

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: P854362

Luminaire Tested: SQ2-WBM-075U-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854362  
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-935-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**

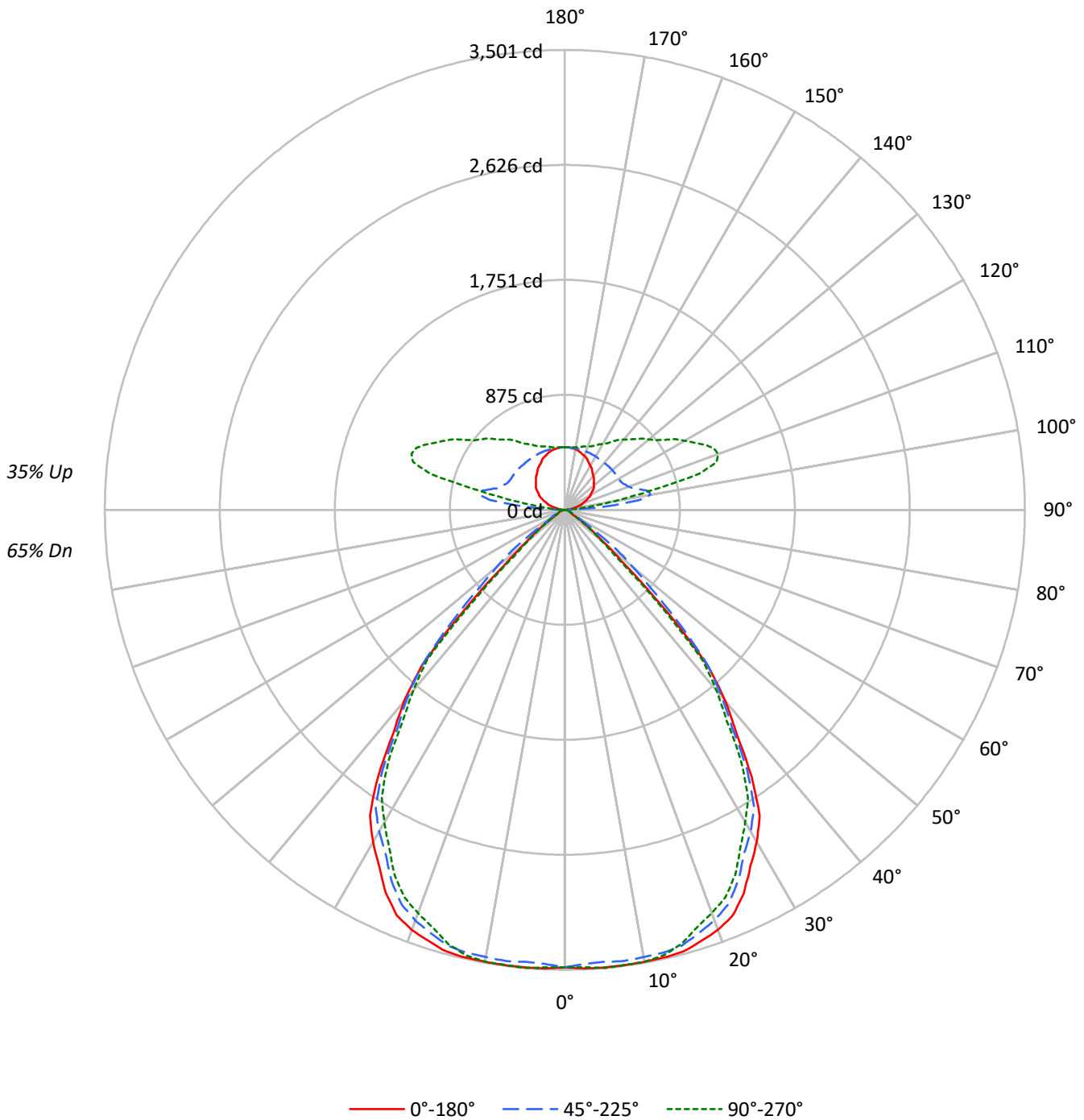
Lumens per Lamp: N/A  
Luminaire Lumens: 8392.4 lumens  
Efficiency: N/A  
Efficacy: 115.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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	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°	56225	56225	56225
5°	56666	55987	56747
10°	57272	56667	57289
15°	58191	57424	57190
20°	58477	57156	56127
25°	57377	55561	54619
30°	54441	52709	51220
35°	48817	47656	46180
40°	40078	39192	37761
45°	25060	28458	22735
50°	9909	16832	8854
55°	4808	7645	4752
60°	2257	3739	2063
65°	2021	2174	1945
70°	1978	2025	1836
75°	1934	1934	1747
80°	1860	1860	1674
85°	1667	1667	1667

