

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: P854214

Luminaire Tested: SQ2-PR1-100U-100D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854214
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G2-2308-131-9)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PR1-100U-100D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

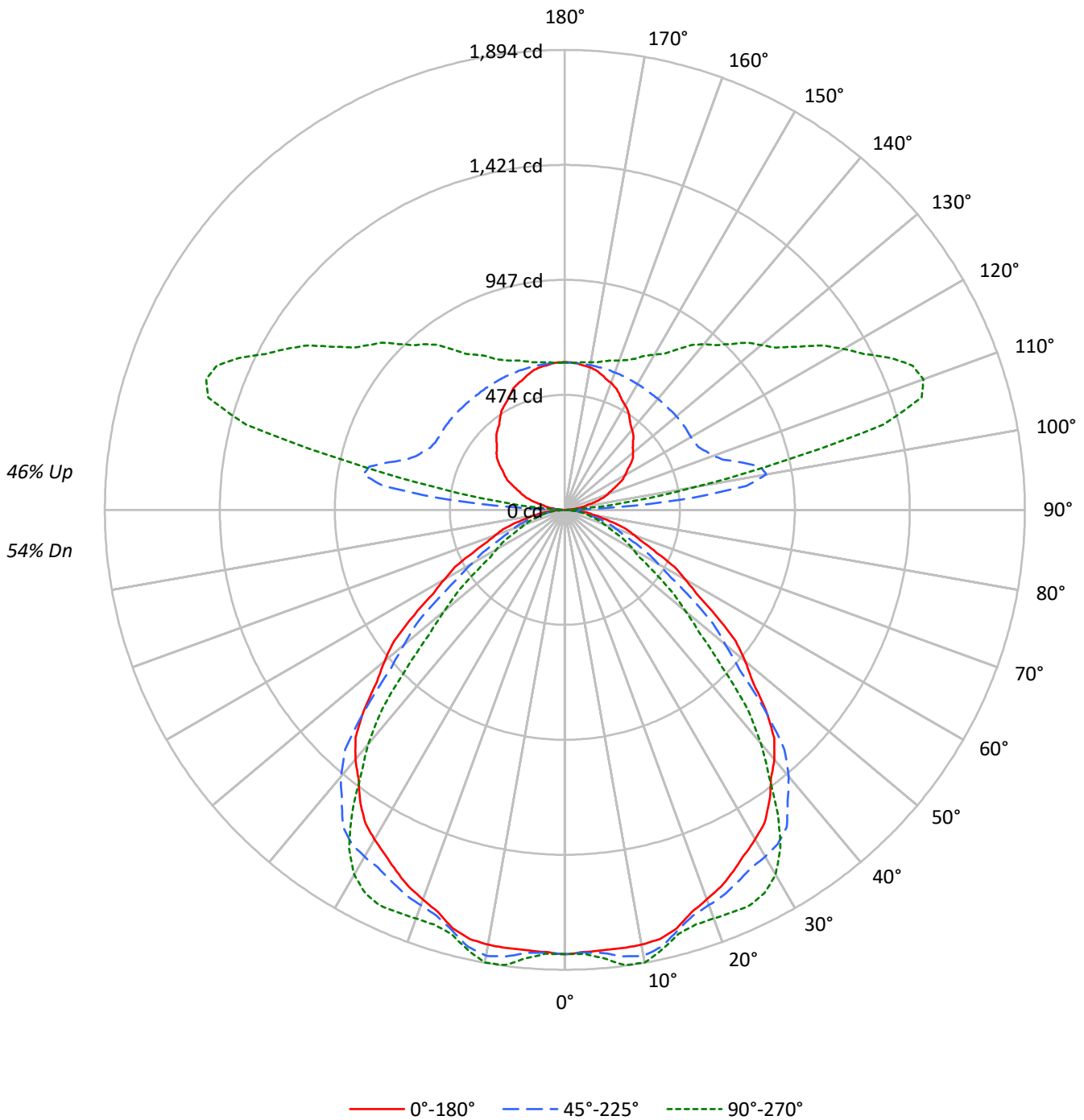
Lumens per Lamp: N/A
Luminaire Lumens: 8181.0 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.34 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 70.2
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR	0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	60	60	60	54	
	1	99	95	92	88	92	89	85	83	76	74	72	64	63	61	54	53	52	47	
	2	91	84	78	73	84	78	73	69	67	64	60	57	55	52	48	46	45	40	
	3	83	74	67	62	77	69	63	58	60	55	51	51	48	45	43	41	39	35	
	4	77	66	59	53	71	62	55	50	54	48	44	46	42	39	39	36	34	30	
	5	70	59	51	46	65	55	48	43	48	43	39	42	37	34	35	32	30	27	
	6	65	53	45	40	60	50	43	38	44	38	34	38	33	30	32	29	26	24	
	7	60	48	41	35	56	45	38	33	40	34	30	34	30	27	30	26	24	21	
	8	56	44	36	31	52	41	34	30	36	31	27	32	27	24	27	24	21	19	
	9	52	40	33	28	49	38	31	27	33	28	24	29	25	22	25	22	19	17	
	10	49	37	30	25	45	35	28	24	31	25	22	27	23	20	23	20	18	16	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	29547	29547	29547
5°	29509	29691	30054
10°	29819	30585	31044
15°	29810	29966	30215
20°	29328	29776	30771
25°	29245	30077	32037
30°	29215	30745	32345
35°	28937	31401	30114
40°	28270	30235	26500
45°	26750	26537	20957
50°	24320	21695	16259
55°	21371	17855	12656
60°	18493	14276	10421
65°	15966	11832	9123
70°	14356	10480	8101
75°	13150	9077	7448
80°	11446	7280	7280
85°	8299	6558	3464

