

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: P854157

Luminaire Tested: SQ2-PP3-150U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854157
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-930-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

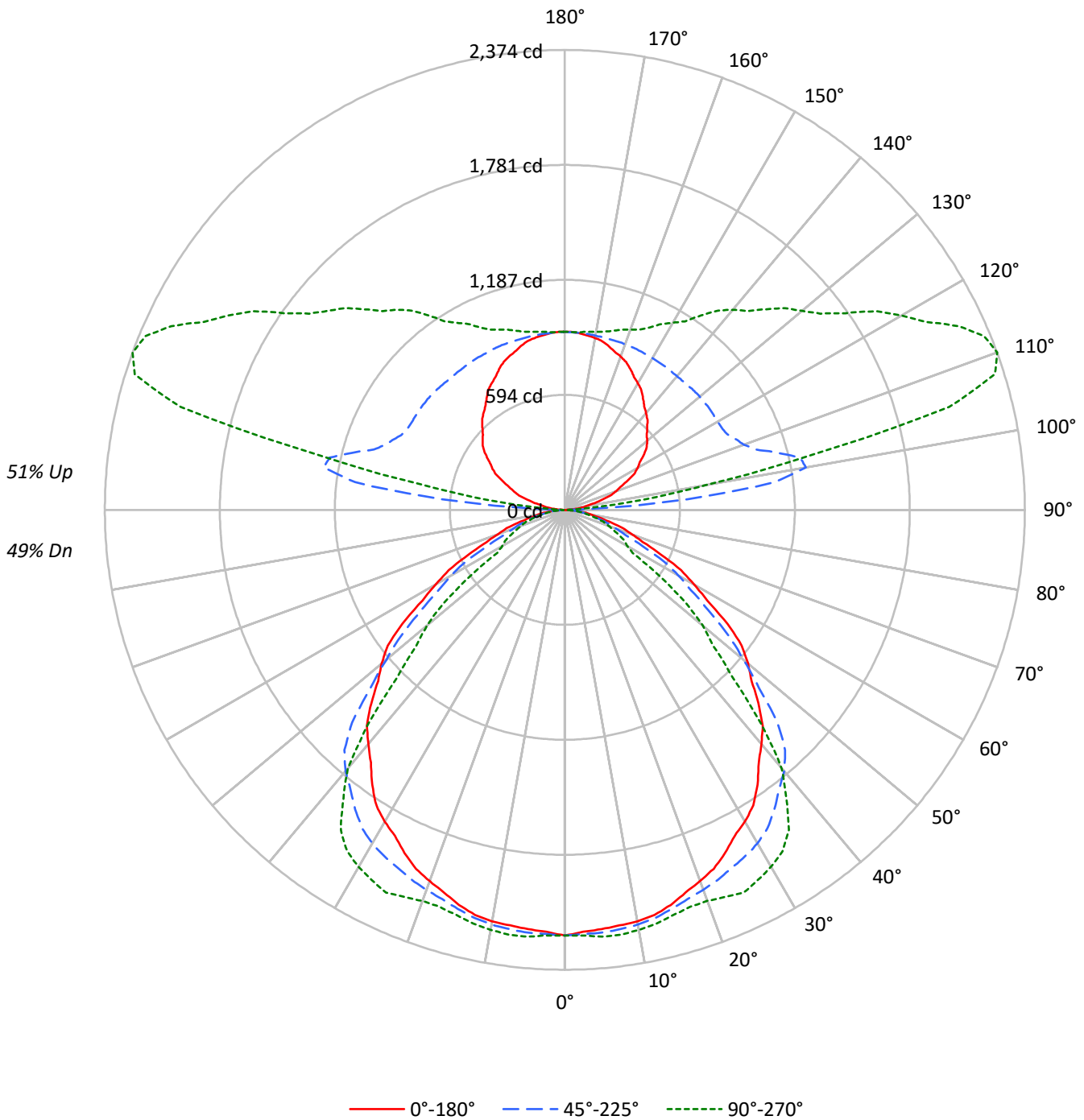
Lumens per Lamp: N/A
Luminaire Lumens: 11204.3 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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°	35479	35479	35479
5°	35199	35501	35840
10°	35379	35644	36102
15°	35293	35642	36186
20°	35041	35880	36917
25°	34843	36332	38856
30°	34644	37069	39668
35°	34154	37176	39740
40°	33242	37110	36718
45°	32248	35429	27951
50°	30981	30223	23280
55°	28836	25436	16738
60°	24826	21826	12000
65°	20944	16860	11801
70°	17434	13270	11292
75°	14778	11447	10580
80°	12524	9930	9503
85°	9892	8170	5169

