

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: P854439

Luminaire Tested: SQ2-WBN-075U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854439  
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-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

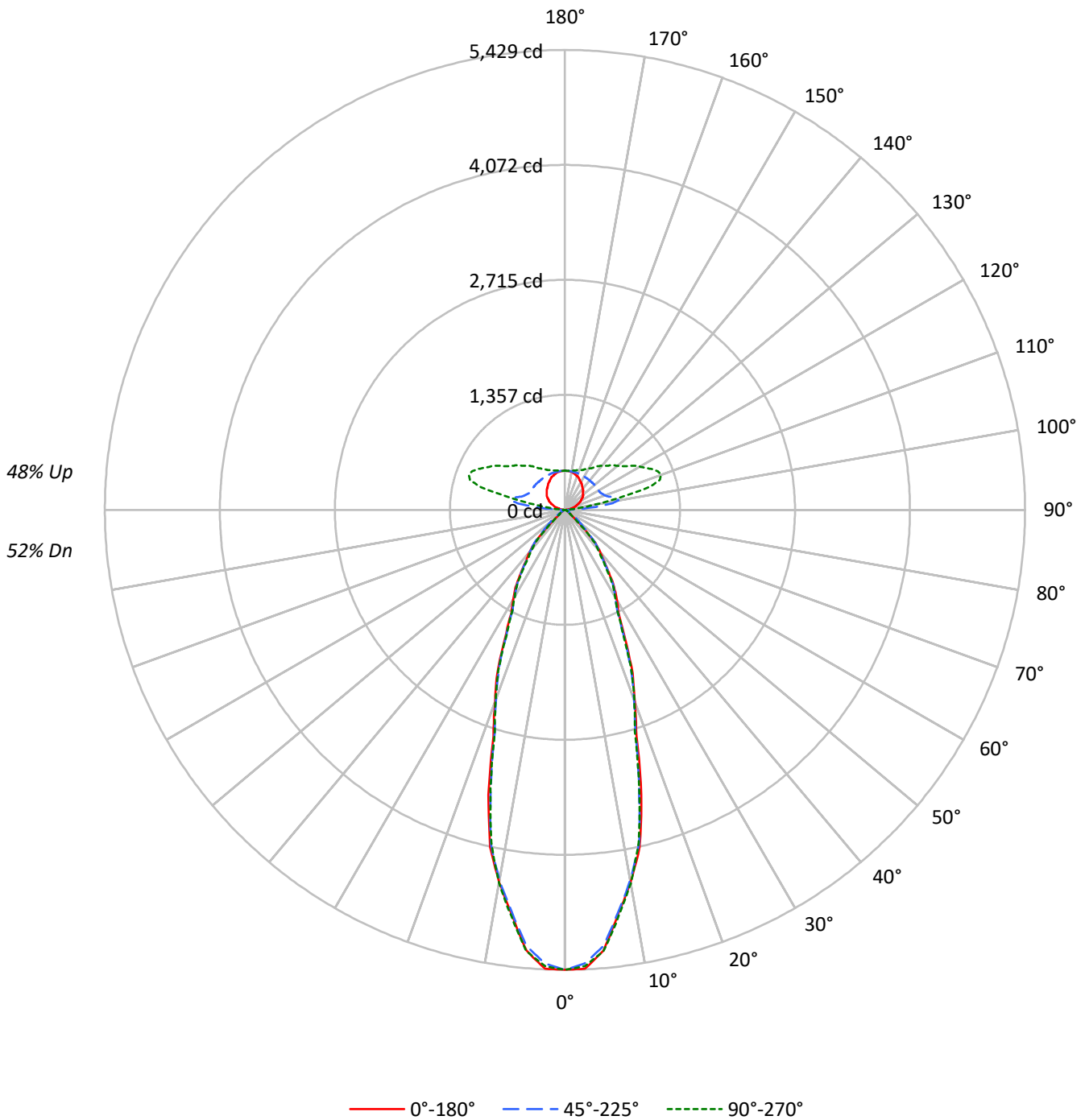
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6015.9 lumens  
Efficiency: N/A  
Efficacy: 118.2 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: P854439

CATALOG NUMBER: SQ2-WBN-075U-075D-930-UNV-STD-W-4

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

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

	0°	45°	90°
0°	87661	87661	87661
5°	84639	83796	84733
10°	73159	72811	73333
15°	58215	56379	56605
20°	41355	40809	41108
25°	29753	29170	28964
30°	22732	22123	22068
35°	17846	17540	17085
40°	13521	13337	12688
45°	7565	9040	6752
50°	2660	5564	2346
55°	1627	3037	1545
60°	1243	1586	1150
65°	1142	1177	1066
70°	1090	1090	1001
75°	1023	1023	961
80°	893	893	893
85°	889	722	722

