

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: P854280

Luminaire Tested: SQ2-PW1-0U-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854280  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PW1-0U-050D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: -  
Ballast/Driver: -

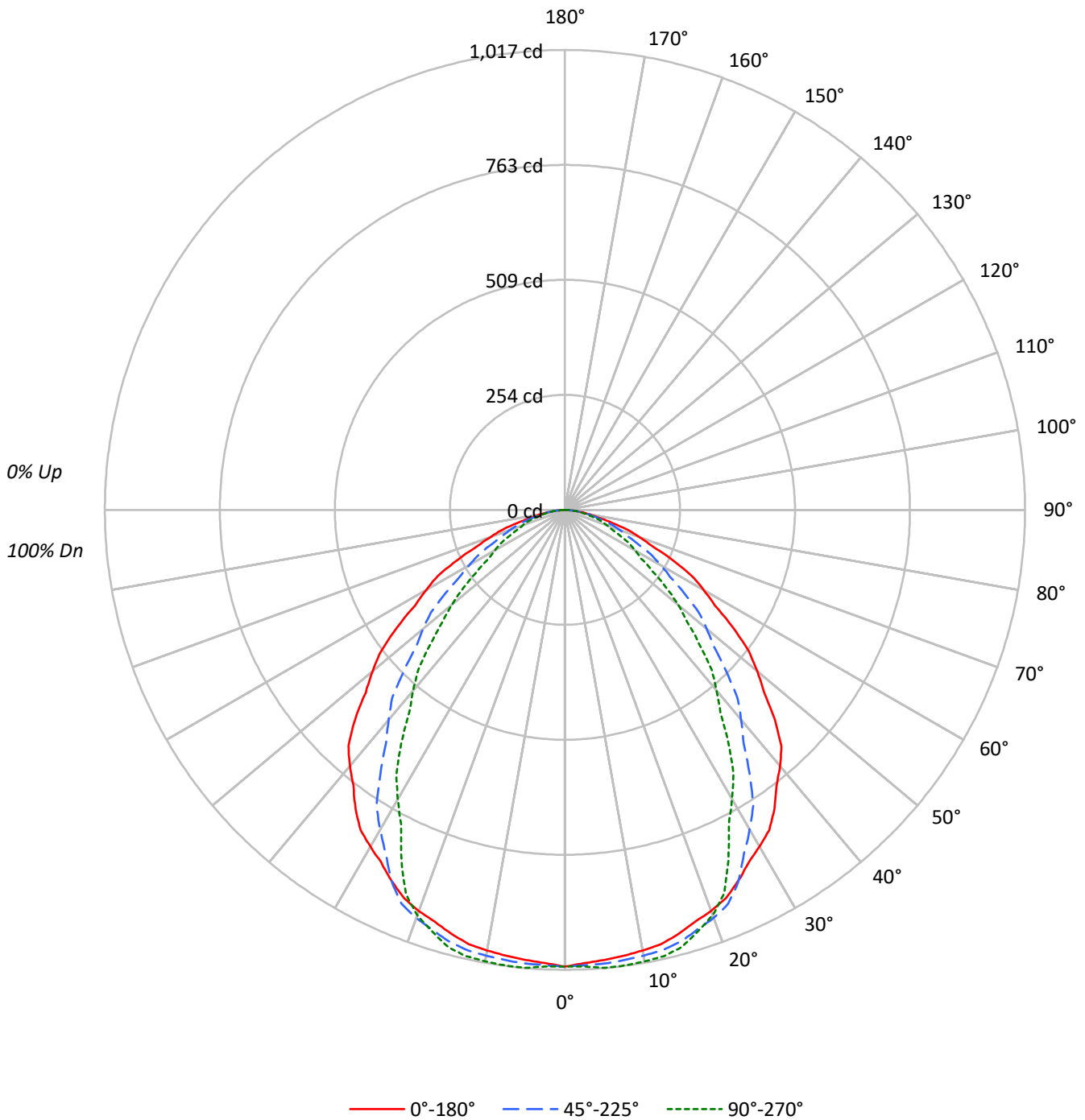
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2240.8 lumens  
Efficiency: N/A  
Efficacy: 125.9 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: Direct  
  
Input Watts (W): 17.8  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	82	79	76	74				74
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64				64
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56				56
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51	49				49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44				44
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	46	41	39				39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	37	47	42	37	35				35
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32				32
10	57	44	37	32	55	44	36	31	43	36	31	42	36	31	41	35	31	29				29

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

	0°	45°	90°
0°	16306	16306	16306
5°	16196	16321	16477
10°	16226	16415	16620
15°	16222	16527	16720
20°	16228	16509	16393
25°	16140	16158	15232
30°	16032	15224	13772
35°	15906	14010	12435
40°	15588	12770	10987
45°	14979	11485	9597
50°	13941	10268	8214
55°	12752	9070	6660
60°	11428	7889	5745
65°	9994	6797	5108
70°	8172	6038	4631
75°	6363	5221	4261
80°	4742	4472	3756
85°	3205	3390	2130

