

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: P183544

Luminaire Tested: **E2-WS-4L30-1D-UNV-4-STD-DM5**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P183544  
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: E2-WS-4L30-1D-UNV-4-STD-DM5  
Description: CORELITE ELEMENT SUSPENDED DIRECT-INDIRECT LED LUMINAIRE, 4 FOOT.  
WaveStream WITH FROSTED LENS. 50% UP / 50% DOWN.  
Light Source: (336)3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5567.8 lumens  
Efficiency: N/A  
Efficacy: 87.4 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

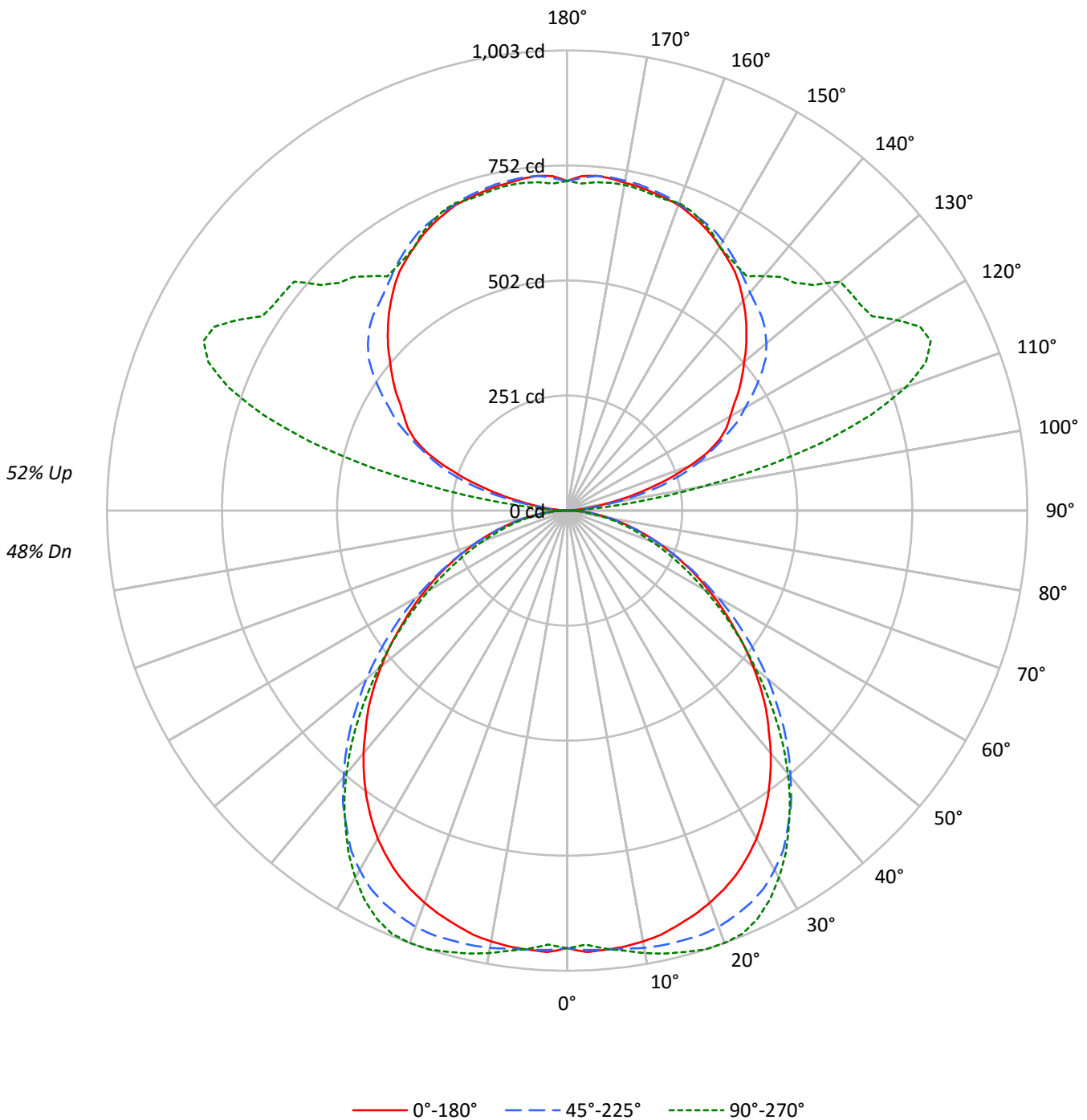
Input Watts (W): 63.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	7640	7640	7640
5°	7687	7443	7350
10°	7679	7313	7257
15°	7637	7207	7188
20°	7592	7108	7111
25°	7525	6943	6892
30°	7389	6693	6468
35°	7166	6297	5927
40°	6883	5810	5339
45°	6566	5270	4688
50°	6170	4694	4022
55°	5714	4082	3414
60°	5295	3477	2837
65°	4874	2885	2300
70°	4380	2317	1816
75°	3856	1764	1363
80°	3237	1213	907
85°	2446	648	438



