

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: P521330

Luminaire Tested: SQ4-BB-150U-125D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521330
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-125D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10024.5 lumens
Efficiency: N/A
Efficacy: 93.7 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

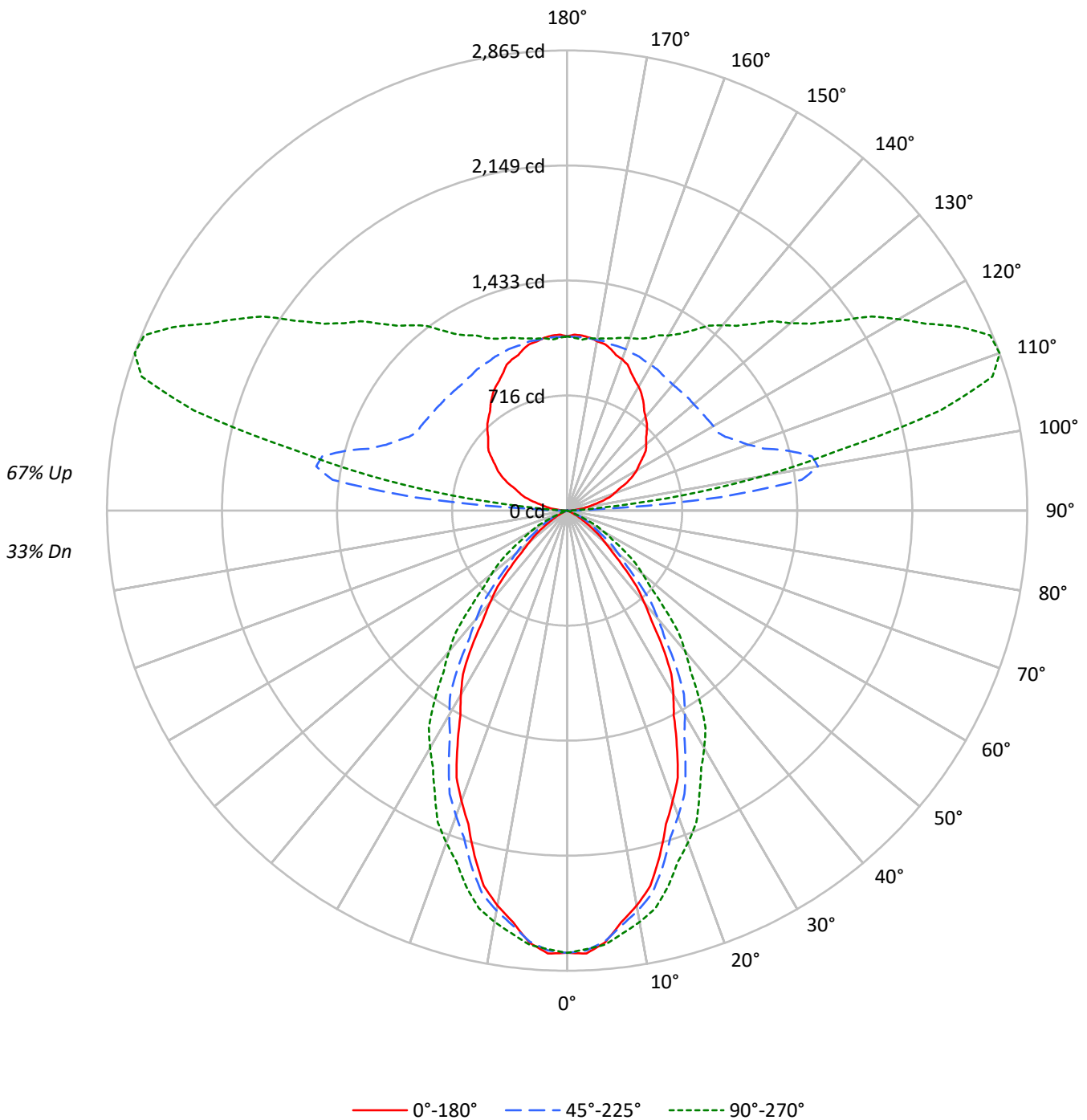
Input Watts (W): 107
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	50	30	10	50	30	10	0														
RCR																																						
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33																				
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30																				
2	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27																				
3	81	72	66	61	73	66	60	56	54	50	47	42	40	38	32	30	29	24																				
4	74	65	58	53	67	59	53	49	48	44	41	38	36	33	29	27	26	22																				
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	24	20																				
6	64	53	45	40	58	48	42	37	40	35	32	32	29	27	25	23	21	18																				
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	20	17																				
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15																				
9	51	40	33	29	47	37	31	27	31	27	23	25	22	20	20	18	16	14																				
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25406	25406	25406
5°	24998	24936	25121
10°	23389	23701	24363
15°	21263	21937	23159
20°	18875	19856	21595
25°	16438	17739	19841
30°	14080	15627	18181
35°	11674	13265	16175
40°	8969	10606	13783
45°	6483	8031	11091
50°	4417	5985	8796
55°	2871	4329	6836
60°	1648	3048	4942
65°	437	1862	2502
70°	216	575	718
75°	96	46	0
80°	69	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11091 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.3	2.5
10°-20°	642.7	6.4
20°-30°	804.6	8.0
30°-40°	743.1	7.4
40°-50°	499.4	5.0
50°-60°	257.9	2.6
60°-70°	80.8	0.8
70°-80°	5.1	0.1
80°-90°	0.1	0.0
90°-100°	494.4	4.9
100°-110°	1406.7	14.0
110°-120°	1347.8	13.4
120°-130°	1066.7	10.6
130°-140°	856.2	8.5
140°-150°	670.3	6.7
150°-160°	490.5	4.9
160°-170°	303.8	3.0
170°-180°	103.1	1.0
0°-30°	1698.5	16.9
0°-40°	2441.7	24.4
0°-60°	3199.0	31.9
0°-90°	3284.9	32.8
90°-120°	3249.0	32.4
90°-150°	5842.2	58.3
90°-180°	6740.0	67.2
0°-180°	10024.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2754	2754	2754	2754	2754	
5°	2699	2672	2692	2702	2712	250
15°	2226	2218	2297	2374	2425	620
25°	1615	1628	1742	1862	1949	740
35°	1036	1062	1178	1316	1436	642
45°	497	527	616	735	850	390
55°	178	208	269	346	425	167
65°	20	38	85	103	115	34
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	54	213	957	331	204	61
105°	219	332	1434	2532	2407	231
115°	406	491	1087	2303	2704	400
125°	573	636	1038	1722	2059	513
135°	701	760	1025	1454	1644	541
