

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:

Luminaire Tested: SQ4-FB-0U-100D-940-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-3)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-0U-100D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

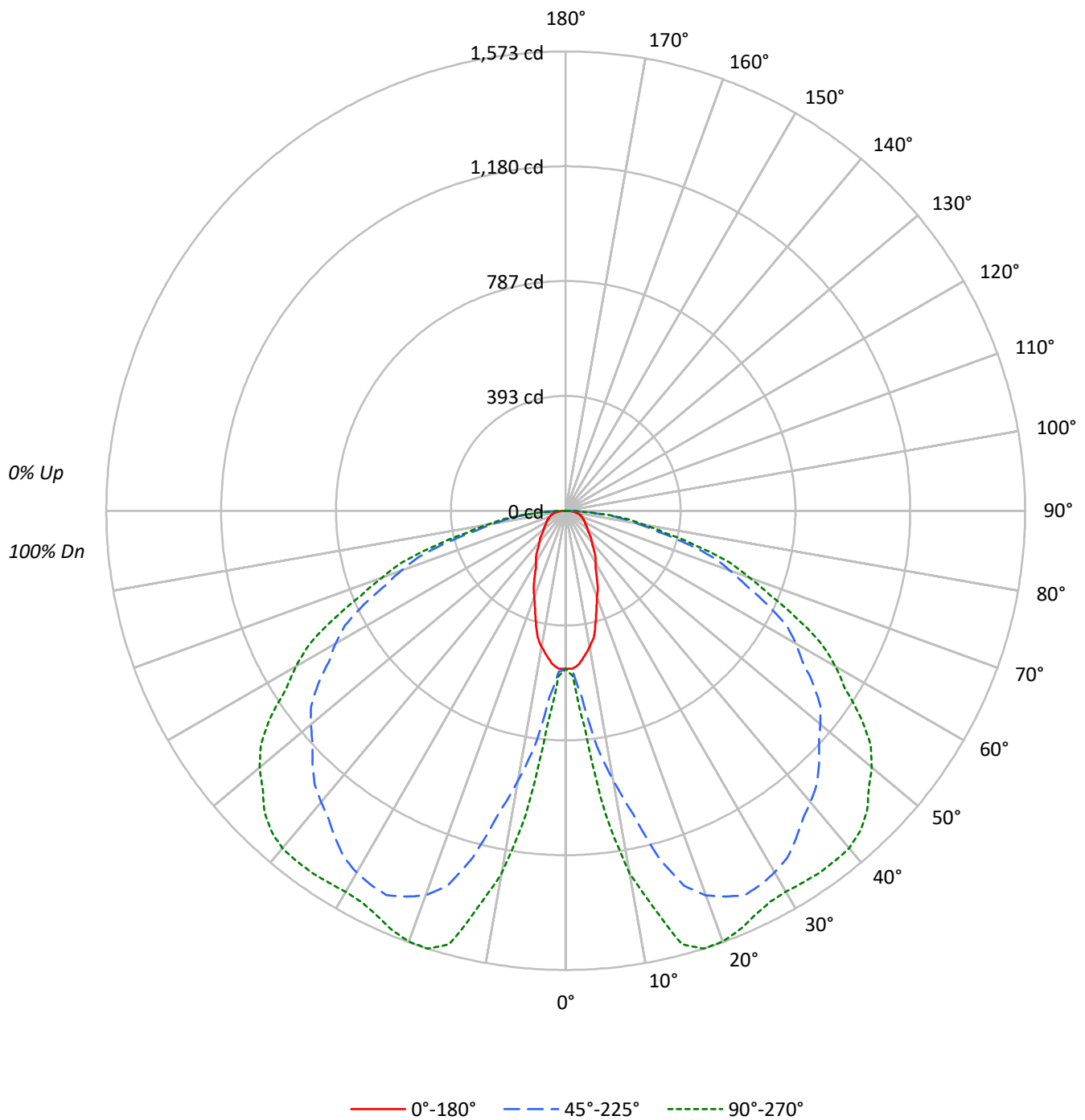
Lumens per Lamp: N/A
Luminaire Lumens: 4188.9 lumens
Efficiency: N/A
Efficacy: 75.7 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 55.3
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		89
2	97	88	81	75	95	87	80	74	83	77	72		80	75	71		77
3	88	77	68	61	86	75	67	61	72	65	59		69	63	58		67
4	80	67	58	51	78	66	57	51	63	56	50		61	54	49		59
5	73	60	50	43	71	58	50	43	56	48	42		54	47	42		52
6	67	53	44	37	65	52	43	37	50	42	36		49	42	36		47
7	62	48	39	32	60	47	38	32	45	38	32		44	37	32		43
8	58	43	34	28	56	43	34	28	41	34	28		40	33	28		39
9	54	40	31	25	52	39	31	25	38	30	25		37	30	25		36
10	50	36	28	23	49	36	28	22	35	27	22		34	27	22		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3329	3329	3329
5°	3256	3960	4610
10°	2957	5859	7870
15°	2516	7830	9786
20°	2051	9177	10276
25°	1713	9857	10382
30°	1446	10161	10705
35°	1281	10311	11370
40°	1118	10460	12116
45°	1014	10666	12687
50°	933	10892	13090
55°	895	11096	13233
60°	920	11198	13125
65°	962	11108	12741
70°	1032	10767	12051
75°	1157	9988	11044
80°	1293	8630	9617
85°	1228	7188	8229

