

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: P854361

Luminaire Tested: SQ2-WBM-075U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854361  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G3-2104-222-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-075U-125D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

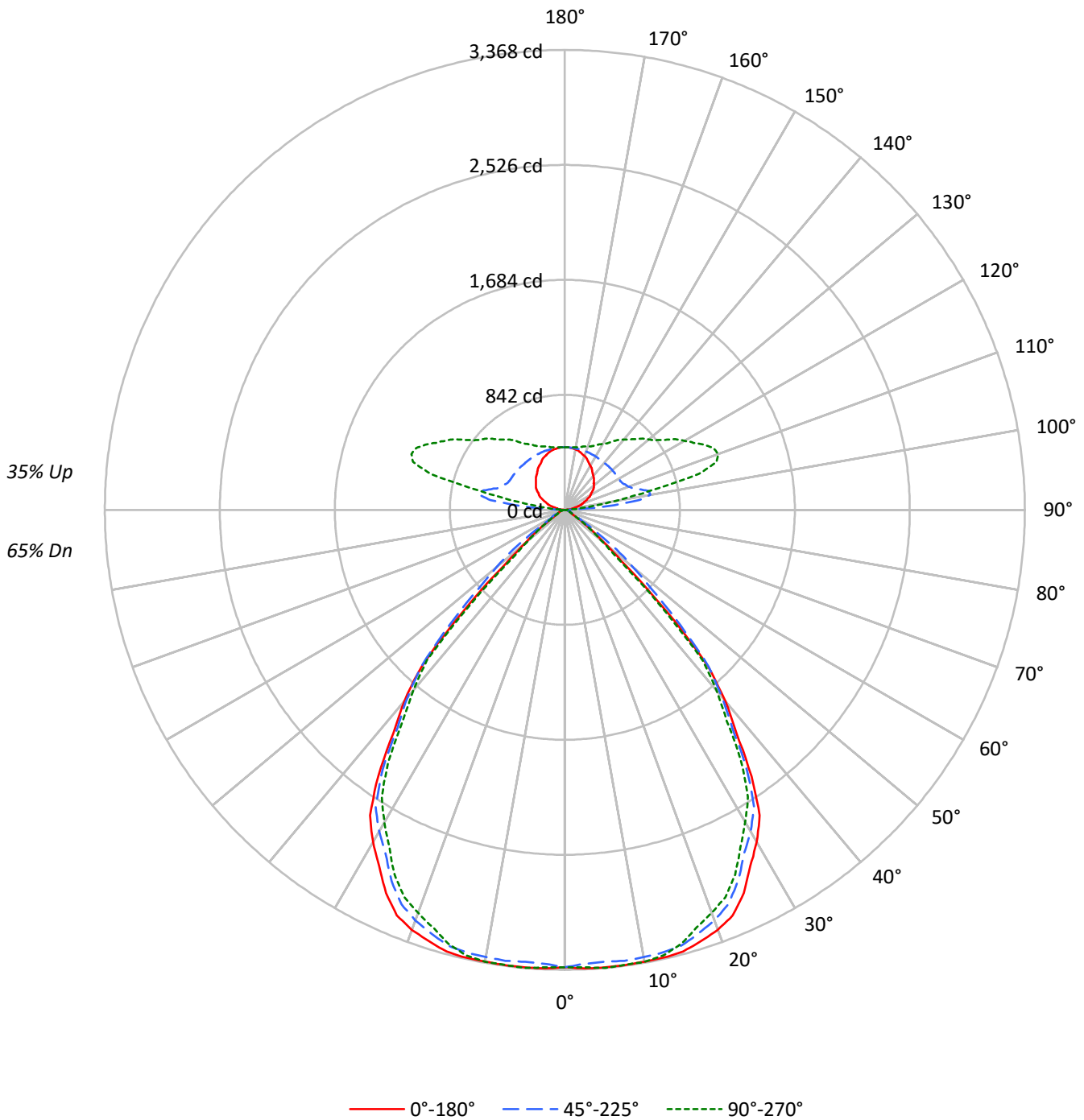
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8071.8 lumens  
Efficiency: N/A  
Efficacy: 110.6 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 73  
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	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70	65
1	103	100	97	94	97	94	92	89	84	82	80	74	73	71	65	64	63	59
2	96	90	85	81	91	85	81	77	76	73	70	68	66	64	60	59	57	54
3	89	82	75	71	84	77	72	68	70	66	62	63	59	57	56	54	52	49
4	83	74	67	62	79	70	65	60	64	59	55	58	54	51	52	49	47	44
5	78	67	60	55	73	64	58	53	58	53	50	53	49	46	48	45	43	40
6	72	62	55	49	68	59	53	48	54	49	45	49	45	42	44	41	39	36
7	68	57	49	44	64	54	48	43	50	44	41	45	41	38	41	38	35	33
8	63	52	45	40	60	50	44	39	46	41	37	42	38	35	38	35	33	31
9	59	48	41	37	56	46	40	36	43	37	34	39	35	32	36	32	30	28
10	56	45	38	34	53	43	37	33	40	35	31	37	32	29	34	30	28	26

