

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: P563810

Luminaire Tested: **SQ4-PP3-150U-100D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563810
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PP3-150U-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

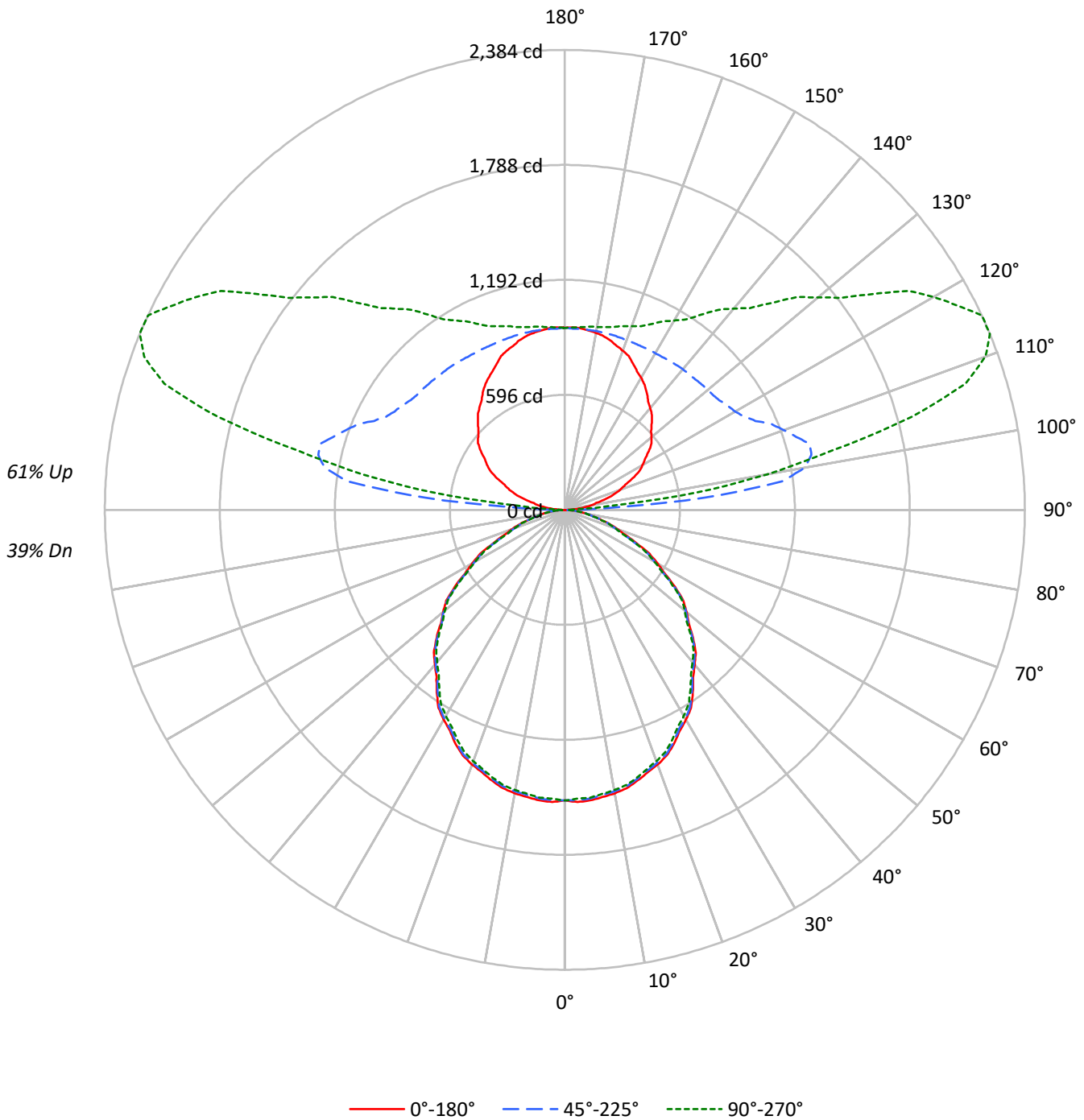
Lumens per Lamp: N/A
Luminaire Lumens: 9942.4 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 72.3
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



