

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: P854139

Luminaire Tested: SQ2-PP3-125U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854139
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-125U-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

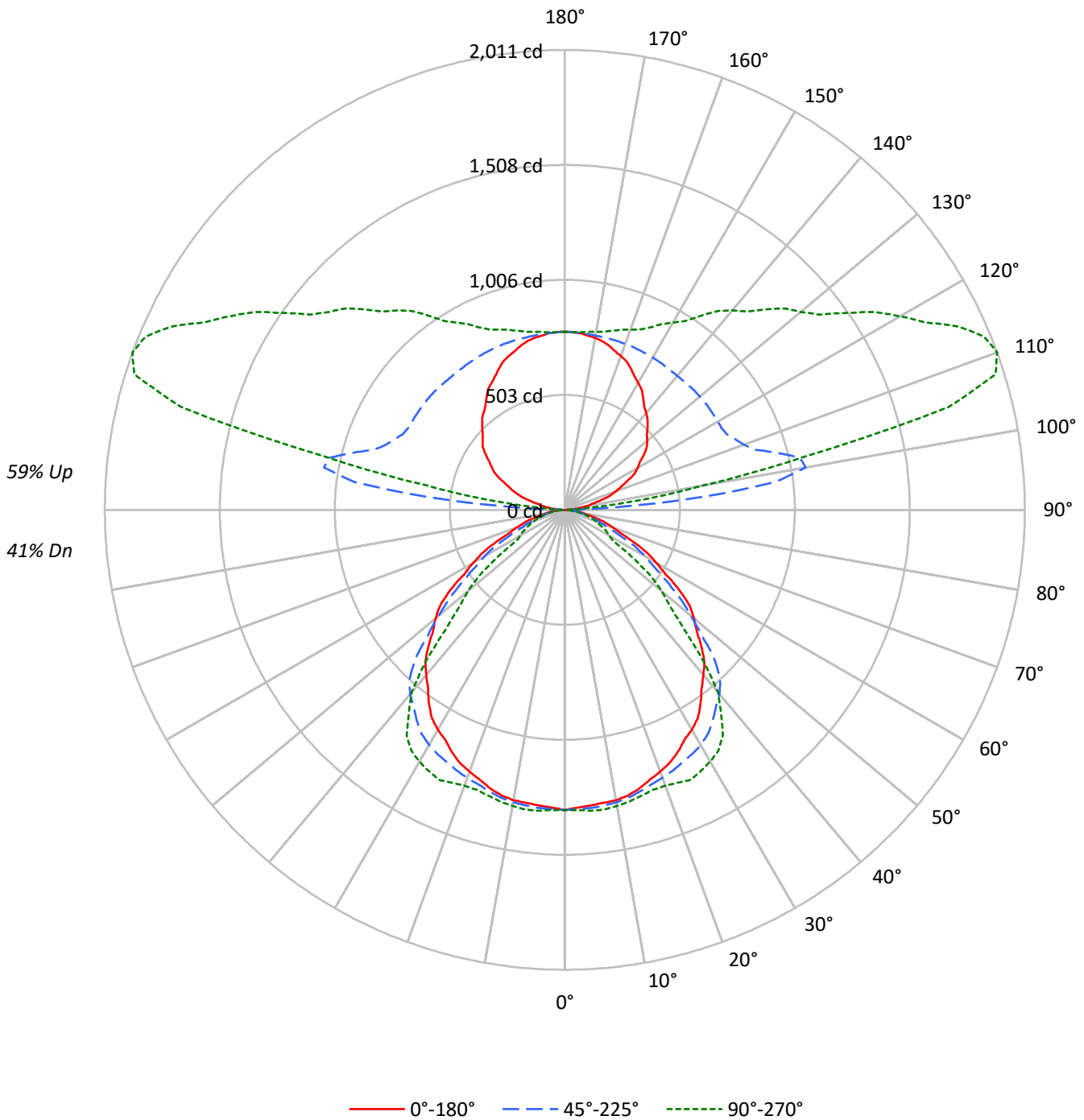
Lumens per Lamp: N/A
Luminaire Lumens: 8108.3 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 70.6
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: P854139

