

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: P854106

Luminaire Tested: SQ2-PP3-075U-100D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854106
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-075U-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

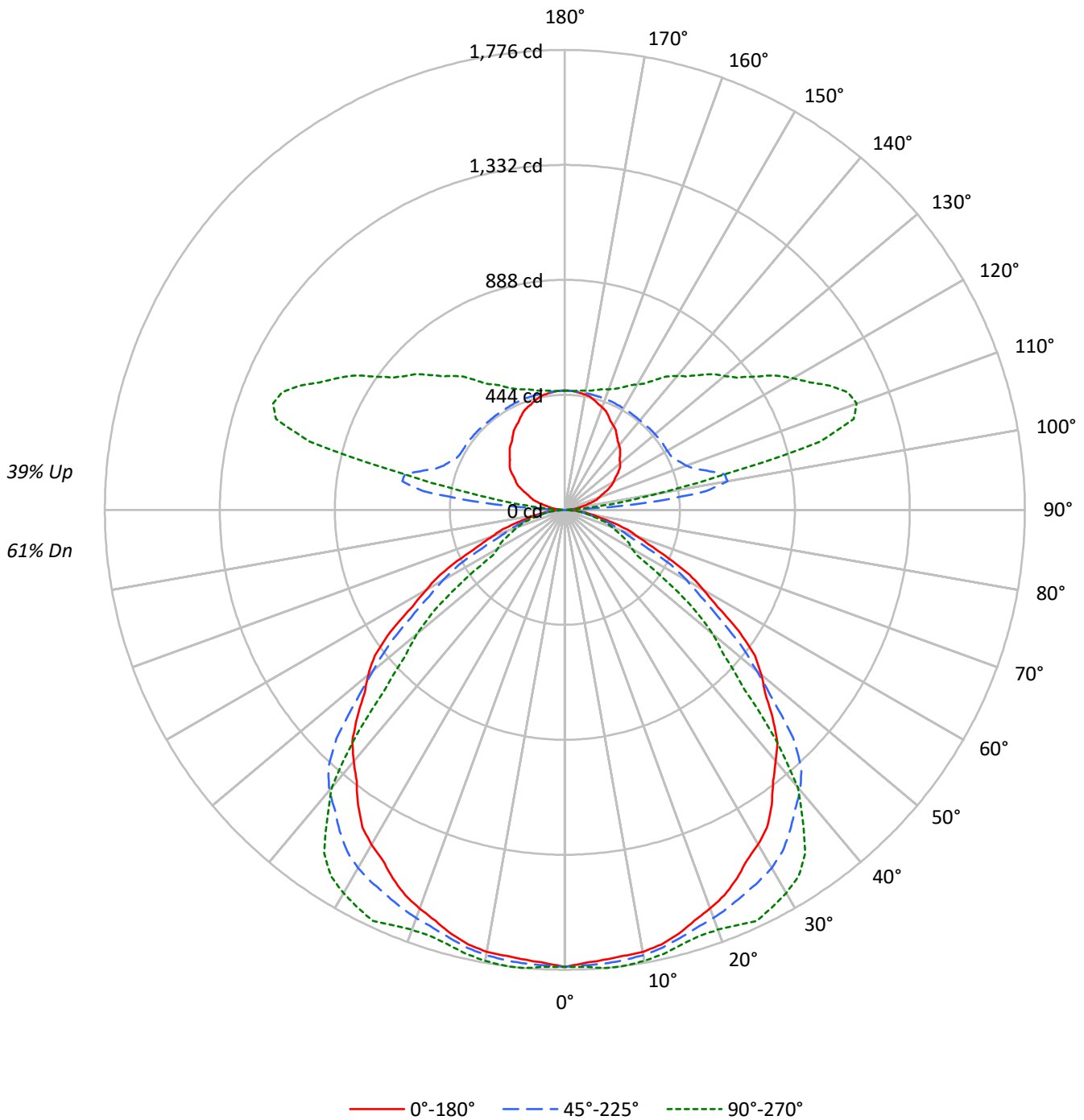
Lumens per Lamp: N/A
Luminaire Lumens: 7294.6 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	79	77	75	69	67	66	60	58	57	53
2	92	85	79	74	86	80	75	70	70	66	63	61	59	56	53	51	49	45
3	85	75	68	63	79	71	65	60	63	58	54	55	51	48	48	45	42	39
4	78	67	59	53	73	63	56	51	56	50	46	49	45	42	43	40	37	34
5	72	60	52	46	67	57	49	44	50	45	40	44	40	36	39	35	32	30
6	66	54	46	40	62	51	44	39	45	40	35	40	36	32	35	32	29	26
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	32	28	26	23
8	57	45	37	31	53	42	35	30	38	32	28	34	29	25	30	26	23	21
9	53	41	33	28	50	39	32	27	35	29	25	31	26	23	27	24	21	19
10	49	37	30	25	46	36	29	24	32	26	23	29	24	21	25	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28493	28493	28493
5°	28269	28511	28783
10°	28412	28627	28994
15°	28344	28625	29061
20°	28142	28816	29649
25°	27982	29179	31206
30°	27824	29770	31858
35°	27429	29857	31915
40°	26698	29803	29489
45°	25898	28453	22448
50°	24882	24272	18696
55°	23159	20428	13444
60°	19940	17531	9639
65°	16821	13540	9478
70°	14002	10655	9069
75°	11871	9195	8497
80°	10060	7978	7634
85°	7947	6558	4150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 28453 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.0	2.3
10°-20°	486.3	6.7
20°-30°	761.9	10.4
30°-40°	939.9	12.9
40°-50°	884.9	12.1
50°-60°	626.5	8.6
60°-70°	357.0	4.9
70°-80°	176.6	2.4
80°-90°	43.6	0.6
90°-100°	174.1	2.4
100°-110°	577.1	7.9
110°-120°	572.7	7.9
120°-130°	466.5	6.4
130°-140°	379.1	5.2
140°-150°	294.4	4.0
150°-160°	212.1	2.9
160°-170°	129.9	1.8
170°-180°	43.9	0.6
0°-30°	1416.2	19.4
0°-40°	2356.1	32.3
0°-60°	3867.5	53.0
0°-90°	4444.7	60.9
90°-120°	1323.9	18.1
90°-150°	2463.9	33.8
90°-180°	2850.0	39.1
0°-180°	7294.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1765	1765	1765	1765	1765	
5°	1744	1775	1759	1763	1776	166
15°	1696	1719	1712	1730	1739	478
25°	1571	1611	1638	1704	1752	723
35°	1392	1430	1515	1601	1619	868
45°	1134	1220	1246	1056	983	873
55°	823	872	726	547	478	726
65°	440	464	354	250	248	442
75°	190	210	147	138	136	206
85°	43	39	35	28	22	50
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°	1764.7	1764.7	1764.7	1764.7	1764.7
2.5°	1751.3	1776.1	1760.3	1763.3	1766.2
5°	1744.2	1775.2	1759.1	1763.2	1775.9
