

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: P520244

Luminaire Tested: **SQ4-F-100U-125D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520244
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

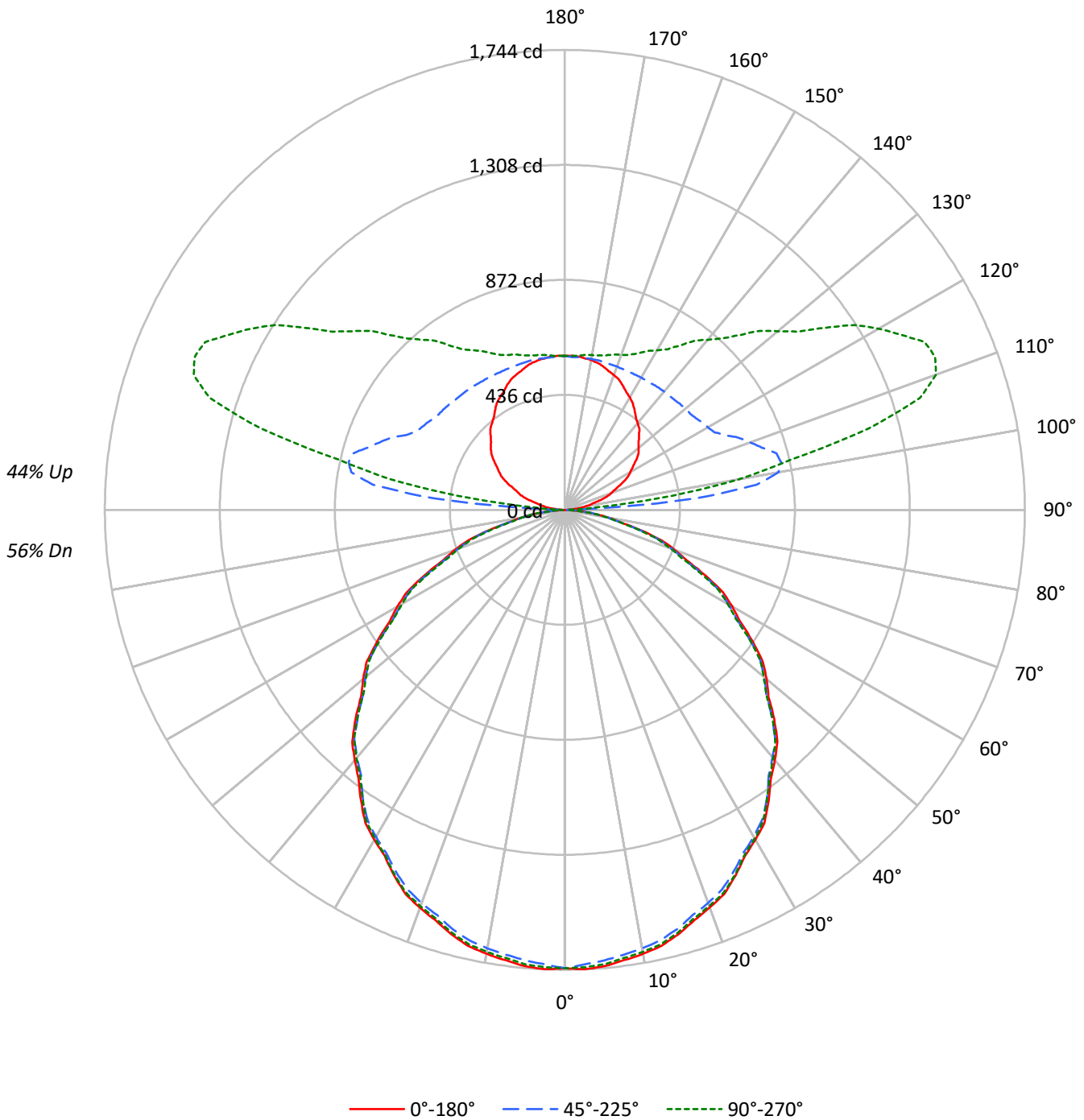
Lumens per Lamp: N/A
Luminaire Lumens: 8534.6 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.7
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: P520244
CATALOG NUMBER: SQ4-F-100U-125D-830-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P520244

