

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-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-075D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

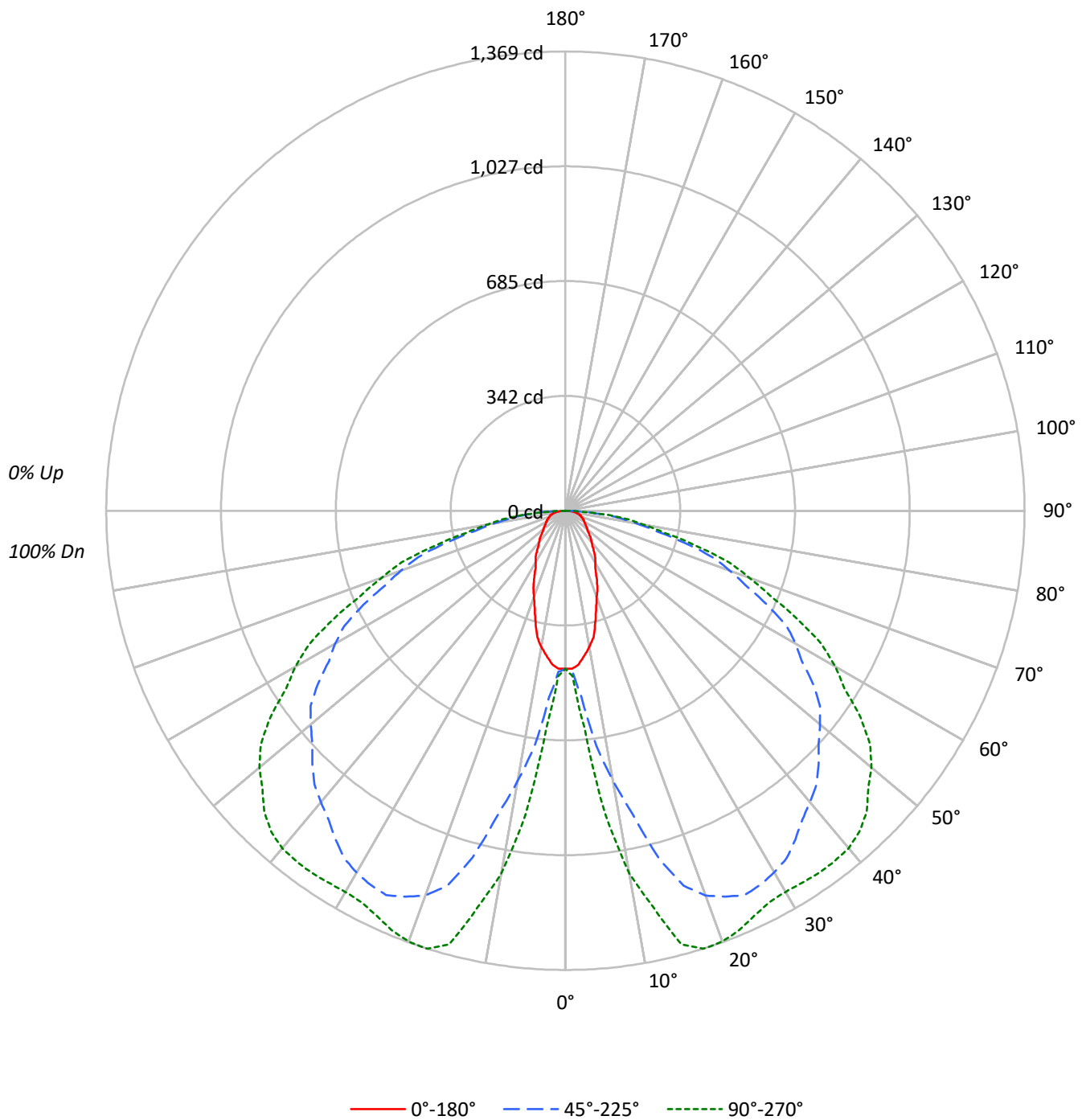
Lumens per Lamp: N/A
Luminaire Lumens: 3646.5 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 40.4
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
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°	2898	2898	2898
5°	2835	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°	811	9481	11396
55°	780	9659	11519
60°	801	9748	11426
65°	838	9669	11092
70°	899	9372	10490
75°	1008	8696	9613
80°	1126	7513	8374
85°	1073	6253	7163

