

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: P183583

Luminaire Tested: **MB-WS-3L40-1D-UNV-4-STD-DM5**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183583
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-3L40-1D-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: 4776.0 lumens
Efficiency: N/A
Efficacy: 103.2 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

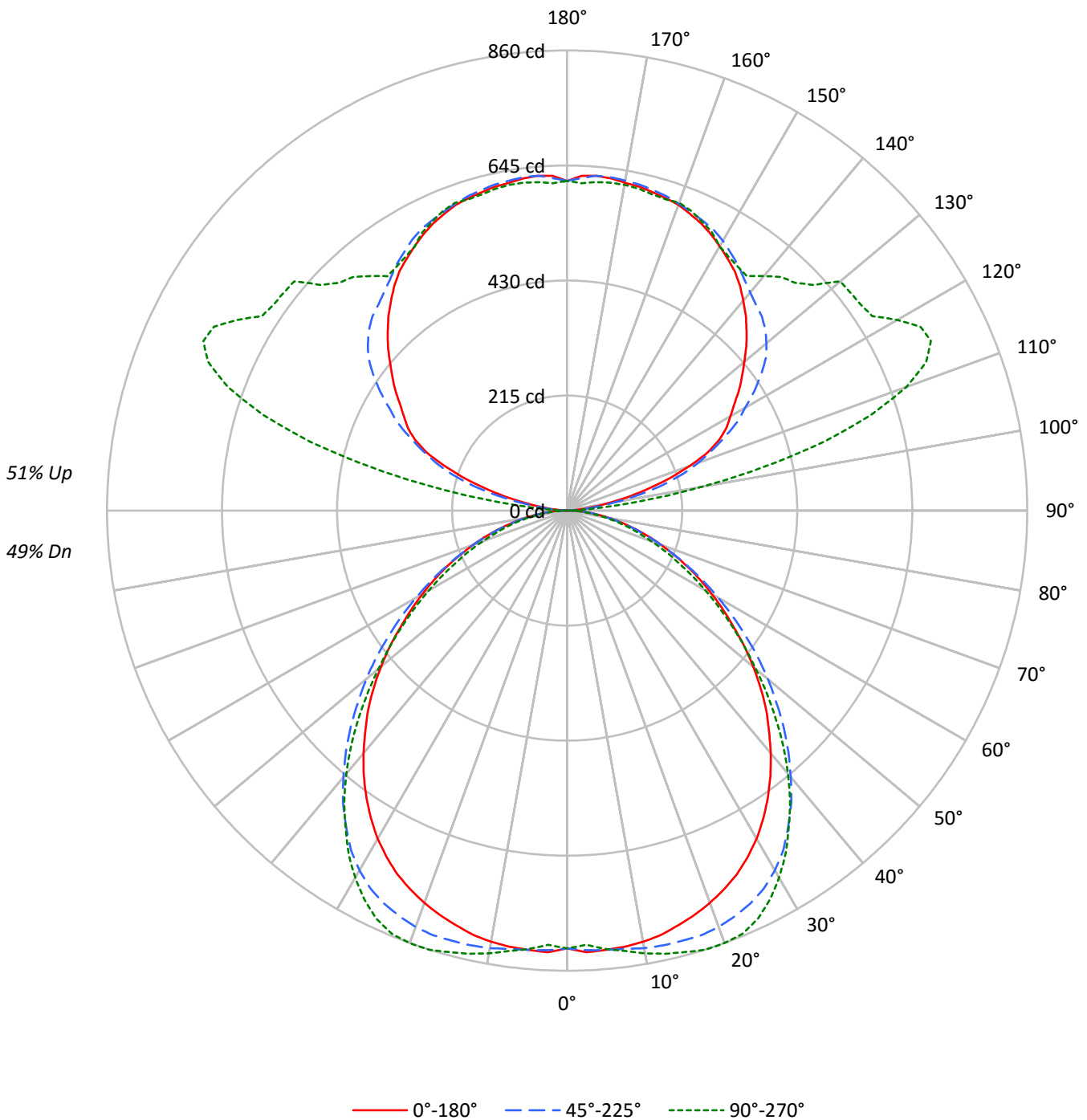
Input Watts (W): 46.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				
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°	6554	6554	6554
5°	6594	6385	6305
10°	6588	6273	6225
15°	6551	6183	6166
20°	6513	6097	6100
25°	6456	5956	5912
30°	6338	5741	5548
35°	6146	5402	5085
40°	5904	4984	4580
45°	5632	4520	4021
50°	5292	4026	3450
55°	4901	3502	2929
60°	4543	2983	2434
65°	4181	2475	1973
70°	3756	1987	1558
75°	3306	1512	1168
80°	2775	1040	778
85°	2098	555	375



