

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: P1036308

Luminaire Tested: SQ4R-PR1-100D-B2750-1D-UNV-W2A_2700K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036308
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P564154)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-100D-B2750-1D-UNV-W2A_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

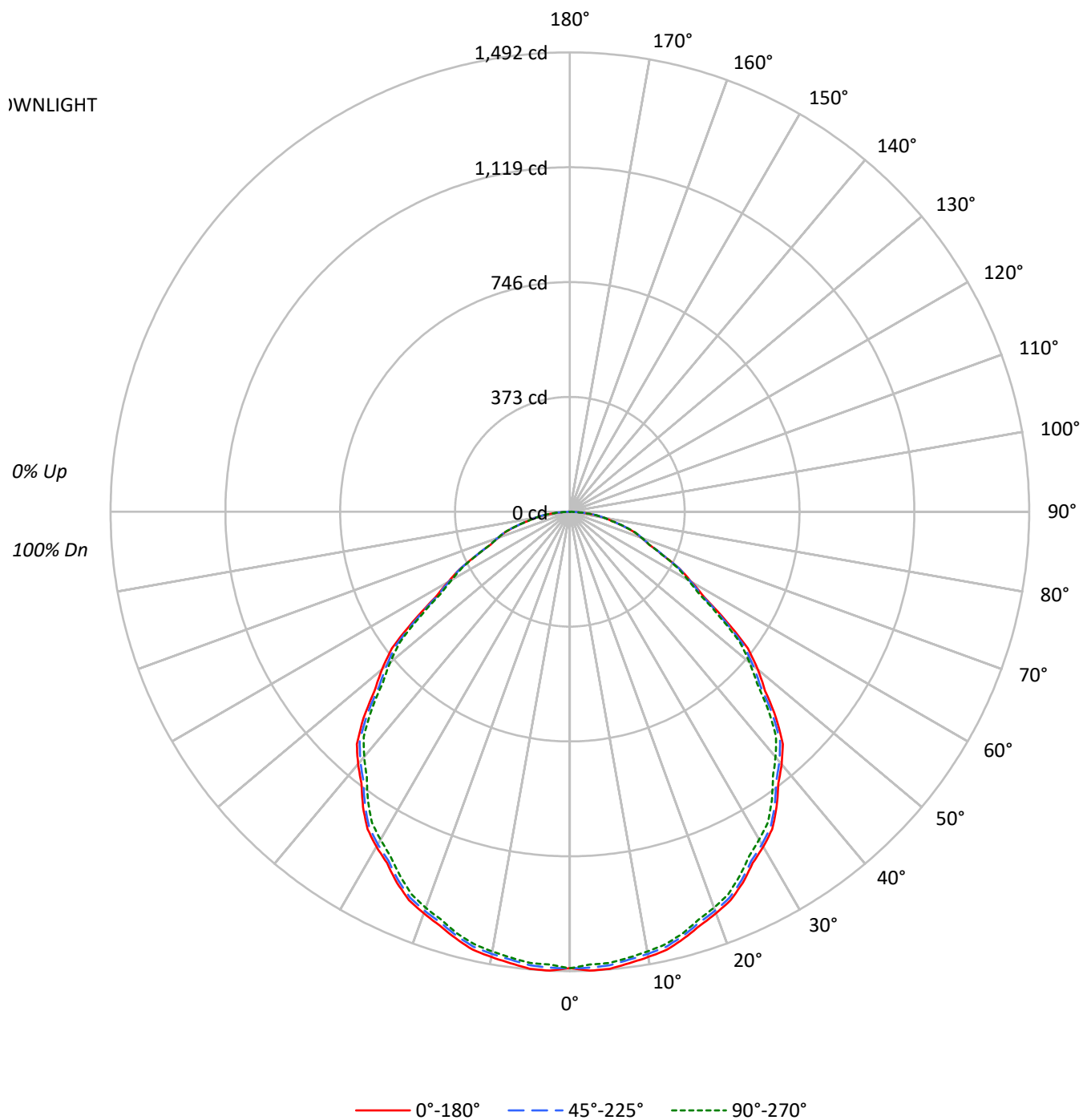
Lumens per Lamp: N/A
Luminaire Lumens: 3706.0 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81
3	92	82	74	68	90	80	73	68	78	71	66		75	70	65		72
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53
7	67	54	46	40	65	53	45	39	52	44	39		50	44	39		49
8	63	49	41	35	61	49	41	35	47	40	35		46	40	35		45
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42
10	55	42	34	29	54	41	34	29	40	34	29		40	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13677	13677	13677
5°	13800	13695	13624
10°	13756	13661	13589
15°	13697	13611	13538
20°	13628	13539	13439
25°	13531	13442	13285
30°	13385	13291	13101
35°	13189	13072	12886
40°	12886	12749	12517
45°	12364	12145	11896
50°	11437	11161	10940
55°	9981	9757	9552
60°	8411	8342	8176
65°	7274	7305	7246
70°	6679	6714	6714
75°	6417	6417	6466
80°	6036	6105	6036
85°	4870	5409	5409

