

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: P853632

Luminaire Tested: SQ2-BBN-125U-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853632
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2308-130-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBN-125U-050D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

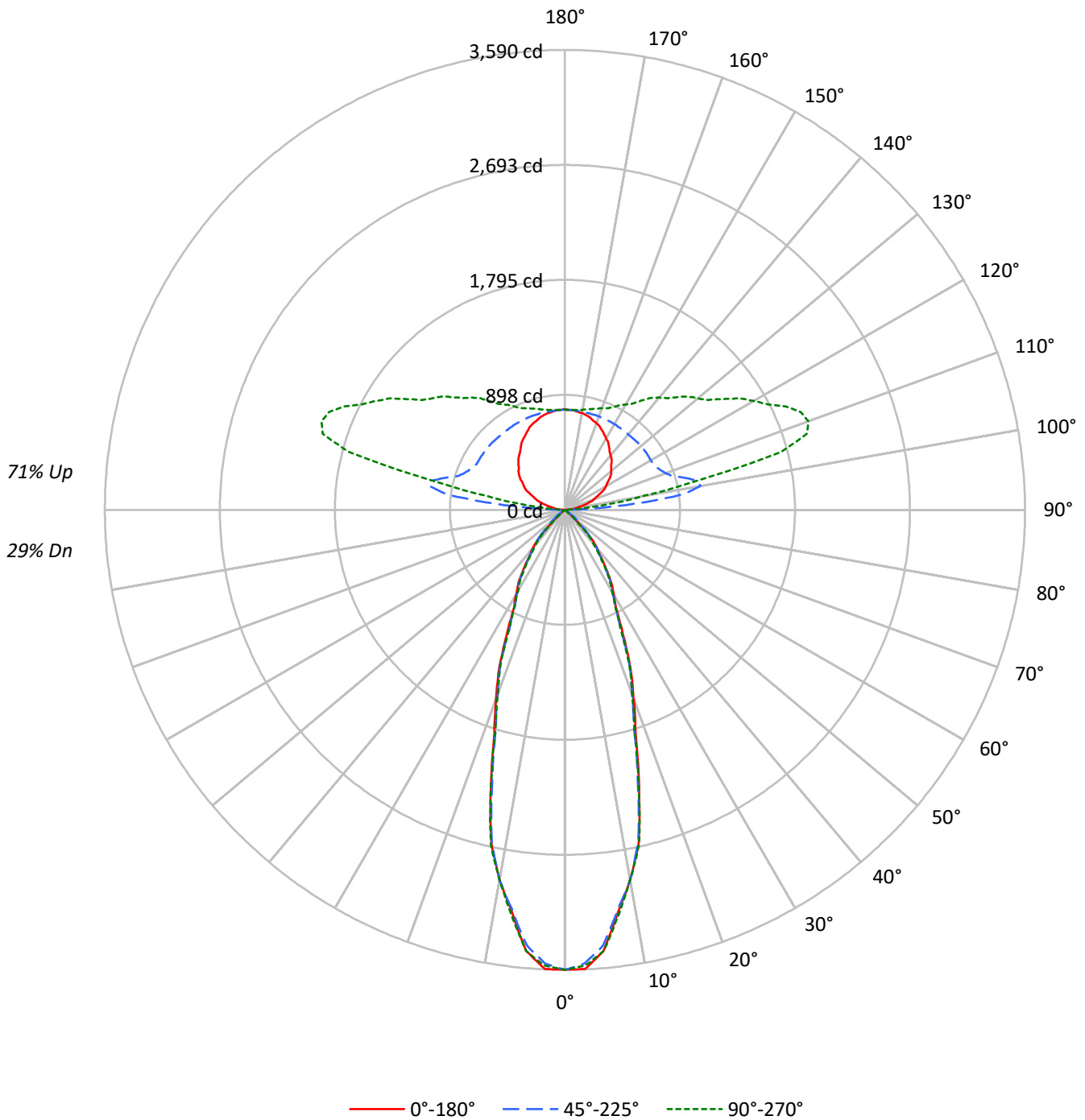
Lumens per Lamp: N/A
Luminaire Lumens: 6765.1 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 62
Input Voltage (V): 120
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	94	91	88	85	85	82	79	77	65	63	61	49	48	47	34	34	34	27
2	87	81	76	72	78	73	69	65	59	56	53	45	43	42	32	32	31	25
3	81	73	67	62	73	66	61	57	53	50	47	41	39	38	30	29	28	24
4	75	66	59	54	67	60	54	50	49	45	42	38	36	34	29	27	26	22
5	70	60	53	48	63	55	49	44	45	41	38	35	33	31	27	25	24	21
6	65	54	48	43	58	50	44	40	41	37	34	33	30	28	25	24	23	20
7	60	50	43	38	55	46	40	36	38	34	31	31	28	26	24	22	21	18
8	57	46	39	35	51	42	37	33	35	31	28	29	26	24	23	21	20	17
9	53	43	36	32	48	39	34	30	33	29	26	27	24	22	21	20	19	17
10	50	40	33	29	45	37	31	27	31	27	24	25	23	21	20	19	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	57955	57955	57955
5°	56018	55326	56049
10°	48075	48106	48075
15°	37315	36720	37229
20°	26931	26374	26352
25°	19096	18335	18369
30°	14206	13845	13712
35°	11054	10774	10545
40°	8180	7975	7472
45°	4181	5126	3368
50°	909	2828	666
55°	256	1148	200
60°	42	229	19
65°	0	23	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 5126 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.4	4.6
10°-20°	611.9	9.0
20°-30°	493.6	7.3
30°-40°	342.9	5.1
40°-50°	158.4	2.3
50°-60°	22.2	0.3
60°-70°	0.8	0.0
70°-80°	0.0	0.0
80°-90°	1.1	0.0
90°-100°	299.1	4.4
100°-110°	973.7	14.4
110°-120°	963.2	14.2
120°-130°	787.1	11.6
130°-140°	643.3	9.5
140°-150°	501.1	7.4
150°-160°	361.2	5.3
160°-170°	220.8	3.3
170°-180°	74.5	1.1
0°-30°	1416.0	20.9
0°-40°	1758.9	26.0
0°-60°	1939.6	28.7
0°-90°	1941.4	28.7
90°-120°	2236.0	33.1
90°-150°	4167.5	61.6
90°-180°	4824.0	71.3
0°-180°	6765.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3590	3590	3590	3590	3590	
5°	3456	3438	3414	3456	3458	311
15°	2232	2261	2197	2228	2227	615
25°	1072	1048	1029	1044	1031	502
35°	561	561	547	537	535	351
45°	183	218	224	204	148	148
55°	9	14	41	12	7	11
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	3	7	6	6	2
95°	40	123	548	195	120	47
105°	165	239	965	1842	1744	176
115°	306	365	786	1619	1905	303
125°	425	474	775	1278	1507	378
135°	514	567	771	1103	1244	397
145°	600	644	769	950	1040	376
155°	685	707	774	851	883	315
165°	747	754	776	805	814	210
175°	779	779	779	785	783	74
