

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P564907

Luminaire Tested: **SQ4-PW1-100U-050D-830-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564907
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-050D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

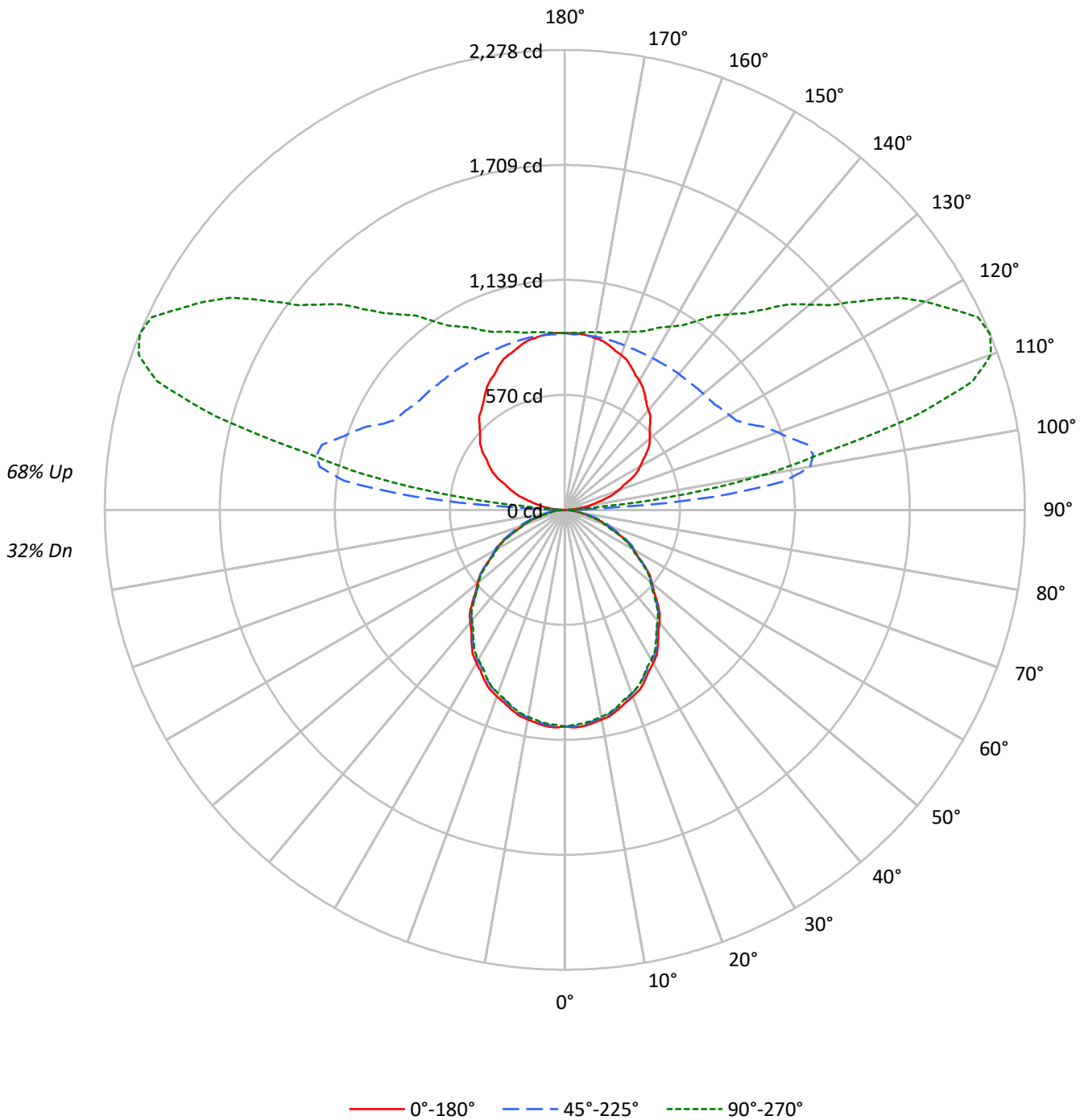
Lumens per Lamp: N/A
Luminaire Lumens: 8418.1 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64.3
Input Voltage (V): 120
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: 24 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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34	27
2	86	78	72	67	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6599	6599	6599
5°	6642	6590	6560
10°	6589	6536	6501
15°	6519	6447	6423
20°	6441	6342	6330
25°	6352	6236	6217
30°	6217	6123	6082
35°	6041	5955	5920
40°	5852	5761	5739
45°	5624	5551	5525
50°	5391	5346	5310
55°	5140	5140	5058
60°	4826	4919	4745
65°	4416	4637	4307
70°	3893	4268	3791
75°	3325	3819	3234
80°	2579	3213	2611
85°	1666	2470	2202



