

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-840-1D-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-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

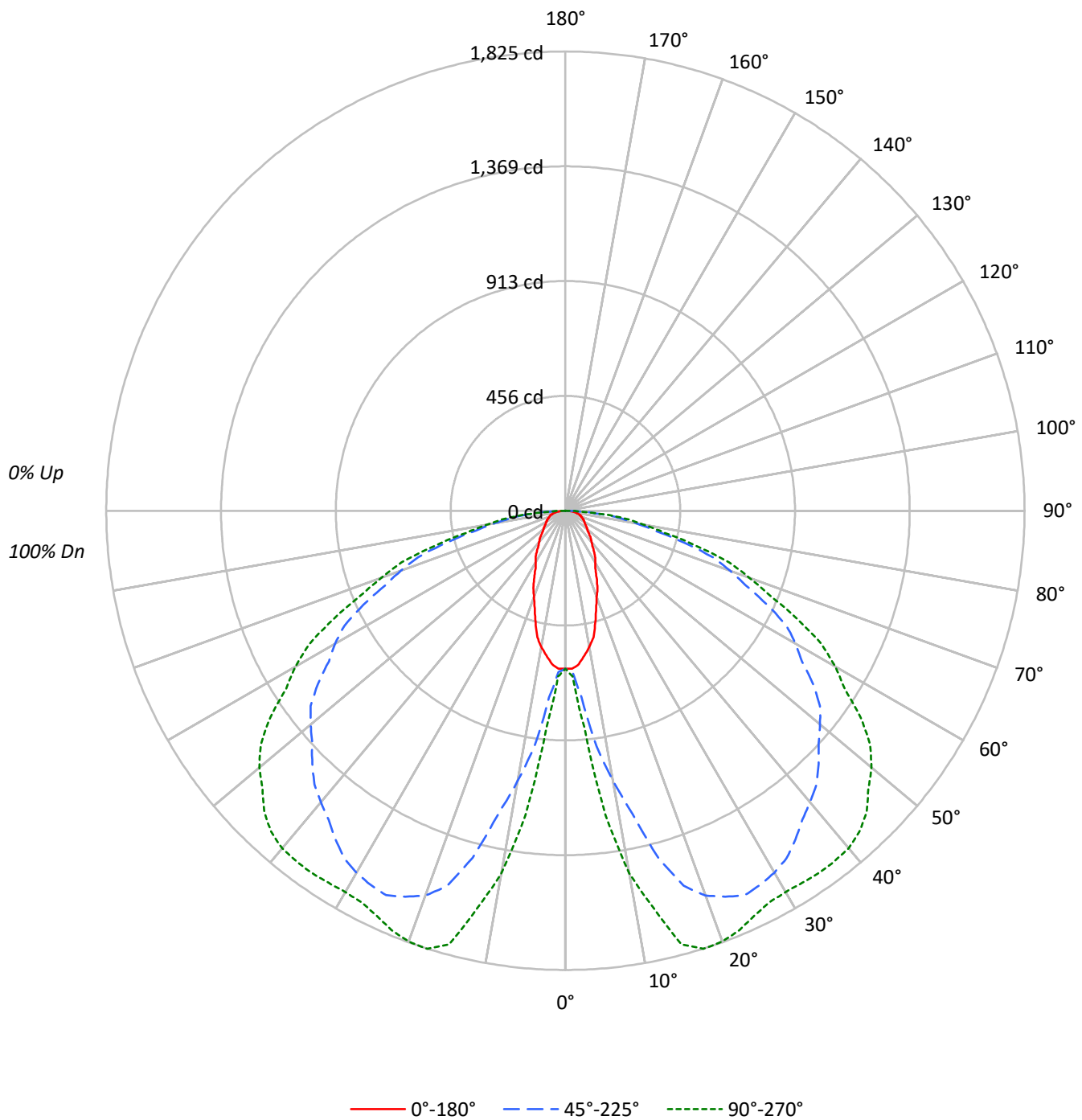
Lumens per Lamp: N/A
Luminaire Lumens: 4862.0 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

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

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-075D-840-1D-UNV-STD-W-8

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-075D-840-1D-UNV-STD-W-8

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°	2898	2898	2898
5°	2834	3447	4013
10°	2574	5100	6851
15°	2190	6816	8519
20°	1785	7988	8945
25°	1491	8581	9038
30°	1259	8845	9319
35°	1115	8976	9897
40°	973	9106	10547
45°	883	9285	11044
50°	812	9482	11395
55°	780	9659	11520
60°	802	9747	11425
65°	838	9670	11091
70°	900	9373	10489
75°	1009	8695	9614
80°	1126	7513	8371
85°	1069	6254	7161

