

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: P854317

Luminaire Tested: SQ2-PW1-150U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854317  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G2-2308-131-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PW1-150U-050D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

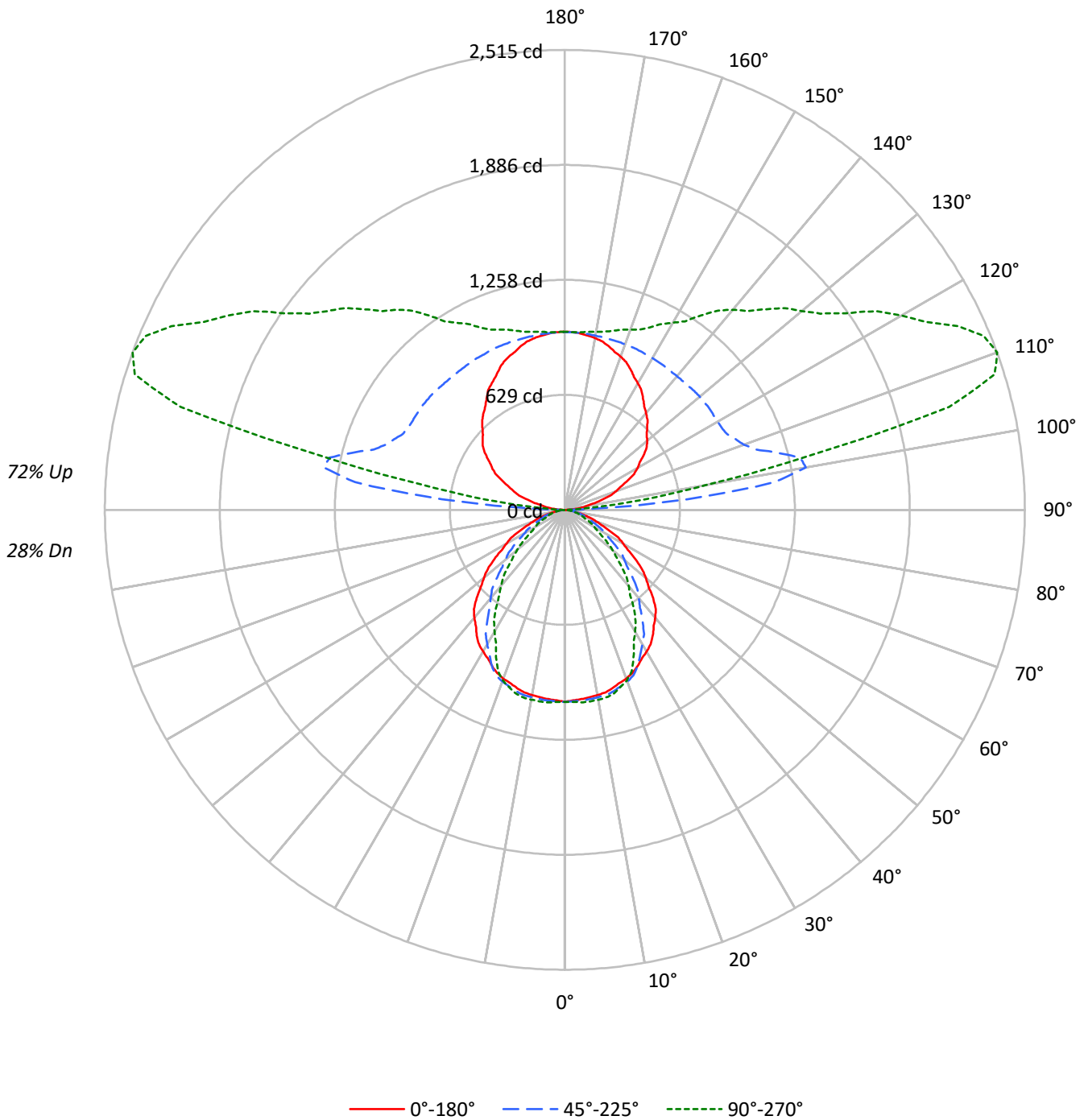
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8335.9 lumens  
Efficiency: N/A  
Efficacy: 112.0 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-Indirect  
  
Input Watts (W): 74.4  
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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CATALOG NUMBER: SQ2-PW1-150U-050D-935-UNV-STD-W-4

### 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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28
1	93	89	85	82	83	80	77	74	63	61	59	47	46	44	32	32	31	24
2	85	78	72	68	76	70	65	61	55	52	49	41	39	38	29	28	26	21
3	78	69	62	57	69	62	56	52	49	45	42	37	34	32	26	24	23	18
4	71	61	54	48	64	55	49	44	44	39	36	33	30	28	23	21	20	16
5	65	54	47	41	58	49	43	38	39	34	31	30	27	24	21	19	18	14
6	60	49	41	36	54	44	37	33	35	30	27	27	24	21	19	17	16	12
7	56	44	36	31	50	40	33	29	32	27	24	24	21	19	17	15	14	11
8	51	40	32	27	46	36	30	25	29	24	21	22	19	17	16	14	12	10
9	48	36	29	24	43	33	27	22	27	22	19	21	17	15	15	13	11	9
10	45	33	26	22	40	30	24	20	24	20	17	19	16	14	14	12	10	8

