

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: P855089

Luminaire Tested: SQ2-PW1-025U-075D-835-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P855089  
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-835-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

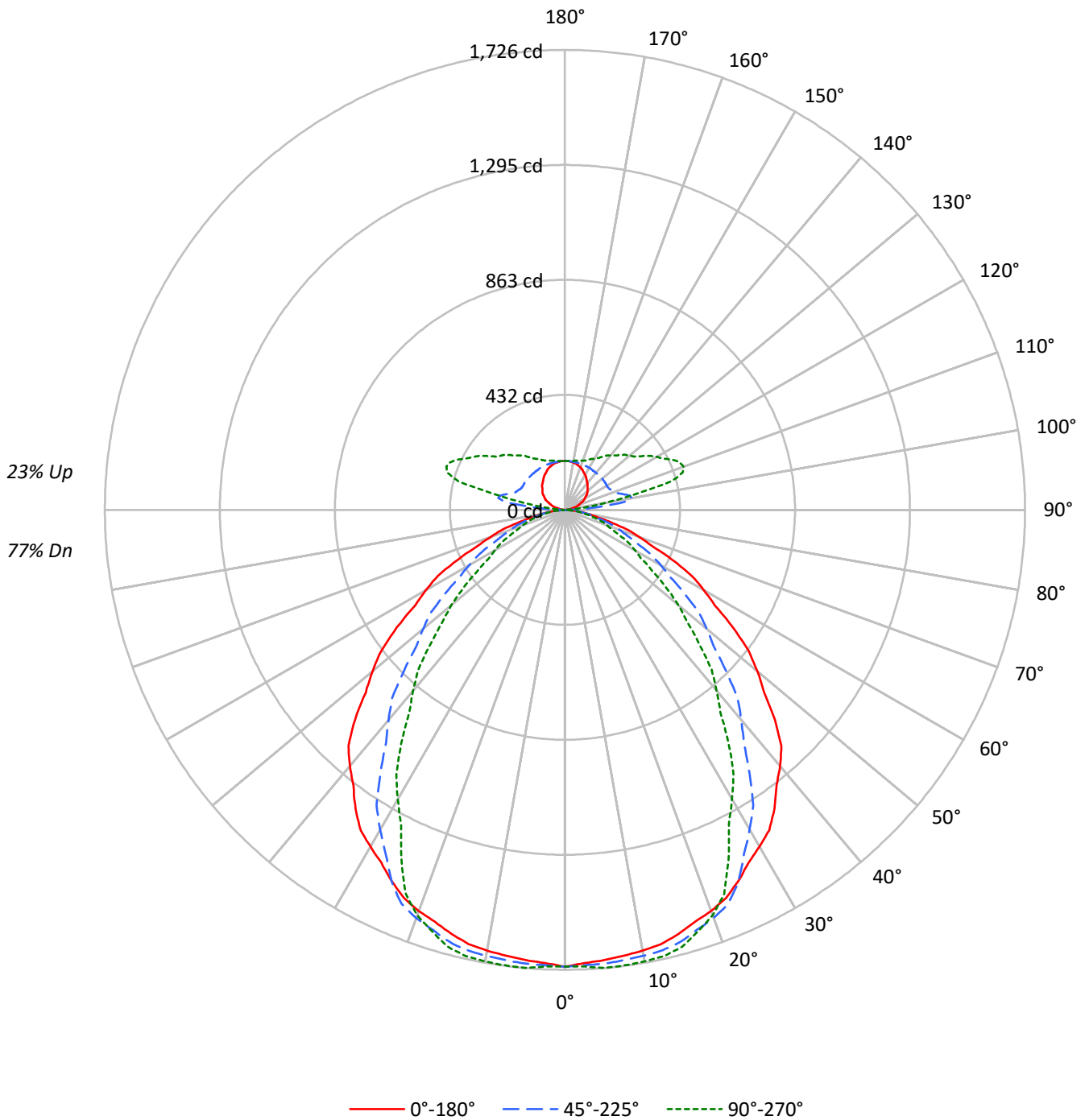
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4941.8 lumens  
Efficiency: N/A  
Efficacy: 144.9 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	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°	27676	27676	27676
5°	27490	27704	27968
10°	27540	27862	28211
15°	27534	28053	28379
20°	27545	28020	27825
25°	27396	27426	25857
30°	27210	25842	23375
35°	26997	23781	21108
40°	26460	21678	18649
45°	25421	19495	16290
50°	23662	17427	13943
55°	21647	15395	11305
60°	19401	13388	9752
65°	16967	11538	8669
70°	13874	10253	7860
75°	10792	8858	7230
80°	8052	7587	6378
85°	5446	5743	3631

