

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: P1036258

Luminaire Tested: SQ4R-PC3-125D-B40-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036258
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-PC3-125D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

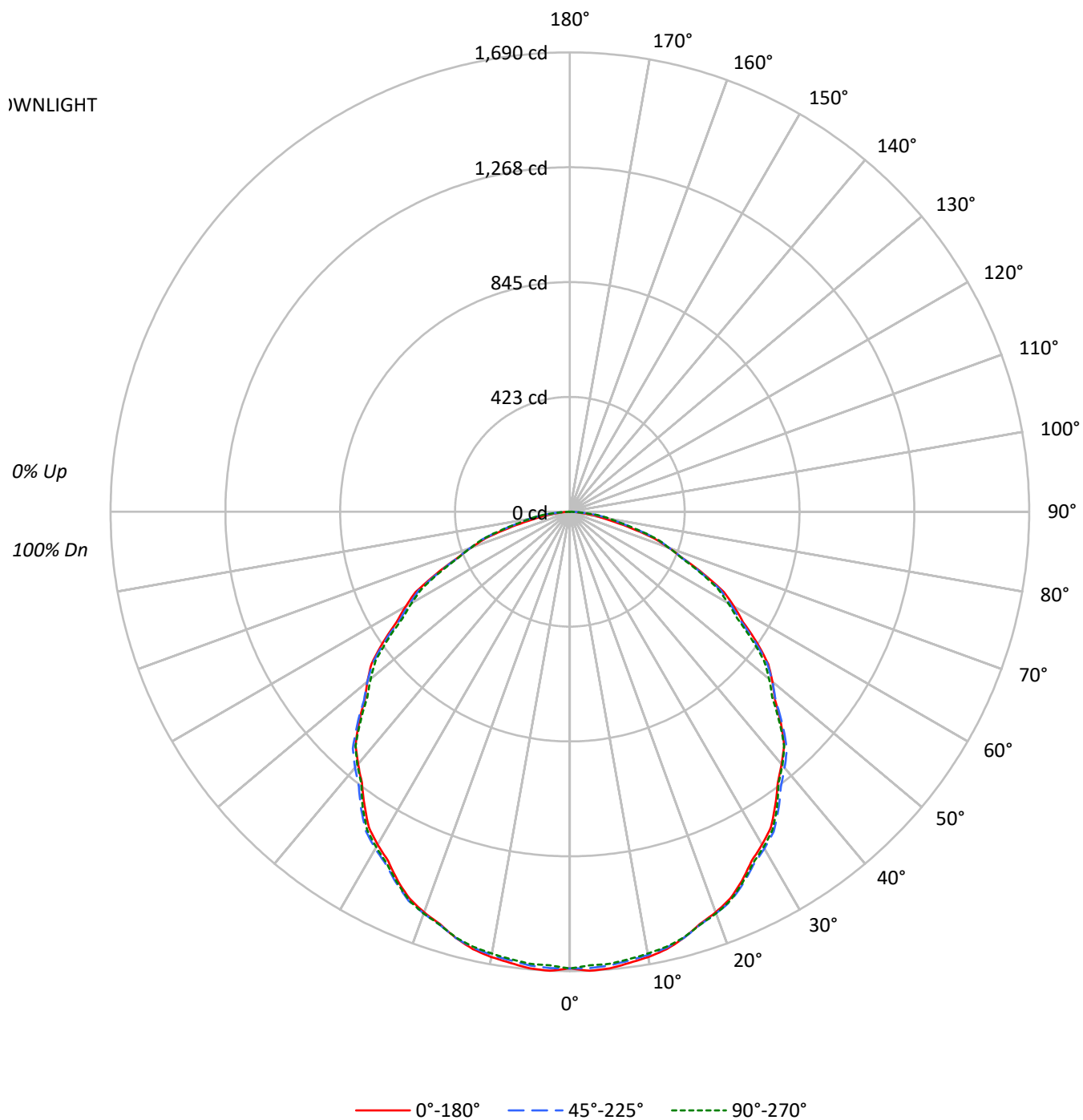
Lumens per Lamp: N/A
Luminaire Lumens: 4585.6 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 45.8
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°	15501	15501	15501
5°	15620	15518	15460
10°	15582	15510	15464
15°	15499	15499	15483
20°	15397	15442	15442
25°	15253	15362	15316
30°	15065	15247	15181
35°	14843	15069	14963
40°	14595	14803	14654
45°	14332	14433	14209
50°	13957	13957	13735
55°	13515	13338	13139
60°	12861	12603	12400
65°	11885	11651	11544
70°	10410	10491	10453
75°	8374	9265	9322
80°	5956	7853	7933
85°	3631	6584	6584