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

	0°	45°	90°
0°	16953	16953	16953
5°	16840	16969	17131
10°	16870	17067	17280
15°	16866	17183	17384
20°	16873	17165	17045
25°	16782	16800	15838
30°	16667	15828	14318
35°	16537	14566	12930
40°	16208	13278	11424
45°	15573	11942	9978
50°	14493	10675	8540
55°	13258	9430	6925
60°	11883	8202	5974
65°	10392	7068	5310
70°	8497	6279	4815
75°	6613	5427	4429
80°	4928	4649	3905
85°	3335	3520	2223

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15573 cd/sqm



TEST NUMBER: P854317

CATALOG NUMBER: SQ2-PW1-150U-050D-935-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.0	1.2
10°-20°	289.7	3.5
20°-30°	426.3	5.1
30°-40°	466.1	5.6
40°-50°	418.1	5.0
50°-60°	311.9	3.7
60°-70°	197.1	2.4
70°-80°	97.6	1.2
80°-90°	23.9	0.3
90°-100°	370.7	4.4
100°-110°	1213.9	14.6
110°-120°	1200.1	14.4
120°-130°	981.0	11.8
130°-140°	800.6	9.6
140°-150°	623.0	7.5
150°-160°	448.6	5.4
160°-170°	274.4	3.3
170°-180°	92.7	1.1
0°-30°	816.0	9.8
0°-40°	1282.1	15.4
0°-60°	2012.2	24.1
0°-90°	2330.8	28.0
90°-120°	2784.7	33.4
90°-150°	5189.3	62.3
90°-180°	6005.0	72.0
0°-180°	8335.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1039	1056	1047	1048	1057	99
15°	1009	1029	1028	1035	1040	285
25°	942	962	943	904	889	434
35°	839	830	739	675	656	523
45°	682	627	523	458	437	523
55°	471	426	335	263	246	421
65°	272	250	185	149	139	270
75°	106	114	87	73	71	117
85°	18	23	19	13	12	23
90°	1	3	8	7	8	3
95°	52	151	674	240	156	59
105°	211	301	1205	2289	2175	222
115°	380	454	979	2023	2375	375
125°	529	590	965	1595	1874	471
135°	637	704	957	1376	1551	493
145°	745	800	955	1184	1297	467
155°	849	877	961	1059	1100	391
165°	927	936	965	1002	1013	261
175°	969	969	970	977	975	92
180°	973	973	973	973	973	



TEST NUMBER: P854317

CATALOG NUMBER: SQ2-PW1-150U-050D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1050.0	1050.0	1050.0	1050.0	1050.0
2.5°	1042.8	1056.1	1047.6	1048.5	1050.8
5°	1039.0	1055.6	1047.0	1048.2	1057.0
7.5°	1033.8	1050.6	1044.2	1047.8	1056.4
10°	1029.0	1046.6	1041.0	1046.2	1054.0
12.5°	1022.6	1041.0	1037.0	1043.0	1050.8
15°	1009.0	1028.6	1028.0	1035.1	1040.0
17.5°	993.2	1012.8	1011.8	1013.7	1016.0
20°	982.0	1001.6	999.0	992.0	992.0
22.5°	966.0	987.1	980.6	961.5	955.2
25°	942.0	962.5	943.0	903.7	889.0
27.5°	914.0	930.6	891.4	835.5	815.2
30°	894.0	906.7	849.0	787.6	768.0
32.5°	873.2	878.1	805.8	741.9	720.8
35°	839.0	830.2	739.0	674.6	656.0
37.5°	798.6	772.4	674.8	607.3	586.8
40°	769.0	731.9	630.0	562.5	542.0
42.5°	736.2	689.7	587.6	520.1	498.8
45°	682.0	627.3	523.0	457.5	437.0
47.5°	621.0	566.6	462.6	399.2	381.6
50°	577.0	524.2	425.0	361.5	340.0
52.5°	532.2	484.9	388.2	322.9	293.6
55°	471.0	426.0	335.0	262.6	246.0
57.5°	408.0	369.1	286.8	221.1	207.4
60°	368.0	333.8	254.0	198.7	185.0
62.5°	329.6	299.3	222.0	177.9	166.6
65°	272.0	249.5	185.0	148.8	139.0
67.5°	216.0	203.5	153.8	122.1	115.6
70°	180.0	176.1	133.0	106.9	102.0
72.5°	148.8	150.4	113.0	92.5	89.2
75°	106.0	113.8	87.0	73.0	71.0
77.5°	72.2	83.9	64.4	54.0	52.4
80°	53.0	64.7	50.0	42.0	42.0
82.5°	37.0	46.4	35.6	31.6	31.6
85°	18.0	22.9	19.0	13.0	12.0
87.5°	5.0	7.7	4.8	3.8	4.0
90°	1.0	3.0	8.0	7.0	8.0
92.5°	17.0	62.0	190.4	61.9	49.6
95°	52.0	150.7	674.0	240.1	156.0
97.5°	94.4	198.8	1156.3	699.5	433.6
100°	124.0	223.7	1337.9	1194.8	791.9
102.5°	157.6	255.0	1317.9	1760.5	1364.7
105°	211.0	300.9	1204.9	2289.2	2174.8
107.5°	263.6	346.1	1094.7	2338.7	2464.4
110°	298.0	378.2	1041.9	2281.1	2514.8



