

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: P518507

Luminaire Tested: **SQ4-BB-075U-050D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518507  
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-050D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

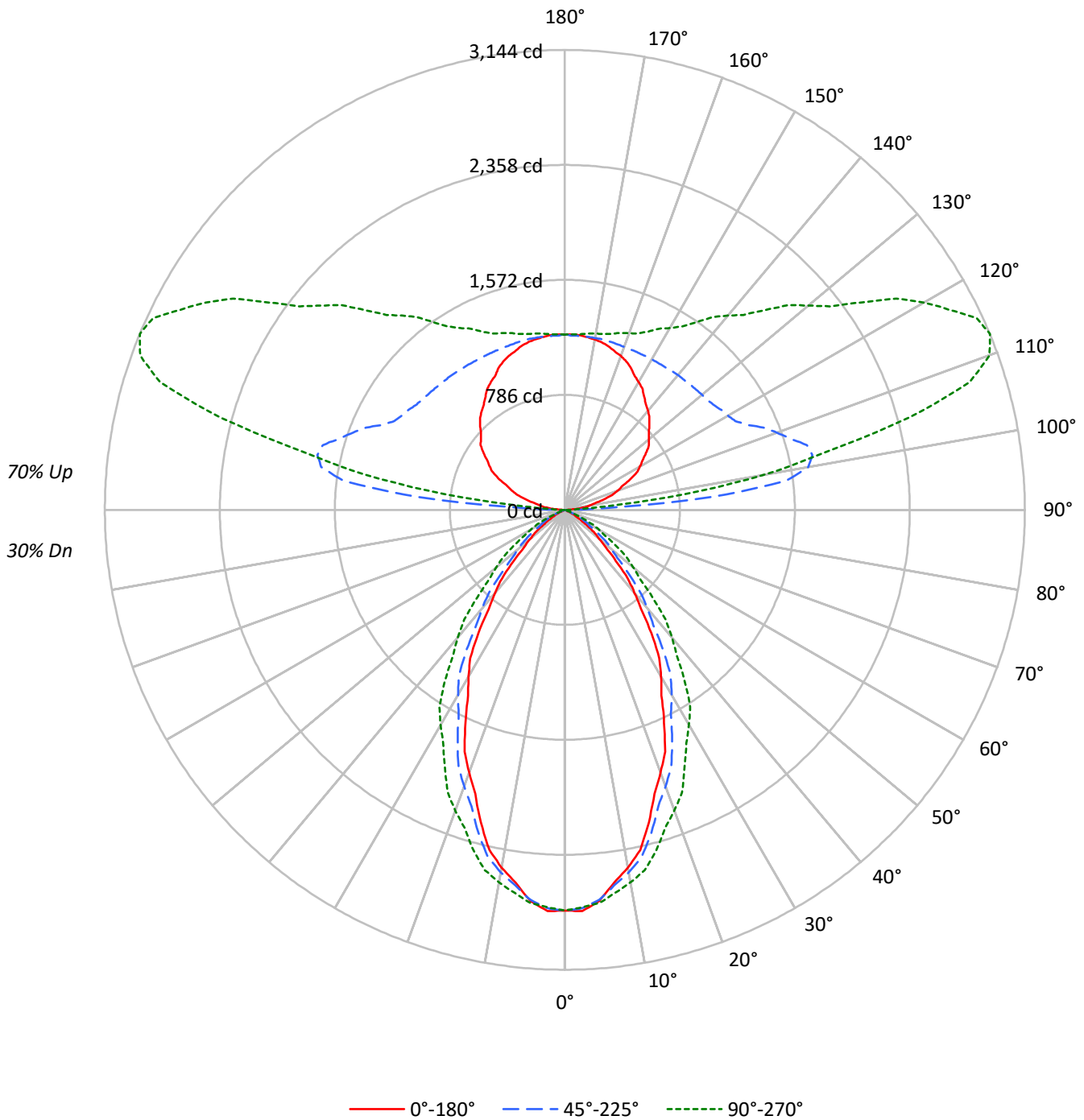
Lumens per Lamp: N/A  
Luminaire Lumens: 11074.2 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 107.4  
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: P518507  
CATALOG NUMBER: SQ4-BB-075U-050D-935-1D-UNV-STD-W-12