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 25421 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.2	3.3
10°-20°	472.9	9.6
20°-30°	696.0	14.1
30°-40°	760.9	15.4
40°-50°	682.6	13.8
50°-60°	509.2	10.3
60°-70°	321.8	6.5
70°-80°	159.4	3.2
80°-90°	37.8	0.8
90°-100°	74.2	1.5
100°-110°	230.8	4.7
110°-120°	225.8	4.6
120°-130°	184.3	3.7
130°-140°	150.8	3.1
140°-150°	117.7	2.4
150°-160°	84.9	1.7
160°-170°	51.9	1.1
170°-180°	17.5	0.4
0°-30°	1332.1	27.0
0°-40°	2093.0	42.4
0°-60°	3284.9	66.5
0°-90°	3803.8	77.0
90°-120°	530.8	10.7
90°-150°	983.6	19.9
90°-180°	1138.0	23.0
0°-180°	4941.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1714	1714	1714	1714	1714	
5°	1696	1723	1709	1711	1726	161
15°	1647	1679	1678	1690	1698	465
25°	1538	1571	1540	1475	1451	708
35°	1370	1355	1206	1101	1071	854
45°	1113	1024	854	747	713	854
55°	769	696	547	429	402	687
65°	444	407	302	243	227	440
75°	173	186	142	119	116	191
85°	29	37	31	21	20	37
90°	0	1	3	3	3	2
95°	10	30	136	50	33	12
105°	40	57	227	434	414	43
115°	72	85	184	381	445	71
125°	100	111	182	299	351	89
135°	120	134	181	258	290	93
145°	141	152	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°	1714.1	1714.1	1714.1	1714.1	1714.1
2.5°	1702.4	1724.1	1710.3	1711.6	1715.5
5°	1696.1	1723.3	1709.3	1711.2	1725.6
7.5°	1687.7	1715.1	1704.6	1710.5	1724.5
10°	1679.8	1708.6	1699.4	1707.9	1720.7
12.5°	1669.4	1699.4	1693.0	1702.7	1715.5
15°	1647.2	1679.2	1678.3	1689.8	1697.8
17.5°	1621.4	1653.4	1651.8	1654.8	1658.7
20°	1603.1	1635.0	1630.8	1619.4	1619.4
22.5°	1577.0	1611.5	1600.9	1569.6	1559.4
25°	1537.8	1571.3	1539.5	1475.2	1451.4
27.5°	1492.1	1519.3	1455.2	1364.0	1330.8
30°	1459.5	1480.2	1386.1	1285.7	1253.8
32.5°	1425.6	1433.5	1315.4	1211.2	1176.7
35°	1369.7	1355.3	1206.5	1101.2	1070.9
37.5°	1303.7	1260.9	1101.7	991.5	958.0
40°	1255.4	1194.7	1028.5	918.3	884.8
42.5°	1201.8	1125.9	959.3	849.1	814.3
45°	1113.3	1024.0	853.8	746.9	713.4
47.5°	1013.7	925.0	755.2	651.7	623.0
50°	942.0	855.8	693.8	590.2	555.1
52.5°	868.8	791.6	633.7	527.2	479.3
55°	769.0	695.5	546.9	428.8	401.6
57.5°	666.1	602.5	468.2	360.9	338.6
60°	600.8	544.9	414.6	324.3	302.0
62.5°	538.1	488.5	362.5	290.5	271.9
65°	444.1	407.3	302.0	242.9	226.9
67.5°	352.6	332.1	251.1	199.3	188.8
70°	293.9	287.4	217.2	174.5	166.5
72.5°	243.0	245.5	184.5	151.1	145.6
75°	173.0	185.8	142.0	119.1	115.9
77.5°	117.9	137.0	105.1	88.0	85.6
80°	86.6	105.7	81.6	68.6	68.6
82.5°	60.4	75.7	58.2	51.6	51.6
85°	29.4	37.3	31.0	21.2	19.6
87.5°	7.8	11.9	5.9	4.6	4.6
90°	0.0	1.1	3.4	3.4	3.4
92.5°	3.6	12.6	43.0	14.1	11.4
95°	10.1	29.9	136.1	50.2	32.6
97.5°	18.4	38.9	225.4	140.3	88.4
100°	24.8	43.5	254.2	237.8	158.5
102.5°	31.0	48.9	248.9	339.6	266.6
105°	40.5	57.0	227.2	433.8	414.0
107.5°	49.9	65.3	206.5	441.0	462.7
110°	56.2	71.6	195.7	430.6	473.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	62.6	77.1	190.3	412.0	466.4
115°	72.0	85.2	184.5	380.6	445.4
117.5°	81.3	93.4	182.0	350.5	416.9
120°	86.6	98.7	181.1	333.3	397.1
122.5°	92.0	104.1	182.0	318.8	377.3
125°	100.2	111.1	182.2	299.2	350.9
127.5°	106.6	117.8	182.2	284.7	328.6
130°	110.2	122.3	182.2	276.5	316.1
132.5°	114.8	126.9	181.3	269.2	306.1
135°	120.4	133.5	181.1	258.4	290.2
137.5°	126.9	139.0	181.1	247.5	276.5
140°	130.5	142.6	181.1	240.1	266.6
142.5°	135.0	146.2	181.1	232.9	256.7
145°	140.6	151.6	181.1	223.2	243.0
147.5°	147.3	156.8	182.2	214.1	229.7
150°	151.9	159.6	182.2	209.5	221.6
152.5°	155.5	162.3	182.2	204.9	215.2
155°	160.8	166.4	182.2	200.4	207.0
157.5°	166.2	170.4	182.2	196.2	200.4
160°	169.9	173.1	182.2	193.5	196.8
162.5°	172.6	175.0	182.2	191.7	194.2
165°	176.5	177.7	183.3	189.0	191.3
167.5°	179.0	179.3	182.2	187.4	188.5
170°	179.9	181.1	182.2	185.6	186.7
172.5°	181.7	182.0	183.1	184.7	184.9
175°	183.3	183.3	183.3	184.5	183.3
177.5°	183.3	183.3	183.3	183.3	183.3
180°	183.3	183.3	183.3	183.3	183.3



