

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

(formerly Eaton)

Brand: CORELITE

Report Number: P564252

Luminaire Tested: **SQ4-PR1-100U-050D-935-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564252
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-050D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

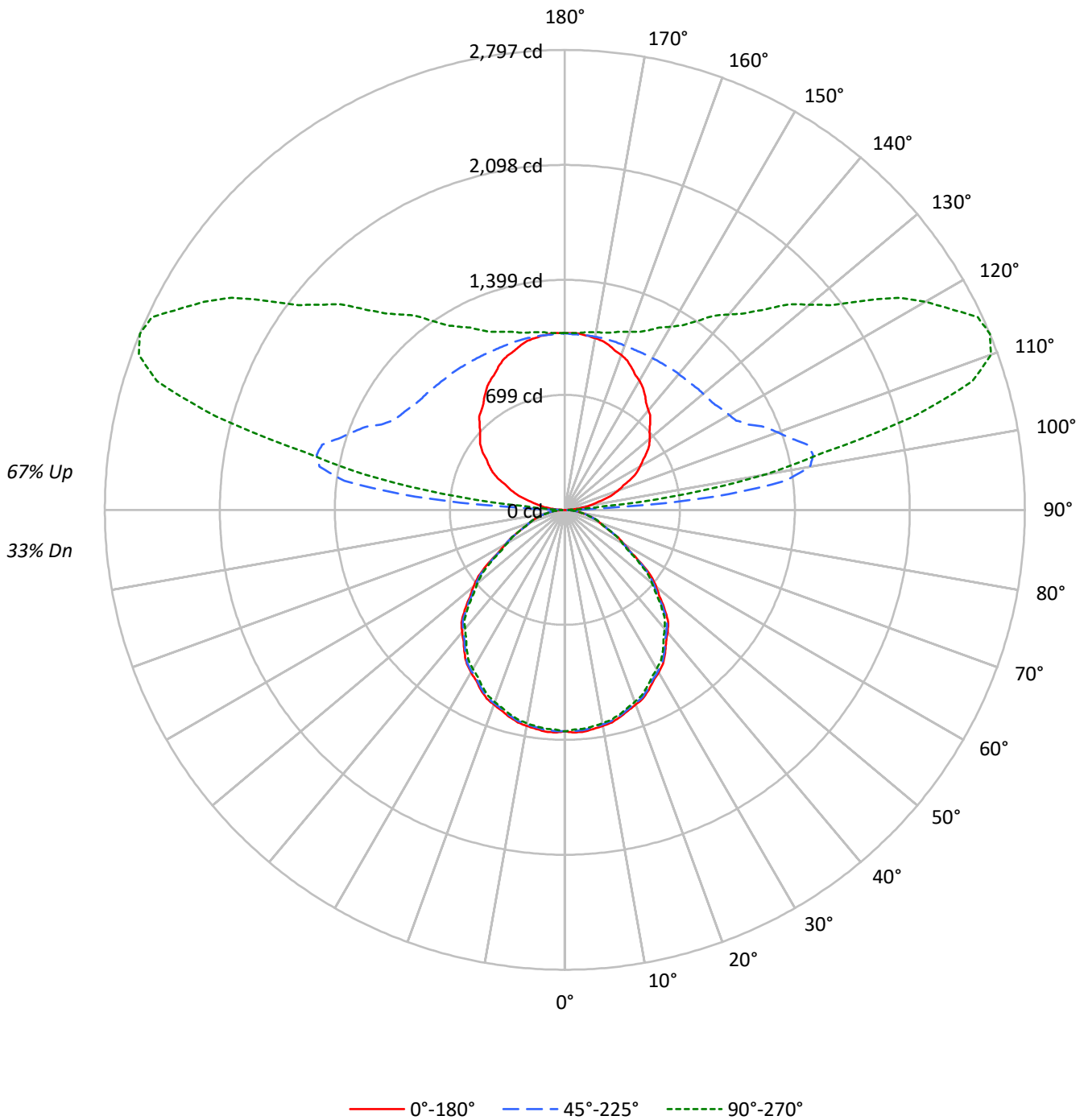
Lumens per Lamp: N/A
Luminaire Lumens: 10349.2 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.7
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	79	73	68	77	71	66	62	57	53	50	44	42	40	32	30	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	26	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	31	29	25	23	22	17
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	18	17	13
7	56	44	36	31	50	40	33	29	33	28	24	25	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6214	6214	6214
5°	6270	6222	6189
10°	6250	6207	6174
15°	6223	6184	6151
20°	6191	6152	6106
25°	6148	6106	6036
30°	6082	6038	5952
35°	5992	5940	5855
40°	5855	5793	5687
45°	5616	5518	5404
50°	5196	5071	4971
55°	4535	4432	4339
60°	3821	3789	3714
65°	3305	3318	3293
70°	3036	3052	3052
75°	2916	2916	2937
80°	2744	2773	2744
85°	2212	2456	2456



