

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: P854061

Luminaire Tested: SQ2-PH1-125U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854061
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G2-2308-131-10)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PH1-125U-125D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

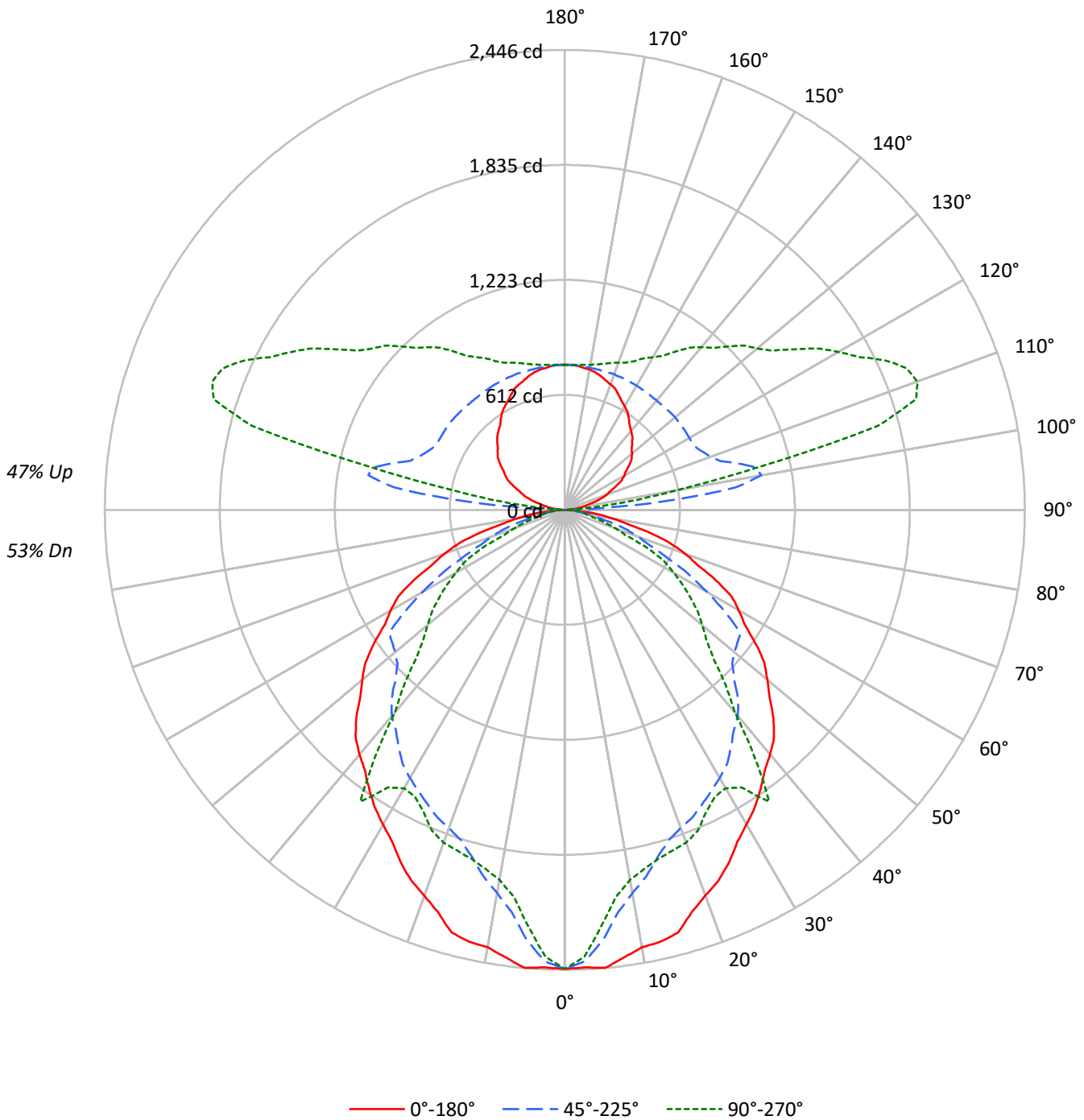
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10164.3 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.02 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 93.1
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	99	94	91	87	91	88	84	81	75	73	70	63	62	60	53	51	50	45
2	90	83	77	72	83	77	72	67	66	62	59	56	53	50	46	44	43	38
3	82	73	66	60	76	68	61	56	58	53	49	49	46	43	41	39	36	32
4	75	64	57	51	69	60	53	48	52	46	42	44	40	37	37	34	31	28
5	69	58	49	43	64	54	46	41	46	41	36	40	35	32	33	30	27	24
6	64	52	44	38	59	48	41	36	42	36	32	36	31	28	30	27	24	21
7	59	47	39	33	54	44	36	31	38	32	28	33	28	25	28	24	22	19
8	55	42	35	29	51	40	33	28	35	29	25	30	25	22	25	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	27	23	20	23	20	17	15
10	48	36	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39417	39417	39417
5°	39642	37271	36028
10°	38730	33931	32750
15°	38903	31915	32110
20°	37515	30931	32368
25°	36829	30788	31614
30°	36031	30704	31873
35°	35757	30354	37359
40°	35789	30157	29619
45°	35801	29012	25512
50°	35299	29582	23920
55°	34849	32104	22950
60°	34504	28126	21526
65°	33899	22808	18724
70°	32021	19407	13379
75°	28546	14635	10143
80°	23329	9503	9503
85°	14635	8614	6447

