

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: P521223

Luminaire Tested: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521223
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-125D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 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: 7269.7 lumens
Efficiency: N/A
Efficacy: 82.7 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: General Diffuse

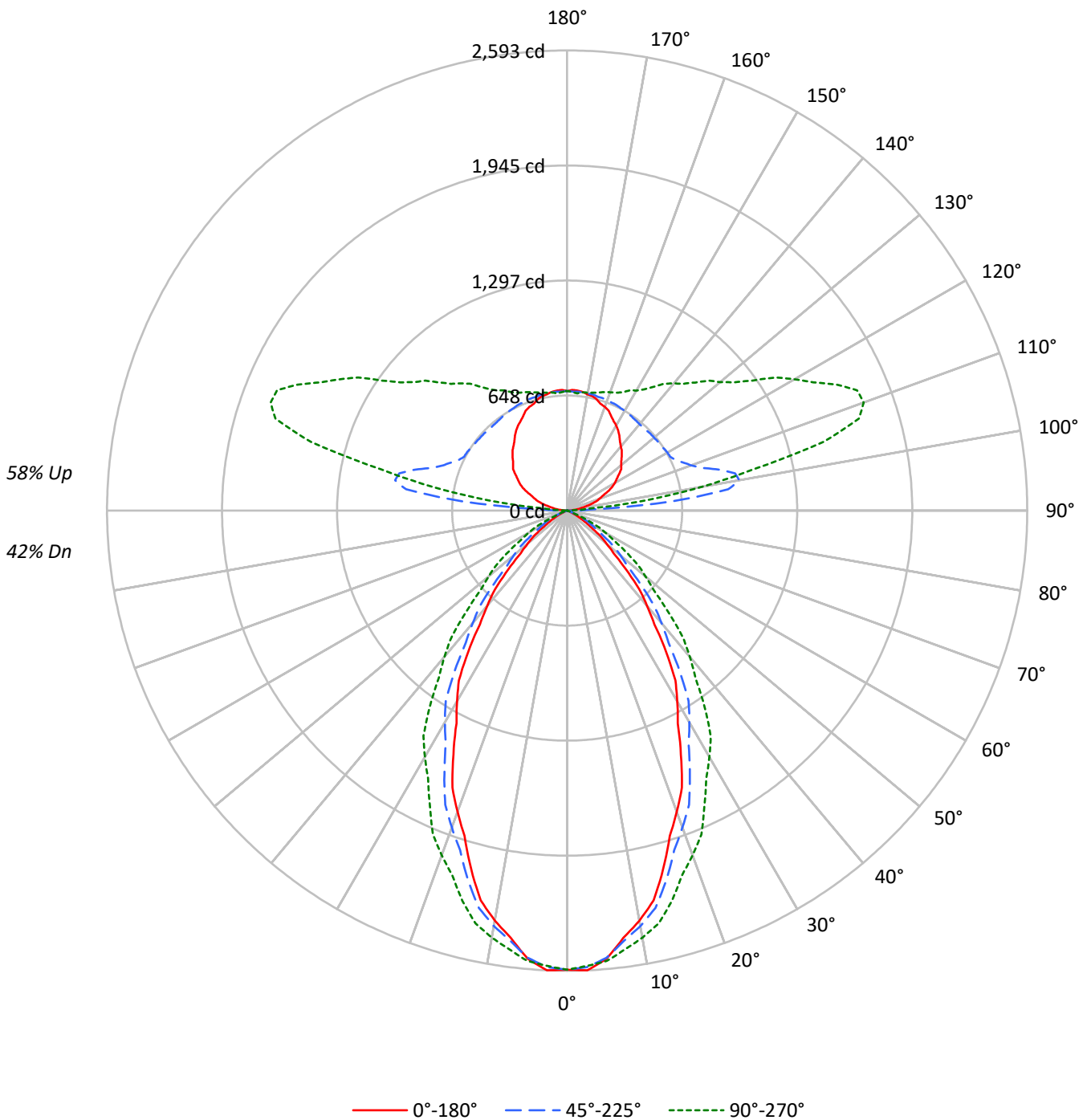
Input Watts (W): 87.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42				
1	98	94	91	88	89	86	83	81	72	70	68	58	57	56	46	45	44	39				
2	90	84	79	74	82	77	73	69	65	61	59	53	51	49	42	41	40	35				
3	83	75	69	64	76	69	64	60	58	55	51	48	46	43	39	37	36	32				
4	77	68	61	55	71	62	57	52	53	49	45	44	41	39	36	34	32	29				
5	71	61	54	49	65	57	50	46	48	44	40	40	37	35	33	31	29	26				
6	66	55	48	43	61	51	45	41	44	39	36	37	34	31	31	28	27	24				
7	62	51	43	38	57	47	41	36	40	36	32	34	31	28	29	26	24	22				
8	57	46	39	34	53	43	37	33	37	33	29	32	28	26	27	24	22	20				
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	22	21	19				
10	50	39	33	28	47	37	31	27	32	28	24	28	24	22	23	21	19	17				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23870	23870	23870
5°	23486	23429	23602
10°	21976	22269	22890
15°	19978	20612	21760
20°	17734	18656	20290
25°	15443	16667	18642
30°	13228	14682	17082
35°	10968	12463	15197
40°	8427	9965	12950
45°	6092	7546	10420
50°	4150	5624	8265
55°	2698	4066	6423
60°	1548	2864	4643
65°	410	1749	2349
70°	202	540	674
75°	89	46	0
80°	69	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10420 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.1	3.2
10°-20°	603.8	8.3
20°-30°	755.9	10.4
30°-40°	698.2	9.6
40°-50°	469.2	6.5
50°-60°	242.3	3.3
60°-70°	75.9	1.0
70°-80°	4.8	0.1
80°-90°	0.1	0.0
90°-100°	306.9	4.2
100°-110°	873.2	12.0
110°-120°	836.6	11.5
120°-130°	662.1	9.1
130°-140°	531.5	7.3
140°-150°	416.1	5.7
150°-160°	304.4	4.2
160°-170°	188.6	2.6
170°-180°	64.0	0.9
0°-30°	1595.8	22.0
0°-40°	2294.1	31.6
0°-60°	3005.6	41.3
0°-90°	3086.4	42.5
90°-120°	2016.7	27.7
90°-150°	3626.3	49.9
90°-180°	4183.0	57.5
0°-180°	7269.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2587	2587	2587	2587	2587	
5°	2536	2510	2530	2539	2548	235
15°	2092	2084	2158	2230	2278	583
25°	1517	1529	1637	1749	1831	695
35°	974	998	1106	1237	1349	603
45°	467	495	578	691	799	367
55°	168	196	253	325	399	157
65°	19	36	80	97	108	32
75°	2	2	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	33	132	594	206	127	38
105°	136	206	890	1572	1494	144
115°	252	305	675	1429	1678	248
125°	356	395	644	1069	1278	319
135°	435	472	636	903	1020	336
145°	513	540	642	781	851	321
155°	586	600	657	706	735	271
165°	648	650	664	679	689	182
