

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: P854918

Luminaire Tested: SQ2-PP3-125U-075D-830-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854918
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-075D-830-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

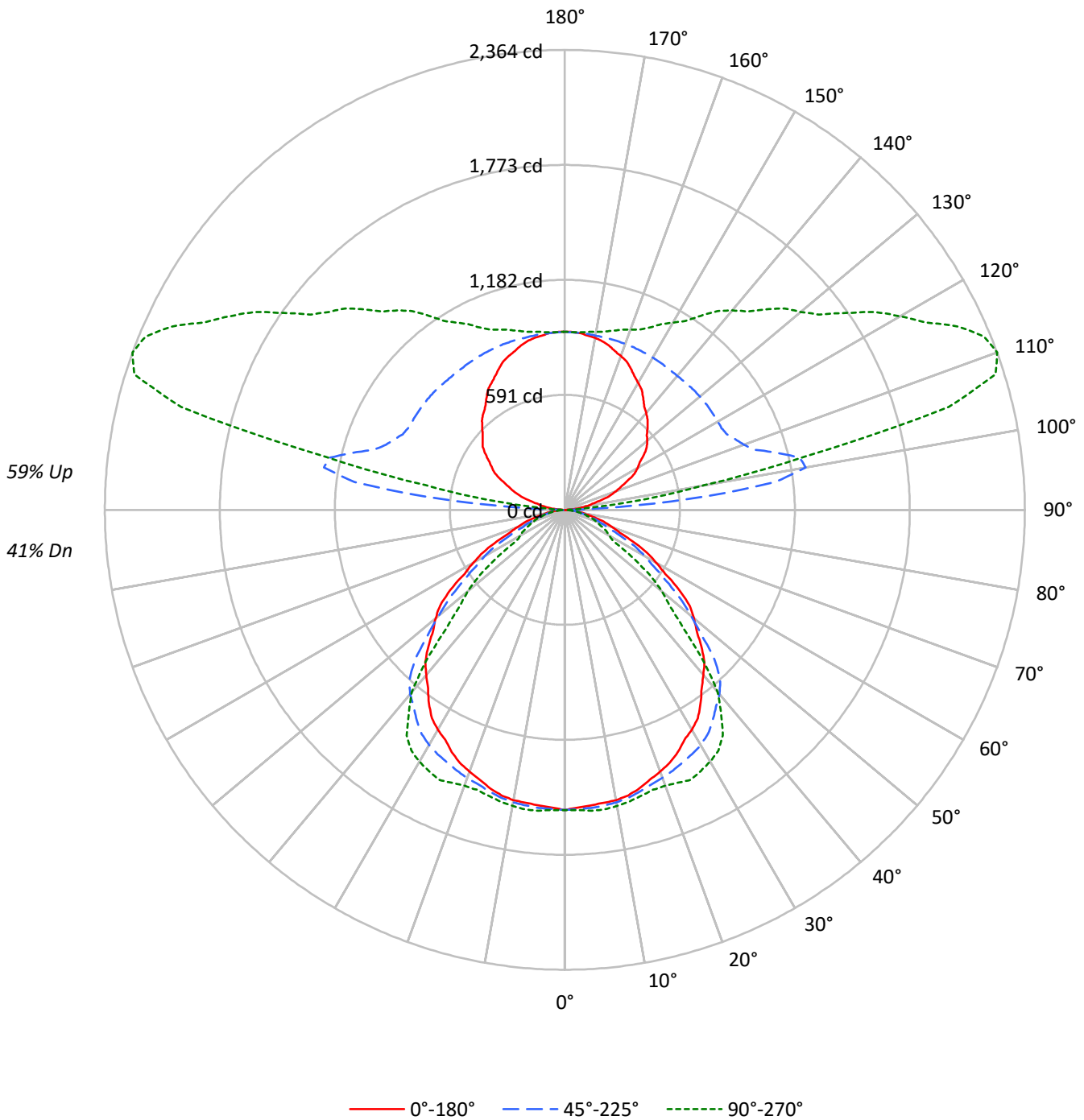
Lumens per Lamp: N/A
Luminaire Lumens: 9531.7 lumens
Efficiency: N/A
Efficacy: 135.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 70.6
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: P854918

CATALOG NUMBER: SQ2-PP3-125U-075D-830-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P854918

