

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: P520071

Luminaire Tested: **SQ4-F-075U-125D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520071
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-940-1D-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

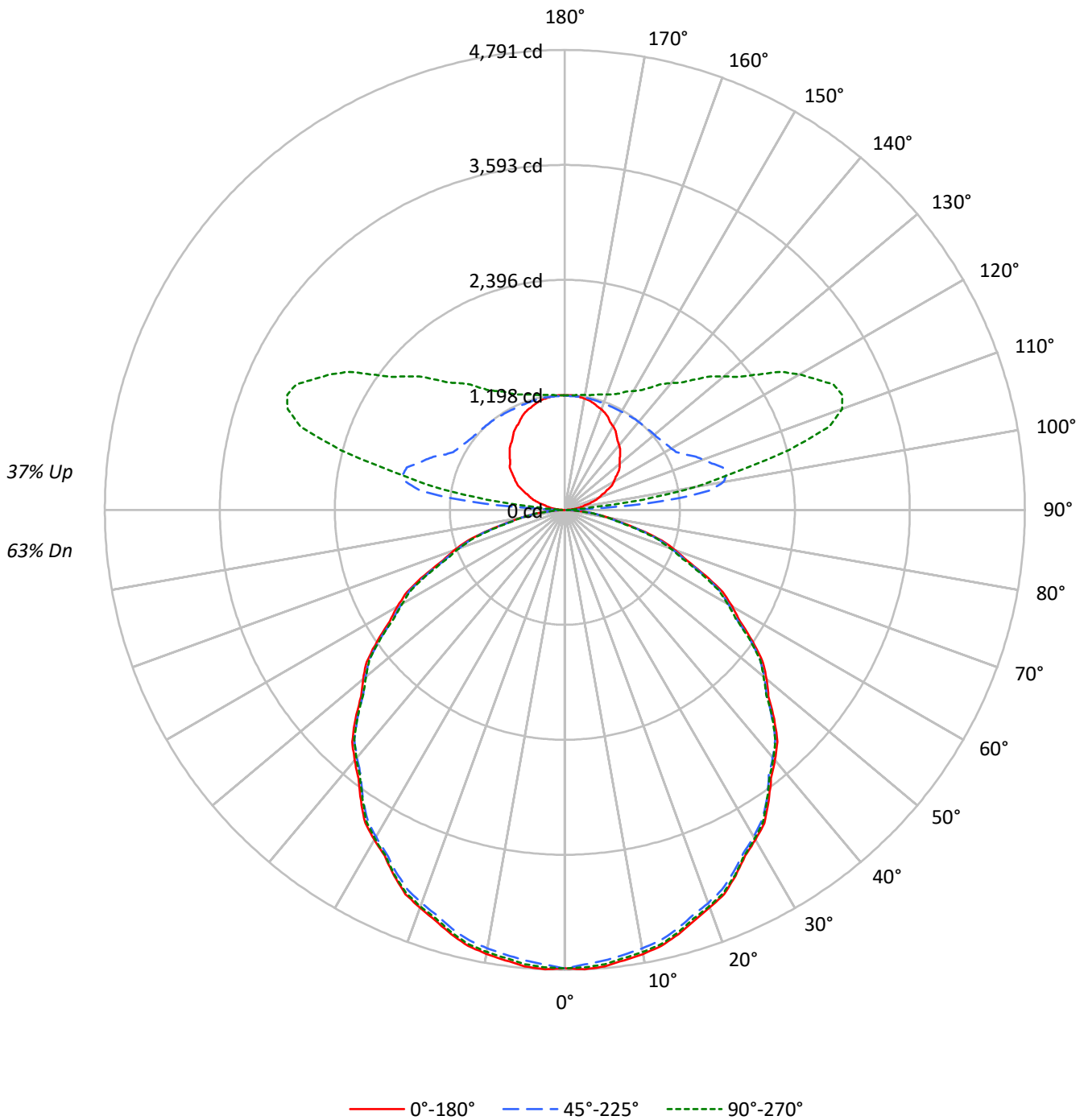
Lumens per Lamp: N/A
Luminaire Lumens: 20797.5 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

