

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: P854248

Luminaire Tested: SQ2-PW1-025U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854248  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PW1-025U-075D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

**Summary**

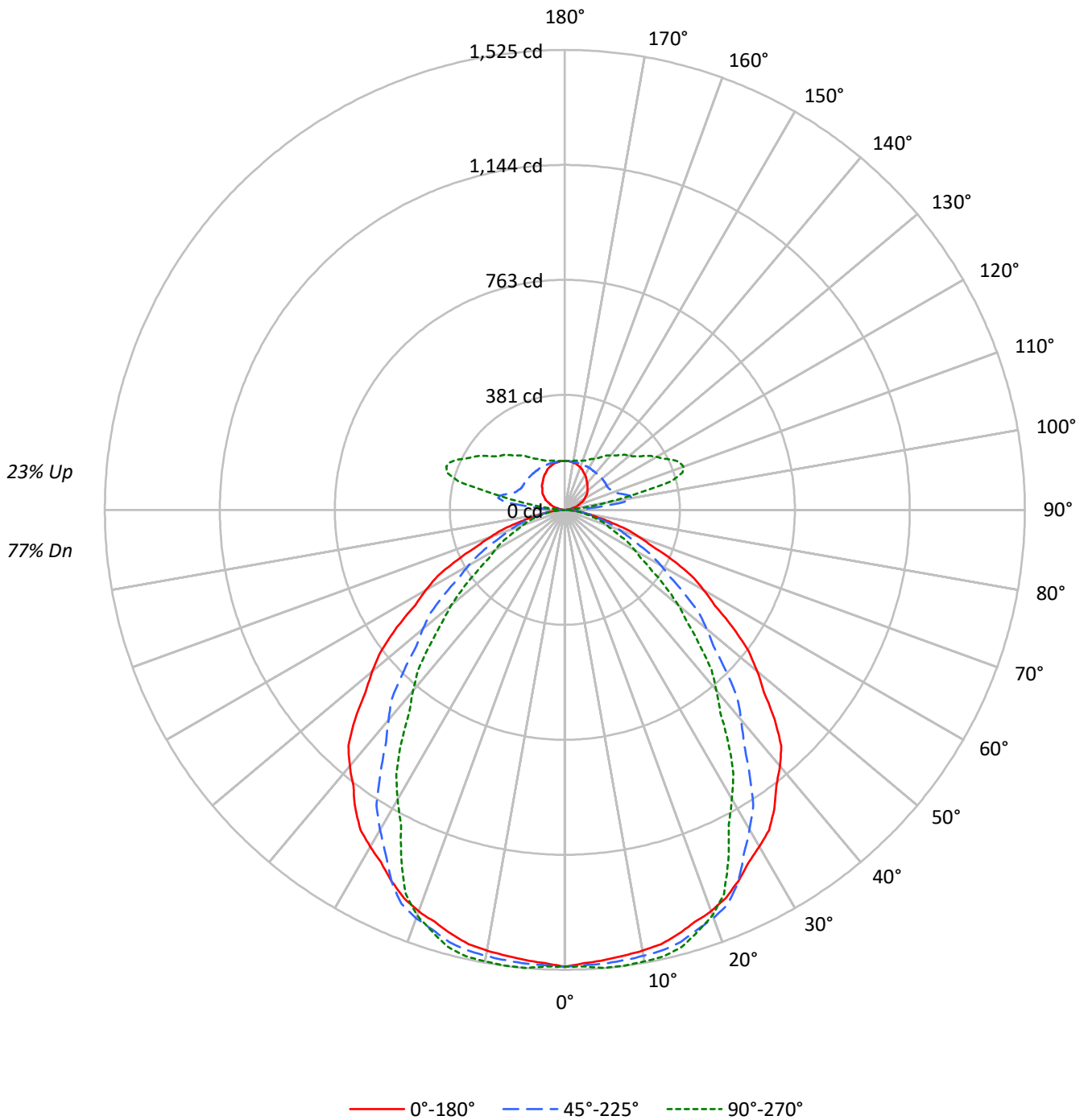
Lumens per Lamp: N/A  
Luminaire Lumens: 4366.8 lumens  
Efficiency: N/A  
Efficacy: 128.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 34.1  
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	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77				
1	105	101	97	94	100	96	93	90	88	85	83	80	78	76	73	72	70	67				
2	96	89	83	78	91	85	80	75	78	74	70	71	68	65	65	63	60	57				
3	88	79	72	66	84	76	69	64	70	64	60	64	60	56	59	55	52	50				
4	81	71	63	57	77	68	61	55	62	57	52	58	53	49	53	49	46	43				
5	75	63	55	49	71	61	54	48	56	50	46	52	47	43	48	44	41	38				
6	70	57	49	44	66	55	48	42	51	45	40	48	42	38	44	40	36	34				
7	65	52	44	39	62	50	43	38	47	41	36	44	38	34	40	36	32	30				
8	60	48	40	35	57	46	39	34	43	37	32	40	35	31	37	33	29	27				
9	56	44	36	31	54	42	35	31	40	34	29	37	32	28	35	30	27	25				
10	53	41	33	28	50	39	32	28	37	31	27	34	29	26	32	28	24	23				

