

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: P1036222

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036222
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P520092)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-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

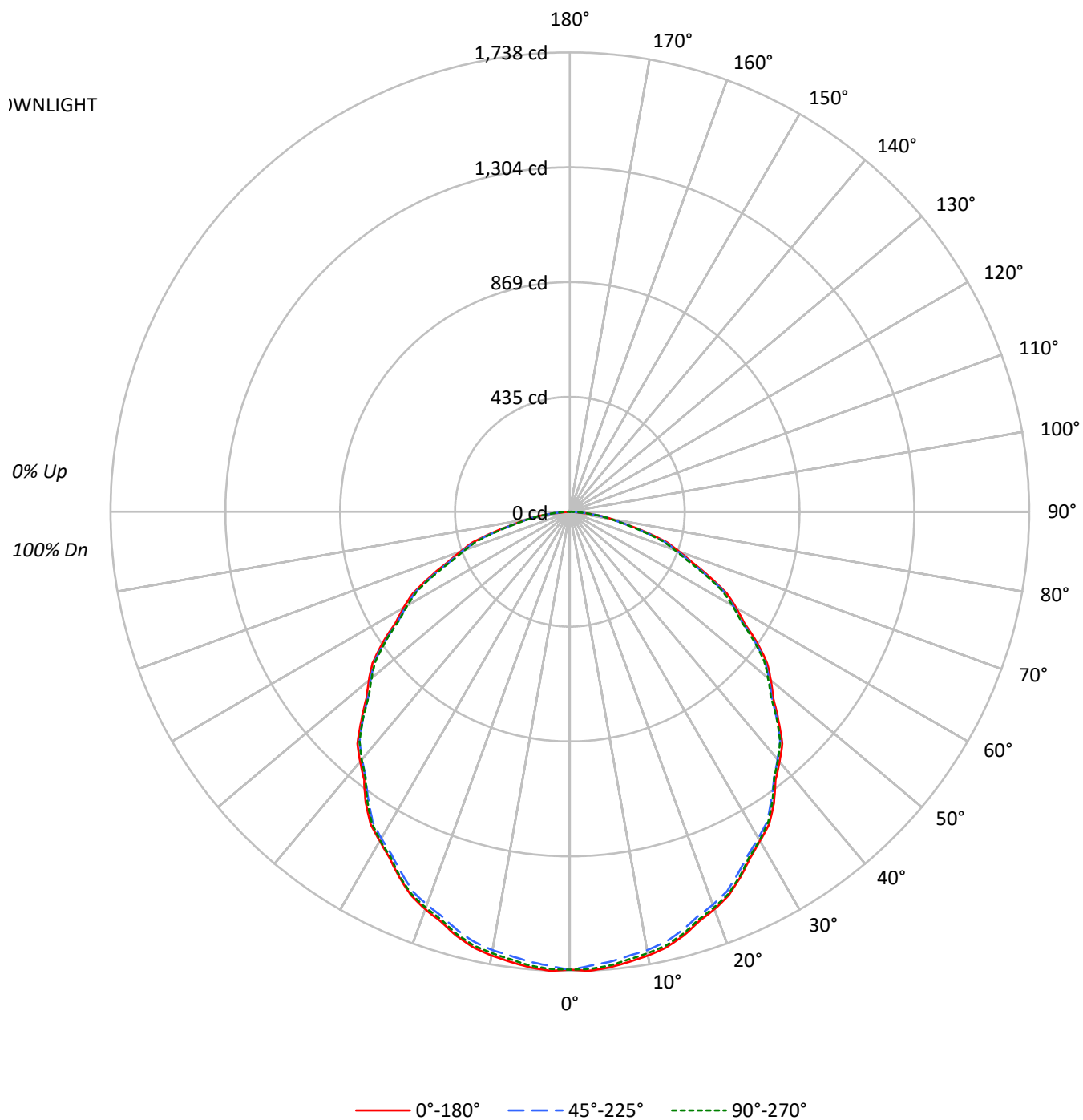
Lumens per Lamp: N/A
Luminaire Lumens: 4729.4 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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: P1036222

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

Luminous Intensity Polar Plot



TEST NUMBER: P1036222

CATALOG NUMBER: SQ4R-F-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	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	63		70
4	83	71	62	55	81	70	61	55	67	60	54		65	59	54		63
5	76	63	54	48	74	62	54	48	60	53	47		58	52	46		56
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51
7	65	52	43	37	64	51	43	37	49	42	36		48	41	36		47
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		40
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15986	15986	15986
5°	16028	15835	15962
10°	15972	15777	15886
15°	15862	15664	15798
20°	15712	15532	15646
25°	15537	15349	15493
30°	15322	15198	15296
35°	15156	14973	15049
40°	14867	14723	14753
45°	14559	14439	14439
50°	14252	14119	14053
55°	13919	13732	13658
60°	13400	13184	13099
65°	12760	12509	12354
70°	11888	11635	11386
75°	10662	10334	10085
80°	8629	8517	8257
85°	5124	5907	6129