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°	14688	14688	14688
5°	14736	14549	14671
10°	14668	14488	14603
15°	14570	14394	14512
20°	14435	14272	14383
25°	14271	14119	14235
30°	14095	13973	14048
35°	13895	13776	13786
40°	13665	13518	13560
45°	13410	13261	13284
50°	13117	12965	12928
55°	12783	12599	12571
60°	12368	12093	12029
65°	11725	11477	11324
70°	10920	10636	10494
75°	9714	9495	9214
80°	7915	7681	7633
85°	4732	5378	5378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	450.6	2.2
10°-20°	1283.4	6.2
20°-30°	1928.2	9.3
30°-40°	2300.7	11.1
40°-50°	2358.3	11.3
50°-60°	2102.0	10.1
60°-70°	1564.8	7.5
70°-80°	847.7	4.1
80°-90°	197.7	1.0
90°-100°	562.1	2.7
100°-110°	1546.5	7.4
110°-120°	1596.3	7.7
120°-130°	1278.9	6.1
130°-140°	1004.5	4.8
140°-150°	769.8	3.7
150°-160°	553.5	2.7
160°-170°	338.4	1.6
170°-180°	114.1	0.5
0°-30°	3662.2	17.6
0°-40°	5962.9	28.7
0°-60°	10423.1	50.1
0°-90°	13033.3	62.7
90°-120°	3704.9	17.8
90°-150°	6758.2	32.5
90°-180°	7764.0	37.3
0°-180°	20797.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4776	4776	4776	4776	4776	
5°	4773	4766	4713	4755	4752	453
15°	4576	4566	4521	4560	4558	1290
25°	4206	4198	4161	4185	4195	1937
35°	3701	3698	3669	3669	3672	2314
45°	3083	3076	3049	3044	3054	2376
55°	2384	2376	2350	2332	2345	2129
65°	1611	1601	1577	1566	1556	1595
75°	818	818	799	783	775	868
85°	134	152	152	155	152	185
90°	2	10	18	23	23	9
95°	84	307	994	425	271	88
105°	276	425	1704	2595	2422	291
115°	490	596	1367	2722	3089	483
125°	674	769	1240	2098	2457	602
135°	814	903	1204	1696	1920	628
145°	941	1005	1187	1445	1557	590
155°	1065	1100	1179	1299	1336	489
165°	1151	1166	1184	1232	1240	324
175°	1192	1194	1187	1202	1200	113
180°	1192	1192	1192	1192	1192	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4776.0	4776.0	4776.0	4776.0	4776.0
2.5°	4790.7	4782.5	4740.2	4775.8	4769.7
5°	4773.4	4765.7	4712.9	4754.9	4752.3
7.5°	4732.8	4723.1	4675.1	4714.4	4709.7
10°	4697.1	4689.4	4639.3	4678.7	4676.1
12.5°	4653.0	4645.3	4595.2	4634.5	4634.0
15°	4576.2	4565.9	4521.0	4560.4	4557.8
17.5°	4484.2	4472.3	4428.0	4459.1	4464.2
20°	4410.6	4402.9	4360.7	4389.7	4394.8
22.5°	4334.9	4325.2	4280.8	4314.0	4319.1
25°	4205.6	4197.9	4160.9	4184.8	4195.1
27.5°	4063.7	4063.7	4029.4	4046.5	4052.7
30°	3969.0	3969.0	3934.9	3945.6	3955.9
32.5°	3868.1	3859.9	3827.7	3836.3	3846.5
35°	3701.0	3698.3	3669.3	3669.4	3672.0
