

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: P854441

Luminaire Tested: SQ2-WBN-075U-075D-940-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854441  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G3-2308-130-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBN-075U-075D-940-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

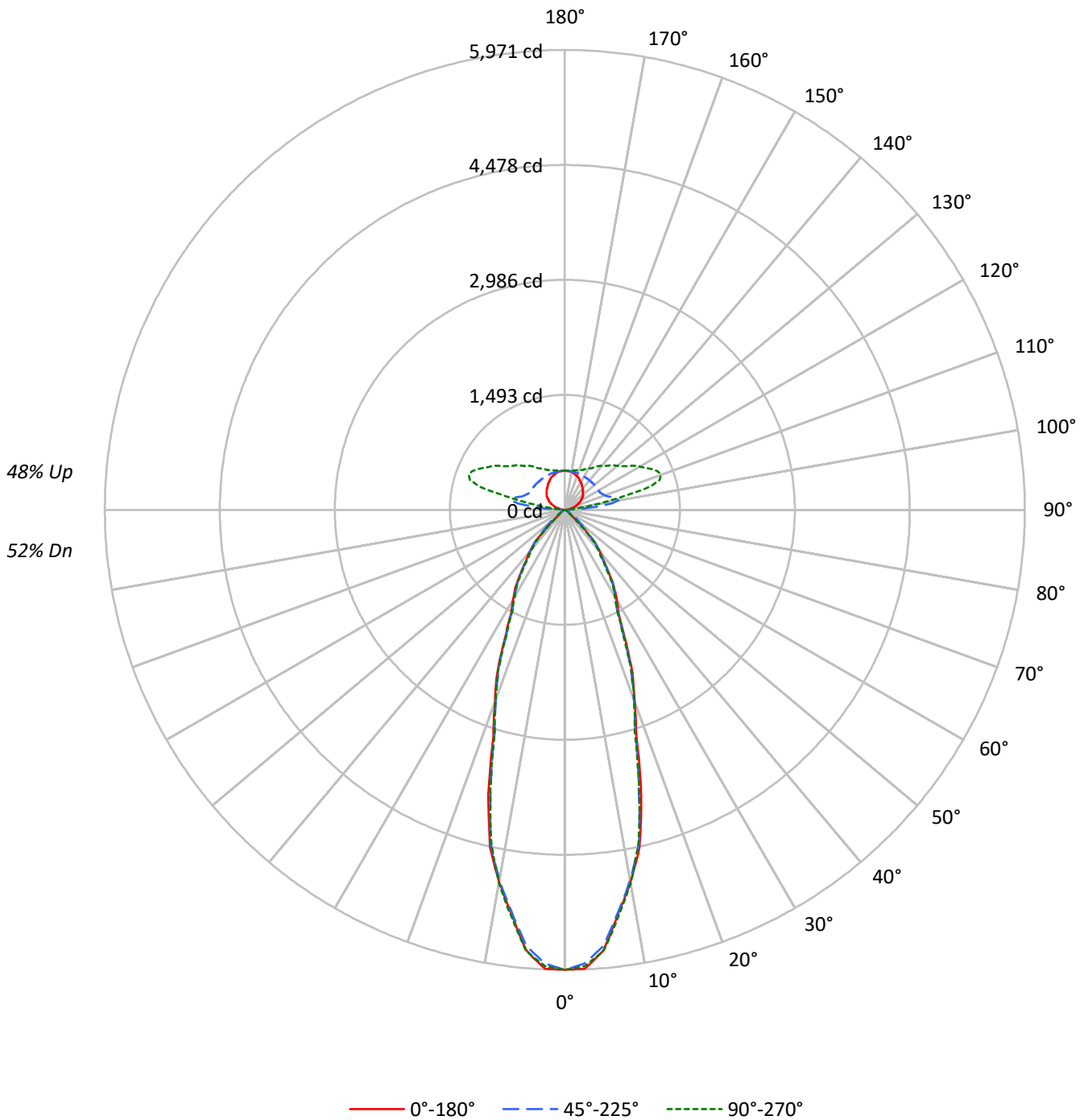
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6616.2 lumens  
Efficiency: N/A  
Efficacy: 130.0 lumens/watt  
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 50.9  
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

TEST NUMBER: P854441

CATALOG NUMBER: SQ2-WBN-075U-075D-940-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P854441

