

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: P1036213

Luminaire Tested: SQ4R-F-100D-B2750-1D-UNV-W2A_3000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036213
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-100D-B2750-1D-UNV-W2A_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

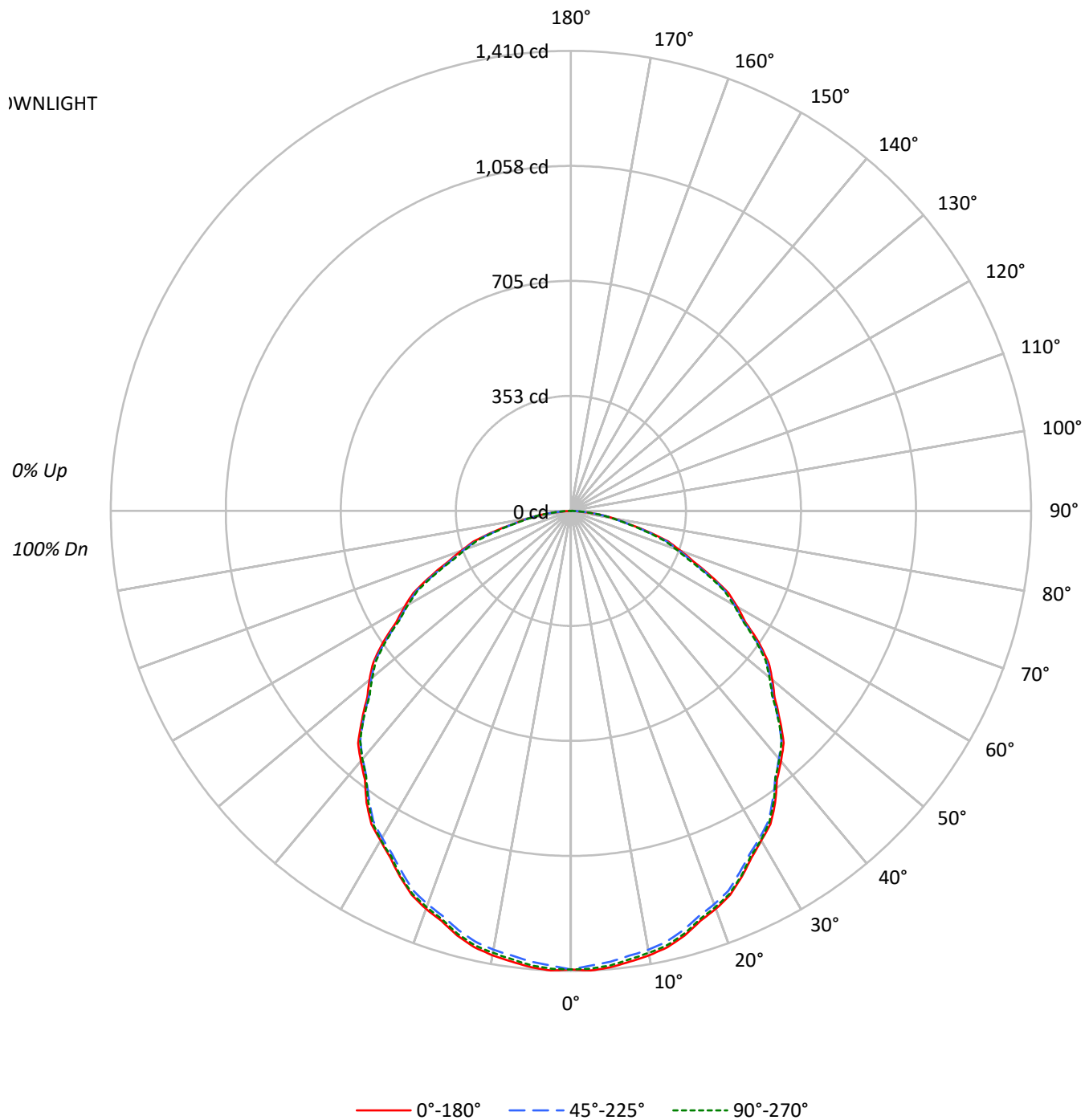
Lumens per Lamp: N/A
Luminaire Lumens: 3836.2 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 34.9
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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12967	12967	12967
5°	13000	12845	12948
10°	12956	12797	12885
15°	12867	12706	12815
20°	12745	12599	12691
25°	12602	12450	12567
30°	12428	12327	12408
35°	12294	12145	12207
40°	12058	11942	11966
45°	11808	11712	11712
50°	11560	11451	11398
55°	11290	11139	11078
60°	10868	10695	10625
65°	10352	10145	10020
70°	9644	9439	9236
75°	8648	8384	8181
80°	6997	6912	6700
85°	4160	4795	4975

