

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: P520370

Luminaire Tested: **SQ4-F-150U-050D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520370
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-050D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

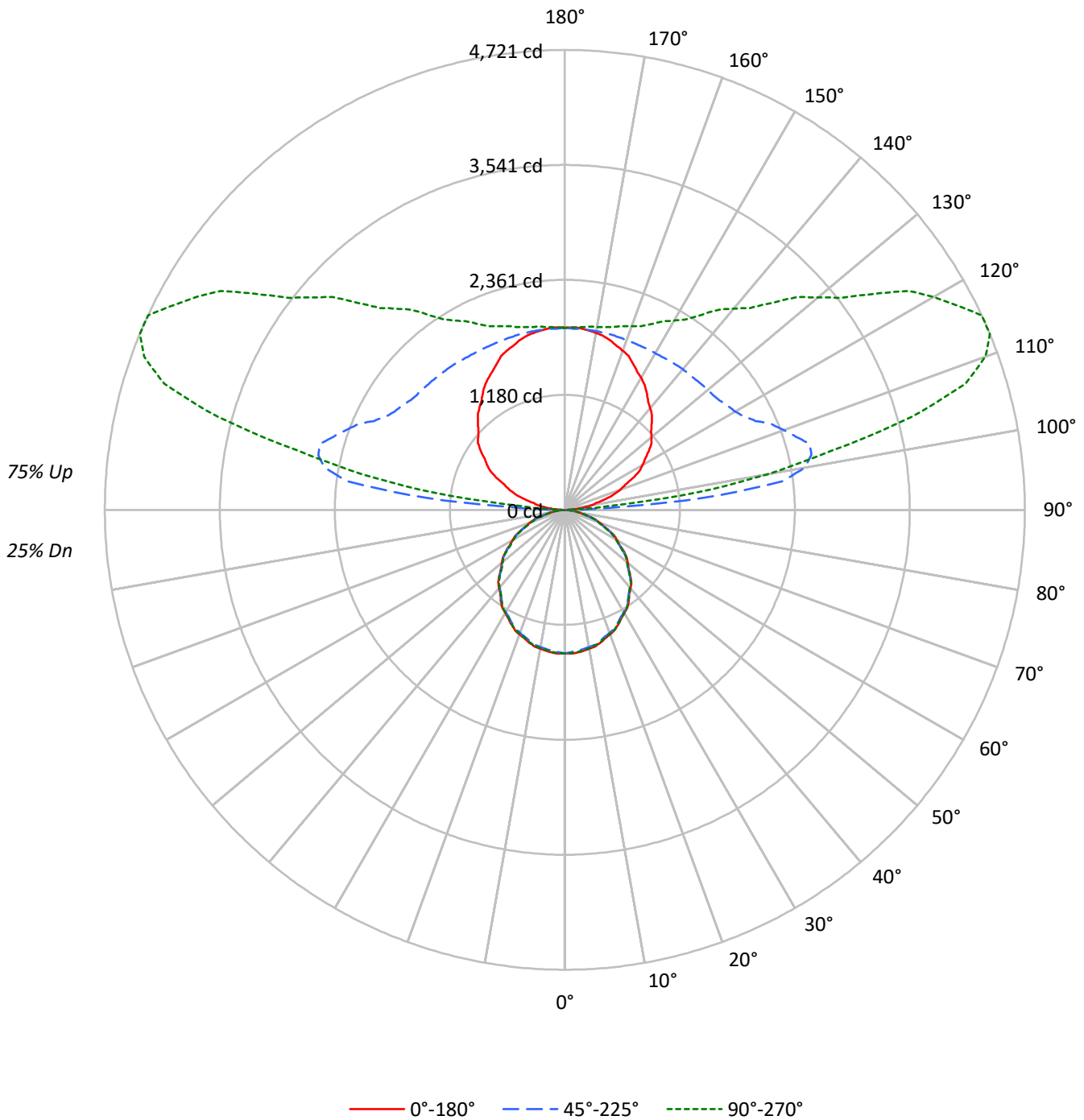
Lumens per Lamp: N/A
Luminaire Lumens: 16072.5 lumens
Efficiency: N/A
Efficacy: 140.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 114.4
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	51	51	51	33	33	33	25
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28	21
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23	18
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20	15
4	70	59	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	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	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	18	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6796	6796	6796
5°	6813	6730	6785
10°	6790	6707	6753
15°	6743	6659	6715
20°	6680	6603	6651
25°	6605	6525	6585
30°	6513	6460	6502
35°	6441	6364	6397
40°	6318	6259	6271
45°	6189	6137	6137
50°	6058	6001	5972
55°	5916	5837	5805
60°	5695	5604	5568
65°	5425	5317	5253
70°	5054	4947	4841
75°	4534	4394	4288
80°	3666	3616	3509
85°	2191	2504	2609



