

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: P854167

Luminaire Tested: SQ2-PR1-025U-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854167
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-9)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PR1-025U-100D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

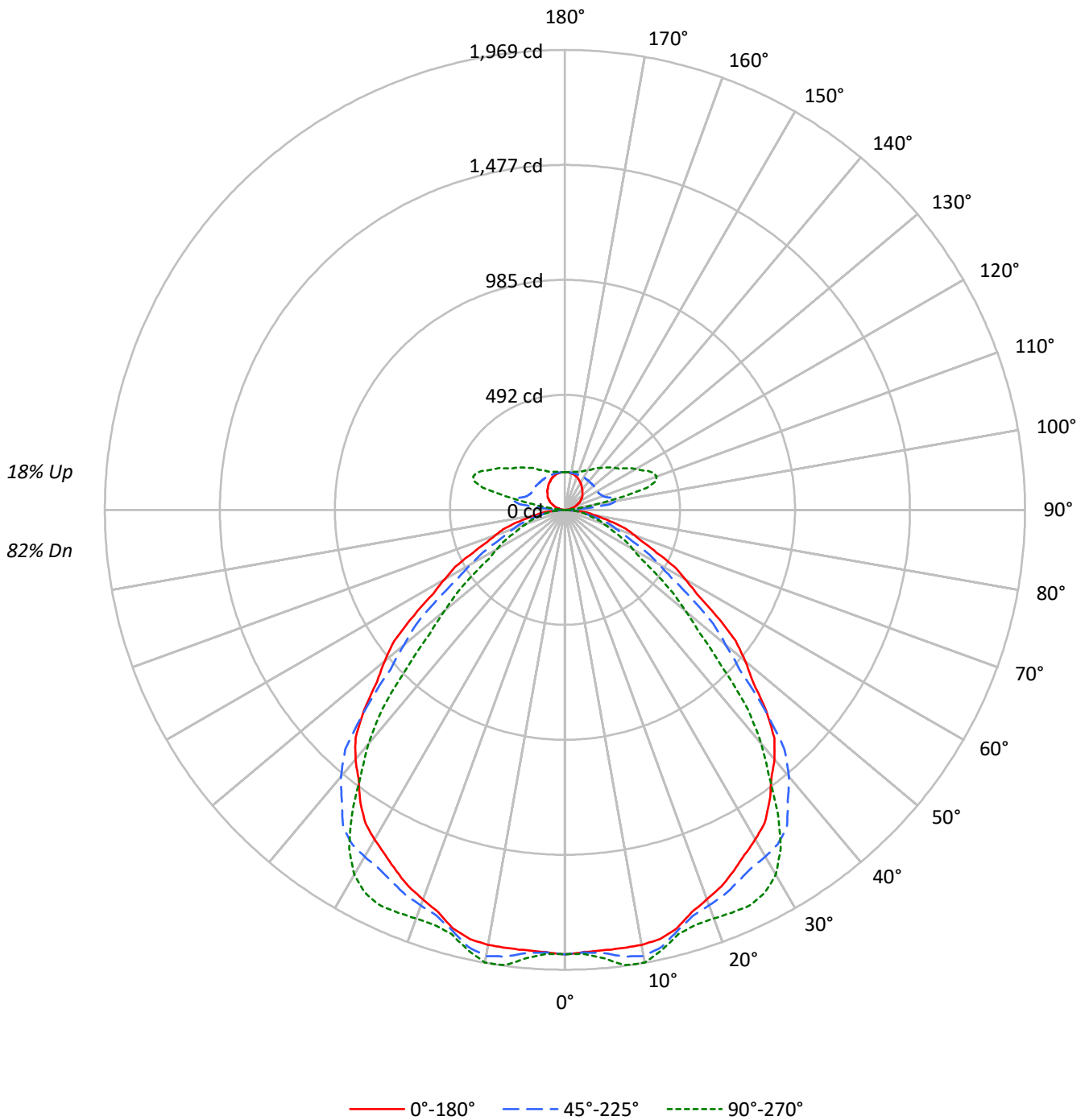
Lumens per Lamp: N/A
Luminaire Lumens: 5580.6 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.34 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45
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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	82
1	106	102	98	95	102	98	95	92	90	88	86	84	82	80	77	76	74	71
2	97	90	84	79	93	87	81	77	80	76	72	75	71	68	69	67	64	61
3	90	80	73	67	86	77	71	66	72	67	62	67	63	59	62	59	56	53
4	82	72	64	58	79	69	62	57	65	59	54	60	55	51	56	52	49	46
5	76	64	56	50	73	62	55	49	58	52	47	55	49	45	51	47	43	41
6	70	58	50	44	67	56	49	43	53	46	42	50	44	40	47	42	38	36
7	65	53	45	39	63	51	44	39	48	42	37	45	40	36	43	38	34	32
8	61	48	41	35	58	47	40	35	44	38	33	42	36	32	39	35	31	29
9	57	45	37	32	55	43	36	31	41	35	30	39	33	29	36	32	28	26
10	53	41	34	29	51	40	33	28	38	32	27	36	30	26	34	29	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30721	30721	30721
5°	30681	30870	31246
10°	31004	31800	32277
15°	30994	31156	31415
20°	30493	30960	31993
25°	30407	31271	33309
30°	30374	31966	33629
35°	30086	32648	31310
40°	29392	31436	27554
45°	27811	27590	21790
50°	25284	22556	16905
55°	22221	18565	13157
60°	19226	14844	10834
65°	16600	12302	9486
70°	14922	10895	8422
75°	13674	9439	7742
80°	11901	7578	7578
85°	8614	6836	3594

