

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: P1036348

Luminaire Tested: SQ4R-PW1-125D-B2750-1D-UNV-W2A_2700K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036348
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_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

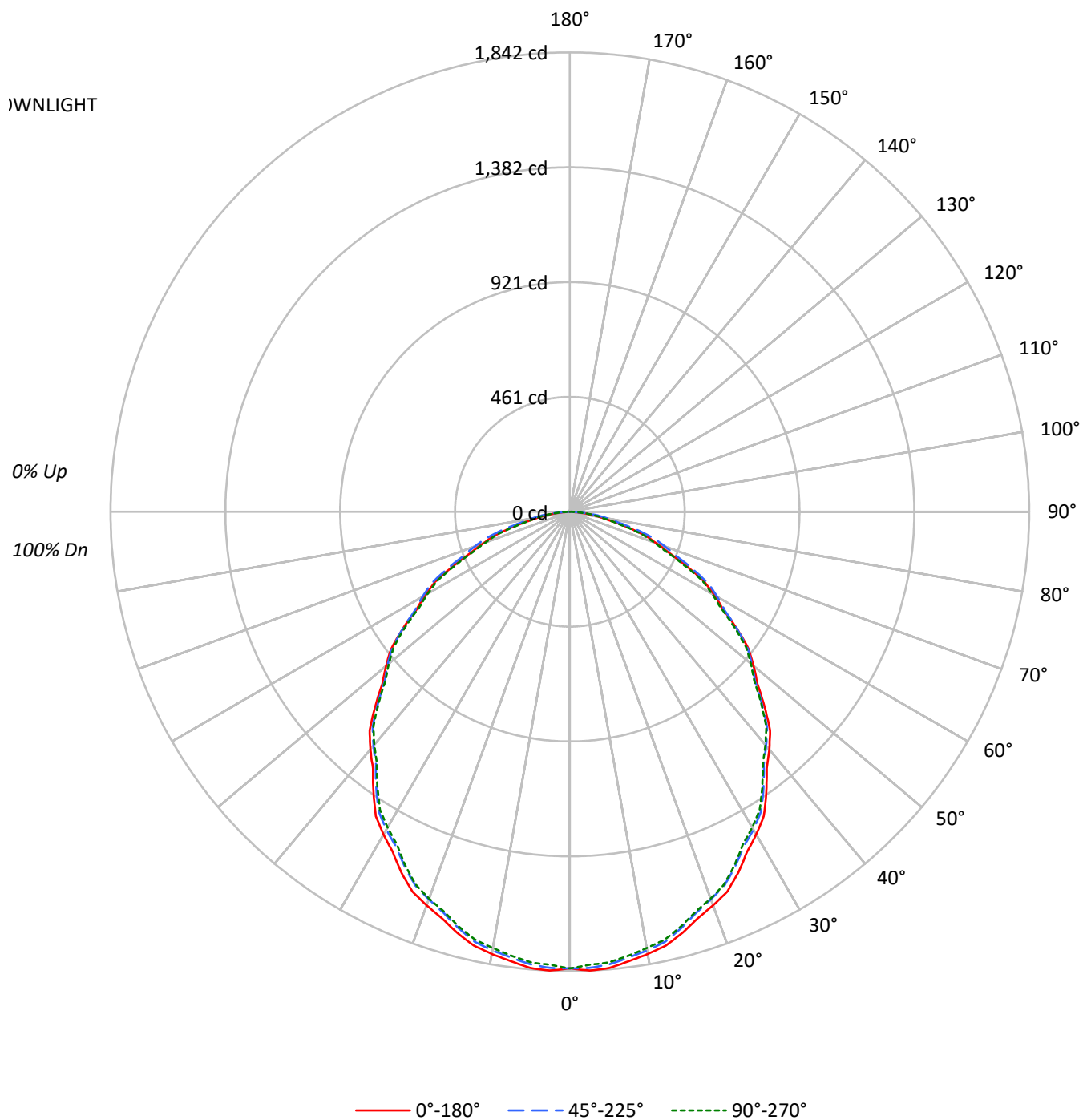
Lumens per Lamp: N/A
Luminaire Lumens: 4659.0 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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: P1036348

CATALOG NUMBER: SQ4R-PW1-125D-B2750-1D-UNV-W2A_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P1036348

CATALOG NUMBER: SQ4R-PW1-125D-B2750-1D-UNV-W2A_2700K

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°	16894	16894	16894
5°	17005	16871	16796
10°	16868	16732	16641
15°	16690	16504	16443
20°	16490	16236	16206
25°	16259	15964	15913
30°	15916	15677	15572
35°	15464	15245	15155
40°	14983	14748	14691
45°	14398	14210	14145
50°	13804	13687	13593
55°	13156	13156	12950
60°	12358	12594	12147
65°	11304	11870	11025
70°	9962	10922	9709
75°	8516	9774	8277
80°	6604	8230	6695
85°	4266	6330	5621