145°	827	870	1033	1259	1372	517
155°	945	967	1058	1138	1184	437
165°	1044	1048	1070	1094	1110	294
175°	1093	1087	1083	1076	1068	104
180°	1085	1085	1085	1085	1085	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2753.7	2753.7	2753.7	2753.7	2753.7
2.5°	2760.1	2734.0	2740.9	2740.7	2733.5
5°	2699.1	2671.7	2692.4	2702.0	2712.4
7.5°	2585.0	2563.7	2603.4	2633.2	2654.8
10°	2496.6	2478.3	2529.9	2570.5	2600.5
12.5°	2394.3	2380.2	2442.5	2498.3	2536.5
15°	2226.1	2218.3	2296.7	2373.8	2424.6
17.5°	2046.0	2045.8	2135.3	2231.0	2292.2
20°	1922.4	1926.3	2022.3	2127.9	2199.5
22.5°	1798.8	1807.9	1910.4	2020.4	2102.5
25°	1614.7	1627.7	1742.5	1861.8	1949.0
27.5°	1437.7	1456.8	1577.6	1701.5	1807.8
30°	1321.6	1343.7	1466.8	1597.2	1706.6
32.5°	1207.5	1233.8	1353.8	1491.7	1603.2
35°	1036.5	1062.5	1177.7	1316.3	1436.1
37.5°	859.8	885.3	997.8	1134.3	1263.7
40°	744.7	773.4	880.6	1012.8	1144.4
42.5°	640.3	668.9	769.8	899.7	1023.9
45°	496.9	526.9	615.5	735.3	850.0
47.5°	378.1	410.6	488.4	596.8	701.3
50°	307.7	340.3	417.0	512.5	612.8
52.5°	251.3	282.8	352.0	442.0	534.0
55°	178.5	208.5	269.1	345.5	425.0
57.5°	123.4	149.2	203.6	267.3	329.6
60°	89.3	114.0	165.2	217.0	267.8
62.5°	59.4	82.1	132.2	171.8	206.0
65°	20.0	38.2	85.3	102.8	114.6
67.5°	10.1	12.2	44.8	47.2	51.2
70°	8.0	8.0	21.3	22.7	26.6
72.5°	5.9	5.9	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.5	87.5	203.0	59.1	44.6
95°	53.6	213.0	957.1	331.3	204.2
97.5°	98.6	249.5	1474.0	1054.7	722.8
100°	129.9	271.1	1586.2	1606.7	1237.6
102.5°	164.6	294.5	1561.5	2056.6	1734.3
105°	218.6	331.6	1433.6	2532.2	2407.2
107.5°	273.5	374.8	1284.2	2666.3	2777.6
110°	311.5	406.3	1198.4	2615.0	2865.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	347.8	437.7	1140.7	2493.7	2850.2
115°	406.4	491.1	1087.0	2302.8	2704.2
117.5°	457.9	537.4	1055.3	2094.2	2519.4
120°	499.2	565.7	1052.0	1975.0	2382.4
122.5°	532.2	598.7	1043.7	1870.4	2248.8
125°	573.4	636.0	1037.5	1721.8	2058.6
127.5°	618.4	676.9	1034.2	1632.9	1910.5
130°	641.5	700.0	1029.3	1571.1	1813.1
132.5°	666.3	723.1	1029.3	1522.8	1745.5
135°	701.3	759.8	1025.2	1454.4	1644.0
137.5°	734.3	791.2	1024.7	1396.5	1560.2
140°	759.1	817.6	1023.1	1348.5	1505.8
142.5°	787.1	835.9	1028.0	1310.1	1451.3
145°	827.1	869.5	1033.4	1258.7	1371.7
147.5°	861.4	902.5	1042.5	1206.8	1304.4
150°	891.1	919.3	1045.8	1189.7	1258.2
152.5°	914.2	944.0	1049.1	1166.5	1230.2
155°	944.7	966.9	1058.2	1137.6	1184.0
157.5°	982.7	996.0	1060.2	1124.5	1157.6
160°	1002.5	1012.6	1068.5	1114.5	1142.7
162.5°	1014.0	1025.7	1070.1	1106.1	1127.9
165°	1043.7	1047.8	1070.5	1093.6	1109.7
167.5°	1063.9	1060.3	1080.0	1090.5	1096.9
170°	1070.5	1068.5	1076.7	1079.0	1087.0
172.5°	1085.4	1078.5	1081.7	1075.6	1082.1
175°	1093.2	1087.2	1082.9	1076.5	1068.5
177.5°	1096.5	1086.8	1081.7	1075.1	1076.7
180°	1085.0	1085.0	1085.0	1085.0	1085.0

(END OF REPORT)