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 11834 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.6	3.5
10°-20°	377.7	9.8
20°-30°	567.2	14.8
30°-40°	677.1	17.7
40°-50°	693.9	18.1
50°-60°	618.8	16.1
60°-70°	460.8	12.0
70°-80°	250.2	6.5
80°-90°	57.9	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°	1077.5	28.1
0°-40°	1754.6	45.7
0°-60°	3067.3	80.0
0°-90°	3836.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3836.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1406	1406	1406	1406	1406	
5°	1404	1402	1387	1400	1398	133
15°	1347	1343	1330	1342	1342	380
25°	1238	1234	1223	1231	1234	570
35°	1092	1088	1078	1078	1084	681
45°	905	907	898	896	898	699
55°	702	702	692	687	689	625
65°	474	472	465	459	459	470
75°	243	241	235	232	230	256
85°	39	43	45	47	47	56
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1405.5	1405.5	1405.5	1405.5	1405.5
2.5°	1409.9	1407.1	1395.0	1405.5	1404.2
5°	1403.7	1401.8	1386.9	1399.9	1398.1
7.5°	1393.4	1389.9	1375.0	1387.9	1386.0
10°	1382.9	1379.2	1366.0	1377.2	1375.4
12.5°	1369.5	1367.3	1352.6	1363.8	1363.3
15°	1347.1	1343.4	1330.2	1341.6	1341.6
17.5°	1318.0	1315.7	1302.8	1313.5	1312.4
20°	1298.1	1294.6	1283.2	1292.6	1292.6
22.5°	1274.2	1272.0	1260.8	1268.5	1270.0
25°	1237.9	1234.5	1223.0	1230.7	1234.5
27.5°	1198.2	1195.3	1185.9	1190.8	1193.4
30°	1166.6	1166.6	1157.1	1159.1	1164.7
32.5°	1138.1	1138.1	1127.0	1129.0	1131.7
35°	1091.5	1087.7	1078.3	1078.3	1083.8
37.5°	1037.0	1035.3	1029.3	1028.3	1029.7
40°	1001.2	999.3	991.5	993.5	993.5
42.5°	965.0	963.0	955.3	952.9	955.8
45°	905.0	907.0	897.6	895.6	897.6
47.5°	846.2	846.2	838.5	833.3	836.0
50°	805.4	805.4	797.8	794.1	794.1
52.5°	763.2	764.7	755.4	750.5	752.0
55°	701.9	701.9	692.5	686.9	688.7
57.5°	634.0	634.0	624.8	619.1	622.4
60°	589.0	589.0	579.6	573.8	575.8
62.5°	543.8	543.8	534.5	528.9	529.1
65°	474.2	472.4	464.7	459.0	459.0
67.5°	407.2	402.3	396.6	389.2	389.2
70°	357.5	355.5	349.9	342.4	342.4
72.5°	312.3	309.0	303.3	297.3	297.3
75°	242.6	240.7	235.2	231.5	229.5
77.5°	173.9	172.4	172.0	166.7	168.2
80°	131.7	131.7	130.1	126.1	126.1
82.5°	94.0	95.5	92.2	91.3	89.8
85°	39.3	43.1	45.3	47.0	47.0
87.5°	7.6	11.8	10.5	12.1	12.1
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	20.49	22.11	20.85	22.43	22.74	20.33	21.95	20.69	22.27	22.58
	3H	22.23	23.70	22.61	24.03	24.39	22.02	23.49	22.40	23.82	24.18
	4H	22.88	24.27	23.28	24.62	24.99	22.65	24.04	23.05	24.39	24.76
	6H	23.25	24.54	23.67	24.90	25.29	23.02	24.30	23.43	24.67	25.06
	8H	23.38	24.60	23.80	24.99	25.39	23.14	24.37	23.57	24.75	25.15
	12H	23.43	24.60	23.86	24.99	25.41	23.21	24.38	23.64	24.76	25.19
4H	2H	21.11	22.49	21.51	22.84	23.21	20.98	22.37	21.38	22.71	23.09
	3H	23.08	24.24	23.49	24.64	25.04	22.90	24.06	23.31	24.46	24.86
	4H	23.84	24.89	24.27	25.30	25.74	23.64	24.68	24.07	25.10	25.53
	6H	24.32	25.23	24.77	25.67	26.13	24.11	25.02	24.56	25.46	25.92
	8H	24.48	25.34	24.95	25.78	26.25	24.27	25.12	24.73	25.56	26.03
	12H	24.57	25.33	25.05	25.81	26.28	24.37	25.13	24.85	25.61	26.08
8H	4H	24.10	24.95	24.56	25.40	25.86	23.92	24.77	24.38	25.22	25.68
	6H	24.68	25.39	25.17	25.88	26.35	24.49	25.20	24.98	25.69	26.16
	8H	24.91	25.55	25.42	26.05	26.54	24.71	25.35	25.22	25.86	26.34
	12H	25.04	25.61	25.55	26.10	26.66	24.87	25.43	25.37	25.92	26.48
12H	4H	24.12	24.89	24.60	25.36	25.83	23.94	24.71	24.42	25.19	25.65
	6H	24.72	25.35	25.23	25.86	26.35	24.53	25.17	25.04	25.67	26.16
	8H	25.00	25.56	25.51	26.05	26.61	24.81	25.37	25.31	25.86	26.42

END OF REPORT