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	1.2
10°-20°	285.2	3.4
20°-30°	423.1	5.0
30°-40°	495.1	5.9
40°-50°	492.9	5.9
50°-60°	425.6	5.1
60°-70°	306.4	3.6
70°-80°	160.7	1.9
80°-90°	41.6	0.5
90°-100°	409.9	4.9
100°-110°	1131.5	13.4
110°-120°	1166.9	13.9
120°-130°	937.7	11.1
130°-140°	736.9	8.8
140°-150°	565.2	6.7
150°-160°	406.2	4.8
160°-170°	248.4	3.0
170°-180°	83.8	1.0
0°-30°	809.4	9.6
0°-40°	1304.5	15.5
0°-60°	2222.9	26.4
0°-90°	2731.6	32.4
90°-120°	2708.2	32.2
90°-150°	4948.1	58.8
90°-180°	5686.0	67.5
0°-180°	8418.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1073	1073	1073	1073	1073	
5°	1076	1064	1067	1064	1062	102
15°	1024	1011	1012	1010	1009	289
25°	936	920	919	913	916	430
35°	804	793	793	786	788	503
45°	647	641	638	636	635	499
55°	479	478	479	473	472	428
65°	303	313	319	306	296	301
75°	140	153	161	150	136	150
85°	24	31	35	33	31	31
90°	3	6	11	13	14	5
95°	60	222	744	306	199	64
105°	202	311	1245	1900	1790	215
115°	361	437	1003	1985	2257	355
125°	496	564	909	1538	1805	441
135°	596	661	884	1246	1404	462
145°	692	740	872	1060	1141	433
155°	780	806	865	952	982	359
165°	844	855	870	903	910	238
175°	875	876	871	884	881	83
180°	875	875	875	875	875	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1072.9	1072.9	1072.9	1072.9	1072.9
2.5°	1079.0	1070.1	1072.9	1070.5	1065.4
5°	1075.8	1063.7	1067.3	1064.4	1062.5
7.5°	1064.8	1053.7	1056.3	1053.2	1052.1
10°	1055.0	1043.9	1046.5	1042.6	1040.8
12.5°	1043.6	1031.8	1034.4	1030.5	1029.4
15°	1023.8	1010.8	1012.4	1010.5	1008.6
17.5°	1000.7	987.6	987.8	984.8	984.4
20°	984.1	970.2	968.9	965.2	967.0
22.5°	965.9	951.3	950.0	944.8	947.4
25°	935.9	920.1	918.8	913.2	916.0
27.5°	901.1	885.5	885.6	877.7	880.6
30°	875.4	860.6	862.1	852.8	856.4
32.5°	848.1	834.8	835.7	826.3	830.0
35°	804.5	793.4	793.1	785.6	788.4
37.5°	759.8	750.0	748.5	744.2	744.9
40°	728.8	720.5	717.5	714.7	714.7
42.5°	696.3	688.7	685.7	683.6	682.9
45°	646.6	641.0	638.1	636.2	635.2
47.5°	597.4	592.3	589.7	588.3	587.4
50°	563.4	559.7	558.7	555.8	554.9
52.5°	529.4	527.2	526.2	522.5	521.6
55°	479.3	478.3	479.3	472.6	471.7
57.5°	427.1	428.6	431.6	422.7	420.5
60°	392.3	396.0	399.9	389.4	385.7
62.5°	356.8	362.7	368.1	356.1	350.9
65°	303.4	312.7	318.6	306.0	295.9
67.5°	252.0	263.5	270.5	257.1	245.6
70°	216.5	229.4	237.3	223.7	210.8
72.5°	185.5	199.9	206.3	193.5	180.6
75°	139.9	152.8	160.7	150.0	136.1
77.5°	99.3	111.5	118.0	108.6	97.2
80°	72.8	85.7	90.7	83.0	73.7
82.5°	51.6	62.3	65.8	61.1	54.8
85°	23.6	31.0	35.0	33.0	31.2
87.5°	6.6	12.3	16.6	16.9	17.9
90°	2.8	5.5	11.2	12.6	14.0
92.5°	25.2	104.6	187.1	68.3	53.2
95°	60.2	221.8	743.6	305.6	198.8
97.5°	99.7	248.4	1101.5	848.0	614.2
100°	128.8	264.4	1233.7	1242.4	1009.6
102.5°	156.8	282.5	1259.4	1535.0	1314.3
105°	201.6	311.2	1244.9	1900.5	1789.6
107.5°	249.3	346.7	1175.4	2076.7	2117.2
110°	282.9	370.5	1121.6	2114.6	2246.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	313.1	397.4	1071.2	2084.7	2278.5
115°	361.3	436.6	1002.6	1984.8	2257.3
117.5°	403.3	478.3	957.5	1844.2	2154.2
120°	431.3	505.2	939.6	1749.1	2061.2
122.5°	458.2	528.8	925.0	1660.2	1955.9
125°	495.7	564.2	908.8	1538.0	1805.0
127.5°	527.6	596.1	899.3	1434.6	1664.9
130°	548.9	617.4	894.8	1371.4	1580.9
132.5°	569.1	634.2	890.3	1318.3	1508.1
135°	596.5	660.9	883.6	1245.7	1404.5
137.5°	627.3	685.9	880.2	1184.6	1320.2
140°	644.1	701.6	878.0	1143.9	1263.1
142.5°	663.2	716.3	875.7	1107.8	1212.6
145°	691.7	739.7	872.4	1060.5	1141.2
147.5°	719.2	761.1	869.3	1020.6	1083.3
150°	739.4	773.6	868.2	996.8	1047.4
152.5°	755.0	787.1	867.1	976.4	1018.3
155°	780.0	806.0	865.4	951.5	981.6
157.5°	802.9	822.9	865.7	933.3	953.9
160°	816.4	834.2	866.8	923.1	938.2
162.5°	827.6	843.2	867.9	914.1	925.9
165°	844.4	855.3	869.6	903.3	910.2
167.5°	857.3	863.8	871.0	896.8	899.0
170°	864.0	869.5	871.0	893.4	893.4
172.5°	869.6	872.9	871.0	888.9	887.8
175°	875.2	876.5	871.0	883.5	880.8
177.5°	877.4	876.3	870.7	878.5	876.3
180°	875.2	875.2	875.2	875.2	875.2

(END OF REPORT)