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 28458 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	332.7	4.0
10°-20°	972.5	11.6
20°-30°	1437.8	17.1
30°-40°	1485.7	17.7
40°-50°	893.9	10.7
50°-60°	214.8	2.6
60°-70°	58.7	0.7
70°-80°	32.7	0.4
80°-90°	10.7	0.1
90°-100°	180.4	2.1
100°-110°	597.9	7.1
110°-120°	593.4	7.1
120°-130°	483.3	5.8
130°-140°	392.8	4.7
140°-150°	305.1	3.6
150°-160°	219.8	2.6
160°-170°	134.6	1.6
170°-180°	45.5	0.5
0°-30°	2743.0	32.7
0°-40°	4228.7	50.4
0°-60°	5337.5	63.6
0°-90°	5439.6	64.8
90°-120°	1371.7	16.3
90°-150°	2552.9	30.4
90°-180°	2953.0	35.2
0°-180°	8392.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3482	3482	3482	3482	3482	
5°	3496	3486	3454	3503	3501	334
15°	3481	3508	3435	3436	3421	981
25°	3221	3245	3119	3075	3066	1472
35°	2477	2471	2418	2371	2343	1524
45°	1098	1246	1246	1178	996	850
55°	171	192	272	183	169	174
65°	53	56	57	53	51	54
75°	31	33	31	30	28	32
85°	9	10	9	9	9	10
90°	0	1	3	4	4	2
95°	26	76	327	117	78	29
105°	105	149	598	1129	1056	110
115°	187	223	482	1003	1173	184
125°	261	290	473	788	929	232
135°	312	344	469	676	763	241
145°	362	389	468	582	637	227
155°	414	428	471	520	539	191
165°	454	459	473	492	497	128
175°	475	475	476	479	478	45
180°	477	477	477	477	477	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3482.3	3482.3	3482.3	3482.3	3482.3
2.5°	3495.1	3486.5	3459.2	3491.0	3485.5
5°	3496.3	3485.6	3454.4	3503.3	3501.3
7.5°	3495.7	3490.1	3463.6	3501.1	3493.5
10°	3493.3	3496.2	3456.4	3497.2	3494.3
12.5°	3491.7	3504.8	3452.4	3481.2	3473.5
15°	3481.3	3507.7	3435.4	3436.1	3421.4
17.5°	3443.4	3475.4	3381.7	3353.9	3335.3
20°	3403.4	3434.7	3326.5	3285.2	3266.6
22.5°	3341.1	3370.0	3249.8	3207.7	3192.3
25°	3220.7	3245.1	3118.8	3074.7	3065.9
27.5°	3058.3	3068.7	2952.6	2909.4	2894.3
30°	2920.1	2921.1	2827.2	2775.6	2747.3
32.5°	2759.5	2752.7	2680.2	2628.5	2593.1
35°	2476.7	2470.8	2417.8	2371.2	2342.9
37.5°	2144.3	2143.3	2092.8	2052.6	2024.1
40°	1901.5	1908.3	1859.5	1809.2	1791.6
42.5°	1610.6	1661.2	1619.8	1564.8	1553.5
45°	1097.5	1246.0	1246.3	1178.3	995.7
47.5°	627.8	787.9	897.0	694.4	515.5
50°	394.5	515.6	670.1	422.8	352.5
52.5°	280.2	339.6	495.9	297.4	263.0
55°	170.8	192.3	271.6	183.4	168.8
57.5°	103.5	123.6	157.4	123.0	103.9
60°	69.9	88.5	115.8	81.5	63.9
62.5°	61.9	68.8	91.1	64.2	57.5
65°	52.9	55.9	56.9	52.9	50.9
67.5°	46.7	48.7	47.7	46.7	43.7
70°	41.9	43.9	42.9	41.9	38.9
72.5°	37.2	39.1	38.1	37.1	35.0
75°	31.0	32.9	31.0	29.9	28.0
77.5°	24.0	25.7	24.8	23.9	22.0
80°	20.0	20.9	20.0	19.9	18.0
82.5°	16.0	16.2	15.2	15.2	14.0
85°	9.0	10.0	9.0	9.0	9.0
87.5°	3.2	3.4	3.8	4.0	3.2
90°	0.0	1.0	3.0	3.9	3.9
92.5°	7.9	30.5	89.9	29.1	24.5
95°	25.7	75.9	326.8	116.6	78.0
97.5°	47.2	99.7	570.5	332.7	210.3
100°	62.2	112.4	660.6	567.4	376.2
102.5°	78.8	127.5	655.0	867.1	655.0
105°	104.7	149.1	598.4	1128.9	1055.5
107.5°	131.1	170.7	544.1	1155.5	1211.3
110°	146.1	185.7	516.4	1129.2	1242.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	161.9	200.7	499.8	1082.5	1226.4
115°	186.6	223.3	481.9	1003.1	1173.0
117.5°	211.1	243.7	475.3	927.3	1105.5
120°	226.1	258.0	473.0	879.8	1052.6
122.5°	239.5	270.6	473.0	840.7	1000.4
125°	260.7	289.6	473.0	788.2	929.1
127.5°	278.1	306.4	471.8	748.4	868.9
130°	288.3	318.3	471.0	725.2	833.4
132.5°	297.8	328.5	470.2	706.0	803.3
135°	312.0	343.9	469.0	676.4	763.3
137.5°	327.4	358.1	467.8	647.7	724.4
140°	337.7	367.6	467.0	628.6	699.1
142.5°	347.2	376.3	467.8	609.5	672.2
145°	362.4	389.4	468.0	581.8	636.9
147.5°	378.8	401.4	468.2	558.4	599.4
150°	389.0	409.3	469.0	544.8	579.6
152.5°	398.5	418.0	469.8	533.6	561.4
155°	413.7	428.2	471.0	519.8	539.1
157.5°	428.5	439.7	472.2	510.0	523.7
160°	436.4	446.1	473.0	502.8	513.4
162.5°	444.3	451.7	473.0	498.0	506.3
165°	454.2	459.0	473.0	491.8	496.7
167.5°	463.3	465.8	474.0	486.3	488.8
170°	468.0	469.0	474.0	483.8	484.8
172.5°	471.2	472.2	474.7	481.5	481.7
175°	474.9	474.9	475.9	478.9	477.9
177.5°	476.9	476.9	476.1	477.7	476.1
180°	476.9	476.9	476.9	476.9	476.9



