

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: P1036204

Luminaire Tested: SQ4R-F-075D-B2750-1D-UNV-W2A_2700K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036204
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-075D-B2750-1D-UNV-W2A_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 750 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

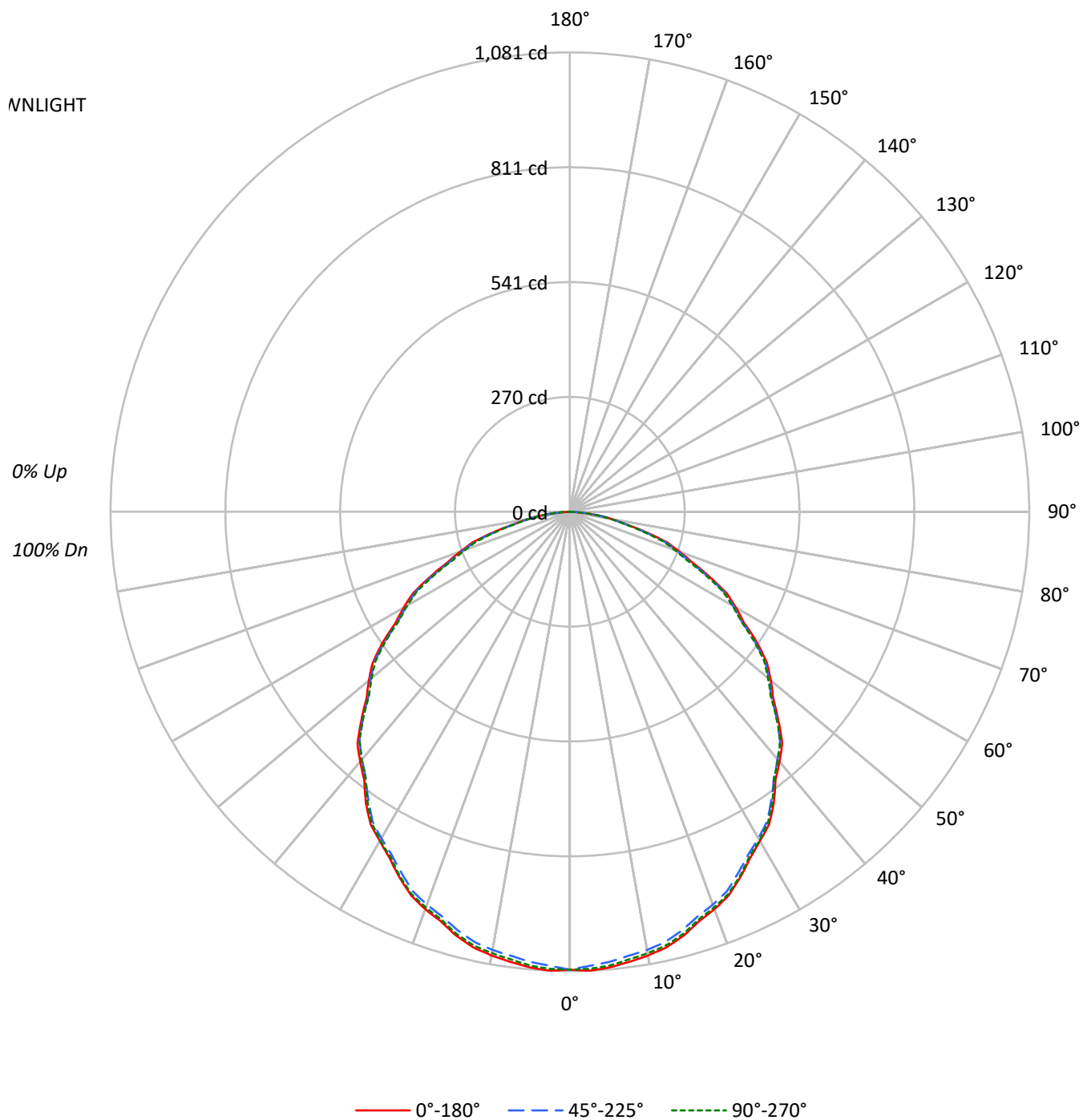
Lumens per Lamp: N/A
Luminaire Lumens: 2941.0 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	86	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	61	61	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	53	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9941	9941	9941
5°	9967	9847	9926
10°	9933	9811	9879
15°	9865	9741	9824
20°	9771	9659	9730
25°	9662	9545	9634
30°	9528	9451	9511
35°	9425	9311	9359
40°	9245	9156	9174
45°	9053	8978	8978
50°	8862	8780	8738
55°	8656	8540	8493
60°	8333	8198	8147
65°	7936	7778	7682
70°	7394	7235	7081
75°	6630	6427	6270
80°	5366	5297	5133
85°	3186	3673	3811

