

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: P518583

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518583
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-125D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

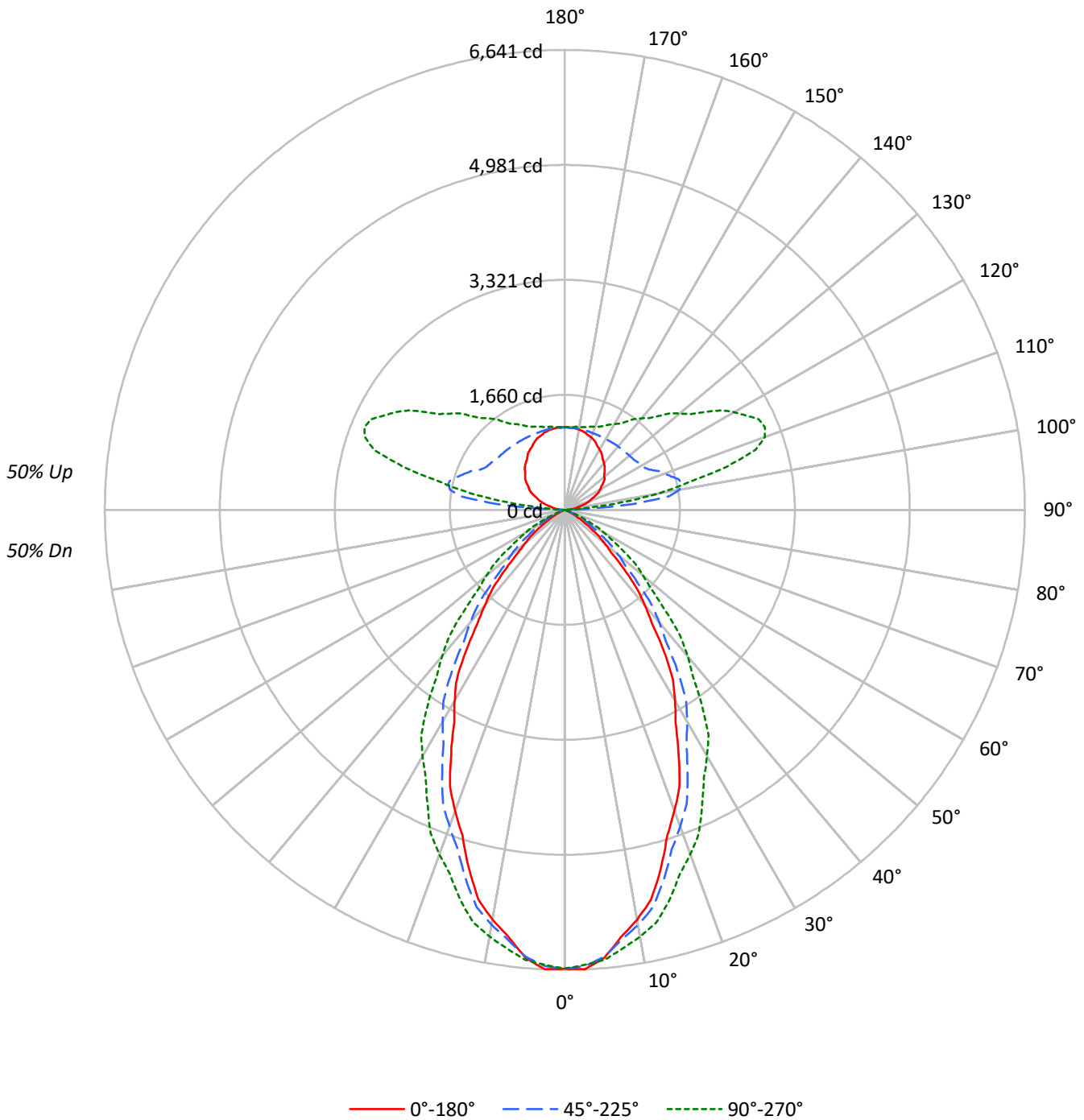
Lumens per Lamp: N/A
Luminaire Lumens: 15671.0 lumens
Efficiency: N/A
Efficacy: 80.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 194.8
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	57	57	57	50
1	100	96	93	90	92	89	86	84	76	74	72	64	63	61	53	52	51	46
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46	42
3	85	77	71	66	79	72	67	62	62	58	55	53	51	48	45	43	41	38
4	79	70	63	58	73	65	59	55	57	52	49	49	46	43	41	39	37	34
5	73	63	56	51	68	59	53	48	52	47	43	45	41	39	38	36	34	31
6	68	58	50	45	63	54	48	43	47	43	39	41	38	35	36	33	31	28
7	64	53	46	41	59	50	43	39	44	39	35	38	34	32	33	30	28	26
8	60	48	41	37	55	46	39	35	40	35	32	35	32	29	31	28	26	24
9	56	45	38	33	52	42	36	32	37	33	29	33	29	27	29	26	24	22
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20376	20376	20376
5°	20049	19999	20148
10°	18759	19009	19540
15°	17054	17595	18574
20°	15138	15925	17320
25°	13183	14227	15913
30°	11292	12533	14582
35°	9363	10638	12973
40°	7193	8506	11054
45°	5200	6441	8895
50°	3543	4800	7055
55°	2303	3472	5482
60°	1321	2445	3963
65°	350	1493	2006
70°	173	461	576
75°	76	38	0
80°	57	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	604.7	3.9
10°-20°	1546.3	9.9
20°-30°	1935.8	12.4
30°-40°	1788.1	11.4
40°-50°	1201.5	7.7
50°-60°	620.6	4.0
60°-70°	194.4	1.2
70°-80°	12.3	0.1
80°-90°	3.3	0.0
90°-100°	562.1	3.6
100°-110°	1546.5	9.9
110°-120°	1596.3	10.2
120°-130°	1279.0	8.2
130°-140°	1004.5	6.4
140°-150°	769.8	4.9
150°-160°	553.5	3.5
160°-170°	338.4	2.2
170°-180°	114.1	0.7
0°-30°	4086.8	26.1
0°-40°	5874.9	37.5
0°-60°	7696.9	49.1
0°-90°	7906.9	50.5
90°-120°	3704.9	23.6
90°-150°	6758.2	43.1
90°-180°	7764.0	49.5
0°-180°	15671.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6626	6626	6626	6626	6626	
5°	6494	6428	6478	6501	6526	602
15°	5356	5338	5526	5712	5834	1492
25°	3885	3916	4193	4480	4690	1781
35°	2494	2556	2834	3167	3456	1545
45°	1196	1268	1481	1769	2045	939
55°	430	502	648	831	1022	401
65°	48	92	205	248	276	81
75°	6	6	3	0	0	9
85°	0	0	0	0	0	1
90°	2	10	18	23	23	6
95°	84	307	994	425	271	88
105°	276	425	1704	2595	2422	291
115°	489	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	1233	1240	324
175°	1192	1194	1187	1202	1199	113
180°	1192	1192	1192	1192	1192	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6625.6	6625.6	6625.6	6625.6	6625.6
2.5°	6641.0	6578.3	6594.9	6594.5	6576.9
