

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: P853513

Luminaire Tested: SQ2-BBM-075U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853513  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G3-2104-222-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-BBM-075U-050D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

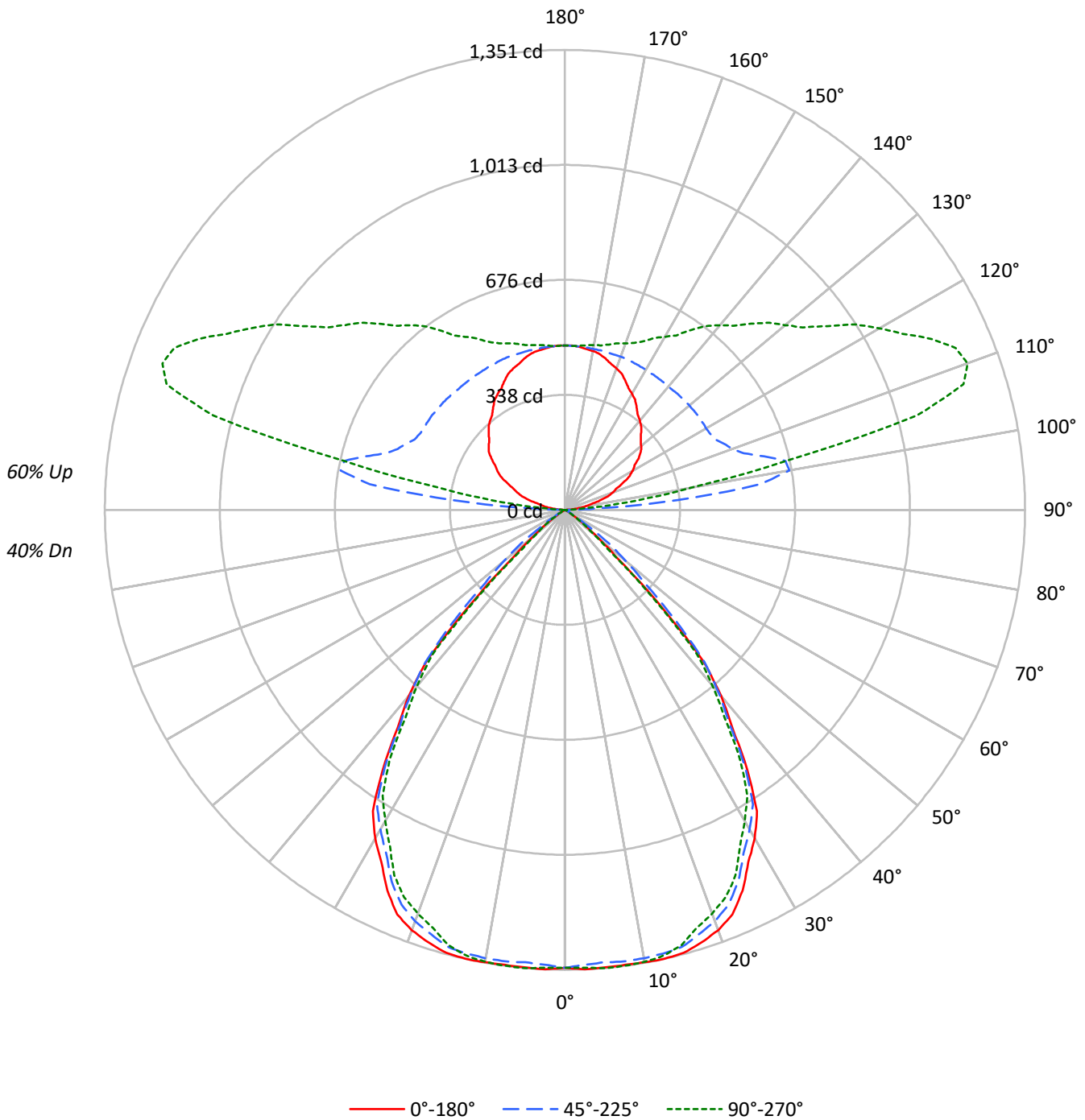
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4998.9 lumens  
Efficiency: N/A  
Efficacy: 120.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 41.4  
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				
1	97	94	90	87	89	86	83	80	71	69	67	57	56	55	44	43	43	37				
2	90	84	78	74	82	77	72	69	64	61	58	52	50	48	41	40	39	34				
3	83	75	69	64	76	69	64	59	58	54	51	47	45	43	38	36	35	31				
4	77	68	61	56	70	62	57	52	53	48	45	43	41	38	35	33	32	28				
5	71	61	54	49	65	57	50	46	48	43	40	40	37	34	32	30	29	25				
6	66	55	48	43	61	51	45	41	44	39	36	37	33	31	30	28	26	23				
7	61	51	43	38	56	47	41	36	40	36	32	34	30	28	28	26	24	21				
8	57	46	39	35	53	43	37	33	37	32	29	31	28	25	26	24	22	20				
9	54	42	36	31	49	40	34	30	34	30	26	29	26	23	24	22	20	18				
10	50	39	33	28	46	37	31	27	32	27	24	27	24	21	23	20	19	17				

