

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: P854296

Luminaire Tested: SQ2-PW1-100U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854296
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G2-2308-131-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PW1-100U-075D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

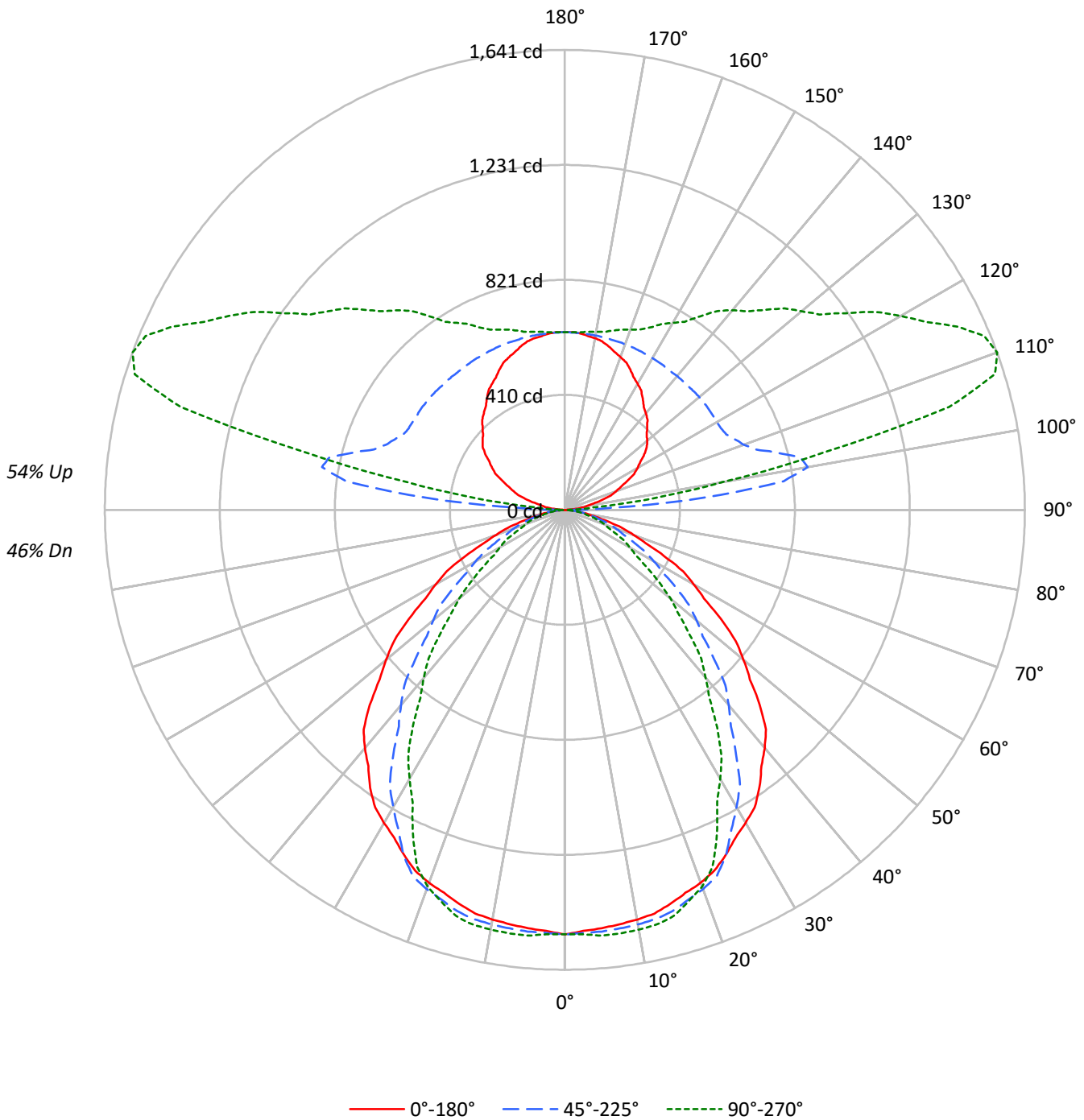
Lumens per Lamp: N/A
Luminaire Lumens: 7307.3 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 59.3
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: P854296

