

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: P1036323

Luminaire Tested: SQ4R-PR1-125D-B50-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036323
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P564154)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-125D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

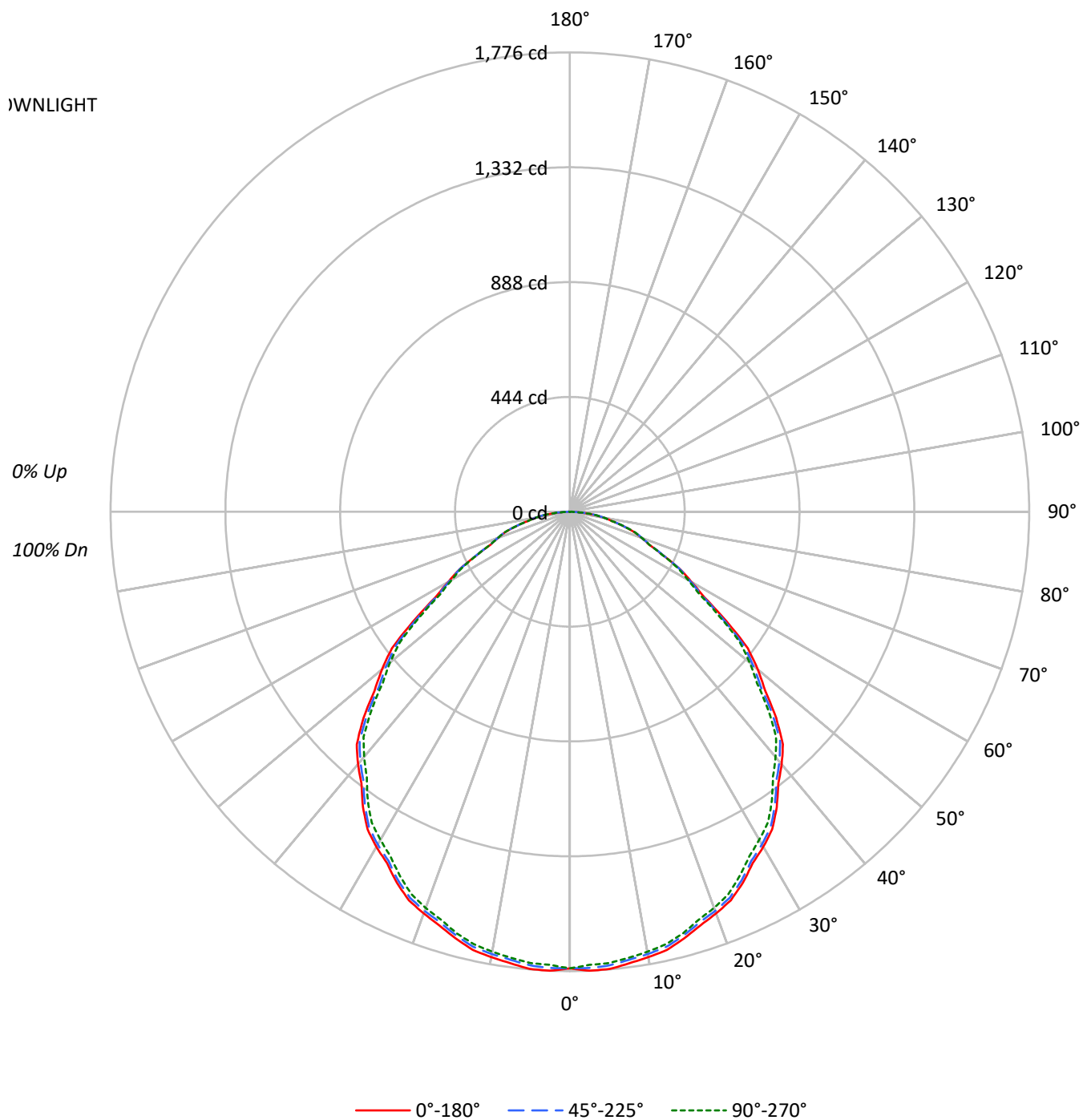
Lumens per Lamp: N/A
Luminaire Lumens: 4412.6 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81
3	92	82	74	68	90	80	73	68	78	71	66		75	70	65		72
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53
7	67	54	46	40	65	53	45	39	52	44	39		50	44	39		49
8	63	49	41	35	61	49	41	35	47	40	35		46	40	35		45
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42
10	55	42	34	29	54	41	34	29	40	34	29		40	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16285	16285	16285
5°	16433	16306	16220
10°	16379	16266	16180
15°	16309	16206	16118
20°	16226	16121	16003
25°	16111	16005	15818
30°	15937	15825	15599
35°	15703	15566	15344
40°	15343	15179	14904
45°	14721	14461	14163
50°	13617	13290	13027
55°	11884	11618	11374
60°	10014	9933	9734
65°	8663	8695	8628
70°	7952	7996	7996
75°	7643	7643	7696
80°	7183	7268	7183
85°	5790	6436	6436

