

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: P854190

Luminaire Tested: SQ2-PR1-075U-100D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854190
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G2-2308-131-9)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PR1-075U-100D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

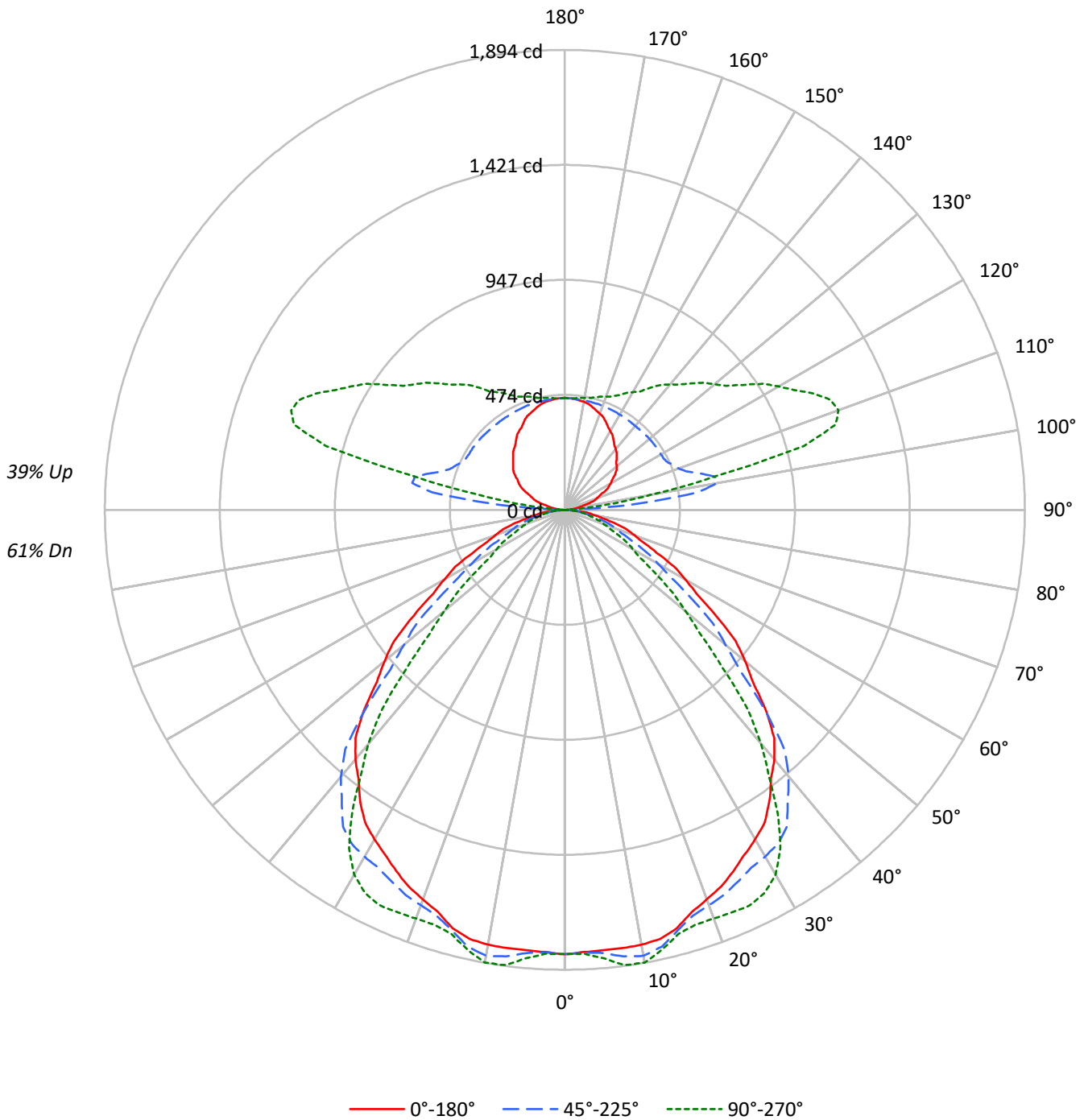
Lumens per Lamp: N/A
Luminaire Lumens: 7252.7 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.34 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 60.9
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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	61
1	101	97	93	90	94	91	88	85	80	77	75	69	67	66	60	58	57	53
2	93	85	80	75	86	80	75	71	71	67	63	62	59	56	53	51	49	45
3	85	76	69	63	79	71	65	60	63	58	54	55	51	48	48	45	43	39
4	78	68	60	54	73	64	57	52	56	51	47	50	45	42	43	40	37	34
5	72	61	53	47	67	57	50	45	51	45	41	45	40	37	39	36	33	30
6	66	55	47	41	62	52	44	39	46	40	36	41	36	33	36	32	29	27
7	62	49	42	36	58	47	40	35	42	36	32	37	32	29	33	29	26	24
8	57	45	37	32	54	43	36	31	38	33	28	34	29	26	30	26	24	21
9	53	41	34	29	50	39	32	28	35	30	26	31	27	23	28	24	21	19
10	50	38	31	26	47	36	29	25	32	27	23	29	25	21	26	22	20	18

