

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-BB-125U-075D-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-BB-125U-075D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

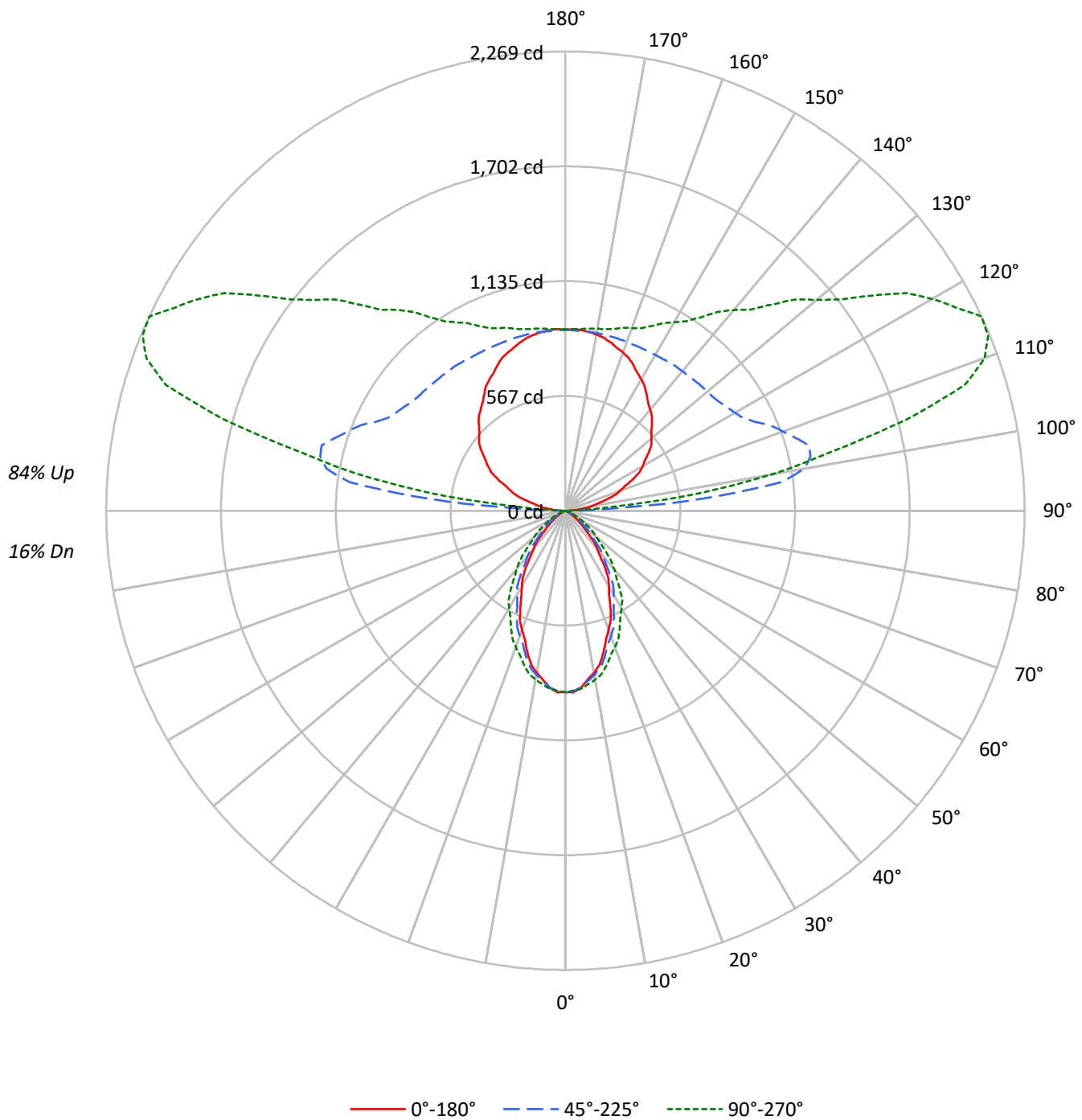
Lumens per Lamp: N/A
Luminaire Lumens: 6846.1 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 87.9
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	99	99	99	99	87	87	87	87	64	64	64	44	44	44	25	25	25
1	91	87	83	80	79	76	74	71	57	55	54	39	38	37	22	22	22
2	83	76	71	66	73	67	63	59	50	48	45	35	33	32	20	20	19
3	76	68	61	56	67	60	54	50	45	41	39	31	29	28	19	18	17
4	70	60	53	48	61	53	47	43	40	36	33	28	26	24	17	16	15
5	64	54	46	41	56	48	41	37	36	32	29	26	23	21	16	14	14
6	59	48	41	35	52	43	37	32	33	28	25	23	21	19	14	13	12
7	55	43	36	31	48	39	33	28	30	25	22	21	19	17	13	12	11
8	51	39	32	27	44	35	29	25	27	23	20	19	17	15	12	11	10
9	47	36	29	24	41	32	26	22	25	21	18	18	15	13	11	10	9
10	44	33	26	22	39	29	24	20	23	19	16	17	14	12	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5517	5517	5517
5°	5428	5414	5454
10°	5078	5146	5290
15°	4617	4763	5029
20°	4098	4311	4689
25°	3569	3851	4308
30°	3057	3393	3947
35°	2535	2880	3512
40°	1947	2303	2993
45°	1407	1744	2408
50°	959	1299	1910
55°	623	939	1484
60°	358	662	1073
65°	95	405	543
70°	47	124	156
75°	21	10	0
80°	14	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2408 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	1.2
10°-20°	209.3	3.1
20°-30°	262.0	3.8
30°-40°	242.0	3.5
40°-50°	162.6	2.4
50°-60°	84.0	1.2
60°-70°	26.3	0.4
70°-80°	1.7	0.0
80°-90°	2.1	0.0
90°-100°	418.4	6.1
100°-110°	1127.1	16.5
110°-120°	1182.9	17.3
120°-130°	959.9	14.0
130°-140°	752.8	11.0
140°-150°	578.0	8.4
150°-160°	415.6	6.1
160°-170°	253.9	3.7
170°-180°	85.6	1.3
0°-30°	553.2	8.1
0°-40°	795.2	11.6
0°-60°	1041.9	15.2