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.6	1.6
10°-20°	234.5	4.9
20°-30°	368.1	7.7
30°-40°	437.7	9.2
40°-50°	426.8	8.9
50°-60°	351.7	7.4
60°-70°	244.6	5.1
70°-80°	134.4	2.8
80°-90°	40.1	0.8
90°-100°	54.0	1.1
100°-110°	276.7	5.8
110°-120°	424.7	8.9
120°-130°	443.4	9.3
130°-140°	405.8	8.5
140°-150°	346.7	7.3
150°-160°	274.4	5.7
160°-170°	174.4	3.7
170°-180°	59.5	1.2
0°-30°	681.1	14.3
0°-40°	1118.8	23.4
0°-60°	1897.3	39.7
0°-90°	2316.3	48.5
90°-120°	755.4	15.8
90°-150°	1951.3	40.9
90°-180°	2460.0	51.5
0°-180°	4776.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	824	816	824	822	822	78
15°	802	804	832	850	854	227
25°	750	762	810	834	842	345
35°	654	670	720	724	722	409
45°	526	546	572	560	552	405
55°	380	398	406	388	376	341
65°	248	256	252	238	228	246
75°	130	134	128	120	116	138
85°	38	40	36	32	30	39
90°	0	2	2	2	2	3
95°	20	22	26	56	62	28
105°	156	156	184	404	496	166
115°	314	310	324	568	750	305
125°	392	416	442	592	670	351
135°	474	482	514	562	602	366
145°	546	548	558	552	556	341
155°	592	590	598	598	596	273
165°	616	616	620	614	612	174
175°	628	622	628	624	616	60
180°	616	616	616	616	616	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	818.2	818.2	818.2	818.2	818.2
2.5°	826.2	816.2	822.2	820.2	812.2
5°	824.2	816.2	824.2	822.2	822.2
7.5°	822.2	814.2	826.2	830.2	830.2
10°	818.2	812.2	830.2	836.2	840.2
12.5°	812.2	808.2	832.2	844.2	848.2
15°	802.2	804.2	832.2	850.2	854.2
17.5°	792.2	798.2	832.2	852.2	860.2
20°	780.2	788.2	828.2	852.2	860.2
22.5°	766.2	776.2	820.2	846.2	856.2
25°	750.2	762.2	810.2	834.2	842.2
27.5°	730.2	744.2	796.2	816.2	820.2
30°	708.2	722.2	776.2	790.2	792.2
32.5°	682.2	700.2	752.2	760.2	760.2
35°	654.1	670.2	720.2	724.2	722.2
37.5°	624.1	642.1	688.2	686.2	684.2
40°	592.1	610.1	650.1	646.1	642.1
42.5°	558.1	578.1	612.1	604.1	598.1
45°	526.1	546.1	572.1	560.1	552.1
47.5°	490.1	510.1	530.1	518.1	506.1
50°	454.1	472.1	490.1	470.1	460.1
52.5°	418.1	436.1	448.1	430.1	418.1
55°	380.1	398.1	406.1	388.1	376.1
57.5°	346.1	360.1	366.1	348.1	336.1
60°	312.1	324.1	326.1	310.1	298.1
62.5°	280.1	290.1	288.1	272.1	262.1
65°	248.1	256.1	252.1	238.1	228.1
67.5°	216.0	222.1	218.0	206.0	198.0
70°	186.0	192.0	186.0	174.0	168.0
72.5°	158.0	162.0	156.0	146.0	140.0
75°	130.0	134.0	128.0	120.0	116.0
77.5°	104.0	106.0	102.0	96.0	92.0
80°	80.0	82.0	78.0	74.0	70.0
82.5°	58.0	60.0	56.0	54.0	50.0
85°	38.0	40.0	36.0	32.0	30.0
87.5°	18.0	20.0	16.0	14.0	12.0
90°	0.0	2.0	2.0	2.0	2.0
92.5°	6.0	8.0	8.0	12.0	12.0
95°	20.0	22.0	26.0	56.0	62.0
97.5°	44.0	46.0	56.0	132.0	146.0
100°	74.0	78.0	94.0	224.1	254.1
102.5°	114.0	116.0	140.0	320.1	376.1
105°	156.0	156.0	184.0	404.1	496.1
107.5°	200.0	194.0	226.1	472.1	596.1
110°	244.1	236.1	260.1	518.1	674.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.1	274.1	292.1	546.1	726.2
115°	314.1	310.1	324.1	568.1	750.2
117.5°	336.1	342.1	358.1	584.1	744.2
120°	352.1	372.1	384.1	598.1	712.2
122.5°	370.1	398.1	414.1	594.1	676.2
125°	392.1	416.1	442.1	592.1	670.2
127.5°	412.1	428.1	468.1	594.1	668.2
130°	432.1	446.1	486.1	580.1	666.2
132.5°	454.1	464.1	502.1	560.1	624.1
135°	474.1	482.1	514.1	562.1	602.1
137.5°	494.1	498.1	522.1	564.1	592.1
140°	512.1	514.1	532.1	550.1	572.1
142.5°	530.1	532.1	544.1	546.1	552.1
145°	546.1	548.1	558.1	552.1	556.1
147.5°	558.1	560.1	570.1	562.1	562.1
150°	570.1	570.1	582.1	574.1	570.1
152.5°	582.1	580.1	592.1	586.1	586.1
155°	592.1	590.1	598.1	598.1	596.1
157.5°	600.1	598.1	604.1	608.1	606.1
160°	608.1	606.1	610.1	610.1	612.1
162.5°	612.1	612.1	616.1	610.1	610.1
165°	616.1	616.1	620.1	614.1	612.1
167.5°	620.1	620.1	624.1	618.1	616.1
170°	622.1	622.1	626.1	620.1	618.1
172.5°	626.1	624.1	628.1	622.1	618.1
175°	628.1	622.1	628.1	624.1	616.1
177.5°	626.1	620.1	622.1	616.1	612.1
180°	616.1	616.1	616.1	616.1	616.1

(END OF REPORT)