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 35801 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.8	2.1
10°-20°	565.0	5.6
20°-30°	828.5	8.2
30°-40°	1003.3	9.9
40°-50°	986.7	9.7
50°-60°	858.9	8.4
60°-70°	597.1	5.9
70°-80°	283.1	2.8
80°-90°	63.2	0.6
90°-100°	295.3	2.9
100°-110°	961.5	9.5
110°-120°	951.1	9.4
120°-130°	777.3	7.6
130°-140°	635.3	6.3
140°-150°	494.8	4.9
150°-160°	356.7	3.5
160°-170°	218.0	2.1
170°-180°	73.6	0.7
0°-30°	1608.3	15.8
0°-40°	2611.7	25.7
0°-60°	4457.2	43.9
0°-90°	5400.7	53.1
90°-120°	2208.0	21.7
90°-150°	4115.4	40.5
90°-180°	4764.0	46.9
0°-180°	10164.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2441	2441	2441	2441	2441	
5°	2446	2444	2300	2228	2223	230
15°	2327	2073	1909	1896	1921	649
25°	2067	1758	1728	1781	1775	951
35°	1814	1467	1540	1673	1895	1136
45°	1568	1161	1271	1315	1117	1205
55°	1238	904	1140	822	815	1106
65°	887	622	597	490	490	872
75°	458	317	235	167	163	485
85°	79	52	46	37	35	106
90°	0	3	7	6	6	4
95°	40	122	541	193	119	46
105°	163	236	952	1819	1723	174
115°	302	360	776	1599	1881	299
125°	420	468	765	1262	1488	374
135°	507	560	762	1090	1229	392
145°	593	636	760	938	1028	371
155°	676	698	764	840	872	311
165°	738	744	766	795	804	208
175°	769	769	769	775	773	73
180°	772	772	772	772	772	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2441.3	2441.3	2441.3	2441.3	2441.3
2.5°	2435.7	2461.1	2404.1	2381.7	2378.1
5°	2445.9	2443.6	2299.6	2227.5	2222.9
7.5°	2401.3	2330.9	2158.8	2079.3	2075.6
10°	2362.3	2255.5	2069.6	1997.6	1997.6
12.5°	2353.0	2184.5	1997.1	1944.0	1954.9
15°	2327.4	2073.1	1909.3	1896.0	1921.0
17.5°	2242.9	1969.0	1841.0	1871.4	1900.5
20°	2183.4	1913.2	1800.2	1856.5	1883.8
22.5°	2133.3	1859.4	1770.4	1832.1	1846.6
25°	2067.3	1758.4	1728.2	1781.4	1774.6
27.5°	1988.3	1665.8	1685.9	1718.5	1722.6
30°	1932.6	1610.1	1646.9	1680.1	1709.6
32.5°	1878.7	1545.3	1604.1	1682.8	1750.5
35°	1814.1	1466.6	1540.0	1672.8	1895.4
37.5°	1746.3	1373.8	1475.4	1587.2	1658.0
40°	1698.0	1307.3	1430.8	1568.8	1405.3
42.5°	1645.9	1255.3	1363.9	1542.1	1265.9
45°	1567.9	1161.3	1270.6	1314.9	1117.3
47.5°	1475.9	1088.4	1207.4	1096.5	1019.2
50°	1405.3	1039.6	1177.7	1002.3	952.3
52.5°	1336.5	989.0	1157.2	924.6	891.0
55°	1238.0	904.2	1140.5	822.1	815.3
57.5°	1133.5	817.8	1008.6	732.9	744.7
60°	1068.5	761.9	871.0	680.3	666.6
62.5°	999.7	707.7	742.8	613.4	599.7
65°	887.3	621.6	597.0	490.1	490.1
67.5°	763.7	532.1	483.6	401.1	346.6
70°	678.3	473.9	411.1	319.7	283.4
72.5°	587.2	411.9	336.8	262.0	220.2
75°	457.6	316.8	234.6	167.1	162.6
77.5°	330.8	228.1	158.0	124.0	124.5
80°	250.9	173.6	102.2	99.9	102.2
82.5°	176.5	119.3	76.2	79.4	79.9
85°	79.0	51.7	46.5	37.1	34.8
87.5°	16.7	15.5	10.6	10.4	10.4
90°	0.0	2.8	6.6	5.7	5.7
92.5°	13.7	49.1	157.1	51.8	39.9
95°	39.9	121.6	541.3	193.0	118.7
97.5°	75.0	158.2	918.7	559.5	341.5
100°	97.8	179.5	1060.8	945.9	613.5
102.5°	123.6	202.4	1043.3	1399.4	1064.0
105°	163.3	235.8	952.5	1819.3	1722.7
107.5°	206.3	274.4	866.3	1855.7	1958.1
110°	237.4	299.6	825.3	1810.5	1995.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	263.3	324.7	799.4	1728.9	1967.2
115°	302.0	360.5	775.9	1599.0	1881.3
117.5°	341.9	394.6	766.8	1480.1	1761.1
120°	364.7	416.7	764.5	1407.0	1679.1
122.5°	386.7	438.0	765.3	1343.5	1597.0
125°	419.8	468.0	765.4	1262.5	1488.2
127.5°	448.1	497.5	765.3	1201.8	1390.0
130°	466.3	516.4	764.5	1167.2	1335.3
132.5°	482.3	534.6	763.7	1135.0	1292.7
135°	507.1	560.1	761.7	1089.6	1228.9
137.5°	531.4	584.7	759.6	1043.5	1167.2
140°	548.9	600.0	758.8	1012.2	1129.2
142.5°	565.6	614.5	758.8	982.3	1086.6
145°	592.6	636.2	759.8	938.4	1027.6
147.5°	618.8	656.7	761.1	901.1	970.0
150°	636.3	669.7	762.6	878.8	937.3
152.5°	653.8	681.3	763.4	861.9	908.5
155°	676.2	698.5	764.5	840.2	871.8
157.5°	697.5	713.4	765.6	824.3	846.4
160°	710.4	723.4	766.4	814.3	831.9
162.5°	721.8	731.8	766.4	805.8	819.0
165°	737.9	744.4	766.4	795.1	804.4
167.5°	749.3	753.4	766.6	787.0	791.9
170°	756.9	758.8	767.3	781.6	783.5
172.5°	762.2	763.3	768.9	778.5	778.2
175°	769.2	769.2	769.2	774.9	773.0
177.5°	772.1	771.4	770.6	774.3	771.3
180°	772.1	772.1	772.1	772.1	772.1

