

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: P854187

Luminaire Tested: SQ2-PR1-075U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854187  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G2-2308-131-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PR1-075U-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: -

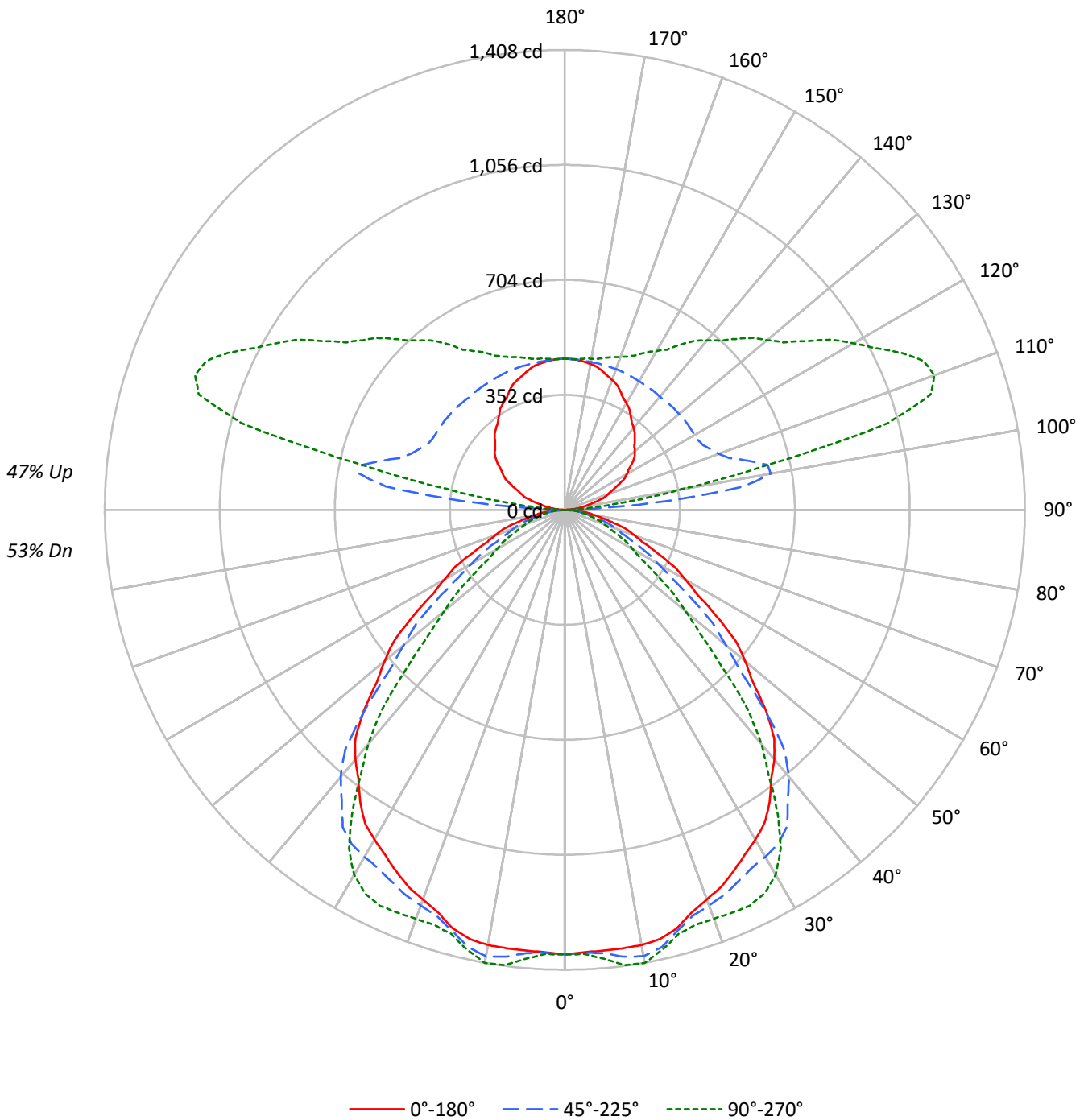
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6137.6 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.34 / 1.36  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 50  
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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53
1	99	95	91	88	92	88	85	82	76	73	71	64	63	61	53	52	51	46
2	91	84	78	73	84	78	73	69	67	63	60	57	54	52	48	46	44	40
3	83	74	67	62	77	69	63	58	60	55	51	51	48	45	43	40	38	34
4	76	66	58	53	71	62	55	50	53	48	44	46	42	39	39	36	34	30
5	70	59	51	45	65	55	48	43	48	43	38	41	37	34	35	32	30	26
6	65	53	45	40	60	50	43	38	44	38	34	38	33	30	32	29	26	23
7	60	48	40	35	56	45	38	33	40	34	30	34	30	27	29	26	23	21
8	56	44	36	31	52	41	34	30	36	31	27	31	27	24	27	24	21	19
9	52	40	33	28	48	38	31	27	33	28	24	29	25	22	25	22	19	17
10	49	37	30	25	45	35	28	24	31	25	22	27	23	20	23	20	17	15

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

	0°	45°	90°
0°	21976	21976	21976
5°	21948	22083	22352
10°	22179	22748	23089
15°	22171	22288	22474
20°	21813	22148	22886
25°	21752	22370	23828
30°	21729	22866	24056
35°	21522	23355	22397
40°	21026	22489	19711
45°	19895	19737	15586
50°	18088	16136	12095
55°	15896	13278	9413
60°	13756	10618	7750
65°	11874	8798	6785
70°	10678	7794	6024
75°	9782	6750	5540
80°	8517	5421	5421
85°	6169	4891	2575