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 13288 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	1.7
10°-20°	309.2	7.4
20°-30°	541.9	12.9
30°-40°	697.8	16.7
40°-50°	779.0	18.6
50°-60°	747.1	17.8
60°-70°	594.5	14.2
70°-80°	350.3	8.4
80°-90°	98.2	2.3
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°	922.1	22.0
0°-40°	1619.9	38.7
0°-60°	3145.9	75.1
0°-90°	4188.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4188.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	541	541	541	541	541	
5°	527	565	641	724	747	48
15°	395	726	1230	1487	1537	110
25°	252	823	1452	1527	1530	116
35°	171	772	1373	1457	1514	106
45°	117	606	1226	1393	1458	90
55°	84	405	1035	1197	1234	76
65°	66	265	763	862	875	66
75°	49	167	420	458	465	51
85°	17	45	102	114	117	20
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	541.3	541.3	541.3	541.3	541.3	541.3	541.3	541.3	541.3	541.3
2.5°	541.3	541.3	544.1	548.2	549.6	555.2	563.6	567.7	570.5	567.7
5°	527.4	534.3	556.9	590.0	623.1	659.6	706.6	729.2	743.2	746.7
7.5°	499.9	519.0	583.4	669.7	765.8	861.2	943.7	1010.5	1049.5	1051.2
10°	473.4	506.5	605.7	737.9	870.2	1006.0	1119.1	1188.7	1244.4	1260.1
12.5°	444.2	493.9	629.3	806.2	987.2	1139.6	1265.3	1341.9	1386.4	1392.4
15°	395.1	468.2	663.1	913.7	1138.3	1321.0	1441.1	1502.0	1529.8	1536.8
17.5°	349.5	445.2	692.7	998.0	1263.9	1428.6	1519.8	1558.0	1572.0	1572.7
20°	313.3	422.9	706.6	1056.4	1328.0	1475.9	1542.0	1566.4	1573.4	1569.9
22.5°	286.8	399.3	715.0	1095.4	1366.9	1494.0	1543.4	1555.3	1558.0	1554.6
25°	252.4	360.3	715.3	1147.0	1406.3	1498.5	1524.6	1528.1	1531.6	1529.8
27.5°	221.7	316.8	704.9	1181.1	1411.8	1477.3	1489.5	1498.2	1509.0	1511.4
30°	203.6	288.9	691.0	1192.2	1406.3	1455.0	1467.2	1482.9	1502.0	1507.2
32.5°	189.7	262.5	670.1	1193.6	1392.4	1428.6	1444.9	1474.5	1502.0	1510.0
35°	170.6	222.8	635.3	1183.5	1361.0	1385.4	1420.2	1468.9	1505.5	1514.2
37.5°	151.8	194.2	587.9	1163.0	1320.0	1345.4	1402.8	1461.6	1502.4	1513.1
40°	139.2	177.5	551.7	1143.5	1287.9	1317.5	1388.9	1453.3	1496.8	1509.0
42.5°	129.5	163.6	512.7	1118.4	1251.7	1292.5	1372.2	1440.7	1481.5	1490.9
45°	116.6	142.7	450.8	1072.1	1195.7	1256.6	1343.6	1409.8	1448.0	1458.5
47.5°	104.4	128.1	386.0	1019.2	1138.6	1213.1	1302.2	1364.9	1400.0	1407.0
50°	97.5	118.4	342.9	981.6	1098.2	1178.3	1268.8	1331.4	1361.0	1368.0
52.5°	91.9	110.0	302.5	938.4	1056.4	1142.1	1228.4	1285.5	1312.3	1315.1
55°	83.5	99.2	248.9	872.0	990.3	1079.1	1162.6	1207.9	1227.0	1234.0
57.5°	79.0	91.2	206.8	799.9	915.8	1004.9	1080.8	1116.0	1131.3	1133.7
60°	74.8	87.0	184.5	748.4	868.5	952.0	1018.2	1047.7	1061.7	1066.9
62.5°	70.7	84.2	167.8	695.5	812.8	893.5	951.3	976.7	987.9	988.9
65°	66.1	80.1	147.9	614.4	725.8	800.6	845.9	866.7	872.0	875.4
67.5°	61.6	75.9	133.7	532.6	636.0	697.9	731.3	749.4	750.5	757.8
70°	57.4	73.1	125.3	476.9	569.1	628.3	656.1	670.1	668.3	670.1
72.5°	54.6	68.9	119.7	419.8	505.1	551.7	576.8	586.5	587.6	587.9
75°	48.7	60.9	111.4	332.4	400.3	440.3	459.5	457.7	463.0	464.7
77.5°	42.1	52.6	91.5	245.1	300.1	326.5	341.8	346.7	345.0	345.3
80°	36.5	47.0	74.8	188.0	233.2	254.1	268.0	271.5	269.8	271.5
82.5°	29.6	38.6	58.1	139.2	174.7	191.4	201.2	201.9	202.9	206.1
85°	17.4	22.6	34.8	76.6	97.5	106.2	113.1	114.9	116.6	116.6
87.5°	7.0	9.7	18.1	32.0	40.4	43.2	43.2	40.4	43.2	39.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)