

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-050D-835-1D-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-050D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

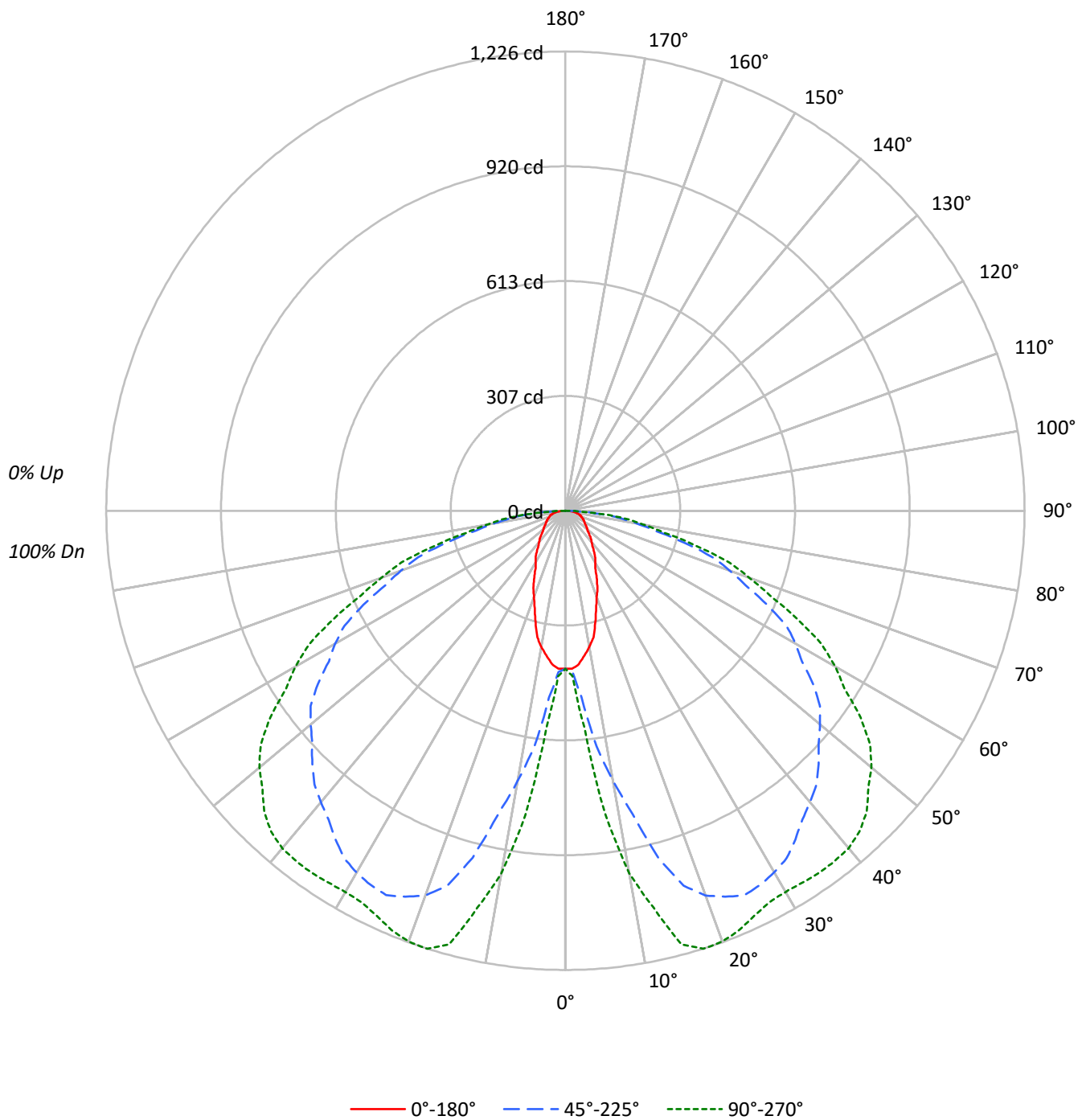
Lumens per Lamp: N/A
Luminaire Lumens: 3265.8 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 35.2
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°	1947	1947	1947
5°	1904	2316	2696
10°	1729	3426	4602
15°	1471	4578	5722
20°	1199	5366	6008
25°	1002	5764	6071
30°	846	5941	6259
35°	749	6029	6648
40°	654	6116	7084
45°	593	6237	7418
50°	545	6369	7654
55°	524	6488	7738
60°	538	6547	7674
65°	563	6495	7450
70°	604	6295	7046
75°	677	5841	6458
80°	757	5046	5624
85°	720	4203	4811