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.4	1.2
10°-20°	364.5	3.5
20°-30°	549.7	5.3
30°-40°	655.0	6.3
40°-50°	645.8	6.2
50°-60°	493.5	4.8
60°-70°	305.4	3.0
70°-80°	173.5	1.7
80°-90°	55.0	0.5
90°-100°	503.0	4.9
100°-110°	1388.8	13.4
110°-120°	1432.3	13.8
120°-130°	1150.9	11.1
130°-140°	904.5	8.7
140°-150°	693.7	6.7
150°-160°	498.6	4.8
160°-170°	304.9	2.9
170°-180°	102.8	1.0
0°-30°	1041.6	10.1
0°-40°	1696.6	16.4
0°-60°	2835.9	27.4
0°-90°	3369.7	32.6
90°-120°	3324.1	32.1
90°-150°	6073.2	58.7
90°-180°	6979.0	67.4
0°-180°	10349.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1347	1347	1347	1347	1347	
5°	1354	1339	1344	1339	1337	128
15°	1303	1289	1295	1290	1288	368
25°	1208	1193	1200	1187	1186	556
35°	1064	1052	1055	1041	1040	664
45°	861	850	846	831	828	660
55°	564	555	551	542	540	505
65°	303	301	304	302	302	307
75°	164	164	164	165	165	173
85°	42	44	46	46	46	49
90°	3	7	14	16	17	7
95°	74	272	913	375	244	79
105°	248	382	1528	2333	2196	263
115°	443	536	1231	2436	2770	436
125°	608	692	1115	1888	2215	541
135°	732	811	1084	1529	1724	566
145°	849	908	1071	1302	1401	532
155°	957	989	1062	1168	1205	441
165°	1036	1050	1067	1109	1117	292
175°	1074	1076	1069	1084	1081	102
180°	1074	1074	1074	1074	1074	

