

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: P853519

Luminaire Tested: SQ2-BBM-075U-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853519  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G3-2104-222-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-BBM-075U-100D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

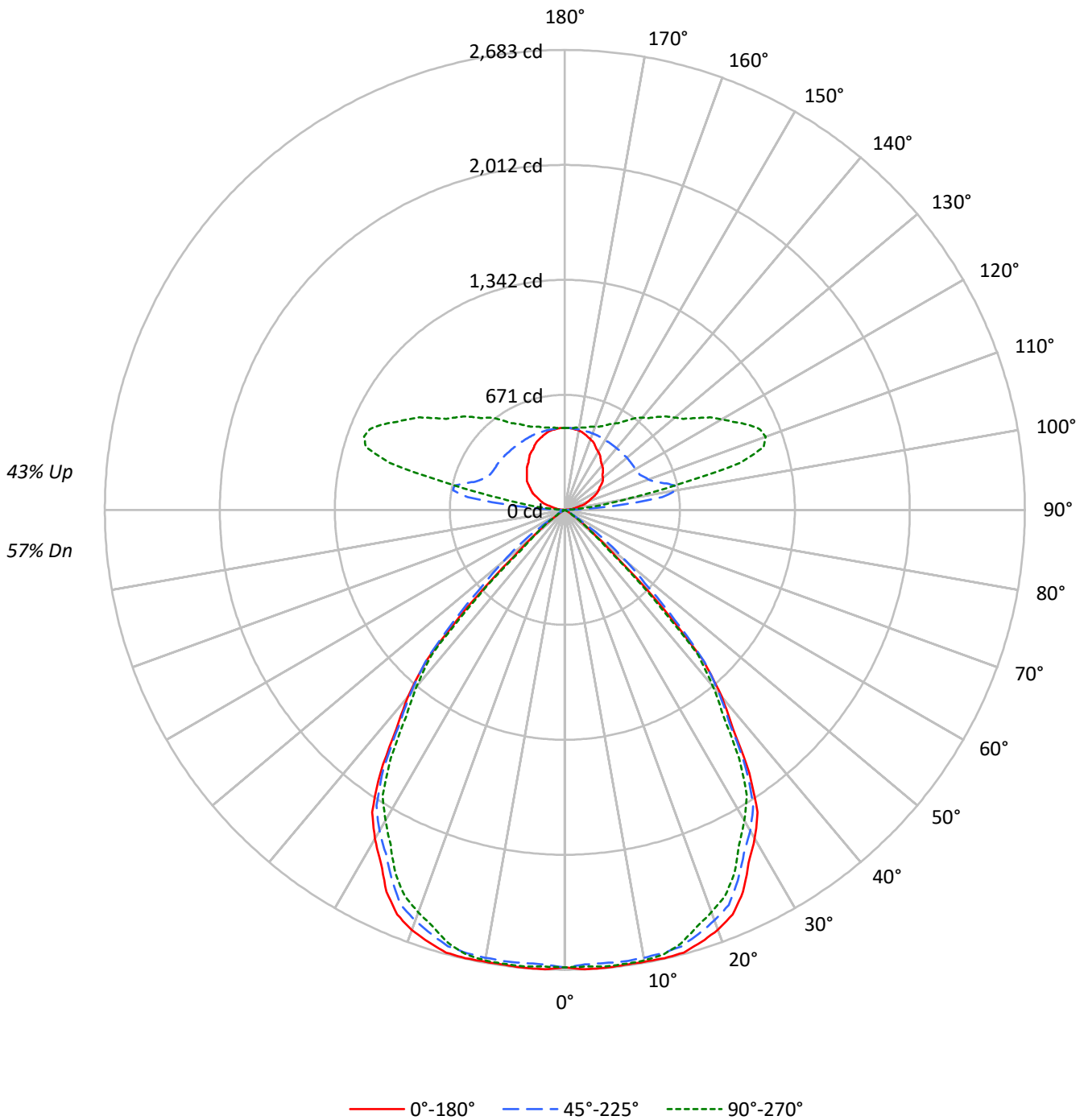
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6956.7 lumens  
Efficiency: N/A  
Efficacy: 113.3 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): 61.4  
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	0
RCR																		
0	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57
1	102	98	95	92	95	92	89	87	80	78	76	69	68	67	59	58	58	53
2	95	89	84	79	88	83	79	75	73	70	67	64	61	60	55	54	52	48
3	88	80	74	69	82	75	70	66	67	63	60	59	56	53	51	49	47	44
4	82	73	66	61	76	69	63	58	61	57	53	54	51	48	47	45	43	40
5	76	66	59	54	71	63	56	52	56	51	48	50	46	43	44	41	39	36
6	71	60	53	48	66	57	51	46	51	46	43	46	42	39	41	38	36	33
7	66	55	48	43	62	53	46	42	47	42	39	43	39	36	38	35	33	30
8	62	51	44	39	58	48	42	38	44	39	35	39	36	33	35	32	30	28
9	58	47	40	36	55	45	39	35	41	36	32	37	33	30	33	30	28	26
10	55	44	37	33	51	42	36	32	38	33	30	34	30	28	31	28	26	24

