

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: P522045

Luminaire Tested: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522045
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 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: 10234.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

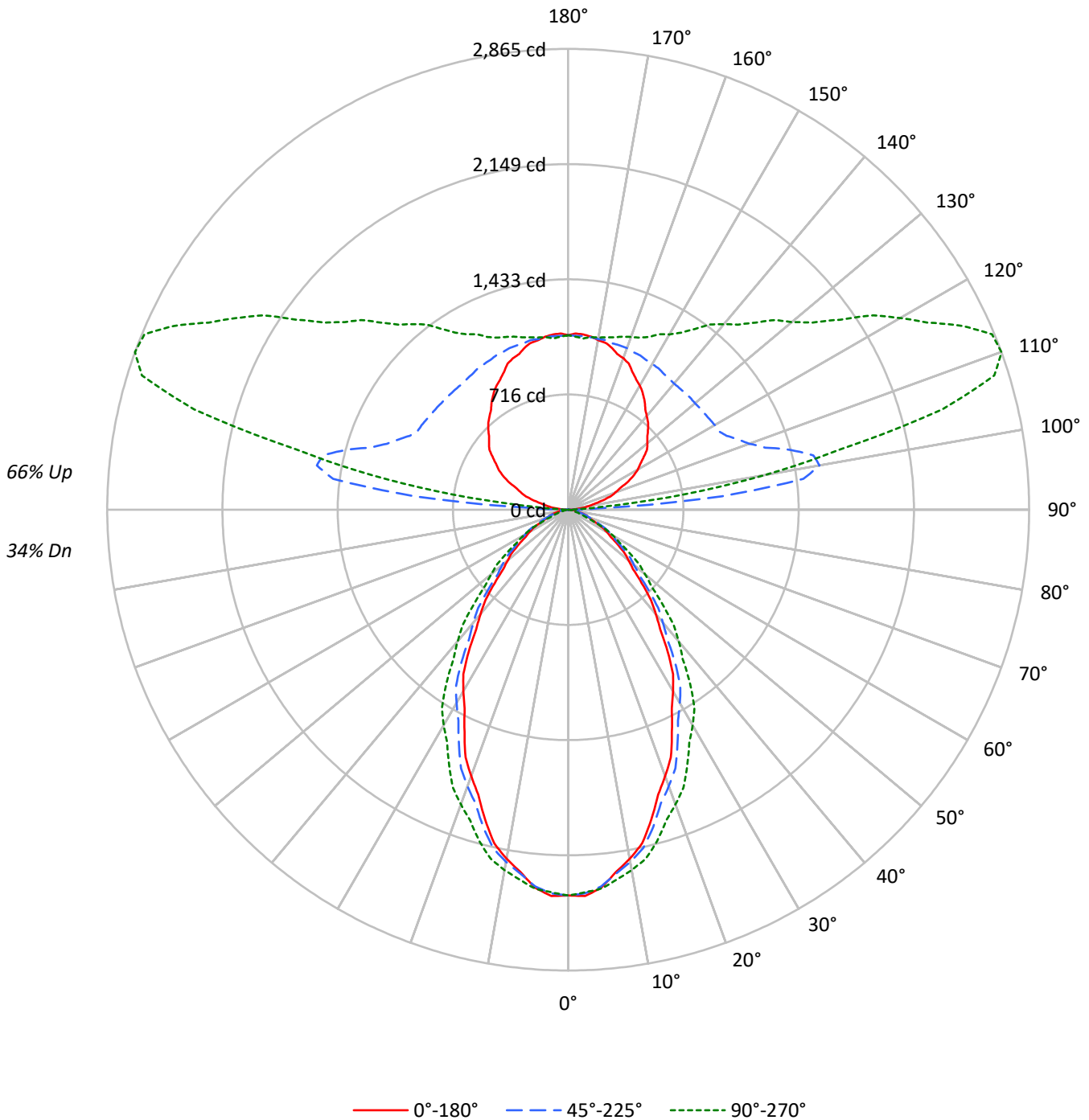
Input Watts (W): 93.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	75	75	75	57	57	57	42	42	42	34																				
1	95	91	88	84	86	82	80	77	66	64	63	52	50	49	38	37	37	30																				
2	87	80	75	70	79	73	68	64	59	56	53	46	44	42	34	33	32	27																				
3	80	71	65	59	72	65	59	55	53	49	46	42	39	37	31	30	28	24																				
4	74	64	56	51	66	58	52	47	47	43	40	38	35	32	28	27	25	21																				
5	68	57	50	44	61	52	46	41	43	38	35	34	31	28	26	24	22	19																				
6	63	51	44	39	57	47	41	36	39	34	31	31	28	25	24	22	20	17																				
7	58	47	39	34	53	43	36	32	35	31	27	29	25	23	22	20	18	15																				
8	54	43	35	30	49	39	33	28	32	28	24	26	23	20	20	18	17	14																				
9	50	39	32	27	46	36	30	25	30	25	22	24	21	19	19	17	15	13																				
10	47	36	29	25	43	33	27	23	28	23	20	23	19	17	18	16	14	12																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22125	22125	22125
5°	21849	21771	21898
10°	20643	20830	21313
15°	19057	19499	20373
20°	17305	17956	19144
25°	15521	16367	17835
30°	13878	14786	16479
35°	12136	13013	14874
40°	10214	11026	12876
45°	8430	9157	10750
50°	7037	7672	8957
55°	5974	6584	7396
60°	5106	5709	5903
65°	4065	4801	3814
70°	3604	3747	2328
75°	3337	3037	1426
80°	3076	2795	1227
85°	2784	2562	1006

