

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: P854143

Luminaire Tested: SQ2-PP3-125U-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854143
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-125U-100D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

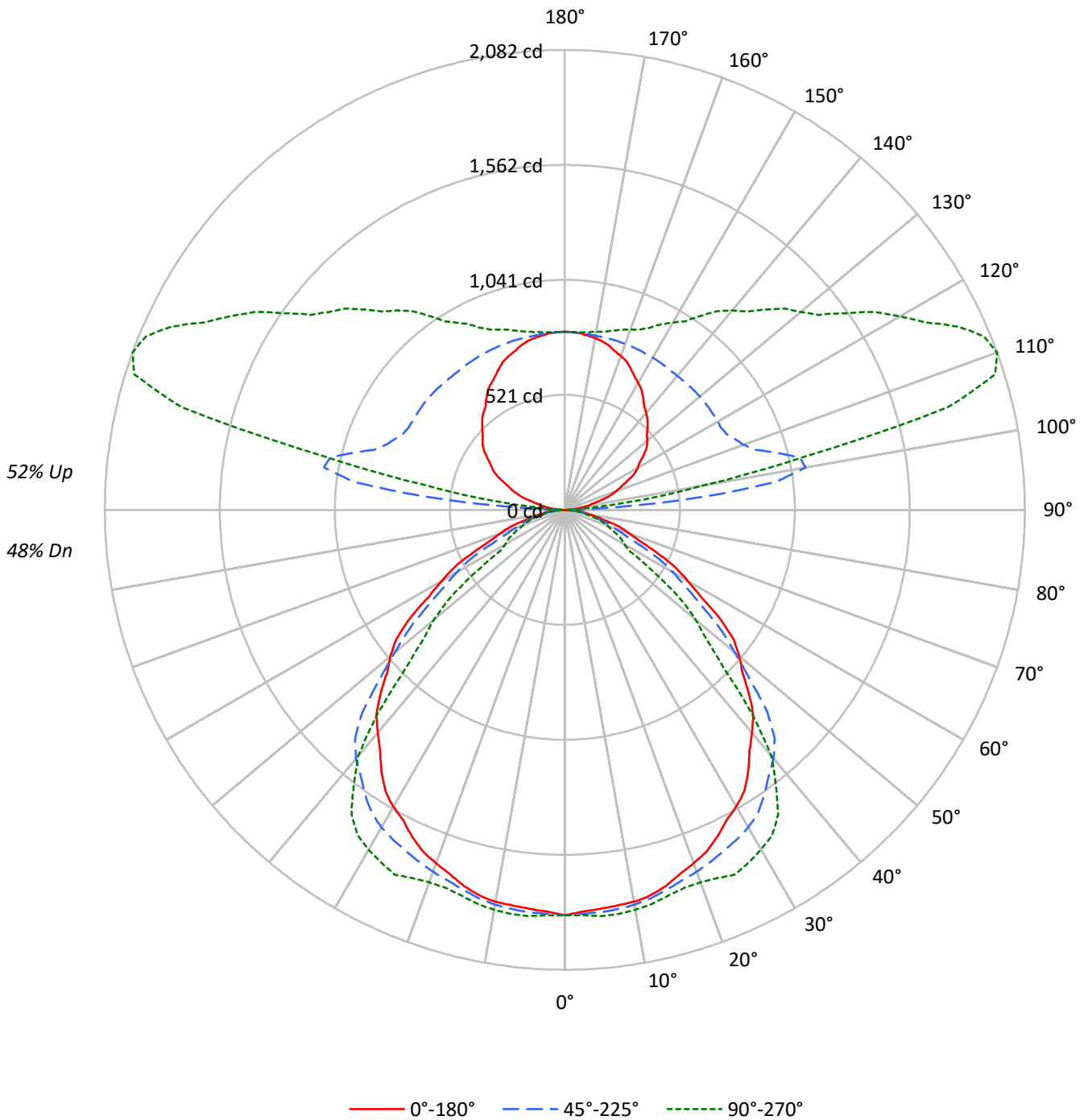
Lumens per Lamp: N/A
Luminaire Lumens: 9591.8 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 81.5
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48				48
1	98	94	90	87	90	87	83	81	73	71	69	60	59	58	49	48	47				42	
2	90	82	77	72	82	76	71	67	64	61	58	54	51	49	44	42	40				36	
3	82	73	66	60	75	67	61	56	57	53	49	48	45	42	39	37	35				31	
4	75	65	57	51	69	60	53	48	51	46	42	43	39	36	35	32	30				27	
5	69	58	50	44	63	54	47	41	46	41	36	39	35	31	32	29	27				23	
6	64	52	44	38	59	48	41	36	41	36	32	35	31	28	29	26	24				21	
7	59	47	39	34	54	44	37	32	38	32	28	32	28	25	26	23	21				18	
8	55	43	35	30	50	40	33	28	34	29	25	29	25	22	24	21	19				16	
9	51	39	32	27	47	36	30	25	31	26	22	27	23	20	22	19	17				15	
10	48	36	29	24	44	33	27	23	29	24	20	25	21	18	21	18	15				13	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	29624	29624	29624
5°	29392	29644	29927
10°	29542	29763	30145
15°	29471	29762	30216
20°	29259	29960	30826
25°	29094	30337	32446
30°	28929	30954	33122
35°	28519	31042	33183
40°	27758	30987	30661
45°	26928	29583	23341
50°	25870	25237	19439
55°	24076	21239	13976
60°	20731	18225	10020
65°	17486	14078	9857
70°	14559	11080	9432
75°	12339	9557	8833
80°	10460	8294	7931
85°	8262	6836	4316

