

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: P854934

Luminaire Tested: SQ2-PP3-050U-075D-830-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854934
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-075D-830-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

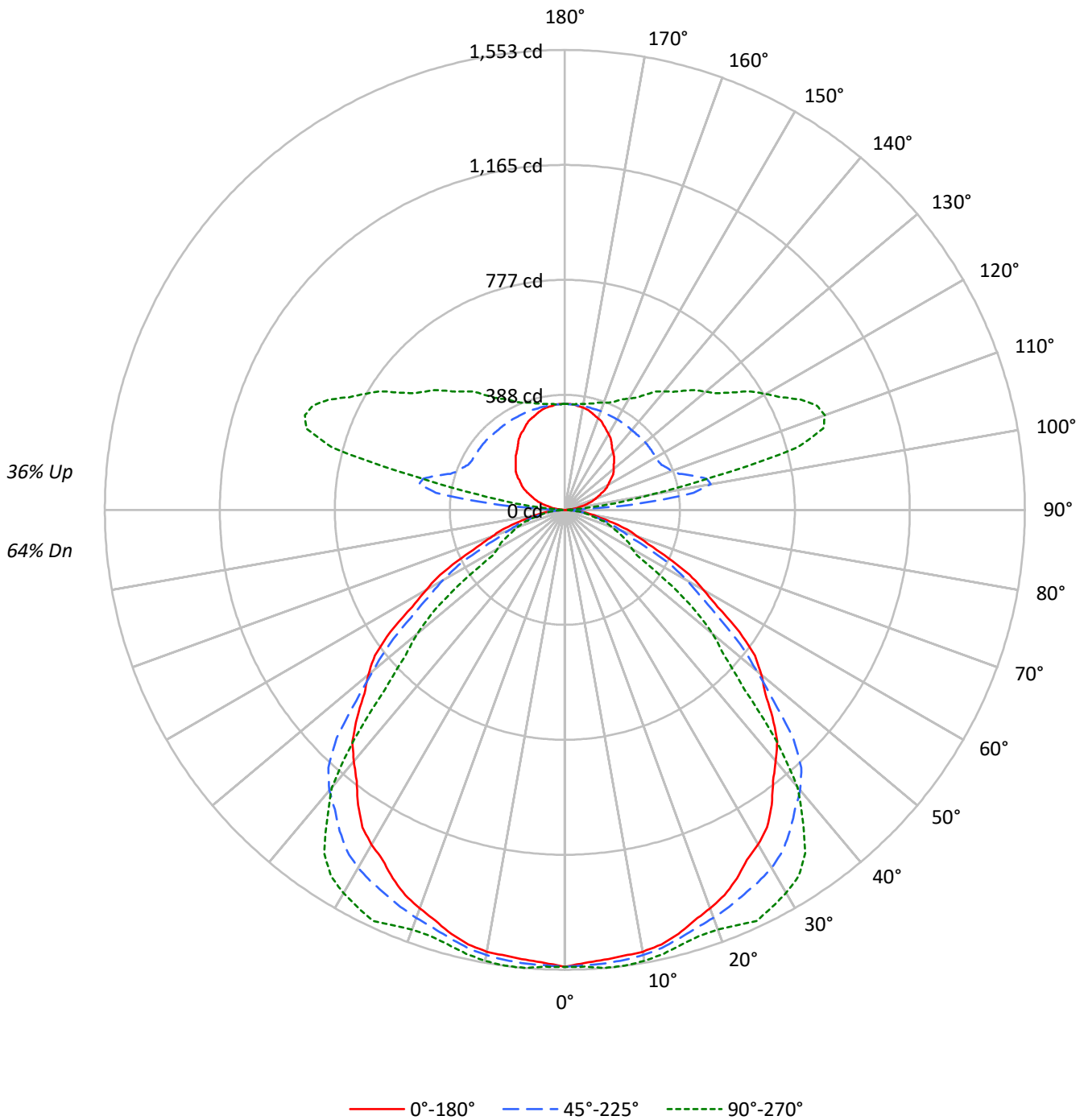
Lumens per Lamp: N/A
Luminaire Lumens: 6108.6 lumens
Efficiency: N/A
Efficacy: 147.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 41.5
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	0	
RCR																						
0	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69	64				
1	102	97	94	90	95	92	88	86	81	78	76	71	69	68	62	61	59	55				
2	93	86	80	75	87	81	76	71	72	68	64	63	60	57	55	53	51	47				
3	85	76	69	63	80	72	65	60	64	59	55	56	52	49	49	47	44	41				
4	78	68	60	54	73	64	57	52	57	51	47	50	46	43	44	41	38	35				
5	72	61	52	47	67	57	50	45	51	45	41	46	41	37	40	37	34	31				
6	67	54	46	41	62	52	44	39	46	40	36	41	37	33	37	33	30	27				
7	62	49	41	36	58	47	40	34	42	36	32	38	33	29	33	30	27	24				
8	57	45	37	32	54	43	36	31	38	33	28	34	30	26	31	27	24	22				
9	53	41	34	29	50	39	32	28	35	30	26	32	27	24	28	24	22	20				
10	50	38	31	26	47	36	29	25	33	27	23	29	25	21	26	22	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24913	24913	24913
5°	24716	24929	25165
10°	24843	25030	25351
15°	24782	25028	25409
20°	24606	25194	25923
25°	24467	25513	27285
30°	24328	26028	27854
35°	23984	26104	27906
40°	23343	26059	25781
45°	22644	24877	19626
50°	21755	21223	16347
55°	20248	17861	11752
60°	17434	15326	8428
65°	14705	11840	8290
70°	12246	9319	7931
75°	10374	8041	7430
80°	8796	6983	6676
85°	6947	5743	3631

