

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: P183465

Luminaire Tested: **MB-WS-5L40-1D-UNV-4-STD-DM8**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183465
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-5L40-1D-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

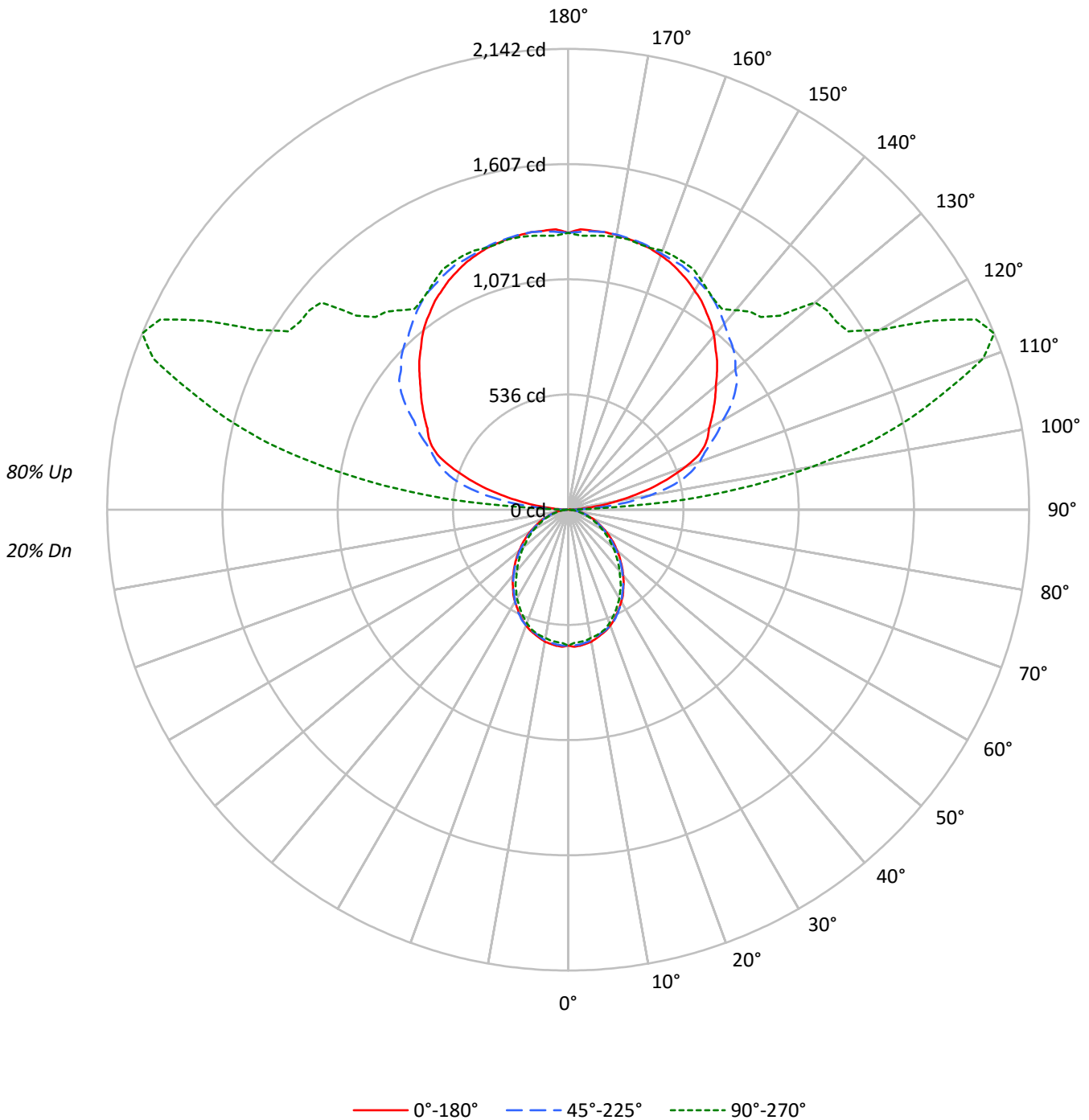
Lumens per Lamp: N/A
Luminaire Lumens: 7305.6 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 3.58' x H: 0.21')
CIE Type: Semi-Indirect

Input Watts (W): 79.2
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°	5060	5060	5060
5°	5077	4871	4731
10°	5015	4662	4484
15°	4895	4409	4263
20°	4783	4218	3979
25°	4601	3953	3650
30°	4417	3651	3334
35°	4196	3328	2999
40°	3954	3018	2640
45°	3712	2693	2333
50°	3458	2390	2027
55°	3220	2077	1762
60°	2950	1774	1488
65°	2675	1500	1220
70°	2434	1224	981
75°	2093	937	740
80°	1835	665	490
85°	1458	407	258



