

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: P854323

Luminaire Tested: SQ2-PW1-150U-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854323
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-100D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

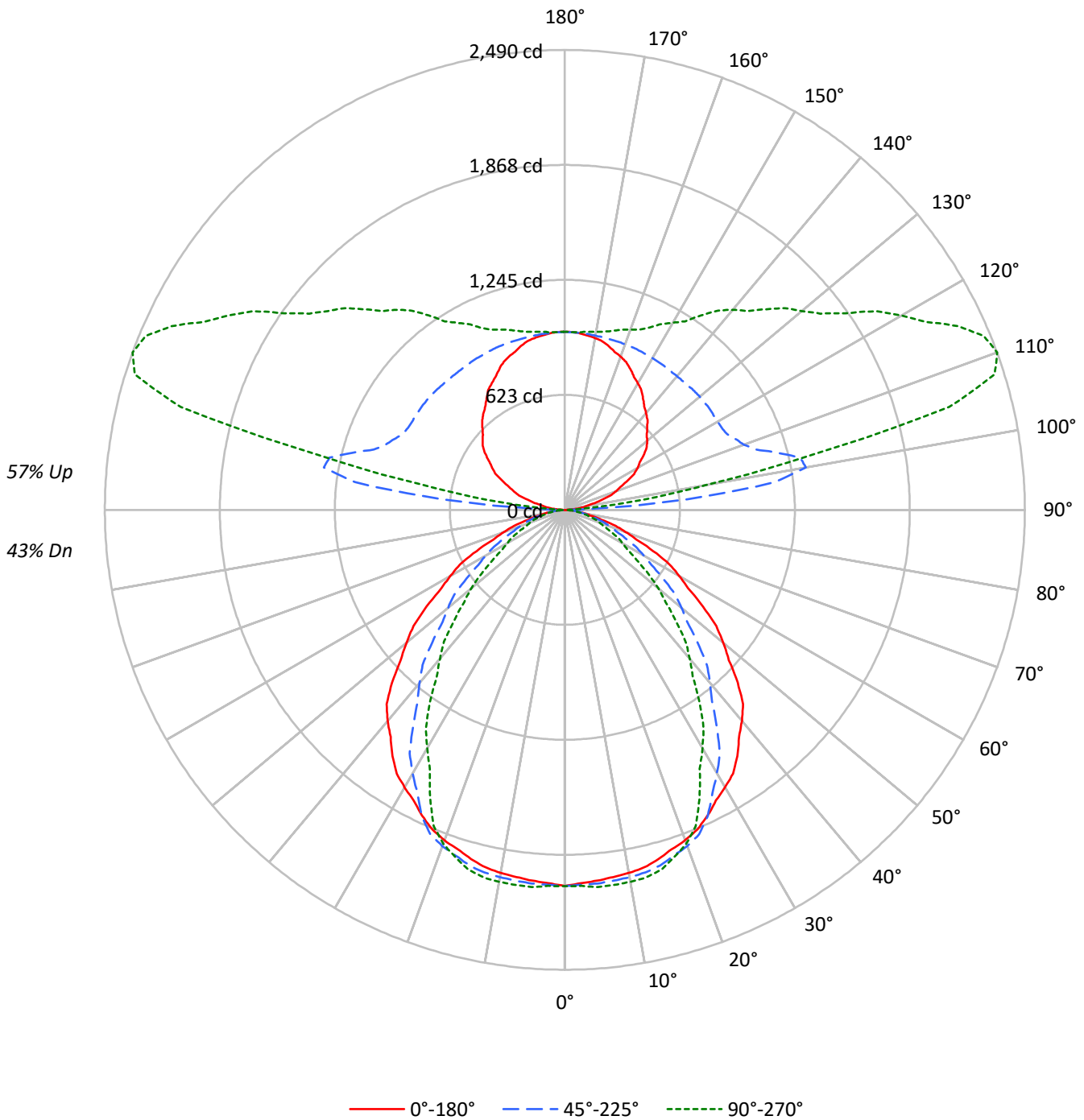
Lumens per Lamp: N/A
Luminaire Lumens: 10465.7 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 94.2
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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43				43
1	97	93	89	86	88	85	82	79	70	68	66	57	56	54	45	44	43				37	
2	88	81	76	71	81	75	70	66	62	59	56	51	48	46	40	38	37				32	
3	81	72	65	60	74	66	60	55	55	51	47	45	42	40	36	34	32				28	
4	74	64	56	51	68	59	52	47	49	45	41	41	37	34	32	30	28				24	
5	68	57	49	44	62	53	46	41	44	39	35	37	33	30	29	27	25				21	
6	63	51	44	38	58	48	41	36	40	35	31	33	29	26	27	24	22				19	
7	58	47	39	33	53	43	36	31	37	31	27	30	26	24	25	22	20				17	
8	54	42	35	30	50	39	33	28	33	28	24	28	24	21	23	20	18				15	
9	50	39	31	27	46	36	29	25	31	26	22	26	22	19	21	18	16				14	
10	47	35	28	24	43	33	27	22	28	23	20	24	20	17	19	17	15				13	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32881	32881	32881
5°	32661	32913	33227
10°	32721	33103	33516
15°	32712	33329	33718
20°	32727	33292	33060
25°	32550	32584	30718
30°	32328	30700	27772
35°	32075	28251	25080
40°	31436	25754	22156
45°	30204	23162	19354
50°	28110	20705	16566
55°	25714	18291	13430
60°	23050	15910	11586
65°	20157	13708	10300
70°	16480	12179	9338
75°	12826	10524	8590
80°	9558	9019	7578
85°	6465	6836	4316

