

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: P853635

Luminaire Tested: SQ2-BBN-125U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853635
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-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

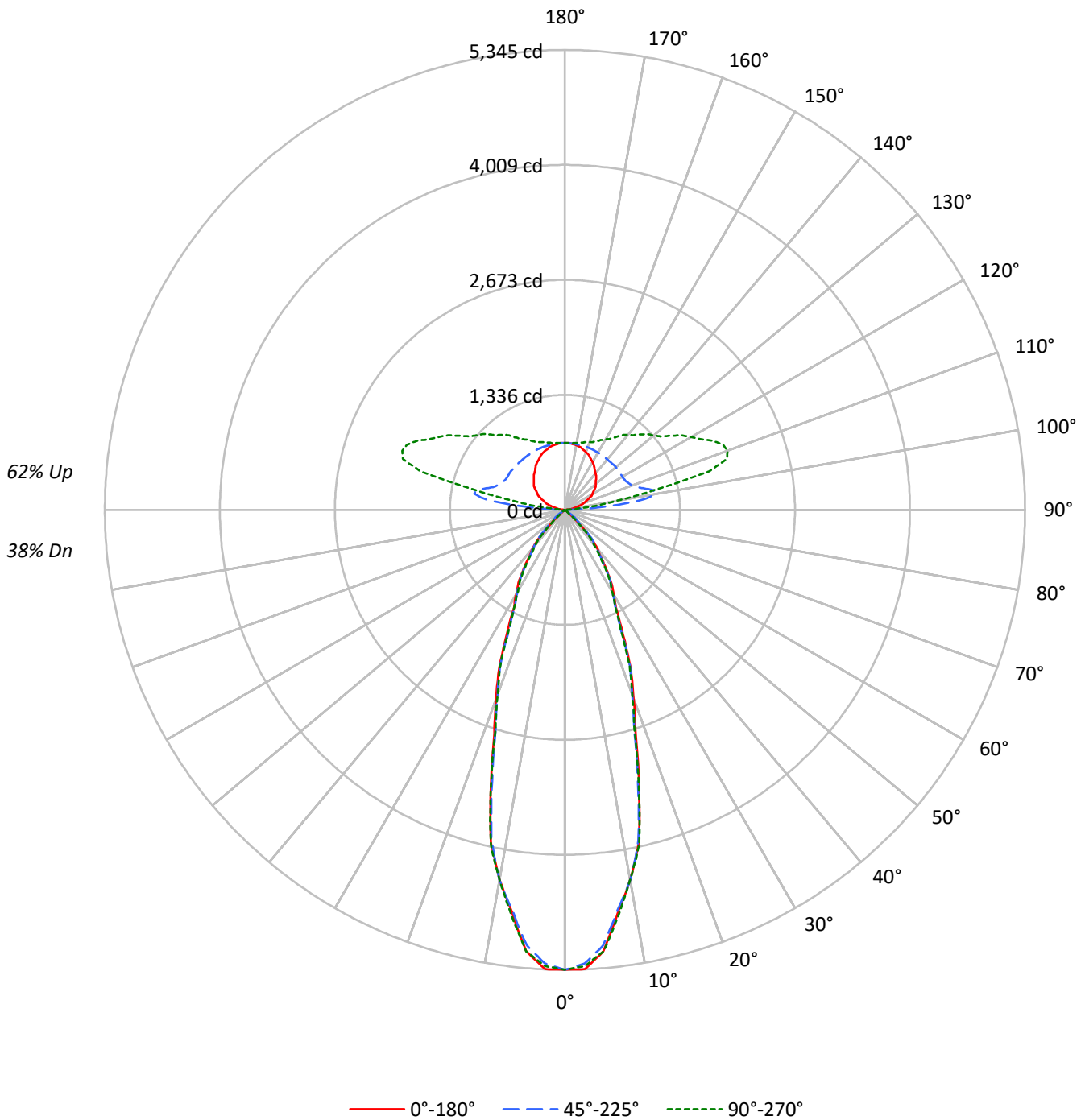
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7692.2 lumens
Efficiency: N/A
Efficacy: 107.6 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): 71.5
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	104	104	104	104	95	95	95	95	76	76	76	60	60	60	45	45	45	38
1	97	93	90	87	88	85	82	80	70	68	66	55	54	53	42	42	41	35
2	90	84	79	75	82	77	73	69	64	61	58	51	50	48	40	39	38	33
3	84	76	70	65	76	70	65	61	58	55	52	48	45	43	38	36	35	31
4	78	69	63	58	71	64	58	54	54	50	47	44	42	40	35	34	33	29
5	73	63	56	51	66	58	53	48	49	45	42	41	38	36	33	32	31	27
6	68	58	51	46	62	54	48	44	46	42	38	38	36	33	32	30	29	26
7	64	53	47	42	58	50	44	40	43	38	35	36	33	31	30	28	27	24
8	60	49	43	38	55	46	40	36	40	36	33	34	31	29	28	27	25	23
9	56	46	39	35	52	43	37	34	37	33	30	32	29	27	27	25	24	22
10	53	43	37	32	49	40	35	31	35	31	28	30	27	25	26	24	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	86306	86306	86306
5°	83418	82389	83465
10°	71592	71639	71592
15°	55569	54683	55440
20°	40105	39276	39244
25°	28436	27303	27355
30°	21157	20618	20420
35°	16462	16044	15703
40°	12182	11877	11126
45°	6224	7633	5014
50°	1354	4210	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°	462.2	6.0
10°-20°	911.3	11.8
20°-30°	735.1	9.6
30°-40°	510.7	6.6
40°-50°	235.9	3.1
50°-60°	33.1	0.4
60°-70°	1.1	0.0
70°-80°	0.0	0.0
80°-90°	1.1	0.0
90°-100°	297.7	3.9
100°-110°	969.3	12.6
110°-120°	958.8	12.5
120°-130°	783.5	10.2
130°-140°	640.4	8.3
140°-150°	498.8	6.5
150°-160°	359.5	4.7
160°-170°	219.7	2.9
170°-180°	74.1	1.0
0°-30°	2108.6	27.4
0°-40°	2619.3	34.1
0°-60°	2888.3	37.5
0°-90°	2890.6	37.6
90°-120°	2225.8	28.9
90°-150°	4148.5	53.9
90°-180°	4802.0	62.4
0°-180°	7692.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5345	5345	5345	5345	5345	
5°	5147	5120	5083	5146	5150	463
15°	3324	3367	3271	3318	3317	915
25°	1596	1560	1533	1555	1536	747
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	3	7	6	6	2
95°	40	123	546	194	120	47
105°	165	238	960	1834	1737	176
115°	304	363	782	1612	1896	301
125°	423	472	772	1273	1500	377
135°	511	565	768	1098	1239	395
145°	597	641	766	946	1036	374
155°	682	704	771	847	879	314
165°	744	750	772	802	811	209
