

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: P1036343

Luminaire Tested: SQ4R-PW1-100D-B2750-1D-UNV-W2A_4000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036343
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_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

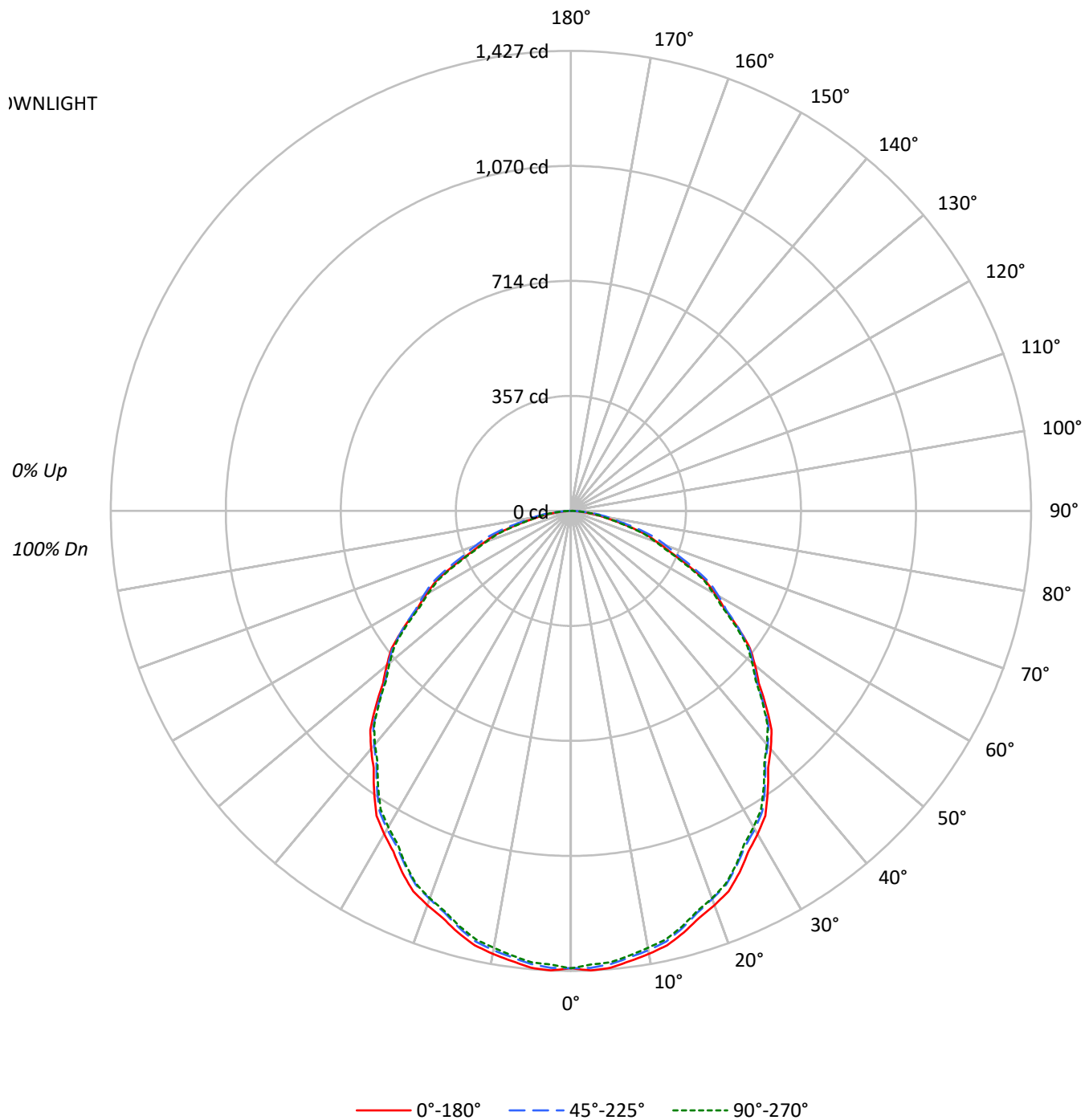
Lumens per Lamp: N/A
Luminaire Lumens: 3609.8 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	13089	13089	13089
5°	13175	13071	13013
10°	13069	12964	12894
15°	12931	12788	12740
20°	12777	12579	12557
25°	12598	12370	12330
30°	12331	12146	12065
35°	11982	11812	11741
40°	11608	11426	11382
45°	11156	11010	10959
50°	10695	10606	10531
55°	10193	10193	10034
60°	9573	9758	9411
65°	8759	9197	8542
70°	7720	8462	7521
75°	6598	7571	6417
80°	5117	6381	5186
85°	3303	4901	4361

