

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: P1036218

Luminaire Tested: SQ4R-F-100D-B40-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036218
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-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

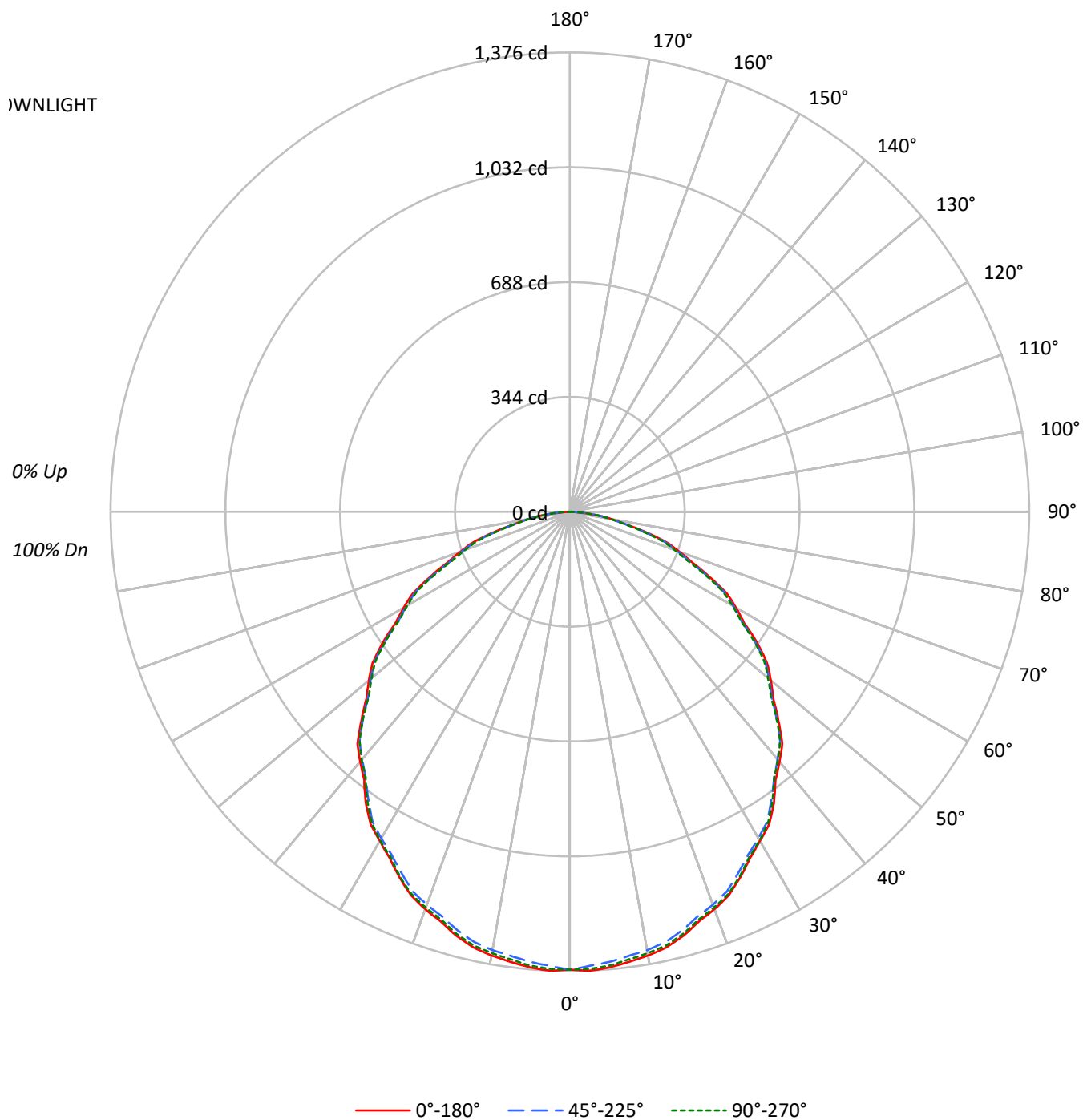
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3744.4 lumens
Efficiency: N/A
Efficacy: 107.3 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): 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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84		
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70		
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	59		
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51		
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44		
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38		
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30		
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27		
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12657	12657	12657
5°	12690	12537	12638
10°	12646	12491	12577
15°	12559	12402	12508
20°	12440	12297	12388
25°	12300	12153	12266
30°	12130	12032	12111
35°	12000	11854	11914
40°	11771	11656	11679
45°	11526	11431	11431
50°	11283	11177	11127
55°	11020	10872	10813
60°	10608	10439	10372
65°	10103	9903	9780
70°	9414	9212	9015
75°	8441	8185	7985
80°	6833	6742	6540
85°	4065	4679	4848

