

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: P1036166

Luminaire Tested: SQ4R-BB-050D-B2750-1D-UNV-W2A_3500K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036166
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-050D-B2750-1D-UNV-W2A_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 500 LUMENS PER FOOT DOV

Light Source: -
Ballast/Driver: -

Summary

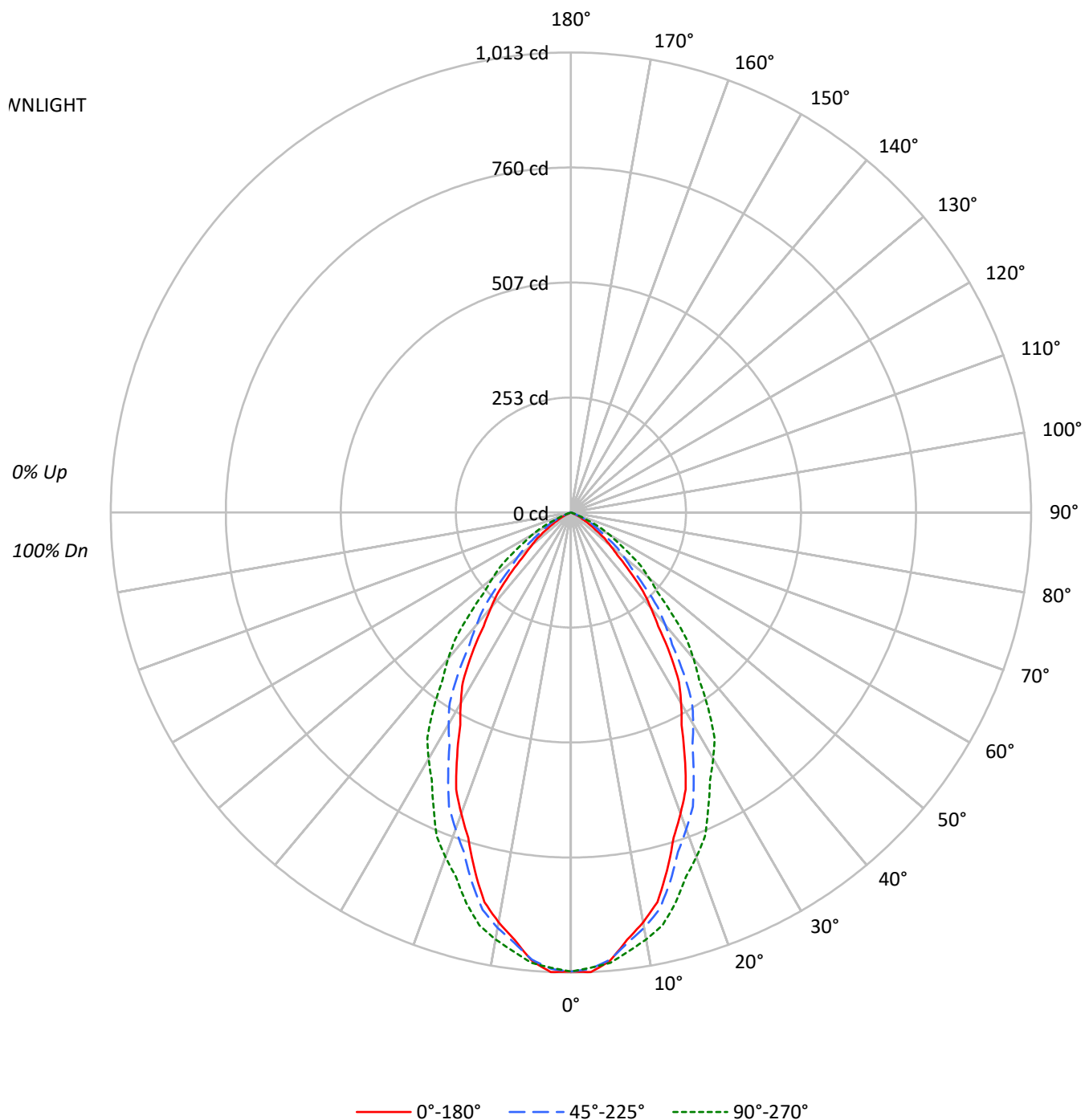
Lumens per Lamp: N/A
Luminaire Lumens: 1205.6 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.8
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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91		
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82		
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	74		
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	67		
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	61		
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56		
7	77	66	59	54	75	65	59	54	64	58	53	62	57	53	61	56	53	51		
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	47		
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	44		
10	65	54	47	42	63	53	47	42	52	46	42	51	46	42	51	46	42	41		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9325	9325	9325
5°	9174	9152	9220
10°	8583	8700	8941
15°	7804	8051	8500
20°	6927	7287	7925
25°	6032	6510	7282
30°	5168	5735	6672
35°	4284	4868	5937
40°	3292	3893	5058
45°	2380	2949	4071
50°	1621	2195	3230
55°	1055	1588	2509
60°	605	1120	1814
65°	159	683	919
70°	81	210	264
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4071 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.2	7.7
10°-20°	235.9	19.6
20°-30°	295.3	24.5
30°-40°	272.7	22.6
40°-50°	183.3	15.2
50°-60°	94.7	7.9
60°-70°	29.6	2.5
70°-80°	1.9	0.2
80°-90°	0.0	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°	623.4	51.7
0°-40°	896.1	74.3
0°-60°	1174.1	97.4
0°-90°	1205.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1205.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1011	1011	1011	1011	1011	
5°	991	980	988	992	996	92
15°	817	814	843	871	890	228
25°	592	597	640	683	715	272
35°	380	390	432	483	527	236
45°	182	193	226	270	312	143
55°	66	76	99	127	156	61
65°	7	14	31	38	42	12
75°	1	1	0	0	0	1
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°	1010.7	1010.7	1010.7	1010.7	1010.7