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 24877 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.9	2.4
10°-20°	425.2	7.0
20°-30°	666.1	10.9
30°-40°	821.8	13.5
40°-50°	773.7	12.7
50°-60°	547.8	9.0
60°-70°	312.1	5.1
70°-80°	154.4	2.5
80°-90°	38.2	0.6
90°-100°	142.5	2.3
100°-110°	452.1	7.4
110°-120°	443.3	7.3
120°-130°	360.7	5.9
130°-140°	294.1	4.8
140°-150°	229.3	3.8
150°-160°	165.2	2.7
160°-170°	100.9	1.7
170°-180°	34.1	0.6
0°-30°	1238.3	20.3
0°-40°	2060.0	33.7
0°-60°	3381.5	55.4
0°-90°	3886.3	63.6
90°-120°	1037.9	17.0
90°-150°	1922.1	31.5
90°-180°	2222.0	36.4
0°-180°	6108.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1543	1543	1543	1543	1543	
5°	1525	1552	1538	1542	1553	145
15°	1483	1503	1497	1512	1520	418
25°	1373	1408	1432	1490	1532	633
35°	1217	1250	1324	1400	1416	759
45°	992	1067	1090	923	860	763
55°	719	762	634	478	418	635
65°	385	406	310	219	217	387
75°	166	184	129	121	119	180
85°	38	34	31	24	20	44
90°	0	1	3	3	3	2
95°	19	58	259	96	62	22
105°	79	111	446	849	814	83
115°	141	167	360	748	880	139
125°	195	218	354	586	691	173
135°	235	258	352	504	568	182
145°	275	296	352	435	474	172
155°	313	324	353	389	404	144
165°	341	344	354	368	371	96
175°	357	356	357	359	358	34
180°	358	358	358	358	358	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1543.0	1543.0	1543.0	1543.0	1543.0
2.5°	1531.2	1552.9	1539.0	1541.7	1544.2
5°	1525.0	1552.1	1538.1	1541.6	1552.7
7.5°	1519.1	1546.9	1533.2	1539.0	1552.7
10°	1515.3	1539.1	1526.7	1535.1	1546.3
12.5°	1503.5	1526.1	1514.9	1525.9	1535.8
15°	1482.6	1503.3	1497.3	1512.1	1520.1
17.5°	1454.2	1479.4	1479.3	1500.5	1508.7
20°	1432.1	1462.4	1466.3	1492.8	1508.7
22.5°	1408.6	1443.9	1450.6	1490.4	1517.9
25°	1373.4	1408.4	1432.1	1490.1	1531.6
27.5°	1332.2	1366.9	1415.8	1480.8	1513.6
30°	1304.9	1338.3	1396.1	1463.7	1494.0
32.5°	1271.0	1305.7	1367.5	1440.2	1467.9
35°	1216.8	1250.3	1324.4	1399.8	1415.8
37.5°	1154.5	1192.4	1275.5	1317.5	1318.6
40°	1107.5	1156.9	1236.4	1244.0	1223.2
42.5°	1061.8	1125.3	1181.5	1147.2	1055.0
45°	991.7	1066.6	1089.5	923.4	859.5
47.5°	917.0	991.0	954.5	774.4	730.4
50°	866.1	936.3	844.9	692.3	650.8
52.5°	808.6	871.2	747.0	613.5	550.3
55°	719.3	762.4	634.5	478.1	417.5
57.5°	611.7	642.0	542.5	358.9	291.0
60°	539.9	563.9	474.6	294.4	261.0
62.5°	474.6	496.0	404.2	255.8	244.0
65°	384.9	405.7	309.9	218.6	217.0
67.5°	306.3	328.9	237.8	190.7	188.9
70°	259.4	283.2	197.4	171.2	168.0
72.5°	220.1	242.9	167.3	150.4	148.5
75°	166.3	184.0	128.9	120.6	119.1
77.5°	120.8	131.8	95.9	91.6	90.0
80°	94.6	99.4	75.1	73.4	71.8
82.5°	71.1	69.5	56.8	55.1	52.2
85°	37.5	34.4	31.0	24.3	19.6
87.5°	11.8	12.0	5.9	4.6	4.6
90°	0.0	1.1	3.4	3.4	3.4
92.5°	6.3	25.0	79.9	26.6	18.7
95°	19.1	57.7	258.8	96.0	61.8
97.5°	35.6	74.7	438.5	274.0	168.1
100°	47.3	84.7	499.6	455.5	296.0
102.5°	59.9	95.5	488.9	669.0	512.1
105°	78.8	110.7	445.7	848.9	813.6
107.5°	97.7	127.2	404.4	867.7	915.1
110°	110.2	138.8	383.7	846.1	934.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	122.9	149.7	372.1	808.7	920.6
115°	140.7	167.1	360.1	748.0	880.1
117.5°	158.0	183.1	355.4	689.5	822.7
120°	168.8	193.0	354.5	653.4	782.2
122.5°	179.7	203.0	354.5	624.3	744.3
125°	194.7	217.8	354.5	586.5	690.9
127.5°	207.9	230.2	354.5	557.1	646.2
130°	216.1	239.1	354.5	539.8	620.0
132.5°	224.2	247.3	353.6	526.1	598.4
135°	235.2	258.4	352.2	504.5	568.4
137.5°	246.0	270.2	352.0	483.9	540.9
140°	253.3	277.5	351.1	469.3	521.0
142.5°	262.2	285.5	352.0	454.9	503.0
145°	274.6	295.6	352.2	435.3	473.7
147.5°	287.0	304.8	352.4	418.0	449.4
150°	296.0	310.2	353.3	407.9	433.3
152.5°	303.1	315.7	353.3	399.8	420.7
155°	312.8	323.8	353.3	388.6	404.0
157.5°	323.3	330.7	354.5	381.7	392.3
160°	328.6	335.2	354.5	377.2	386.0
162.5°	334.0	338.9	354.5	373.6	379.7
165°	341.0	344.3	354.5	368.0	371.4
167.5°	347.6	348.4	355.6	364.3	367.1
170°	351.1	351.1	355.6	362.4	363.5
172.5°	352.9	353.8	355.6	360.6	360.8
175°	356.7	355.7	356.7	359.0	357.8
177.5°	357.8	356.9	356.9	358.8	356.9
180°	357.8	357.8	357.8	357.8	357.8



