

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-PC3-100U-075D-927-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PC3-100U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

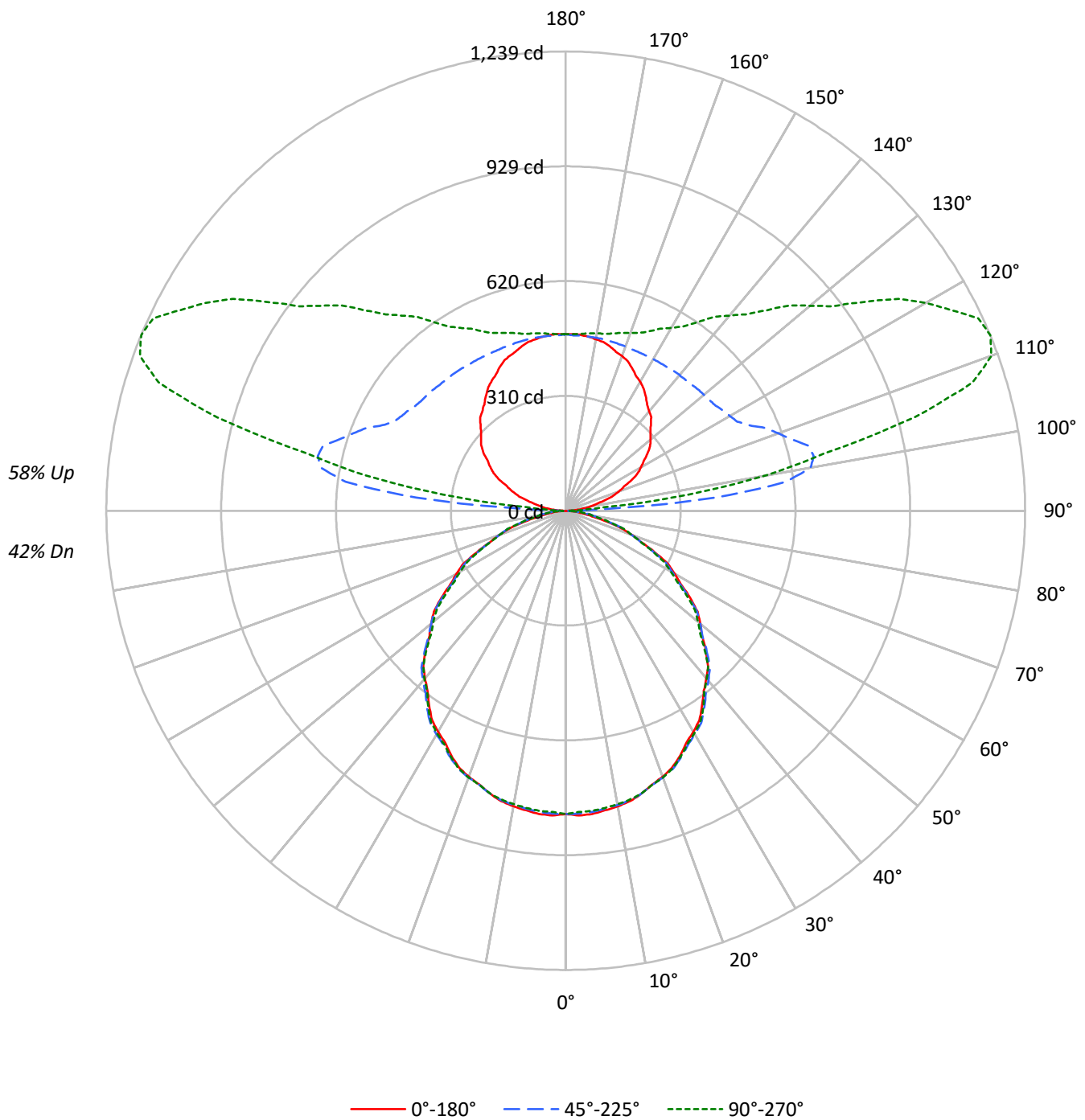
Lumens per Lamp: N/A
Luminaire Lumens: 5326.6 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 49.1
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

TEST NUMBER:

CATALOG NUMBER: SQ4-PC3-100U-075D-927-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-PC3-100U-075D-927-1D-UNV-STD-W-4

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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49
1	96	92	88	85	87	84	81	78	69	67	65	56	54	53	43	42	41
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	27	25
5	67	55	47	41	61	51	44	39	42	37	33	34	30	27	27	24	22
6	61	50	42	36	56	46	39	33	38	33	29	31	27	24	24	22	19
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17
8	53	40	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7549	7549	7549
5°	7605	7556	7529
10°	7588	7552	7530
15°	7548	7548	7540
20°	7498	7520	7520
25°	7427	7481	7458
30°	7336	7425	7394
35°	7228	7338	7287
40°	7108	7208	7135
45°	6979	7028	6919
50°	6796	6796	6687
55°	6581	6495	6397
60°	6263	6137	6039
65°	5790	5674	5624
70°	5069	5109	5088
75°	4078	4509	4538
80°	2896	3825	3863
85°	1768	3208	3208

