

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: P853735

Luminaire Tested: SQ2-F-150U-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853735
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G2-2308-131-13)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-F-150U-100D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

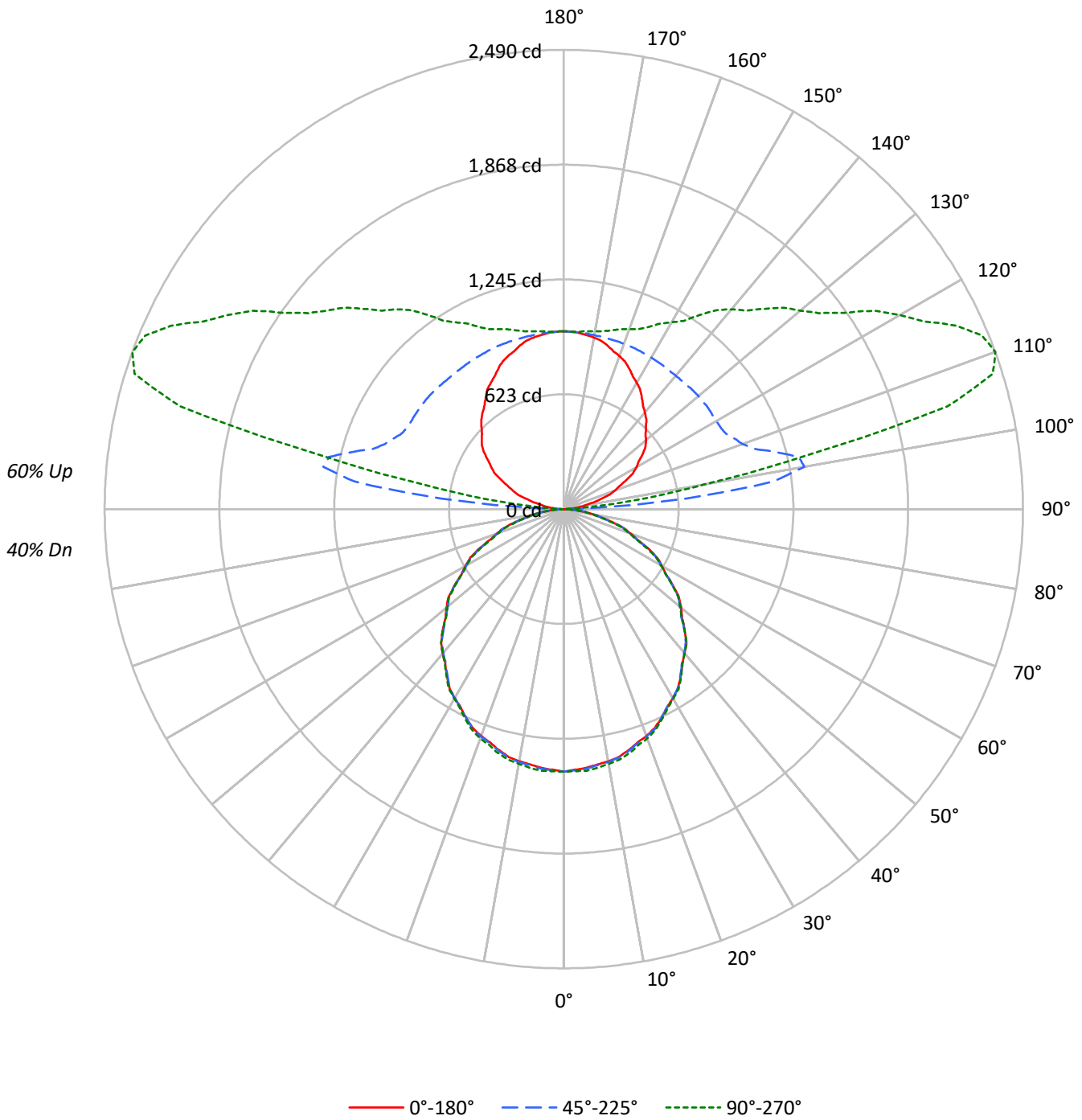
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9943.4 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 94.2
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: P853735
CATALOG NUMBER: SQ2-F-150U-100D-935-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P853735

CATALOG NUMBER: SQ2-F-150U-100D-935-UNV-STD-W-4

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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				
1	95	91	87	84	87	83	80	77	68	66	64	54	53	51	41	40	40	34				
2	87	79	73	68	79	72	67	63	59	56	52	47	45	43	36	35	33	28				
3	79	70	62	57	72	64	57	52	52	48	44	42	39	36	32	30	28	24				
4	72	62	54	48	65	56	49	44	46	41	37	37	33	31	29	26	24	20				
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17				
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15				
7	56	44	36	31	51	40	33	29	34	28	24	27	23	20	21	18	16	13				
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12				
9	48	36	29	24	44	33	27	22	28	23	19	23	19	16	18	15	13	11				
10	45	33	26	21	41	31	24	20	26	21	17	21	17	14	17	14	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22985	22985	22985
5°	22822	22885	23073
10°	22768	22832	22991
15°	22629	22695	22922
20°	22495	22527	22728
25°	22287	22287	22425
30°	22057	22057	22130
35°	21790	21715	21867
40°	21503	21420	21503
45°	21169	21080	21169
50°	20851	20657	20705
55°	20366	20310	20200
60°	19853	19730	19604
65°	19266	19045	18819
70°	18128	18038	17670
75°	17062	16700	16213
80°	15146	14784	14245
85°	12208	11134	10411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 21299 cd/sqm



