

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: P853527

Luminaire Tested: SQ2-BBM-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853527  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-BBM-075D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SURFACE LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: -  
Ballast/Driver: -

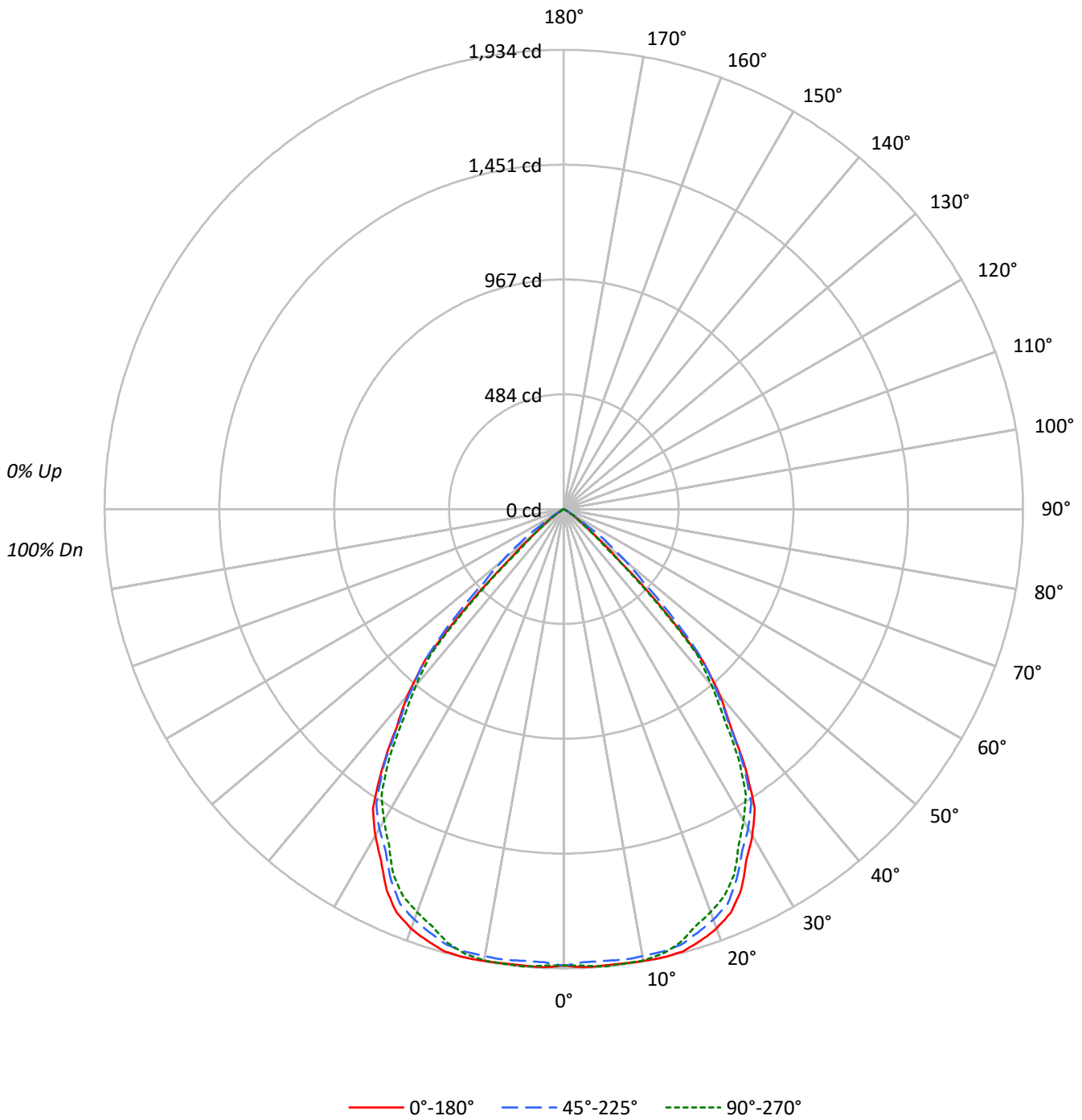
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2873.9 lumens  
Efficiency: N/A  
Efficacy: 104.1 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: Direct  
  
Input Watts (W): 27.6  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92
2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	67	86	78	72	67	76	70	66	74	69	66	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	67	61	56	76	67	60	56	65	60	55	64	59	55	63	58	55	53
8	73	63	56	51	72	62	55	51	61	55	51	60	54	51	59	54	50	49
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	47	43	42