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

	0°	45°	90°
0°	24456	24456	24456
5°	24292	24480	24713
10°	24337	24620	24928
15°	24331	24789	25078
20°	24340	24761	24588
25°	24209	24235	22848
30°	24045	22835	20655
35°	23856	21013	18652
40°	23381	19155	16480
45°	22464	17228	14394
50°	20909	15400	12321
55°	19128	13605	9990
60°	17144	11832	8619
65°	14991	10197	7660
70°	12260	9059	6944
75°	9538	7829	6388
80°	7113	6704	5635
85°	4817	5076	3205

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 22464 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.2	3.3
10°-20°	417.9	9.6
20°-30°	615.0	14.1
30°-40°	672.4	15.4
40°-50°	603.2	13.8
50°-60°	450.0	10.3
60°-70°	284.4	6.5
70°-80°	140.9	3.2
80°-90°	33.4	0.8
90°-100°	65.6	1.5
100°-110°	203.9	4.7
110°-120°	199.5	4.6
120°-130°	162.9	3.7
130°-140°	133.2	3.1
140°-150°	104.0	2.4
150°-160°	75.0	1.7
160°-170°	45.9	1.1
170°-180°	15.5	0.4
0°-30°	1177.1	27.0
0°-40°	1849.5	42.4
0°-60°	2902.7	66.5
0°-90°	3361.3	77.0
90°-120°	469.0	10.7
90°-150°	869.1	19.9
90°-180°	1006.0	23.0
0°-180°	4366.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1515	1515	1515	1515	1515	
5°	1499	1523	1510	1512	1525	143
15°	1456	1484	1483	1493	1500	411
25°	1359	1388	1360	1304	1282	626
35°	1210	1198	1066	973	946	755
45°	984	905	754	660	630	754
55°	680	615	483	379	355	607
65°	392	360	267	215	200	389
75°	153	164	126	105	102	168
85°	26	33	27	19	17	33
90°	0	1	3	3	3	1
95°	9	26	120	44	29	10
105°	36	50	201	383	366	38
115°	64	75	163	336	394	63
125°	88	98	161	264	310	79
135°	106	118	160	228	256	82
145°	124	134	160	197	215	78
155°	142	147	161	177	183	66
165°	156	157	162	167	169	44
175°	162	162	162	163	162	15
180°	162	162	162	162	162	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1514.7	1514.7	1514.7	1514.7	1514.7
2.5°	1504.3	1523.5	1511.3	1512.5	1515.9
5°	1498.8	1522.8	1510.4	1512.1	1524.8
7.5°	1491.3	1515.6	1506.3	1511.5	1523.9
10°	1484.4	1509.8	1501.7	1509.2	1520.5
12.5°	1475.2	1501.7	1496.0	1504.6	1515.9
15°	1455.6	1483.8	1483.0	1493.2	1500.3
17.5°	1432.8	1461.0	1459.6	1462.3	1465.7
20°	1416.6	1444.8	1441.1	1431.0	1431.0
22.5°	1393.5	1424.0	1414.6	1387.0	1378.0
25°	1358.9	1388.5	1360.4	1303.6	1282.5
27.5°	1318.5	1342.5	1285.9	1205.3	1176.0
30°	1289.7	1308.0	1224.8	1136.1	1107.9
32.5°	1259.7	1266.7	1162.4	1070.3	1039.8
35°	1210.3	1197.6	1066.1	973.1	946.3
37.5°	1152.0	1114.2	973.5	876.1	846.5
40°	1109.3	1055.7	908.8	811.5	781.9
42.5°	1062.0	994.9	847.7	750.3	719.6
45°	983.8	904.9	754.5	660.0	630.4
47.5°	895.8	817.4	667.3	575.9	550.5
50°	832.4	756.2	613.1	521.5	490.5
52.5°	767.7	699.5	560.0	465.9	423.5
55°	679.5	614.6	483.3	378.9	354.9
57.5°	588.6	532.4	413.7	318.9	299.2
60°	530.9	481.5	366.4	286.6	266.9
62.5°	475.5	431.7	320.3	256.7	240.3
65°	392.4	359.9	266.9	214.6	200.5
67.5°	311.6	293.5	221.9	176.1	166.8
70°	259.7	254.0	191.9	154.2	147.1
72.5°	214.7	216.9	163.0	133.5	128.7
75°	152.9	164.2	125.5	105.2	102.4
77.5°	104.2	121.1	92.9	77.8	75.6
80°	76.5	93.4	72.1	60.6	60.6
82.5°	53.4	66.9	51.4	45.6	45.6
85°	26.0	33.0	27.4	18.7	17.3
87.5°	6.9	10.5	5.2	4.1	4.1
90°	0.0	1.0	3.0	3.0	3.0
92.5°	3.2	11.1	38.0	12.5	10.1
95°	8.9	26.4	120.3	44.4	28.8
97.5°	16.3	34.4	199.2	124.0	78.1
100°	21.9	38.4	224.6	210.1	140.1
102.5°	27.4	43.2	219.9	300.1	235.6
105°	35.8	50.4	200.8	383.3	365.8
107.5°	44.1	57.7	182.5	389.7	408.9
110°	49.7	63.3	172.9	380.5	418.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	55.3	68.1	168.2	364.1	412.1
115°	63.6	75.3	163.0	336.3	393.6
117.5°	71.8	82.5	160.8	309.7	368.4
120°	76.5	87.2	160.0	294.5	350.9
122.5°	81.3	92.0	160.8	281.7	333.4
125°	88.5	98.2	161.0	264.4	310.1
127.5°	94.2	104.1	161.0	251.6	290.4
130°	97.4	108.1	161.0	244.3	279.3
132.5°	101.4	112.1	160.2	237.9	270.5
135°	106.4	118.0	160.0	228.3	256.4
137.5°	112.1	122.8	160.0	218.7	244.3
140°	115.3	126.0	160.0	212.2	235.6
142.5°	119.3	129.2	160.0	205.8	226.8
145°	124.2	134.0	160.0	197.2	214.7
147.5°	130.2	138.6	161.0	189.2	203.0
150°	134.2	141.0	161.0	185.1	195.8
152.5°	137.4	143.4	161.0	181.1	190.2
155°	142.1	147.0	161.0	177.1	182.9
157.5°	146.9	150.6	161.0	173.4	177.1
160°	150.1	153.0	161.0	171.0	173.9
162.5°	152.5	154.6	161.0	169.4	171.6
165°	156.0	157.0	162.0	167.0	169.0
167.5°	158.2	158.4	161.0	165.6	166.6
170°	159.0	160.0	161.0	164.0	165.0
172.5°	160.6	160.8	161.8	163.2	163.4
175°	162.0	162.0	162.0	163.0	162.0
177.5°	162.0	162.0	162.0	162.0	162.0
180°	162.0	162.0	162.0	162.0	162.0



