

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: P1036220

Luminaire Tested: SQ4R-F-125D-B2750-1D-UNV-W2A_2700K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036220
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-B2750-1D-UNV-W2A_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

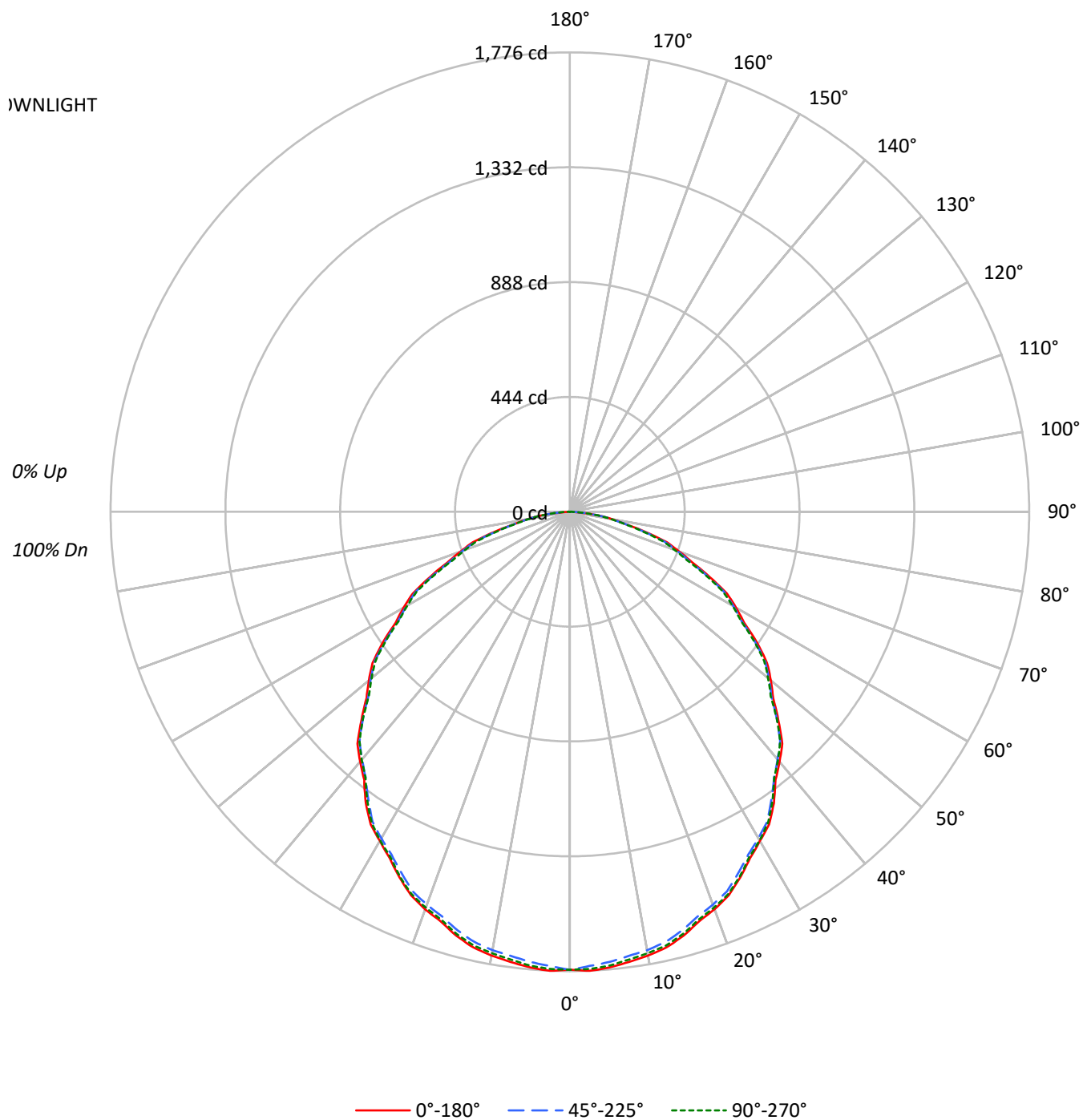
Lumens per Lamp: N/A
Luminaire Lumens: 4833.0 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	16337	16337	16337
5°	16379	16182	16312
10°	16322	16122	16234
15°	16210	16007	16144
20°	16057	15872	15989
25°	15877	15685	15832
30°	15657	15531	15631
35°	15488	15301	15379
40°	15192	15045	15075
45°	14877	14754	14754
50°	14563	14428	14361
55°	14224	14033	13957
60°	13694	13474	13387
65°	13040	12782	12625
70°	12150	11888	11635
75°	10897	10562	10306
80°	8820	8703	8437
85°	5240	6034	6267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 14910 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.1	3.5
10°-20°	475.8	9.8
20°-30°	714.6	14.8
30°-40°	853.1	17.7
40°-50°	874.2	18.1
50°-60°	779.6	16.1
60°-70°	580.6	12.0
70°-80°	315.1	6.5
80°-90°	73.0	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°	1357.5	28.1
0°-40°	2210.5	45.7
0°-60°	3864.3	80.0
0°-90°	4833.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4833.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1771	1771	1771	1771	1771	
5°	1768	1766	1747	1764	1761	168
15°	1697	1692	1676	1690	1690	478
25°	1560	1555	1541	1550	1555	718
35°	1375	1370	1358	1358	1365	858
45°	1140	1143	1131	1128	1131	880
55°	884	884	872	865	868	788
65°	597	595	586	578	578	592
75°	306	303	296	292	289	323
85°	50	54	57	59	59	71
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1770.7	1770.7	1770.7	1770.7	1770.7
2.5°	1776.3	1772.7	1757.5	1770.7	1769.1
5°	1768.5	1766.0	1747.2	1763.5	1761.3
7.5°	1755.5	1751.1	1732.3	1748.6	1746.1
10°	1742.2	1737.5	1720.9	1735.0	1732.8
12.5°	1725.4	1722.6	1704.1	1718.2	1717.6
15°	1697.1	1692.4	1675.8	1690.2	1690.2
17.5°	1660.3	1657.6	1641.3	1654.8	1653.4
20°	1635.4	1631.0	1616.6	1628.5	1628.5
22.5°	1605.3	1602.5	1588.4	1598.1	1600.0
25°	1559.6	1555.2	1540.8	1550.5	1555.2
27.5°	1509.6	1506.0	1494.1	1500.1	1503.5
30°	1469.7	1469.7	1457.8	1460.3	1467.2
