

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-125D-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-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

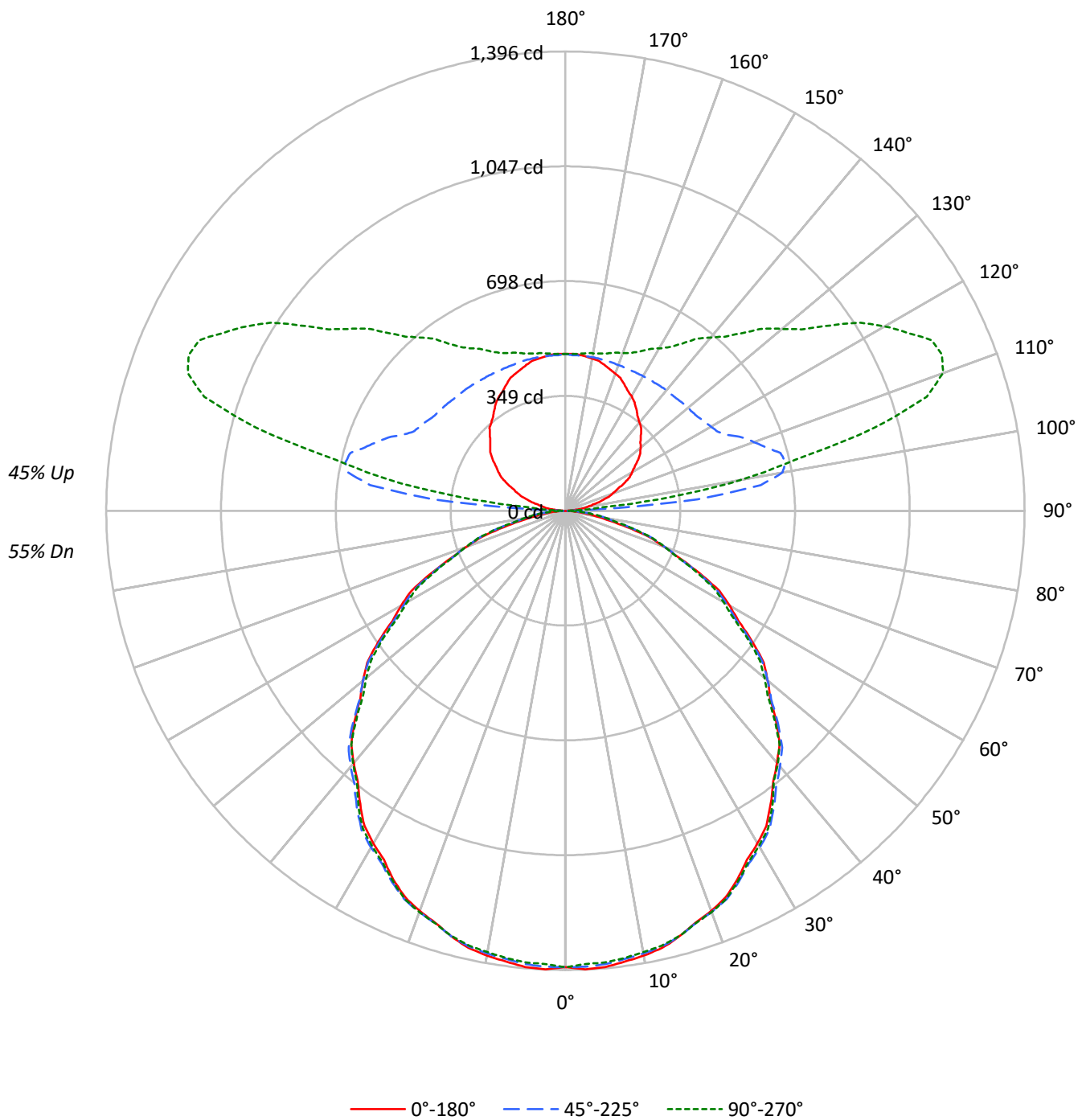
Lumens per Lamp: N/A
Luminaire Lumens: 6879.9 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61
1	99	95	91	87	92	88	85	82	76	73	71	64	63	61	54	53	51
2	90	83	76	71	83	77	72	67	66	62	59	56	53	51	47	45	43
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37
4	75	64	56	50	70	60	53	47	52	46	42	44	40	37	37	34	32
5	69	57	49	43	64	54	46	41	46	41	36	40	35	32	34	30	28
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	31	27	24
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	22
8	55	42	34	29	51	39	32	27	35	29	25	30	25	22	26	22	19
9	51	38	31	26	47	36	29	25	32	26	22	28	23	20	24	20	17
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12800	12800	12800
5°	12897	12813	12766
10°	12865	12805	12768
15°	12797	12797	12785
20°	12714	12751	12751
25°	12594	12684	12646
30°	12440	12590	12536
35°	12254	12442	12356
40°	12052	12222	12098
45°	11833	11917	11733
50°	11524	11524	11339
55°	11158	11014	10848
60°	10619	10405	10239
65°	9815	9619	9536
70°	8594	8662	8629
75°	6916	7646	7693
80°	4915	6482	6551
85°	2996	5441	5441

