

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: P521275

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521275
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-125U-125D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 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: 8340.6 lumens
Efficiency: N/A
Efficacy: 86.0 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

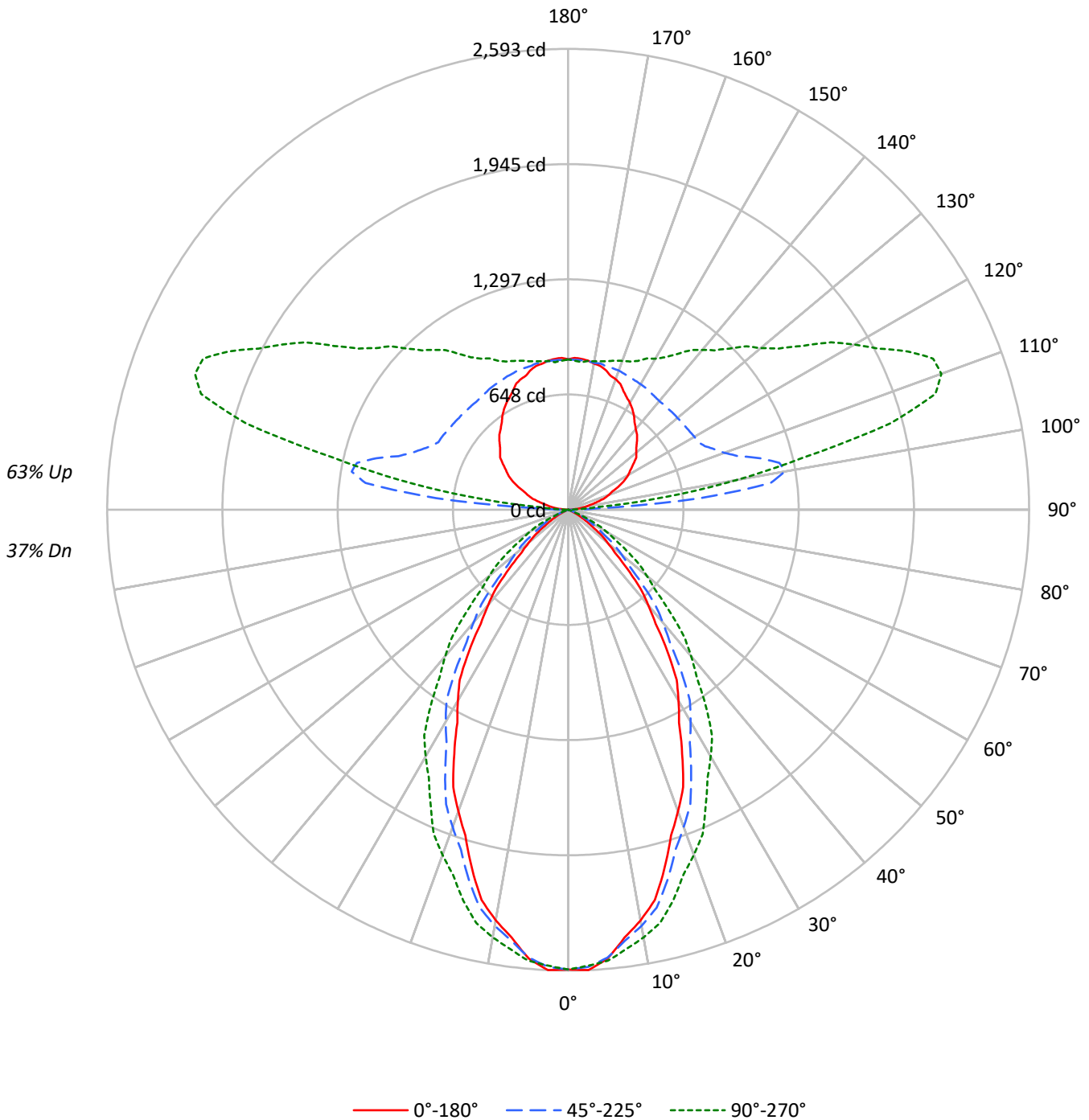
Input Watts (W): 97
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	69	67	65	54	53	52	41	40	40	34				
2	89	82	77	73	80	75	71	67	62	59	56	49	47	46	38	37	36	31				
3	82	74	67	62	74	67	62	58	56	52	49	45	42	40	35	33	32	28				
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	49	44	46	41	38	37	34	32	30	28	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	24	24	21	20	17				
9	52	41	34	30	48	38	32	28	33	28	25	27	24	22	22	20	18	16				
10	49	38	31	27	45	35	30	26	30	26	23	25	22	20	21	19	17	15				

