

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: P1036312

Luminaire Tested: SQ4R-PR1-100D-B2750-1D-UNV-W2A_5000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036312
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P564154)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-100D-B2750-1D-UNV-W2A_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

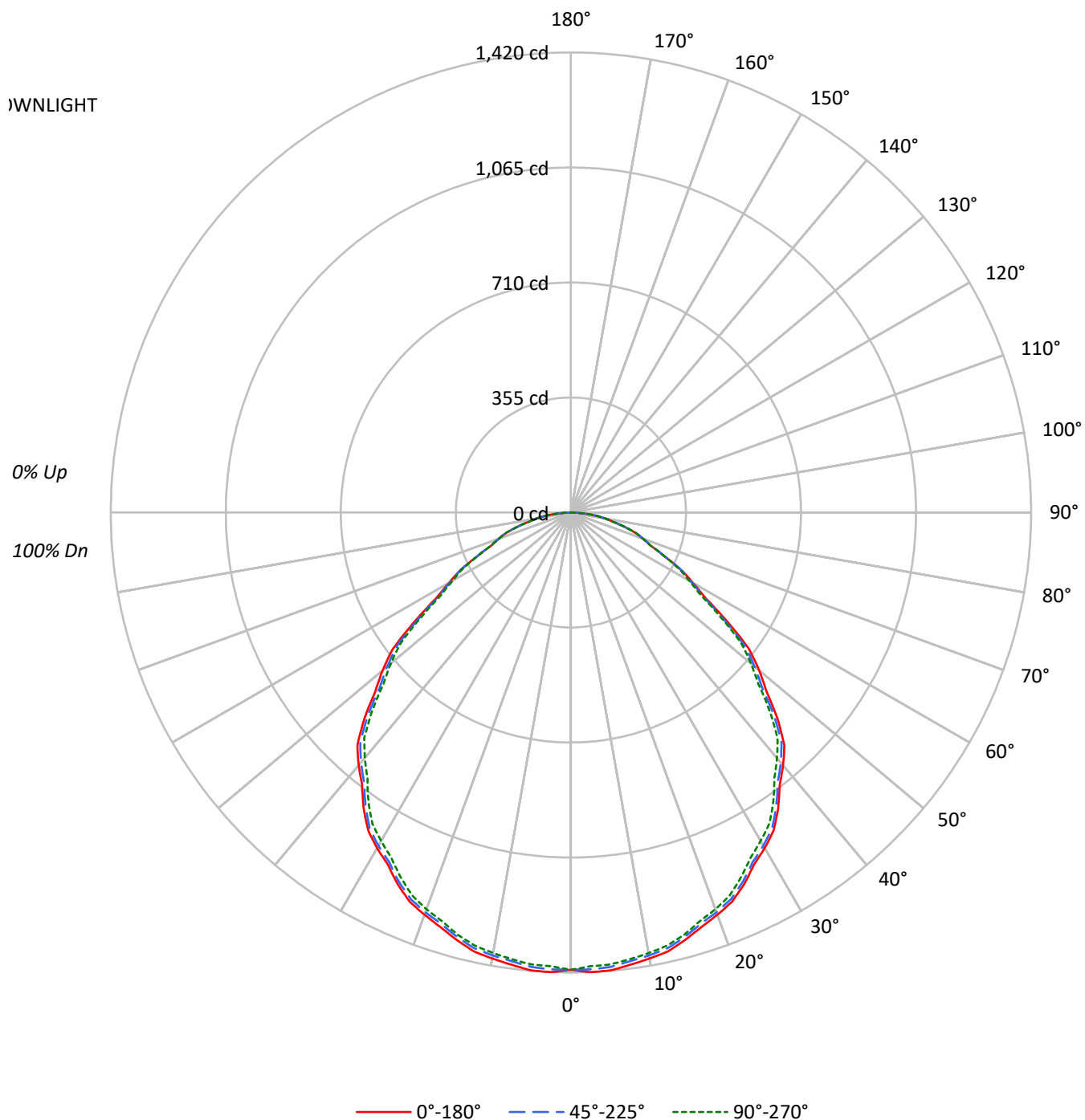
Lumens per Lamp: N/A
Luminaire Lumens: 3528.2 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81
3	92	82	74	68	90	80	73	68	78	71	66		75	70	65		72
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53
7	67	54	46	40	65	53	45	39	52	44	39		50	44	39		49
8	63	49	41	35	61	49	41	35	47	40	35		46	40	35		45
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42
10	55	42	34	29	54	41	34	29	40	34	29		40	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13021	13021	13021
5°	13138	13038	12970
10°	13096	13005	12937
15°	13040	12958	12888
20°	12974	12889	12794
25°	12882	12797	12648
30°	12743	12653	12472
35°	12556	12445	12268
40°	12268	12137	11916
45°	11770	11562	11326
50°	10889	10626	10415
55°	9502	9289	9093
60°	8006	7942	7783
65°	6925	6953	6899
70°	6358	6393	6393
75°	6110	6110	6156
80°	5749	5813	5749
85°	4637	5145	5145

