

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: P1036311

Luminaire Tested: SQ4R-PR1-100D-B2750-1D-UNV-W2A_4000K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036311
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_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

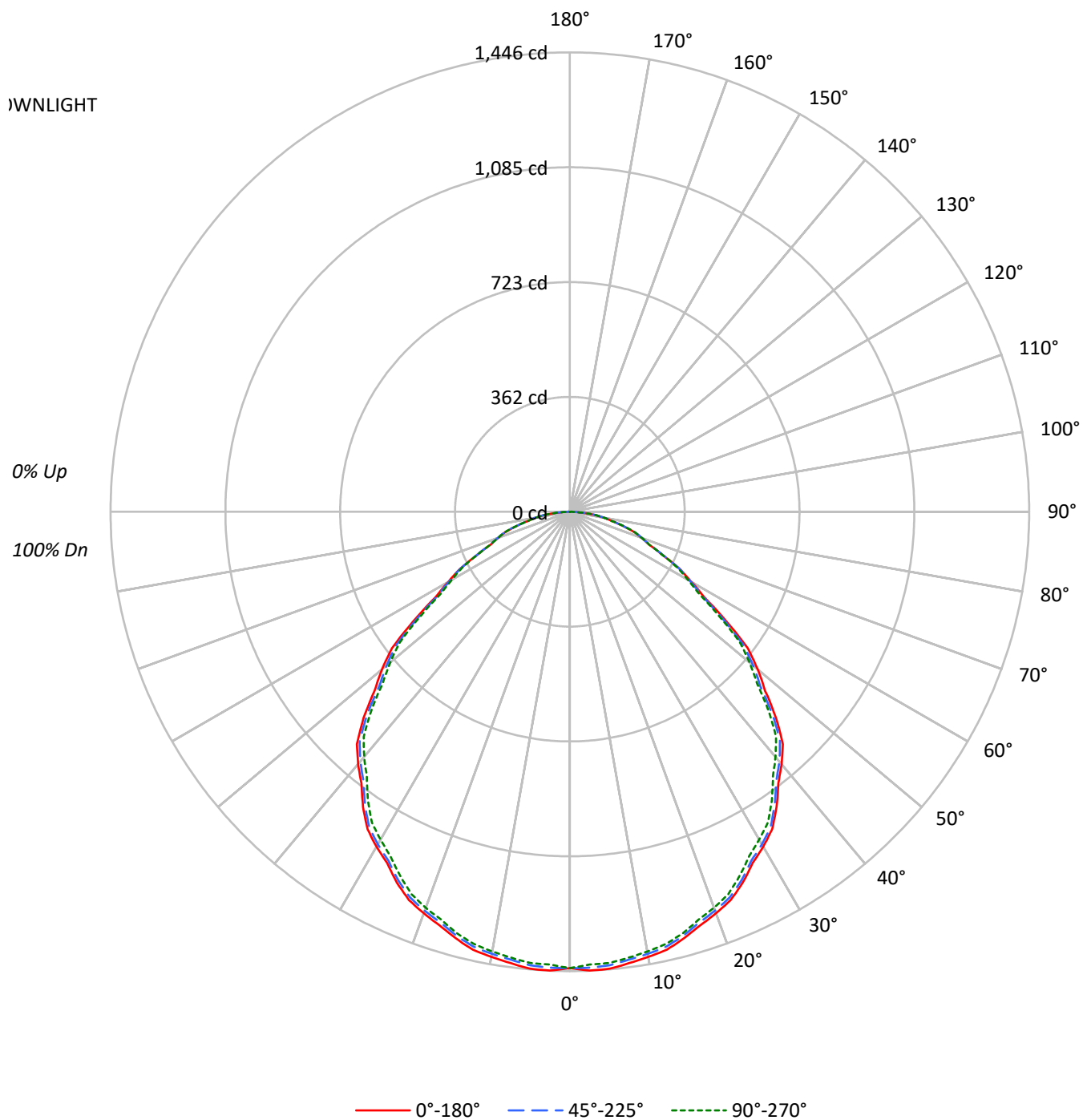
Lumens per Lamp: N/A
Luminaire Lumens: 3591.3 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1036311

CATALOG NUMBER: SQ4R-PR1-100D-B2750-1D-UNV-W2A_4000K

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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	87	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	75	75	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	64	64	62
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	56	56	54
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	49	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	43	43	41
7	67	54	46	40	65	53	45	39	52	44	39	50	44	39	49	43	39	39	39	37
8	63	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	35	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	31	31	30
10	55	42	34	29	54	41	34	29	40	34	29	40	33	29	39	33	29	29	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13253	13253	13253
5°	13374	13272	13202
10°	13330	13239	13168
15°	13273	13190	13119
20°	13207	13120	13024
25°	13113	13026	12874
30°	12971	12880	12696
35°	12781	12668	12487
40°	12487	12355	12129
45°	11982	11769	11528
50°	11082	10815	10601
55°	9672	9455	9256
60°	8150	8084	7923
65°	7049	7078	7021
70°	6471	6507	6507
75°	6217	6217	6267
80°	5850	5914	5850
85°	4721	5240	5240

