

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: P854094

Luminaire Tested: SQ2-PP3-050U-100D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854094
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-10, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-050U-100D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

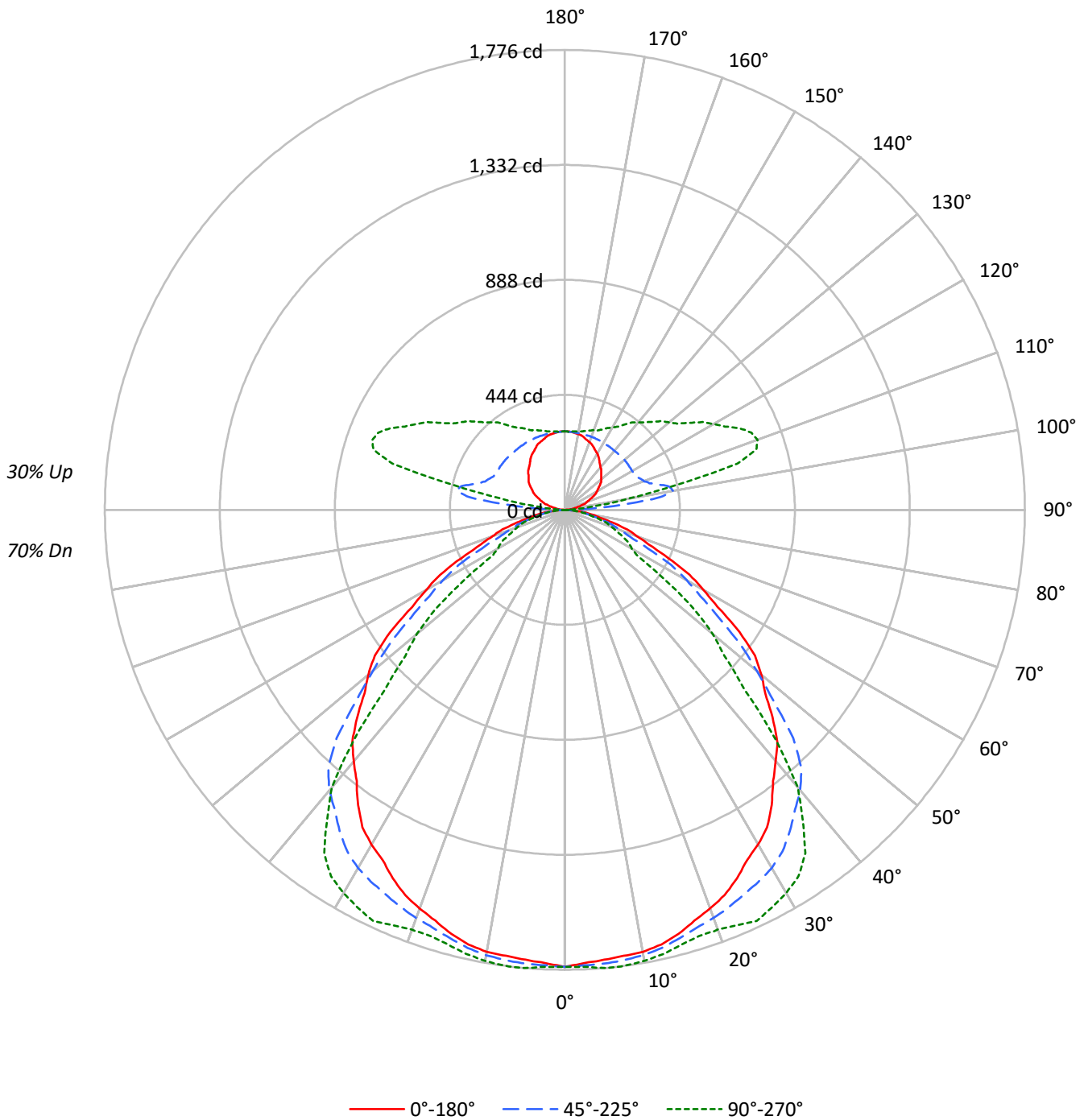
Lumens per Lamp: N/A
Luminaire Lumens: 6326.6 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 52.4
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	50	30	10
RCR																				
0	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	70	70	70
1	103	99	95	92	97	94	91	88	84	82	80	75	74	72	67	66	65	61	61	61
2	94	87	81	76	89	83	78	73	75	71	67	67	64	61	60	58	56	52	52	52
3	87	77	70	64	82	74	67	62	66	61	57	60	56	52	54	51	48	45	45	45
4	80	69	61	55	75	66	59	53	59	54	49	54	49	45	48	45	42	39	39	39
5	73	62	54	48	69	59	52	46	54	47	43	49	44	40	44	40	37	34	34	34
6	68	56	47	42	64	53	46	40	48	42	38	44	39	35	40	36	33	30	30	30
7	63	50	42	37	59	48	41	36	44	38	33	40	35	31	37	32	29	27	27	27
8	58	46	38	33	55	44	37	32	40	34	30	37	32	28	34	29	26	24	24	24
9	54	42	34	29	52	40	33	29	37	31	27	34	29	25	31	27	24	22	22	22
10	51	39	31	26	48	37	30	26	34	28	24	31	26	23	29	25	21	20	20	20

