

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: P520255

Luminaire Tested: **SQ4-F-100U-125D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520255
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-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

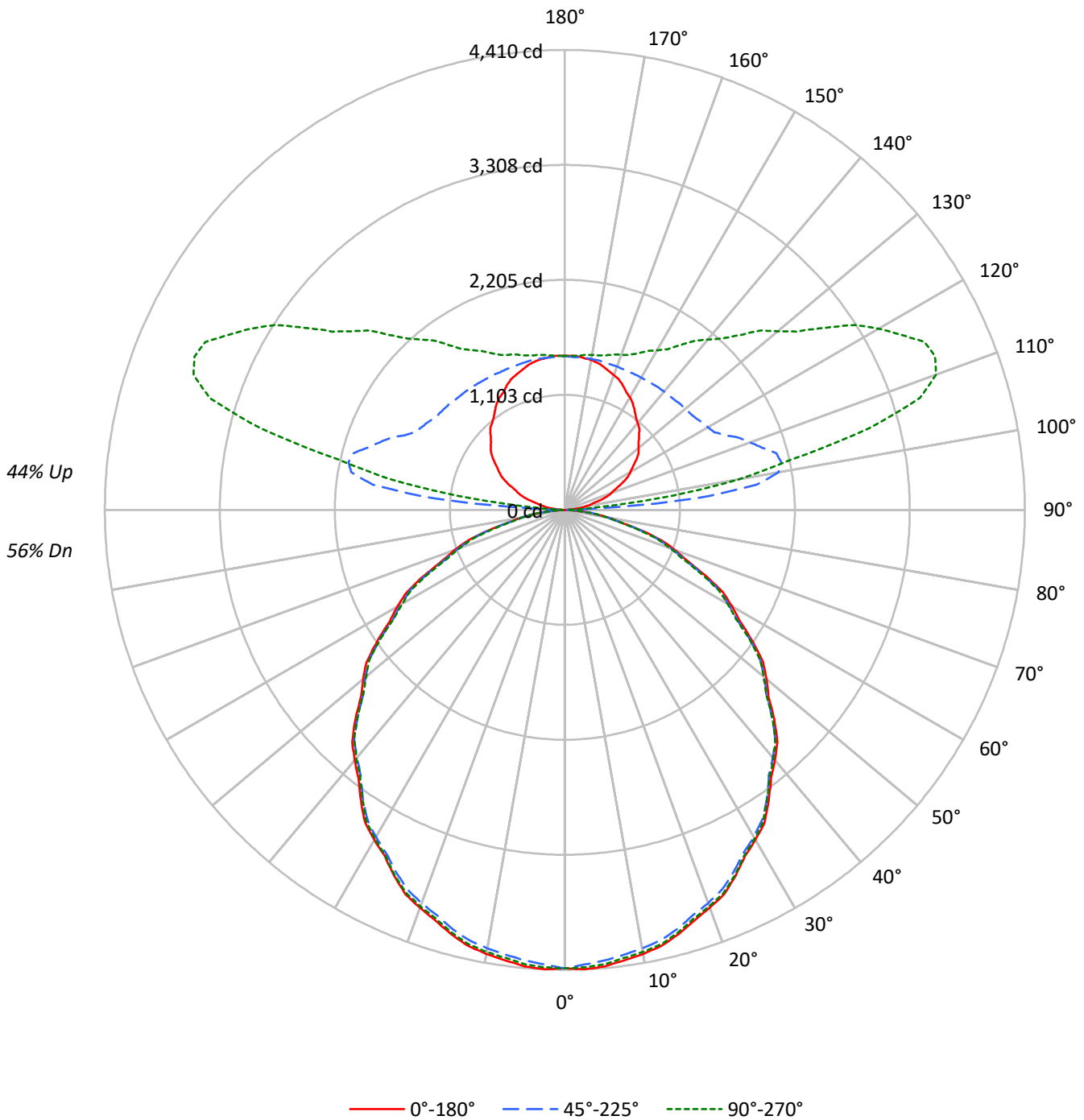
Lumens per Lamp: N/A
Luminaire Lumens: 21585.4 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 215.6
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	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°	13520	13520	13520
5°	13565	13393	13505
10°	13502	13336	13442
15°	13412	13250	13358
20°	13287	13137	13240
25°	13136	12997	13104
30°	12974	12862	12931
35°	12790	12681	12690
40°	12579	12443	12482
45°	12344	12207	12228
50°	12074	11935	11900
55°	11766	11598	11572
60°	11385	11132	11072
65°	10793	10565	10424
70°	10051	9790	9659
75°	8940	8740	8480
80°	7284	7070	7028
85°	4354	4954	4954



