

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: P565120

Luminaire Tested: **SQ4-PW1-150U-050D-940-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565120
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-050D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

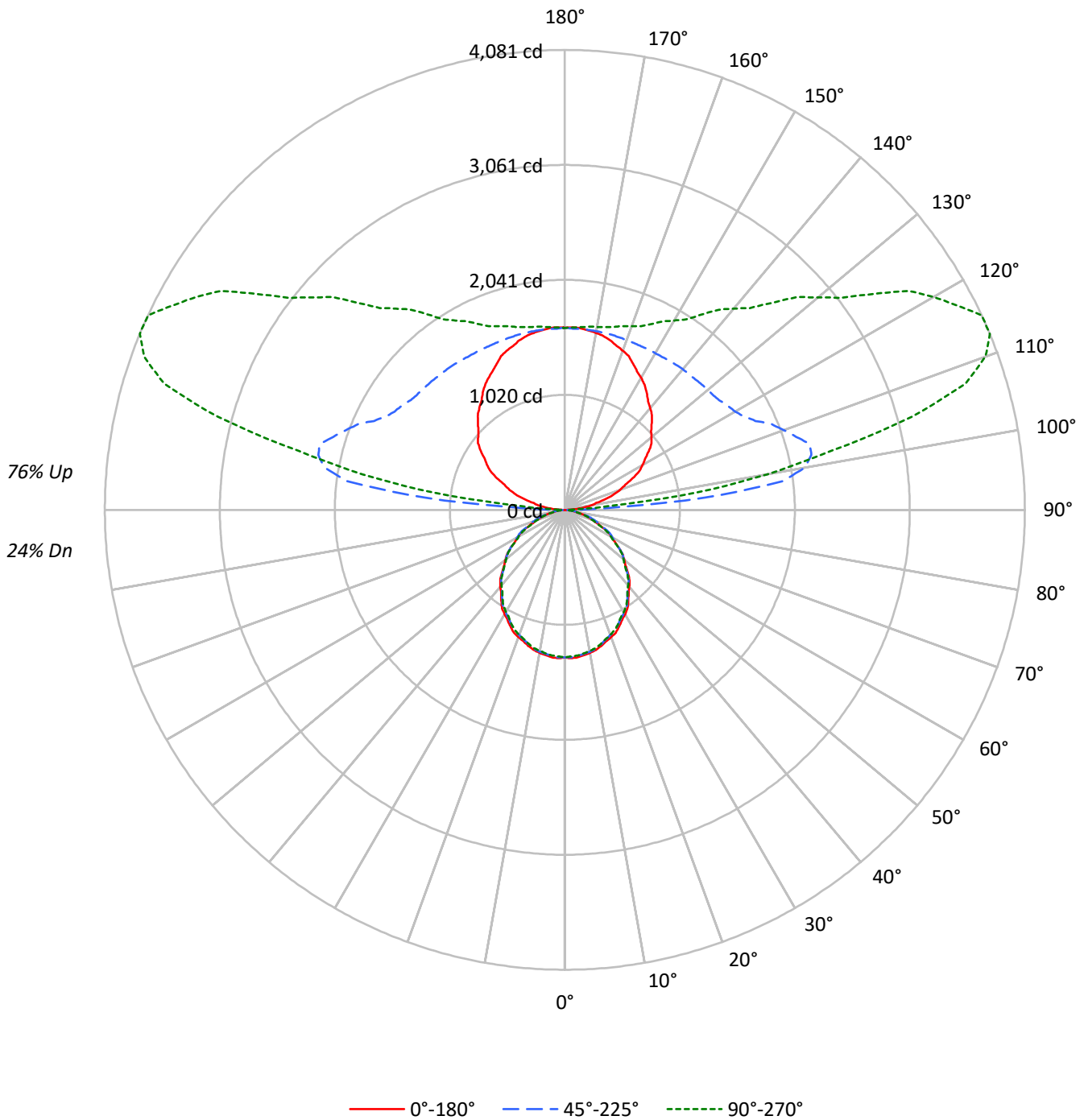
Lumens per Lamp: N/A
Luminaire Lumens: 13752.1 lumens
Efficiency: N/A
Efficacy: 122.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 111.9
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	50	30	10	0	
RCR																						
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24				24
1	92	88	84	81	82	78	75	72	60	58	57	44	43	42	29	28	27	21				21
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23	17				17
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	22	21	20	15				15
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13				13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11				11
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10				10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	11	9				9
8	50	38	31	26	45	35	28	24	27	22	19	20	17	15	14	12	10	8				8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7				7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8	6				6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6044	6044	6044
5°	6083	6035	6008
10°	6035	5986	5954
15°	5971	5904	5882
20°	5899	5809	5797
25°	5817	5711	5694
30°	5694	5608	5571
35°	5532	5454	5421
40°	5360	5276	5255
45°	5151	5083	5061
50°	4938	4896	4863
55°	4707	4707	4633
60°	4420	4505	4346
65°	4045	4246	3944
70°	3566	3907	3472
75°	3044	3497	2962
80°	2362	2943	2391
85°	1530	2260	2017



