

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: P854925

Luminaire Tested: SQ2-PP3-0U-100D-830-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

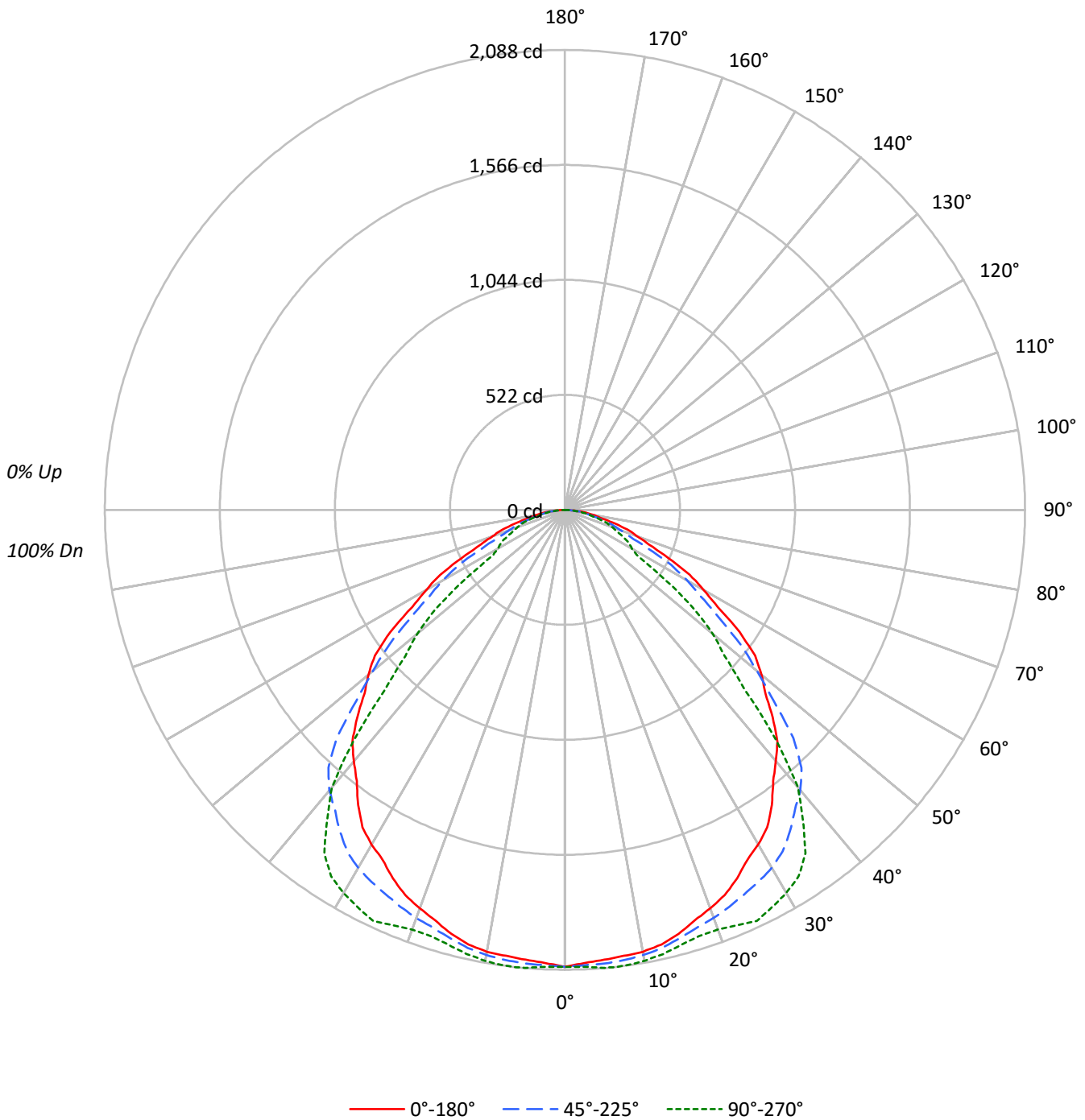
Test Method: LM-79-2019  
Report Number: P854925  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PP3-0U-100D-830-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5224.5 lumens  
Efficiency: N/A  
Efficacy: 138.9 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: Direct  
  
Input Watts (W): 37.6  
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: P854925  
CATALOG NUMBER: SQ2-PP3-0U-100D-830-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P854925

CATALOG NUMBER: SQ2-PP3-OU-100D-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	89	87
2	101	94	88	82	99	92	86	81	88	84	80	85	81	78	82	79	76	74
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	74	66	60	83	73	66	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	50	48
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	33495	33495	33495
5°	33232	33516	33836
10°	33401	33652	34083
15°	33320	33650	34165
20°	33082	33874	34854
25°	32895	34301	36685
30°	32708	34998	37449
35°	32244	35096	37517
40°	31386	35036	34665
45°	30446	33449	26389
50°	29248	28535	21979
55°	27220	24014	15803
60°	23441	20605	11328
65°	19771	15916	11144
70°	16461	12529	10664
75°	13949	10805	9987
80°	11827	9382	8963
85°	9337	7725	4872

