

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: P854001

Luminaire Tested: SQ2-PH1-025U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854001
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-10)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PH1-025U-125D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

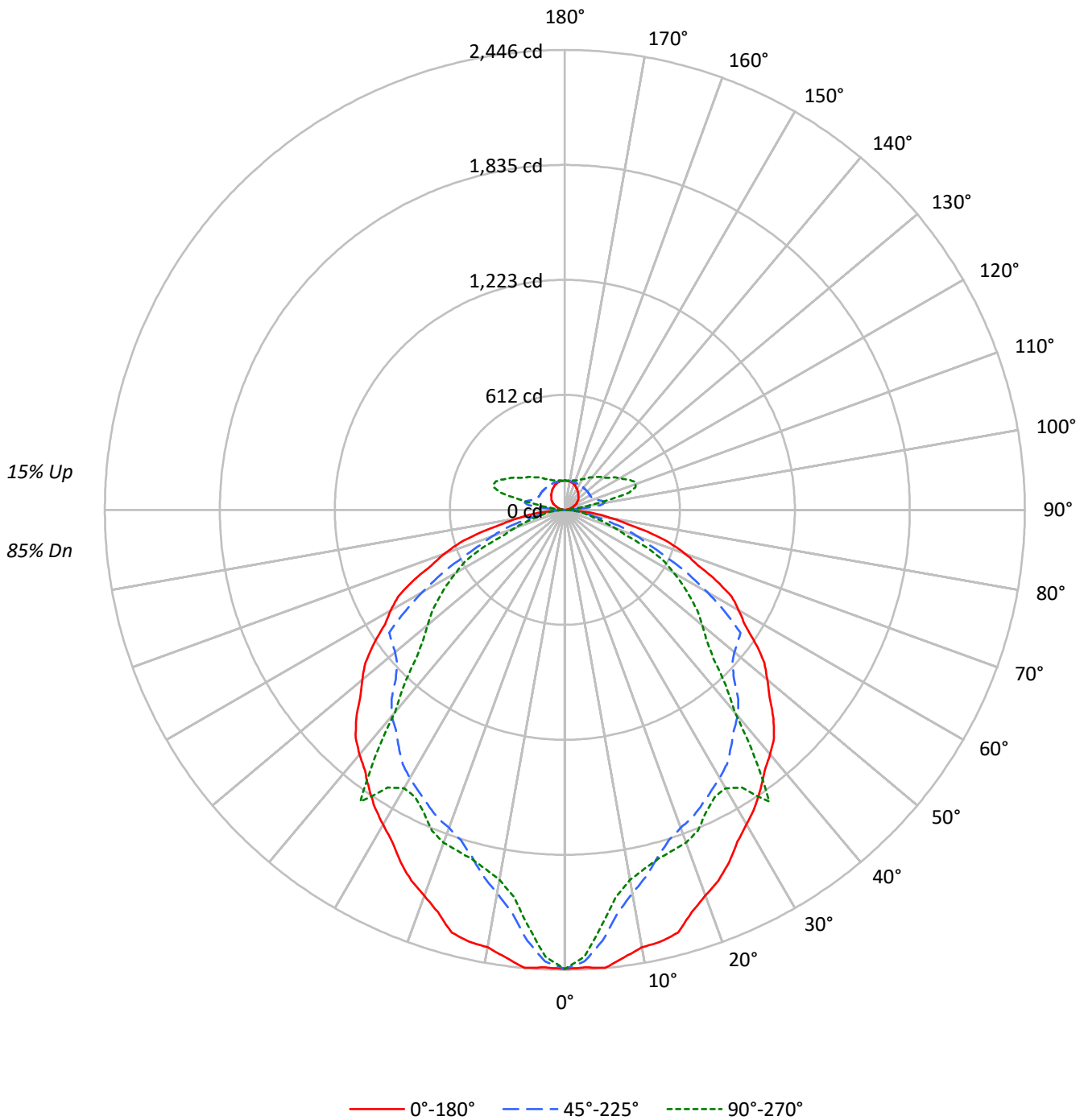
Lumens per Lamp: N/A
Luminaire Lumens: 6366.5 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.02 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 56.6
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

TEST NUMBER: P854001

CATALOG NUMBER: SQ2-PH1-025U-125D-930-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P854001

CATALOG NUMBER: SQ2-PH1-025U-125D-930-UNV-STD-W-4

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	115	115	115	115	111	111	111	111	103	103	103	95	95	95	88	88	88	85
1	106	102	98	94	102	98	94	91	91	88	86	84	82	80	79	77	75	72
2	97	89	83	77	93	86	80	75	80	75	71	75	71	67	69	66	64	61
3	88	79	71	65	85	76	69	63	71	65	60	66	61	57	62	58	55	52
4	81	70	61	55	78	67	60	54	63	57	52	59	54	49	55	51	47	45
5	75	62	54	48	72	60	53	47	57	50	45	53	47	43	50	45	41	39
6	69	56	48	42	66	55	47	41	51	44	39	48	42	38	45	40	36	34
7	64	51	43	37	61	50	42	36	47	40	35	44	38	34	41	36	32	30
8	60	47	38	33	57	45	38	32	43	36	31	40	34	30	38	33	29	27
9	56	43	35	30	53	42	34	29	39	33	28	37	31	27	35	30	26	24
10	52	39	32	27	50	38	31	26	36	30	26	34	29	25	33	28	24	22