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.4	0.9
10°-20°	348.3	2.5
20°-30°	516.7	3.8
30°-40°	604.6	4.4
40°-50°	601.9	4.4
50°-60°	519.7	3.8
60°-70°	374.1	2.7
70°-80°	196.2	1.4
80°-90°	52.0	0.4
90°-100°	750.7	5.5
100°-110°	2029.9	14.8
110°-120°	2134.1	15.5
120°-130°	1733.5	12.6
130°-140°	1359.8	9.9
140°-150°	1043.6	7.6
150°-160°	750.6	5.5
160°-170°	458.5	3.3
170°-180°	154.6	1.1
0°-30°	988.4	7.2
0°-40°	1592.9	11.6
0°-60°	2714.6	19.7
0°-90°	3336.9	24.3
90°-120°	4914.7	35.7
90°-150°	9051.5	65.8
90°-180°	10415.0	75.7
0°-180°	13752.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1310	1310	1310	1310	1310	
5°	1314	1299	1303	1300	1298	124
15°	1250	1234	1236	1234	1232	352
25°	1143	1124	1122	1115	1119	525
35°	982	969	968	959	963	614
45°	790	783	779	777	776	609
55°	585	584	585	577	576	522
65°	371	382	389	374	361	367
75°	171	187	196	183	166	183
85°	29	38	43	40	38	38
90°	4	10	23	24	23	9
95°	116	409	1248	646	384	122
105°	377	583	2252	3322	3186	397
115°	664	812	1868	3615	4081	656
125°	909	1042	1683	2840	3337	811
135°	1090	1220	1638	2294	2596	843
145°	1268	1363	1615	1963	2113	793
155°	1431	1487	1602	1761	1819	660
165°	1558	1573	1608	1671	1680	439
175°	1617	1616	1610	1631	1628	154
180°	1615	1615	1615	1615	1615	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1310.2	1310.2	1310.2	1310.2	1310.2
2.5°	1317.6	1306.8	1310.2	1307.3	1301.0
5°	1313.7	1299.0	1303.3	1299.8	1297.5
7.5°	1300.3	1286.7	1289.9	1286.2	1284.8
10°	1288.3	1274.7	1277.9	1273.2	1271.0
12.5°	1274.4	1260.0	1263.1	1258.5	1257.1
15°	1250.2	1234.4	1236.3	1234.0	1231.7
17.5°	1222.0	1206.0	1206.3	1202.6	1202.2
20°	1201.7	1184.8	1183.2	1178.7	1180.9
22.5°	1179.5	1161.7	1160.1	1153.7	1156.9
25°	1142.8	1123.6	1122.0	1115.2	1118.6
27.5°	1100.3	1081.4	1081.4	1071.8	1075.4
30°	1068.9	1050.9	1052.8	1041.3	1045.9
32.5°	1035.7	1019.4	1020.5	1009.0	1013.5
35°	982.4	968.8	968.5	959.4	962.7
37.5°	927.9	915.9	914.0	908.7	909.6
40°	890.0	879.9	876.2	872.7	872.7
42.5°	850.3	841.1	837.4	834.8	833.9
45°	789.6	782.8	779.2	776.9	775.7
47.5°	729.6	723.2	720.1	718.5	717.3
