

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: P853623

Luminaire Tested: SQ2-BBN-100U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853623
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G3-2308-130-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-BBN-100U-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

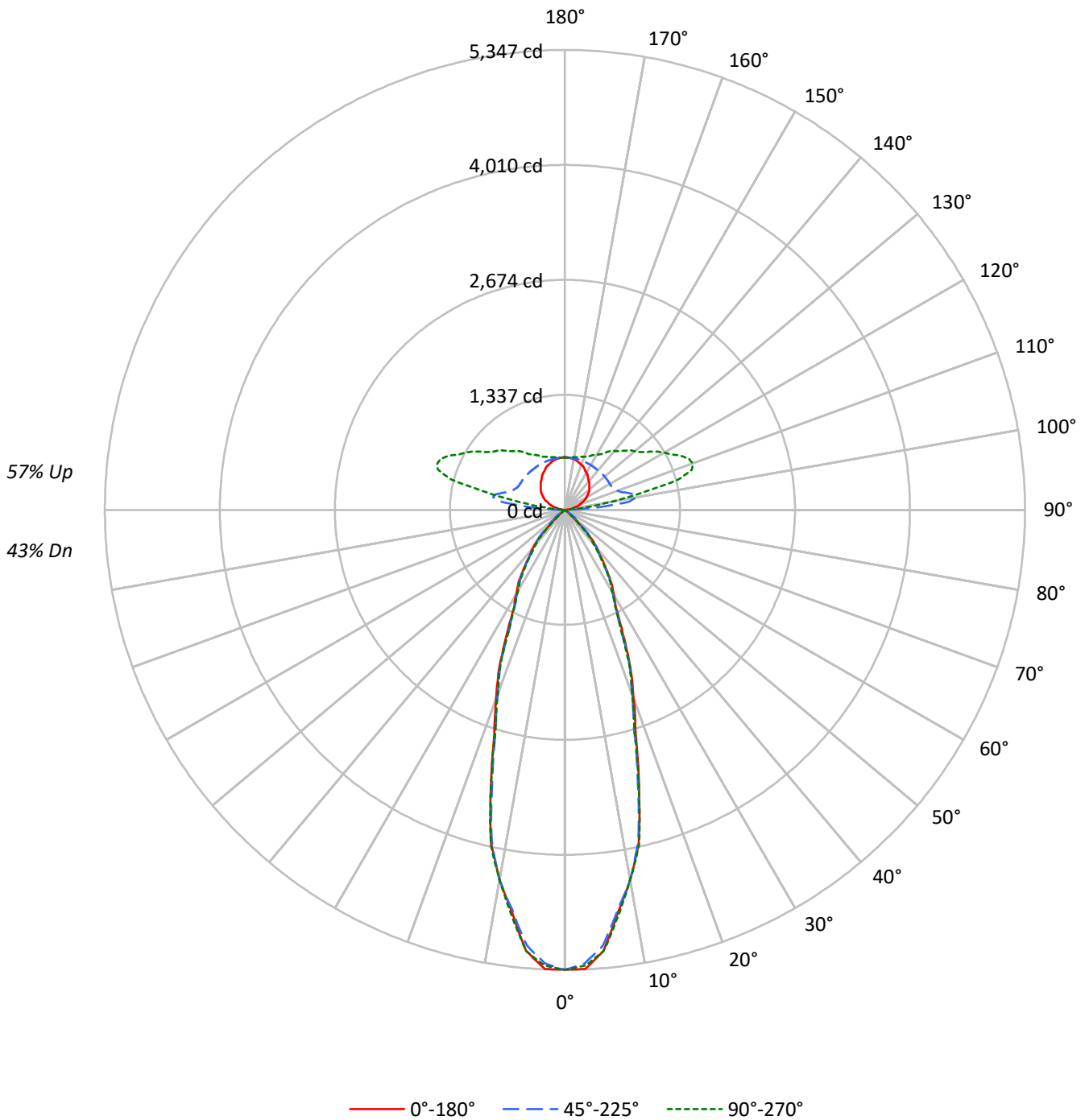
Lumens per Lamp: N/A
Luminaire Lumens: 6685.8 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.2
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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43
1	98	95	92	89	90	87	85	82	73	71	70	60	59	58	47	47	46	41
2	92	86	81	77	84	79	75	72	67	64	62	55	54	52	45	44	43	38
3	85	78	72	67	78	72	67	63	61	58	55	51	49	47	42	41	40	36
4	80	71	65	60	73	66	61	56	57	53	50	48	45	43	40	38	37	33
5	75	65	58	54	69	61	55	51	53	48	45	45	42	40	38	36	34	31
6	70	60	53	48	65	56	50	46	49	45	41	42	39	37	36	34	32	30
7	66	55	49	44	61	52	46	42	46	41	38	39	36	34	34	32	30	28
8	62	51	45	41	57	48	43	39	43	38	35	37	34	32	32	30	29	26
9	58	48	42	37	54	45	40	36	40	36	33	35	32	30	31	28	27	25
10	55	45	39	35	51	42	37	33	38	34	31	33	30	28	29	27	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	86327	86327	86327
5°	83440	82409	83487
10°	71608	71656	71608
15°	55582	54696	55452
20°	40113	39287	39252
25°	28443	27310	27362
30°	21160	20622	20424
35°	16466	16048	15705
40°	12185	11881	11129
45°	6227	7633	5017
50°	1356	4212	992
55°	380	1709	298
60°	61	342	32
65°	0	38	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: 7633 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.3	6.9
10°-20°	911.5	13.6
20°-30°	735.3	11.0
30°-40°	510.8	7.6
40°-50°	236.0	3.5
50°-60°	33.1	0.5
60°-70°	1.1	0.0
70°-80°	0.0	0.0
80°-90°	1.4	0.0
90°-100°	254.6	3.8
100°-110°	770.1	11.5
110°-120°	751.8	11.2
120°-130°	614.3	9.2
130°-140°	501.5	7.5
140°-150°	390.4	5.8
150°-160°	281.4	4.2
160°-170°	172.3	2.6
170°-180°	58.2	0.9
0°-30°	2109.1	31.5
0°-40°	2619.9	39.2
0°-60°	2889.0	43.2
0°-90°	2891.5	43.2
90°-120°	1776.6	26.6
90°-150°	3282.7	49.1
90°-180°	3795.0	56.8
0°-180°	6685.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5347	5347	5347	5347	5347	
5°	5148	5121	5085	5147	5151	463
15°	3325	3368	3272	3318	3317	915
25°	1597	1561	1533	1556	1536	748
35°	835	835	814	800	797	523
45°	273	325	334	304	220	220
55°	14	21	61	17	11	17
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	2	12	7	6	1
95°	32	100	480	178	112	37
105°	134	188	756	1436	1365	141
115°	238	284	612	1266	1486	236
125°	333	370	603	1000	1176	296
135°	399	441	599	862	970	309
145°	466	501	599	742	811	292
155°	531	549	603	665	690	244
165°	581	588	606	629	636	164
