

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-100D-927-1D-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-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

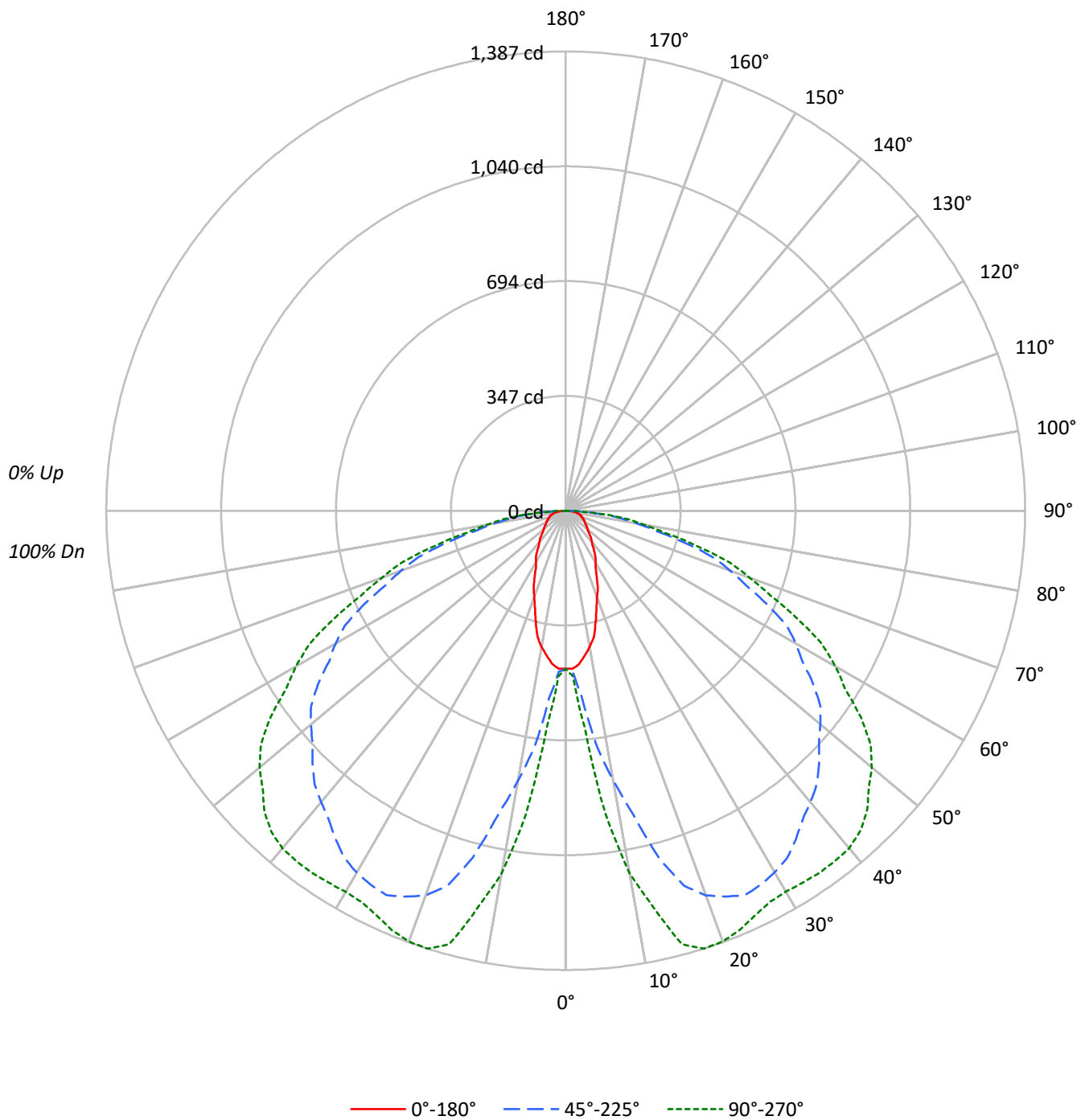
Lumens per Lamp: N/A
Luminaire Lumens: 3693.9 lumens
Efficiency: N/A
Efficacy: 66.8 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 55.3
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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82		
2	97	88	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67		
3	88	77	68	61	86	75	67	61	72	65	59	69	63	58	67	62	57	55		
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	59	53	48	46		
5	73	60	50	43	71	58	50	43	56	48	42	54	47	42	52	46	41	39		
6	67	53	44	37	65	52	43	37	50	42	36	49	42	36	47	41	36	34		
7	62	48	39	32	60	47	38	32	45	38	32	44	37	32	43	36	31	29		
8	58	43	34	28	56	43	34	28	41	34	28	40	33	28	39	32	28	26		
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25	23		
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2936	2936	2936
5°	2871	3492	4065
10°	2608	5167	6940
15°	2219	6905	8630
20°	1809	8092	9062
25°	1510	8692	9156
30°	1276	8960	9440
35°	1129	9093	10026
40°	986	9224	10685
45°	894	9405	11187
50°	822	9604	11543
55°	790	9785	11669
60°	812	9874	11573
65°	849	9795	11236
70°	910	9495	10627
75°	1022	8808	9739
80°	1141	7612	8480
85°	1080	6334	7255