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	414.8	1.9
10°-20°	1181.4	5.5
20°-30°	1774.9	8.2
30°-40°	2117.8	9.8
40°-50°	2170.8	10.1
50°-60°	1934.9	9.0
60°-70°	1440.4	6.7
70°-80°	780.3	3.6
80°-90°	182.2	0.8
90°-100°	691.0	3.2
100°-110°	1907.8	8.8
110°-120°	1967.5	9.1
120°-130°	1581.1	7.3
130°-140°	1242.6	5.8
140°-150°	953.0	4.4
150°-160°	684.9	3.2
160°-170°	418.9	1.9
170°-180°	141.2	0.7
0°-30°	3371.1	15.6
0°-40°	5488.9	25.4
0°-60°	9594.5	44.4
0°-90°	11997.4	55.6
90°-120°	4566.4	21.2
90°-150°	8343.0	38.7
90°-180°	9588.0	44.4
0°-180°	21585.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4396	4396	4396	4396	4396	
5°	4394	4387	4338	4377	4374	417
15°	4212	4203	4162	4198	4196	1188
25°	3871	3864	3830	3852	3862	1783
35°	3407	3404	3378	3378	3380	2130
45°	2838	2831	2807	2802	2812	2187
55°	2194	2187	2163	2146	2158	1960
65°	1483	1474	1452	1442	1432	1469
75°	752	752	736	721	714	799
85°	123	140	140	143	140	171
90°	5	9	19	21	24	10
95°	102	374	1254	515	335	109
105°	340	525	2099	3204	3017	362
115°	609	736	1690	3347	3806	599
125°	836	951	1532	2593	3043	744
135°	1006	1114	1490	2100	2368	778
145°	1166	1247	1471	1788	1924	730
155°	1315	1359	1459	1604	1655	606
165°	1424	1442	1466	1523	1535	401
175°	1476	1478	1469	1490	1485	140
180°	1476	1476	1476	1476	1476	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4396.3	4396.3	4396.3	4396.3	4396.3
2.5°	4409.8	4402.3	4363.4	4396.1	4390.5
5°	4393.9	4386.8	4338.3	4376.9	4374.5
7.5°	4356.6	4347.6	4303.4	4339.6	4335.3
10°	4323.7	4316.6	4270.5	4306.7	4304.3
12.5°	4283.0	4275.9	4229.8	4266.1	4265.6
15°	4212.4	4203.0	4161.6	4197.8	4195.5
17.5°	4127.8	4116.8	4076.0	4104.6	4109.3
20°	4059.9	4052.9	4014.0	4040.7	4045.5
22.5°	3990.3	3981.3	3940.5	3971.1	3975.8
25°	3871.2	3864.1	3830.1	3852.1	3861.6
27.5°	3740.6	3740.6	3709.2	3724.8	3730.5
30°	3653.5	3653.5	3622.0	3631.9	3641.4
32.5°	3560.6	3553.0	3523.3	3531.3	3540.7
35°	3406.7	3404.3	3377.6	3377.8	3380.1
37.5°	3247.5	3240.8	3211.7	3213.9	3225.2
40°	3133.3	3128.5	3099.4	3099.6	3109.1
42.5°	3017.1	3012.4	2987.1	2983.4	2987.1
45°	2838.2	2831.1	2806.6	2802.1	2811.5
47.5°	2647.4	2649.3	2620.3	2613.7	2618.9