5°	6494.2	6428.4	6478.2	6501.2	6526.3
7.5°	6219.8	6168.4	6264.1	6335.8	6387.8
10°	6007.0	5963.1	6087.1	6184.9	6257.0
12.5°	5760.8	5727.0	5876.9	6011.0	6103.2
15°	5356.3	5337.5	5526.2	5711.7	5833.9
17.5°	4922.9	4922.3	5137.7	5368.0	5515.3
20°	4625.5	4634.9	4865.9	5119.8	5292.2
22.5°	4328.0	4349.9	4596.6	4861.4	5058.8
25°	3885.0	3916.3	4192.7	4479.6	4689.6
27.5°	3459.3	3505.1	3795.9	4094.0	4349.8
30°	3179.8	3233.1	3529.2	3842.9	4106.2
32.5°	2905.4	2968.7	3257.4	3589.1	3857.4
35°	2493.8	2556.5	2833.6	3167.1	3455.5
37.5°	2068.8	2130.2	2400.9	2729.1	3040.7
40°	1791.8	1860.8	2118.8	2436.9	2753.5
42.5°	1540.5	1609.5	1852.1	2164.7	2463.7
45°	1195.6	1267.7	1480.9	1769.3	2045.1
47.5°	909.7	988.1	1175.1	1436.0	1687.3
50°	740.5	818.8	1003.3	1233.2	1474.5
52.5°	604.5	680.4	846.9	1063.5	1284.7
55°	429.5	501.6	647.5	831.3	1022.5
57.5°	296.8	358.9	489.8	643.2	793.0
60°	214.8	274.3	397.5	522.1	644.3
62.5°	143.0	197.5	318.0	413.4	495.6
65°	48.1	92.0	205.1	247.5	275.7
67.5°	24.4	29.4	107.7	113.7	123.1
70°	19.2	19.2	51.3	54.7	64.1
72.5°	14.1	14.1	20.5	26.3	28.2
75°	6.4	6.4	3.2	0.0	0.0
77.5°	3.2	3.2	2.6	0.0	0.0
80°	3.2	3.2	0.0	0.0	0.0
82.5°	0.6	0.6	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	2.0	3.6	4.6	4.6
90°	2.5	10.0	17.8	22.8	22.8
92.5°	35.0	149.5	259.2	99.5	81.7
95°	83.7	306.8	994.0	425.1	271.3
97.5°	136.4	340.2	1516.9	1168.8	824.6
100°	175.0	360.9	1681.2	1696.9	1384.5
102.5°	211.5	385.5	1723.8	2105.3	1818.7
105°	276.4	425.2	1704.0	2595.2	2421.7
107.5°	338.3	474.1	1607.2	2835.2	2886.7
110°	382.9	506.9	1534.1	2894.8	3073.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	423.5	543.5	1461.1	2856.4	3128.1
115°	489.4	596.0	1366.8	2721.6	3088.6
117.5°	552.3	650.5	1306.9	2532.5	2947.6
120°	590.8	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	2457.2
127.5°	721.2	810.9	1225.3	1956.7	2272.1
130°	745.5	837.3	1217.2	1872.9	2160.5
132.5°	773.9	865.7	1211.1	1799.2	2059.1
135°	814.0	903.2	1204.5	1696.4	1919.6
137.5°	851.5	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	1509.0	1651.3
145°	940.8	1005.2	1186.7	1445.4	1557.0
147.5°	979.8	1035.4	1183.7	1389.1	1478.4
150°	1004.2	1053.8	1181.7	1358.2	1427.6
152.5°	1026.5	1072.1	1179.6	1331.6	1389.1
155°	1065.0	1099.7	1179.1	1299.2	1336.4
157.5°	1092.9	1121.2	1179.1	1272.5	1298.3
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	1232.6	1240.0
167.5°	1166.5	1177.9	1186.7	1221.3	1223.3
170°	1176.6	1184.0	1186.7	1217.2	1217.2
172.5°	1184.7	1188.2	1186.7	1211.0	1209.1
175°	1191.8	1194.3	1186.7	1201.9	1199.4
177.5°	1193.8	1193.8	1185.7	1197.8	1193.8
180°	1191.8	1191.8	1191.8	1191.8	1191.8

(END OF REPORT)