

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: P521214

Luminaire Tested: SQ4-BB-100U-100D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521214
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-100U-100D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7160.8 lumens
Efficiency: N/A
Efficacy: 95.9 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

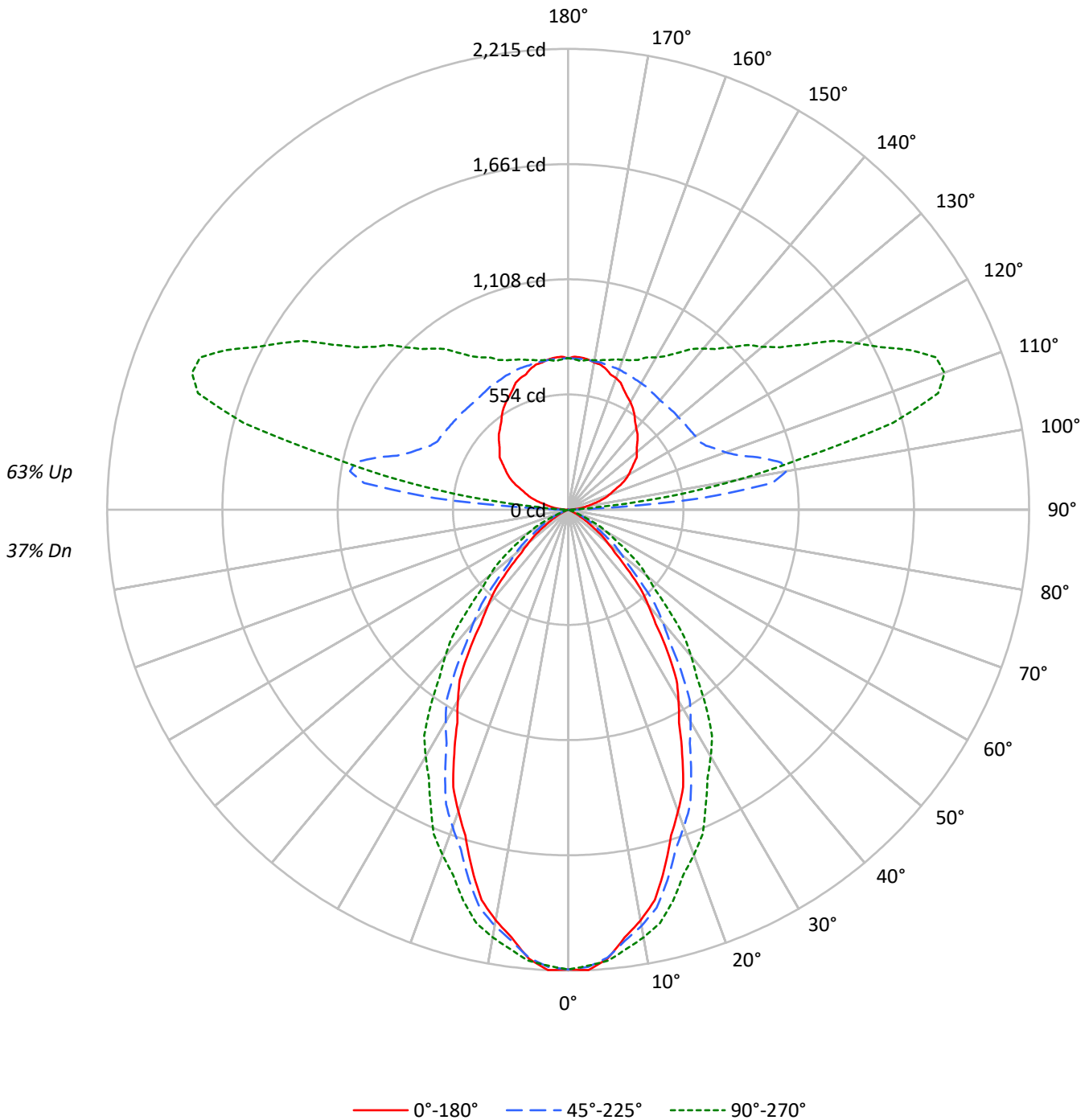
Input Watts (W): 74.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37				
1	96	92	89	86	87	84	81	79	68	67	65	54	53	52	41	40	40	34				
2	89	82	77	73	80	75	71	67	62	59	56	49	47	45	38	37	36	30				
3	82	74	67	62	74	67	62	58	56	52	49	45	42	40	35	33	32	27				
4	75	66	59	54	69	61	55	50	50	46	43	41	38	36	32	30	29	25				
5	70	59	52	47	63	55	48	44	46	41	38	37	34	32	29	27	26	23				
6	65	54	47	41	59	50	43	39	42	37	34	34	31	29	27	25	24	21				
7	60	49	42	37	55	45	39	35	38	34	30	32	28	26	25	23	22	19				
8	56	45	38	33	51	42	35	31	35	31	27	29	26	23	24	21	20	17				
9	52	41	34	30	48	38	32	28	33	28	25	27	24	21	22	20	18	16				
10	49	38	31	27	45	35	29	26	30	26	23	25	22	20	21	18	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20391	20391	20391
5°	20062	20013	20161
10°	18772	19023	19553
15°	17066	17607	18588
20°	15149	15936	17332
25°	13192	14237	15925
30°	11300	12541	14592
35°	9370	10646	12982
40°	7199	8513	11062
45°	5203	6446	8901
50°	3545	4804	7059
55°	2305	3474	5487
60°	1321	2447	3965
65°	349	1493	2008
70°	173	461	577
75°	75	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8901 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.7	2.8
10°-20°	515.8	7.2
20°-30°	645.7	9.0
30°-40°	596.4	8.3
40°-50°	400.8	5.6
50°-60°	207.0	2.9
60°-70°	64.8	0.9
70°-80°	4.1	0.1
80°-90°	0.1	0.0
90°-100°	331.9	4.6
100°-110°	944.4	13.2
110°-120°	904.8	12.6
120°-130°	716.1	10.0
130°-140°	574.8	8.0
140°-150°	450.0	6.3
150°-160°	329.3	4.6
160°-170°	203.9	2.8
170°-180°	69.2	1.0
0°-30°	1363.2	19.0
0°-40°	1959.7	27.4
0°-60°	2567.4	35.9
0°-90°	2636.4	36.8
90°-120°	2181.1	30.5
90°-150°	3921.9	54.8
90°-180°	4524.0	63.2
0°-180°	7160.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2210	2210	2210	2210	2210	
5°	2166	2144	2161	2169	2177	201
15°	1787	1780	1843	1905	1946	498
25°	1296	1306	1398	1494	1564	594
35°	832	853	945	1056	1153	515
45°	399	423	494	590	682	313
55°	143	167	216	277	341	134
65°	16	31	68	82	92	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	36	143	642	222	137	41
105°	147	223	962	1700	1616	155
115°	273	330	730	1546	1815	269
125°	385	427	696	1156	1382	345
135°	471	510	688	976	1104	363
145°	555	584	694	845	921	347
155°	634	649	710	764	795	293
165°	701	703	719	734	745	197
175°	734	730	727	723	717	70