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 30204 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.9	1.9
10°-20°	561.9	5.4
20°-30°	826.9	7.9
30°-40°	904.0	8.6
40°-50°	811.0	7.7
50°-60°	605.0	5.8
60°-70°	382.3	3.7
70°-80°	189.4	1.8
80°-90°	45.4	0.4
90°-100°	367.1	3.5
100°-110°	1201.9	11.5
110°-120°	1188.3	11.4
120°-130°	971.3	9.3
130°-140°	792.7	7.6
140°-150°	616.9	5.9
150°-160°	444.2	4.2
160°-170°	271.7	2.6
170°-180°	91.8	0.9
0°-30°	1582.7	15.1
0°-40°	2486.7	23.8
0°-60°	3902.7	37.3
0°-90°	4519.8	43.2
90°-120°	2757.3	26.3
90°-150°	5138.2	49.1
90°-180°	5946.0	56.8
0°-180°	10465.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2036	2036	2036	2036	2036	
5°	2015	2048	2031	2033	2050	192
15°	1957	1995	1994	2008	2017	553
25°	1827	1867	1829	1753	1724	841
35°	1627	1610	1433	1308	1272	1015
45°	1323	1217	1014	887	848	1014
55°	914	826	650	509	477	816
65°	528	484	359	289	270	523
75°	206	221	169	142	138	226
85°	35	44	37	25	23	44
90°	1	3	8	7	8	4
95°	52	149	667	238	154	58
105°	209	298	1193	2267	2153	220
115°	376	450	969	2003	2351	372
125°	524	584	955	1580	1855	466
135°	631	698	948	1362	1536	488
145°	738	792	946	1172	1284	462
155°	841	869	952	1048	1089	387
165°	918	926	955	992	1003	259
175°	959	959	960	967	965	91
180°	963	963	963	963	963	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2036.5	2036.5	2036.5	2036.5	2036.5
2.5°	2022.6	2048.4	2031.9	2033.6	2038.1
5°	2015.2	2047.5	2030.7	2033.1	2050.1
7.5°	2005.1	2037.7	2025.3	2032.3	2049.0
10°	1995.8	2030.0	2019.1	2029.1	2044.3
12.5°	1983.4	2019.1	2011.3	2022.9	2038.1
15°	1957.0	1995.0	1993.9	2007.7	2017.2
17.5°	1926.4	1964.3	1962.5	1966.1	1970.6
20°	1904.7	1942.6	1937.6	1924.1	1924.1
22.5°	1873.6	1914.6	1901.9	1864.8	1852.7
25°	1827.1	1866.9	1829.0	1752.7	1724.3
27.5°	1772.8	1805.0	1728.9	1620.6	1581.1
30°	1734.0	1758.6	1646.7	1527.5	1489.6
32.5°	1693.6	1703.1	1562.9	1439.0	1398.0
35°	1627.3	1610.2	1433.3	1308.4	1272.4
37.5°	1548.9	1498.1	1308.8	1178.0	1138.1
40°	1491.5	1419.5	1221.9	1091.1	1051.2
42.5°	1427.9	1337.6	1139.7	1008.8	967.5
45°	1322.8	1216.6	1014.4	887.4	847.6
47.5°	1204.5	1099.0	897.2	774.3	740.1
50°	1119.1	1016.7	824.3	701.2	659.5
52.5°	1032.2	940.5	752.9	626.4	569.5
55°	913.5	826.3	649.8	509.4	477.1
57.5°	791.3	715.9	556.3	428.8	402.3
60°	713.8	647.4	492.7	385.4	358.8
62.5°	639.3	580.5	430.6	345.1	323.1
65°	527.6	483.9	358.8	288.6	269.6
67.5°	418.9	394.7	298.3	236.7	224.2
70°	349.1	341.5	258.0	207.3	197.8
72.5°	288.6	291.6	219.2	179.5	173.0
75°	205.6	220.8	168.7	141.5	137.7
77.5°	140.0	162.8	124.9	104.7	101.6
80°	102.8	125.6	97.0	81.5	81.5
82.5°	71.8	90.0	69.0	61.3	61.3
85°	34.9	44.4	36.9	25.2	23.3
87.5°	9.5	14.4	7.8	6.0	6.2
90°	1.0	2.9	7.9	7.0	7.9
92.5°	16.8	61.4	188.5	61.3	49.1
95°	51.5	149.3	667.3	237.7	154.5
97.5°	93.5	196.9	1144.9	692.6	429.3
100°	122.8	221.5	1324.7	1183.0	784.1
102.5°	156.0	252.5	1304.9	1743.1	1351.3
105°	208.9	298.0	1193.0	2266.7	2153.4
107.5°	261.0	342.7	1083.9	2315.6	2440.1
110°	295.0	374.4	1031.7	2258.7	2490.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	327.5	404.6	1000.0	2159.5	2456.0
115°	376.2	449.8	969.3	2002.9	2351.4
117.5°	423.6	492.3	957.6	1849.0	2202.9
120°	454.4	519.3	954.4	1759.3	2103.9
122.5°	482.2	545.5	954.4	1681.9	2001.7
125°	523.7	583.8	955.4	1579.5	1855.4
127.5°	559.0	620.2	954.2	1504.0	1744.1
130°	581.2	643.1	953.4	1458.4	1675.2
132.5°	601.0	664.5	951.1	1419.1	1615.8
135°	630.7	697.5	947.5	1362.3	1535.6
137.5°	662.0	728.2	945.3	1303.1	1459.8
140°	684.1	748.0	944.5	1265.7	1413.8
142.5°	706.3	766.3	944.5	1225.8	1360.0
145°	737.6	791.8	945.5	1171.8	1284.1
147.5°	770.5	815.6	946.9	1124.9	1209.7
150°	791.1	830.8	948.5	1097.6	1169.3
152.5°	811.7	846.7	949.3	1075.2	1134.4
155°	840.6	868.6	951.5	1048.4	1089.1
157.5°	866.5	886.8	953.6	1027.4	1056.8
160°	883.1	899.6	954.4	1015.4	1038.6
162.5°	897.4	910.8	954.4	1005.7	1022.7
165°	917.8	926.5	955.4	992.3	1002.9
167.5°	935.0	939.3	956.6	981.9	987.7
170°	944.5	946.5	957.4	976.3	978.2
172.5°	951.7	952.8	959.8	972.3	972.6
175°	959.4	959.4	960.4	967.3	965.3
177.5°	963.3	962.6	961.8	966.4	963.3
180°	963.3	963.3	963.3	963.3	963.3



