

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-025U-075D-927-1D-UNV-STD-W-8

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-025U-075D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

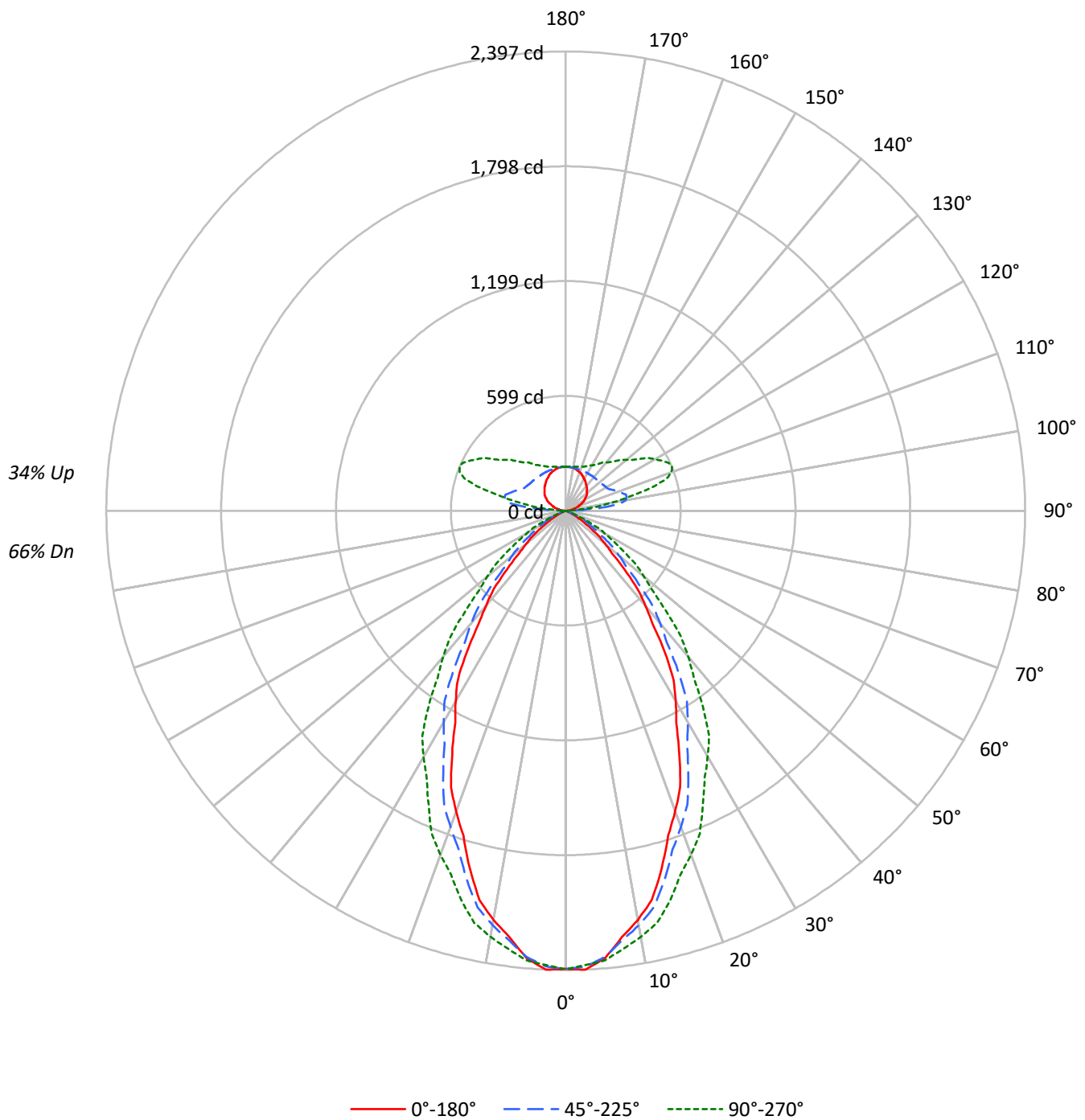
Lumens per Lamp: N/A
Luminaire Lumens: 4341.8 lumens
Efficiency: N/A
Efficacy: 66.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 64.9
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71
1	104	100	97	94	98	95	92	89	84	82	81	75	73	72	66	65	64
2	96	90	85	81	91	86	81	77	77	73	71	69	66	64	61	59	58
3	90	82	75	71	84	78	72	68	70	66	62	63	60	57	56	54	52
4	83	74	67	62	79	71	65	60	64	59	56	58	54	51	52	49	47
5	78	67	60	55	73	64	58	53	59	54	50	53	49	46	48	45	43
6	72	62	55	49	68	59	53	48	54	49	45	49	45	42	45	42	39
7	68	57	50	45	64	54	48	43	50	45	41	46	41	38	42	38	36
8	63	52	45	41	60	50	44	39	46	41	37	43	38	35	39	36	33
9	60	48	42	37	57	47	40	36	43	38	34	40	35	32	37	33	31
10	56	45	38	34	53	43	37	33	40	35	32	37	33	30	34	31	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11033	11033	11033
5°	10855	10828	10909
10°	10157	10292	10580
15°	9234	9526	10057
20°	8196	8622	9378
25°	7138	7703	8616
30°	6114	6786	7895
35°	5070	5760	7024
40°	3895	4606	5985
45°	2816	3488	4816
50°	1918	2599	3819
55°	1247	1880	2969
60°	715	1324	2146