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	2.4
10°-20°	511.6	7.1
20°-30°	790.8	10.9
30°-40°	951.2	13.1
40°-50°	854.1	11.8
50°-60°	572.2	7.9
60°-70°	332.8	4.6
70°-80°	170.9	2.4
80°-90°	42.6	0.6
90°-100°	174.1	2.4
100°-110°	577.1	8.0
110°-120°	572.7	7.9
120°-130°	466.5	6.4
130°-140°	379.1	5.2
140°-150°	294.4	4.1
150°-160°	212.1	2.9
160°-170°	129.9	1.8
170°-180°	43.9	0.6
0°-30°	1479.1	20.4
0°-40°	2430.3	33.5
0°-60°	3856.5	53.2
0°-90°	4402.8	60.7
90°-120°	1323.9	18.3
90°-150°	2463.9	34.0
90°-180°	2850.0	39.3
0°-180°	7252.7	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	1	3	4	4	3
95°	25	73	315	113	75	28
105°	101	144	578	1090	1019	107
115°	180	216	465	968	1132	178
125°	252	280	456	761	897	224
135°	301	332	453	653	737	233
145°	350	376	452	562	615	219
155°	399	413	455	502	520	184
165°	438	443	456	475	479	124
175°	458	458	459	462	461	44
180°	460	460	460	460	460	



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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	12.1	5.0	5.2	5.2
90°	0.0	0.9	2.9	3.8	3.8
92.5°	7.6	29.4	86.7	28.1	23.6
95°	24.8	73.2	315.4	112.6	75.3
97.5°	45.6	96.2	550.6	321.1	203.0
100°	60.0	108.5	637.5	547.6	363.1
102.5°	76.0	123.0	632.2	836.8	632.2
105°	101.0	143.9	577.5	1089.6	1018.7
107.5°	126.6	164.8	525.1	1115.3	1169.1
110°	141.0	179.2	498.4	1089.8	1198.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	156.3	193.7	482.4	1044.8	1183.6
115°	180.1	215.5	465.1	968.1	1132.1
117.5°	203.7	235.2	458.8	894.9	1067.0
120°	218.2	249.0	456.5	849.1	1015.9
122.5°	231.2	261.2	456.5	811.4	965.6
125°	251.6	279.5	456.5	760.7	896.8
127.5°	268.4	295.8	455.3	722.3	838.6
130°	278.3	307.2	454.6	700.0	804.3
132.5°	287.4	317.1	453.8	681.4	775.3
135°	301.1	331.9	452.7	652.8	736.7
137.5°	316.0	345.6	451.5	625.1	699.1
140°	325.9	354.8	450.8	606.7	674.7
142.5°	335.1	363.2	451.5	588.2	648.8
145°	349.7	375.8	451.7	561.6	614.7
147.5°	365.6	387.4	451.9	539.0	578.5
150°	375.5	395.0	452.7	525.9	559.4
152.5°	384.6	403.4	453.4	515.0	541.9
155°	399.3	413.3	454.6	501.7	520.3
157.5°	413.6	424.4	455.7	492.2	505.5
160°	421.2	430.5	456.5	485.3	495.6
162.5°	428.8	435.9	456.5	480.7	488.7
165°	438.4	443.0	456.5	474.7	479.4
167.5°	447.1	449.6	457.4	469.3	471.7
170°	451.7	452.6	457.4	467.0	467.9
172.5°	454.8	455.7	458.2	464.7	464.9
175°	458.4	458.4	459.3	462.2	461.2
177.5°	460.3	460.3	459.5	461.0	459.5
180°	460.3	460.3	460.3	460.3	460.3



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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	19.49	20.41	20.36	21.29	22.40	16.22	17.13	17.09	18.01	19.13
	3H	20.73	21.55	21.61	22.44	23.58	17.29	18.10	18.17	19.00	20.14
	4H	21.18	21.95	22.08	22.85	24.00	17.69	18.46	18.59	19.36	20.51
	6H	21.50	22.21	22.41	23.12	24.28	18.02	18.73	18.93	19.64	20.80
	8H	21.59	22.26	22.51	23.18	24.35	18.11	18.78	19.03	19.71	20.87
	12H	21.62	22.26	22.54	23.18	24.36	18.12	18.76	19.04	19.68	20.86
4H	2H	19.58	20.35	20.48	21.25	22.40	16.79	17.56	17.70	18.46	19.61
	3H	21.05	21.69	21.97	22.62	23.79	18.06	18.70	18.98	19.63	20.80
	4H	21.65	22.23	22.57	23.16	24.35	18.57	19.15	19.50	20.08	21.27
	6H	22.11	22.60	23.04	23.55	24.75	19.01	19.51	19.95	20.46	21.65
	8H	22.24	22.71	23.18	23.65	24.85	19.13	19.60	20.07	20.54	21.75
	12H	22.30	22.71	23.25	23.68	24.89	19.16	19.58	20.12	20.54	21.75
8H	4H	21.68	22.15	22.62	23.09	24.29	18.88	19.35	19.82	20.29	21.50
	6H	22.23	22.62	23.20	23.60	24.81	19.42	19.80	20.38	20.79	21.99
	8H	22.43	22.77	23.40	23.75	24.97	19.60	19.94	20.58	20.92	22.14
	12H	22.54	22.84	23.51	23.80	25.07	19.67	19.97	20.64	20.94	22.21
12H	4H	21.64	22.06	22.60	23.02	24.23	18.90	19.32	19.86	20.28	21.49
	6H	22.22	22.56	23.19	23.53	24.75	19.48	19.82	20.45	20.79	22.02
	8H	22.43	22.73	23.41	23.70	24.97	19.69	19.99	20.66	20.96	22.23