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

	0°	45°	90°
0°	31042	31042	31042
5°	31285	30943	31332
10°	31678	31349	31632
15°	32251	31768	31607
20°	32292	31613	31036
25°	31493	30688	30259
30°	29604	28959	28225
35°	26276	26067	25288
40°	21549	21184	20394
45°	12849	15109	12056
50°	4011	8382	3793
55°	1517	2978	1517
60°	94	840	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: 15109 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.8	6.4
10°-20°	538.5	18.7
20°-30°	792.2	27.6
30°-40°	809.7	28.2
40°-50°	466.5	16.2
50°-60°	80.4	2.8
60°-70°	2.9	0.1
70°-80°	0.0	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1514.5	52.7
0°-40°	2324.2	80.9
0°-60°	2871.0	99.9
0°-90°	2873.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2873.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1923	1923	1923	1923	1923	
5°	1930	1926	1909	1935	1933	184
15°	1929	1945	1900	1903	1891	543
25°	1768	1784	1723	1705	1698	807
35°	1333	1343	1322	1297	1283	823
45°	563	646	662	625	528	435
55°	54	61	106	60	54	57
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1922.6	1922.6	1922.6	1922.6	1922.6
2.5°	1931.1	1925.8	1910.3	1927.9	1924.2
5°	1930.3	1925.6	1909.2	1935.1	1933.2
7.5°	1929.2	1926.0	1914.4	1935.6	1930.9
10°	1932.2	1931.3	1912.1	1934.1	1929.4
12.5°	1933.8	1939.6	1909.7	1927.1	1918.6
15°	1929.4	1945.4	1900.5	1903.1	1890.9
17.5°	1907.8	1930.4	1870.7	1859.7	1842.4
20°	1879.4	1905.7	1839.9	1821.3	1806.3
22.5°	1839.3	1863.4	1800.7	1777.5	1765.5
25°	1767.8	1783.8	1722.6	1705.1	1698.5
27.5°	1666.4	1670.9	1624.9	1603.1	1594.7
30°	1587.9	1587.9	1553.3	1529.9	1513.9
32.5°	1496.4	1494.1	1469.4	1443.7	1427.7
35°	1333.1	1343.4	1322.5	1297.1	1283.0
37.5°	1156.3	1160.2	1144.3	1117.1	1105.3
40°	1022.4	1023.3	1005.1	985.4	967.6
42.5°	866.2	885.2	868.1	837.2	829.8
45°	562.7	646.3	661.7	624.9	528.0
47.5°	282.8	387.0	452.2	351.2	248.7
50°	159.7	221.7	333.7	185.8	151.0
52.5°	106.6	134.0	231.4	121.5	101.8
55°	53.9	61.4	105.8	59.5	53.9
57.5°	18.3	28.4	46.0	29.4	20.2
60°	2.9	12.3	26.0	9.4	1.0
62.5°	0.6	3.2	16.0	2.6	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	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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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	3.96	5.09	4.32	5.40	5.72	3.57	4.70	3.94	5.01	5.33
	3H	3.79	4.78	4.17	5.11	5.48	3.40	4.39	3.79	4.73	5.09
	4H	3.70	4.62	4.11	4.97	5.36	3.32	4.23	3.72	4.58	4.97
	6H	3.60	4.44	4.02	4.81	5.21	3.22	4.05	3.64	4.43	4.82
	8H	3.55	4.34	3.99	4.73	5.14	3.17	3.95	3.60	4.34	4.75
	12H	3.50	4.25	3.93	4.63	5.07	3.11	3.86	3.55	4.25	4.68
4H	2H	3.71	4.62	4.11	4.97	5.36	3.32	4.24	3.73	4.59	4.98
	3H	3.53	4.27	3.95	4.68	5.08	3.15	3.88	3.56	4.29	4.69
	4H	3.42	4.08	3.86	4.50	4.95	3.04	3.69	3.48	4.11	4.56
	6H	3.32	3.88	3.79	4.33	4.80	2.94	3.50	3.41	3.94	4.42
	8H	3.25	3.78	3.73	4.23	4.70	2.87	3.39	3.34	3.84	4.31
	12H	3.19	3.65	3.68	4.14	4.61	2.81	3.26	3.30	3.75	4.23
8H	4H	3.25	3.78	3.73	4.23	4.70	2.87	3.39	3.34	3.84	4.31
	6H	3.13	3.55	3.64	4.06	4.54	2.75	3.17	3.26	3.67	4.15
	8H	3.06	3.44	3.59	3.96	4.45	2.67	3.05	3.20	3.57	4.07
	12H	3.00	3.34	3.52	3.83	4.41	2.62	2.95	3.14	3.45	4.03
12H	4H	3.19	3.65	3.68	4.14	4.61	2.81	3.26	3.30	3.75	4.23
	6H	3.06	3.44	3.59	3.96	4.45	2.67	3.05	3.20	3.57	4.07
	8H	3.00	3.34	3.52	3.83	4.41	2.62	2.95	3.14	3.45	4.03