

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: P1036174

Luminaire Tested: SQ4R-BB-075D-B2750-1D-UNV-W2A_3500K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036174
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P518604)
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-BB-075D-B2750-1D-UNV-W2A_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

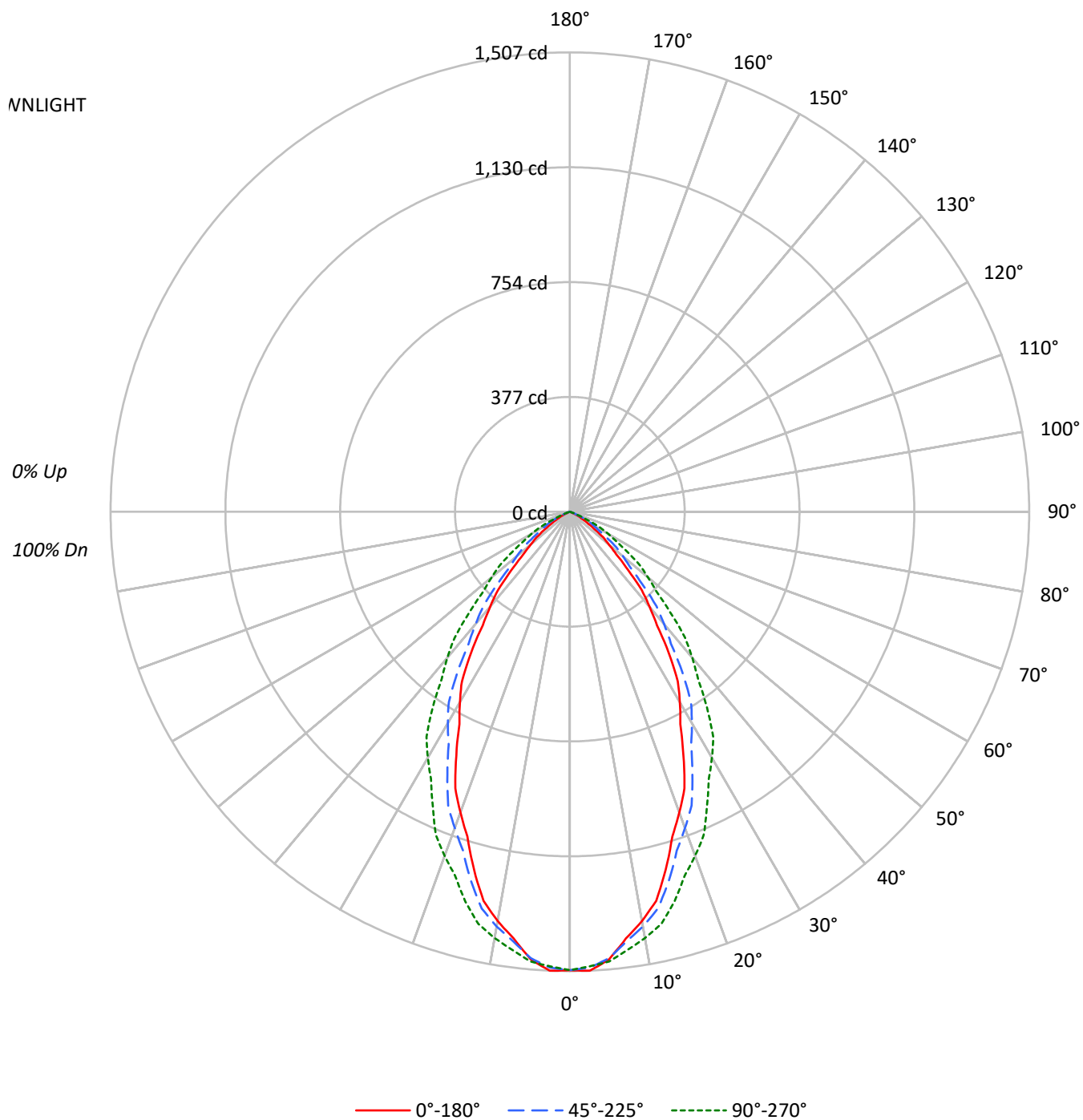
Lumens per Lamp: N/A
Luminaire Lumens: 1793.7 lumens
Efficiency: N/A
Efficacy: 70.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	93	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	84	84	82
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	76	76	74
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	69	69	67
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	63	63	61
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	58	58	56
7	77	66	59	54	75	65	59	54	64	58	53	62	57	53	61	56	53	53	53	51
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	49	49	47
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	45	45	44
10	65	54	47	42	63	53	47	42	52	46	42	51	46	42	51	46	42	42	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13873	13873	13873
5°	13650	13616	13718
10°	12770	12942	13303
15°	11611	11979	12646
20°	10307	10842	11792
25°	8975	9686	10835
30°	7689	8533	9928
35°	6374	7243	8831
40°	4897	5792	7525
45°	3542	4385	6055
50°	2411	3267	4804
55°	1568	2363	3732
60°	899	1664	2700
65°	238	1017	1367
70°	119	313	391
75°	53	25	0
80°	37	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 6055 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.2	7.7
10°-20°	350.9	19.6
20°-30°	439.3	24.5
30°-40°	405.8	22.6
40°-50°	272.7	15.2
50°-60°	140.8	7.9
60°-70°	44.1	2.5
70°-80°	2.8	0.2
80°-90°	0.1	0.0
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°	927.5	51.7
0°-40°	1333.3	74.3
0°-60°	1746.8	97.4
0°-90°	1793.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1793.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1504	1504	1504	1504	1504	
5°	1474	1459	1470	1475	1481	137
15°	1216	1211	1254	1296	1324	339
25°	882	889	952	1017	1064	404
35°	566	580	643	719	784	351
45°	272	288	336	402	464	213
55°	98	114	147	189	232	91
65°	11	21	47	56	63	18
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1503.7	1503.7	1503.7	1503.7	1503.7