50°	688.0	683.5	682.2	678.7	677.6
52.5°	646.4	643.7	642.5	638.1	637.0
55°	585.3	584.1	585.3	577.2	576.0
57.5°	521.5	523.4	527.1	516.2	513.5
60°	479.1	483.6	488.3	475.5	471.0
62.5°	435.7	442.9	449.5	434.8	428.5
65°	370.6	381.8	389.0	373.7	361.3
67.5°	307.8	321.8	330.4	313.9	299.9
70°	264.4	280.2	289.7	273.2	257.4
72.5°	226.5	244.1	251.9	236.3	220.5
75°	170.8	186.6	196.2	183.2	166.2
77.5°	121.2	136.1	144.1	132.7	118.7
80°	88.9	104.7	110.8	101.3	90.0
82.5°	63.0	76.1	80.3	74.6	67.0
85°	28.9	37.9	42.7	40.4	38.1
87.5°	8.1	15.8	22.1	22.4	23.0
90°	3.5	10.3	22.6	24.3	22.6
92.5°	49.4	180.0	355.1	154.1	111.6
95°	116.5	408.9	1248.5	646.1	384.3
97.5°	187.1	469.0	1946.1	1610.6	1182.8
100°	240.0	493.3	2163.2	2255.9	1824.1
102.5°	288.7	527.0	2239.7	2745.3	2422.3
105°	377.3	583.1	2251.8	3321.6	3185.6
107.5°	459.4	647.1	2153.4	3681.2	3726.4
110°	523.4	693.4	2065.8	3777.7	3969.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	580.4	739.6	1985.1	3758.4	4081.1
115°	664.3	812.2	1867.6	3615.3	4081.1
117.5°	746.3	885.1	1790.0	3396.5	3924.6
120°	796.4	932.4	1744.1	3239.6	3778.6
122.5°	843.7	977.0	1716.3	3071.4	3614.4
125°	909.4	1042.1	1683.2	2840.4	3336.9
127.5°	969.9	1100.2	1663.8	2652.0	3088.6
130°	1003.3	1137.6	1655.4	2535.6	2930.0
132.5°	1038.1	1171.1	1647.1	2430.5	2793.7
135°	1090.3	1219.5	1638.0	2293.5	2596.1
137.5°	1142.8	1264.9	1630.4	2182.3	2428.9
140°	1179.0	1292.9	1627.6	2110.8	2330.1
142.5°	1213.7	1320.8	1622.0	2046.2	2238.3
145°	1267.6	1362.9	1615.4	1963.1	2112.7
147.5°	1316.7	1401.0	1607.8	1887.9	2002.8
150°	1352.8	1427.7	1605.0	1847.0	1938.8
152.5°	1386.2	1451.5	1603.6	1809.1	1884.6
155°	1431.1	1487.2	1601.5	1761.1	1818.9
157.5°	1477.7	1516.8	1601.9	1727.6	1765.7
160°	1504.1	1536.4	1603.2	1706.5	1733.7
162.5°	1525.0	1551.9	1604.6	1689.6	1710.0
165°	1558.0	1573.3	1608.5	1671.3	1679.8
167.5°	1580.6	1591.2	1608.8	1655.5	1659.6
170°	1594.5	1599.6	1610.2	1648.5	1648.5
172.5°	1605.7	1606.7	1610.2	1640.1	1638.7
175°	1617.2	1615.5	1610.2	1631.0	1627.6
177.5°	1621.0	1616.9	1609.9	1623.7	1619.6
180°	1615.4	1615.4	1615.4	1615.4	1615.4

(END OF REPORT)