

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: P1036226

Luminaire Tested: SQ4R-F-125D-B40-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036226
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-125D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

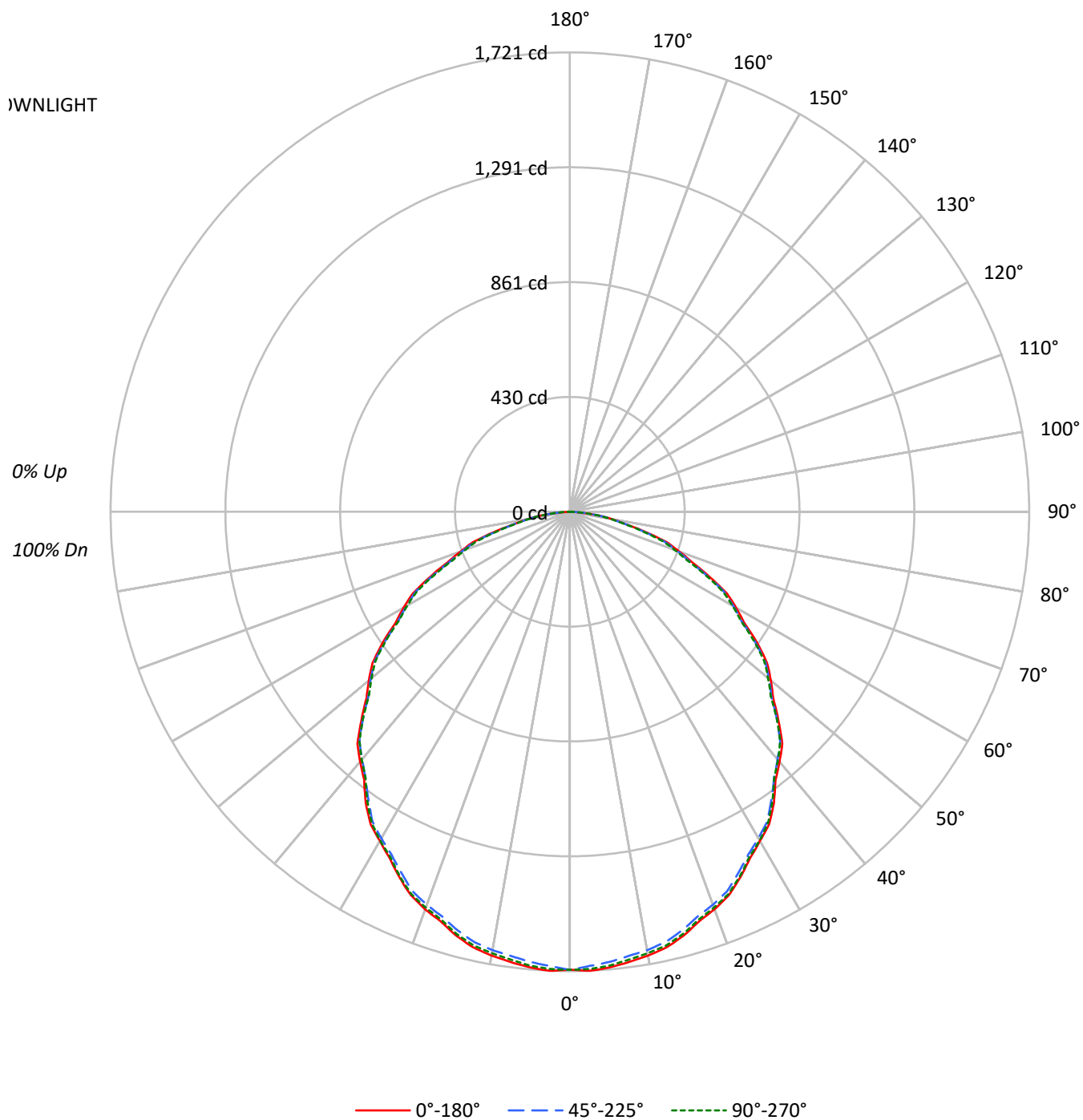
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4683.5 lumens
Efficiency: N/A
Efficacy: 102.3 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): 45.8
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°	15831	15831	15831
5°	15872	15681	15807
10°	15817	15624	15732
15°	15709	15512	15645
20°	15560	15381	15494
25°	15386	15200	15342
30°	15173	15050	15147
35°	15009	14828	14903
40°	14723	14580	14609
45°	14417	14298	14298
50°	14112	13982	13916
55°	13784	13599	13526
60°	13269	13057	12974
65°	12636	12387	12234
70°	11775	11521	11276
75°	10559	10234	9988
80°	8549	8432	8177
85°	5081	5843	6076