175°	608	608	609	614	612	58
180°	610	610	610	610	610	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5346.7	5346.7	5346.7	5346.7	5346.7
2.5°	5343.6	5324.0	5277.3	5319.4	5306.6
5°	5148.2	5120.8	5084.6	5147.3	5151.1
7.5°	4716.9	4725.7	4692.0	4761.2	4753.9
10°	4367.7	4374.3	4370.6	4393.1	4367.7
12.5°	3963.0	3989.2	3939.7	3974.6	3985.4
15°	3325.2	3367.6	3272.2	3318.4	3317.4
17.5°	2727.0	2722.7	2673.4	2682.0	2679.2
20°	2334.6	2328.0	2286.5	2279.8	2284.5
22.5°	1998.6	1987.4	1972.7	1956.1	1962.3
25°	1596.6	1560.8	1533.0	1555.7	1535.9
27.5°	1281.5	1280.9	1258.0	1260.6	1264.4
30°	1135.0	1128.4	1106.1	1106.8	1095.5
32.5°	1004.8	1009.5	982.0	976.6	965.3
35°	835.4	835.4	814.2	799.7	796.8
37.5°	678.3	676.6	661.6	641.0	633.6
40°	578.1	573.4	563.7	538.4	528.0
42.5°	464.0	476.7	467.3	441.9	426.3
45°	272.7	325.4	334.3	303.5	219.7
47.5°	117.2	175.2	223.2	145.5	75.7
50°	54.0	99.2	167.7	71.5	39.5
52.5°	31.6	54.2	124.5	41.8	24.9
55°	13.5	21.0	60.7	17.2	10.6
57.5°	5.0	9.2	22.9	7.4	4.0
60°	1.9	3.8	10.6	2.8	1.0
62.5°	0.4	1.5	5.2	1.3	0.2
65°	0.0	0.0	1.0	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	0.4	2.3	1.3	1.1
90°	0.0	1.9	11.5	6.7	5.7
92.5°	10.7	43.3	155.4	51.6	37.1
95°	31.6	99.9	480.5	177.5	112.0
97.5°	61.1	127.1	757.3	501.1	305.1
100°	79.4	144.0	846.1	818.0	549.4
102.5°	100.1	162.4	827.8	1147.3	914.7
105°	134.0	188.3	756.2	1436.0	1364.9
107.5°	166.2	218.0	687.2	1464.6	1547.0
110°	187.6	237.2	652.8	1428.6	1578.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	208.3	256.4	632.1	1368.3	1557.7
115°	238.3	284.2	611.6	1265.6	1486.5
117.5°	268.2	311.6	604.4	1169.4	1395.5
120°	288.1	329.3	602.1	1113.3	1330.5
122.5°	306.5	345.4	602.1	1063.9	1264.6
125°	333.1	369.6	603.0	999.5	1176.3
127.5°	354.7	392.5	602.1	950.8	1101.7
130°	368.5	407.8	602.1	922.9	1059.6
132.5°	380.8	420.8	601.3	897.4	1023.6
135°	399.1	441.3	599.2	862.0	969.6
137.5°	419.6	459.7	599.2	824.1	923.8
140°	432.6	471.9	599.2	799.5	894.0
142.5°	445.7	483.5	598.4	777.0	859.5
145°	466.1	500.8	599.2	741.5	810.7
147.5°	486.6	516.0	600.3	712.2	765.3
150°	499.6	526.8	601.1	695.9	740.8
152.5°	511.9	536.0	601.9	681.9	718.6
155°	531.2	549.0	603.0	664.8	690.1
157.5°	548.1	562.5	604.2	652.2	669.8
160°	558.0	570.2	604.9	644.5	657.6
162.5°	568.0	577.1	605.7	637.5	648.4
165°	581.0	587.5	605.9	629.0	636.5
167.5°	592.1	595.5	607.0	622.4	625.6
170°	598.2	600.1	607.8	619.3	620.2
172.5°	602.1	603.2	607.8	616.2	616.4
175°	607.8	607.8	608.8	613.5	611.6
177.5°	610.5	609.7	608.9	611.2	609.7
180°	609.7	609.7	609.7	609.7	609.7



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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