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11982 cd/sqm

TEST NUMBER: P1036311

CATALOG NUMBER: SQ4R-PR1-100D-B2750-1D-UNV-W2A_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.9	3.8
10°-20°	388.7	10.8
20°-30°	586.3	16.3
30°-40°	698.5	19.5
40°-50°	688.7	19.2
50°-60°	526.3	14.7
60°-70°	325.7	9.1
70°-80°	185.0	5.2
80°-90°	56.3	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°	1110.8	30.9
0°-40°	1809.4	50.4
0°-60°	3024.4	84.2
0°-90°	3591.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3591.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1436	1436	1436	1436	1436	
5°	1444	1428	1433	1428	1426	137
15°	1390	1375	1381	1376	1374	392
25°	1288	1272	1280	1266	1265	593
35°	1135	1121	1125	1110	1109	708
45°	918	906	902	886	884	703
55°	601	592	588	578	575	539
65°	323	321	324	322	322	327
75°	174	174	174	176	176	184
85°	45	47	50	50	50	54
90°	0	0	0	0	0	

TEST NUMBER: P1036311

CATALOG NUMBER: SQ4R-PR1-100D-B2750-1D-UNV-W2A_4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1436.5	1436.5	1436.5	1436.5	1436.5
2.5°	1445.6	1433.0	1436.5	1433.5	1426.8
5°	1444.0	1428.2	1433.0	1427.8	1425.5
7.5°	1433.0	1417.4	1422.1	1417.0	1415.7
10°	1422.9	1408.4	1413.1	1408.1	1405.6
12.5°	1412.0	1396.7	1402.2	1396.2	1393.9
15°	1389.6	1375.1	1380.9	1376.0	1373.5
17.5°	1364.9	1349.3	1355.3	1349.5	1346.3
20°	1345.1	1330.5	1336.3	1327.8	1326.5
22.5°	1323.3	1308.8	1314.5	1303.0	1302.8
25°	1288.1	1272.3	1279.6	1265.9	1264.6
27.5°	1246.3	1231.8	1237.6	1223.7	1222.4
30°	1217.5	1203.0	1209.0	1194.1	1191.7
32.5°	1184.9	1171.4	1176.3	1161.4	1159.9
35°	1134.8	1121.3	1124.7	1110.0	1108.7
37.5°	1077.6	1065.4	1067.3	1050.9	1049.9
40°	1036.8	1024.9	1025.8	1008.5	1007.1
42.5°	992.5	980.3	979.2	962.0	960.7
45°	918.3	906.1	902.0	885.8	883.5
47.5°	833.6	821.4	813.9	800.7	799.0
50°	772.1	759.9	753.5	742.3	738.6
52.5°	705.8	693.7	688.3	678.1	674.5
55°	601.3	591.7	587.8	577.9	575.4
57.5°	502.1	495.7	494.4	484.8	483.8
60°	441.7	438.1	438.1	429.4	429.4
62.5°	390.3	387.5	389.5	383.7	382.9
65°	322.9	320.6	324.2	321.6	321.6
67.5°	269.8	269.8	271.9	270.9	270.9
70°	239.9	239.9	241.2	241.2	241.2
72.5°	213.3	212.4	215.6	215.4	214.6
75°	174.4	174.4	174.4	175.8	175.8
77.5°	135.9	136.1	137.1	136.9	135.9
80°	110.1	111.3	111.3	110.1	110.1
82.5°	84.5	85.6	85.6	85.3	84.5
85°	44.6	46.9	49.5	49.5	49.5
87.5°	12.8	16.7	19.9	19.9	18.8
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1036311

CATALOG NUMBER: SQ4R-PR1-100D-B2750-1D-UNV-W2A_4000K

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	19.08	20.64	19.45	20.96	21.27	18.91	20.47	19.27	20.79	21.10
	3H	20.41	21.82	20.79	22.15	22.51	20.31	21.72	20.69	22.05	22.41
	4H	21.02	22.34	21.42	22.68	23.06	20.95	22.26	21.34	22.61	22.99
	6H	21.46	22.68	21.88	23.05	23.44	21.40	22.62	21.81	22.99	23.38
	8H	21.65	22.81	22.07	23.20	23.60	21.59	22.75	22.02	23.14	23.54
	12H	21.76	22.87	22.19	23.25	23.68	21.72	22.83	22.15	23.21	23.64
4H	2H	19.56	20.87	19.95	21.22	21.60	19.41	20.73	19.81	21.08	21.46
	3H	21.16	22.25	21.57	22.65	23.05	21.08	22.18	21.49	22.58	22.98
	4H	21.89	22.88	22.32	23.29	23.73	21.85	22.84	22.28	23.25	23.69
	6H	22.48	23.34	22.94	23.78	24.24	22.44	23.30	22.90	23.75	24.20
	8H	22.72	23.53	23.19	23.97	24.44	22.69	23.49	23.15	23.94	24.40
	12H	22.88	23.60	23.36	24.08	24.55	22.87	23.59	23.35	24.06	24.54
8H	4H	22.17	22.97	22.63	23.42	23.88	22.13	22.93	22.59	23.38	23.84
	6H	22.89	23.56	23.39	24.05	24.53	22.86	23.53	23.35	24.02	24.50
	8H	23.23	23.83	23.74	24.34	24.83	23.20	23.80	23.71	24.31	24.79
	12H	23.46	24.00	23.97	24.49	25.05	23.46	23.99	23.96	24.48	25.04
12H	4H	22.20	22.92	22.68	23.40	23.87	22.16	22.88	22.64	23.36	23.83
	6H	22.96	23.56	23.47	24.07	24.56	22.92	23.53	23.44	24.04	24.52
	8H	23.35	23.89	23.86	24.38	24.94	23.32	23.86	23.83	24.35	24.91