

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: P854084

Luminaire Tested: SQ2-PP3-025U-100D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854084
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-025U-100D-940-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

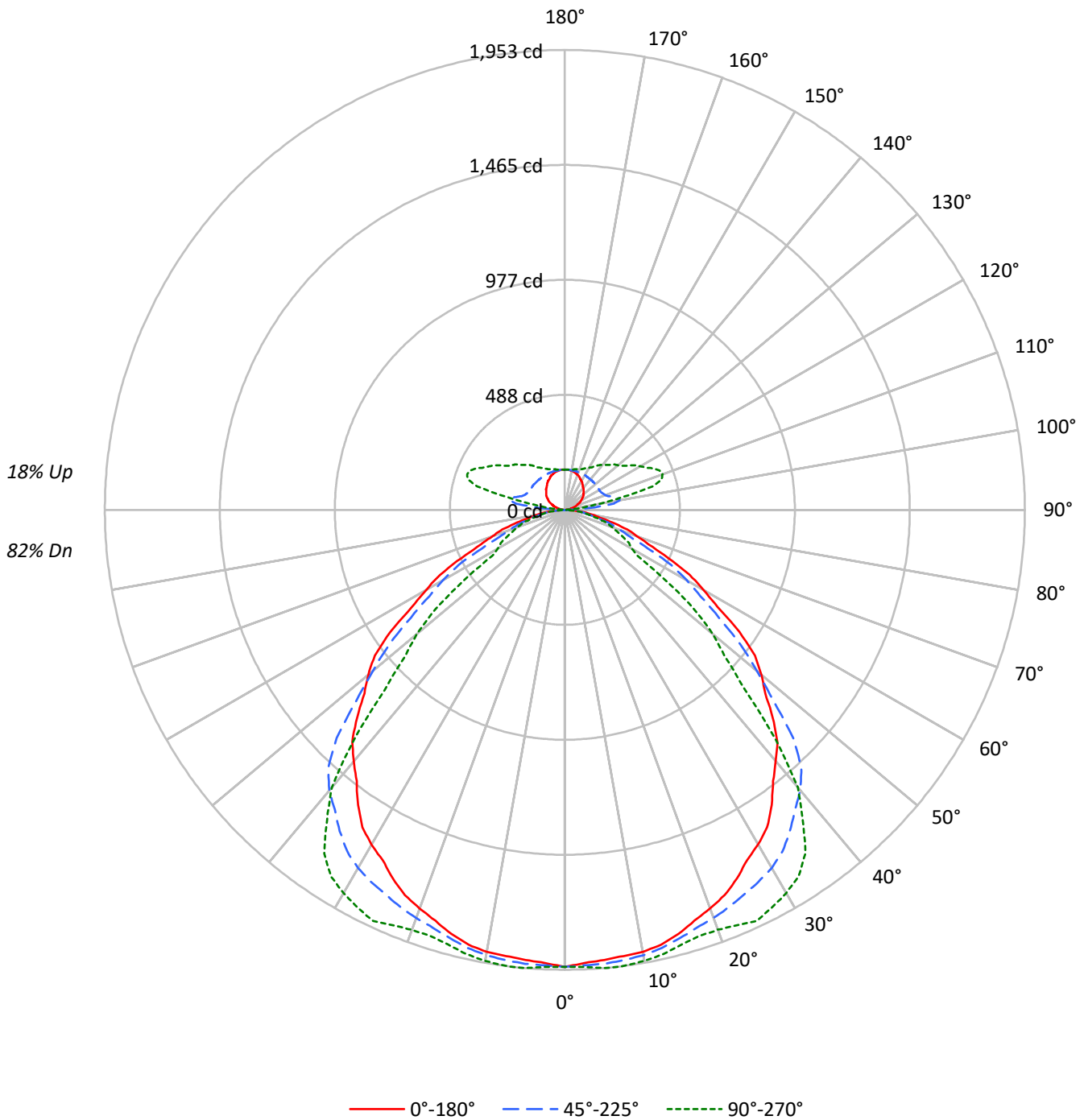
Lumens per Lamp: N/A
Luminaire Lumens: 5949.1 lumens
Efficiency: N/A
Efficacy: 132.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45
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: P854084

CATALOG NUMBER: SQ2-PP3-025U-100D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P854084

