

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: P521112

Luminaire Tested: SQ4-BB-075U-100D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521112
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-075U-100D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 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: 6170.5 lumens
Efficiency: N/A
Efficacy: 93.6 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

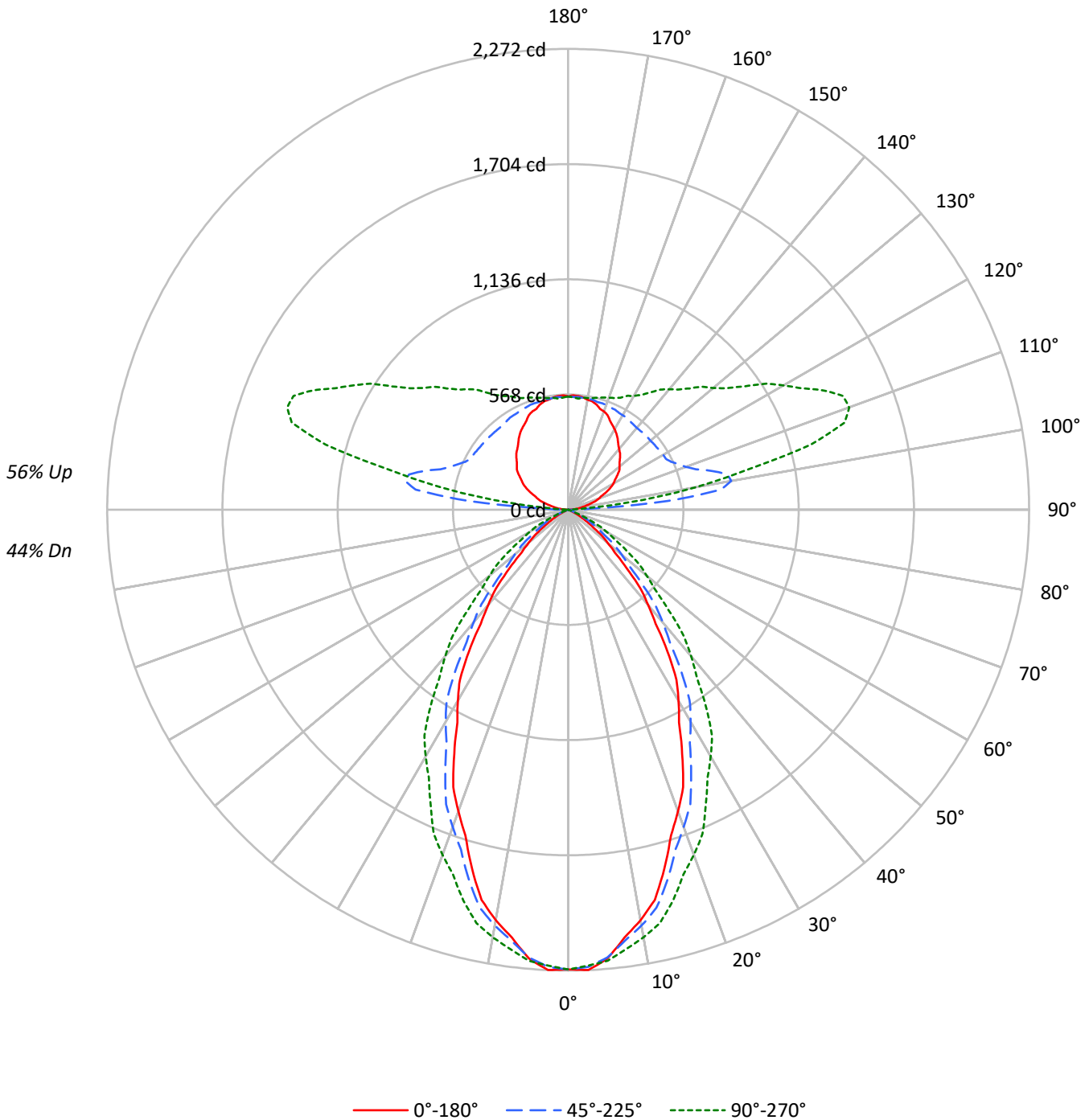
Input Watts (W): 65.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	50	50	50	44				
1	98	94	91	88	90	87	84	81	72	70	69	59	58	57	47	46	46	40				
2	91	84	79	75	83	78	73	69	65	62	59	54	52	50	43	42	41	36				
3	84	75	69	64	77	70	64	60	59	55	52	49	46	44	40	38	37	33				
4	77	68	61	56	71	63	57	52	54	49	46	45	42	39	37	35	33	30				
5	72	61	54	49	66	57	51	46	49	44	41	41	38	35	34	32	30	27				
6	67	56	49	43	61	52	46	41	45	40	36	38	34	32	32	29	27	24				
7	62	51	44	39	57	48	41	37	41	36	33	35	31	29	29	27	25	22				
8	58	47	40	35	53	44	37	33	38	33	30	32	29	26	27	25	23	21				
9	54	43	36	32	50	40	34	30	35	30	27	30	27	24	26	23	21	19				
10	51	40	33	29	47	37	31	27	33	28	25	28	25	22	24	21	20	18				

