

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: P183428

Luminaire Tested: **E2-WS-3L35-1D-UNV-4-STD-DM8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P183428  
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-3L35-1D-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)3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4875.6 lumens  
Efficiency: N/A  
Efficacy: 105.3 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

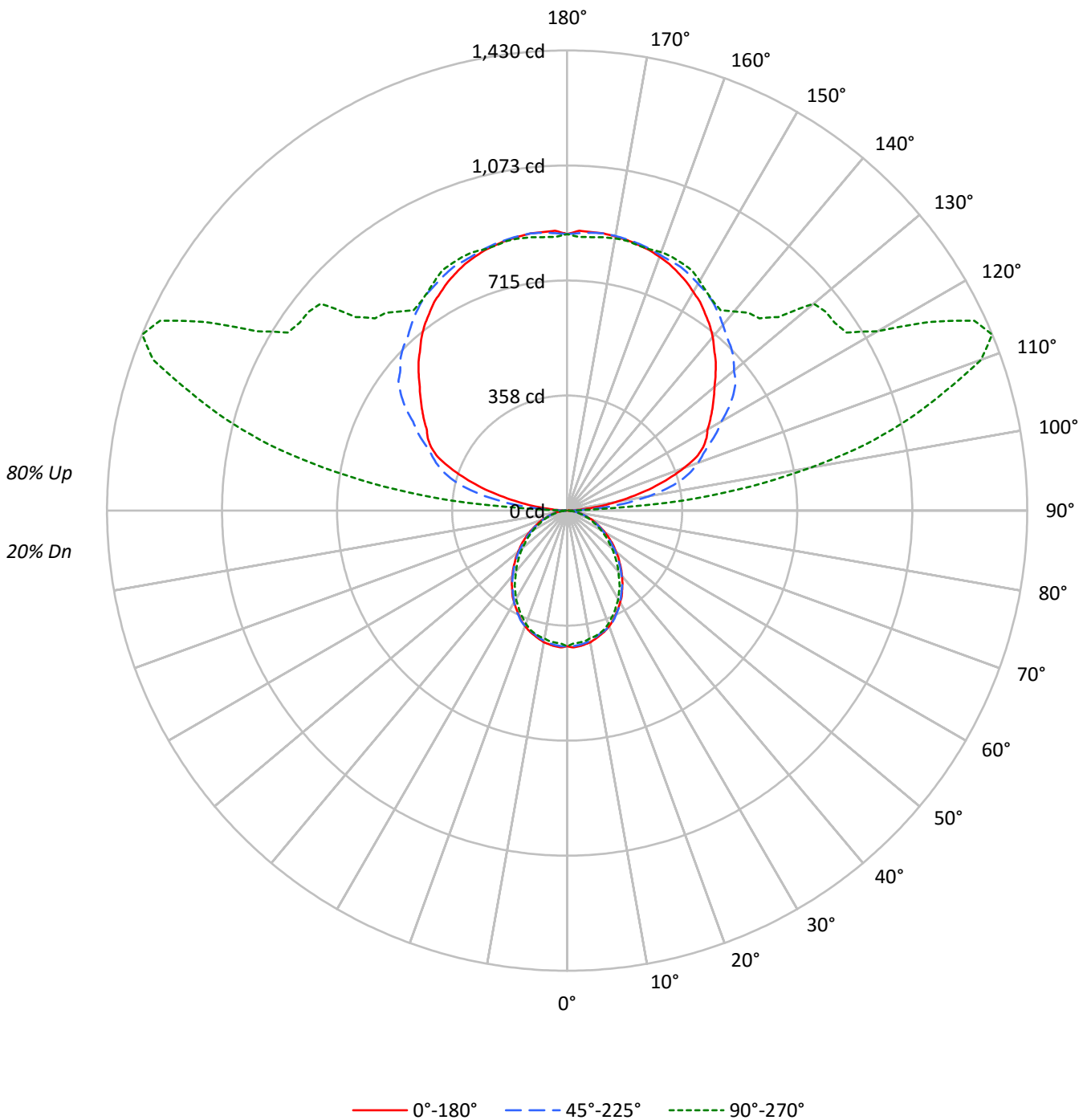
Input Watts (W): 46.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3377	3377	3377
5°	3388	3251	3158
10°	3347	3112	2992
15°	3266	2943	2845
20°	3192	2815	2656
25°	3071	2638	2437
30°	2948	2436	2225
35°	2800	2221	2002
40°	2639	2015	1762
45°	2477	1797	1556
50°	2308	1594	1353
55°	2150	1387	1176
60°	1969	1184	993
65°	1785	1001	814
70°	1624	817	655
75°	1396	625	494
80°	1225	444	327
85°	972	271	171