0°-90°	1072.0	15.7
90°-120°	2728.4	39.9
90°-150°	5019.1	73.3
90°-180°	5774.0	84.3
0°-180°	6846.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	879	870	877	880	883	81
15°	725	722	748	773	790	202
25°	526	530	568	606	635	241
35°	338	346	384	429	468	209
45°	162	172	200	240	277	127
55°	58	68	88	112	138	54
65°	6	12	28	34	37	11
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
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:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	896.9	896.9	896.9	896.9	896.9
2.5°	898.9	890.5	892.7	892.6	890.3
5°	879.1	870.2	876.9	880.0	883.4
7.5°	841.9	835.0	847.9	857.6	864.7
10°	813.1	807.2	824.0	837.2	847.0
12.5°	779.8	775.2	795.5	813.7	826.1
15°	725.0	722.5	748.0	773.1	789.7
17.5°	666.4	666.3	695.4	726.6	746.6
20°	626.1	627.4	658.6	693.0	716.4
22.5°	585.8	588.8	622.2	658.0	684.8
25°	525.9	530.1	567.5	606.4	634.8
27.5°	468.3	474.5	513.8	554.2	588.8
30°	430.4	437.6	477.7	520.2	555.8
32.5°	393.3	401.9	440.9	485.8	522.1
35°	337.6	346.1	383.6	428.7	467.7
37.5°	280.0	288.3	325.0	369.4	411.6
40°	242.5	251.9	286.8	329.9	372.7
42.5°	208.5	217.9	250.7	293.0	333.5
45°	161.8	171.6	200.5	239.5	276.8
47.5°	123.1	133.7	159.1	194.4	228.4
50°	100.2	110.8	135.8	166.9	199.6
52.5°	81.8	92.1	114.6	144.0	173.9
55°	58.1	67.9	87.6	112.5	138.4
57.5°	40.2	48.6	66.3	87.1	107.3
60°	29.1	37.1	53.8	70.7	87.2
62.5°	19.4	26.7	43.0	56.0	67.1
65°	6.5	12.4	27.8	33.5	37.3
67.5°	3.3	4.0	14.6	15.4	16.7
70°	2.6	2.6	6.9	7.4	8.7
72.5°	1.9	1.9	2.8	3.6	3.8
75°	0.9	0.9	0.4	0.0	0.0
77.5°	0.4	0.4	0.3	0.0	0.0
80°	0.4	0.4	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	1.3	2.7	3.0	3.0
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

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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)