

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: P520225

Luminaire Tested: **SQ4-F-100U-100D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520225
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-100D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

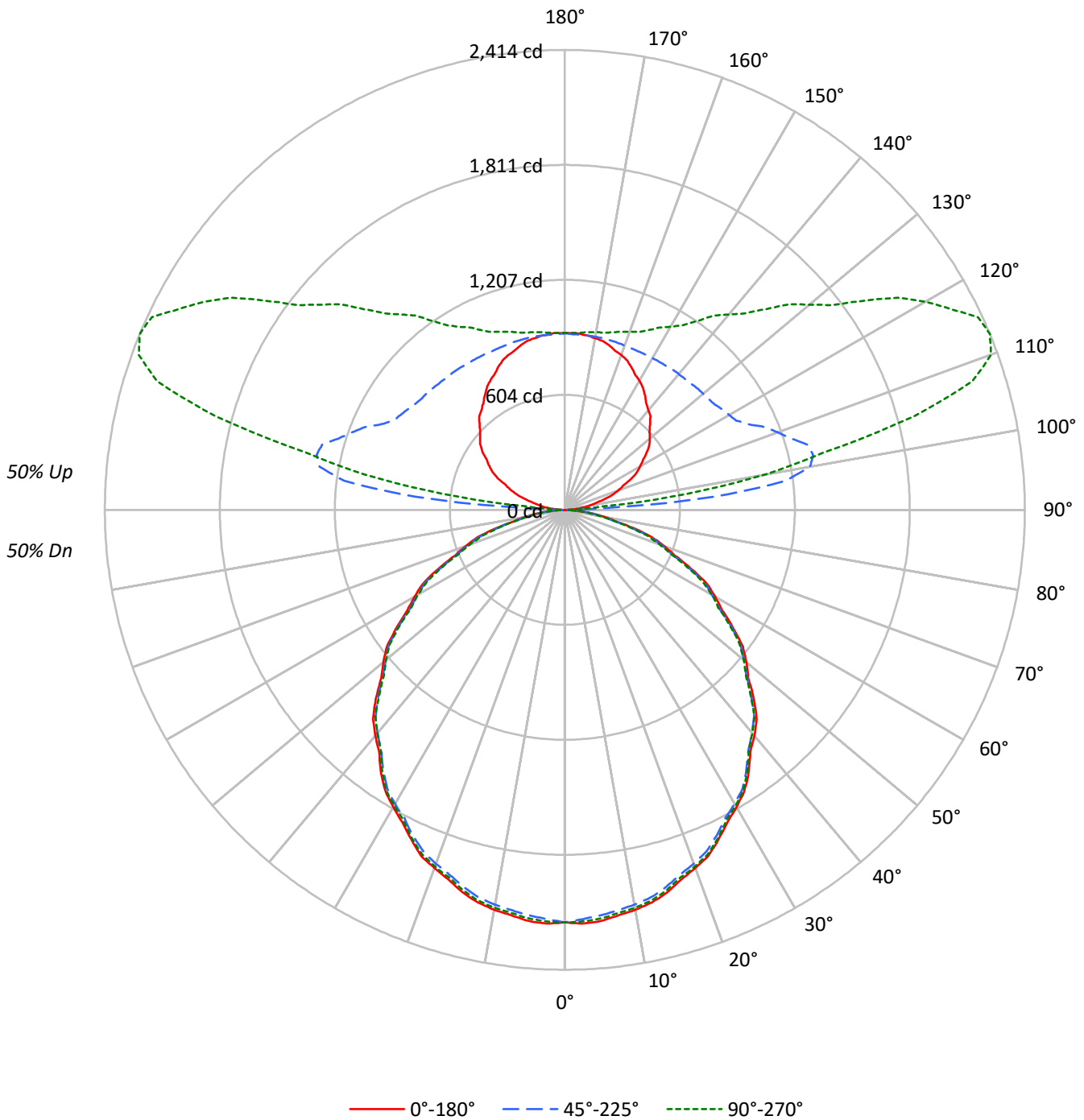
Lumens per Lamp: N/A
Luminaire Lumens: 11932.5 lumens
Efficiency: N/A
Efficacy: 132.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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