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 28917 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.7	2.2
10°-20°	511.6	6.3
20°-30°	790.8	9.7
30°-40°	951.2	11.6
40°-50°	854.1	10.4
50°-60°	572.2	7.0
60°-70°	332.8	4.1
70°-80°	170.9	2.1
80°-90°	43.3	0.5
90°-100°	253.5	3.1
100°-110°	766.7	9.4
110°-120°	748.4	9.1
120°-130°	611.6	7.5
130°-140°	499.2	6.1
140°-150°	388.6	4.8
150°-160°	280.2	3.4
160°-170°	171.5	2.1
170°-180°	57.9	0.7
0°-30°	1479.1	18.1
0°-40°	2430.3	29.7
0°-60°	3856.5	47.1
0°-90°	4403.4	53.8
90°-120°	1768.6	21.6
90°-150°	3268.0	39.9
90°-180°	3778.0	46.2
0°-180°	8181.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1830	1830	1830	1830	1830	
5°	1821	1852	1832	1836	1854	174
15°	1783	1856	1793	1798	1808	501
25°	1642	1707	1688	1751	1798	757
35°	1468	1481	1593	1562	1528	915
45°	1172	1266	1162	980	918	896
55°	759	788	634	490	450	682
65°	418	427	310	252	239	423
75°	211	205	146	123	119	224
85°	45	36	35	24	19	55
90°	0	2	11	7	6	3
95°	31	100	478	177	112	37
105°	133	187	753	1430	1359	140
115°	237	283	609	1260	1480	235
125°	332	368	600	995	1171	295
135°	397	439	596	858	965	308
145°	464	498	596	738	807	291
155°	529	546	600	662	687	243
165°	578	585	603	626	634	163
175°	605	605	606	611	609	57
180°	607	607	607	607	607	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1830.0	1830.0	1830.0	1830.0	1830.0
2.5°	1822.6	1844.5	1824.1	1825.6	1830.0
5°	1820.7	1851.7	1831.9	1836.0	1854.3
7.5°	1820.3	1864.5	1855.0	1866.4	1890.5
10°	1818.8	1871.7	1865.5	1867.9	1893.5
12.5°	1809.9	1871.5	1843.1	1840.8	1854.7
15°	1783.4	1856.3	1792.7	1798.5	1807.6
17.5°	1736.8	1813.0	1752.4	1773.0	1790.9
20°	1706.9	1781.7	1733.0	1759.8	1790.9
22.5°	1680.0	1754.8	1715.1	1752.6	1795.3
25°	1641.6	1707.3	1688.3	1750.9	1798.3
27.5°	1601.3	1640.0	1662.5	1746.5	1779.7
30°	1567.0	1592.5	1649.1	1722.1	1734.9
32.5°	1529.7	1545.0	1631.2	1669.2	1652.8
35°	1468.1	1480.9	1593.1	1562.5	1527.8
37.5°	1395.0	1421.3	1507.7	1419.5	1379.7
40°	1341.3	1385.0	1434.5	1302.9	1257.3
42.5°	1275.6	1345.7	1337.5	1169.9	1114.1
45°	1171.5	1266.4	1162.2	979.8	917.8
47.5°	1048.8	1146.2	975.6	812.8	754.8
50°	968.2	1046.6	863.7	711.2	647.3
52.5°	886.1	942.6	768.2	615.8	557.8
55°	759.2	788.4	634.3	489.7	449.6
57.5°	642.8	661.4	518.2	395.6	366.0
60°	572.7	585.5	442.1	346.4	322.7
62.5°	508.5	518.4	380.9	304.8	286.9
65°	417.9	427.0	309.7	251.5	238.8
67.5°	345.9	350.6	254.8	209.0	197.0
70°	304.1	305.9	222.0	180.7	171.6
72.5°	266.8	264.2	190.7	156.9	150.7
75°	210.8	205.3	145.5	123.0	119.4
77.5°	157.4	151.6	102.2	94.8	94.8
80°	123.1	115.8	78.3	78.3	78.3
82.5°	91.8	81.6	60.4	60.4	58.9
85°	44.8	35.7	35.4	24.1	18.7
87.5°	11.9	12.3	6.8	5.8	5.6
90°	0.0	1.9	11.4	6.6	5.7
92.5°	10.7	43.1	154.7	51.3	37.0
95°	31.4	99.5	478.3	176.7	111.5
97.5°	60.8	126.6	753.9	498.9	303.8
100°	79.1	143.4	842.3	814.3	546.9
102.5°	99.7	161.7	824.0	1142.2	910.5
105°	133.4	187.4	752.8	1429.6	1358.8
107.5°	165.4	217.0	684.1	1458.0	1540.0
110°	186.8	236.1	649.8	1422.2	1571.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	207.3	255.2	629.3	1362.1	1550.7
115°	237.3	282.9	608.9	1259.9	1479.8
117.5°	267.0	310.2	601.6	1164.2	1389.3
120°	286.8	327.8	599.3	1108.3	1324.5
122.5°	305.1	343.9	599.3	1059.2	1258.9
125°	331.6	367.9	600.3	995.0	1171.1
127.5°	353.1	390.8	599.3	946.5	1096.7
130°	366.8	406.0	599.3	918.8	1054.8
132.5°	379.0	418.9	598.6	893.4	1019.0
135°	397.3	439.3	596.5	858.1	965.2
137.5°	417.7	457.6	596.5	820.4	919.7
140°	430.7	469.8	596.5	795.9	890.0
142.5°	443.6	481.3	595.7	773.5	855.7
145°	464.0	498.5	596.5	738.1	807.1
147.5°	484.4	513.7	597.6	709.0	761.9
150°	497.4	524.4	598.4	692.8	737.5
152.5°	509.6	533.6	599.2	678.9	715.4
155°	528.8	546.5	600.3	661.8	687.0
157.5°	545.6	559.9	601.4	649.3	666.8
160°	555.5	567.6	602.2	641.6	654.6
162.5°	565.4	574.6	603.0	634.7	645.5
165°	578.4	584.9	603.2	626.2	633.6
167.5°	589.4	592.8	604.3	619.6	622.8
170°	595.5	597.4	605.1	616.5	617.4
172.5°	599.3	600.5	605.1	613.4	613.6
175°	605.1	605.1	606.0	610.7	608.9
177.5°	607.7	607.0	606.2	608.5	607.0
180°	607.0	607.0	607.0	607.0	607.0

