

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: P855326

Luminaire Tested: SQ2-PP3-150U-125D-840-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P855326
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-150U-125D-840-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

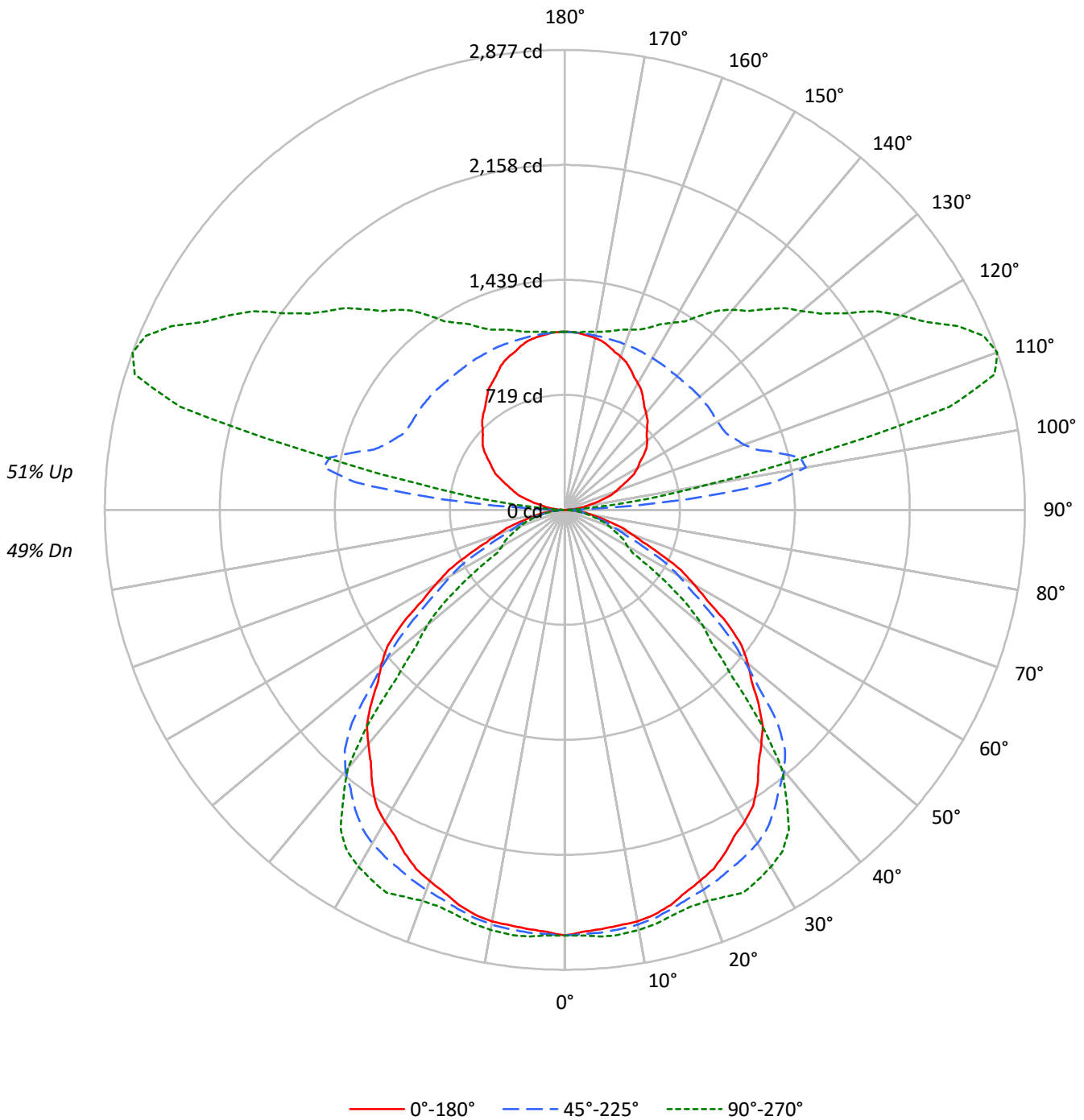
Lumens per Lamp: N/A
Luminaire Lumens: 13576.3 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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