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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	20.82	21.92	21.52	22.63	23.46	17.31	18.41	18.00	19.11	19.94
	3H	22.16	23.15	22.87	23.86	24.73	18.53	19.52	19.24	20.23	21.09
	4H	22.55	23.47	23.27	24.20	25.07	18.99	19.92	19.72	20.64	21.52
	6H	22.76	23.61	23.50	24.35	25.24	19.32	20.17	20.06	20.91	21.80
	8H	22.80	23.61	23.55	24.37	25.26	19.40	20.21	20.15	20.97	21.86
	12H	22.81	23.58	23.56	24.33	25.25	19.42	20.19	20.17	20.94	21.86
4H	2H	20.95	21.88	21.68	22.61	23.48	18.02	18.95	18.75	19.67	20.55
	3H	22.52	23.29	23.26	24.05	24.94	19.43	20.20	20.17	20.96	21.85
	4H	23.04	23.73	23.80	24.50	25.42	19.98	20.68	20.74	21.44	22.37
	6H	23.38	23.98	24.16	24.77	25.70	20.40	21.00	21.18	21.79	22.72
	8H	23.47	24.03	24.25	24.81	25.75	20.51	21.07	21.29	21.86	22.80
	12H	23.49	23.99	24.29	24.80	25.75	20.54	21.05	21.34	21.85	22.80
8H	4H	23.09	23.65	23.87	24.44	25.38	20.33	20.89	21.11	21.67	22.61
	6H	23.54	24.00	24.35	24.83	25.77	20.84	21.30	21.65	22.13	23.08
	8H	23.68	24.10	24.51	24.92	25.88	21.01	21.42	21.83	22.24	23.20
	12H	23.76	24.12	24.58	24.94	25.96	21.08	21.44	21.90	22.26	23.27
12H	4H	23.06	23.57	23.86	24.37	25.32	20.35	20.86	21.15	21.66	22.61
	6H	23.53	23.94	24.35	24.77	25.73	20.91	21.32	21.73	22.15	23.11
	8H	23.70	24.06	24.52	24.88	25.90	21.10	21.47	21.93	22.28	23.30