

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: P521216

Luminaire Tested: SQ4-BB-100U-100D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521216
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_5700K
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 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7343.2 lumens
Efficiency: N/A
Efficacy: 98.4 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

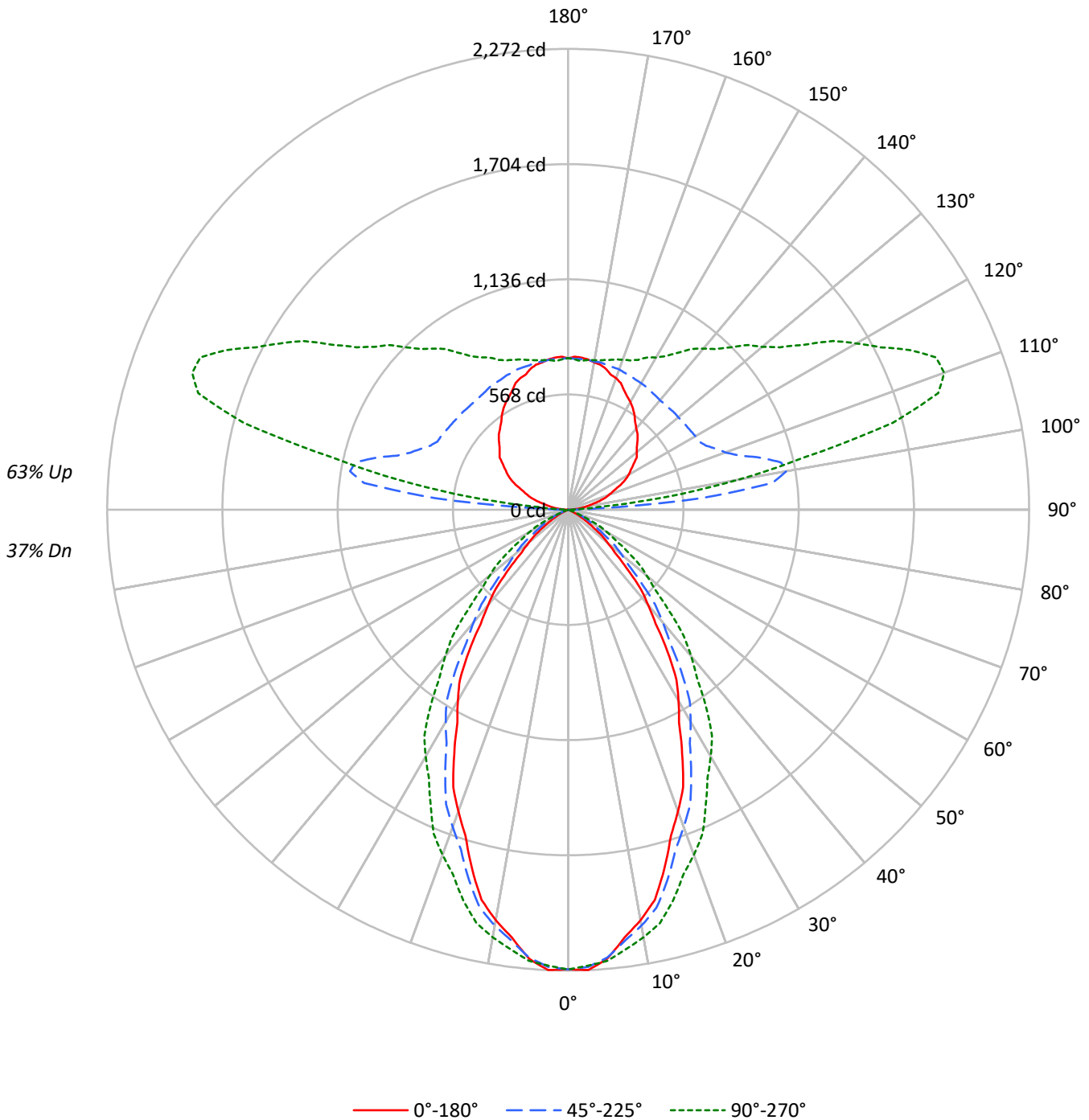
Input Watts (W): 74.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	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°	20910	20910	20910
5°	20573	20522	20675
10°	19250	19507	20051
15°	17501	18056	19060
20°	15535	16342	17773
25°	13528	14600	16330
30°	11588	12861	14964
35°	9607	10917	13313
40°	7382	8729	11344
45°	5337	6610	9127
50°	3636	4926	7240
55°	2363	3563	5627
60°	1356	2510	4067
65°	358	1533	2059
70°	178	472	591
75°	78	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9127 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.8	2.8
10°-20°	528.9	7.2
20°-30°	662.2	9.0
30°-40°	611.6	8.3
40°-50°	411.0	5.6
50°-60°	212.3	2.9
60°-70°	66.5	0.9
70°-80°	4.2	0.1
80°-90°	0.1	0.0
90°-100°	340.3	4.6
100°-110°	968.4	13.2
110°-120°	927.8	12.6
120°-130°	734.4	10.0
130°-140°	589.4	8.0
140°-150°	461.5	6.3
150°-160°	337.6	4.6
160°-170°	209.1	2.8
170°-180°	71.0	1.0
0°-30°	1397.9	19.0
0°-40°	2009.6	27.4
0°-60°	2632.8	35.9
0°-90°	2703.6	36.8
90°-120°	2236.6	30.5
90°-150°	4021.8	54.8
90°-180°	4640.0	63.2
0°-180°	7343.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2266	2266	2266	2266	2266	
5°	2221	2199	2216	2224	2232	206
15°	1832	1826	1890	1954	1996	510
25°	1329	1340	1434	1532	1604	609
35°	853	874	969	1083	1182	528
45°	409	434	507	605	700	321
55°	147	172	222	284	350	137
65°	16	32	70	85	94	28
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	37	147	659	228	141	42
105°	150	228	987	1743	1657	159
115°	280	338	748	1585	1862	275
125°	395	438	714	1185	1417	353
135°	483	523	706	1001	1132	373
145°	569	599	711	866	944	356
155°	650	666	728	783	815	301
165°	718	721	737	753	764	202
175°	753	748	746	741	736	71
180°	747	747	747	747	747	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2266.4	2266.4	2266.4	2266.4	2266.4
2.5°	2271.6	2250.2	2255.8	2255.7	2249.7
5°	2221.4	2198.9	2215.9	2223.8	2232.4
7.5°	2127.6	2110.0	2142.7	2167.2	2185.0
10°	2054.7	2039.7	2082.2	2115.6	2140.3
