

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: P854212

Luminaire Tested: SQ2-PR1-100U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854212
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G2-2308-131-9)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PR1-100U-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

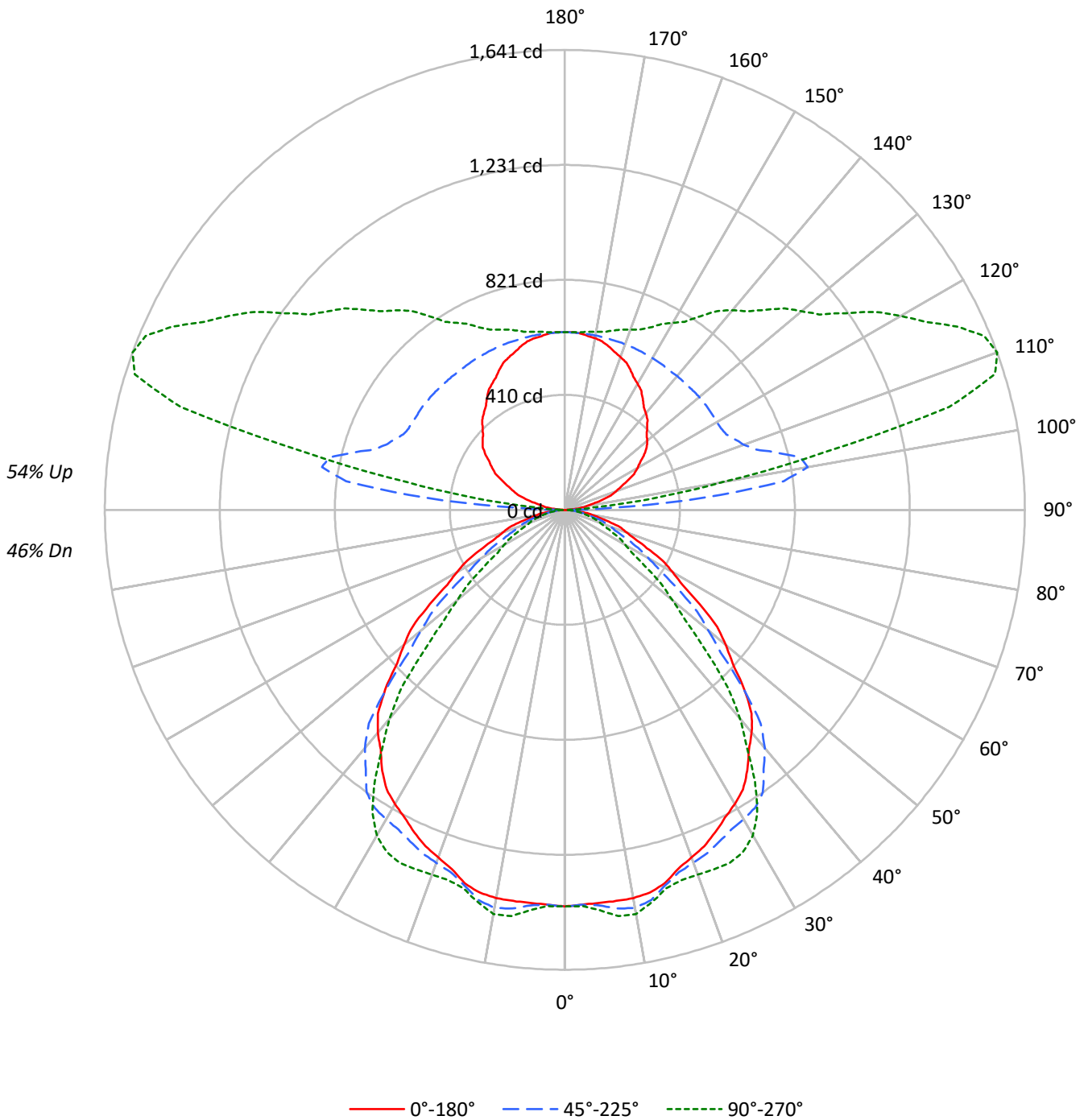
Lumens per Lamp: N/A
Luminaire Lumens: 7350.9 lumens
Efficiency: N/A
Efficacy: 124.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.34 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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	0
RCR																		
0	106	106	106	106	98	98	98	98	81	81	81	66	66	66	53	53	53	46
1	98	93	90	87	89	86	83	80	72	70	68	59	58	56	48	47	46	40
2	89	82	76	72	82	76	71	67	64	60	57	53	50	48	43	41	39	35
3	82	73	66	60	75	67	61	56	57	52	49	47	44	41	38	36	34	30
4	75	65	57	51	69	60	53	48	51	46	42	42	39	36	34	32	30	26
5	69	58	50	44	63	54	47	42	46	40	36	38	34	31	31	28	26	23
6	64	52	44	39	58	48	41	36	41	36	32	35	31	28	28	26	23	20
7	59	47	39	34	54	44	37	32	37	32	28	32	27	24	26	23	21	18
8	55	43	35	30	50	40	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	32	27	47	36	30	25	31	26	23	27	23	20	22	19	17	15
10	48	36	29	24	44	33	27	23	29	24	20	25	21	18	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22850	22850	22850
5°	22820	22960	23240
10°	23059	23651	24005
15°	23052	23173	23366
20°	22680	23027	23795
25°	22616	23257	24773
30°	22592	23774	25012
35°	22377	24283	23288
40°	21861	23381	20493
45°	20685	20521	16205
50°	18806	16777	12574
55°	16527	13807	9788
60°	14302	11041	8060
65°	12344	9150	7056
70°	11098	8105	6264
75°	10168	7018	5758
80°	8852	5635	5635
85°	6410	5076	2668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 22361 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.7	1.9
10°-20°	395.6	5.4
20°-30°	611.5	8.3
30°-40°	735.5	10.0
40°-50°	660.4	9.0
50°-60°	442.5	6.0
60°-70°	257.4	3.5
70°-80°	132.2	1.8
80°-90°	33.8	0.5
90°-100°	264.7	3.6
100°-110°	800.7	10.9
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°	1143.8	15.6
0°-40°	1879.3	25.6
0°-60°	2982.2	40.6
0°-90°	3405.5	46.3
90°-120°	1847.1	25.1
90°-150°	3413.2	46.4
90°-180°	3945.0	53.7
0°-180°	7350.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1415	1415	1415	1415	1415	
5°	1408	1432	1417	1420	1434	134
15°	1379	1436	1386	1391	1398	387
25°	1270	1320	1306	1354	1391	585
35°	1135	1145	1232	1208	1182	708
45°	906	979	899	758	710	693
55°	587	610	490	379	348	528
65°	323	330	240	194	185	327
75°	163	159	112	95	92	173
85°	35	28	27	19	14	43
