

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: P183431

Luminaire Tested: **E2-WS-1L40-1D-UNV-4-STD-DM8**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183431
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: E2-WS-1L40-1D-UNV-4-STD-DM8
Description: CORELITE ELEMENT 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: 3000.3 lumens
Efficiency: N/A
Efficacy: 115.0 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

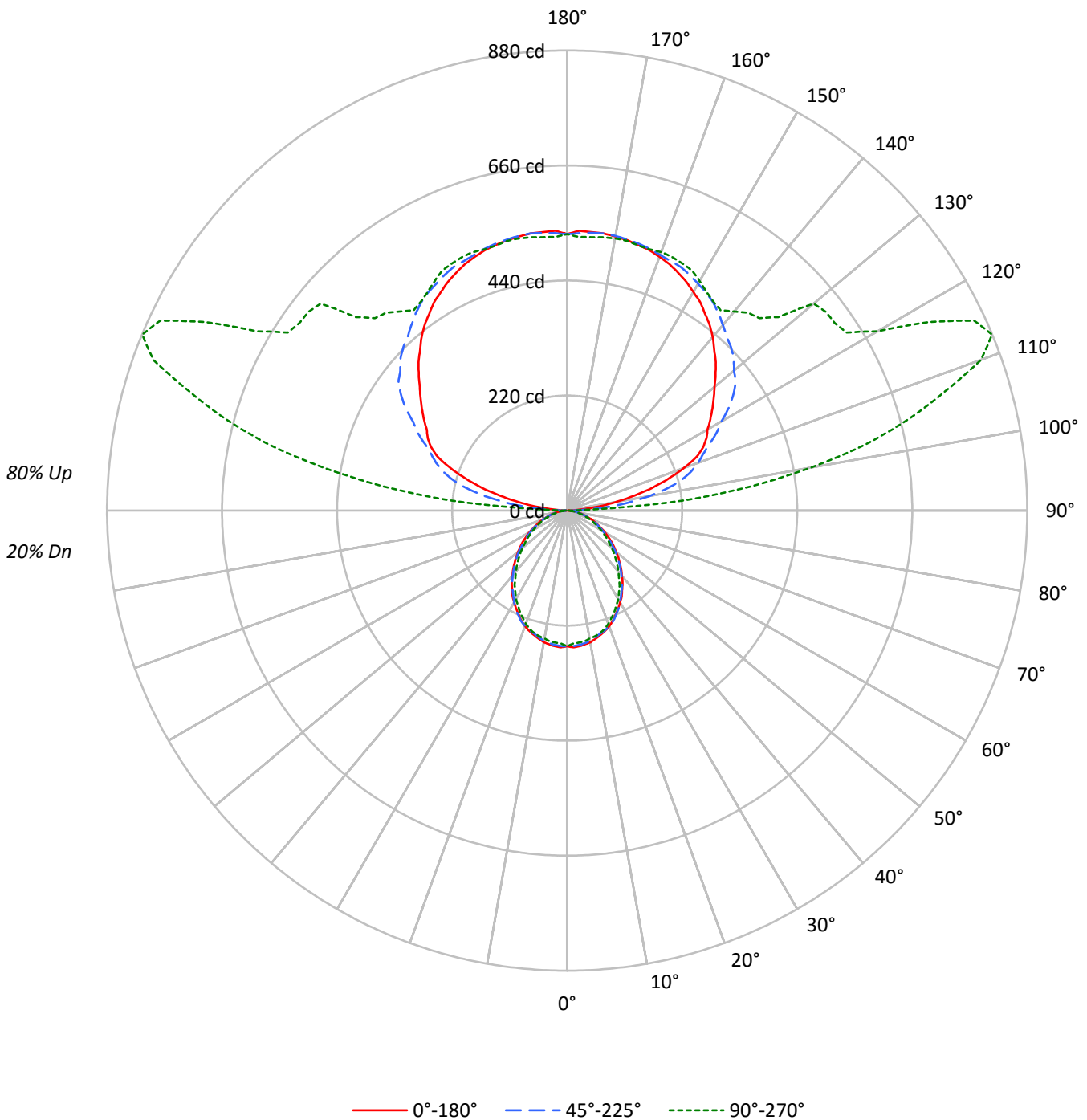
Input Watts (W): 26.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P183431

CATALOG NUMBER: E2-WS-1L40-1D-UNV-4-STD-DM8

Luminous Intensity Polar Plot





TEST NUMBER: P183431

CATALOG NUMBER: E2-WS-1L40-1D-UNV-4-STD-DM8

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°	2078	2078	2078
5°	2085	2000	1943
10°	2060	1915	1842
15°	2010	1811	1751
20°	1964	1732	1634
25°	1890	1623	1500
30°	1814	1499	1369
35°	1723	1367	1232
40°	1624	1240	1084
45°	1525	1106	958
50°	1421	982	832
55°	1323	853	723
60°	1212	728	611
65°	1099	616	501
70°	1000	503	402
75°	860	385	304
80°	753	273	201
85°	602	168	105



