

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: P855120

Luminaire Tested: SQ2-PP3-150U-100D-835-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P855120
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-150U-100D-835-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

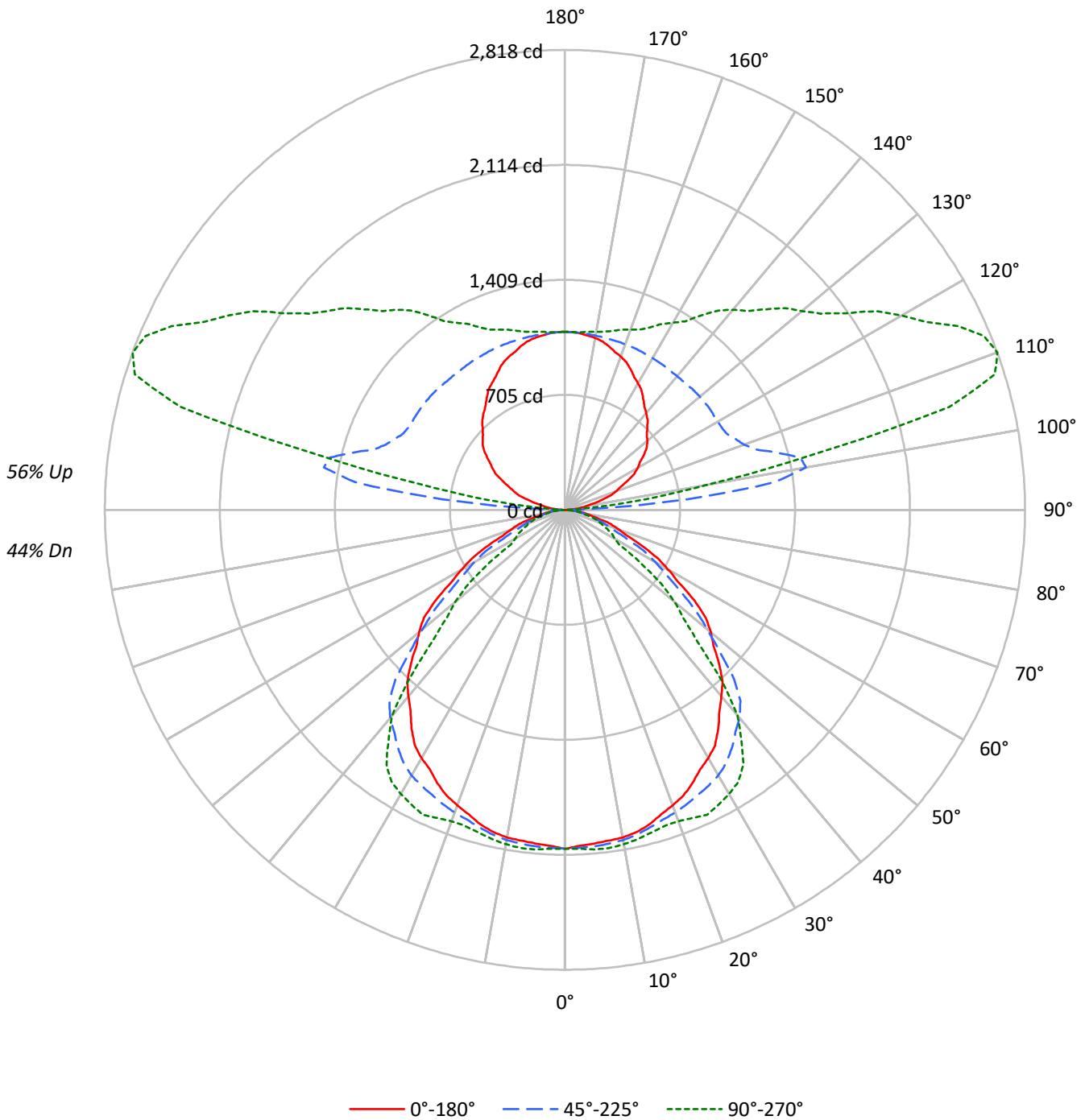
Lumens per Lamp: N/A
Luminaire Lumens: 11959.2 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 94.2
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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	44
1	97	93	89	86	89	85	82	79	71	69	67	57	56	55	45	44	43	38
2	89	82	76	71	81	75	70	66	62	59	56	51	48	46	40	39	37	32
3	81	72	65	59	74	66	60	55	55	51	47	45	42	40	36	34	32	28
4	74	64	56	50	68	59	52	47	49	44	41	41	37	34	32	30	28	24
5	68	57	49	43	62	53	46	41	44	39	35	37	33	30	29	27	25	21
6	63	51	43	38	57	47	40	35	40	35	31	33	29	26	27	24	22	19
7	58	46	38	33	53	43	36	31	36	31	27	30	26	23	24	22	19	17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	22	19	17	15
9	50	38	31	26	46	35	29	24	30	25	21	25	21	19	21	18	16	13
10	47	35	28	23	43	33	26	22	28	23	19	23	19	17	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33525	33525	33525
5°	33263	33546	33867
10°	33431	33682	34115
15°	33351	33680	34195
20°	33112	33905	34885
25°	32924	34331	36718
30°	32738	35029	37483
35°	32274	35130	37552
40°	31413	35068	34697
45°	30474	33479	26414
50°	29276	28560	21999
55°	27246	24034	15817
60°	23460	20625	11341
65°	19790	15931	11156
70°	16475	12538	10674
75°	13961	10817	9994
80°	11836	9382	8973
85°	9355	7744	4891

