

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: P854156

Luminaire Tested: SQ2-PP3-150U-100D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854156
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-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

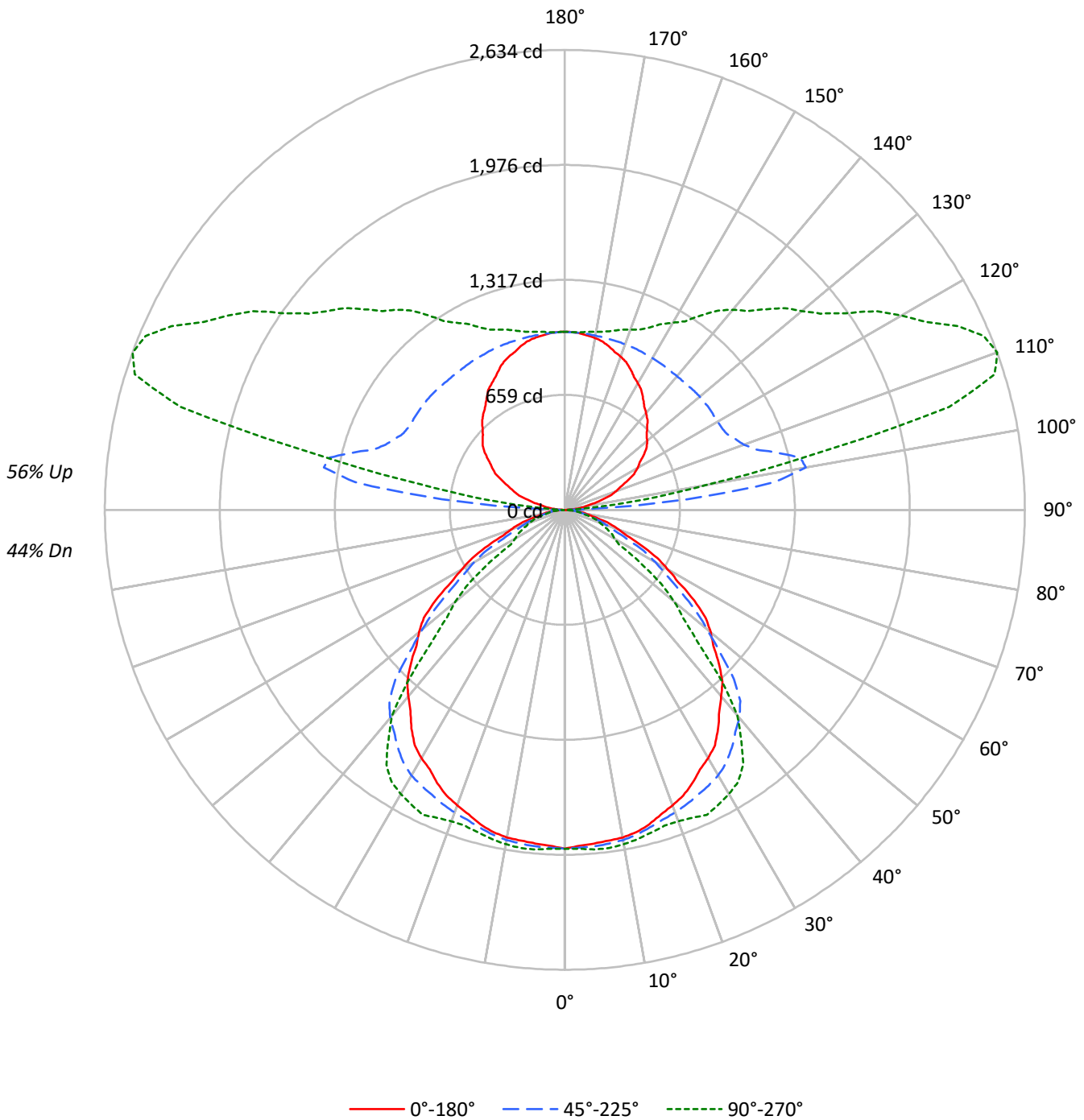
Lumens per Lamp: N/A
Luminaire Lumens: 11178.3 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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

