

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: P854324

Luminaire Tested: SQ2-PW1-150U-100D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854324
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-940-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

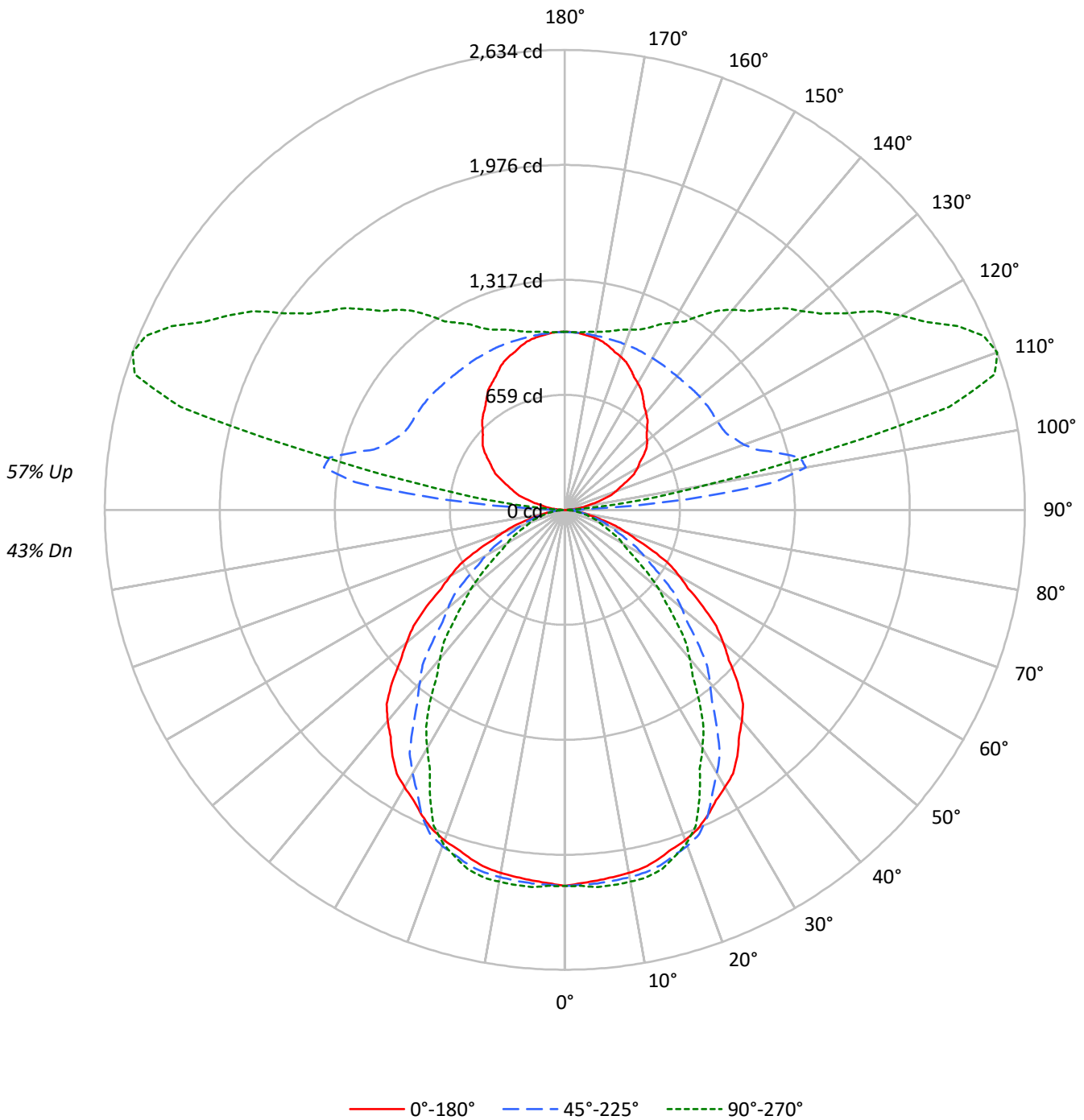
Lumens per Lamp: N/A
Luminaire Lumens: 11070.2 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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	0
RCR																		
0	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	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°	34781	34781	34781
5°	34548	34814	35148
10°	34611	35015	35452
15°	34603	35254	35666
20°	34617	35216	34969
25°	34429	34467	32493
30°	34194	32473	29375
35°	33928	29883	26528
40°	33253	27242	23438
45°	31949	24501	20473
50°	29735	21901	17520
55°	27201	19347	14207
60°	24380	16827	12255
65°	21318	14499	10896
70°	17434	12883	9880
75°	13568	11135	9089
80°	10107	9540	8015
85°	6836	7225	4557