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 33479 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.7	1.7
10°-20°	572.2	4.8
20°-30°	896.4	7.5
30°-40°	1105.8	9.2
40°-50°	1041.2	8.7
50°-60°	737.2	6.2
60°-70°	420.0	3.5
70°-80°	207.8	1.7
80°-90°	52.0	0.4
90°-100°	415.4	3.5
100°-110°	1360.2	11.4
110°-120°	1344.7	11.2
120°-130°	1099.2	9.2
130°-140°	897.0	7.5
140°-150°	698.1	5.8
150°-160°	502.7	4.2
160°-170°	307.5	2.6
170°-180°	103.9	0.9
0°-30°	1666.3	13.9
0°-40°	2772.2	23.2
0°-60°	4550.6	38.1
0°-90°	5230.4	43.7
90°-120°	3120.3	26.1
90°-150°	5814.7	48.6
90°-180°	6729.0	56.3
0°-180°	11959.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2076	2076	2076	2076	2076	
5°	2052	2089	2070	2075	2090	196
15°	1995	2023	2015	2035	2046	562
25°	1848	1895	1927	2005	2061	851
35°	1637	1682	1782	1884	1905	1021
45°	1335	1435	1466	1243	1157	1027
55°	968	1026	854	644	562	854
65°	518	546	417	294	292	520
75°	224	248	173	162	160	243
85°	50	46	42	33	26	59
90°	1	3	9	8	9	5
95°	58	169	755	269	175	66
105°	236	337	1350	2565	2437	249
115°	426	509	1097	2267	2661	421
125°	593	661	1081	1788	2100	527
135°	714	789	1072	1542	1738	552
145°	835	896	1070	1326	1453	523
155°	951	983	1077	1186	1232	438
165°	1039	1048	1081	1123	1135	293
175°	1086	1086	1087	1095	1092	103
180°	1090	1090	1090	1090	1090	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2076.4	2076.4	2076.4	2076.4	2076.4
2.5°	2060.6	2089.8	2071.2	2074.7	2078.2
5°	2052.3	2088.7	2069.8	2074.6	2089.6
7.5°	2044.4	2081.7	2063.2	2071.2	2089.6
10°	2039.1	2071.3	2054.4	2065.7	2080.8
12.5°	2023.3	2053.7	2038.7	2053.4	2066.8
15°	1995.2	2023.1	2014.9	2035.0	2045.7
17.5°	1957.0	1990.9	1990.8	2019.1	2030.3
20°	1927.1	1968.0	1973.3	2008.8	2030.3
22.5°	1895.5	1943.2	1952.1	2005.6	2042.7
25°	1848.1	1895.3	1927.1	2005.2	2061.1
27.5°	1792.8	1839.6	1905.2	1992.6	2036.9
30°	1756.0	1801.0	1878.9	1969.8	2010.5
32.5°	1710.3	1757.1	1840.2	1938.1	1975.4
35°	1637.4	1682.4	1782.3	1883.8	1905.2
37.5°	1553.5	1604.7	1716.4	1773.1	1774.3
40°	1490.4	1556.9	1663.8	1674.1	1646.2
42.5°	1429.0	1514.3	1590.0	1543.7	1419.7
45°	1334.6	1435.4	1466.2	1242.6	1156.8
47.5°	1234.0	1333.6	1284.4	1042.1	982.8
50°	1165.5	1260.0	1137.0	931.6	875.8
52.5°	1088.2	1172.4	1005.3	825.5	740.6
55°	967.9	1026.0	853.8	643.5	561.9
57.5°	823.1	863.9	730.0	483.0	391.6
60°	726.5	758.7	638.7	396.3	351.2
62.5°	638.7	667.5	543.9	344.3	328.4
65°	518.0	545.9	417.0	294.1	292.0
67.5°	412.3	442.7	320.0	256.8	254.2
70°	349.0	381.1	265.6	230.4	226.1
72.5°	296.3	326.8	225.2	202.3	199.7
75°	223.8	247.5	173.4	162.4	160.2
77.5°	162.4	177.4	129.0	123.4	121.2
80°	127.3	133.8	100.9	98.7	96.5
82.5°	95.7	93.6	76.4	74.1	70.3
85°	50.5	46.2	41.8	32.8	26.4
87.5°	16.1	16.5	8.8	6.8	7.0
90°	1.1	3.3	8.9	7.9	8.9
92.5°	19.0	69.5	213.3	69.4	55.6
95°	58.3	169.0	755.2	269.0	174.8
97.5°	105.8	222.8	1295.6	783.8	485.8
100°	139.0	250.7	1499.1	1338.8	887.3
102.5°	176.5	285.7	1476.7	1972.6	1529.2
105°	236.4	337.2	1350.1	2565.1	2436.9
107.5°	295.4	387.8	1226.6	2620.5	2761.4
110°	333.8	423.7	1167.5	2556.1	2817.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	370.6	457.9	1131.7	2443.8	2779.4
115°	425.7	509.0	1096.9	2266.6	2661.0
117.5°	479.4	557.1	1083.7	2092.4	2492.9
120°	514.2	587.7	1080.1	1990.9	2380.9
122.5°	545.7	617.3	1080.1	1903.3	2265.3
125°	592.7	660.7	1081.2	1787.5	2099.7
127.5°	632.6	701.9	1079.8	1702.0	1973.7
130°	657.7	727.8	1078.9	1650.4	1895.8
132.5°	680.1	752.0	1076.3	1605.9	1828.5
135°	713.7	789.3	1072.3	1541.7	1737.8
137.5°	749.2	824.1	1069.8	1474.7	1652.0
140°	774.2	846.5	1068.9	1432.3	1599.9
142.5°	799.3	867.2	1068.9	1387.2	1539.1
145°	834.7	896.1	1070.0	1326.1	1453.2
147.5°	871.9	923.0	1071.6	1273.0	1369.0
150°	895.3	940.2	1073.4	1242.1	1323.3
152.5°	918.6	958.2	1074.3	1216.8	1283.8
155°	951.3	983.0	1076.8	1186.4	1232.5
157.5°	980.6	1003.6	1079.2	1162.7	1195.9
160°	999.4	1018.0	1080.1	1149.1	1175.3
162.5°	1015.6	1030.7	1080.1	1138.1	1157.4
165°	1038.6	1048.5	1081.2	1122.9	1134.9
167.5°	1058.1	1063.0	1082.5	1111.2	1117.7
170°	1068.9	1071.1	1083.5	1104.8	1107.0
172.5°	1077.0	1078.2	1086.2	1100.3	1100.7
175°	1085.7	1085.7	1086.8	1094.7	1092.4
177.5°	1090.1	1089.3	1088.4	1093.6	1090.1
180°	1090.1	1090.1	1090.1	1090.1	1090.1



