

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-125D-835-1D-UNV-STD-W-4

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-125D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

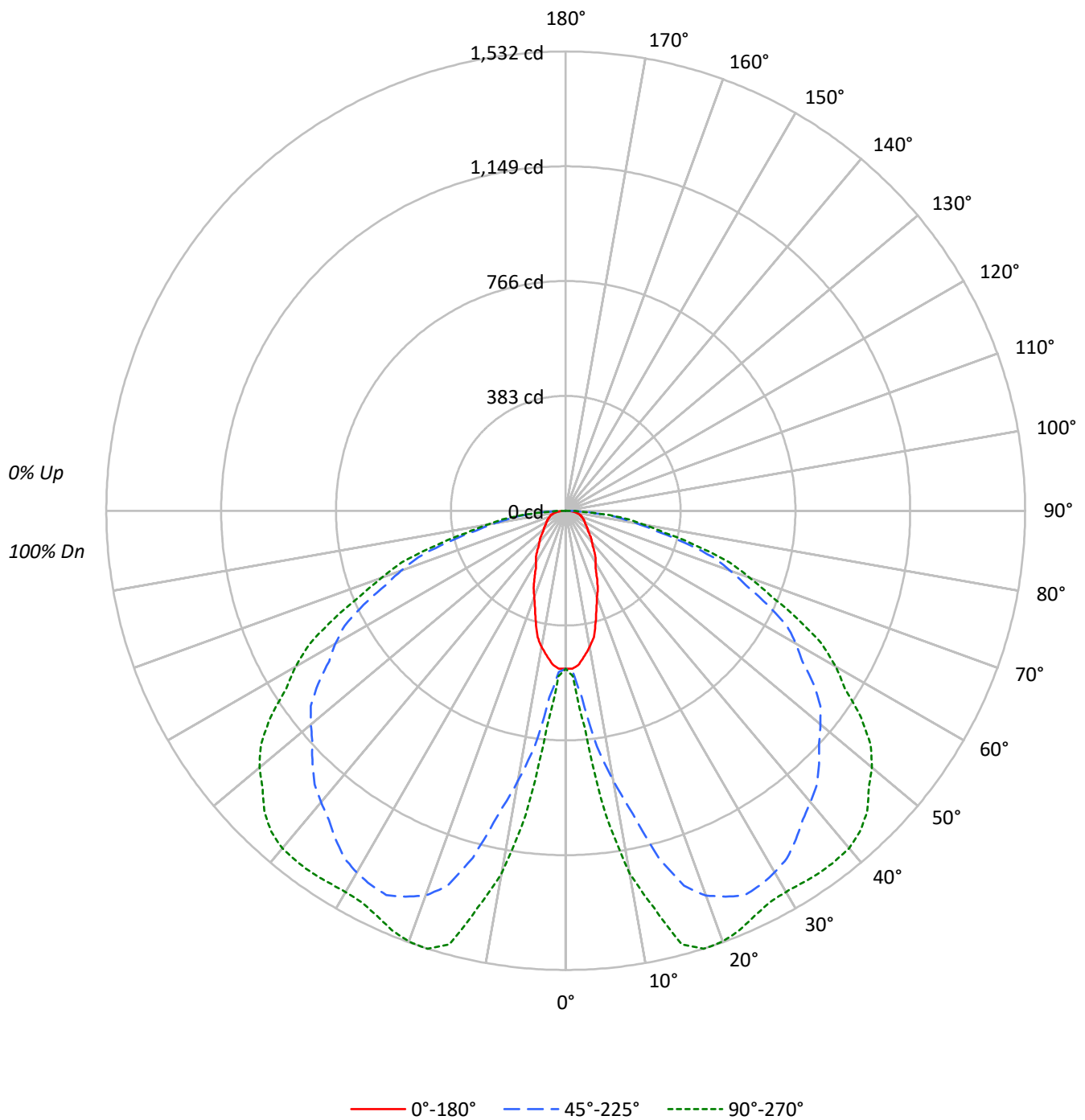
Lumens per Lamp: N/A
Luminaire Lumens: 4081.0 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.6
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:

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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°	4865	4865	4865
5°	4759	5787	6737
10°	4321	8562	11501
15°	3676	11442	14301
20°	2997	13410	15017
25°	2503	14405	15173
30°	2114	14849	15644
35°	1872	15068	16615
40°	1634	15286	17706
45°	1482	15586	18540
50°	1364	15917	19130
55°	1309	16215	19338
60°	1345	16364	19179
65°	1406	16232	18620
70°	1511	15735	17610
75°	1693	14598	16138
80°	1891	12613	14053
85°	1800	10501	12026