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10750 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.0	2.1
10°-20°	572.1	5.6
20°-30°	741.1	7.2
30°-40°	725.7	7.1
40°-50°	555.5	5.4
50°-60°	370.1	3.6
60°-70°	202.0	2.0
70°-80°	84.2	0.8
80°-90°	23.8	0.2
90°-100°	494.4	4.8
100°-110°	1406.7	13.7
110°-120°	1347.8	13.2
120°-130°	1066.7	10.4
130°-140°	856.2	8.4
140°-150°	670.3	6.5
150°-160°	490.5	4.8
160°-170°	303.8	3.0
170°-180°	103.1	1.0
0°-30°	1533.2	15.0
0°-40°	2258.8	22.1
0°-60°	3184.4	31.1
0°-90°	3494.4	34.1
90°-120°	3249.0	31.7
90°-150°	5842.2	57.1
90°-180°	6740.0	65.9
0°-180°	10234.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2398	2398	2398	2398	2398	
5°	2359	2336	2351	2356	2364	219
15°	1995	1988	2041	2097	2133	557
25°	1525	1529	1608	1678	1752	701
35°	1078	1083	1155	1233	1321	670
45°	646	658	702	755	824	504
55°	371	387	409	425	460	337
65°	186	202	220	192	175	194
75°	94	94	85	58	40	100
85°	26	26	24	16	10	29
90°	0	0	0	0	0	4
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°	2398.1	2398.1	2398.1	2398.1	2398.1
2.5°	2404.0	2382.6	2388.0	2387.8	2381.2
5°	2359.1	2335.5	2350.7	2356.2	2364.4
7.5°	2271.6	2253.7	2281.5	2302.1	2318.7
10°	2203.4	2188.0	2223.4	2253.4	2275.0
12.5°	2124.3	2111.3	2155.2	2195.4	2223.6
15°	1995.1	1987.9	2041.4	2096.9	2132.9
17.5°	1856.8	1853.3	1914.7	1979.5	2025.6
20°	1762.5	1761.5	1828.8	1896.3	1949.8
22.5°	1667.4	1669.7	1740.4	1810.6	1871.5
25°	1524.7	1528.8	1607.8	1677.9	1752.0
27.5°	1392.8	1394.6	1476.3	1550.3	1629.3
30°	1302.7	1307.8	1387.9	1464.5	1546.8
32.5°	1212.6	1218.6	1297.0	1376.1	1460.1
35°	1077.5	1082.6	1155.4	1233.1	1320.6
37.5°	938.2	945.2	1009.7	1083.2	1169.3
40°	848.1	858.4	915.5	984.7	1069.1
42.5°	761.4	774.2	827.1	892.8	968.9
45°	646.1	658.4	701.8	755.0	823.9
47.5°	546.7	560.9	594.3	640.1	698.9
50°	490.3	503.7	534.5	568.4	624.0
52.5°	440.7	454.1	481.5	507.6	555.0
55°	371.4	386.9	409.3	424.9	459.8
57.5°	314.6	329.4	347.2	354.2	375.4
60°	276.7	293.2	309.4	308.6	319.9
62.5°	242.2	256.2	272.3	261.2	261.8
65°	186.2	201.7	219.9	192.2	174.7
67.5°	150.5	153.8	172.6	134.0	113.2
70°	133.6	133.6	138.9	103.8	86.3
72.5°	117.6	117.6	112.8	84.4	66.1
75°	93.6	93.6	85.2	58.5	40.0
77.5°	72.2	71.4	65.2	43.7	29.0
80°	57.9	57.9	52.6	34.5	23.1
82.5°	45.2	45.2	40.8	26.9	17.3
85°	26.3	26.3	24.2	15.6	9.5
87.5°	9.3	9.3	8.4	5.0	4.2
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)