

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: P1036340

Luminaire Tested: SQ4R-PW1-100D-B2750-1D-UNV-W2A_2700K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036340
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_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

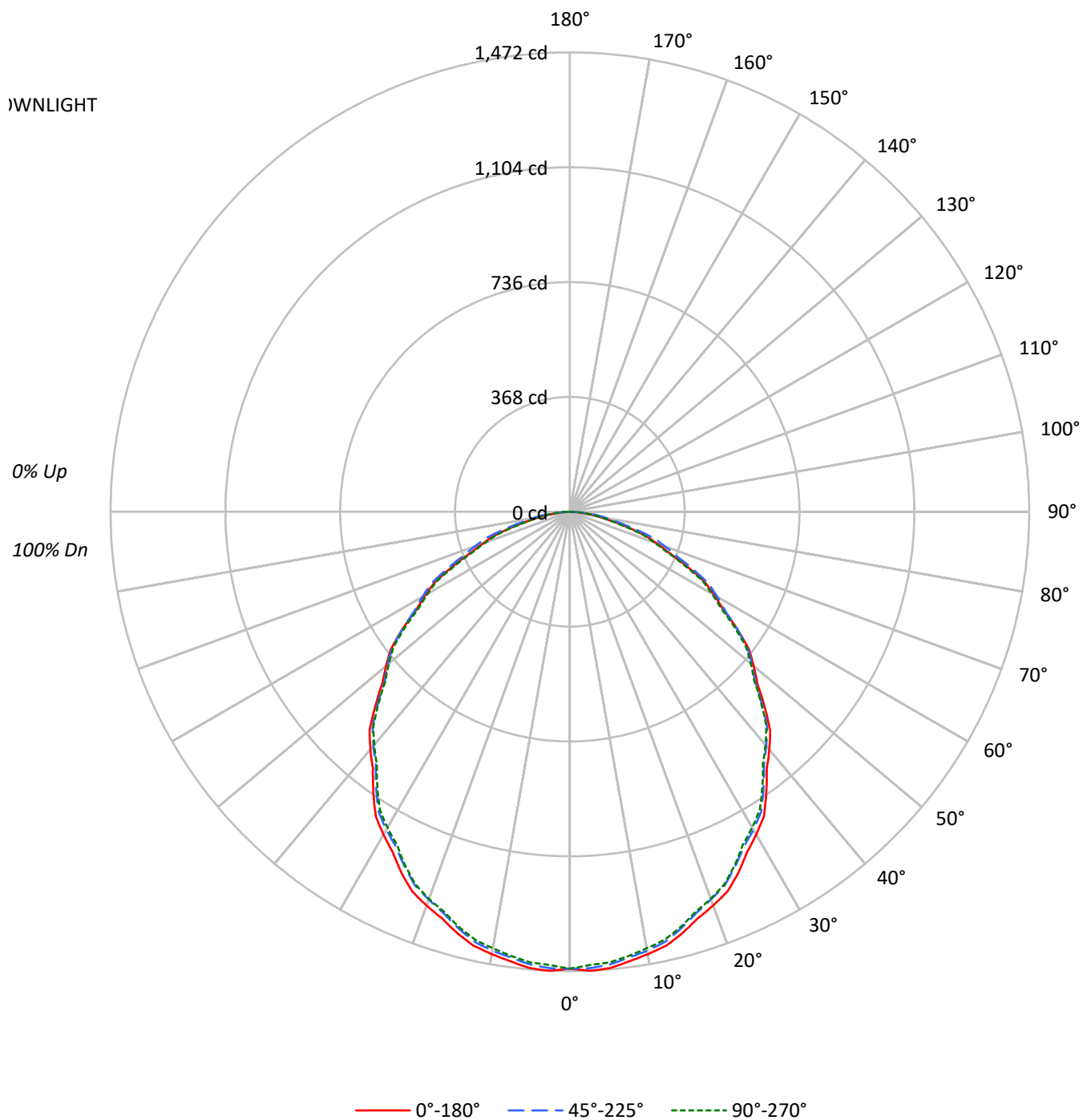
Lumens per Lamp: N/A
Luminaire Lumens: 3725.0 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	13507	13507	13507
5°	13596	13488	13429
10°	13486	13378	13305
15°	13344	13196	13147
20°	13184	12981	12957
25°	13000	12765	12724
30°	12726	12534	12451
35°	12365	12189	12116
40°	11979	11791	11745
45°	11512	11361	11309
50°	11036	10944	10867
55°	10518	10518	10354
60°	9879	10069	9712
65°	9038	9490	8815
70°	7966	8732	7761
75°	6809	7814	6620
80°	5281	6583	5350
85°	3409	5060	4499