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 19417 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.2	1.7
10°-20°	301.3	7.4
20°-30°	527.9	12.9
30°-40°	679.8	16.7
40°-50°	759.0	18.6
50°-60°	727.8	17.8
60°-70°	579.2	14.2
70°-80°	341.2	8.4
80°-90°	95.6	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°	898.4	22.0
0°-40°	1578.1	38.7
0°-60°	3064.9	75.1
0°-90°	4081.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4081.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	514	551	625	705	727	47
15°	385	707	1198	1448	1497	107
25°	246	802	1415	1488	1490	113
35°	166	752	1338	1419	1475	104
45°	114	591	1195	1357	1421	88
55°	81	394	1008	1166	1202	74
65°	64	258	744	839	853	64
75°	48	162	410	446	453	50
85°	17	44	99	111	114	19
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3
2.5°	527.3	527.3	530.1	534.1	535.5	540.9	549.0	553.1	555.8	553.1
5°	513.8	520.6	542.6	574.8	607.0	642.6	688.4	710.5	724.0	727.4
7.5°	487.0	505.6	568.4	652.5	746.1	839.0	919.4	984.5	1022.5	1024.2
10°	461.2	493.4	590.1	718.9	847.8	980.1	1090.3	1158.1	1212.4	1227.6
12.5°	432.7	481.2	613.1	785.4	961.8	1110.3	1232.7	1307.3	1350.7	1356.5
15°	384.9	456.1	646.0	890.2	1108.9	1287.0	1404.0	1463.3	1490.5	1497.2
17.5°	340.5	433.7	674.9	972.3	1231.4	1391.8	1480.6	1517.9	1531.5	1532.2
20°	305.2	412.0	688.4	1029.2	1293.8	1437.9	1502.3	1526.1	1532.9	1529.5
22.5°	279.4	389.0	696.6	1067.2	1331.7	1455.5	1503.7	1515.2	1517.9	1514.5
25°	245.9	351.0	696.9	1117.4	1370.1	1459.9	1485.4	1488.8	1492.2	1490.5
27.5°	216.0	308.6	686.7	1150.7	1375.5	1439.3	1451.1	1459.6	1470.1	1472.5
30°	198.4	281.5	673.2	1161.5	1370.1	1417.5	1429.4	1444.7	1463.3	1468.4
32.5°	184.8	255.7	652.8	1162.9	1356.5	1391.8	1407.7	1436.5	1463.3	1471.1
35°	166.2	217.0	618.9	1153.0	1326.0	1349.7	1383.6	1431.1	1466.7	1475.2
37.5°	147.9	189.2	572.8	1133.0	1286.0	1310.7	1366.7	1424.0	1463.7	1474.2
40°	135.7	173.0	537.5	1114.0	1254.8	1283.6	1353.1	1415.9	1458.2	1470.1
42.5°	126.2	159.4	499.5	1089.6	1219.5	1259.2	1336.8	1403.6	1443.3	1452.5
45°	113.6	139.0	439.2	1044.5	1164.9	1224.2	1309.0	1373.5	1410.8	1420.9
47.5°	101.7	124.8	376.1	993.0	1109.3	1181.9	1268.7	1329.7	1364.0	1370.7
50°	95.0	115.3	334.0	956.3	1069.9	1147.9	1236.1	1297.2	1326.0	1332.8
52.5°	89.5	107.2	294.7	914.3	1029.2	1112.7	1196.8	1252.4	1278.5	1281.2
55°	81.4	96.7	242.5	849.5	964.8	1051.3	1132.7	1176.8	1195.4	1202.2
57.5°	77.0	88.9	201.4	779.3	892.2	979.1	1053.0	1087.2	1102.2	1104.5
60°	72.9	84.8	179.7	729.1	846.1	927.5	991.9	1020.8	1034.3	1039.4
62.5°	68.8	82.1	163.5	677.6	791.9	870.5	926.8	951.6	962.4	963.5
65°	64.4	78.0	144.1	598.6	707.1	780.0	824.1	844.4	849.5	852.9
67.5°	60.0	73.9	130.2	518.9	619.6	679.9	712.5	730.1	731.2	738.3
70°	56.0	71.2	122.1	464.6	554.5	612.1	639.3	652.8	651.1	652.8
72.5°	53.2	67.1	116.7	409.0	492.1	537.5	561.9	571.4	572.4	572.8
75°	47.5	59.3	108.5	323.9	390.0	429.0	447.6	446.0	451.0	452.7
77.5°	41.0	51.2	89.2	238.7	292.3	318.1	333.0	337.8	336.1	336.4
80°	35.6	45.8	72.9	183.1	227.2	247.6	261.1	264.5	262.8	264.5
82.5°	28.8	37.6	56.6	135.7	170.2	186.5	196.0	196.7	197.7	200.8
85°	17.0	22.0	33.9	74.6	95.0	103.4	110.2	111.9	113.6	113.6
87.5°	6.8	9.5	17.6	31.2	39.3	42.1	42.1	39.3	42.1	38.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)