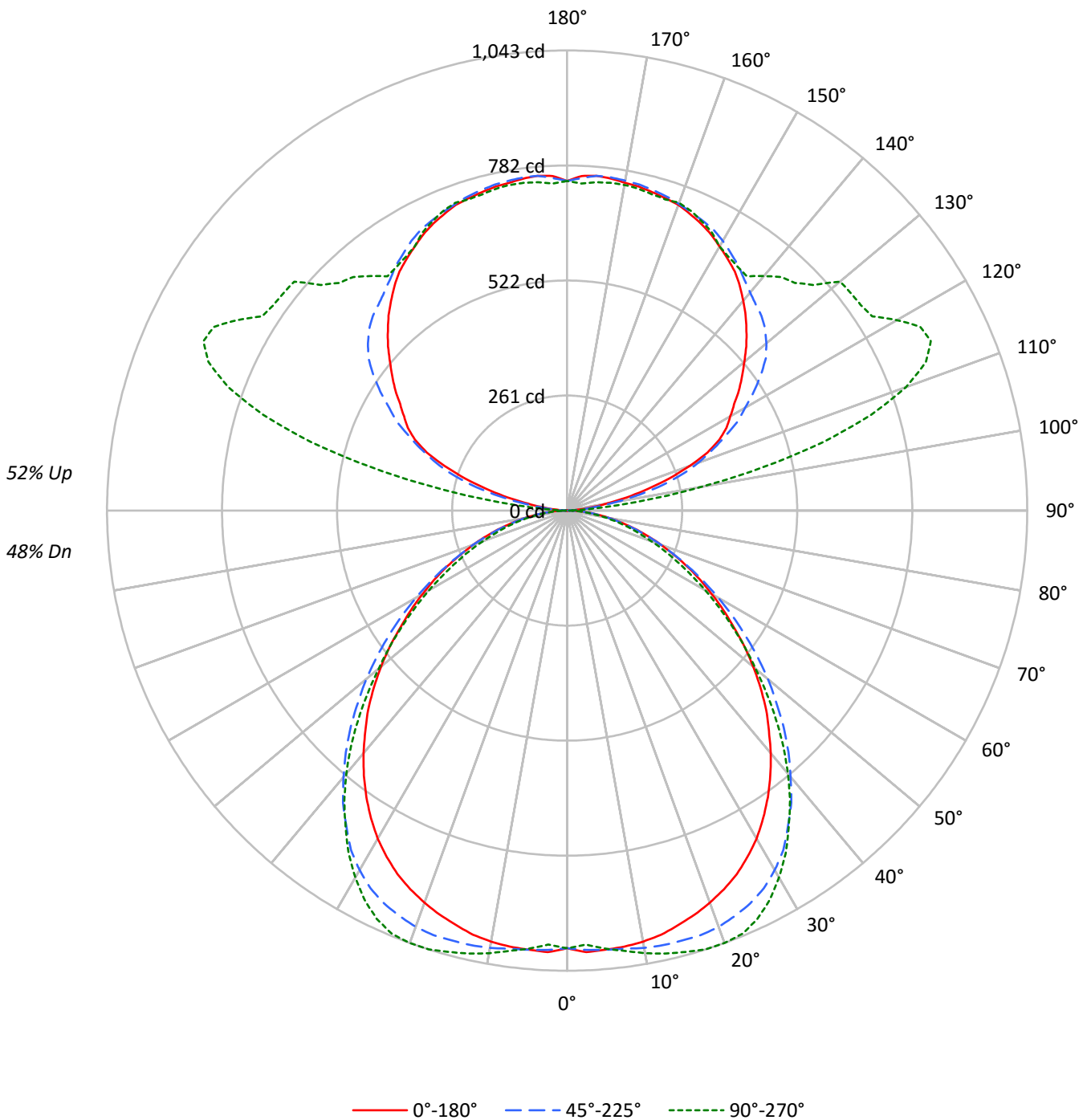
Input Watts (W): 63.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7946	7946	7946
5°	7994	7741	7644
10°	7987	7605	7546
15°	7942	7495	7476
20°	7896	7392	7395
25°	7826	7221	7168
30°	7684	6960	6726
35°	7452	6549	6165
40°	7158	6042	5553
45°	6829	5481	4875
50°	6417	4881	4183
55°	5942	4245	3551
60°	5508	3616	2951
65°	5068	3001	2392
70°	4556	2410	1889
75°	4008	1834	1417
80°	3365	1261	944
85°	2546	674	455



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.3	1.6
10°-20°	284.2	4.9
20°-30°	446.2	7.7
30°-40°	530.6	9.2
40°-50°	517.5	8.9
50°-60°	426.3	7.4
60°-70°	296.5	5.1
70°-80°	163.0	2.8
80°-90°	48.6	0.8
90°-100°	65.5	1.1
100°-110°	335.5	5.8
110°-120°	514.9	8.9
120°-130°	537.6	9.3
130°-140°	492.0	8.5
140°-150°	420.3	7.3
150°-160°	332.7	5.7
160°-170°	211.5	3.7
170°-180°	72.1	1.2
0°-30°	825.8	14.3
0°-40°	1356.4	23.4
0°-60°	2300.3	39.7
0°-90°	2808.4	48.5
90°-120°	915.9	15.8
90°-150°	2365.8	40.9
90°-180°	2982.0	51.5
0°-180°	5790.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	992	992	992	992	992	
5°	999	990	999	997	997	95
15°	973	975	1009	1031	1036	275
25°	910	924	982	1011	1021	418
35°	793	812	873	878	876	495
45°	638	662	694	679	669	491
55°	461	483	492	470	456	414
65°	301	310	306	289	276	298
75°	158	162	155	146	141	168
85°	46	48	44	39	36	48
90°	0	2	2	2	2	4
95°	24	27	32	68	75	34
105°	189	189	223	490	602	201
115°	381	376	393	689	910	370
125°	475	504	536	718	812	425
135°	575	584	623	682	730	444
145°	662	664	677	669	674	413
155°	718	716	725	725	723	331
165°	747	747	752	745	742	211
175°	762	754	762	757	747	72
180°	747	747	747	747	747	