CATALOG NUMBER: SQ2-PW1-100U-075D-935-UNV-STD-W-4

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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	97	93	90	86	89	86	83	80	72	70	68	59	58	56	47	46	45	40
2	89	82	76	71	82	76	71	66	64	60	57	52	50	48	42	40	39	34
3	82	73	66	60	75	67	61	56	57	52	48	47	44	41	38	36	34	30
4	75	65	57	51	69	60	53	48	51	46	42	42	38	35	34	32	30	26
5	69	58	50	44	63	53	47	41	45	40	36	38	34	31	31	28	26	23
6	64	52	44	39	58	48	41	36	41	36	32	34	30	27	28	25	23	20
7	59	47	39	34	54	44	37	32	37	32	28	31	27	24	26	23	21	18
8	55	43	35	30	50	40	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	32	27	47	36	30	25	31	26	23	27	23	20	22	19	17	15
10	48	36	29	24	44	34	27	23	29	24	20	25	21	18	21	18	15	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24456	24456	24456
5°	24292	24480	24713
10°	24337	24620	24928
15°	24331	24789	25078
20°	24340	24761	24588
25°	24209	24235	22848
30°	24045	22835	20655
35°	23856	21013	18652
40°	23381	19155	16480
45°	22464	17228	14394
50°	20909	15400	12321
55°	19128	13605	9990
60°	17144	11832	8619
65°	14991	10197	7660
70°	12260	9059	6944
75°	9538	7829	6388
80°	7113	6704	5635
85°	4817	5076	3205

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 22464 cd/sqm



TEST NUMBER: P854296

CATALOG NUMBER: SQ2-PW1-100U-075D-935-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.2	2.0
10°-20°	417.9	5.7
20°-30°	615.0	8.4
30°-40°	672.4	9.2
40°-50°	603.2	8.3
50°-60°	450.0	6.2
60°-70°	284.4	3.9
70°-80°	140.9	1.9
80°-90°	34.1	0.5
90°-100°	264.7	3.6
100°-110°	800.7	11.0
110°-120°	781.7	10.7
120°-130°	638.8	8.7
130°-140°	521.4	7.1
140°-150°	405.9	5.6
150°-160°	292.6	4.0
160°-170°	179.1	2.5
170°-180°	60.5	0.8
0°-30°	1177.1	16.1
0°-40°	1849.5	25.3
0°-60°	2902.7	39.7
0°-90°	3362.0	46.0
90°-120°	1847.1	25.3
90°-150°	3413.2	46.7
90°-180°	3945.0	54.0
0°-180°	7307.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1515	1515	1515	1515	1515	
5°	1499	1523	1510	1512	1525	143
15°	1456	1484	1483	1493	1500	411
25°	1359	1388	1360	1304	1282	626
35°	1210	1198	1066	973	946	755
45°	984	905	754	660	630	754
55°	680	615	483	379	355	607
65°	392	360	267	215	200	389
75°	153	164	126	105	102	168
85°	26	33	27	19	17	33
90°	0	2	12	7	6	2
95°	33	104	500	185	116	39
105°	139	196	786	1493	1419	146
115°	248	296	636	1316	1546	245
125°	346	384	627	1039	1223	308
135°	415	459	623	896	1008	321
145°	485	521	623	771	843	304
155°	552	571	627	691	718	254
165°	604	611	630	654	662	170
175°	632	632	633	638	636	60
180°	634	634	634	634	634	



TEST NUMBER: P854296

CATALOG NUMBER: SQ2-PW1-100U-075D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1514.7	1514.7	1514.7	1514.7	1514.7
2.5°	1504.3	1523.5	1511.3	1512.5	1515.9
5°	1498.8	1522.8	1510.4	1512.1	1524.8
7.5°	1491.3	1515.6	1506.3	1511.5	1523.9
10°	1484.4	1509.8	1501.7	1509.2	1520.5
12.5°	1475.2	1501.7	1496.0	1504.6	1515.9
15°	1455.6	1483.8	1483.0	1493.2	1500.3
17.5°	1432.8	1461.0	1459.6	1462.3	1465.7
20°	1416.6	1444.8	1441.1	1431.0	1431.0
22.5°	1393.5	1424.0	1414.6	1387.0	1378.0
25°	1358.9	1388.5	1360.4	1303.6	1282.5
27.5°	1318.5	1342.5	1285.9	1205.3	1176.0
30°	1289.7	1308.0	1224.8	1136.1	1107.9
32.5°	1259.7	1266.7	1162.4	1070.3	1039.8
35°	1210.3	1197.6	1066.1	973.1	946.3
37.5°	1152.0	1114.2	973.5	876.1	846.5
40°	1109.3	1055.7	908.8	811.5	781.9
42.5°	1062.0	994.9	847.7	750.3	719.6
45°	983.8	904.9	754.5	660.0	630.4
47.5°	895.8	817.4	667.3	575.9	550.5
50°	832.4	756.2	613.1	521.5	490.5
52.5°	767.7	699.5	560.0	465.9	423.5
55°	679.5	614.6	483.3	378.9	354.9
57.5°	588.6	532.4	413.7	318.9	299.2
60°	530.9	481.5	366.4	286.6	266.9
62.5°	475.5	431.7	320.3	256.7	240.3
65°	392.4	359.9	266.9	214.6	200.5
67.5°	311.6	293.5	221.9	176.1	166.8
70°	259.7	254.0	191.9	154.2	147.1
72.5°	214.7	216.9	163.0	133.5	128.7
75°	152.9	164.2	125.5	105.2	102.4
77.5°	104.2	121.1	92.9	77.8	75.6
80°	76.5	93.4	72.1	60.6	60.6
82.5°	53.4	66.9	51.4	45.6	45.6
85°	26.0	33.0	27.4	18.7	17.3
87.5°	6.9	10.7	7.0	4.9	4.7
90°	0.0	1.9	11.9	6.9	6.0
92.5°	11.1	45.0	161.6	53.6	38.6
95°	32.8	103.9	499.6	184.6	116.4
97.5°	63.5	132.2	787.4	521.0	317.3
100°	82.6	149.7	879.7	850.5	571.2
102.5°	104.1	168.9	860.6	1192.9	951.0
105°	139.3	195.8	786.2	1493.1	1419.1
107.5°	172.8	226.7	714.5	1522.8	1608.4
110°	195.1	246.6	678.7	1485.4	1641.0



