

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

Brand: CORELITE

Report Number: P854137

Luminaire Tested: SQ2-PP3-125U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854137
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-125U-050D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

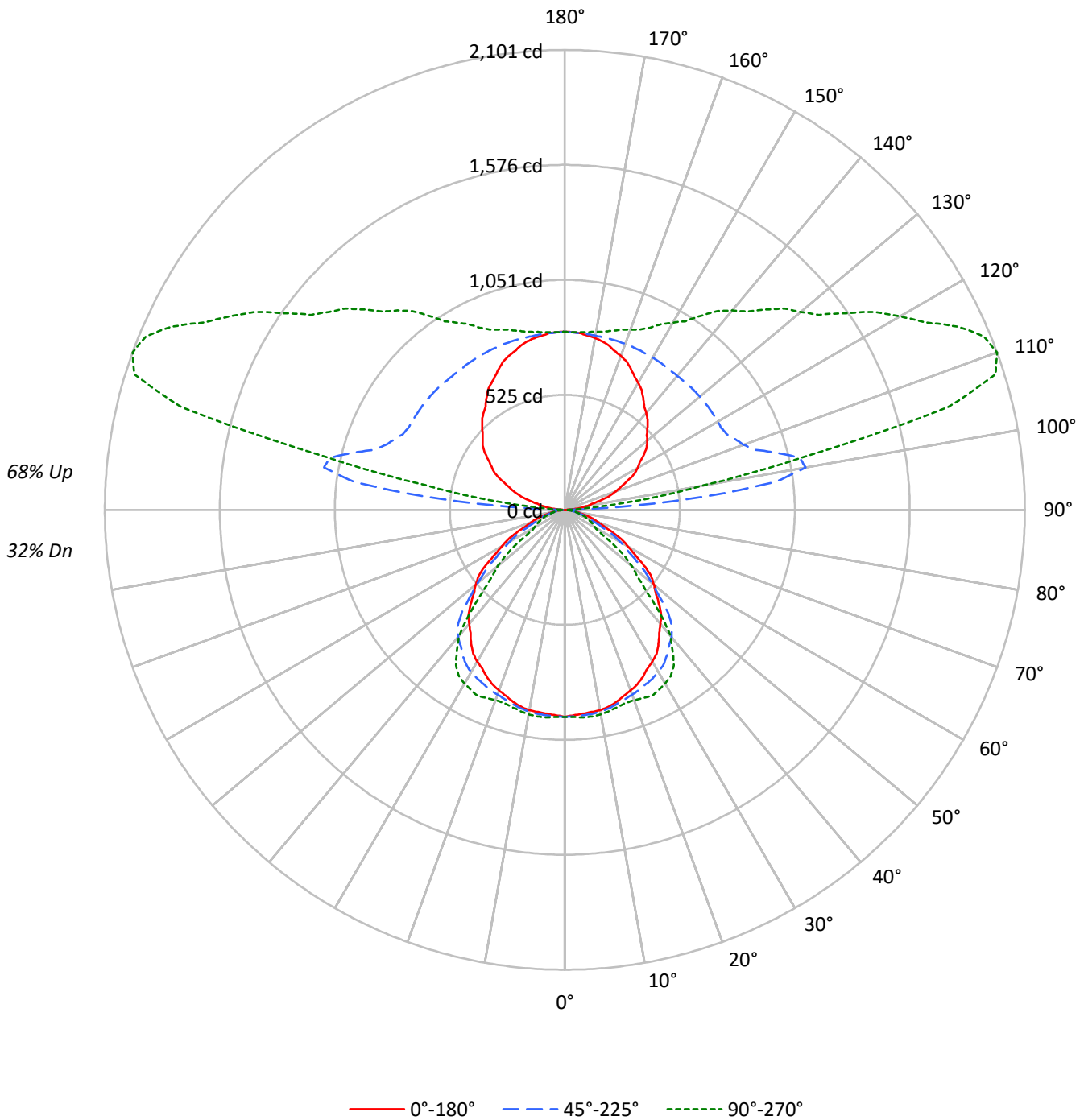
Lumens per Lamp: N/A
Luminaire Lumens: 7398.8 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 61.7
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	50	30	10	0	
RCR																						
0	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32				
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28				
2	86	79	73	68	77	71	67	62	57	54	51	44	42	40	32	30	29	24				
3	79	70	63	57	71	63	57	52	51	46	43	39	36	34	28	27	25	21				
4	72	62	54	48	65	56	50	45	45	40	37	35	32	29	26	24	22	18				
5	66	55	47	42	59	50	43	38	40	35	32	31	28	25	23	21	19	16				
6	61	49	41	36	55	45	38	33	36	31	28	28	25	22	21	19	17	14				
7	56	44	37	31	50	40	34	29	33	28	24	26	22	20	19	17	15	12				
8	52	40	33	28	47	37	30	26	30	25	22	24	20	17	18	15	14	11				
9	48	37	29	25	43	33	27	23	27	23	19	22	18	16	16	14	12	10				
10	45	33	26	22	41	31	24	20	25	20	17	20	16	14	15	13	11	9				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15274	15274	15274
5°	15154	15284	15430
10°	15231	15346	15542
15°	15194	15345	15579
20°	15086	15447	15893
25°	15000	15642	16728
30°	14915	15959	17078
35°	14704	16005	17109
40°	14311	15976	15808
45°	13883	15253	12033
50°	13338	13011	10022
55°	12414	10950	7206
60°	10689	9397	5167
65°	9016	7259	5081
70°	7506	5712	4862
75°	6363	4928	4554
80°	5393	4277	4091
85°	4261	3520	2223