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 9072 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.7	3.5
10°-20°	289.5	9.8
20°-30°	434.9	14.8
30°-40°	519.1	17.7
40°-50°	531.9	18.1
50°-60°	474.4	16.1
60°-70°	353.3	12.0
70°-80°	191.8	6.5
80°-90°	44.4	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°	826.1	28.1
0°-40°	1345.2	45.7
0°-60°	2351.5	80.0
0°-90°	2941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2941.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1078	1078	1078	1078	1078	
5°	1076	1075	1063	1073	1072	102
15°	1033	1030	1020	1028	1028	291
25°	949	946	938	944	946	437
35°	837	834	827	827	831	522
45°	694	695	688	687	688	536
55°	538	538	531	527	528	479
65°	364	362	356	352	352	360
75°	186	184	180	178	176	197
85°	30	33	35	36	36	43
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1077.5	1077.5	1077.5	1077.5	1077.5
2.5°	1080.9	1078.7	1069.5	1077.5	1076.5
5°	1076.2	1074.7	1063.2	1073.2	1071.8
7.5°	1068.3	1065.6	1054.1	1064.1	1062.6
10°	1060.2	1057.3	1047.2	1055.8	1054.5
12.5°	1049.9	1048.2	1037.0	1045.6	1045.2
15°	1032.8	1029.9	1019.8	1028.5	1028.5
17.5°	1010.4	1008.7	998.7	1007.0	1006.2
20°	995.2	992.5	983.8	991.0	991.0
22.5°	976.9	975.2	966.6	972.5	973.7
25°	949.1	946.4	937.6	943.5	946.4
27.5°	918.6	916.4	909.2	912.9	914.9
30°	894.4	894.4	887.1	888.6	892.8
32.5°	872.5	872.5	864.1	865.6	867.6
35°	836.8	833.9	826.7	826.7	830.9
37.5°	795.0	793.7	789.1	788.3	789.5
40°	767.6	766.1	760.2	761.7	761.7
42.5°	739.8	738.3	732.4	730.5	732.7
45°	693.8	695.3	688.1	686.6	688.1
47.5°	648.7	648.7	642.8	638.8	641.0
50°	617.4	617.4	611.7	608.8	608.8
52.5°	585.1	586.2	579.2	575.3	576.5
55°	538.1	538.1	530.9	526.6	528.0
57.5°	486.1	486.1	479.0	474.6	477.1
60°	451.6	451.6	444.3	439.9	441.5
62.5°	416.9	416.9	409.8	405.4	405.6
65°	363.5	362.2	356.3	351.9	351.9
67.5°	312.1	308.4	304.1	298.3	298.3
70°	274.1	272.6	268.2	262.5	262.5
72.5°	239.4	236.9	232.5	228.0	228.0
75°	186.0	184.5	180.3	177.5	175.9
77.5°	133.3	132.2	131.8	127.8	129.0
80°	101.0	101.0	99.7	96.6	96.6
82.5°	72.1	73.2	70.7	70.0	68.9
85°	30.1	33.0	34.7	36.0	36.0
87.5°	5.9	9.1	8.1	9.3	9.3
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	19.56	21.19	19.93	21.51	21.82	19.40	21.03	19.77	21.34	21.66
	3H	21.31	22.78	21.68	23.10	23.46	21.10	22.57	21.47	22.89	23.25
	4H	21.96	23.35	22.36	23.69	24.07	21.73	23.11	22.13	23.46	23.84
	6H	22.33	23.61	22.74	23.98	24.37	22.10	23.38	22.51	23.74	24.13
	8H	22.46	23.68	22.88	24.07	24.47	22.22	23.44	22.64	23.83	24.23
	12H	22.51	23.68	22.94	24.06	24.49	22.28	23.46	22.71	23.84	24.27
4H	2H	20.19	21.57	20.58	21.92	22.29	20.06	21.44	20.46	21.79	22.17
	3H	22.16	23.32	22.57	23.71	24.11	21.98	23.14	22.39	23.54	23.94
	4H	22.92	23.97	23.35	24.38	24.81	22.71	23.76	23.15	24.17	24.61
	6H	23.40	24.31	23.85	24.75	25.21	23.18	24.10	23.64	24.54	24.99
	8H	23.56	24.42	24.02	24.86	25.32	23.34	24.20	23.80	24.64	25.11
	12H	23.64	24.41	24.12	24.89	25.36	23.44	24.21	23.92	24.69	25.15
8H	4H	23.18	24.03	23.64	24.47	24.94	23.00	23.85	23.46	24.29	24.76
	6H	23.76	24.47	24.25	24.95	25.43	23.57	24.27	24.06	24.76	25.24
	8H	23.99	24.63	24.50	25.13	25.62	23.79	24.43	24.30	24.93	25.42
	12H	24.12	24.68	24.63	25.17	25.73	23.94	24.51	24.45	25.00	25.56
12H	4H	23.20	23.96	23.68	24.44	24.91	23.02	23.79	23.50	24.26	24.73
	6H	23.79	24.43	24.30	24.94	25.42	23.61	24.24	24.12	24.75	25.24
	8H	24.08	24.64	24.58	25.13	25.69	23.88	24.45	24.39	24.94	25.50