

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: P1036373

Luminaire Tested: SQ4R-WB-075D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036373
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P519276)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-WB-075D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

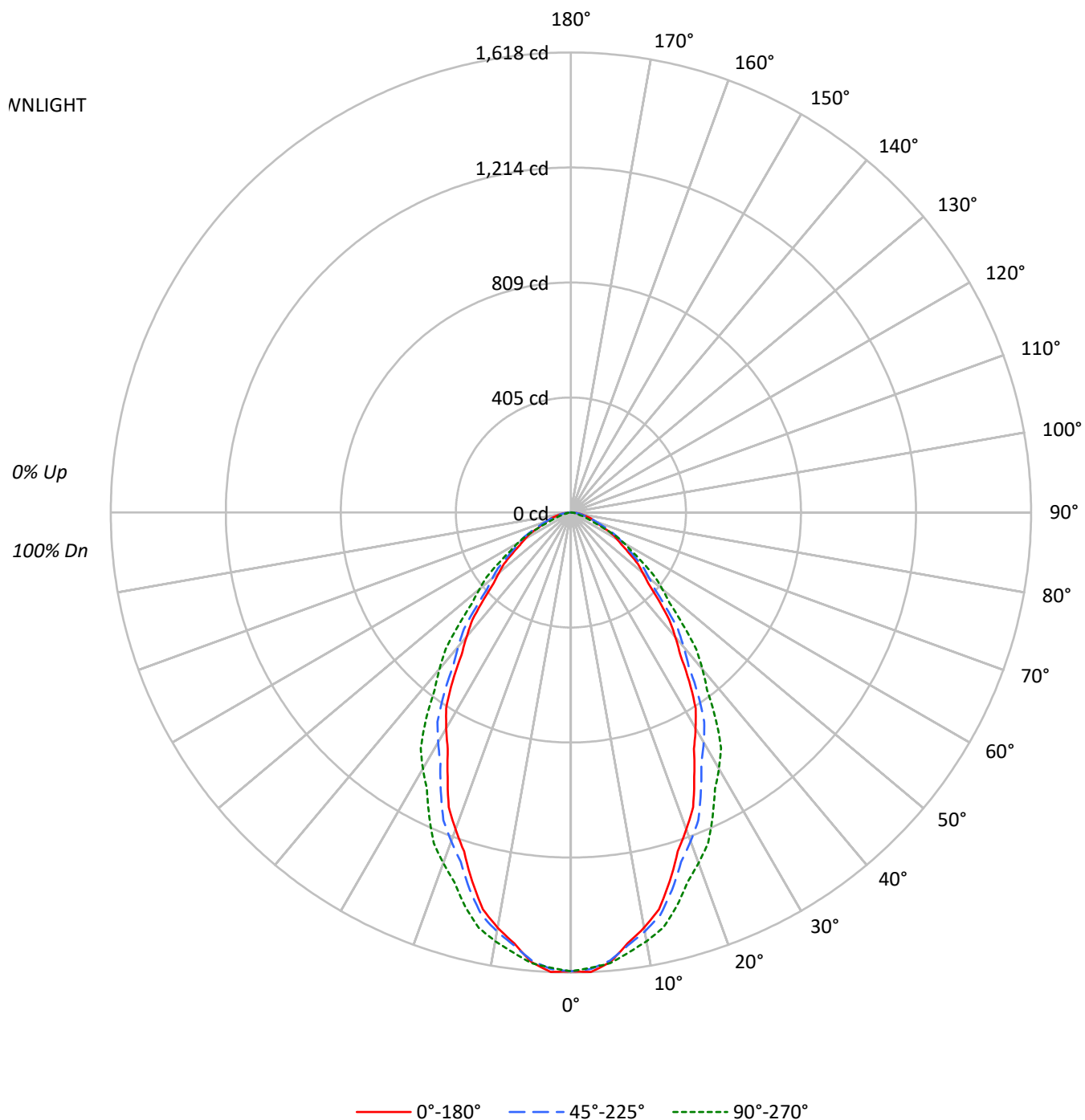
Lumens per Lamp: N/A
Luminaire Lumens: 2351.5 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.6
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	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	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89	89	89
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78	78	78
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69	69	69
4	89	79	72	66	87	78	71	66	76	70	65	74	68	64	71	67	64	62	62	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55	55	55
6	78	66	59	53	76	65	58	53	64	57	53	62	56	52	61	56	52	50	50	50
7	73	61	53	48	71	60	53	48	59	52	48	58	52	47	56	51	47	45	45	45
8	68	57	49	44	67	56	49	44	55	48	44	53	48	43	52	47	43	41	41	41
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38	38	38
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35	35	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14888	14888	14888
5°	14703	14650	14736
10°	13892	14017	14342
15°	12823	13122	13710
20°	11645	12082	12882
25°	10446	11015	12002
30°	9339	9949	11088
35°	8167	8756	10010
40°	6872	7420	8664
45°	5672	6161	7235
50°	4735	5163	6026
55°	4020	4430	4977
60°	3438	3842	3973
65°	2738	3229	2565
70°	2428	2522	1567
75°	2246	2046	959
80°	2067	1881	824
85°	1863	1736	677

