

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-PR1-125U-125D-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 (G3-1910-536-24)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-125U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

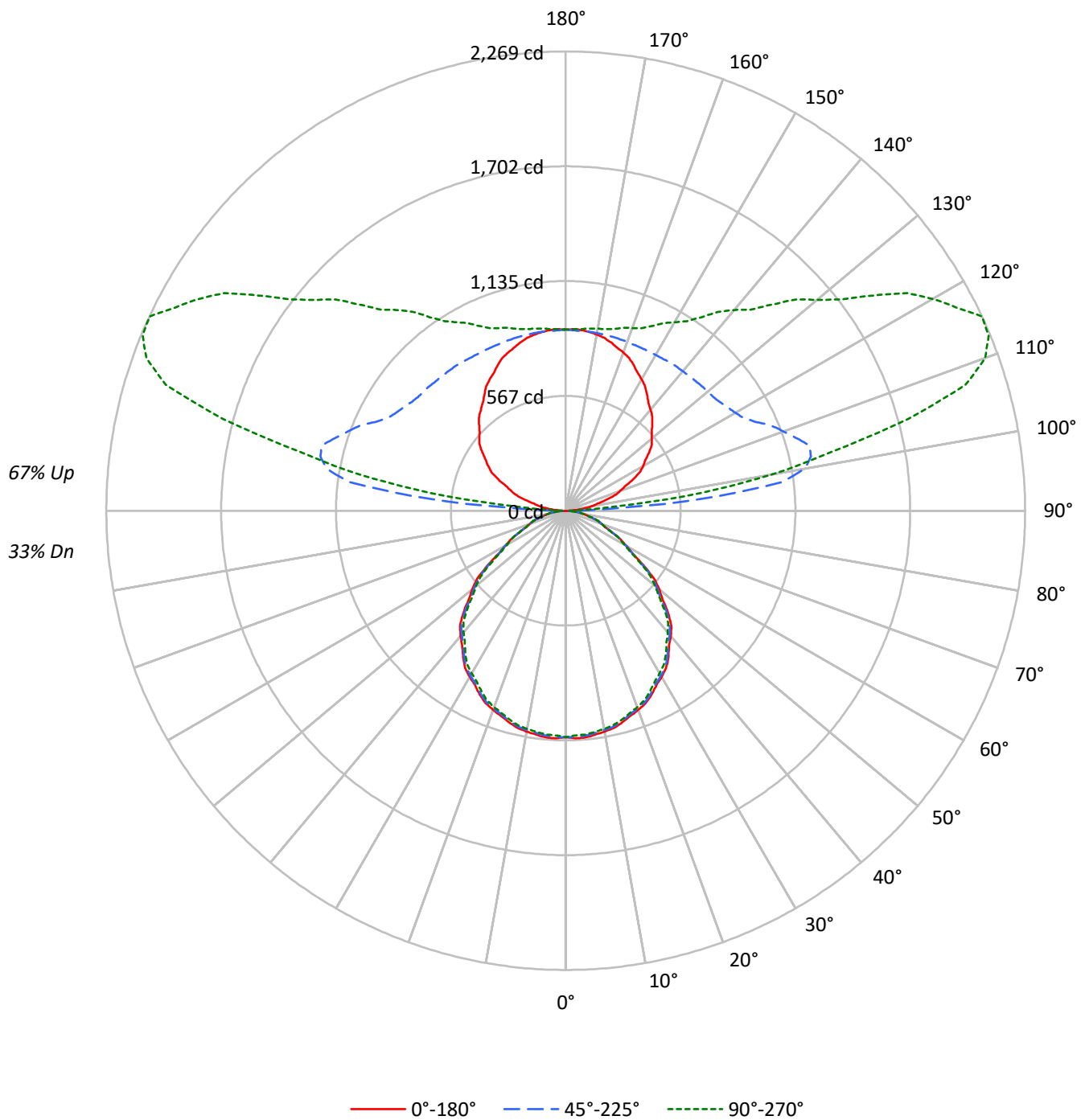
Lumens per Lamp: N/A
Luminaire Lumens: 8573.0 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 117.2
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