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	2.7
10°-20°	486.3	7.7
20°-30°	761.9	12.0
30°-40°	939.9	14.9
40°-50°	884.9	14.0
50°-60°	626.5	9.9
60°-70°	357.0	5.6
70°-80°	176.6	2.8
80°-90°	43.6	0.7
90°-100°	120.7	1.9
100°-110°	382.8	6.1
110°-120°	375.4	5.9
120°-130°	305.5	4.8
130°-140°	249.1	3.9
140°-150°	194.2	3.1
150°-160°	139.9	2.2
160°-170°	85.5	1.4
170°-180°	28.9	0.5
0°-30°	1416.2	22.4
0°-40°	2356.1	37.2
0°-60°	3867.5	61.1
0°-90°	4444.7	70.3
90°-120°	879.0	13.9
90°-150°	1627.7	25.7
90°-180°	1882.0	29.7
0°-180°	6326.6	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	3	3	3
95°	16	49	219	81	52	19
105°	67	94	377	719	689	70
115°	119	142	305	633	745	118
125°	165	184	300	497	585	147
135°	199	219	298	427	481	154
145°	232	250	298	369	401	146
155°	265	274	299	329	342	122
165°	289	292	300	312	314	81
175°	302	301	302	304	303	29
180°	303	303	303	303	303	



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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	5.0	5.0
90°	0.0	0.9	2.9	2.9	2.9
92.5°	5.3	21.2	67.7	22.5	15.8
95°	16.2	48.8	219.2	81.3	52.4
97.5°	30.1	63.3	371.3	232.0	142.4
100°	40.0	71.7	423.1	385.8	250.6
102.5°	50.7	80.9	414.0	566.5	433.6
105°	66.7	93.7	377.4	718.8	689.0
107.5°	82.7	107.7	342.5	734.7	775.0
110°	93.4	117.6	325.0	716.5	791.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.1	126.8	315.1	684.9	779.6
115°	119.1	141.5	305.0	633.4	745.3
117.5°	133.8	155.0	301.0	583.9	696.7
120°	143.0	163.5	300.2	553.3	662.3
122.5°	152.1	171.9	300.2	528.8	630.3
125°	164.9	184.4	300.2	496.6	585.2
127.5°	176.1	194.9	300.2	471.7	547.2
130°	183.0	202.5	300.2	457.1	525.1
132.5°	189.8	209.4	299.4	445.5	506.8
135°	199.2	218.7	298.3	427.2	481.3
137.5°	208.3	228.8	298.1	409.8	458.0
140°	214.4	234.9	297.3	397.4	441.2
142.5°	222.1	241.8	298.1	385.2	426.0
145°	232.5	250.2	298.3	368.6	401.2
147.5°	243.0	258.1	298.5	354.0	380.6
150°	250.6	262.8	299.2	345.5	366.9
152.5°	256.7	267.4	299.2	338.5	356.2
155°	264.9	274.3	299.2	329.1	342.1
157.5°	273.7	280.0	300.2	323.3	332.2
160°	278.3	283.9	300.2	319.4	326.9
162.5°	282.9	287.0	300.2	316.3	321.5
165°	288.8	291.6	300.2	311.7	314.5
167.5°	294.3	295.0	301.2	308.5	310.9
170°	297.3	297.3	301.2	306.9	307.8
172.5°	298.9	299.6	301.2	305.4	305.5
175°	302.1	301.2	302.1	304.0	303.1
177.5°	303.1	302.3	302.3	303.8	302.3
180°	303.1	303.1	303.1	303.1	303.1



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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	20.89	21.92	21.66	22.71	23.66	17.29	18.32	18.06	19.10	20.05
	3H	22.00	22.92	22.78	23.71	24.70	18.41	19.32	19.19	20.12	21.10
	4H	22.35	23.22	23.15	24.02	25.01	18.88	19.74	19.68	20.54	21.54
	6H	22.57	23.37	23.39	24.18	25.19	19.23	20.03	20.04	20.84	21.85
	8H	22.63	23.39	23.45	24.22	25.22	19.32	20.08	20.14	20.91	21.92
	12H	22.65	23.37	23.48	24.19	25.23	19.34	20.06	20.17	20.89	21.92
4H	2H	21.02	21.89	21.83	22.69	23.68	18.02	18.89	18.83	19.69	20.69
	3H	22.35	23.06	23.16	23.90	24.91	19.29	20.00	20.11	20.84	21.85
	4H	22.83	23.47	23.66	24.31	25.35	19.85	20.50	20.68	21.34	22.38
	6H	23.17	23.73	24.02	24.59	25.64	20.30	20.86	21.15	21.72	22.76
	8H	23.27	23.79	24.12	24.65	25.70	20.42	20.95	21.27	21.80	22.86
	12H	23.31	23.78	24.18	24.66	25.72	20.46	20.93	21.33	21.81	22.87
8H	4H	22.86	23.38	23.71	24.23	25.29	20.14	20.66	20.99	21.51	22.57
	6H	23.29	23.73	24.17	24.62	25.68	20.69	21.12	21.56	22.02	23.07
	8H	23.45	23.83	24.34	24.73	25.80	20.87	21.26	21.76	22.15	23.22
	12H	23.54	23.88	24.43	24.77	25.89	20.95	21.29	21.84	22.18	23.30
12H	4H	22.82	23.29	23.69	24.17	25.23	20.15	20.62	21.02	21.50	22.56
	6H	23.28	23.67	24.17	24.56	25.63	20.74	21.12	21.63	22.02	23.09
	8H	23.46	23.80	24.35	24.68	25.81	20.96	21.29	21.85	22.18	23.31