TEST NUMBER: P854296

CATALOG NUMBER: SQ2-PW1-100U-075D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	216.6	266.6	657.2	1422.6	1619.6
115°	247.8	295.5	635.9	1315.9	1545.5
117.5°	278.8	324.0	628.4	1215.9	1451.0
120°	299.5	342.4	626.0	1157.5	1383.3
122.5°	318.7	359.1	626.0	1106.2	1314.8
125°	346.3	384.3	627.0	1039.2	1223.1
127.5°	368.8	408.1	626.0	988.6	1145.4
130°	383.1	424.0	626.0	959.6	1101.7
132.5°	395.9	437.5	625.2	933.1	1064.2
135°	415.0	458.8	623.0	896.2	1008.1
137.5°	436.3	477.9	623.0	856.8	960.5
140°	449.8	490.7	623.0	831.2	929.5
142.5°	463.4	502.7	622.2	807.8	893.7
145°	484.7	520.7	623.0	770.9	842.9
147.5°	505.9	536.5	624.2	740.5	795.7
150°	519.5	547.7	625.0	723.6	770.3
152.5°	532.2	557.3	625.8	709.0	747.2
155°	552.3	570.8	627.0	691.2	717.5
157.5°	569.8	584.8	628.2	678.1	696.4
160°	580.2	592.8	629.0	670.1	683.7
162.5°	590.5	600.1	629.7	662.8	674.1
165°	604.1	610.9	629.9	654.0	661.8
167.5°	615.6	619.1	631.1	647.1	650.4
170°	622.0	623.9	631.9	643.9	644.9
172.5°	626.0	627.1	631.9	640.7	640.9
175°	631.9	631.9	632.9	637.9	635.9
177.5°	634.7	633.9	633.1	635.5	633.9
180°	633.9	633.9	633.9	633.9	633.9



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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	17.78	18.57	18.77	19.57	20.90	14.26	15.05	15.26	16.06	17.39
	3H	19.09	19.80	20.10	20.81	22.17	15.46	16.17	16.47	17.18	18.53
	4H	19.46	20.13	20.49	21.15	22.51	15.91	16.58	16.93	17.59	18.95
	6H	19.66	20.28	20.70	21.30	22.67	16.22	16.84	17.25	17.86	19.23
	8H	19.69	20.28	20.73	21.32	22.68	16.29	16.88	17.33	17.92	19.28
	12H	19.69	20.25	20.73	21.28	22.67	16.30	16.86	17.34	17.89	19.28
4H	2H	17.87	18.54	18.90	19.56	20.92	14.94	15.61	15.97	16.62	17.98
	3H	19.41	19.97	20.45	21.01	22.38	16.32	16.87	17.35	17.92	19.29
	4H	19.92	20.42	20.96	21.46	22.86	16.86	17.37	17.90	18.41	19.80
	6H	20.24	20.68	21.30	21.74	23.13	17.26	17.70	18.31	18.76	20.15
	8H	20.32	20.73	21.37	21.78	23.19	17.37	17.77	18.42	18.83	20.23
	12H	20.33	20.70	21.40	21.77	23.18	17.39	17.75	18.46	18.82	20.23
8H	4H	19.95	20.36	21.00	21.41	22.81	17.18	17.59	18.24	18.64	20.05
	6H	20.38	20.72	21.46	21.81	23.22	17.69	18.02	18.76	19.12	20.52
	8H	20.53	20.82	21.61	21.90	23.32	17.85	18.14	18.93	19.22	20.65
	12H	20.59	20.85	21.68	21.92	23.39	17.91	18.17	18.99	19.24	20.70
12H	4H	19.91	20.27	20.98	21.34	22.75	17.20	17.56	18.27	18.63	20.04
	6H	20.37	20.67	21.46	21.75	23.17	17.75	18.05	18.84	19.13	20.55
	8H	20.53	20.79	21.62	21.87	23.33	17.93	18.19	19.02	19.27	20.73