TEST NUMBER: P183431

CATALOG NUMBER: E2-WS-1L40-1D-UNV-4-STD-DM8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.4	0.8
10°-20°	68.8	2.3
20°-30°	100.1	3.3
30°-40°	112.9	3.8
40°-50°	107.2	3.6
50°-60°	88.3	2.9
60°-70°	62.1	2.1
70°-80°	35.0	1.2
80°-90°	11.6	0.4
90°-100°	117.7	3.9
100°-110°	359.0	12.0
110°-120°	430.5	14.3
120°-130°	397.9	13.3
130°-140°	350.2	11.7
140°-150°	299.6	10.0
150°-160°	235.6	7.9
160°-170°	148.8	5.0
170°-180°	50.7	1.7
0°-30°	193.3	6.4
0°-40°	306.2	10.2
0°-60°	501.7	16.7
0°-90°	610.4	20.3
90°-120°	907.1	30.2
90°-150°	1954.8	65.2
90°-180°	2390.0	79.7
0°-180°	3000.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	259	259	259	259	259	
5°	261	257	258	257	253	25
15°	246	244	244	244	242	69
25°	220	217	221	215	214	101
35°	183	185	182	177	175	115
45°	142	144	140	134	132	110
55°	103	104	99	94	93	92
65°	65	66	63	59	58	65
75°	34	35	33	31	30	36
85°	11	12	11	10	8	11
90°	1	4	2	1	0	3
95°	33	42	77	192	226	40
105°	169	172	227	564	677	177
115°	287	287	299	588	859	280
125°	339	361	388	545	625	304
135°	402	413	443	486	520	310
145°	460	463	486	485	488	288
155°	502	498	514	518	521	232
165°	526	524	528	525	525	149
175°	534	532	533	530	525	51
180°	528	528	528	528	528	



TEST NUMBER: P183431

CATALOG NUMBER: E2-WS-1L40-1D-UNV-4-STD-DM8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	259.4	259.4	259.4	259.4	259.4
2.5°	261.8	258.2	259.4	258.2	254.6
5°	260.6	257.0	258.2	257.0	253.4
7.5°	258.2	254.6	255.8	254.6	252.2
10°	255.8	252.2	253.4	251.0	248.6
12.5°	251.0	248.6	248.6	246.1	246.1
15°	246.1	243.7	243.7	243.7	242.5
17.5°	241.3	237.7	240.1	240.1	237.7
20°	235.3	231.7	235.3	232.9	230.5
22.5°	228.1	225.6	229.3	224.4	222.0
25°	219.6	217.2	220.8	214.8	213.6
27.5°	211.2	210.0	212.4	206.3	203.9
30°	202.7	201.5	202.7	197.9	195.5
32.5°	194.3	193.1	191.9	187.0	184.6
35°	183.4	184.6	182.2	177.4	175.0
37.5°	173.8	175.0	172.5	166.5	162.9
40°	162.9	165.3	161.7	155.7	152.0
42.5°	153.2	154.4	150.8	144.8	142.4
45°	142.4	143.6	140.0	133.9	131.5
47.5°	132.7	133.9	130.3	124.3	121.9
50°	121.9	123.1	119.5	113.4	111.0
52.5°	112.2	113.4	108.6	103.8	101.4
55°	102.6	103.8	98.9	94.1	92.9
57.5°	92.9	94.1	89.3	85.7	83.3
60°	83.3	84.5	79.6	76.0	74.8
62.5°	73.6	74.8	71.2	67.6	66.4
65°	65.2	66.4	62.7	59.1	57.9
67.5°	56.7	57.9	54.3	51.9	50.7
70°	49.5	49.5	47.1	44.6	43.4
72.5°	41.0	42.2	39.8	37.4	36.2
75°	33.8	35.0	32.6	31.4	30.2
77.5°	27.8	29.0	26.5	25.3	24.1
80°	21.7	22.9	20.5	19.3	18.1
82.5°	15.7	16.9	15.7	14.5	13.3
85°	10.9	12.1	10.9	9.7	8.4
87.5°	4.8	7.2	4.8	4.8	3.6
90°	1.2	3.6	2.4	1.2	0.0
92.5°	12.1	16.9	25.3	43.4	47.1
95°	32.6	42.2	77.2	191.9	225.6
97.5°	61.5	72.4	118.2	300.4	354.7
100°	94.1	105.0	159.3	395.8	473.0
102.5°	131.5	140.0	196.7	483.9	585.2
105°	168.9	172.5	226.8	563.5	676.9
107.5°	203.9	206.3	248.6	623.8	757.8
110°	237.7	234.1	266.7	648.0	842.2



TEST NUMBER: P183431

CATALOG NUMBER: E2-WS-1L40-1D-UNV-4-STD-DM8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	267.9	261.8	281.1	629.9	879.6
115°	287.2	287.2	299.2	587.6	859.1
117.5°	300.4	308.9	322.2	565.9	780.7
120°	310.1	331.8	340.3	557.5	685.4
122.5°	324.6	351.1	366.8	550.2	633.5
125°	339.1	360.8	388.5	545.4	625.0
127.5°	353.5	368.0	406.6	544.2	623.8
130°	368.0	380.1	416.3	522.5	615.4
132.5°	384.9	397.0	432.0	485.1	547.8
135°	401.8	412.7	442.8	486.3	520.1
137.5°	416.3	424.7	451.3	486.3	512.8
140°	433.2	439.2	463.3	476.6	497.1
142.5°	447.7	452.5	475.4	476.6	482.6
145°	459.7	463.3	486.3	485.1	487.5
147.5°	473.0	474.2	494.7	495.9	495.9
150°	482.6	482.6	500.7	506.8	506.8
152.5°	493.5	491.1	508.0	514.0	517.6
155°	502.0	498.3	514.0	517.6	521.3
157.5°	510.4	506.8	516.4	522.5	524.9
160°	516.4	512.8	520.1	523.7	526.1
162.5°	522.5	517.6	524.9	522.5	523.7
165°	526.1	523.7	528.5	524.9	524.9
167.5°	529.7	528.5	530.9	528.5	528.5
170°	532.1	530.9	533.3	529.7	528.5
172.5°	534.5	532.1	534.5	529.7	527.3
175°	534.5	532.1	533.3	529.7	524.9
177.5°	535.7	530.9	530.9	526.1	523.7
180°	528.5	528.5	528.5	528.5	528.5

(END OF REPORT)