

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-927-1D-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-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

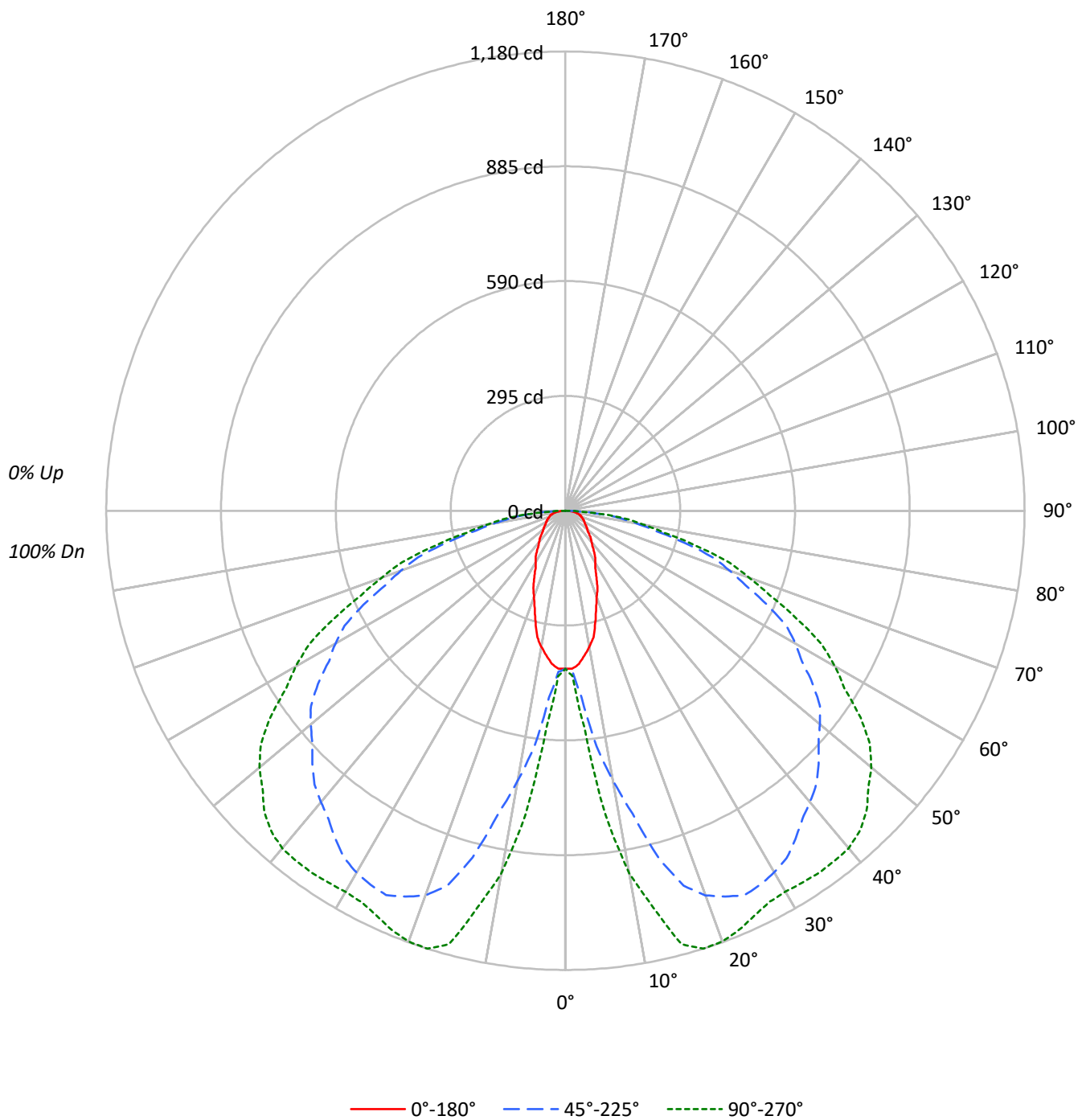
Lumens per Lamp: N/A
Luminaire Lumens: 3142.4 lumens
Efficiency: N/A
Efficacy: 72.1 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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
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°	3747	3747	3747
5°	3664	4456	5187
10°	3327	6593	8856
15°	2831	8811	11012
20°	2307	10326	11563
25°	1927	11092	11684
30°	1628	11434	12046
35°	1442	11603	12794
40°	1259	11771	13634
45°	1142	12002	14276
50°	1049	12256	14729
55°	1009	12485	14890
60°	1035	12600	14769
65°	1083	12498	14336
70°	1163	12115	13561
75°	1305	11240	12427
80°	1456	9712	10823
85°	1387	8082	9263

