

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: P853653

Luminaire Tested: SQ2-BBN-150U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853653  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G3-2308-130-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-BBN-150U-125D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

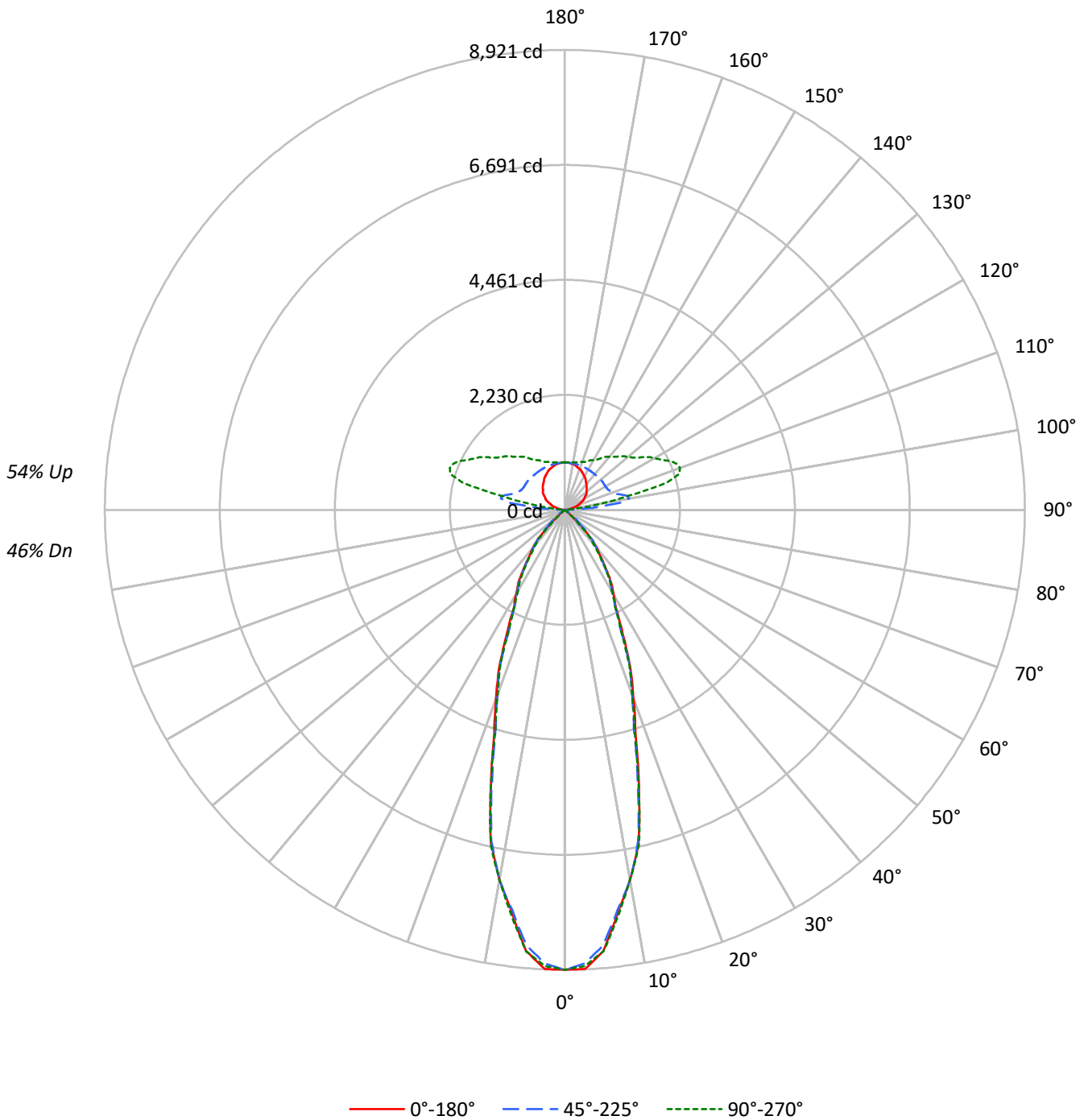
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10492.9 lumens  
Efficiency: N/A  
Efficacy: 99.1 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): 105.9  
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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46				
1	99	96	93	90	91	88	86	83	74	73	71	62	61	60	50	49	49	43				
2	92	87	82	78	85	80	76	73	68	66	63	57	55	54	47	46	45	40				
3	86	79	73	68	80	73	68	64	63	59	57	53	51	49	44	43	42	38				
4	81	72	66	61	75	67	62	58	58	54	51	50	47	45	42	40	39	36				
5	75	66	60	55	70	62	56	52	54	50	47	47	44	41	40	38	36	33				
6	71	61	54	50	66	57	51	47	50	46	43	44	41	38	38	36	34	31				
7	67	56	50	45	62	53	47	43	47	43	39	41	38	36	36	34	32	30				
8	63	52	46	42	58	50	44	40	44	40	37	39	36	33	34	32	30	28				
9	59	49	43	38	55	46	41	37	41	37	34	37	34	31	32	30	28	27				
10	56	46	40	36	52	43	38	34	39	35	32	35	32	29	31	29	27	25				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	144040	144040	144040
5°	139223	137503	139302
10°	119483	119562	119483
15°	92740	91263	92526
20°	66933	65551	65496
25°	47459	45569	45654
30°	35309	34411	34081
35°	27474	26777	26207
40°	20331	19823	18569
45°	10389	12739	8371
50°	2261	7026	1655
55°	633	2852	498
60°	103	572	52
65°	0	61	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: 12739 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	771.4	7.4
10°-20°	1520.9	14.5
20°-30°	1226.9	11.7
30°-40°	852.3	8.1
40°-50°	393.7	3.8
50°-60°	55.3	0.5
60°-70°	1.9	0.0
70°-80°	0.0	0.0
80°-90°	1.3	0.0
90°-100°	350.0	3.3
100°-110°	1146.0	10.9
110°-120°	1133.0	10.8
120°-130°	926.2	8.8
130°-140°	755.8	7.2
140°-150°	588.2	5.6
150°-160°	423.5	4.0
160°-170°	259.1	2.5
170°-180°	87.5	0.8
0°-30°	3519.2	33.5
0°-40°	4371.5	41.7
0°-60°	4820.5	45.9
0°-90°	4823.7	46.0
90°-120°	2629.1	25.1
90°-150°	4899.3	46.7
90°-180°	5670.0	54.0
0°-180°	10492.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8921	8921	8921	8921	8921	
5°	8590	8544	8484	8589	8595	772
15°	5548	5619	5460	5537	5535	1527
25°	2664	2604	2558	2596	2563	1247
35°	1394	1394	1358	1334	1330	872
45°	455	543	558	506	367	367
55°	22	35	101	29	18	28
65°	0	0	2	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	1	3	8	7	8	2
95°	49	142	636	227	147	56
105°	199	284	1138	2161	2053	210
115°	359	429	924	1910	2242	354
125°	499	557	911	1506	1769	444
135°	601	665	904	1299	1464	465
145°	703	755	902	1117	1224	441
