

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: P183582

Luminaire Tested: **MB-WS-2L40-1D-UNV-4-STD-DM5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183582
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-2L40-1D-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)4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3594.8 lumens
Efficiency: N/A
Efficacy: 101.3 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

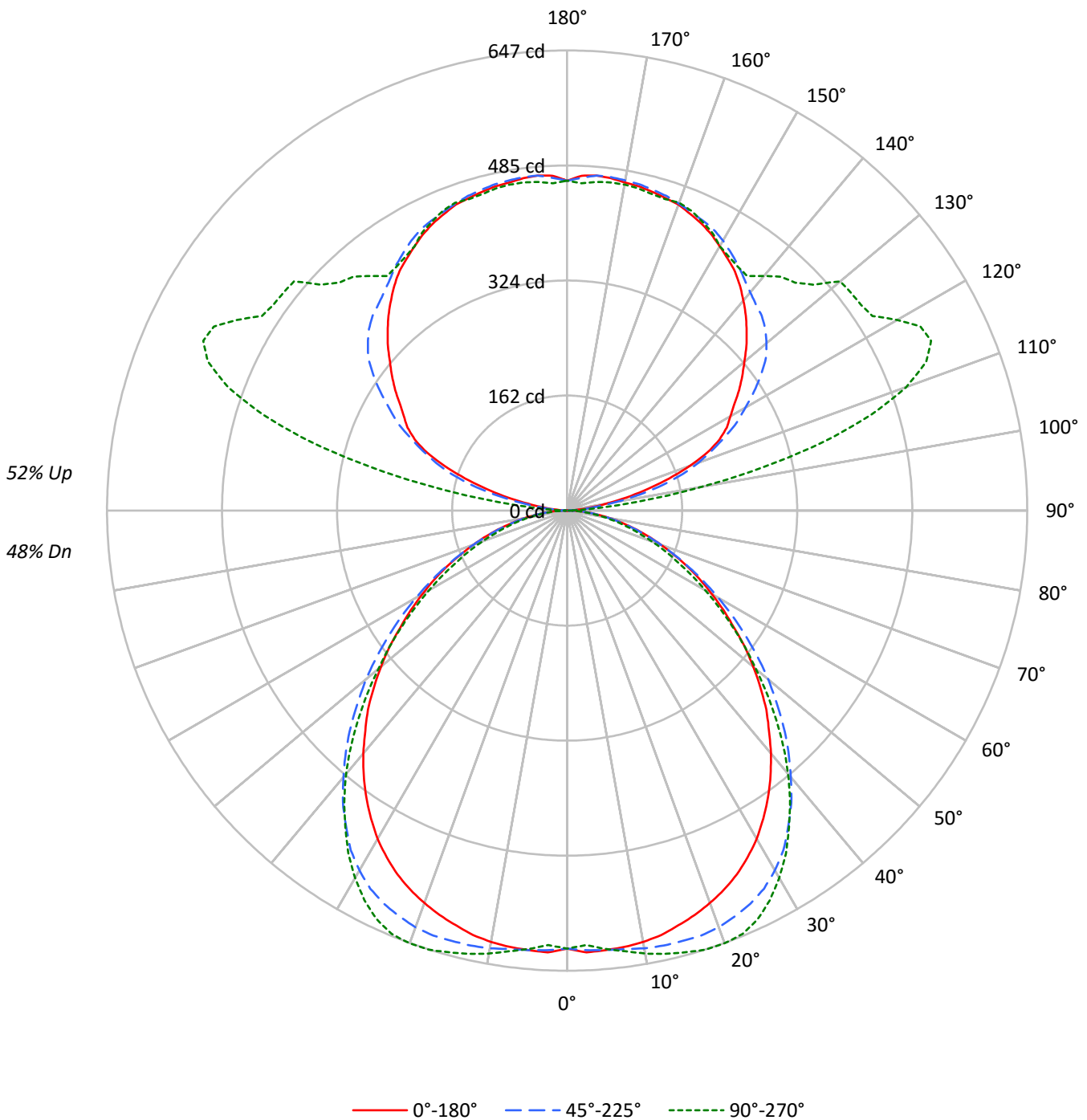
Input Watts (W): 35.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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°	4933	4933	4933
5°	4963	4805	4745
10°	4958	4722	4685
15°	4931	4654	4641
20°	4902	4589	4591
25°	4859	4483	4450
30°	4770	4321	4176
35°	4627	4065	3827
40°	4444	3751	3447
45°	4240	3402	3027
50°	3984	3030	2597
55°	3689	2636	2205
60°	3419	2245	1831
65°	3147	1863	1484
70°	2827	1496	1173
75°	2490	1139	879
80°	2089	782	586
85°	1579	418	283



