

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: P853633

Luminaire Tested: SQ2-BBN-125U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853633
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-935-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

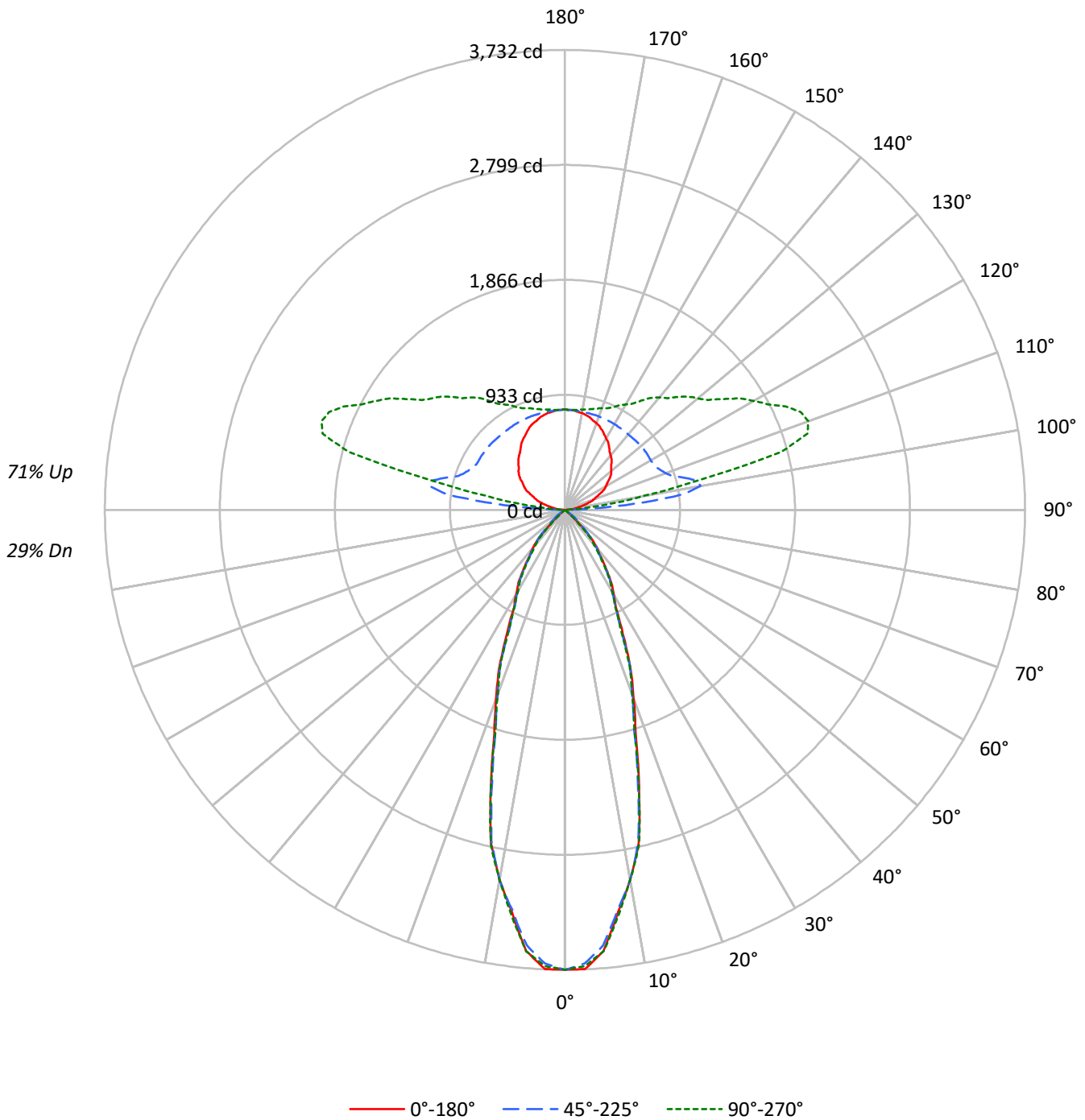
Lumens per Lamp: N/A
Luminaire Lumens: 7033.8 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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

TEST NUMBER: P853633

CATALOG NUMBER: SQ2-BBN-125U-050D-935-UNV-STD-W-4

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°	60258	60258	60258
5°	58242	57524	58276
10°	49985	50018	49985
15°	38796	38180	38708
20°	28000	27423	27400
25°	19855	19064	19099
30°	14771	14395	14257
35°	11493	11201	10963
40°	8505	8294	7769
45°	4345	5329	3500
50°	947	2939	693
55°	265	1194	208
60°	42	239	23
65°	0	27	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: 5329 cd/sqm



