

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: P565100

Luminaire Tested: **SQ4-PW1-150U-050D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565100
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

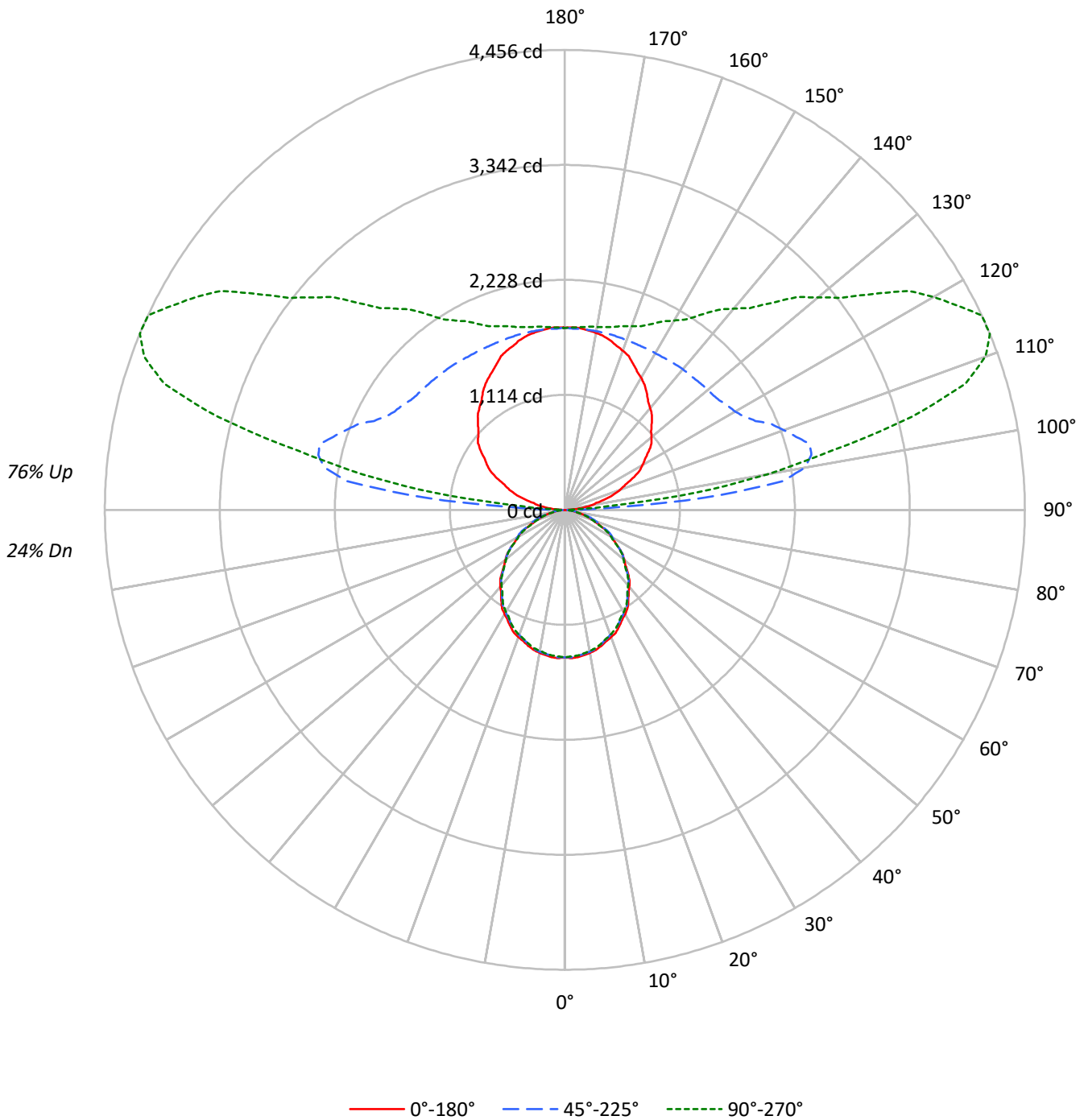
Lumens per Lamp: N/A
Luminaire Lumens: 15015.4 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6600	6600	6600
5°	6642	6590	6560
10°	6589	6536	6500
15°	6519	6447	6423
20°	6441	6342	6330
25°	6351	6236	6216
30°	6217	6123	6083
35°	6040	5955	5920
40°	5852	5761	5738
45°	5624	5551	5526
50°	5391	5346	5310
55°	5139	5139	5058
60°	4826	4919	4744
65°	4416	4637	4306
70°	3893	4268	3791
75°	3324	3820	3235
80°	2580	3214	2611
85°	1667	2467	2202