TEST NUMBER: P854156

CATALOG NUMBER: SQ2-PP3-150U-100D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P854156

CATALOG NUMBER: SQ2-PP3-150U-100D-940-UNV-STD-W-4

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	97	97	97	97	80	80	80	64	64	64	50	50	50	44
1	97	93	89	86	89	85	82	79	71	69	67	57	56	55	45	44	43	38
2	89	82	76	71	81	75	70	66	62	59	56	51	48	46	40	39	37	32
3	81	72	65	59	74	66	60	55	55	51	47	45	42	40	36	34	32	28
4	74	64	56	50	68	59	52	47	49	44	41	41	37	34	32	30	28	24
5	68	57	49	43	62	53	46	41	44	39	35	37	33	30	29	27	25	21
6	63	51	43	38	57	47	40	35	40	35	31	33	29	26	27	24	22	19
7	58	46	38	33	53	43	36	31	36	31	27	30	26	23	24	22	19	17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	22	19	17	15
9	50	38	31	26	46	35	29	24	30	25	21	25	21	19	21	18	16	13
10	47	35	28	23	43	33	26	22	28	23	19	23	19	17	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31336	31336	31336
5°	31091	31357	31655
10°	31247	31483	31886
15°	31173	31482	31962
20°	30950	31691	32606
25°	30775	32090	34321
30°	30600	32742	35037
35°	30167	32836	35100
40°	29360	32777	32431
45°	28483	31294	24688
50°	27364	26693	20562
55°	25470	22466	14784
60°	21929	19278	10601
65°	18499	14892	10426
70°	15399	11717	9975
75°	13057	10112	9345
80°	11065	8777	8396
85°	8744	7225	4557

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 31294 cd/sqm



TEST NUMBER: P854156

CATALOG NUMBER: SQ2-PP3-150U-100D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.8	1.7
10°-20°	534.8	4.8
20°-30°	837.9	7.5
30°-40°	1033.6	9.2
40°-50°	973.2	8.7
50°-60°	689.0	6.2
60°-70°	392.6	3.5
70°-80°	194.2	1.7
80°-90°	48.6	0.4
90°-100°	388.3	3.5
100°-110°	1271.3	11.4
110°-120°	1256.9	11.2
120°-130°	1027.5	9.2
130°-140°	838.5	7.5
140°-150°	652.5	5.8
150°-160°	469.8	4.2
160°-170°	287.4	2.6
170°-180°	97.1	0.9
0°-30°	1557.5	13.9
0°-40°	2591.2	23.2
0°-60°	4253.4	38.1
0°-90°	4888.9	43.7
90°-120°	2916.5	26.1
90°-150°	5435.0	48.6
90°-180°	6289.0	56.3
0°-180°	11178.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1941	1941	1941	1941	1941	
5°	1918	1952	1935	1939	1953	183
15°	1865	1891	1883	1902	1912	526
25°	1728	1772	1801	1874	1926	796
35°	1530	1573	1666	1761	1781	954
45°	1247	1342	1370	1161	1081	960
55°	905	959	798	601	525	798
65°	484	510	390	275	273	486
75°	209	231	162	152	150	227
85°	47	43	39	31	25	55
90°	1	3	8	7	8	5
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	