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 11567 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.8	1.7
10°-20°	269.2	7.4
20°-30°	471.7	12.9
30°-40°	607.4	16.7
40°-50°	678.2	18.6
50°-60°	650.3	17.8
60°-70°	517.5	14.2
70°-80°	304.9	8.4
80°-90°	85.5	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°	802.7	22.0
0°-40°	1410.1	38.7
0°-60°	2738.6	75.1
0°-90°	3646.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3646.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	459	492	558	630	650	42
15°	344	632	1070	1294	1338	95
25°	220	717	1264	1330	1332	101
35°	148	672	1195	1268	1318	93
45°	102	528	1067	1213	1270	79
55°	73	352	901	1042	1074	66
65°	58	230	664	750	762	57
75°	42	145	366	399	404	44
85°	15	39	89	100	102	17
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	471.2	471.2	471.2	471.2	471.2	471.2	471.2	471.2	471.2	471.2
2.5°	471.2	471.2	473.6	477.3	478.5	483.3	490.6	494.2	496.6	494.2
5°	459.1	465.1	484.8	513.6	542.4	574.2	615.1	634.8	646.9	650.0
7.5°	435.1	451.8	507.9	583.0	666.6	749.7	821.5	879.7	913.6	915.1
10°	412.1	440.9	527.3	642.4	757.5	875.7	974.2	1034.8	1083.3	1096.9
12.5°	386.7	430.0	547.9	701.8	859.4	992.1	1101.5	1168.1	1206.9	1212.1
15°	343.9	407.6	577.2	795.4	990.9	1150.0	1254.5	1307.5	1331.8	1337.8
17.5°	304.2	387.6	603.0	868.8	1100.3	1243.6	1323.0	1356.3	1368.4	1369.0
20°	272.7	368.2	615.1	919.7	1156.0	1284.8	1342.4	1363.6	1369.6	1366.6
22.5°	249.7	347.6	622.4	953.6	1190.0	1300.6	1343.6	1353.9	1356.3	1353.3
25°	219.7	313.6	622.7	998.4	1224.2	1304.5	1327.2	1330.3	1333.3	1331.8
27.5°	193.0	275.7	613.6	1028.1	1229.0	1286.0	1296.6	1304.2	1313.6	1315.7
30°	177.3	251.5	601.5	1037.8	1224.2	1266.6	1277.2	1290.9	1307.5	1312.1
32.5°	165.1	228.5	583.3	1039.0	1212.1	1243.6	1257.8	1283.6	1307.5	1314.5
35°	148.5	193.9	553.0	1030.3	1184.8	1206.0	1236.3	1278.7	1310.6	1318.1
37.5°	132.1	169.1	511.8	1012.4	1149.0	1171.2	1221.2	1272.4	1307.8	1317.2
40°	121.2	154.5	480.3	995.4	1121.2	1146.9	1209.0	1265.1	1303.0	1313.6
42.5°	112.7	142.4	446.3	973.6	1089.7	1125.1	1194.5	1254.2	1289.6	1297.8
45°	101.5	124.2	392.4	933.3	1040.9	1093.9	1169.7	1227.2	1260.6	1269.6
47.5°	90.9	111.5	336.0	887.2	991.2	1056.0	1133.6	1188.1	1218.7	1224.8
50°	84.8	103.0	298.5	854.5	956.0	1025.7	1104.5	1159.0	1184.8	1190.9
52.5°	80.0	95.8	263.3	816.9	919.7	994.2	1069.4	1119.0	1142.4	1144.8
55°	72.7	86.4	216.7	759.1	862.1	939.4	1012.1	1051.5	1068.1	1074.2
57.5°	68.8	79.4	180.0	696.3	797.2	874.8	940.9	971.5	984.8	986.9
60°	65.1	75.8	160.6	651.5	756.0	828.8	886.3	912.1	924.2	928.8
62.5°	61.5	73.3	146.1	605.4	707.5	777.8	828.1	850.3	860.0	860.9
65°	57.6	69.7	128.8	534.8	631.8	696.9	736.3	754.5	759.1	762.1
67.5°	53.6	66.1	116.4	463.6	553.6	607.6	636.6	652.4	653.3	659.7
70°	50.0	63.6	109.1	415.1	495.4	546.9	571.2	583.3	581.8	583.3
72.5°	47.6	60.0	104.2	365.4	439.7	480.3	502.1	510.6	511.5	511.8
75°	42.4	53.0	97.0	289.4	348.5	383.3	400.0	398.5	403.0	404.5
77.5°	36.7	45.8	79.7	213.3	261.2	284.2	297.6	301.8	300.3	300.6
80°	31.8	40.9	65.1	163.6	203.0	221.2	233.3	236.4	234.8	236.4
82.5°	25.8	33.6	50.6	121.2	152.1	166.7	175.1	175.8	176.7	179.4
85°	15.2	19.7	30.3	66.7	84.8	92.4	98.5	100.0	101.5	101.5
87.5°	6.1	8.5	15.8	27.9	35.2	37.6	37.6	35.2	37.6	33.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)