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-125U-125D-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-125U-125D-927-1D-UNV-STD-W-6

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	103	103	103	103		93	93	93	93		74	74	74		56	56	56		40	40	40
1	94	90	86	83		85	81	78	75		65	63	61		50	48	47		36	35	34
2	86	79	73	68		77	71	66	62		57	53	51		44	42	40		32	30	29
3	78	69	62	57		70	63	57	52		50	46	43		39	36	34		28	26	25
4	72	61	54	48		64	56	49	44		45	40	36		35	31	29		25	23	22
5	66	55	47	41		59	50	43	38		40	35	31		31	28	25		23	21	19
6	60	49	41	36		54	44	38	33		36	31	27		28	25	22		21	18	17
7	56	44	36	31		50	40	33	29		33	28	24		26	22	19		19	17	15
8	52	40	32	27		47	36	30	25		30	25	21		23	20	17		17	15	13
9	48	36	29	24		43	33	27	22		27	22	19		21	18	15		16	14	12
10	45	33	26	22		40	30	24	20		25	20	17		20	16	14		15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6881	6881	6881
5°	6943	6889	6853
10°	6921	6873	6837
15°	6891	6847	6811
20°	6856	6812	6762
25°	6808	6762	6684
30°	6734	6686	6590
35°	6635	6577	6483
40°	6484	6414	6297
45°	6219	6110	5985
50°	5754	5615	5505
55°	5022	4908	4805
60°	4232	4196	4114
65°	3660	3675	3646
70°	3361	3379	3379
75°	3230	3230	3251
80°	3039	3071	3039
85°	2449	2717	2717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6219 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-125U-125D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.8	1.2
10°-20°	302.7	3.5
20°-30°	456.5	5.3
30°-40°	544.0	6.3
40°-50°	536.3	6.3
50°-60°	409.9	4.8
60°-70°	253.6	3.0
70°-80°	144.1	1.7
80°-90°	45.9	0.5
90°-100°	418.4	4.9
100°-110°	1127.1	13.1
110°-120°	1182.9	13.8
120°-130°	959.9	11.2
130°-140°	752.8	8.8
140°-150°	578.0	6.7
150°-160°	415.6	4.8
160°-170°	253.9	3.0
170°-180°	85.6	1.0
0°-30°	865.0	10.1
0°-40°	1409.0	16.4
0°-60°	2355.1	27.5
0°-90°	2798.8	32.6
90°-120°	2728.4	31.8
90°-150°	5019.1	58.5
90°-180°	5774.0	67.4
0°-180°	8573.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1119	1119	1119	1119	1119	
5°	1124	1112	1116	1112	1110	107
15°	1082	1071	1075	1072	1070	305
25°	1003	991	996	986	985	462
35°	884	873	876	864	863	551
45°	715	706	702	690	688	548
55°	468	461	458	450	448	420
65°	252	250	252	250	250	255
75°	136	136	136	137	137	143
85°	35	37	38	38	38	40
90°	2	7	14	15	15	6
95°	64	228	686	351	243	67
105°	208	324	1246	1865	1750	219
115°	368	450	1038	2006	2269	362
125°	502	577	932	1575	1854	449
135°	605	675	906	1271	1439	467
145°	700	754	894	1087	1167	439
155°	794	823	886	975	1006	366
165°	861	871	890	925	930	243
175°	896	894	891	904	901	85
180°	894	894	894	894	894	