### Luminous Intensity Polar Plot





TEST NUMBER: P518507

CATALOG NUMBER: SQ4-BB-075U-050D-935-1D-UNV-STD-W-12

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20			
RC	80				70				50				30				10			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30		
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27		
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24		
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22		
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20		
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18		
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16		
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15		
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14		
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13		
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8423	8423	8423
5°	8288	8267	8329
10°	7755	7858	8077
15°	7050	7273	7678
20°	6258	6583	7160
25°	5450	5881	6578
30°	4668	5181	6028
35°	3870	4398	5363
40°	2974	3516	4569
45°	2150	2663	3677
50°	1465	1984	2916
55°	952	1435	2266
60°	546	1011	1638
65°	145	617	830
70°	72	191	238
75°	32	15	0
80°	23	0	0
85°	0	0	0



TEST NUMBER: P518507

CATALOG NUMBER: SQ4-BB-075U-050D-935-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	250.0	2.3
10°-20°	639.2	5.8
20°-30°	800.2	7.2
30°-40°	739.2	6.7
40°-50°	496.7	4.5
50°-60°	256.6	2.3
60°-70°	80.3	0.7
70°-80°	5.1	0.0
80°-90°	3.1	0.0
90°-100°	565.0	5.1
100°-110°	1554.4	14.0
110°-120°	1604.4	14.5
120°-130°	1285.5	11.6
130°-140°	1009.6	9.1
140°-150°	773.7	7.0
150°-160°	556.3	5.0
160°-170°	340.2	3.1
170°-180°	114.7	1.0
0°-30°	1689.4	15.3
0°-40°	2428.6	21.9
0°-60°	3181.8	28.7
0°-90°	3270.4	29.5
90°-120°	3723.8	33.6
90°-150°	6792.7	61.3
90°-180°	7804.0	70.5
0°-180°	11074.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2739	2739	2739	2739	2739	
5°	2685	2657	2678	2688	2698	249
15°	2214	2206	2284	2361	2412	617
25°	1606	1619	1733	1852	1939	736
35°	1031	1057	1171	1309	1428	639
45°	494	524	612	731	845	388
55°	178	207	268	344	423	166
65°	20	38	85	102	114	34
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	2	10	18	23	23	6
95°	84	308	999	427	273	89
105°	278	427	1713	2608	2434	293
115°	492	599	1374	2736	3104	485
125°	678	773	1246	2108	2470	605
135°	818	908	1211	1705	1929	631
145°	946	1010	1193	1453	1565	593
155°	1070	1105	1185	1306	1343	492
165°	1157	1172	1190	1239	1246	326
175°	1198	1200	1193	1208	1206	114
180°	1198	1198	1198	1198	1198	