37.5°	3528.0	3520.8	3489.0	3491.5	3503.8
40°	3403.9	3398.7	3367.1	3367.3	3377.6
42.5°	3277.7	3272.5	3245.2	3241.0	3245.2
45°	3083.2	3075.5	3049.1	3044.0	3054.3
47.5°	2876.1	2878.2	2846.7	2839.5	2845.0
50°	2741.6	2741.6	2709.9	2694.3	2702.1
52.5°	2600.6	2596.5	2564.9	2547.4	2565.4
55°	2384.1	2376.3	2349.8	2331.8	2344.6
57.5°	2162.2	2150.4	2123.8	2104.1	2111.3
60°	2010.8	1992.8	1966.1	1950.4	1955.6
62.5°	1853.1	1843.3	1814.7	1790.8	1802.1
65°	1611.3	1601.0	1577.1	1566.4	1556.1
67.5°	1374.2	1367.5	1340.6	1329.3	1322.6
70°	1214.4	1201.5	1182.8	1169.6	1167.1
72.5°	1058.7	1043.8	1025.1	1013.9	1007.2
75°	817.5	817.5	799.1	783.1	775.4
77.5°	587.7	589.8	574.6	569.3	565.6
80°	446.9	446.9	433.7	428.5	431.0
82.5°	312.3	318.4	313.9	306.4	302.8
85°	134.1	152.0	152.4	155.1	152.4
87.5°	23.6	39.6	43.6	40.3	36.3
90°	2.5	10.0	17.7	22.8	22.8
92.5°	35.0	149.6	259.2	99.5	81.7
95°	83.7	306.8	994.1	425.1	271.3
97.5°	136.4	340.2	1516.9	1168.8	824.7
100°	175.0	360.9	1681.2	1696.9	1384.5
102.5°	211.5	385.6	1723.8	2105.3	1818.6
105°	276.4	425.2	1704.1	2595.2	2421.6
107.5°	338.2	474.2	1607.1	2835.2	2886.7
110°	382.9	506.9	1534.2	2894.8	3073.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	423.4	543.4	1461.1	2856.4	3128.1
115°	489.5	596.1	1366.8	2721.6	3088.6
117.5°	552.2	650.4	1307.0	2532.5	2947.6
120°	590.9	685.1	1280.6	2390.8	2819.8
122.5°	625.3	719.5	1262.3	2266.6	2673.7
125°	674.5	768.7	1240.0	2097.7	2457.1
127.5°	721.2	811.0	1225.3	1956.6	2272.1
130°	745.5	837.3	1217.2	1872.9	2160.5
132.5°	773.9	865.6	1211.1	1799.2	2059.0
135°	814.0	903.3	1204.5	1696.4	1919.6
137.5°	851.6	934.3	1198.9	1613.4	1797.4
140°	879.9	956.8	1196.9	1558.2	1724.3
142.5°	904.3	975.2	1192.8	1508.9	1651.3
145°	940.8	1005.2	1186.8	1445.4	1557.0
147.5°	979.8	1035.3	1183.7	1389.1	1478.3
150°	1004.1	1053.7	1181.7	1358.2	1427.7
152.5°	1026.4	1072.1	1179.6	1331.6	1389.1
155°	1065.1	1099.7	1179.1	1299.1	1336.4
157.5°	1092.9	1121.2	1179.1	1272.5	1298.4
160°	1113.2	1135.5	1179.1	1258.2	1278.0
162.5°	1129.4	1147.8	1181.2	1245.9	1261.8
165°	1151.2	1166.1	1184.2	1232.5	1240.0
167.5°	1166.5	1177.9	1186.8	1221.3	1223.2
170°	1176.6	1184.0	1186.8	1217.2	1217.2
172.5°	1184.7	1188.2	1186.8	1211.0	1209.1
175°	1191.8	1194.3	1186.8	1201.9	1199.5
177.5°	1193.9	1193.9	1185.8	1197.8	1193.9
180°	1191.8	1191.8	1191.8	1191.8	1191.8

(END OF REPORT)