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-125U-125D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1118.7	1118.7	1118.7	1118.7	1118.7
2.5°	1125.6	1115.8	1118.7	1116.3	1111.0
5°	1124.5	1112.2	1115.8	1111.9	1110.0
7.5°	1115.8	1103.8	1107.3	1103.5	1102.3
10°	1108.1	1096.8	1100.4	1096.5	1094.6
12.5°	1099.6	1087.6	1091.9	1087.3	1085.4
15°	1082.1	1070.8	1075.3	1071.5	1069.6
17.5°	1062.8	1050.8	1055.3	1050.8	1048.4
20°	1047.4	1036.1	1040.7	1033.9	1033.0
22.5°	1030.4	1019.1	1023.7	1014.6	1014.5
25°	1003.1	990.8	996.3	985.7	984.8
27.5°	970.5	959.2	963.8	952.9	951.8
30°	948.2	936.9	941.4	929.8	927.9
32.5°	922.7	912.2	916.0	904.4	903.3
35°	883.6	873.2	875.9	864.3	863.4
37.5°	839.1	829.7	831.2	818.4	817.5
40°	807.5	798.1	798.8	785.3	784.3
42.5°	772.8	763.4	762.6	749.1	748.1
45°	715.0	705.6	702.4	689.9	688.0
47.5°	649.1	639.6	633.8	623.6	622.3
50°	601.3	591.8	586.8	578.1	575.3
52.5°	549.6	540.2	535.9	528.0	525.1
55°	468.3	460.8	457.7	449.9	448.1
57.5°	391.0	385.9	385.0	377.5	376.8
60°	344.0	341.2	341.1	334.4	334.4
62.5°	303.9	301.8	303.3	298.9	298.1
65°	251.5	249.6	252.5	250.5	250.5
67.5°	210.1	210.1	211.8	211.0	211.0
70°	186.9	186.9	187.9	187.9	187.9
72.5°	166.1	165.4	167.9	167.8	167.1
75°	135.9	135.9	135.9	136.8	136.8
77.5°	105.8	106.0	106.8	106.6	105.8
80°	85.8	86.7	86.7	85.8	85.8
82.5°	65.7	66.7	66.7	66.5	65.7
85°	34.7	36.6	38.5	38.5	38.5
87.5°	10.5	14.4	18.2	18.4	17.6
90°	2.3	6.7	13.7	14.8	14.8
92.5°	27.8	98.2	194.2	93.5	64.9
95°	63.8	227.6	685.9	350.8	242.7
97.5°	101.9	260.5	1075.8	898.8	677.7
100°	131.0	273.6	1199.8	1255.3	1041.4
102.5°	159.3	292.1	1240.8	1522.4	1346.8
105°	208.5	324.4	1246.5	1864.9	1750.2
107.5°	255.0	358.4	1193.4	2040.9	2070.6
110°	286.0	384.0	1145.1	2095.6	2203.7

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-125U-125D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	318.8	409.7	1098.6	2083.5	2261.1
115°	368.0	450.5	1038.0	2005.7	2268.6
117.5°	412.9	490.2	991.1	1881.5	2174.3
120°	442.1	516.7	967.4	1792.3	2093.1
122.5°	467.6	541.4	950.1	1701.1	2001.1
125°	502.5	577.1	932.1	1575.3	1853.8
127.5°	536.0	609.5	920.7	1464.3	1713.0
130°	556.0	629.6	916.1	1400.8	1619.1
132.5°	576.1	648.7	911.5	1344.8	1545.3
135°	605.0	675.2	905.8	1270.9	1439.1
137.5°	632.6	699.9	902.9	1208.2	1346.3
140°	651.8	716.4	900.1	1169.6	1294.4
142.5°	671.8	732.0	898.3	1133.6	1238.8
145°	699.6	754.2	894.5	1086.6	1166.8
147.5°	729.7	777.2	890.6	1047.0	1110.0
150°	749.7	791.0	888.8	1022.1	1074.5
152.5°	768.0	803.8	887.8	1001.8	1044.4
155°	794.2	823.1	886.5	974.9	1006.1
157.5°	817.2	839.7	886.7	956.0	976.9
160°	831.8	850.7	887.6	944.9	960.5
162.5°	844.5	859.9	888.5	935.7	946.9
165°	861.4	871.4	889.9	925.3	929.8
167.5°	875.1	880.9	891.0	917.3	919.1
170°	884.2	886.4	891.0	912.7	912.7
172.5°	889.7	890.1	891.9	908.1	908.1
175°	895.6	894.5	891.0	903.5	901.3
177.5°	898.1	896.3	891.7	899.0	897.2
180°	894.5	894.5	894.5	894.5	894.5

(END OF REPORT)