

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: P1036354

Luminaire Tested: SQ4R-PW1-125D-B40-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036354
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-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

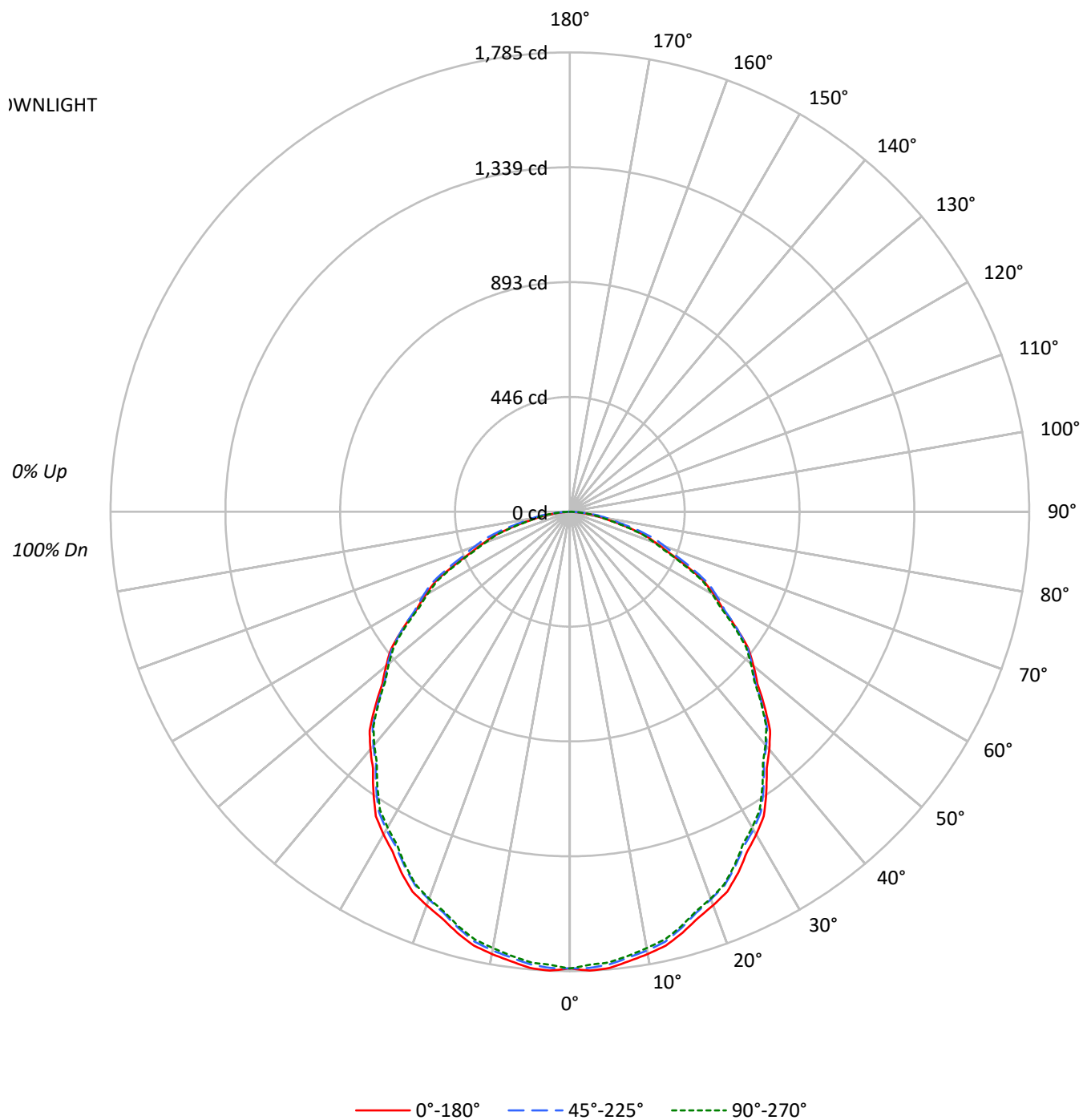
Lumens per Lamp: N/A
Luminaire Lumens: 4514.9 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	16372	16372	16372
5°	16479	16348	16276
10°	16346	16214	16126
15°	16173	15993	15934
20°	15979	15733	15704
25°	15757	15471	15421
30°	15424	15192	15091
35°	14986	14773	14686
40°	14519	14291	14237
45°	13953	13771	13708
50°	13376	13264	13172
55°	12749	12749	12550
60°	11976	12204	11771
65°	10955	11503	10684
70°	9655	10585	9409
75°	8252	9471	8021
80°	6402	7975	6487
85°	4139	6129	5452