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.7	0.9
10°-20°	380.3	2.5
20°-30°	564.1	3.8
30°-40°	660.1	4.4
40°-50°	657.2	4.4
50°-60°	567.5	3.8
60°-70°	408.5	2.7
70°-80°	214.2	1.4
80°-90°	56.8	0.4
90°-100°	819.7	5.5
100°-110°	2216.3	14.8
110°-120°	2330.1	15.5
120°-130°	1892.7	12.6
130°-140°	1484.7	9.9
140°-150°	1139.5	7.6
150°-160°	819.5	5.5
160°-170°	500.6	3.3
170°-180°	168.8	1.1
0°-30°	1079.2	7.2
0°-40°	1739.3	11.6
0°-60°	2963.9	19.7
0°-90°	3643.4	24.3
90°-120°	5366.2	35.7
90°-150°	9883.0	65.8
90°-180°	11372.0	75.7
0°-180°	15015.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1431	1431	1431	1431	1431	
5°	1434	1418	1423	1419	1417	136
15°	1365	1348	1350	1347	1345	385
25°	1248	1227	1225	1218	1221	574
35°	1073	1058	1058	1048	1051	671
45°	862	855	851	848	847	665
55°	639	638	639	630	629	570
65°	405	417	425	408	394	401
75°	186	204	214	200	182	200
85°	32	41	47	44	42	42
90°	4	11	25	26	25	10
95°	127	446	1363	706	420	133
105°	412	637	2459	3627	3478	434
115°	725	887	2039	3947	4456	716
125°	993	1138	1838	3101	3643	885
135°	1190	1332	1788	2504	2835	920
145°	1384	1488	1764	2143	2307	866
155°	1563	1624	1749	1923	1986	721
165°	1701	1718	1756	1825	1834	479
175°	1766	1764	1758	1781	1777	168
180°	1764	1764	1764	1764	1764	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1430.6	1430.6	1430.6	1430.6	1430.6
2.5°	1438.6	1426.8	1430.6	1427.4	1420.5
5°	1434.3	1418.3	1423.0	1419.2	1416.7
7.5°	1419.7	1404.9	1408.4	1404.3	1402.8
10°	1406.6	1391.8	1395.3	1390.2	1387.7
12.5°	1391.5	1375.7	1379.1	1374.1	1372.6
15°	1365.0	1347.8	1349.9	1347.3	1344.9
17.5°	1334.3	1316.8	1317.1	1313.1	1312.6
20°	1312.1	1293.6	1291.9	1286.9	1289.4
22.5°	1287.9	1268.4	1266.7	1259.7	1263.2
25°	1247.8	1226.9	1225.1	1217.6	1221.3
27.5°	1201.4	1180.7	1180.8	1170.3	1174.2
30°	1167.1	1147.4	1149.5	1137.0	1141.9
32.5°	1130.8	1113.1	1114.2	1101.7	1106.6
35°	1072.6	1057.8	1057.5	1047.5	1051.2
37.5°	1013.1	1000.1	998.0	992.2	993.2
40°	971.8	960.7	956.7	952.9	952.9
42.5°	928.4	918.3	914.3	911.5	910.5
45°	862.1	854.7	850.8	848.2	847.0
47.5°	796.6	789.7	786.2	784.5	783.2
50°	751.2	746.3	744.9	741.1	739.9
52.5°	705.8	702.9	701.5	696.7	695.5
55°	639.0	637.8	639.0	630.2	628.9
57.5°	569.5	571.4	575.5	563.6	560.6
60°	523.1	528.0	533.2	519.2	514.2
62.5°	475.7	483.6	490.8	474.8	467.9
65°	404.6	416.9	424.8	408.1	394.5
67.5°	336.0	351.3	360.7	342.7	327.5
70°	288.6	305.9	316.4	298.3	281.1
72.5°	247.3	266.5	275.0	258.0	240.7
75°	186.5	203.8	214.3	200.0	181.5
77.5°	132.3	148.6	157.3	144.9	129.6
80°	97.1	114.3	121.0	110.6	98.3
82.5°	68.8	83.1	87.7	81.5	73.1
85°	31.5	41.4	46.6	44.1	41.6
87.5°	8.8	17.2	24.1	24.5	25.1
90°	3.8	11.2	24.7	26.5	24.7
92.5°	53.9	196.5	387.7	168.3	121.9
95°	127.2	446.5	1363.2	705.5	419.6
97.5°	204.3	512.1	2124.9	1758.5	1291.4
100°	262.0	538.6	2361.9	2463.2	1991.6
102.5°	315.2	575.4	2445.4	2997.5	2644.8
105°	412.0	636.6	2458.7	3626.8	3478.3
107.5°	501.6	706.6	2351.2	4019.3	4068.7
110°	571.5	757.1	2255.5	4124.7	4334.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	633.8	807.5	2167.5	4103.7	4456.0
115°	725.3	886.8	2039.1	3947.4	4456.0
117.5°	814.9	966.4	1954.4	3708.6	4285.2
120°	869.6	1018.1	1904.3	3537.2	4125.7
122.5°	921.2	1066.7	1873.9	3353.5	3946.4
125°	993.0	1137.8	1837.9	3101.4	3643.4
127.5°	1059.0	1201.2	1816.6	2895.6	3372.3
130°	1095.5	1242.2	1807.5	2768.5	3199.2
132.5°	1133.5	1278.6	1798.4	2653.8	3050.3
135°	1190.4	1331.5	1788.5	2504.2	2834.6
137.5°	1247.8	1381.1	1780.1	2382.8	2652.0
140°	1287.3	1411.6	1777.1	2304.7	2544.1
142.5°	1325.2	1442.2	1771.0	2234.1	2443.9
145°	1384.1	1488.0	1763.8	2143.4	2306.8
147.5°	1437.6	1529.7	1755.5	2061.3	2186.8
150°	1477.1	1558.8	1752.4	2016.7	2116.9
152.5°	1513.6	1584.9	1750.9	1975.3	2057.7
155°	1562.6	1623.8	1748.6	1922.8	1985.9
157.5°	1613.4	1656.1	1749.0	1886.3	1927.8
160°	1642.3	1677.6	1750.5	1863.2	1892.9
162.5°	1665.1	1694.4	1752.0	1844.8	1867.1
165°	1701.2	1717.9	1756.2	1824.8	1834.1
167.5°	1725.8	1737.3	1756.6	1807.6	1812.0
170°	1741.0	1746.6	1758.1	1799.9	1799.9
172.5°	1753.2	1754.3	1758.1	1790.7	1789.2
175°	1765.7	1763.9	1758.1	1780.8	1777.1
177.5°	1769.9	1765.4	1757.7	1772.8	1768.4
180°	1763.8	1763.8	1763.8	1763.8	1763.8

(END OF REPORT)