

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: P519903

Luminaire Tested: **SQ4-F-050U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519903
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

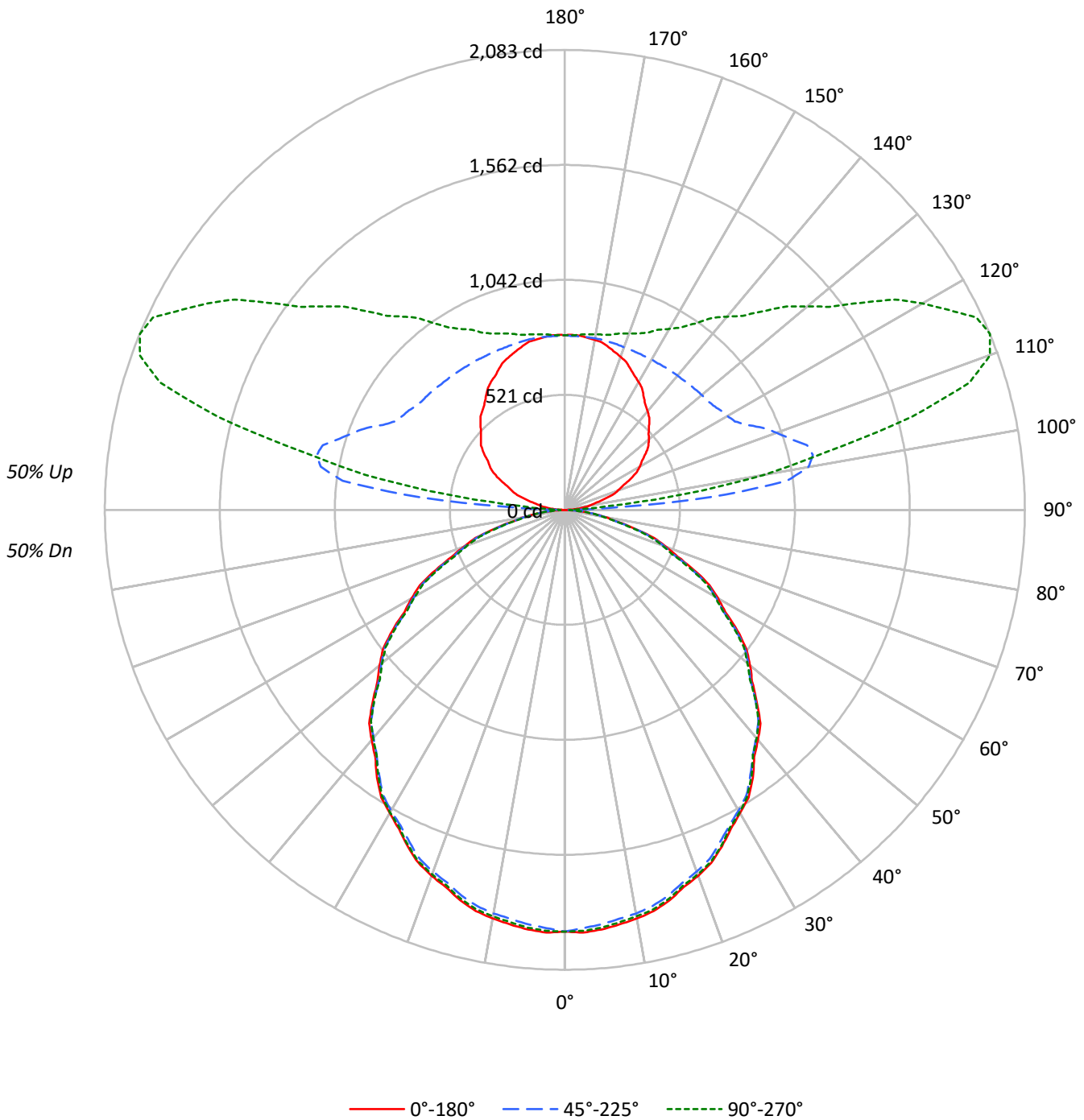
Lumens per Lamp: N/A
Luminaire Lumens: 10382.8 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 89.5
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5875	5875	5875
5°	5889	5818	5866
10°	5870	5798	5838
15°	5830	5756	5805
20°	5775	5708	5750
25°	5710	5640	5693
30°	5630	5585	5621
35°	5568	5501	5530
40°	5462	5410	5421
45°	5350	5306	5306
50°	5237	5188	5163
55°	5115	5046	5019
60°	4923	4845	4813
65°	4689	4597	4541
70°	4369	4277	4185
75°	3920	3799	3707
80°	3170	3124	3036
85°	1895	2163	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.2	1.7
10°-20°	513.3	4.9
20°-30°	770.9	7.4
30°-40°	920.2	8.9
40°-50°	943.0	9.1
50°-60°	841.0	8.1
60°-70°	626.3	6.0
70°-80°	340.0	3.3
80°-90°	81.8	0.8
90°-100°	379.8	3.7
100°-110°	1031.8	9.9
110°-120°	1060.8	10.2
120°-130°	848.2	8.2
130°-140°	666.4	6.4
140°-150°	511.0	4.9
150°-160°	367.5	3.5
160°-170°	224.7	2.2
170°-180°	75.7	0.7
0°-30°	1464.4	14.1
0°-40°	2384.7	23.0
0°-60°	4168.7	40.1
0°-90°	5216.8	50.2
90°-120°	2472.4	23.8
90°-150°	4498.0	43.3
90°-180°	5166.0	49.8
0°-180°	10382.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1910	1910	1910	1910	1910	
5°	1908	1905	1885	1903	1900	181
15°	1831	1826	1808	1823	1823	516
25°	1683	1678	1662	1672	1678	775
35°	1483	1478	1465	1466	1473	926
45°	1230	1233	1220	1217	1220	949
55°	954	954	941	934	936	850
65°	644	642	632	624	624	638
75°	330	327	320	314	312	349
85°	54	59	61	64	64	75
90°	3	10	18	23	23	5
95°	56	208	662	288	193	59
105°	183	285	1135	1728	1626	195
115°	326	395	908	1807	2058	321
125°	448	510	822	1384	1633	399
135°	539	599	799	1128	1272	417
145°	623	668	789	958	1030	391
155°	705	730	784	860	885	325
165°	763	773	786	819	822	215
175°	791	794	789	799	796	75
180°	791	791	791	791	791	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1910.3	1910.3	1910.3	1910.3	1910.3
2.5°	1916.4	1912.5	1896.0	1910.3	1908.2
5°	1907.7	1905.3	1884.7	1902.6	1900.0
7.5°	1893.9	1888.9	1868.9	1886.2	1883.7
10°	1879.6	1874.6	1856.5	1871.8	1869.4
12.5°	1861.2	1858.2	1838.2	1853.5	1853.0
15°	1831.0	1826.0	1808.0	1823.3	1823.3
17.5°	1791.1	1788.1	1770.7	1785.5	1783.5
20°	1764.5	1759.5	1744.0	1756.9	1756.9
22.5°	1731.8	1728.8	1713.4	1724.1	1726.2