TEST NUMBER: P854317

CATALOG NUMBER: SQ2-PW1-150U-050D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	330.8	408.6	1009.9	2181.0	2480.4
115°	380.0	454.3	978.9	2022.9	2374.8
117.5°	427.8	497.2	967.1	1867.4	2224.8
120°	459.0	524.5	963.9	1776.8	2124.8
122.5°	487.0	550.9	963.9	1698.6	2021.7
125°	529.0	589.6	964.9	1595.2	1873.9
127.5°	564.6	626.3	963.7	1519.0	1761.5
130°	587.0	649.5	962.9	1472.9	1691.9
132.5°	607.0	671.1	960.5	1433.2	1631.9
135°	637.0	704.4	956.9	1375.9	1550.9
137.5°	668.6	735.4	954.7	1316.1	1474.3
140°	690.9	755.5	953.9	1278.3	1427.9
142.5°	713.3	774.0	953.9	1238.0	1373.5
145°	744.9	799.7	954.9	1183.5	1296.9
147.5°	778.1	823.7	956.3	1136.1	1221.7
150°	798.9	839.0	957.9	1108.6	1180.9
152.5°	819.7	855.1	958.7	1085.9	1145.7
155°	848.9	877.3	960.9	1058.9	1099.9
157.5°	875.1	895.7	963.1	1037.6	1067.3
160°	891.9	908.6	963.9	1025.5	1048.9
162.5°	906.3	919.8	963.9	1015.7	1032.9
165°	926.9	935.7	964.9	1002.2	1012.9
167.5°	944.3	948.6	966.1	991.7	997.5
170°	953.9	955.9	966.9	986.0	987.9
172.5°	961.1	962.3	969.3	981.9	982.3
175°	968.9	968.9	969.9	976.9	974.9
177.5°	972.9	972.1	971.3	976.1	972.9
180°	972.9	972.9	972.9	972.9	972.9



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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	14.37	15.04	15.50	16.16	17.72	10.85	11.53	11.98	12.65	14.20
	3H	15.67	16.28	16.81	17.40	18.98	12.04	12.65	13.18	13.77	15.35
	4H	16.04	16.61	17.19	17.74	19.32	12.48	13.05	13.63	14.18	15.76
	6H	16.23	16.76	17.39	17.89	19.48	12.79	13.32	13.95	14.45	16.04
	8H	16.26	16.76	17.42	17.91	19.49	12.86	13.36	14.02	14.51	16.09
	12H	16.25	16.73	17.41	17.86	19.47	12.87	13.34	14.03	14.48	16.08
4H	2H	14.45	15.02	15.60	16.15	17.72	11.51	12.08	12.67	13.21	14.79
	3H	15.97	16.45	17.14	17.60	19.19	12.88	13.36	14.04	14.51	16.10
	4H	16.48	16.91	17.64	18.06	19.66	13.42	13.86	14.59	15.00	16.61
	6H	16.80	17.17	17.97	18.34	19.94	13.82	14.19	14.99	15.36	16.96
	8H	16.87	17.22	18.04	18.38	19.99	13.92	14.27	15.09	15.42	17.04
	12H	16.88	17.20	18.06	18.36	19.98	13.93	14.25	15.12	15.42	17.04
8H	4H	16.50	16.85	17.67	18.01	19.62	13.74	14.08	14.90	15.24	16.86
	6H	16.93	17.22	18.12	18.42	20.03	14.23	14.52	15.42	15.72	17.33
	8H	17.07	17.32	18.27	18.50	20.14	14.40	14.65	15.59	15.83	17.46
	12H	17.13	17.35	18.33	18.53	20.19	14.45	14.67	15.65	15.85	17.51
12H	4H	16.45	16.77	17.63	17.94	19.56	13.74	14.06	14.93	15.23	16.85
	6H	16.92	17.17	18.11	18.35	19.98	14.30	14.55	15.49	15.73	17.36
	8H	17.07	17.29	18.27	18.47	20.14	14.48	14.70	15.67	15.87	17.54