

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: P854128

Luminaire Tested: SQ2-PP3-100U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854128
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-100U-075D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

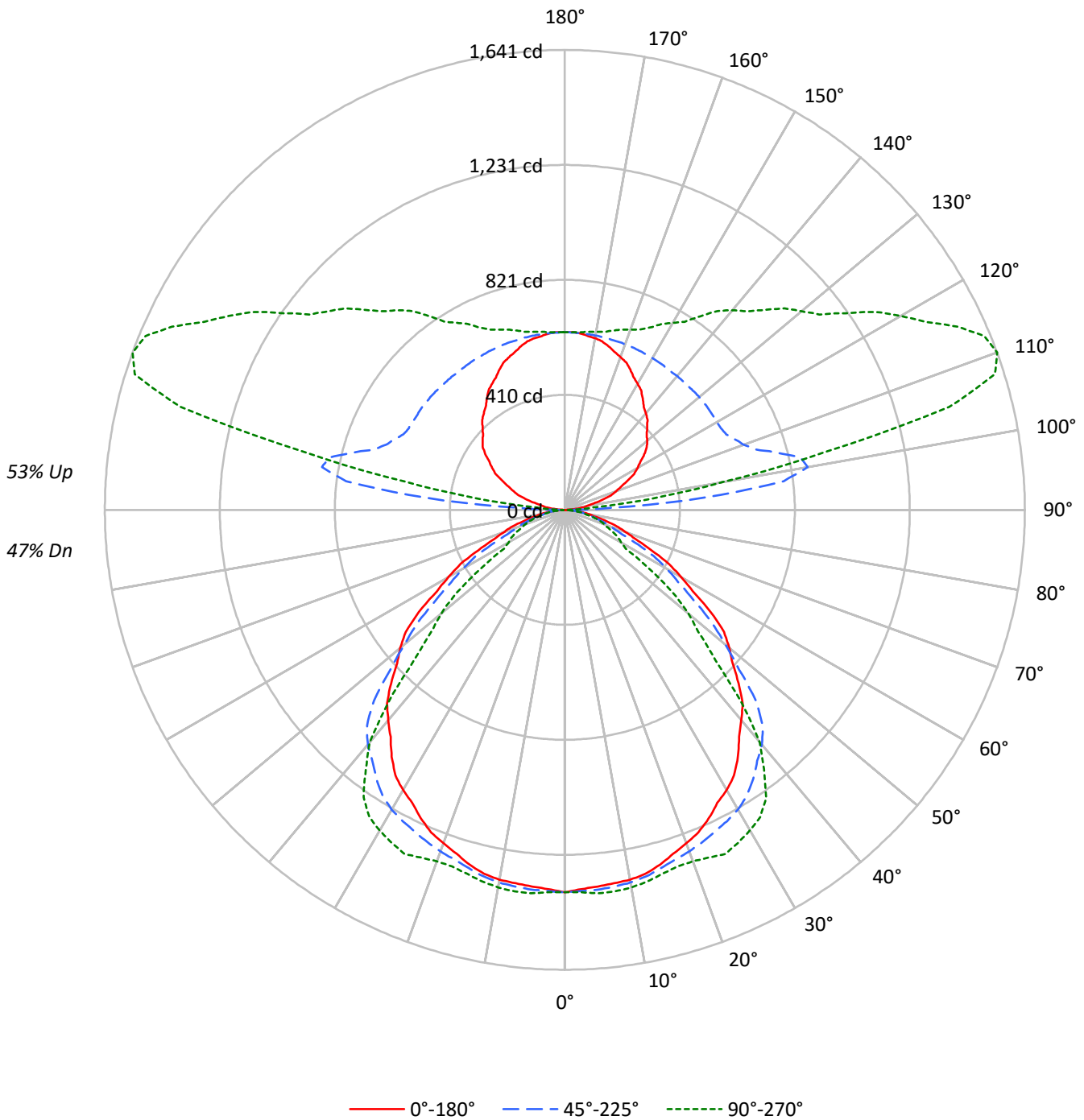
Lumens per Lamp: N/A
Luminaire Lumens: 7383.3 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 59.3
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53	47				47
1	98	93	90	86	89	86	83	80	72	70	68	59	58	56	48	47	46				40	
2	89	82	76	71	82	76	71	66	64	60	57	53	50	48	42	41	39				34	
3	82	73	66	60	75	67	61	56	57	52	48	47	44	41	38	36	34				30	
4	75	64	57	51	69	60	53	48	50	45	41	42	38	35	34	32	29				26	
5	69	57	50	44	63	53	46	41	45	40	36	38	34	31	31	28	26				23	
6	63	52	44	38	58	48	41	36	41	35	31	34	30	27	28	25	23				20	
7	59	47	39	33	54	43	36	32	37	32	28	31	27	24	26	23	20				18	
8	54	42	35	30	50	39	33	28	34	28	25	29	24	21	24	21	18				16	
9	51	39	31	26	47	36	29	25	31	26	22	26	22	19	22	19	16				14	
10	47	35	28	24	43	33	27	22	28	23	20	24	20	17	20	17	15				13	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22034	22034	22034
5°	21861	22049	22258
10°	21972	22138	22422
15°	21919	22136	22474
20°	21763	22283	22928
25°	21640	22564	24132
30°	21517	23021	24636
35°	21212	23089	24681
40°	20645	23048	22803
45°	20027	22003	17358
50°	19241	18771	14458
55°	17909	15797	10396
60°	15419	13556	7453
65°	13005	10472	7331
70°	10829	8242	7015
75°	9177	7112	6569
80°	7782	6174	5904
85°	6150	5076	3205

