

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-F-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, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-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

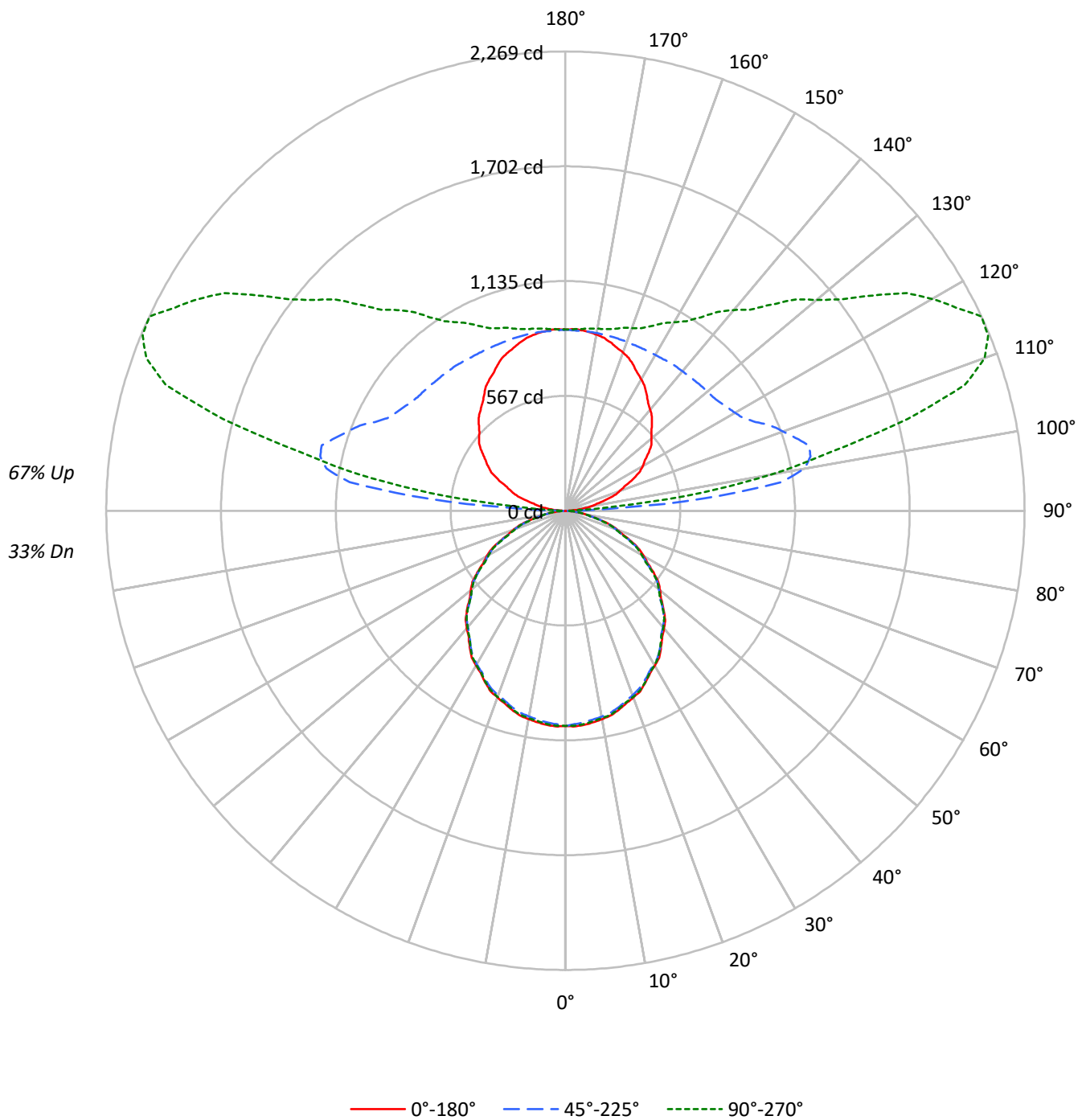
Lumens per Lamp: N/A
Luminaire Lumens: 8678.0 lumens
Efficiency: N/A
Efficacy: 74.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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

