

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: P183462

Luminaire Tested: **MB-WS-2L40-1D-UNV-4-STD-DM8**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183462
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-2L40-1D-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)4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3743.9 lumens
Efficiency: N/A
Efficacy: 105.5 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

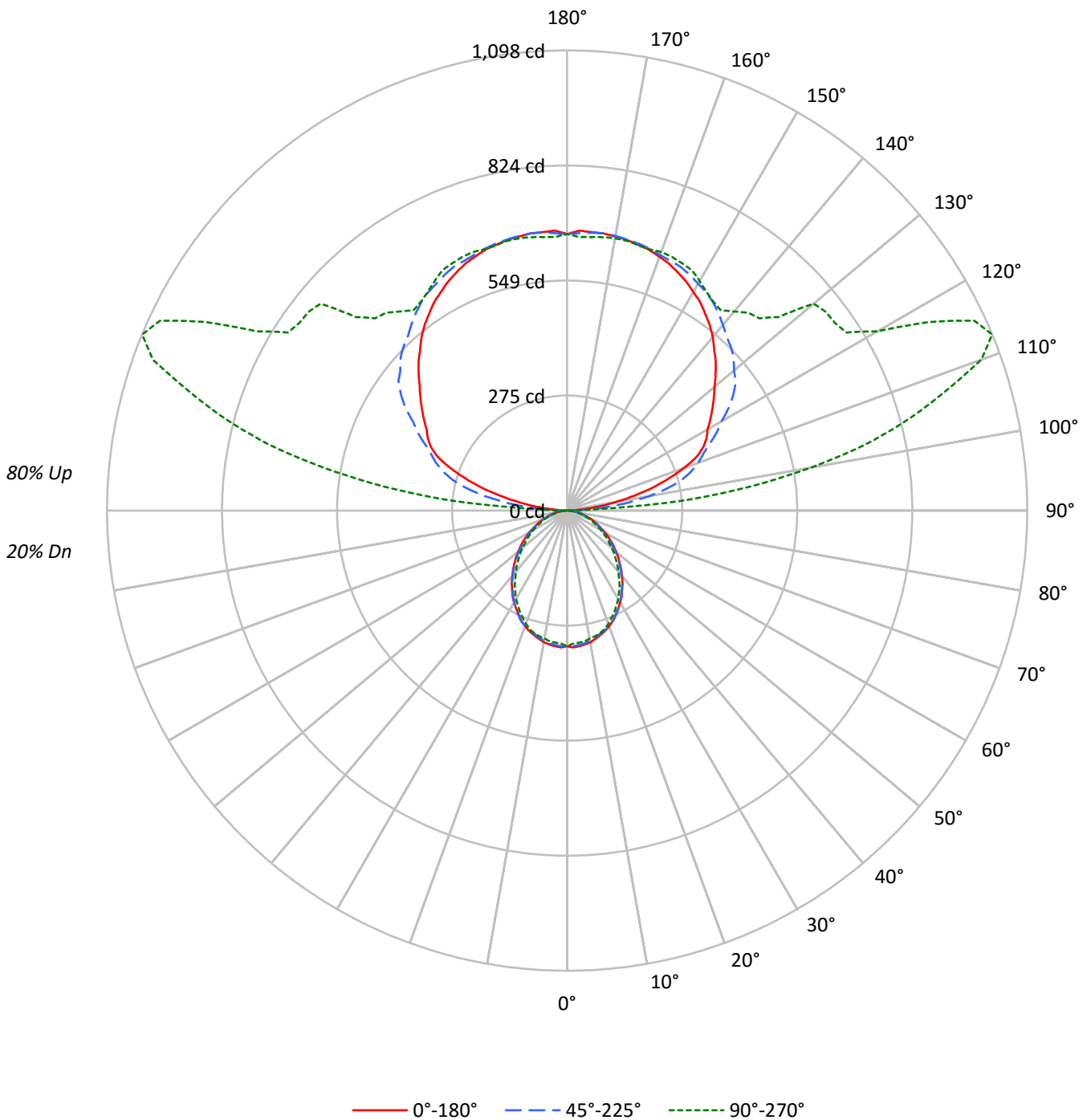
Input Watts (W): 35.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
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°	2593	2593	2593
5°	2602	2496	2425
10°	2570	2389	2298
15°	2509	2259	2184
20°	2451	2161	2039
25°	2358	2025	1871
30°	2264	1871	1708
35°	2151	1706	1537
40°	2027	1547	1353
45°	1902	1380	1195
50°	1773	1225	1039
55°	1651	1065	903
60°	1512	909	763
65°	1370	769	625
70°	1246	627	503
75°	1073	481	379
80°	940	341	251
85°	751	210	131