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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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49				
1	98	94	90	87	90	87	84	81	74	71	69	61	60	58	50	49	48	43				
2	90	83	77	72	83	77	72	67	65	61	58	54	52	49	45	43	41	37				
3	82	73	66	60	76	68	62	57	58	53	49	48	45	42	40	38	36	31				
4	75	65	57	51	69	60	54	48	52	46	42	43	40	37	36	33	31	27				
5	69	58	50	44	64	54	47	42	46	41	37	39	35	32	32	30	27	24				
6	64	52	44	39	59	49	41	36	42	36	32	35	31	28	30	26	24	21				
7	59	47	39	34	54	44	37	32	38	32	28	32	28	25	27	24	21	19				
8	55	43	35	30	51	40	33	28	35	29	25	30	25	22	25	22	19	17				
9	51	39	32	27	47	37	30	25	32	26	23	27	23	20	23	20	17	15				
10	48	36	29	24	44	34	27	23	29	24	20	25	21	18	21	18	16	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	42988	42988	42988
5°	42652	43016	43426
10°	42868	43191	43745
15°	42765	43188	43846
20°	42459	43474	44732
25°	42218	44023	47081
30°	41978	44916	48065
35°	41384	45046	48153
40°	40278	44965	44491
45°	39075	42930	33867
50°	37540	36620	28208
55°	34939	30821	20284
60°	30083	26447	14541
65°	25379	20432	14300
70°	21125	16074	13690
75°	17904	13874	12820
80°	15184	12041	11520
85°	11986	9911	6262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 42930 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.5	1.9
10°-20°	733.7	5.4
20°-30°	1149.5	8.5
30°-40°	1418.0	10.4
40°-50°	1335.1	9.8
50°-60°	945.3	7.0
60°-70°	538.6	4.0
70°-80°	266.5	2.0
80°-90°	66.4	0.5
90°-100°	424.1	3.1
100°-110°	1388.7	10.2
110°-120°	1372.9	10.1
120°-130°	1122.3	8.3
130°-140°	915.8	6.7
140°-150°	712.7	5.2
150°-160°	513.2	3.8
160°-170°	314.0	2.3
170°-180°	106.1	0.8
0°-30°	2136.7	15.7
0°-40°	3554.7	26.2
0°-60°	5835.1	43.0
0°-90°	6706.6	49.4
90°-120°	3185.7	23.5
90°-150°	5936.5	43.7
90°-180°	6870.0	50.6
0°-180°	13576.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2662	2662	2662	2662	2662	
5°	2632	2678	2654	2660	2679	251
15°	2558	2594	2584	2609	2623	721
25°	2370	2430	2471	2571	2643	1092
35°	2100	2157	2285	2416	2443	1309
45°	1711	1840	1880	1593	1483	1317
55°	1241	1316	1095	825	721	1095
65°	664	700	535	377	374	667
75°	287	317	222	208	206	311
85°	65	59	54	42	34	76
90°	1	3	9	8	9	6
95°	59	172	771	275	178	67
105°	241	344	1378	2619	2488	254
115°	435	520	1120	2314	2717	429
125°	605	674	1104	1825	2144	538
135°	729	806	1095	1574	1774	564
145°	852	915	1092	1354	1484	534
155°	971	1004	1099	1211	1258	447
165°	1060	1070	1104	1146	1159	299
175°	1108	1108	1110	1118	1115	105
180°	1113	1113	1113	1113	1113	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2662.5	2662.5	2662.5	2662.5	2662.5
2.5°	2642.3	2679.7	2655.7	2660.4	2664.8
5°	2631.6	2678.3	2654.1	2660.1	2679.4
7.5°	2621.5	2669.4	2645.7	2655.7	2679.4
10°	2614.7	2655.9	2634.4	2648.8	2668.2
12.5°	2594.4	2633.5	2614.1	2633.1	2650.1
15°	2558.4	2594.2	2583.7	2609.3	2623.1
17.5°	2509.5	2552.9	2552.8	2589.1	2603.4
20°	2471.1	2523.4	2530.2	2575.9	2603.4
22.5°	2430.6	2491.7	2503.2	2571.8	2619.2
25°	2369.8	2430.3	2471.1	2571.2	2642.8
27.5°	2298.9	2358.9	2443.0	2555.1	2611.9
30°	2251.6	2309.4	2409.2	2525.8	2578.1
32.5°	2193.1	2253.1	2359.7	2485.2	2533.0
35°	2099.6	2157.4	2285.4	2415.5	2443.0
37.5°	1992.1	2057.6	2201.0	2273.6	2275.2
40°	1911.0	1996.3	2133.4	2146.7	2110.9
42.5°	1832.2	1941.8	2038.9	1979.4	1820.5
45°	1711.3	1840.5	1880.1	1593.3	1483.2
47.5°	1582.3	1710.0	1647.1	1336.2	1260.4
50°	1494.5	1615.6	1457.9	1194.5	1123.0
52.5°	1395.5	1503.4	1289.1	1058.7	949.6
55°	1241.2	1315.5	1094.9	825.1	720.6
57.5°	1055.4	1107.7	936.1	619.3	502.1
60°	931.6	972.9	819.0	508.1	450.3
62.5°	819.0	855.9	697.5	441.5	421.1
65°	664.3	700.1	534.8	377.1	374.3
67.5°	528.5	567.7	410.3	329.2	326.0
70°	447.5	488.8	340.5	295.4	290.0
72.5°	379.9	419.1	288.8	259.4	256.2
75°	287.0	317.3	222.4	208.3	205.5
77.5°	208.3	227.5	165.5	158.1	155.3
80°	163.3	171.5	129.5	126.6	123.9
82.5°	122.7	119.9	97.9	95.0	90.1
85°	64.7	59.2	53.5	42.1	33.8
87.5°	20.5	21.0	10.8	8.4	8.6
90°	1.2	3.4	9.2	8.0	9.2
92.5°	19.5	70.9	217.8	70.9	56.8
95°	59.4	172.5	771.0	274.7	178.4
97.5°	108.0	227.5	1322.8	800.2	496.0
100°	141.8	255.9	1530.5	1366.8	906.0
102.5°	180.3	291.7	1507.7	2013.9	1561.2
105°	241.4	344.3	1378.4	2618.9	2488.0
107.5°	301.5	395.9	1252.3	2675.4	2819.2
110°	340.9	432.6	1192.0	2609.6	2876.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	378.4	467.4	1155.4	2495.1	2837.5
115°	434.7	519.7	1119.8	2314.1	2716.8
117.5°	489.4	568.7	1106.4	2136.3	2545.1
120°	525.0	599.9	1102.7	2032.6	2430.8
122.5°	557.1	630.2	1102.7	1943.2	2312.7
125°	605.1	674.4	1103.9	1824.9	2143.6
127.5°	645.9	716.5	1102.5	1737.7	2015.1
130°	671.5	743.1	1101.5	1684.9	1935.5
132.5°	694.3	767.8	1098.9	1639.6	1866.9
135°	728.6	805.9	1094.7	1574.0	1774.2
137.5°	764.9	841.3	1092.2	1505.6	1686.6
140°	790.5	864.3	1091.3	1462.3	1633.5
142.5°	816.0	885.4	1091.3	1416.2	1571.3
145°	852.3	914.8	1092.4	1353.8	1483.7
147.5°	890.1	942.3	1094.1	1299.7	1397.7
150°	914.0	959.8	1095.8	1268.2	1350.9
152.5°	937.8	978.2	1096.8	1242.2	1310.7
155°	971.1	1003.6	1099.3	1211.3	1258.3
157.5°	1001.2	1024.6	1101.8	1187.0	1221.0
160°	1020.3	1039.4	1102.7	1173.1	1199.9
162.5°	1036.9	1052.2	1102.7	1161.9	1181.6
165°	1060.4	1070.4	1103.9	1146.5	1158.8
167.5°	1080.3	1085.2	1105.3	1134.4	1141.2
170°	1091.3	1093.5	1106.2	1128.0	1130.2
172.5°	1099.6	1100.8	1108.9	1123.3	1123.8
175°	1108.4	1108.4	1109.6	1117.5	1115.3
177.5°	1113.0	1112.1	1111.2	1116.6	1113.0
180°	1113.0	1113.0	1113.0	1113.0	1113.0