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 11717 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	1.7
10°-20°	272.7	7.4
20°-30°	477.8	12.9
30°-40°	615.3	16.7
40°-50°	687.0	18.6
50°-60°	658.8	17.8
60°-70°	524.3	14.2
70°-80°	308.9	8.4
80°-90°	86.6	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°	813.1	22.0
0°-40°	1428.4	38.7
0°-60°	2774.2	75.1
0°-90°	3693.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3693.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	477	477	477	477	477	
5°	465	498	566	638	658	43
15°	348	640	1084	1311	1355	97
25°	222	726	1281	1347	1349	103
35°	150	681	1211	1285	1335	94
45°	103	534	1081	1229	1286	80
55°	74	357	912	1055	1088	67
65°	58	233	673	760	772	58
75°	43	147	371	404	410	45
85°	15	40	90	101	103	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°	477.3	477.3	477.3	477.3	477.3	477.3	477.3	477.3	477.3	477.3
2.5°	477.3	477.3	479.8	483.5	484.7	489.6	497.0	500.6	503.1	500.6
5°	465.0	471.2	491.1	520.3	549.5	581.7	623.1	643.1	655.4	658.4
7.5°	440.8	457.7	514.5	590.6	675.3	759.4	832.2	891.1	925.5	927.0
10°	417.5	446.6	534.1	650.7	767.4	887.1	986.9	1048.3	1097.4	1111.2
12.5°	391.7	435.6	555.0	710.9	870.5	1005.0	1115.8	1183.3	1222.6	1227.8
15°	348.4	412.9	584.8	805.8	1003.7	1164.9	1270.8	1324.5	1349.1	1355.2
17.5°	308.2	392.6	610.8	880.0	1114.6	1259.7	1340.2	1373.9	1386.2	1386.8
20°	276.3	373.0	623.1	931.6	1171.0	1301.5	1359.8	1381.3	1387.4	1384.4
22.5°	252.9	352.1	630.5	966.0	1205.4	1317.5	1361.0	1371.5	1373.9	1370.9
25°	222.5	317.7	630.8	1011.4	1240.1	1321.4	1344.5	1347.5	1350.6	1349.1
27.5°	195.5	279.3	621.6	1041.5	1245.0	1302.7	1313.5	1321.1	1330.7	1332.8
30°	179.6	254.8	609.3	1051.3	1240.1	1283.1	1293.8	1307.6	1324.5	1329.1
32.5°	167.3	231.4	590.9	1052.6	1227.8	1259.7	1274.2	1300.3	1324.5	1331.6
35°	150.4	196.5	560.2	1043.7	1200.2	1221.7	1252.4	1295.4	1327.6	1335.3
37.5°	133.8	171.3	518.4	1025.5	1164.0	1186.4	1237.0	1288.9	1324.8	1334.3
40°	122.8	156.5	486.5	1008.4	1135.7	1161.8	1224.8	1281.5	1319.9	1330.7
42.5°	114.2	144.3	452.1	986.2	1103.8	1139.7	1210.0	1270.5	1306.4	1314.7
45°	102.8	125.9	397.5	945.4	1054.4	1108.1	1184.9	1243.2	1276.9	1286.1
47.5°	92.1	113.0	340.4	898.8	1004.1	1069.7	1148.3	1203.6	1234.6	1240.7
50°	85.9	104.4	302.4	865.6	968.4	1039.0	1118.9	1174.1	1200.2	1206.3
52.5°	81.0	97.0	266.7	827.6	931.6	1007.1	1083.2	1133.6	1157.2	1159.7
55°	73.7	87.5	219.5	768.9	873.3	951.6	1025.2	1065.1	1082.0	1088.2
57.5°	69.7	80.4	182.3	705.4	807.6	886.2	953.1	984.1	997.6	999.8
60°	66.0	76.7	162.7	660.0	765.9	839.5	897.8	923.9	936.2	940.8
62.5°	62.3	74.3	148.0	613.3	716.7	788.0	838.9	861.3	871.1	872.1
65°	58.3	70.6	130.5	541.8	640.0	706.0	745.9	764.3	768.9	772.0
67.5°	54.3	66.9	117.9	469.6	560.8	615.4	644.9	660.9	661.8	668.2
70°	50.6	64.5	110.5	420.5	501.9	554.1	578.6	590.9	589.4	590.9
72.5°	48.2	60.8	105.6	370.2	445.4	486.5	508.6	517.2	518.1	518.4
75°	43.0	53.7	98.2	293.1	353.0	388.3	405.2	403.6	408.3	409.8
77.5°	37.1	46.4	80.7	216.1	264.6	287.9	301.4	305.7	304.2	304.5
80°	32.2	41.4	66.0	165.8	205.7	224.1	236.4	239.4	237.9	239.4
82.5°	26.1	34.1	51.3	122.8	154.1	168.8	177.4	178.0	179.0	181.7
85°	15.3	20.0	30.7	67.5	85.9	93.6	99.8	101.3	102.8	102.8
87.5°	6.1	8.6	16.0	28.2	35.6	38.1	38.1	35.6	38.1	34.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)