

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: P564436

Luminaire Tested: **SQ4-PR1-150U-050D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564436
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PR1-150U-050D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

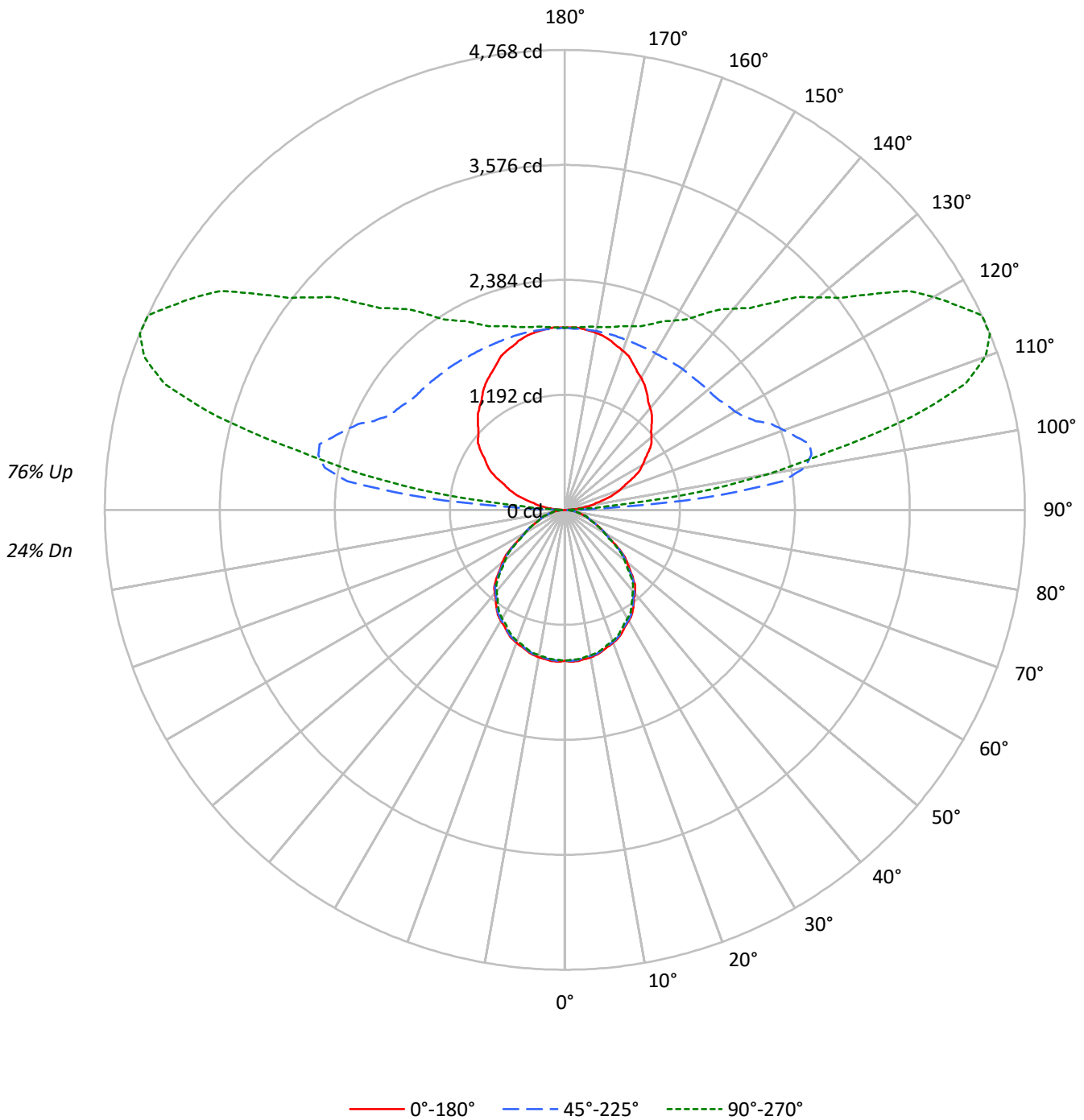
Lumens per Lamp: N/A
Luminaire Lumens: 16087.7 lumens
Efficiency: N/A
Efficacy: 143.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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	33	33	33	24
1	92	88	84	81	82	78	75	73	61	59	57	44	43	42	29	28	28	21
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	34	32	30	23	21	20	15
4	70	60	52	47	62	54	47	42	42	37	34	31	28	25	20	19	17	13
5	64	53	46	40	57	48	41	36	37	33	29	28	24	22	18	17	15	11
6	59	48	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	26	22	22	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	21	39	29	23	19	23	19	15	17	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7224	7224	7224
5°	7289	7233	7195
10°	7266	7215	7177
15°	7234	7189	7150
20°	7197	7151	7098
25°	7147	7099	7016
30°	7070	7019	6919
35°	6965	6904	6806
40°	6807	6733	6612
45°	6529	6415	6283
50°	6040	5895	5779
55°	5272	5153	5044
60°	4442	4406	4318
65°	3842	3858	3828
70°	3530	3547	3547
75°	3390	3390	3413
80°	3188	3225	3188
85°	2572	2858	2858



