

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: P1036344

Luminaire Tested: SQ4R-PW1-100D-B2750-1D-UNV-W2A_5000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036344
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_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

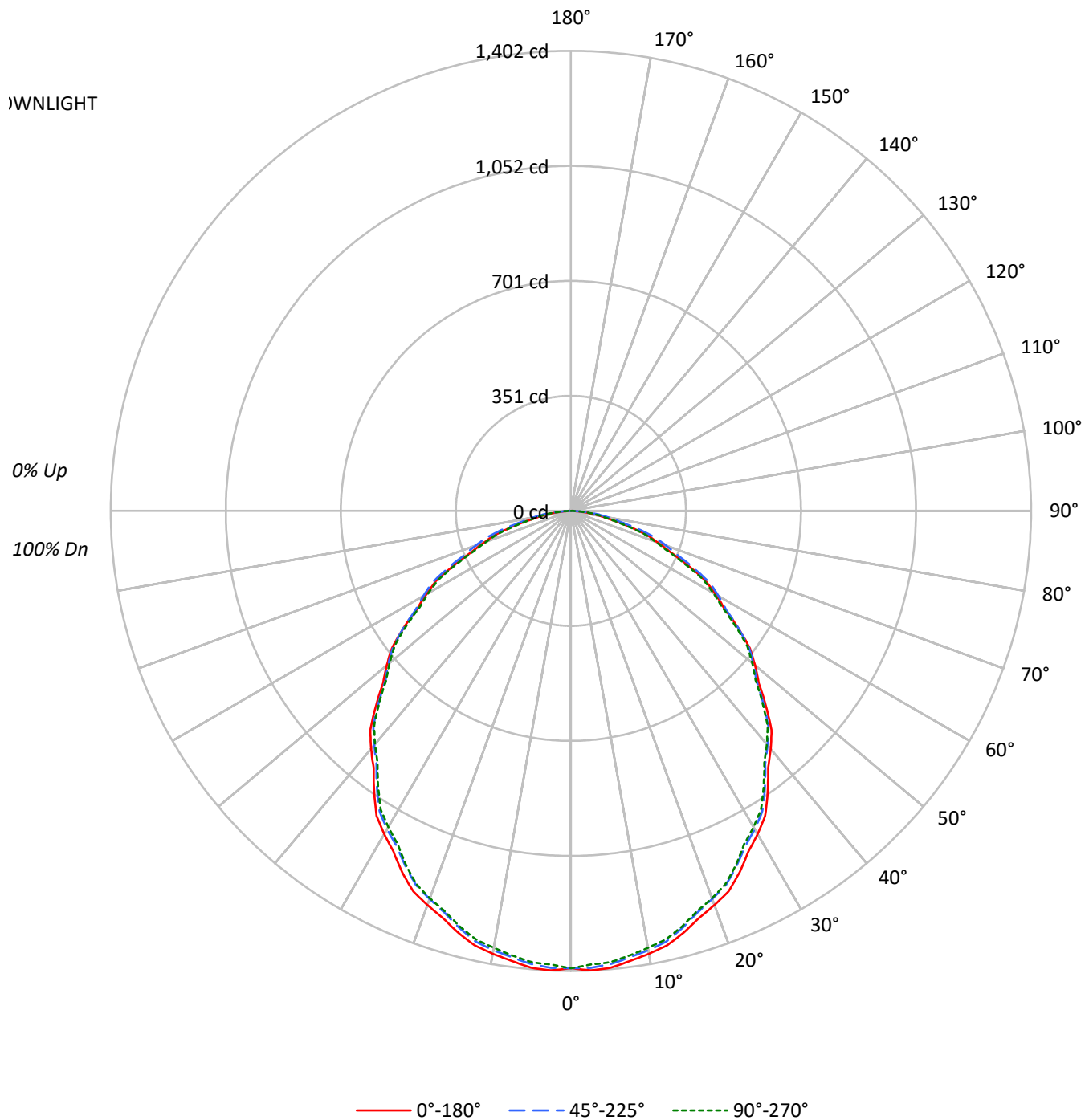
Lumens per Lamp: N/A
Luminaire Lumens: 3546.3 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12859	12859	12859
5°	12944	12841	12784
10°	12839	12737	12667
15°	12704	12562	12517
20°	12552	12358	12336
25°	12376	12152	12113
30°	12115	11933	11853
35°	11771	11604	11535
40°	11404	11225	11182
45°	10960	10815	10766
50°	10507	10419	10346
55°	10013	10013	9857
60°	9405	9586	9247
65°	8604	9034	8392
70°	7583	8314	7389
75°	6481	7440	6302
80°	5026	6270	5095
85°	3250	4817	4287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10960 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	3.7
10°-20°	370.6	10.4
20°-30°	549.7	15.5
30°-40°	643.2	18.1
40°-50°	640.3	18.1
50°-60°	552.9	15.6
60°-70°	398.0	11.2
70°-80°	208.7	5.9
80°-90°	51.8	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°	1051.5	29.6
0°-40°	1694.6	47.8
0°-60°	2887.8	81.4
0°-90°	3546.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3546.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1394	1394	1394	1394	1394	
5°	1398	1382	1386	1383	1380	132
15°	1330	1313	1315	1313	1310	375
25°	1216	1195	1194	1186	1190	559
35°	1045	1031	1030	1021	1024	653
45°	840	833	829	826	825	648
55°	622	622	622	614	613	555
65°	394	406	414	398	384	391
75°	182	199	209	195	177	195
85°	31	40	46	43	40	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.8	1393.8	1393.8	1393.8	1393.8
2.5°	1401.8	1390.1	1393.8	1390.8	1384.0
5°	1397.6	1381.9	1386.5	1382.7	1380.4
7.5°	1383.4	1369.0	1372.2	1368.3	1366.8
10°	1370.4	1356.1	1359.5	1354.5	1352.1
12.5°	1355.9	1340.4	1343.8	1338.7	1337.4
15°	1330.0	1313.1	1315.2	1312.7	1310.4
17.5°	1300.0	1283.0	1283.2	1279.4	1278.8
20°	1278.4	1260.4	1258.7	1253.8	1256.4
22.5°	1254.9	1235.8	1234.1	1227.4	1230.8
25°	1215.7	1195.4	1193.7	1186.3	1189.9
27.5°	1170.6	1150.5	1150.5	1140.1	1144.0
