

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: P183581

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P183581  
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-1L40-1D-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: 2880.8 lumens  
Efficiency: N/A  
Efficacy: 110.4 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

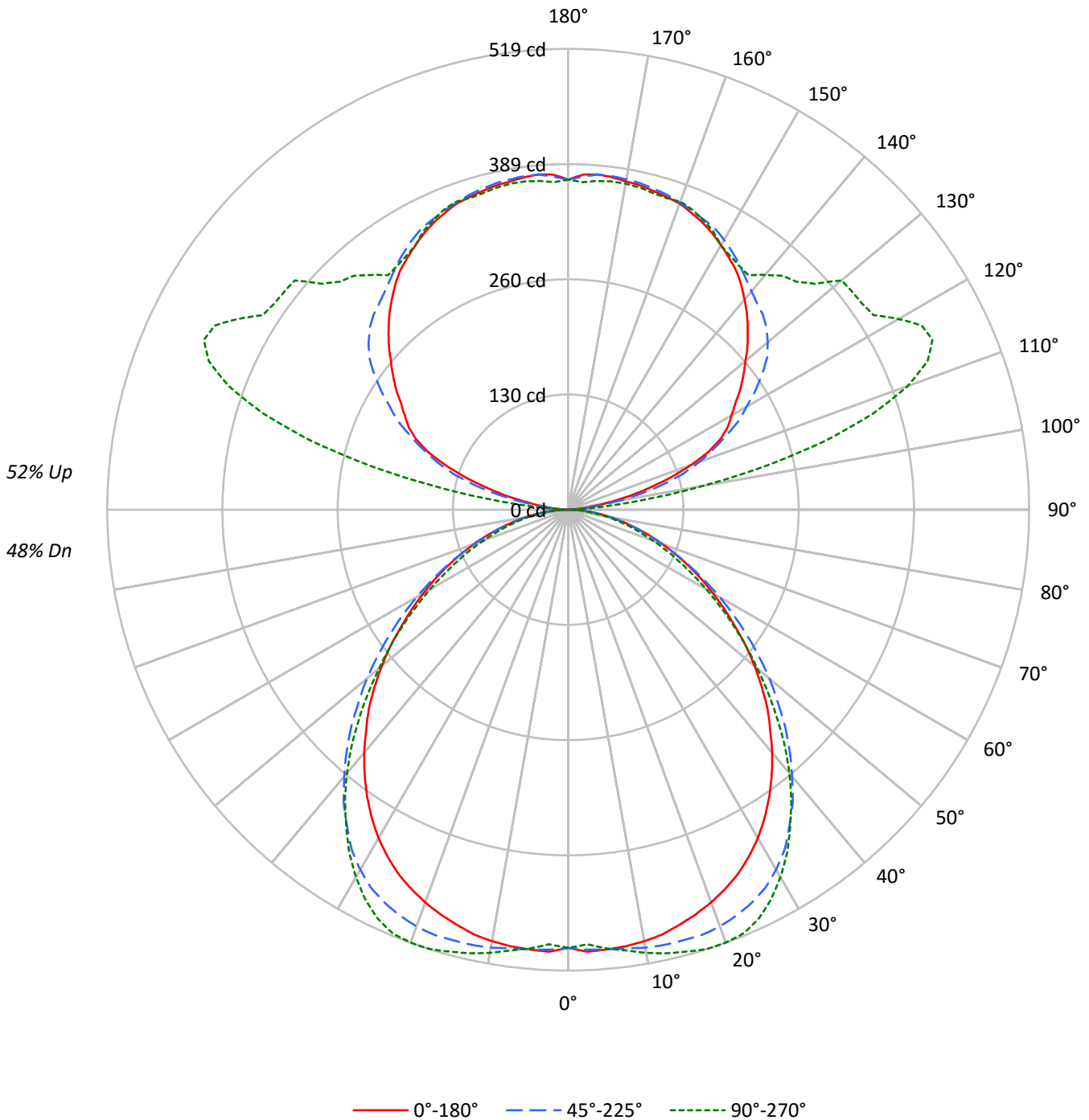
Input Watts (W): 26.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3953	3953	3953
5°	3977	3851	3803
10°	3973	3783	3755
15°	3951	3730	3719
20°	3929	3677	3679
25°	3894	3593	3566
30°	3822	3463	3346
35°	3708	3258	3067
40°	3561	3007	2762
45°	3397	2726	2425
50°	3192	2428	2081
55°	2957	2112	1766
60°	2739	1799	1468
65°	2521	1492	1190
70°	2266	1199	940
75°	1994	912	705
80°	1676	628	469
85°	1265	335	226



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.4	1.6
10°-20°	141.4	4.9
20°-30°	222.0	7.7
30°-40°	264.0	9.2
40°-50°	257.5	8.9
50°-60°	212.1	7.4
60°-70°	147.5	5.1
70°-80°	81.1	2.8
80°-90°	24.2	0.8
90°-100°	32.6	1.1
100°-110°	166.9	5.8
110°-120°	256.2	8.9
120°-130°	267.5	9.3
130°-140°	244.8	8.5
140°-150°	209.1	7.3
150°-160°	165.5	5.7
160°-170°	105.2	3.7
170°-180°	35.9	1.2
0°-30°	410.8	14.3
0°-40°	674.8	23.4
0°-60°	1144.4	39.7
0°-90°	1397.2	48.5
90°-120°	455.6	15.8
90°-150°	1177.0	40.9
90°-180°	1484.0	51.5
0°-180°	2880.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	497	492	497	496	496	47
15°	484	485	502	513	515	137
25°	452	460	489	503	508	208
35°	395	404	434	437	436	246
45°	317	329	345	338	333	244
55°	229	240	245	234	227	206
65°	150	154	152	144	138	148
75°	78	81	77	72	70	83
85°	23	24	22	19	18	24
90°	0	1	1	1	1	2
95°	12	13	16	34	37	17
105°	94	94	111	244	299	100
115°	189	187	196	343	452	184
125°	236	251	267	357	404	211
135°	286	291	310	339	363	221
145°	329	331	337	333	335	206
155°	357	356	361	361	360	165
165°	372	372	374	370	369	105
175°	379	375	379	376	372	36
180°	372	372	372	372	372	