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 14590 cd/sqm

TEST NUMBER: P1036222

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.5	3.5
10°-20°	465.6	9.8
20°-30°	699.3	14.8
30°-40°	834.8	17.7
40°-50°	855.4	18.1
50°-60°	762.9	16.1
60°-70°	568.1	12.0
70°-80°	308.4	6.5
80°-90°	71.4	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°	1328.4	28.1
0°-40°	2163.2	45.7
0°-60°	3781.5	80.0
0°-90°	4729.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4729.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1733	1733	1733	1733	1733	
5°	1731	1728	1710	1726	1724	164
15°	1661	1656	1640	1654	1654	468
25°	1526	1522	1508	1517	1522	703
35°	1346	1341	1329	1329	1336	840
45°	1116	1118	1107	1104	1107	861
55°	865	865	854	847	849	771
65°	584	582	573	566	566	579
75°	299	297	290	285	283	316
85°	48	53	56	58	58	69
90°	0	0	0	0	0	

TEST NUMBER: P1036222

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1732.7	1732.7	1732.7	1732.7	1732.7
2.5°	1738.2	1734.7	1719.8	1732.7	1731.2
5°	1730.6	1728.1	1709.8	1725.7	1723.5
7.5°	1717.9	1713.6	1695.2	1711.1	1708.7
10°	1704.9	1700.3	1684.0	1697.8	1695.7
12.5°	1688.4	1685.7	1667.6	1681.4	1680.8
15°	1660.7	1656.1	1639.9	1654.0	1654.0
17.5°	1624.7	1622.1	1606.1	1619.3	1618.0
20°	1600.3	1596.0	1581.9	1593.6	1593.6
22.5°	1570.9	1568.2	1554.4	1563.8	1565.7
25°	1526.2	1521.9	1507.8	1517.3	1521.9
27.5°	1477.2	1473.7	1462.1	1467.9	1471.3
30°	1438.2	1438.2	1426.6	1429.0	1435.8
32.5°	1403.0	1403.0	1389.5	1391.9	1395.1
35°	1345.6	1341.0	1329.4	1329.4	1336.1
37.5°	1278.5	1276.3	1269.0	1267.6	1269.5
40°	1234.4	1231.9	1222.4	1224.9	1224.9
42.5°	1189.6	1187.2	1177.8	1174.8	1178.3
45°	1115.8	1118.2	1106.6	1104.1	1106.6
47.5°	1043.2	1043.2	1033.8	1027.2	1030.7
50°	992.9	992.9	983.7	979.1	979.1
52.5°	940.9	942.8	931.4	925.1	927.0
55°	865.3	865.3	853.7	846.9	849.1
57.5°	781.7	781.7	770.2	763.3	767.3
60°	726.2	726.2	714.5	707.5	709.9
62.5°	670.4	670.4	659.0	651.9	652.2
65°	584.5	582.3	573.0	565.9	565.9
67.5°	502.0	496.0	489.0	479.8	479.8
70°	440.7	438.3	431.3	422.1	422.1
72.5°	385.0	381.0	373.9	366.6	366.6
75°	299.1	296.7	289.9	285.3	282.9
77.5°	214.4	212.5	212.0	205.5	207.4
80°	162.4	162.4	160.3	155.4	155.4
82.5°	115.9	117.8	113.7	112.6	110.8
85°	48.4	53.0	55.8	57.9	57.9
87.5°	9.5	14.6	13.0	14.9	14.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1036222

CATALOG NUMBER: SQ4R-F-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	21.21	22.84	21.58	23.16	23.47	21.05	22.68	21.42	23.00	23.31
	3H	22.96	24.43	23.33	24.75	25.11	22.75	24.22	23.13	24.55	24.91
	4H	23.61	25.00	24.01	25.34	25.72	23.38	24.76	23.78	25.11	25.49
	6H	23.98	25.26	24.39	25.63	26.02	23.75	25.03	24.16	25.39	25.79
	8H	24.11	25.33	24.53	25.72	26.12	23.87	25.09	24.29	25.48	25.88
	12H	24.16	25.33	24.59	25.71	26.14	23.94	25.11	24.37	25.49	25.92
4H	2H	21.84	23.22	22.23	23.57	23.94	21.71	23.09	22.11	23.44	23.82
	3H	23.81	24.97	24.22	25.36	25.76	23.63	24.79	24.04	25.19	25.59
	4H	24.57	25.62	25.00	26.03	26.47	24.37	25.41	24.80	25.82	26.26
	6H	25.05	25.96	25.50	26.40	26.86	24.83	25.75	25.29	26.19	26.64
	8H	25.21	26.07	25.67	26.51	26.97	24.99	25.85	25.45	26.29	26.76
	12H	25.29	26.06	25.77	26.54	27.01	25.09	25.86	25.57	26.34	26.81
8H	4H	24.83	25.68	25.29	26.12	26.59	24.65	25.50	25.11	25.94	26.41
	6H	25.41	26.12	25.90	26.61	27.08	25.22	25.92	25.71	26.41	26.89
	8H	25.64	26.28	26.15	26.78	27.27	25.44	26.08	25.95	26.58	27.07
	12H	25.77	26.33	26.28	26.82	27.38	25.59	26.16	26.10	26.65	27.21
12H	4H	24.85	25.61	25.33	26.09	26.56	24.67	25.44	25.15	25.91	26.38
	6H	25.44	26.08	25.95	26.59	27.07	25.26	25.90	25.77	26.40	26.89
	8H	25.73	26.29	26.23	26.78	27.34	25.54	26.10	26.04	26.59	27.15