

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: P1036195

Luminaire Tested: SQ4R-BB-125D-B50-1D-UNV

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036195
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-125D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

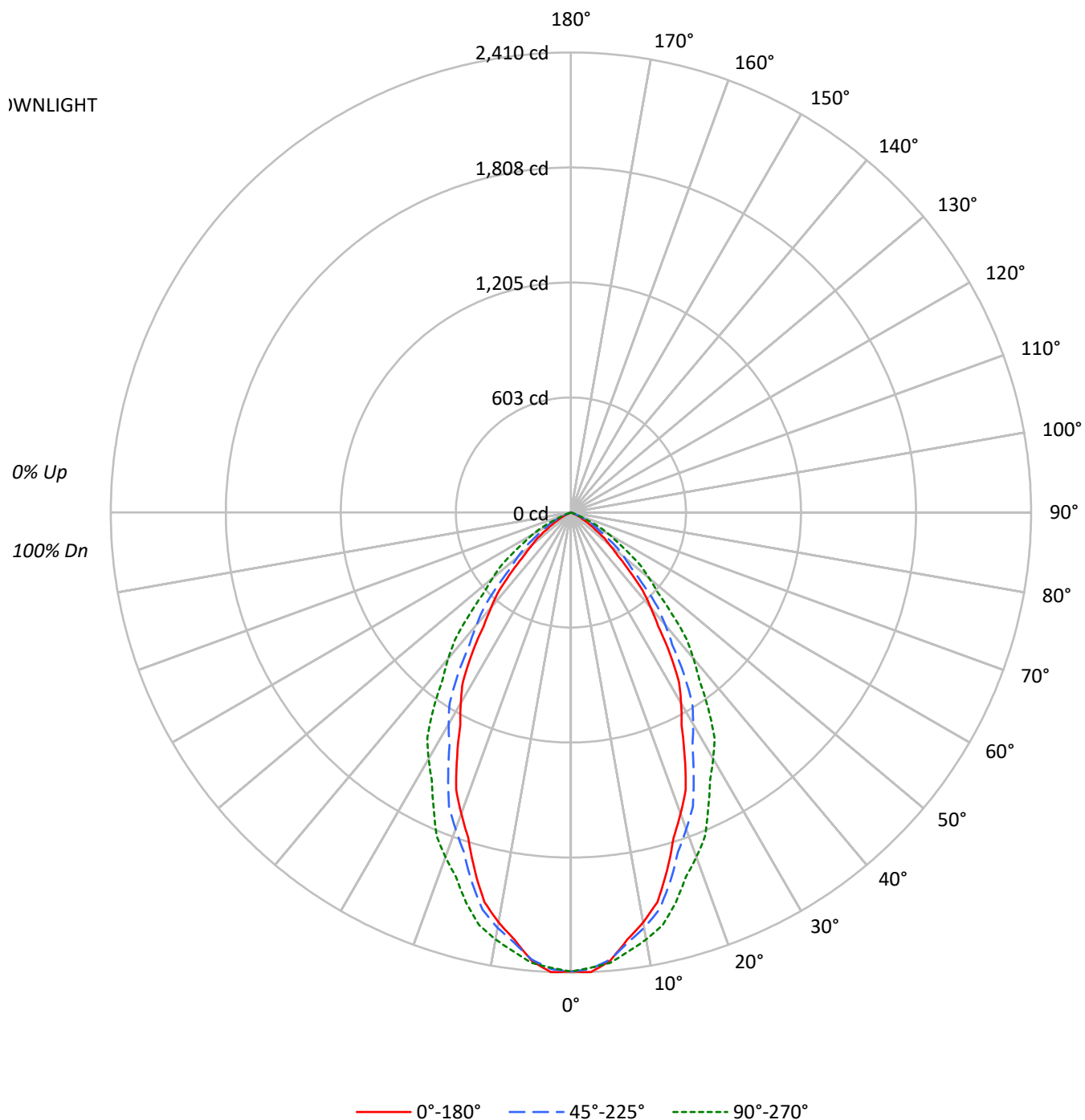
Lumens per Lamp: N/A
Luminaire Lumens: 2868.4 lumens
Efficiency: N/A
Efficacy: 62.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	22185	22185	22185
5°	21828	21775	21936
10°	20422	20697	21275
15°	18567	19157	20224
20°	16483	17338	18856
25°	14353	15489	17325
30°	12295	13645	15876
35°	10193	11584	14123
40°	7831	9262	12034
45°	5663	7013	9684
50°	3857	5225	7682
55°	2508	3780	5969
60°	1439	2663	4316
65°	380	1626	2185
70°	192	504	623
75°	86	36	0
80°	53	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 9684 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.4	7.7
10°-20°	561.2	19.6
20°-30°	702.6	24.5
30°-40°	648.9	22.6
40°-50°	436.0	15.2
50°-60°	225.2	7.9
60°-70°	70.5	2.5
70°-80°	4.4	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°	1483.2	51.7
0°-40°	2132.1	74.3
0°-60°	2793.4	97.4
0°-90°	2868.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2868.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2405	2405	2405	2405	2405	
5°	2357	2333	2351	2359	2368	219
15°	1944	1937	2006	2073	2117	541
25°	1410	1421	1522	1626	1702	646
35°	905	928	1028	1149	1254	561
45°	434	460	538	642	742	341
55°	156	182	235	302	371	145
65°	17	33	74	90	100	29
75°	2	2	1	0	0	3
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°	2404.6	2404.6	2404.6	2404.6	2404.6
2.5°	2410.1	2387.5	2393.3	2393.3	2387.0
5°	2356.9	2333.0	2351.1	2359.3	2368.5
7.5°	2257.4	2238.7	2273.4	2299.2	2318.3
10°	2179.9	2164.1	2209.2	2244.5	2270.9
12.5°	2090.6	2078.3	2132.8	2181.6	2215.0
15°	1943.9	1937.2	2005.6	2072.7	2117.3
17.5°	1786.8	1786.5	1864.4	1948.2	2001.6
20°	1678.8	1682.2	1765.9	1858.2	1920.5
22.5°	1570.7	1578.6	1668.2	1764.4	1836.0
25°	1409.9	1421.2	1521.5	1625.9	1701.9
27.5°	1255.5	1272.1	1377.8	1485.7	1578.6
