

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

Brand: CORELITE

Report Number: P521303

Luminaire Tested: SQ4-BB-150U-075D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521303
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-150U-075D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8556.8 lumens
Efficiency: N/A
Efficacy: 103.0 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

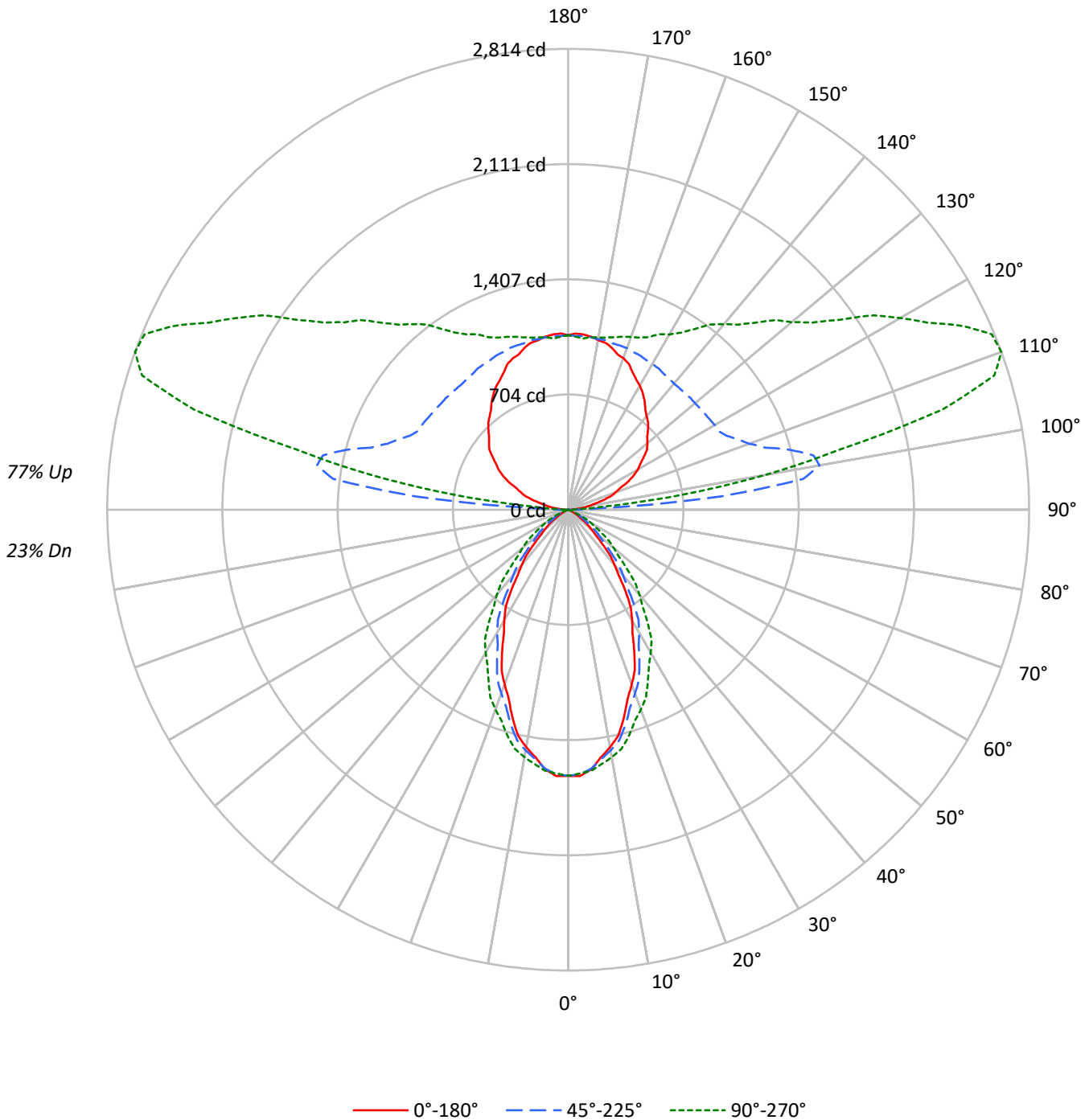
Input Watts (W): 83.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23
1	92	89	85	82	82	79	76	74	61	59	57	44	43	42	29	28	28	21
2	85	78	73	68	75	70	65	62	54	51	49	40	38	36	26	25	25	19
3	78	70	63	58	69	62	57	52	48	45	42	36	34	32	24	23	22	17
4	72	62	55	50	64	56	50	45	44	40	36	32	30	28	22	21	20	15
5	66	56	48	43	59	50	44	39	39	35	32	29	27	25	20	19	18	14
6	61	50	43	37	54	45	39	34	36	31	28	27	24	22	19	17	16	13
7	56	45	38	33	50	41	35	30	32	28	25	25	22	20	17	16	14	12
8	52	41	34	29	47	37	31	27	30	25	22	23	20	18	16	14	13	11
9	49	38	31	26	44	34	28	24	27	23	20	21	18	16	15	13	12	10
10	46	35	28	24	41	31	26	22	25	21	18	19	17	15	14	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14991	14991	14991
5°	14750	14713	14822
10°	13801	13984	14375
15°	12546	12944	13665
20°	11137	11716	12742
25°	9698	10467	11707
30°	8308	9221	10728
35°	6889	7827	9544
40°	5292	6258	8132
45°	3826	4739	6543
50°	2607	3531	5190
55°	1694	2554	4034
60°	972	1799	2915
65°	258	1098	1476
70°	127	340	424
75°	57	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6543 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.3	1.7
10°-20°	379.2	4.4
20°-30°	474.7	5.5
30°-40°	438.5	5.1
40°-50°	294.6	3.4
50°-60°	152.2	1.8
60°-70°	47.7	0.6
70°-80°	3.0	0.0
80°-90°	0.1	0.0
90°-100°	485.5	5.7
100°-110°	1381.5	16.1
110°-120°	1323.6	15.5
120°-130°	1047.6	12.2
