

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: P855143

Luminaire Tested: SQ2-PP3-025U-125D-835-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P855143  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PP3-025U-125D-835-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

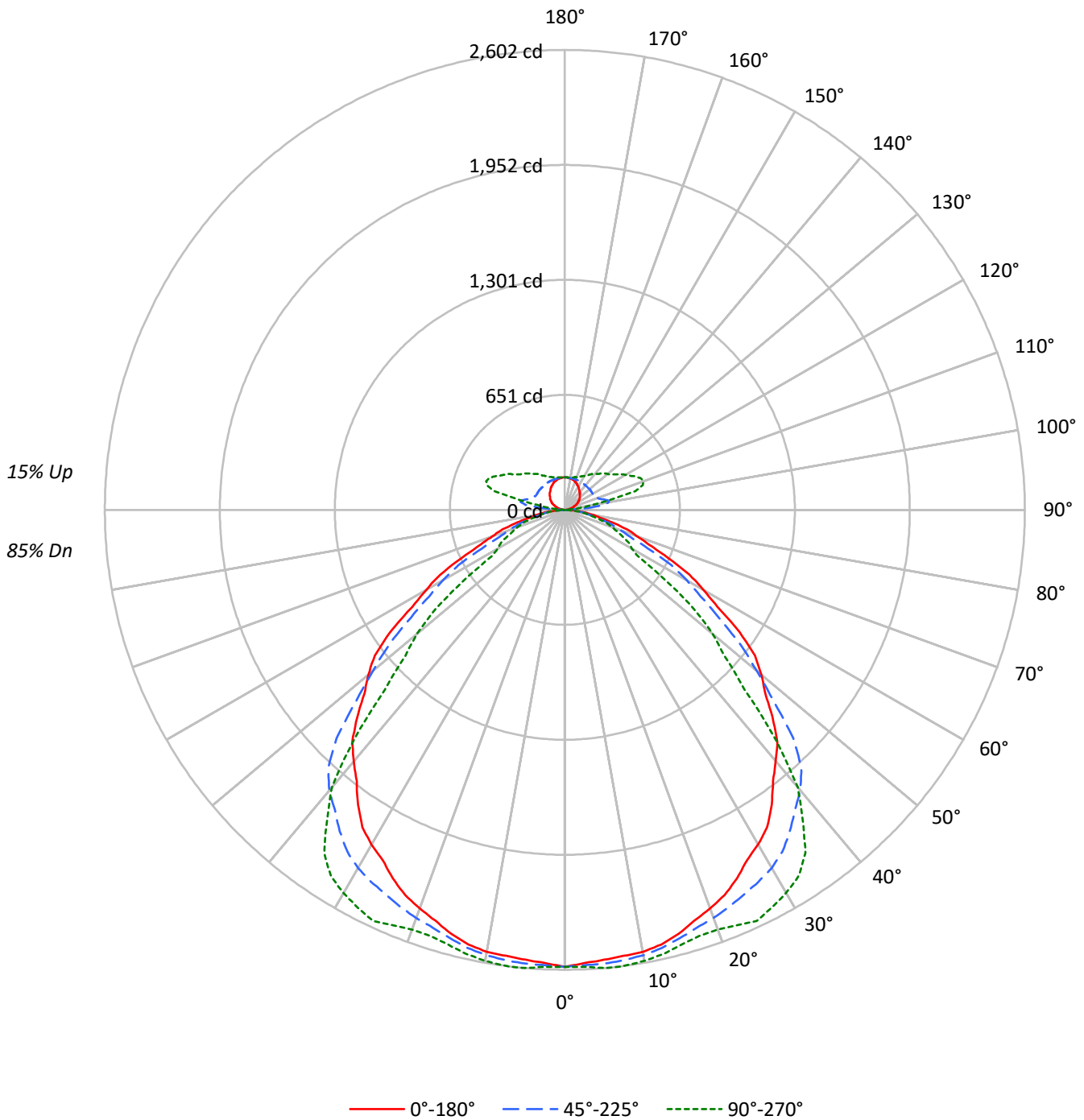
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7648.6 lumens  
Efficiency: N/A  
Efficacy: 135.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 56.6  
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									
RC	80									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	116	116	116	116	111	111	111	111	103	103	103	95	95	95	88	88	88	85																			
1	107	102	99	95	102	99	95	92	92	89	87	86	83	82	80	78	77	74																			
2	98	91	84	79	94	87	82	77	82	77	73	76	73	69	71	68	66	63																			
3	90	80	73	67	86	78	71	66	73	67	63	68	64	60	64	60	57	54																			
4	83	72	64	58	79	69	62	56	65	59	54	61	56	52	57	53	50	47																			
5	76	64	56	50	73	62	55	49	59	52	47	55	50	45	52	47	44	41																			
6	70	58	50	44	68	56	49	43	53	47	42	50	44	40	47	42	39	36																			
7	65	53	45	39	63	51	44	38	48	42	37	46	40	36	43	38	35	32																			
8	61	48	40	35	59	47	39	34	44	38	33	42	36	32	40	35	31	29																			
9	57	44	36	31	55	43	36	31	41	34	30	39	33	29	37	32	28	26																			
10	53	41	33	28	51	40	33	28	38	31	27	36	30	26	34	29	26	24																			

