

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: P1036350

Luminaire Tested: SQ4R-PW1-125D-B2750-1D-UNV-W2A_3500K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036350
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-PW1-125D-B2750-1D-UNV-W2A_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

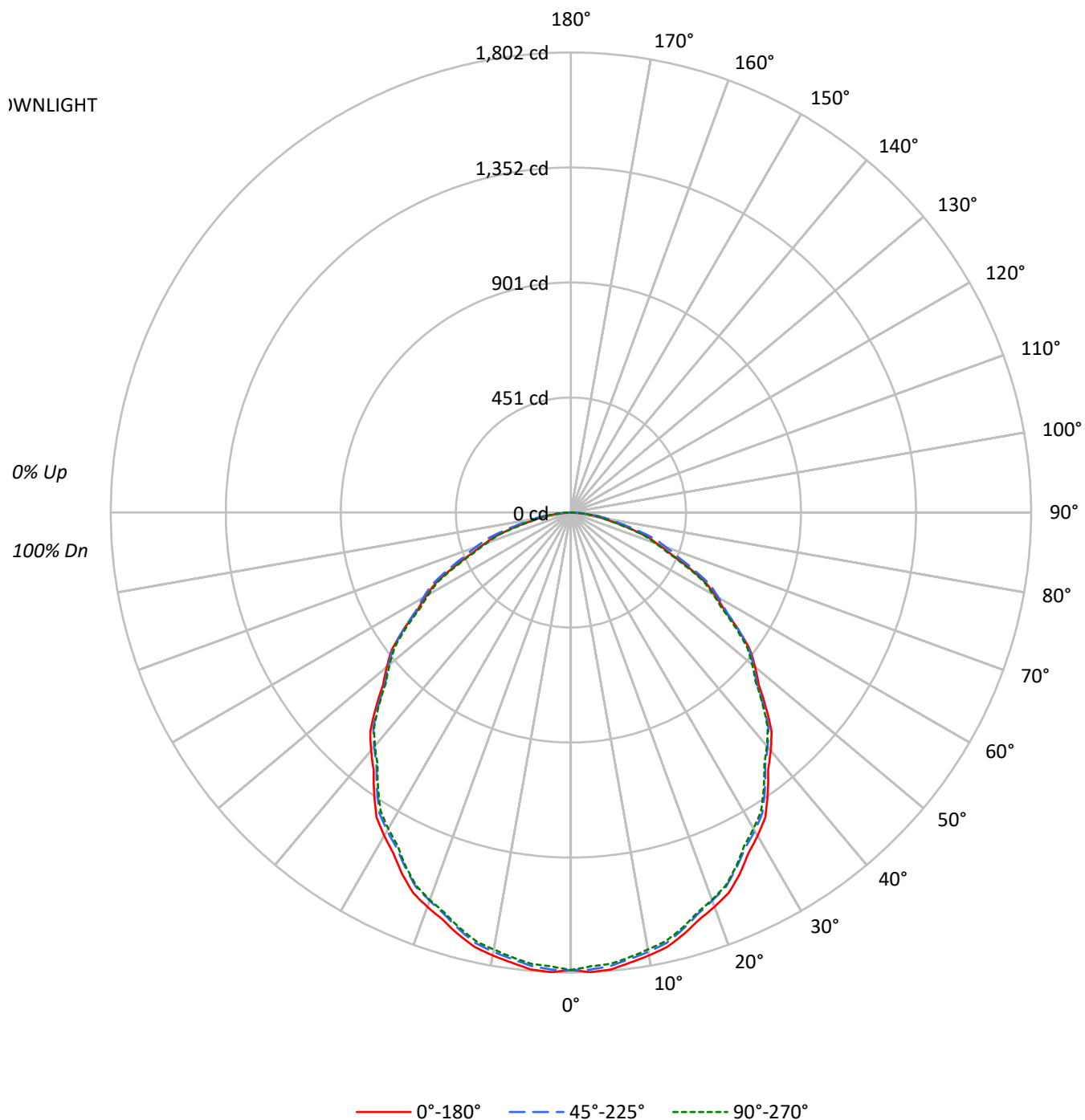
Lumens per Lamp: N/A
Luminaire Lumens: 4559.2 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1036350

CATALOG NUMBER: SQ4R-PW1-125D-B2750-1D-UNV-W2A_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1036350

CATALOG NUMBER: SQ4R-PW1-125D-B2750-1D-UNV-W2A_3500K

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°	16532	16532	16532
5°	16640	16509	16435
10°	16506	16373	16284
15°	16331	16151	16091
20°	16136	15888	15859
25°	15911	15622	15572
30°	15575	15341	15239
35°	15133	14918	14830
40°	14661	14432	14377
45°	14089	13906	13842
50°	13508	13395	13301
55°	12875	12875	12672
60°	12092	12324	11887
65°	11062	11614	10789
70°	9749	10688	9501
75°	8334	9564	8099
80°	6461	8055	6551
85°	4171	6193	5505