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14398 cd/sqm

TEST NUMBER: P1036348

CATALOG NUMBER: SQ4R-PW1-125D-B2750-1D-UNV-W2A_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.4	3.7
10°-20°	486.8	10.4
20°-30°	722.1	15.5
30°-40°	844.9	18.1
40°-50°	841.2	18.1
50°-60°	726.4	15.6
60°-70°	522.9	11.2
70°-80°	274.2	5.9
80°-90°	68.0	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°	1381.4	29.6
0°-40°	2226.3	47.8
0°-60°	3794.0	81.4
0°-90°	4659.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4659.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1831	1831	1831	1831	1831	
5°	1836	1816	1822	1817	1814	174
15°	1747	1725	1728	1724	1722	493
25°	1597	1570	1568	1558	1563	734
35°	1373	1354	1354	1341	1346	858
45°	1104	1094	1089	1086	1084	851
55°	818	816	818	807	805	730
65°	518	534	544	522	505	513
75°	239	261	274	256	232	256
85°	40	53	60	56	53	55
90°	0	0	0	0	0	

TEST NUMBER: P1036348

CATALOG NUMBER: SQ4R-PW1-125D-B2750-1D-UNV-W2A_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1831.1	1831.1	1831.1	1831.1	1831.1
2.5°	1841.6	1826.3	1831.1	1827.2	1818.3
5°	1836.1	1815.5	1821.6	1816.6	1813.5
7.5°	1817.4	1798.5	1802.7	1797.7	1795.7
10°	1800.5	1781.5	1786.0	1779.6	1776.3
12.5°	1781.3	1761.0	1765.4	1758.7	1757.1
15°	1747.3	1725.1	1727.9	1724.5	1721.5
17.5°	1707.9	1685.6	1685.9	1680.9	1680.0
20°	1679.5	1655.8	1653.6	1647.2	1650.6
22.5°	1648.6	1623.6	1621.4	1612.5	1616.9
25°	1597.2	1570.5	1568.2	1558.5	1563.2
27.5°	1537.9	1511.5	1511.5	1497.9	1502.9
30°	1494.0	1468.7	1471.5	1455.3	1461.7
32.5°	1447.5	1424.7	1426.1	1410.3	1416.7
35°	1373.0	1354.1	1353.5	1340.8	1345.5
37.5°	1296.8	1280.1	1277.3	1270.1	1271.2
40°	1244.0	1229.8	1224.5	1219.8	1219.8
42.5°	1188.3	1175.6	1170.3	1166.7	1165.5
45°	1103.5	1094.1	1089.1	1085.7	1084.1
47.5°	1019.5	1010.9	1006.5	1004.2	1002.6
50°	961.7	955.3	953.6	948.6	947.0
52.5°	903.6	899.7	898.0	891.9	890.2
55°	817.9	816.5	817.9	806.8	805.1
57.5°	728.9	731.4	736.7	721.4	717.5
60°	669.7	675.8	682.5	664.7	658.3
62.5°	608.8	619.1	628.2	607.7	598.8
65°	517.8	533.7	543.7	522.3	505.0
67.5°	430.2	449.7	461.7	438.9	419.1
70°	369.3	391.6	404.9	381.8	359.9
72.5°	316.5	341.2	352.1	330.1	308.1
75°	238.9	260.9	274.2	255.9	232.2
77.5°	169.4	190.2	201.3	185.5	165.8
80°	124.3	146.3	154.9	141.6	126.0
82.5°	88.2	106.5	112.4	104.3	93.4
85°	40.3	52.8	59.8	56.5	53.1
87.5°	10.3	19.2	24.5	24.5	25.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1036348

CATALOG NUMBER: SQ4R-PW1-125D-B2750-1D-UNV-W2A_2700K

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	20.83	22.43	21.20	22.75	23.06	20.73	22.33	21.10	22.65	22.96
	3H	22.39	23.83	22.77	24.16	24.52	22.26	23.70	22.64	24.03	24.39
	4H	22.94	24.30	23.34	24.65	25.02	22.80	24.16	23.20	24.51	24.88
	6H	23.23	24.49	23.65	24.86	25.25	23.10	24.36	23.51	24.72	25.11
	8H	23.33	24.52	23.75	24.91	25.31	23.20	24.40	23.63	24.79	25.19
	12H	23.36	24.51	23.79	24.89	25.32	23.27	24.41	23.70	24.80	25.23
4H	2H	21.47	22.83	21.87	23.18	23.56	21.40	22.75	21.79	23.10	23.48
	3H	23.27	24.41	23.68	24.81	25.21	23.16	24.30	23.57	24.69	25.09
	4H	23.94	24.96	24.37	25.37	25.81	23.81	24.84	24.25	25.25	25.69
	6H	24.34	25.23	24.79	25.67	26.13	24.22	25.11	24.67	25.55	26.01
	8H	24.47	25.30	24.93	25.75	26.21	24.36	25.19	24.82	25.64	26.10
	12H	24.54	25.28	25.02	25.76	26.23	24.46	25.20	24.94	25.68	26.15
8H	4H	24.21	25.04	24.67	25.49	25.95	24.10	24.94	24.56	25.38	25.85
	6H	24.73	25.42	25.23	25.91	26.39	24.62	25.31	25.11	25.80	26.28
	8H	24.93	25.55	25.44	26.06	26.55	24.83	25.45	25.34	25.96	26.44
	12H	25.05	25.60	25.56	26.09	26.65	24.99	25.53	25.49	26.02	26.59
12H	4H	24.23	24.98	24.71	25.45	25.92	24.13	24.87	24.61	25.35	25.82
	6H	24.78	25.40	25.29	25.90	26.39	24.67	25.29	25.18	25.80	26.28
	8H	25.03	25.58	25.54	26.07	26.63	24.94	25.48	25.44	25.98	26.54