

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: P518563

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518563  
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-830-1D-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

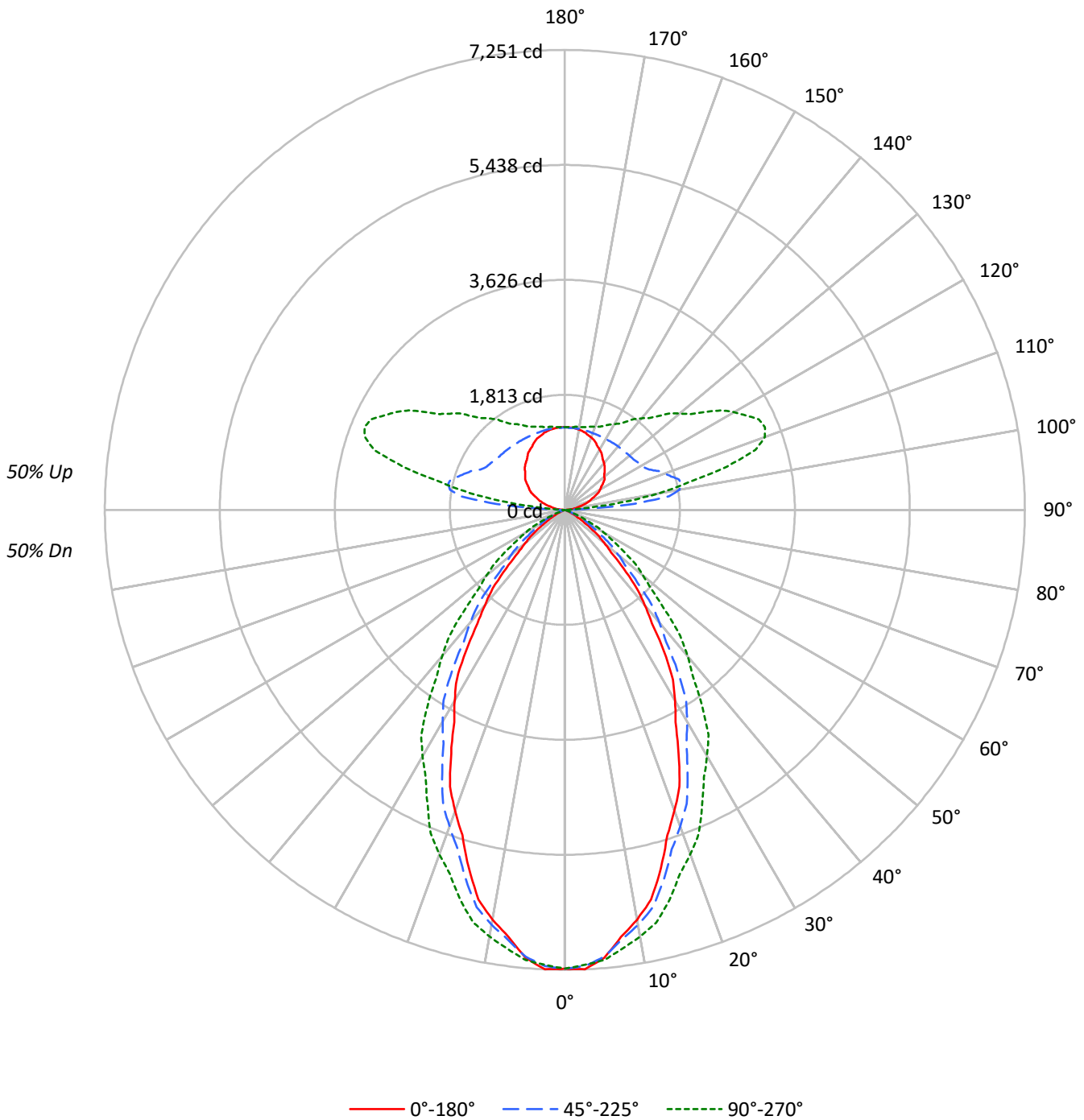
Lumens per Lamp: N/A  
Luminaire Lumens: 17110.6 lumens  
Efficiency: N/A  
Efficacy: 87.8 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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