30°	1154.1	1173.4	1280.8	1394.6	1490.2
32.5°	1054.3	1077.5	1182.0	1302.7	1399.9
35°	905.0	927.8	1028.5	1149.4	1253.9
37.5°	750.9	773.0	871.3	990.6	1103.6
40°	650.2	675.3	769.0	884.4	999.2
42.5°	559.1	584.2	672.1	785.6	894.1
45°	434.0	460.1	537.5	642.1	742.2
47.5°	330.3	358.4	426.4	521.2	612.3
50°	268.7	297.1	364.0	447.5	535.2
52.5°	219.3	247.1	307.3	385.9	466.2
55°	155.9	182.0	235.0	301.8	371.1
57.5°	107.7	130.3	177.7	233.3	287.9
60°	78.0	99.6	144.3	189.4	233.9
62.5°	51.9	71.6	115.4	150.1	179.9
65°	17.4	33.4	74.5	89.8	100.1
67.5°	8.9	10.6	38.9	41.3	44.7
70°	7.1	7.1	18.7	19.7	23.1
72.5°	5.0	5.0	7.3	9.5	10.3
75°	2.4	2.4	1.0	0.0	0.0
77.5°	1.0	1.0	1.0	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.3	0.3	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	10.70	11.93	11.06	12.24	12.55	15.28	16.51	15.65	16.82	17.14
	3H	10.57	11.65	10.95	11.99	12.35	15.26	16.34	15.64	16.67	17.03
	4H	10.50	11.50	10.90	11.85	12.24	15.18	16.18	15.58	16.53	16.91
	6H	10.41	11.33	10.82	11.70	12.09	15.09	16.00	15.50	16.38	16.77
	8H	10.36	11.23	10.79	11.62	12.03	15.04	15.91	15.47	16.30	16.70
	12H	10.31	11.14	10.75	11.52	11.95	14.99	15.82	15.43	16.20	16.63
4H	2H	11.06	12.06	11.46	12.41	12.80	15.22	16.22	15.62	16.57	16.96
	3H	10.95	11.76	11.36	12.16	12.57	15.20	16.00	15.61	16.41	16.81
	4H	10.85	11.57	11.29	11.99	12.44	15.10	15.82	15.53	16.24	16.68
	6H	10.77	11.38	11.23	11.83	12.30	15.01	15.62	15.47	16.07	16.54
	8H	10.70	11.28	11.18	11.73	12.20	14.94	15.52	15.42	15.97	16.44
	12H	10.65	11.15	11.14	11.64	12.11	14.89	15.39	15.38	15.88	16.36
8H	4H	10.71	11.29	11.18	11.73	12.21	14.95	15.52	15.42	15.97	16.44
	6H	10.60	11.07	11.11	11.57	12.05	14.83	15.30	15.34	15.80	16.28
	8H	10.53	10.95	11.06	11.47	11.96	14.77	15.18	15.29	15.70	16.20
	12H	10.48	10.85	11.00	11.35	11.92	14.71	15.08	15.23	15.58	16.15
12H	4H	10.66	11.16	11.15	11.65	12.12	14.89	15.40	15.38	15.88	16.36
	6H	10.53	10.95	11.06	11.47	11.96	14.77	15.18	15.29	15.70	16.20
	8H	10.48	10.85	11.00	11.35	11.92	14.71	15.08	15.23	15.58	16.15