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 9040 cd/sqm



TEST NUMBER: P854439

CATALOG NUMBER: SQ2-WBN-075U-075D-930-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	471.3	7.8
10°-20°	936.7	15.6
20°-30°	775.7	12.9
30°-40°	558.0	9.3
40°-50°	284.3	4.7
50°-60°	74.0	1.2
60°-70°	30.7	0.5
70°-80°	17.0	0.3
80°-90°	5.5	0.1
90°-100°	174.9	2.9
100°-110°	579.7	9.6
110°-120°	575.3	9.6
120°-130°	468.6	7.8
130°-140°	380.8	6.3
140°-150°	295.8	4.9
150°-160°	213.1	3.5
160°-170°	130.5	2.2
170°-180°	44.1	0.7
0°-30°	2183.6	36.3
0°-40°	2741.6	45.6
0°-60°	3099.9	51.5
0°-90°	3153.1	52.4
90°-120°	1329.9	22.1
90°-150°	2475.1	41.1
90°-180°	2863.0	47.6
0°-180°	6015.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5429	5429	5429	5429	5429	
5°	5222	5215	5170	5245	5228	471
15°	3483	3443	3373	3397	3386	945
25°	1670	1667	1637	1623	1626	786
35°	905	911	890	875	867	568
45°	331	381	396	368	296	265
55°	58	67	108	62	55	57
65°	30	31	31	29	28	30
75°	16	16	16	15	15	17
85°	5	5	4	5	4	5
90°	0	1	3	4	4	1
95°	25	74	317	113	76	28
105°	102	144	580	1094	1023	107
115°	181	216	467	972	1137	179
125°	253	281	458	764	901	225
135°	302	333	455	656	740	234
145°	351	378	454	564	618	220
155°	401	415	457	504	523	185
165°	440	445	458	477	482	124
175°	460	460	461	464	463	44
180°	462	462	462	462	462	



TEST NUMBER: P854439

CATALOG NUMBER: SQ2-WBN-075U-075D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5429.3	5429.3	5429.3	5429.3	5429.3
2.5°	5420.8	5411.8	5359.9	5402.8	5392.3
5°	5222.2	5214.7	5170.2	5244.9	5228.0
7.5°	4812.1	4818.5	4792.4	4858.5	4840.4
10°	4462.3	4479.2	4441.1	4536.9	4472.9
12.5°	4076.2	4065.3	4038.9	4053.7	4018.3
15°	3482.7	3443.2	3372.9	3396.8	3386.4
17.5°	2805.3	2820.5	2759.6	2757.0	2745.4
20°	2406.9	2411.6	2375.1	2394.3	2392.5
22.5°	2086.4	2087.3	2040.7	2068.8	2051.9
25°	1670.1	1667.3	1637.4	1623.0	1625.8
27.5°	1369.6	1357.9	1335.3	1344.8	1337.8
30°	1219.3	1209.9	1186.6	1192.2	1183.7
32.5°	1084.5	1084.9	1061.0	1058.2	1052.0
35°	905.4	911.0	889.9	875.3	866.8
37.5°	745.5	750.8	733.0	711.6	704.4
40°	641.5	645.2	632.8	607.6	602.0
42.5°	528.2	544.0	531.9	508.1	495.6
45°	331.3	381.2	395.9	368.2	295.7
47.5°	167.6	236.7	282.4	208.5	137.3
50°	105.9	154.0	221.5	125.4	93.4
52.5°	81.3	106.0	176.8	92.6	74.9
55°	57.8	67.2	107.9	62.4	54.9
57.5°	44.7	50.0	64.5	47.3	42.6
60°	38.5	42.3	49.1	40.3	35.6
62.5°	34.7	36.9	39.9	34.2	32.6
65°	29.9	30.8	30.8	28.9	27.9
67.5°	25.4	26.4	26.2	25.2	24.3
70°	23.1	24.1	23.1	22.1	21.2
72.5°	20.0	21.0	20.0	19.8	18.9
75°	16.4	16.4	16.4	15.4	15.4
77.5°	12.7	12.9	11.9	11.9	11.2
80°	9.6	10.6	9.6	9.6	9.6
82.5°	8.1	8.3	7.3	7.3	7.3
85°	4.8	4.8	3.9	4.8	3.9
87.5°	1.5	1.7	2.1	2.3	2.3
90°	0.0	0.9	2.9	3.8	3.8
92.5°	7.7	29.6	87.1	28.2	23.7
95°	24.9	73.6	316.9	113.1	75.6
97.5°	45.8	96.7	553.1	322.6	203.9
100°	60.3	109.0	640.4	550.1	364.7
102.5°	76.4	123.6	635.1	840.6	635.1
105°	101.5	144.5	580.1	1094.5	1023.3
107.5°	127.1	165.5	527.5	1120.3	1174.4
110°	141.7	180.1	500.7	1094.8	1204.3