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.0	0.9
10°-20°	395.8	2.5
20°-30°	594.5	3.7
30°-40°	709.7	4.4
40°-50°	727.2	4.5
50°-60°	648.6	4.0
60°-70°	483.0	3.0
70°-80°	262.2	1.6
80°-90°	64.6	0.4
90°-100°	868.4	5.4
100°-110°	2348.1	14.6
110°-120°	2468.7	15.4
120°-130°	2005.2	12.5
130°-140°	1572.9	9.8
140°-150°	1207.2	7.5
150°-160°	868.2	5.4
160°-170°	530.4	3.3
170°-180°	178.8	1.1
0°-30°	1129.3	7.0
0°-40°	1839.0	11.4
0°-60°	3214.8	20.0
0°-90°	4024.6	25.0
90°-120°	5685.2	35.4
90°-150°	10470.5	65.1
90°-180°	12048.0	75.0
0°-180°	16072.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1473	1473	1473	1473	1473	
5°	1471	1469	1453	1467	1465	140
15°	1412	1408	1394	1406	1406	398
25°	1298	1294	1282	1290	1294	598
35°	1144	1140	1130	1130	1136	714
45°	949	951	941	939	941	732
55°	736	736	726	720	722	655
65°	497	495	487	481	481	492
75°	254	252	246	243	241	269
85°	41	45	47	49	49	58
90°	4	12	26	28	26	10
95°	135	473	1444	747	444	141
105°	436	674	2605	3842	3685	460
115°	768	940	2160	4182	4721	759
125°	1052	1205	1947	3286	3860	938
135°	1261	1411	1895	2653	3003	975
145°	1466	1576	1869	2271	2444	917
155°	1656	1720	1852	2037	2104	764
165°	1802	1820	1861	1933	1943	508
175°	1871	1869	1863	1887	1883	178
180°	1869	1869	1869	1869	1869	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1473.2	1473.2	1473.2	1473.2	1473.2
2.5°	1477.9	1474.8	1462.1	1473.2	1471.6
5°	1471.2	1469.2	1453.4	1467.3	1465.3
7.5°	1460.5	1456.7	1441.2	1454.6	1452.7
10°	1449.5	1445.7	1431.8	1443.6	1441.6
12.5°	1435.3	1433.0	1417.6	1429.4	1429.0
15°	1412.0	1408.2	1394.3	1406.1	1406.1
17.5°	1381.3	1379.0	1365.5	1376.9	1375.4
20°	1360.8	1356.9	1345.0	1354.8	1354.8
22.5°	1335.5	1333.2	1321.3	1329.6	1331.2
25°	1297.7	1293.8	1281.9	1289.9	1293.7
27.5°	1255.8	1252.8	1242.8	1248.1	1250.7
30°	1222.7	1222.7	1212.8	1214.9	1220.7
32.5°	1192.7	1192.7	1181.3	1183.4	1186.0
35°	1143.8	1140.0	1130.0	1130.1	1135.9
37.5°	1087.0	1085.1	1078.7	1077.6	1079.1
40°	1049.2	1047.2	1039.3	1041.3	1041.3
42.5°	1011.3	1009.3	1001.4	998.8	1001.8
45°	948.6	950.6	940.7	938.7	940.7
47.5°	886.7	886.7	878.8	873.4	876.4