50°	2523.6	2523.6	2494.6	2480.2	2487.3
52.5°	2393.9	2390.1	2361.0	2344.9	2361.5
55°	2194.5	2187.4	2163.0	2146.4	2158.2
57.5°	1990.3	1979.4	1955.0	1936.7	1943.3
60°	1851.0	1834.4	1809.8	1795.4	1800.1
62.5°	1705.8	1696.8	1670.5	1648.4	1658.8
65°	1483.2	1473.8	1451.8	1441.8	1432.4
67.5°	1265.0	1258.8	1234.0	1223.6	1217.5
70°	1117.8	1106.0	1088.8	1076.7	1074.2
72.5°	974.6	960.9	943.6	933.3	927.2
75°	752.4	752.4	735.5	720.8	713.7
77.5°	541.0	542.9	529.0	524.0	520.6
80°	411.3	411.3	399.2	394.5	396.8
82.5°	287.4	293.1	288.9	282.1	278.7
85°	123.4	140.0	140.4	142.7	140.4
87.5°	22.3	36.5	40.6	37.2	33.9
90°	4.7	9.3	18.9	21.3	23.6
92.5°	42.5	176.4	315.5	115.1	89.7
95°	101.5	373.9	1253.7	515.4	335.2
97.5°	168.1	418.8	1857.2	1429.8	1035.5
100°	217.2	445.7	2080.0	2094.8	1702.3
102.5°	264.4	476.4	2123.6	2588.2	2216.0
105°	340.0	524.7	2098.9	3204.4	3017.4
107.5°	420.2	584.6	1981.9	3501.5	3569.9
110°	476.9	624.7	1891.2	3565.5	3787.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	527.9	670.1	1806.2	3515.0	3841.9
115°	609.2	736.1	1690.5	3346.6	3806.0
117.5°	680.0	806.5	1614.5	3109.6	3632.2
120°	727.2	851.8	1584.2	2949.1	3475.4
122.5°	772.6	891.7	1559.7	2799.3	3297.9
125°	835.8	951.2	1532.3	2593.2	3043.4
127.5°	889.6	1005.0	1516.3	2418.9	2807.3
130°	925.5	1041.0	1508.8	2312.4	2665.6
132.5°	959.5	1069.4	1501.1	2222.9	2542.9
135°	1005.8	1114.4	1489.9	2100.3	2368.1
137.5°	1057.8	1156.6	1484.1	1997.4	2226.0
140°	1086.1	1183.0	1480.4	1928.8	2129.7
142.5°	1118.2	1207.7	1476.6	1867.8	2044.6
145°	1166.4	1247.1	1471.0	1788.0	1924.2
147.5°	1212.6	1283.3	1465.7	1720.7	1826.5
150°	1246.6	1304.4	1463.8	1680.7	1766.1
152.5°	1273.0	1327.1	1462.0	1646.4	1717.0
155°	1315.1	1359.0	1459.1	1604.3	1655.1
157.5°	1353.8	1387.6	1459.6	1573.7	1608.4
160°	1376.5	1406.5	1461.5	1556.5	1581.9
162.5°	1395.4	1421.7	1463.4	1541.3	1561.1
165°	1423.7	1442.2	1466.2	1523.1	1534.7
167.5°	1445.4	1456.5	1468.6	1512.1	1515.8
170°	1456.7	1466.0	1468.6	1506.4	1506.4
172.5°	1466.2	1471.8	1468.6	1498.8	1496.9
175°	1475.6	1478.0	1468.6	1489.7	1485.1
177.5°	1479.5	1477.6	1468.1	1481.3	1477.5
180°	1475.6	1475.6	1475.6	1475.6	1475.6

(END OF REPORT)