

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: P565154

Luminaire Tested: **SQ4-PW1-150U-100D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565154
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

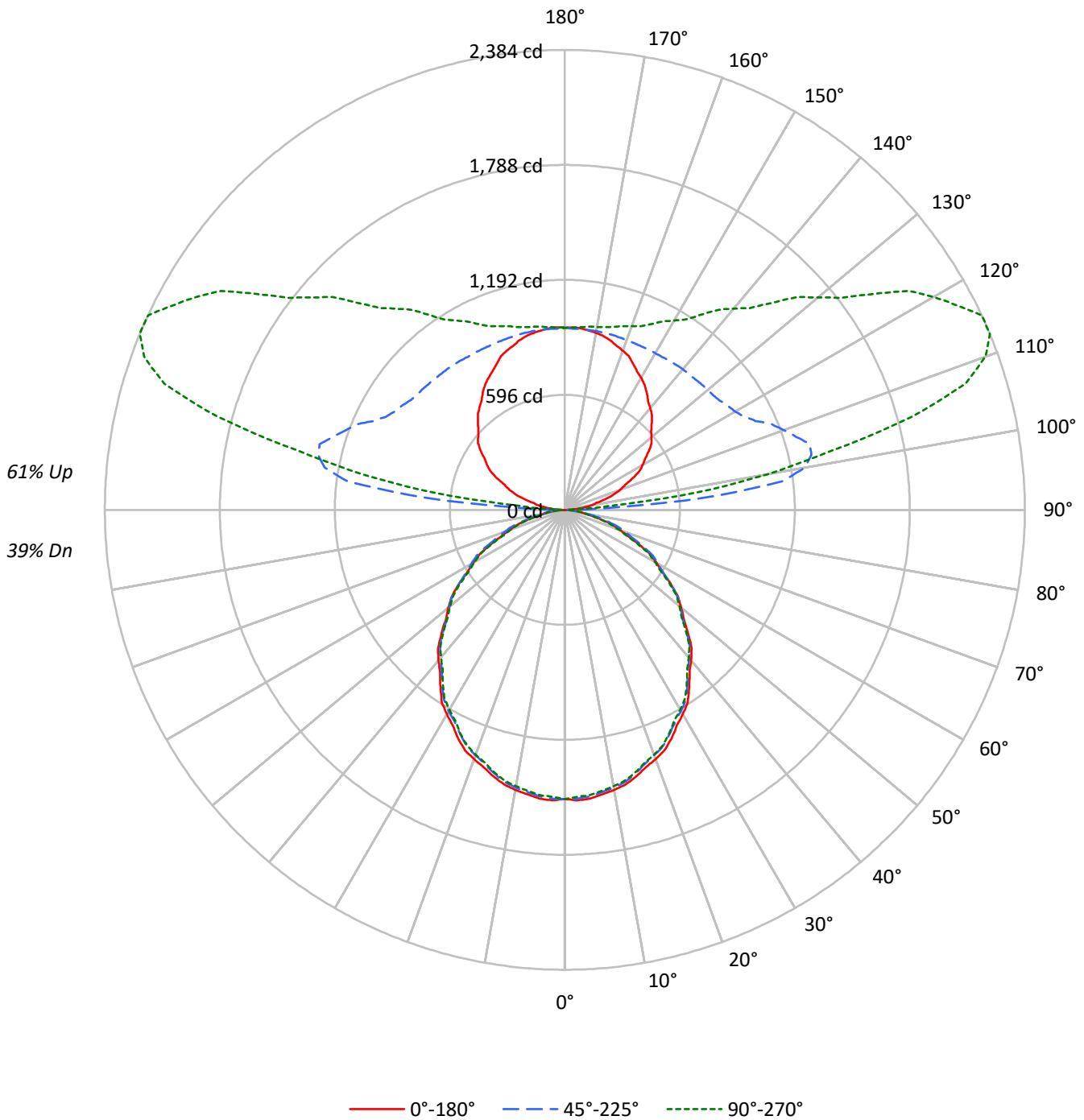
Lumens per Lamp: N/A
Luminaire Lumens: 9900.3 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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



