

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: P521197

Luminaire Tested: SQ4-BB-100U-075D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521197
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-075D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 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: 6037.8 lumens
Efficiency: N/A
Efficacy: 94.2 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

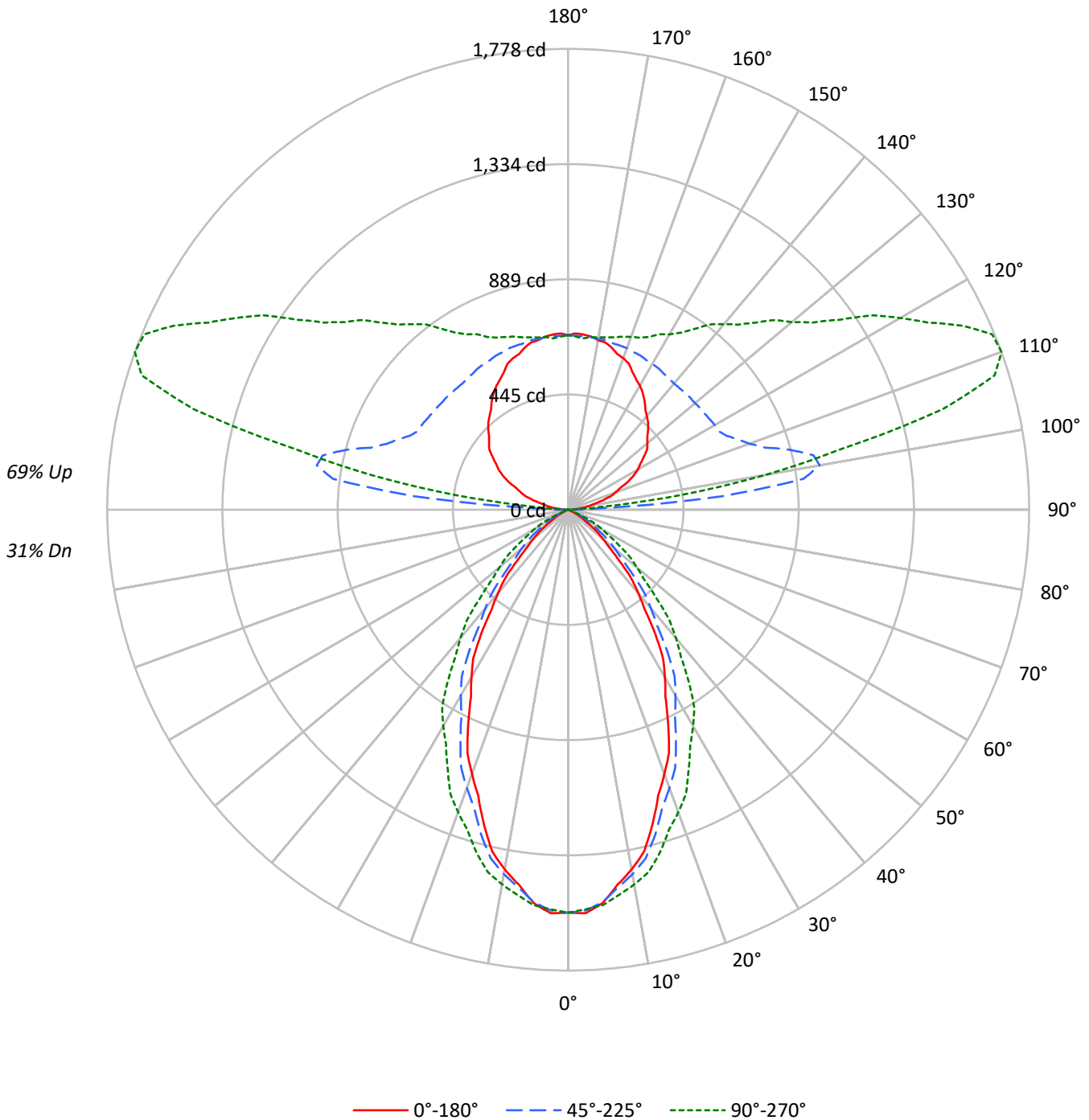
Input Watts (W): 64.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	31				
1	95	91	87	84	85	82	79	77	65	63	62	50	49	48	36	35	35	28				
2	87	81	75	71	78	73	68	65	58	55	53	45	43	42	33	32	31	25				
3	80	72	65	60	72	65	60	55	53	49	46	41	38	36	30	29	28	23				
4	74	64	57	52	66	58	52	48	47	43	40	37	34	32	28	26	25	21				
5	68	58	51	45	61	53	46	42	43	39	35	34	31	29	25	24	22	19				
6	63	52	45	40	57	48	41	37	39	35	31	31	28	26	24	22	20	17				
7	58	47	40	35	53	43	37	33	36	31	28	29	25	23	22	20	18	16				
8	54	43	36	31	49	40	34	29	33	28	25	26	23	21	20	18	17	14				
9	51	40	33	28	46	36	30	26	30	26	23	24	21	19	19	17	16	13				
10	48	36	30	25	43	34	28	24	28	24	21	23	20	18	18	16	14	12				

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	2.3
10°-20°	362.8	6.0
20°-30°	454.2	7.5
30°-40°	419.5	6.9
40°-50°	281.9	4.7
50°-60°	145.6	2.4
60°-70°	45.6	0.8
70°-80°	2.9	0.0
80°-90°	0.1	0.0
90°-100°	306.9	5.1
100°-110°	873.2	14.5
110°-120°	836.6	13.9
120°-130°	662.1	11.0
130°-140°	531.5	8.8
140°-150°	416.1	6.9
150°-160°	304.4	5.0
160°-170°	188.6	3.1
170°-180°	64.0	1.1
0°-30°	958.8	15.9
0°-40°	1378.4	22.8
0°-60°	1805.8	29.9
0°-90°	1854.4	30.7
90°-120°	2016.7	33.4
90°-150°	3626.3	60.1
90°-180°	4183.0	69.3
0°-180°	6037.8	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	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°	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°	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)