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 11551 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.4	3.5
10°-20°	368.6	9.8
20°-30°	553.7	14.8
30°-40°	660.9	17.7
40°-50°	677.3	18.1
50°-60°	604.0	16.1
60°-70°	449.8	12.0
70°-80°	244.2	6.5
80°-90°	56.5	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°	1051.7	28.1
0°-40°	1712.6	45.7
0°-60°	2993.9	80.0
0°-90°	3744.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3744.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1372	1372	1372	1372	1372	
5°	1370	1368	1354	1366	1365	130
15°	1315	1311	1298	1310	1310	370
25°	1208	1205	1194	1201	1205	556
35°	1065	1062	1052	1052	1058	665
45°	883	885	876	874	876	682
55°	685	685	676	670	672	610
65°	463	461	454	448	448	458
75°	237	235	230	226	224	250
85°	38	42	44	46	46	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1371.9	1371.9	1371.9	1371.9	1371.9
2.5°	1376.2	1373.5	1361.6	1371.9	1370.6
5°	1370.2	1368.3	1353.7	1366.4	1364.6
7.5°	1360.1	1356.7	1342.2	1354.8	1352.8
10°	1349.8	1346.2	1333.3	1344.3	1342.5
12.5°	1336.7	1334.6	1320.3	1331.2	1330.7
15°	1314.9	1311.2	1298.4	1309.5	1309.5
17.5°	1286.4	1284.2	1271.6	1282.1	1281.0
20°	1267.0	1263.7	1252.5	1261.7	1261.7
22.5°	1243.7	1241.6	1230.6	1238.2	1239.6
25°	1208.3	1204.9	1193.8	1201.3	1204.9
27.5°	1169.6	1166.8	1157.5	1162.3	1164.8
30°	1138.6	1138.6	1129.4	1131.4	1136.8
32.5°	1110.8	1110.8	1100.1	1102.0	1104.6
35°	1065.4	1061.7	1052.5	1052.5	1057.8
37.5°	1012.2	1010.5	1004.7	1003.7	1005.1
40°	977.3	975.4	967.8	969.7	969.7
42.5°	941.9	940.0	932.4	930.1	932.9
45°	883.4	885.3	876.1	874.2	876.1
47.5°	825.9	825.9	818.5	813.3	816.0
50°	786.1	786.1	778.7	775.2	775.2
52.5°	744.9	746.4	737.4	732.5	734.0
55°	685.1	685.1	675.9	670.5	672.2
57.5°	618.8	618.8	609.8	604.3	607.5
60°	574.9	574.9	565.7	560.1	562.1
62.5°	530.8	530.8	521.7	516.2	516.4
65°	462.8	461.1	453.6	448.0	448.0
67.5°	397.4	392.7	387.1	379.9	379.9
70°	349.0	347.0	341.5	334.2	334.2
72.5°	304.9	301.6	296.0	290.2	290.2
75°	236.8	234.9	229.6	226.0	224.0
77.5°	169.8	168.2	167.8	162.7	164.2
80°	128.6	128.6	126.9	123.1	123.1
82.5°	91.8	93.2	90.0	89.2	87.7
85°	38.4	42.1	44.2	45.8	45.8
87.5°	7.5	11.5	10.3	11.8	11.8
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	20.40	22.03	20.77	22.34	22.66	20.24	21.87	20.61	22.18	22.50
	3H	22.14	23.61	22.52	23.94	24.30	21.94	23.41	22.31	23.73	24.09
	4H	22.80	24.18	23.20	24.53	24.91	22.57	23.95	22.97	24.30	24.68
	6H	23.17	24.45	23.58	24.82	25.21	22.94	24.22	23.35	24.58	24.97
	8H	23.30	24.52	23.72	24.91	25.31	23.06	24.28	23.48	24.67	25.07
	12H	23.35	24.52	23.78	24.90	25.33	23.12	24.30	23.55	24.68	25.11
4H	2H	21.02	22.41	21.42	22.75	23.13	20.90	22.28	21.30	22.63	23.01
	3H	23.00	24.15	23.41	24.55	24.95	22.82	23.98	23.23	24.38	24.78
	4H	23.76	24.80	24.19	25.22	25.65	23.55	24.60	23.99	25.01	25.45
	6H	24.23	25.15	24.69	25.59	26.04	24.02	24.94	24.48	25.38	25.83
	8H	24.40	25.25	24.86	25.70	26.16	24.18	25.04	24.64	25.48	25.95
	12H	24.48	25.25	24.96	25.73	26.20	24.28	25.05	24.76	25.53	25.99
8H	4H	24.02	24.87	24.48	25.31	25.78	23.84	24.69	24.30	25.13	25.60
	6H	24.60	25.31	25.09	25.79	26.27	24.41	25.11	24.90	25.60	26.08
	8H	24.83	25.46	25.34	25.97	26.46	24.63	25.27	25.14	25.77	26.26
	12H	24.96	25.52	25.47	26.01	26.57	24.78	25.34	25.29	25.84	26.40
12H	4H	24.04	24.80	24.52	25.28	25.75	23.86	24.63	24.34	25.10	25.57
	6H	24.63	25.27	25.14	25.78	26.26	24.45	25.08	24.96	25.59	26.08
	8H	24.92	25.48	25.42	25.97	26.53	24.72	25.29	25.23	25.78	26.34

END OF REPORT