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14089 cd/sqm

TEST NUMBER: P1036350

CATALOG NUMBER: SQ4R-PW1-125D-B2750-1D-UNV-W2A_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.7	3.7
10°-20°	476.4	10.4
20°-30°	706.6	15.5
30°-40°	826.8	18.1
40°-50°	823.2	18.1
50°-60°	710.8	15.6
60°-70°	511.7	11.2
70°-80°	268.3	5.9
80°-90°	66.5	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°	1351.8	29.6
0°-40°	2178.6	47.8
0°-60°	3712.6	81.4
0°-90°	4559.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4559.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1792	1792	1792	1792	1792	
5°	1797	1777	1783	1778	1775	170
15°	1710	1688	1691	1688	1685	482
25°	1563	1537	1535	1525	1530	719
35°	1344	1325	1324	1312	1317	840
45°	1080	1071	1066	1062	1061	833
55°	800	799	800	790	788	714
65°	507	522	532	511	494	502
75°	234	255	268	250	227	250
85°	39	52	58	55	52	53
90°	0	0	0	0	0	

TEST NUMBER: P1036350

CATALOG NUMBER: SQ4R-PW1-125D-B2750-1D-UNV-W2A_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1791.9	1791.9	1791.9	1791.9	1791.9
2.5°	1802.1	1787.2	1791.9	1788.0	1779.3
5°	1796.7	1776.6	1782.6	1777.7	1774.6
7.5°	1778.4	1760.0	1764.1	1759.2	1757.2
10°	1761.9	1743.3	1747.7	1741.5	1738.2
12.5°	1743.1	1723.3	1727.6	1721.0	1719.4
15°	1709.8	1688.1	1690.9	1687.5	1684.6
17.5°	1671.3	1649.5	1649.8	1644.9	1644.0
20°	1643.5	1620.3	1618.2	1611.9	1615.2
22.5°	1613.3	1588.8	1586.6	1577.9	1582.2
25°	1563.0	1536.8	1534.6	1525.1	1529.7
27.5°	1504.9	1479.1	1479.1	1465.8	1470.7
30°	1462.0	1437.2	1440.0	1424.1	1430.4
32.5°	1416.5	1394.2	1395.5	1380.1	1386.3
35°	1343.6	1325.1	1324.5	1312.1	1316.7
37.5°	1269.0	1252.7	1249.9	1242.9	1244.0
40°	1217.3	1203.4	1198.3	1193.7	1193.7
42.5°	1162.8	1150.4	1145.2	1141.7	1140.5
45°	1079.8	1070.6	1065.8	1062.4	1060.9
47.5°	997.6	989.2	984.9	982.7	981.1
50°	941.1	934.8	933.2	928.3	926.7
52.5°	884.2	880.4	878.8	872.8	871.1
55°	800.4	799.0	800.4	789.5	787.8
57.5°	713.3	715.7	720.9	705.9	702.1
60°	655.3	661.3	667.9	650.5	644.2
62.5°	595.8	605.8	614.7	594.7	586.0
65°	506.7	522.3	532.0	511.1	494.2
67.5°	421.0	440.1	451.8	429.5	410.1
70°	361.4	383.2	396.2	373.6	352.2
72.5°	309.7	333.9	344.6	323.0	301.5
75°	233.8	255.3	268.3	250.4	227.2
77.5°	165.8	186.1	197.0	181.5	162.2
80°	121.6	143.2	151.6	138.6	123.3
82.5°	86.3	104.2	110.0	102.1	91.4
85°	39.4	51.7	58.5	55.3	52.0
87.5°	10.1	18.8	24.0	24.0	25.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1036350

CATALOG NUMBER: SQ4R-PW1-125D-B2750-1D-UNV-W2A_3500K

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	20.76	22.36	21.12	22.67	22.99	20.66	22.26	21.02	22.57	22.89
	3H	22.32	23.76	22.69	24.08	24.45	22.19	23.63	22.56	23.96	24.32
	4H	22.87	24.22	23.26	24.57	24.95	22.73	24.08	23.13	24.43	24.81
	6H	23.16	24.42	23.57	24.78	25.17	23.03	24.28	23.44	24.65	25.04
	8H	23.25	24.45	23.68	24.84	25.24	23.13	24.33	23.55	24.72	25.12
	12H	23.29	24.44	23.72	24.82	25.25	23.19	24.34	23.62	24.72	25.15
4H	2H	21.40	22.76	21.80	23.10	23.48	21.32	22.68	21.72	23.03	23.40
	3H	23.20	24.33	23.61	24.73	25.13	23.09	24.22	23.50	24.62	25.02
	4H	23.86	24.88	24.29	25.30	25.73	23.74	24.76	24.17	25.17	25.61
	6H	24.26	25.16	24.72	25.60	26.05	24.14	25.03	24.60	25.47	25.93
	8H	24.39	25.23	24.86	25.67	26.14	24.28	25.12	24.74	25.56	26.03
	12H	24.46	25.21	24.94	25.69	26.16	24.38	25.13	24.86	25.60	26.07
8H	4H	24.14	24.97	24.60	25.41	25.88	24.03	24.86	24.49	25.30	25.77
	6H	24.66	25.35	25.15	25.84	26.31	24.54	25.24	25.04	25.72	26.20
	8H	24.86	25.48	25.37	25.98	26.47	24.76	25.38	25.27	25.88	26.37
	12H	24.98	25.52	25.48	26.02	26.58	24.91	25.46	25.42	25.95	26.51
12H	4H	24.15	24.90	24.64	25.38	25.85	24.05	24.80	24.53	25.27	25.74
	6H	24.70	25.32	25.21	25.83	26.32	24.59	25.21	25.10	25.72	26.21
	8H	24.96	25.50	25.46	26.00	26.56	24.86	25.41	25.37	25.90	26.46