TEST NUMBER: P563810
CATALOG NUMBER: SQ4-PP3-150U-100D-840-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P563810

CATALOG NUMBER: SQ4-PP3-150U-100D-840-1D-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	0
RCR																		
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	74	69	79	73	68	63	60	56	53	47	45	43	36	34	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	73	62	54	49	66	57	50	45	47	42	38	37	34	31	29	26	24	20
5	67	55	47	42	60	51	44	39	42	37	33	33	30	27	26	23	21	18
6	61	50	42	36	56	45	38	33	38	32	28	30	26	24	23	21	19	16
7	57	45	37	31	51	41	34	29	34	29	25	27	24	21	21	19	17	14
8	52	40	33	28	48	37	30	26	31	26	22	25	21	18	20	17	15	12
9	49	37	30	25	44	34	27	23	28	23	20	23	19	17	18	15	13	11
10	46	34	27	22	41	31	25	21	26	21	18	21	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13899	13899	13899
5°	14001	13916	13867
10°	13978	13879	13818
15°	13885	13810	13734
20°	13794	13716	13612
25°	13630	13535	13401
30°	13378	13307	13138
35°	13027	12938	12775
40°	12611	12532	12388
45°	12266	12180	12060
50°	11826	11750	11636
55°	11215	11065	10980
60°	10208	9916	9868
65°	8994	8619	8591
70°	7764	7445	7445
75°	6684	6591	6495
80°	5892	5961	5823
85°	4615	5028	5028



TEST NUMBER: P563810

CATALOG NUMBER: SQ4-PP3-150U-100D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.5	1.4
10°-20°	406.8	4.1
20°-30°	609.3	6.1
30°-40°	714.6	7.2
40°-50°	716.9	7.2
50°-60°	611.6	6.2
60°-70°	398.8	4.0
70°-80°	200.1	2.0
80°-90°	57.3	0.6
90°-100°	438.6	4.4
100°-110°	1185.8	11.9
110°-120°	1246.8	12.5
120°-130°	1012.7	10.2
130°-140°	794.4	8.0
140°-150°	609.7	6.1
150°-160°	438.5	4.4
160°-170°	267.9	2.7
170°-180°	90.3	0.9
0°-30°	1158.5	11.7
0°-40°	1873.2	18.8
0°-60°	3201.6	32.2
0°-90°	3857.9	38.8
90°-120°	2871.2	28.9
90°-150°	5287.9	53.2
90°-180°	6085.0	61.2
0°-180°	9942.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1506	1506	1506	1506	1506	
5°	1512	1498	1503	1497	1497	144
15°	1454	1440	1446	1440	1438	410
25°	1339	1323	1330	1318	1316	616
35°	1157	1145	1149	1136	1134	723
45°	940	934	934	924	924	724
55°	697	695	688	684	683	620
65°	412	404	395	392	394	411
75°	188	188	185	184	182	203
85°	44	47	48	48	48	51
90°	2	6	13	14	13	6
95°	68	239	729	378	224	71
105°	220	341	1316	1940	1861	232
115°	388	474	1091	2112	2384	383
125°	531	609	983	1659	1949	474
135°	637	712	957	1340	1517	492
145°	741	796	944	1147	1234	463
155°	836	869	936	1029	1063	386
165°	910	919	940	976	981	256
175°	945	944	941	953	951	90
180°	944	944	944	944	944	

