

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: P520437

Luminaire Tested: **SQ4-F-150U-125D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520437
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-125D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

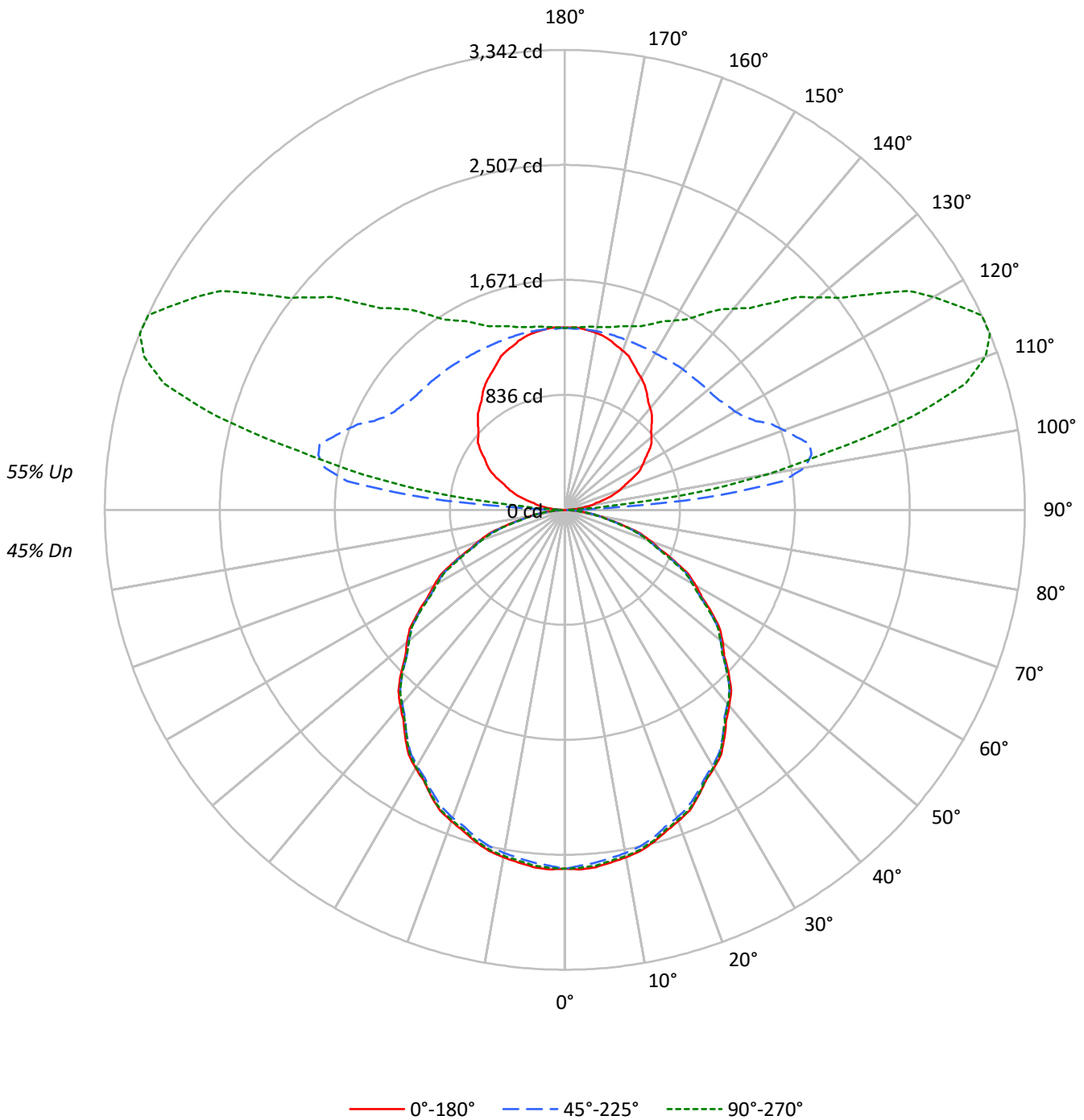
Lumens per Lamp: N/A
Luminaire Lumens: 15645.3 lumens
Efficiency: N/A
Efficacy: 125.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 124.4
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



