

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: P1036188

Luminaire Tested: SQ4R-BB-125D-B2750-1D-UNV-W2A_2700K

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P1036188
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-B2750-1D-UNV-W2A_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, DIRECT ONLY 1250 LUMENS PER FOOT DC

Light Source: -
Ballast/Driver: -

Summary

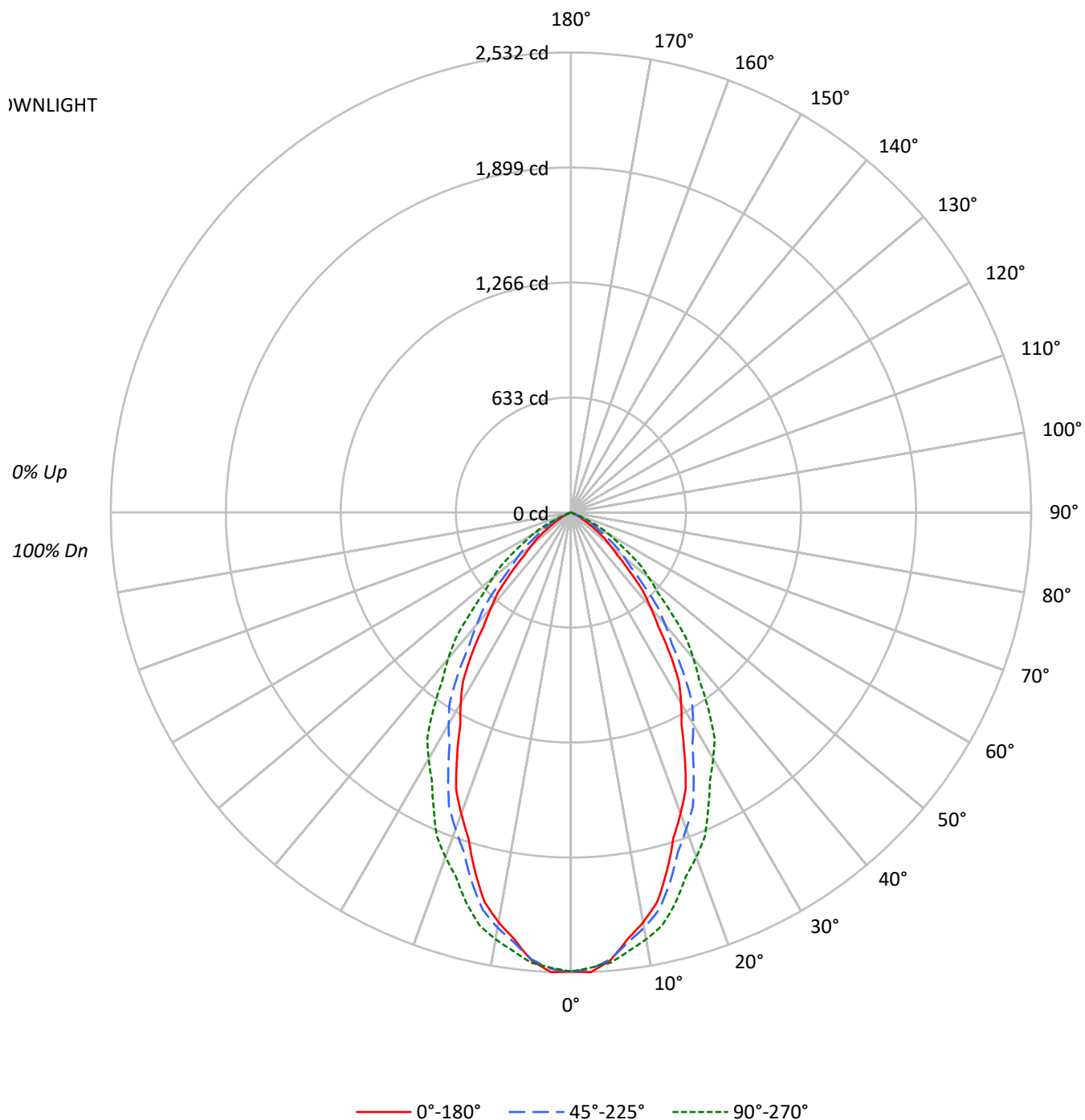
Lumens per Lamp: N/A
Luminaire Lumens: 3013.0 lumens
Efficiency: N/A
Efficacy: 65.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	23304	23304	23304
5°	22929	22872	23042
10°	21452	21740	22347
15°	19504	20122	21243
20°	17314	18212	19806
25°	15076	16270	18199
30°	12915	14332	16676
35°	10707	12168	14835
40°	8226	9729	12641
45°	5949	7367	10172
50°	4051	5487	8069
55°	2635	3970	6270
60°	1511	2797	4534
65°	400	1709	2294
70°	202	529	656
75°	89	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10172 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.5	7.7
10°-20°	589.5	19.6
20°-30°	738.0	24.5
30°-40°	681.6	22.6
40°-50°	458.0	15.2
50°-60°	236.6	7.9
60°-70°	74.1	2.5
70°-80°	4.7	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°	1557.9	51.7
0°-40°	2239.6	74.3
0°-60°	2934.1	97.4
0°-90°	3013.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3013.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2526	2526	2526	2526	2526	
5°	2476	2451	2470	2478	2488	230
15°	2042	2035	2107	2177	2224	569
25°	1481	1493	1598	1708	1788	679
35°	951	975	1080	1207	1317	589
45°	456	483	565	674	780	358
55°	164	191	247	317	390	153
65°	18	35	78	94	105	31
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°	2525.8	2525.8	2525.8	2525.8	2525.8
2.5°	2531.6	2507.8	2513.9	2513.9	2507.3
5°	2475.7	2450.6	2469.6	2478.2	2487.9
7.5°	2371.2	2351.5	2388.0	2415.1	2435.1
10°	2289.8	2273.2	2320.5	2357.6	2385.3
12.5°	2196.0	2183.0	2240.3	2291.5	2326.6
15°	2041.9	2034.8	2106.7	2177.2	2224.0
17.5°	1876.8	1876.5	1958.4	2046.4	2102.5
20°	1763.4	1767.0	1854.9	1951.8	2017.3
22.5°	1649.9	1658.2	1752.3	1853.3	1928.5
