

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: P518411

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518411
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

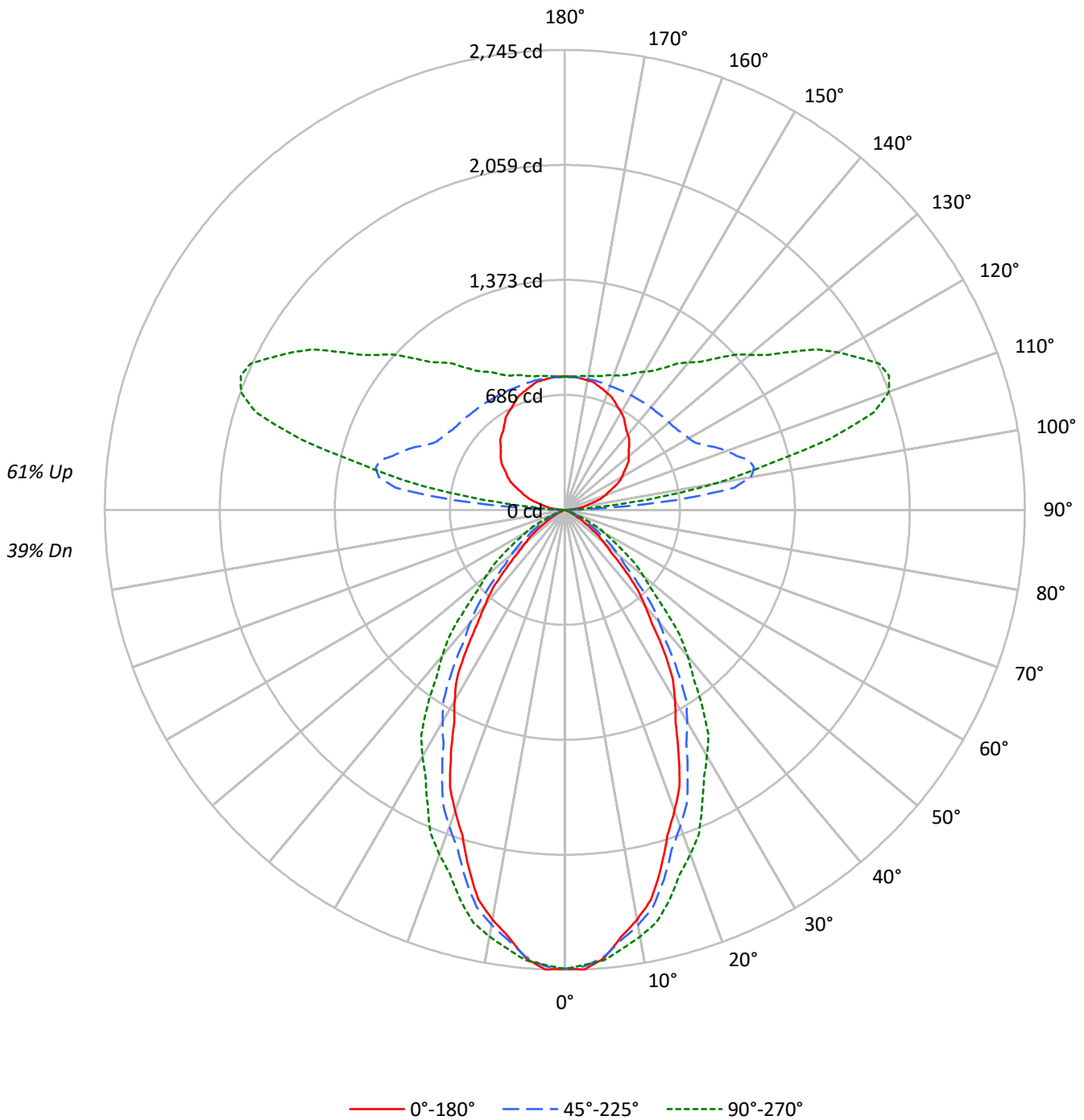
Lumens per Lamp: N/A
Luminaire Lumens: 8462.7 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 79.6
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: P518411
CATALOG NUMBER: SQ4-BB-050U-050D-935-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P518411