CATALOG NUMBER: SQ2-WBN-075U-075D-940-UNV-STD-W-4

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52		
1	101	97	94	91	93	90	88	86	78	76	74	66	65	64	55	54	54	49		
2	94	88	83	79	87	82	78	75	71	68	66	61	59	58	52	51	50	45		
3	88	80	74	70	82	75	70	66	66	62	59	57	55	52	49	47	46	42		
4	82	73	67	62	76	69	64	59	61	57	54	53	50	48	46	44	43	39		
5	77	67	61	56	72	64	58	54	56	52	49	50	47	44	44	41	40	37		
6	72	62	56	51	67	59	53	49	53	48	45	47	43	41	41	39	37	34		
7	68	58	51	47	64	55	49	45	49	45	41	44	41	38	39	37	35	32		
8	64	54	47	43	60	51	45	41	46	42	38	41	38	36	37	34	33	31		
9	61	50	44	40	57	48	42	38	43	39	36	39	36	33	35	33	31	29		
10	57	47	41	37	54	45	39	36	41	37	34	37	34	31	33	31	29	27		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	96407	96407	96407
5°	93085	92158	93187
10°	80458	80076	80650
15°	64025	62006	62253
20°	45483	44881	45209
25°	32721	32079	31853
30°	25001	24330	24270
35°	19626	19291	18790
40°	14870	14667	13953
45°	8321	9942	7426
50°	2926	6119	2580
55°	1790	3339	1700
60°	1369	1744	1266
65°	1253	1295	1173
70°	1199	1199	1100
75°	1123	1123	1054
80°	986	986	986
85°	982	778	778

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 9942 cd/sqm



TEST NUMBER: P854441

CATALOG NUMBER: SQ2-WBN-075U-075D-940-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	518.3	7.8
10°-20°	1030.1	15.6
20°-30°	853.1	12.9
30°-40°	613.7	9.3
40°-50°	312.6	4.7
50°-60°	81.4	1.2
60°-70°	33.8	0.5
70°-80°	18.7	0.3
80°-90°	6.1	0.1
90°-100°	192.3	2.9
100°-110°	637.5	9.6
110°-120°	632.7	9.6
120°-130°	515.4	7.8
130°-140°	418.8	6.3
140°-150°	325.3	4.9
150°-160°	234.4	3.5
160°-170°	143.5	2.2
170°-180°	48.5	0.7
0°-30°	2401.5	36.3
0°-40°	3015.2	45.6
0°-60°	3409.2	51.5
0°-90°	3467.8	52.4
90°-120°	1462.5	22.1
90°-150°	2722.0	41.1
90°-180°	3148.0	47.6
0°-180°	6616.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5971	5971	5971	5971	5971	
5°	5743	5735	5686	5768	5750	518
15°	3830	3787	3710	3736	3724	1040
25°	1837	1834	1801	1785	1788	864
35°	996	1002	979	963	953	625
45°	364	419	435	405	325	291
55°	64	74	119	69	60	62
65°	33	34	34	32	31	33
75°	18	18	18	17	17	19
85°	5	5	4	5	4	6
90°	0	1	3	4	4	1
95°	27	81	348	124	83	31
105°	112	159	638	1204	1126	118
115°	199	238	514	1070	1251	197
125°	278	309	504	840	991	247
135°	333	367	500	721	814	257
145°	386	415	499	620	679	242
155°	441	457	502	554	575	203
165°	484	489	504	524	530	137
175°	506	506	508	511	510	48
180°	508	508	508	508	508	

TEST NUMBER: P854441

CATALOG NUMBER: SQ2-WBN-075U-075D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5971.0	5971.0	5971.0	5971.0	5971.0
2.5°	5961.7	5951.7	5894.7	5941.9	5930.3
5°	5743.3	5735.0	5686.1	5768.3	5749.6
7.5°	5292.2	5299.3	5270.6	5343.3	5323.4
10°	4907.5	4926.2	4884.2	4989.6	4919.2
12.5°	4483.0	4471.0	4441.9	4458.1	4419.2
15°	3830.3	3786.8	3709.5	3735.7	3724.3
17.5°	3085.2	3102.0	3035.0	3032.1	3019.3
20°	2647.1	2652.3	2612.1	2633.3	2631.2
22.5°	2294.6	2295.6	2244.3	2275.3	2256.6
25°	1836.7	1833.6	1800.7	1784.9	1788.0
27.5°	1506.3	1493.4	1468.5	1479.0	1471.3
30°	1341.0	1330.7	1305.0	1311.1	1301.8
32.5°	1192.7	1193.1	1166.9	1163.8	1156.9
35°	995.7	1001.9	978.7	962.6	953.3
37.5°	819.9	825.7	806.1	782.6	774.7
40°	705.5	709.6	695.9	668.2	662.0
42.5°	580.9	598.3	584.9	558.8	545.1
45°	364.4	419.3	435.4	404.9	325.2
47.5°	184.3	260.3	310.6	229.3	151.0
50°	116.5	169.3	243.6	138.0	102.7
52.5°	89.4	116.5	194.5	101.9	82.4
55°	63.6	73.9	118.6	68.7	60.4
57.5°	49.1	54.9	71.0	52.0	46.8
60°	42.4	46.5	54.0	44.4	39.2
62.5°	38.1	40.6	43.9	37.7	35.8
65°	32.8	33.9	33.9	31.8	30.7
67.5°	28.0	29.0	28.8	27.7	26.7
70°	25.4	26.5	25.4	24.3	23.3
72.5°	22.0	23.1	22.0	21.8	20.8
75°	18.0	18.0	18.0	16.9	16.9
77.5°	14.0	14.2	13.1	13.1	12.3
80°	10.6	11.6	10.6	10.6	10.6
82.5°	8.9	9.1	8.1	8.1	8.1
85°	5.3	5.3	4.2	5.3	4.2
87.5°	1.7	1.9	2.3	2.5	2.5
90°	0.0	1.0	3.2	4.2	4.2
92.5°	8.4	32.5	95.8	31.1	26.1
95°	27.4	80.9	348.5	124.3	83.2
97.5°	50.3	106.3	608.3	354.8	224.2
100°	66.3	119.9	704.3	604.9	401.1
102.5°	84.0	135.9	698.4	924.5	698.4
105°	111.6	159.0	638.0	1203.7	1125.5
107.5°	139.8	182.0	580.1	1232.1	1291.6
110°	155.8	198.0	550.6	1204.0	1324.4



