

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: P854120

Luminaire Tested: SQ2-PP3-0U-100D-940-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

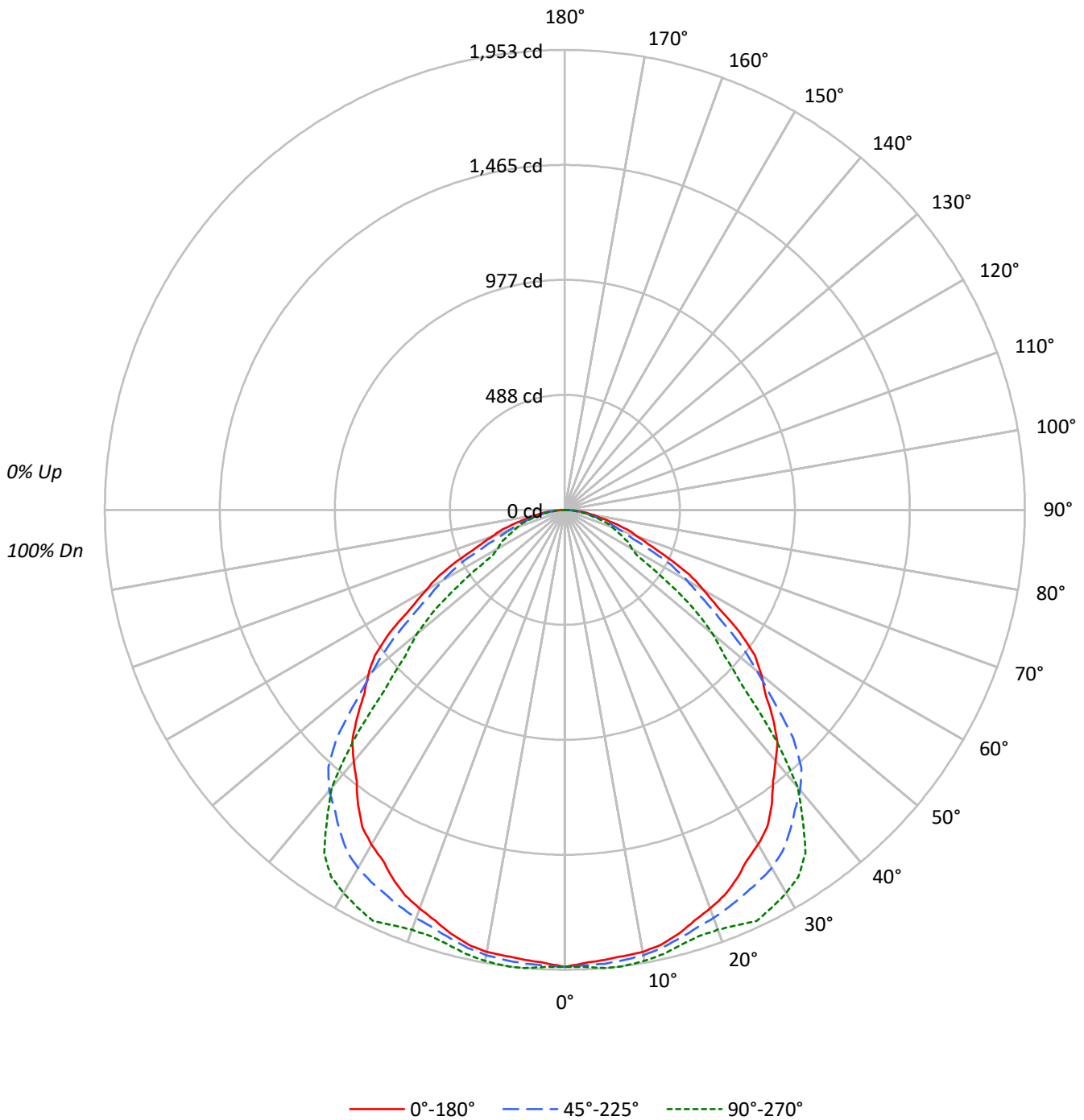
Test Method: LM-79-2019  
Report Number: P854120  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PP3-0U-100D-940-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4887.8 lumens  
Efficiency: N/A  
Efficacy: 130.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.6  
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	89	87
2	101	94	88	82	99	92	86	81	88	84	80	85	81	78	82	79	76	74
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	74	66	60	83	73	66	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	50	48
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28

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

	0°	45°	90°
0°	31336	31336	31336
5°	31091	31357	31655
10°	31247	31483	31886
15°	31173	31482	31962
20°	30950	31691	32606
25°	30775	32090	34321
30°	30600	32742	35037
35°	30167	32836	35100
40°	29360	32777	32431
45°	28483	31294	24688
50°	27364	26693	20562
55°	25470	22466	14784
60°	21929	19278	10601
65°	18499	14892	10426
70°	15399	11717	9975
75°	13057	10112	9345
80°	11065	8777	8396
85°	8744	7225	4557