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 22003 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.9	1.8
10°-20°	376.1	5.1
20°-30°	589.2	8.0
30°-40°	726.8	9.8
40°-50°	684.3	9.3
50°-60°	484.5	6.6
60°-70°	276.1	3.7
70°-80°	136.6	1.8
80°-90°	34.5	0.5
90°-100°	264.7	3.6
100°-110°	800.7	10.8
110°-120°	781.7	10.6
120°-130°	638.8	8.7
130°-140°	521.4	7.1
140°-150°	405.9	5.5
150°-160°	292.6	4.0
160°-170°	179.1	2.4
170°-180°	60.5	0.8
0°-30°	1095.2	14.8
0°-40°	1822.0	24.7
0°-60°	2990.8	40.5
0°-90°	3438.0	46.6
90°-120°	1847.1	25.0
90°-150°	3413.2	46.2
90°-180°	3945.0	53.4
0°-180°	7383.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1365	1365	1365	1365	1365	
5°	1349	1373	1360	1364	1373	128
15°	1311	1330	1324	1337	1344	370
25°	1215	1246	1267	1318	1355	559
35°	1076	1106	1171	1238	1252	671
45°	877	943	964	817	760	675
55°	636	674	561	423	369	561
65°	340	359	274	193	192	342
75°	147	163	114	107	105	159
85°	33	30	27	22	17	39
90°	0	2	12	7	6	3
95°	33	104	500	185	116	39
105°	139	196	786	1493	1419	146
115°	248	296	636	1316	1546	245
125°	346	384	627	1039	1223	308
135°	415	459	623	896	1008	321
145°	485	521	623	771	843	304
155°	552	571	627	691	718	254
165°	604	611	630	654	662	170
175°	632	632	633	638	636	60
180°	634	634	634	634	634	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1364.7	1364.7	1364.7	1364.7	1364.7
2.5°	1354.3	1373.5	1361.2	1363.6	1365.8
5°	1348.8	1372.8	1360.4	1363.5	1373.3
7.5°	1343.6	1368.2	1356.0	1361.2	1373.3
10°	1340.2	1361.3	1350.3	1357.7	1367.6
12.5°	1329.8	1349.8	1339.9	1349.6	1358.3
15°	1311.3	1329.6	1324.3	1337.4	1344.5
17.5°	1286.2	1308.5	1308.4	1327.1	1334.4
20°	1266.6	1293.4	1296.9	1320.3	1334.4
22.5°	1245.8	1277.1	1283.0	1318.2	1342.5
25°	1214.7	1245.7	1266.6	1317.9	1354.6
27.5°	1178.3	1209.0	1252.2	1309.7	1338.7
30°	1154.1	1183.7	1234.8	1294.6	1321.4
32.5°	1124.1	1154.8	1209.5	1273.8	1298.3
35°	1076.2	1105.8	1171.4	1238.1	1252.2
37.5°	1021.1	1054.6	1128.1	1165.3	1166.2
40°	979.5	1023.2	1093.5	1100.3	1081.9
42.5°	939.1	995.3	1045.0	1014.6	933.1
45°	877.1	943.4	963.6	816.7	760.2
47.5°	811.0	876.5	844.2	684.9	646.0
50°	766.0	828.1	747.3	612.3	575.6
52.5°	715.2	770.5	660.7	542.6	486.7
55°	636.2	674.3	561.2	422.9	369.3
57.5°	541.0	567.8	479.8	317.4	257.4
60°	477.5	498.7	419.8	260.4	230.8
62.5°	419.8	438.7	357.5	226.2	215.8
65°	340.4	358.8	274.1	193.3	191.9
67.5°	270.9	290.9	210.3	168.7	167.1
70°	229.4	250.5	174.6	151.4	148.6
72.5°	194.7	214.8	148.0	133.0	131.3
75°	147.1	162.7	114.0	106.7	105.3
77.5°	106.8	116.6	84.8	81.0	79.6
80°	83.7	87.9	66.4	64.9	63.5
82.5°	62.9	61.5	50.2	48.7	46.2
85°	33.2	30.4	27.4	21.5	17.3
87.5°	10.4	10.8	7.0	4.9	4.7
90°	0.0	1.9	11.9	6.9	6.0
92.5°	11.1	45.0	161.6	53.6	38.6
95°	32.8	103.9	499.6	184.6	116.4
97.5°	63.5	132.2	787.4	521.0	317.3
100°	82.6	149.7	879.7	850.5	571.2
102.5°	104.1	168.9	860.6	1192.9	951.0
105°	139.3	195.8	786.2	1493.1	1419.1
107.5°	172.8	226.7	714.5	1522.8	1608.4
110°	195.1	246.6	678.7	1485.4	1641.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	216.6	266.6	657.2	1422.6	1619.6
115°	247.8	295.5	635.9	1315.9	1545.5
117.5°	278.8	324.0	628.4	1215.9	1451.0
120°	299.5	342.4	626.0	1157.5	1383.3
122.5°	318.7	359.1	626.0	1106.2	1314.8
125°	346.3	384.3	627.0	1039.2	1223.1
127.5°	368.8	408.1	626.0	988.6	1145.4
130°	383.1	424.0	626.0	959.6	1101.7
132.5°	395.9	437.5	625.2	933.1	1064.2
135°	415.0	458.8	623.0	896.2	1008.1
137.5°	436.3	477.9	623.0	856.8	960.5
140°	449.8	490.7	623.0	831.2	929.5
142.5°	463.4	502.7	622.2	807.8	893.7
145°	484.7	520.7	623.0	770.9	842.9
147.5°	505.9	536.5	624.2	740.5	795.7
150°	519.5	547.7	625.0	723.6	770.3
152.5°	532.2	557.3	625.8	709.0	747.2
155°	552.3	570.8	627.0	691.2	717.5
157.5°	569.8	584.8	628.2	678.1	696.4
160°	580.2	592.8	629.0	670.1	683.7
162.5°	590.5	600.1	629.7	662.8	674.1
165°	604.1	610.9	629.9	654.0	661.8
167.5°	615.6	619.1	631.1	647.1	650.4
170°	622.0	623.9	631.9	643.9	644.9
172.5°	626.0	627.1	631.9	640.7	640.9
175°	631.9	631.9	632.9	637.9	635.9
177.5°	634.7	633.9	633.1	635.5	633.9
180°	633.9	633.9	633.9	633.9	633.9



