

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-075D-835-1D-UNV-STD-W-8

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-075D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

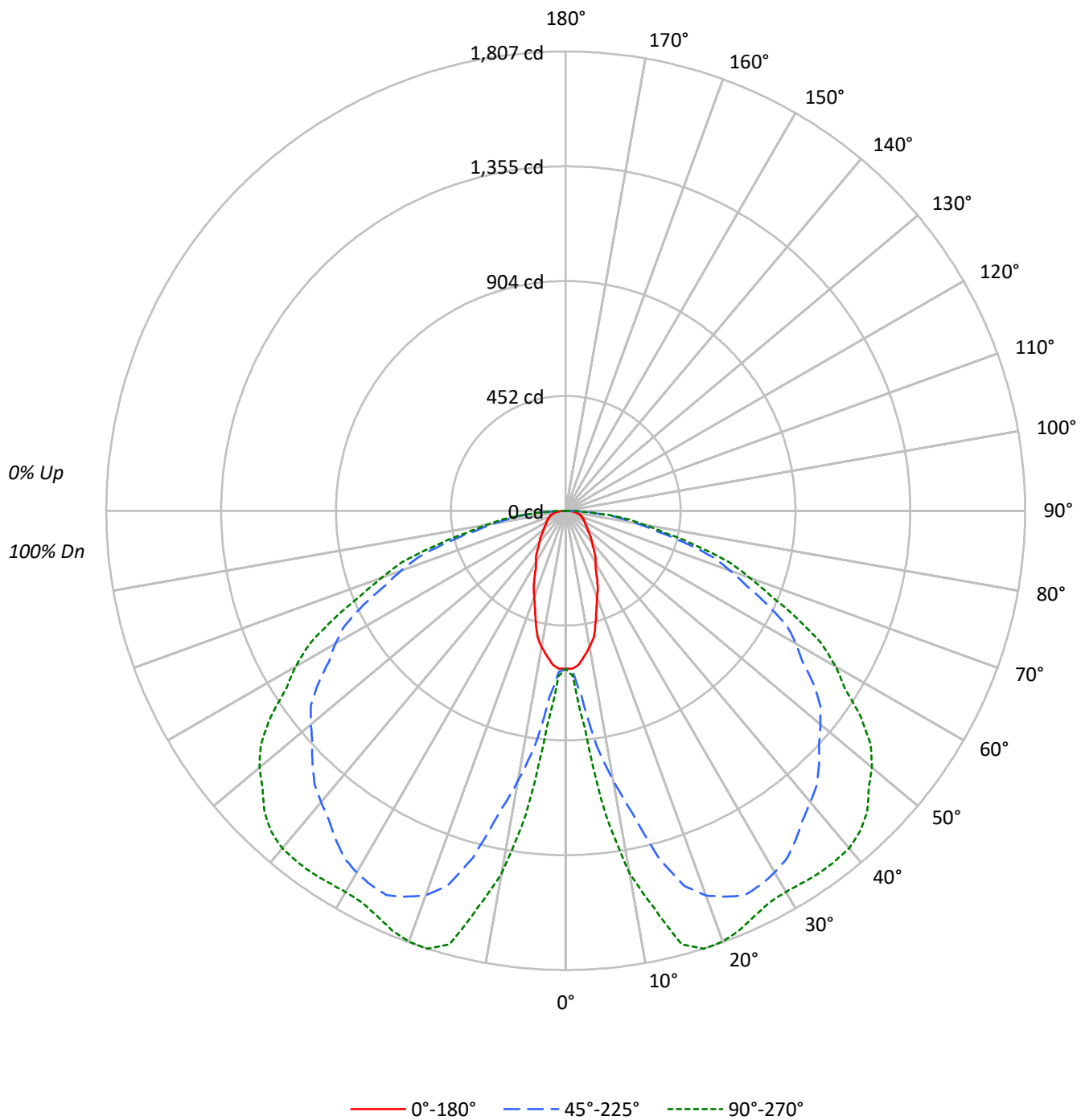
Lumens per Lamp: N/A
Luminaire Lumens: 4813.6 lumens
Efficiency: N/A
Efficacy: 88.5 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 54.4
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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84
2	97	88	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	61	86	75	67	61	72	65	59	69	63	58	67	62	57
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48
5	73	60	50	43	71	58	50	43	56	48	42	54	47	42	52	46	41
6	67	53	44	37	65	52	43	37	50	42	36	49	42	36	47	41	36
7	62	48	39	32	60	47	38	32	45	38	32	44	37	32	43	36	31
8	58	43	34	28	56	43	34	28	41	34	28	40	33	28	39	32	28
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2869	2869	2869
5°	2806	3413	3973
10°	2548	5050	6783
15°	2168	6748	8434
20°	1767	7909	8856
25°	1476	8495	8948
30°	1246	8757	9226
35°	1104	8887	9799
40°	964	9015	10442
45°	874	9192	10934
50°	804	9387	11282
55°	772	9563	11405
60°	793	9651	11311
65°	830	9573	10981
70°	890	9280	10386
75°	998	8609	9518
80°	1116	7438	8289
85°	1059	6193	7093

