

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-830-1D-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-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

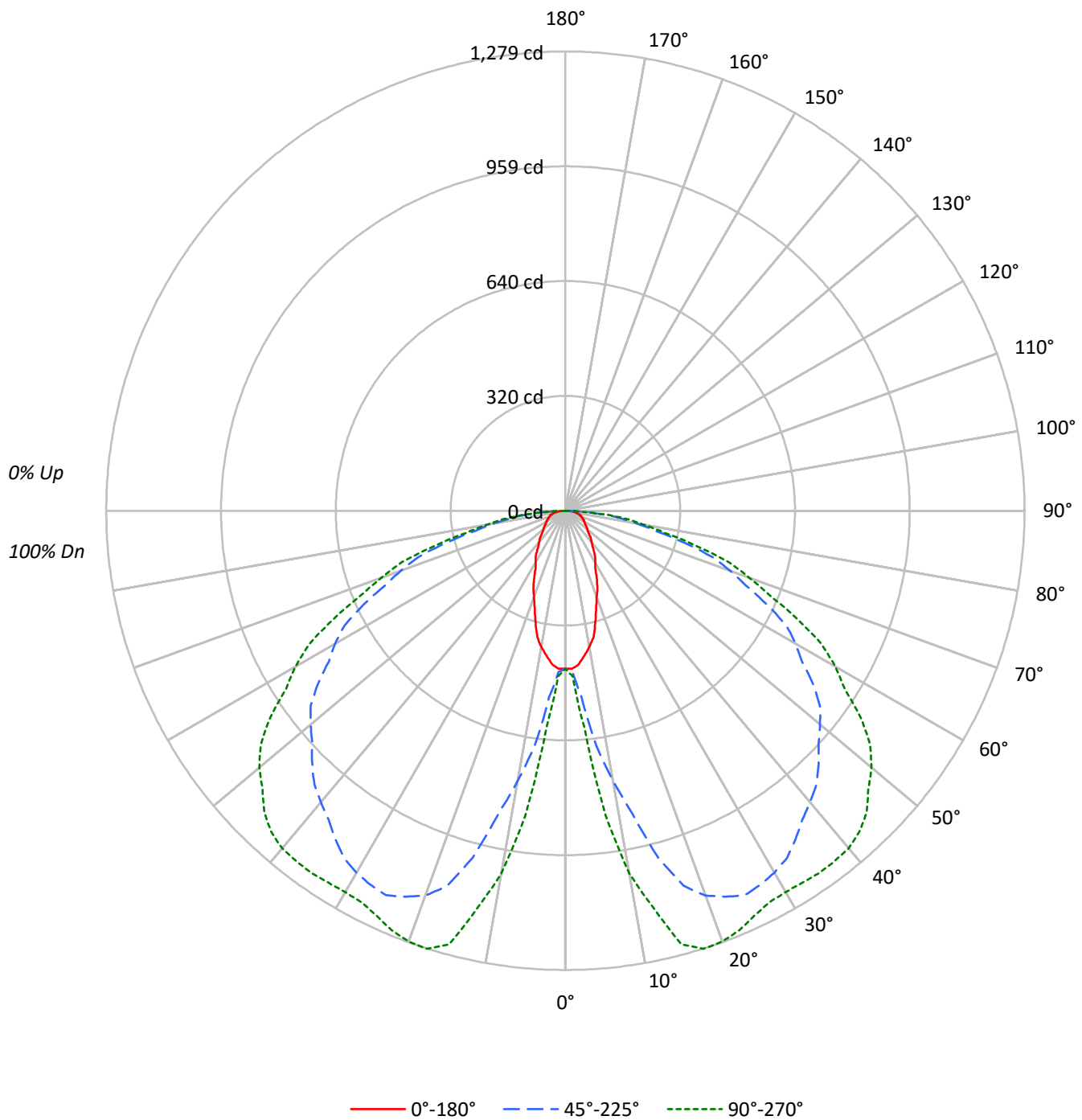
Lumens per Lamp: N/A
Luminaire Lumens: 3407.6 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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°	2708	2708	2708
5°	2649	3221	3750
10°	2405	4766	6402
15°	2047	6370	7961
20°	1668	7465	8359
25°	1393	8018	8446
30°	1177	8266	8708
35°	1042	8388	9249
40°	910	8509	9856
45°	825	8676	10321
50°	759	8860	10648
55°	729	9026	10764
60°	749	9109	10677
65°	783	9036	10365
70°	840	8759	9803
75°	941	8125	8983
80°	1052	7020	7825
85°	1002	5847	6697