CATALOG NUMBER: SQ4-F-100U-125D-830-1D-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56		
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47		
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39		
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33		
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28		
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24		
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21		
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19		
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17		
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15		
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16038	16038	16038
5°	16090	15886	16020
10°	16016	15819	15944
15°	15908	15716	15844
20°	15761	15583	15704
25°	15581	15417	15544
30°	15390	15257	15339
35°	15171	15042	15052
40°	14920	14759	14806
45°	14642	14479	14504
50°	14322	14158	14115
55°	13957	13756	13727
60°	13505	13203	13134
65°	12802	12531	12365
70°	11923	11613	11459
75°	10609	10366	10060
80°	8645	8384	8336
85°	5166	5865	5865



TEST NUMBER: P520244

CATALOG NUMBER: SQ4-F-100U-125D-830-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.0	1.9
10°-20°	467.1	5.5
20°-30°	701.8	8.2
30°-40°	837.3	9.8
40°-50°	858.3	10.1
50°-60°	765.0	9.0
60°-70°	569.5	6.7
70°-80°	308.5	3.6
80°-90°	72.0	0.8
90°-100°	273.2	3.2
100°-110°	754.3	8.8
110°-120°	777.9	9.1
120°-130°	625.1	7.3
130°-140°	491.3	5.8
140°-150°	376.8	4.4
150°-160°	270.8	3.2
160°-170°	165.6	1.9
170°-180°	55.8	0.7
0°-30°	1332.9	15.6
0°-40°	2170.2	25.4
0°-60°	3793.5	44.4
0°-90°	4743.6	55.6
90°-120°	1805.5	21.2
90°-150°	3298.7	38.7
90°-180°	3791.0	44.4
0°-180°	8534.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1738	1738	1738	1738	1738	
5°	1737	1734	1715	1731	1730	165
15°	1666	1662	1645	1660	1659	470
25°	1531	1528	1514	1523	1527	705
35°	1347	1346	1336	1336	1336	842
45°	1122	1119	1110	1108	1112	865
55°	868	865	855	849	853	775
65°	586	583	574	570	566	581
75°	298	298	291	285	282	316
85°	49	55	55	56	55	67
90°	2	4	7	8	9	4
95°	40	148	496	204	133	43
105°	134	207	830	1267	1193	143
115°	241	291	668	1323	1505	237
125°	330	376	606	1025	1203	294
135°	398	441	589	830	936	308
145°	461	493	582	707	761	289
155°	520	537	577	634	654	240
165°	563	570	580	602	607	159
175°	583	584	581	589	587	55
180°	583	583	583	583	583	

