

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-050D-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-050D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

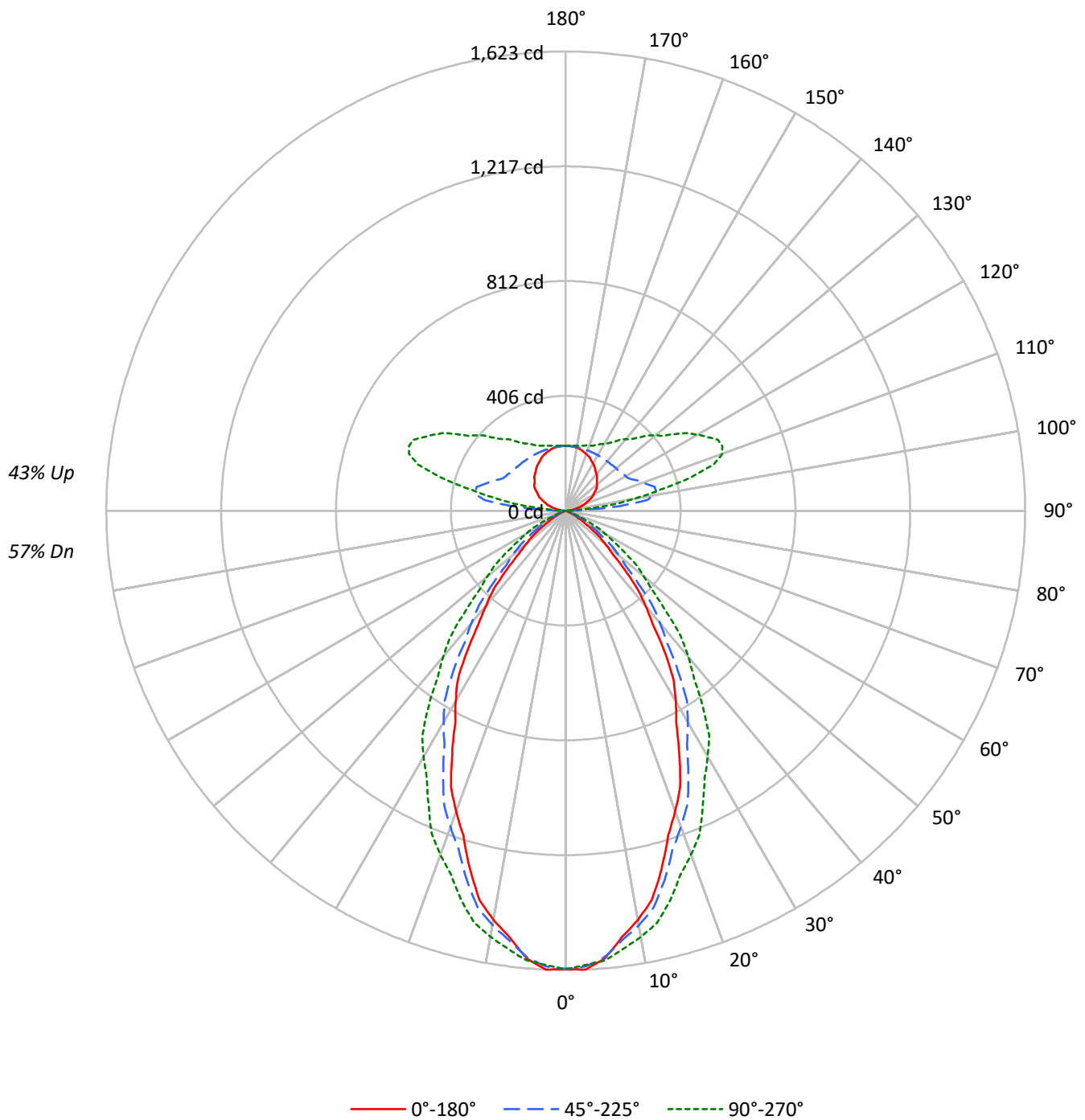
Lumens per Lamp: N/A
Luminaire Lumens: 3420.6 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 45.7
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	101	98	94	92	94	91	89	86	79	77	76	68	67	66	58	57	56
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	54	52	51
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	46
4	81	71	65	59	75	67	61	57	60	55	51	52	49	46	46	43	41
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	42	40	37
6	70	59	52	47	65	56	50	45	50	45	41	44	41	38	39	36	34
7	65	54	47	42	61	51	45	41	46	41	37	41	37	34	37	34	31
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7470	7470	7470
5°	7350	7332	7386
10°	6877	6969	7164
15°	6252	6451	6810
20°	5550	5838	6350
25°	4833	5216	5834
30°	4140	4595	5346
35°	3432	3900	4756
40°	2637	3119	4053
45°	1906	2362	3261
50°	1299	1760	2586
55°	844	1273	2010
60°	484	896	1453
65°	129	547	736
70°	63	169	212
75°	29	14	0
80°	21	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3261 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.8	4.3
10°-20°	377.9	11.0
20°-30°	473.1	13.8
30°-40°	437.0	12.8
40°-50°	293.7	8.6
50°-60°	151.7	4.4
60°-70°	47.5	1.4
70°-80°	3.0	0.1
80°-90°	1.3	0.0
90°-100°	111.9	3.3
100°-110°	294.1	8.6
110°-120°	304.9	8.9
120°-130°	244.6	7.2
130°-140°	191.9	5.6
140°-150°	147.3	4.3
150°-160°	106.1	3.1
160°-170°	64.9	1.9
170°-180°	21.9	0.6
0°-30°	998.9	29.2
0°-40°	1435.9	42.0
0°-60°	1881.2	55.0
0°-90°	1933.0	56.5
90°-120°	710.8	20.8
90°-150°	1294.6	37.8