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 33449 cd/sqm

TEST NUMBER: P854925

CATALOG NUMBER: SQ2-PP3-OU-100D-830-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.5	3.8
10°-20°	571.7	10.9
20°-30°	895.6	17.1
30°-40°	1104.8	21.1
40°-50°	1040.2	19.9
50°-60°	736.5	14.1
60°-70°	419.7	8.0
70°-80°	207.6	4.0
80°-90°	50.8	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1664.8	31.9
0°-40°	2769.7	53.0
0°-60°	4546.4	87.0
0°-90°	5224.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5224.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2074	2074	2074	2074	2074	
5°	2050	2087	2068	2073	2088	195
15°	1993	2021	2013	2033	2044	562
25°	1846	1894	1925	2003	2059	850
35°	1636	1681	1781	1882	1903	1020
45°	1333	1434	1465	1241	1156	1026
55°	967	1025	853	643	561	853
65°	518	545	417	294	292	520
75°	224	247	173	162	160	242
85°	50	46	42	33	26	61
90°	0	0	0	0	0	



TEST NUMBER: P854925

CATALOG NUMBER: SQ2-PP3-OU-100D-830-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2074.5	2074.5	2074.5	2074.5	2074.5
2.5°	2058.8	2088.0	2069.3	2072.8	2076.3
5°	2050.4	2086.8	2067.9	2072.7	2087.7
7.5°	2042.5	2079.8	2061.4	2069.3	2087.7
10°	2037.3	2069.4	2052.6	2063.9	2078.9
12.5°	2021.5	2051.9	2036.9	2051.6	2064.9
15°	1993.4	2021.3	2013.1	2033.1	2043.9
17.5°	1955.2	1989.1	1989.0	2017.3	2028.5
20°	1925.4	1966.2	1971.5	2007.0	2028.5
22.5°	1893.8	1941.4	1950.4	2003.8	2040.8
25°	1846.5	1893.6	1925.4	2003.4	2059.2
27.5°	1791.2	1838.0	1903.4	1990.8	2035.0
30°	1754.4	1799.4	1877.2	1968.0	2008.7
32.5°	1708.7	1755.5	1838.5	1936.3	1973.7
35°	1635.9	1680.9	1780.6	1882.1	1903.4
37.5°	1552.1	1603.3	1714.8	1771.5	1772.7
40°	1489.1	1555.5	1662.3	1672.6	1644.7
42.5°	1427.7	1512.9	1588.6	1542.3	1418.4
45°	1333.4	1434.1	1464.9	1241.4	1155.7
47.5°	1232.9	1332.3	1283.3	1041.2	982.0
50°	1164.4	1258.9	1136.0	930.7	875.0
52.5°	1087.2	1171.3	1004.4	824.8	739.9
55°	967.0	1025.0	853.1	642.9	561.4
57.5°	822.3	863.1	729.4	482.6	391.2
60°	725.9	758.0	638.1	396.0	350.8
62.5°	638.1	666.9	543.4	343.9	328.1
65°	517.5	545.4	416.6	293.9	291.7
67.5°	411.9	442.3	319.7	256.5	253.9
70°	348.7	380.8	265.4	230.2	225.9
72.5°	296.0	326.5	225.0	202.2	199.6
75°	223.6	247.3	173.2	162.2	160.1
77.5°	162.2	177.3	128.9	123.2	121.1
80°	127.2	133.6	100.9	98.6	96.4
82.5°	95.7	93.5	76.3	74.1	70.2
85°	50.4	46.1	41.7	32.8	26.3
87.5°	15.8	15.8	7.0	5.3	5.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P854925

CATALOG NUMBER: SQ2-PP3-OU-100D-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	23.64	25.16	24.01	25.48	25.79	20.04	21.56	20.40	21.87	22.19
	3H	24.79	26.15	25.16	26.48	26.84	21.19	22.55	21.57	22.88	23.24
	4H	25.16	26.43	25.56	26.78	27.16	21.69	22.96	22.08	23.31	23.69
	6H	25.41	26.58	25.82	26.95	27.34	22.06	23.24	22.47	23.61	24.00
	8H	25.47	26.59	25.90	26.98	27.38	22.17	23.29	22.59	23.68	24.08
	12H	25.51	26.58	25.94	26.96	27.39	22.20	23.27	22.63	23.65	24.08
4H	2H	23.83	25.11	24.23	25.45	25.83	20.83	22.11	21.23	22.46	22.83
	3H	25.20	26.25	25.61	26.65	27.05	22.14	23.20	22.55	23.60	24.00
	4H	25.70	26.64	26.13	27.06	27.50	22.72	23.67	23.15	24.08	24.52
	6H	26.07	26.89	26.53	27.33	27.79	23.20	24.02	23.65	24.46	24.92
	8H	26.17	26.94	26.64	27.39	27.85	23.33	24.10	23.79	24.54	25.01
	12H	26.24	26.92	26.72	27.40	27.87	23.38	24.07	23.87	24.55	25.02
8H	4H	25.76	26.53	26.22	26.97	27.44	23.04	23.81	23.50	24.25	24.72
	6H	26.21	26.85	26.71	27.34	27.82	23.61	24.24	24.10	24.73	25.21
	8H	26.37	26.94	26.89	27.45	27.94	23.79	24.37	24.31	24.88	25.36
	12H	26.48	26.99	26.99	27.48	28.05	23.89	24.40	24.40	24.89	25.46
12H	4H	25.75	26.43	26.23	26.91	27.38	23.08	23.76	23.56	24.24	24.71
	6H	26.20	26.78	26.72	27.28	27.77	23.66	24.23	24.17	24.74	25.23
	8H	26.40	26.91	26.91	27.40	27.96	23.90	24.40	24.41	24.89	25.46