CATALOG NUMBER: SQ2-PP3-025U-100D-940-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	110	110	110	110	101	101	101	93	93	93	86	86	86	82
1	106	102	98	95	101	98	94	91	90	88	85	84	81	80	77	76	74	71
2	97	90	84	79	93	86	81	76	80	76	72	74	71	68	69	66	64	61
3	89	80	72	67	85	77	70	65	71	66	62	66	62	58	62	58	55	52
4	82	71	63	57	78	69	61	56	64	58	53	60	55	51	56	51	48	45
5	76	64	56	50	72	62	54	48	58	51	46	54	48	44	50	46	42	40
6	70	58	49	43	67	56	48	43	52	46	41	49	43	39	46	41	37	35
7	65	52	44	38	62	51	43	38	48	41	36	45	39	35	42	37	33	31
8	60	48	40	34	58	46	39	34	44	37	32	41	35	31	39	34	30	28
9	56	44	36	31	54	43	35	30	40	34	29	38	32	28	36	31	27	25
10	53	40	33	28	51	39	32	27	37	31	27	35	30	26	33	28	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31336	31336	31336
5°	31091	31357	31655
10°	31247	31483	31886
15°	31173	31482	31962
20°	30950	31691	32606
25°	30775	32090	34321
30°	30600	32742	35037
35°	30167	32836	35100
40°	29360	32777	32431
45°	28483	31294	24688
50°	27364	26693	20562
55°	25470	22466	14784
60°	21929	19278	10601
65°	18499	14892	10426
70°	15399	11717	9975
75°	13057	10112	9345
80°	11065	8777	8396
85°	8744	7225	4557

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 31294 cd/sqm



TEST NUMBER: P854084

CATALOG NUMBER: SQ2-PP3-025U-100D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.8	3.1
10°-20°	534.8	9.0
20°-30°	837.9	14.1
30°-40°	1033.6	17.4
40°-50°	973.2	16.4
50°-60°	689.0	11.6
60°-70°	392.6	6.6
70°-80°	194.2	3.3
80°-90°	47.9	0.8
90°-100°	69.2	1.2
100°-110°	215.2	3.6
110°-120°	210.5	3.5
120°-130°	171.8	2.9
130°-140°	140.6	2.4
140°-150°	109.7	1.8
150°-160°	79.2	1.3
160°-170°	48.4	0.8
170°-180°	16.3	0.3
0°-30°	1557.5	26.2
0°-40°	2591.2	43.6
0°-60°	4253.4	71.5
0°-90°	4888.2	82.2
90°-120°	494.8	8.3
90°-150°	917.0	15.4
90°-180°	1061.0	17.8
0°-180°	5949.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1941	1941	1941	1941	1941	
5°	1918	1952	1935	1939	1953	183
15°	1865	1891	1883	1902	1912	526
25°	1728	1772	1801	1874	1926	796
35°	1530	1573	1666	1761	1781	954
45°	1247	1342	1370	1161	1081	960
55°	905	959	798	601	525	798
65°	484	510	390	275	273	486
75°	209	231	162	152	150	227
85°	47	43	39	31	25	55
90°	0	1	3	3	3	2
95°	9	28	127	47	30	11
105°	38	53	212	404	386	40
115°	67	79	172	355	415	66
125°	93	104	170	279	327	83
135°	112	124	169	241	271	87
145°	131	141	169	208	226	82
155°	150	155	170	187	193	69
165°	165	166	171	176	178	46
175°	171	171	171	172	171	16
180°	171	171	171	171	171	



TEST NUMBER: P854084

CATALOG NUMBER: SQ2-PP3-025U-100D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1940.8	1940.8	1940.8	1940.8	1940.8
2.5°	1926.0	1953.3	1935.9	1939.3	1942.5
5°	1918.3	1952.4	1934.7	1939.1	1953.1
7.5°	1910.9	1945.8	1928.5	1935.9	1953.1
10°	1905.9	1936.0	1920.3	1930.9	1944.9
12.5°	1891.2	1919.7	1905.5	1919.4	1931.8
15°	1864.9	1891.0	1883.4	1902.1	1912.1
17.5°	1829.2	1860.9	1860.8	1887.3	1897.7
20°	1801.3	1839.4	1844.4	1877.7	1897.7
22.5°	1771.8	1816.3	1824.7	1874.7	1909.2
25°	1727.5	1771.6	1801.3	1874.3	1926.5
27.5°	1675.8	1719.5	1780.8	1862.6	1903.9
30°	1641.3	1683.4	1756.2	1841.2	1879.3
32.5°	1598.6	1642.3	1720.1	1811.5	1846.4
35°	1530.5	1572.6	1665.9	1760.7	1780.8
37.5°	1452.1	1499.9	1604.4	1657.3	1658.5
40°	1393.0	1455.2	1555.1	1564.8	1538.7
42.5°	1335.6	1415.4	1486.2	1442.9	1327.0
45°	1247.4	1341.7	1370.5	1161.4	1081.2
47.5°	1153.4	1246.5	1200.6	974.1	918.7
50°	1089.4	1177.7	1062.7	870.7	818.6
52.5°	1017.2	1095.8	939.6	771.7	692.2
55°	904.8	958.9	798.1	601.4	525.2
57.5°	769.4	807.5	682.4	451.5	366.0
60°	679.1	709.2	597.0	370.4	328.3
62.5°	597.0	623.9	508.4	321.8	306.9
65°	484.2	510.3	389.8	274.9	272.9
67.5°	385.3	413.8	299.1	240.0	237.6
70°	326.2	356.3	248.2	215.3	211.3
72.5°	277.0	305.5	210.5	189.1	186.7
75°	209.3	231.3	162.1	151.8	149.8
77.5°	151.8	165.9	120.6	115.3	113.2
80°	119.0	125.0	94.4	92.3	90.3
82.5°	89.5	87.4	71.4	69.3	65.7
85°	47.2	43.2	39.0	30.6	24.6
87.5°	14.8	15.0	7.2	5.6	5.6
90°	0.0	1.0	3.1	3.1	3.1
92.5°	3.4	11.8	40.1	13.2	10.7
95°	9.4	27.9	126.9	46.8	30.4
97.5°	17.2	36.3	210.2	130.8	82.4
100°	23.1	40.5	237.0	221.7	147.9
102.5°	28.9	45.6	232.0	316.6	248.5
105°	37.8	53.1	211.8	404.4	385.9
107.5°	46.6	60.9	192.5	411.1	431.4
110°	52.4	66.8	182.5	401.5	441.5



