

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: P1036251

Luminaire Tested: SQ4R-PC3-100D-B50-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036251
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-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

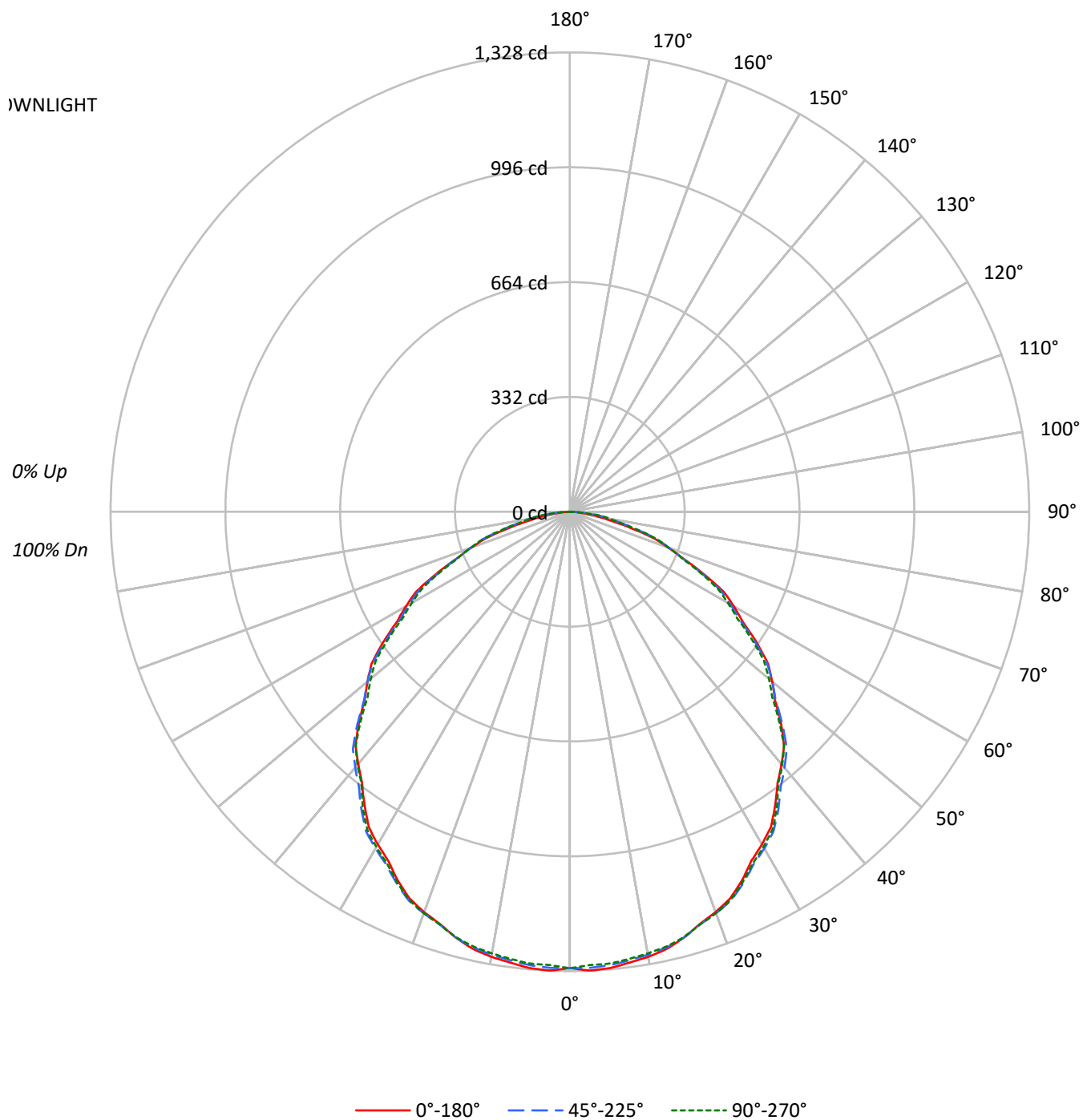
Lumens per Lamp: N/A
Luminaire Lumens: 3601.5 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	12174	12174	12174
5°	12268	12188	12143
10°	12238	12181	12145
15°	12174	12174	12160
20°	12093	12129	12129
25°	11979	12065	12029
30°	11832	11976	11923
35°	11656	11834	11752
40°	11462	11626	11508
45°	11256	11336	11160
50°	10962	10962	10787
55°	10613	10476	10320
60°	10101	9900	9739
65°	9335	9152	9069
70°	8176	8238	8211
75°	6577	7276	7322
80°	4681	6169	6232
85°	2848	5166	5166