TEST NUMBER: P853735

CATALOG NUMBER: SQ2-F-150U-100D-935-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.6	1.4
10°-20°	384.5	3.9
20°-30°	578.5	5.8
30°-40°	692.2	7.0
40°-50°	714.2	7.2
50°-60°	644.3	6.5
60°-70°	491.7	4.9
70°-80°	282.7	2.8
80°-90°	74.8	0.8
90°-100°	367.1	3.7
100°-110°	1201.9	12.1
110°-120°	1188.3	12.0
120°-130°	971.3	9.8
130°-140°	792.7	8.0
140°-150°	616.9	6.2
150°-160°	444.2	4.5
160°-170°	271.7	2.7
170°-180°	91.8	0.9
0°-30°	1097.6	11.0
0°-40°	1789.8	18.0
0°-60°	3148.3	31.7
0°-90°	3997.5	40.2
90°-120°	2757.3	27.7
90°-150°	5138.2	51.7
90°-180°	5946.0	59.8
0°-180°	9943.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1424	1424	1424	1424	1424	
5°	1408	1427	1412	1414	1424	134
15°	1354	1371	1358	1364	1371	382
25°	1251	1264	1251	1253	1259	576
35°	1106	1113	1102	1106	1109	691
45°	927	933	923	925	927	715
55°	724	727	722	718	718	647
65°	504	502	498	494	493	496
75°	274	272	268	262	260	288
85°	66	62	60	54	56	76
90°	1	3	8	7	8	5
95°	52	149	667	238	154	58
105°	209	298	1193	2267	2153	220
115°	376	450	969	2003	2351	372
125°	524	584	955	1580	1855	466
135°	631	698	948	1362	1536	488
145°	738	792	946	1172	1284	462
155°	841	869	952	1048	1089	387
165°	918	926	955	992	1003	259
175°	959	959	960	967	965	91
180°	963	963	963	963	963	

TEST NUMBER: P853735

CATALOG NUMBER: SQ2-F-150U-100D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1423.6	1423.6	1423.6	1423.6	1423.6
2.5°	1414.3	1431.0	1417.4	1420.6	1422.1
5°	1408.1	1427.1	1412.0	1414.1	1423.6
7.5°	1396.5	1417.0	1400.4	1404.1	1414.7
10°	1388.7	1407.7	1392.6	1394.7	1402.3
12.5°	1376.3	1395.3	1380.2	1383.8	1391.4
15°	1353.8	1370.9	1357.7	1363.7	1371.3
17.5°	1327.8	1346.0	1331.3	1336.5	1342.9
20°	1309.2	1324.4	1311.1	1313.3	1322.8
22.5°	1285.9	1301.1	1289.4	1290.0	1297.9
25°	1251.0	1264.3	1251.0	1253.1	1258.8
27.5°	1211.1	1222.4	1211.1	1213.1	1218.0
30°	1183.1	1194.5	1183.1	1185.1	1187.0
32.5°	1152.1	1162.0	1150.5	1152.6	1157.5
35°	1105.5	1113.1	1101.7	1105.6	1109.4
37.5°	1055.9	1061.6	1052.0	1054.0	1057.4
40°	1020.2	1025.9	1016.3	1018.3	1020.2
42.5°	984.5	988.7	979.1	981.1	984.5
45°	927.1	932.8	923.2	925.2	927.1
47.5°	868.9	872.3	864.3	862.8	866.2
50°	830.1	832.0	822.4	822.4	824.3
52.5°	788.2	790.1	783.6	780.5	782.4
55°	723.5	727.2	721.5	717.6	717.6
57.5°	658.3	661.7	654.4	652.5	652.1
60°	614.8	616.7	611.0	609.0	607.1
62.5°	571.4	571.8	566.0	564.0	562.1
65°	504.3	502.4	498.5	494.5	492.6
67.5°	429.0	430.9	427.1	420.9	420.9
70°	384.0	385.9	382.1	374.3	374.3
72.5°	340.6	339.4	337.1	330.8	327.8
75°	273.5	271.6	267.7	261.8	259.9
77.5°	206.4	204.5	202.5	195.2	196.7
80°	162.9	161.0	159.0	153.2	153.2
82.5°	124.1	120.7	118.7	112.9	112.9
85°	65.9	62.2	60.1	54.4	56.2
87.5°	18.8	17.7	17.1	13.8	14.0
90°	1.0	2.9	7.9	7.0	7.9
92.5°	16.8	61.4	188.5	61.3	49.1
95°	51.5	149.3	667.3	237.7	154.5
97.5°	93.5	196.9	1144.9	692.6	429.3
100°	122.8	221.5	1324.7	1183.0	784.1
102.5°	156.0	252.5	1304.9	1743.1	1351.3
105°	208.9	298.0	1193.0	2266.7	2153.4
107.5°	261.0	342.7	1083.9	2315.6	2440.1
110°	295.0	374.4	1031.7	2258.7	2490.0