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12364 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.2	3.8
10°-20°	401.1	10.8
20°-30°	605.0	16.3
30°-40°	720.8	19.5
40°-50°	710.7	19.2
50°-60°	543.1	14.7
60°-70°	336.1	9.1
70°-80°	190.9	5.2
80°-90°	58.1	1.6
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°	1146.3	30.9
0°-40°	1867.1	50.4
0°-60°	3120.9	84.2
0°-90°	3706.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3706.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1482	1482	1482	1482	1482	
5°	1490	1474	1479	1473	1471	141
15°	1434	1419	1425	1420	1417	405
25°	1329	1313	1320	1306	1305	612
35°	1171	1157	1161	1145	1144	731
45°	948	935	931	914	912	726
55°	620	611	607	596	594	556
65°	333	331	335	332	332	338
75°	180	180	180	181	181	190
85°	46	48	51	51	51	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1482.4	1482.4	1482.4	1482.4	1482.4
2.5°	1491.7	1478.7	1482.4	1479.3	1472.3
5°	1490.1	1473.8	1478.7	1473.4	1471.0
7.5°	1478.7	1462.6	1467.5	1462.2	1460.9
10°	1468.3	1453.4	1458.2	1453.1	1450.5
12.5°	1457.1	1441.3	1447.0	1440.8	1438.4
15°	1434.0	1419.0	1425.0	1419.9	1417.3
17.5°	1408.5	1392.4	1398.6	1392.6	1389.3
20°	1388.0	1373.0	1379.0	1370.2	1368.8
22.5°	1365.5	1350.6	1356.5	1344.6	1344.4
25°	1329.2	1312.9	1320.4	1306.3	1305.0
27.5°	1286.1	1271.1	1277.1	1262.8	1261.4
30°	1256.4	1241.4	1247.6	1232.2	1229.7
32.5°	1222.7	1208.8	1213.9	1198.5	1196.9
35°	1171.0	1157.1	1160.6	1145.4	1144.1
37.5°	1112.0	1099.4	1101.4	1084.5	1083.4
40°	1069.9	1057.6	1058.5	1040.7	1039.3
42.5°	1024.2	1011.6	1010.5	992.7	991.4
45°	947.6	935.0	930.8	914.1	911.7
47.5°	860.2	847.6	839.9	826.3	824.5
50°	796.8	784.2	777.6	766.0	762.2
52.5°	728.3	715.8	710.3	699.7	696.0
55°	620.5	610.6	606.6	596.3	593.8
57.5°	518.1	511.5	510.2	500.3	499.2
60°	455.8	452.1	452.1	443.1	443.1
62.5°	402.8	399.9	401.9	396.0	395.1
65°	333.2	330.8	334.6	331.9	331.9
67.5°	278.4	278.4	280.6	279.5	279.5
70°	247.6	247.6	248.9	248.9	248.9
72.5°	220.1	219.2	222.5	222.3	221.4
75°	180.0	180.0	180.0	181.4	181.4
77.5°	140.2	140.4	141.5	141.3	140.2
80°	113.6	114.9	114.9	113.6	113.6
82.5°	87.2	88.3	88.3	88.0	87.2
85°	46.0	48.4	51.1	51.1	51.1
87.5°	13.2	17.2	20.5	20.5	19.4
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	19.19	20.75	19.56	21.07	21.38	19.02	20.58	19.38	20.90	21.21
	3H	20.52	21.93	20.90	22.26	22.62	20.42	21.83	20.80	22.15	22.52
	4H	21.13	22.44	21.53	22.79	23.17	21.05	22.37	21.45	22.72	23.10
	6H	21.57	22.79	21.99	23.16	23.55	21.51	22.73	21.92	23.10	23.49
	8H	21.76	22.92	22.18	23.31	23.71	21.70	22.86	22.12	23.25	23.65
	12H	21.87	22.98	22.30	23.36	23.79	21.82	22.94	22.25	23.32	23.75
4H	2H	19.66	20.98	20.06	21.33	21.71	19.52	20.84	19.92	21.19	21.57
	3H	21.26	22.36	21.68	22.76	23.16	21.19	22.29	21.60	22.69	23.09
	4H	22.00	22.99	22.43	23.40	23.84	21.96	22.94	22.39	23.36	23.80
	6H	22.59	23.45	23.05	23.89	24.35	22.55	23.41	23.01	23.85	24.31
	8H	22.83	23.64	23.30	24.08	24.55	22.80	23.60	23.26	24.05	24.51
	12H	22.99	23.71	23.47	24.19	24.66	22.97	23.70	23.46	24.17	24.64
8H	4H	22.28	23.08	22.74	23.53	23.99	22.24	23.04	22.70	23.49	23.95
	6H	23.00	23.67	23.50	24.16	24.64	22.97	23.64	23.46	24.13	24.60
	8H	23.34	23.94	23.85	24.45	24.94	23.31	23.91	23.82	24.42	24.90
	12H	23.57	24.11	24.08	24.60	25.16	23.56	24.10	24.07	24.59	25.15
12H	4H	22.31	23.03	22.79	23.51	23.98	22.27	22.99	22.75	23.47	23.94
	6H	23.07	23.67	23.58	24.18	24.67	23.03	23.64	23.54	24.14	24.63
	8H	23.46	24.00	23.97	24.49	25.05	23.43	23.97	23.94	24.46	25.02

END OF REPORT