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 10809 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.8	1.7
10°-20°	251.6	7.4
20°-30°	440.8	12.9
30°-40°	567.6	16.7
40°-50°	633.7	18.6
50°-60°	607.7	17.8
60°-70°	483.6	14.2
70°-80°	284.9	8.4
80°-90°	79.9	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°	750.1	22.0
0°-40°	1317.7	38.7
0°-60°	2559.2	75.1
0°-90°	3407.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3407.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	440	440	440	440	440	
5°	429	460	522	589	607	39
15°	321	590	1000	1210	1250	89
25°	205	670	1182	1242	1244	95
35°	139	628	1117	1185	1232	87
45°	95	493	997	1133	1186	73
55°	68	329	842	973	1004	62
65°	54	215	621	701	712	53
75°	40	136	342	373	378	41
85°	14	37	83	93	95	16
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	440.3	440.3	440.3	440.3	440.3	440.3	440.3	440.3	440.3	440.3
2.5°	440.3	440.3	442.6	446.0	447.1	451.7	458.4	461.8	464.1	461.8
5°	429.0	434.7	453.1	480.0	506.9	536.6	574.8	593.2	604.6	607.4
7.5°	406.6	422.2	474.6	544.8	623.0	700.6	767.7	822.0	853.7	855.2
10°	385.1	412.0	492.7	600.3	707.9	818.4	910.4	967.0	1012.3	1025.1
12.5°	361.3	401.8	512.0	655.8	803.1	927.1	1029.3	1091.6	1127.9	1132.7
15°	321.4	380.9	539.4	743.3	926.0	1074.6	1172.3	1221.9	1244.5	1250.2
17.5°	284.3	362.2	563.5	811.8	1028.2	1162.1	1236.3	1267.5	1278.8	1279.3
20°	254.9	344.0	574.8	859.4	1080.3	1200.6	1254.4	1274.3	1279.9	1277.1
22.5°	233.3	324.8	581.6	891.1	1112.0	1215.4	1255.6	1265.2	1267.5	1264.6
25°	205.3	293.1	581.9	933.0	1144.0	1219.0	1240.3	1243.1	1245.9	1244.5
27.5°	180.4	257.7	573.4	960.8	1148.5	1201.8	1211.7	1218.8	1227.5	1229.5
30°	165.7	235.0	562.1	969.8	1144.0	1183.6	1193.5	1206.3	1221.9	1226.1
32.5°	154.3	213.5	545.1	971.0	1132.7	1162.1	1175.4	1199.5	1221.9	1228.4
35°	138.8	181.2	516.8	962.8	1107.2	1127.0	1155.3	1195.0	1224.7	1231.8
37.5°	123.5	158.0	478.3	946.1	1073.8	1094.4	1141.2	1189.0	1222.1	1230.9
40°	113.3	144.4	448.8	930.2	1047.7	1071.8	1129.8	1182.2	1217.6	1227.5
42.5°	105.3	133.1	417.1	909.8	1018.3	1051.4	1116.2	1172.0	1205.2	1212.8
45°	94.9	116.1	366.7	872.2	972.7	1022.2	1093.0	1146.8	1178.0	1186.5
47.5°	85.0	104.2	314.0	829.1	926.2	986.8	1059.3	1110.3	1138.9	1144.6
50°	79.3	96.3	278.9	798.5	893.4	958.5	1032.1	1083.1	1107.2	1112.8
52.5°	74.8	89.5	246.1	763.4	859.4	929.1	999.3	1045.7	1067.5	1069.8
55°	68.0	80.7	202.5	709.3	805.6	877.8	945.8	982.6	998.2	1003.8
57.5°	64.3	74.2	168.2	650.7	745.0	817.5	879.2	907.8	920.3	922.3
60°	60.9	70.8	150.1	608.8	706.5	774.5	828.3	852.3	863.7	867.9
62.5°	57.5	68.5	136.5	565.8	661.2	726.9	773.9	794.6	803.6	804.5
65°	53.8	65.1	120.3	499.8	590.4	651.3	688.1	705.1	709.3	712.2
67.5°	50.1	61.7	108.7	433.2	517.3	567.8	594.9	609.7	610.5	616.5
70°	46.7	59.5	101.9	387.9	463.0	511.1	533.8	545.1	543.7	545.1
72.5°	44.5	56.1	97.4	341.5	410.9	448.8	469.2	477.1	478.0	478.3
75°	39.6	49.6	90.6	270.4	325.6	358.2	373.8	372.4	376.6	378.0
77.5°	34.3	42.8	74.5	199.3	244.1	265.6	278.1	282.0	280.6	280.9
80°	29.7	38.2	60.9	152.9	189.7	206.7	218.0	220.9	219.5	220.9
82.5°	24.1	31.4	47.3	113.3	142.1	155.7	163.7	164.2	165.1	167.6
85°	14.2	18.4	28.3	62.3	79.3	86.4	92.0	93.4	94.9	94.9
87.5°	5.7	7.9	14.7	26.1	32.8	35.1	35.1	32.8	35.1	31.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)