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 31949 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.1	1.9
10°-20°	594.3	5.4
20°-30°	874.6	7.9
30°-40°	956.3	8.6
40°-50°	857.9	7.7
50°-60°	639.9	5.8
60°-70°	404.4	3.7
70°-80°	200.3	1.8
80°-90°	48.0	0.4
90°-100°	388.3	3.5
100°-110°	1271.3	11.5
110°-120°	1256.9	11.4
120°-130°	1027.5	9.3
130°-140°	838.5	7.6
140°-150°	652.5	5.9
150°-160°	469.8	4.2
160°-170°	287.4	2.6
170°-180°	97.1	0.9
0°-30°	1674.1	15.1
0°-40°	2630.4	23.8
0°-60°	4128.1	37.3
0°-90°	4780.9	43.2
90°-120°	2916.5	26.3
90°-150°	5435.0	49.1
90°-180°	6289.0	56.8
0°-180°	11070.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2154	2154	2154	2154	2154	
5°	2132	2166	2148	2150	2169	203
15°	2070	2110	2109	2124	2134	584
25°	1933	1975	1935	1854	1824	890
35°	1721	1703	1516	1384	1346	1074
45°	1399	1287	1073	939	897	1073
55°	966	874	687	539	505	863
65°	558	512	380	305	285	553
75°	218	234	178	150	146	240
85°	37	47	39	27	25	47
90°	1	3	8	7	8	4
95°	54	158	706	251	163	62
105°	221	315	1262	2398	2278	233
115°	398	476	1025	2119	2487	393
125°	554	618	1011	1671	1963	493
135°	667	738	1002	1441	1624	516
145°	780	838	1000	1240	1358	489
155°	889	919	1006	1109	1152	409
165°	971	980	1011	1050	1061	274
175°	1015	1015	1016	1023	1021	96
180°	1019	1019	1019	1019	1019	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2154.2	2154.2	2154.2	2154.2	2154.2
2.5°	2139.4	2166.7	2149.3	2151.0	2155.8
5°	2131.6	2165.7	2148.0	2150.5	2168.6
7.5°	2121.0	2155.5	2142.3	2149.7	2167.3
10°	2111.1	2147.2	2135.7	2146.4	2162.4
12.5°	2098.0	2135.7	2127.5	2139.8	2155.8
15°	2070.1	2110.2	2109.1	2123.6	2133.7
17.5°	2037.7	2077.8	2075.8	2079.6	2084.4
20°	2014.7	2054.8	2049.6	2035.2	2035.2
22.5°	1981.9	2025.2	2011.8	1972.5	1959.7
25°	1932.6	1974.7	1934.7	1854.0	1823.9
27.5°	1875.2	1909.3	1828.8	1714.2	1672.5
30°	1834.1	1860.2	1741.8	1615.8	1575.6
32.5°	1791.5	1801.5	1653.2	1522.1	1478.8
35°	1721.3	1703.2	1516.1	1384.0	1345.9
37.5°	1638.4	1584.7	1384.4	1246.0	1203.9
40°	1577.7	1501.5	1292.5	1154.1	1112.0
42.5°	1510.4	1414.9	1205.5	1067.1	1023.3
45°	1399.2	1286.9	1073.0	938.7	896.6
47.5°	1274.1	1162.5	949.1	819.0	782.9
50°	1183.8	1075.5	871.9	741.7	697.5
52.5°	1091.9	994.8	796.4	662.5	602.4
55°	966.3	874.0	687.3	538.8	504.7
57.5°	837.1	757.2	588.4	453.6	425.5
60°	755.0	684.8	521.1	407.6	379.5
62.5°	676.2	614.0	455.5	365.1	341.8
65°	558.0	511.9	379.5	305.2	285.2
67.5°	443.1	417.5	315.5	250.4	237.2
70°	369.3	361.3	272.9	219.3	209.3
72.5°	305.3	308.5	231.8	189.8	183.0
75°	217.5	233.5	178.5	149.7	145.7
77.5°	148.1	172.2	132.1	110.7	107.5
80°	108.7	132.8	102.6	86.2	86.2
82.5°	75.9	95.2	73.0	64.8	64.8
85°	36.9	47.0	39.0	26.6	24.6
87.5°	10.1	15.3	8.2	6.4	6.6
90°	1.0	3.1	8.4	7.4	8.4
92.5°	17.8	64.9	199.4	64.8	51.9
95°	54.5	157.9	705.9	251.4	163.4
97.5°	98.9	208.2	1211.1	732.6	454.1
100°	129.9	234.3	1401.2	1251.3	829.4
102.5°	165.0	267.0	1380.3	1843.8	1429.3
105°	221.0	315.2	1262.0	2397.6	2277.8
107.5°	276.1	362.5	1146.5	2449.4	2581.1
110°	312.1	396.1	1091.3	2389.1	2633.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	346.4	427.9	1057.7	2284.3	2597.8
115°	398.0	475.8	1025.3	2118.6	2487.3
117.5°	448.0	520.7	1012.9	1955.8	2330.2
120°	480.7	549.3	1009.6	1860.9	2225.4
122.5°	510.0	577.0	1009.6	1779.0	2117.4
125°	554.0	617.5	1010.6	1670.7	1962.6
127.5°	591.3	656.0	1009.4	1590.9	1844.9
130°	614.7	680.3	1008.5	1542.6	1772.0
132.5°	635.7	702.9	1006.0	1501.1	1709.1
135°	667.1	737.8	1002.2	1441.0	1624.3
137.5°	700.2	770.2	999.9	1378.4	1544.1
140°	723.7	791.2	999.1	1338.8	1495.5
142.5°	747.1	810.6	999.1	1296.6	1438.5
145°	780.2	837.6	1000.1	1239.5	1358.3
147.5°	815.0	862.7	1001.6	1189.8	1279.5
150°	836.8	878.7	1003.3	1161.0	1236.8
152.5°	858.5	895.6	1004.1	1137.3	1200.0
155°	889.1	918.8	1006.4	1109.0	1152.0
157.5°	916.6	938.1	1008.7	1086.7	1117.9
160°	934.2	951.6	1009.6	1074.0	1098.6
162.5°	949.2	963.4	1009.6	1063.8	1081.8
165°	970.8	980.0	1010.6	1049.6	1060.9
167.5°	989.0	993.5	1011.9	1038.6	1044.8
170°	999.1	1001.1	1012.7	1032.7	1034.7
172.5°	1006.6	1007.9	1015.2	1028.4	1028.8
175°	1014.8	1014.8	1015.8	1023.1	1021.1
177.5°	1019.0	1018.2	1017.3	1022.3	1019.0
180°	1019.0	1019.0	1019.0	1019.0	1019.0