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.4	0.8
10°-20°	85.8	2.3
20°-30°	124.9	3.3
30°-40°	140.9	3.8
40°-50°	133.8	3.6
50°-60°	110.1	2.9
60°-70°	77.5	2.1
70°-80°	43.7	1.2
80°-90°	14.4	0.4
90°-100°	146.8	3.9
100°-110°	448.0	12.0
110°-120°	537.2	14.3
120°-130°	496.5	13.3
130°-140°	436.9	11.7
140°-150°	373.8	10.0
150°-160°	294.0	7.9
160°-170°	185.7	5.0
170°-180°	63.3	1.7
0°-30°	241.2	6.4
0°-40°	382.1	10.2
0°-60°	626.0	16.7
0°-90°	761.6	20.3
90°-120°	1132.0	30.2
90°-150°	2439.3	65.2
90°-180°	2982.0	79.7
0°-180°	3743.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	324	324	324	324	324	
5°	325	321	322	321	316	31
15°	307	304	304	304	303	87
25°	274	271	276	268	266	126
35°	229	230	227	221	218	143
45°	178	179	175	167	164	137
55°	128	130	124	117	116	114
65°	81	83	78	74	72	81
75°	42	44	41	39	38	45
85°	14	15	14	12	10	14
90°	2	4	3	2	0	3
95°	41	53	96	239	282	50
105°	211	215	283	703	845	221
115°	358	358	373	733	1072	349
125°	423	450	485	681	780	379
135°	501	515	553	607	649	387
145°	574	578	607	605	608	359
155°	626	622	641	646	650	289
165°	656	654	660	655	655	186
175°	667	664	666	661	655	64
180°	660	660	660	660	660	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	323.7	323.7	323.7	323.7	323.7
2.5°	326.7	322.2	323.7	322.2	317.7
5°	325.2	320.7	322.2	320.7	316.2
7.5°	322.2	317.7	319.2	317.7	314.7
10°	319.2	314.7	316.2	313.2	310.2
12.5°	313.2	310.2	310.2	307.2	307.2
15°	307.2	304.1	304.1	304.1	302.6
17.5°	301.1	296.6	299.6	299.6	296.6
20°	293.6	289.1	293.6	290.6	287.6
22.5°	284.6	281.6	286.1	280.1	277.0
25°	274.0	271.0	275.5	268.0	266.5
27.5°	263.5	262.0	265.0	257.5	254.5
30°	253.0	251.4	253.0	246.9	243.9
32.5°	242.4	240.9	239.4	233.4	230.4
35°	228.9	230.4	227.4	221.3	218.3
37.5°	216.8	218.3	215.3	207.8	203.3
40°	203.3	206.3	201.8	194.2	189.7
42.5°	191.2	192.7	188.2	180.7	177.7
45°	177.7	179.2	174.7	167.1	164.1
47.5°	165.6	167.1	162.6	155.1	152.1
50°	152.1	153.6	149.1	141.5	138.5
52.5°	140.0	141.5	135.5	129.5	126.5
55°	128.0	129.5	123.5	117.4	115.9
57.5°	115.9	117.4	111.4	106.9	103.9
60°	103.9	105.4	99.4	94.9	93.4
62.5°	91.8	93.4	88.8	84.3	82.8
65°	81.3	82.8	78.3	73.8	72.3
67.5°	70.8	72.3	67.8	64.7	63.2
70°	61.7	61.7	58.7	55.7	54.2
72.5°	51.2	52.7	49.7	46.7	45.2
75°	42.2	43.7	40.7	39.1	37.6
77.5°	34.6	36.1	33.1	31.6	30.1
80°	27.1	28.6	25.6	24.1	22.6
82.5°	19.6	21.1	19.6	18.1	16.6
85°	13.6	15.1	13.6	12.0	10.5
87.5°	6.0	9.0	6.0	6.0	4.5
90°	1.5	4.5	3.0	1.5	0.0
92.5°	15.1	21.1	31.6	54.2	58.7
95°	40.7	52.7	96.4	239.4	281.6
97.5°	76.8	90.3	147.6	374.9	442.7
100°	117.4	131.0	198.7	493.9	590.2
102.5°	164.1	174.7	245.4	603.8	730.2
105°	210.8	215.3	283.1	703.1	844.7
107.5°	254.5	257.5	310.2	778.4	945.6
110°	296.6	292.1	332.8	808.5	1051.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	334.3	326.7	350.8	786.0	1097.6
115°	358.3	358.3	373.4	733.3	1072.0
117.5°	374.9	385.5	402.0	706.2	974.2
120°	387.0	414.1	424.6	695.6	855.2
122.5°	405.0	438.1	457.7	686.6	790.5
125°	423.1	450.2	484.8	680.6	779.9
127.5°	441.2	459.2	507.4	679.1	778.4
130°	459.2	474.3	519.5	652.0	767.9
132.5°	480.3	495.4	539.0	605.3	683.6
135°	501.4	514.9	552.6	606.8	648.9
137.5°	519.5	530.0	563.1	606.8	639.9
140°	540.5	548.1	578.2	594.7	620.3
142.5°	558.6	564.6	593.2	594.7	602.3
145°	573.7	578.2	606.8	605.3	608.3
147.5°	590.2	591.7	617.3	618.8	618.8
150°	602.3	602.3	624.9	632.4	632.4
152.5°	615.8	612.8	633.9	641.4	645.9
155°	626.4	621.8	641.4	645.9	650.4
157.5°	636.9	632.4	644.4	652.0	655.0
160°	644.4	639.9	648.9	653.5	656.5
162.5°	652.0	645.9	655.0	652.0	653.5
165°	656.5	653.5	659.5	655.0	655.0
167.5°	661.0	659.5	662.5	659.5	659.5
170°	664.0	662.5	665.5	661.0	659.5
172.5°	667.0	664.0	667.0	661.0	658.0
175°	667.0	664.0	665.5	661.0	655.0
177.5°	668.5	662.5	662.5	656.5	653.5
180°	659.5	659.5	659.5	659.5	659.5

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