

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: P854938

Luminaire Tested: SQ2-PP3-025U-075D-830-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854938
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-025U-075D-830-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

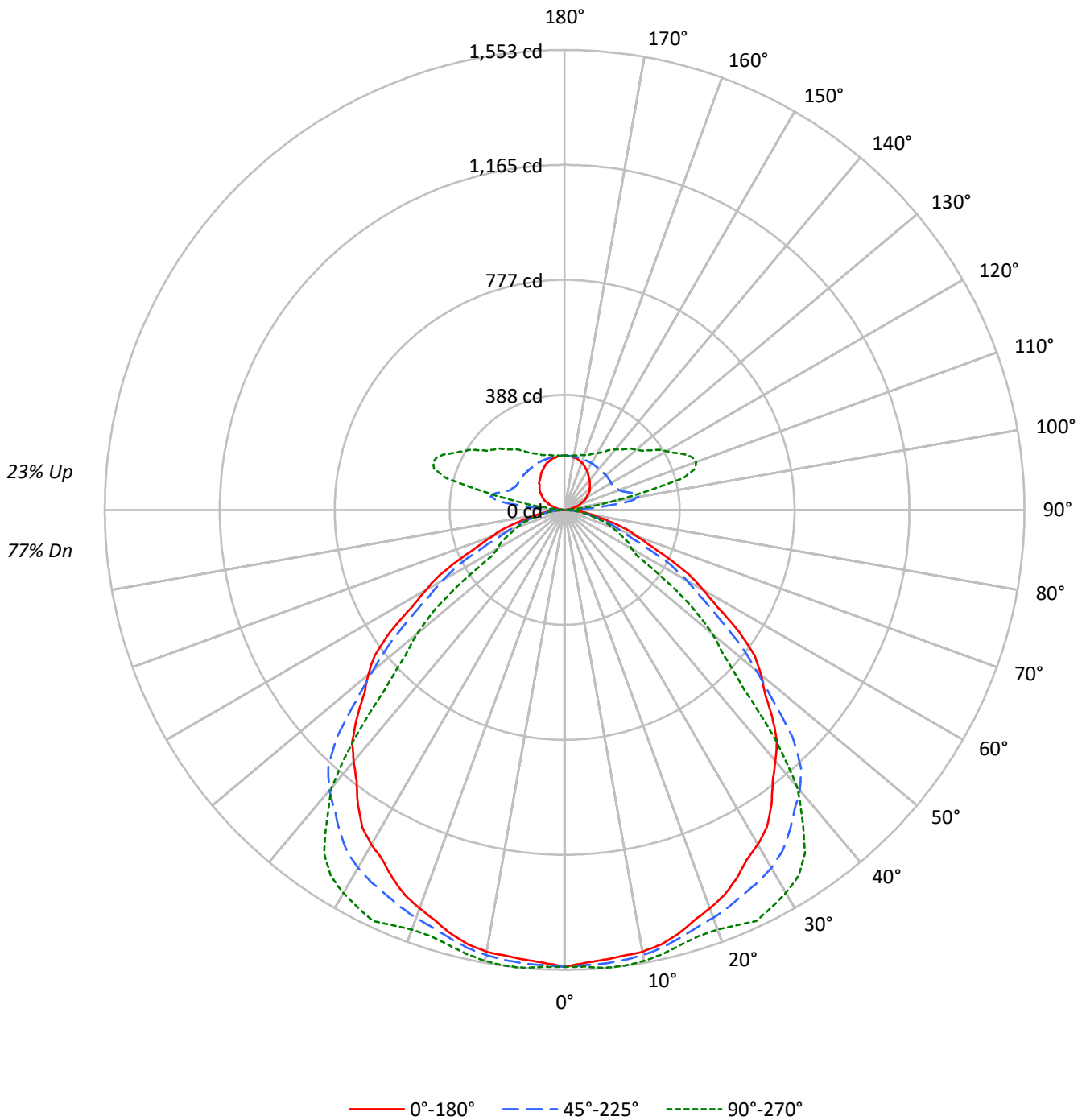
Lumens per Lamp: N/A
Luminaire Lumens: 5023.2 lumens
Efficiency: N/A
Efficacy: 147.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 34.1
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	114	114	114	114	108	108	108	108	99	99	99	90	90	90	81	81	81	77			
1	105	101	97	94	100	96	93	90	88	85	83	80	78	77	73	72	70	67			
2	96	89	83	78	91	85	80	75	78	74	70	71	68	65	65	63	60	57			
3	88	79	71	66	84	76	69	64	69	64	60	64	60	56	59	55	52	49			
4	81	70	62	56	77	67	60	55	62	56	52	57	52	49	53	49	46	43			
5	75	63	55	49	71	61	53	47	56	50	45	52	47	42	48	43	40	38			
6	69	57	49	43	66	55	47	42	51	44	40	47	42	37	43	39	35	33			
7	64	52	43	38	61	50	42	37	46	40	35	43	37	33	40	35	32	29			
8	60	47	39	34	57	45	38	33	42	36	31	39	34	30	37	32	28	26			
9	56	43	35	30	53	42	34	30	39	33	28	36	31	27	34	29	26	24			
10	52	40	32	27	50	38	31	27	36	30	26	34	28	25	31	27	23	22			