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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	20.55	21.38	21.52	22.36	23.64	16.95	17.77	17.92	18.75	20.04
	3H	21.65	22.38	22.63	23.37	24.67	18.05	18.79	19.03	19.78	21.08
	4H	21.99	22.68	22.98	23.67	24.99	18.51	19.21	19.51	20.20	21.51
	6H	22.20	22.84	23.20	23.84	25.16	18.86	19.50	19.86	20.49	21.82
	8H	22.25	22.86	23.26	23.87	25.19	18.94	19.55	19.95	20.56	21.88
	12H	22.26	22.84	23.28	23.85	25.19	18.95	19.53	19.97	20.54	21.89
4H	2H	20.66	21.35	21.66	22.34	23.66	17.66	18.35	18.66	19.35	20.66
	3H	21.96	22.54	22.97	23.56	24.89	18.91	19.48	19.91	20.50	21.83
	4H	22.43	22.96	23.45	23.97	25.32	19.46	19.99	20.48	21.00	22.35
	6H	22.77	23.22	23.80	24.26	25.61	19.90	20.35	20.93	21.39	22.73
	8H	22.86	23.29	23.89	24.31	25.68	20.02	20.44	21.05	21.47	22.83
	12H	22.90	23.28	23.94	24.32	25.69	20.05	20.43	21.09	21.47	22.84
8H	4H	22.45	22.87	23.48	23.90	25.26	19.73	20.15	20.76	21.18	22.54
	6H	22.88	23.23	23.93	24.30	25.66	20.27	20.62	21.33	21.69	23.05
	8H	23.04	23.34	24.10	24.40	25.78	20.46	20.77	21.52	21.82	23.20
	12H	23.12	23.39	24.18	24.44	25.86	20.53	20.80	21.60	21.85	23.28
12H	4H	22.41	22.79	23.45	23.83	25.20	19.74	20.12	20.78	21.16	22.53
	6H	22.87	23.18	23.93	24.23	25.61	20.33	20.63	21.39	21.69	23.07
	8H	23.04	23.31	24.10	24.36	25.78	20.53	20.80	21.60	21.86	23.28