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

	0°	45°	90°
0°	41743	41743	41743
5°	41417	41772	42169
10°	41627	41940	42478
15°	41526	41937	42576
20°	41230	42216	43436
25°	40996	42749	45719
30°	40762	43617	46674
35°	40186	43741	46759
40°	39112	43663	43203
45°	37943	41687	32887
50°	36452	35560	27392
55°	33926	29928	19696
60°	29214	25682	14121
65°	24642	19839	13887
70°	20516	15611	13294
75°	17386	13468	12445
80°	14737	11688	11186
85°	11634	9615	6076

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 41687 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.2	3.2
10°-20°	712.5	9.3
20°-30°	1116.2	14.6
30°-40°	1377.0	18.0
40°-50°	1296.4	16.9
50°-60°	917.9	12.0
60°-70°	523.0	6.8
70°-80°	258.8	3.4
80°-90°	63.7	0.8
90°-100°	74.1	1.0
100°-110°	230.6	3.0
110°-120°	225.6	2.9
120°-130°	184.2	2.4
130°-140°	150.7	2.0
140°-150°	117.6	1.5
150°-160°	84.9	1.1
160°-170°	51.9	0.7
170°-180°	17.5	0.2
0°-30°	2074.9	27.1
0°-40°	3451.8	45.1
0°-60°	5666.1	74.1
0°-90°	6511.6	85.1
90°-120°	530.3	6.9
90°-150°	982.7	12.8
90°-180°	1137.0	14.9
0°-180°	7648.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2585	2585	2585	2585	2585	
5°	2555	2601	2577	2583	2602	243
15°	2484	2519	2509	2534	2547	700
25°	2301	2360	2400	2497	2566	1060
35°	2039	2095	2219	2346	2372	1272
45°	1662	1787	1826	1547	1440	1279
55°	1205	1277	1063	801	700	1063
65°	645	680	519	366	364	648
75°	279	308	216	202	200	302
85°	63	58	52	41	33	74
90°	0	1	3	3	3	3
95°	10	30	136	50	33	12
105°	40	57	227	433	414	43
115°	72	85	184	380	445	71
125°	100	111	182	299	351	89
135°	120	133	181	258	290	93
145°	140	151	181	223	243	88
155°	161	166	182	200	207	74
165°	176	178	183	189	191	50
175°	183	183	183	184	183	17
180°	183	183	183	183	183	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2585.4	2585.4	2585.4	2585.4	2585.4
2.5°	2565.8	2602.1	2578.8	2583.4	2587.7
5°	2555.4	2600.8	2577.3	2583.1	2601.8
7.5°	2545.6	2592.1	2569.1	2578.8	2601.8
10°	2539.0	2579.1	2558.1	2572.2	2590.9
12.5°	2519.3	2557.2	2538.4	2556.9	2573.4
15°	2484.3	2519.1	2508.9	2533.8	2547.1
17.5°	2436.8	2479.0	2478.9	2514.1	2528.0
20°	2399.6	2450.4	2457.0	2501.3	2528.0
22.5°	2360.2	2419.6	2430.7	2497.4	2543.4
25°	2301.2	2360.0	2399.6	2496.8	2566.3
27.5°	2232.3	2290.6	2372.3	2481.2	2536.3
30°	2186.4	2242.5	2339.5	2452.7	2503.5
32.5°	2129.6	2187.8	2291.4	2413.3	2459.7
35°	2038.8	2094.9	2219.2	2345.6	2372.3
37.5°	1934.5	1998.1	2137.3	2207.8	2209.3
40°	1855.7	1938.5	2071.6	2084.5	2049.8
42.5°	1779.2	1885.6	1979.8	1922.1	1767.8
45°	1661.7	1787.2	1825.7	1547.2	1440.3
47.5°	1536.5	1660.5	1599.4	1297.6	1223.9
50°	1451.2	1568.8	1415.7	1160.0	1090.5
52.5°	1355.1	1459.8	1251.7	1028.0	922.1
55°	1205.2	1277.4	1063.2	801.2	699.7
57.5°	1024.8	1075.6	909.0	601.4	487.5
60°	904.7	944.7	795.3	493.4	437.3
62.5°	795.3	831.1	677.3	428.7	408.9
65°	645.0	679.8	519.3	366.2	363.5
67.5°	513.2	551.2	398.5	319.7	316.5
70°	434.6	474.6	330.7	286.9	281.6
72.5°	368.9	406.9	280.4	251.9	248.7
75°	278.7	308.2	215.9	202.2	199.5
77.5°	202.2	220.9	160.7	153.6	150.9
80°	158.5	166.6	125.7	122.9	120.3
82.5°	119.2	116.4	95.1	92.2	87.5
85°	62.8	57.5	51.9	40.9	32.8
87.5°	19.7	19.9	9.4	7.2	7.2
90°	0.0	1.1	3.4	3.4	3.4
92.5°	3.6	12.6	42.9	14.1	11.4
95°	10.1	29.9	136.0	50.1	32.6
97.5°	18.4	38.8	225.2	140.2	88.4
100°	24.7	43.5	253.9	237.5	158.4
102.5°	31.0	48.8	248.6	339.3	266.4
105°	40.5	56.9	227.0	433.3	413.6
107.5°	49.9	65.3	206.3	440.6	462.4
110°	56.2	71.5	195.6	430.3	473.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	62.5	77.0	190.1	411.7	465.9
115°	72.0	85.1	184.3	380.2	445.1
117.5°	81.1	93.2	181.9	350.1	416.5
120°	86.6	98.7	181.0	332.9	396.8
122.5°	91.9	104.0	181.9	318.5	377.0
125°	100.0	111.0	182.1	299.0	350.6
127.5°	106.5	117.8	182.1	284.4	328.4
130°	110.1	122.2	182.1	276.2	315.8
132.5°	114.6	126.7	181.2	269.0	305.9
135°	120.3	133.4	181.0	258.1	289.9
137.5°	126.7	138.9	181.0	247.3	276.2
140°	130.4	142.5	181.0	240.0	266.4
142.5°	134.9	146.1	181.0	232.8	256.4
145°	140.4	151.4	181.0	222.9	242.7
147.5°	147.2	156.6	182.1	213.9	229.5
150°	151.8	159.5	182.1	209.4	221.4
152.5°	155.3	162.2	182.1	204.8	215.1
155°	160.7	166.2	182.1	200.2	206.8
157.5°	166.1	170.3	182.1	196.1	200.3
160°	169.7	173.0	182.1	193.4	196.7
162.5°	172.4	174.8	182.1	191.6	194.0
165°	176.4	177.6	183.2	188.9	191.0
167.5°	178.9	179.1	182.1	187.3	188.3
170°	179.8	181.0	182.1	185.5	186.6
172.5°	181.6	181.9	183.0	184.6	184.8
175°	183.2	183.2	183.2	184.2	183.2
177.5°	183.2	183.2	183.2	183.2	183.2
180°	183.2	183.2	183.2	183.2	183.2