32.5°	1433.7	1433.7	1419.9	1422.4	1425.7
35°	1375.1	1370.4	1358.5	1358.5	1365.4
37.5°	1306.5	1304.3	1296.8	1295.4	1297.3
40°	1261.4	1258.9	1249.2	1251.7	1251.7
42.5°	1215.7	1213.2	1203.6	1200.5	1204.1
45°	1140.2	1142.7	1130.8	1128.3	1130.8
47.5°	1066.0	1066.0	1056.4	1049.7	1053.3
50°	1014.6	1014.6	1005.2	1000.5	1000.5
52.5°	961.5	963.4	951.8	945.4	947.3
55°	884.3	884.3	872.4	865.4	867.7
57.5°	798.8	798.8	787.1	780.0	784.1
60°	742.1	742.1	730.2	723.0	725.5
62.5°	685.1	685.1	673.4	666.2	666.5
65°	597.3	595.1	585.5	578.3	578.3
67.5°	513.0	506.9	499.7	490.3	490.3
70°	450.4	447.9	440.7	431.3	431.3
72.5°	393.4	389.3	382.1	374.6	374.6
75°	305.7	303.2	296.3	291.6	289.1
77.5°	219.1	217.2	216.6	210.0	211.9
80°	166.0	166.0	163.8	158.8	158.8
82.5°	118.4	120.4	116.2	115.1	113.2
85°	49.5	54.2	57.0	59.2	59.2
87.5°	9.7	14.9	13.3	15.2	15.2
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	21.29	22.92	21.65	23.23	23.55	21.13	22.76	21.49	23.07	23.39
	3H	23.03	24.50	23.41	24.83	25.19	22.82	24.29	23.20	24.62	24.98
	4H	23.69	25.07	24.09	25.42	25.79	23.46	24.84	23.85	25.19	25.56
	6H	24.06	25.34	24.47	25.70	26.09	23.82	25.11	24.23	25.47	25.86
	8H	24.18	25.41	24.61	25.79	26.19	23.94	25.17	24.37	25.56	25.96
	12H	24.23	25.41	24.66	25.79	26.22	24.01	25.18	24.44	25.56	25.99
4H	2H	21.91	23.29	22.31	23.64	24.02	21.79	23.17	22.18	23.52	23.89
	3H	23.88	25.04	24.29	25.44	25.84	23.71	24.86	24.12	25.26	25.66
	4H	24.64	25.69	25.08	26.10	26.54	24.44	25.49	24.87	25.90	26.34
	6H	25.12	26.03	25.58	26.48	26.93	24.91	25.82	25.36	26.26	26.72
	8H	25.29	26.14	25.75	26.58	27.05	25.07	25.92	25.53	26.37	26.83
	12H	25.37	26.14	25.85	26.61	27.08	25.17	25.94	25.65	26.41	26.88
8H	4H	24.90	25.76	25.36	26.20	26.66	24.72	25.58	25.18	26.02	26.48
	6H	25.48	26.19	25.98	26.68	27.16	25.29	26.00	25.78	26.49	26.96
	8H	25.72	26.35	26.23	26.86	27.34	25.52	26.15	26.03	26.66	27.14
	12H	25.85	26.41	26.35	26.90	27.46	25.67	26.23	26.18	26.72	27.28
12H	4H	24.92	25.69	25.40	26.16	26.63	24.75	25.51	25.23	25.99	26.46
	6H	25.52	26.16	26.03	26.66	27.15	25.33	25.97	25.84	26.48	26.96
	8H	25.80	26.36	26.31	26.85	27.42	25.61	26.17	26.12	26.66	27.22

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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