90°-180°	1488.0	43.5
0°-180°	3420.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1619	1619	1619	1619	1619	
5°	1587	1571	1583	1589	1595	147
15°	1309	1304	1351	1396	1426	365
25°	950	957	1025	1095	1146	435
35°	610	625	693	774	845	378
45°	292	310	362	432	500	229
55°	105	123	158	203	250	98
65°	12	22	50	60	67	20
75°	2	2	1	0	0	2
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1619.4	1619.4	1619.4	1619.4	1619.4
2.5°	1623.1	1607.8	1611.9	1611.8	1607.5
5°	1587.3	1571.2	1583.3	1589.0	1595.1
7.5°	1520.2	1507.6	1531.0	1548.5	1561.3
10°	1468.2	1457.5	1487.8	1511.7	1529.3
12.5°	1408.0	1399.7	1436.4	1469.2	1491.7
15°	1309.1	1304.5	1350.7	1396.0	1425.9
17.5°	1203.2	1203.1	1255.7	1312.0	1348.0
20°	1130.5	1132.8	1189.3	1251.3	1293.5
22.5°	1057.8	1063.2	1123.5	1188.2	1236.4
25°	949.5	957.2	1024.7	1094.9	1146.2
27.5°	845.5	856.7	927.8	1000.6	1063.1
30°	777.2	790.2	862.6	939.2	1003.6
32.5°	710.1	725.6	796.1	877.2	942.8
35°	609.5	624.8	692.6	774.1	844.6
37.5°	505.6	520.7	586.8	667.0	743.2
40°	437.9	454.8	517.9	595.6	673.0
42.5°	376.5	393.4	452.7	529.1	602.2
45°	292.2	309.8	362.0	432.4	499.8
47.5°	222.3	241.5	287.2	351.0	412.4
50°	181.0	200.1	245.2	301.4	360.4
52.5°	147.8	166.3	207.0	259.9	314.0
55°	105.0	122.6	158.3	203.2	249.9
57.5°	72.5	87.7	119.7	157.2	193.8
60°	52.5	67.0	97.1	127.6	157.5
62.5°	34.9	48.3	77.7	101.1	121.1
65°	11.8	22.5	50.1	60.5	67.4
67.5°	6.0	7.2	26.3	27.8	30.1
70°	4.7	4.7	12.5	13.4	15.7
72.5°	3.4	3.4	5.0	6.4	6.9
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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

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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)