

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: P1036214

Luminaire Tested: SQ4R-F-100D-B2750-1D-UNV-W2A_3500K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036214
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P520092)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-100D-B2750-1D-UNV-W2A_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1000 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

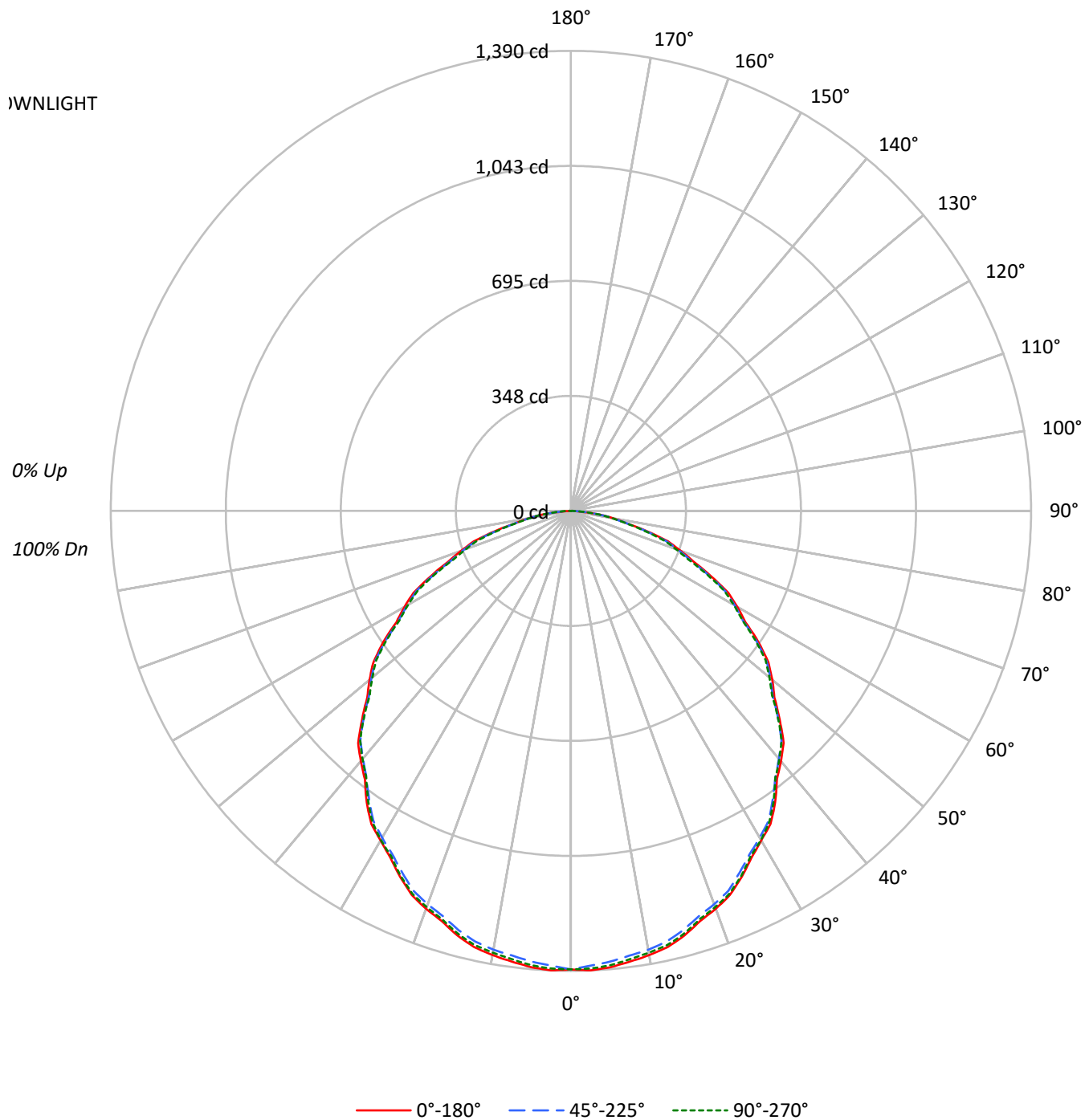
Lumens per Lamp: N/A
Luminaire Lumens: 3781.2 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	63		70
4	83	71	62	55	81	70	61	55	67	60	54		65	59	54		63
5	76	63	54	48	74	62	54	48	60	53	47		58	52	46		56
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51
7	65	52	43	37	64	51	43	37	49	42	36		48	41	36		47
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		40
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12782	12782	12782
5°	12814	12660	12762
10°	12769	12614	12701
15°	12683	12523	12630
20°	12563	12418	12510
25°	12422	12272	12386
30°	12249	12150	12230
35°	12117	11970	12031
40°	11886	11771	11795
45°	11640	11543	11543
50°	11394	11288	11236
55°	11128	10978	10919
60°	10713	10542	10474
65°	10204	10001	9876
70°	9506	9301	9104
75°	8527	8263	8063
80°	6902	6811	6604
85°	4107	4721	4901