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11770 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.5	3.8
10°-20°	381.9	10.8
20°-30°	576.0	16.3
30°-40°	686.3	19.5
40°-50°	676.6	19.2
50°-60°	517.1	14.7
60°-70°	319.9	9.1
70°-80°	181.7	5.2
80°-90°	55.3	1.6
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°	1091.3	30.9
0°-40°	1777.5	50.4
0°-60°	2971.2	84.2
0°-90°	3528.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3528.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1411	1411	1411	1411	1411	
5°	1419	1403	1408	1403	1400	135
15°	1365	1351	1357	1352	1349	385
25°	1265	1250	1257	1244	1242	582
35°	1115	1102	1105	1090	1089	696
45°	902	890	886	870	868	691
55°	591	581	578	568	565	529
65°	317	315	318	316	316	321
75°	171	171	171	173	173	181
85°	44	46	49	49	49	53
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1411.3	1411.3	1411.3	1411.3	1411.3
2.5°	1420.1	1407.8	1411.3	1408.3	1401.7
5°	1418.6	1403.1	1407.8	1402.7	1400.4
7.5°	1407.8	1392.4	1397.1	1392.1	1390.8
10°	1397.9	1383.7	1388.2	1383.4	1380.9
12.5°	1387.2	1372.2	1377.6	1371.7	1369.4
15°	1365.2	1350.9	1356.6	1351.8	1349.3
17.5°	1340.9	1325.6	1331.5	1325.8	1322.6
20°	1321.4	1307.1	1312.8	1304.5	1303.1
22.5°	1300.0	1285.8	1291.4	1280.1	1279.9
25°	1265.4	1249.9	1257.1	1243.6	1242.4
27.5°	1224.4	1210.1	1215.8	1202.2	1200.9
30°	1196.1	1181.8	1187.7	1173.1	1170.7
32.5°	1164.0	1150.8	1155.7	1141.0	1139.5
35°	1114.8	1101.6	1104.9	1090.4	1089.2
37.5°	1058.7	1046.7	1048.6	1032.5	1031.4
40°	1018.6	1006.9	1007.7	990.8	989.4
42.5°	975.1	963.1	962.0	945.1	943.8
45°	902.1	890.1	886.1	870.2	868.0
47.5°	818.9	806.9	799.6	786.7	784.9
50°	758.6	746.6	740.3	729.3	725.6
52.5°	693.4	681.5	676.2	666.1	662.6
55°	590.7	581.3	577.5	567.7	565.3
57.5°	493.2	487.0	485.7	476.3	475.3
60°	433.9	430.4	430.4	421.8	421.8
62.5°	383.5	380.7	382.6	377.0	376.1
65°	317.2	314.9	318.5	316.0	316.0
67.5°	265.0	265.0	267.1	266.1	266.1
70°	235.7	235.7	237.0	237.0	237.0
72.5°	209.5	208.7	211.8	211.6	210.8
75°	171.4	171.4	171.4	172.7	172.7
77.5°	133.5	133.7	134.7	134.5	133.5
80°	108.2	109.4	109.4	108.2	108.2
82.5°	83.0	84.1	84.1	83.8	83.0
85°	43.8	46.1	48.6	48.6	48.6
87.5°	12.6	16.4	19.5	19.5	18.5
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	19.02	20.58	19.38	20.90	21.21	18.85	20.41	19.21	20.72	21.04
	3H	20.35	21.76	20.73	22.08	22.45	20.25	21.66	20.63	21.98	22.35
	4H	20.96	22.27	21.35	22.62	23.00	20.88	22.20	21.28	22.55	22.93
	6H	21.40	22.62	21.81	22.99	23.38	21.34	22.56	21.75	22.93	23.32
	8H	21.59	22.75	22.01	23.14	23.54	21.53	22.69	21.95	23.08	23.48
	12H	21.70	22.81	22.13	23.19	23.62	21.65	22.77	22.08	23.15	23.58
4H	2H	19.49	20.81	19.89	21.16	21.54	19.35	20.67	19.75	21.02	21.40
	3H	21.09	22.19	21.50	22.59	22.99	21.02	22.12	21.43	22.52	22.92
	4H	21.83	22.82	22.26	23.23	23.67	21.79	22.77	22.22	23.19	23.63
	6H	22.42	23.28	22.88	23.72	24.18	22.38	23.24	22.84	23.68	24.14
	8H	22.66	23.47	23.13	23.91	24.38	22.63	23.43	23.09	23.88	24.34
	12H	22.82	23.54	23.30	24.02	24.49	22.80	23.53	23.28	24.00	24.47
8H	4H	22.11	22.91	22.57	23.36	23.82	22.06	22.87	22.53	23.31	23.78
	6H	22.83	23.50	23.33	23.99	24.47	22.80	23.47	23.29	23.96	24.43
	8H	23.17	23.77	23.68	24.28	24.77	23.13	23.74	23.65	24.25	24.73
	12H	23.40	23.94	23.91	24.43	24.99	23.39	23.93	23.90	24.42	24.98
12H	4H	22.14	22.86	22.62	23.34	23.81	22.10	22.82	22.58	23.30	23.77
	6H	22.90	23.50	23.41	24.01	24.49	22.86	23.47	23.37	23.97	24.46
	8H	23.29	23.83	23.80	24.32	24.88	23.26	23.80	23.77	24.29	24.85