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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	18.71	19.49	19.73	20.51	21.88	15.20	15.97	16.22	17.00	18.36
	3H	20.03	20.72	21.06	21.75	23.14	16.40	17.09	17.43	18.12	19.51
	4H	20.40	21.05	21.44	22.09	23.48	16.84	17.49	17.88	18.53	19.93
	6H	20.60	21.20	21.65	22.24	23.65	17.15	17.75	18.21	18.79	20.20
	8H	20.63	21.20	21.69	22.25	23.66	17.23	17.80	18.28	18.85	20.26
	12H	20.62	21.16	21.68	22.21	23.64	17.24	17.78	18.30	18.83	20.25
4H	2H	18.81	19.46	19.86	20.49	21.89	15.87	16.52	16.92	17.56	18.96
	3H	20.34	20.88	21.40	21.95	23.36	17.25	17.79	18.31	18.86	20.27
	4H	20.85	21.34	21.91	22.40	23.83	17.79	18.29	18.86	19.35	20.78
	6H	21.17	21.60	22.25	22.68	24.10	18.19	18.62	19.27	19.70	21.12
	8H	21.25	21.65	22.32	22.72	24.16	18.30	18.69	19.37	19.76	21.21
	12H	21.26	21.62	22.35	22.71	24.15	18.32	18.67	19.41	19.76	21.20
8H	4H	20.88	21.28	21.95	22.35	23.79	18.11	18.51	19.19	19.58	21.02
	6H	21.31	21.64	22.41	22.75	24.19	18.62	18.94	19.71	20.06	21.50
	8H	21.46	21.74	22.56	22.84	24.30	18.78	19.07	19.88	20.16	21.62
	12H	21.52	21.77	22.63	22.86	24.36	18.84	19.09	19.94	20.18	21.68
12H	4H	20.84	21.19	21.93	22.28	23.72	18.13	18.48	19.22	19.57	21.01
	6H	21.30	21.59	22.41	22.69	24.14	18.68	18.97	19.79	20.07	21.52
	8H	21.46	21.71	22.57	22.81	24.30	18.86	19.12	19.97	20.21	21.71