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15253 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	1.2
10°-20°	260.7	3.5
20°-30°	408.4	5.5
30°-40°	503.8	6.8
40°-50°	474.4	6.4
50°-60°	335.9	4.5
60°-70°	191.4	2.6
70°-80°	94.7	1.3
80°-90°	24.0	0.3
90°-100°	311.0	4.2
100°-110°	1012.4	13.7
110°-120°	1001.4	13.5
120°-130°	818.4	11.1
130°-140°	668.9	9.0
140°-150°	521.0	7.0
150°-160°	375.5	5.1
160°-170°	229.5	3.1
170°-180°	77.4	1.0
0°-30°	759.2	10.3
0°-40°	1263.0	17.1
0°-60°	2073.2	28.0
0°-90°	2383.3	32.2
90°-120°	2324.8	31.4
90°-150°	4333.0	58.6
90°-180°	5015.0	67.8
0°-180°	7398.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	935	952	943	945	952	89
15°	909	922	918	927	932	256
25°	842	864	878	914	939	388
35°	746	766	812	858	868	465
45°	608	654	668	566	527	468
55°	441	467	389	293	256	389
65°	236	249	190	134	133	237
75°	102	113	79	74	73	111
85°	23	21	19	15	12	27
90°	0	3	7	6	6	3
95°	42	128	570	203	125	49
105°	172	248	1003	1916	1814	183
115°	318	380	817	1684	1981	315
125°	442	493	806	1329	1567	393
135°	534	590	802	1147	1294	412
145°	624	670	800	988	1082	391
155°	712	735	805	885	918	328
165°	777	784	807	837	847	219
175°	810	810	810	816	814	77
180°	813	813	813	813	813	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946.0	946.0	946.0	946.0	946.0
2.5°	938.8	952.1	943.6	945.2	946.8
5°	935.0	951.6	943.0	945.2	952.0
7.5°	931.4	948.4	940.0	943.6	952.0
10°	929.0	943.7	936.0	941.2	948.0
12.5°	921.8	935.7	928.8	935.5	941.6
15°	909.0	921.7	918.0	927.1	932.0
17.5°	891.6	907.1	907.0	919.9	925.0
20°	878.0	896.6	899.0	915.2	925.0
22.5°	863.6	885.3	889.4	913.8	930.6
25°	842.0	863.5	878.0	913.6	939.0
27.5°	816.8	838.1	868.0	907.9	928.0
30°	800.0	820.5	856.0	897.4	916.0
32.5°	779.2	800.5	838.4	883.0	900.0
35°	746.0	766.5	812.0	858.2	868.0
37.5°	707.8	731.1	782.0	807.8	808.4
40°	679.0	709.3	758.0	762.7	750.0
42.5°	651.0	689.9	724.4	703.3	646.8
45°	608.0	654.0	668.0	566.1	527.0
47.5°	562.2	607.6	585.2	474.8	447.8
50°	531.0	574.0	518.0	424.4	399.0
52.5°	495.8	534.1	458.0	376.1	337.4
55°	441.0	467.4	389.0	293.2	256.0
57.5°	375.0	393.6	332.6	220.1	178.4
60°	331.0	345.7	291.0	180.5	160.0
62.5°	291.0	304.1	247.8	156.8	149.6
65°	236.0	248.7	190.0	134.0	133.0
67.5°	187.8	201.7	145.8	117.0	115.8
70°	159.0	173.7	121.0	105.0	103.0
72.5°	135.0	148.9	102.6	92.2	91.0
75°	102.0	112.8	79.0	74.0	73.0
77.5°	74.0	80.8	58.8	56.2	55.2
80°	58.0	60.9	46.0	45.0	44.0
82.5°	43.6	42.6	34.8	33.8	32.0
85°	23.0	21.0	19.0	14.9	12.0
87.5°	7.2	7.8	4.6	3.6	3.6
90°	0.0	2.9	7.0	6.0	6.0
92.5°	14.4	51.7	165.4	54.5	42.0
95°	42.0	128.0	569.9	203.2	125.0
97.5°	79.0	166.6	967.3	589.1	359.6
100°	103.0	189.0	1116.9	995.9	645.9
102.5°	130.2	213.1	1098.5	1473.4	1120.3
105°	172.0	248.2	1002.9	1915.5	1813.8
107.5°	217.2	288.9	912.1	1953.8	2061.6
110°	250.0	315.5	868.9	1906.2	2100.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	277.2	341.9	841.7	1820.3	2071.2
115°	318.0	379.6	816.9	1683.6	1980.8
117.5°	360.0	415.5	807.3	1558.3	1854.2
120°	384.0	438.7	804.9	1481.3	1767.8
122.5°	407.2	461.1	805.7	1414.5	1681.4
125°	441.9	492.8	805.9	1329.2	1566.8
127.5°	471.7	523.8	805.7	1265.4	1463.4
130°	490.9	543.7	804.9	1228.9	1405.8
132.5°	507.7	562.9	804.1	1195.0	1361.0
135°	533.9	589.7	801.9	1147.2	1293.9
137.5°	559.5	615.7	799.7	1098.6	1228.9
140°	577.9	631.7	798.9	1065.7	1188.9
142.5°	595.5	647.0	798.9	1034.2	1144.1
145°	623.9	669.9	799.9	988.0	1081.9
147.5°	651.5	691.4	801.3	948.7	1021.3
150°	669.9	705.1	802.9	925.3	986.9
152.5°	688.3	717.3	803.7	907.4	956.5
155°	711.9	735.4	804.9	884.7	917.9
157.5°	734.3	751.1	806.1	867.8	891.1
160°	747.9	761.6	806.9	857.3	875.9
162.5°	759.9	770.5	806.9	848.4	862.3
165°	776.9	783.8	806.9	837.1	846.9
167.5°	788.9	793.2	807.1	828.6	833.7
170°	796.9	798.9	807.9	823.0	824.9
172.5°	802.5	803.7	809.5	819.7	819.3
175°	809.9	809.9	809.9	815.9	813.9
177.5°	812.9	812.1	811.3	815.2	812.1
180°	812.9	812.9	812.9	812.9	812.9