25°	1480.9	1492.8	1598.2	1707.8	1787.7
27.5°	1318.8	1336.2	1447.2	1560.6	1658.2
30°	1212.3	1232.5	1345.3	1464.9	1565.3
32.5°	1107.4	1131.8	1241.6	1368.3	1470.4
35°	950.6	974.6	1080.3	1207.3	1317.1
37.5°	788.7	812.0	915.2	1040.5	1159.2
40°	683.0	709.3	807.8	929.0	1049.6
42.5°	587.3	613.6	706.0	825.2	939.2
45°	455.9	483.3	564.6	674.5	779.6
47.5°	346.9	376.5	447.9	547.5	643.2
50°	282.2	312.1	382.3	470.0	562.2
52.5°	230.4	259.5	322.8	405.3	489.7
55°	163.8	191.2	246.8	317.0	389.8
57.5°	113.1	136.9	186.7	245.1	302.4
60°	81.9	104.6	151.6	198.9	245.7
62.5°	54.5	75.2	121.2	157.7	189.0
65°	18.3	35.1	78.3	94.3	105.1
67.5°	9.4	11.1	40.9	43.4	47.0
70°	7.5	7.5	19.6	20.7	24.3
72.5°	5.3	5.3	7.7	10.0	10.8
75°	2.5	2.5	1.1	0.0	0.0
77.5°	1.1	1.1	1.1	0.0	0.0
80°	1.1	1.1	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	10.87	12.10	11.23	12.41	12.73	15.45	16.68	15.82	17.00	17.31
	3H	10.75	11.83	11.13	12.16	12.52	15.43	16.51	15.81	16.84	17.21
	4H	10.67	11.67	11.07	12.02	12.41	15.35	16.35	15.75	16.70	17.09
	6H	10.58	11.50	11.00	11.87	12.26	15.26	16.18	15.67	16.55	16.94
	8H	10.53	11.40	10.97	11.79	12.20	15.21	16.08	15.64	16.47	16.88
	12H	10.49	11.31	10.92	11.70	12.13	15.16	15.99	15.60	16.37	16.80
4H	2H	11.23	12.23	11.64	12.59	12.97	15.39	16.39	15.79	16.74	17.13
	3H	11.12	11.93	11.53	12.33	12.74	15.37	16.18	15.78	16.58	16.99
	4H	11.03	11.74	11.46	12.17	12.61	15.27	15.99	15.71	16.41	16.85
	6H	10.94	11.55	11.40	12.00	12.47	15.18	15.79	15.64	16.24	16.71
	8H	10.88	11.45	11.35	11.90	12.37	15.12	15.69	15.59	16.14	16.61
	12H	10.82	11.33	11.31	11.81	12.29	15.06	15.57	15.55	16.05	16.53
8H	4H	10.88	11.46	11.36	11.91	12.38	15.12	15.69	15.59	16.14	16.61
	6H	10.77	11.24	11.28	11.74	12.22	15.01	15.47	15.51	15.97	16.45
	8H	10.71	11.12	11.23	11.64	12.14	14.94	15.36	15.46	15.87	16.37
	12H	10.66	11.02	11.17	11.52	12.09	14.89	15.26	15.40	15.75	16.33
12H	4H	10.83	11.33	11.32	11.82	12.29	15.06	15.57	15.55	16.05	16.53
	6H	10.71	11.12	11.23	11.64	12.14	14.94	15.36	15.46	15.87	16.37
	8H	10.66	11.02	11.17	11.52	12.09	14.89	15.26	15.40	15.75	16.33