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



TEST NUMBER: P854001

CATALOG NUMBER: SQ2-PH1-025U-125D-930-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.8	3.4
10°-20°	565.0	8.9
20°-30°	828.5	13.0
30°-40°	1003.3	15.8
40°-50°	986.7	15.5
50°-60°	858.9	13.5
60°-70°	597.1	9.4
70°-80°	283.1	4.4
80°-90°	62.8	1.0
90°-100°	63.0	1.0
100°-110°	196.0	3.1
110°-120°	191.7	3.0
120°-130°	156.5	2.5
130°-140°	128.0	2.0
140°-150°	99.9	1.6
150°-160°	72.1	1.1
160°-170°	44.1	0.7
170°-180°	14.9	0.2
0°-30°	1608.3	25.3
0°-40°	2611.7	41.0
0°-60°	4457.2	70.0
0°-90°	5400.2	84.8
90°-120°	450.7	7.1
90°-150°	835.2	13.1
90°-180°	966.0	15.2
0°-180°	6366.5	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	1	3	3	3	3
95°	9	25	116	43	28	10
105°	34	48	193	368	352	36
115°	61	72	157	323	378	60
125°	85	94	155	254	298	75
135°	102	113	154	219	246	79
145°	119	129	154	190	206	75
155°	137	141	155	170	176	63
165°	150	151	156	160	162	42
175°	156	156	156	157	156	15
180°	156	156	156	156	156	



TEST NUMBER: P854001

CATALOG NUMBER: SQ2-PH1-025U-125D-930-UNV-STD-W-4

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	15.1	9.9	9.9	9.9
90°	0.0	0.9	2.9	2.9	2.9
92.5°	3.1	10.7	36.5	12.0	9.7
95°	8.6	25.4	115.6	42.6	27.7
97.5°	15.7	33.0	191.4	119.2	75.1
100°	21.0	36.9	215.9	201.9	134.7
102.5°	26.4	41.5	211.3	288.4	226.4
105°	34.4	48.4	192.9	368.3	351.5
107.5°	42.4	55.5	175.4	374.5	393.0
110°	47.8	60.8	166.2	365.7	402.1



TEST NUMBER: P854001

CATALOG NUMBER: SQ2-PH1-025U-125D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.1	65.4	161.6	349.9	396.0
115°	61.1	72.3	156.6	323.1	378.2
117.5°	69.0	79.2	154.5	297.6	354.0
120°	73.5	83.8	153.8	283.0	337.2
122.5°	78.1	88.4	154.5	270.7	320.4
125°	85.0	94.3	154.7	254.1	298.0
127.5°	90.5	100.1	154.7	241.7	279.1
130°	93.6	103.9	154.7	234.8	268.4
132.5°	97.4	107.7	154.0	228.6	260.0
135°	102.2	113.4	153.8	219.3	246.4
137.5°	107.7	118.0	153.8	210.1	234.8
140°	110.8	121.1	153.8	204.0	226.4
142.5°	114.6	124.1	153.8	197.8	218.0
145°	119.4	128.7	153.8	189.5	206.3
147.5°	125.1	133.2	154.7	181.8	195.0
150°	128.9	135.5	154.7	177.9	188.2
152.5°	132.0	137.8	154.7	174.0	182.8
155°	136.6	141.3	154.7	170.1	175.8
157.5°	141.2	144.7	154.7	166.7	170.2
160°	144.2	147.0	154.7	164.4	167.2
162.5°	146.5	148.6	154.7	162.8	164.9
165°	150.0	150.9	155.7	160.5	162.4
167.5°	152.1	152.2	154.7	159.2	160.1
170°	152.8	153.8	154.7	157.6	158.6
172.5°	154.4	154.5	155.5	156.8	157.0
175°	155.7	155.7	155.7	156.6	155.7
177.5°	155.7	155.7	155.7	155.7	155.7
180°	155.7	155.7	155.7	155.7	155.7

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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	22.86	24.14	23.45	24.74	25.40	21.54	22.81	22.12	23.41	24.08
	3H	24.92	26.07	25.52	26.67	27.38	22.60	23.75	23.20	24.35	25.06
	4H	25.67	26.75	26.29	27.37	28.09	22.83	23.91	23.46	24.53	25.25
	6H	26.18	27.17	26.81	27.80	28.54	23.00	24.00	23.63	24.63	25.36
	8H	26.31	27.26	26.96	27.91	28.65	23.04	23.99	23.69	24.64	25.38
	12H	26.37	27.28	27.02	27.92	28.69	23.05	23.96	23.71	24.61	25.37
4H	2H	23.29	24.37	23.91	24.99	25.71	22.23	23.31	22.85	23.93	24.65
	3H	25.43	26.33	26.07	26.99	27.73	23.44	24.34	24.08	25.00	25.74
	4H	26.26	27.08	26.92	27.74	28.51	23.74	24.55	24.39	25.21	25.99
	6H	26.87	27.58	27.55	28.27	29.05	23.97	24.67	24.65	25.36	26.15
	8H	27.05	27.71	27.73	28.40	29.19	24.03	24.69	24.72	25.38	26.17
	12H	27.14	27.73	27.84	28.44	29.24	24.06	24.65	24.76	25.37	26.16
8H	4H	26.31	26.97	27.00	27.66	28.45	23.99	24.64	24.67	25.33	26.12
	6H	26.98	27.53	27.70	28.26	29.06	24.27	24.82	24.99	25.55	26.35
	8H	27.21	27.70	27.94	28.43	29.24	24.38	24.87	25.11	25.60	26.41
	12H	27.35	27.77	28.07	28.50	29.37	24.44	24.87	25.17	25.59	26.47
12H	4H	26.29	26.88	26.99	27.59	28.39	24.00	24.59	24.70	25.31	26.10
	6H	26.96	27.45	27.69	28.18	28.99	24.31	24.79	25.03	25.53	26.34
	8H	27.21	27.64	27.94	28.36	29.24	24.44	24.87	25.17	25.59	26.47