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	15.08	15.78	16.18	16.88	18.38	11.48	12.18	12.58	13.27	14.78
	3H	16.16	16.79	17.27	17.89	19.42	12.57	13.19	13.68	14.30	15.82
	4H	16.50	17.09	17.62	18.20	19.73	13.02	13.62	14.14	14.72	16.25
	6H	16.70	17.25	17.83	18.36	19.90	13.36	13.91	14.49	15.01	16.56
	8H	16.75	17.27	17.88	18.39	19.92	13.44	13.96	14.57	15.08	16.62
	12H	16.76	17.25	17.89	18.37	19.92	13.45	13.94	14.59	15.06	16.62
4H	2H	15.17	15.76	16.29	16.87	18.40	12.17	12.76	13.30	13.87	15.40
	3H	16.46	16.96	17.59	18.09	19.63	13.40	13.90	14.54	15.03	16.57
	4H	16.93	17.38	18.07	18.50	20.06	13.95	14.41	15.09	15.53	17.09
	6H	17.26	17.65	18.40	18.79	20.34	14.38	14.77	15.53	15.92	17.47
	8H	17.35	17.71	18.49	18.84	20.41	14.50	14.87	15.65	16.00	17.57
	12H	17.38	17.71	18.54	18.85	20.43	14.52	14.85	15.68	16.00	17.57
8H	4H	16.94	17.30	18.08	18.43	20.00	14.21	14.58	15.36	15.71	17.28
	6H	17.36	17.66	18.52	18.84	20.40	14.75	15.05	15.92	16.23	17.80
	8H	17.52	17.78	18.69	18.93	20.52	14.94	15.20	16.11	16.36	17.94
	12H	17.60	17.83	18.77	18.98	20.60	15.01	15.24	16.18	16.39	18.01
12H	4H	16.89	17.22	18.05	18.36	19.94	14.22	14.54	15.37	15.69	17.26
	6H	17.35	17.61	18.52	18.77	20.35	14.81	15.07	15.98	16.22	17.81
	8H	17.51	17.74	18.69	18.90	20.52	15.01	15.24	16.18	16.39	18.01