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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	23.33	24.57	23.92	25.16	25.82	19.73	20.96	20.32	21.55	22.22
	3H	24.46	25.56	25.06	26.16	26.86	20.86	21.97	21.47	22.57	23.27
	4H	24.82	25.85	25.44	26.47	27.18	21.34	22.38	21.97	22.99	23.71
	6H	25.05	26.00	25.69	26.63	27.36	21.71	22.66	22.35	23.29	24.02
	8H	25.11	26.02	25.76	26.67	27.40	21.80	22.71	22.45	23.36	24.09
	12H	25.14	26.00	25.79	26.64	27.40	21.83	22.70	22.48	23.34	24.10
4H	2H	23.49	24.52	24.11	25.14	25.85	20.49	21.52	21.12	22.14	22.86
	3H	24.83	25.69	25.47	26.34	27.08	21.78	22.63	22.41	23.29	24.02
	4H	25.32	26.09	25.98	26.75	27.52	22.35	23.12	23.00	23.78	24.54
	6H	25.68	26.34	26.35	27.03	27.81	22.80	23.47	23.48	24.16	24.94
	8H	25.78	26.40	26.46	27.09	27.87	22.93	23.56	23.61	24.24	25.03
	12H	25.83	26.39	26.53	27.10	27.89	22.98	23.54	23.68	24.25	25.04
8H	4H	25.36	25.99	26.05	26.67	27.46	22.64	23.27	23.33	23.95	24.74
	6H	25.81	26.32	26.52	27.05	27.85	23.20	23.72	23.91	24.45	25.24
	8H	25.97	26.43	26.69	27.16	27.97	23.39	23.85	24.11	24.58	25.39
	12H	26.07	26.48	26.79	27.19	28.07	23.48	23.89	24.20	24.61	25.48
12H	4H	25.34	25.90	26.04	26.61	27.40	22.67	23.23	23.37	23.94	24.73
	6H	25.80	26.26	26.52	26.99	27.80	23.25	23.72	23.98	24.45	25.26
	8H	25.98	26.39	26.71	27.11	27.98	23.48	23.89	24.20	24.61	25.48