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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	19.90	20.85	20.74	21.71	22.77	16.29	17.25	17.13	18.10	19.17
	3H	21.00	21.85	21.85	22.72	23.81	17.41	18.26	18.26	19.12	20.22
	4H	21.35	22.15	22.22	23.02	24.13	17.87	18.68	18.74	19.55	20.65
	6H	21.57	22.31	22.45	23.19	24.30	18.22	18.96	19.10	19.84	20.96
	8H	21.62	22.32	22.51	23.22	24.34	18.31	19.02	19.20	19.91	21.03
	12H	21.64	22.31	22.53	23.20	24.34	18.33	19.00	19.22	19.89	21.03
4H	2H	20.02	20.82	20.89	21.69	22.80	17.02	17.82	17.89	18.69	19.80
	3H	21.34	22.00	22.22	22.91	24.02	18.28	18.94	19.16	19.85	20.97
	4H	21.81	22.42	22.71	23.32	24.46	18.84	19.44	19.73	20.34	21.49
	6H	22.16	22.68	23.07	23.60	24.75	19.28	19.80	20.19	20.73	21.88
	8H	22.25	22.74	23.17	23.66	24.82	19.41	19.89	20.32	20.81	21.97
	12H	22.29	22.73	23.22	23.67	24.83	19.44	19.88	20.37	20.81	21.98
8H	4H	21.84	22.33	22.75	23.24	24.40	19.12	19.60	20.03	20.52	21.68
	6H	22.27	22.68	23.21	23.64	24.80	19.67	20.07	20.61	21.03	22.19
	8H	22.43	22.79	23.38	23.74	24.92	19.85	20.21	20.80	21.16	22.34
	12H	22.52	22.84	23.47	23.78	25.01	19.93	20.25	20.88	21.19	22.42
12H	4H	21.80	22.24	22.73	23.18	24.34	19.13	19.57	20.06	20.50	21.67
	6H	22.26	22.62	23.21	23.57	24.75	19.72	20.08	20.67	21.03	22.21
	8H	22.44	22.75	23.39	23.70	24.92	19.93	20.25	20.88	21.19	22.42