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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	20.38	21.26	21.31	22.21	23.44	19.05	19.93	19.98	20.88	22.11
	3H	22.41	23.20	23.35	24.15	25.40	20.09	20.88	21.03	21.83	23.08
	4H	23.14	23.89	24.10	24.85	26.11	20.30	21.05	21.26	22.01	23.27
	6H	23.62	24.31	24.59	25.28	26.55	20.45	21.14	21.42	22.10	23.37
	8H	23.75	24.40	24.73	25.39	26.66	20.48	21.14	21.46	22.12	23.39
	12H	23.80	24.42	24.78	25.40	26.69	20.48	21.10	21.46	22.08	23.37
4H	2H	20.76	21.50	21.72	22.47	23.72	19.70	20.44	20.66	21.40	22.66
	3H	22.87	23.49	23.84	24.48	25.75	20.88	21.50	21.85	22.49	23.76
	4H	23.68	24.25	24.66	25.23	26.53	21.15	21.72	22.14	22.71	24.00
	6H	24.27	24.76	25.26	25.76	27.06	21.36	21.85	22.36	22.86	24.15
	8H	24.44	24.89	25.43	25.89	27.20	21.42	21.88	22.42	22.88	24.19
	12H	24.51	24.92	25.52	25.94	27.25	21.43	21.84	22.44	22.86	24.17
8H	4H	23.70	24.16	24.70	25.16	26.47	21.37	21.83	22.37	22.83	24.14
	6H	24.35	24.73	25.37	25.77	27.08	21.64	22.02	22.67	23.06	24.37
	8H	24.58	24.91	25.61	25.94	27.27	21.75	22.08	22.78	23.11	24.44
	12H	24.69	24.98	25.73	26.01	27.38	21.79	22.08	22.83	23.11	24.48
12H	4H	23.65	24.06	24.67	25.08	26.40	21.37	21.78	22.38	22.80	24.11
	6H	24.33	24.66	25.36	25.69	27.02	21.68	22.01	22.70	23.04	24.36
	8H	24.56	24.85	25.59	25.88	27.25	21.79	22.08	22.82	23.11	24.48