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11512 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.9	3.7
10°-20°	389.2	10.4
20°-30°	577.4	15.5
30°-40°	675.6	18.1
40°-50°	672.6	18.1
50°-60°	580.8	15.6
60°-70°	418.1	11.2
70°-80°	219.2	5.9
80°-90°	54.4	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°	1104.5	29.6
0°-40°	1780.0	47.8
0°-60°	3033.4	81.4
0°-90°	3725.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3725.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1464	1464	1464	1464	1464	
5°	1468	1452	1456	1452	1450	139
15°	1397	1379	1382	1379	1376	394
25°	1277	1256	1254	1246	1250	587
35°	1098	1083	1082	1072	1076	686
45°	882	875	871	868	867	681
55°	654	653	654	645	644	584
65°	414	427	435	418	404	410
75°	191	209	219	205	186	205
85°	32	42	48	45	42	44
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1464.0	1464.0	1464.0	1464.0	1464.0
2.5°	1472.4	1460.2	1464.0	1460.9	1453.7
5°	1468.0	1451.5	1456.4	1452.4	1450.0
7.5°	1453.1	1438.0	1441.3	1437.3	1435.7
10°	1439.5	1424.4	1428.0	1422.8	1420.2
12.5°	1424.2	1407.9	1411.5	1406.2	1404.8
15°	1397.0	1379.3	1381.5	1378.8	1376.4
17.5°	1365.5	1347.7	1347.9	1343.9	1343.2
20°	1342.8	1323.9	1322.1	1317.0	1319.7
22.5°	1318.1	1298.1	1296.3	1289.2	1292.8
25°	1277.0	1255.6	1253.9	1246.1	1249.9
27.5°	1229.6	1208.5	1208.5	1197.6	1201.6
30°	1194.5	1174.3	1176.5	1163.6	1168.7
32.5°	1157.4	1139.1	1140.2	1127.6	1132.7
35°	1097.8	1082.6	1082.2	1072.0	1075.7
37.5°	1036.8	1023.5	1021.3	1015.5	1016.4
40°	994.6	983.2	979.0	975.2	975.2
42.5°	950.1	939.9	935.7	932.8	931.9
45°	882.3	874.7	870.7	868.1	866.7
47.5°	815.1	808.3	804.7	802.9	801.6
50°	768.9	763.8	762.5	758.4	757.1
52.5°	722.4	719.3	718.0	713.1	711.8
55°	653.9	652.8	653.9	645.0	643.7
57.5°	582.8	584.8	589.0	576.8	573.7
60°	535.4	540.3	545.7	531.4	526.3
62.5°	486.7	495.0	502.3	485.8	478.7
65°	414.0	426.7	434.7	417.6	403.8
67.5°	344.0	359.5	369.1	350.9	335.1
70°	295.3	313.1	323.7	305.3	287.7
72.5°	253.0	272.8	281.5	263.9	246.4
75°	191.0	208.6	219.2	204.6	185.7
77.5°	135.4	152.1	161.0	148.3	132.5
80°	99.4	117.0	123.9	113.2	100.7
82.5°	70.5	85.2	89.8	83.4	74.7
85°	32.2	42.2	47.8	45.1	42.5
87.5°	8.2	15.3	19.6	19.6	20.7
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	20.06	21.66	20.42	21.97	22.28	19.96	21.56	20.32	21.87	22.18
	3H	21.61	23.06	21.99	23.38	23.74	21.48	22.93	21.86	23.25	23.61
	4H	22.16	23.52	22.56	23.87	24.24	22.03	23.38	22.42	23.73	24.11
	6H	22.46	23.71	22.87	24.08	24.47	22.32	23.58	22.73	23.94	24.34
	8H	22.55	23.75	22.97	24.14	24.54	22.43	23.63	22.85	24.01	24.41
	12H	22.59	23.74	23.02	24.12	24.55	22.49	23.64	22.92	24.02	24.45
4H	2H	20.70	22.05	21.10	22.40	22.78	20.62	21.98	21.02	22.32	22.70
	3H	22.50	23.63	22.91	24.03	24.43	22.39	23.52	22.80	23.92	24.32
	4H	23.16	24.18	23.59	24.59	25.03	23.04	24.06	23.47	24.47	24.91
	6H	23.56	24.45	24.02	24.89	25.35	23.44	24.33	23.89	24.77	25.23
	8H	23.69	24.53	24.15	24.97	25.43	23.58	24.42	24.04	24.86	25.32
	12H	23.76	24.51	24.24	24.98	25.45	23.68	24.43	24.16	24.90	25.37
8H	4H	23.43	24.27	23.89	24.71	25.18	23.33	24.16	23.79	24.60	25.07
	6H	23.95	24.65	24.45	25.13	25.61	23.84	24.53	24.34	25.02	25.50
	8H	24.15	24.77	24.67	25.28	25.77	24.05	24.67	24.56	25.18	25.67
	12H	24.27	24.82	24.78	25.31	25.88	24.21	24.76	24.72	25.25	25.81
12H	4H	23.45	24.20	23.93	24.68	25.15	23.35	24.10	23.83	24.57	25.04
	6H	24.00	24.62	24.51	25.13	25.61	23.89	24.51	24.40	25.02	25.51
	8H	24.26	24.80	24.76	25.29	25.86	24.16	24.71	24.67	25.20	25.76

END OF REPORT