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 30065 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.7	3.3
10°-20°	531.9	9.5
20°-30°	822.2	14.7
30°-40°	988.9	17.7
40°-50°	888.0	15.9
50°-60°	594.9	10.7
60°-70°	346.0	6.2
70°-80°	177.7	3.2
80°-90°	44.2	0.8
90°-100°	65.4	1.2
100°-110°	203.4	3.6
110°-120°	199.0	3.6
120°-130°	162.5	2.9
130°-140°	132.9	2.4
140°-150°	103.7	1.9
150°-160°	74.9	1.3
160°-170°	45.8	0.8
170°-180°	15.4	0.3
0°-30°	1537.8	27.6
0°-40°	2526.8	45.3
0°-60°	4009.6	71.8
0°-90°	4577.6	82.0
90°-120°	467.8	8.4
90°-150°	867.0	15.5
90°-180°	1003.0	18.0
0°-180°	5580.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1903	1903	1903	1903	1903	
5°	1893	1925	1905	1909	1928	181
15°	1854	1930	1864	1870	1879	521
25°	1707	1775	1755	1820	1870	787
35°	1526	1540	1656	1624	1588	952
45°	1218	1317	1208	1019	954	932
55°	789	820	660	509	467	709
65°	434	444	322	262	248	439
75°	219	214	151	128	124	233
85°	46	37	37	25	19	58
90°	0	1	3	3	3	2
95°	9	26	120	44	29	10
105°	36	50	200	382	365	38
115°	64	75	163	335	393	63
125°	88	98	161	264	309	78
135°	106	118	160	228	256	82
145°	124	134	160	197	214	78
155°	142	147	161	177	182	65
165°	156	157	162	167	168	44
175°	162	162	162	163	162	15
180°	162	162	162	162	162	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1902.7	1902.7	1902.7	1902.7	1902.7
2.5°	1895.0	1917.7	1896.5	1898.2	1902.7
5°	1893.0	1925.3	1904.7	1909.0	1927.9
7.5°	1892.6	1938.5	1928.7	1940.5	1965.6
10°	1891.1	1946.1	1939.6	1942.1	1968.7
12.5°	1881.8	1945.9	1916.3	1913.9	1928.3
15°	1854.2	1930.1	1863.9	1870.0	1879.4
17.5°	1805.7	1885.0	1822.0	1843.4	1862.0
20°	1774.7	1852.5	1801.9	1829.7	1862.0
22.5°	1746.8	1824.5	1783.2	1822.3	1866.6
25°	1706.8	1775.1	1755.3	1820.4	1869.7
27.5°	1664.9	1705.1	1728.5	1815.8	1850.3
30°	1629.2	1655.8	1714.6	1790.5	1803.8
32.5°	1590.4	1606.4	1696.0	1735.5	1718.5
35°	1526.4	1539.7	1656.4	1624.5	1588.5
37.5°	1450.4	1477.7	1567.6	1475.8	1434.5
40°	1394.5	1440.1	1491.5	1354.7	1307.3
42.5°	1326.3	1399.1	1390.7	1216.3	1158.3
45°	1218.0	1316.7	1208.3	1018.7	954.3
47.5°	1090.4	1191.7	1014.4	845.1	784.7
50°	1006.6	1088.2	898.0	739.4	673.0
52.5°	921.3	980.1	798.7	640.2	579.9
55°	789.4	819.7	659.5	509.2	467.4
57.5°	668.4	687.7	538.8	411.3	380.5
60°	595.4	608.7	459.7	360.2	335.5
62.5°	528.7	539.0	396.1	316.9	298.3
65°	434.5	443.9	322.0	261.5	248.3
67.5°	359.6	364.5	264.9	217.3	204.8
70°	316.1	318.0	230.8	187.9	178.4
72.5°	277.4	274.7	198.2	163.2	156.7
75°	219.2	213.5	151.3	127.9	124.1
77.5°	163.7	157.6	106.3	98.5	98.5
80°	128.0	120.4	81.5	81.5	81.5
82.5°	95.4	84.8	62.8	62.8	61.3
85°	46.5	37.1	36.9	25.1	19.4
87.5°	12.4	12.6	5.2	5.2	5.2
90°	0.0	1.0	3.0	3.0	3.0
92.5°	3.2	11.1	37.9	12.4	10.1
95°	8.9	26.4	120.0	44.3	28.8
97.5°	16.3	34.3	198.7	123.7	77.9
100°	21.8	38.3	224.1	209.6	139.8
102.5°	27.4	43.1	219.3	299.3	235.0
105°	35.7	50.2	200.3	382.3	364.9
107.5°	44.0	57.6	182.0	388.7	407.9
110°	49.6	63.1	172.5	379.6	417.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	55.1	67.9	167.8	363.2	411.1
115°	63.5	75.1	162.6	335.4	392.6
117.5°	71.6	82.2	160.4	308.9	367.4
120°	76.3	87.0	159.6	293.8	350.0
122.5°	81.1	91.8	160.4	281.0	332.5
125°	88.2	97.9	160.6	263.8	309.3
127.5°	94.0	103.9	160.6	250.9	289.7
130°	97.2	107.8	160.6	243.7	278.6
132.5°	101.1	111.8	159.8	237.3	269.9
135°	106.1	117.7	159.6	227.7	255.8
137.5°	111.8	122.5	159.6	218.1	243.7
140°	115.0	125.7	159.6	211.7	235.0
142.5°	119.0	128.9	159.6	205.3	226.2
145°	123.9	133.6	159.6	196.7	214.2
147.5°	129.9	138.2	160.6	188.7	202.5
150°	133.8	140.6	160.6	184.7	195.3
152.5°	137.0	143.0	160.6	180.7	189.8
155°	141.8	146.6	160.6	176.6	182.4
157.5°	146.5	150.2	160.6	173.0	176.7
160°	149.7	152.6	160.6	170.6	173.5
162.5°	152.1	154.2	160.6	169.0	171.1
165°	155.7	156.6	161.6	166.6	168.5
167.5°	157.8	158.0	160.6	165.2	166.2
170°	158.6	159.6	160.6	163.6	164.6
172.5°	160.2	160.4	161.4	162.8	163.0
175°	161.6	161.6	161.6	162.6	161.6
177.5°	161.6	161.6	161.6	161.6	161.6
180°	161.6	161.6	161.6	161.6	161.6