CATALOG NUMBER: SQ2-PP3-125U-075D-930-UNV-STD-W-4

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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41
1	96	92	88	85	88	84	81	78	69	67	65	55	54	53	43	42	41	35
2	88	81	75	70	80	74	69	65	61	58	54	49	47	45	38	37	35	30
3	80	71	64	59	73	65	59	55	54	50	46	44	41	38	34	32	30	26
4	74	63	56	50	67	58	52	46	48	43	40	39	36	33	31	28	26	23
5	68	56	49	43	61	52	45	40	43	38	34	35	32	29	28	25	23	20
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	25	23	20	17
7	58	46	38	33	52	42	35	31	35	30	26	29	25	22	23	20	18	16
8	53	41	34	29	49	38	32	27	32	27	23	27	23	20	21	18	16	14
9	50	38	31	26	45	35	28	24	29	24	21	24	21	18	19	17	15	13
10	46	35	28	23	42	32	26	22	27	22	19	22	19	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21191	21191	21191
5°	21026	21206	21409
10°	21133	21292	21564
15°	21081	21290	21615
20°	20931	21431	22051
25°	20811	21702	23209
30°	20694	22143	23694
35°	20402	22206	23737
40°	19857	22167	21933
45°	19262	21162	16696
50°	18505	18053	13906
55°	17225	15192	9999
60°	14832	13039	7169
65°	12508	10071	7049
70°	10414	7926	6746
75°	8827	6837	6319
80°	7485	5932	5672
85°	5910	4891	3075

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 21162 cd/sqm



TEST NUMBER: P854139

CATALOG NUMBER: SQ2-PP3-125U-075D-930-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.0	1.5
10°-20°	361.7	4.5
20°-30°	566.7	7.0
30°-40°	699.0	8.6
40°-50°	658.1	8.1
50°-60°	466.0	5.7
60°-70°	265.5	3.3
70°-80°	131.4	1.6
80°-90°	33.0	0.4
90°-100°	297.7	3.7
100°-110°	969.3	12.0
110°-120°	958.8	11.8
120°-130°	783.5	9.7
130°-140°	640.4	7.9
140°-150°	498.8	6.2
150°-160°	359.5	4.4
160°-170°	219.7	2.7
170°-180°	74.1	0.9
0°-30°	1053.3	13.0
0°-40°	1752.4	21.6
0°-60°	2876.5	35.5
0°-90°	3306.4	40.8
90°-120°	2225.8	27.5
90°-150°	4148.5	51.2
90°-180°	4802.0	59.2
0°-180°	8108.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1297	1320	1308	1311	1321	124
15°	1261	1279	1274	1286	1293	355
25°	1168	1198	1218	1268	1303	538
35°	1035	1064	1127	1191	1204	646
45°	844	907	927	786	731	649
55°	612	648	540	407	355	540
65°	327	345	264	186	184	329
75°	142	156	110	103	101	153
85°	32	29	26	21	17	37
90°	0	3	7	6	6	3
95°	40	123	546	194	120	47
105°	165	238	960	1834	1737	176
115°	304	363	782	1612	1896	301
125°	423	472	772	1273	1500	377
135°	511	565	768	1098	1239	395
145°	597	641	766	946	1036	374
155°	682	704	771	847	879	314
165°	744	750	772	802	811	209
175°	775	775	775	781	779	74
180°	778	778	778	778	778	



TEST NUMBER: P854139

CATALOG NUMBER: SQ2-PP3-125U-075D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1312.5	1312.5	1312.5	1312.5	1312.5
2.5°	1302.6	1321.0	1309.2	1311.5	1313.7
5°	1297.3	1320.3	1308.4	1311.4	1320.9
7.5°	1292.3	1315.9	1304.2	1309.2	1320.9
10°	1289.0	1309.3	1298.7	1305.8	1315.3
12.5°	1279.0	1298.2	1288.7	1298.0	1306.4
15°	1261.2	1278.8	1273.7	1286.3	1293.1
17.5°	1237.1	1258.5	1258.4	1276.4	1283.4
20°	1218.2	1244.0	1247.3	1269.8	1283.4
22.5°	1198.2	1228.3	1234.0	1267.8	1291.2
25°	1168.2	1198.1	1218.2	1267.6	1302.8
27.5°	1133.3	1162.9	1204.3	1259.6	1287.6
30°	1110.0	1138.5	1187.7	1245.1	1270.9
32.5°	1081.1	1110.7	1163.3	1225.1	1248.7
35°	1035.1	1063.5	1126.6	1190.8	1204.3
37.5°	982.1	1014.3	1085.0	1120.8	1121.6
40°	942.1	984.1	1051.7	1058.2	1040.6
42.5°	903.2	957.2	1005.1	975.8	897.4
45°	843.6	907.3	926.8	785.5	731.2
47.5°	780.0	843.0	811.9	658.8	621.3
50°	736.7	796.4	718.7	588.9	553.6
52.5°	687.9	741.1	635.5	521.9	468.1
55°	611.9	648.5	539.7	406.7	355.2
57.5°	520.3	546.1	461.5	305.3	247.5
60°	459.3	479.6	403.8	250.5	222.0
62.5°	403.8	421.9	343.8	217.6	207.6
65°	327.4	345.1	263.6	185.9	184.5
67.5°	260.6	279.8	202.3	162.3	160.7
70°	220.6	241.0	167.9	145.6	142.9
72.5°	187.3	206.6	142.4	127.9	126.3
75°	141.5	156.4	109.6	102.6	101.3
77.5°	102.7	112.2	81.6	77.9	76.6
80°	80.5	84.5	63.8	62.4	61.0
82.5°	60.5	59.1	48.3	46.8	44.4
85°	31.9	29.2	26.4	20.7	16.6
87.5°	10.0	10.6	5.8	4.5	4.5
90°	0.0	2.8	6.7	5.7	5.7
92.5°	13.8	49.5	158.3	52.2	40.2
95°	40.2	122.6	545.7	194.5	119.7
97.5°	75.6	159.5	926.1	564.0	344.2
100°	98.6	181.0	1069.3	953.5	618.4
102.5°	124.6	204.0	1051.7	1410.7	1072.6
105°	164.7	237.7	960.2	1833.9	1736.6
107.5°	207.9	276.6	873.3	1870.6	1973.8
110°	239.3	302.0	831.9	1825.0	2011.3