2.5°	1507.1	1493.0	1496.6	1496.6	1492.6
5°	1473.8	1458.8	1470.2	1475.4	1481.2
7.5°	1411.6	1399.9	1421.7	1437.8	1449.6
10°	1363.1	1353.3	1381.4	1403.6	1420.0
12.5°	1307.4	1299.6	1333.7	1364.2	1385.1
15°	1215.6	1211.4	1254.1	1296.1	1324.0
17.5°	1117.3	1117.1	1165.9	1218.2	1251.7
20°	1049.8	1052.0	1104.3	1161.9	1201.0
22.5°	982.3	987.2	1043.2	1103.3	1148.1
25°	881.6	888.7	951.5	1016.6	1064.3
27.5°	785.1	795.5	861.5	929.1	987.2
30°	721.7	733.7	801.0	872.1	931.9
32.5°	659.3	673.7	739.1	814.6	875.3
35°	565.9	580.2	643.1	718.8	784.1
37.5°	469.5	483.4	544.8	619.4	690.1
40°	406.6	422.3	480.9	553.1	624.8
42.5°	349.6	365.3	420.3	491.2	559.2
45°	271.5	287.7	336.1	401.5	464.1
47.5°	206.6	224.2	266.7	326.0	382.9
50°	168.0	185.7	227.6	279.8	334.7
52.5°	137.2	154.5	192.2	241.3	291.5
55°	97.5	113.8	146.9	188.8	232.0
57.5°	67.3	81.5	111.2	145.9	180.1
60°	48.7	62.2	90.2	118.4	146.3
62.5°	32.5	44.8	72.1	93.8	112.5
65°	10.9	20.9	46.6	56.2	62.6
67.5°	5.6	6.6	24.4	25.8	28.0
70°	4.4	4.4	11.6	12.3	14.5
72.5°	3.1	3.1	4.6	6.0	6.5
75°	1.5	1.5	0.7	0.0	0.0
77.5°	0.7	0.7	0.7	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	9.06	10.30	9.43	10.61	10.92	13.65	14.88	14.02	15.19	15.51
	3H	8.94	10.02	9.32	10.35	10.72	13.63	14.71	14.01	15.04	15.40
	4H	8.86	9.87	9.27	10.22	10.60	13.55	14.55	13.95	14.90	15.28
	6H	8.78	9.69	9.19	10.07	10.46	13.46	14.37	13.87	14.75	15.14
	8H	8.73	9.60	9.16	9.99	10.39	13.41	14.27	13.84	14.67	15.07
	12H	8.68	9.51	9.12	9.89	10.32	13.36	14.19	13.80	14.57	15.00
4H	2H	9.43	10.43	9.83	10.78	11.17	13.59	14.59	13.99	14.94	15.32
	3H	9.32	10.12	9.73	10.53	10.94	13.56	14.37	13.98	14.78	15.18
	4H	9.22	9.94	9.66	10.36	10.81	13.47	14.19	13.90	14.61	15.05
	6H	9.13	9.75	9.60	10.20	10.67	13.38	13.99	13.84	14.44	14.91
	8H	9.07	9.65	9.54	10.09	10.57	13.31	13.89	13.79	14.34	14.81
	12H	9.02	9.52	9.51	10.01	10.48	13.26	13.76	13.75	14.25	14.73
8H	4H	9.08	9.65	9.55	10.10	10.58	13.32	13.89	13.79	14.34	14.81
	6H	8.97	9.44	9.48	9.94	10.42	13.20	13.67	13.71	14.17	14.65
	8H	8.90	9.32	9.43	9.84	10.33	13.14	13.55	13.66	14.07	14.57
	12H	8.85	9.22	9.37	9.72	10.29	13.08	13.45	13.60	13.95	14.52
12H	4H	9.03	9.53	9.51	10.02	10.49	13.26	13.77	13.75	14.25	14.73
	6H	8.90	9.32	9.43	9.84	10.33	13.14	13.55	13.66	14.07	14.57
	8H	8.85	9.22	9.37	9.72	10.29	13.08	13.45	13.60	13.95	14.52

END OF REPORT