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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	18.90	19.75	19.83	20.69	21.91	15.62	16.47	16.55	17.42	18.64
	3H	20.13	20.89	21.07	21.84	23.09	16.69	17.45	17.63	18.40	19.64
	4H	20.58	21.30	21.54	22.26	23.51	17.08	17.80	18.04	18.76	20.01
	6H	20.90	21.56	21.87	22.52	23.78	17.42	18.08	18.39	19.04	20.30
	8H	20.98	21.61	21.96	22.59	23.85	17.50	18.13	18.48	19.11	20.37
	12H	21.01	21.60	21.99	22.58	23.86	17.51	18.11	18.49	19.08	20.37
4H	2H	18.97	19.69	19.94	20.65	21.90	16.19	16.91	17.15	17.86	19.12
	3H	20.44	21.04	21.42	22.03	23.29	17.45	18.05	18.43	19.04	20.30
	4H	21.04	21.58	22.02	22.56	23.85	17.96	18.50	18.94	19.48	20.77
	6H	21.49	21.96	22.49	22.96	24.25	18.39	18.86	19.39	19.87	21.15
	8H	21.62	22.06	22.62	23.06	24.36	18.52	18.95	19.51	19.95	21.25
	12H	21.68	22.07	22.69	23.08	24.39	18.54	18.93	19.55	19.94	21.25
8H	4H	21.06	21.50	22.06	22.50	23.80	18.26	18.70	19.26	19.70	21.00
	6H	21.61	21.97	22.63	23.01	24.31	18.80	19.16	19.82	20.20	21.50
	8H	21.81	22.13	22.84	23.15	24.47	18.98	19.30	20.01	20.33	21.65
	12H	21.91	22.19	22.95	23.21	24.58	19.05	19.33	20.08	20.35	21.71
12H	4H	21.02	21.41	22.04	22.43	23.74	18.28	18.67	19.30	19.69	20.99
	6H	21.60	21.92	22.63	22.94	24.26	18.86	19.18	19.89	20.20	21.52
	8H	21.81	22.09	22.84	23.11	24.47	19.07	19.35	20.10	20.37	21.73