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.96	18.76	18.95	19.76	21.08	14.35	15.16	15.35	16.16	17.48
	3H	19.05	19.76	20.05	20.77	22.12	15.45	16.17	16.46	17.18	18.52
	4H	19.39	20.06	20.40	21.08	22.43	15.91	16.59	16.93	17.60	18.95
	6H	19.60	20.22	20.63	21.24	22.60	16.26	16.88	17.28	17.90	19.26
	8H	19.65	20.24	20.68	21.27	22.63	16.34	16.93	17.37	17.97	19.32
	12H	19.66	20.22	20.70	21.25	22.63	16.35	16.92	17.39	17.94	19.33
4H	2H	18.06	18.74	19.08	19.75	21.10	15.06	15.74	16.08	16.75	18.10
	3H	19.36	19.92	20.39	20.96	22.33	16.30	16.87	17.34	17.91	19.27
	4H	19.83	20.35	20.87	21.38	22.77	16.86	17.37	17.90	18.40	19.79
	6H	20.17	20.61	21.22	21.66	23.05	17.29	17.73	18.34	18.79	20.17
	8H	20.26	20.67	21.31	21.72	23.12	17.41	17.83	18.46	18.87	20.27
	12H	20.29	20.66	21.36	21.73	23.13	17.44	17.81	18.51	18.87	20.28
8H	4H	19.85	20.26	20.90	21.31	22.70	17.13	17.54	18.18	18.59	19.98
	6H	20.28	20.62	21.35	21.71	23.10	17.67	18.01	18.74	19.10	20.50
	8H	20.43	20.73	21.51	21.81	23.22	17.86	18.15	18.94	19.23	20.64
	12H	20.52	20.78	21.60	21.85	23.31	17.93	18.19	19.01	19.26	20.72
12H	4H	19.80	20.17	20.87	21.24	22.64	17.13	17.50	18.20	18.57	19.97
	6H	20.27	20.56	21.34	21.64	23.05	17.72	18.02	18.80	19.10	20.51
	8H	20.43	20.70	21.52	21.77	23.22	17.93	18.19	19.01	19.26	20.72