

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: P854154

Luminaire Tested: SQ2-PP3-150U-100D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854154
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-930-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

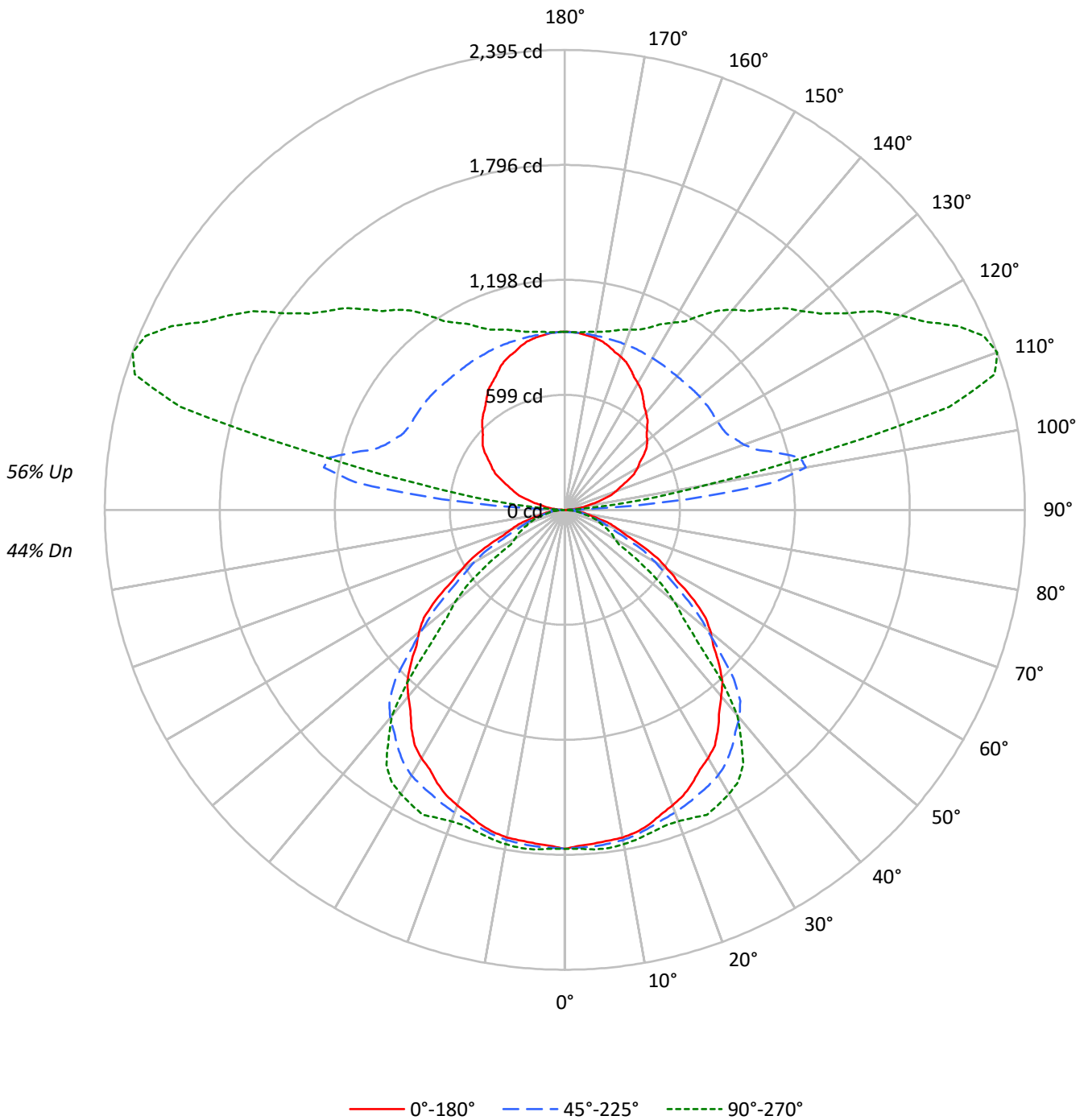
Lumens per Lamp: N/A
Luminaire Lumens: 10164.1 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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

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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	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°	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	1.7
10°-20°	486.3	4.8
20°-30°	761.9	7.5
30°-40°	939.9	9.2
40°-50°	884.9	8.7
50°-60°	626.5	6.2
60°-70°	357.0	3.5
70°-80°	176.6	1.7
80°-90°	44.2	0.4
90°-100°	353.0	3.5
100°-110°	1156.0	11.4
110°-120°	1142.9	11.2
120°-130°	934.2	9.2
130°-140°	762.4	7.5
140°-150°	593.3	5.8
150°-160°	427.2	4.2
160°-170°	261.4	2.6
170°-180°	88.3	0.9
0°-30°	1416.2	13.9
0°-40°	2356.1	23.2
0°-60°	3867.5	38.1
0°-90°	4445.3	43.7
90°-120°	2651.9	26.1
90°-150°	4941.9	48.6
90°-180°	5719.0	56.3
0°-180°	10164.1	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°	1	3	8	7	8	4
95°	50	144	642	229	149	56
105°	201	287	1148	2180	2071	212
115°	362	433	932	1926	2262	357
125°	504	562	919	1519	1784	448
135°	607	671	911	1310	1477	469
145°	709	762	909	1127	1235	445
155°	808	836	915	1008	1048	372
165°	883	891	919	954	965	249
175°	923	923	924	930	928	88
180°	926	926	926	926	926	