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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	20.39	21.49	21.09	22.20	23.03	16.88	17.98	17.57	18.68	19.51
	3H	21.73	22.72	22.44	23.43	24.30	18.10	19.09	18.81	19.80	20.66
	4H	22.12	23.04	22.84	23.77	24.65	18.56	19.49	19.29	20.21	21.09
	6H	22.33	23.19	23.07	23.92	24.81	18.89	19.74	19.63	20.48	21.37
	8H	22.37	23.18	23.12	23.94	24.83	18.97	19.78	19.72	20.54	21.43
	12H	22.38	23.15	23.13	23.90	24.82	18.99	19.76	19.74	20.51	21.43
4H	2H	20.53	21.45	21.26	22.18	23.05	17.59	18.52	18.32	19.24	20.12
	3H	22.09	22.86	22.83	23.62	24.51	19.00	19.77	19.74	20.53	21.42
	4H	22.61	23.30	23.37	24.07	24.99	19.56	20.25	20.31	21.01	21.94
	6H	22.95	23.55	23.73	24.34	25.27	19.97	20.57	20.75	21.36	22.29
	8H	23.04	23.60	23.82	24.38	25.32	20.08	20.64	20.86	21.43	22.37
	12H	23.06	23.56	23.86	24.37	25.32	20.11	20.62	20.91	21.42	22.37
8H	4H	22.66	23.22	23.44	24.01	24.95	19.90	20.46	20.68	21.24	22.18
	6H	23.11	23.57	23.92	24.40	25.34	20.41	20.87	21.22	21.70	22.65
	8H	23.25	23.67	24.08	24.49	25.45	20.58	20.99	21.40	21.81	22.77
	12H	23.33	23.69	24.15	24.51	25.53	20.65	21.01	21.47	21.83	22.84
12H	4H	22.63	23.14	23.43	23.94	24.89	19.93	20.43	20.72	21.23	22.18
	6H	23.10	23.51	23.92	24.34	25.30	20.48	20.89	21.30	21.72	22.68
	8H	23.27	23.64	24.09	24.45	25.47	20.67	21.04	21.50	21.85	22.87