

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-830-1D-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-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

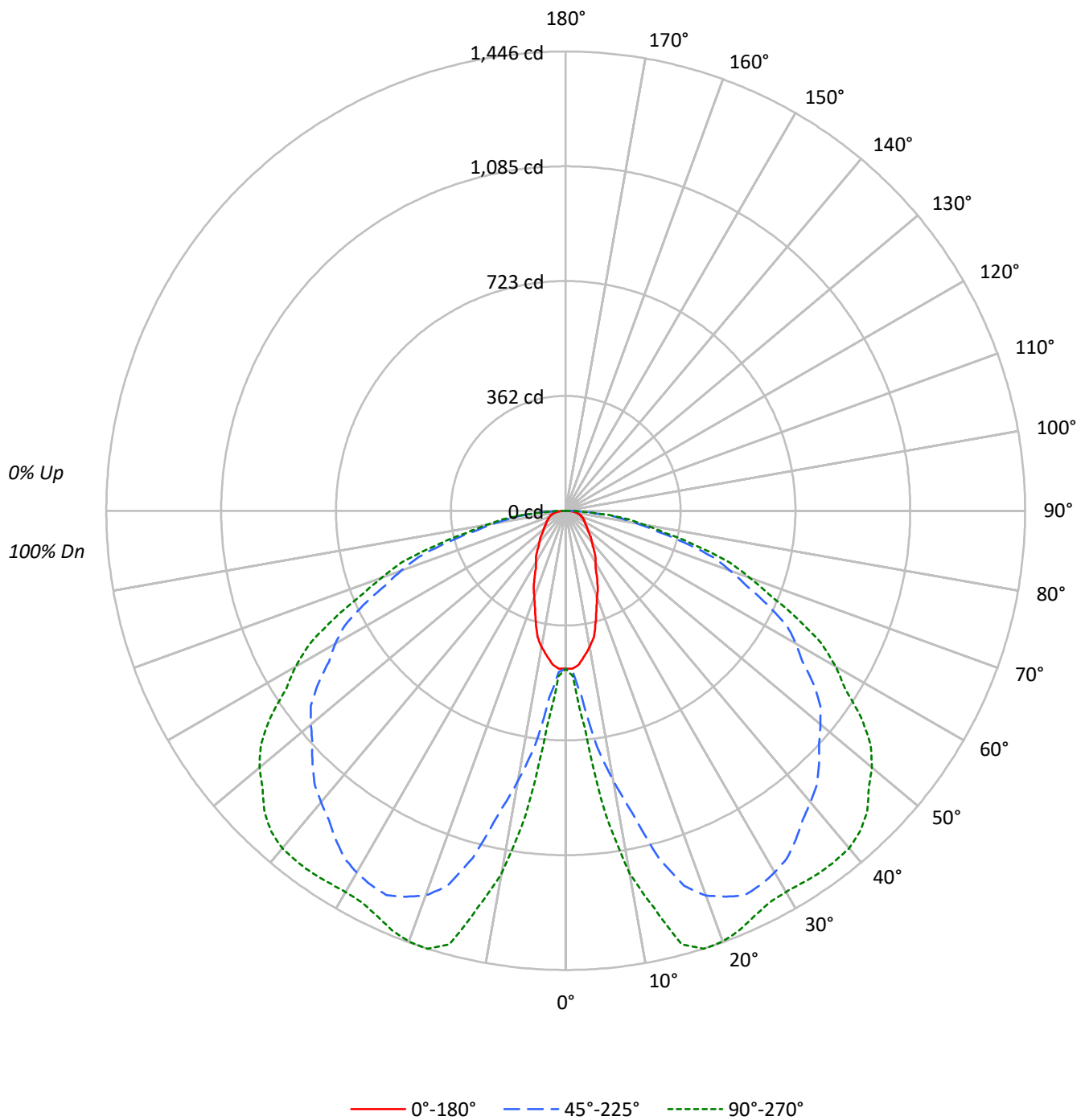
Lumens per Lamp: N/A
Luminaire Lumens: 3852.0 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	4593	4593	4593
5°	4491	5462	6359
10°	4078	8082	10856
15°	3470	10801	13498
20°	2829	12658	14174
25°	2363	13596	14321
30°	1995	14016	14766
35°	1766	14223	15683
40°	1542	14429	16712
45°	1399	14712	17500
50°	1286	15024	18057
55°	1235	15305	18254
60°	1270	15446	18104
65°	1327	15321	17574
70°	1424	14853	16622
75°	1597	13778	15232
80°	1785	11907	13267
85°	1694	9908	11348

