

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: P183517

Luminaire Tested: **MB-WS-2L35-1D-UNV-4-STD**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183517
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26967)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: MB-WS-2L35-1D-UNV-4-STD
Description: CORELITE MINIGATOR SUSPENDED DIRECT-INDIRECT LED LUMINAIRE, 4 FOOT.
WaveStream WITH FROSTED LENS. 65% UP / 35% DOWN.
Light Source: (336)3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

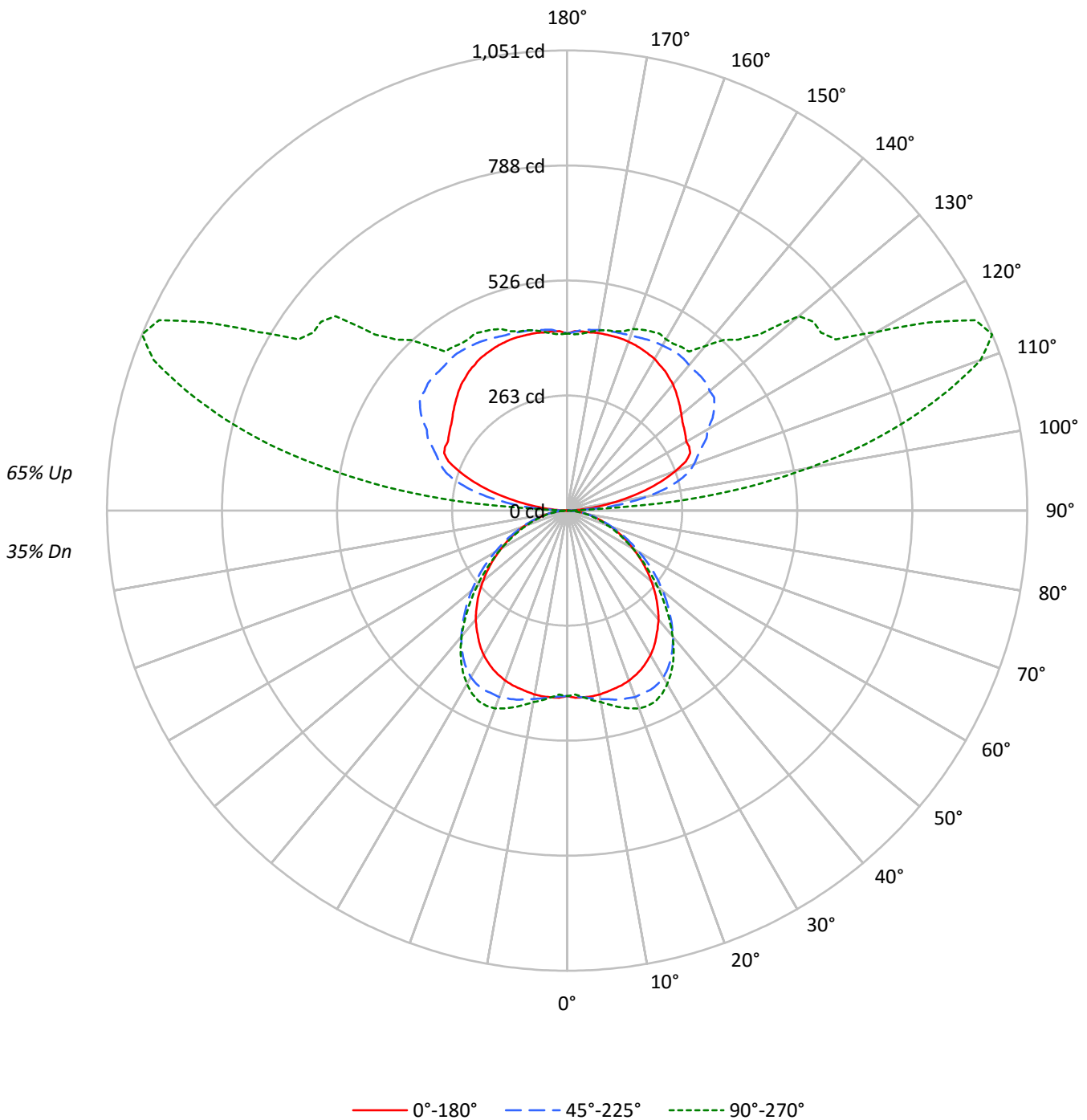
Lumens per Lamp: N/A
Luminaire Lumens: 3767.0 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.48 / 1.47
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 3.58' x H: 0.21')
CIE Type: Semi-Indirect