TEST NUMBER: P518507

CATALOG NUMBER: SQ4-BB-075U-050D-935-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2738.9	2738.9	2738.9	2738.9	2738.9
2.5°	2745.3	2719.4	2726.2	2726.0	2718.8
5°	2684.6	2657.4	2678.0	2687.5	2697.9
7.5°	2571.2	2549.9	2589.5	2619.1	2640.6
10°	2483.2	2465.1	2516.3	2556.7	2586.5
12.5°	2381.4	2367.4	2429.4	2484.9	2522.9
15°	2214.2	2206.4	2284.4	2361.1	2411.6
17.5°	2035.1	2034.8	2123.8	2219.0	2279.9
20°	1912.1	1916.0	2011.5	2116.4	2187.7
22.5°	1789.1	1798.2	1900.2	2009.6	2091.2
25°	1606.0	1618.9	1733.2	1851.8	1938.6
27.5°	1430.0	1448.9	1569.2	1692.4	1798.1
30°	1314.5	1336.5	1458.9	1588.6	1697.4
32.5°	1201.0	1227.2	1346.5	1483.7	1594.6
35°	1030.9	1056.8	1171.4	1309.2	1428.4
37.5°	855.2	880.6	992.5	1128.2	1257.0
40°	740.7	769.2	875.9	1007.4	1138.2
42.5°	636.8	665.3	765.6	894.9	1018.5
45°	494.3	524.1	612.2	731.4	845.4
47.5°	376.1	408.4	485.8	593.6	697.5
50°	306.1	338.5	414.7	509.8	609.5
52.5°	249.9	281.3	350.1	439.6	531.1
55°	177.6	207.4	267.7	343.7	422.7
57.5°	122.7	148.4	202.5	265.9	327.8
60°	88.8	113.4	164.3	215.8	266.3
62.5°	59.1	81.6	131.4	170.9	204.9
65°	19.9	38.0	84.8	102.3	114.0
67.5°	10.1	12.1	44.5	47.0	50.9
70°	8.0	8.0	21.2	22.6	26.5
72.5°	5.8	5.8	8.5	10.9	11.7
75°	2.7	2.7	1.3	0.0	0.0
77.5°	1.3	1.3	1.1	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	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	22.9	22.9
92.5°	35.2	150.3	260.5	100.0	82.1
95°	84.1	308.4	999.1	427.2	272.7
97.5°	137.1	342.0	1524.6	1174.7	828.8
100°	175.9	362.8	1689.8	1705.6	1391.6
102.5°	212.6	387.5	1732.6	2116.0	1827.9
105°	277.8	427.3	1712.7	2608.5	2434.0
107.5°	340.0	476.6	1615.4	2849.6	2901.5
110°	384.9	509.5	1542.0	2909.6	3089.0



TEST NUMBER: P518507

CATALOG NUMBER: SQ4-BB-075U-050D-935-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	425.6	546.3	1468.6	2871.0	3144.1
115°	491.9	599.1	1373.8	2735.5	3104.3
117.5°	555.1	653.8	1313.6	2545.5	2962.6
120°	593.9	688.6	1287.1	2403.0	2834.2
122.5°	628.5	723.2	1268.8	2278.2	2687.4
125°	678.0	772.7	1246.3	2108.4	2469.7
127.5°	724.9	815.1	1231.5	1966.7	2283.7
130°	749.3	841.5	1223.4	1882.4	2171.5
132.5°	777.9	870.1	1217.3	1808.4	2069.6
135°	818.1	907.9	1210.6	1705.1	1929.4
137.5°	855.9	939.1	1205.0	1621.6	1806.5
140°	884.4	961.7	1203.0	1566.2	1733.1
142.5°	908.9	980.1	1198.9	1516.7	1659.7
145°	945.6	1010.4	1192.8	1452.8	1564.9
147.5°	984.8	1040.6	1189.7	1396.2	1485.9
150°	1009.3	1059.1	1187.7	1365.2	1434.9
152.5°	1031.7	1077.6	1185.7	1338.4	1396.2
155°	1070.5	1105.4	1185.2	1305.8	1343.2
157.5°	1098.5	1126.9	1185.2	1279.0	1304.9
160°	1118.9	1141.3	1185.2	1264.6	1284.6
162.5°	1135.2	1153.6	1187.2	1252.3	1268.2
165°	1157.1	1172.1	1190.3	1238.8	1246.3
167.5°	1172.4	1183.9	1192.8	1227.5	1229.5
170°	1182.6	1190.1	1192.8	1223.4	1223.4
172.5°	1190.8	1194.3	1192.8	1217.2	1215.2
175°	1197.9	1200.4	1192.8	1208.0	1205.5
177.5°	1199.9	1199.9	1191.8	1203.9	1199.9
180°	1197.9	1197.9	1197.9	1197.9	1197.9

(END OF REPORT)