TEST NUMBER: P564252

CATALOG NUMBER: SQ4-PR1-100U-050D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1347.1	1347.1	1347.1	1347.1	1347.1
2.5°	1355.4	1343.6	1347.1	1344.1	1337.8
5°	1354.0	1339.3	1343.6	1338.9	1336.6
7.5°	1343.6	1329.1	1333.4	1328.7	1327.3
10°	1334.3	1320.7	1325.0	1320.3	1318.1
12.5°	1324.1	1309.6	1314.8	1309.2	1306.9
15°	1303.0	1289.4	1294.8	1290.2	1287.9
17.5°	1279.8	1265.2	1270.7	1265.3	1262.4
20°	1261.2	1247.6	1253.1	1244.9	1243.8
22.5°	1240.8	1227.2	1232.7	1221.7	1221.5
25°	1207.8	1193.1	1199.7	1186.9	1185.8
27.5°	1168.6	1155.0	1160.5	1147.5	1146.1
30°	1141.7	1128.1	1133.6	1119.6	1117.3
32.5°	1111.1	1098.4	1102.9	1089.0	1087.6
35°	1064.0	1051.5	1054.7	1040.7	1039.6
37.5°	1010.4	999.0	1000.8	985.5	984.4
40°	972.3	961.0	961.9	945.6	944.4
42.5°	930.5	919.2	918.2	902.0	900.8
45°	860.9	849.6	845.8	830.7	828.4
47.5°	781.5	770.2	763.2	750.9	749.3
50°	724.0	712.7	706.6	696.1	692.7
52.5°	661.8	650.5	645.3	635.7	632.3
55°	563.9	554.8	551.1	541.8	539.5
57.5°	470.8	464.7	463.6	454.6	453.7
60°	414.2	410.8	410.7	402.6	402.6
62.5°	365.9	363.4	365.2	359.9	359.0
65°	302.8	300.6	304.0	301.7	301.7
67.5°	252.9	252.9	255.0	254.1	254.1
70°	225.1	225.1	226.3	226.3	226.3
72.5°	200.0	199.1	202.1	202.1	201.2
75°	163.6	163.6	163.6	164.8	164.8
77.5°	127.4	127.6	128.6	128.3	127.4
80°	103.3	104.4	104.4	103.3	103.3
82.5°	79.1	80.3	80.3	80.0	79.1
85°	41.8	44.0	46.4	46.4	46.4
87.5°	12.8	17.1	21.3	21.6	21.1
90°	3.4	6.8	13.7	15.5	17.2
92.5°	30.9	128.4	229.6	83.8	65.3
95°	73.9	272.2	912.6	375.1	244.1
97.5°	122.4	304.9	1351.9	1040.9	753.8
100°	158.1	324.5	1514.2	1524.9	1239.2
102.5°	192.5	346.8	1545.8	1884.1	1613.2
105°	247.5	381.9	1527.9	2332.6	2196.5
107.5°	305.9	425.6	1442.7	2548.9	2598.7
110°	347.2	454.7	1376.7	2595.5	2756.8



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CATALOG NUMBER: SQ4-PR1-100U-050D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	384.3	487.8	1314.8	2558.7	2796.7
115°	443.4	535.9	1230.6	2436.1	2770.5
117.5°	495.0	587.1	1175.2	2263.6	2644.0
120°	529.4	620.1	1153.2	2146.8	2529.9
122.5°	562.4	649.1	1135.4	2037.7	2400.7
125°	608.4	692.4	1115.4	1887.7	2215.4
127.5°	647.6	731.6	1103.7	1760.9	2043.5
130°	673.7	757.8	1098.2	1683.3	1940.4
132.5°	698.5	778.5	1092.7	1618.1	1851.0
135°	732.2	811.1	1084.5	1528.9	1723.9
137.5°	770.0	841.9	1080.4	1454.0	1620.4
140°	790.6	861.2	1077.6	1404.1	1550.3
142.5°	814.0	879.2	1074.9	1359.7	1488.4
145°	849.0	907.9	1070.7	1301.6	1400.7
147.5°	882.7	934.1	1067.0	1252.6	1329.6
150°	907.5	949.5	1065.6	1223.4	1285.6
152.5°	926.7	966.0	1064.2	1198.4	1249.8
155°	957.3	989.2	1062.2	1167.8	1204.8
157.5°	985.5	1010.0	1062.5	1145.6	1170.8
160°	1002.0	1023.8	1063.9	1133.0	1151.5
162.5°	1015.8	1034.9	1065.2	1122.0	1136.4
165°	1036.4	1049.8	1067.3	1108.8	1117.2
167.5°	1052.2	1060.3	1069.0	1100.7	1103.4
170°	1060.4	1067.2	1069.0	1096.5	1096.5
172.5°	1067.3	1071.3	1069.0	1091.0	1089.7
175°	1074.2	1075.9	1069.0	1084.4	1081.1
177.5°	1076.9	1075.6	1068.7	1078.2	1075.6
180°	1074.2	1074.2	1074.2	1074.2	1074.2

(END OF REPORT)