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 29583 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.7	1.8
10°-20°	505.6	5.3
20°-30°	792.1	8.3
30°-40°	977.2	10.2
40°-50°	920.0	9.6
50°-60°	651.4	6.8
60°-70°	371.2	3.9
70°-80°	183.6	1.9
80°-90°	45.8	0.5
90°-100°	308.2	3.2
100°-110°	1003.2	10.5
110°-120°	992.4	10.3
120°-130°	811.0	8.5
130°-140°	662.8	6.9
140°-150°	516.3	5.4
150°-160°	372.1	3.9
160°-170°	227.4	2.4
170°-180°	76.7	0.8
0°-30°	1472.5	15.4
0°-40°	2449.7	25.5
0°-60°	4021.1	41.9
0°-90°	4621.7	48.2
90°-120°	2303.8	24.0
90°-150°	4293.8	44.8
90°-180°	4970.0	51.8
0°-180°	9591.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1835	1835	1835	1835	1835	
5°	1814	1846	1829	1833	1846	173
15°	1763	1788	1780	1798	1808	497
25°	1633	1675	1703	1772	1821	752
35°	1447	1487	1575	1665	1684	902
45°	1179	1268	1296	1098	1022	908
55°	855	907	754	569	496	755
65°	458	482	368	260	258	460
75°	198	219	153	144	142	214
85°	45	41	37	29	23	52
90°	0	3	7	6	6	4
95°	42	127	565	201	124	48
105°	170	246	994	1898	1797	182
115°	315	376	810	1668	1963	312
125°	438	488	799	1317	1553	390
135°	529	584	795	1137	1282	409
145°	618	664	793	979	1072	387
155°	706	729	798	877	910	325
165°	770	777	800	830	839	217
175°	803	803	803	808	806	76
180°	806	806	806	806	806	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1834.8	1834.8	1834.8	1834.8	1834.8
2.5°	1820.9	1846.7	1830.2	1833.3	1836.4
5°	1813.5	1845.7	1829.0	1833.2	1846.5
7.5°	1806.5	1839.5	1823.2	1830.2	1846.5
10°	1801.9	1830.3	1815.4	1825.4	1838.7
12.5°	1787.9	1814.8	1801.5	1814.5	1826.3
15°	1763.1	1787.7	1780.5	1798.2	1807.7
17.5°	1729.3	1759.3	1759.2	1784.2	1794.1
20°	1702.9	1739.0	1743.7	1775.1	1794.1
22.5°	1675.0	1717.1	1725.0	1772.3	1805.0
25°	1633.1	1674.8	1702.9	1771.9	1821.3
27.5°	1584.2	1625.6	1683.5	1760.8	1799.9
30°	1551.7	1591.5	1660.3	1740.6	1776.6
32.5°	1511.3	1552.7	1626.1	1712.6	1745.6
35°	1446.9	1486.7	1574.9	1664.6	1683.5
37.5°	1372.8	1418.0	1516.7	1566.8	1567.9
40°	1317.0	1375.8	1470.2	1479.3	1454.7
42.5°	1262.7	1338.1	1405.0	1364.1	1254.5
45°	1179.3	1268.4	1295.6	1098.0	1022.2
47.5°	1090.4	1178.4	1135.0	920.9	868.5
50°	1029.9	1113.4	1004.7	823.2	773.9
52.5°	961.6	1036.0	888.3	729.5	654.4
55°	855.3	906.6	754.5	568.6	496.5
57.5°	727.3	763.4	645.1	426.8	346.0
60°	642.0	670.4	564.4	350.2	310.3
62.5°	564.4	589.8	480.6	304.2	290.2
65°	457.7	482.4	368.5	259.9	258.0
67.5°	364.3	391.2	282.8	226.9	224.6
70°	308.4	336.8	234.7	203.6	199.8
72.5°	261.8	288.8	199.0	178.8	176.5
75°	197.8	218.7	153.2	143.5	141.6
77.5°	143.5	156.8	114.0	109.0	107.1
80°	112.5	118.2	89.2	87.2	85.3
82.5°	84.6	82.7	67.5	65.5	62.1
85°	44.6	40.8	36.9	29.0	23.3
87.5°	14.0	14.5	7.6	5.8	5.8
90°	0.0	2.9	6.9	5.9	5.9
92.5°	14.3	51.3	163.9	54.0	41.6
95°	41.6	126.9	564.8	201.4	123.9
97.5°	78.3	165.1	958.5	583.8	356.3
100°	102.1	187.3	1106.8	986.9	640.1
102.5°	129.0	211.2	1088.5	1460.1	1110.1
105°	170.4	246.0	993.8	1898.2	1797.4
107.5°	215.2	286.3	903.9	1936.2	2042.9
110°	247.7	312.6	861.0	1889.0	2081.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	274.7	338.8	834.1	1803.8	2052.4
115°	315.1	376.1	809.5	1668.3	1962.9
117.5°	356.7	411.7	800.0	1544.3	1837.4
120°	380.5	434.7	797.6	1468.0	1751.8
122.5°	403.5	457.0	798.4	1401.7	1666.2
125°	438.0	488.3	798.6	1317.2	1552.7
127.5°	467.5	519.0	798.4	1253.9	1450.2
130°	486.5	538.8	797.6	1217.8	1393.1
132.5°	503.2	557.8	796.8	1184.2	1348.7
135°	529.1	584.3	794.7	1136.8	1282.2
137.5°	554.5	610.1	792.5	1088.7	1217.8
140°	572.7	626.0	791.7	1056.0	1178.1
142.5°	590.1	641.1	791.7	1024.8	1133.7
145°	618.3	663.8	792.7	979.1	1072.1
147.5°	645.6	685.2	794.1	940.2	1012.1
150°	663.9	698.7	795.7	916.9	978.0
152.5°	682.1	710.8	796.4	899.2	947.8
155°	705.5	728.7	797.6	876.7	909.6
157.5°	727.7	744.3	798.8	860.0	883.0
160°	741.2	754.7	799.6	849.6	868.0
162.5°	753.0	763.5	799.6	840.7	854.5
165°	769.9	776.7	799.6	829.6	839.2
167.5°	781.8	786.0	799.8	821.1	826.2
170°	789.7	791.6	800.6	815.5	817.4
172.5°	795.3	796.4	802.2	812.3	811.9
175°	802.6	802.6	802.6	808.5	806.5
177.5°	805.6	804.8	804.0	807.9	804.8
180°	805.6	805.6	805.6	805.6	805.6