TEST NUMBER: P520244

CATALOG NUMBER: SQ4-F-100U-125D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1738.3	1738.3	1738.3	1738.3	1738.3
2.5°	1743.6	1740.6	1725.2	1738.2	1736.0
5°	1737.3	1734.4	1715.3	1730.6	1729.7
7.5°	1722.6	1719.0	1701.5	1715.8	1714.2
10°	1709.5	1706.8	1688.5	1702.8	1701.9
12.5°	1693.5	1690.6	1672.4	1686.8	1686.6
15°	1665.5	1661.8	1645.4	1659.7	1658.8
17.5°	1632.1	1627.7	1611.6	1622.9	1624.8
20°	1605.3	1602.5	1587.1	1597.6	1599.5
22.5°	1577.7	1574.2	1558.0	1570.1	1572.0
25°	1530.6	1527.9	1514.4	1523.1	1526.9
27.5°	1479.0	1479.0	1466.6	1472.7	1475.0
30°	1444.6	1444.6	1432.1	1436.1	1439.8
32.5°	1407.8	1404.8	1393.1	1396.2	1400.0
35°	1347.0	1346.1	1335.5	1335.5	1336.4
37.5°	1284.0	1281.4	1269.8	1270.7	1275.2
40°	1238.8	1237.0	1225.4	1225.5	1229.3
42.5°	1192.9	1191.1	1181.1	1179.6	1181.1
45°	1122.2	1119.3	1109.7	1107.9	1111.6
47.5°	1046.8	1047.5	1036.0	1033.4	1035.5
50°	997.8	997.8	986.4	980.7	983.4
52.5°	946.5	945.0	933.4	927.2	933.7
55°	867.7	864.8	855.2	848.6	853.4
57.5°	786.9	782.6	773.0	765.7	768.3
60°	731.9	725.3	715.5	709.9	711.8
62.5°	674.4	670.8	660.5	651.8	655.8
65°	586.4	582.7	574.0	570.1	566.4
67.5°	500.2	497.7	487.9	483.9	481.4
70°	442.0	437.3	430.5	425.7	424.8
72.5°	385.3	379.9	373.1	369.0	366.6
75°	297.6	297.6	290.8	285.0	282.2
77.5°	214.0	214.7	209.1	207.2	205.8
80°	162.7	162.7	157.8	156.0	156.9
82.5°	113.6	115.8	114.2	111.5	110.2
85°	48.8	55.3	55.4	56.5	55.4
87.5°	8.8	14.4	16.1	14.7	13.4
90°	1.9	3.7	7.4	8.4	9.3
92.5°	16.8	69.7	124.7	45.5	35.5
95°	40.2	147.9	495.7	203.8	132.6
97.5°	66.5	165.6	734.3	565.3	409.4
100°	85.9	176.3	822.4	828.3	673.1
102.5°	104.6	188.3	839.6	1023.3	876.2
105°	134.4	207.4	829.9	1267.0	1193.0
107.5°	166.2	231.2	783.6	1384.5	1411.5
110°	188.5	247.0	747.8	1409.7	1497.4



TEST NUMBER: P520244

CATALOG NUMBER: SQ4-F-100U-125D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	208.7	265.0	714.1	1389.8	1519.0
115°	240.9	291.0	668.4	1323.2	1504.8
117.5°	268.9	318.9	638.3	1229.5	1436.1
120°	287.6	336.8	626.4	1166.0	1374.1
122.5°	305.5	352.6	616.7	1106.7	1304.0
125°	330.5	376.1	605.9	1025.3	1203.3
127.5°	351.8	397.4	599.5	956.5	1110.0
130°	365.9	411.6	596.5	914.3	1053.9
132.5°	379.4	422.8	593.5	878.9	1005.4
135°	397.7	440.6	589.1	830.4	936.3
137.5°	418.2	457.3	586.8	789.8	880.1
140°	429.4	467.8	585.3	762.6	842.0
142.5°	442.1	477.5	583.8	738.6	808.4
145°	461.2	493.1	581.6	707.0	760.8
147.5°	479.5	507.4	579.5	680.4	722.1
150°	492.9	515.7	578.8	664.5	698.3
152.5°	503.3	524.7	578.0	650.9	678.9
155°	519.9	537.3	576.9	634.3	654.4
157.5°	535.3	548.6	577.1	622.2	635.9
160°	544.3	556.1	577.8	615.4	625.5
162.5°	551.7	562.1	578.6	609.4	617.3
165°	563.0	570.2	579.7	602.2	606.8
167.5°	571.5	575.9	580.7	597.9	599.4
170°	576.0	579.7	580.7	595.6	595.6
172.5°	579.7	582.0	580.7	592.5	591.8
175°	583.4	584.3	580.7	589.0	587.2
177.5°	584.9	584.2	580.5	585.6	584.2
180°	583.4	583.4	583.4	583.4	583.4

(END OF REPORT)