

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P1036342

Luminaire Tested: SQ4R-PW1-100D-B2750-1D-UNV-W2A_3500K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036342
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P564826)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PW1-100D-B2750-1D-UNV-W2A_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

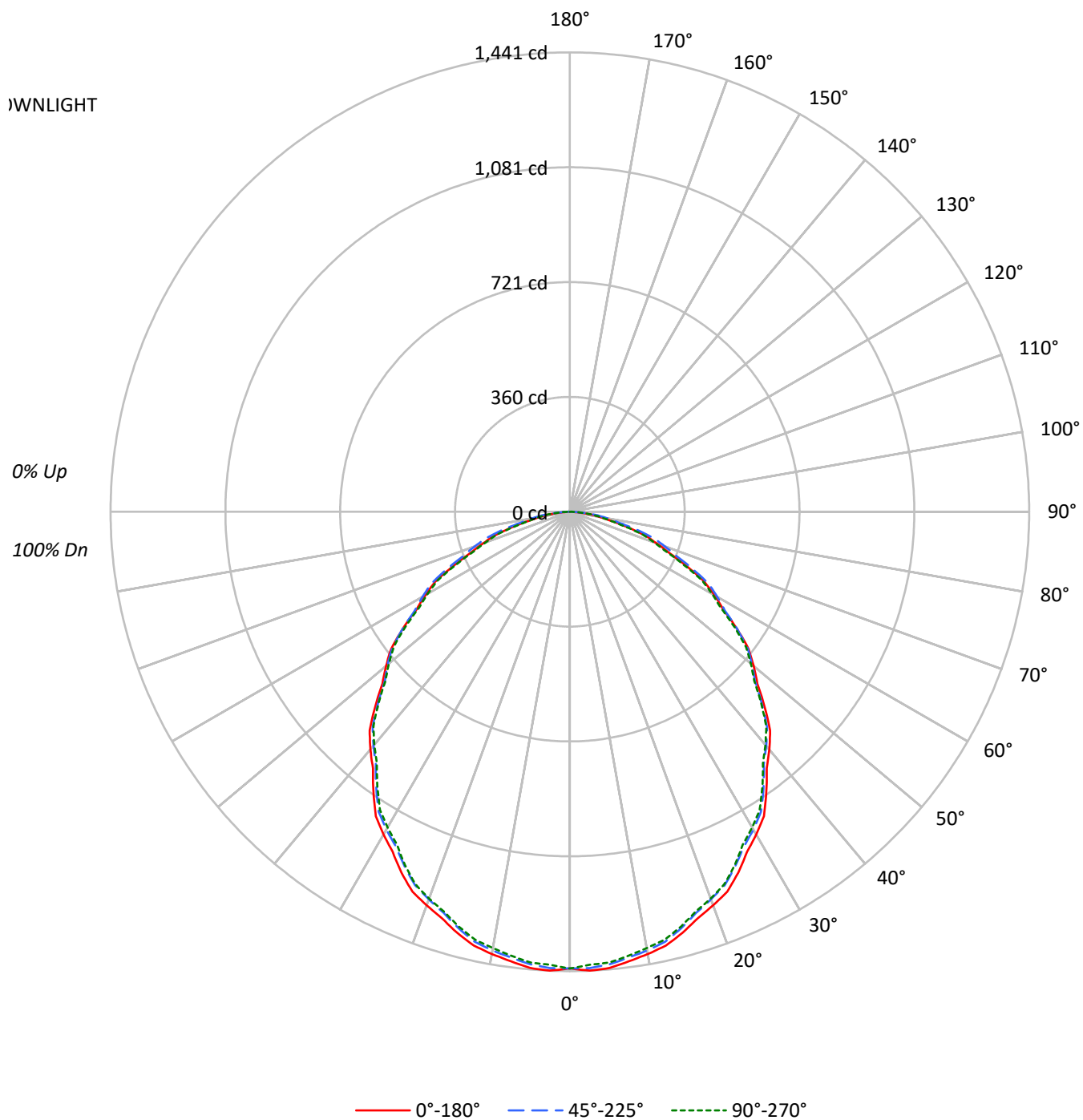
Lumens per Lamp: N/A
Luminaire Lumens: 3645.2 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.9
Input Voltage (V): NR
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13217	13217	13217
5°	13304	13199	13141
10°	13197	13092	13020
15°	13058	12913	12865
20°	12901	12703	12679
25°	12721	12491	12451
30°	12453	12265	12184
35°	12100	11928	11856
40°	11722	11538	11494
45°	11265	11117	11066
50°	10800	10711	10634
55°	10293	10293	10132
60°	9667	9854	9503
65°	8844	9287	8625
70°	7796	8546	7594
75°	6662	7646	6477
80°	5170	6440	5233
85°	3335	4954	4404

