

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: P520051

Luminaire Tested: **SQ4-F-075U-125D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520051
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-125D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

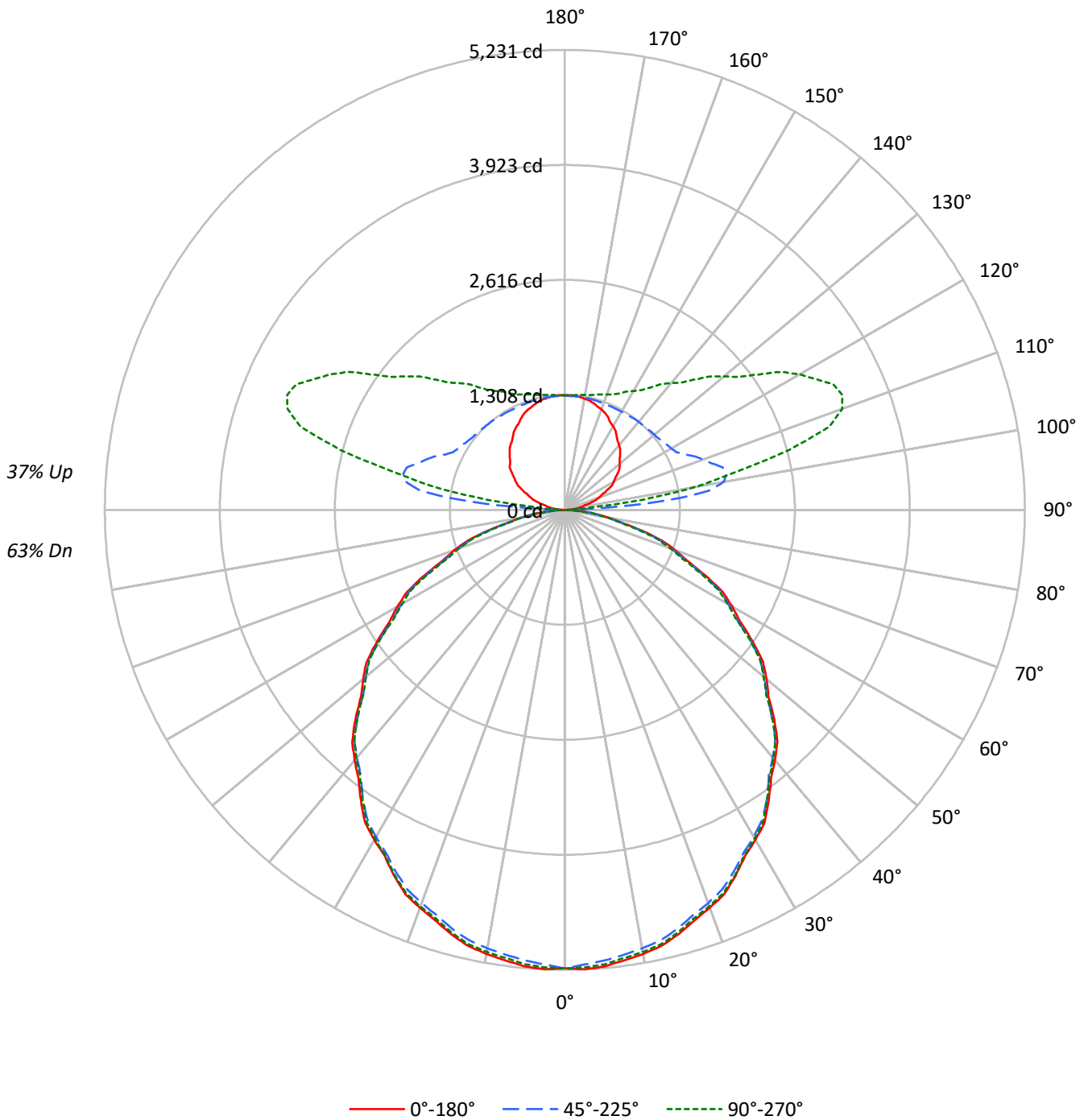
Lumens per Lamp: N/A
Luminaire Lumens: 22707.9 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 194.1
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	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68	63
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57	53
2	92	84	78	72	86	79	73	69	69	65	61	61	57	55	53	50	48	44
3	83	74	66	60	78	69	63	57	61	56	52	54	49	46	47	43	41	37
4	76	65	57	51	71	61	54	48	54	48	44	48	43	39	41	38	35	32
5	70	58	50	44	65	55	47	42	49	42	38	43	38	34	37	34	30	27
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27	24
7	60	47	39	33	56	45	37	32	40	34	29	35	30	26	31	27	24	21
8	55	43	35	29	52	41	33	28	36	30	26	32	27	24	28	24	21	19
9	52	39	31	26	48	37	30	25	33	27	23	30	25	21	26	22	19	17
10	48	36	28	24	45	34	27	23	31	25	21	27	23	19	24	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16038	16038	16038
5°	16090	15886	16019
10°	16016	15819	15944
15°	15908	15717	15845
20°	15761	15582	15705
25°	15582	15416	15543
30°	15389	15257	15339
35°	15171	15042	15052
40°	14921	14759	14806
45°	14642	14479	14504
50°	14321	14157	14116
55°	13957	13757	13726
60°	13504	13204	13134
65°	12802	12531	12364
70°	11922	11613	11458
75°	10606	10366	10060
80°	8641	8386	8336
85°	5166	5872	5872