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.1	0.9
10°-20°	423.7	2.6
20°-30°	639.0	4.0
30°-40°	761.4	4.7
40°-50°	750.7	4.7
50°-60°	573.7	3.6
60°-70°	355.0	2.2
70°-80°	201.7	1.3
80°-90°	65.3	0.4
90°-100°	877.2	5.5
100°-110°	2371.7	14.7
110°-120°	2493.5	15.5
120°-130°	2025.4	12.6
130°-140°	1588.7	9.9
140°-150°	1219.4	7.6
150°-160°	877.0	5.5
160°-170°	535.7	3.3
170°-180°	180.6	1.1
0°-30°	1210.8	7.5
0°-40°	1972.2	12.3
0°-60°	3296.6	20.5
0°-90°	3918.6	24.4
90°-120°	5742.4	35.7
90°-150°	10575.8	65.7
90°-180°	12169.0	75.6
0°-180°	16087.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1566	1566	1566	1566	1566	
5°	1574	1557	1562	1556	1554	149
15°	1515	1499	1505	1500	1497	427
25°	1404	1387	1395	1380	1378	646
35°	1237	1222	1226	1210	1208	772
45°	1001	988	983	966	963	767
55°	656	645	641	630	627	587
65°	352	349	353	351	351	357
75°	190	190	190	192	192	201
85°	49	51	54	54	54	57
90°	4	12	26	28	26	11
95°	136	478	1459	755	449	142
105°	441	681	2631	3881	3722	464
115°	776	949	2182	4224	4768	766
125°	1063	1218	1967	3319	3899	947
135°	1274	1425	1914	2680	3033	984
145°	1481	1592	1888	2294	2468	927
155°	1672	1738	1871	2058	2125	771
165°	1820	1838	1879	1953	1963	513
175°	1890	1888	1881	1906	1902	179
180°	1888	1888	1888	1888	1888	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1565.9	1565.9	1565.9	1565.9	1565.9
2.5°	1575.6	1561.9	1565.9	1562.5	1555.1
5°	1574.0	1556.9	1561.9	1556.4	1553.8
7.5°	1561.9	1545.0	1550.0	1544.6	1543.0
10°	1551.1	1535.3	1540.3	1534.8	1532.2
12.5°	1539.2	1522.3	1528.4	1521.9	1519.2
15°	1514.7	1498.8	1505.2	1499.8	1497.1
17.5°	1487.7	1470.8	1477.2	1470.9	1467.5
20°	1466.1	1450.3	1456.7	1447.2	1445.9
22.5°	1442.4	1426.5	1432.9	1420.2	1420.0
25°	1404.1	1386.9	1394.6	1379.8	1378.4
27.5°	1358.5	1342.7	1349.0	1333.9	1332.3
30°	1327.2	1311.4	1317.7	1301.5	1298.9
32.5°	1291.6	1276.8	1282.1	1265.9	1264.3
35°	1236.8	1222.3	1226.0	1209.8	1208.5
37.5°	1174.5	1161.3	1163.4	1145.6	1144.3
40°	1130.3	1117.1	1118.1	1099.2	1097.9
42.5°	1081.7	1068.5	1067.4	1048.5	1047.2
45°	1000.8	987.6	983.3	965.7	963.0
47.5°	908.5	895.3	887.2	872.9	871.0