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7235 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.0	6.3
10°-20°	385.0	16.4
20°-30°	498.7	21.2
30°-40°	488.3	20.8
40°-50°	373.8	15.9
50°-60°	249.1	10.6
60°-70°	135.9	5.8
70°-80°	56.6	2.4
80°-90°	16.0	0.7
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°	1031.7	43.9
0°-40°	1520.0	64.6
0°-60°	2142.9	91.1
0°-90°	2351.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2351.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1614	1614	1614	1614	1614	
5°	1588	1572	1582	1586	1591	148
15°	1342	1338	1374	1411	1435	375
25°	1026	1029	1082	1129	1179	472
35°	725	729	777	830	889	451
45°	435	443	472	508	554	339
55°	250	260	275	286	309	227
65°	125	136	148	129	118	130
75°	63	63	57	39	27	67
85°	18	18	16	11	6	20
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1613.7	1613.7	1613.7	1613.7	1613.7
2.5°	1617.7	1603.3	1607.0	1606.8	1602.4
5°	1587.6	1571.5	1581.8	1585.5	1591.1
7.5°	1528.6	1516.6	1535.3	1549.1	1560.4
10°	1482.8	1472.3	1496.2	1516.4	1530.9
12.5°	1429.6	1420.7	1450.4	1477.3	1496.4
15°	1342.5	1337.7	1373.8	1411.1	1435.3
17.5°	1249.5	1247.2	1288.5	1332.1	1363.0
20°	1186.0	1185.4	1230.6	1276.1	1312.0
22.5°	1122.1	1123.5	1171.1	1218.4	1259.4
25°	1026.1	1028.8	1082.0	1129.1	1179.0
27.5°	937.3	938.5	993.3	1043.2	1096.4
30°	876.6	880.1	933.9	985.5	1040.8
32.5°	816.1	820.1	872.8	926.0	982.5
35°	725.1	728.6	777.4	829.9	888.7
37.5°	631.3	636.0	679.5	728.9	786.9
40°	570.6	577.7	616.1	662.7	719.4
42.5°	512.3	520.9	556.6	600.8	651.9
45°	434.7	443.1	472.2	508.0	554.5
47.5°	367.9	377.5	399.9	430.7	470.3
50°	329.9	339.0	359.7	382.4	419.8
52.5°	296.6	305.5	324.0	341.6	373.5
55°	249.9	260.3	275.4	286.0	309.4
57.5°	211.7	221.7	233.7	238.4	252.7
60°	186.3	197.4	208.2	207.5	215.3
62.5°	163.0	172.5	183.3	175.6	176.1
65°	125.4	135.8	147.9	129.4	117.5
67.5°	101.3	103.4	116.1	90.3	76.2
70°	90.0	90.0	93.5	69.9	58.1
72.5°	79.2	79.2	76.0	56.7	44.4
75°	63.0	63.0	57.4	39.4	26.9
77.5°	48.6	48.1	43.9	29.3	19.5
80°	38.9	38.9	35.4	23.2	15.5
82.5°	30.5	30.5	27.4	18.1	11.5
85°	17.6	17.6	16.4	10.6	6.4
87.5°	6.3	6.3	5.6	3.3	2.9
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	15.13	16.51	15.50	16.82	17.13	15.76	17.13	16.12	17.44	17.76
	3H	16.11	17.33	16.49	17.66	18.02	16.22	17.44	16.59	17.77	18.13
	4H	16.54	17.69	16.95	18.04	18.42	16.29	17.43	16.70	17.78	18.17
	6H	16.85	17.90	17.27	18.27	18.67	16.30	17.35	16.72	17.72	18.12
	8H	16.98	17.98	17.41	18.37	18.77	16.30	17.29	16.73	17.69	18.09
	12H	17.07	18.02	17.50	18.40	18.83	16.28	17.24	16.72	17.62	18.05
4H	2H	15.62	16.76	16.02	17.11	17.49	16.14	17.28	16.54	17.63	18.01
	3H	16.79	17.72	17.20	18.13	18.53	16.77	17.71	17.19	18.11	18.51
	4H	17.32	18.16	17.76	18.58	19.02	16.91	17.74	17.34	18.16	18.60
	6H	17.74	18.47	18.21	18.91	19.38	16.98	17.70	17.44	18.15	18.61
	8H	17.92	18.60	18.39	19.04	19.51	16.99	17.66	17.45	18.11	18.58
	12H	18.05	18.65	18.53	19.13	19.60	16.98	17.58	17.47	18.07	18.54
8H	4H	17.43	18.11	17.90	18.55	19.02	17.05	17.73	17.52	18.17	18.64
	6H	17.97	18.52	18.47	19.02	19.50	17.20	17.75	17.70	18.25	18.73
	8H	18.23	18.73	18.75	19.24	19.73	17.25	17.75	17.77	18.26	18.75
	12H	18.44	18.87	18.95	19.37	19.94	17.29	17.73	17.80	18.22	18.79
12H	4H	17.41	18.01	17.90	18.49	18.97	17.06	17.66	17.54	18.14	18.61
	6H	17.97	18.47	18.49	18.98	19.48	17.24	17.74	17.76	18.25	18.74
	8H	18.29	18.73	18.80	19.22	19.79	17.34	17.78	17.86	18.28	18.85