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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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13830	13830	13830
5°	13919	13810	13748
10°	13808	13697	13623
15°	13662	13511	13460
20°	13498	13291	13266
25°	13310	13068	13027
30°	13029	12832	12747
35°	12659	12481	12406
40°	12263	12073	12025
45°	11786	11632	11580
50°	11298	11203	11127
55°	10771	10771	10600
60°	10114	10308	9942
65°	9254	9717	9025
70°	8157	8942	7944
75°	6969	8003	6780
80°	5403	6737	5473
85°	3493	5176	4615



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.2	1.4
10°-20°	398.5	4.0
20°-30°	591.1	6.0
30°-40°	691.7	7.0
40°-50°	688.6	7.0
50°-60°	594.6	6.0
60°-70°	428.0	4.3
70°-80°	224.5	2.3
80°-90°	57.6	0.6
90°-100°	438.6	4.4
100°-110°	1185.8	12.0
110°-120°	1246.8	12.6
120°-130°	1012.7	10.2
130°-140°	794.4	8.0
140°-150°	609.7	6.2
150°-160°	438.5	4.4
160°-170°	267.9	2.7
170°-180°	90.3	0.9
0°-30°	1130.8	11.4
0°-40°	1822.5	18.4
0°-60°	3105.7	31.4
0°-90°	3815.8	38.5
90°-120°	2871.2	29.0
90°-150°	5287.9	53.4
90°-180°	6085.0	61.5
0°-180°	9900.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1499	1499	1499	1499	1499	
5°	1503	1486	1491	1487	1484	142
15°	1430	1412	1414	1412	1409	403
25°	1308	1286	1284	1276	1280	601
35°	1124	1108	1108	1098	1102	703
45°	903	896	892	889	888	697
55°	670	668	670	660	659	597
65°	424	437	445	428	413	420
75°	196	214	224	210	190	210
85°	33	43	49	46	44	44
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1499.0	1499.0	1499.0	1499.0	1499.0
2.5°	1507.4	1495.0	1499.0	1495.6	1488.4
5°	1502.9	1486.2	1491.1	1487.0	1484.4
7.5°	1487.6	1472.1	1475.7	1471.5	1469.9
10°	1473.9	1458.4	1462.0	1456.7	1454.1
12.5°	1458.0	1441.5	1445.1	1439.8	1438.2
15°	1430.3	1412.2	1414.5	1411.8	1409.2
17.5°	1398.1	1379.7	1380.1	1375.9	1375.4
20°	1374.8	1355.5	1353.7	1348.5	1351.1
22.5°	1349.5	1329.1	1327.3	1320.0	1323.6
25°	1307.5	1285.5	1283.7	1275.9	1279.7
27.5°	1258.9	1237.2	1237.2	1226.2	1230.3
30°	1223.0	1202.3	1204.5	1191.4	1196.5
32.5°	1184.9	1166.3	1167.5	1154.4	1159.6
35°	1123.9	1108.4	1108.1	1097.6	1101.5
37.5°	1061.6	1047.9	1045.7	1039.7	1040.7
40°	1018.2	1006.6	1002.4	998.4	998.4
42.5°	972.8	962.2	958.0	955.1	954.1
45°	903.3	895.6	891.5	888.8	887.5
47.5°	834.7	827.4	823.8	822.0	820.7
50°	787.1	782.0	780.5	776.5	775.2
52.5°	739.6	736.5	735.1	730.0	728.8
55°	669.6	668.3	669.6	660.3	659.0
57.5°	596.7	598.8	603.0	590.5	587.4
60°	548.1	553.2	558.6	544.0	538.8
62.5°	498.4	506.7	514.3	497.5	490.2
65°	423.9	436.9	445.1	427.6	413.4
67.5°	352.1	368.1	378.0	359.1	343.1
70°	302.4	320.5	331.5	312.6	294.5
72.5°	259.1	279.3	288.2	270.3	252.3
75°	195.5	213.5	224.5	209.5	190.2
77.5°	138.7	155.7	164.8	151.8	135.8
80°	101.7	119.8	126.8	115.9	103.0
82.5°	72.1	87.1	91.9	85.4	76.6
85°	33.0	43.3	48.9	46.2	43.6
87.5°	8.9	16.9	22.7	22.9	23.8
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



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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)