TEST NUMBER: P520437
CATALOG NUMBER: SQ4-F-150U-125D-830-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P520437

CATALOG NUMBER: SQ4-F-150U-125D-830-1D-UNV-STD-W-6

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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16038	16038	16038
5°	16090	15886	16019
10°	16016	15819	15944
15°	15909	15716	15845
20°	15761	15583	15705
25°	15581	15417	15543
30°	15389	15257	15338
35°	15171	15042	15052
40°	14921	14759	14806
45°	14642	14480	14504
50°	14322	14156	14116
55°	13958	13757	13726
60°	13503	13203	13133
65°	12802	12531	12364
70°	11921	11612	11457
75°	10606	10366	10060
80°	8643	8388	8335
85°	5166	5872	5872



TEST NUMBER: P520437

CATALOG NUMBER: SQ4-F-150U-125D-830-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.0	1.6
10°-20°	700.7	4.5
20°-30°	1052.7	6.7
30°-40°	1256.0	8.0
40°-50°	1287.5	8.2
50°-60°	1147.5	7.3
60°-70°	854.2	5.5
70°-80°	462.8	3.0
80°-90°	109.0	0.7
90°-100°	614.8	3.9
100°-110°	1662.2	10.6
110°-120°	1747.6	11.2
120°-130°	1419.5	9.1
130°-140°	1113.5	7.1
140°-150°	854.6	5.5
150°-160°	614.6	3.9
160°-170°	375.5	2.4
170°-180°	126.6	0.8
0°-30°	1999.3	12.8
0°-40°	3255.3	20.8
0°-60°	5690.3	36.4
0°-90°	7116.4	45.5
90°-120°	4024.6	25.7
90°-150°	7412.3	47.4
90°-180°	8529.0	54.5
0°-180°	15645.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2607	2607	2607	2607	2607	
5°	2606	2602	2573	2596	2594	247
15°	2498	2493	2468	2490	2488	704
25°	2296	2292	2272	2285	2290	1057
35°	2020	2019	2003	2003	2005	1263
45°	1683	1679	1665	1662	1667	1297
55°	1302	1297	1283	1273	1280	1162
65°	880	874	861	855	850	871
75°	446	446	436	428	423	474
85°	73	83	83	85	83	101
90°	3	8	18	20	18	8
95°	95	335	1022	529	315	100
105°	309	477	1844	2720	2609	325
115°	544	665	1529	2960	3342	537
125°	745	853	1378	2326	2733	664
135°	893	999	1341	1878	2126	690
145°	1038	1116	1323	1608	1730	649
155°	1172	1218	1312	1442	1490	541
165°	1276	1288	1317	1368	1376	359
175°	1324	1323	1318	1336	1333	126
180°	1323	1323	1323	1323	1323	