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13953 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.1	3.7
10°-20°	471.8	10.4
20°-30°	699.8	15.5
30°-40°	818.8	18.1
40°-50°	815.2	18.1
50°-60°	703.9	15.6
60°-70°	506.7	11.2
70°-80°	265.7	5.9
80°-90°	65.9	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°	1338.6	29.6
0°-40°	2157.5	47.8
0°-60°	3676.6	81.4
0°-90°	4514.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4514.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1774	1774	1774	1774	1774	
5°	1779	1759	1765	1760	1757	169
15°	1693	1672	1674	1671	1668	477
25°	1548	1522	1520	1510	1515	712
35°	1330	1312	1312	1299	1304	832
45°	1069	1060	1055	1052	1051	825
55°	793	791	793	782	780	707
65°	502	517	527	506	489	497
75°	232	253	266	248	225	248
85°	39	51	58	55	52	53
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1774.5	1774.5	1774.5	1774.5	1774.5
2.5°	1784.6	1769.8	1774.5	1770.7	1762.0
5°	1779.3	1759.3	1765.2	1760.4	1757.4
7.5°	1761.2	1742.9	1746.9	1742.1	1740.1
10°	1744.8	1726.4	1730.7	1724.5	1721.3
12.5°	1726.2	1706.5	1710.8	1704.3	1702.7
15°	1693.2	1671.7	1674.4	1671.1	1668.2
17.5°	1655.1	1633.5	1633.7	1628.9	1628.0
20°	1627.5	1604.6	1602.4	1596.2	1599.5
22.5°	1597.6	1573.4	1571.2	1562.6	1566.9
25°	1547.8	1521.9	1519.7	1510.3	1514.8
27.5°	1490.3	1464.7	1464.7	1451.6	1456.4
30°	1447.8	1423.3	1426.0	1410.3	1416.5
32.5°	1402.7	1380.6	1382.0	1366.7	1372.9
35°	1330.5	1312.2	1311.6	1299.3	1303.9
37.5°	1256.7	1240.5	1237.8	1230.8	1231.9
40°	1205.5	1191.8	1186.6	1182.1	1182.1
42.5°	1151.5	1139.2	1134.1	1130.6	1129.4
45°	1069.4	1060.3	1055.4	1052.1	1050.6
47.5°	988.0	979.6	975.4	973.1	971.6
50°	931.9	925.7	924.1	919.3	917.7
52.5°	875.6	871.9	870.2	864.3	862.7
55°	792.6	791.2	792.6	781.8	780.2
57.5°	706.4	708.8	713.9	699.1	695.3
60°	649.0	654.9	661.4	644.1	637.9
62.5°	590.0	599.9	608.8	588.9	580.3
65°	501.8	517.2	526.9	506.1	489.4
67.5°	416.9	435.8	447.4	425.3	406.1
70°	357.9	379.5	392.4	370.0	348.8
72.5°	306.7	330.6	341.2	319.9	298.6
75°	231.5	252.8	265.7	248.0	225.0
77.5°	164.2	184.3	195.1	179.8	160.7
80°	120.5	141.8	150.1	137.2	122.1
82.5°	85.5	103.2	108.9	101.1	90.5
85°	39.1	51.2	57.9	54.8	51.5
87.5°	10.0	18.6	23.7	23.7	25.1
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	20.72	22.32	21.09	22.64	22.95	20.62	22.22	20.99	22.54	22.85
	3H	22.28	23.72	22.66	24.05	24.41	22.15	23.60	22.53	23.92	24.28
	4H	22.83	24.19	23.23	24.54	24.91	22.69	24.05	23.09	24.40	24.78
	6H	23.13	24.38	23.54	24.75	25.14	22.99	24.25	23.40	24.61	25.00
	8H	23.22	24.42	23.64	24.80	25.20	23.09	24.29	23.52	24.68	25.08
	12H	23.26	24.40	23.69	24.79	25.21	23.16	24.31	23.59	24.69	25.12
4H	2H	21.37	22.72	21.76	23.07	23.45	21.29	22.64	21.69	22.99	23.37
	3H	23.17	24.30	23.58	24.70	25.10	23.05	24.19	23.46	24.59	24.99
	4H	23.83	24.85	24.26	25.26	25.70	23.70	24.73	24.14	25.14	25.58
	6H	24.23	25.12	24.68	25.56	26.02	24.11	25.00	24.56	25.44	25.90
	8H	24.36	25.19	24.82	25.64	26.10	24.25	25.08	24.71	25.53	25.99
	12H	24.43	25.18	24.91	25.65	26.12	24.35	25.09	24.83	25.57	26.04
8H	4H	24.10	24.94	24.56	25.38	25.84	23.99	24.83	24.46	25.27	25.74
	6H	24.62	25.31	25.12	25.80	26.28	24.51	25.20	25.01	25.69	26.17
	8H	24.82	25.44	25.33	25.95	26.44	24.72	25.34	25.23	25.85	26.34
	12H	24.94	25.49	25.45	25.98	26.54	24.88	25.43	25.38	25.92	26.48
12H	4H	24.12	24.87	24.60	25.35	25.81	24.02	24.76	24.50	25.24	25.71
	6H	24.67	25.29	25.18	25.79	26.28	24.56	25.18	25.07	25.69	26.17
	8H	24.92	25.47	25.43	25.96	26.52	24.83	25.38	25.33	25.87	26.43

END OF REPORT