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 35429 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.2	1.9
10°-20°	605.5	5.4
20°-30°	948.7	8.5
30°-40°	1170.3	10.4
40°-50°	1101.8	9.8
50°-60°	780.1	7.0
60°-70°	444.5	4.0
70°-80°	219.9	2.0
80°-90°	54.8	0.5
90°-100°	350.0	3.1
100°-110°	1146.0	10.2
110°-120°	1133.0	10.1
120°-130°	926.2	8.3
130°-140°	755.8	6.7
140°-150°	588.2	5.2
150°-160°	423.5	3.8
160°-170°	259.1	2.3
170°-180°	87.5	0.8
0°-30°	1763.4	15.7
0°-40°	2933.7	26.2
0°-60°	4815.6	43.0
0°-90°	5534.8	49.4
90°-120°	2629.1	23.5
90°-150°	4899.3	43.7
90°-180°	5670.0	50.6
0°-180°	11204.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2197	2197	2197	2197	2197	
5°	2172	2210	2190	2195	2211	207
15°	2111	2141	2132	2154	2165	595
25°	1956	2006	2039	2122	2181	901
35°	1733	1780	1886	1994	2016	1081
45°	1412	1519	1552	1315	1224	1087
55°	1024	1086	904	681	595	904
65°	548	578	441	311	309	550
75°	237	262	184	172	170	257
85°	53	49	44	35	28	63
90°	1	3	8	7	8	5
95°	49	142	636	227	147	56
105°	199	284	1138	2161	2053	210
115°	359	429	924	1910	2242	354
125°	499	557	911	1506	1769	444
135°	601	665	904	1299	1464	465
145°	703	755	902	1117	1224	441
155°	802	828	907	1000	1038	369
165°	875	883	911	946	956	247
175°	915	915	916	922	920	87
180°	919	919	919	919	919	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2197.4	2197.4	2197.4	2197.4	2197.4
2.5°	2180.6	2211.5	2191.8	2195.6	2199.2
5°	2171.8	2210.4	2190.4	2195.4	2211.3
7.5°	2163.5	2203.0	2183.4	2191.8	2211.3
10°	2157.9	2191.9	2174.1	2186.1	2202.0
12.5°	2141.2	2173.4	2157.4	2173.1	2187.1
15°	2111.4	2140.9	2132.3	2153.5	2164.8
17.5°	2071.0	2106.9	2106.8	2136.8	2148.6
20°	2039.4	2082.6	2088.2	2125.9	2148.6
22.5°	2006.0	2056.4	2065.9	2122.5	2161.6
25°	1955.8	2005.8	2039.4	2122.1	2181.1
27.5°	1897.3	1946.8	2016.2	2108.8	2155.6
30°	1858.2	1905.9	1988.3	2084.5	2127.7
32.5°	1809.9	1859.4	1947.4	2051.0	2090.5
35°	1732.8	1780.5	1886.1	1993.5	2016.2
37.5°	1644.1	1698.1	1816.4	1876.4	1877.7
40°	1577.2	1647.6	1760.7	1771.6	1742.1
42.5°	1512.1	1602.5	1682.6	1633.7	1502.4
45°	1412.3	1519.0	1551.6	1315.0	1224.1
47.5°	1305.9	1411.3	1359.3	1102.8	1040.1
50°	1233.4	1333.3	1203.2	985.8	926.8
52.5°	1151.6	1240.7	1063.8	873.6	783.7
55°	1024.4	1085.7	903.6	680.9	594.6
57.5°	871.0	914.2	772.6	511.1	414.4
60°	768.8	802.9	675.9	419.3	371.6
62.5°	675.9	706.4	575.6	364.3	347.5
65°	548.2	577.7	441.3	311.2	308.9
67.5°	436.2	468.5	338.7	271.7	269.0
70°	369.3	403.4	281.1	243.8	239.2
72.5°	313.6	345.8	238.3	214.1	211.4
75°	236.9	261.9	183.5	171.8	169.6
77.5°	171.9	187.8	136.6	130.5	128.2
80°	134.7	141.5	106.8	104.5	102.2
82.5°	101.3	99.0	80.8	78.4	74.3
85°	53.4	48.9	44.1	34.7	27.9
87.5°	16.9	17.3	8.9	6.9	7.1
90°	0.9	2.8	7.6	6.6	7.6
92.5°	16.0	58.5	179.7	58.5	46.8
95°	49.1	142.3	636.3	226.7	147.3
97.5°	89.1	187.7	1091.7	660.4	409.3
100°	117.1	211.2	1263.1	1128.0	747.7
102.5°	148.8	240.7	1244.3	1662.1	1288.4
105°	199.2	284.1	1137.6	2161.3	2053.3
107.5°	248.9	326.8	1033.5	2208.0	2326.7
110°	281.3	357.0	983.7	2153.7	2374.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	312.3	385.8	953.5	2059.2	2341.8
115°	358.7	428.9	924.2	1909.8	2242.1
117.5°	403.9	469.4	913.1	1763.0	2100.5
120°	433.3	495.2	910.1	1677.5	2006.1
122.5°	459.8	520.1	910.1	1603.7	1908.7
125°	499.4	556.6	911.0	1506.1	1769.2
127.5°	533.0	591.4	909.9	1434.1	1663.0
130°	554.2	613.2	909.1	1390.6	1597.3
132.5°	573.0	633.6	906.9	1353.1	1540.7
135°	601.4	665.1	903.5	1299.0	1464.2
137.5°	631.2	694.3	901.4	1242.6	1391.9
140°	652.3	713.3	900.6	1206.9	1348.1
142.5°	673.5	730.7	900.6	1168.8	1296.8
145°	703.3	755.0	901.6	1117.4	1224.4
147.5°	734.7	777.7	902.9	1072.6	1153.4
150°	754.3	792.1	904.4	1046.6	1114.9
152.5°	773.9	807.3	905.2	1025.2	1081.7
155°	801.5	828.3	907.2	999.7	1038.5
157.5°	826.2	845.6	909.3	979.6	1007.7
160°	842.1	857.8	910.1	968.2	990.3
162.5°	855.7	868.4	910.1	959.0	975.2
165°	875.1	883.4	911.0	946.2	956.3
167.5°	891.6	895.6	912.1	936.2	941.8
170°	900.6	902.5	912.9	930.9	932.7
172.5°	907.4	908.5	915.2	927.1	927.4
175°	914.8	914.8	915.7	922.3	920.5
177.5°	918.6	917.8	917.1	921.5	918.6
180°	918.6	918.6	918.6	918.6	918.6



