

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: P521301

Luminaire Tested: SQ4-BB-150U-075D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521301
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8186.5 lumens
Efficiency: N/A
Efficacy: 98.9 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

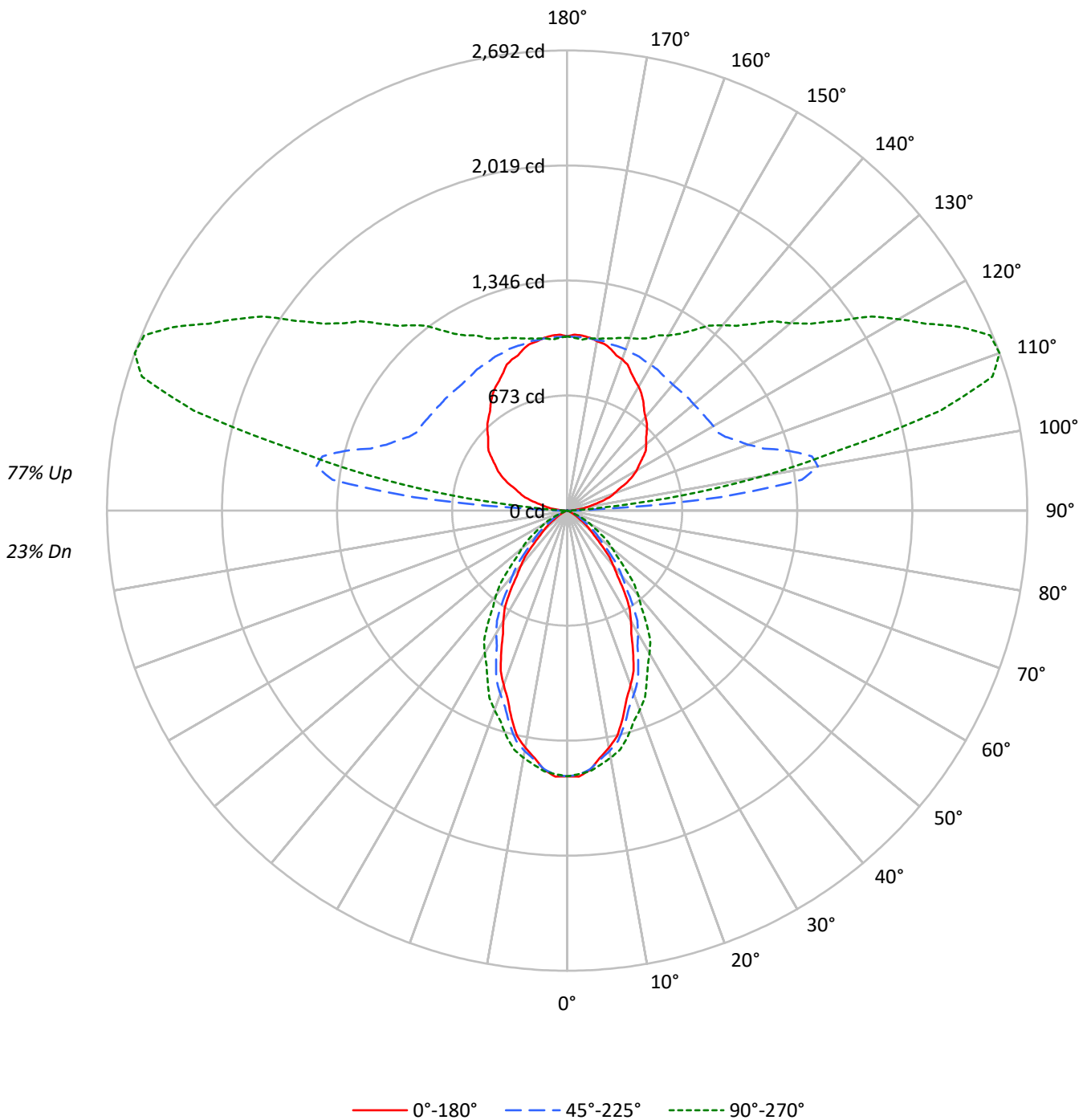
Input Watts (W): 82.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	14342	14342	14342
5°	14112	14076	14181
10°	13204	13380	13753
15°	12004	12385	13074
20°	10655	11209	12191
25°	9279	10014	11201
30°	7948	8821	10264
35°	6590	7488	9131
40°	5063	5987	7780
45°	3660	4534	6260
50°	2493	3379	4965
55°	1621	2443	3859
60°	930	1722	2790
65°	247	1050	1412
70°	121	324	405
75°	53	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6260 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.9	1.7
10°-20°	362.8	4.4
20°-30°	454.2	5.5
30°-40°	419.5	5.1
40°-50°	281.9	3.4
50°-60°	145.6	1.8
60°-70°	45.6	0.6
70°-80°	2.9	0.0
80°-90°	0.1	0.0
90°-100°	464.5	5.7
100°-110°	1321.7	16.1
110°-120°	1266.3	15.5
120°-130°	1002.2	12.2
130°-140°	804.5	9.8
140°-150°	629.8	7.7
150°-160°	460.8	5.6
160°-170°	285.4	3.5
170°-180°	96.9	1.2
0°-30°	958.8	11.7
0°-40°	1378.4	16.8
0°-60°	1805.8	22.1
0°-90°	1854.4	22.7
90°-120°	3052.5	37.3
90°-150°	5489.0	67.0
90°-180°	6332.0	77.3
0°-180°	8186.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1554	1554	1554	1554	1554	
5°	1524	1508	1520	1525	1531	141
15°	1257	1252	1297	1340	1369	350
25°	912	919	984	1051	1100	418
35°	585	600	665	743	811	362
45°	280	297	348	415	480	220
55°	101	118	152	195	240	94
65°	11	22	48	58	65	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	50	200	899	311	192	58
105°	205	312	1347	2379	2262	217
115°	382	461	1021	2164	2541	376
125°	539	598	975	1618	1934	482
135°	659	714	963	1366	1545	508
145°	777	817	971	1183	1289	485
155°	888	908	994	1069	1112	410
165°	981	984	1006	1028	1043	276
175°	1027	1022	1018	1012	1004	97
180°	1019	1019	1019	1019	1019	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1554.5	1554.5	1554.5	1554.5	1554.5
2.5°	1558.1	1543.4	1547.3	1547.2	1543.1
5°	1523.7	1508.2	1519.9	1525.3	1531.2
7.5°	1459.3	1447.2	1469.7	1486.5	1498.7
10°	1409.4	1399.1	1428.2	1451.1	1468.0
12.5°	1351.6	1343.7	1378.8	1410.3	1431.9
15°	1256.7	1252.3	1296.6	1340.1	1368.8