65°	190	809	1086
70°	93	250	312
75°	41	21	0
80°	32	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4816 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.3	5.0
10°-20°	558.2	12.9
20°-30°	698.8	16.1
30°-40°	645.4	14.9
40°-50°	433.7	10.0
50°-60°	224.0	5.2
60°-70°	70.2	1.6
70°-80°	4.4	0.1
80°-90°	1.3	0.0
90°-100°	111.9	2.6
100°-110°	294.1	6.8
110°-120°	304.9	7.0
120°-130°	244.6	5.6
130°-140°	191.9	4.4
140°-150°	147.3	3.4
150°-160°	106.1	2.4
160°-170°	64.9	1.5
170°-180°	21.9	0.5
0°-30°	1475.2	34.0
0°-40°	2120.6	48.8
0°-60°	2778.3	64.0
0°-90°	2854.2	65.7
90°-120°	710.8	16.4
90°-150°	1294.6	29.8
90°-180°	1488.0	34.3
0°-180°	4341.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2392	2392	2392	2392	2392	
5°	2344	2320	2338	2347	2356	217
15°	1933	1927	1995	2062	2106	538
25°	1402	1414	1513	1617	1693	643
35°	900	923	1023	1143	1247	558
45°	432	458	535	639	738	339
55°	155	181	234	300	369	145
65°	17	33	74	89	100	29
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	4	12	6	6	1
95°	15	58	193	99	68	16
105°	53	80	325	494	460	56
115°	94	114	260	520	593	93
125°	131	147	237	400	472	116
135°	156	172	230	323	366	121
145°	181	192	227	276	297	113
155°	204	210	227	249	256	94
165°	221	224	227	235	238	62
175°	230	230	228	231	231	22
180°	230	230	230	230	230	