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



TEST NUMBER: P183517
CATALOG NUMBER: MB-WS-2L35-1D-UNV-4-STD

Luminous Intensity Polar Plot





TEST NUMBER: P183517

CATALOG NUMBER: MB-WS-2L35-1D-UNV-4-STD

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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35
1	94	90	86	83	85	82	78	76	66	63	61	51	49	48	37	36	36	29
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30	25
3	78	69	62	56	71	63	57	52	51	46	43	39	36	34	29	27	26	21
4	72	61	53	48	64	56	49	44	45	40	36	35	32	29	26	24	22	18
5	66	54	46	41	59	49	43	37	40	35	31	31	28	25	23	21	19	16
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14
7	56	44	36	31	50	40	33	28	33	27	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	29	25	30	25	21	23	20	17	18	15	13	11
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3393	3393	3393
5°	3424	3316	3282
10°	3434	3301	3291
15°	3435	3322	3356
20°	3449	3336	3411
25°	3442	3320	3368
30°	3408	3253	3204
35°	3328	3099	2972
40°	3237	2885	2674
45°	3097	2612	2343
50°	2924	2339	2014
55°	2740	2049	1701
60°	2534	1742	1422
65°	2338	1449	1149
70°	2116	1167	903
75°	1877	890	684
80°	1589	611	459
85°	1220	341	221



TEST NUMBER: P183517

CATALOG NUMBER: MB-WS-2L35-1D-UNV-4-STD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.0	1.1
10°-20°	125.8	3.3
20°-30°	204.3	5.4
30°-40°	248.8	6.6
40°-50°	245.0	6.5
50°-60°	202.9	5.4
60°-70°	141.4	3.8
70°-80°	78.1	2.1
80°-90°	23.7	0.6
90°-100°	138.1	3.7
100°-110°	424.3	11.3
110°-120°	496.9	13.2
120°-130°	427.4	11.3
130°-140°	343.9	9.1
140°-150°	268.7	7.1
150°-160°	198.4	5.3
160°-170°	119.1	3.2
170°-180°	39.4	1.0
0°-30°	371.1	9.9
0°-40°	619.9	16.5
0°-60°	1067.8	28.3
0°-90°	1310.9	34.8
90°-120°	1059.3	28.1
90°-150°	2099.2	55.7
90°-180°	2456.0	65.2
0°-180°	3767.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	424	424	424	424	424	
5°	428	424	428	428	428	41
15°	421	425	447	460	465	119
25°	400	413	452	474	480	184
35°	354	372	413	422	422	222
45°	289	307	331	329	322	223
55°	212	227	238	226	218	190
65°	139	148	148	139	133	137
75°	74	77	75	69	68	78
85°	22	24	22	19	18	22
90°	0	3	2	2	2	3
95°	38	50	90	227	257	47
105°	192	202	264	673	810	199
115°	310	316	338	706	1029	299
125°	326	366	410	608	708	293
135°	359	379	432	499	552	277
145°	390	400	438	449	456	244
155°	406	409	431	447	452	188
165°	412	413	422	424	424	117
175°	410	410	415	412	406	39
180°	404	404	404	404	404	



