

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: P854332

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

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854332  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2104-222-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-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: -

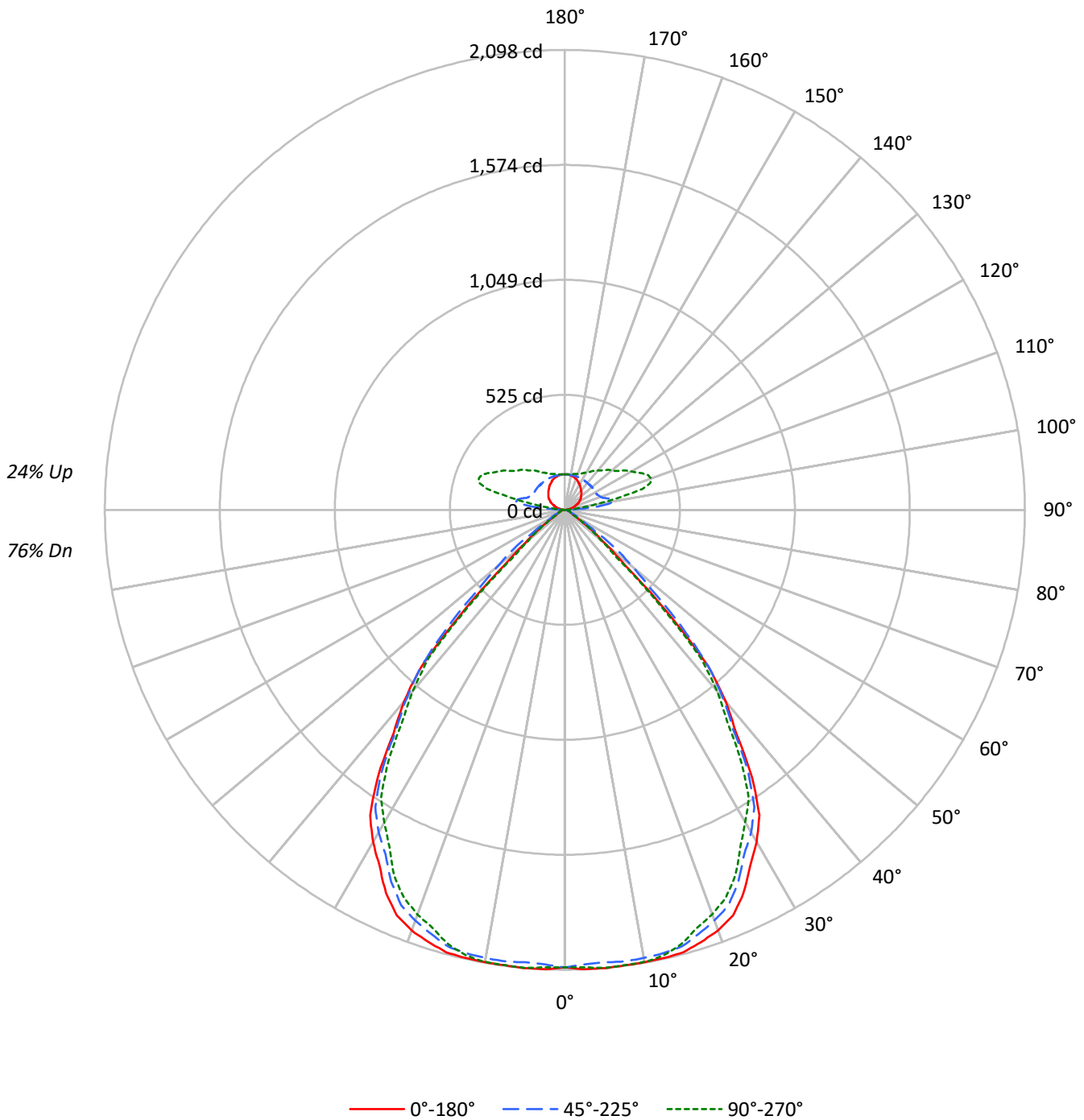
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4270.8 lumens  
Efficiency: N/A  
Efficacy: 122.0 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): 35  
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
RCR																				
0	113	113	113	113	108	108	108	108	98	98	98	89	89	89	80	80	80	76		
1	106	103	100	97	101	99	96	93	90	88	86	82	81	80	75	74	73	70		
2	99	93	88	84	95	90	85	82	83	79	76	76	73	71	70	68	66	63		
3	93	85	79	74	89	82	76	72	76	71	68	70	67	64	65	62	60	57		
4	86	77	71	66	83	75	69	64	69	65	61	64	61	57	60	57	54	52		
5	81	71	64	59	77	68	62	57	64	59	55	60	55	52	56	52	49	47		
6	75	65	58	53	72	63	56	52	59	53	49	55	51	47	52	48	45	43		
7	71	60	53	48	68	58	51	47	54	49	45	51	46	43	48	44	41	39		
8	66	55	48	43	63	53	47	43	50	45	41	47	43	39	45	41	38	36		
9	62	51	44	40	60	50	43	39	47	41	38	44	40	36	42	38	35	33		
10	59	47	41	36	56	46	40	36	44	38	35	41	37	33	39	35	32	31		

