

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: P518916

Luminaire Tested: **SQ4-BB-150U-075D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518916
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-075D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

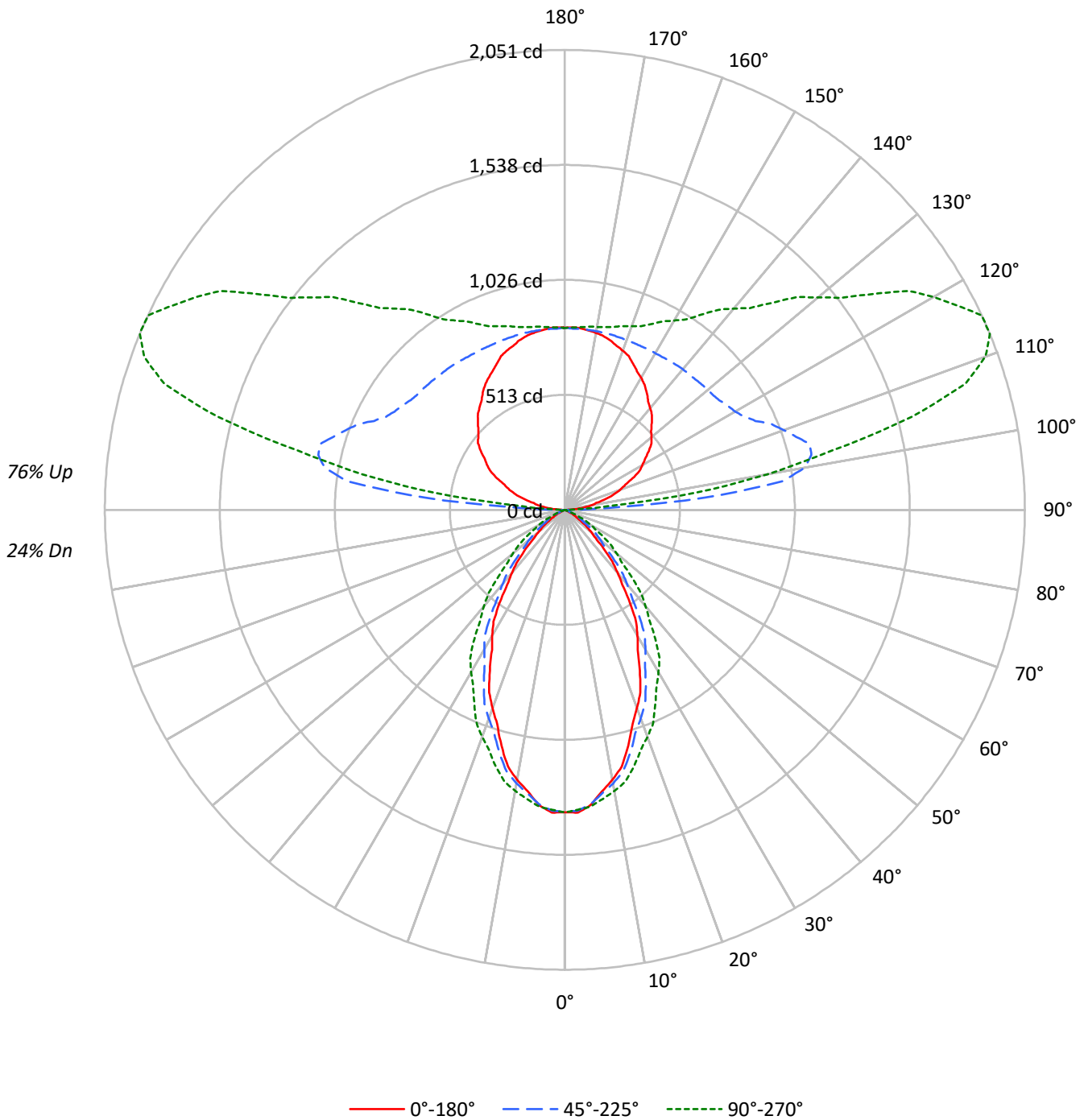
Lumens per Lamp: N/A
Luminaire Lumens: 6844.3 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63.5
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: P518916
CATALOG NUMBER: SQ4-BB-150U-075D-935-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P518916

CATALOG NUMBER: SQ4-BB-150U-075D-935-1D-UNV-STD-W-4

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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	24
1	93	89	85	82	82	79	76	74	61	59	58	45	44	43	29	29	28	21
2	85	79	73	69	76	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	23	23	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	30	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	18	20	17	15	14	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12441	12441	12441
5°	12240	12209	12300
10°	11453	11606	11929
15°	10411	10742	11340
20°	9242	9722	10574
25°	8048	8686	9715
30°	6894	7651	8902
35°	5716	6495	7920
40°	4391	5193	6748
45°	3175	3933	5431
50°	2163	2931	4307
55°	1406	2120	3347
60°	806	1493	2419
65°	214	910	1225
70°	105	281	351
75°	46	25	0
80°	37	0	0
85°	0	0	0