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	492.0	2.2
10°-20°	1401.3	6.2
20°-30°	2105.3	9.3
30°-40°	2512.0	11.1
40°-50°	2574.9	11.3
50°-60°	2295.1	10.1
60°-70°	1708.5	7.5
70°-80°	925.6	4.1
80°-90°	215.8	1.0
90°-100°	613.7	2.7
100°-110°	1688.6	7.4
110°-120°	1742.9	7.7
120°-130°	1396.4	6.1
130°-140°	1096.8	4.8
140°-150°	840.5	3.7
150°-160°	604.3	2.7
160°-170°	369.5	1.6
170°-180°	124.6	0.5
0°-30°	3998.6	17.6
0°-40°	6510.7	28.7
0°-60°	11380.6	50.1
0°-90°	14230.5	62.7
90°-120°	4045.2	17.8
90°-150°	7379.0	32.5
90°-180°	8477.0	37.3
0°-180°	22707.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5215	5215	5215	5215	5215	
5°	5212	5203	5146	5192	5189	494
15°	4996	4985	4936	4979	4976	1409
25°	4592	4584	4543	4569	4580	2115
35°	4041	4038	4006	4006	4009	2527
45°	3366	3358	3329	3324	3335	2594
55°	2603	2595	2566	2546	2560	2325
65°	1759	1748	1722	1710	1699	1742
75°	893	893	872	855	847	948
85°	146	166	166	169	166	202
90°	3	11	19	25	25	10
95°	91	335	1085	464	296	97
105°	302	464	1861	2834	2644	318
115°	534	651	1492	2972	3372	527
125°	736	839	1354	2290	2683	657
135°	889	986	1315	1852	2096	686
145°	1027	1098	1296	1578	1700	644
155°	1163	1201	1288	1418	1459	534
165°	1257	1273	1293	1346	1354	354
175°	1301	1304	1296	1312	1310	124
180°	1301	1301	1301	1301	1301	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5214.8	5214.8	5214.8	5214.8	5214.8
2.5°	5230.8	5221.8	5175.6	5214.5	5207.9
5°	5211.8	5203.4	5145.8	5191.6	5188.9
7.5°	5167.6	5157.0	5104.5	5147.5	5142.4
10°	5128.6	5120.2	5065.5	5108.4	5105.6
12.5°	5080.4	5071.9	5017.2	5060.3	5059.7
15°	4996.5	4985.4	4936.3	4979.3	4976.5
17.5°	4896.1	4883.2	4834.7	4868.7	4874.3
20°	4815.8	4807.3	4761.2	4792.9	4798.6
22.5°	4733.1	4722.5	4674.0	4710.3	4715.9
25°	4591.9	4583.5	4543.1	4569.2	4580.5
27.5°	4437.0	4437.0	4399.7	4418.1	4424.9
30°	4333.6	4333.6	4296.3	4308.1	4319.3
32.5°	4223.4	4214.4	4179.2	4188.7	4199.9
35°	4040.9	4038.1	4006.4	4006.5	4009.3
37.5°	3852.1	3844.2	3809.6	3812.1	3825.6
40°	3716.6	3711.0	3676.4	3676.6	3687.9
42.5°	3578.8	3573.3	3543.3	3538.8	3543.3
45°	3366.5	3358.0	3329.1	3323.6	3334.9
47.5°	3140.3	3142.5	3108.2	3100.2	3106.4