TEST NUMBER: P854156

CATALOG NUMBER: SQ2-PP3-150U-100D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1940.8	1940.8	1940.8	1940.8	1940.8
2.5°	1926.0	1953.3	1935.9	1939.3	1942.5
5°	1918.3	1952.4	1934.7	1939.1	1953.1
7.5°	1910.9	1945.8	1928.5	1935.9	1953.1
10°	1905.9	1936.0	1920.3	1930.9	1944.9
12.5°	1891.2	1919.7	1905.5	1919.4	1931.8
15°	1864.9	1891.0	1883.4	1902.1	1912.1
17.5°	1829.2	1860.9	1860.8	1887.3	1897.7
20°	1801.3	1839.4	1844.4	1877.7	1897.7
22.5°	1771.8	1816.3	1824.7	1874.7	1909.2
25°	1727.5	1771.6	1801.3	1874.3	1926.5
27.5°	1675.8	1719.5	1780.8	1862.6	1903.9
30°	1641.3	1683.4	1756.2	1841.2	1879.3
32.5°	1598.6	1642.3	1720.1	1811.5	1846.4
35°	1530.5	1572.6	1665.9	1760.7	1780.8
37.5°	1452.1	1499.9	1604.4	1657.3	1658.5
40°	1393.0	1455.2	1555.1	1564.8	1538.7
42.5°	1335.6	1415.4	1486.2	1442.9	1327.0
45°	1247.4	1341.7	1370.5	1161.4	1081.2
47.5°	1153.4	1246.5	1200.6	974.1	918.7
50°	1089.4	1177.7	1062.7	870.7	818.6
52.5°	1017.2	1095.8	939.6	771.7	692.2
55°	904.8	958.9	798.1	601.4	525.2
57.5°	769.4	807.5	682.4	451.5	366.0
60°	679.1	709.2	597.0	370.4	328.3
62.5°	597.0	623.9	508.4	321.8	306.9
65°	484.2	510.3	389.8	274.9	272.9
67.5°	385.3	413.8	299.1	240.0	237.6
70°	326.2	356.3	248.2	215.3	211.3
72.5°	277.0	305.5	210.5	189.1	186.7
75°	209.3	231.3	162.1	151.8	149.8
77.5°	151.8	165.9	120.6	115.3	113.2
80°	119.0	125.0	94.4	92.3	90.3
82.5°	89.5	87.4	71.4	69.3	65.7
85°	47.2	43.2	39.0	30.6	24.6
87.5°	15.0	15.4	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



TEST NUMBER: P854156

CATALOG NUMBER: SQ2-PP3-150U-100D-940-UNV-STD-W-4

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



TEST NUMBER: P854156

CATALOG NUMBER: SQ2-PP3-150U-100D-940-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	18.90	19.68	19.91	20.70	22.06	15.29	16.07	16.31	17.09	18.46
	3H	19.99	20.68	21.01	21.71	23.09	16.39	17.09	17.42	18.12	19.50
	4H	20.32	20.98	21.36	22.02	23.40	16.85	17.51	17.89	18.54	19.93
	6H	20.54	21.14	21.58	22.18	23.58	17.19	17.80	18.24	18.84	20.24
	8H	20.58	21.16	21.64	22.21	23.61	17.28	17.85	18.33	18.90	20.30
	12H	20.59	21.14	21.65	22.19	23.61	17.29	17.84	18.35	18.88	20.30
4H	2H	18.99	19.65	20.04	20.69	22.08	16.00	16.66	17.04	17.69	19.08
	3H	20.30	20.84	21.35	21.90	23.31	17.24	17.79	18.29	18.85	20.25
	4H	20.77	21.27	21.83	22.32	23.74	17.79	18.29	18.85	19.34	20.77
	6H	21.10	21.53	22.17	22.60	24.02	18.23	18.66	19.30	19.73	21.15
	8H	21.19	21.59	22.26	22.66	24.09	18.35	18.75	19.42	19.81	21.25
	12H	21.23	21.59	22.31	22.67	24.11	18.37	18.73	19.46	19.81	21.25
8H	4H	20.78	21.18	21.85	22.25	23.68	18.06	18.46	19.13	19.53	20.96
	6H	21.21	21.54	22.30	22.65	24.08	18.60	18.93	19.69	20.04	21.47
	8H	21.36	21.65	22.46	22.75	24.20	18.79	19.08	19.89	20.17	21.62
	12H	21.45	21.70	22.55	22.79	24.28	18.86	19.11	19.96	20.20	21.69
12H	4H	20.73	21.10	21.82	22.18	23.62	18.06	18.42	19.15	19.51	20.94
	6H	21.20	21.49	22.30	22.58	24.03	18.65	18.94	19.75	20.04	21.49
	8H	21.36	21.62	22.47	22.71	24.20	18.86	19.12	19.96	20.20	21.69