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 31294 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.8	3.8
10°-20°	534.8	10.9
20°-30°	837.9	17.1
30°-40°	1033.6	21.1
40°-50°	973.2	19.9
50°-60°	689.0	14.1
60°-70°	392.6	8.0
70°-80°	194.2	4.0
80°-90°	47.5	1.0
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°	1557.5	31.9
0°-40°	2591.2	53.0
0°-60°	4253.4	87.0
0°-90°	4887.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4887.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1941	1941	1941	1941	1941	
5°	1918	1952	1935	1939	1953	183
15°	1865	1891	1883	1902	1912	526
25°	1728	1772	1801	1874	1926	796
35°	1530	1573	1666	1761	1781	954
45°	1247	1342	1370	1161	1081	960
55°	905	959	798	601	525	798
65°	484	510	390	275	273	486
75°	209	231	162	152	150	227
85°	47	43	39	31	25	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1940.8	1940.8	1940.8	1940.8	1940.8
2.5°	1926.0	1953.3	1935.9	1939.3	1942.5
5°	1918.3	1952.4	1934.7	1939.1	1953.1
7.5°	1910.9	1945.8	1928.5	1935.9	1953.1
10°	1905.9	1936.0	1920.3	1930.9	1944.9
12.5°	1891.2	1919.7	1905.5	1919.4	1931.8
15°	1864.9	1891.0	1883.4	1902.1	1912.1
17.5°	1829.2	1860.9	1860.8	1887.3	1897.7
20°	1801.3	1839.4	1844.4	1877.7	1897.7
22.5°	1771.8	1816.3	1824.7	1874.7	1909.2
25°	1727.5	1771.6	1801.3	1874.3	1926.5
27.5°	1675.8	1719.5	1780.8	1862.6	1903.9
30°	1641.3	1683.4	1756.2	1841.2	1879.3
32.5°	1598.6	1642.3	1720.1	1811.5	1846.4
35°	1530.5	1572.6	1665.9	1760.7	1780.8
37.5°	1452.1	1499.9	1604.4	1657.3	1658.5
40°	1393.0	1455.2	1555.1	1564.8	1538.7
42.5°	1335.6	1415.4	1486.2	1442.9	1327.0
45°	1247.4	1341.7	1370.5	1161.4	1081.2
47.5°	1153.4	1246.5	1200.6	974.1	918.7
50°	1089.4	1177.7	1062.7	870.7	818.6
52.5°	1017.2	1095.8	939.6	771.7	692.2
55°	904.8	958.9	798.1	601.4	525.2
57.5°	769.4	807.5	682.4	451.5	366.0
60°	679.1	709.2	597.0	370.4	328.3
62.5°	597.0	623.9	508.4	321.8	306.9
65°	484.2	510.3	389.8	274.9	272.9
67.5°	385.3	413.8	299.1	240.0	237.6
70°	326.2	356.3	248.2	215.3	211.3
72.5°	277.0	305.5	210.5	189.1	186.7
75°	209.3	231.3	162.1	151.8	149.8
77.5°	151.8	165.9	120.6	115.3	113.2
80°	119.0	125.0	94.4	92.3	90.3
82.5°	89.5	87.4	71.4	69.3	65.7
85°	47.2	43.2	39.0	30.6	24.6
87.5°	14.8	14.8	6.6	4.9	4.9
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	23.41	24.93	23.77	25.25	25.56	19.81	21.33	20.17	21.64	21.96
	3H	24.56	25.92	24.93	26.25	26.61	20.96	22.32	21.34	22.65	23.01
	4H	24.93	26.20	25.33	26.55	26.93	21.45	22.73	21.85	23.08	23.46
	6H	25.17	26.35	25.59	26.72	27.11	21.83	23.01	22.24	23.38	23.77
	8H	25.24	26.36	25.67	26.75	27.15	21.93	23.06	22.36	23.44	23.85
	12H	25.28	26.35	25.71	26.73	27.16	21.97	23.04	22.40	23.42	23.85
4H	2H	23.60	24.87	24.00	25.22	25.60	20.60	21.88	21.00	22.22	22.60
	3H	24.97	26.02	25.38	26.42	26.82	21.91	22.96	22.32	23.36	23.77
	4H	25.47	26.41	25.90	26.83	27.27	22.49	23.44	22.92	23.85	24.29
	6H	25.84	26.66	26.29	27.10	27.56	22.96	23.79	23.42	24.23	24.69
	8H	25.94	26.71	26.41	27.16	27.62	23.10	23.87	23.56	24.31	24.78
	12H	26.01	26.69	26.49	27.17	27.64	23.15	23.84	23.64	24.32	24.79
8H	4H	25.53	26.30	25.99	26.74	27.21	22.81	23.58	23.27	24.02	24.49
	6H	25.98	26.62	26.48	27.11	27.59	23.38	24.01	23.87	24.50	24.98
	8H	26.14	26.71	26.65	27.22	27.71	23.56	24.13	24.08	24.64	25.13
	12H	26.25	26.76	26.76	27.25	27.82	23.66	24.17	24.17	24.66	25.23
12H	4H	25.52	26.20	26.00	26.68	27.15	22.85	23.53	23.33	24.01	24.48
	6H	25.97	26.54	26.49	27.05	27.54	23.43	24.00	23.94	24.51	25.00
	8H	26.17	26.68	26.68	27.17	27.73	23.66	24.17	24.17	24.66	25.23