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 21507 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.4	2.1
10°-20°	380.5	6.2
20°-30°	588.2	9.6
30°-40°	707.4	11.5
40°-50°	635.2	10.3
50°-60°	425.5	6.9
60°-70°	247.5	4.0
70°-80°	127.1	2.1
80°-90°	31.8	0.5
90°-100°	174.9	2.8
100°-110°	579.7	9.4
110°-120°	575.3	9.4
120°-130°	468.6	7.6
130°-140°	380.8	6.2
140°-150°	295.8	4.8
150°-160°	213.1	3.5
160°-170°	130.5	2.1
170°-180°	44.1	0.7
0°-30°	1100.1	17.9
0°-40°	1807.5	29.5
0°-60°	2868.3	46.7
0°-90°	3274.8	53.4
90°-120°	1329.9	21.7
90°-150°	2475.1	40.3
90°-180°	2863.0	46.6
0°-180°	6137.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1361	1361	1361	1361	1361	
5°	1354	1377	1362	1366	1379	129
15°	1326	1381	1333	1338	1344	372
25°	1221	1270	1256	1302	1338	563
35°	1092	1101	1185	1162	1136	681
45°	871	942	864	729	683	667
55°	565	586	472	364	334	507
65°	311	318	230	187	178	314
75°	157	153	108	92	89	166
85°	33	26	26	18	14	41
90°	0	1	3	4	4	2
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1361.1	1361.1	1361.1	1361.1	1361.1
2.5°	1355.6	1371.8	1356.7	1357.9	1361.1
5°	1354.2	1377.2	1362.5	1365.6	1379.1
7.5°	1353.9	1386.7	1379.7	1388.2	1406.1
10°	1352.8	1392.1	1387.5	1389.3	1408.3
12.5°	1346.1	1392.0	1370.8	1369.1	1379.4
15°	1326.4	1380.7	1333.4	1337.7	1344.5
17.5°	1291.7	1348.4	1303.4	1318.7	1332.0
20°	1269.5	1325.2	1289.0	1308.9	1332.0
22.5°	1249.6	1305.2	1275.6	1303.6	1335.3
25°	1221.0	1269.8	1255.7	1302.2	1337.5
27.5°	1191.0	1219.8	1236.5	1299.0	1323.6
30°	1165.5	1184.5	1226.5	1280.9	1290.3
32.5°	1137.7	1149.1	1213.2	1241.5	1229.3
35°	1091.9	1101.4	1184.9	1162.1	1136.3
37.5°	1037.6	1057.1	1121.4	1055.7	1026.2
40°	997.6	1030.2	1067.0	969.1	935.2
42.5°	948.8	1000.8	994.8	870.1	828.6
45°	871.3	941.9	864.4	728.8	682.6
47.5°	780.0	852.5	725.6	604.5	561.4
50°	720.1	778.4	642.4	528.9	481.5
52.5°	659.0	701.1	571.4	458.0	414.9
55°	564.7	586.4	471.7	364.2	334.4
57.5°	478.1	492.0	385.4	294.2	272.2
60°	426.0	435.4	328.8	257.7	240.0
62.5°	378.2	385.6	283.3	226.7	213.4
65°	310.8	317.6	230.3	187.1	177.6
67.5°	257.2	260.8	189.5	155.5	146.5
70°	226.2	227.5	165.1	134.4	127.6
72.5°	198.4	196.5	141.8	116.7	112.1
75°	156.8	152.7	108.2	91.5	88.8
77.5°	117.1	112.8	76.0	70.5	70.5
80°	91.6	86.1	58.3	58.3	58.3
82.5°	68.3	60.7	45.0	44.9	43.8
85°	33.3	26.5	26.4	17.9	13.9
87.5°	8.9	9.1	3.9	4.1	4.1
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



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**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	17.83	18.67	18.76	19.62	20.85	14.55	15.40	15.49	16.35	17.57
	3H	19.06	19.81	20.01	20.77	22.02	15.61	16.37	16.56	17.33	18.58
	4H	19.51	20.22	20.47	21.19	22.44	16.01	16.73	16.98	17.69	18.95
	6H	19.83	20.48	20.80	21.45	22.72	16.35	17.00	17.32	17.97	19.24
	8H	19.91	20.53	20.89	21.52	22.78	16.43	17.06	17.41	18.04	19.31
	12H	19.94	20.53	20.92	21.51	22.80	16.44	17.03	17.42	18.01	19.30
4H	2H	17.90	18.62	18.87	19.58	20.84	15.12	15.83	16.09	16.79	18.05
	3H	19.37	19.97	20.35	20.96	22.23	16.38	16.97	17.36	17.97	19.24
	4H	19.97	20.51	20.95	21.49	22.79	16.89	17.43	17.88	18.41	19.71
	6H	20.42	20.88	21.42	21.89	23.19	17.32	17.79	18.32	18.80	20.09
	8H	20.55	20.98	21.55	21.99	23.29	17.45	17.88	18.45	18.88	20.19
	12H	20.60	20.99	21.62	22.01	23.33	17.47	17.86	18.48	18.87	20.19
8H	4H	19.99	20.43	20.99	21.43	22.74	17.19	17.63	18.19	18.63	19.94
	6H	20.54	20.90	21.57	21.94	23.25	17.73	18.09	18.75	19.13	20.44
	8H	20.74	21.05	21.77	22.08	23.41	17.91	18.23	18.95	19.26	20.58
	12H	20.84	21.12	21.88	22.14	23.52	17.98	18.25	19.01	19.28	20.65
12H	4H	19.95	20.34	20.97	21.36	22.67	17.21	17.60	18.23	18.62	19.93
	6H	20.53	20.84	21.56	21.87	23.20	17.79	18.10	18.82	19.13	20.46
	8H	20.74	21.02	21.77	22.04	23.41	18.00	18.27	19.03	19.30	20.67