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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	89	86	90	86	83	80	73	70	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	39	35
3	81	71	64	58	74	66	60	55	56	51	47	47	43	40	38	36	33	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	44	39	35	37	33	30	31	27	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	19	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	19	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13231	13051	13155
20°	13094	12939	13045
25°	12951	12800	12901
30°	12793	12656	12720
35°	12633	12477	12543
40°	12423	12279	12291
45°	12204	12036	11997
50°	11889	11747	11719
55°	11539	11411	11332
60°	11190	10988	10952
65°	10642	10405	10317
70°	9889	9648	9461
75°	8831	8548	8370
80°	7265	7003	6687
85°	4298	4721	4827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.4	1.7
10°-20°	582.0	4.9
20°-30°	874.0	7.3
30°-40°	1043.1	8.7
40°-50°	1069.2	9.0
50°-60°	952.1	8.0
60°-70°	709.7	5.9
70°-80°	384.3	3.2
80°-90°	89.4	0.7
90°-100°	434.2	3.6
100°-110°	1198.7	10.0
110°-120°	1236.3	10.4
120°-130°	993.5	8.3
130°-140°	780.8	6.5
140°-150°	598.8	5.0
150°-160°	430.3	3.6
160°-170°	263.2	2.2
170°-180°	88.7	0.7
0°-30°	1660.4	13.9
0°-40°	2703.5	22.7
0°-60°	4724.7	39.6
0°-90°	5908.1	49.5
90°-120°	2869.2	24.0
90°-150°	5242.2	43.9
90°-180°	6024.0	50.5
0°-180°	11932.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2165	2165	2165	2165	2165	
5°	2167	2163	2137	2156	2154	205
15°	2078	2070	2050	2066	2066	585
25°	1908	1904	1886	1896	1901	879
35°	1682	1675	1662	1665	1670	1050
45°	1403	1396	1384	1376	1379	1079
55°	1076	1078	1064	1054	1057	963
65°	731	728	715	707	709	723
75°	372	367	360	352	352	396
85°	61	67	67	68	68	85
90°	3	6	12	13	15	6
95°	64	235	788	324	211	68
105°	214	330	1319	2014	1896	227
115°	383	463	1062	2103	2391	376
125°	525	598	963	1629	1912	467
135°	632	700	936	1320	1488	489
145°	733	784	924	1124	1209	459
155°	826	854	917	1008	1040	381
165°	895	906	921	957	964	252
175°	927	929	923	936	933	88
180°	927	927	927	927	927	