155°	802	828	907	1000	1038	369
165°	875	883	911	946	956	247
175°	915	915	916	922	920	87
180°	919	919	919	919	919	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8921.2	8921.2	8921.2	8921.2	8921.2
2.5°	8916.1	8883.4	8805.5	8875.7	8854.3
5°	8590.0	8544.4	8483.9	8588.6	8594.9
7.5°	7870.4	7885.2	7828.9	7944.4	7932.2
10°	7287.8	7298.8	7292.6	7330.2	7287.8
12.5°	6612.5	6656.2	6573.6	6631.9	6649.8
15°	5548.2	5619.0	5459.8	5536.9	5535.4
17.5°	4550.2	4542.9	4460.8	4475.1	4470.4
20°	3895.5	3884.5	3815.1	3804.0	3811.9
22.5°	3334.7	3316.2	3291.6	3263.9	3274.3
25°	2664.0	2604.3	2557.9	2595.7	2562.7
27.5°	2138.3	2137.3	2099.0	2103.4	2109.6
30°	1893.9	1882.9	1845.7	1846.8	1828.0
32.5°	1676.5	1684.4	1638.6	1629.5	1610.6
35°	1393.9	1393.9	1358.5	1334.3	1329.6
37.5°	1131.8	1129.0	1103.9	1069.5	1057.2
40°	964.6	956.8	940.5	898.3	881.0
42.5°	774.3	795.3	779.7	737.3	711.3
45°	455.0	543.0	557.9	506.5	366.6
47.5°	195.5	292.3	372.3	242.7	126.4
50°	90.0	165.5	279.7	119.4	65.9
52.5°	52.7	90.5	207.7	69.8	41.5
55°	22.5	35.1	101.3	28.7	17.7
57.5°	8.4	15.3	38.3	12.4	6.8
60°	3.2	6.4	17.7	4.8	1.6
62.5°	0.6	2.5	8.7	2.2	0.3
65°	0.0	0.0	1.6	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°	0.2	0.6	1.5	1.3	1.5
90°	0.9	2.8	7.6	6.6	7.6
92.5°	16.0	58.5	179.7	58.5	46.8
95°	49.1	142.3	636.3	226.7	147.3
97.5°	89.1	187.7	1091.7	660.4	409.3
100°	117.1	211.2	1263.1	1128.0	747.7
102.5°	148.8	240.7	1244.3	1662.1	1288.4
105°	199.2	284.1	1137.6	2161.3	2053.3
107.5°	248.9	326.8	1033.5	2208.0	2326.7
110°	281.3	357.0	983.7	2153.7	2374.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	312.3	385.8	953.5	2059.2	2341.8
115°	358.7	428.9	924.2	1909.8	2242.1
117.5°	403.9	469.4	913.1	1763.0	2100.5
120°	433.3	495.2	910.1	1677.5	2006.1
122.5°	459.8	520.1	910.1	1603.7	1908.7
125°	499.4	556.6	911.0	1506.1	1769.2
127.5°	533.0	591.4	909.9	1434.1	1663.0
130°	554.2	613.2	909.1	1390.6	1597.3
132.5°	573.0	633.6	906.9	1353.1	1540.7
135°	601.4	665.1	903.5	1299.0	1464.2
137.5°	631.2	694.3	901.4	1242.6	1391.9
140°	652.3	713.3	900.6	1206.9	1348.1
142.5°	673.5	730.7	900.6	1168.8	1296.8
145°	703.3	755.0	901.6	1117.4	1224.4
147.5°	734.7	777.7	902.9	1072.6	1153.4
150°	754.3	792.1	904.4	1046.6	1114.9
152.5°	773.9	807.3	905.2	1025.2	1081.7
155°	801.5	828.3	907.2	999.7	1038.5
157.5°	826.2	845.6	909.3	979.6	1007.7
160°	842.1	857.8	910.1	968.2	990.3
162.5°	855.7	868.4	910.1	959.0	975.2
165°	875.1	883.4	911.0	946.2	956.3
167.5°	891.6	895.6	912.1	936.2	941.8
170°	900.6	902.5	912.9	930.9	932.7
172.5°	907.4	908.5	915.2	927.1	927.4
175°	914.8	914.8	915.7	922.3	920.5
177.5°	918.6	917.8	917.1	921.5	918.6
180°	918.6	918.6	918.6	918.6	918.6

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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