TEST NUMBER: P854439

CATALOG NUMBER: SQ2-WBN-075U-075D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	157.0	194.6	484.6	1049.5	1189.0
115°	180.9	216.5	467.2	972.5	1137.3
117.5°	204.7	236.3	460.8	899.0	1071.8
120°	219.2	250.1	458.5	852.9	1020.5
122.5°	232.2	262.4	458.5	815.1	969.9
125°	252.7	280.8	458.5	764.2	900.8
127.5°	269.6	297.1	457.4	725.6	842.4
130°	279.5	308.5	456.6	703.1	808.0
132.5°	288.7	318.5	455.9	684.5	778.9
135°	302.5	333.4	454.7	655.7	740.0
137.5°	317.4	347.2	453.6	628.0	702.3
140°	327.4	356.4	452.8	609.4	677.8
142.5°	336.6	364.9	453.6	590.9	651.7
145°	351.3	377.5	453.8	564.1	617.5
147.5°	367.2	389.1	453.9	541.4	581.1
150°	377.2	396.8	454.7	528.2	561.9
152.5°	386.4	405.3	455.5	517.4	544.3
155°	401.1	415.1	456.6	504.0	522.7
157.5°	415.5	426.3	457.8	494.5	507.7
160°	423.1	432.5	458.5	487.5	497.8
162.5°	430.8	437.9	458.5	482.9	490.9
165°	440.4	445.0	458.5	476.8	481.5
167.5°	449.2	451.6	459.5	471.4	473.9
170°	453.8	454.7	459.5	469.1	470.0
172.5°	456.8	457.8	460.3	466.8	467.0
175°	460.5	460.5	461.4	464.3	463.3
177.5°	462.4	462.4	461.6	463.1	461.6
180°	462.4	462.4	462.4	462.4	462.4



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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	2.67	3.36	3.65	4.32	5.58	2.28	2.97	3.26	3.93	5.19
	3H	3.72	4.33	4.70	5.30	6.58	3.28	3.89	4.27	4.86	6.14
	4H	4.14	4.72	5.14	5.70	6.98	3.70	4.28	4.70	5.25	6.54
	6H	4.45	4.99	5.46	5.97	7.26	4.03	4.56	5.04	5.54	6.84
	8H	4.55	5.06	5.57	6.05	7.34	4.13	4.63	5.15	5.63	6.92
	12H	4.62	5.09	5.63	6.08	7.39	4.18	4.66	5.20	5.65	6.96
4H	2H	2.89	3.47	3.89	4.44	5.73	2.55	3.13	3.56	4.11	5.39
	3H	4.18	4.66	5.19	5.67	6.96	3.80	4.27	4.81	5.28	6.57
	4H	4.75	5.18	5.76	6.18	7.50	4.35	4.79	5.37	5.79	7.11
	6H	5.20	5.57	6.23	6.59	7.91	4.81	5.18	5.84	6.20	7.52
	8H	5.36	5.70	6.38	6.72	8.04	4.97	5.31	5.99	6.33	7.66
	12H	5.46	5.77	6.50	6.80	8.13	5.05	5.36	6.09	6.39	7.72
8H	4H	4.89	5.24	5.92	6.25	7.58	4.53	4.88	5.56	5.89	7.22
	6H	5.47	5.76	6.52	6.81	8.14	5.12	5.40	6.17	6.46	7.78
	8H	5.72	5.97	6.78	7.01	8.36	5.36	5.61	6.42	6.65	8.00
	12H	5.91	6.12	6.96	7.16	8.55	5.53	5.75	6.59	6.78	8.17
12H	4H	4.86	5.17	5.91	6.20	7.54	4.52	4.83	5.56	5.86	7.19
	6H	5.50	5.74	6.55	6.79	8.13	5.15	5.40	6.21	6.44	7.79
	8H	5.77	5.98	6.83	7.02	8.41	5.42	5.64	6.48	6.67	8.07