7.5°	1737.5	1769.2	1753.5	1760.2	1775.9
10°	1733.0	1760.4	1746.1	1755.7	1768.5
12.5°	1719.6	1745.5	1732.6	1745.2	1756.5
15°	1695.7	1719.4	1712.5	1729.5	1738.6
17.5°	1663.3	1692.1	1692.0	1716.1	1725.6
20°	1637.9	1672.5	1677.1	1707.3	1725.6
22.5°	1611.0	1651.5	1659.1	1704.6	1736.0
25°	1570.7	1610.9	1637.9	1704.3	1751.7
27.5°	1523.7	1563.5	1619.2	1693.6	1731.2
30°	1492.4	1530.7	1596.8	1674.1	1708.8
32.5°	1453.6	1493.3	1564.0	1647.2	1678.9
35°	1391.6	1429.9	1514.8	1601.0	1619.2
37.5°	1320.4	1363.8	1458.8	1507.0	1508.0
40°	1266.7	1323.2	1414.0	1422.8	1399.1
42.5°	1214.4	1287.0	1351.3	1312.0	1206.6
45°	1134.2	1219.9	1246.1	1056.1	983.1
47.5°	1048.8	1133.4	1091.7	885.7	835.4
50°	990.6	1070.8	966.3	791.7	744.3
52.5°	924.9	996.4	854.4	701.6	629.4
55°	822.7	871.9	725.7	546.9	477.6
57.5°	699.6	734.2	620.5	410.5	332.8
60°	617.5	644.8	542.9	336.8	298.5
62.5°	542.9	567.3	462.3	292.6	279.1
65°	440.3	464.0	354.4	249.9	248.1
67.5°	350.3	376.2	272.0	218.2	216.0
70°	296.6	324.0	225.7	195.8	192.1
72.5°	251.8	277.7	191.4	171.9	169.8
75°	190.3	210.3	147.4	138.0	136.2
77.5°	138.0	150.8	109.7	104.8	103.0
80°	108.2	113.7	85.8	83.9	82.1
82.5°	81.3	79.5	64.9	63.0	59.7
85°	42.9	39.3	35.4	27.9	22.4
87.5°	13.4	13.6	6.5	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	20.14	21.07	21.01	21.95	23.06	16.54	17.47	17.40	18.35	19.46
	3H	21.24	22.07	22.12	22.96	24.10	17.65	18.48	18.53	19.37	20.50
	4H	21.59	22.37	22.48	23.27	24.41	18.12	18.90	19.01	19.79	20.94
	6H	21.81	22.53	22.71	23.43	24.59	18.47	19.18	19.37	20.09	21.25
	8H	21.86	22.54	22.77	23.46	24.62	18.55	19.24	19.47	20.16	21.31
	12H	21.88	22.53	22.79	23.44	24.62	18.57	19.22	19.49	20.13	21.32
4H	2H	20.26	21.04	21.16	21.94	23.08	17.26	18.04	18.16	18.94	20.09
	3H	21.58	22.22	22.49	23.15	24.31	18.52	19.17	19.43	20.09	21.25
	4H	22.05	22.64	22.97	23.56	24.75	19.08	19.66	20.00	20.59	21.78
	6H	22.39	22.90	23.33	23.85	25.04	19.52	20.03	20.46	20.97	22.16
	8H	22.49	22.96	23.43	23.90	25.10	19.64	20.12	20.58	21.06	22.26
	12H	22.53	22.95	23.48	23.91	25.12	19.67	20.10	20.63	21.06	22.27
8H	4H	22.08	22.55	23.01	23.49	24.69	19.35	19.83	20.29	20.77	21.97
	6H	22.51	22.90	23.47	23.88	25.08	19.90	20.29	20.86	21.28	22.48
	8H	22.67	23.01	23.64	23.99	25.20	20.09	20.43	21.06	21.41	22.63
	12H	22.76	23.06	23.73	24.03	25.29	20.17	20.47	21.14	21.44	22.70
12H	4H	22.04	22.46	22.99	23.42	24.63	19.37	19.79	20.32	20.75	21.96
	6H	22.50	22.84	23.47	23.82	25.04	19.96	20.30	20.93	21.27	22.49
	8H	22.67	22.98	23.65	23.94	25.21	20.17	20.47	21.14	21.44	22.70