17.5°	1155.0	1154.9	1205.4	1259.4	1294.0
20°	1085.2	1087.4	1141.6	1201.2	1241.7
22.5°	1015.4	1020.6	1078.5	1140.6	1186.9
25°	911.5	918.9	983.7	1051.0	1100.3
27.5°	811.6	822.4	890.6	960.5	1020.5
30°	746.0	758.5	828.0	901.6	963.4
32.5°	681.7	696.5	764.2	842.1	905.0
35°	585.1	599.8	664.8	743.1	810.7
37.5°	485.4	499.8	563.3	640.3	713.4
40°	420.4	436.6	497.1	571.8	646.0
42.5°	361.4	377.6	434.5	507.9	578.0
45°	280.5	297.4	347.5	415.1	479.8
47.5°	213.4	231.8	275.7	336.9	395.9
50°	173.7	192.1	235.4	289.3	345.9
52.5°	141.8	159.6	198.7	249.5	301.4
55°	100.8	117.7	151.9	195.1	239.9
57.5°	69.6	84.2	114.9	150.9	186.1
60°	50.4	64.4	93.3	122.5	151.2
62.5°	33.5	46.3	74.6	97.0	116.3
65°	11.3	21.6	48.1	58.1	64.7
67.5°	5.7	6.9	25.3	26.7	28.9
70°	4.5	4.5	12.0	12.8	15.0
72.5°	3.3	3.3	4.8	6.2	6.6
75°	1.5	1.5	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°	15.5	82.2	190.7	55.5	41.9
95°	50.4	200.1	899.2	311.2	191.9
97.5°	92.6	234.4	1384.9	991.0	679.1
100°	122.1	254.7	1490.3	1509.6	1162.8
102.5°	154.7	276.7	1467.1	1932.3	1629.5
105°	205.4	311.5	1346.9	2379.1	2261.7
107.5°	257.0	352.1	1206.6	2505.1	2609.7
110°	292.6	381.7	1126.0	2456.9	2691.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	326.7	411.3	1071.7	2342.9	2677.9
115°	381.8	461.4	1021.3	2163.6	2540.7
117.5°	430.2	504.9	991.5	1967.6	2367.1
120°	469.0	531.5	988.4	1855.6	2238.4
122.5°	500.0	562.5	980.6	1757.3	2112.8
125°	538.8	597.5	974.8	1617.7	1934.1
127.5°	581.0	636.0	971.7	1534.2	1795.0
130°	602.7	657.7	967.1	1476.1	1703.5
132.5°	626.0	679.4	967.1	1430.7	1639.9
135°	658.9	713.9	963.2	1366.5	1544.6
137.5°	689.9	743.4	962.8	1312.0	1465.9
140°	713.2	768.1	961.3	1266.9	1414.7
142.5°	739.5	785.4	965.9	1230.9	1363.6
145°	777.1	816.9	970.9	1182.7	1288.8
147.5°	809.3	848.0	979.5	1133.9	1225.6
150°	837.2	863.7	982.6	1117.8	1182.2
152.5°	858.9	887.0	985.7	1095.9	1155.8
155°	887.6	908.5	994.2	1068.8	1112.4
157.5°	923.3	935.8	996.1	1056.5	1087.6
160°	941.9	951.3	1003.9	1047.1	1073.7
162.5°	952.7	963.7	1005.4	1039.2	1059.7
165°	980.6	984.4	1005.8	1027.5	1042.6
167.5°	999.6	996.2	1014.7	1024.6	1030.6
170°	1005.8	1003.9	1011.6	1013.7	1021.3
172.5°	1019.8	1013.3	1016.3	1010.6	1016.7
175°	1027.1	1021.5	1017.5	1011.5	1003.9
177.5°	1030.2	1021.1	1016.3	1010.1	1011.6
180°	1019.4	1019.4	1019.4	1019.4	1019.4

(END OF REPORT)