TEST NUMBER: P520437

CATALOG NUMBER: SQ4-F-150U-125D-830-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2607.4	2607.4	2607.4	2607.4	2607.4
2.5°	2615.4	2610.9	2587.8	2607.3	2603.9
5°	2606.0	2601.7	2572.9	2595.8	2594.4
7.5°	2583.9	2578.5	2552.2	2573.7	2571.2
10°	2564.3	2560.0	2532.8	2554.3	2552.8
12.5°	2540.2	2536.0	2508.7	2530.1	2529.8
15°	2498.3	2492.6	2468.1	2489.6	2488.3
17.5°	2448.1	2441.7	2417.3	2434.4	2437.2
20°	2407.9	2403.7	2380.7	2396.5	2399.3
22.5°	2366.6	2361.2	2337.0	2355.1	2357.9
25°	2295.9	2291.8	2271.6	2284.6	2290.2
27.5°	2218.5	2218.5	2199.8	2209.1	2212.4
30°	2166.8	2166.8	2148.2	2154.0	2159.6
32.5°	2111.7	2107.2	2089.6	2094.3	2099.9
35°	2020.4	2019.0	2003.2	2003.2	2004.6
37.5°	1926.0	1922.1	1904.8	1906.1	1912.8
40°	1858.3	1855.4	1838.2	1838.3	1844.0
42.5°	1789.4	1786.6	1771.6	1769.4	1771.6
45°	1683.3	1679.0	1664.6	1661.9	1667.4
47.5°	1570.1	1571.3	1554.1	1550.2	1553.2
50°	1496.7	1496.7	1479.4	1470.9	1475.2
52.5°	1419.7	1417.5	1400.3	1390.7	1400.6
55°	1301.6	1297.3	1282.9	1273.0	1280.0
57.5°	1180.4	1174.0	1159.5	1148.6	1152.6
60°	1097.7	1087.9	1073.3	1064.8	1067.6
62.5°	1011.7	1006.3	990.7	977.6	983.8
65°	879.6	874.1	861.0	855.1	849.5
67.5°	750.2	746.6	731.9	725.7	722.0
70°	662.9	655.9	645.7	638.5	637.1
72.5°	578.0	569.9	559.7	553.5	549.8
75°	446.3	446.3	436.2	427.5	423.3
77.5°	320.9	322.0	313.7	310.7	308.8
80°	244.0	244.0	236.8	233.9	235.3
82.5°	170.5	173.8	171.4	167.2	165.3
85°	73.2	83.0	83.2	84.6	83.2
87.5°	13.2	22.2	25.5	23.5	21.0
90°	2.8	8.5	18.5	19.9	18.5
92.5°	40.4	147.4	290.7	126.3	91.4
95°	95.4	334.9	1022.4	529.1	314.7
97.5°	153.2	384.1	1593.7	1318.8	968.6
100°	196.5	404.0	1771.4	1847.4	1493.7
102.5°	236.4	431.6	1834.0	2248.1	1983.6
105°	309.0	477.4	1844.1	2720.1	2608.7
107.5°	376.2	530.0	1763.4	3014.5	3051.6
110°	428.7	567.9	1691.7	3093.6	3250.8

TEST NUMBER: P520437

CATALOG NUMBER: SQ4-F-150U-125D-830-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	475.3	605.6	1625.6	3077.8	3342.0
115°	543.9	665.1	1529.3	2960.5	3342.0
117.5°	611.1	724.8	1465.8	2781.5	3213.8
120°	652.2	763.5	1428.2	2652.9	3094.2
122.5°	690.9	800.1	1405.5	2515.2	2959.8
125°	744.7	853.4	1378.4	2326.0	2732.6
127.5°	794.3	901.0	1362.4	2171.7	2529.3
130°	821.6	931.6	1355.6	2076.4	2399.4
132.5°	850.1	959.0	1348.7	1990.3	2287.7
135°	892.8	998.6	1341.4	1878.2	2126.0
137.5°	935.9	1035.8	1335.1	1787.1	1988.9
140°	965.4	1058.7	1332.8	1728.5	1908.1
142.5°	993.9	1081.6	1328.3	1675.6	1832.9
145°	1038.1	1116.0	1322.9	1607.6	1730.1
147.5°	1078.2	1147.3	1316.6	1546.0	1640.2
150°	1107.8	1169.1	1314.3	1512.5	1587.7
152.5°	1135.2	1188.7	1313.2	1481.5	1543.3
155°	1171.9	1217.8	1311.5	1442.1	1489.5
157.5°	1210.1	1242.1	1311.7	1414.7	1445.9
160°	1231.7	1258.2	1312.9	1397.4	1419.6
162.5°	1248.8	1270.8	1314.0	1383.6	1400.3
165°	1275.9	1288.4	1317.1	1368.5	1375.6
167.5°	1294.4	1303.1	1317.4	1355.7	1359.0
170°	1305.8	1310.0	1318.5	1349.9	1349.9
172.5°	1314.9	1315.7	1318.5	1343.1	1342.0
175°	1324.3	1322.9	1318.5	1335.6	1332.8
177.5°	1327.4	1324.1	1318.3	1329.6	1326.3
180°	1322.9	1322.9	1322.9	1322.9	1322.9

(END OF REPORT)