TEST NUMBER: P520225

CATALOG NUMBER: SQ4-F-100U-100D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2165.4	2165.4	2165.4	2165.4	2165.4
2.5°	2173.8	2169.1	2150.0	2165.3	2163.1
5°	2166.9	2162.6	2137.2	2156.4	2153.6
7.5°	2146.7	2142.4	2120.0	2137.7	2135.1
10°	2131.3	2126.9	2104.5	2122.3	2120.9
12.5°	2111.0	2106.7	2084.3	2102.1	2100.6
15°	2077.8	2070.5	2049.5	2065.9	2065.9
17.5°	2033.8	2028.2	2008.8	2022.5	2022.8
20°	2000.5	1996.1	1976.7	1991.6	1993.0
22.5°	1967.2	1962.8	1941.0	1954.8	1957.4
25°	1908.3	1904.0	1886.0	1896.5	1900.9
27.5°	1847.7	1841.2	1823.6	1832.9	1836.1
30°	1801.3	1798.4	1782.0	1786.6	1790.9
32.5°	1752.6	1749.7	1735.6	1737.9	1745.7
35°	1682.4	1675.2	1661.6	1664.7	1670.5
37.5°	1599.5	1596.0	1582.8	1581.2	1586.7
40°	1547.2	1541.3	1529.3	1526.5	1530.8
42.5°	1490.1	1484.3	1469.9	1467.0	1472.6
45°	1403.0	1395.8	1383.7	1376.4	1379.2
47.5°	1305.5	1305.5	1293.0	1284.5	1288.9
50°	1242.5	1242.5	1227.6	1220.3	1224.7
52.5°	1177.1	1178.3	1162.2	1158.4	1156.9
55°	1076.0	1077.5	1064.1	1053.8	1056.7
57.5°	978.5	975.4	959.8	953.0	954.5
60°	909.6	905.2	893.2	883.0	890.3
62.5°	839.4	837.3	825.5	813.9	813.0
65°	731.2	728.4	714.9	707.4	708.9
67.5°	623.6	620.2	607.9	597.3	601.0
70°	549.9	549.9	536.5	530.5	526.1
72.5°	482.1	476.3	466.4	458.0	454.8
75°	371.6	367.2	359.7	352.2	352.2
77.5°	270.5	266.7	261.9	256.8	255.3
80°	205.1	203.6	197.7	196.0	188.8
82.5°	144.5	144.2	140.6	136.7	136.4
85°	60.9	66.8	66.9	68.4	68.4
87.5°	11.3	18.8	19.0	16.9	17.2
90°	3.0	5.8	11.9	13.4	14.8
92.5°	26.7	110.8	198.2	72.3	56.4
95°	63.8	234.9	787.7	323.8	210.7
97.5°	105.6	263.1	1167.0	898.4	650.7
100°	136.5	280.0	1307.0	1316.3	1069.6
102.5°	166.2	299.3	1334.3	1626.3	1392.4
105°	213.7	329.7	1318.8	2013.5	1895.9
107.5°	264.0	367.4	1245.2	2200.1	2243.1
110°	299.6	392.5	1188.3	2240.3	2379.6



TEST NUMBER: P520225

CATALOG NUMBER: SQ4-F-100U-100D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.7	421.1	1134.9	2208.6	2414.0
115°	382.7	462.6	1062.2	2102.8	2391.4
117.5°	427.2	506.8	1014.4	1953.8	2282.2
120°	456.9	535.3	995.5	1853.0	2183.7
122.5°	485.4	560.3	980.0	1758.8	2072.2
125°	525.2	597.7	962.8	1629.4	1912.3
127.5°	559.0	631.5	952.7	1519.9	1763.9
130°	581.6	654.1	948.0	1453.0	1674.9
132.5°	602.9	672.0	943.2	1396.7	1597.8
135°	632.0	700.2	936.1	1319.7	1488.0
137.5°	664.7	726.7	932.5	1255.0	1398.7
140°	682.5	743.3	930.2	1211.9	1338.1
142.5°	702.6	758.8	927.8	1173.6	1284.7
145°	732.8	783.7	924.2	1123.5	1209.0
147.5°	761.9	806.3	921.0	1081.2	1147.7
150°	783.3	819.6	919.8	1056.0	1109.7
152.5°	799.9	833.8	918.6	1034.4	1078.8
155°	826.3	853.9	916.8	1008.0	1040.0
157.5°	850.6	871.8	917.1	988.8	1010.6
160°	864.9	883.8	918.3	978.0	994.0
162.5°	876.7	893.3	919.5	968.4	980.9
165°	894.6	906.1	921.3	957.1	964.3
167.5°	908.2	915.2	922.7	950.1	952.4
170°	915.3	921.2	922.7	946.5	946.5
172.5°	921.3	924.7	922.7	941.7	940.5
175°	927.2	928.7	922.7	936.0	933.1
177.5°	929.6	928.4	922.4	930.8	928.4
180°	927.2	927.2	927.2	927.2	927.2

(END OF REPORT)