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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	19.89	20.71	20.85	21.69	22.97	16.28	17.11	17.25	18.09	19.37
	3H	20.98	21.71	21.96	22.70	24.01	17.38	18.12	18.36	19.11	20.41
	4H	21.32	22.01	22.31	23.01	24.32	17.84	18.54	18.84	19.53	20.84
	6H	21.53	22.17	22.54	23.17	24.49	18.19	18.83	19.19	19.83	21.15
	8H	21.58	22.19	22.59	23.20	24.52	18.27	18.88	19.28	19.89	21.22
	12H	21.59	22.17	22.61	23.18	24.52	18.29	18.86	19.30	19.87	21.22
4H	2H	19.99	20.69	20.99	21.68	22.99	16.99	17.69	17.99	18.68	19.99
	3H	21.30	21.87	22.30	22.89	24.22	18.24	18.81	19.25	19.84	21.16
	4H	21.77	22.29	22.78	23.31	24.66	18.79	19.32	19.81	20.33	21.68
	6H	22.10	22.55	23.13	23.59	24.94	19.23	19.68	20.26	20.72	22.07
	8H	22.20	22.62	23.22	23.65	25.01	19.35	19.77	20.38	20.80	22.16
	12H	22.23	22.61	23.28	23.66	25.02	19.38	19.76	20.42	20.80	22.17
8H	4H	21.78	22.20	22.81	23.23	24.60	19.06	19.48	20.09	20.51	21.87
	6H	22.21	22.56	23.27	23.63	24.99	19.61	19.95	20.66	21.03	22.39
	8H	22.37	22.68	23.43	23.73	25.11	19.79	20.10	20.85	21.16	22.53
	12H	22.45	22.72	23.52	23.78	25.20	19.86	20.14	20.93	21.19	22.61
12H	4H	21.74	22.12	22.79	23.17	24.53	19.07	19.45	20.11	20.49	21.86
	6H	22.20	22.51	23.26	23.57	24.94	19.66	19.97	20.72	21.02	22.40
	8H	22.37	22.64	23.43	23.69	25.11	19.87	20.14	20.93	21.19	22.61