175°	775	775	775	781	779	74
180°	778	778	778	778	778	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5345.4	5345.4	5345.4	5345.4	5345.4
2.5°	5342.3	5322.7	5276.0	5318.1	5305.3
5°	5146.9	5119.6	5083.4	5146.1	5149.8
7.5°	4715.8	4724.6	4690.9	4760.1	4752.8
10°	4366.7	4373.3	4369.6	4392.1	4366.7
12.5°	3962.1	3988.3	3938.8	3973.7	3984.4
15°	3324.4	3366.8	3271.4	3317.6	3316.7
17.5°	2726.4	2722.0	2672.8	2681.4	2678.6
20°	2334.1	2327.5	2285.9	2279.3	2284.0
22.5°	1998.1	1987.0	1972.3	1955.7	1961.9
25°	1596.2	1560.4	1532.6	1555.3	1535.5
27.5°	1281.2	1280.6	1257.7	1260.3	1264.1
30°	1134.8	1128.2	1105.9	1106.6	1095.3
32.5°	1004.5	1009.2	981.8	976.3	965.0
35°	835.2	835.2	814.0	799.5	796.7
37.5°	678.2	676.5	661.4	640.8	633.5
40°	578.0	573.3	563.5	538.3	527.9
42.5°	463.9	476.6	467.2	441.8	426.2
45°	272.6	325.4	334.3	303.5	219.6
47.5°	117.1	175.2	223.1	145.4	75.7
50°	53.9	99.2	167.6	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	0.6	1.3	1.1	1.1
90°	0.0	2.8	6.7	5.7	5.7
92.5°	13.8	49.5	158.3	52.2	40.2
95°	40.2	122.6	545.7	194.5	119.7
97.5°	75.6	159.5	926.1	564.0	344.2
100°	98.6	181.0	1069.3	953.5	618.4
102.5°	124.6	204.0	1051.7	1410.7	1072.6
105°	164.7	237.7	960.2	1833.9	1736.6
107.5°	207.9	276.6	873.3	1870.6	1973.8
110°	239.3	302.0	831.9	1825.0	2011.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	265.4	327.3	805.9	1742.8	1983.0
115°	304.4	363.4	782.1	1611.9	1896.4
117.5°	344.6	397.8	772.9	1492.0	1775.2
120°	367.6	420.0	770.6	1418.3	1692.5
122.5°	389.8	441.5	771.4	1354.3	1609.8
125°	423.1	471.8	771.6	1272.6	1500.1
127.5°	451.7	501.5	771.4	1211.5	1401.1
130°	470.0	520.6	770.6	1176.5	1346.0
132.5°	486.1	538.9	769.9	1144.1	1303.1
135°	511.2	564.6	767.8	1098.3	1238.8
137.5°	535.7	589.4	765.7	1051.8	1176.5
140°	553.3	604.8	764.9	1020.3	1138.2
142.5°	570.2	619.4	764.9	990.1	1095.3
145°	597.4	641.4	765.8	945.9	1035.8
147.5°	623.8	662.0	767.2	908.3	977.8
150°	641.4	675.1	768.7	885.9	944.9
152.5°	659.0	686.7	769.5	868.8	915.8
155°	681.6	704.1	770.6	847.0	878.8
157.5°	703.0	719.1	771.8	830.9	853.1
160°	716.1	729.2	772.5	820.8	838.6
162.5°	727.6	737.7	772.5	812.3	825.6
165°	743.8	750.4	772.5	801.5	810.8
167.5°	755.3	759.4	772.7	793.3	798.2
170°	763.0	764.8	773.5	787.9	789.8
172.5°	768.3	769.5	775.0	784.8	784.4
175°	775.4	775.4	775.4	781.1	779.2
177.5°	778.3	777.5	776.8	780.5	777.5
180°	778.3	778.3	778.3	778.3	778.3



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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