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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	19.14	19.96	20.12	20.95	22.25	15.54	16.36	16.52	17.34	18.64
	3H	20.23	20.96	21.23	21.96	23.28	16.64	17.37	17.63	18.37	19.69
	4H	20.57	21.26	21.58	22.26	23.59	17.10	17.79	18.11	18.79	20.12
	6H	20.79	21.42	21.80	22.43	23.77	17.44	18.08	18.46	19.08	20.42
	8H	20.84	21.44	21.86	22.46	23.80	17.53	18.13	18.55	19.15	20.49
	12H	20.85	21.42	21.87	22.44	23.80	17.54	18.11	18.57	19.13	20.49
4H	2H	19.25	19.93	20.26	20.93	22.26	16.25	16.94	17.26	17.94	19.27
	3H	20.55	21.12	21.57	22.15	23.49	17.49	18.06	18.51	19.09	20.44
	4H	21.02	21.54	22.05	22.56	23.93	18.05	18.57	19.07	19.59	20.96
	6H	21.36	21.80	22.39	22.85	24.21	18.48	18.93	19.52	19.98	21.34
	8H	21.45	21.87	22.49	22.91	24.28	18.60	19.02	19.64	20.06	21.44
	12H	21.48	21.86	22.54	22.91	24.30	18.63	19.01	19.69	20.06	21.44
8H	4H	21.04	21.45	22.07	22.49	23.87	18.32	18.73	19.35	19.77	21.15
	6H	21.47	21.81	22.53	22.89	24.27	18.86	19.20	19.92	20.28	21.66
	8H	21.62	21.93	22.69	22.99	24.39	19.05	19.35	20.11	20.41	21.81
	12H	21.71	21.98	22.78	23.03	24.47	19.12	19.39	20.19	20.44	21.88
12H	4H	20.99	21.37	22.05	22.42	23.81	18.32	18.70	19.38	19.75	21.13
	6H	21.46	21.76	22.52	22.82	24.22	18.91	19.22	19.98	20.28	21.68
	8H	21.62	21.89	22.70	22.95	24.39	19.12	19.39	20.19	20.45	21.88