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11265 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.9	3.7
10°-20°	380.9	10.4
20°-30°	565.0	15.5
30°-40°	661.1	18.1
40°-50°	658.1	18.1
50°-60°	568.3	15.6
60°-70°	409.1	11.2
70°-80°	214.5	5.9
80°-90°	53.2	1.5
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°	1080.8	29.6
0°-40°	1741.9	47.8
0°-60°	2968.3	81.4
0°-90°	3645.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3645.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1433	1433	1433	1433	1433	
5°	1436	1420	1425	1421	1419	136
15°	1367	1350	1352	1349	1347	385
25°	1250	1229	1227	1219	1223	575
35°	1074	1059	1059	1049	1053	672
45°	863	856	852	850	848	666
55°	640	639	640	631	630	571
65°	405	418	425	409	395	402
75°	187	204	214	200	182	200
85°	32	41	47	44	42	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1432.6	1432.6	1432.6	1432.6	1432.6
2.5°	1440.8	1428.9	1432.6	1429.6	1422.5
5°	1436.5	1420.4	1425.2	1421.3	1418.9
7.5°	1422.0	1407.2	1410.4	1406.5	1404.9
10°	1408.6	1393.9	1397.4	1392.3	1389.8
12.5°	1393.7	1377.7	1381.2	1376.1	1374.7
15°	1367.1	1349.7	1351.9	1349.2	1346.9
17.5°	1336.2	1318.8	1319.0	1315.1	1314.4
20°	1314.0	1295.5	1293.8	1288.8	1291.4
22.5°	1289.8	1270.3	1268.5	1261.6	1265.1
25°	1249.6	1228.7	1227.0	1219.4	1223.1
27.5°	1203.2	1182.6	1182.6	1171.9	1175.8
30°	1168.9	1149.1	1151.3	1138.7	1143.7
32.5°	1132.6	1114.7	1115.8	1103.4	1108.4
35°	1074.3	1059.4	1059.0	1049.0	1052.6
37.5°	1014.6	1001.6	999.4	993.7	994.6
40°	973.3	962.1	958.0	954.3	954.3
42.5°	929.7	919.8	915.6	912.8	911.9
45°	863.4	856.0	852.0	849.5	848.1
47.5°	797.6	791.0	787.5	785.7	784.4
50°	752.4	747.4	746.2	742.1	740.9
52.5°	706.9	703.9	702.6	697.8	696.5
55°	639.9	638.8	639.9	631.2	629.9
57.5°	570.3	572.3	576.4	564.4	561.4
60°	523.9	528.7	534.0	520.0	515.0
62.5°	476.3	484.4	491.5	475.4	468.4
65°	405.1	417.6	425.4	408.6	395.1
67.5°	336.6	351.8	361.2	343.4	327.9
70°	289.0	306.4	316.8	298.8	281.5
72.5°	247.6	267.0	275.5	258.2	241.1
75°	186.9	204.1	214.5	200.2	181.7
77.5°	132.5	148.8	157.5	145.1	129.7
80°	97.3	114.5	121.2	110.8	98.5
82.5°	69.0	83.4	87.9	81.6	73.1
85°	31.5	41.3	46.8	44.1	41.6
87.5°	8.0	15.0	19.2	19.2	20.3
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	19.98	21.58	20.34	21.89	22.21	19.88	21.48	20.24	21.79	22.11
	3H	21.54	22.98	21.92	23.31	23.67	21.41	22.85	21.79	23.18	23.54
	4H	22.09	23.45	22.49	23.79	24.17	21.95	23.31	22.35	23.66	24.03
	6H	22.38	23.64	22.79	24.00	24.39	22.25	23.50	22.66	23.87	24.26
	8H	22.47	23.67	22.90	24.06	24.46	22.35	23.55	22.78	23.94	24.34
	12H	22.51	23.66	22.94	24.04	24.47	22.41	23.56	22.84	23.94	24.37
4H	2H	20.62	21.98	21.02	22.33	22.70	20.54	21.90	20.94	22.25	22.62
	3H	22.42	23.56	22.83	23.95	24.35	22.31	23.44	22.72	23.84	24.24
	4H	23.08	24.11	23.51	24.52	24.96	22.96	23.98	23.39	24.40	24.83
	6H	23.49	24.38	23.94	24.82	25.28	23.36	24.26	23.82	24.70	25.15
	8H	23.62	24.45	24.08	24.89	25.36	23.51	24.34	23.97	24.78	25.25
	12H	23.68	24.43	24.17	24.91	25.38	23.60	24.35	24.08	24.83	25.30
8H	4H	23.36	24.19	23.82	24.64	25.10	23.25	24.08	23.71	24.53	24.99
	6H	23.88	24.57	24.37	25.06	25.53	23.77	24.46	24.26	24.95	25.42
	8H	24.08	24.70	24.59	25.21	25.69	23.98	24.60	24.49	25.11	25.59
	12H	24.20	24.75	24.71	25.24	25.80	24.13	24.68	24.64	25.17	25.73
12H	4H	23.38	24.13	23.86	24.60	25.07	23.27	24.02	23.75	24.50	24.97
	6H	23.92	24.54	24.43	25.05	25.54	23.82	24.44	24.33	24.94	25.43
	8H	24.18	24.73	24.69	25.22	25.78	24.08	24.63	24.59	25.12	25.68