

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: P853625

Luminaire Tested: SQ2-BBN-100U-075D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853625
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-940-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

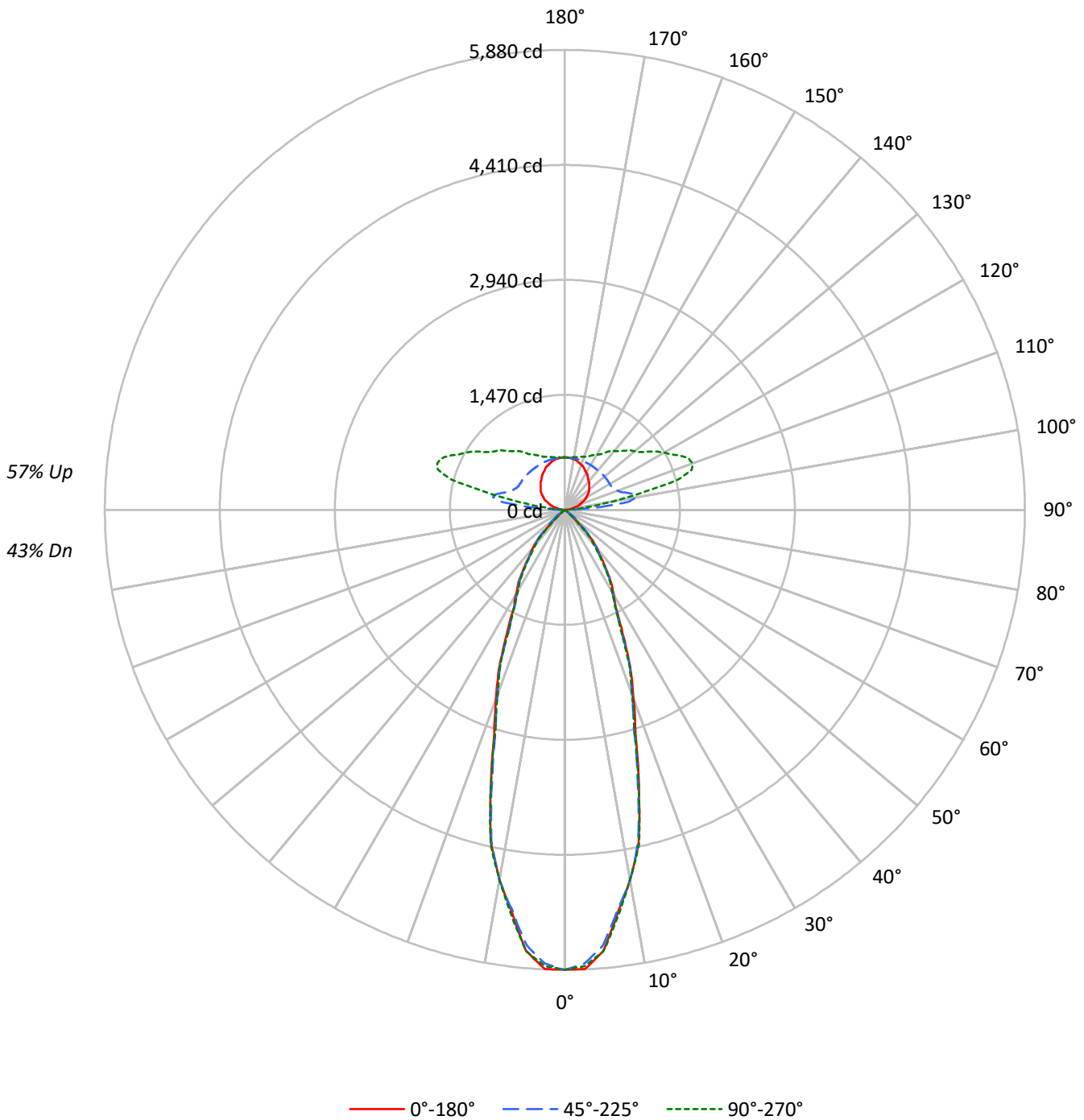
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7353.0 lumens
Efficiency: N/A
Efficacy: 122.1 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°	94939	94939	94939
5°	91765	90631	91816
10°	78753	78805	78753
15°	61127	60154	60986
20°	44117	43206	43170
25°	31281	30034	30091
30°	23273	22680	22464
35°	18108	17649	17274
40°	13401	13066	12239
45°	6848	8396	5517
50°	1490	4632	1090
55°	417	1880	329
60°	68	378	36
65°	0	42	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: 8396 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	508.5	6.9
10°-20°	1002.4	13.6
20°-30°	808.7	11.0
30°-40°	561.8	7.6
40°-50°	259.5	3.5
50°-60°	36.4	0.5
60°-70°	1.2	0.0
70°-80°	0.0	0.0
80°-90°	1.6	0.0
90°-100°	280.0	3.8
100°-110°	847.0	11.5
110°-120°	826.8	11.2
120°-130°	675.6	9.2
130°-140°	551.5	7.5
140°-150°	429.3	5.8
150°-160°	309.5	4.2
160°-170°	189.5	2.6
170°-180°	64.0	0.9
0°-30°	2319.5	31.5
0°-40°	2881.3	39.2
0°-60°	3177.3	43.2
0°-90°	3180.1	43.2
90°-120°	1953.8	26.6
90°-150°	3610.3	49.1
90°-180°	4173.0	56.8
0°-180°	7353.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5880	5880	5880	5880	5880	
5°	5662	5632	5592	5661	5665	509
15°	3657	3704	3599	3650	3648	1007
25°	1756	1716	1686	1711	1689	822
35°	919	919	895	880	876	575
45°	300	358	368	334	242	242
55°	15	23	67	19	12	19
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	2	13	7	6	2
95°	35	110	528	195	123	41
105°	147	207	832	1579	1501	155
115°	262	312	673	1392	1635	259
125°	366	406	663	1099	1294	325
135°	439	485	659	948	1066	340
145°	513	551	659	815	892	321
155°	584	604	663	731	759	269
165°	639	646	666	692	700	180
175°	668	668	670	675	673	63
180°	670	670	670	670	670	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5880.1	5880.1	5880.1	5880.1	5880.1
2.5°	5876.8	5855.2	5803.8	5850.2	5836.1
5°	5661.9	5631.8	5591.9	5660.9	5665.0
7.5°	5187.5	5197.3	5160.2	5236.3	5228.2
10°	4803.5	4810.8	4806.7	4831.5	4803.5
12.5°	4358.5	4387.3	4332.8	4371.2	4383.0
15°	3656.9	3703.6	3598.7	3649.5	3648.5