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

	0°	45°	90°
0°	43095	43095	43095
5°	43470	43000	43357
10°	43891	43497	43776
15°	44699	44047	43779
20°	44812	43816	42922
25°	43809	42508	41671
30°	41297	40309	39023
35°	36998	36348	34889
40°	30016	29510	28351
45°	18267	20710	16395
50°	5827	11705	5325
55°	2027	4251	2083
60°	161	1227	32
65°	0	76	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: 20710 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	255.1	3.7
10°-20°	745.9	10.7
20°-30°	1099.5	15.8
30°-40°	1125.9	16.2
40°-50°	648.8	9.3
50°-60°	113.6	1.6
60°-70°	4.4	0.1
70°-80°	0.0	0.0
80°-90°	0.6	0.0
90°-100°	181.0	2.6
100°-110°	600.0	8.6
110°-120°	595.5	8.6
120°-130°	485.0	7.0
130°-140°	394.2	5.7
140°-150°	306.1	4.4
150°-160°	220.6	3.2
160°-170°	135.1	1.9
170°-180°	45.6	0.7
0°-30°	2100.5	30.2
0°-40°	3226.4	46.4
0°-60°	3988.8	57.3
0°-90°	3993.8	57.4
90°-120°	1376.5	19.8
90°-150°	2561.8	36.8
90°-180°	2963.0	42.6
0°-180°	6956.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2669	2669	2669	2669	2669	
5°	2682	2676	2653	2685	2675	256
15°	2674	2696	2635	2635	2619	753
25°	2459	2478	2386	2364	2339	1122
35°	1877	1866	1844	1799	1770	1152
45°	800	895	907	862	718	612
55°	72	87	151	82	74	80
65°	0	1	2	1	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	76	328	117	78	29
105°	105	150	600	1133	1059	111
115°	187	224	484	1007	1177	185
125°	262	291	475	791	932	232
135°	313	345	471	679	766	242
145°	364	391	470	584	639	228
155°	415	430	473	522	541	191
165°	456	461	475	494	498	129
175°	477	477	478	480	480	45
180°	479	479	479	479	479	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2669.1	2669.1	2669.1	2669.1	2669.1
2.5°	2682.7	2675.7	2654.7	2676.1	2666.7
5°	2682.1	2676.2	2653.1	2684.9	2675.1
7.5°	2677.1	2675.7	2657.9	2682.9	2671.7
10°	2677.1	2682.0	2653.1	2678.9	2670.1
12.5°	2678.7	2689.9	2648.3	2668.4	2655.7
15°	2674.1	2695.6	2635.1	2634.8	2619.1
17.5°	2644.1	2669.5	2593.3	2572.6	2551.7
20°	2608.1	2637.4	2550.1	2520.6	2498.1
22.5°	2556.1	2584.7	2495.7	2462.2	2439.7
25°	2459.1	2477.7	2386.1	2364.5	2339.1
27.5°	2321.5	2332.4	2261.3	2224.0	2201.1
30°	2215.1	2222.9	2162.1	2121.4	2093.1
32.5°	2091.9	2088.8	2044.5	2003.1	1976.3
35°	1877.1	1866.3	1844.1	1799.4	1770.1
37.5°	1612.9	1610.9	1588.9	1550.2	1519.5
40°	1424.1	1422.1	1400.1	1365.6	1345.1
42.5°	1195.3	1232.4	1206.5	1164.2	1151.4
45°	800.0	894.9	907.0	861.8	718.0
47.5°	412.8	539.5	631.6	492.0	340.8
50°	232.0	325.9	466.0	263.8	212.0
52.5°	151.2	196.6	325.2	168.4	142.4
55°	72.0	86.7	151.0	81.8	74.0
57.5°	25.8	39.9	66.0	40.5	25.0
60°	5.0	16.7	38.0	11.8	1.0
62.5°	1.8	4.9	22.0	3.2	1.0
65°	0.0	1.0	2.0	1.0	0.0
67.5°	0.0	0.8	0.8	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°	7.9	30.6	90.2	29.2	24.6
95°	25.8	76.1	328.0	117.0	78.3
97.5°	47.4	100.1	572.5	333.9	211.0
100°	62.4	112.8	662.9	569.3	377.5
102.5°	79.1	127.9	657.3	870.1	657.3
105°	105.0	149.6	600.4	1132.8	1059.2
107.5°	131.6	171.3	546.0	1159.6	1215.6
110°	146.6	186.4	518.2	1133.1	1246.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	162.5	201.4	501.6	1086.3	1230.6
115°	187.3	224.1	483.5	1006.6	1177.1
117.5°	211.8	244.6	477.0	930.5	1109.3
120°	226.9	258.9	474.6	882.8	1056.2
122.5°	240.4	271.6	474.6	843.7	1003.9
125°	261.6	290.6	474.6	790.9	932.4
127.5°	279.0	307.5	473.4	751.0	871.9
130°	289.3	319.4	472.6	727.8	836.3
132.5°	298.8	329.6	471.8	708.5	806.1
135°	313.1	345.1	470.6	678.7	765.9
137.5°	328.6	359.4	469.5	650.0	726.9
140°	338.9	368.9	468.7	630.8	701.5
142.5°	348.4	377.6	469.5	611.6	674.6
145°	363.6	390.8	469.7	583.9	639.1
147.5°	380.1	402.8	469.9	560.4	601.4
150°	390.4	410.7	470.6	546.7	581.6
152.5°	399.9	419.5	471.4	535.5	563.4
155°	415.2	429.7	472.6	521.6	541.0
157.5°	430.0	441.3	473.8	511.8	525.5
160°	437.9	447.6	474.6	504.6	515.2
162.5°	445.9	453.2	474.6	499.8	508.1
165°	455.8	460.6	474.6	493.5	498.4
167.5°	464.9	467.4	475.6	487.9	490.5
170°	469.7	470.6	475.6	485.5	486.5
172.5°	472.8	473.8	476.4	483.1	483.3
175°	476.6	476.6	477.6	480.5	479.6
177.5°	478.6	478.6	477.8	479.3	477.8
180°	478.6	478.6	478.6	478.6	478.6



