

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: P854204

Luminaire Tested: SQ2-PR1-100D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854204
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-9)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PR1-100D-940-UNV-STD-W-4
Description: CORELITE SQ2 SURFACE LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: -
Ballast/Driver: -

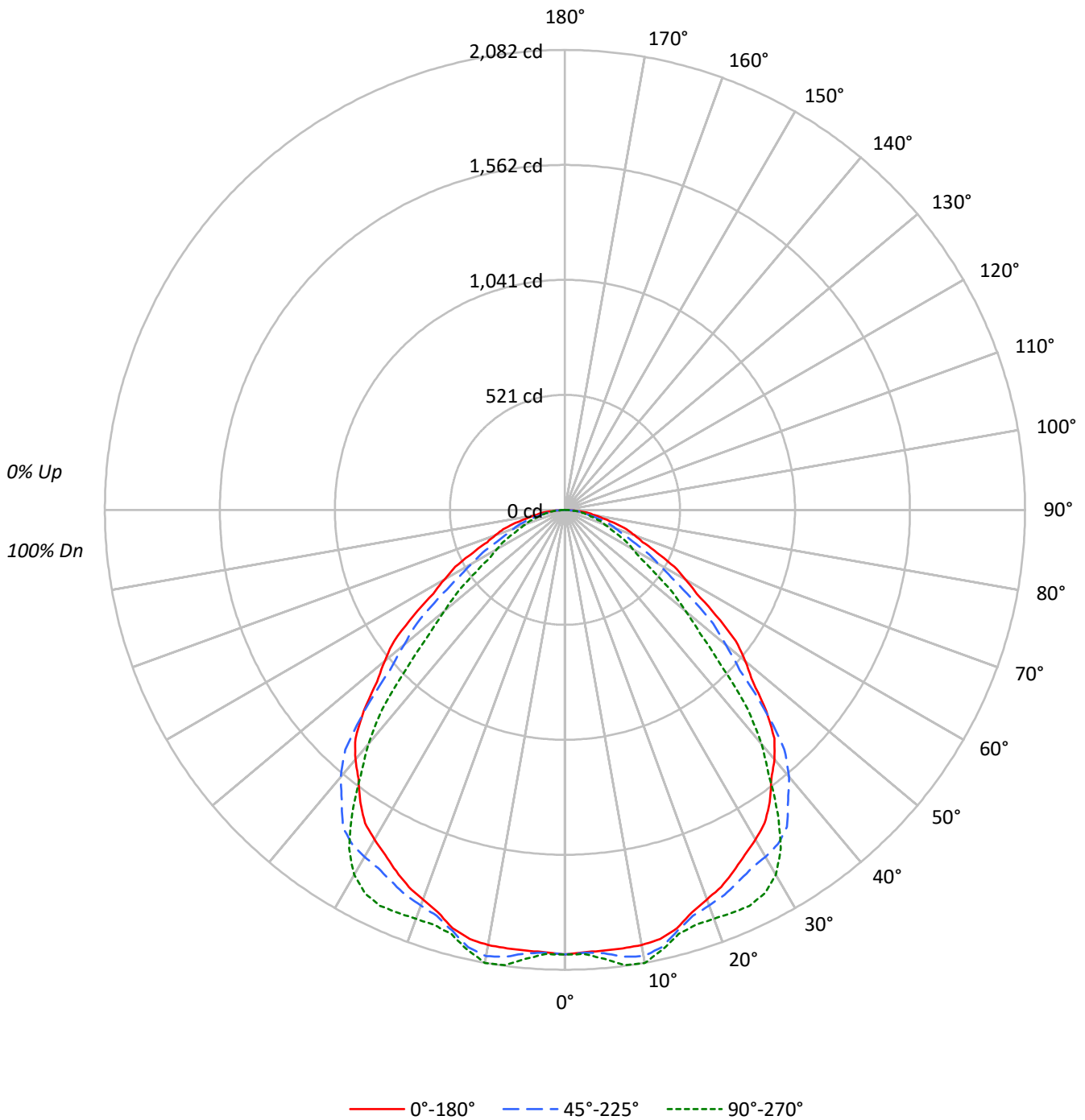
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4841.6 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.34 / 1.36
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				65
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44				44
7	69	56	48	42	67	55	47	42	54	47	42	52	46	41	51	45	41	39				39
8	64	51	43	38	63	51	43	38	49	42	37	48	42	37	47	41	37	35				35
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32				32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29				29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32495	32495	32495
5°	32454	32653	33052
10°	32795	33636	34141
15°	32784	32956	33230
20°	32254	32747	33840
25°	32163	33077	35234
30°	32130	33812	35572
35°	31824	34535	33119
40°	31091	33253	29145
45°	29419	29186	23048
50°	26746	23860	17882
55°	23505	19634	13917
60°	20337	15700	11460
65°	17559	13012	10032
70°	15786	11523	8908
75°	14460	9981	8191
80°	12590	8015	8015
85°	9114	7225	3798

