

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: P854416

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

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854416  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2308-130-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBN-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: -

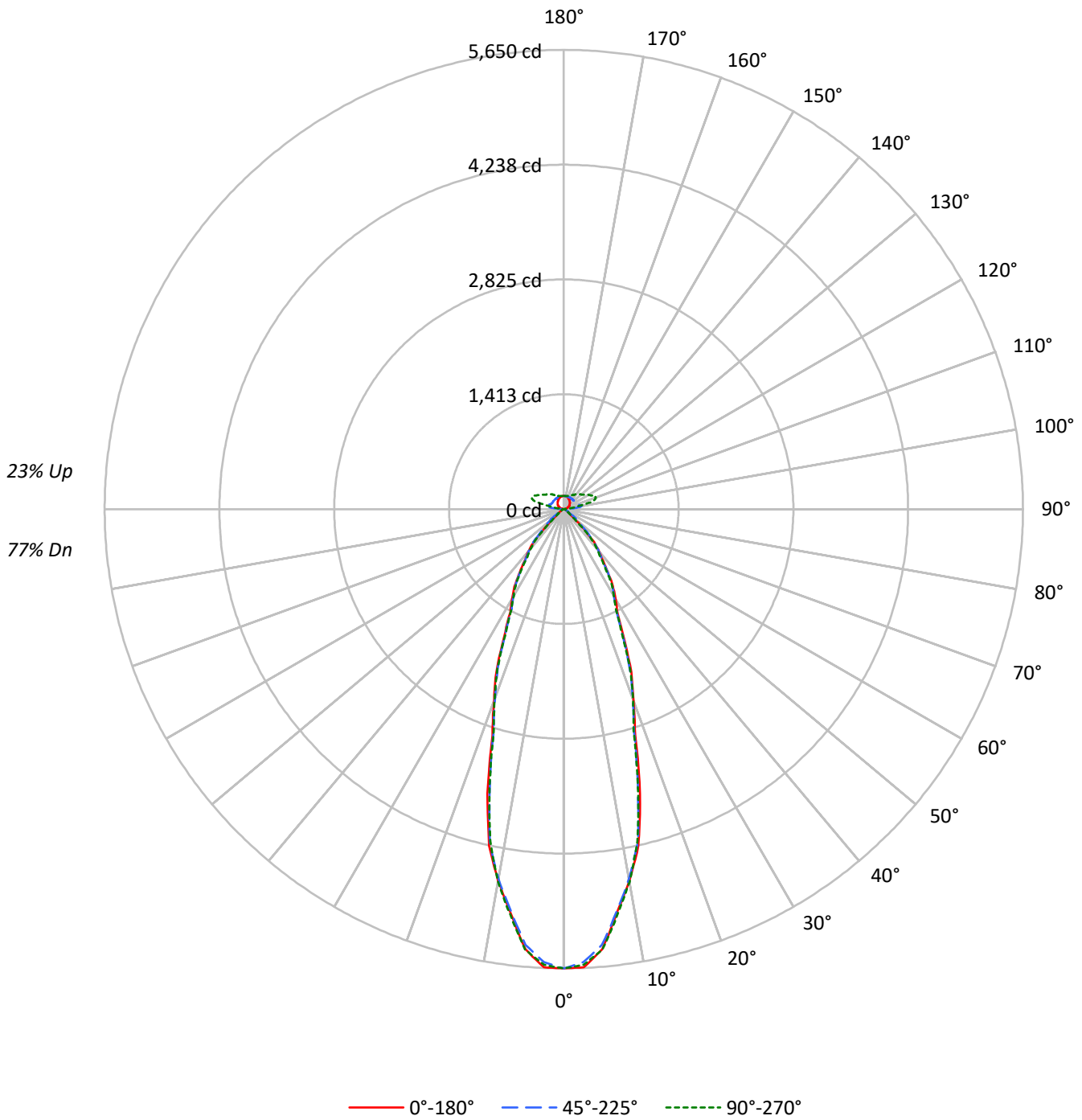
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4287.0 lumens  
Efficiency: N/A  
Efficacy: 122.5 lumens/watt  
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63  
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	0	
RCR																						
0	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77				
1	107	104	101	99	102	100	97	95	91	89	88	84	82	81	76	76	75	71				
2	101	96	91	87	96	92	88	85	85	82	79	78	76	74	72	71	69	66				
3	95	88	83	78	91	85	80	76	79	75	72	73	71	68	68	66	64	62				
4	90	82	76	71	86	79	74	69	74	70	66	69	66	63	65	62	60	57				
5	85	76	70	65	81	74	68	64	69	65	61	65	61	58	61	58	56	54				
6	80	71	65	60	77	69	63	59	65	60	57	61	57	54	58	55	52	50				
7	76	66	60	56	73	64	59	55	61	56	53	58	54	51	55	52	49	47				
8	72	62	56	52	70	61	55	51	58	53	49	55	51	48	52	49	46	45				
9	69	59	53	49	66	57	52	48	55	50	47	52	48	45	50	46	44	42				
10	65	55	50	46	63	54	49	45	52	47	44	50	46	43	47	44	42	40				

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

	0°	45°	90°
0°	91232	91232	91232
5°	88088	87209	88185
10°	76140	75777	76320
15°	60587	58678	58912
20°	43041	42472	42782
25°	30964	30358	30143
30°	23659	23023	22967
35°	18571	18256	17781
40°	14071	13881	13205
45°	7873	9407	7026
50°	2771	5790	2442
55°	1692	3161	1607
60°	1295	1650	1198
65°	1188	1226	1112
70°	1138	1138	1043
75°	1061	1061	998
80°	930	930	930
85°	926	741	741