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14721 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.9	3.8
10°-20°	477.6	10.8
20°-30°	720.3	16.3
30°-40°	858.3	19.5
40°-50°	846.2	19.2
50°-60°	646.7	14.7
60°-70°	400.2	9.1
70°-80°	227.3	5.2
80°-90°	69.1	1.6
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°	1364.8	30.9
0°-40°	2223.1	50.4
0°-60°	3716.0	84.2
0°-90°	4412.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4412.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1765	1765	1765	1765	1765	
5°	1774	1755	1761	1754	1751	168
15°	1708	1690	1697	1691	1688	482
25°	1583	1563	1572	1555	1554	728
35°	1394	1378	1382	1364	1362	870
45°	1128	1113	1108	1088	1086	864
55°	739	727	722	710	707	662
65°	397	394	398	395	395	402
75°	214	214	214	216	216	226
85°	55	58	61	61	61	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1765.1	1765.1	1765.1	1765.1	1765.1
2.5°	1776.1	1760.6	1765.1	1761.4	1753.1
5°	1774.3	1754.9	1760.6	1754.3	1751.4
7.5°	1760.6	1741.5	1747.3	1741.0	1739.3
10°	1748.3	1730.5	1736.2	1730.2	1727.1
12.5°	1735.0	1716.0	1722.9	1715.5	1712.7
15°	1707.5	1689.6	1696.7	1690.6	1687.5
17.5°	1677.0	1657.9	1665.2	1658.1	1654.2
20°	1652.6	1634.8	1641.9	1631.4	1629.9
22.5°	1626.0	1608.1	1615.2	1601.0	1600.7
25°	1582.6	1563.3	1572.2	1555.4	1553.8
27.5°	1531.3	1513.5	1520.6	1503.5	1501.9
30°	1495.9	1478.1	1485.4	1467.1	1464.2
32.5°	1455.8	1439.4	1445.4	1427.0	1425.2
35°	1394.2	1377.8	1382.0	1363.9	1362.3
37.5°	1324.0	1309.0	1311.4	1291.2	1289.9
40°	1273.9	1259.2	1260.3	1239.1	1237.5
42.5°	1219.4	1204.5	1203.2	1181.9	1180.4
45°	1128.2	1113.3	1108.3	1088.4	1085.5
47.5°	1024.2	1009.2	1000.1	983.8	981.7
50°	948.7	933.7	925.9	912.0	907.6
52.5°	867.2	852.3	845.7	833.1	828.6
55°	738.8	727.0	722.3	709.9	707.1
57.5°	616.9	609.1	607.5	595.7	594.3
60°	542.7	538.3	538.3	527.5	527.5
62.5°	479.6	476.2	478.6	471.4	470.4
65°	396.8	393.9	398.3	395.2	395.2
67.5°	331.5	331.5	334.2	332.8	332.8
70°	294.8	294.8	296.4	296.4	296.4
72.5°	262.1	261.0	264.9	264.7	263.6
75°	214.4	214.4	214.4	215.9	215.9
77.5°	167.0	167.2	168.5	168.2	167.0
80°	135.2	136.8	136.8	135.2	135.2
82.5°	103.8	105.1	105.1	104.8	103.8
85°	54.7	57.7	60.8	60.8	60.8
87.5°	15.7	20.5	24.4	24.4	23.0
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	19.80	21.36	20.16	21.67	21.99	19.63	21.19	19.99	21.50	21.82
	3H	21.13	22.53	21.51	22.86	23.22	21.03	22.43	21.41	22.76	23.12
	4H	21.73	23.05	22.13	23.40	23.78	21.66	22.98	22.06	23.33	23.70
	6H	22.18	23.40	22.59	23.77	24.16	22.12	23.34	22.53	23.70	24.09
	8H	22.36	23.53	22.79	23.92	24.32	22.30	23.47	22.73	23.86	24.26
	12H	22.47	23.59	22.90	23.97	24.40	22.43	23.54	22.86	23.92	24.35
4H	2H	20.27	21.59	20.67	21.94	22.31	20.13	21.45	20.53	21.80	22.17
	3H	21.87	22.97	22.28	23.37	23.77	21.80	22.90	22.21	23.29	23.70
	4H	22.61	23.60	23.04	24.01	24.45	22.56	23.55	22.99	23.97	24.40
	6H	23.20	24.06	23.65	24.50	24.96	23.16	24.02	23.61	24.46	24.92
	8H	23.44	24.25	23.90	24.69	25.16	23.40	24.21	23.87	24.65	25.12
	12H	23.60	24.32	24.08	24.80	25.27	23.58	24.30	24.06	24.78	25.25
8H	4H	22.88	23.69	23.35	24.13	24.60	22.84	23.65	23.30	24.09	24.56
	6H	23.61	24.28	24.11	24.77	25.25	23.57	24.24	24.07	24.73	25.21
	8H	23.94	24.55	24.46	25.06	25.54	23.91	24.51	24.42	25.02	25.51
	12H	24.18	24.71	24.69	25.20	25.77	24.17	24.71	24.68	25.20	25.76
12H	4H	22.91	23.64	23.40	24.11	24.58	22.87	23.60	23.35	24.07	24.54
	6H	23.67	24.28	24.18	24.78	25.27	23.64	24.24	24.15	24.75	25.24
	8H	24.07	24.61	24.58	25.10	25.66	24.04	24.57	24.55	25.07	25.63

END OF REPORT