TEST NUMBER: P853633

CATALOG NUMBER: SQ2-BBN-125U-050D-935-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.7	4.6
10°-20°	636.2	9.0
20°-30°	513.2	7.3
30°-40°	356.5	5.1
40°-50°	164.7	2.3
50°-60°	23.1	0.3
60°-70°	0.8	0.0
70°-80°	0.0	0.0
80°-90°	1.2	0.0
90°-100°	311.0	4.4
100°-110°	1012.4	14.4
110°-120°	1001.4	14.2
120°-130°	818.4	11.6
130°-140°	668.9	9.5
140°-150°	521.0	7.4
150°-160°	375.5	5.3
160°-170°	229.5	3.3
170°-180°	77.4	1.1
0°-30°	1472.2	20.9
0°-40°	1828.8	26.0
0°-60°	2016.6	28.7
0°-90°	2018.6	28.7
90°-120°	2324.8	33.1
90°-150°	4333.0	61.6
90°-180°	5015.0	71.3
0°-180°	7033.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3732	3732	3732	3732	3732	
5°	3594	3574	3549	3593	3596	323
15°	2321	2351	2284	2316	2316	639
25°	1114	1090	1070	1086	1072	522
35°	583	583	568	558	556	365
45°	190	227	233	212	153	154
55°	9	15	42	12	7	12
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°	42	128	570	203	125	49
105°	172	248	1003	1916	1814	183
115°	318	380	817	1684	1981	315
125°	442	493	806	1329	1567	393
135°	534	590	802	1147	1294	412
145°	624	670	800	988	1082	391
155°	712	735	805	885	918	328
165°	777	784	807	837	847	219
175°	810	810	810	816	814	77
180°	813	813	813	813	813	



TEST NUMBER: P853633

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3732.1	3732.1	3732.1	3732.1	3732.1
2.5°	3729.9	3716.3	3683.7	3713.1	3704.1
5°	3593.5	3574.5	3549.2	3592.9	3595.6
7.5°	3292.5	3298.7	3275.2	3323.5	3318.3
10°	3048.8	3053.4	3050.8	3066.5	3048.8
12.5°	2766.3	2784.6	2750.0	2774.4	2781.9
15°	2321.0	2350.6	2284.1	2316.3	2315.7
17.5°	1903.5	1900.5	1866.1	1872.1	1870.2
20°	1629.6	1625.0	1596.0	1591.4	1594.7
22.5°	1395.0	1387.3	1377.0	1365.4	1369.8
25°	1114.5	1089.5	1070.1	1085.9	1072.1
27.5°	894.5	894.1	878.1	879.9	882.5
30°	792.3	787.7	772.1	772.6	764.7
32.5°	701.4	704.6	685.5	681.7	673.8
35°	583.1	583.1	568.3	558.2	556.2
37.5°	473.5	472.3	461.8	447.4	442.3
40°	403.5	400.3	393.5	375.8	368.6
42.5°	323.9	332.7	326.2	308.5	297.5
45°	190.3	227.2	233.4	211.9	153.3
47.5°	81.8	122.3	155.8	101.5	52.9
50°	37.7	69.2	117.0	49.9	27.6
52.5°	22.1	37.8	86.9	29.2	17.4
55°	9.4	14.7	42.4	12.0	7.4
57.5°	3.5	6.4	16.0	5.2	2.8
60°	1.3	2.7	7.4	2.0	0.7
62.5°	0.3	1.1	3.6	0.9	0.1
65°	0.0	0.0	0.7	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	1.4	1.2	1.2
90°	0.0	2.9	7.0	6.0	6.0
92.5°	14.4	51.7	165.4	54.5	42.0
95°	42.0	128.0	569.9	203.2	125.0
97.5°	79.0	166.6	967.3	589.1	359.6
100°	103.0	189.0	1116.9	995.9	645.9
102.5°	130.2	213.1	1098.5	1473.4	1120.3
105°	172.0	248.2	1002.9	1915.5	1813.8
107.5°	217.2	288.9	912.1	1953.8	2061.6
110°	250.0	315.5	868.9	1906.2	2100.8



TEST NUMBER: P853633

CATALOG NUMBER: SQ2-BBN-125U-050D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	277.2	341.9	841.7	1820.3	2071.2
115°	318.0	379.6	816.9	1683.6	1980.8
117.5°	360.0	415.5	807.3	1558.3	1854.2
120°	384.0	438.7	804.9	1481.3	1767.8
122.5°	407.2	461.1	805.7	1414.5	1681.4
125°	441.9	492.8	805.9	1329.2	1566.8
127.5°	471.7	523.8	805.7	1265.4	1463.4
130°	490.9	543.7	804.9	1228.9	1405.8
132.5°	507.7	562.9	804.1	1195.0	1361.0
135°	533.9	589.7	801.9	1147.2	1293.9
137.5°	559.5	615.7	799.7	1098.6	1228.9
140°	577.9	631.7	798.9	1065.7	1188.9
142.5°	595.5	647.0	798.9	1034.2	1144.1
145°	623.9	669.9	799.9	988.0	1081.9
147.5°	651.5	691.4	801.3	948.7	1021.3
150°	669.9	705.1	802.9	925.3	986.9
152.5°	688.3	717.3	803.7	907.4	956.5
155°	711.9	735.4	804.9	884.7	917.9
157.5°	734.3	751.1	806.1	867.8	891.1
160°	747.9	761.6	806.9	857.3	875.9
162.5°	759.9	770.5	806.9	848.4	862.3
165°	776.9	783.8	806.9	837.1	846.9
167.5°	788.9	793.2	807.1	828.6	833.7
170°	796.9	798.9	807.9	823.0	824.9
172.5°	802.5	803.7	809.5	819.7	819.3
175°	809.9	809.9	809.9	815.9	813.9
177.5°	812.9	812.1	811.3	815.2	812.1
180°	812.9	812.9	812.9	812.9	812.9



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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