2.5°	1013.0	1003.4	1005.9	1005.9	1003.2
5°	990.6	980.5	988.2	991.6	995.5
7.5°	948.8	940.9	955.6	966.3	974.4
10°	916.2	909.6	928.6	943.3	954.4
12.5°	878.7	873.5	896.4	916.9	930.9
15°	817.0	814.2	842.9	871.2	889.9
17.5°	751.0	750.9	783.6	818.9	841.3
20°	705.5	707.0	742.2	781.0	807.2
22.5°	660.1	663.5	701.1	741.6	771.7
25°	592.5	597.3	639.5	683.3	715.3
27.5°	527.6	534.7	579.0	624.4	663.5
30°	485.1	493.2	538.3	586.2	626.3
32.5°	443.1	452.9	496.8	547.5	588.3
35°	380.4	390.0	432.2	483.1	527.1
37.5°	315.6	324.9	366.2	416.3	463.8
40°	273.3	283.8	323.2	371.8	420.0
42.5°	235.1	245.5	282.5	330.2	375.8
45°	182.4	193.4	226.0	269.9	312.0
47.5°	138.9	150.7	179.2	219.1	257.4
50°	112.9	124.9	152.9	188.1	225.0
52.5°	92.2	103.8	129.2	162.1	195.9
55°	65.6	76.5	98.7	126.8	156.0
57.5°	45.3	54.8	74.8	98.1	121.0
60°	32.8	41.9	60.7	79.6	98.3
62.5°	21.8	30.1	48.4	63.1	75.6
65°	7.3	14.1	31.3	37.8	42.1
67.5°	3.7	4.4	16.3	17.4	18.8
70°	3.0	3.0	7.8	8.3	9.8
72.5°	2.1	2.1	3.1	4.0	4.3
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.5	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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	7.69	8.92	8.05	9.23	9.55	12.27	13.50	12.64	13.82	14.13
	3H	7.57	8.65	7.95	8.98	9.34	12.25	13.33	12.63	13.66	14.03
	4H	7.49	8.49	7.89	8.84	9.23	12.17	13.17	12.57	13.52	13.91
	6H	7.40	8.32	7.82	8.69	9.09	12.08	13.00	12.49	13.37	13.76
	8H	7.35	8.22	7.79	8.61	9.02	12.03	12.90	12.46	13.29	13.69
	12H	7.31	8.13	7.74	8.52	8.95	11.98	12.81	12.42	13.19	13.62
4H	2H	8.05	9.05	8.46	9.41	9.79	12.21	13.21	12.61	13.56	13.95
	3H	7.94	8.75	8.35	9.15	9.56	12.19	13.00	12.60	13.40	13.81
	4H	7.84	8.56	8.28	8.98	9.43	12.09	12.81	12.52	13.23	13.67
	6H	7.76	8.37	8.22	8.82	9.29	12.00	12.61	12.46	13.06	13.53
	8H	7.69	8.27	8.17	8.72	9.19	11.94	12.51	12.41	12.96	13.43
	12H	7.64	8.14	8.13	8.63	9.11	11.88	12.39	12.37	12.87	13.35
8H	4H	7.70	8.28	8.17	8.73	9.20	11.94	12.51	12.41	12.96	13.43
	6H	7.59	8.06	8.10	8.56	9.04	11.83	12.29	12.33	12.79	13.27
	8H	7.53	7.94	8.05	8.46	8.96	11.76	12.17	12.28	12.69	13.19
	12H	7.47	7.84	7.99	8.34	8.91	11.71	12.07	12.22	12.57	13.15
12H	4H	7.65	8.15	8.14	8.64	9.11	11.88	12.39	12.37	12.87	13.35
	6H	7.53	7.94	8.05	8.46	8.96	11.76	12.17	12.28	12.69	13.19
	8H	7.47	7.84	7.99	8.34	8.91	11.71	12.07	12.22	12.57	13.15

END OF REPORT