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

	0°	45°	90°
0°	54077	54077	54077
5°	54501	53848	54579
10°	55085	54502	55100
15°	55968	55231	55005
20°	56244	54974	53983
25°	55184	53440	52533
30°	52361	50696	49264
35°	46952	45835	44415
40°	38545	37696	36320
45°	24103	27371	21866
50°	9530	16189	8518
55°	4622	7355	4569
60°	2170	3597	1986
65°	1945	2090	1872
70°	1902	1950	1770
75°	1859	1859	1678
80°	1785	1785	1609
85°	1593	1593	1593

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 27371 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	320.0	4.0
10°-20°	935.4	11.6
20°-30°	1382.8	17.1
30°-40°	1428.9	17.7
40°-50°	859.8	10.7
50°-60°	206.6	2.6
60°-70°	56.4	0.7
70°-80°	31.4	0.4
80°-90°	10.3	0.1
90°-100°	173.5	2.1
100°-110°	575.1	7.1
110°-120°	570.7	7.1
120°-130°	464.9	5.8
130°-140°	377.8	4.7
140°-150°	293.4	3.6
150°-160°	211.4	2.6
160°-170°	129.5	1.6
170°-180°	43.7	0.5
0°-30°	2638.2	32.7
0°-40°	4067.2	50.4
0°-60°	5133.6	63.6
0°-90°	5231.8	64.8
90°-120°	1319.3	16.3
90°-150°	2455.4	30.4
90°-180°	2840.0	35.2
0°-180°	8071.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3349	3349	3349	3349	3349	
5°	3363	3352	3322	3369	3368	321
15°	3348	3374	3304	3305	3291	944
25°	3098	3121	3000	2957	2949	1416
35°	2382	2376	2325	2281	2253	1466
45°	1056	1198	1199	1133	958	818
55°	164	185	261	176	162	167
65°	51	54	55	51	49	52
75°	30	32	30	29	27	31
85°	9	10	9	9	9	10
90°	0	1	3	4	4	1
95°	25	73	314	112	75	28
105°	101	143	576	1086	1015	106
115°	180	215	463	965	1128	177
125°	251	279	455	758	894	223
135°	300	331	451	650	734	232
145°	348	374	450	560	612	219
155°	398	412	453	500	518	183
165°	437	442	455	473	478	123
175°	457	457	458	461	460	43
180°	459	459	459	459	459	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3349.3	3349.3	3349.3	3349.3	3349.3
2.5°	3361.6	3353.3	3327.0	3357.6	3352.4
5°	3362.7	3352.4	3322.4	3369.4	3367.5
7.5°	3362.2	3356.7	3331.2	3367.4	3360.1
10°	3359.9	3362.7	3324.3	3363.6	3360.8
12.5°	3358.3	3370.9	3320.5	3348.2	3340.8
15°	3348.3	3373.7	3304.2	3304.8	3290.7
17.5°	3311.8	3342.6	3252.5	3225.8	3207.9
20°	3273.4	3303.5	3199.5	3159.7	3141.8
22.5°	3213.5	3241.3	3125.7	3085.2	3070.4
25°	3097.6	3121.1	2999.7	2957.2	2948.8
27.5°	2941.5	2951.4	2839.8	2798.2	2783.8
30°	2808.5	2809.5	2719.2	2669.6	2642.4
32.5°	2654.1	2647.5	2577.8	2528.1	2494.1
35°	2382.1	2376.4	2325.4	2280.6	2253.4
37.5°	2062.4	2061.5	2012.8	1974.2	1946.8
40°	1828.8	1835.4	1788.5	1740.1	1723.2
42.5°	1549.1	1597.8	1557.9	1505.1	1494.2
45°	1055.6	1198.4	1198.7	1133.3	957.6
47.5°	603.8	757.8	862.7	667.9	495.8
50°	379.4	495.9	644.5	406.7	339.1
52.5°	269.5	326.6	477.0	286.1	253.0
55°	164.2	184.9	261.3	176.4	162.3
57.5°	99.5	118.9	151.4	118.3	99.9
60°	67.2	85.1	111.4	78.4	61.5
62.5°	59.6	66.1	87.6	61.7	55.3
65°	50.9	53.7	54.7	50.9	49.0
67.5°	45.0	46.8	45.9	44.9	42.1
70°	40.3	42.2	41.3	40.3	37.5
72.5°	35.7	37.6	36.7	35.7	33.6
75°	29.8	31.7	29.8	28.8	26.9
77.5°	23.1	24.7	23.8	23.0	21.1
80°	19.2	20.1	19.2	19.2	17.3
82.5°	15.4	15.6	14.6	14.6	13.4
85°	8.6	9.6	8.6	8.6	8.6
87.5°	3.1	3.3	3.6	3.8	3.1
90°	0.0	0.9	2.8	3.8	3.8
92.5°	7.6	29.3	86.4	28.0	23.6
95°	24.7	73.0	314.3	112.2	75.0
97.5°	45.4	95.9	548.7	320.0	202.3
100°	59.8	108.1	635.3	545.7	361.8
102.5°	75.8	122.6	630.0	833.9	630.0
105°	100.7	143.4	575.5	1085.8	1015.2
107.5°	126.1	164.2	523.3	1111.4	1165.1
110°	140.6	178.6	496.7	1086.1	1194.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	155.7	193.1	480.7	1041.1	1179.5
115°	179.5	214.8	463.4	964.8	1128.2
117.5°	203.0	234.4	457.2	891.8	1063.3
120°	217.5	248.1	454.9	846.1	1012.4
122.5°	230.4	260.3	454.9	808.6	962.2
125°	250.7	278.6	454.9	758.1	893.6
127.5°	267.4	294.7	453.8	719.8	835.7
130°	277.3	306.1	453.0	697.5	801.5
132.5°	286.4	316.0	452.2	679.1	772.7
135°	300.1	330.7	451.1	650.5	734.1
137.5°	314.9	344.4	450.0	623.0	696.7
140°	324.8	353.6	449.2	604.6	672.4
142.5°	333.9	362.0	450.0	586.2	646.5
145°	348.5	374.5	450.1	559.6	612.5
147.5°	364.3	386.0	450.3	537.1	576.5
150°	374.2	393.7	451.1	524.0	557.5
152.5°	383.3	402.0	451.9	513.2	540.0
155°	397.9	411.8	453.0	500.0	518.5
157.5°	412.2	422.9	454.1	490.5	503.7
160°	419.8	429.0	454.9	483.6	493.8
162.5°	427.4	434.4	454.9	479.0	487.0
165°	436.9	441.5	454.9	473.0	477.7
167.5°	445.6	448.0	455.8	467.7	470.1
170°	450.1	451.1	455.8	465.4	466.3
172.5°	453.2	454.1	456.6	463.1	463.3
175°	456.8	456.8	457.7	460.6	459.6
177.5°	458.7	458.7	457.9	459.4	457.9
180°	458.7	458.7	458.7	458.7	458.7