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.6	1.6
10°-20°	273.3	4.9
20°-30°	429.1	7.7
30°-40°	510.2	9.2
40°-50°	497.6	8.9
50°-60°	410.0	7.4
60°-70°	285.1	5.1
70°-80°	156.7	2.8
80°-90°	46.7	0.8
90°-100°	62.9	1.1
100°-110°	322.6	5.8
110°-120°	495.1	8.9
120°-130°	516.9	9.3
130°-140°	473.1	8.5
140°-150°	404.2	7.3
150°-160°	319.9	5.7
160°-170°	203.4	3.7
170°-180°	69.3	1.2
0°-30°	794.0	14.3
0°-40°	1304.2	23.4
0°-60°	2211.8	39.7
0°-90°	2700.4	48.5
90°-120°	880.6	15.8
90°-150°	2274.8	40.9
90°-180°	2867.0	51.5
0°-180°	5567.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	954	954	954	954	954	
5°	961	952	961	958	958	91
15°	935	938	970	991	996	264
25°	874	888	944	972	982	402
35°	763	781	840	844	842	476
45°	613	637	667	653	644	472
55°	443	464	473	452	438	398
65°	289	298	294	278	266	286
75°	152	156	149	140	135	161
85°	44	47	42	37	35	46
90°	0	2	2	2	2	4
95°	23	26	30	65	72	33
105°	182	182	215	471	578	193
115°	366	362	378	662	874	356
125°	457	485	515	690	781	409
135°	553	562	599	655	702	427
145°	637	639	651	644	648	397
155°	690	688	697	697	695	318
165°	718	718	723	716	714	203
175°	732	725	732	728	718	70
180°	718	718	718	718	718	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	953.8	953.8	953.8	953.8	953.8
2.5°	963.1	951.5	958.5	956.2	946.8
5°	960.8	951.5	960.8	958.5	958.5
7.5°	958.5	949.2	963.1	967.8	967.8
10°	953.8	946.8	967.8	974.8	979.5
12.5°	946.8	942.2	970.1	984.1	988.8
15°	935.2	937.5	970.1	991.1	995.8
17.5°	923.5	930.5	970.1	993.5	1002.8
20°	909.5	918.8	965.5	993.5	1002.8
22.5°	893.2	904.8	956.2	986.5	998.1
25°	874.5	888.5	944.5	972.5	981.8
27.5°	851.2	867.5	928.2	951.5	956.2
30°	825.6	841.9	904.8	921.2	923.5
32.5°	795.2	816.2	876.9	886.2	886.2
35°	762.6	781.2	839.5	844.2	841.9
37.5°	727.6	748.6	802.2	799.9	797.6
40°	690.3	711.3	757.9	753.3	748.6
42.5°	650.6	674.0	713.6	704.3	697.3
45°	613.3	636.7	667.0	653.0	643.7
47.5°	571.4	594.7	618.0	604.0	590.0
50°	529.4	550.4	571.4	548.0	536.4
52.5°	487.4	508.4	522.4	501.4	487.4
55°	443.1	464.1	473.4	452.4	438.4
57.5°	403.4	419.8	426.8	405.8	391.8
60°	363.8	377.8	380.1	361.5	347.5
62.5°	326.5	338.2	335.8	317.2	305.5
65°	289.2	298.5	293.8	277.5	265.9
67.5°	251.9	258.9	254.2	240.2	230.9
70°	216.9	223.9	216.9	202.9	195.9
72.5°	184.2	188.9	181.9	170.2	163.2
75°	151.6	156.2	149.3	139.9	135.3
77.5°	121.3	123.6	118.9	111.9	107.3
80°	93.3	95.6	91.0	86.3	81.6
82.5°	67.6	70.0	65.3	63.0	58.3
85°	44.3	46.6	42.0	37.3	35.0
87.5°	21.0	23.3	18.7	16.3	14.0
90°	0.0	2.3	2.3	2.3	2.3
92.5°	7.0	9.3	9.3	14.0	14.0
95°	23.3	25.7	30.3	65.3	72.3
97.5°	51.3	53.6	65.3	153.9	170.2
100°	86.3	91.0	109.6	261.2	296.2
102.5°	132.9	135.3	163.2	373.1	438.4
105°	181.9	181.9	214.6	471.1	578.4
107.5°	233.2	226.2	263.5	550.4	695.0
110°	284.5	275.2	303.2	604.0	785.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	331.2	319.5	340.5	636.7	846.5
115°	366.1	361.5	377.8	662.3	874.5
117.5°	391.8	398.8	417.4	681.0	867.5
120°	410.4	433.8	447.8	697.3	830.2
122.5°	431.4	464.1	482.7	692.6	788.2
125°	457.1	485.1	515.4	690.3	781.2
127.5°	480.4	499.1	545.7	692.6	778.9
130°	503.7	520.1	566.7	676.3	776.6
132.5°	529.4	541.0	585.4	653.0	727.6
135°	552.7	562.0	599.3	655.3	702.0
137.5°	576.0	580.7	608.7	657.6	690.3
140°	597.0	599.3	620.3	641.3	667.0
142.5°	618.0	620.3	634.3	636.7	643.7
145°	636.7	639.0	650.6	643.7	648.3
147.5°	650.6	653.0	664.6	655.3	655.3
150°	664.6	664.6	678.6	669.3	664.6
152.5°	678.6	676.3	690.3	683.3	683.3
155°	690.3	688.0	697.3	697.3	695.0
157.5°	699.6	697.3	704.3	709.0	706.6
160°	709.0	706.6	711.3	711.3	713.6
162.5°	713.6	713.6	718.3	711.3	711.3
165°	718.3	718.3	722.9	715.9	713.6
167.5°	722.9	722.9	727.6	720.6	718.3
170°	725.3	725.3	729.9	722.9	720.6
172.5°	729.9	727.6	732.3	725.3	720.6
175°	732.3	725.3	732.3	727.6	718.3
177.5°	729.9	722.9	725.3	718.3	713.6
180°	718.3	718.3	718.3	718.3	718.3

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