180°	782	782	782	782	782	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3589.5	3589.5	3589.5	3589.5	3589.5
2.5°	3587.5	3574.3	3542.9	3571.2	3562.6
5°	3456.3	3437.9	3413.6	3455.7	3458.2
7.5°	3166.7	3172.7	3150.0	3196.5	3191.6
10°	2932.3	2936.7	2934.2	2949.4	2932.3
12.5°	2660.6	2678.2	2645.0	2668.4	2675.6
15°	2232.4	2260.8	2196.8	2227.8	2227.2
17.5°	1830.8	1827.9	1794.8	1800.6	1798.7
20°	1567.4	1563.0	1535.0	1530.6	1533.7
22.5°	1341.8	1334.3	1324.4	1313.3	1317.4
25°	1071.9	1047.8	1029.2	1044.4	1031.1
27.5°	860.3	860.0	844.6	846.3	848.8
30°	762.0	757.6	742.6	743.1	735.5
32.5°	674.6	677.7	659.3	655.6	648.0
35°	560.8	560.8	546.6	536.9	535.0
37.5°	455.4	454.3	444.1	430.3	425.4
40°	388.1	385.0	378.4	361.4	354.5
42.5°	311.5	320.0	313.7	296.7	286.2
45°	183.1	218.5	224.5	203.8	147.5
47.5°	78.7	117.6	149.8	97.6	50.8
50°	36.2	66.6	112.6	48.0	26.5
52.5°	21.2	36.4	83.6	28.1	16.7
55°	9.1	14.1	40.8	11.5	7.1
57.5°	3.4	6.1	15.4	5.0	2.7
60°	1.3	2.6	7.1	1.9	0.6
62.5°	0.3	1.0	3.5	0.9	0.1
65°	0.0	0.0	0.6	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.6	1.3	1.2	1.2
90°	0.0	2.8	6.7	5.8	5.8
92.5°	13.8	49.8	159.1	52.4	40.4
95°	40.4	123.1	548.2	195.4	120.2
97.5°	76.0	160.2	930.3	566.6	345.8
100°	99.1	181.8	1074.2	957.9	621.3
102.5°	125.2	205.0	1056.5	1417.1	1077.5
105°	165.4	238.8	964.6	1842.3	1744.5
107.5°	208.9	277.9	877.3	1879.2	1982.8
110°	240.4	303.4	835.7	1833.4	2020.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.6	328.8	809.5	1750.8	1992.0
115°	305.8	365.1	785.7	1619.2	1905.1
117.5°	346.2	399.6	776.5	1498.8	1783.4
120°	369.3	421.9	774.2	1424.8	1700.3
122.5°	391.6	443.5	774.9	1360.5	1617.2
125°	425.1	474.0	775.1	1278.5	1507.0
127.5°	453.7	503.7	774.9	1217.0	1407.5
130°	472.2	523.0	774.2	1181.9	1352.1
132.5°	488.3	541.4	773.4	1149.4	1309.0
135°	513.5	567.1	771.3	1103.4	1244.4
137.5°	538.2	592.1	769.2	1056.7	1181.9
140°	555.9	607.6	768.4	1025.0	1143.4
142.5°	572.8	622.2	768.4	994.7	1100.4
145°	600.1	644.3	769.4	950.3	1040.5
147.5°	626.6	665.0	770.7	912.5	982.3
150°	644.3	678.2	772.2	889.9	949.2
152.5°	662.0	689.9	773.0	872.7	920.0
155°	684.7	707.3	774.2	850.9	882.8
157.5°	706.3	722.4	775.3	834.7	857.1
160°	719.3	732.5	776.1	824.6	842.4
162.5°	730.9	741.0	776.1	816.0	829.4
165°	747.2	753.8	776.1	805.1	814.5
167.5°	758.8	762.9	776.3	797.0	801.9
170°	766.5	768.3	777.0	791.5	793.4
172.5°	771.9	773.0	778.6	788.4	788.0
175°	779.0	779.0	779.0	784.7	782.8
177.5°	781.9	781.1	780.3	784.1	781.1
180°	781.9	781.9	781.9	781.9	781.9



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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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00