

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: P520022

Luminaire Tested: **SQ4-F-075U-075D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520022
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-075D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

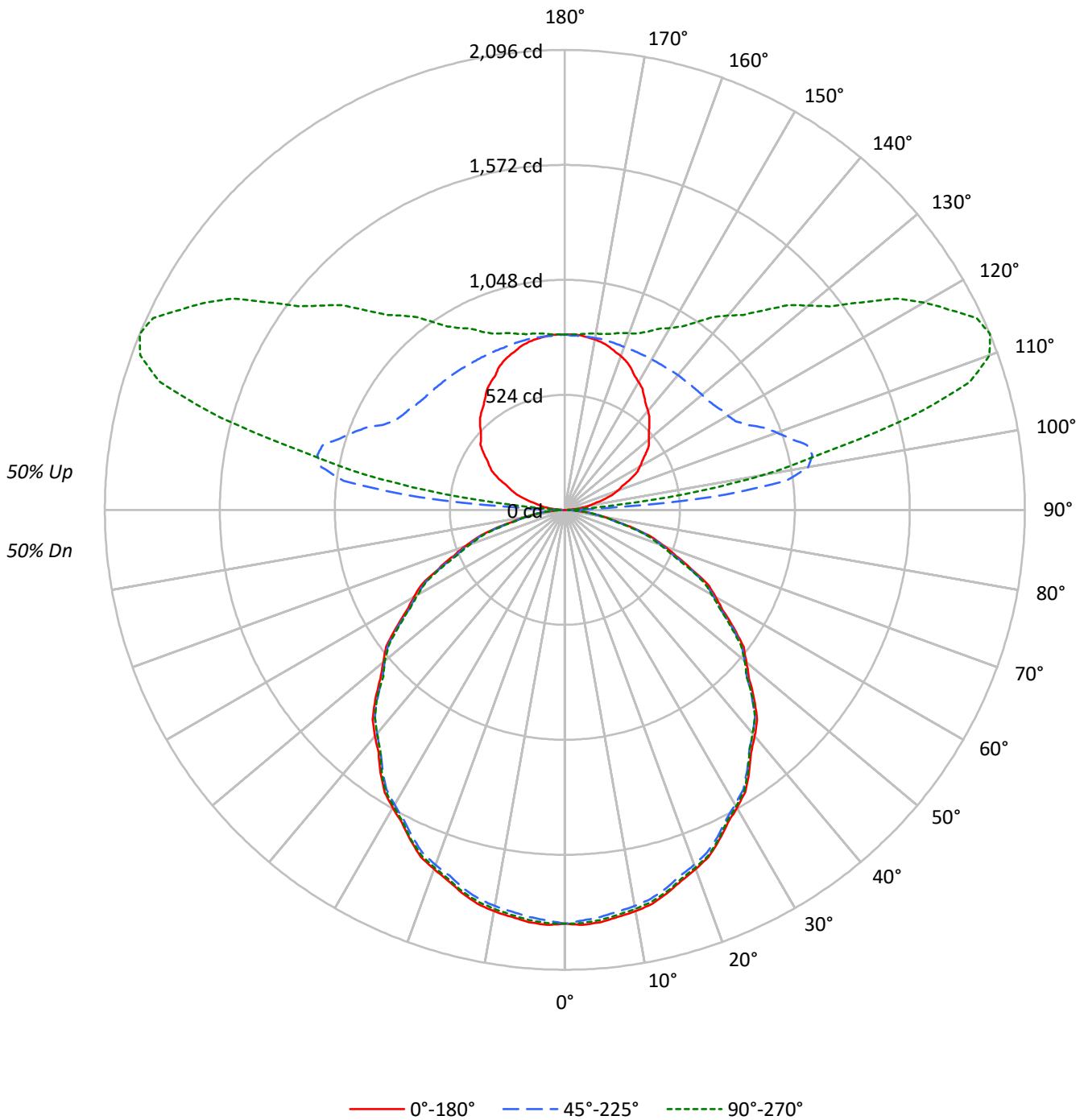
Lumens per Lamp: N/A
Luminaire Lumens: 10353.8 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 90.2
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