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	2.9
10°-20°	425.2	8.5
20°-30°	666.1	13.3
30°-40°	821.8	16.4
40°-50°	773.7	15.4
50°-60°	547.8	10.9
60°-70°	312.1	6.2
70°-80°	154.4	3.1
80°-90°	38.2	0.8
90°-100°	74.1	1.5
100°-110°	230.6	4.6
110°-120°	225.6	4.5
120°-130°	184.1	3.7
130°-140°	150.6	3.0
140°-150°	117.6	2.3
150°-160°	84.8	1.7
160°-170°	51.9	1.0
170°-180°	17.5	0.3
0°-30°	1238.3	24.7
0°-40°	2060.0	41.0
0°-60°	3381.5	67.3
0°-90°	3886.3	77.4
90°-120°	530.3	10.6
90°-150°	982.7	19.6
90°-180°	1137.0	22.6
0°-180°	5023.2	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°	10	30	136	50	33	12
105°	40	57	227	433	414	43
115°	72	85	184	380	445	71
125°	100	111	182	299	351	89
135°	120	133	181	258	290	93
145°	140	152	181	223	243	88
155°	161	166	182	200	207	74
165°	176	178	183	189	191	50
175°	183	183	183	184	183	17
180°	183	183	183	183	183	



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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°	3.6	12.6	43.0	14.1	11.4
95°	10.1	29.8	136.0	50.2	32.6
97.5°	18.4	38.9	225.2	140.2	88.3
100°	24.8	43.4	253.9	237.5	158.4
102.5°	31.0	48.8	248.6	339.3	266.4
105°	40.5	57.0	227.0	433.4	413.6
107.5°	49.9	65.2	206.3	440.6	462.3
110°	56.2	71.6	195.5	430.2	473.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	62.5	77.0	190.2	411.7	465.9
115°	71.9	85.1	184.3	380.2	445.0
117.5°	81.2	93.3	181.8	350.2	416.5
120°	86.5	98.6	180.9	333.0	396.7
122.5°	91.9	104.0	181.8	318.5	377.0
125°	100.1	111.0	182.0	298.9	350.6
127.5°	106.5	117.7	182.0	284.5	328.3
130°	110.1	122.2	182.0	276.2	315.8
132.5°	114.6	126.7	181.1	269.0	305.8
135°	120.3	133.4	180.9	258.1	289.9
137.5°	126.7	138.8	180.9	247.3	276.2
140°	130.4	142.5	180.9	239.9	266.4
142.5°	134.9	146.1	180.9	232.7	256.4
145°	140.4	151.5	180.9	223.0	242.7
147.5°	147.2	156.7	182.0	213.9	229.5
150°	151.7	159.4	182.0	209.3	221.4
152.5°	155.4	162.1	182.0	204.8	215.0
155°	160.7	166.2	182.0	200.2	206.8
157.5°	166.1	170.3	182.0	196.1	200.2
160°	169.7	173.0	182.0	193.3	196.6
162.5°	172.4	174.8	182.0	191.5	194.0
165°	176.4	177.5	183.2	188.8	191.1
167.5°	178.9	179.1	182.0	187.2	188.4
170°	179.8	180.9	182.0	185.4	186.6
172.5°	181.6	181.8	182.9	184.5	184.7
175°	183.2	183.2	183.2	184.3	183.2
177.5°	183.2	183.2	183.2	183.2	183.2
180°	183.2	183.2	183.2	183.2	183.2



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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	20.97	22.09	21.65	22.79	23.61	17.36	18.48	18.05	19.18	20.00
	3H	22.08	23.08	22.78	23.79	24.65	18.49	19.49	19.19	20.20	21.05
	4H	22.44	23.38	23.16	24.10	24.97	18.96	19.90	19.68	20.62	21.49
	6H	22.67	23.53	23.40	24.26	25.14	19.32	20.19	20.06	20.92	21.80
	8H	22.72	23.54	23.47	24.29	25.18	19.41	20.24	20.16	20.99	21.87
	12H	22.74	23.53	23.49	24.27	25.18	19.44	20.22	20.19	20.97	21.88
4H	2H	21.11	22.05	21.83	22.77	23.64	18.11	19.05	18.83	19.77	20.64
	3H	22.44	23.22	23.18	23.98	24.86	19.38	20.16	20.12	20.92	21.80
	4H	22.93	23.63	23.68	24.39	25.30	19.95	20.65	20.70	21.41	22.33
	6H	23.28	23.88	24.05	24.67	25.59	20.40	21.01	21.17	21.79	22.72
	8H	23.37	23.94	24.15	24.72	25.66	20.53	21.10	21.30	21.88	22.81
	12H	23.42	23.93	24.22	24.73	25.67	20.57	21.08	21.36	21.88	22.82
8H	4H	22.96	23.53	23.74	24.31	25.24	20.24	20.81	21.02	21.59	22.52
	6H	23.40	23.87	24.21	24.69	25.63	20.79	21.26	21.60	22.09	23.02
	8H	23.56	23.98	24.37	24.80	25.75	20.98	21.40	21.80	22.22	23.17
	12H	23.66	24.03	24.47	24.84	25.85	21.07	21.43	21.88	22.25	23.26
12H	4H	22.93	23.44	23.73	24.24	25.18	20.26	20.77	21.05	21.57	22.51
	6H	23.39	23.81	24.21	24.63	25.58	20.85	21.27	21.66	22.09	23.04
	8H	23.57	23.94	24.39	24.75	25.76	21.07	21.44	21.88	22.25	23.26