TEST NUMBER: P854139

CATALOG NUMBER: SQ2-PP3-125U-075D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	265.4	327.3	805.9	1742.8	1983.0
115°	304.4	363.4	782.1	1611.9	1896.4
117.5°	344.6	397.8	772.9	1492.0	1775.2
120°	367.6	420.0	770.6	1418.3	1692.5
122.5°	389.8	441.5	771.4	1354.3	1609.8
125°	423.1	471.8	771.6	1272.6	1500.1
127.5°	451.7	501.5	771.4	1211.5	1401.1
130°	470.0	520.6	770.6	1176.5	1346.0
132.5°	486.1	538.9	769.9	1144.1	1303.1
135°	511.2	564.6	767.8	1098.3	1238.8
137.5°	535.7	589.4	765.7	1051.8	1176.5
140°	553.3	604.8	764.9	1020.3	1138.2
142.5°	570.2	619.4	764.9	990.1	1095.3
145°	597.4	641.4	765.8	945.9	1035.8
147.5°	623.8	662.0	767.2	908.3	977.8
150°	641.4	675.1	768.7	885.9	944.9
152.5°	659.0	686.7	769.5	868.8	915.8
155°	681.6	704.1	770.6	847.0	878.8
157.5°	703.0	719.1	771.8	830.9	853.1
160°	716.1	729.2	772.5	820.8	838.6
162.5°	727.6	737.7	772.5	812.3	825.6
165°	743.8	750.4	772.5	801.5	810.8
167.5°	755.3	759.4	772.7	793.3	798.2
170°	763.0	764.8	773.5	787.9	789.8
172.5°	768.3	769.5	775.0	784.8	784.4
175°	775.4	775.4	775.4	781.1	779.2
177.5°	778.3	777.5	776.8	780.5	777.5
180°	778.3	778.3	778.3	778.3	778.3



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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	17.23	17.99	18.26	19.03	20.43	13.62	14.38	14.66	15.42	16.82
	3H	18.31	18.99	19.36	20.04	21.46	14.72	15.40	15.77	16.45	17.87
	4H	18.65	19.29	19.71	20.34	21.77	15.18	15.82	16.24	16.87	18.30
	6H	18.86	19.45	19.93	20.51	21.94	15.52	16.11	16.59	17.16	18.60
	8H	18.91	19.47	19.98	20.54	21.97	15.60	16.16	16.67	17.23	18.66
	12H	18.92	19.45	20.00	20.52	21.97	15.61	16.14	16.69	17.21	18.66
4H	2H	17.32	17.96	18.39	19.02	20.44	14.32	14.97	15.39	16.02	17.44
	3H	18.62	19.15	19.70	20.23	21.67	15.56	16.10	16.64	17.18	18.61
	4H	19.09	19.58	20.17	20.65	22.11	16.11	16.60	17.19	17.67	19.13
	6H	19.42	19.84	20.51	20.93	22.39	16.55	16.97	17.64	18.06	19.52
	8H	19.51	19.90	20.60	20.99	22.46	16.67	17.06	17.76	18.14	19.61
	12H	19.55	19.90	20.65	21.00	22.47	16.69	17.04	17.80	18.14	19.62
8H	4H	19.10	19.49	20.19	20.58	22.05	16.38	16.77	17.47	17.86	19.33
	6H	19.53	19.85	20.64	20.98	22.45	16.92	17.24	18.03	18.37	19.84
	8H	19.69	19.97	20.80	21.08	22.56	17.11	17.39	18.23	18.50	19.99
	12H	19.77	20.02	20.89	21.12	22.65	17.18	17.43	18.30	18.53	20.06
12H	4H	19.06	19.41	20.16	20.51	21.98	16.38	16.74	17.49	17.84	19.31
	6H	19.52	19.80	20.64	20.91	22.40	16.97	17.26	18.09	18.37	19.85
	8H	19.68	19.93	20.80	21.04	22.56	17.18	17.43	18.30	18.53	20.06