CATALOG NUMBER: SQ2-PP3-125U-075D-830-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	50	30	10	0	
RCR																						
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41				41
1	96	92	88	85	88	84	81	78	69	67	65	55	54	53	43	42	41				35	
2	88	81	75	70	80	74	69	65	61	58	54	49	47	45	38	37	35				30	
3	80	71	64	59	73	65	59	55	54	50	46	44	41	38	34	32	30				26	
4	74	63	56	50	67	58	52	46	48	43	40	39	36	33	31	28	26				23	
5	68	56	49	43	61	52	45	40	43	38	34	35	32	29	28	25	23				20	
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	25	23	20				17	
7	58	46	38	33	52	42	35	31	35	30	26	29	25	22	23	20	18				16	
8	53	41	34	29	49	38	32	27	32	27	23	27	23	20	21	18	16				14	
9	50	38	31	26	45	35	28	24	29	24	21	24	21	18	19	17	15				13	
10	46	35	28	23	42	32	26	22	27	22	19	22	19	16	18	15	13				11	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24913	24913	24913
5°	24716	24929	25165
10°	24843	25030	25351
15°	24782	25028	25409
20°	24606	25194	25923
25°	24467	25513	27285
30°	24328	26028	27854
35°	23984	26104	27906
40°	23343	26059	25781
45°	22644	24877	19626
50°	21755	21223	16347
55°	20248	17861	11752
60°	17434	15326	8428
65°	14705	11840	8290
70°	12246	9319	7931
75°	10374	8041	7430
80°	8796	6983	6676
85°	6947	5743	3631

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 24877 cd/sqm



TEST NUMBER: P854918

CATALOG NUMBER: SQ2-PP3-125U-075D-830-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.9	1.5
10°-20°	425.2	4.5
20°-30°	666.1	7.0
30°-40°	821.8	8.6
40°-50°	773.7	8.1
50°-60°	547.8	5.7
60°-70°	312.1	3.3
70°-80°	154.4	1.6
80°-90°	38.8	0.4
90°-100°	350.0	3.7
100°-110°	1139.4	12.0
110°-120°	1127.1	11.8
120°-130°	921.1	9.7
130°-140°	752.8	7.9
140°-150°	586.4	6.2
150°-160°	422.6	4.4
160°-170°	258.3	2.7
170°-180°	87.2	0.9
0°-30°	1238.3	13.0
0°-40°	2060.0	21.6
0°-60°	3381.5	35.5
0°-90°	3886.9	40.8
90°-120°	2616.5	27.5
90°-150°	4876.7	51.2
90°-180°	5645.0	59.2
0°-180°	9531.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1543	1543	1543	1543	1543	
5°	1525	1552	1538	1542	1553	145
15°	1483	1503	1497	1512	1520	418
25°	1373	1408	1432	1490	1532	633
35°	1217	1250	1324	1400	1416	759
45°	992	1067	1090	923	860	763
55°	719	762	634	478	418	635
65°	385	406	310	219	217	387
75°	166	184	129	121	119	180
85°	38	34	31	24	20	44
90°	0	3	8	7	7	4
95°	47	144	641	229	141	55
105°	194	279	1129	2156	2041	206
115°	358	427	919	1895	2229	354
125°	497	555	907	1496	1764	443
135°	601	664	903	1291	1456	464
145°	702	754	900	1112	1218	440
155°	801	828	906	996	1033	369
165°	874	882	908	942	953	246
175°	912	912	912	918	916	86
180°	915	915	915	915	915	



TEST NUMBER: P854918

CATALOG NUMBER: SQ2-PP3-125U-075D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1543.0	1543.0	1543.0	1543.0	1543.0
2.5°	1531.2	1552.9	1539.0	1541.7	1544.2
5°	1525.0	1552.1	1538.1	1541.6	1552.7
7.5°	1519.1	1546.9	1533.2	1539.0	1552.7
10°	1515.3	1539.1	1526.7	1535.1	1546.3
12.5°	1503.5	1526.1	1514.9	1525.9	1535.8
15°	1482.6	1503.3	1497.3	1512.1	1520.1
17.5°	1454.2	1479.4	1479.3	1500.5	1508.7
20°	1432.1	1462.4	1466.3	1492.8	1508.7
22.5°	1408.6	1443.9	1450.6	1490.4	1517.9
25°	1373.4	1408.4	1432.1	1490.1	1531.6
27.5°	1332.2	1366.9	1415.8	1480.8	1513.6
30°	1304.9	1338.3	1396.1	1463.7	1494.0
32.5°	1271.0	1305.7	1367.5	1440.2	1467.9
35°	1216.8	1250.3	1324.4	1399.8	1415.8
37.5°	1154.5	1192.4	1275.5	1317.5	1318.6
40°	1107.5	1156.9	1236.4	1244.0	1223.2
42.5°	1061.8	1125.3	1181.5	1147.2	1055.0
45°	991.7	1066.6	1089.5	923.4	859.5
47.5°	917.0	991.0	954.5	774.4	730.4
50°	866.1	936.3	844.9	692.3	650.8
52.5°	808.6	871.2	747.0	613.5	550.3
55°	719.3	762.4	634.5	478.1	417.5
57.5°	611.7	642.0	542.5	358.9	291.0
60°	539.9	563.9	474.6	294.4	261.0
62.5°	474.6	496.0	404.2	255.8	244.0
65°	384.9	405.7	309.9	218.6	217.0
67.5°	306.3	328.9	237.8	190.7	188.9
70°	259.4	283.2	197.4	171.2	168.0
72.5°	220.1	242.9	167.3	150.4	148.5
75°	166.3	184.0	128.9	120.6	119.1
77.5°	120.8	131.8	95.9	91.6	90.0
80°	94.6	99.4	75.1	73.4	71.8
82.5°	71.1	69.5	56.8	55.1	52.2
85°	37.5	34.4	31.0	24.3	19.6
87.5°	11.8	12.4	6.8	5.3	5.3
90°	0.0	3.3	7.9	6.8	6.8
92.5°	16.2	58.2	186.1	61.4	47.3
95°	47.3	144.0	641.4	228.7	140.7
97.5°	88.9	187.5	1088.7	663.0	404.7
100°	115.9	212.8	1257.0	1120.9	727.0
102.5°	146.5	239.8	1236.4	1658.3	1260.9
105°	193.6	279.4	1128.7	2155.8	2041.4
107.5°	244.4	325.2	1026.5	2199.0	2320.3
110°	281.3	355.0	977.9	2145.4	2364.4