25°	1682.7	1677.7	1662.2	1672.5	1677.6
27.5°	1628.5	1624.4	1611.6	1618.3	1621.9
30°	1585.5	1585.5	1572.8	1575.4	1582.9
32.5°	1546.6	1546.6	1531.8	1534.4	1538.0
35°	1483.2	1478.2	1465.3	1465.5	1473.0
37.5°	1409.6	1407.1	1398.8	1397.3	1399.3
40°	1360.5	1358.0	1347.6	1350.2	1350.2
42.5°	1311.4	1308.9	1298.5	1295.1	1299.1
45°	1230.0	1232.6	1219.9	1217.3	1219.9
47.5°	1149.7	1149.7	1139.5	1132.5	1136.4
50°	1094.5	1094.5	1084.3	1079.1	1079.1
52.5°	1037.2	1039.2	1027.0	1019.9	1021.9
55°	953.9	953.9	941.1	933.5	936.0
57.5°	861.8	861.8	849.0	841.4	845.9
60°	800.4	800.4	787.7	780.1	782.5
62.5°	739.0	739.0	726.2	718.6	719.1
65°	644.4	641.9	631.7	624.0	624.0
67.5°	553.4	546.9	539.1	528.8	528.8
70°	485.9	483.4	475.7	465.4	465.4
72.5°	424.5	420.0	412.3	404.1	404.1
75°	329.9	327.4	319.7	314.5	312.0
77.5°	236.3	234.3	233.7	226.6	228.7
80°	179.0	179.0	176.4	171.4	171.4
82.5°	127.9	129.9	125.3	124.2	122.3
85°	53.7	58.7	61.3	63.9	63.9
87.5°	10.7	18.2	17.9	21.0	21.0
90°	2.6	10.0	17.8	22.9	22.9
92.5°	22.9	104.0	180.7	77.6	65.6
95°	55.9	207.7	661.5	287.9	193.3
97.5°	92.6	229.4	1014.1	789.0	554.1
100°	117.1	243.8	1121.9	1137.3	918.4
102.5°	141.4	258.4	1150.4	1406.6	1213.5
105°	183.2	285.2	1134.7	1727.7	1625.6
107.5°	226.4	316.5	1069.0	1893.4	1921.8
110°	256.9	339.0	1020.1	1926.1	2047.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	361.5	971.3	1899.0	2082.6
115°	325.6	395.3	908.2	1806.8	2058.1
117.5°	365.3	432.0	868.0	1676.3	1959.4
120°	391.8	456.5	849.7	1588.8	1869.8
122.5°	414.2	478.9	837.5	1501.1	1772.2
125°	447.8	510.0	821.7	1384.5	1633.3
127.5°	477.8	539.4	813.1	1296.2	1509.6
130°	496.0	555.8	809.0	1240.7	1432.3
132.5°	514.4	574.2	804.9	1193.4	1363.1
135°	539.3	599.1	798.9	1127.7	1272.0
137.5°	566.3	620.6	795.7	1069.7	1191.1
140°	582.6	634.8	793.8	1032.8	1142.3
142.5°	598.9	647.2	791.7	1004.0	1095.5
145°	623.3	668.1	788.7	958.2	1030.4
147.5°	650.8	689.1	786.1	922.2	978.9
150°	669.0	701.4	786.1	901.6	946.4
152.5°	683.4	711.7	784.0	883.1	920.0
155°	704.7	729.6	783.6	860.5	885.3
157.5°	725.6	745.0	783.6	845.1	863.9
160°	737.7	755.2	783.6	834.8	849.7
162.5°	750.0	763.4	785.6	826.5	837.5
165°	763.2	773.2	786.1	819.3	821.7
167.5°	777.0	781.9	788.7	810.5	812.6
170°	781.0	786.0	788.7	806.4	806.4
172.5°	785.1	788.1	788.7	802.4	802.4
175°	791.2	793.7	788.7	798.8	796.3
177.5°	793.3	793.3	787.1	795.1	791.2
180°	791.2	791.2	791.2	791.2	791.2

(END OF REPORT)