

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: P854326

Luminaire Tested: SQ2-PW1-150U-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854326
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G2-2308-131-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PW1-150U-125D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

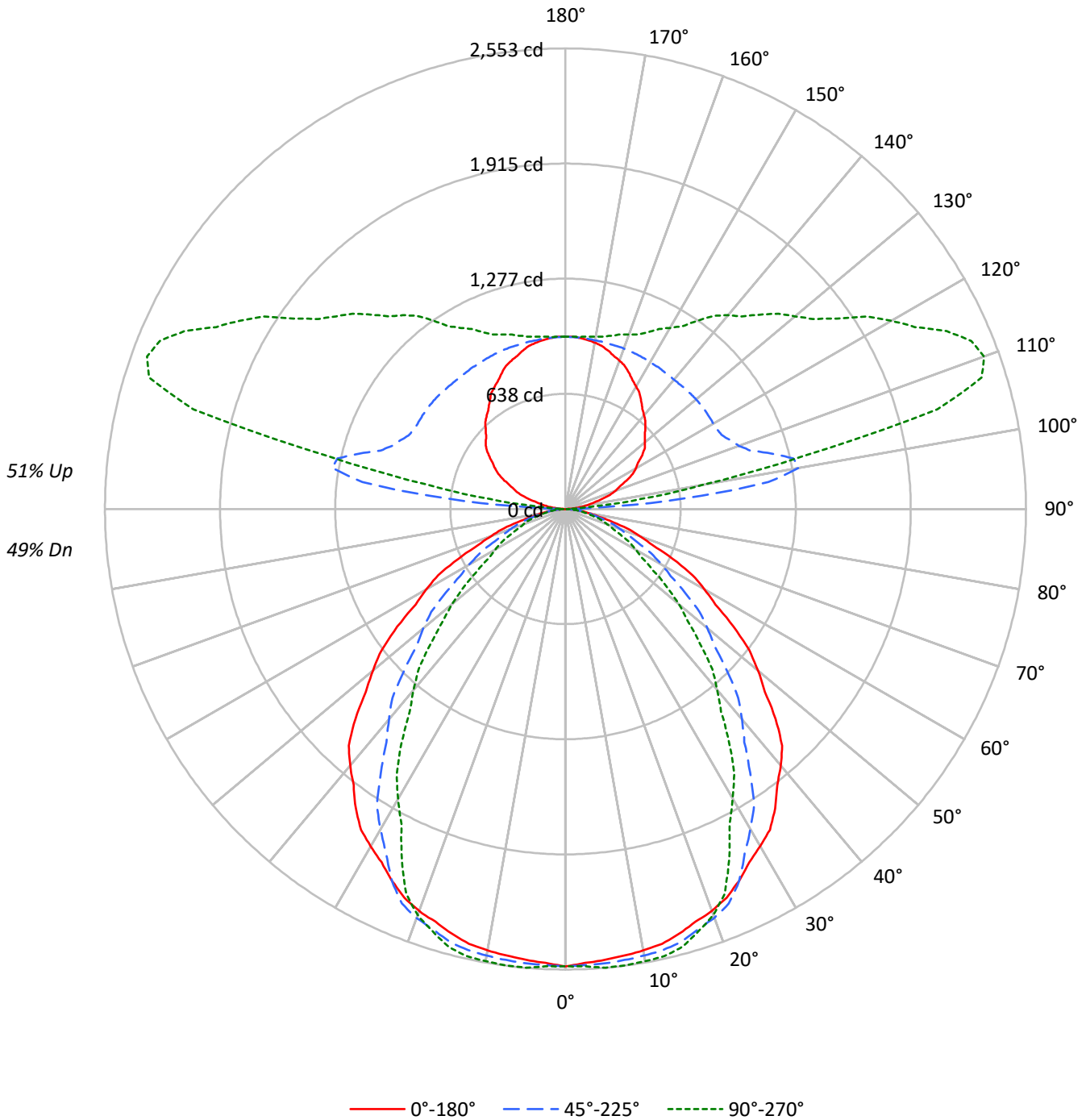
Lumens per Lamp: N/A
Luminaire Lumens: 11522.3 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 105.8
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: P854326

CATALOG NUMBER: SQ2-PW1-150U-125D-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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	98	94	90	87	90	87	84	81	73	71	69	61	59	58	50	49	48	42
2	90	83	77	72	83	77	72	67	65	61	58	54	52	49	44	43	41	36
3	82	73	66	61	76	68	62	57	58	53	49	48	45	42	40	37	35	31
4	75	65	58	52	69	60	54	49	52	47	43	43	40	37	36	33	31	27
5	69	58	50	45	64	54	47	42	46	41	37	39	35	32	33	30	27	24
6	64	52	45	39	59	49	42	37	42	37	33	36	32	28	30	27	24	21
7	59	47	40	34	55	44	37	33	38	33	29	33	28	25	27	24	22	19
8	55	43	36	31	51	40	34	29	35	30	26	30	26	23	25	22	20	17
9	51	40	32	27	48	37	30	26	32	27	23	28	23	21	23	20	18	16
10	48	36	29	25	44	34	28	23	30	25	21	26	21	19	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	40943	40943	40943
5°	40670	40982	41373
10°	40743	41218	41733
15°	40732	41499	41984
20°	40749	41453	41163
25°	40529	40572	38249
30°	40253	38227	34580
35°	39937	35177	31227
40°	39144	32068	27590
45°	37609	28841	24099
50°	35003	25782	20625
55°	32020	22773	16724
60°	28698	19808	14428
65°	25096	17070	12825
70°	20521	15163	11627
75°	15970	13107	10699
80°	11901	11232	9428
85°	8058	8503	5372