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 31800 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.4	4.0
10°-20°	562.6	11.6
20°-30°	869.7	18.0
30°-40°	1046.1	21.6
40°-50°	939.3	19.4
50°-60°	629.2	13.0
60°-70°	366.0	7.6
70°-80°	188.0	3.9
80°-90°	46.4	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°	1626.7	33.6
0°-40°	2672.8	55.2
0°-60°	4241.3	87.6
0°-90°	4841.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4841.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2013	2013	2013	2013	2013	
5°	2002	2036	2015	2019	2039	191
15°	1961	2042	1972	1978	1988	551
25°	1805	1878	1857	1926	1978	833
35°	1615	1629	1752	1718	1680	1007
45°	1288	1393	1278	1078	1009	986
55°	835	867	698	539	494	750
65°	460	470	341	277	263	465
75°	232	226	160	135	131	246
85°	49	39	39	26	20	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2012.6	2012.6	2012.6	2012.6	2012.6
2.5°	2004.4	2028.5	2006.1	2007.8	2012.6
5°	2002.4	2036.5	2014.7	2019.2	2039.3
7.5°	2002.0	2050.5	2040.1	2052.6	2079.1
10°	2000.3	2058.5	2051.6	2054.3	2082.4
12.5°	1990.5	2058.3	2027.0	2024.5	2039.7
15°	1961.3	2041.6	1971.6	1978.0	1988.0
17.5°	1910.0	1993.9	1927.3	1949.9	1969.5
20°	1877.2	1959.5	1905.9	1935.4	1969.5
22.5°	1847.7	1929.9	1886.2	1927.5	1974.5
25°	1805.4	1877.6	1856.7	1925.6	1977.8
27.5°	1761.1	1803.6	1828.4	1920.7	1957.2
30°	1723.4	1751.4	1813.6	1894.0	1908.0
32.5°	1682.3	1699.2	1793.9	1835.8	1817.7
35°	1614.6	1628.7	1752.1	1718.4	1680.3
37.5°	1534.2	1563.1	1658.1	1561.1	1517.4
40°	1475.1	1523.3	1577.7	1432.9	1382.8
42.5°	1402.9	1479.9	1471.0	1286.6	1225.2
45°	1288.4	1392.7	1278.2	1077.6	1009.4
47.5°	1153.4	1260.5	1073.0	893.9	830.1
50°	1064.8	1151.0	949.9	782.1	711.9
52.5°	974.5	1036.7	844.9	677.2	613.4
55°	835.0	867.1	697.5	538.6	494.4
57.5°	707.0	727.4	569.9	435.0	402.5
60°	629.8	643.9	486.2	381.0	354.9
62.5°	559.3	570.1	418.9	335.2	315.5
65°	459.6	469.6	340.6	276.6	262.6
67.5°	380.4	385.6	280.2	229.9	216.6
70°	334.4	336.4	244.1	198.8	188.7
72.5°	293.4	290.6	209.7	172.6	165.8
75°	231.8	225.8	160.0	135.3	131.3
77.5°	173.2	166.7	112.4	104.2	104.2
80°	135.4	127.4	86.2	86.2	86.2
82.5°	100.9	89.7	66.5	66.4	64.8
85°	49.2	39.2	39.0	26.5	20.5
87.5°	13.1	13.1	4.9	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	22.80	24.29	23.16	24.61	24.92	19.52	21.02	19.89	21.33	21.65
	3H	24.08	25.41	24.46	25.74	26.11	20.63	21.97	21.01	22.30	22.66
	4H	24.56	25.81	24.96	26.16	26.54	21.06	22.32	21.46	22.66	23.04
	6H	24.90	26.06	25.32	26.43	26.82	21.42	22.58	21.84	22.95	23.34
	8H	25.00	26.10	25.43	26.49	26.89	21.53	22.63	21.95	23.02	23.42
	12H	25.05	26.10	25.48	26.49	26.92	21.55	22.61	21.99	22.99	23.42
4H	2H	22.95	24.20	23.35	24.55	24.93	20.17	21.42	20.57	21.77	22.15
	3H	24.48	25.51	24.89	25.91	26.31	21.49	22.52	21.90	22.92	23.32
	4H	25.10	26.02	25.53	26.44	26.88	22.02	22.95	22.45	23.36	23.80
	6H	25.58	26.39	26.04	26.83	27.29	22.49	23.29	22.94	23.73	24.20
	8H	25.72	26.48	26.19	26.92	27.39	22.62	23.37	23.08	23.82	24.28
	12H	25.80	26.48	26.29	26.96	27.43	22.67	23.34	23.15	23.82	24.29
8H	4H	25.16	25.92	25.63	26.36	26.83	22.37	23.12	22.83	23.56	24.03
	6H	25.73	26.36	26.23	26.85	27.33	22.92	23.54	23.42	24.04	24.51
	8H	25.93	26.49	26.45	27.00	27.49	23.11	23.67	23.62	24.18	24.67
	12H	26.06	26.56	26.57	27.05	27.62	23.19	23.69	23.70	24.18	24.75
12H	4H	25.15	25.82	25.63	26.30	26.77	22.41	23.08	22.89	23.56	24.03
	6H	25.72	26.28	26.23	26.79	27.28	22.98	23.54	23.50	24.05	24.54
	8H	25.96	26.45	26.47	26.95	27.51	23.21	23.71	23.72	24.20	24.77