50°	844.1	844.1	836.2	832.2	832.2
52.5°	799.9	801.5	792.0	786.5	788.1
55°	735.6	735.6	725.7	719.8	721.8
57.5°	664.6	664.6	654.7	648.9	652.4
60°	617.3	617.3	607.4	601.5	603.5
62.5°	569.9	569.9	560.1	554.2	554.6
65°	497.0	495.0	487.1	481.2	481.2
67.5°	426.8	421.7	415.7	407.8	407.8
70°	374.7	372.7	366.8	358.9	358.9
72.5°	327.4	323.9	317.9	311.6	311.6
75°	254.4	252.4	246.5	242.6	240.6
77.5°	182.2	180.6	180.3	174.7	176.3
80°	138.0	138.0	136.1	132.1	132.1
82.5°	98.6	100.2	96.6	95.8	94.3
85°	41.4	45.3	47.3	49.3	49.3
87.5°	8.7	14.9	16.2	18.1	17.7
90°	4.0	11.9	26.2	28.1	26.2
92.5°	57.1	208.1	410.7	178.3	129.2
95°	134.8	473.0	1444.2	747.4	444.5
97.5°	216.4	542.5	2251.2	1863.1	1368.2
100°	277.6	570.6	2502.3	2609.6	2110.1
102.5°	333.9	609.6	2590.8	3175.7	2802.0
105°	436.5	674.5	2604.9	3842.4	3685.0
107.5°	531.5	748.6	2491.0	4258.2	4310.6
110°	605.4	802.2	2389.6	4369.9	4592.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	671.4	855.5	2296.3	4347.7	4720.9
115°	768.4	939.5	2160.4	4182.0	4720.9
117.5°	863.3	1023.8	2070.6	3929.0	4539.9
120°	921.3	1078.6	2017.5	3747.5	4370.9
122.5°	976.0	1130.1	1985.3	3552.8	4181.1
125°	1052.0	1205.4	1947.1	3285.8	3860.0
127.5°	1122.0	1272.7	1924.6	3067.7	3572.8
130°	1160.6	1316.0	1914.9	2933.1	3389.4
132.5°	1200.8	1354.7	1905.2	2811.5	3231.6
135°	1261.2	1410.7	1894.8	2653.0	3003.2
137.5°	1322.0	1463.1	1885.9	2524.4	2809.6
140°	1363.8	1495.5	1882.7	2441.6	2695.3
142.5°	1404.0	1527.9	1876.3	2366.9	2589.2
145°	1466.3	1576.5	1868.6	2270.8	2443.9
147.5°	1523.1	1620.6	1859.8	2183.9	2316.8
150°	1564.9	1651.4	1856.5	2136.6	2242.7
152.5°	1603.5	1679.1	1854.9	2092.8	2180.1
155°	1655.5	1720.3	1852.5	2037.1	2104.0
157.5°	1709.4	1754.5	1852.9	1998.4	2042.5
160°	1740.0	1777.3	1854.5	1973.9	2005.4
162.5°	1764.1	1795.2	1856.1	1954.4	1978.1
165°	1802.3	1819.9	1860.6	1933.2	1943.1
167.5°	1828.4	1840.7	1861.0	1915.0	1919.7
170°	1844.5	1850.4	1862.6	1906.8	1906.8
172.5°	1857.4	1858.6	1862.6	1897.2	1895.6
175°	1870.6	1868.7	1862.6	1886.6	1882.7
177.5°	1875.1	1870.3	1862.2	1878.2	1873.4
180°	1868.6	1868.6	1868.6	1868.6	1868.6

(END OF REPORT)