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14979 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.2	4.3
10°-20°	278.6	12.4
20°-30°	410.0	18.3
30°-40°	448.3	20.0
40°-50°	402.2	17.9
50°-60°	300.0	13.4
60°-70°	189.6	8.5
70°-80°	93.9	4.2
80°-90°	22.0	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	784.8	35.0
0°-40°	1233.1	55.0
0°-60°	1935.3	86.4
0°-90°	2240.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2240.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1010	1010	1010	1010	1010	
5°	999	1015	1007	1008	1017	95
15°	970	989	989	996	1000	274
25°	906	926	907	869	855	417
35°	807	798	711	649	631	503
45°	656	603	503	440	420	503
55°	453	410	322	253	237	405
65°	262	240	178	143	134	259
75°	102	110	84	70	68	112
85°	17	22	18	12	12	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1009.9	1009.9	1009.9	1009.9	1009.9
2.5°	1003.0	1015.8	1007.6	1008.4	1010.7
5°	999.3	1015.3	1007.0	1008.2	1016.6
7.5°	994.3	1010.5	1004.3	1007.8	1016.1
10°	989.7	1006.6	1001.2	1006.2	1013.7
12.5°	983.5	1001.2	997.4	1003.1	1010.7
15°	970.5	989.3	988.7	995.6	1000.3
17.5°	955.3	974.1	973.2	974.9	977.2
20°	944.5	963.3	960.8	954.1	954.1
22.5°	929.1	949.4	943.1	924.7	918.7
25°	906.0	925.8	907.0	869.2	855.0
27.5°	879.1	895.1	857.4	803.6	784.1
30°	859.9	872.1	816.6	757.5	738.7
32.5°	839.9	844.6	775.0	713.6	693.3
35°	807.0	798.5	710.8	648.8	630.9
37.5°	768.1	742.9	649.0	584.1	564.4
40°	739.6	703.9	605.9	541.0	521.3
42.5°	708.1	663.3	565.2	500.3	479.8
45°	656.0	603.3	503.0	440.1	420.3
47.5°	597.3	545.0	444.9	384.0	367.0
50°	555.0	504.2	408.8	347.7	327.0
52.5°	511.9	466.4	373.4	310.6	282.4
55°	453.0	409.8	322.2	252.6	236.6
57.5°	392.4	355.0	275.8	212.6	199.5
60°	353.9	321.0	244.3	191.1	177.9
62.5°	317.0	287.9	213.5	171.1	160.2
65°	261.6	240.0	177.9	143.1	133.7
67.5°	207.8	195.7	147.9	117.4	111.2
70°	173.1	169.4	127.9	102.8	98.1
72.5°	143.1	144.6	108.7	89.0	85.8
75°	102.0	109.5	83.7	70.2	68.3
77.5°	69.4	80.7	61.9	51.9	50.4
80°	51.0	62.3	48.1	40.4	40.4
82.5°	35.6	44.6	34.2	30.4	30.4
85°	17.3	22.0	18.3	12.5	11.5
87.5°	4.6	6.9	3.1	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0



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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	20.67	22.17	21.03	22.49	22.80	17.16	18.66	17.52	18.97	19.29
	3H	22.04	23.38	22.42	23.71	24.07	18.41	19.75	18.78	20.08	20.44
	4H	22.44	23.70	22.84	24.05	24.43	18.88	20.14	19.28	20.49	20.87
	6H	22.67	23.84	23.09	24.20	24.60	19.23	20.39	19.64	20.76	21.15
	8H	22.72	23.83	23.15	24.22	24.62	19.32	20.43	19.75	20.82	21.22
	12H	22.74	23.80	23.17	24.18	24.61	19.35	20.41	19.78	20.79	21.22
4H	2H	20.85	22.11	21.25	22.46	22.84	17.91	19.17	18.31	19.52	19.90
	3H	22.45	23.49	22.86	23.89	24.29	19.36	20.40	19.77	20.80	21.20
	4H	22.98	23.92	23.41	24.33	24.77	19.93	20.86	20.36	21.28	21.72
	6H	23.34	24.16	23.80	24.60	25.06	20.36	21.18	20.82	21.62	22.08
	8H	23.43	24.20	23.90	24.64	25.11	20.48	21.24	20.94	21.69	22.15
	12H	23.48	24.16	23.96	24.64	25.11	20.53	21.21	21.01	21.69	22.16
8H	4H	23.06	23.82	23.53	24.27	24.74	20.30	21.06	20.76	21.50	21.97
	6H	23.52	24.15	24.02	24.64	25.12	20.82	21.45	21.32	21.94	22.42
	8H	23.67	24.23	24.18	24.74	25.23	20.99	21.55	21.50	22.06	22.55
	12H	23.76	24.26	24.27	24.75	25.32	21.08	21.57	21.59	22.07	22.63
12H	4H	23.05	23.73	23.53	24.21	24.68	20.34	21.02	20.82	21.50	21.97
	6H	23.51	24.08	24.03	24.59	25.08	20.89	21.46	21.41	21.97	22.45
	8H	23.70	24.20	24.21	24.69	25.26	21.10	21.60	21.61	22.09	22.66