130°-140°	840.8	9.8
140°-150°	658.3	7.7
150°-160°	481.7	5.6
160°-170°	298.3	3.5
170°-180°	101.2	1.2
0°-30°	1002.2	11.7
0°-40°	1440.7	16.8
0°-60°	1887.5	22.1
0°-90°	1938.3	22.7
90°-120°	3190.6	37.3
90°-150°	5737.2	67.0
90°-180°	6618.0	77.3
0°-180°	8556.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1625	1625	1625	1625	1625	
5°	1593	1576	1589	1594	1600	148
15°	1314	1309	1355	1401	1431	366
25°	953	960	1028	1098	1150	437
35°	612	627	695	777	847	379
45°	293	311	363	434	502	230
55°	105	123	159	204	251	98
65°	12	23	50	61	68	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	53	209	940	325	200	60
105°	215	326	1408	2487	2364	227
115°	399	482	1068	2262	2656	393
125°	563	624	1019	1691	2022	504
135°	689	746	1007	1428	1614	531
145°	812	854	1015	1236	1347	507
155°	928	950	1039	1117	1163	429
165°	1025	1029	1051	1074	1090	288
175°	1074	1068	1064	1057	1049	102
180°	1066	1066	1066	1066	1066	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1624.8	1624.8	1624.8	1624.8	1624.8
2.5°	1628.6	1613.2	1617.3	1617.2	1612.9
5°	1592.6	1576.4	1588.6	1594.3	1600.4
7.5°	1525.3	1512.7	1536.1	1553.7	1566.5
10°	1473.1	1462.3	1492.7	1516.7	1534.4
12.5°	1412.7	1404.4	1441.2	1474.1	1496.7
15°	1313.5	1308.9	1355.2	1400.7	1430.6
17.5°	1207.2	1207.1	1259.9	1316.4	1352.5
20°	1134.3	1136.6	1193.3	1255.5	1297.8
22.5°	1061.4	1066.7	1127.2	1192.2	1240.6
25°	952.7	960.4	1028.2	1098.5	1150.0
27.5°	848.3	859.5	930.9	1004.0	1066.7
30°	779.8	792.8	865.5	942.4	1007.0
32.5°	712.5	728.0	798.8	880.2	946.0
35°	611.6	626.9	694.9	776.7	847.4
37.5°	507.3	522.4	588.8	669.3	745.7
40°	439.4	456.3	519.6	597.6	675.2
42.5°	377.8	394.7	454.2	530.8	604.2
45°	293.2	310.9	363.2	433.9	501.5
47.5°	223.1	242.3	288.2	352.1	413.8
50°	181.6	200.8	246.0	302.4	361.6
52.5°	148.3	166.9	207.7	260.8	315.1