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 37609 cd/sqm



TEST NUMBER: P854326

CATALOG NUMBER: SQ2-PW1-150U-125D-935-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.5	2.1
10°-20°	699.6	6.1
20°-30°	1029.6	8.9
30°-40°	1125.7	9.8
40°-50°	1009.8	8.8
50°-60°	753.3	6.5
60°-70°	476.0	4.1
70°-80°	235.8	2.0
80°-90°	56.2	0.5
90°-100°	363.9	3.2
100°-110°	1191.6	10.3
110°-120°	1178.0	10.2
120°-130°	963.0	8.4
130°-140°	785.9	6.8
140°-150°	611.6	5.3
150°-160°	440.4	3.8
160°-170°	269.4	2.3
170°-180°	91.0	0.8
0°-30°	1970.7	17.1
0°-40°	3096.4	26.9
0°-60°	4859.5	42.2
0°-90°	5627.6	48.8
90°-120°	2733.5	23.7
90°-150°	5093.9	44.2
90°-180°	5895.0	51.2
0°-180°	11522.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2536	2536	2536	2536	2536	
5°	2509	2549	2529	2532	2553	239
15°	2437	2484	2483	2500	2512	688
25°	2275	2325	2277	2182	2147	1048
35°	2026	2005	1785	1629	1584	1264
45°	1647	1515	1263	1105	1055	1263
55°	1138	1029	809	634	594	1016
65°	657	603	447	359	336	651
75°	256	275	210	176	172	282
85°	44	55	46	31	29	55
90°	1	3	8	7	8	4
95°	51	148	662	236	153	58
105°	207	295	1183	2247	2135	218
115°	373	446	961	1986	2331	368
125°	519	579	947	1566	1839	462
135°	625	692	939	1351	1522	484
145°	731	785	937	1162	1273	458
155°	833	861	943	1039	1080	384
165°	910	918	947	984	994	256
175°	951	951	952	959	957	90
180°	955	955	955	955	955	



TEST NUMBER: P854326

CATALOG NUMBER: SQ2-PW1-150U-125D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2535.8	2535.8	2535.8	2535.8	2535.8
2.5°	2518.4	2550.5	2530.0	2532.1	2537.7
5°	2509.3	2549.4	2528.6	2531.5	2552.7
7.5°	2496.7	2537.3	2521.8	2530.5	2551.3
10°	2485.1	2527.6	2514.1	2526.6	2545.5
12.5°	2469.6	2514.0	2504.4	2518.9	2537.7
15°	2436.8	2484.0	2482.7	2499.9	2511.7
17.5°	2398.6	2445.9	2443.6	2448.0	2453.7
20°	2371.6	2418.8	2412.6	2395.7	2395.7
22.5°	2333.0	2384.0	2368.2	2322.0	2306.9
25°	2275.0	2324.6	2277.4	2182.4	2147.0
27.5°	2207.4	2247.5	2152.8	2017.9	1968.8
30°	2159.1	2189.8	2050.4	1902.0	1854.8
32.5°	2108.8	2120.6	1946.1	1791.8	1740.8
35°	2026.2	2005.0	1784.7	1629.1	1584.3
37.5°	1928.7	1865.4	1629.7	1466.7	1417.2
40°	1857.2	1767.5	1521.5	1358.6	1309.0
42.5°	1778.0	1665.6	1419.1	1256.1	1204.6
45°	1647.1	1514.8	1263.1	1105.0	1055.4
47.5°	1499.8	1368.5	1117.2	964.1	921.6
50°	1393.5	1266.0	1026.4	873.1	821.1
52.5°	1285.3	1171.0	937.5	779.9	709.1
55°	1137.5	1028.9	809.0	634.2	594.1
57.5°	985.3	891.4	692.6	533.9	500.9
60°	888.7	806.1	613.4	479.8	446.8
62.5°	796.0	722.8	536.1	429.7	402.3
65°	656.9	602.6	446.8	359.3	335.7
67.5°	521.7	491.4	371.4	294.8	279.2
70°	434.7	425.3	321.2	258.1	246.3
72.5°	359.4	363.1	272.9	223.5	215.4
75°	256.0	274.9	210.1	176.2	171.5
77.5°	174.4	202.7	155.5	130.3	126.5
80°	128.0	156.3	120.8	101.4	101.4
82.5°	89.4	112.0	86.0	76.3	76.3
85°	43.5	55.3	45.9	31.3	29.0
87.5°	11.8	17.8	9.3	7.2	7.4
90°	1.0	2.9	7.9	6.9	7.9
92.5°	16.7	60.8	186.9	60.8	48.7
95°	51.0	148.0	661.6	235.7	153.1
97.5°	92.7	195.2	1135.1	686.6	425.6
100°	121.7	219.6	1313.3	1172.8	777.4
102.5°	154.7	250.3	1293.7	1728.1	1339.6
105°	207.1	295.4	1182.8	2247.2	2134.9
107.5°	258.7	339.7	1074.6	2295.7	2419.1
110°	292.5	371.2	1022.8	2239.2	2468.6



