

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: P521307

Luminaire Tested: SQ4-BB-150U-075D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521307
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_5700K
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 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9079.3 lumens
Efficiency: N/A
Efficacy: 109.7 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

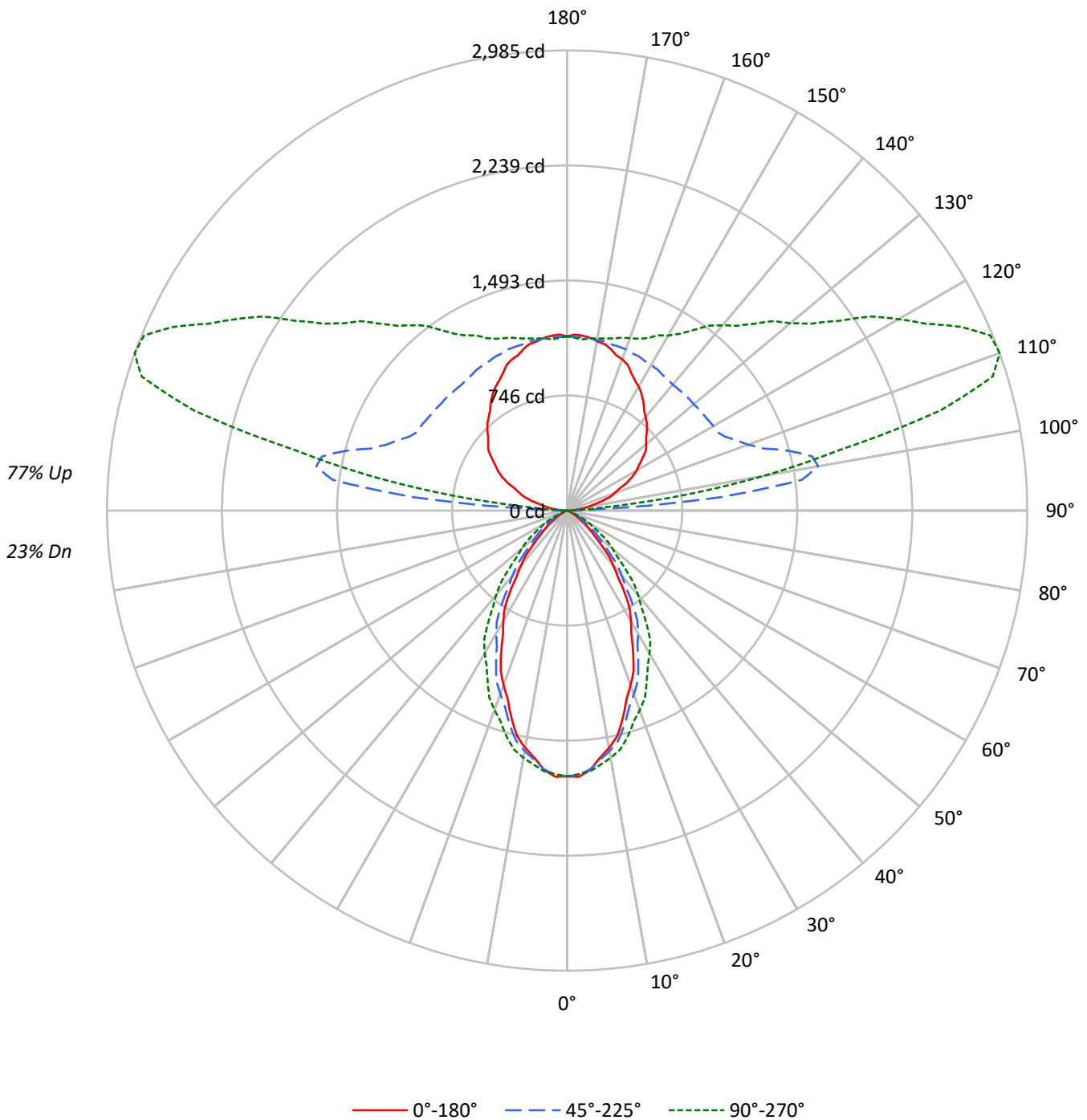
Input Watts (W): 82.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	15906	15906	15906
5°	15650	15612	15728
10°	14644	14839	15253
15°	13312	13734	14499
20°	11817	12431	13521
25°	10291	11106	12423
30°	8815	9783	11383
35°	7309	8304	10127
40°	5615	6640	8629
45°	4059	5027	6943
50°	2766	3748	5507
55°	1798	2710	4280
60°	1031	1908	3093
65°	273	1166	1565
70°	135	359	450
75°	61	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6943 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.3	1.7
10°-20°	402.4	4.4
20°-30°	503.7	5.5
30°-40°	465.3	5.1
40°-50°	312.6	3.4
50°-60°	161.5	1.8
60°-70°	50.6	0.6
70°-80°	3.2	0.0
80°-90°	0.1	0.0
90°-100°	515.2	5.7
100°-110°	1465.8	16.1
110°-120°	1404.4	15.5
120°-130°	1111.5	12.2
130°-140°	892.2	9.8
140°-150°	698.5	7.7
150°-160°	511.1	5.6
160°-170°	316.6	3.5
170°-180°	107.4	1.2
0°-30°	1063.4	11.7
0°-40°	1528.7	16.8
0°-60°	2002.8	22.1
0°-90°	2056.6	22.7
90°-120°	3385.4	37.3
90°-150°	6087.6	67.0
90°-180°	7023.0	77.4
0°-180°	9079.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1724	1724	1724	1724	1724	
5°	1690	1673	1686	1692	1698	157
15°	1394	1389	1438	1486	1518	388
25°	1011	1019	1091	1166	1220	463
35°	649	665	737	824	899	402
45°	311	330	385	460	532	244
55°	112	130	168	216	266	104
65°	12	24	53	64	72	21
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	56	222	997	345	213	64
105°	228	346	1494	2639	2508	241
115°	423	512	1133	2400	2818	417
125°	598	663	1081	1794	2145	535
135°	731	792	1068	1516	1713	564
145°	862	906	1077	1312	1429	538
155°	984	1008	1103	1185	1234	455
165°	1088	1092	1116	1140	1156	306
175°	1139	1133	1128	1122	1113	108
180°	1131	1131	1131	1131	1131	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1724.0	1724.0	1724.0	1724.0	1724.0
2.5°	1728.0	1711.7	1716.0	1715.9	1711.4
5°	1689.8	1672.7	1685.7	1691.7	1698.2
7.5°	1618.4	1605.1	1629.9	1648.6	1662.1
10°	1563.1	1551.6	1583.9	1609.4	1628.1
12.5°	1499.0	1490.2	1529.2	1564.1	1588.1
15°	1393.7	1388.8	1437.9	1486.2	1518.0