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.6	0.8
10°-20°	111.7	2.3
20°-30°	162.7	3.3
30°-40°	183.5	3.8
40°-50°	174.3	3.6
50°-60°	143.4	2.9
60°-70°	100.9	2.1
70°-80°	56.9	1.2
80°-90°	18.8	0.4
90°-100°	191.2	3.9
100°-110°	583.4	12.0
110°-120°	699.6	14.3
120°-130°	646.7	13.3
130°-140°	569.0	11.7
140°-150°	486.8	10.0
150°-160°	382.9	7.9
160°-170°	241.8	5.0
170°-180°	82.4	1.7
0°-30°	314.1	6.4
0°-40°	497.5	10.2
0°-60°	815.2	16.7
0°-90°	991.9	20.3
90°-120°	1474.2	30.2
90°-150°	3176.7	65.2
90°-180°	3884.0	79.7
0°-180°	4875.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	422	422	422	422	422	
5°	424	418	420	418	412	40
15°	400	396	396	396	394	113
25°	357	353	359	349	347	164
35°	298	300	296	288	284	187
45°	231	233	228	218	214	179
55°	167	169	161	153	151	149
65°	106	108	102	96	94	105
75°	55	57	53	51	49	59
85°	18	20	18	16	14	18
90°	2	6	4	2	0	4
95°	53	69	126	312	367	65
105°	274	280	369	916	1100	287
115°	467	467	486	955	1396	455
125°	551	586	631	886	1016	494
135°	653	671	720	790	845	503
145°	747	753	790	788	792	468
155°	816	810	835	841	847	376
165°	855	851	859	853	853	242
175°	869	865	867	861	853	83
180°	859	859	859	859	859	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	421.6	421.6	421.6	421.6	421.6
2.5°	425.5	419.6	421.6	419.6	413.7
5°	423.5	417.7	419.6	417.7	411.8
7.5°	419.6	413.7	415.7	413.7	409.8
10°	415.7	409.8	411.8	407.9	403.9
12.5°	407.9	403.9	403.9	400.0	400.0
15°	400.0	396.1	396.1	396.1	394.1
17.5°	392.2	386.3	390.2	390.2	386.3
20°	382.4	376.5	382.4	378.4	374.5
22.5°	370.6	366.7	372.6	364.7	360.8
25°	356.9	353.0	358.8	349.0	347.1
27.5°	343.1	341.2	345.1	335.3	331.4
30°	329.4	327.5	329.4	321.6	317.7
32.5°	315.7	313.7	311.8	303.9	300.0
35°	298.0	300.0	296.1	288.2	284.3
37.5°	282.4	284.3	280.4	270.6	264.7
40°	264.7	268.6	262.8	252.9	247.1
42.5°	249.0	251.0	245.1	235.3	231.4
45°	231.4	233.3	227.5	217.7	213.7
47.5°	215.7	217.7	211.8	202.0	198.0
50°	198.0	200.0	194.1	184.3	180.4
52.5°	182.4	184.3	176.5	168.6	164.7
55°	166.7	168.6	160.8	152.9	151.0
57.5°	151.0	152.9	145.1	139.2	135.3
60°	135.3	137.3	129.4	123.5	121.6
62.5°	119.6	121.6	115.7	109.8	107.8
65°	105.9	107.8	102.0	96.1	94.1
67.5°	92.2	94.1	88.2	84.3	82.4
70°	80.4	80.4	76.5	72.6	70.6
72.5°	66.7	68.6	64.7	60.8	58.8
75°	54.9	56.9	52.9	51.0	49.0
77.5°	45.1	47.1	43.1	41.2	39.2
80°	35.3	37.3	33.3	31.4	29.4
82.5°	25.5	27.5	25.5	23.5	21.6
85°	17.6	19.6	17.6	15.7	13.7
87.5°	7.8	11.8	7.8	7.8	5.9
90°	2.0	5.9	3.9	2.0	0.0
92.5°	19.6	27.5	41.2	70.6	76.5
95°	52.9	68.6	125.5	311.8	366.7
97.5°	100.0	117.7	192.2	488.2	576.5
100°	152.9	170.6	258.8	643.2	768.6
102.5°	213.7	227.5	319.6	786.3	951.0
105°	274.5	280.4	368.6	915.7	1100.0
107.5°	331.4	335.3	403.9	1013.8	1231.4
110°	386.3	380.4	433.3	1053.0	1368.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	435.3	425.5	456.9	1023.6	1429.5
115°	466.7	466.7	486.3	954.9	1396.1
117.5°	488.2	502.0	523.5	919.6	1268.7
120°	503.9	539.2	553.0	905.9	1113.8
122.5°	527.5	570.6	596.1	894.1	1029.4
125°	551.0	586.3	631.4	886.3	1015.7
127.5°	574.5	598.1	660.8	884.3	1013.8
130°	598.1	617.7	676.5	849.0	1000.0
132.5°	625.5	645.1	702.0	788.3	890.2
135°	653.0	670.6	719.6	790.2	845.1
137.5°	676.5	690.2	733.4	790.2	833.4
140°	703.9	713.7	753.0	774.5	807.9
142.5°	727.5	735.3	772.6	774.5	784.3
145°	747.1	753.0	790.2	788.3	792.2
147.5°	768.6	770.6	803.9	805.9	805.9
150°	784.3	784.3	813.7	823.6	823.6
152.5°	802.0	798.1	825.5	835.3	841.2
155°	815.7	809.8	835.3	841.2	847.1
157.5°	829.4	823.6	839.2	849.0	853.0
160°	839.2	833.4	845.1	851.0	854.9
162.5°	849.0	841.2	853.0	849.0	851.0
165°	854.9	851.0	858.8	853.0	853.0
167.5°	860.8	858.8	862.8	858.8	858.8
170°	864.7	862.8	866.7	860.8	858.8
172.5°	868.7	864.7	868.7	860.8	856.9
175°	868.7	864.7	866.7	860.8	853.0
177.5°	870.6	862.8	862.8	854.9	851.0
180°	858.8	858.8	858.8	858.8	858.8

(END OF REPORT)