12.5°	1970.5	1959.0	2010.2	2056.1	2087.6
15°	1832.2	1825.7	1890.3	1953.7	1995.5
17.5°	1683.9	1683.7	1757.4	1836.2	1886.6
20°	1582.2	1585.4	1664.4	1751.3	1810.2
22.5°	1480.4	1487.9	1572.3	1662.9	1730.4
25°	1328.9	1339.6	1434.2	1532.3	1604.1
27.5°	1183.3	1198.9	1298.4	1400.4	1487.9
30°	1087.7	1105.9	1207.2	1314.5	1404.6
32.5°	993.8	1015.5	1114.2	1227.7	1319.5
35°	853.0	874.5	969.3	1083.3	1182.0
37.5°	707.6	728.7	821.2	933.5	1040.1
40°	612.9	636.5	724.8	833.6	941.9
42.5°	527.0	550.5	633.5	740.5	842.7
45°	409.0	433.6	506.6	605.2	699.5
47.5°	311.2	338.0	402.0	491.2	577.2
50°	253.3	280.1	343.2	421.8	504.4
52.5°	206.8	232.7	289.7	363.8	439.5
55°	146.9	171.6	221.5	284.4	349.8
57.5°	101.5	122.8	167.5	220.0	271.3
60°	73.5	93.8	136.0	178.6	220.4
62.5°	48.9	67.6	108.8	141.4	169.5
65°	16.4	31.5	70.2	84.6	94.3
67.5°	8.3	10.0	36.8	38.9	42.1
70°	6.6	6.6	17.5	18.7	21.9
72.5°	4.8	4.8	7.0	9.0	9.6
75°	2.2	2.2	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°	11.4	60.2	139.7	40.7	30.7
95°	36.9	146.6	658.9	228.0	140.6
97.5°	67.9	171.7	1014.7	726.1	497.6
100°	89.5	186.6	1092.0	1106.1	852.0
102.5°	113.3	202.7	1074.9	1415.8	1193.9
105°	150.5	228.3	986.9	1743.2	1657.1
107.5°	188.3	258.0	884.1	1835.5	1912.1
110°	214.4	279.7	825.0	1800.2	1972.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	239.4	301.3	785.2	1716.7	1962.1
115°	279.7	338.0	748.3	1585.3	1861.6
117.5°	315.2	369.9	726.5	1441.7	1734.4
120°	343.6	389.5	724.2	1359.6	1640.1
122.5°	366.4	412.2	718.5	1287.6	1548.1
125°	394.8	437.8	714.2	1185.3	1417.1
127.5°	425.7	466.0	712.0	1124.1	1315.2
130°	441.6	481.9	708.6	1081.5	1248.2
132.5°	458.7	497.8	708.6	1048.3	1201.6
135°	482.8	523.1	705.7	1001.2	1131.7
137.5°	505.5	544.7	705.4	961.3	1074.1
140°	522.6	562.8	704.3	928.3	1036.6
142.5°	541.9	575.5	707.7	901.9	999.1
145°	569.4	598.6	711.4	866.5	944.3
147.5°	593.0	621.3	717.7	830.8	898.0
150°	613.4	632.9	719.9	819.0	866.2
152.5°	629.3	649.9	722.2	803.0	846.9
155°	650.3	665.6	728.4	783.1	815.1
157.5°	676.5	685.6	729.9	774.1	796.9
160°	690.1	697.1	735.5	767.2	786.7
162.5°	698.1	706.1	736.7	761.4	776.4
165°	718.5	721.3	737.0	752.8	763.9
167.5°	732.4	729.9	743.5	750.7	755.1
170°	737.0	735.6	741.2	742.8	748.3
172.5°	747.2	742.5	744.6	740.5	744.9
175°	752.6	748.4	745.5	741.1	735.5
177.5°	754.9	748.2	744.6	740.1	741.2
180°	746.9	746.9	746.9	746.9	746.9

(END OF REPORT)