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11156 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.6	3.7
10°-20°	377.2	10.4
20°-30°	559.5	15.5
30°-40°	654.7	18.1
40°-50°	651.8	18.1
50°-60°	562.8	15.6
60°-70°	405.1	11.2
70°-80°	212.4	5.9
80°-90°	52.7	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°	1070.3	29.6
0°-40°	1724.9	47.8
0°-60°	2939.5	81.4
0°-90°	3609.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3609.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1419	1419	1419	1419	1419	
5°	1423	1407	1411	1408	1405	135
15°	1354	1337	1339	1336	1334	382
25°	1238	1217	1215	1208	1211	569
35°	1064	1049	1049	1039	1042	665
45°	855	848	844	841	840	660
55°	634	633	634	625	624	565
65°	401	414	421	405	391	398
75°	185	202	212	198	180	198
85°	31	41	46	44	41	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1418.7	1418.7	1418.7	1418.7	1418.7
2.5°	1426.8	1415.0	1418.7	1415.7	1408.7
5°	1422.6	1406.6	1411.3	1407.5	1405.1
7.5°	1408.1	1393.5	1396.7	1392.8	1391.3
10°	1395.0	1380.3	1383.8	1378.8	1376.3
12.5°	1380.1	1364.3	1367.8	1362.7	1361.3
15°	1353.8	1336.6	1338.8	1336.1	1333.8
17.5°	1323.3	1306.0	1306.2	1302.3	1301.6
20°	1301.3	1282.9	1281.2	1276.3	1278.9
22.5°	1277.3	1257.9	1256.2	1249.3	1252.8
25°	1237.5	1216.8	1215.1	1207.5	1211.2
27.5°	1191.6	1171.1	1171.1	1160.5	1164.4
30°	1157.5	1138.0	1140.1	1127.6	1132.5
32.5°	1121.6	1103.9	1104.9	1092.7	1097.7
35°	1063.8	1049.1	1048.7	1038.8	1042.4
37.5°	1004.7	991.8	989.7	984.1	985.0
40°	963.8	952.8	948.7	945.0	945.0
42.5°	920.7	910.8	906.8	903.9	903.1
45°	855.0	847.6	843.8	841.2	839.9
47.5°	789.9	783.3	779.8	778.1	776.8
50°	745.1	740.2	738.9	734.9	733.7
52.5°	700.1	697.0	695.8	691.0	689.8
55°	633.7	632.6	633.7	625.0	623.8
57.5°	564.8	566.7	570.8	559.0	556.0
60°	518.8	523.6	528.8	515.0	510.0
62.5°	471.6	479.7	486.8	470.8	463.9
65°	401.2	413.5	421.3	404.7	391.3
67.5°	333.4	348.4	357.7	340.0	324.7
70°	286.2	303.4	313.7	295.9	278.8
72.5°	245.2	264.4	272.8	255.7	238.8
75°	185.1	202.1	212.4	198.3	180.0
77.5°	131.2	147.4	156.0	143.7	128.4
80°	96.3	113.4	120.1	109.7	97.6
82.5°	68.3	82.6	87.0	80.8	72.4
85°	31.2	40.9	46.3	43.7	41.2
87.5°	7.9	14.8	19.0	19.0	20.1
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	19.95	21.55	20.31	21.86	22.17	19.85	21.45	20.21	21.76	22.08
	3H	21.50	22.95	21.88	23.27	23.63	21.38	22.82	21.75	23.15	23.51
	4H	22.05	23.41	22.45	23.76	24.14	21.92	23.27	22.32	23.62	24.00
	6H	22.35	23.60	22.76	23.97	24.36	22.21	23.47	22.63	23.84	24.23
	8H	22.44	23.64	22.86	24.03	24.43	22.32	23.52	22.74	23.91	24.30
	12H	22.48	23.63	22.91	24.01	24.44	22.38	23.53	22.81	23.91	24.34
4H	2H	20.59	21.94	20.99	22.29	22.67	20.51	21.87	20.91	22.22	22.59
	3H	22.39	23.52	22.80	23.92	24.32	22.28	23.41	22.69	23.81	24.21
	4H	23.05	24.07	23.48	24.49	24.92	22.93	23.95	23.36	24.36	24.80
	6H	23.45	24.34	23.91	24.79	25.24	23.33	24.22	23.79	24.66	25.12
	8H	23.58	24.42	24.04	24.86	25.33	23.47	24.31	23.93	24.75	25.22
	12H	23.65	24.40	24.13	24.87	25.34	23.57	24.32	24.05	24.79	25.26
8H	4H	23.32	24.16	23.79	24.60	25.07	23.22	24.05	23.68	24.49	24.96
	6H	23.84	24.54	24.34	25.02	25.50	23.73	24.43	24.23	24.91	25.39
	8H	24.05	24.67	24.56	25.17	25.66	23.94	24.56	24.46	25.07	25.56
	12H	24.17	24.71	24.67	25.20	25.77	24.10	24.65	24.61	25.14	25.70
12H	4H	23.34	24.09	23.82	24.57	25.04	23.24	23.99	23.72	24.46	24.93
	6H	23.89	24.51	24.40	25.02	25.50	23.78	24.40	24.29	24.91	25.40
	8H	24.15	24.69	24.65	25.18	25.75	24.05	24.60	24.56	25.09	25.65