

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-075U-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 (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-050D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

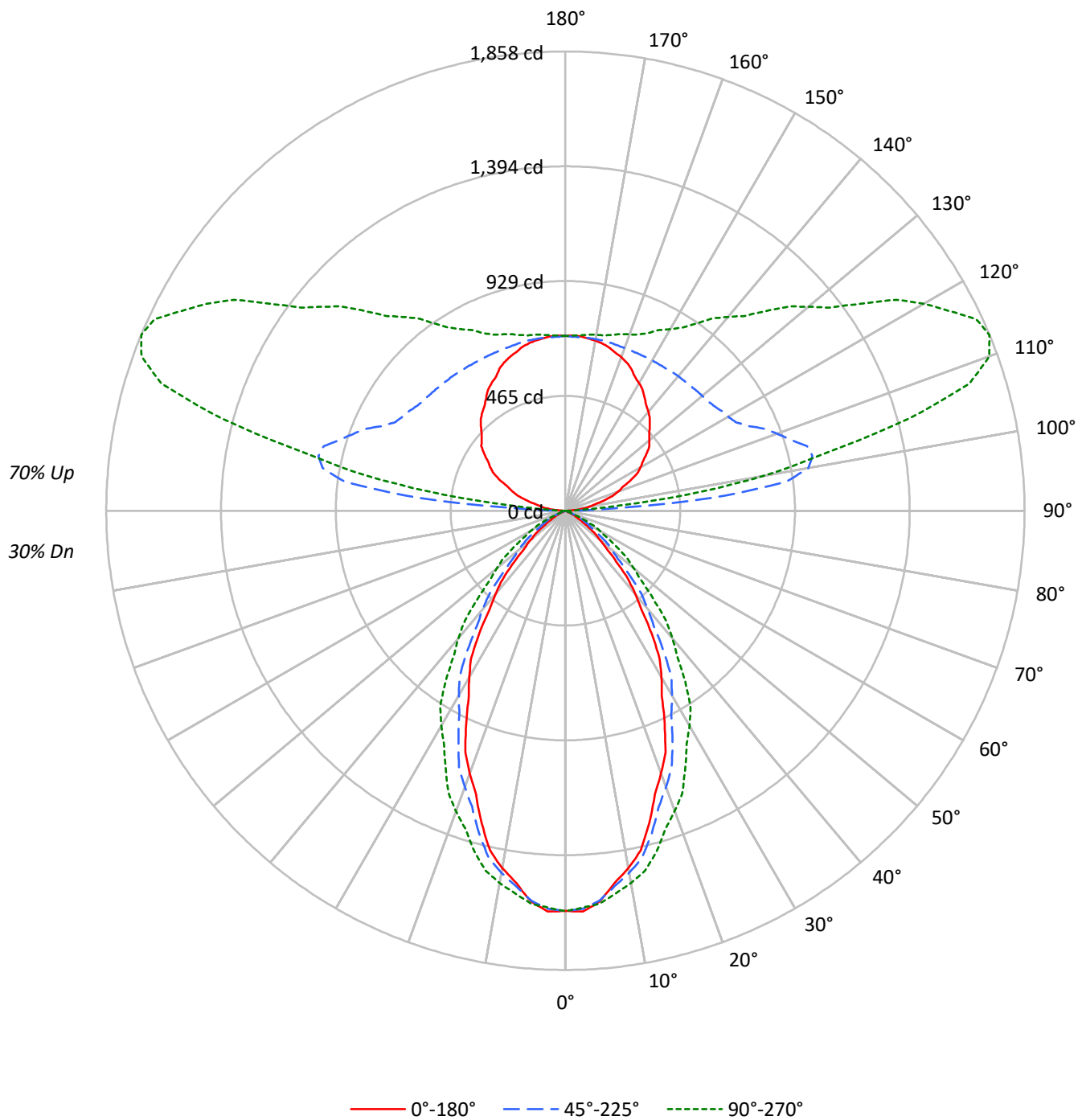
Lumens per Lamp: N/A
Luminaire Lumens: 6544.0 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.8
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37
1	94	90	87	84	85	81	79	76	64	63	61	49	48	47	35	34	34
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14