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

	0°	45°	90°
0°	33700	33700	33700
5°	34007	33585	33990
10°	34351	34023	34334
15°	34922	34471	34302
20°	35087	34263	33747
25°	34367	33350	32797
30°	32608	31674	30667
35°	29325	28714	27670
40°	24040	23682	22776
45°	15034	17112	14118
50°	5880	9977	5378
55°	2902	4647	2874
60°	1356	2228	1227
65°	1223	1299	1146
70°	1180	1227	1133
75°	1185	1185	1061
80°	1116	1116	1023
85°	1112	926	926

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 17112 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.6	4.7
10°-20°	583.5	13.7
20°-30°	862.7	20.2
30°-40°	892.7	20.9
40°-50°	536.9	12.6
50°-60°	128.5	3.0
60°-70°	35.1	0.8
70°-80°	19.6	0.5
80°-90°	6.6	0.2
90°-100°	65.6	1.5
100°-110°	203.9	4.8
110°-120°	199.5	4.7
120°-130°	162.9	3.8
130°-140°	133.2	3.1
140°-150°	104.0	2.4
150°-160°	75.0	1.8
160°-170°	45.9	1.1
170°-180°	15.5	0.4
0°-30°	1645.8	38.5
0°-40°	2538.4	59.4
0°-60°	3203.9	75.0
0°-90°	3265.2	76.5
90°-120°	469.0	11.0
90°-150°	869.1	20.4
90°-180°	1006.0	23.6
0°-180°	4270.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2087	2087	2087	2087	2087	
5°	2098	2091	2072	2100	2097	200
15°	2089	2105	2062	2062	2052	589
25°	1929	1945	1872	1852	1841	882
35°	1488	1486	1457	1423	1404	913
45°	658	747	749	712	618	509
55°	103	116	165	110	102	103
65°	32	33	34	32	30	32
75°	19	19	19	18	17	20
85°	6	6	5	5	5	6
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°	2087.2	2087.2	2087.2	2087.2	2087.2
2.5°	2097.6	2092.1	2075.2	2092.7	2088.8
5°	2098.2	2091.3	2072.2	2100.1	2097.2
7.5°	2096.0	2093.0	2078.4	2099.5	2095.0
10°	2095.2	2096.1	2075.2	2097.1	2094.2
12.5°	2094.4	2102.4	2072.0	2089.0	2082.2
15°	2089.2	2104.8	2062.2	2061.9	2052.1
17.5°	2067.0	2085.5	2028.5	2012.9	2000.9
20°	2042.1	2060.7	1994.1	1969.0	1964.1
22.5°	2002.9	2023.1	1951.7	1924.1	1916.1
25°	1929.1	1944.7	1872.0	1851.8	1841.0
27.5°	1830.6	1839.2	1771.0	1747.8	1733.0
30°	1749.0	1752.9	1698.9	1668.4	1644.9