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 18328 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.7
10°-20°	284.4	7.4
20°-30°	498.3	12.9
30°-40°	641.6	16.7
40°-50°	716.4	18.6
50°-60°	687.0	17.8
60°-70°	546.7	14.2
70°-80°	322.1	8.4
80°-90°	90.3	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°	848.0	22.0
0°-40°	1489.6	38.7
0°-60°	2893.0	75.1
0°-90°	3852.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3852.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	498	498	498	498	498	
5°	485	520	590	665	687	45
15°	363	667	1131	1367	1413	101
25°	232	757	1336	1404	1407	107
35°	157	710	1263	1340	1392	98
45°	107	557	1128	1281	1341	83
55°	77	372	952	1100	1135	70
65°	61	243	702	792	805	60
75°	45	153	386	421	427	47
85°	16	42	94	105	107	18
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	497.8	497.8	497.8	497.8	497.8	497.8	497.8	497.8	497.8	497.8
2.5°	497.8	497.8	500.3	504.2	505.4	510.6	518.2	522.1	524.6	522.1
5°	484.9	491.4	512.2	542.6	573.0	606.6	649.8	670.6	683.4	686.6
7.5°	459.7	477.3	536.5	615.9	704.2	791.9	867.8	929.2	965.1	966.7
10°	435.3	465.7	557.0	678.6	800.2	925.1	1029.1	1093.1	1144.4	1158.8
12.5°	408.4	454.2	578.7	741.3	907.8	1048.0	1163.6	1234.0	1275.0	1280.4
15°	363.3	430.5	609.8	840.3	1046.7	1214.8	1325.2	1381.2	1406.8	1413.2
17.5°	321.4	409.4	637.0	917.7	1162.3	1313.7	1397.6	1432.8	1445.6	1446.2
20°	288.1	388.9	649.8	971.5	1221.2	1357.2	1418.0	1440.4	1446.8	1443.6
22.5°	263.8	367.2	657.5	1007.4	1257.0	1373.9	1419.3	1430.2	1432.8	1429.6
25°	232.1	331.3	657.8	1054.7	1293.2	1378.0	1402.0	1405.2	1408.4	1406.8
27.5°	203.9	291.3	648.2	1086.1	1298.3	1358.5	1369.7	1377.7	1387.6	1389.9
30°	187.3	265.7	635.4	1096.3	1293.2	1338.0	1349.2	1363.6	1381.2	1386.0
32.5°	174.5	241.4	616.2	1097.6	1280.4	1313.7	1328.7	1355.9	1381.2	1388.6
35°	156.8	204.9	584.2	1088.3	1251.6	1274.0	1306.0	1350.8	1384.4	1392.4
37.5°	139.6	178.6	540.6	1069.5	1213.8	1237.2	1290.0	1344.1	1381.5	1391.5
40°	128.0	163.3	507.4	1051.5	1184.4	1211.6	1277.2	1336.4	1376.4	1387.6
42.5°	119.1	150.4	471.5	1028.5	1151.1	1188.5	1261.8	1324.9	1362.3	1371.0
45°	107.2	131.2	414.5	985.9	1099.5	1155.6	1235.6	1296.4	1331.6	1341.2
47.5°	96.0	117.8	355.0	937.2	1047.0	1115.5	1197.5	1255.1	1287.4	1293.8
50°	89.6	108.8	315.3	902.7	1009.9	1083.5	1166.8	1224.4	1251.6	1258.0
52.5°	84.5	101.2	278.2	863.0	971.5	1050.2	1129.6	1182.1	1206.8	1209.3
55°	76.8	91.2	228.9	801.8	910.7	992.3	1069.1	1110.7	1128.3	1134.8
57.5°	72.7	83.9	190.1	735.6	842.2	924.1	993.9	1026.2	1040.3	1042.6
60°	68.8	80.0	169.7	688.2	798.6	875.5	936.3	963.5	976.3	981.1
62.5°	65.0	77.5	154.3	639.6	747.4	821.7	874.8	898.2	908.4	909.4
65°	60.8	73.6	136.0	565.0	667.4	736.2	777.8	797.0	801.8	805.0
67.5°	56.7	69.8	122.9	489.8	584.8	641.8	672.5	689.2	690.1	696.9
70°	52.8	67.2	115.2	438.5	523.4	577.8	603.4	616.2	614.6	616.2
72.5°	50.3	63.4	110.1	386.0	464.5	507.4	530.4	539.4	540.3	540.6
75°	44.8	56.0	102.4	305.7	368.1	404.9	422.5	420.9	425.7	427.3
77.5°	38.7	48.3	84.2	225.3	275.9	300.3	314.3	318.8	317.2	317.5
80°	33.6	43.2	68.8	172.9	214.5	233.7	246.5	249.7	248.1	249.7
82.5°	27.2	35.5	53.5	128.0	160.7	176.1	185.0	185.7	186.6	189.5
85°	16.0	20.8	32.0	70.4	89.6	97.6	104.0	105.6	107.2	107.2
87.5°	6.4	9.0	16.6	29.4	37.1	39.7	39.7	37.1	39.7	35.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)