30°	1137.2	1118.0	1120.1	1107.8	1112.6
32.5°	1101.9	1084.5	1085.5	1073.5	1078.4
35°	1045.1	1030.7	1030.3	1020.6	1024.1
37.5°	987.1	974.4	972.3	966.8	967.6
40°	946.9	936.0	932.0	928.4	928.4
42.5°	904.5	894.8	890.8	888.0	887.2
45°	840.0	832.7	828.9	826.5	825.1
47.5°	776.0	769.5	766.1	764.4	763.1
50°	732.0	727.2	725.9	722.0	720.8
52.5°	687.7	684.8	683.6	678.9	677.7
55°	622.5	621.5	622.5	614.1	612.8
57.5°	554.8	556.7	560.7	549.1	546.2
60°	509.7	514.4	519.5	505.9	501.1
62.5°	463.4	471.3	478.2	462.5	455.7
65°	394.1	406.2	413.8	397.6	384.4
67.5°	327.5	342.3	351.4	334.1	319.0
70°	281.1	298.1	308.2	290.7	273.9
72.5°	240.9	259.7	268.0	251.2	234.6
75°	181.8	198.6	208.7	194.8	176.8
77.5°	128.9	144.8	153.3	141.2	126.1
80°	94.6	111.4	118.0	107.8	95.9
82.5°	67.1	81.1	85.5	79.4	71.1
85°	30.7	40.2	45.5	42.9	40.5
87.5°	7.8	14.6	18.7	18.7	19.7
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	19.88	21.48	20.25	21.80	22.11	19.78	21.38	20.15	21.70	22.01
	3H	21.44	22.89	21.82	23.21	23.57	21.31	22.76	21.69	23.08	23.44
	4H	21.99	23.35	22.39	23.70	24.07	21.86	23.21	22.25	23.56	23.94
	6H	22.29	23.54	22.70	23.91	24.30	22.15	23.41	22.56	23.77	24.16
	8H	22.38	23.58	22.80	23.97	24.36	22.26	23.45	22.68	23.84	24.24
	12H	22.42	23.56	22.85	23.95	24.37	22.32	23.47	22.75	23.85	24.28
4H	2H	20.53	21.88	20.92	22.23	22.61	20.45	21.80	20.85	22.15	22.53
	3H	22.33	23.46	22.74	23.86	24.26	22.21	23.35	22.62	23.75	24.15
	4H	22.99	24.01	23.42	24.42	24.86	22.87	23.89	23.30	24.30	24.74
	6H	23.39	24.28	23.85	24.72	25.18	23.27	24.16	23.72	24.60	25.06
	8H	23.52	24.36	23.98	24.80	25.26	23.41	24.24	23.87	24.69	25.15
	12H	23.59	24.34	24.07	24.81	25.28	23.51	24.25	23.99	24.73	25.20
8H	4H	23.26	24.10	23.72	24.54	25.01	23.16	23.99	23.62	24.43	24.90
	6H	23.78	24.47	24.28	24.96	25.44	23.67	24.36	24.17	24.85	25.33
	8H	23.98	24.60	24.49	25.11	25.60	23.88	24.50	24.39	25.01	25.50
	12H	24.10	24.65	24.61	25.14	25.70	24.04	24.59	24.55	25.08	25.64
12H	4H	23.28	24.03	23.76	24.51	24.98	23.18	23.93	23.66	24.40	24.87
	6H	23.83	24.45	24.34	24.96	25.44	23.72	24.34	24.23	24.85	25.34
	8H	24.08	24.63	24.59	25.12	25.68	23.99	24.54	24.50	25.03	25.59