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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
RCR																	
0	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	35	35
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	19	16	14
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13
9	48	36	28	24	43	33	26	22	27	22	18	21	17	15	16	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6542	6542	6542
5°	6563	6480	6534
10°	6533	6452	6504
15°	6489	6411	6463
20°	6429	6356	6406
25°	6356	6289	6340
30°	6278	6224	6256
35°	6189	6135	6140
40°	6086	6020	6040
45°	5972	5906	5917
50°	5842	5775	5758
55°	5693	5612	5599
60°	5509	5386	5357
65°	5222	5111	5043
70°	4863	4737	4674
75°	4325	4228	4104
80°	3524	3422	3400
85°	2110	2392	2392

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5972 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.3	1.2
10°-20°	285.8	3.3
20°-30°	429.4	4.9
30°-40°	512.3	5.9
40°-50°	525.2	6.1
50°-60°	468.1	5.4
60°-70°	348.4	4.0
70°-80°	188.8	2.2
80°-90°	45.4	0.5
90°-100°	418.4	4.8
100°-110°	1127.1	13.0
110°-120°	1182.9	13.6
120°-130°	959.9	11.1
130°-140°	752.8	8.7
140°-150°	578.0	6.7
150°-160°	415.6	4.8
160°-170°	253.9	2.9
170°-180°	85.6	1.0
0°-30°	815.5	9.4
0°-40°	1327.9	15.3
0°-60°	2321.1	26.7
0°-90°	2903.8	33.5
90°-120°	2728.4	31.4
90°-150°	5019.1	57.8
90°-180°	5774.0	66.5
0°-180°	8678.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1063	1061	1050	1059	1058	101
15°	1019	1017	1007	1016	1015	287
25°	936	935	927	932	934	431
35°	824	824	817	817	818	515
45°	687	685	679	678	680	529
55°	531	529	523	519	522	474
65°	359	356	351	349	346	355
75°	182	182	178	174	173	193
85°	30	34	34	34	34	41
90°	2	7	14	15	15	5
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-F-125U-125D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1063.6	1063.6	1063.6	1063.6	1063.6
2.5°	1066.8	1065.0	1055.6	1063.5	1062.2
5°	1063.0	1061.3	1049.5	1058.9	1058.3
7.5°	1054.0	1051.8	1041.1	1049.8	1048.8
10°	1046.0	1044.3	1033.1	1041.9	1041.3
12.5°	1036.2	1034.5	1023.3	1032.1	1032.0
15°	1019.1	1016.8	1006.8	1015.6	1015.0
17.5°	998.6	996.0	986.1	993.0	994.1
20°	982.2	980.5	971.1	977.5	978.7
22.5°	965.3	963.2	953.3	960.7	961.8
25°	936.5	934.8	926.6	931.9	934.2
27.5°	904.9	904.9	897.3	901.1	902.5
30°	883.9	883.9	876.3	878.6	880.9
32.5°	861.4	859.6	852.4	854.3	856.6
35°	824.2	823.6	817.1	817.1	817.7
37.5°	785.6	784.0	777.0	777.5	780.3
40°	758.0	756.9	749.8	749.9	752.2
42.5°	729.9	728.8	722.7	721.7	722.7
45°	686.6	684.9	679.0	677.9	680.2
47.5°	640.5	640.9	633.9	632.3	633.6
50°	610.5	610.5	603.5	600.0	601.7
52.5°	579.1	578.2	571.2	567.3	571.3
55°	530.9	529.2	523.3	519.3	522.1
57.5°	481.5	478.9	473.0	468.5	470.1
60°	447.8	443.8	437.8	434.3	435.5
62.5°	412.7	410.5	404.1	398.8	401.3
65°	358.8	356.5	351.2	348.8	346.5
67.5°	306.0	304.5	298.5	296.0	294.5
70°	270.4	267.6	263.4	260.5	259.9
72.5°	235.8	232.5	228.3	225.8	224.3
75°	182.0	182.0	177.9	174.4	172.7
77.5°	130.9	131.3	128.0	126.8	126.0
80°	99.5	99.5	96.6	95.4	96.0
82.5°	69.5	70.9	69.9	68.2	67.4
85°	29.9	33.9	33.9	34.5	33.9
87.5°	5.6	9.7	11.6	10.9	10.0
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:

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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)