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	0.8
10°-20°	167.4	2.3
20°-30°	243.8	3.3
30°-40°	274.9	3.8
40°-50°	261.1	3.6
50°-60°	214.9	2.9
60°-70°	151.2	2.1
70°-80°	85.2	1.2
80°-90°	28.2	0.4
90°-100°	286.5	3.9
100°-110°	874.1	12.0
110°-120°	1048.2	14.3
120°-130°	968.9	13.3
130°-140°	852.6	11.7
140°-150°	729.5	10.0
150°-160°	573.7	7.9
160°-170°	362.3	5.0
170°-180°	123.4	1.7
0°-30°	470.6	6.4
0°-40°	745.5	10.2
0°-60°	1221.6	16.7
0°-90°	1486.2	20.3
90°-120°	2208.9	30.2
90°-150°	4759.9	65.2
90°-180°	5819.0	79.7
0°-180°	7305.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	635	626	629	626	617	60
15°	599	594	594	594	591	169
25°	535	529	538	523	520	246
35°	447	450	444	432	426	280
45°	347	350	341	326	320	268
55°	250	253	241	229	226	223
65°	159	162	153	144	141	158
75°	82	85	79	76	74	89
85°	26	29	26	24	21	26
90°	3	9	6	3	0	6
95°	79	103	188	467	549	97
105°	411	420	552	1372	1648	430
115°	699	699	729	1431	2092	681
125°	826	878	946	1328	1522	740
135°	978	1005	1078	1184	1266	754
145°	1119	1128	1184	1181	1187	701
155°	1222	1213	1252	1260	1269	564
165°	1281	1275	1287	1278	1278	362
175°	1302	1296	1299	1290	1278	124
180°	1287	1287	1287	1287	1287	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	631.7	631.7	631.7	631.7	631.7
2.5°	637.6	628.8	631.7	628.8	619.9
5°	634.6	625.8	628.8	625.8	617.0
7.5°	628.8	619.9	622.9	619.9	614.1
10°	622.9	614.1	617.0	611.1	605.3
12.5°	611.1	605.3	605.3	599.4	599.4
15°	599.4	593.5	593.5	593.5	590.6
17.5°	587.6	578.8	584.7	584.7	578.8
20°	572.9	564.1	572.9	567.1	561.2
22.5°	555.3	549.4	558.2	546.5	540.6
25°	534.7	528.9	537.7	523.0	520.0
27.5°	514.2	511.2	517.1	502.4	496.5
30°	493.6	490.7	493.6	481.8	476.0
32.5°	473.0	470.1	467.2	455.4	449.5
35°	446.6	449.5	443.7	431.9	426.0
37.5°	423.1	426.0	420.1	405.5	396.6
40°	396.6	402.5	393.7	379.0	370.2
42.5°	373.1	376.1	367.3	352.6	346.7
45°	346.7	349.6	340.8	326.1	320.3
47.5°	323.2	326.1	317.3	302.6	296.7
50°	296.7	299.7	290.9	276.2	270.3
52.5°	273.2	276.2	264.4	252.7	246.8
55°	249.7	252.7	240.9	229.2	226.2
57.5°	226.2	229.2	217.4	208.6	202.7
60°	202.7	205.7	193.9	185.1	182.2
62.5°	179.2	182.2	173.3	164.5	161.6
65°	158.7	161.6	152.8	144.0	141.0
67.5°	138.1	141.0	132.2	126.3	123.4
70°	120.5	120.5	114.6	108.7	105.8
72.5°	99.9	102.8	97.0	91.1	88.1
75°	82.3	85.2	79.3	76.4	73.5
77.5°	67.6	70.5	64.6	61.7	58.8
80°	52.9	55.8	49.9	47.0	44.1
82.5°	38.2	41.1	38.2	35.3	32.3
85°	26.4	29.4	26.4	23.5	20.6
87.5°	11.8	17.6	11.8	11.8	8.8
90°	2.9	8.8	5.9	2.9	0.0
92.5°	29.4	41.1	61.7	105.8	114.6
95°	79.3	102.8	188.0	467.2	549.4
97.5°	149.8	176.3	287.9	731.6	863.8
100°	229.2	255.6	387.8	963.7	1151.7
102.5°	320.3	340.8	478.9	1178.2	1425.0
105°	411.3	420.1	552.4	1372.1	1648.3
107.5°	496.5	502.4	605.3	1519.0	1845.1
110°	578.8	570.0	649.3	1577.8	2050.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	652.3	637.6	684.6	1533.7	2141.9
115°	699.3	699.3	728.7	1430.9	2091.9
117.5°	731.6	752.2	784.5	1378.0	1901.0
120°	755.1	808.0	828.5	1357.4	1668.8
122.5°	790.4	855.0	893.2	1339.8	1542.5
125°	825.6	878.5	946.1	1328.0	1521.9
127.5°	860.9	896.1	990.1	1325.1	1519.0
130°	896.1	925.5	1013.6	1272.2	1498.4
132.5°	937.3	966.6	1051.8	1181.1	1333.9
135°	978.4	1004.8	1078.3	1184.1	1266.3
137.5°	1013.6	1034.2	1098.9	1184.1	1248.7
140°	1054.8	1069.5	1128.2	1160.6	1210.5
142.5°	1090.0	1101.8	1157.6	1160.6	1175.2
145°	1119.4	1128.2	1184.1	1181.1	1187.0
147.5°	1151.7	1154.7	1204.6	1207.6	1207.6
150°	1175.2	1175.2	1219.3	1234.0	1234.0
152.5°	1201.7	1195.8	1236.9	1251.6	1260.4
155°	1222.3	1213.4	1251.6	1260.4	1269.3
157.5°	1242.8	1234.0	1257.5	1272.2	1278.1
160°	1257.5	1248.7	1266.3	1275.1	1281.0
162.5°	1272.2	1260.4	1278.1	1272.2	1275.1
165°	1281.0	1275.1	1286.9	1278.1	1278.1
167.5°	1289.8	1286.9	1292.8	1286.9	1286.9
170°	1295.7	1292.8	1298.6	1289.8	1286.9
172.5°	1301.6	1295.7	1301.6	1289.8	1284.0
175°	1301.6	1295.7	1298.6	1289.8	1278.1
177.5°	1304.5	1292.8	1292.8	1281.0	1275.1
180°	1286.9	1286.9	1286.9	1286.9	1286.9

(END OF REPORT)