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°	1415.2	1415.2	1415.2	1415.2	1415.2
2.5°	1409.4	1426.3	1410.6	1411.8	1415.2
5°	1408.0	1431.9	1416.6	1419.8	1433.9
7.5°	1407.7	1441.8	1434.5	1443.3	1461.9
10°	1406.5	1447.4	1442.6	1444.5	1464.2
12.5°	1399.6	1447.3	1425.3	1423.5	1434.2
15°	1379.1	1435.5	1386.3	1390.8	1397.9
17.5°	1343.0	1402.0	1355.2	1371.1	1384.9
20°	1320.0	1377.8	1340.2	1360.9	1384.9
22.5°	1299.2	1357.0	1326.3	1355.3	1388.3
25°	1269.5	1320.2	1305.5	1354.0	1390.6
27.5°	1238.3	1268.2	1285.6	1350.6	1376.2
30°	1211.8	1231.5	1275.2	1331.7	1341.6
32.5°	1182.9	1194.8	1261.4	1290.8	1278.1
35°	1135.3	1145.2	1232.0	1208.3	1181.5
37.5°	1078.8	1099.1	1165.9	1097.7	1066.9
40°	1037.2	1071.1	1109.3	1007.6	972.3
42.5°	986.4	1040.6	1034.3	904.7	861.5
45°	905.9	979.3	898.7	757.7	709.7
47.5°	811.0	886.3	754.5	628.5	583.7
50°	748.7	809.4	667.9	549.9	500.6
52.5°	685.2	729.0	594.1	476.2	431.3
55°	587.1	609.7	490.5	378.7	347.7
57.5°	497.1	511.5	400.7	305.9	283.0
60°	442.9	452.7	341.9	267.9	249.6
62.5°	393.2	400.9	294.6	235.7	221.9
65°	323.1	330.2	239.5	194.5	184.7
67.5°	267.5	271.1	197.1	161.6	152.3
70°	235.1	236.6	171.7	139.8	132.7
72.5°	206.3	204.3	147.4	121.4	116.6
75°	163.0	158.8	112.5	95.1	92.3
77.5°	121.8	117.2	79.1	73.3	73.3
80°	95.2	89.6	60.6	60.6	60.6
82.5°	71.0	63.1	46.7	46.7	45.6
85°	34.6	27.6	27.4	18.7	14.4
87.5°	9.2	9.6	5.9	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	17.30	18.09	18.29	19.09	20.42	14.02	14.81	15.02	15.82	17.14
	3H	18.52	19.23	19.53	20.24	21.59	15.08	15.79	16.09	16.80	18.15
	4H	18.97	19.64	19.99	20.66	22.01	15.48	16.15	16.50	17.16	18.52
	6H	19.29	19.90	20.32	20.92	22.29	15.81	16.42	16.84	17.44	18.81
	8H	19.37	19.95	20.40	20.99	22.35	15.89	16.48	16.93	17.51	18.87
	12H	19.39	19.95	20.43	20.98	22.37	15.90	16.45	16.94	17.48	18.87
4H	2H	17.37	18.04	18.39	19.05	20.40	14.58	15.25	15.61	16.27	17.62
	3H	18.83	19.39	19.87	20.43	21.80	15.84	16.40	16.88	17.44	18.81
	4H	19.42	19.93	20.47	20.97	22.36	16.35	16.85	17.39	17.89	19.28
	6H	19.87	20.31	20.93	21.37	22.75	16.78	17.21	17.83	18.27	19.66
	8H	20.00	20.41	21.06	21.46	22.86	16.90	17.31	17.95	18.36	19.76
	12H	20.06	20.42	21.12	21.49	22.89	16.92	17.28	17.99	18.35	19.76
8H	4H	19.45	19.85	20.50	20.90	22.30	16.65	17.05	17.70	18.10	19.50
	6H	19.99	20.33	21.07	21.42	22.82	17.18	17.51	18.25	18.61	20.01
	8H	20.19	20.48	21.27	21.56	22.98	17.36	17.66	18.45	18.74	20.15
	12H	20.29	20.55	21.38	21.62	23.08	17.43	17.68	18.51	18.76	20.22
12H	4H	19.40	19.77	20.47	20.83	22.24	16.66	17.03	17.73	18.09	19.50
	6H	19.98	20.27	21.06	21.35	22.77	17.24	17.53	18.32	18.61	20.03
	8H	20.19	20.45	21.27	21.52	22.98	17.44	17.70	18.53	18.78	20.24