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 9407 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	490.5	11.4
10°-20°	974.8	22.7
20°-30°	807.3	18.8
30°-40°	580.7	13.5
40°-50°	295.9	6.9
50°-60°	77.0	1.8
60°-70°	31.9	0.7
70°-80°	17.7	0.4
80°-90°	5.7	0.1
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°	2272.6	53.0
0°-40°	2853.3	66.6
0°-60°	3226.2	75.3
0°-90°	3281.5	76.5
90°-120°	469.0	10.9
90°-150°	869.1	20.3
90°-180°	1006.0	23.5
0°-180°	4287.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5650	5650	5650	5650	5650	
5°	5435	5427	5381	5459	5441	490
15°	3625	3584	3510	3535	3524	984
25°	1738	1735	1704	1689	1692	818
35°	942	948	926	911	902	591
45°	345	397	412	383	308	276
55°	60	70	112	65	57	59
65°	31	32	32	30	29	31
75°	17	17	17	16	16	18
85°	5	5	4	5	4	5
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°	5650.5	5650.5	5650.5	5650.5	5650.5
2.5°	5641.6	5632.2	5578.3	5623.0	5612.0
5°	5435.0	5427.1	5380.8	5458.6	5441.0
7.5°	5008.1	5014.8	4987.7	5056.4	5037.6
10°	4644.1	4661.7	4622.0	4721.7	4655.1
12.5°	4242.3	4230.9	4203.4	4218.8	4182.0
15°	3624.6	3583.5	3510.4	3535.2	3524.4
17.5°	2919.6	2935.4	2872.0	2869.4	2857.2
20°	2505.0	2509.9	2471.9	2491.9	2489.9
22.5°	2171.4	2172.4	2123.9	2153.1	2135.5
25°	1738.1	1735.2	1704.1	1689.1	1692.0
27.5°	1425.4	1413.2	1389.7	1399.6	1392.3
30°	1269.0	1259.2	1234.9	1240.8	1231.9
32.5°	1128.7	1129.1	1104.2	1101.3	1094.8
35°	942.2	948.1	926.2	911.0	902.1
37.5°	775.8	781.3	762.8	740.6	733.1
40°	667.6	671.5	658.6	632.4	626.5
42.5°	549.7	566.2	553.5	528.8	515.8
45°	344.8	396.8	412.0	383.2	307.7
47.5°	174.4	246.4	293.9	217.0	142.9
50°	110.3	160.2	230.5	130.6	97.2
52.5°	84.6	110.3	184.0	96.4	78.0
55°	60.1	69.9	112.3	65.0	57.1
57.5°	46.5	52.0	67.2	49.2	44.3
60°	40.1	44.0	51.1	42.0	37.1
62.5°	36.1	38.4	41.5	35.6	33.9
65°	31.1	32.1	32.1	30.0	29.1
67.5°	26.5	27.4	27.3	26.2	25.3
70°	24.1	25.0	24.1	23.0	22.1
72.5°	20.8	21.8	20.8	20.6	19.6
75°	17.0	17.0	17.0	16.0	16.0
77.5°	13.2	13.4	12.4	12.4	11.6
80°	10.0	11.0	10.0	10.0	10.0
82.5°	8.4	8.6	7.6	7.6	7.6
85°	5.0	5.0	4.0	5.0	4.0
87.5°	1.6	1.8	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	4.93	5.76	5.66	6.47	7.32	4.54	5.37	5.28	6.09	6.94
	3H	5.98	6.71	6.73	7.44	8.32	5.55	6.28	6.29	7.01	7.89
	4H	6.41	7.09	7.17	7.83	8.73	5.97	6.66	6.74	7.40	8.29
	6H	6.72	7.35	7.50	8.10	9.00	6.30	6.93	7.08	7.68	8.59
	8H	6.82	7.41	7.61	8.18	9.09	6.41	7.00	7.19	7.77	8.68
	12H	6.89	7.45	7.67	8.21	9.14	6.46	7.02	7.24	7.78	8.71
4H	2H	5.15	5.84	5.92	6.58	7.48	4.83	5.51	5.60	6.25	7.15
	3H	6.46	7.02	7.23	7.79	8.70	6.07	6.64	6.85	7.41	8.32
	4H	7.01	7.52	7.80	8.30	9.24	6.63	7.13	7.42	7.91	8.85
	6H	7.47	7.90	8.28	8.70	9.65	7.09	7.52	7.90	8.32	9.27
	8H	7.62	8.03	8.43	8.82	9.78	7.24	7.65	8.05	8.44	9.40
	12H	7.73	8.09	8.55	8.91	9.87	7.33	7.69	8.15	8.51	9.47
8H	4H	7.16	7.56	7.97	8.36	9.31	6.81	7.21	7.62	8.01	8.97
	6H	7.74	8.07	8.58	8.91	9.87	7.39	7.72	8.23	8.56	9.52
	8H	7.98	8.27	8.83	9.11	10.08	7.63	7.92	8.48	8.76	9.73
	12H	8.17	8.42	9.02	9.25	10.29	7.80	8.05	8.65	8.88	9.92
12H	4H	7.13	7.49	7.96	8.31	9.27	6.80	7.15	7.62	7.97	8.93
	6H	7.76	8.05	8.61	8.89	9.86	7.42	7.71	8.27	8.55	9.53
	8H	8.03	8.28	8.88	9.11	10.15	7.70	7.95	8.54	8.77	9.81