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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	8.10	8.90	8.95	9.75	10.81	7.77	8.57	8.62	9.42	10.48
	3H	8.61	9.33	9.48	10.19	11.27	8.27	8.99	9.14	9.85	10.93
	4H	8.88	9.55	9.77	10.42	11.51	8.51	9.18	9.40	10.05	11.14
	6H	9.11	9.72	10.00	10.60	11.70	8.72	9.33	9.61	10.20	11.31
	8H	9.18	9.76	10.08	10.65	11.76	8.78	9.36	9.68	10.25	11.36
	12H	9.22	9.77	10.12	10.65	11.78	8.82	9.38	9.73	10.26	11.39
4H	2H	8.11	8.78	9.00	9.65	10.75	7.81	8.48	8.70	9.35	10.44
	3H	8.84	9.39	9.74	10.29	11.40	8.54	9.09	9.43	9.98	11.09
	4H	9.25	9.75	10.16	10.65	11.78	8.91	9.40	9.81	10.30	11.43
	6H	9.62	10.05	10.54	10.97	12.11	9.25	9.67	10.17	10.59	11.73
	8H	9.75	10.15	10.67	11.06	12.21	9.37	9.77	10.29	10.68	11.83
	12H	9.83	10.18	10.77	11.12	12.27	9.45	9.80	10.39	10.74	11.89
8H	4H	9.33	9.73	10.26	10.64	11.79	9.01	9.41	9.94	10.32	11.47
	6H	9.83	10.15	10.77	11.11	12.26	9.48	9.81	10.43	10.76	11.91
	8H	10.04	10.33	11.00	11.27	12.44	9.68	9.97	10.64	10.92	12.09
	12H	10.20	10.45	11.15	11.39	12.61	9.84	10.09	10.80	11.03	12.25
12H	4H	9.31	9.66	10.24	10.59	11.75	8.99	9.35	9.93	10.28	11.43
	6H	9.84	10.13	10.80	11.08	12.24	9.51	9.79	10.47	10.74	11.91
	8H	10.09	10.34	11.04	11.28	12.50	9.74	10.00	10.70	10.93	12.15