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 7770 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	1.7
10°-20°	241.1	7.4
20°-30°	422.5	12.9
30°-40°	544.0	16.7
40°-50°	607.4	18.6
50°-60°	582.4	17.8
60°-70°	463.5	14.2
70°-80°	273.1	8.4
80°-90°	76.6	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°	718.9	22.0
0°-40°	1262.9	38.7
0°-60°	2452.7	75.1
0°-90°	3265.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3265.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	422	422	422	422	422	
5°	411	441	500	564	582	38
15°	308	566	959	1159	1198	85
25°	197	642	1132	1191	1193	91
35°	133	602	1071	1136	1180	83
45°	91	473	956	1086	1137	70
55°	65	315	807	933	962	59
65°	52	206	595	672	682	51
75°	38	130	328	357	362	40
85°	14	35	79	89	91	15
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	422.0	422.0	422.0	422.0	422.0	422.0	422.0	422.0	422.0	422.0
2.5°	422.0	422.0	424.2	427.4	428.5	432.9	439.4	442.6	444.8	442.6
5°	411.1	416.6	434.2	460.0	485.8	514.3	550.9	568.5	579.4	582.1
7.5°	389.7	404.6	454.8	522.1	597.0	671.4	735.7	787.8	818.2	819.6
10°	369.1	394.9	472.2	575.3	678.5	784.3	872.5	926.8	970.2	982.4
12.5°	346.3	385.1	490.7	628.5	769.6	888.5	986.5	1046.2	1080.9	1085.5
15°	308.0	365.0	517.0	712.4	887.4	1029.9	1123.5	1171.0	1192.7	1198.2
17.5°	272.5	347.1	540.1	778.1	985.4	1113.8	1184.9	1214.7	1225.6	1226.1
20°	244.2	329.7	550.9	823.6	1035.3	1150.7	1202.2	1221.2	1226.7	1223.9
22.5°	223.6	311.3	557.4	854.0	1065.7	1164.8	1203.3	1212.5	1214.7	1212.0
25°	196.8	280.9	557.7	894.2	1096.4	1168.3	1188.7	1191.4	1194.1	1192.7
27.5°	172.9	247.0	549.6	920.8	1100.7	1151.8	1161.3	1168.0	1176.4	1178.3
30°	158.8	225.2	538.7	929.5	1096.4	1134.4	1143.9	1156.1	1171.0	1175.1
32.5°	147.9	204.6	522.4	930.6	1085.5	1113.8	1126.5	1149.6	1171.0	1177.3
35°	133.0	173.7	495.3	922.7	1061.1	1080.1	1107.2	1145.2	1173.7	1180.5
37.5°	118.3	151.4	458.4	906.7	1029.1	1048.9	1093.7	1139.5	1171.3	1179.7
40°	108.6	138.4	430.1	891.5	1004.1	1027.2	1082.8	1133.0	1167.0	1176.4
42.5°	101.0	127.6	399.7	872.0	975.9	1007.6	1069.8	1123.3	1155.0	1162.3
45°	90.9	111.3	351.4	835.9	932.2	979.7	1047.5	1099.1	1129.0	1137.1
47.5°	81.4	99.9	301.0	794.6	887.7	945.8	1015.2	1064.1	1091.5	1096.9
50°	76.0	92.3	267.3	765.3	856.2	918.6	989.2	1038.0	1061.1	1066.5
52.5°	71.6	85.8	235.8	731.7	823.6	890.4	957.7	1002.2	1023.1	1025.3
55°	65.1	77.3	194.0	679.8	772.1	841.3	906.4	941.7	956.6	962.1
57.5°	61.6	71.1	161.2	623.6	714.0	783.5	842.6	870.1	882.0	883.9
60°	58.3	67.8	143.8	583.5	677.1	742.2	793.8	816.9	827.7	831.8
62.5°	55.1	65.7	130.8	542.2	633.7	696.6	741.7	761.5	770.2	771.0
65°	51.6	62.4	115.3	479.0	565.8	624.2	659.5	675.7	679.8	682.5
67.5°	48.0	59.2	104.2	415.2	495.8	544.1	570.2	584.3	585.1	590.8
70°	44.8	57.0	97.7	371.8	443.7	489.8	511.6	522.4	521.1	522.4
72.5°	42.6	53.7	93.4	327.3	393.8	430.1	449.7	457.3	458.1	458.4
75°	38.0	47.5	86.8	259.2	312.1	343.3	358.2	356.9	360.9	362.3
77.5°	32.8	41.0	71.4	191.1	233.9	254.6	266.5	270.3	268.9	269.2
80°	28.5	36.6	58.3	146.5	181.8	198.1	209.0	211.7	210.3	211.7
82.5°	23.1	30.1	45.3	108.6	136.2	149.3	156.9	157.4	158.2	160.7
85°	13.6	17.6	27.1	59.7	76.0	82.8	88.2	89.6	90.9	90.9
87.5°	5.4	7.6	14.1	25.0	31.5	33.7	33.7	31.5	33.7	30.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)