TEST NUMBER: P854441

CATALOG NUMBER: SQ2-WBN-075U-075D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	172.7	214.0	532.9	1154.2	1307.6
115°	199.0	238.1	513.8	1069.6	1250.7
117.5°	225.1	259.9	506.8	988.7	1178.7
120°	241.1	275.1	504.3	938.0	1122.3
122.5°	255.4	288.6	504.3	896.4	1066.7
125°	277.9	308.8	504.3	840.4	990.7
127.5°	296.5	326.7	503.0	798.0	926.5
130°	307.4	339.3	502.2	773.3	888.6
132.5°	317.5	350.3	501.3	752.8	856.6
135°	332.7	366.7	500.1	721.2	813.8
137.5°	349.1	381.8	498.8	690.6	772.3
140°	360.1	392.0	498.0	670.2	745.4
142.5°	370.2	401.3	498.8	649.8	716.8
145°	386.4	415.2	499.0	620.4	679.1
147.5°	403.9	427.9	499.2	595.4	639.1
150°	414.8	436.4	500.1	580.9	618.0
152.5°	424.9	445.7	500.9	569.0	598.6
155°	441.1	456.6	502.2	554.2	574.8
157.5°	456.9	468.9	503.5	543.8	558.4
160°	465.3	475.6	504.3	536.1	547.5
162.5°	473.8	481.6	504.3	531.0	539.9
165°	484.3	489.4	504.3	524.4	529.6
167.5°	494.0	496.7	505.4	518.5	521.1
170°	499.0	500.1	505.4	515.9	516.9
172.5°	502.4	503.4	506.2	513.4	513.6
175°	506.4	506.4	507.5	510.6	509.6
177.5°	508.5	508.5	507.7	509.3	507.7
180°	508.5	508.5	508.5	508.5	508.5

-----



TEST NUMBER: P854441

CATALOG NUMBER: SQ2-WBN-075U-075D-940-UNV-STD-W-4

**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	3.00	3.69	3.98	4.65	5.91	2.62	3.31	3.60	4.27	5.52
	3H	4.05	4.66	5.03	5.63	6.91	3.61	4.23	4.60	5.20	6.47
	4H	4.47	5.05	5.47	6.02	7.31	4.03	4.61	5.03	5.59	6.87
	6H	4.78	5.31	5.79	6.29	7.59	4.36	4.90	5.37	5.88	7.17
	8H	4.88	5.38	5.90	6.38	7.67	4.46	4.97	5.48	5.96	7.25
	12H	4.95	5.42	5.96	6.41	7.72	4.51	4.99	5.53	5.98	7.29
4H	2H	3.22	3.80	4.22	4.77	6.06	2.89	3.47	3.90	4.45	5.73
	3H	4.51	4.99	5.52	6.00	7.29	4.13	4.61	5.14	5.61	6.91
	4H	5.07	5.51	6.09	6.51	7.83	4.68	5.12	5.70	6.12	7.44
	6H	5.53	5.90	6.55	6.92	8.24	5.14	5.52	6.17	6.54	7.86
	8H	5.68	6.03	6.71	7.04	8.37	5.30	5.65	6.33	6.66	7.99
	12H	5.79	6.10	6.83	7.13	8.46	5.38	5.69	6.43	6.72	8.06
8H	4H	5.22	5.56	6.24	6.58	7.91	4.87	5.21	5.89	6.23	7.55
	6H	5.80	6.08	6.85	7.14	8.47	5.45	5.73	6.50	6.79	8.12
	8H	6.05	6.29	7.10	7.34	8.68	5.69	5.94	6.75	6.98	8.33
	12H	6.24	6.45	7.29	7.49	8.88	5.86	6.08	6.92	7.11	8.51
12H	4H	5.19	5.50	6.23	6.53	7.86	4.85	5.16	5.89	6.19	7.52
	6H	5.82	6.07	6.88	7.11	8.46	5.49	5.73	6.54	6.78	8.12
	8H	6.10	6.31	7.15	7.35	8.74	5.76	5.97	6.81	7.01	8.40