CATALOG NUMBER: SQ4-BB-050U-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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	97	93	90	87	88	85	82	79	69	68	66	55	54	53	42	42	41	35
2	89	83	77	73	81	76	71	67	63	59	57	50	48	47	39	38	37	32
3	82	74	68	63	75	68	62	58	56	53	49	46	43	41	36	34	33	29
4	76	66	60	54	69	61	55	51	51	47	43	42	39	37	33	31	30	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	33	31	29	27	24
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	25	22
7	61	50	42	37	55	46	40	35	39	34	31	32	29	27	26	24	22	20
8	56	45	38	33	52	42	36	32	36	31	28	30	27	24	25	22	21	18
9	53	42	35	30	48	39	33	29	33	29	25	28	25	22	23	21	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	22	19	18	16

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: P518411

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.0	3.0
10°-20°	639.2	7.6
20°-30°	800.2	9.5
30°-40°	739.2	8.7
40°-50°	496.7	5.9
50°-60°	256.6	3.0
60°-70°	80.3	0.9
70°-80°	5.1	0.1
80°-90°	3.2	0.0
90°-100°	381.7	4.5
100°-110°	1037.0	12.3
110°-120°	1066.3	12.6
120°-130°	852.5	10.1
130°-140°	669.8	7.9
140°-150°	513.6	6.1
150°-160°	369.4	4.4
160°-170°	225.9	2.7
170°-180°	76.1	0.9
0°-30°	1689.4	20.0
0°-40°	2428.6	28.7
0°-60°	3181.8	37.6
0°-90°	3270.4	38.6
90°-120°	2485.0	29.4
90°-150°	4521.0	53.4
90°-180°	5192.0	61.4
0°-180°	8462.7	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°	3	10	18	23	23	4
95°	56	209	665	289	194	60
105°	184	287	1140	1736	1634	196
115°	327	397	913	1816	2069	323
125°	450	512	826	1392	1642	401
135°	542	602	803	1134	1278	419
145°	626	672	793	963	1036	393
155°	708	733	788	865	890	327
165°	767	777	790	823	826	217
175°	795	798	793	803	800	76
180°	795	795	795	795	795	

TEST NUMBER: P518411

CATALOG NUMBER: SQ4-BB-050U-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°	2.6	10.1	17.9	23.0	23.0
92.5°	23.0	104.5	181.5	78.0	66.0
95°	56.3	208.8	664.8	289.3	194.3
97.5°	93.1	230.6	1019.2	792.9	556.9
100°	117.6	245.1	1127.6	1143.1	923.1
102.5°	142.2	259.7	1156.3	1413.7	1219.7
105°	184.1	286.6	1140.4	1736.4	1633.9
107.5°	227.6	318.1	1074.5	1903.1	1931.6
110°	258.3	340.8	1025.4	1935.9	2058.4

TEST NUMBER: P518411

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.9	363.4	976.3	1908.7	2093.2
115°	327.3	397.3	912.9	1816.1	2068.6
117.5°	367.2	434.2	872.5	1684.9	1969.4
120°	393.8	458.8	854.0	1596.9	1879.4
122.5°	416.3	481.3	841.8	1508.7	1781.2
125°	450.0	512.5	825.9	1391.6	1641.6
127.5°	480.2	542.2	817.2	1302.8	1517.3
130°	498.6	558.6	813.1	1247.1	1439.6
132.5°	517.0	577.0	809.0	1199.5	1370.0
135°	542.1	602.1	802.9	1133.5	1278.5
137.5°	569.2	623.7	799.8	1075.2	1197.2
140°	585.6	638.1	797.8	1038.1	1148.1
142.5°	601.9	650.4	795.7	1009.0	1101.0
145°	626.5	671.5	792.7	963.1	1035.6
147.5°	654.1	692.6	790.1	926.9	983.9
150°	672.5	705.0	790.1	906.2	951.2
152.5°	686.8	715.3	788.1	887.6	924.6
155°	708.3	733.3	787.6	864.8	889.8
157.5°	729.3	748.8	787.6	849.4	868.4
160°	741.5	759.0	787.6	839.0	854.0
162.5°	753.8	767.3	789.6	830.8	841.8
165°	767.1	777.1	790.1	823.4	825.9
167.5°	780.9	785.9	792.7	814.7	816.7
170°	785.0	790.0	792.7	810.6	810.6
172.5°	789.1	792.1	792.7	806.5	806.5
175°	795.2	797.7	792.7	802.8	800.3
177.5°	797.3	797.3	791.1	799.2	795.2
180°	795.2	795.2	795.2	795.2	795.2

(END OF REPORT)