TEST NUMBER: P853735

CATALOG NUMBER: SQ2-F-150U-100D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	327.5	404.6	1000.0	2159.5	2456.0
115°	376.2	449.8	969.3	2002.9	2351.4
117.5°	423.6	492.3	957.6	1849.0	2202.9
120°	454.4	519.3	954.4	1759.3	2103.9
122.5°	482.2	545.5	954.4	1681.9	2001.7
125°	523.7	583.8	955.4	1579.5	1855.4
127.5°	559.0	620.2	954.2	1504.0	1744.1
130°	581.2	643.1	953.4	1458.4	1675.2
132.5°	601.0	664.5	951.1	1419.1	1615.8
135°	630.7	697.5	947.5	1362.3	1535.6
137.5°	662.0	728.2	945.3	1303.1	1459.8
140°	684.1	748.0	944.5	1265.7	1413.8
142.5°	706.3	766.3	944.5	1225.8	1360.0
145°	737.6	791.8	945.5	1171.8	1284.1
147.5°	770.5	815.6	946.9	1124.9	1209.7
150°	791.1	830.8	948.5	1097.6	1169.3
152.5°	811.7	846.7	949.3	1075.2	1134.4
155°	840.6	868.6	951.5	1048.4	1089.1
157.5°	866.5	886.8	953.6	1027.4	1056.8
160°	883.1	899.6	954.4	1015.4	1038.6
162.5°	897.4	910.8	954.4	1005.7	1022.7
165°	917.8	926.5	955.4	992.3	1002.9
167.5°	935.0	939.3	956.6	981.9	987.7
170°	944.5	946.5	957.4	976.3	978.2
172.5°	951.7	952.8	959.8	972.3	972.6
175°	959.4	959.4	960.4	967.3	965.3
177.5°	963.3	962.6	961.8	966.4	963.3
180°	963.3	963.3	963.3	963.3	963.3



TEST NUMBER: P853735

CATALOG NUMBER: SQ2-F-150U-100D-935-UNV-STD-W-4

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	17.88	18.67	18.92	19.72	21.12	17.81	18.59	18.84	19.64	21.04
	3H	19.66	20.37	20.70	21.42	22.84	19.54	20.25	20.58	21.30	22.72
	4H	20.31	20.98	21.37	22.04	23.47	20.16	20.83	21.22	21.89	23.32
	6H	20.78	21.40	21.85	22.45	23.90	20.60	21.21	21.66	22.27	23.71
	8H	20.92	21.50	21.99	22.58	24.01	20.71	21.30	21.78	22.38	23.81
	12H	20.99	21.55	22.06	22.61	24.07	20.76	21.32	21.84	22.39	23.85
4H	2H	18.43	19.10	19.49	20.15	21.58	18.36	19.03	19.43	20.09	21.52
	3H	20.41	20.97	21.48	22.05	23.49	20.30	20.86	21.37	21.94	23.38
	4H	21.19	21.71	22.27	22.78	24.24	21.05	21.56	22.13	22.64	24.10
	6H	21.78	22.22	22.86	23.32	24.77	21.60	22.04	22.68	23.14	24.59
	8H	21.97	22.38	23.05	23.46	24.94	21.76	22.18	22.85	23.26	24.74
	12H	22.06	22.44	23.17	23.54	25.02	21.84	22.21	22.94	23.31	24.79
8H	4H	21.44	21.85	22.52	22.93	24.41	21.31	21.72	22.39	22.81	24.28
	6H	22.15	22.49	23.26	23.62	25.09	21.98	22.32	23.09	23.45	24.92
	8H	22.42	22.71	23.53	23.83	25.32	22.22	22.52	23.34	23.63	25.12
	12H	22.58	22.84	23.70	23.95	25.48	22.35	22.62	23.47	23.72	25.25
12H	4H	21.43	21.80	22.53	22.90	24.38	21.30	21.68	22.41	22.78	24.26
	6H	22.19	22.49	23.31	23.60	25.09	22.03	22.33	23.15	23.44	24.93
	8H	22.48	22.74	23.60	23.85	25.38	22.29	22.56	23.41	23.66	25.19