TEST NUMBER: P854326

CATALOG NUMBER: SQ2-PW1-150U-125D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	324.7	401.1	991.4	2141.0	2434.8
115°	373.0	445.9	960.9	1985.7	2331.2
117.5°	419.9	488.0	949.4	1833.1	2183.9
120°	450.5	514.8	946.2	1744.1	2085.8
122.5°	478.0	540.8	946.2	1667.4	1984.5
125°	519.2	578.7	947.2	1565.9	1839.4
127.5°	554.2	614.8	946.0	1491.1	1729.1
130°	576.2	637.6	945.2	1445.8	1660.8
132.5°	595.8	658.8	942.9	1406.9	1601.9
135°	625.2	691.5	939.3	1350.6	1522.4
137.5°	656.3	721.9	937.2	1291.9	1447.2
140°	678.3	741.6	936.4	1254.8	1401.7
142.5°	700.2	759.7	936.4	1215.2	1348.3
145°	731.3	785.0	937.4	1161.7	1273.1
147.5°	763.8	808.6	938.8	1115.2	1199.3
150°	784.3	823.6	940.3	1088.2	1159.2
152.5°	804.7	839.4	941.1	1065.9	1124.7
155°	833.3	861.2	943.3	1039.4	1079.7
157.5°	859.1	879.2	945.4	1018.5	1047.7
160°	875.5	891.9	946.2	1006.6	1029.6
162.5°	889.7	902.9	946.2	997.0	1013.9
165°	909.9	918.5	947.2	983.8	994.3
167.5°	927.0	931.2	948.4	973.4	979.2
170°	936.4	938.3	949.2	967.9	969.8
172.5°	943.5	944.6	951.5	963.9	964.3
175°	951.1	951.1	952.1	958.9	957.0
177.5°	955.0	954.3	953.5	958.1	955.0
180°	955.0	955.0	955.0	955.0	955.0

TEST NUMBER: P854326

CATALOG NUMBER: SQ2-PW1-150U-125D-935-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	19.84	20.66	20.82	21.64	22.93	16.33	17.14	17.30	18.13	19.42
	3H	21.16	21.89	22.15	22.88	24.19	17.53	18.26	18.52	19.25	20.56
	4H	21.53	22.22	22.53	23.22	24.54	17.97	18.66	18.97	19.66	20.98
	6H	21.73	22.37	22.74	23.37	24.70	18.29	18.92	19.30	19.92	21.26
	8H	21.77	22.37	22.78	23.38	24.71	18.36	18.96	19.38	19.98	21.31
	12H	21.76	22.33	22.78	23.34	24.70	18.37	18.94	19.39	19.96	21.31
4H	2H	19.94	20.63	20.95	21.62	22.94	17.01	17.69	18.01	18.69	20.01
	3H	21.48	22.05	22.50	23.08	24.41	18.39	18.96	19.40	19.98	21.32
	4H	21.99	22.51	23.01	23.53	24.88	18.93	19.45	19.96	20.47	21.83
	6H	22.32	22.76	23.35	23.81	25.16	19.33	19.78	20.37	20.82	22.18
	8H	22.39	22.81	23.43	23.85	25.21	19.44	19.86	20.47	20.89	22.26
	12H	22.41	22.78	23.46	23.83	25.21	19.46	19.84	20.51	20.88	22.26
8H	4H	22.02	22.44	23.06	23.47	24.84	19.26	19.67	20.29	20.71	22.08
	6H	22.46	22.80	23.51	23.88	25.24	19.76	20.11	20.82	21.18	22.55
	8H	22.60	22.90	23.67	23.97	25.35	19.92	20.23	20.99	21.29	22.67
	12H	22.67	22.93	23.73	23.99	25.42	19.98	20.25	21.05	21.30	22.73
12H	4H	21.98	22.36	23.03	23.41	24.78	19.27	19.65	20.32	20.70	22.07
	6H	22.45	22.75	23.51	23.81	25.20	19.83	20.13	20.89	21.19	22.58
	8H	22.61	22.87	23.68	23.93	25.36	20.01	20.28	21.08	21.33	22.76