TEST NUMBER: P563810

CATALOG NUMBER: SQ4-PP3-150U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1506.5	1506.5	1506.5	1506.5	1506.5
2.5°	1516.0	1503.7	1506.5	1504.3	1498.1
5°	1511.8	1497.6	1502.6	1497.3	1497.3
7.5°	1501.5	1486.0	1491.0	1485.7	1485.4
10°	1492.0	1476.5	1481.5	1476.1	1474.9
12.5°	1478.3	1462.8	1468.8	1462.4	1462.2
15°	1453.7	1439.5	1445.8	1440.5	1437.9
17.5°	1426.0	1410.5	1418.1	1410.7	1409.6
20°	1404.9	1389.4	1397.0	1386.4	1386.4
22.5°	1379.5	1364.0	1372.7	1358.9	1358.9
25°	1338.9	1323.4	1329.6	1317.7	1316.4
27.5°	1290.5	1275.3	1281.8	1268.3	1268.1
30°	1255.7	1241.5	1249.1	1234.5	1233.2
32.5°	1217.6	1204.5	1210.0	1195.4	1194.1
35°	1156.6	1145.0	1148.7	1135.5	1134.2
37.5°	1092.5	1080.6	1084.8	1073.4	1072.9
40°	1047.1	1039.3	1040.5	1031.2	1028.6
42.5°	1004.8	996.0	997.1	987.9	987.4
45°	940.1	933.6	933.5	924.3	924.3
47.5°	871.4	866.5	865.1	857.4	857.2
50°	823.9	820.0	818.6	812.0	810.7
52.5°	774.3	772.5	767.9	762.4	762.1
55°	697.2	694.6	687.9	683.9	682.6
57.5°	613.4	608.3	600.8	595.0	596.0
60°	553.2	548.1	537.4	534.8	534.8
62.5°	495.1	488.9	478.2	474.6	476.7
65°	412.0	404.2	394.8	392.2	393.5
67.5°	336.4	329.5	319.3	319.2	318.2
70°	287.8	284.0	276.0	276.0	276.0
72.5°	244.5	242.7	236.9	236.9	235.8
75°	187.5	187.5	184.9	183.5	182.2
77.5°	140.5	141.0	139.7	138.3	136.0
80°	110.9	113.5	112.2	110.9	109.6
82.5°	83.4	86.0	85.8	83.4	83.2
85°	43.6	47.4	47.5	47.5	47.5
87.5°	12.0	17.0	19.5	19.8	20.6
90°	2.0	6.0	13.2	14.2	13.2
92.5°	28.9	105.1	207.4	90.0	65.2
95°	68.1	238.9	729.4	377.5	224.5
97.5°	109.3	274.0	1136.9	940.9	691.0
100°	140.2	288.2	1263.7	1317.9	1065.6
102.5°	168.6	307.9	1308.4	1603.8	1415.1
105°	220.4	340.6	1315.5	1940.5	1861.0
107.5°	268.4	378.0	1258.0	2150.6	2177.0
110°	305.8	405.1	1206.8	2207.0	2319.2



TEST NUMBER: P563810

CATALOG NUMBER: SQ4-PP3-150U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	339.1	432.1	1159.7	2195.7	2384.2
115°	388.1	474.5	1091.0	2112.1	2384.2
117.5°	436.0	517.1	1045.7	1984.3	2292.8
120°	465.3	544.7	1018.9	1892.6	2207.5
122.5°	492.9	570.8	1002.6	1794.3	2111.6
125°	531.3	608.8	983.3	1659.4	1949.4
127.5°	566.6	642.7	972.0	1549.3	1804.4
130°	586.1	664.6	967.1	1481.3	1711.7
132.5°	606.5	684.1	962.2	1419.9	1632.1
135°	636.9	712.4	956.9	1339.9	1516.7
137.5°	667.6	738.9	952.5	1274.9	1418.9
140°	688.7	755.3	950.8	1233.1	1361.2
142.5°	709.1	771.6	947.6	1195.4	1307.6
145°	740.6	796.2	943.7	1146.9	1234.3
147.5°	769.2	818.5	939.3	1102.9	1170.1
150°	790.3	834.0	937.6	1079.0	1132.7
152.5°	809.8	848.0	936.8	1056.9	1101.0
155°	836.0	868.8	935.6	1028.8	1062.6
157.5°	863.3	886.1	935.8	1009.2	1031.5
160°	878.7	897.6	936.6	996.9	1012.8
162.5°	890.9	906.6	937.4	987.1	999.0
165°	910.2	919.1	939.7	976.3	981.3
167.5°	923.4	929.6	939.9	967.1	969.5
170°	931.5	934.5	940.7	963.0	963.0
172.5°	938.0	938.6	940.7	958.1	957.3
175°	944.7	943.8	940.7	952.8	950.8
177.5°	947.0	944.6	940.5	948.6	946.2
180°	943.7	943.7	943.7	943.7	943.7

(END OF REPORT)