

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: P1036341

Luminaire Tested: SQ4R-PW1-100D-B2750-1D-UNV-W2A_3000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036341
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-PW1-100D-B2750-1D-UNV-W2A_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

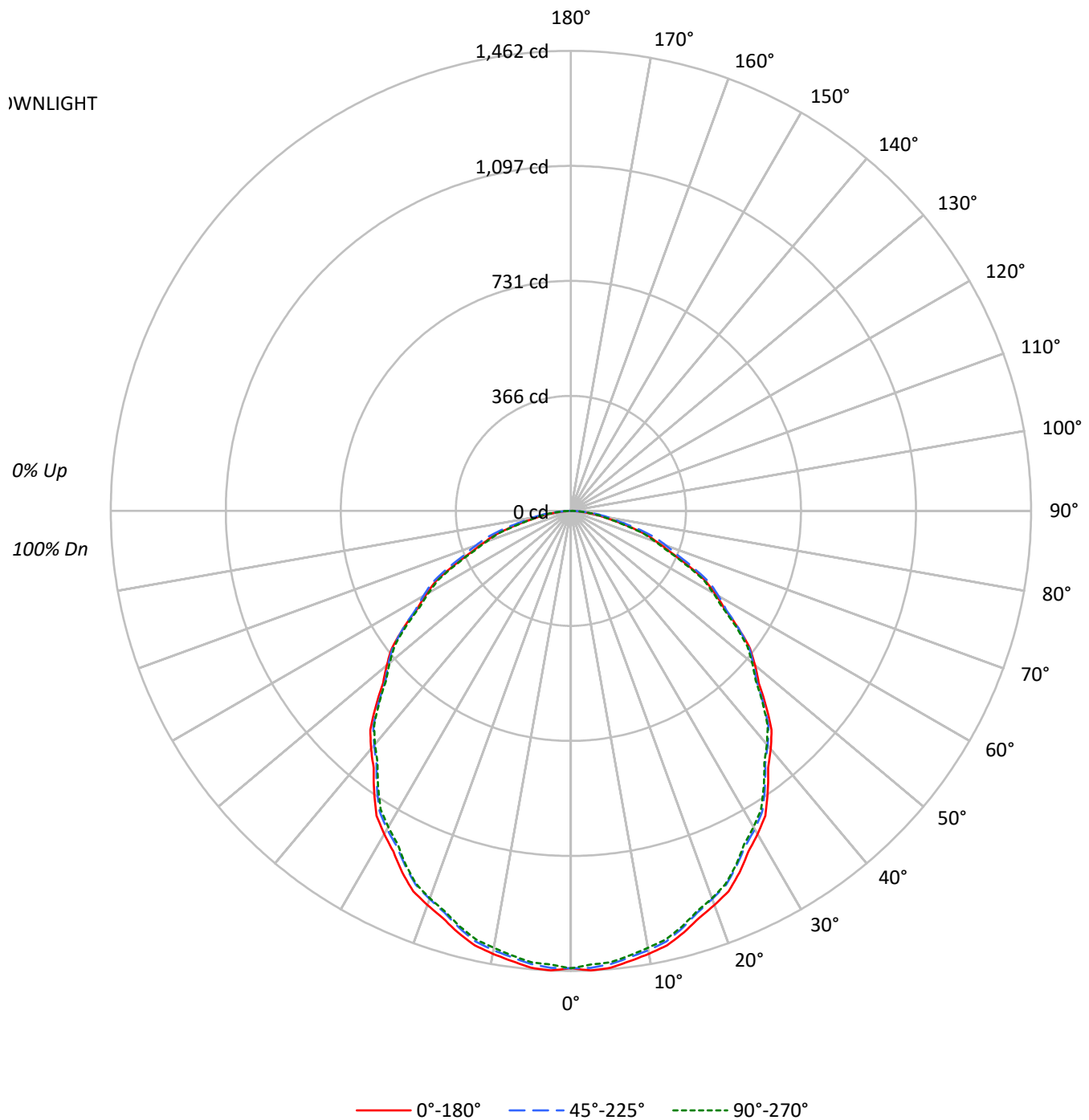
Lumens per Lamp: N/A
Luminaire Lumens: 3698.2 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	13410	13410	13410
5°	13498	13391	13333
10°	13389	13282	13210
15°	13248	13101	13052
20°	13089	12888	12864
25°	12906	12673	12632
30°	12634	12443	12361
35°	12276	12101	12029
40°	11892	11707	11661
45°	11430	11279	11228
50°	10957	10866	10789
55°	10443	10443	10280
60°	9809	9998	9641
65°	8973	9422	8752
70°	7909	8670	7704
75°	6759	7757	6573
80°	5244	6535	5313
85°	3387	5028	4467