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 11665 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.7	3.5
10°-20°	372.2	9.8
20°-30°	559.1	14.8
30°-40°	667.4	17.7
40°-50°	683.9	18.1
50°-60°	609.9	16.1
60°-70°	454.2	12.0
70°-80°	246.6	6.5
80°-90°	57.1	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°	1062.0	28.1
0°-40°	1729.4	45.7
0°-60°	3023.3	80.0
0°-90°	3781.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3781.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1385	1385	1385	1385	1385	
5°	1384	1382	1367	1380	1378	131
15°	1328	1324	1311	1322	1322	374
25°	1220	1217	1206	1213	1217	562
35°	1076	1072	1063	1063	1068	671
45°	892	894	885	883	885	689
55°	692	692	682	677	679	616
65°	467	466	458	452	452	463
75°	239	237	232	228	226	253
85°	39	42	45	46	46	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1385.4	1385.4	1385.4	1385.4	1385.4
2.5°	1389.7	1386.9	1375.0	1385.4	1384.1
5°	1383.6	1381.7	1367.0	1379.8	1378.0
7.5°	1373.4	1370.0	1355.3	1368.0	1366.1
10°	1363.0	1359.4	1346.4	1357.5	1355.7
12.5°	1349.8	1347.7	1333.2	1344.3	1343.8
15°	1327.8	1324.1	1311.1	1322.3	1322.3
17.5°	1299.0	1296.8	1284.1	1294.6	1293.6
20°	1279.5	1276.1	1264.8	1274.1	1274.1
22.5°	1255.9	1253.7	1242.7	1250.3	1251.8
25°	1220.2	1216.7	1205.5	1213.0	1216.7
27.5°	1181.0	1178.2	1168.9	1173.7	1176.2
30°	1149.8	1149.8	1140.5	1142.5	1148.0
32.5°	1121.7	1121.7	1110.9	1112.8	1115.5
35°	1075.8	1072.1	1062.8	1062.8	1068.2
37.5°	1022.1	1020.4	1014.6	1013.5	1015.0
40°	986.9	984.9	977.3	979.3	979.3
42.5°	951.2	949.2	941.6	939.2	942.1
45°	892.1	894.0	884.7	882.8	884.7
47.5°	834.0	834.0	826.5	821.3	824.1
50°	793.8	793.8	786.4	782.8	782.8
52.5°	752.2	753.7	744.6	739.7	741.2
55°	691.8	691.8	682.5	677.1	678.8
57.5°	624.9	624.9	615.8	610.2	613.5
60°	580.6	580.6	571.3	565.6	567.6
62.5°	536.0	536.0	526.9	521.3	521.5
65°	467.4	465.6	458.1	452.4	452.4
67.5°	401.3	396.5	390.9	383.6	383.6
70°	352.4	350.4	344.8	337.5	337.5
72.5°	307.9	304.5	299.0	293.1	293.1
75°	239.2	237.2	231.8	228.2	226.2
77.5°	171.4	169.9	169.5	164.3	165.8
80°	129.9	129.9	128.2	124.3	124.3
82.5°	92.7	94.1	90.9	90.0	88.6
85°	38.8	42.5	44.6	46.3	46.3
87.5°	7.5	11.6	10.4	11.9	11.9
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	20.44	22.06	20.80	22.38	22.69	20.28	21.90	20.64	22.22	22.53
	3H	22.18	23.65	22.56	23.97	24.34	21.97	23.44	22.35	23.77	24.13
	4H	22.83	24.22	23.23	24.57	24.94	22.60	23.99	23.00	24.33	24.71
	6H	23.20	24.49	23.62	24.85	25.24	22.97	24.25	23.38	24.62	25.01
	8H	23.33	24.55	23.75	24.94	25.34	23.09	24.32	23.52	24.70	25.10
	12H	23.38	24.55	23.81	24.94	25.36	23.16	24.33	23.59	24.71	25.14
4H	2H	21.06	22.44	21.46	22.79	23.16	20.93	22.32	21.33	22.66	23.04
	3H	23.03	24.19	23.44	24.59	24.99	22.85	24.01	23.26	24.41	24.81
	4H	23.79	24.84	24.22	25.25	25.69	23.59	24.63	24.02	25.05	25.48
	6H	24.27	25.18	24.72	25.62	26.08	24.06	24.97	24.51	25.41	25.87
	8H	24.43	25.29	24.90	25.73	26.20	24.22	25.07	24.68	25.51	25.98
	12H	24.52	25.28	25.00	25.76	26.23	24.32	25.08	24.80	25.56	26.03
8H	4H	24.05	24.90	24.51	25.35	25.81	23.87	24.72	24.33	25.17	25.63
	6H	24.63	25.34	25.12	25.83	26.30	24.44	25.15	24.93	25.64	26.11
	8H	24.86	25.50	25.37	26.00	26.49	24.66	25.30	25.17	25.81	26.29
	12H	24.99	25.56	25.50	26.05	26.61	24.82	25.38	25.32	25.87	26.43
12H	4H	24.07	24.84	24.55	25.31	25.78	23.89	24.66	24.37	25.14	25.60
	6H	24.67	25.30	25.18	25.81	26.30	24.48	25.12	24.99	25.62	26.11
	8H	24.95	25.51	25.46	26.00	26.56	24.76	25.32	25.26	25.81	26.37

END OF REPORT