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	3.4
10°-20°	528.9	8.6
20°-30°	662.2	10.7
30°-40°	611.6	9.9
40°-50°	411.0	6.7
50°-60°	212.3	3.4
60°-70°	66.5	1.1
70°-80°	4.2	0.1
80°-90°	0.1	0.0
90°-100°	254.3	4.1
100°-110°	723.6	11.7
110°-120°	693.3	11.2
120°-130°	548.7	8.9
130°-140°	440.5	7.1
140°-150°	344.8	5.6
150°-160°	252.3	4.1
160°-170°	156.3	2.5
170°-180°	53.0	0.9
0°-30°	1397.9	22.7
0°-40°	2009.6	32.6
0°-60°	2632.8	42.7
0°-90°	2703.6	43.8
90°-120°	1671.3	27.1
90°-150°	3005.3	48.7
90°-180°	3467.0	56.2
0°-180°	6170.5	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	1
95°	28	110	492	170	105	32
105°	112	171	737	1303	1238	119
115°	209	253	559	1185	1391	206
125°	295	327	534	886	1059	264
135°	361	391	527	748	846	278
145°	426	447	532	648	706	266
155°	486	497	544	585	609	225
165°	537	539	551	563	571	151
175°	562	559	557	554	550	53
180°	558	558	558	558	558	

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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°	8.5	45.0	104.4	30.4	22.9
95°	27.6	109.5	492.3	170.4	105.0
97.5°	50.7	128.3	758.2	542.6	371.8
100°	66.8	139.5	816.0	826.5	636.6
102.5°	84.7	151.5	803.2	1057.9	892.1
105°	112.5	170.6	737.4	1302.6	1238.3
107.5°	140.7	192.8	660.6	1371.6	1428.8
110°	160.2	209.0	616.5	1345.2	1473.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.9	225.2	586.8	1282.8	1466.2
115°	209.0	252.6	559.2	1184.6	1391.1
117.5°	235.6	276.4	542.8	1077.3	1296.0
120°	256.8	291.0	541.1	1016.0	1225.5
122.5°	273.8	308.0	536.9	962.1	1156.8
125°	295.0	327.1	533.7	885.7	1058.9
127.5°	318.1	348.2	532.0	840.0	982.8
130°	330.0	360.1	529.5	808.2	932.7
132.5°	342.7	372.0	529.5	783.3	897.9
135°	360.8	390.9	527.4	748.1	845.7
137.5°	377.7	407.0	527.1	718.4	802.6
140°	390.5	420.6	526.3	693.7	774.6
142.5°	404.9	430.0	528.8	673.9	746.6
145°	425.5	447.3	531.6	647.5	705.6
147.5°	443.1	464.3	536.3	620.8	671.0
150°	458.4	472.9	538.0	612.0	647.3
152.5°	470.3	485.6	539.7	600.0	632.8
155°	486.0	497.4	544.3	585.2	609.1
157.5°	505.5	512.3	545.4	578.5	595.5
160°	515.7	520.9	549.6	573.3	587.8
162.5°	521.6	527.6	550.5	569.0	580.2
165°	536.9	539.0	550.7	562.6	570.9
167.5°	547.3	545.4	555.6	561.0	564.3
170°	550.7	549.7	553.9	555.0	559.2
172.5°	558.3	554.8	556.4	553.3	556.6
175°	562.4	559.3	557.1	553.8	549.6
177.5°	564.1	559.1	556.4	553.0	553.9
180°	558.1	558.1	558.1	558.1	558.1

(END OF REPORT)