TEST NUMBER:

CATALOG NUMBER: SQ4-BB-025U-075D-927-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2391.6	2391.6	2391.6	2391.6	2391.6
2.5°	2397.2	2374.5	2380.5	2380.4	2374.0
5°	2344.2	2320.4	2338.4	2346.7	2355.7
7.5°	2245.1	2226.6	2261.1	2287.0	2305.8
10°	2168.3	2152.5	2197.2	2232.5	2258.6
12.5°	2079.4	2067.2	2121.3	2169.8	2203.0
15°	1933.4	1926.6	1994.7	2061.7	2105.8
17.5°	1777.0	1776.8	1854.5	1937.6	1990.8
20°	1669.6	1673.0	1756.4	1848.1	1910.3
22.5°	1562.2	1570.2	1659.2	1754.8	1826.1
25°	1402.3	1413.7	1513.4	1617.0	1692.8
27.5°	1248.7	1265.2	1370.2	1477.8	1570.1
30°	1147.8	1167.0	1273.9	1387.1	1482.2
32.5°	1048.7	1071.6	1175.8	1295.5	1392.4
35°	900.2	922.8	1022.8	1143.2	1247.3
37.5°	746.8	768.9	866.6	985.1	1097.6
40°	646.8	671.7	764.8	879.6	993.9
42.5°	556.1	581.0	668.5	781.4	889.3
45°	431.6	457.6	534.6	638.6	738.2
47.5°	328.4	356.7	424.2	518.3	609.1
50°	267.3	295.6	362.2	445.1	532.2
52.5°	218.2	245.6	305.7	383.9	463.7
55°	155.0	181.1	233.7	300.1	369.1
57.5°	107.1	129.5	176.8	232.2	286.3
60°	77.5	99.0	143.5	188.4	232.6
62.5°	51.6	71.3	114.8	149.2	178.9
65°	17.4	33.2	74.1	89.3	99.5
67.5°	8.8	10.6	38.9	41.0	44.4
70°	6.9	6.9	18.5	19.7	23.1
72.5°	5.1	5.1	7.4	9.5	10.2
75°	2.3	2.3	1.2	0.0	0.0
77.5°	1.2	1.2	0.9	0.0	0.0
80°	1.2	1.2	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.9	2.4	1.2	1.2
90°	1.5	4.3	11.8	5.9	5.9
92.5°	6.2	29.8	65.9	29.2	18.8
95°	14.7	57.9	192.7	99.3	67.7
97.5°	25.6	63.6	288.3	229.3	168.9
100°	33.8	68.4	317.8	322.0	250.1
102.5°	40.9	73.1	326.0	401.1	339.5
105°	53.0	80.3	325.1	493.6	460.5
107.5°	65.3	90.6	306.6	541.6	549.6
110°	73.6	96.6	291.3	553.9	588.5

TEST NUMBER:

CATALOG NUMBER: SQ4-BB-025U-075D-927-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	81.8	103.7	277.2	546.1	599.0
115°	94.2	114.3	260.4	519.5	592.9
117.5°	106.2	124.6	248.9	482.6	564.0
120°	113.3	130.5	244.2	457.9	537.0
122.5°	120.3	137.6	240.7	433.1	511.1
125°	130.9	146.8	236.9	400.3	472.2
127.5°	139.5	155.6	233.6	373.9	434.6
130°	144.2	161.4	232.4	357.3	413.4
132.5°	148.9	166.1	231.3	343.0	393.4
135°	155.9	171.8	229.5	323.2	366.3
137.5°	163.3	178.8	229.2	308.3	343.7
140°	169.2	183.6	228.0	296.5	329.5
142.5°	173.9	187.1	228.0	288.1	316.6
145°	181.0	192.5	226.6	275.6	297.2
147.5°	188.0	199.2	226.6	265.2	283.0
150°	192.7	202.8	226.6	259.2	273.6
152.5°	197.4	205.2	226.6	254.5	265.4
155°	204.5	210.2	226.6	248.8	256.0
157.5°	209.8	215.3	226.6	243.7	248.9
160°	213.3	217.6	226.6	241.3	244.2
162.5°	216.8	220.0	226.6	239.0	241.9
165°	220.7	223.5	226.6	235.4	238.3
167.5°	224.2	225.6	228.0	233.9	235.1
170°	226.6	228.0	228.0	233.9	233.9
172.5°	227.7	228.0	228.0	232.7	231.6
175°	229.5	229.5	228.0	231.0	231.0
177.5°	229.5	229.5	228.3	230.6	229.5
180°	229.5	229.5	229.5	229.5	229.5

(END OF REPORT)