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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	19.13	19.91	20.15	20.93	22.29	15.53	16.31	16.54	17.33	18.69
	3H	20.22	20.92	21.25	21.95	23.33	16.63	17.32	17.65	18.35	19.73
	4H	20.56	21.22	21.60	22.25	23.64	17.08	17.74	18.12	18.78	20.17
	6H	20.77	21.38	21.82	22.41	23.81	17.43	18.03	18.47	19.07	20.47
	8H	20.82	21.39	21.87	22.45	23.84	17.51	18.09	18.56	19.14	20.53
	12H	20.83	21.38	21.89	22.42	23.84	17.52	18.07	18.58	19.12	20.54
4H	2H	19.23	19.89	20.27	20.92	22.31	16.23	16.89	17.28	17.92	19.31
	3H	20.53	21.08	21.58	22.14	23.54	17.47	18.02	18.53	19.08	20.48
	4H	21.00	21.50	22.06	22.55	23.98	18.03	18.53	19.09	19.58	21.00
	6H	21.33	21.76	22.40	22.84	24.26	18.46	18.89	19.53	19.97	21.38
	8H	21.43	21.83	22.50	22.89	24.33	18.58	18.98	19.65	20.05	21.48
	12H	21.46	21.82	22.55	22.90	24.34	18.61	18.97	19.69	20.05	21.49
8H	4H	21.01	21.41	22.08	22.48	23.92	18.29	18.69	19.36	19.76	21.19
	6H	21.44	21.77	22.53	22.88	24.31	18.84	19.17	19.93	20.28	21.71
	8H	21.60	21.89	22.70	22.98	24.43	19.02	19.31	20.12	20.40	21.85
	12H	21.68	21.94	22.78	23.03	24.52	19.09	19.35	20.19	20.44	21.93
12H	4H	20.97	21.33	22.06	22.41	23.85	18.30	18.66	19.38	19.74	21.18
	6H	21.43	21.72	22.53	22.81	24.26	18.89	19.18	19.99	20.27	21.72
	8H	21.60	21.85	22.70	22.94	24.43	19.09	19.35	20.19	20.44	21.93