TEST NUMBER: P520022
CATALOG NUMBER: SQ4-F-075U-075D-935-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P520022

CATALOG NUMBER: SQ4-F-075U-075D-935-1D-UNV-STD-W-8

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	89	86	90	86	83	80	73	71	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	40	35
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	25	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	20	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8701	8701	8701
5°	8734	8624	8687
10°	8699	8587	8651
15°	8632	8527	8600
20°	8555	8454	8521
25°	8461	8374	8435
30°	8353	8262	8308
35°	8243	8157	8196
40°	8104	8022	8012
45°	7966	7865	7887
50°	7744	7683	7683
55°	7565	7468	7399
60°	7320	7195	7132
65°	6925	6795	6702
70°	6505	6343	6181
75°	5853	5639	5516
80°	4678	4588	4543
85°	2805	3165	3260



TEST NUMBER: P520022

CATALOG NUMBER: SQ4-F-075U-075D-935-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.0	1.7
10°-20°	506.9	4.9
20°-30°	761.5	7.4
30°-40°	908.6	8.8
40°-50°	931.9	9.0
50°-60°	830.3	8.0
60°-70°	619.1	6.0
70°-80°	335.7	3.2
80°-90°	79.2	0.8
90°-100°	376.7	3.6
100°-110°	1036.3	10.0
110°-120°	1069.6	10.3
120°-130°	857.0	8.3
130°-140°	673.1	6.5
140°-150°	515.8	5.0
150°-160°	370.9	3.6
160°-170°	226.8	2.2
170°-180°	76.4	0.7
0°-30°	1446.4	14.0
0°-40°	2355.1	22.7
0°-60°	4117.3	39.8
0°-90°	5151.3	49.8
90°-120°	2482.6	24.0
90°-150°	4528.5	43.7
90°-180°	5203.0	50.3
0°-180°	10353.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1886	1886	1886	1886	1886	
5°	1886	1883	1862	1878	1876	179
15°	1808	1804	1785	1799	1801	510
25°	1662	1660	1645	1654	1657	766
35°	1464	1460	1448	1449	1455	914
45°	1221	1216	1206	1206	1209	940
55°	941	939	929	920	920	840
65°	634	634	622	616	614	632
75°	328	322	316	311	310	345
85°	53	56	60	60	62	73
90°	2	7	12	15	15	5
95°	56	206	666	285	182	59
105°	185	285	1142	1739	1623	195
115°	328	399	916	1824	2070	324
125°	452	515	831	1406	1646	403
135°	545	605	807	1137	1286	421
145°	630	674	795	968	1043	395
155°	714	737	790	870	896	328
165°	771	781	794	826	831	217
175°	799	800	795	805	804	76
180°	799	799	799	799	799	