180°	728	728	728	728	728	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2210.1	2210.1	2210.1	2210.1	2210.1
2.5°	2215.2	2194.3	2199.8	2199.7	2193.8
5°	2166.2	2144.3	2160.9	2168.6	2176.9
7.5°	2074.7	2057.6	2089.5	2113.4	2130.7
10°	2003.7	1989.1	2030.5	2063.1	2087.1
12.5°	1921.6	1910.3	1960.3	2005.1	2035.8
15°	1786.7	1780.4	1843.3	1905.2	1946.0
17.5°	1642.1	1641.9	1713.7	1790.6	1839.7
20°	1542.9	1546.0	1623.1	1707.8	1765.3
22.5°	1443.7	1451.0	1533.3	1621.6	1687.4
25°	1295.9	1306.4	1398.5	1494.2	1564.3
27.5°	1153.9	1169.2	1266.2	1365.6	1450.9
30°	1060.7	1078.4	1177.2	1281.9	1369.7
32.5°	969.1	990.3	1086.5	1197.2	1286.7
35°	831.9	852.8	945.2	1056.4	1152.6
37.5°	690.1	710.6	800.8	910.3	1014.3
40°	597.7	620.7	706.8	812.9	918.5
42.5°	513.9	536.9	617.8	722.1	821.8
45°	398.8	422.9	494.0	590.2	682.2
47.5°	303.4	329.6	392.0	479.0	562.8
50°	247.0	273.1	334.7	411.3	491.8
52.5°	201.7	227.0	282.5	354.7	428.5
55°	143.3	167.3	216.0	277.3	341.1
57.5°	99.0	119.7	163.4	214.6	264.5
60°	71.6	91.5	132.6	174.1	214.9
62.5°	47.7	65.9	106.1	137.9	165.3
65°	16.0	30.7	68.4	82.5	92.0
67.5°	8.1	9.8	35.9	37.9	41.1
70°	6.4	6.4	17.1	18.2	21.4
72.5°	4.7	4.7	6.8	8.8	9.4
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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°	11.1	58.7	136.3	39.7	29.9
95°	36.0	143.0	642.5	222.4	137.1
97.5°	66.2	167.5	989.5	708.1	485.2
100°	87.2	182.0	1064.8	1078.6	830.8
102.5°	110.5	197.7	1048.2	1380.6	1164.3
105°	146.8	222.6	962.4	1699.9	1616.0
107.5°	183.6	251.6	862.1	1789.9	1864.7
110°	209.1	272.7	804.5	1755.5	1923.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	233.5	293.8	765.7	1674.0	1913.4
115°	272.8	329.7	729.7	1545.9	1815.4
117.5°	307.4	360.8	708.4	1405.9	1691.3
120°	335.1	379.8	706.2	1325.8	1599.3
122.5°	357.3	401.9	700.7	1255.6	1509.6
125°	385.0	426.9	696.5	1155.8	1381.9
127.5°	415.1	454.4	694.3	1096.2	1282.5
130°	430.6	469.9	691.0	1054.7	1217.2
132.5°	447.3	485.4	691.0	1022.3	1171.7
135°	470.8	510.1	688.2	976.3	1103.6
137.5°	493.0	531.1	687.9	937.5	1047.4
140°	509.6	548.8	686.8	905.2	1010.8
142.5°	528.4	561.2	690.1	879.5	974.3
145°	555.3	583.7	693.7	845.0	920.8
147.5°	578.3	605.9	699.8	810.2	875.7
150°	598.2	617.2	702.0	798.6	844.7
152.5°	613.7	633.7	704.3	783.1	825.8
155°	634.2	649.1	710.4	763.7	794.8
157.5°	659.7	668.6	711.7	754.9	777.1
160°	673.0	679.7	717.3	748.2	767.1
162.5°	680.7	688.6	718.4	742.5	757.2
165°	700.7	703.4	718.7	734.1	745.0
167.5°	714.2	711.8	725.0	732.1	736.4
170°	718.7	717.3	722.8	724.3	729.7
172.5°	728.6	724.0	726.1	722.1	726.4
175°	733.9	729.8	727.0	722.7	717.3
177.5°	736.1	729.6	726.1	721.7	722.8
180°	728.4	728.4	728.4	728.4	728.4

(END OF REPORT)