175°	679	675	672	668	663	64
180°	674	674	674	674	674	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2587.2	2587.2	2587.2	2587.2	2587.2
2.5°	2593.2	2568.8	2575.2	2575.1	2568.2
5°	2535.9	2510.2	2529.7	2538.6	2548.4
7.5°	2428.8	2408.7	2446.0	2474.0	2494.4
10°	2345.7	2328.5	2377.0	2415.1	2443.3
12.5°	2249.5	2236.3	2294.8	2347.2	2383.2
15°	2091.6	2084.2	2157.9	2230.3	2278.1
17.5°	1922.3	1922.1	2006.2	2096.1	2153.7
20°	1806.2	1809.9	1900.1	1999.2	2066.5
22.5°	1690.0	1698.6	1794.9	1898.3	1975.4
25°	1517.0	1529.3	1637.2	1749.2	1831.2
27.5°	1350.8	1368.7	1482.2	1598.7	1698.5
30°	1241.7	1262.5	1378.1	1500.6	1603.4
32.5°	1134.5	1159.3	1272.0	1401.5	1506.3
35°	973.8	998.3	1106.5	1236.7	1349.3
37.5°	807.8	831.8	937.5	1065.7	1187.3
40°	699.7	726.6	827.4	951.6	1075.2
42.5°	601.6	628.5	723.2	845.3	962.0
45°	466.9	495.0	578.3	690.9	798.6
47.5°	355.2	385.8	458.9	560.7	658.9
50°	289.1	319.7	391.8	481.5	575.8
52.5°	236.1	265.7	330.7	415.3	501.7
55°	167.7	195.9	252.8	324.6	399.3
57.5°	115.9	140.1	191.3	251.2	309.7
60°	83.9	107.1	155.2	203.9	251.6
62.5°	55.8	77.1	124.2	161.4	193.5
65°	18.8	35.9	80.1	96.6	107.6
67.5°	9.5	11.5	42.1	44.4	48.1
70°	7.5	7.5	20.0	21.4	25.0
72.5°	5.5	5.5	8.0	10.3	11.0
75°	2.5	2.5	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	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°	10.2	54.3	126.0	36.7	27.7
95°	33.3	132.2	594.1	205.6	126.8
97.5°	61.2	154.8	914.9	654.7	448.6
100°	80.7	168.3	984.6	997.3	768.2
102.5°	102.2	182.8	969.2	1276.6	1076.5
105°	135.7	205.8	889.8	1571.8	1494.2
107.5°	169.8	232.6	797.1	1655.0	1724.1
110°	193.3	252.2	743.9	1623.2	1778.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	215.9	271.7	708.0	1547.9	1769.2
115°	252.2	304.8	674.7	1429.4	1678.5
117.5°	284.2	333.6	655.0	1299.9	1563.8
120°	309.8	351.2	653.0	1225.9	1478.8
122.5°	330.3	371.6	647.9	1161.0	1395.8
125°	355.9	394.7	644.0	1068.7	1277.8
127.5°	383.8	420.2	642.0	1013.6	1185.9
130°	398.2	434.5	638.9	975.2	1125.4
132.5°	413.6	448.9	638.9	945.2	1083.4
135°	435.3	471.6	636.3	902.8	1020.4
137.5°	455.8	491.1	636.1	866.8	968.5
140°	471.2	507.5	635.1	837.0	934.7
142.5°	488.6	518.9	638.1	813.2	900.9
145°	513.4	539.7	641.5	781.3	851.4
147.5°	534.7	560.2	647.1	749.1	809.7
150°	553.1	570.6	649.1	738.5	781.0
152.5°	567.5	586.0	651.2	724.0	763.6
155°	586.4	600.2	656.8	706.1	734.9
157.5°	610.0	618.2	658.1	698.0	718.5
160°	622.3	628.5	663.2	691.8	709.3
162.5°	629.4	636.7	664.2	686.6	700.1
165°	647.9	650.4	664.5	678.8	688.8
167.5°	660.4	658.2	670.4	676.9	680.9
170°	664.5	663.3	668.3	669.7	674.7
172.5°	673.7	669.5	671.4	667.7	671.7
175°	678.6	674.8	672.2	668.2	663.2
177.5°	680.6	674.6	671.4	667.3	668.3
180°	673.5	673.5	673.5	673.5	673.5

(END OF REPORT)