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11430 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.9	3.7
10°-20°	386.4	10.4
20°-30°	573.2	15.5
30°-40°	670.7	18.1
40°-50°	667.7	18.1
50°-60°	576.6	15.6
60°-70°	415.0	11.2
70°-80°	217.6	5.9
80°-90°	54.0	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°	1096.5	29.6
0°-40°	1767.2	47.8
0°-60°	3011.6	81.4
0°-90°	3698.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3698.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1454	1454	1454	1454	1454	
5°	1457	1441	1446	1442	1440	138
15°	1387	1369	1372	1369	1366	391
25°	1268	1247	1245	1237	1241	583
35°	1090	1075	1074	1064	1068	681
45°	876	868	864	862	860	676
55°	649	648	649	640	639	579
65°	411	424	432	415	401	407
75°	190	207	218	203	184	203
85°	32	42	48	45	42	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1453.5	1453.5	1453.5	1453.5	1453.5
2.5°	1461.8	1449.7	1453.5	1450.4	1443.2
5°	1457.4	1441.1	1445.9	1442.0	1439.6
7.5°	1442.7	1427.7	1430.9	1427.0	1425.4
10°	1429.1	1414.2	1417.7	1412.6	1410.0
12.5°	1414.0	1397.8	1401.4	1396.1	1394.7
15°	1387.0	1369.4	1371.6	1368.9	1366.5
17.5°	1355.7	1338.0	1338.2	1334.2	1333.5
20°	1333.1	1314.4	1312.6	1307.5	1310.2
22.5°	1308.6	1288.8	1287.0	1279.9	1283.5
25°	1267.8	1246.6	1244.9	1237.1	1240.9
27.5°	1220.8	1199.8	1199.8	1189.0	1193.0
30°	1185.9	1165.9	1168.0	1155.2	1160.3
32.5°	1149.1	1130.9	1132.0	1119.5	1124.6
35°	1089.9	1074.8	1074.4	1064.3	1068.0
37.5°	1029.3	1016.1	1014.0	1008.2	1009.1
40°	987.4	976.1	972.0	968.2	968.2
42.5°	943.3	933.1	929.0	926.1	925.2
45°	876.0	868.4	864.4	861.9	860.5
47.5°	809.2	802.5	798.9	797.1	795.8
50°	763.4	758.3	757.0	752.9	751.7
52.5°	717.2	714.1	712.8	708.0	706.7
55°	649.2	648.1	649.2	640.4	639.1
57.5°	578.6	580.6	584.8	572.7	569.6
60°	531.6	536.4	541.8	527.6	522.5
62.5°	483.2	491.4	498.7	482.3	475.3
65°	411.0	423.6	431.6	414.6	400.9
67.5°	341.5	356.9	366.4	348.4	332.7
70°	293.2	310.8	321.4	303.1	285.6
72.5°	251.2	270.8	279.5	262.0	244.6
75°	189.6	207.1	217.6	203.1	184.4
77.5°	134.4	151.0	159.8	147.2	131.5
80°	98.7	116.2	123.0	112.4	100.0
82.5°	70.0	84.6	89.2	82.8	74.2
85°	32.0	41.9	47.5	44.8	42.2
87.5°	8.1	15.2	19.5	19.5	20.6
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	20.03	21.63	20.39	21.94	22.26	19.93	21.53	20.30	21.85	22.16
	3H	21.59	23.03	21.97	23.36	23.72	21.46	22.90	21.84	23.23	23.59
	4H	22.14	23.50	22.54	23.84	24.22	22.00	23.36	22.40	23.71	24.08
	6H	22.43	23.69	22.84	24.05	24.44	22.30	23.55	22.71	23.92	24.31
	8H	22.52	23.72	22.95	24.11	24.51	22.40	23.60	22.83	23.99	24.39
	12H	22.56	23.71	22.99	24.09	24.52	22.46	23.61	22.89	23.99	24.42
4H	2H	20.67	22.03	21.07	22.38	22.75	20.59	21.95	20.99	22.30	22.68
	3H	22.47	23.61	22.88	24.00	24.40	22.36	23.49	22.77	23.89	24.29
	4H	23.13	24.16	23.56	24.57	25.01	23.01	24.03	23.44	24.45	24.88
	6H	23.54	24.43	23.99	24.87	25.33	23.41	24.31	23.87	24.75	25.20
	8H	23.67	24.50	24.13	24.94	25.41	23.56	24.39	24.02	24.83	25.30
	12H	23.73	24.48	24.22	24.96	25.43	23.65	24.40	24.13	24.88	25.35
8H	4H	23.41	24.24	23.87	24.69	25.15	23.30	24.14	23.76	24.58	25.04
	6H	23.93	24.62	24.42	25.11	25.58	23.82	24.51	24.31	25.00	25.47
	8H	24.13	24.75	24.64	25.26	25.74	24.03	24.65	24.54	25.16	25.64
	12H	24.25	24.80	24.76	25.29	25.85	24.18	24.73	24.69	25.22	25.78
12H	4H	23.43	24.18	23.91	24.65	25.12	23.32	24.07	23.80	24.55	25.02
	6H	23.97	24.59	24.48	25.10	25.59	23.87	24.49	24.38	24.99	25.48
	8H	24.23	24.78	24.74	25.27	25.83	24.13	24.68	24.64	25.17	25.73

END OF REPORT