17.5°	1281.0	1280.8	1336.9	1396.8	1435.1
20°	1203.6	1206.0	1266.1	1332.2	1377.1
22.5°	1126.2	1131.9	1196.1	1265.0	1316.3
25°	1010.9	1019.1	1091.0	1165.6	1220.3
27.5°	900.1	912.0	987.7	1065.3	1131.8
30°	827.4	841.3	918.3	999.9	1068.5
32.5°	756.0	772.5	847.6	933.9	1003.7
35°	648.9	665.2	737.3	824.1	899.1
37.5°	538.3	554.3	624.7	710.1	791.2
40°	466.2	484.2	551.3	634.1	716.5
42.5°	400.9	418.8	481.9	563.3	641.1
45°	311.1	329.9	385.3	460.4	532.1
47.5°	236.7	257.1	305.8	373.7	439.1
50°	192.7	213.1	261.1	320.9	383.7
52.5°	157.3	177.0	220.4	276.7	334.3
55°	111.8	130.5	168.5	216.3	266.1
57.5°	77.2	93.4	127.4	167.4	206.4
60°	55.9	71.4	103.4	135.8	167.6
62.5°	37.2	51.4	82.7	107.6	128.9
65°	12.5	23.9	53.4	64.4	71.7
67.5°	6.3	7.6	28.0	29.6	32.0
70°	5.0	5.0	13.3	14.2	16.7
72.5°	3.7	3.7	5.3	6.9	7.3
75°	1.7	1.7	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	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°	17.2	91.2	211.5	61.6	46.4
95°	55.9	221.9	997.3	345.2	212.8
97.5°	102.7	259.9	1535.9	1099.1	753.1
100°	135.4	282.5	1652.8	1674.2	1289.6
102.5°	171.5	306.9	1627.1	2143.0	1807.2
105°	227.8	345.5	1493.8	2638.6	2508.3
107.5°	285.0	390.5	1338.2	2778.3	2894.3
110°	324.6	423.3	1248.8	2724.8	2985.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	362.4	456.1	1188.6	2598.4	2970.0
115°	423.4	511.7	1132.7	2399.6	2817.8
117.5°	477.2	560.0	1099.6	2182.2	2625.2
120°	520.1	589.5	1096.2	2058.0	2482.5
122.5°	554.5	623.9	1087.6	1949.0	2343.2
125°	597.5	662.7	1081.1	1794.1	2145.0
127.5°	644.4	705.3	1077.7	1701.5	1990.7
130°	668.4	729.4	1072.5	1637.1	1889.3
132.5°	694.2	753.5	1072.5	1586.8	1818.8
135°	730.8	791.7	1068.2	1515.5	1713.0
137.5°	765.2	824.4	1067.8	1455.1	1625.8
140°	791.0	851.9	1066.1	1405.1	1569.0
142.5°	820.2	871.0	1071.2	1365.2	1512.3
145°	861.9	906.0	1076.8	1311.6	1429.3
147.5°	897.6	940.4	1086.3	1257.5	1359.2
150°	928.5	957.9	1089.7	1239.6	1311.1
152.5°	952.6	983.7	1093.2	1215.5	1281.9
155°	984.4	1007.5	1102.6	1185.4	1233.7
157.5°	1023.9	1037.8	1104.8	1171.7	1206.2
160°	1044.6	1055.1	1113.4	1161.3	1190.7
162.5°	1056.6	1068.8	1115.1	1152.6	1175.3
165°	1087.6	1091.8	1115.5	1139.5	1156.3
167.5°	1108.6	1104.8	1125.4	1136.3	1143.0
170°	1115.5	1113.4	1122.0	1124.3	1132.7
172.5°	1131.0	1123.8	1127.1	1120.8	1127.5
175°	1139.2	1132.8	1128.4	1121.8	1113.4
177.5°	1142.6	1132.5	1127.1	1120.3	1122.0
180°	1130.6	1130.6	1130.6	1130.6	1130.6

(END OF REPORT)