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 14448 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.9	3.5
10°-20°	461.1	9.8
20°-30°	692.5	14.8
30°-40°	826.7	17.7
40°-50°	847.1	18.1
50°-60°	755.5	16.1
60°-70°	562.6	12.0
70°-80°	305.4	6.5
80°-90°	70.7	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°	1315.5	28.1
0°-40°	2142.1	45.7
0°-60°	3744.7	80.0
0°-90°	4683.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4683.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1716	1716	1716	1716	1716	
5°	1714	1711	1693	1709	1707	163
15°	1645	1640	1624	1638	1638	463
25°	1511	1507	1493	1502	1507	696
35°	1333	1328	1316	1316	1323	831
45°	1105	1107	1096	1093	1096	853
55°	857	857	845	839	841	763
65°	579	577	567	560	560	573
75°	296	294	287	283	280	313
85°	48	52	55	57	57	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1715.9	1715.9	1715.9	1715.9	1715.9
2.5°	1721.3	1717.9	1703.1	1715.9	1714.4
5°	1713.8	1711.4	1693.1	1708.9	1706.8
7.5°	1701.2	1696.9	1678.7	1694.5	1692.1
10°	1688.3	1683.7	1667.7	1681.3	1679.2
12.5°	1672.0	1669.3	1651.4	1665.0	1664.5
15°	1644.6	1640.0	1624.0	1637.9	1637.9
17.5°	1608.9	1606.3	1590.5	1603.6	1602.2
20°	1584.8	1580.5	1566.6	1578.1	1578.1
22.5°	1555.6	1552.9	1539.3	1548.7	1550.5
25°	1511.4	1507.1	1493.1	1502.5	1507.1
27.5°	1462.9	1459.4	1447.9	1453.7	1457.0
30°	1424.2	1424.2	1412.7	1415.1	1421.8
32.5°	1389.3	1389.3	1376.0	1378.4	1381.6
35°	1332.6	1328.0	1316.5	1316.5	1323.2
37.5°	1266.1	1263.9	1256.7	1255.3	1257.2
40°	1222.4	1220.0	1210.6	1213.0	1213.0
42.5°	1178.1	1175.7	1166.4	1163.4	1166.8
45°	1104.9	1107.3	1095.8	1093.4	1095.8
47.5°	1033.0	1033.0	1023.7	1017.2	1020.7
50°	983.2	983.2	974.1	969.5	969.5
52.5°	931.8	933.6	922.4	916.2	918.0
55°	856.9	856.9	845.4	838.6	840.9
57.5°	774.1	774.1	762.7	755.9	759.8
60°	719.1	719.1	707.6	700.6	703.1
62.5°	663.9	663.9	652.6	645.6	645.9
65°	578.8	576.7	567.4	560.4	560.4
67.5°	497.1	491.2	484.2	475.1	475.1
70°	436.5	434.0	427.1	418.0	418.0
72.5°	381.2	377.3	370.3	363.0	363.0
75°	296.2	293.8	287.1	282.6	280.2
77.5°	212.3	210.5	209.9	203.5	205.3
80°	160.9	160.9	158.7	153.9	153.9
82.5°	114.7	116.7	112.6	111.5	109.7
85°	48.0	52.5	55.2	57.4	57.4
87.5°	9.4	14.4	12.9	14.7	14.7
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	21.18	22.81	21.55	23.12	23.44	21.02	22.65	21.39	22.96	23.28
	3H	22.92	24.39	23.30	24.72	25.08	22.71	24.18	23.09	24.51	24.87
	4H	23.58	24.96	23.98	25.31	25.69	23.35	24.73	23.75	25.08	25.45
	6H	23.95	25.23	24.36	25.59	25.99	23.71	25.00	24.13	25.36	25.75
	8H	24.07	25.30	24.50	25.69	26.08	23.84	25.06	24.26	25.45	25.85
	12H	24.13	25.30	24.55	25.68	26.11	23.90	25.07	24.33	25.46	25.88
4H	2H	21.80	23.19	22.20	23.53	23.91	21.68	23.06	22.07	23.41	23.78
	3H	23.77	24.93	24.18	25.33	25.73	23.60	24.76	24.01	25.15	25.55
	4H	24.54	25.58	24.97	26.00	26.43	24.33	25.38	24.76	25.79	26.23
	6H	25.01	25.93	25.47	26.37	26.82	24.80	25.71	25.25	26.15	26.61
	8H	25.18	26.03	25.64	26.47	26.94	24.96	25.81	25.42	26.26	26.72
	12H	25.26	26.03	25.74	26.50	26.97	25.06	25.83	25.54	26.30	26.77
8H	4H	24.79	25.65	25.25	26.09	26.56	24.61	25.47	25.07	25.91	26.37
	6H	25.37	26.08	25.87	26.57	27.05	25.18	25.89	25.68	26.38	26.85
	8H	25.61	26.24	26.12	26.75	27.23	25.41	26.04	25.92	26.55	27.03
	12H	25.74	26.30	26.24	26.79	27.35	25.56	26.12	26.07	26.61	27.17
12H	4H	24.81	25.58	25.29	26.06	26.52	24.64	25.40	25.12	25.88	26.35
	6H	25.41	26.05	25.92	26.55	27.04	25.22	25.86	25.73	26.37	26.85
	8H	25.69	26.25	26.20	26.75	27.31	25.50	26.06	26.01	26.55	27.11

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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