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	2.3
10°-20°	377.9	5.8
20°-30°	473.1	7.2
30°-40°	437.0	6.7
40°-50°	293.7	4.5
50°-60°	151.7	2.3
60°-70°	47.5	0.7
70°-80°	3.0	0.0
80°-90°	1.9	0.0
90°-100°	333.8	5.1
100°-110°	918.3	14.0
110°-120°	947.9	14.5
120°-130°	759.5	11.6
130°-140°	596.5	9.1
140°-150°	457.1	7.0
150°-160°	328.7	5.0
160°-170°	201.0	3.1
170°-180°	67.7	1.0
0°-30°	998.9	15.3
0°-40°	1435.9	21.9
0°-60°	1881.2	28.7
0°-90°	1933.6	29.5
90°-120°	2200.0	33.6
90°-150°	4013.1	61.3
90°-180°	4610.0	70.4
0°-180°	6544.0	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	6	10	14	14	3
95°	50	182	590	252	161	52
105°	164	252	1012	1541	1438	173
115°	291	354	812	1616	1834	287
125°	400	456	736	1246	1459	357
135°	483	536	715	1007	1140	373
145°	559	597	705	858	924	350
155°	632	653	700	771	794	291
165°	684	692	703	732	736	193
175°	708	709	705	714	712	67
180°	708	708	708	708	708	

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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	1.2	2.1	2.7	2.7
90°	1.5	5.9	10.5	13.6	13.6
92.5°	20.8	88.8	153.9	59.1	48.5
95°	49.7	182.2	590.3	252.4	161.1
97.5°	81.0	202.0	900.7	694.0	489.7
100°	103.9	214.3	998.3	1007.7	822.1
102.5°	125.6	228.9	1023.6	1250.1	1079.9
105°	164.1	252.5	1011.9	1541.1	1438.0
107.5°	200.9	281.5	954.3	1683.5	1714.2
110°	227.4	301.0	911.0	1719.0	1825.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	251.5	322.7	867.6	1696.1	1857.5
115°	290.6	353.9	811.6	1616.1	1834.0
117.5°	328.0	386.3	776.1	1503.8	1750.3
120°	350.8	406.8	760.4	1419.7	1674.4
122.5°	371.3	427.3	749.6	1345.9	1587.7
125°	400.5	456.5	736.3	1245.6	1459.1
127.5°	428.2	481.5	727.6	1161.9	1349.2
130°	442.7	497.2	722.8	1112.1	1282.9
132.5°	459.6	514.0	719.1	1068.4	1222.7
135°	483.3	536.4	715.2	1007.4	1139.9
137.5°	505.6	554.8	711.9	958.0	1067.3
140°	522.5	568.1	710.7	925.3	1023.9
142.5°	537.0	579.1	708.3	896.0	980.5
145°	558.6	596.9	704.7	858.3	924.5
147.5°	581.8	614.8	702.9	824.9	877.9
150°	596.3	625.7	701.7	806.5	847.7
152.5°	609.5	636.6	700.5	790.7	824.9
155°	632.4	653.0	700.2	771.4	793.5
157.5°	649.0	665.8	700.2	755.6	770.9
160°	661.0	674.3	700.2	747.1	758.9
162.5°	670.7	681.6	701.4	739.8	749.3
165°	683.6	692.4	703.2	731.9	736.3
167.5°	692.6	699.4	704.7	725.2	726.4
170°	698.7	703.1	704.7	722.8	722.8
172.5°	703.5	705.6	704.7	719.1	717.9
175°	707.7	709.2	704.7	713.7	712.2
177.5°	708.9	708.9	704.1	711.3	708.9
180°	707.7	707.7	707.7	707.7	707.7

(END OF REPORT)