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	2.8
10°-20°	603.8	7.2
20°-30°	755.9	9.1
30°-40°	698.2	8.4
40°-50°	469.2	5.6
50°-60°	242.3	2.9
60°-70°	75.9	0.9
70°-80°	4.8	0.1
80°-90°	0.1	0.0
90°-100°	385.4	4.6
100°-110°	1096.7	13.1
110°-120°	1050.8	12.6
120°-130°	831.6	10.0
130°-140°	667.5	8.0
140°-150°	522.6	6.3
150°-160°	382.4	4.6
160°-170°	236.8	2.8
170°-180°	80.4	1.0
0°-30°	1595.8	19.1
0°-40°	2294.1	27.5
0°-60°	3005.6	36.0
0°-90°	3086.4	37.0
90°-120°	2532.9	30.4
90°-150°	4554.7	54.6
90°-180°	5254.0	63.0
0°-180°	8340.6	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	2
95°	42	166	746	258	159	48
105°	170	258	1118	1974	1877	180
115°	317	383	848	1795	2108	312
125°	447	496	809	1342	1605	400
135°	547	592	799	1134	1282	422
145°	645	678	806	981	1069	403
155°	736	754	825	887	923	340
165°	814	817	835	853	865	229
175°	852	848	844	839	833	81
180°	846	846	846	846	846	

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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°	12.9	68.2	158.2	46.1	34.7
95°	41.8	166.0	746.2	258.3	159.2
97.5°	76.9	194.5	1149.2	822.3	563.5
100°	101.3	211.4	1236.6	1252.6	964.9
102.5°	128.3	229.6	1217.3	1603.4	1352.1
105°	170.5	258.5	1117.6	1974.1	1876.7
107.5°	213.2	292.2	1001.2	2078.7	2165.5
110°	242.8	316.7	934.3	2038.7	2233.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	271.1	341.3	889.3	1944.1	2222.1
115°	316.8	382.8	847.5	1795.3	2108.2
117.5°	357.0	419.0	822.7	1632.7	1964.1
120°	389.2	441.0	820.1	1539.7	1857.4
122.5°	414.9	466.8	813.7	1458.2	1753.2
125°	447.1	495.8	808.9	1342.3	1604.9
127.5°	482.1	527.7	806.3	1273.1	1489.4
130°	500.1	545.7	802.4	1224.8	1413.5
132.5°	519.4	563.8	802.4	1187.2	1360.8
135°	546.8	592.4	799.2	1133.9	1281.7
137.5°	572.5	616.8	798.9	1088.7	1216.4
140°	591.8	637.4	797.6	1051.3	1173.9
142.5°	613.7	651.7	801.5	1021.4	1131.5
145°	644.8	677.9	805.7	981.3	1069.4
147.5°	671.5	703.6	812.7	940.9	1017.0
150°	694.7	716.7	815.3	927.5	980.9
152.5°	712.7	736.0	817.9	909.4	959.1
155°	736.5	753.8	825.0	886.9	923.1
157.5°	766.1	776.5	826.6	876.7	902.5
160°	781.5	789.4	833.0	868.9	890.9
162.5°	790.5	799.7	834.3	862.3	879.3
165°	813.7	816.8	834.6	852.6	865.2
167.5°	829.5	826.6	842.0	850.2	855.2
170°	834.6	833.0	839.4	841.2	847.5
172.5°	846.2	840.8	843.3	838.6	843.6
175°	852.3	847.6	844.3	839.3	833.0
177.5°	854.9	847.3	843.3	838.2	839.4
180°	845.9	845.9	845.9	845.9	845.9

(END OF REPORT)