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 14951 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.3	1.7
10°-20°	232.0	7.4
20°-30°	406.5	12.9
30°-40°	523.4	16.7
40°-50°	584.4	18.6
50°-60°	560.4	17.8
60°-70°	446.0	14.2
70°-80°	262.8	8.4
80°-90°	73.7	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°	691.7	22.0
0°-40°	1215.2	38.7
0°-60°	2360.0	75.1
0°-90°	3142.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3142.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	396	424	481	543	560	36
15°	296	544	922	1115	1153	82
25°	189	618	1090	1146	1148	87
35°	128	579	1030	1093	1136	80
45°	88	455	920	1045	1094	68
55°	63	304	776	898	926	57
65°	50	198	572	646	657	49
75°	37	125	315	344	349	38
85°	13	34	76	86	88	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°	406.1	406.1	406.1	406.1	406.1	406.1	406.1	406.1	406.1	406.1
2.5°	406.1	406.1	408.1	411.3	412.3	416.5	422.8	425.9	428.0	425.9
5°	395.6	400.8	417.8	442.6	467.4	494.8	530.1	547.1	557.5	560.1
7.5°	375.0	389.3	437.6	502.4	574.5	646.0	707.9	758.1	787.3	788.6
10°	355.1	379.9	454.4	553.6	652.8	754.7	839.5	891.7	933.5	945.3
12.5°	333.2	370.5	472.1	604.8	740.6	854.9	949.2	1006.6	1040.1	1044.5
15°	296.4	351.2	497.4	685.5	853.9	991.0	1081.1	1126.8	1147.7	1152.9
17.5°	262.2	334.0	519.6	748.7	948.2	1071.7	1140.1	1168.8	1179.2	1179.8
20°	235.0	317.3	530.1	792.5	996.2	1107.2	1156.8	1175.1	1180.3	1177.7
22.5°	215.2	299.5	536.4	821.8	1025.4	1120.8	1157.8	1166.7	1168.8	1166.2
25°	189.3	270.3	536.6	860.4	1055.0	1124.2	1143.7	1146.3	1149.0	1147.7
27.5°	166.3	237.6	528.8	886.0	1059.1	1108.2	1117.4	1123.9	1132.0	1133.8
30°	152.8	216.7	518.3	894.4	1055.0	1091.5	1100.6	1112.4	1126.8	1130.7
32.5°	142.3	196.9	502.7	895.4	1044.5	1071.7	1083.9	1106.1	1126.8	1132.8
35°	128.0	167.1	476.6	887.8	1021.0	1039.3	1065.4	1102.0	1129.4	1135.9
37.5°	113.9	145.7	441.0	872.4	990.2	1009.3	1052.3	1096.5	1127.0	1135.1
40°	104.5	133.2	413.9	857.8	966.2	988.4	1041.9	1090.2	1122.8	1132.0
42.5°	97.1	122.7	384.6	839.0	939.0	969.6	1029.4	1080.8	1111.4	1118.4
45°	87.5	107.1	338.2	804.3	897.0	942.7	1007.9	1057.6	1086.3	1094.1
47.5°	78.3	96.1	289.6	764.6	854.1	910.0	976.9	1023.9	1050.3	1055.5
50°	73.1	88.8	257.2	736.4	823.9	883.9	951.8	998.8	1021.0	1026.2
52.5°	68.9	82.5	226.9	704.0	792.5	856.8	921.5	964.3	984.4	986.5
55°	62.7	74.4	186.7	654.1	742.9	809.5	872.2	906.1	920.5	925.7
57.5°	59.3	68.4	155.1	600.1	687.0	753.9	810.8	837.2	848.7	850.5
60°	56.1	65.3	138.4	561.4	651.5	714.2	763.8	786.0	796.4	800.4
62.5°	53.0	63.2	125.9	521.7	609.7	670.3	713.7	732.7	741.1	741.9
65°	49.6	60.1	111.0	460.9	544.4	600.6	634.5	650.2	654.1	656.7
67.5°	46.2	56.9	100.3	399.5	477.1	523.6	548.6	562.2	563.0	568.5
70°	43.1	54.8	94.0	357.7	426.9	471.3	492.2	502.7	501.4	502.7
72.5°	41.0	51.7	89.8	314.9	378.9	413.9	432.7	440.0	440.8	441.0
75°	36.6	45.7	83.6	249.4	300.3	330.3	344.7	343.4	347.3	348.6
77.5°	31.6	39.4	68.7	183.8	225.1	244.9	256.4	260.1	258.8	259.0
80°	27.4	35.3	56.1	141.0	175.0	190.6	201.1	203.7	202.4	203.7
82.5°	22.2	29.0	43.6	104.5	131.1	143.6	150.9	151.5	152.2	154.6
85°	13.1	17.0	26.1	57.4	73.1	79.6	84.9	86.2	87.5	87.5
87.5°	5.2	7.3	13.6	24.0	30.3	32.4	32.4	30.3	32.4	29.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)