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 11917 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	1.9
10°-20°	376.8	5.5
20°-30°	570.6	8.3
30°-40°	684.1	9.9
40°-50°	697.5	10.1
50°-60°	608.9	8.9
60°-70°	435.9	6.3
70°-80°	224.5	3.3
80°-90°	57.8	0.8
90°-100°	222.9	3.2
100°-110°	615.3	8.9
110°-120°	634.6	9.2
120°-130°	510.0	7.4
130°-140°	400.8	5.8
140°-150°	307.4	4.5
150°-160°	220.9	3.2
160°-170°	135.1	2.0
170°-180°	45.5	0.7
0°-30°	1078.7	15.7
0°-40°	1762.7	25.6
0°-60°	3069.1	44.6
0°-90°	3787.3	55.0
90°-120°	1472.8	21.4
90°-150°	2691.0	39.1
90°-180°	3093.0	45.0
0°-180°	6879.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1387	1387	1387	1387	1387	
5°	1392	1379	1384	1380	1378	132
15°	1340	1328	1340	1340	1338	378
25°	1237	1228	1246	1242	1242	569
35°	1088	1086	1105	1097	1097	680
45°	907	904	913	902	899	698
55°	694	685	685	674	674	618
65°	450	440	441	437	437	445
75°	194	203	214	216	216	210
85°	28	43	51	53	51	38
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-125D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1387.3	1387.3	1387.3	1387.3	1387.3
2.5°	1395.6	1383.5	1387.3	1384.2	1379.1
5°	1392.5	1378.7	1383.5	1379.6	1378.4
7.5°	1382.5	1368.7	1375.0	1372.4	1371.2
10°	1373.2	1359.4	1366.8	1364.2	1362.9
12.5°	1360.9	1348.1	1356.5	1353.9	1353.7
15°	1339.8	1328.5	1339.8	1339.8	1338.5
17.5°	1313.4	1303.1	1315.2	1315.9	1315.2
20°	1294.9	1283.6	1298.7	1297.5	1298.7
22.5°	1272.3	1263.0	1279.2	1275.9	1277.1
25°	1237.1	1228.3	1246.0	1242.2	1242.2
27.5°	1195.4	1189.2	1208.5	1204.4	1204.4
30°	1167.7	1161.4	1181.8	1176.7	1176.7
32.5°	1136.9	1132.6	1152.0	1145.8	1145.8
35°	1088.0	1085.5	1104.7	1097.0	1097.0
37.5°	1037.7	1035.4	1052.8	1043.5	1040.5
40°	1000.7	999.4	1014.8	1004.5	1004.5
42.5°	963.7	962.4	975.8	963.4	963.4
45°	906.9	904.4	913.3	901.7	899.2
47.5°	845.0	842.5	848.1	835.5	834.2
50°	802.9	800.4	802.9	791.3	790.0
52.5°	759.7	755.2	755.6	744.0	743.8
55°	693.7	684.9	684.7	674.4	674.4
57.5°	623.8	612.2	613.3	604.5	603.2
60°	575.5	562.9	563.9	556.2	554.9
62.5°	528.2	513.7	516.7	507.9	507.7
65°	449.6	439.6	440.6	436.8	436.8
67.5°	374.1	364.8	371.5	368.4	368.2
70°	318.6	312.3	321.1	321.1	319.9
72.5°	267.2	266.9	278.0	278.0	278.8
75°	194.0	202.8	214.5	215.8	215.8
77.5°	129.5	145.1	158.0	158.5	158.3
80°	92.5	110.1	122.0	124.6	123.3
82.5°	62.7	81.3	91.2	93.7	92.5
85°	28.3	43.3	51.4	52.6	51.4
87.5°	8.5	17.9	21.8	21.9	20.0
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

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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)