TEST NUMBER: P183581

CATALOG NUMBER: MB-WS-1L40-1D-UNV-4-STD-DM5

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	493.5	493.5	493.5	493.5	493.5
2.5°	498.3	492.3	495.9	494.7	489.9
5°	497.1	492.3	497.1	495.9	495.9
7.5°	495.9	491.1	498.3	500.7	500.7
10°	493.5	489.9	500.7	504.4	506.8
12.5°	489.9	487.5	502.0	509.2	511.6
15°	483.9	485.1	502.0	512.8	515.2
17.5°	477.8	481.4	502.0	514.0	518.8
20°	470.6	475.4	499.5	514.0	518.8
22.5°	462.1	468.2	494.7	510.4	516.4
25°	452.5	459.7	488.7	503.2	508.0
27.5°	440.4	448.9	480.2	492.3	494.7
30°	427.1	435.6	468.2	476.6	477.8
32.5°	411.5	422.3	453.7	458.5	458.5
35°	394.6	404.2	434.4	436.8	435.6
37.5°	376.5	387.3	415.1	413.9	412.7
40°	357.2	368.0	392.2	389.7	387.3
42.5°	336.6	348.7	369.2	364.4	360.8
45°	317.3	329.4	345.1	337.9	333.0
47.5°	295.6	307.7	319.8	312.5	305.3
50°	273.9	284.8	295.6	283.6	277.5
52.5°	252.2	263.0	270.3	259.4	252.2
55°	229.3	240.1	244.9	234.1	226.8
57.5°	208.7	217.2	220.8	210.0	202.7
60°	188.2	195.5	196.7	187.0	179.8
62.5°	168.9	175.0	173.8	164.1	158.1
65°	149.6	154.4	152.0	143.6	137.6
67.5°	130.3	133.9	131.5	124.3	119.5
70°	112.2	115.8	112.2	105.0	101.4
72.5°	95.3	97.7	94.1	88.1	84.5
75°	78.4	80.8	77.2	72.4	70.0
77.5°	62.7	64.0	61.5	57.9	55.5
80°	48.3	49.5	47.1	44.6	42.2
82.5°	35.0	36.2	33.8	32.6	30.2
85°	22.9	24.1	21.7	19.3	18.1
87.5°	10.9	12.1	9.7	8.4	7.2
90°	0.0	1.2	1.2	1.2	1.2
92.5°	3.6	4.8	4.8	7.2	7.2
95°	12.1	13.3	15.7	33.8	37.4
97.5°	26.5	27.8	33.8	79.6	88.1
100°	44.6	47.1	56.7	135.1	153.2
102.5°	68.8	70.0	84.5	193.1	226.8
105°	94.1	94.1	111.0	243.7	299.2
107.5°	120.7	117.0	136.3	284.8	359.6
110°	147.2	142.4	156.9	312.5	406.6



TEST NUMBER: P183581

CATALOG NUMBER: MB-WS-1L40-1D-UNV-4-STD-DM5

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	171.3	165.3	176.2	329.4	438.0
115°	189.4	187.0	195.5	342.7	452.5
117.5°	202.7	206.3	216.0	352.3	448.9
120°	212.4	224.4	231.7	360.8	429.6
122.5°	223.2	240.1	249.8	358.4	407.8
125°	236.5	251.0	266.7	357.2	404.2
127.5°	248.6	258.2	282.4	358.4	403.0
130°	260.6	269.1	293.2	349.9	401.8
132.5°	273.9	279.9	302.9	337.9	376.5
135°	286.0	290.8	310.1	339.1	363.2
137.5°	298.0	300.4	314.9	340.3	357.2
140°	308.9	310.1	321.0	331.8	345.1
142.5°	319.8	321.0	328.2	329.4	333.0
145°	329.4	330.6	336.6	333.0	335.4
147.5°	336.6	337.9	343.9	339.1	339.1
150°	343.9	343.9	351.1	346.3	343.9
152.5°	351.1	349.9	357.2	353.5	353.5
155°	357.2	356.0	360.8	360.8	359.6
157.5°	362.0	360.8	364.4	366.8	365.6
160°	366.8	365.6	368.0	368.0	369.2
162.5°	369.2	369.2	371.6	368.0	368.0
165°	371.6	371.6	374.1	370.4	369.2
167.5°	374.1	374.1	376.5	372.8	371.6
170°	375.3	375.3	377.7	374.1	372.8
172.5°	377.7	376.5	378.9	375.3	372.8
175°	378.9	375.3	378.9	376.5	371.6
177.5°	377.7	374.1	375.3	371.6	369.2
180°	371.6	371.6	371.6	371.6	371.6

(END OF REPORT)