TEST NUMBER: P854918

CATALOG NUMBER: SQ2-PP3-125U-075D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	311.9	384.8	947.4	2048.7	2331.0
115°	357.8	427.2	919.4	1894.8	2229.3
117.5°	405.1	467.6	908.6	1753.9	2086.8
120°	432.1	493.8	905.9	1667.2	1989.6
122.5°	458.2	519.0	906.8	1592.1	1892.4
125°	497.4	554.6	907.0	1496.1	1763.5
127.5°	530.9	589.5	906.8	1424.2	1647.1
130°	552.5	612.0	905.9	1383.1	1582.2
132.5°	571.4	633.5	905.0	1345.0	1531.8
135°	600.9	663.7	902.6	1291.2	1456.3
137.5°	629.8	692.9	900.1	1236.5	1383.1
140°	650.5	710.9	899.2	1199.4	1338.0
142.5°	670.2	728.1	899.2	1164.0	1287.7
145°	702.2	753.9	900.3	1112.0	1217.6
147.5°	733.3	778.2	901.9	1067.8	1149.4
150°	754.0	793.6	903.6	1041.4	1110.7
152.5°	774.7	807.3	904.5	1021.3	1076.5
155°	801.3	827.6	905.9	995.6	1033.1
157.5°	826.5	845.4	907.2	976.8	1002.9
160°	841.8	857.1	908.1	964.9	985.8
162.5°	855.2	867.2	908.1	954.9	970.5
165°	874.4	882.1	908.1	942.2	953.1
167.5°	887.9	892.8	908.4	932.6	938.3
170°	896.9	899.1	909.3	926.2	928.4
172.5°	903.3	904.5	911.1	922.6	922.2
175°	911.5	911.5	911.5	918.2	916.0
177.5°	914.9	914.0	913.1	917.5	914.0
180°	914.9	914.9	914.9	914.9	914.9



TEST NUMBER: P854918

CATALOG NUMBER: SQ2-PP3-125U-075D-830-UNV-STD-W-4

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	17.79	18.55	18.83	19.59	20.99	14.18	14.94	15.22	15.98	17.38
	3H	18.88	19.55	19.92	20.60	22.02	15.28	15.96	16.33	17.01	18.43
	4H	19.21	19.86	20.27	20.91	22.33	15.74	16.38	16.80	17.43	18.86
	6H	19.42	20.01	20.49	21.07	22.51	16.08	16.67	17.15	17.73	19.16
	8H	19.47	20.03	20.54	21.10	22.54	16.16	16.72	17.24	17.80	19.23
	12H	19.48	20.01	20.56	21.08	22.53	16.17	16.71	17.25	17.77	19.23
4H	2H	17.88	18.53	18.95	19.58	21.00	14.88	15.53	15.95	16.58	18.00
	3H	19.18	19.72	20.26	20.80	22.23	16.13	16.66	17.20	17.74	19.18
	4H	19.65	20.14	20.73	21.21	22.67	16.68	17.16	17.76	18.23	19.70
	6H	19.99	20.40	21.07	21.50	22.95	17.11	17.53	18.20	18.62	20.08
	8H	20.08	20.47	21.17	21.55	23.02	17.23	17.62	18.32	18.71	20.18
	12H	20.11	20.46	21.21	21.56	23.04	17.26	17.61	18.36	18.71	20.18
8H	4H	19.66	20.05	20.75	21.14	22.61	16.94	17.33	18.03	18.42	19.89
	6H	20.09	20.41	21.20	21.54	23.01	17.49	17.81	18.60	18.93	20.40
	8H	20.25	20.53	21.37	21.64	23.13	17.67	17.95	18.79	19.06	20.55
	12H	20.33	20.58	21.45	21.69	23.21	17.74	17.99	18.86	19.09	20.62
12H	4H	19.62	19.97	20.72	21.07	22.55	16.95	17.30	18.05	18.40	19.87
	6H	20.08	20.36	21.20	21.47	22.96	17.54	17.82	18.66	18.93	20.42
	8H	20.25	20.50	21.37	21.60	23.13	17.74	17.99	18.86	19.10	20.62