

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: P1036246

Luminaire Tested: SQ4R-PC3-100D-B2750-1D-UNV-W2A_3500K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036246
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P562810)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PC3-100D-B2750-1D-UNV-W2A_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

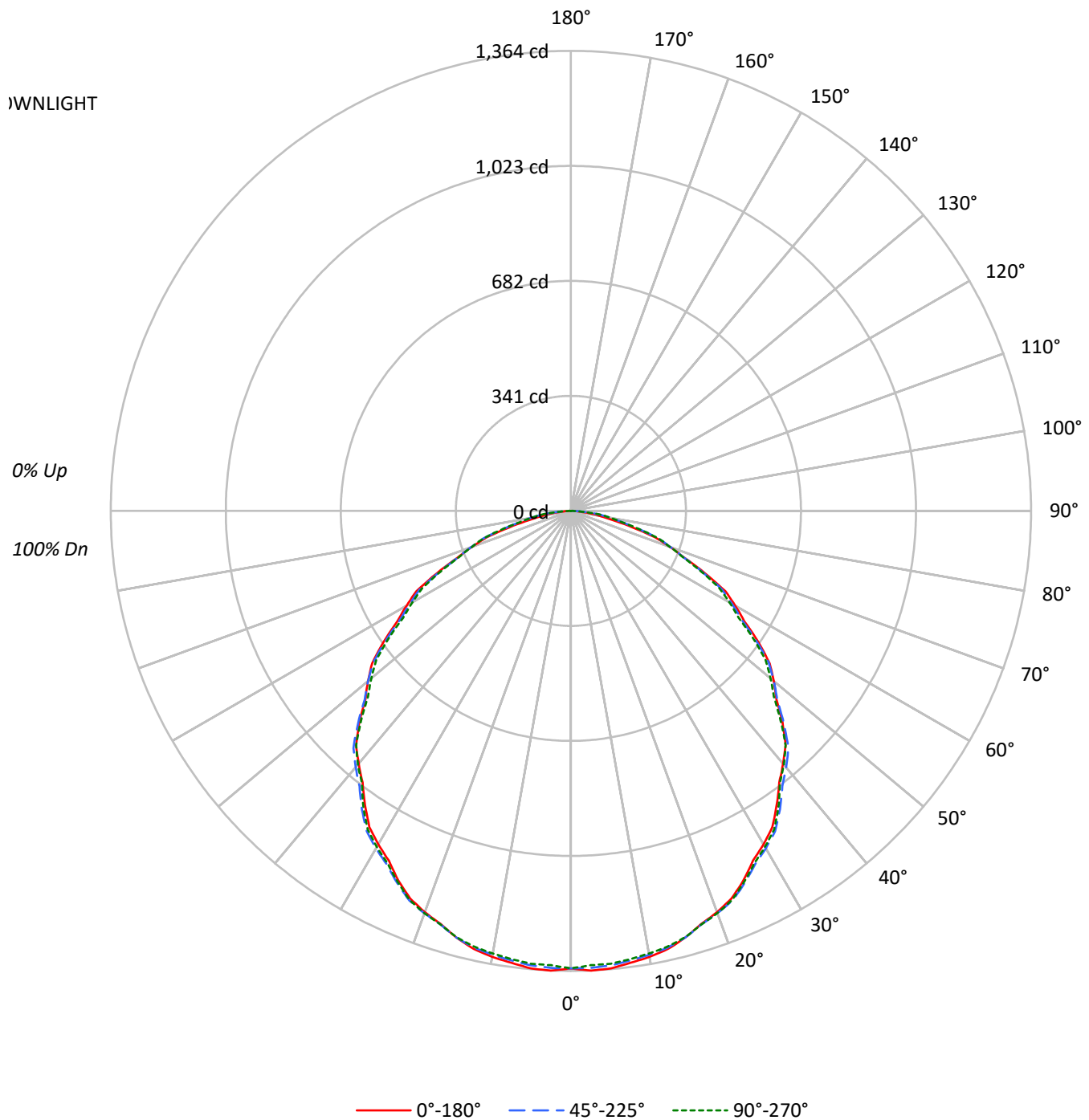
Lumens per Lamp: N/A
Luminaire Lumens: 3701.9 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	100	97	106	102	98	95	98	95	92		94	92	89		91
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		80
3	91	80	72	66	88	79	71	65	76	70	64		73	68	63		71
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63
5	77	64	55	48	74	63	54	48	61	53	48		59	52	47		57
6	71	58	49	42	69	57	48	42	55	47	42		53	46	41		52
7	66	52	43	37	64	51	43	37	50	42	37		48	42	37		47
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		43
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		40
10	54	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12513	12513	12513
5°	12609	12528	12482
10°	12579	12520	12484
15°	12513	12513	12499
20°	12431	12466	12466
25°	12313	12401	12364
30°	12162	12309	12256
35°	11982	12164	12080
40°	11783	11950	11830
45°	11571	11652	11470
50°	11267	11267	11088
55°	10909	10768	10608
60°	10383	10175	10010
65°	9595	9407	9320
70°	8406	8468	8438
75°	6759	7479	7525
80°	4808	6339	6408
85°	2932	5314	5314