TEST NUMBER: P183517

CATALOG NUMBER: MB-WS-2L35-1D-UNV-4-STD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	423.6	423.6	423.6	423.6	423.6
2.5°	428.0	423.6	425.0	425.0	420.6
5°	428.0	423.6	428.0	428.0	428.0
7.5°	428.0	425.0	432.4	435.4	436.9
10°	426.5	425.0	436.9	442.8	444.2
12.5°	423.6	425.0	441.3	451.6	454.6
15°	420.6	425.0	447.2	460.5	464.9
17.5°	417.7	423.6	450.1	467.8	473.7
20°	413.2	422.1	453.1	472.3	481.1
22.5°	407.3	417.7	451.6	473.7	482.6
25°	400.0	413.2	451.6	473.7	479.7
27.5°	391.1	405.9	447.2	467.8	470.8
30°	380.8	395.5	439.8	456.0	457.5
32.5°	369.0	386.7	428.0	439.8	441.3
35°	354.2	371.9	413.2	422.1	422.1
37.5°	339.4	358.6	395.5	400.0	400.0
40°	324.7	342.4	376.3	377.8	374.9
42.5°	307.0	324.7	354.2	354.2	348.3
45°	289.3	307.0	330.6	329.1	321.7
47.5°	270.1	287.8	308.5	302.5	295.2
50°	250.9	268.6	284.8	276.0	268.6
52.5°	231.7	249.4	261.2	250.9	243.5
55°	212.5	227.3	237.6	225.8	218.4
57.5°	193.3	206.6	214.0	202.2	194.8
60°	174.1	186.0	190.4	180.1	174.1
62.5°	156.4	166.8	168.2	157.9	152.0
65°	138.7	147.6	147.6	138.7	132.8
67.5°	121.0	128.4	126.9	119.5	115.1
70°	104.8	110.7	109.2	101.8	97.4
72.5°	88.6	93.0	91.5	85.6	82.6
75°	73.8	76.7	75.3	69.4	67.9
77.5°	59.0	62.0	60.5	56.1	53.1
80°	45.8	48.7	45.8	42.8	41.3
82.5°	32.5	35.4	33.9	31.0	29.5
85°	22.1	23.6	22.1	19.2	17.7
87.5°	10.3	11.8	10.3	7.4	7.4
90°	0.0	3.0	1.5	1.5	1.5
92.5°	14.8	20.7	28.0	47.2	32.5
95°	38.4	50.2	90.0	227.3	256.8
97.5°	72.3	84.1	140.2	361.6	419.1
100°	109.2	124.0	187.4	476.7	560.8
102.5°	149.1	163.8	228.8	581.5	696.6
105°	191.9	202.2	264.2	673.0	810.2
107.5°	228.8	237.6	290.7	740.9	913.5
110°	262.7	268.6	308.5	768.9	1005.1



TEST NUMBER: P183517

CATALOG NUMBER: MB-WS-2L35-1D-UNV-4-STD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.7	293.7	321.7	751.2	1050.8
115°	309.9	315.8	338.0	705.5	1028.7
117.5°	314.4	332.1	358.6	670.0	929.8
120°	314.4	352.7	370.4	647.9	816.1
122.5°	320.3	366.0	394.1	622.8	727.6
125°	326.2	366.0	410.3	608.0	708.4
127.5°	332.1	361.6	423.6	602.1	708.4
130°	340.9	366.0	425.0	565.2	690.7
132.5°	349.8	373.4	430.9	506.2	594.8
135°	358.6	379.3	432.4	498.8	552.0
137.5°	367.5	383.7	432.4	490.0	528.4
140°	376.3	389.6	433.9	463.4	490.0
142.5°	382.2	395.5	436.9	450.1	457.5
145°	389.6	400.0	438.3	448.7	456.0
147.5°	394.1	402.9	436.9	448.7	451.6
150°	400.0	405.9	435.4	453.1	451.6
152.5°	402.9	407.3	433.9	450.1	456.0
155°	405.9	408.8	430.9	447.2	451.6
157.5°	408.8	410.3	428.0	442.8	447.2
160°	410.3	411.8	425.0	436.9	441.3
162.5°	411.8	411.8	423.6	426.5	429.5
165°	411.8	413.2	422.1	423.6	423.6
167.5°	411.8	414.7	420.6	422.1	422.1
170°	411.8	414.7	419.1	417.7	417.7
172.5°	410.3	411.8	416.2	413.2	411.8
175°	410.3	410.3	414.7	411.8	405.9
177.5°	410.3	407.3	408.8	405.9	402.9
180°	404.4	404.4	404.4	404.4	404.4

(END OF REPORT)