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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	1.60	2.34	2.53	3.26	4.44	1.07	1.81	2.00	2.73	3.91
	3H	1.41	2.06	2.35	2.99	4.19	0.88	1.53	1.82	2.46	3.66
	4H	1.30	1.92	2.26	2.85	4.06	0.77	1.39	1.73	2.32	3.53
	6H	1.19	1.76	2.16	2.70	3.92	0.66	1.23	1.63	2.17	3.39
	8H	1.13	1.67	2.11	2.62	3.84	0.60	1.14	1.58	2.09	3.31
	12H	1.07	1.58	2.05	2.53	3.77	0.54	1.05	1.52	2.00	3.24
4H	2H	1.31	1.93	2.27	2.86	4.07	0.78	1.40	1.75	2.33	3.55
	3H	1.11	1.62	2.08	2.58	3.81	0.59	1.09	1.55	2.06	3.28
	4H	1.00	1.46	1.97	2.42	3.67	0.47	0.93	1.45	1.89	3.14
	6H	0.89	1.28	1.88	2.26	3.51	0.36	0.75	1.35	1.74	2.99
	8H	0.83	1.19	1.81	2.17	3.43	0.30	0.66	1.29	1.64	2.90
	12H	0.76	1.08	1.76	2.07	3.34	0.23	0.55	1.23	1.55	2.81
8H	4H	0.83	1.19	1.81	2.17	3.43	0.30	0.66	1.29	1.64	2.90
	6H	0.71	1.01	1.72	2.02	3.28	0.18	0.48	1.19	1.50	2.75
	8H	0.65	0.91	1.67	1.92	3.19	0.12	0.38	1.14	1.39	2.66
	12H	0.58	0.81	1.60	1.81	3.13	0.05	0.28	1.07	1.28	2.61
12H	4H	0.76	1.08	1.76	2.07	3.34	0.23	0.55	1.23	1.55	2.81
	6H	0.65	0.91	1.67	1.92	3.19	0.12	0.38	1.14	1.39	2.66
	8H	0.58	0.81	1.60	1.81	3.13	0.05	0.28	1.07	1.28	2.60