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 11652 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.4	3.5
10°-20°	368.4	10.0
20°-30°	557.9	15.1
30°-40°	668.8	18.1
40°-50°	682.0	18.4
50°-60°	595.3	16.1
60°-70°	426.2	11.5
70°-80°	219.5	5.9
80°-90°	55.5	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°	1054.6	28.5
0°-40°	1723.4	46.6
0°-60°	3000.7	81.1
0°-90°	3701.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3701.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1356	1356	1356	1356	1356	
5°	1362	1348	1353	1349	1348	129
15°	1310	1299	1310	1310	1309	369
25°	1210	1201	1218	1214	1214	557
35°	1064	1061	1080	1072	1072	665
45°	887	884	893	882	879	683
55°	678	670	669	660	660	605
65°	440	430	431	427	427	435
75°	190	198	210	211	211	205
85°	28	42	50	52	50	39
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1356.3	1356.3	1356.3	1356.3	1356.3
2.5°	1364.5	1352.7	1356.3	1353.3	1348.3
5°	1361.5	1347.9	1352.7	1348.8	1347.7
7.5°	1351.6	1338.1	1344.5	1341.8	1340.5
10°	1342.7	1329.0	1336.4	1333.8	1332.5
12.5°	1330.6	1318.0	1326.3	1323.8	1323.4
15°	1310.0	1298.9	1310.0	1310.0	1308.6
17.5°	1284.0	1274.1	1285.7	1286.6	1285.7
20°	1266.1	1255.0	1269.7	1268.4	1269.7
22.5°	1244.0	1234.9	1250.7	1247.4	1248.7
25°	1209.5	1200.9	1218.2	1214.5	1214.5
27.5°	1168.8	1162.5	1181.6	1177.5	1177.5
30°	1141.6	1135.5	1155.4	1150.4	1150.4
32.5°	1111.5	1107.3	1126.4	1120.4	1120.4
35°	1063.8	1061.3	1080.0	1072.5	1072.5
37.5°	1014.5	1012.3	1029.5	1020.4	1017.3
40°	978.3	977.2	992.2	982.2	982.2
42.5°	942.2	940.9	954.1	942.0	942.0
45°	886.8	884.1	893.0	881.6	879.1
47.5°	826.1	823.8	829.1	816.8	815.5
50°	785.0	782.4	785.0	773.6	772.5
52.5°	742.7	738.2	738.6	727.4	727.2
55°	678.2	669.6	669.4	659.5	659.5
57.5°	609.8	598.6	599.7	591.1	589.7
60°	562.7	550.3	551.4	543.8	542.5
62.5°	516.3	502.3	505.0	496.6	496.4
65°	439.5	429.7	430.9	426.9	426.9
67.5°	365.7	356.6	363.2	360.2	360.0
70°	311.6	305.2	313.9	313.9	312.8
72.5°	261.3	261.1	271.6	271.6	272.5
75°	189.6	198.3	209.8	211.1	211.1
77.5°	126.6	141.8	154.6	155.0	154.8
80°	90.5	107.6	119.3	121.9	120.6
82.5°	61.3	79.5	89.1	91.6	90.5
85°	27.7	42.5	50.2	51.6	50.2
87.5°	8.0	16.9	20.2	20.2	18.2
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	20.25	21.86	20.61	22.18	22.49	20.13	21.75	20.50	22.06	22.38
	3H	21.79	23.25	22.17	23.57	23.93	21.73	23.19	22.11	23.52	23.88
	4H	22.30	23.67	22.70	24.02	24.39	22.33	23.70	22.73	24.05	24.43
	6H	22.54	23.81	22.95	24.17	24.56	22.70	23.97	23.11	24.33	24.72
	8H	22.60	23.81	23.03	24.20	24.60	22.84	24.05	23.26	24.44	24.84
	12H	22.62	23.78	23.05	24.17	24.60	22.92	24.08	23.35	24.47	24.89
4H	2H	20.84	22.21	21.24	22.56	22.94	20.75	22.12	21.15	22.47	22.84
	3H	22.60	23.74	23.01	24.14	24.54	22.57	23.72	22.98	24.11	24.51
	4H	23.21	24.24	23.64	24.65	25.09	23.28	24.31	23.71	24.72	25.16
	6H	23.55	24.45	24.00	24.89	25.34	23.75	24.65	24.21	25.10	25.55
	8H	23.65	24.49	24.11	24.93	25.40	23.94	24.78	24.40	25.22	25.69
	12H	23.70	24.45	24.18	24.93	25.40	24.07	24.82	24.55	25.30	25.77
8H	4H	23.46	24.30	23.92	24.75	25.21	23.52	24.37	23.98	24.81	25.27
	6H	23.91	24.60	24.40	25.09	25.57	24.11	24.81	24.61	25.30	25.78
	8H	24.07	24.70	24.58	25.21	25.69	24.37	25.00	24.88	25.51	25.99
	12H	24.18	24.73	24.68	25.22	25.78	24.57	25.12	25.08	25.61	26.18
12H	4H	23.48	24.24	23.96	24.72	25.18	23.54	24.29	24.02	24.77	25.24
	6H	23.95	24.58	24.46	25.09	25.57	24.15	24.78	24.66	25.28	25.77
	8H	24.18	24.73	24.68	25.22	25.78	24.47	25.02	24.97	25.51	26.07