

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: P1036224

Luminaire Tested: SQ4R-F-125D-B2750-1D-UNV-W2A_5000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036224
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_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

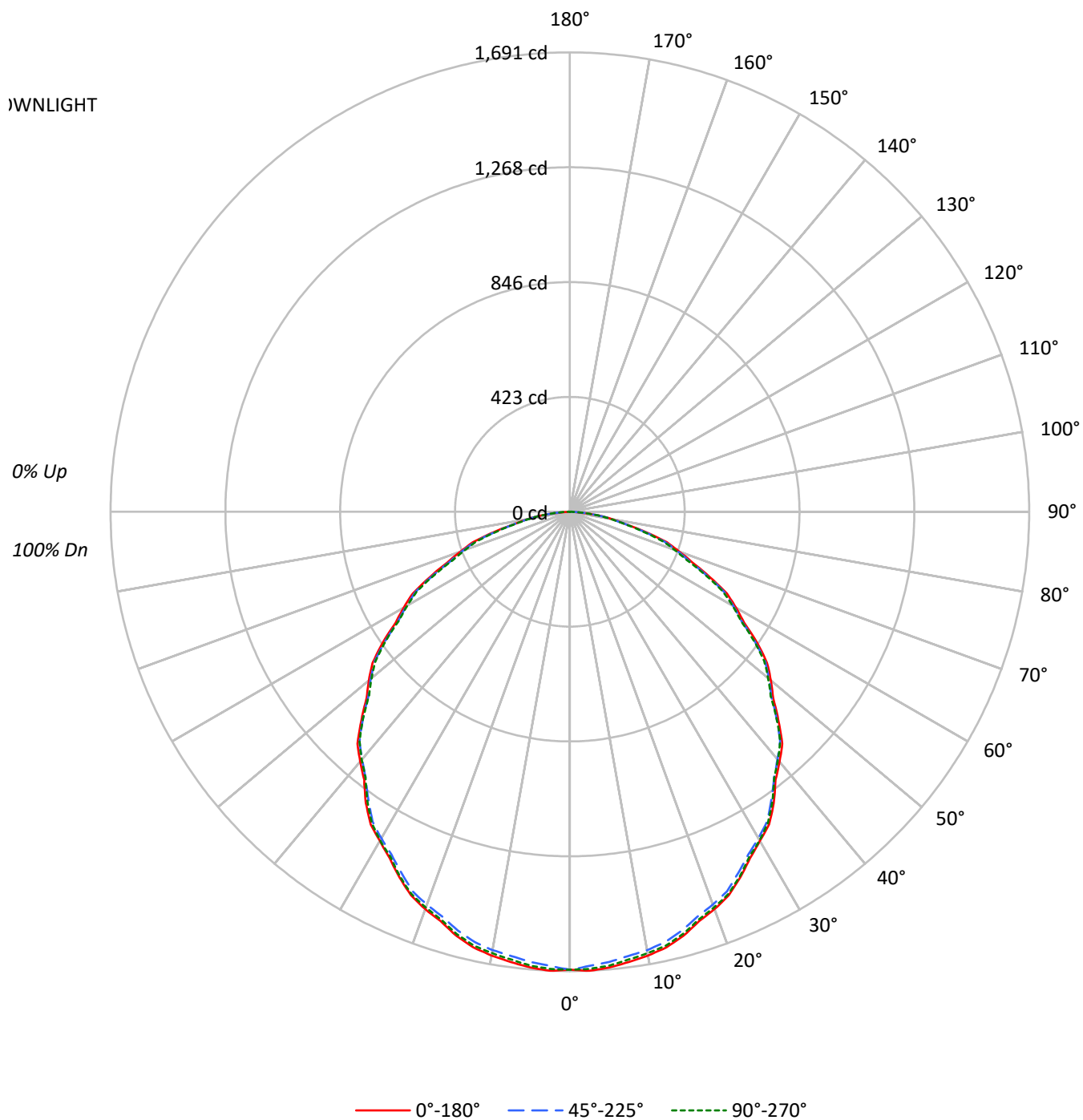
Lumens per Lamp: N/A
Luminaire Lumens: 4601.1 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	15554	15554	15554
5°	15593	15405	15530
10°	15539	15348	15455
15°	15433	15239	15370
20°	15286	15110	15222
25°	15115	14933	15072
30°	14906	14786	14881
35°	14745	14567	14641
40°	14464	14324	14352
45°	14163	14046	14046
50°	13864	13736	13672
55°	13542	13359	13288
60°	13037	12828	12745
65°	12413	12169	12020
70°	11567	11319	11076
75°	10373	10056	9810
80°	8395	8283	8033
85°	4986	5748	5970