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.2	1.6
10°-20°	176.5	4.9
20°-30°	277.0	7.7
30°-40°	329.4	9.2
40°-50°	321.3	8.9
50°-60°	264.7	7.4
60°-70°	184.1	5.1
70°-80°	101.2	2.8
80°-90°	30.2	0.8
90°-100°	40.6	1.1
100°-110°	208.3	5.8
110°-120°	319.7	8.9
120°-130°	333.8	9.3
130°-140°	305.5	8.5
140°-150°	260.9	7.3
150°-160°	206.6	5.7
160°-170°	131.3	3.7
170°-180°	44.8	1.2
0°-30°	512.6	14.3
0°-40°	842.1	23.4
0°-60°	1428.0	39.7
0°-90°	1743.4	48.5
90°-120°	568.6	15.8
90°-150°	1468.7	40.9
90°-180°	1851.0	51.5
0°-180°	3594.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	616	616	616	616	616	
5°	620	614	620	619	619	59
15°	604	605	626	640	643	171
25°	565	574	610	628	634	260
35°	492	504	542	545	544	308
45°	396	411	431	422	416	305
55°	286	300	306	292	283	257
65°	187	193	190	179	172	185
75°	98	101	96	90	87	104
85°	29	30	27	24	23	30
90°	0	2	2	2	2	2
95°	15	17	20	42	47	21
105°	117	117	138	304	373	125
115°	236	233	244	428	565	230
125°	295	313	333	446	504	264
135°	357	363	387	423	453	275
145°	411	413	420	416	419	257
155°	446	444	450	450	449	205
165°	464	464	467	462	461	131
175°	473	468	473	470	464	45
180°	464	464	464	464	464	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	615.8	615.8	615.8	615.8	615.8
2.5°	621.8	614.3	618.8	617.3	611.3
5°	620.3	614.3	620.3	618.8	618.8
7.5°	618.8	612.8	621.8	624.9	624.9
10°	615.8	611.3	624.9	629.4	632.4
12.5°	611.3	608.3	626.4	635.4	638.4
15°	603.8	605.3	626.4	639.9	642.9
17.5°	596.3	600.8	626.4	641.4	647.4
20°	587.2	593.2	623.4	641.4	647.4
22.5°	576.7	584.2	617.3	636.9	644.4
25°	564.6	573.7	609.8	627.9	633.9
27.5°	549.6	560.1	599.3	614.3	617.3
30°	533.0	543.6	584.2	594.7	596.3
32.5°	513.4	527.0	566.1	572.2	572.2
35°	492.4	504.4	542.0	545.1	543.6
37.5°	469.8	483.3	518.0	516.4	514.9
40°	445.7	459.2	489.3	486.3	483.3
42.5°	420.1	435.1	460.7	454.7	450.2
45°	396.0	411.1	430.6	421.6	415.6
47.5°	368.9	383.9	399.0	390.0	380.9
50°	341.8	355.3	368.9	353.8	346.3
52.5°	314.7	328.2	337.3	323.7	314.7
55°	286.1	299.6	305.7	292.1	283.1
57.5°	260.5	271.0	275.5	262.0	253.0
60°	234.9	243.9	245.4	233.4	224.3
62.5°	210.8	218.3	216.8	204.8	197.2
65°	186.7	192.7	189.7	179.2	171.6
67.5°	162.6	167.1	164.1	155.1	149.1
70°	140.0	144.5	140.0	131.0	126.5
72.5°	118.9	122.0	117.4	109.9	105.4
75°	97.9	100.9	96.4	90.3	87.3
77.5°	78.3	79.8	76.8	72.3	69.3
80°	60.2	61.7	58.7	55.7	52.7
82.5°	43.7	45.2	42.2	40.7	37.6
85°	28.6	30.1	27.1	24.1	22.6
87.5°	13.6	15.1	12.0	10.5	9.0
90°	0.0	1.5	1.5	1.5	1.5
92.5°	4.5	6.0	6.0	9.0	9.0
95°	15.1	16.6	19.6	42.2	46.7
97.5°	33.1	34.6	42.2	99.4	109.9
100°	55.7	58.7	70.8	168.6	191.2
102.5°	85.8	87.3	105.4	240.9	283.1
105°	117.4	117.4	138.5	304.1	373.4
107.5°	150.6	146.1	170.1	355.3	448.7
110°	183.7	177.7	195.7	390.0	507.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	213.8	206.3	219.8	411.1	546.6
115°	236.4	233.4	243.9	427.6	564.6
117.5°	253.0	257.5	269.5	439.7	560.1
120°	265.0	280.1	289.1	450.2	536.0
122.5°	278.6	299.6	311.7	447.2	508.9
125°	295.1	313.2	332.8	445.7	504.4
127.5°	310.2	322.2	352.3	447.2	502.9
130°	325.2	335.8	365.9	436.6	501.4
132.5°	341.8	349.3	377.9	421.6	469.8
135°	356.8	362.9	387.0	423.1	453.2
137.5°	371.9	374.9	393.0	424.6	445.7
140°	385.5	387.0	400.5	414.1	430.6
142.5°	399.0	400.5	409.5	411.1	415.6
145°	411.1	412.6	420.1	415.6	418.6
147.5°	420.1	421.6	429.1	423.1	423.1
150°	429.1	429.1	438.2	432.1	429.1
152.5°	438.2	436.6	445.7	441.2	441.2
155°	445.7	444.2	450.2	450.2	448.7
157.5°	451.7	450.2	454.7	457.7	456.2
160°	457.7	456.2	459.2	459.2	460.7
162.5°	460.7	460.7	463.8	459.2	459.2
165°	463.8	463.8	466.8	462.2	460.7
167.5°	466.8	466.8	469.8	465.3	463.8
170°	468.3	468.3	471.3	466.8	465.3
172.5°	471.3	469.8	472.8	468.3	465.3
175°	472.8	468.3	472.8	469.8	463.8
177.5°	471.3	466.8	468.3	463.8	460.7
180°	463.8	463.8	463.8	463.8	463.8

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