17.5°	2999.1	2994.3	2940.2	2949.6	2946.5
20°	2567.6	2560.3	2514.6	2507.3	2512.5
22.5°	2198.0	2185.8	2169.6	2151.3	2158.1
25°	1755.9	1716.5	1685.9	1710.9	1689.1
27.5°	1409.4	1408.7	1383.5	1386.4	1390.5
30°	1248.3	1241.0	1216.5	1217.3	1204.9
32.5°	1105.0	1110.2	1080.0	1074.0	1061.6
35°	918.7	918.7	895.4	879.5	876.4
37.5°	746.0	744.1	727.6	704.9	696.8
40°	635.8	630.6	619.9	592.1	580.7
42.5°	510.3	524.2	513.9	486.0	468.8
45°	299.9	357.9	367.7	333.8	241.6
47.5°	128.9	192.7	245.4	160.0	83.3
50°	59.3	109.1	184.4	78.7	43.4
52.5°	34.8	59.6	136.9	46.0	27.3
55°	14.8	23.1	66.8	18.9	11.7
57.5°	5.5	10.1	25.2	8.2	4.5
60°	2.1	4.2	11.7	3.1	1.1
62.5°	0.4	1.7	5.7	1.5	0.2
65°	0.0	0.0	1.1	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	2.5	1.5	1.3
90°	0.0	2.1	12.6	7.3	6.3
92.5°	11.8	47.6	171.0	56.7	40.8
95°	34.7	109.9	528.4	195.2	123.2
97.5°	67.2	139.8	832.9	551.1	335.6
100°	87.4	158.4	930.6	899.6	604.2
102.5°	110.1	178.7	910.3	1261.8	1005.9
105°	147.4	207.1	831.6	1579.3	1501.1
107.5°	182.7	239.8	755.8	1610.7	1701.3
110°	206.3	260.9	717.9	1571.2	1735.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	229.1	282.0	695.2	1504.8	1713.1
115°	262.1	312.5	672.7	1391.9	1634.8
117.5°	295.0	342.7	664.7	1286.1	1534.8
120°	316.9	362.1	662.1	1224.4	1463.2
122.5°	337.1	379.9	662.1	1170.1	1390.8
125°	366.3	406.5	663.2	1099.2	1293.7
127.5°	390.1	431.7	662.1	1045.7	1211.6
130°	405.3	448.5	662.1	1015.0	1165.3
132.5°	418.8	462.8	661.3	987.0	1125.7
135°	439.0	485.3	659.0	948.0	1066.3
137.5°	461.5	505.5	659.0	906.3	1016.0
140°	475.8	519.0	659.0	879.2	983.2
142.5°	490.1	531.7	658.1	854.5	945.3
145°	512.6	550.7	659.0	815.4	891.6
147.5°	535.2	567.5	660.2	783.2	841.7
150°	549.5	579.3	661.1	765.4	814.8
152.5°	563.0	589.5	661.9	750.0	790.3
155°	584.2	603.8	663.2	731.2	759.0
157.5°	602.8	618.6	664.4	717.3	736.7
160°	613.7	627.1	665.3	708.8	723.2
162.5°	624.7	634.7	666.1	701.1	713.1
165°	639.0	646.2	666.3	691.8	700.0
167.5°	651.2	654.9	667.6	684.5	688.0
170°	657.9	660.0	668.4	681.1	682.1
172.5°	662.1	663.4	668.4	677.7	677.9
175°	668.4	668.4	669.5	674.7	672.7
177.5°	671.4	670.6	669.7	672.2	670.5
180°	670.5	670.5	670.5	670.5	670.5



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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