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 11567 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-075D-840-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	1.7
10°-20°	358.9	7.4
20°-30°	629.0	12.9
30°-40°	809.9	16.7
40°-50°	904.2	18.6
50°-60°	867.1	17.8
60°-70°	690.1	14.2
70°-80°	406.6	8.4
80°-90°	114.0	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°	1070.3	22.0
0°-40°	1880.2	38.7
0°-60°	3651.5	75.1
0°-90°	4862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4862.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	612	656	744	840	867	56
15°	459	842	1427	1726	1784	127
25°	293	956	1686	1773	1776	135
35°	198	896	1594	1691	1758	124
45°	135	704	1423	1617	1693	105
55°	97	470	1201	1389	1432	88
65°	77	307	886	1000	1016	76
75°	57	193	488	532	539	59
85°	20	53	118	133	135	23
90°	0	0	0	0	0	

TEST NUMBER:

CATALOG NUMBER: SQ4-FB-0U-075D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	628.3	628.3	628.3	628.3	628.3	628.3	628.3	628.3	628.3	628.3
2.5°	628.3	628.3	631.5	636.3	638.0	644.4	654.1	659.0	662.2	659.0
5°	612.1	620.2	646.4	684.8	723.2	765.6	820.2	846.4	862.6	866.6
7.5°	580.2	602.4	677.1	777.3	888.9	999.6	1095.3	1172.9	1218.1	1220.2
10°	549.5	587.9	703.0	856.5	1010.1	1167.6	1298.9	1379.7	1444.4	1462.6
12.5°	515.5	573.3	730.5	935.7	1145.8	1322.8	1468.6	1557.5	1609.2	1616.1
15°	458.6	543.4	769.7	1060.6	1321.2	1533.3	1672.7	1743.4	1775.7	1783.8
17.5°	405.6	516.7	804.0	1158.3	1467.0	1658.1	1764.0	1808.4	1824.6	1825.4
20°	363.6	490.9	820.2	1226.2	1541.4	1713.1	1789.8	1818.1	1826.2	1822.1
22.5°	332.9	463.4	829.9	1271.5	1586.6	1734.1	1791.4	1805.2	1808.4	1804.4
25°	292.9	418.2	830.3	1331.3	1632.3	1739.3	1769.6	1773.7	1777.7	1775.7
27.5°	257.4	367.7	818.1	1370.9	1638.7	1714.7	1728.8	1738.9	1751.4	1754.3
30°	236.4	335.3	802.0	1383.8	1632.3	1688.8	1703.0	1721.1	1743.4	1749.4
32.5°	220.2	304.6	777.7	1385.4	1616.1	1658.1	1677.1	1711.4	1743.4	1752.7
35°	198.0	258.6	737.3	1373.7	1579.7	1608.0	1648.4	1705.0	1747.4	1757.5
37.5°	176.2	225.4	682.4	1349.8	1532.1	1561.6	1628.2	1696.5	1743.8	1756.3
40°	161.6	206.1	640.4	1327.2	1494.9	1529.2	1612.1	1686.8	1737.3	1751.4
42.5°	150.3	189.9	595.1	1298.1	1452.9	1500.1	1592.7	1672.3	1719.5	1730.4
45°	135.3	165.6	523.2	1244.4	1387.8	1458.5	1559.5	1636.3	1680.7	1692.9
47.5°	121.2	148.7	448.1	1183.0	1321.6	1408.0	1511.5	1584.2	1625.0	1633.1
50°	113.1	137.4	398.0	1139.3	1274.7	1367.6	1472.7	1545.4	1579.7	1587.8
52.5°	106.7	127.7	351.1	1089.2	1226.2	1325.6	1425.8	1492.1	1523.2	1526.4
55°	97.0	115.1	288.9	1012.1	1149.4	1252.5	1349.4	1402.0	1424.2	1432.3
57.5°	91.7	105.9	240.0	928.4	1063.0	1166.4	1254.5	1295.3	1313.1	1315.9
60°	86.9	101.0	214.1	868.7	1008.0	1105.0	1181.8	1216.1	1232.3	1238.3
62.5°	82.0	97.8	194.7	807.2	943.4	1037.1	1104.2	1133.7	1146.6	1147.8
65°	76.8	92.9	171.7	713.1	842.4	929.3	981.8	1006.0	1012.1	1016.1
67.5°	71.5	88.1	155.1	618.2	738.2	810.1	848.9	869.9	871.1	879.6
70°	66.7	84.8	145.4	553.5	660.6	729.3	761.6	777.7	775.7	777.7
72.5°	63.4	80.0	139.0	487.3	586.2	640.4	669.5	680.8	682.0	682.4
75°	56.6	70.7	129.3	385.8	464.6	511.1	533.3	531.3	537.4	539.4
77.5°	48.9	61.0	106.3	284.4	348.3	379.0	396.8	402.4	400.4	400.8
80°	42.4	54.5	86.9	218.2	270.7	294.9	311.1	315.1	313.1	315.1
82.5°	34.3	44.8	67.5	161.6	202.8	222.2	233.5	234.3	235.5	239.2
85°	20.2	26.3	40.4	88.9	113.1	123.2	131.3	133.3	135.3	135.3
87.5°	8.1	11.3	21.0	37.2	46.9	50.1	50.1	46.9	50.1	45.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)