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 14433 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.0	3.5
10°-20°	456.3	10.0
20°-30°	691.0	15.1
30°-40°	828.5	18.1
40°-50°	844.7	18.4
50°-60°	737.4	16.1
60°-70°	527.9	11.5
70°-80°	272.0	5.9
80°-90°	68.8	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°	1306.4	28.5
0°-40°	2134.8	46.6
0°-60°	3717.0	81.1
0°-90°	4585.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4585.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1680	1680	1680	1680	1680	
5°	1687	1670	1676	1671	1669	160
15°	1623	1609	1623	1623	1621	458
25°	1498	1488	1509	1504	1504	690
35°	1318	1314	1338	1328	1328	824
45°	1098	1095	1106	1092	1089	845
55°	840	829	829	817	817	749
65°	544	532	534	529	529	538
75°	235	246	260	262	262	254
85°	34	52	62	64	62	48
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1680.1	1680.1	1680.1	1680.1	1680.1
2.5°	1690.2	1675.5	1680.1	1676.3	1670.2
5°	1686.6	1669.6	1675.5	1670.7	1669.3
7.5°	1674.2	1657.6	1665.3	1662.1	1660.5
10°	1663.2	1646.2	1655.5	1652.2	1650.6
12.5°	1648.2	1632.6	1642.9	1639.8	1639.4
15°	1622.7	1609.0	1622.7	1622.7	1621.0
17.5°	1590.5	1578.2	1592.7	1593.7	1592.7
20°	1568.2	1554.6	1572.8	1571.2	1572.8
22.5°	1540.9	1529.7	1549.2	1545.2	1546.8
25°	1498.3	1487.5	1509.0	1504.5	1504.5
27.5°	1447.9	1440.0	1463.7	1458.5	1458.5
30°	1414.1	1406.6	1431.2	1425.0	1425.0
32.5°	1376.7	1371.7	1395.3	1387.8	1387.8
35°	1317.8	1314.5	1337.9	1328.5	1328.5
37.5°	1256.7	1254.0	1275.2	1263.9	1260.2
40°	1211.8	1210.6	1229.1	1216.7	1216.7
42.5°	1167.0	1165.5	1181.9	1166.8	1166.8
45°	1098.4	1095.2	1106.2	1091.9	1089.0
47.5°	1023.3	1020.4	1027.1	1011.8	1010.2
50°	972.4	969.2	972.4	958.2	956.9
52.5°	920.1	914.5	915.0	901.0	900.7
55°	840.2	829.4	829.2	816.8	816.8
57.5°	755.4	741.5	742.8	732.1	730.5
60°	697.0	681.6	683.0	673.6	672.0
62.5°	639.6	622.1	625.6	615.2	614.9
65°	544.4	532.3	533.7	528.8	528.8
67.5°	452.9	441.7	450.0	446.3	446.0
70°	385.9	378.1	388.9	388.9	387.5
72.5°	323.7	323.4	336.6	336.6	337.6
75°	234.9	245.7	259.9	261.5	261.5
77.5°	156.9	175.7	191.5	192.0	191.8
80°	112.1	133.2	147.8	151.0	149.3
82.5°	75.9	98.5	110.5	113.5	112.1
85°	34.3	52.5	62.2	63.9	62.2
87.5°	9.9	20.9	24.9	24.9	22.5
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	20.99	22.60	21.35	22.92	23.23	20.88	22.49	21.24	22.80	23.12
	3H	22.53	23.99	22.91	24.32	24.68	22.48	23.93	22.85	24.26	24.62
	4H	23.04	24.41	23.44	24.76	25.14	23.08	24.45	23.48	24.80	25.17
	6H	23.28	24.55	23.69	24.91	25.30	23.44	24.71	23.85	25.08	25.47
	8H	23.35	24.56	23.77	24.94	25.34	23.58	24.79	24.01	25.18	25.58
	12H	23.37	24.53	23.80	24.91	25.34	23.67	24.83	24.10	25.21	25.64
4H	2H	21.58	22.95	21.98	23.30	23.68	21.49	22.86	21.89	23.21	23.59
	3H	23.34	24.48	23.75	24.88	25.28	23.32	24.46	23.73	24.86	25.26
	4H	23.95	24.98	24.38	25.40	25.83	24.02	25.05	24.45	25.47	25.90
	6H	24.29	25.19	24.74	25.63	26.09	24.50	25.40	24.95	25.84	26.30
	8H	24.39	25.23	24.85	25.68	26.14	24.68	25.52	25.14	25.97	26.43
	12H	24.44	25.20	24.92	25.67	26.14	24.81	25.57	25.29	26.04	26.51
8H	4H	24.20	25.05	24.67	25.49	25.96	24.27	25.11	24.73	25.55	26.02
	6H	24.65	25.35	25.14	25.84	26.31	24.86	25.56	25.35	26.04	26.52
	8H	24.82	25.44	25.33	25.95	26.44	25.12	25.74	25.63	26.25	26.74
	12H	24.92	25.47	25.43	25.96	26.53	25.31	25.87	25.82	26.36	26.92
12H	4H	24.23	24.98	24.71	25.46	25.93	24.28	25.04	24.76	25.52	25.98
	6H	24.70	25.32	25.21	25.83	26.32	24.89	25.52	25.40	26.03	26.52
	8H	24.92	25.47	25.43	25.96	26.53	25.21	25.77	25.72	26.26	26.82