TEST NUMBER: P520022

CATALOG NUMBER: SQ4-F-075U-075D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1886.2	1886.2	1886.2	1886.2	1886.2
2.5°	1893.0	1889.1	1872.6	1886.2	1884.9
5°	1886.2	1882.9	1862.3	1877.7	1876.0
7.5°	1870.8	1867.2	1846.9	1862.2	1861.9
10°	1857.1	1852.1	1833.2	1848.6	1846.9
12.5°	1839.4	1834.4	1815.4	1830.7	1829.1
15°	1807.5	1804.2	1785.4	1799.1	1800.7
17.5°	1771.3	1764.9	1748.1	1761.5	1763.1
20°	1742.6	1737.6	1722.1	1734.1	1735.8
22.5°	1712.5	1707.4	1692.0	1704.0	1705.7
25°	1662.2	1660.5	1645.2	1653.7	1657.1
27.5°	1607.9	1603.1	1590.7	1597.3	1600.7
30°	1568.2	1564.9	1551.1	1556.3	1559.6
32.5°	1527.1	1525.1	1512.7	1515.3	1519.9
35°	1463.8	1460.4	1448.4	1448.6	1455.3
37.5°	1393.7	1390.1	1380.0	1378.4	1381.0
40°	1345.8	1340.8	1332.1	1330.5	1330.5
42.5°	1296.6	1293.0	1281.5	1278.6	1282.5
45°	1221.0	1216.0	1205.6	1205.7	1209.0
47.5°	1139.2	1137.3	1125.3	1119.8	1121.1
50°	1079.0	1082.4	1070.6	1063.9	1070.6
52.5°	1027.1	1025.1	1014.5	1007.7	1010.3
55°	940.6	938.9	928.6	920.0	920.0
57.5°	853.7	849.3	838.6	832.2	837.2
60°	793.4	791.8	779.8	768.0	773.0
62.5°	733.3	730.3	718.3	710.5	714.1
65°	634.4	634.4	622.5	615.6	614.0
67.5°	547.9	539.9	533.2	524.9	522.6
70°	482.3	475.6	470.3	463.3	458.3
72.5°	417.9	413.9	406.0	399.1	398.2
75°	328.4	321.7	316.4	311.2	309.5
77.5°	233.6	232.2	227.4	224.8	225.7
80°	176.1	176.1	172.7	172.7	171.0
82.5°	124.2	125.5	124.9	122.1	121.7
85°	53.0	56.4	59.8	59.9	61.6
87.5°	9.9	17.6	17.4	18.1	18.1
90°	1.7	6.7	11.9	15.3	15.3
92.5°	23.5	100.2	173.6	66.7	54.7
95°	56.0	205.6	666.1	284.8	181.8
97.5°	91.5	228.0	1016.5	783.2	552.5
100°	117.3	241.9	1126.5	1137.1	927.7
102.5°	141.7	258.3	1155.1	1410.6	1218.6
105°	185.3	284.9	1141.9	1739.0	1622.7
107.5°	226.6	317.7	1076.9	1899.8	1934.3
110°	256.6	339.6	1028.0	1939.7	2059.3



TEST NUMBER: P520022

CATALOG NUMBER: SQ4-F-075U-075D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.8	364.2	979.1	1914.0	2096.1
115°	328.0	399.4	915.8	1823.7	2069.6
117.5°	370.1	435.8	875.7	1696.9	1975.1
120°	395.9	459.0	858.1	1602.1	1889.4
122.5°	419.0	482.1	845.9	1518.8	1791.6
125°	452.0	515.1	830.9	1405.6	1646.5
127.5°	483.2	543.3	821.0	1311.1	1522.4
130°	499.5	561.0	815.6	1254.9	1447.7
132.5°	518.6	580.0	811.5	1205.6	1379.7
135°	545.4	605.3	807.1	1136.8	1286.2
137.5°	570.5	626.1	803.3	1081.1	1204.4
140°	589.6	641.1	802.0	1044.1	1155.5
142.5°	605.9	653.4	799.3	1011.1	1106.4
145°	630.4	673.5	795.2	968.5	1043.3
147.5°	656.5	693.8	793.2	930.8	990.6
150°	672.8	706.1	791.8	910.1	956.6
152.5°	687.8	718.4	790.4	892.2	930.8
155°	713.6	736.9	790.1	870.5	895.5
157.5°	732.3	751.3	790.1	852.7	869.9
160°	745.9	760.9	790.1	843.0	856.3
162.5°	756.8	769.1	791.5	834.8	845.5
165°	771.4	781.4	793.5	825.9	830.9
167.5°	781.6	789.2	795.2	818.3	819.7
170°	788.4	793.4	795.2	815.6	815.6
172.5°	793.8	796.2	795.2	811.4	810.2
175°	798.6	800.3	795.2	805.4	803.7
177.5°	800.0	800.0	794.5	802.6	800.0
180°	798.6	798.6	798.6	798.6	798.6

(END OF REPORT)