TEST NUMBER: P854084

CATALOG NUMBER: SQ2-PP3-025U-100D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	58.3	71.8	177.4	384.1	434.8
115°	67.1	79.4	172.0	354.8	415.3
117.5°	75.7	87.0	169.7	326.7	388.7
120°	80.8	92.0	168.8	310.7	370.2
122.5°	85.8	97.1	169.7	297.2	351.7
125°	93.3	103.6	169.9	279.0	327.2
127.5°	99.4	109.9	169.9	265.4	306.4
130°	102.8	114.1	169.9	257.8	294.7
132.5°	107.0	118.2	169.1	251.0	285.5
135°	112.2	124.5	168.8	240.8	270.6
137.5°	118.3	129.6	168.8	230.7	257.8
140°	121.7	132.9	168.8	223.9	248.5
142.5°	125.8	136.3	168.8	217.2	239.3
145°	131.1	141.3	168.8	208.1	226.5
147.5°	137.4	146.2	169.9	199.6	214.1
150°	141.6	148.8	169.9	195.3	206.6
152.5°	144.9	151.3	169.9	191.1	200.7
155°	150.0	155.1	169.9	186.8	193.0
157.5°	155.0	158.9	169.9	183.0	186.9
160°	158.4	161.4	169.9	180.5	183.5
162.5°	160.9	163.1	169.9	178.8	181.0
165°	164.7	165.7	170.9	176.2	178.3
167.5°	167.0	167.2	169.9	174.7	175.8
170°	167.8	168.8	169.9	173.1	174.1
172.5°	169.5	169.7	170.7	172.2	172.4
175°	170.9	170.9	170.9	172.0	170.9
177.5°	170.9	170.9	170.9	170.9	170.9
180°	170.9	170.9	170.9	170.9	170.9



TEST NUMBER: P854084

CATALOG NUMBER: SQ2-PP3-025U-100D-940-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	22.12	23.31	22.75	23.94	24.67	18.52	19.70	19.14	20.34	21.06
	3H	23.24	24.30	23.88	24.95	25.71	19.65	20.71	20.29	21.35	22.11
	4H	23.60	24.59	24.26	25.25	26.03	20.12	21.12	20.79	21.78	22.55
	6H	23.83	24.75	24.50	25.42	26.21	20.49	21.40	21.16	22.07	22.86
	8H	23.89	24.76	24.57	25.45	26.24	20.58	21.45	21.27	22.14	22.94
	12H	23.91	24.75	24.60	25.43	26.25	20.61	21.44	21.30	22.12	22.94
4H	2H	22.27	23.26	22.93	23.92	24.70	19.27	20.27	19.93	20.92	21.70
	3H	23.61	24.43	24.29	25.13	25.92	20.55	21.37	21.23	22.07	22.87
	4H	24.10	24.84	24.79	25.54	26.36	21.12	21.86	21.81	22.56	23.39
	6H	24.45	25.09	25.16	25.82	26.65	21.58	22.22	22.29	22.95	23.78
	8H	24.55	25.15	25.27	25.87	26.72	21.70	22.30	22.42	23.03	23.87
	12H	24.60	25.14	25.34	25.89	26.74	21.75	22.28	22.48	23.03	23.88
8H	4H	24.14	24.74	24.86	25.46	26.31	21.42	22.02	22.13	22.74	23.59
	6H	24.58	25.08	25.33	25.84	26.69	21.97	22.47	22.72	23.23	24.08
	8H	24.74	25.18	25.50	25.95	26.81	22.16	22.60	22.92	23.37	24.23
	12H	24.84	25.23	25.60	25.98	26.91	22.25	22.64	23.01	23.39	24.32
12H	4H	24.11	24.65	24.85	25.40	26.25	21.44	21.98	22.18	22.72	23.57
	6H	24.57	25.01	25.33	25.78	26.64	22.02	22.47	22.79	23.24	24.10
	8H	24.75	25.14	25.51	25.90	26.83	22.25	22.64	23.01	23.40	24.32