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

	0°	45°	90°
0°	21721	21721	21721
5°	21869	21624	21901
10°	22122	21923	22105
15°	22521	22218	22118
20°	22581	22100	21687
25°	21987	21453	21114
30°	20773	20213	19673
35°	18413	18197	17684
40°	15030	14819	14229
45°	8862	10460	8245
50°	2989	5827	2663
55°	1013	2083	1070
60°	97	614	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: 10460 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.5	2.6
10°-20°	376.3	7.5
20°-30°	553.7	11.1
30°-40°	565.7	11.3
40°-50°	325.2	6.5
50°-60°	56.9	1.1
60°-70°	2.1	0.0
70°-80°	0.0	0.0
80°-90°	0.6	0.0
90°-100°	182.6	3.7
100°-110°	605.5	12.1
110°-120°	600.9	12.0
120°-130°	489.5	9.8
130°-140°	397.8	8.0
140°-150°	308.9	6.2
150°-160°	222.6	4.5
160°-170°	136.3	2.7
170°-180°	46.0	0.9
0°-30°	1058.5	21.2
0°-40°	1624.2	32.5
0°-60°	2006.3	40.1
0°-90°	2009.0	40.2
90°-120°	1389.0	27.8
90°-150°	2585.2	51.7
90°-180°	2990.0	59.8
0°-180°	4998.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1345	1345	1345	1345	1345	
5°	1349	1346	1334	1353	1351	129
15°	1347	1359	1329	1330	1323	380
25°	1234	1245	1204	1191	1185	564
35°	934	939	923	908	897	576
45°	388	452	458	434	361	303
55°	36	43	74	42	38	41
65°	0	0	1	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	1	3	4	4	1
95°	26	77	331	118	79	30
105°	106	151	606	1143	1069	112
115°	189	226	488	1016	1188	187
125°	264	293	479	798	941	235
135°	316	348	475	685	773	245
145°	367	394	474	589	645	230
155°	419	434	477	526	546	193
165°	460	465	479	498	503	130
175°	481	481	482	485	484	46
180°	483	483	483	483	483	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1345.3	1345.3	1345.3	1345.3	1345.3
2.5°	1350.9	1347.7	1337.2	1349.2	1346.1
5°	1349.3	1346.3	1334.2	1353.2	1351.3
7.5°	1348.5	1346.1	1338.0	1354.6	1350.7
10°	1349.3	1349.3	1337.2	1352.2	1348.3
12.5°	1350.9	1354.8	1334.8	1346.5	1341.0
15°	1347.3	1359.0	1329.2	1330.1	1323.2
17.5°	1332.6	1348.5	1307.8	1298.2	1287.8
20°	1314.2	1330.9	1286.2	1271.0	1262.2
22.5°	1286.2	1302.1	1255.0	1242.2	1232.6
25°	1234.2	1245.0	1204.2	1191.1	1185.2
27.5°	1166.2	1171.7	1136.2	1122.6	1112.8
30°	1114.2	1114.2	1084.2	1068.9	1055.2
32.5°	1049.4	1046.3	1026.6	1008.9	996.0
35°	934.2	939.1	923.2	907.9	897.2
37.5°	806.8	811.4	795.1	777.8	770.3
40°	713.1	717.0	703.1	684.9	675.1
42.5°	597.9	619.0	606.3	586.4	573.5
45°	388.1	451.6	458.1	434.4	361.1
47.5°	202.2	268.7	317.7	242.6	170.0
50°	119.0	162.1	232.0	132.4	106.0
52.5°	76.6	95.4	163.2	84.7	71.6
55°	36.0	42.9	74.0	41.9	38.0
57.5°	13.4	20.1	33.4	20.3	14.6
60°	3.0	8.9	19.0	5.9	1.0
62.5°	0.6	2.6	11.0	1.2	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	0.2	0.6	0.8	0.8
90°	0.0	1.0	3.0	4.0	4.0
92.5°	8.0	30.9	91.0	29.5	24.8
95°	26.0	76.8	331.0	118.1	79.0
97.5°	47.8	101.0	577.7	336.9	213.0
100°	63.0	113.8	668.9	574.5	381.0
102.5°	79.8	129.1	663.3	878.0	663.3
105°	106.0	151.0	605.9	1143.2	1068.9
107.5°	132.8	172.9	550.9	1170.1	1226.6
110°	148.0	188.1	522.9	1143.5	1257.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	164.0	203.3	506.1	1096.2	1241.8
115°	189.0	226.1	487.9	1015.8	1187.9
117.5°	213.8	246.8	481.3	939.0	1119.5
120°	229.0	261.2	478.9	890.9	1065.9
122.5°	242.6	274.1	478.9	851.4	1013.1
125°	264.0	293.3	478.9	798.1	940.9
127.5°	281.6	310.3	477.7	757.9	879.9
130°	292.0	322.3	476.9	734.4	843.9
132.5°	301.6	332.7	476.1	715.0	813.5
135°	316.0	348.2	474.9	684.9	772.9
137.5°	331.6	362.6	473.7	655.9	733.5
140°	342.0	372.3	472.9	636.5	707.9
142.5°	351.6	381.1	473.7	617.2	680.7
145°	367.0	394.3	473.9	589.2	644.9
147.5°	383.6	406.4	474.1	565.5	606.9
150°	394.0	414.5	474.9	551.7	586.9
152.5°	403.5	423.3	475.7	540.4	568.5
155°	418.9	433.6	476.9	526.4	545.9
157.5°	433.9	445.3	478.1	516.5	530.3
160°	441.9	451.7	478.9	509.2	519.9
162.5°	449.9	457.4	478.9	504.3	512.7
165°	459.9	464.8	478.9	498.0	502.9
167.5°	469.1	471.7	479.9	492.4	494.9
170°	473.9	474.9	479.9	490.0	490.9
172.5°	477.1	478.1	480.7	487.5	487.7
175°	480.9	480.9	481.9	484.9	483.9
177.5°	482.9	482.9	482.1	483.7	482.1
180°	482.9	482.9	482.9	482.9	482.9

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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	0.59	0.00	0.00	0.00	0.00	0.18
	3H	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.07	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	0.23	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