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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	18.52	19.29	19.54	20.31	21.68	15.00	15.78	16.03	16.80	18.17
	3H	19.83	20.52	20.86	21.56	22.94	16.20	16.89	17.23	17.93	19.31
	4H	20.20	20.86	21.25	21.89	23.29	16.65	17.30	17.69	18.33	19.73
	6H	20.40	21.00	21.46	22.04	23.45	16.96	17.56	18.01	18.60	20.01
	8H	20.43	21.00	21.49	22.06	23.46	17.03	17.60	18.09	18.66	20.06
	12H	20.43	20.97	21.49	22.02	23.44	17.04	17.58	18.10	18.63	20.06
4H	2H	18.61	19.26	19.66	20.30	21.70	15.68	16.33	16.73	17.37	18.76
	3H	20.15	20.69	21.21	21.75	23.16	17.06	17.60	18.11	18.66	20.07
	4H	20.65	21.15	21.72	22.20	23.63	17.60	18.09	18.66	19.15	20.58
	6H	20.98	21.40	22.05	22.48	23.91	18.00	18.42	19.07	19.50	20.93
	8H	21.06	21.45	22.13	22.52	23.96	18.10	18.50	19.18	19.57	21.01
	12H	21.07	21.43	22.16	22.51	23.96	18.12	18.48	19.21	19.56	21.01
8H	4H	20.68	21.08	21.76	22.15	23.59	17.92	18.32	18.99	19.39	20.83
	6H	21.12	21.45	22.21	22.56	24.00	18.42	18.75	19.52	19.86	21.30
	8H	21.26	21.55	22.37	22.65	24.10	18.59	18.87	19.69	19.97	21.43
	12H	21.33	21.58	22.43	22.67	24.17	18.64	18.89	19.75	19.99	21.48
12H	4H	20.64	21.00	21.73	22.08	23.53	17.93	18.29	19.02	19.37	20.82
	6H	21.11	21.40	22.21	22.49	23.95	18.49	18.77	19.59	19.87	21.33
	8H	21.27	21.52	22.37	22.61	24.11	18.67	18.92	19.78	20.01	21.51