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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	8.23	9.04	9.09	9.89	10.95	7.90	8.71	8.76	9.56	10.61
	3H	8.75	9.46	9.62	10.32	11.41	8.41	9.12	9.28	9.98	11.07
	4H	9.02	9.69	9.90	10.55	11.65	8.65	9.32	9.53	10.18	11.28
	6H	9.25	9.86	10.14	10.73	11.84	8.85	9.46	9.74	10.34	11.44
	8H	9.32	9.90	10.22	10.79	11.90	8.92	9.50	9.82	10.39	11.49
	12H	9.36	9.91	10.26	10.79	11.92	8.96	9.51	9.86	10.39	11.52
4H	2H	8.25	8.92	9.14	9.79	10.88	7.95	8.62	8.84	9.48	10.58
	3H	8.98	9.53	9.88	10.43	11.54	8.67	9.22	9.57	10.12	11.23
	4H	9.39	9.89	10.29	10.78	11.92	9.04	9.54	9.94	10.43	11.57
	6H	9.76	10.18	10.68	11.10	12.24	9.38	9.81	10.30	10.72	11.86
	8H	9.89	10.29	10.81	11.20	12.35	9.50	9.90	10.42	10.81	11.96
	12H	9.97	10.32	10.91	11.25	12.41	9.58	9.94	10.52	10.87	12.02
8H	4H	9.47	9.87	10.39	10.78	11.93	9.15	9.54	10.07	10.46	11.61
	6H	9.96	10.29	10.91	11.24	12.39	9.62	9.94	10.56	10.89	12.04
	8H	10.18	10.46	11.13	11.41	12.58	9.82	10.11	10.78	11.05	12.22
	12H	10.34	10.59	11.29	11.53	12.75	9.98	10.23	10.93	11.17	12.39
12H	4H	9.44	9.80	10.38	10.73	11.88	9.13	9.48	10.06	10.41	11.57
	6H	9.98	10.27	10.94	11.22	12.38	9.64	9.93	10.60	10.88	12.04
	8H	10.22	10.48	11.18	11.41	12.63	9.88	10.13	10.83	11.07	12.29