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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	21.29	22.46	21.92	23.09	23.82	18.02	19.18	18.65	19.82	20.55
	3H	22.55	23.59	23.19	24.24	25.00	19.11	20.15	19.75	20.79	21.56
	4H	23.01	23.99	23.68	24.65	25.43	19.52	20.50	20.18	21.16	21.94
	6H	23.35	24.25	24.02	24.92	25.71	19.87	20.77	20.54	21.44	22.23
	8H	23.44	24.29	24.13	24.98	25.78	19.96	20.82	20.65	21.51	22.30
	12H	23.48	24.29	24.17	24.98	25.80	19.98	20.79	20.67	21.48	22.30
4H	2H	21.41	22.38	22.08	23.04	23.82	18.62	19.60	19.29	20.26	21.04
	3H	22.91	23.71	23.59	24.41	25.21	19.92	20.72	20.60	21.42	22.22
	4H	23.51	24.24	24.21	24.95	25.77	20.43	21.16	21.13	21.87	22.70
	6H	23.98	24.61	24.70	25.34	26.18	20.89	21.52	21.60	22.24	23.08
	8H	24.12	24.71	24.84	25.43	26.28	21.01	21.60	21.74	22.33	23.18
	12H	24.19	24.71	24.93	25.46	26.32	21.05	21.58	21.79	22.33	23.18
8H	4H	23.56	24.15	24.28	24.87	25.72	20.76	21.35	21.48	22.08	22.92
	6H	24.12	24.61	24.87	25.37	26.23	21.31	21.79	22.06	22.56	23.41
	8H	24.32	24.75	25.08	25.52	26.39	21.49	21.93	22.26	22.70	23.56
	12H	24.43	24.82	25.20	25.58	26.51	21.57	21.95	22.33	22.71	23.64
12H	4H	23.53	24.06	24.27	24.81	25.66	20.79	21.32	21.53	22.07	22.92
	6H	24.10	24.54	24.87	25.31	26.18	21.37	21.80	22.13	22.57	23.44
	8H	24.33	24.71	25.09	25.47	26.40	21.59	21.97	22.35	22.73	23.66