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 7028 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-PC3-100U-075D-927-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.4	1.5
10°-20°	222.2	4.2
20°-30°	336.5	6.3
30°-40°	403.4	7.6
40°-50°	411.4	7.7
50°-60°	359.1	6.7
60°-70°	257.1	4.8
70°-80°	132.4	2.5
80°-90°	34.5	0.6
90°-100°	222.9	4.2
100°-110°	615.3	11.6
110°-120°	634.6	11.9
120°-130°	510.0	9.6
130°-140°	400.8	7.5
140°-150°	307.4	5.8
150°-160°	220.9	4.1
160°-170°	135.1	2.5
170°-180°	45.5	0.9
0°-30°	636.2	11.9
0°-40°	1039.6	19.5
0°-60°	1810.0	34.0
0°-90°	2234.0	41.9
90°-120°	1472.8	27.7
90°-150°	2691.0	50.5
90°-180°	3093.0	58.1
0°-180°	5326.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	821	813	816	814	813	78
15°	790	784	790	790	789	223
25°	730	724	735	733	733	336
35°	642	640	652	647	647	401
45°	535	533	539	532	530	412
55°	409	404	404	398	398	365
65°	265	259	260	258	258	262
75°	114	120	126	127	127	124
85°	17	26	30	31	30	23
90°	2	3	6	7	8	3
95°	33	121	404	166	108	35
105°	110	169	677	1034	973	117
115°	196	237	545	1079	1228	193
125°	270	307	494	836	982	240
135°	324	359	480	677	764	251
145°	376	402	474	577	621	236
155°	424	438	471	518	534	195
165°	459	465	473	491	495	129
175°	476	477	474	480	479	45
180°	476	476	476	476	476	

TEST NUMBER:

CATALOG NUMBER: SQ4-PC3-100U-075D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	818.2	818.2	818.2	818.2	818.2
2.5°	823.0	815.9	818.2	816.3	813.3
5°	821.2	813.1	815.9	813.6	812.9
7.5°	815.3	807.2	810.9	809.4	808.7
10°	809.9	801.7	806.1	804.5	803.8
12.5°	802.6	795.0	800.0	798.5	798.3
15°	790.2	783.5	790.2	790.1	789.4
17.5°	774.6	768.5	775.6	776.1	775.6
20°	763.7	757.0	765.9	765.2	765.9
22.5°	750.3	744.8	754.4	752.5	753.2
25°	729.6	724.4	734.9	732.6	732.6
27.5°	705.0	701.3	712.7	710.3	710.3
30°	688.6	684.9	697.0	694.0	694.0
32.5°	670.5	667.9	679.4	675.8	675.8
35°	641.7	640.2	651.5	647.0	647.0
37.5°	612.0	610.6	620.9	615.4	613.6
40°	590.2	589.4	598.5	592.4	592.4
42.5°	568.3	567.6	575.5	568.2	568.2
45°	534.9	533.4	538.6	531.8	530.3
47.5°	498.3	496.9	500.2	492.7	492.0
50°	473.5	472.0	473.5	466.7	465.9
52.5°	448.0	445.4	445.6	438.8	438.6
55°	409.1	403.9	403.8	397.7	397.7
57.5°	367.9	361.1	361.7	356.5	355.8
60°	339.4	332.0	332.6	328.0	327.3
62.5°	311.5	302.9	304.7	299.5	299.4
65°	265.2	259.2	259.9	257.6	257.6
67.5°	220.6	215.1	219.1	217.3	217.1
70°	187.9	184.2	189.4	189.4	188.6
72.5°	157.6	157.4	163.9	164.0	164.4
75°	114.4	119.6	126.5	127.3	127.3
77.5°	76.4	85.6	93.2	93.5	93.3
80°	54.5	64.9	72.0	73.5	72.7
82.5°	37.0	47.9	53.8	55.3	54.5
85°	16.7	25.6	30.3	31.0	30.3
87.5°	5.2	10.8	13.3	13.5	12.4
90°	1.5	3.0	6.1	6.9	7.6
92.5°	13.7	56.9	101.7	37.1	28.9
95°	32.7	120.6	404.4	166.2	108.1
97.5°	54.2	135.1	599.0	461.2	334.0
100°	70.1	143.8	670.9	675.7	549.1
102.5°	85.3	153.6	684.9	834.8	714.8
105°	109.7	169.2	677.0	1033.6	973.2
107.5°	135.6	188.6	639.2	1129.4	1151.4
110°	153.8	201.5	610.0	1150.0	1221.5

TEST NUMBER:

CATALOG NUMBER: SQ4-PC3-100U-075D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	216.1	582.6	1133.7	1239.2
115°	196.5	237.4	545.3	1079.4	1227.6
117.5°	219.3	260.1	520.7	1003.0	1171.6
120°	234.6	274.8	511.0	951.2	1121.0
122.5°	249.2	287.6	503.1	902.9	1063.7
125°	269.6	306.8	494.2	836.4	981.6
127.5°	286.9	324.2	489.1	780.2	905.5
130°	298.5	335.8	486.6	745.9	859.8
132.5°	309.5	344.9	484.2	717.0	820.2
135°	324.4	359.4	480.5	677.4	763.8
137.5°	341.2	373.0	478.7	644.3	718.0
140°	350.3	381.6	477.5	622.1	686.9
142.5°	360.7	389.6	476.3	602.5	659.5
145°	376.2	402.3	474.4	576.7	620.7
147.5°	391.1	413.9	472.8	555.0	589.1
150°	402.1	420.7	472.2	542.1	569.6
152.5°	410.6	428.0	471.5	531.0	553.8
155°	424.2	438.3	470.6	517.5	533.8
157.5°	436.7	447.5	470.8	507.6	518.8
160°	444.0	453.7	471.4	502.0	510.2
162.5°	450.1	458.6	472.0	497.1	503.5
165°	459.2	465.2	472.9	491.3	495.0
167.5°	466.2	469.8	473.7	487.7	488.9
170°	469.9	472.8	473.7	485.9	485.9
172.5°	472.9	474.7	473.7	483.4	482.8
175°	476.0	476.7	473.7	480.5	479.0
177.5°	477.2	476.6	473.5	477.8	476.6
180°	476.0	476.0	476.0	476.0	476.0

(END OF REPORT)