TEST NUMBER: P518916

CATALOG NUMBER: SQ4-BB-150U-075D-935-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	1.8
10°-20°	314.7	4.6
20°-30°	393.9	5.8
30°-40°	363.9	5.3
40°-50°	244.5	3.6
50°-60°	126.3	1.8
60°-70°	39.5	0.6
70°-80°	2.5	0.0
80°-90°	1.7	0.0
90°-100°	377.3	5.5
100°-110°	1020.1	14.9
110°-120°	1072.5	15.7
120°-130°	871.2	12.7
130°-140°	683.3	10.0
140°-150°	524.5	7.7
150°-160°	377.2	5.5
160°-170°	230.4	3.4
170°-180°	77.7	1.1
0°-30°	831.7	12.2
0°-40°	1195.6	17.5
0°-60°	1566.4	22.9
0°-90°	1610.2	23.5
90°-120°	2469.9	36.1
90°-150°	4548.9	66.5
90°-180°	5234.0	76.5
0°-180°	6844.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1348	1348	1348	1348	1348	
5°	1322	1308	1318	1323	1328	123
15°	1090	1086	1125	1162	1187	304
25°	791	797	853	912	954	362
35°	508	520	577	644	703	314
45°	243	258	301	360	416	191
55°	87	102	132	169	208	82
65°	10	19	42	50	56	17
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	2	5	11	12	11	4
95°	58	206	627	325	193	61
105°	190	293	1132	1669	1601	200
115°	334	408	938	1817	2051	330
125°	457	524	846	1428	1677	407
135°	548	613	823	1153	1305	423
145°	637	685	812	987	1062	399
155°	719	747	805	885	914	332
165°	783	791	808	840	844	221
175°	813	812	809	820	818	77
180°	812	812	812	812	812	



TEST NUMBER: P518916

CATALOG NUMBER: SQ4-BB-150U-075D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1348.4	1348.4	1348.4	1348.4	1348.4
2.5°	1351.5	1338.7	1342.1	1342.0	1338.4
5°	1321.6	1308.2	1318.3	1323.0	1328.1
7.5°	1265.8	1255.3	1274.8	1289.4	1299.9
10°	1222.5	1213.5	1238.8	1258.7	1273.3
12.5°	1172.4	1165.5	1196.0	1223.3	1242.0
15°	1090.0	1086.2	1124.6	1162.4	1187.2
17.5°	1001.8	1001.7	1045.5	1092.4	1122.4
20°	941.3	943.2	990.2	1041.9	1077.0
22.5°	880.8	885.2	935.4	989.3	1029.5
25°	790.6	797.0	853.2	911.6	954.3
27.5°	704.0	713.3	772.5	833.2	885.2
30°	647.1	657.9	718.2	782.0	835.6
32.5°	591.3	604.1	662.9	730.4	785.0
35°	507.5	520.3	576.7	644.5	703.2
37.5°	421.0	433.5	488.6	555.4	618.8
40°	364.6	378.7	431.2	495.9	560.3
42.5°	313.5	327.5	376.9	440.5	501.4
45°	243.3	258.0	301.4	360.1	416.2
47.5°	185.1	201.1	239.1	292.2	343.4
50°	150.7	166.6	204.2	251.0	300.1
52.5°	123.0	138.5	172.3	216.4	261.5
55°	87.4	102.1	131.8	169.2	208.1
57.5°	60.4	73.0	99.7	130.9	161.4
60°	43.7	55.8	80.9	106.2	131.1
62.5°	29.1	40.2	64.7	84.1	100.8
65°	9.8	18.7	41.7	50.4	56.1
67.5°	5.0	6.0	21.9	23.1	25.0
70°	3.9	3.9	10.4	11.1	13.0
72.5°	2.9	2.9	4.2	5.4	5.7
75°	1.3	1.3	0.7	0.0	0.0
77.5°	0.7	0.7	0.5	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.0	2.3	2.4	2.3
90°	1.7	5.2	11.4	12.2	11.4
92.5°	24.8	90.4	178.4	77.5	56.1
95°	58.5	205.5	627.4	324.7	193.1
97.5°	94.0	235.7	978.0	809.4	594.4
100°	120.6	247.9	1087.1	1133.7	916.7
102.5°	145.1	264.9	1125.6	1379.7	1217.3
105°	189.6	293.0	1131.7	1669.3	1600.9
107.5°	230.9	325.2	1082.2	1850.0	1872.7
110°	263.0	348.5	1038.2	1898.5	1995.1



TEST NUMBER: P518916

CATALOG NUMBER: SQ4-BB-150U-075D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	291.7	371.7	997.6	1888.8	2051.0
115°	333.8	408.2	938.5	1816.9	2051.0
117.5°	375.1	444.8	899.6	1706.9	1972.3
120°	400.2	468.6	876.5	1628.1	1898.9
122.5°	424.0	491.0	862.5	1543.5	1816.4
125°	457.0	523.7	845.9	1427.5	1677.0
127.5°	487.4	552.9	836.1	1332.8	1552.2
130°	504.2	571.7	831.9	1274.2	1472.5
132.5°	521.7	588.5	827.7	1221.5	1404.0
135°	547.9	612.9	823.2	1152.6	1304.7
137.5°	574.3	635.7	819.3	1096.7	1220.6
140°	592.5	649.7	817.9	1060.8	1171.0
142.5°	610.0	663.8	815.2	1028.3	1124.9
145°	637.1	684.9	811.8	986.6	1061.8
147.5°	661.7	704.1	808.0	948.8	1006.5
150°	679.9	717.5	806.6	928.2	974.4
152.5°	696.7	729.5	805.9	909.2	947.1
155°	719.2	747.4	804.8	885.0	914.1
157.5°	742.6	762.3	805.0	868.2	887.3
160°	755.9	772.1	805.7	857.6	871.3
162.5°	766.4	779.9	806.4	849.1	859.4
165°	783.0	790.7	808.3	839.9	844.2
167.5°	794.4	799.7	808.5	832.0	834.0
170°	801.3	803.9	809.2	828.4	828.4
172.5°	806.9	807.4	809.2	824.2	823.5
175°	812.7	811.8	809.2	819.7	817.9
177.5°	814.6	812.6	809.0	816.0	813.9
180°	811.8	811.8	811.8	811.8	811.8

(END OF REPORT)