

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: P1036244

Luminaire Tested: SQ4R-PC3-100D-B2750-1D-UNV-W2A_2700K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036244
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P562810)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PC3-100D-B2750-1D-UNV-W2A_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

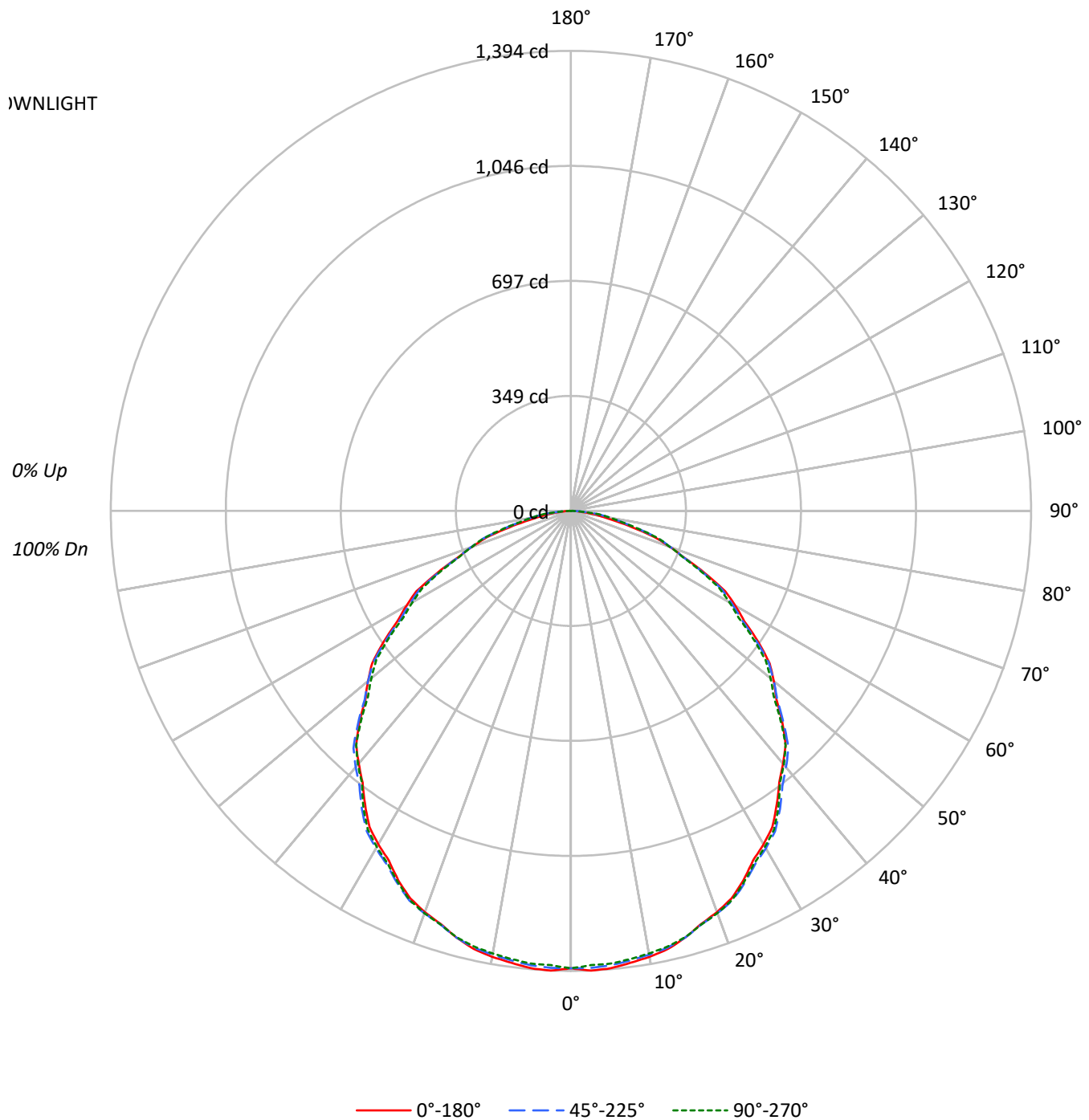
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3783.0 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	105	100	97	106	102	98	95	98	95	92		94	92	89		91
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		80
3	91	80	72	66	88	79	71	65	76	70	64		73	68	63		71
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63
5	77	64	55	48	74	63	54	48	61	53	48		59	52	47		57
6	71	58	49	42	69	57	48	42	55	47	42		53	46	41		52
7	66	52	43	37	64	51	43	37	50	42	37		48	42	37		47
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		43
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		40
10	54	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12788	12788	12788
5°	12885	12802	12755
10°	12855	12795	12757
15°	12787	12787	12773
20°	12703	12739	12739
25°	12582	12673	12634
30°	12428	12579	12524
35°	12244	12431	12344
40°	12040	12211	12089
45°	11824	11907	11722
50°	11514	11514	11331
55°	11149	11004	10840
60°	10610	10398	10230
65°	9804	9612	9525
70°	8589	8654	8624
75°	6908	7643	7689
80°	4915	6477	6546
85°	2996	5431	5431