TEST NUMBER: P183579

CATALOG NUMBER: MB-WS-4L35-1D-UNV-4-STD-DM5

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	992.0	992.0	992.0	992.0	992.0
2.5°	1001.7	989.5	996.8	994.4	984.7
5°	999.2	989.5	999.2	996.8	996.8
7.5°	996.8	987.1	1001.7	1006.5	1006.5
10°	992.0	984.7	1006.5	1013.8	1018.6
12.5°	984.7	979.8	1008.9	1023.5	1028.4
15°	972.6	975.0	1008.9	1030.8	1035.6
17.5°	960.4	967.7	1008.9	1033.2	1042.9
20°	945.9	955.6	1004.1	1033.2	1042.9
22.5°	928.9	941.0	994.4	1025.9	1038.1
25°	909.5	924.1	982.3	1011.4	1021.1
27.5°	885.3	902.2	965.3	989.5	994.4
30°	858.6	875.6	941.0	958.0	960.4
32.5°	827.0	848.9	911.9	921.6	921.6
35°	793.1	812.5	873.1	878.0	875.6
37.5°	756.7	778.5	834.3	831.9	829.5
40°	717.9	739.7	788.2	783.4	778.5
42.5°	676.7	700.9	742.2	732.5	725.2
45°	637.9	662.1	693.7	679.1	669.4
47.5°	594.2	618.5	642.7	628.2	613.6
50°	550.6	572.4	594.2	570.0	557.8
52.5°	506.9	528.7	543.3	521.5	506.9
55°	460.8	482.6	492.3	470.5	456.0
57.5°	419.6	436.6	443.8	422.0	407.5
60°	378.4	392.9	395.3	375.9	361.4
62.5°	339.5	351.7	349.3	329.8	317.7
65°	300.7	310.4	305.6	288.6	276.5
67.5°	261.9	269.2	264.4	249.8	240.1
70°	225.6	232.8	225.6	211.0	203.7
72.5°	191.6	196.5	189.2	177.1	169.8
75°	157.6	162.5	155.2	145.5	140.7
77.5°	126.1	128.5	123.7	116.4	111.6
80°	97.0	99.4	94.6	89.7	84.9
82.5°	70.3	72.8	67.9	65.5	60.6
85°	46.1	48.5	43.7	38.8	36.4
87.5°	21.8	24.3	19.4	17.0	14.6
90°	0.0	2.4	2.4	2.4	2.4
92.5°	7.3	9.7	9.7	14.6	14.6
95°	24.3	26.7	31.5	67.9	75.2
97.5°	53.4	55.8	67.9	160.1	177.1
100°	89.7	94.6	114.0	271.6	308.0
102.5°	138.2	140.7	169.8	388.1	456.0
105°	189.2	189.2	223.1	489.9	601.5
107.5°	242.5	235.3	274.1	572.4	722.8
110°	295.9	286.2	315.3	628.2	817.3



TEST NUMBER: P183579

CATALOG NUMBER: MB-WS-4L35-1D-UNV-4-STD-DM5

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	344.4	332.3	354.1	662.1	880.4
115°	380.8	375.9	392.9	688.8	909.5
117.5°	407.5	414.7	434.1	708.2	902.2
120°	426.9	451.1	465.7	725.2	863.4
122.5°	448.7	482.6	502.0	720.3	819.8
125°	475.4	504.5	536.0	717.9	812.5
127.5°	499.6	519.0	567.5	720.3	810.1
130°	523.9	540.9	589.4	703.4	807.6
132.5°	550.6	562.7	608.8	679.1	756.7
135°	574.8	584.5	623.3	681.5	730.0
137.5°	599.1	603.9	633.0	684.0	717.9
140°	620.9	623.3	645.1	667.0	693.7
142.5°	642.7	645.1	659.7	662.1	669.4
145°	662.1	664.5	676.7	669.4	674.2
147.5°	676.7	679.1	691.2	681.5	681.5
150°	691.2	691.2	705.8	696.1	691.2
152.5°	705.8	703.4	717.9	710.6	710.6
155°	717.9	715.5	725.2	725.2	722.8
157.5°	727.6	725.2	732.5	737.3	734.9
160°	737.3	734.9	739.7	739.7	742.2
162.5°	742.2	742.2	747.0	739.7	739.7
165°	747.0	747.0	751.9	744.6	742.2
167.5°	751.9	751.9	756.7	749.4	747.0
170°	754.3	754.3	759.1	751.9	749.4
172.5°	759.1	756.7	761.6	754.3	749.4
175°	761.6	754.3	761.6	756.7	747.0
177.5°	759.1	751.9	754.3	747.0	742.2
180°	747.0	747.0	747.0	747.0	747.0

(END OF REPORT)