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 11336 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.9	3.5
10°-20°	358.4	10.0
20°-30°	542.7	15.1
30°-40°	650.7	18.1
40°-50°	663.5	18.4
50°-60°	579.2	16.1
60°-70°	414.6	11.5
70°-80°	213.6	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°	1026.0	28.5
0°-40°	1676.7	46.6
0°-60°	2919.3	81.1
0°-90°	3601.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3601.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1320	1320	1320	1320	1320	
5°	1325	1311	1316	1312	1311	126
15°	1274	1264	1274	1274	1273	359
25°	1177	1168	1185	1182	1182	542
35°	1035	1032	1051	1043	1043	647
45°	863	860	869	858	855	664
55°	660	652	651	642	642	588
65°	428	418	419	415	415	423
75°	184	193	204	205	205	199
85°	27	41	49	50	49	38
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1319.5	1319.5	1319.5	1319.5	1319.5
2.5°	1327.5	1316.0	1319.5	1316.6	1311.7
5°	1324.6	1311.3	1316.0	1312.2	1311.1
7.5°	1314.9	1301.8	1308.0	1305.4	1304.2
10°	1306.3	1292.9	1300.2	1297.6	1296.4
12.5°	1294.5	1282.3	1290.3	1287.9	1287.5
15°	1274.5	1263.7	1274.5	1274.5	1273.1
17.5°	1249.2	1239.5	1250.9	1251.7	1250.9
20°	1231.7	1221.0	1235.3	1234.0	1235.3
22.5°	1210.2	1201.4	1216.8	1213.5	1214.9
25°	1176.7	1168.3	1185.2	1181.6	1181.6
27.5°	1137.1	1131.0	1149.6	1145.6	1145.6
30°	1110.6	1104.7	1124.1	1119.2	1119.2
32.5°	1081.3	1077.3	1095.9	1090.0	1090.0
35°	1034.9	1032.5	1050.7	1043.4	1043.4
37.5°	987.0	984.9	1001.5	992.7	989.7
40°	951.7	950.7	965.3	955.5	955.5
42.5°	916.6	915.4	928.2	916.4	916.4
45°	862.7	860.2	868.8	857.7	855.3
47.5°	803.7	801.4	806.7	794.7	793.4
50°	763.7	761.1	763.7	752.6	751.5
52.5°	722.6	718.2	718.6	707.6	707.4
55°	659.8	651.5	651.3	641.6	641.6
57.5°	593.3	582.4	583.4	575.0	573.7
60°	547.4	535.4	536.5	529.0	527.8
62.5°	502.3	488.7	491.3	483.2	483.0
65°	427.6	418.0	419.2	415.4	415.4
67.5°	355.8	346.9	353.4	350.4	350.2
70°	303.1	296.9	305.4	305.4	304.4
72.5°	254.2	254.0	264.3	264.3	265.1
75°	184.5	192.9	204.1	205.4	205.4
77.5°	123.2	137.9	150.4	150.8	150.6
80°	88.1	104.7	116.1	118.6	117.3
82.5°	59.6	77.3	86.7	89.1	88.1
85°	26.9	41.3	48.8	50.2	48.8
87.5°	7.8	16.5	19.6	19.6	17.7
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	20.15	21.77	20.52	22.08	22.39	20.04	21.65	20.40	21.96	22.28
	3H	21.70	23.15	22.07	23.48	23.84	21.64	23.09	22.01	23.42	23.78
	4H	22.20	23.57	22.60	23.92	24.30	22.24	23.61	22.64	23.96	24.33
	6H	22.44	23.71	22.85	24.07	24.47	22.60	23.87	23.01	24.24	24.63
	8H	22.51	23.72	22.93	24.11	24.50	22.74	23.95	23.17	24.34	24.74
	12H	22.53	23.69	22.96	24.07	24.50	22.83	23.99	23.26	24.37	24.80
4H	2H	20.75	22.12	21.14	22.46	22.84	20.65	22.02	21.05	22.37	22.75
	3H	22.50	23.65	22.91	24.04	24.44	22.48	23.62	22.89	24.02	24.42
	4H	23.11	24.14	23.54	24.56	24.99	23.18	24.21	23.61	24.63	25.06
	6H	23.45	24.35	23.90	24.79	25.25	23.66	24.56	24.11	25.00	25.46
	8H	23.55	24.39	24.01	24.84	25.30	23.84	24.69	24.30	25.13	25.59
	12H	23.60	24.36	24.08	24.83	25.30	23.97	24.73	24.45	25.20	25.67
8H	4H	23.37	24.21	23.83	24.65	25.12	23.43	24.27	23.89	24.71	25.18
	6H	23.81	24.51	24.30	25.00	25.47	24.02	24.72	24.51	25.20	25.68
	8H	23.98	24.60	24.49	25.11	25.60	24.28	24.90	24.79	25.41	25.90
	12H	24.08	24.63	24.59	25.12	25.69	24.47	25.03	24.98	25.52	26.08
12H	4H	23.39	24.14	23.87	24.62	25.09	23.44	24.20	23.92	24.68	25.14
	6H	23.86	24.49	24.37	24.99	25.48	24.05	24.68	24.56	25.19	25.68
	8H	24.08	24.63	24.59	25.12	25.69	24.37	24.93	24.88	25.42	25.98

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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