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 11452 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.6	1.7
10°-20°	355.3	7.4
20°-30°	622.7	12.9
30°-40°	801.8	16.7
40°-50°	895.2	18.6
50°-60°	858.5	17.8
60°-70°	683.2	14.2
70°-80°	402.5	8.4
80°-90°	112.8	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°	1059.6	22.0
0°-40°	1861.4	38.7
0°-60°	3615.1	75.1
0°-90°	4813.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4813.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	622	622	622	622	622	
5°	606	650	737	832	858	56
15°	454	834	1413	1708	1766	126
25°	290	946	1669	1755	1758	134
35°	196	888	1578	1674	1740	122
45°	134	696	1409	1601	1676	104
55°	96	465	1189	1375	1418	88
65°	76	304	877	990	1006	75
75°	56	192	483	526	534	58
85°	20	52	117	132	134	23
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0
2.5°	622.0	622.0	625.2	630.0	631.6	638.0	647.6	652.4	655.6	652.4
5°	606.0	614.0	640.0	678.0	716.0	758.0	812.0	838.0	854.0	858.0
7.5°	574.4	596.4	670.4	769.6	880.0	989.6	1084.4	1161.2	1206.0	1208.0
10°	544.0	582.0	696.0	848.0	1000.0	1156.0	1286.0	1366.0	1430.0	1448.0
12.5°	510.4	567.6	723.2	926.4	1134.4	1309.6	1454.0	1542.0	1593.2	1600.0
15°	454.0	538.0	762.0	1050.0	1308.0	1518.0	1656.0	1726.0	1758.0	1766.0
17.5°	401.6	511.6	796.0	1146.8	1452.4	1641.6	1746.4	1790.4	1806.4	1807.2
20°	360.0	486.0	812.0	1214.0	1526.0	1696.0	1772.0	1800.0	1808.0	1804.0
22.5°	329.6	458.8	821.6	1258.8	1570.8	1716.8	1773.6	1787.2	1790.4	1786.4
25°	290.0	414.0	822.0	1318.0	1616.0	1722.0	1752.0	1756.0	1760.0	1758.0
27.5°	254.8	364.0	810.0	1357.2	1622.4	1697.6	1711.6	1721.6	1734.0	1736.8
30°	234.0	332.0	794.0	1370.0	1616.0	1672.0	1686.0	1704.0	1726.0	1732.0
32.5°	218.0	301.6	770.0	1371.6	1600.0	1641.6	1660.4	1694.4	1726.0	1735.2
35°	196.0	256.0	730.0	1360.0	1564.0	1592.0	1632.0	1688.0	1730.0	1740.0
37.5°	174.4	223.2	675.6	1336.4	1516.8	1546.0	1612.0	1679.6	1726.4	1738.8
40°	160.0	204.0	634.0	1314.0	1480.0	1514.0	1596.0	1670.0	1720.0	1734.0
42.5°	148.8	188.0	589.2	1285.2	1438.4	1485.2	1576.8	1655.6	1702.4	1713.2
45°	134.0	164.0	518.0	1232.0	1374.0	1444.0	1544.0	1620.0	1664.0	1676.0
47.5°	120.0	147.2	443.6	1171.2	1308.4	1394.0	1496.4	1568.4	1608.8	1616.8
50°	112.0	136.0	394.0	1128.0	1262.0	1354.0	1458.0	1530.0	1564.0	1572.0
52.5°	105.6	126.4	347.6	1078.4	1214.0	1312.4	1411.6	1477.2	1508.0	1511.2
55°	96.0	114.0	286.0	1002.0	1138.0	1240.0	1336.0	1388.0	1410.0	1418.0
57.5°	90.8	104.8	237.6	919.2	1052.4	1154.8	1242.0	1282.4	1300.0	1302.8
60°	86.0	100.0	212.0	860.0	998.0	1094.0	1170.0	1204.0	1220.0	1226.0
62.5°	81.2	96.8	192.8	799.2	934.0	1026.8	1093.2	1122.4	1135.2	1136.4
65°	76.0	92.0	170.0	706.0	834.0	920.0	972.0	996.0	1002.0	1006.0
67.5°	70.8	87.2	153.6	612.0	730.8	802.0	840.4	861.2	862.4	870.8
70°	66.0	84.0	144.0	548.0	654.0	722.0	754.0	770.0	768.0	770.0
72.5°	62.8	79.2	137.6	482.4	580.4	634.0	662.8	674.0	675.2	675.6
75°	56.0	70.0	128.0	382.0	460.0	506.0	528.0	526.0	532.0	534.0
77.5°	48.4	60.4	105.2	281.6	344.8	375.2	392.8	398.4	396.4	396.8
80°	42.0	54.0	86.0	216.0	268.0	292.0	308.0	312.0	310.0	312.0
82.5°	34.0	44.4	66.8	160.0	200.8	220.0	231.2	232.0	233.2	236.8
85°	20.0	26.0	40.0	88.0	112.0	122.0	130.0	132.0	134.0	134.0
87.5°	8.0	11.2	20.8	36.8	46.4	49.6	49.6	46.4	49.6	44.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)