55°	105.3	123.0	158.8	203.9	250.8
57.5°	72.8	88.0	120.1	157.7	194.5
60°	52.7	67.3	97.5	128.0	158.0
62.5°	35.1	48.4	78.0	101.4	121.5
65°	11.8	22.6	50.3	60.7	67.6
67.5°	6.0	7.2	26.4	27.9	30.2
70°	4.7	4.7	12.6	13.4	15.7
72.5°	3.5	3.5	5.0	6.5	6.9
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.2	85.9	199.3	58.0	43.8
95°	52.7	209.1	939.9	325.3	200.5
97.5°	96.8	245.0	1447.5	1035.8	709.8
100°	127.6	266.3	1557.7	1577.8	1215.4
102.5°	161.6	289.2	1533.4	2019.7	1703.2
105°	214.7	325.6	1407.8	2486.7	2363.9
107.5°	268.6	368.0	1261.2	2618.4	2727.7
110°	305.9	399.0	1176.9	2568.0	2813.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	341.5	429.9	1120.2	2448.9	2799.0
115°	399.1	482.2	1067.5	2261.5	2655.6
117.5°	449.7	527.7	1036.3	2056.6	2474.1
120°	490.2	555.6	1033.1	1939.5	2339.6
122.5°	522.6	588.0	1025.0	1836.8	2208.4
125°	563.1	624.5	1018.9	1690.8	2021.6
127.5°	607.3	664.7	1015.7	1603.6	1876.1
130°	630.0	687.4	1010.8	1542.9	1780.5
132.5°	654.3	710.1	1010.8	1495.4	1714.1
135°	688.7	746.2	1006.7	1428.3	1614.4
137.5°	721.1	777.0	1006.3	1371.4	1532.2
140°	745.4	802.9	1004.7	1324.2	1478.7
142.5°	773.0	820.9	1009.6	1286.6	1425.2
145°	812.3	853.9	1014.8	1236.1	1347.0
147.5°	845.9	886.3	1023.8	1185.2	1281.0
150°	875.1	902.8	1027.0	1168.3	1235.6
152.5°	897.8	927.1	1030.2	1145.5	1208.1
155°	927.7	949.5	1039.2	1117.2	1162.7
157.5°	965.0	978.1	1041.2	1104.3	1136.8
160°	984.5	994.4	1049.3	1094.5	1122.2
162.5°	995.8	1007.3	1050.9	1086.2	1107.6
165°	1025.0	1028.9	1051.3	1073.9	1089.8
167.5°	1044.8	1041.3	1060.6	1070.9	1077.2
170°	1051.3	1049.3	1057.4	1059.6	1067.5
172.5°	1065.9	1059.2	1062.2	1056.3	1062.6
175°	1073.6	1067.6	1063.5	1057.2	1049.3
177.5°	1076.8	1067.3	1062.2	1055.8	1057.4
180°	1065.5	1065.5	1065.5	1065.5	1065.5

(END OF REPORT)