50°	2993.3	2993.3	2959.0	2941.9	2950.4
52.5°	2839.6	2835.0	2800.5	2781.4	2801.1
55°	2603.0	2594.6	2565.7	2546.0	2560.0
57.5°	2360.8	2347.9	2318.9	2297.2	2305.1
60°	2195.5	2175.8	2146.7	2129.6	2135.3
62.5°	2023.3	2012.6	1981.4	1955.3	1967.6
65°	1759.3	1748.0	1722.0	1710.2	1699.1
67.5°	1500.4	1493.1	1463.7	1451.5	1444.2
70°	1325.9	1311.9	1291.5	1277.0	1274.3
72.5°	1156.0	1139.7	1119.3	1107.1	1099.8
75°	892.6	892.6	872.4	855.1	846.6
77.5°	641.8	644.0	627.4	621.6	617.6
80°	487.9	487.9	473.5	467.8	470.7
82.5°	340.9	347.6	342.7	334.6	330.6
85°	146.4	166.0	166.4	169.3	166.4
87.5°	25.8	43.3	47.6	44.1	39.6
90°	2.7	10.9	19.4	24.9	24.9
92.5°	38.2	163.2	283.0	108.7	89.1
95°	91.4	335.0	1085.3	464.1	296.3
97.5°	149.0	371.5	1656.2	1276.2	900.4
100°	191.0	394.1	1835.6	1852.9	1511.7
102.5°	230.9	421.0	1882.2	2298.7	1985.7
105°	301.7	464.2	1860.6	2833.6	2644.1
107.5°	369.3	517.7	1754.8	3095.6	3151.9
110°	418.0	553.4	1675.0	3160.8	3355.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	462.4	593.4	1595.3	3118.7	3415.5
115°	534.3	650.7	1492.3	2971.6	3372.3
117.5°	603.0	710.2	1427.0	2765.1	3218.4
120°	645.1	748.0	1398.2	2610.5	3078.8
122.5°	682.7	785.6	1378.3	2474.8	2919.3
125°	736.5	839.3	1353.9	2290.4	2682.9
127.5°	787.4	885.4	1337.9	2136.4	2480.8
130°	814.0	914.1	1329.0	2045.0	2358.9
132.5°	845.0	945.2	1322.3	1964.5	2248.2
135°	888.7	986.2	1315.2	1852.3	2095.9
137.5°	929.7	1020.2	1309.0	1761.6	1962.5
140°	960.7	1044.6	1306.9	1701.3	1882.7
142.5°	987.3	1064.8	1302.4	1647.6	1803.0
145°	1027.2	1097.5	1295.7	1578.2	1700.0
147.5°	1069.9	1130.5	1292.4	1516.7	1614.2
150°	1096.4	1150.6	1290.2	1483.0	1558.8
152.5°	1120.7	1170.6	1288.0	1453.9	1516.7
155°	1162.9	1200.7	1287.5	1418.5	1459.2
157.5°	1193.3	1224.2	1287.5	1389.4	1417.6
160°	1215.5	1239.9	1287.5	1373.8	1395.4
162.5°	1233.2	1253.3	1289.6	1360.4	1377.7
165°	1257.0	1273.2	1293.0	1345.8	1353.9
167.5°	1273.6	1286.0	1295.7	1333.5	1335.6
170°	1284.7	1292.8	1295.7	1329.0	1329.0
172.5°	1293.6	1297.4	1295.7	1322.3	1320.2
175°	1301.3	1304.0	1295.7	1312.3	1309.6
177.5°	1303.5	1303.5	1294.6	1307.8	1303.5
180°	1301.3	1301.3	1301.3	1301.3	1301.3

(END OF REPORT)