32.5°	1652.1	1656.0	1608.5	1579.7	1560.9
35°	1487.8	1485.9	1456.8	1423.4	1403.8
37.5°	1282.3	1285.1	1262.1	1235.6	1215.9
40°	1140.6	1142.6	1123.6	1085.5	1080.6
42.5°	967.7	997.1	971.5	941.8	918.9
45°	658.4	747.4	749.4	712.3	618.3
47.5°	371.8	473.2	531.7	425.0	311.0
50°	234.1	302.6	397.2	252.3	214.1
52.5°	166.1	200.9	299.6	177.4	157.3
55°	103.1	115.8	165.1	109.9	102.1
57.5°	61.2	74.3	93.9	74.4	62.0
60°	42.0	52.8	69.0	48.8	38.0
62.5°	36.4	40.9	54.6	38.5	34.8
65°	32.0	33.0	34.0	32.0	30.0
67.5°	28.2	29.2	28.4	28.2	26.4
70°	25.0	26.0	26.0	25.0	24.0
72.5°	22.6	23.6	22.8	22.6	20.8
75°	19.0	19.0	19.0	18.0	17.0
77.5°	14.4	15.4	14.4	14.4	13.4
80°	12.0	13.0	12.0	12.0	11.0
82.5°	9.6	9.8	9.6	9.6	8.6
85°	6.0	6.0	5.0	5.0	5.0
87.5°	1.6	2.6	2.2	2.2	2.2
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	7.44	8.33	8.16	9.05	9.90	7.09	7.99	7.82	8.71	9.55
	3H	7.95	8.74	8.69	9.47	10.35	7.61	8.40	8.35	9.13	10.01
	4H	8.22	8.96	8.97	9.69	10.59	7.86	8.60	8.62	9.34	10.23
	6H	8.45	9.13	9.22	9.88	10.78	8.07	8.75	8.84	9.50	10.40
	8H	8.53	9.17	9.31	9.94	10.85	8.14	8.78	8.92	9.55	10.46
	12H	8.59	9.20	9.37	9.95	10.89	8.17	8.78	8.96	9.54	10.47
4H	2H	7.46	8.20	8.22	8.94	9.83	7.15	7.89	7.91	8.62	9.52
	3H	8.18	8.79	8.95	9.56	10.47	7.88	8.48	8.65	9.26	10.17
	4H	8.58	9.13	9.37	9.90	10.85	8.26	8.80	9.04	9.58	10.52
	6H	8.97	9.43	9.77	10.23	11.18	8.61	9.08	9.41	9.88	10.83
	8H	9.11	9.54	9.91	10.34	11.29	8.73	9.16	9.53	9.96	10.92
	12H	9.20	9.59	10.03	10.41	11.37	8.80	9.18	9.62	10.00	10.97
8H	4H	8.67	9.11	9.48	9.90	10.86	8.37	8.81	9.18	9.60	10.56
	6H	9.18	9.53	10.01	10.37	11.33	8.85	9.20	9.68	10.04	11.00
	8H	9.40	9.72	10.25	10.56	11.53	9.04	9.35	9.88	10.19	11.17
	12H	9.58	9.86	10.42	10.69	11.72	9.18	9.46	10.02	10.28	11.32
12H	4H	8.65	9.03	9.47	9.85	10.81	8.36	8.74	9.18	9.56	10.52
	6H	9.19	9.51	10.04	10.35	11.32	8.87	9.18	9.71	10.02	11.00
	8H	9.45	9.73	10.29	10.55	11.59	9.10	9.38	9.94	10.20	11.24