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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°	13.6	14.0	7.5	5.8	6.0
90°	1.0	2.8	7.6	6.7	7.6
92.5°	16.2	59.0	181.3	59.0	47.2
95°	49.5	143.6	641.8	228.6	148.6
97.5°	89.9	189.3	1101.2	666.2	412.9
100°	118.1	213.0	1274.1	1137.8	754.2
102.5°	150.1	242.8	1255.1	1676.5	1299.6
105°	200.9	286.6	1147.5	2180.1	2071.1
107.5°	251.0	329.6	1042.5	2227.2	2346.9
110°	283.8	360.1	992.2	2172.4	2394.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	315.0	389.1	961.8	2077.0	2362.1
115°	361.9	432.6	932.3	1926.4	2261.6
117.5°	407.4	473.5	921.0	1778.3	2118.8
120°	437.1	499.5	918.0	1692.1	2023.5
122.5°	463.7	524.6	918.0	1617.6	1925.3
125°	503.7	561.5	918.9	1519.2	1784.5
127.5°	537.6	596.5	917.8	1446.6	1677.5
130°	559.0	618.6	917.0	1402.6	1611.2
132.5°	578.0	639.1	914.7	1364.9	1554.1
135°	606.6	670.8	911.3	1310.3	1476.9
137.5°	636.7	700.4	909.2	1253.3	1404.0
140°	658.0	719.5	908.4	1217.4	1359.8
142.5°	679.3	737.1	908.4	1179.0	1308.0
145°	709.4	761.6	909.4	1127.1	1235.1
147.5°	741.0	784.4	910.7	1081.9	1163.5
150°	760.8	799.0	912.3	1055.7	1124.6
152.5°	780.7	814.4	913.0	1034.1	1091.1
155°	808.5	835.5	915.1	1008.4	1047.5
157.5°	833.4	853.0	917.2	988.1	1016.4
160°	849.4	865.2	918.0	976.6	998.9
162.5°	863.1	876.0	918.0	967.3	983.7
165°	882.7	891.1	918.9	954.4	964.6
167.5°	899.3	903.4	920.1	944.4	950.0
170°	908.4	910.3	920.8	939.0	940.8
172.5°	915.3	916.4	923.1	935.1	935.5
175°	922.7	922.7	923.7	930.3	928.4
177.5°	926.5	925.8	925.0	929.5	926.5
180°	926.5	926.5	926.5	926.5	926.5



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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	18.57	19.35	19.58	20.37	21.73	14.96	15.74	15.98	16.76	18.13
	3H	19.66	20.35	20.68	21.38	22.76	16.06	16.76	17.09	17.79	19.17
	4H	19.99	20.65	21.03	21.69	23.07	16.52	17.18	17.56	18.21	19.60
	6H	20.20	20.81	21.25	21.85	23.25	16.86	17.47	17.91	18.50	19.91
	8H	20.25	20.83	21.31	21.88	23.28	16.94	17.52	18.00	18.57	19.97
	12H	20.26	20.81	21.32	21.86	23.28	16.96	17.51	18.02	18.55	19.97
4H	2H	18.66	19.32	19.71	20.36	21.74	15.67	16.33	16.71	17.36	18.75
	3H	19.97	20.51	21.02	21.57	22.97	16.91	17.46	17.96	18.52	19.92
	4H	20.44	20.94	21.50	21.99	23.41	17.46	17.96	18.52	19.01	20.44
	6H	20.77	21.20	21.84	22.27	23.69	17.90	18.33	18.97	19.40	20.82
	8H	20.86	21.26	21.93	22.33	23.76	18.02	18.42	19.09	19.48	20.92
	12H	20.89	21.26	21.98	22.34	23.78	18.04	18.40	19.13	19.48	20.92
8H	4H	20.45	20.85	21.52	21.92	23.35	17.73	18.13	18.80	19.20	20.63
	6H	20.88	21.21	21.97	22.32	23.75	18.27	18.60	19.36	19.71	21.14
	8H	21.03	21.32	22.13	22.42	23.87	18.46	18.75	19.56	19.84	21.29
	12H	21.12	21.37	22.22	22.46	23.95	18.53	18.78	19.63	19.87	21.36
12H	4H	20.40	20.77	21.49	21.85	23.29	17.73	18.09	18.82	19.18	20.61
	6H	20.87	21.16	21.96	22.25	23.70	18.32	18.61	19.42	19.71	21.16
	8H	21.03	21.29	22.14	22.38	23.87	18.53	18.78	19.63	19.87	21.36