TEST NUMBER: P518563  
CATALOG NUMBER: SQ4-BB-075U-125D-830-1D-UNV-STD-W-12

### Luminous Intensity Polar Plot





TEST NUMBER: P518563

CATALOG NUMBER: SQ4-BB-075U-125D-830-1D-UNV-STD-W-12

**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	50	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°	22248	22248	22248
5°	21890	21836	21998
10°	20482	20755	21335
15°	18620	19211	20281
20°	16528	17388	18911
25°	14394	15534	17375
30°	12329	13684	15921
35°	10223	11616	14165
40°	7854	9287	12070
45°	5678	7033	9711
50°	3868	5241	7703
55°	2515	3791	5986
60°	1442	2669	4327
65°	382	1630	2190
70°	189	504	629
75°	83	42	0
80°	62	0	0
85°	0	0	0



TEST NUMBER: P518563

CATALOG NUMBER: SQ4-BB-075U-125D-830-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	660.2	3.9
10°-20°	1688.4	9.9
20°-30°	2113.7	12.4
30°-40°	1952.3	11.4
40°-50°	1311.9	7.7
50°-60°	677.6	4.0
60°-70°	212.2	1.2
70°-80°	13.4	0.1
80°-90°	3.6	0.0
90°-100°	613.7	3.6
100°-110°	1688.6	9.9
110°-120°	1742.9	10.2
120°-130°	1396.4	8.2
130°-140°	1096.8	6.4
140°-150°	840.5	4.9
150°-160°	604.3	3.5
160°-170°	369.5	2.2
170°-180°	124.6	0.7
0°-30°	4462.2	26.1
0°-40°	6414.5	37.5
0°-60°	8404.0	49.1
0°-90°	8633.2	50.5
90°-120°	4045.3	23.6
90°-150°	7379.0	43.1
90°-180°	8477.0	49.5
0°-180°	17110.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7234	7234	7234	7234	7234	
5°	7091	7019	7073	7098	7126	657
15°	5848	5828	6034	6236	6370	1629
25°	4242	4276	4578	4891	5120	1945
35°	2723	2791	3094	3458	3773	1687
45°	1306	1384	1617	1932	2233	1025
55°	469	548	707	908	1116	438
65°	52	100	224	270	301	89
75°	7	7	4	0	0	10
85°	0	0	0	0	0	1
90°	3	11	19	25	25	6
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	