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 14195 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.0	3.5
10°-20°	453.0	9.8
20°-30°	680.3	14.8
30°-40°	812.1	17.7
40°-50°	832.2	18.1
50°-60°	742.2	16.1
60°-70°	552.7	12.0
70°-80°	300.0	6.5
80°-90°	69.5	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°	1292.3	28.1
0°-40°	2104.5	45.7
0°-60°	3678.9	80.0
0°-90°	4601.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4601.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1686	1686	1686	1686	1686	
5°	1684	1681	1663	1679	1677	160
15°	1616	1611	1595	1609	1609	455
25°	1485	1481	1467	1476	1481	684
35°	1309	1305	1293	1293	1300	817
45°	1086	1088	1076	1074	1076	838
55°	842	842	830	824	826	750
65°	569	567	557	551	551	563
75°	291	289	282	278	275	308
85°	47	52	54	56	56	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1685.8	1685.8	1685.8	1685.8	1685.8
2.5°	1691.1	1687.7	1673.2	1685.8	1684.2
5°	1683.7	1681.3	1663.4	1678.9	1676.8
7.5°	1671.3	1667.1	1649.2	1664.7	1662.3
10°	1658.6	1654.1	1638.3	1651.8	1649.7
12.5°	1642.6	1640.0	1622.3	1635.8	1635.2
15°	1615.7	1611.2	1595.4	1609.1	1609.1
17.5°	1580.6	1578.1	1562.6	1575.4	1574.1
20°	1556.9	1552.8	1539.0	1550.4	1550.4
22.5°	1528.3	1525.6	1512.2	1521.4	1523.2
25°	1484.8	1480.6	1466.9	1476.1	1480.6
27.5°	1437.2	1433.7	1422.4	1428.1	1431.4
30°	1399.2	1399.2	1387.9	1390.2	1396.8
32.5°	1364.9	1364.9	1351.8	1354.2	1357.3
35°	1309.1	1304.7	1293.3	1293.3	1299.9
37.5°	1243.8	1241.7	1234.6	1233.3	1235.1
40°	1200.9	1198.5	1189.3	1191.6	1191.6
42.5°	1157.4	1155.0	1145.9	1142.9	1146.3
45°	1085.5	1087.9	1076.5	1074.2	1076.5
47.5°	1014.9	1014.9	1005.7	999.3	1002.8
50°	965.9	965.9	957.0	952.5	952.5
52.5°	915.4	917.2	906.1	900.0	901.9
55°	841.9	841.9	830.5	823.9	826.1
57.5°	760.5	760.5	749.3	742.6	746.5
60°	706.5	706.5	695.2	688.3	690.7
62.5°	652.2	652.2	641.1	634.2	634.5
65°	568.6	566.6	557.4	550.6	550.6
67.5°	488.4	482.6	475.7	466.8	466.8
70°	428.8	426.4	419.6	410.6	410.6
72.5°	374.5	370.6	363.8	356.6	356.6
75°	291.0	288.7	282.1	277.6	275.2
77.5°	208.6	206.8	206.2	199.9	201.7
80°	158.0	158.0	155.9	151.2	151.2
82.5°	112.7	114.6	110.6	109.6	107.8
85°	47.1	51.6	54.3	56.4	56.4
87.5°	9.2	14.2	12.7	14.5	14.5
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	21.12	22.75	21.48	23.06	23.37	20.96	22.59	21.32	22.90	23.21
	3H	22.86	24.33	23.24	24.66	25.02	22.65	24.12	23.03	24.45	24.81
	4H	23.52	24.90	23.92	25.25	25.62	23.29	24.67	23.68	25.02	25.39
	6H	23.89	25.17	24.30	25.53	25.92	23.65	24.93	24.06	25.30	25.69
	8H	24.01	25.24	24.44	25.62	26.02	23.77	25.00	24.20	25.39	25.79
	12H	24.06	25.24	24.49	25.62	26.05	23.84	25.01	24.27	25.39	25.82
4H	2H	21.74	23.12	22.14	23.47	23.85	21.61	23.00	22.01	23.35	23.72
	3H	23.71	24.87	24.12	25.27	25.67	23.54	24.69	23.95	25.09	25.49
	4H	24.47	25.52	24.91	25.93	26.37	24.27	25.32	24.70	25.73	26.16
	6H	24.95	25.86	25.40	26.30	26.76	24.74	25.65	25.19	26.09	26.55
	8H	25.12	25.97	25.58	26.41	26.88	24.90	25.75	25.36	26.20	26.66
	12H	25.20	25.97	25.68	26.44	26.91	25.00	25.77	25.48	26.24	26.71
8H	4H	24.73	25.59	25.19	26.03	26.49	24.55	25.40	25.01	25.85	26.31
	6H	25.31	26.02	25.81	26.51	26.98	25.12	25.83	25.61	26.32	26.79
	8H	25.55	26.18	26.05	26.69	27.17	25.35	25.98	25.85	26.49	26.97
	12H	25.68	26.24	26.18	26.73	27.29	25.50	26.06	26.01	26.55	27.11
12H	4H	24.75	25.52	25.23	25.99	26.46	24.57	25.34	25.05	25.82	26.29
	6H	25.35	25.99	25.86	26.49	26.98	25.16	25.80	25.67	26.31	26.79
	8H	25.63	26.19	26.14	26.68	27.24	25.44	26.00	25.95	26.49	27.05