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 11907 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.2	3.5
10°-20°	376.5	10.0
20°-30°	570.1	15.1
30°-40°	683.5	18.1
40°-50°	696.9	18.4
50°-60°	608.3	16.1
60°-70°	435.5	11.5
70°-80°	224.3	5.9
80°-90°	56.8	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°	1077.7	28.5
0°-40°	1761.2	46.6
0°-60°	3066.4	81.1
0°-90°	3783.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3783.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1386	1386	1386	1386	1386	
5°	1391	1377	1382	1378	1377	132
15°	1339	1327	1339	1339	1337	377
25°	1236	1227	1245	1241	1241	569
35°	1087	1084	1104	1096	1096	680
45°	906	904	913	901	898	697
55°	693	684	684	674	674	618
65°	449	439	440	436	436	444
75°	194	203	214	216	216	209
85°	28	43	51	53	51	40
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1386.0	1386.0	1386.0	1386.0	1386.0
2.5°	1394.4	1382.3	1386.0	1382.9	1377.8
5°	1391.3	1377.4	1382.3	1378.3	1377.2
7.5°	1381.2	1367.4	1373.9	1371.2	1369.9
10°	1372.1	1358.1	1365.7	1363.0	1361.7
12.5°	1359.7	1346.9	1355.3	1352.8	1352.4
15°	1338.7	1327.4	1338.7	1338.7	1337.3
17.5°	1312.1	1302.0	1313.9	1314.8	1313.9
20°	1293.8	1282.5	1297.5	1296.2	1297.5
22.5°	1271.2	1261.9	1278.1	1274.7	1276.1
25°	1236.0	1227.2	1244.9	1241.1	1241.1
27.5°	1194.4	1188.0	1207.5	1203.3	1203.3
30°	1166.6	1160.4	1180.7	1175.6	1175.6
32.5°	1135.8	1131.6	1151.1	1144.9	1144.9
35°	1087.1	1084.5	1103.7	1096.0	1096.0
37.5°	1036.7	1034.5	1052.0	1042.7	1039.6
40°	999.7	998.6	1013.9	1003.7	1003.7
42.5°	962.8	961.5	975.0	962.6	962.6
45°	906.2	903.5	912.6	900.9	898.4
47.5°	844.2	841.8	847.3	834.7	833.4
50°	802.2	799.5	802.2	790.5	789.4
52.5°	759.0	754.4	754.8	743.3	743.1
55°	693.1	684.3	684.1	673.9	673.9
57.5°	623.2	611.7	612.8	604.0	602.6
60°	575.0	562.4	563.5	555.7	554.4
62.5°	527.6	513.3	516.1	507.5	507.3
65°	449.1	439.1	440.3	436.3	436.3
67.5°	373.7	364.4	371.2	368.1	367.9
70°	318.4	311.9	320.8	320.8	319.7
72.5°	267.0	266.8	277.6	277.6	278.5
75°	193.8	202.6	214.4	215.7	215.7
77.5°	129.4	144.9	158.0	158.4	158.2
80°	92.5	110.0	121.9	124.6	123.2
82.5°	62.6	81.2	91.1	93.6	92.5
85°	28.3	43.4	51.3	52.7	51.3
87.5°	8.2	17.3	20.6	20.6	18.6
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	20.32	21.94	20.69	22.25	22.56	20.21	21.82	20.57	22.14	22.45
	3H	21.87	23.32	22.24	23.65	24.01	21.81	23.26	22.19	23.59	23.95
	4H	22.38	23.75	22.77	24.09	24.47	22.41	23.78	22.81	24.13	24.50
	6H	22.61	23.88	23.02	24.25	24.64	22.77	24.04	23.19	24.41	24.80
	8H	22.68	23.89	23.10	24.28	24.68	22.91	24.12	23.34	24.51	24.91
	12H	22.70	23.86	23.13	24.24	24.67	23.00	24.16	23.43	24.54	24.97
4H	2H	20.92	22.29	21.31	22.63	23.01	20.83	22.20	21.22	22.54	22.92
	3H	22.67	23.82	23.08	24.21	24.61	22.65	23.79	23.06	24.19	24.59
	4H	23.28	24.31	23.71	24.73	25.16	23.35	24.38	23.78	24.80	25.23
	6H	23.62	24.52	24.08	24.96	25.42	23.83	24.73	24.28	25.17	25.63
	8H	23.72	24.56	24.18	25.01	25.47	24.01	24.86	24.47	25.30	25.76
	12H	23.77	24.53	24.25	25.01	25.47	24.14	24.90	24.62	25.37	25.84
8H	4H	23.54	24.38	24.00	24.82	25.29	23.60	24.44	24.06	24.88	25.35
	6H	23.98	24.68	24.47	25.17	25.64	24.19	24.89	24.68	25.38	25.85
	8H	24.15	24.77	24.66	25.28	25.77	24.45	25.08	24.96	25.58	26.07
	12H	24.25	24.80	24.76	25.30	25.86	24.64	25.20	25.15	25.69	26.25
12H	4H	23.56	24.31	24.04	24.79	25.26	23.61	24.37	24.09	24.85	25.32
	6H	24.03	24.66	24.54	25.16	25.65	24.22	24.85	24.74	25.36	25.85
	8H	24.25	24.80	24.76	25.30	25.86	24.54	25.10	25.05	25.59	26.15