TEST NUMBER: P518563

CATALOG NUMBER: SQ4-BB-075U-125D-830-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7234.3	7234.3	7234.3	7234.3	7234.3
2.5°	7251.1	7182.6	7200.7	7200.2	7181.1
5°	7090.8	7018.9	7073.3	7098.4	7125.8
7.5°	6791.2	6735.1	6839.5	6917.8	6974.6
10°	6558.8	6510.9	6646.3	6753.1	6831.8
12.5°	6290.0	6253.1	6416.7	6563.2	6663.8
15°	5848.3	5827.8	6033.8	6236.3	6369.8
17.5°	5375.1	5374.5	5609.6	5861.1	6021.9
20°	5050.3	5060.6	5312.8	5590.1	5778.3
22.5°	4725.6	4749.5	5018.8	5307.9	5523.5
25°	4241.9	4276.1	4577.9	4891.1	5120.3
27.5°	3777.1	3827.0	4144.6	4470.1	4749.4
30°	3471.9	3530.1	3853.4	4195.9	4483.4
32.5°	3172.3	3241.4	3556.6	3918.8	4211.8
35°	2722.9	2791.4	3093.9	3458.1	3772.9
37.5°	2258.8	2325.9	2621.4	2979.8	3320.0
40°	1956.4	2031.7	2313.4	2660.8	3006.4
42.5°	1682.0	1757.3	2022.2	2363.5	2690.0
45°	1305.5	1384.2	1617.0	1931.8	2232.9
47.5°	993.3	1078.8	1283.1	1567.9	1842.3
50°	808.5	894.0	1095.5	1346.4	1610.0
52.5°	660.1	742.9	924.7	1161.2	1402.8
55°	469.0	547.7	707.0	907.7	1116.5
57.5°	324.1	391.8	534.8	702.3	865.9
60°	234.5	299.5	434.0	570.0	703.5
62.5°	156.1	215.6	347.2	451.4	541.1
65°	52.5	100.4	224.0	270.2	301.0
67.5°	26.6	32.1	117.6	124.1	134.4
70°	21.0	21.0	56.0	59.7	70.0
72.5°	15.4	15.4	22.4	28.7	30.8
75°	7.0	7.0	3.5	0.0	0.0
77.5°	3.5	3.5	2.8	0.0	0.0
80°	3.5	3.5	0.0	0.0	0.0
82.5°	0.7	0.7	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	2.2	3.9	5.0	5.0
90°	2.8	10.9	19.4	24.9	24.9
92.5°	38.2	163.3	283.0	108.6	89.2
95°	91.4	335.0	1085.3	464.1	296.3
97.5°	149.0	371.5	1656.2	1276.1	900.4
100°	191.0	394.1	1835.7	1852.8	1511.7
102.5°	230.9	421.0	1882.2	2298.7	1985.7
105°	301.8	464.2	1860.6	2833.6	2644.1
107.5°	369.3	517.7	1754.8	3095.6	3151.9
110°	418.1	553.4	1675.1	3160.8	3355.7

TEST NUMBER: P518563

CATALOG NUMBER: SQ4-BB-075U-125D-830-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	462.4	593.4	1595.3	3118.8	3415.5
115°	534.4	650.8	1492.3	2971.6	3372.3
117.5°	603.0	710.2	1427.0	2765.2	3218.4
120°	645.1	748.0	1398.2	2610.5	3078.8
122.5°	682.8	785.6	1378.3	2474.8	2919.3
125°	736.5	839.4	1353.9	2290.3	2682.9
127.5°	787.4	885.4	1337.8	2136.4	2480.8
130°	814.0	914.2	1329.0	2044.9	2358.9
132.5°	845.0	945.2	1322.3	1964.5	2248.2
135°	888.8	986.2	1315.1	1852.3	2095.9
137.5°	929.7	1020.2	1309.0	1761.6	1962.5
140°	960.7	1044.7	1306.8	1701.3	1882.7
142.5°	987.3	1064.7	1302.4	1647.6	1803.0
145°	1027.2	1097.6	1295.8	1578.2	1700.0
147.5°	1069.8	1130.5	1292.4	1516.7	1614.2
150°	1096.4	1150.6	1290.2	1483.0	1558.8
152.5°	1120.8	1170.6	1288.0	1453.9	1516.7
155°	1162.9	1200.8	1287.5	1418.5	1459.1
157.5°	1193.3	1224.2	1287.5	1389.4	1417.6
160°	1215.5	1239.8	1287.5	1373.8	1395.4
162.5°	1233.2	1253.2	1289.7	1360.4	1377.7
165°	1257.0	1273.2	1293.0	1345.8	1353.9
167.5°	1273.6	1286.1	1295.8	1333.5	1335.6
170°	1284.7	1292.8	1295.8	1329.0	1329.0
172.5°	1293.5	1297.3	1295.8	1322.3	1320.1
175°	1301.3	1304.0	1295.8	1312.3	1309.6
177.5°	1303.5	1303.5	1294.7	1307.8	1303.5
180°	1301.3	1301.3	1301.3	1301.3	1301.3

(END OF REPORT)