50°	841.6	828.4	821.4	809.2	805.2
52.5°	769.3	756.1	750.2	739.0	735.1
55°	655.5	644.9	640.7	629.8	627.2
57.5°	547.3	540.2	539.0	528.4	527.4
60°	481.5	477.6	477.5	468.0	468.0
62.5°	425.4	422.5	424.6	418.4	417.3
65°	352.0	349.4	353.4	350.7	350.7
67.5°	294.0	294.0	296.5	295.4	295.4
70°	261.7	261.7	263.0	263.0	263.0
72.5°	232.5	231.5	235.0	234.9	233.9
75°	190.2	190.2	190.2	191.5	191.5
77.5°	148.1	148.4	149.4	149.1	148.1
80°	120.0	121.4	121.4	120.0	120.0
82.5°	92.0	93.3	93.3	93.0	92.0
85°	48.6	51.2	54.0	54.0	54.0
87.5°	14.8	20.6	26.9	27.2	25.8
90°	4.1	12.0	26.4	28.4	26.4
92.5°	57.7	210.3	414.9	180.1	130.4
95°	136.1	477.8	1458.8	754.9	449.0
97.5°	218.6	548.0	2273.9	1881.8	1382.0
100°	280.4	576.4	2527.4	2635.8	2131.3
102.5°	337.3	615.8	2616.8	3207.6	2830.2
105°	440.9	681.3	2631.1	3881.0	3722.1
107.5°	536.8	756.1	2516.1	4301.1	4354.0
110°	611.5	810.2	2413.7	4413.9	4638.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	678.2	864.1	2319.4	4391.4	4768.4
115°	776.1	948.9	2182.1	4224.1	4768.4
117.5°	872.0	1034.1	2091.4	3968.5	4585.6
120°	930.5	1089.4	2037.8	3785.2	4414.9
122.5°	985.8	1141.5	2005.3	3588.6	4223.1
125°	1062.6	1217.5	1966.7	3318.8	3898.8
127.5°	1133.3	1285.5	1943.9	3098.6	3608.7
130°	1172.3	1329.2	1934.2	2962.5	3423.4
132.5°	1212.9	1368.3	1924.4	2839.8	3264.1
135°	1273.9	1424.9	1913.9	2679.7	3033.3
137.5°	1335.2	1477.9	1904.9	2549.8	2837.9
140°	1377.5	1510.6	1901.7	2466.2	2722.5
142.5°	1418.1	1543.3	1895.2	2390.7	2615.2
145°	1481.1	1592.4	1887.5	2293.7	2468.5
147.5°	1538.4	1636.9	1878.5	2205.8	2340.1
150°	1580.7	1668.1	1875.3	2158.1	2265.4
152.5°	1619.7	1696.0	1873.6	2113.8	2202.0
155°	1672.1	1737.7	1871.2	2057.6	2125.2
157.5°	1726.5	1772.2	1871.6	2018.5	2063.0
160°	1757.4	1795.2	1873.2	1993.8	2025.6
162.5°	1781.8	1813.2	1874.9	1974.1	1998.0
165°	1820.4	1838.3	1879.3	1952.7	1962.6
167.5°	1846.8	1859.1	1879.7	1934.3	1939.1
170°	1863.1	1869.0	1881.4	1926.1	1926.1
172.5°	1876.1	1877.3	1881.4	1916.3	1914.7
175°	1889.5	1887.5	1881.4	1905.7	1901.7
177.5°	1894.0	1889.2	1881.0	1897.1	1892.3
180°	1887.5	1887.5	1887.5	1887.5	1887.5

(END OF REPORT)