

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: P521099

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

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521099  
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-075D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 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: 5523.5 lumens  
Efficiency: N/A  
Efficacy: 99.7 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: Semi-Indirect

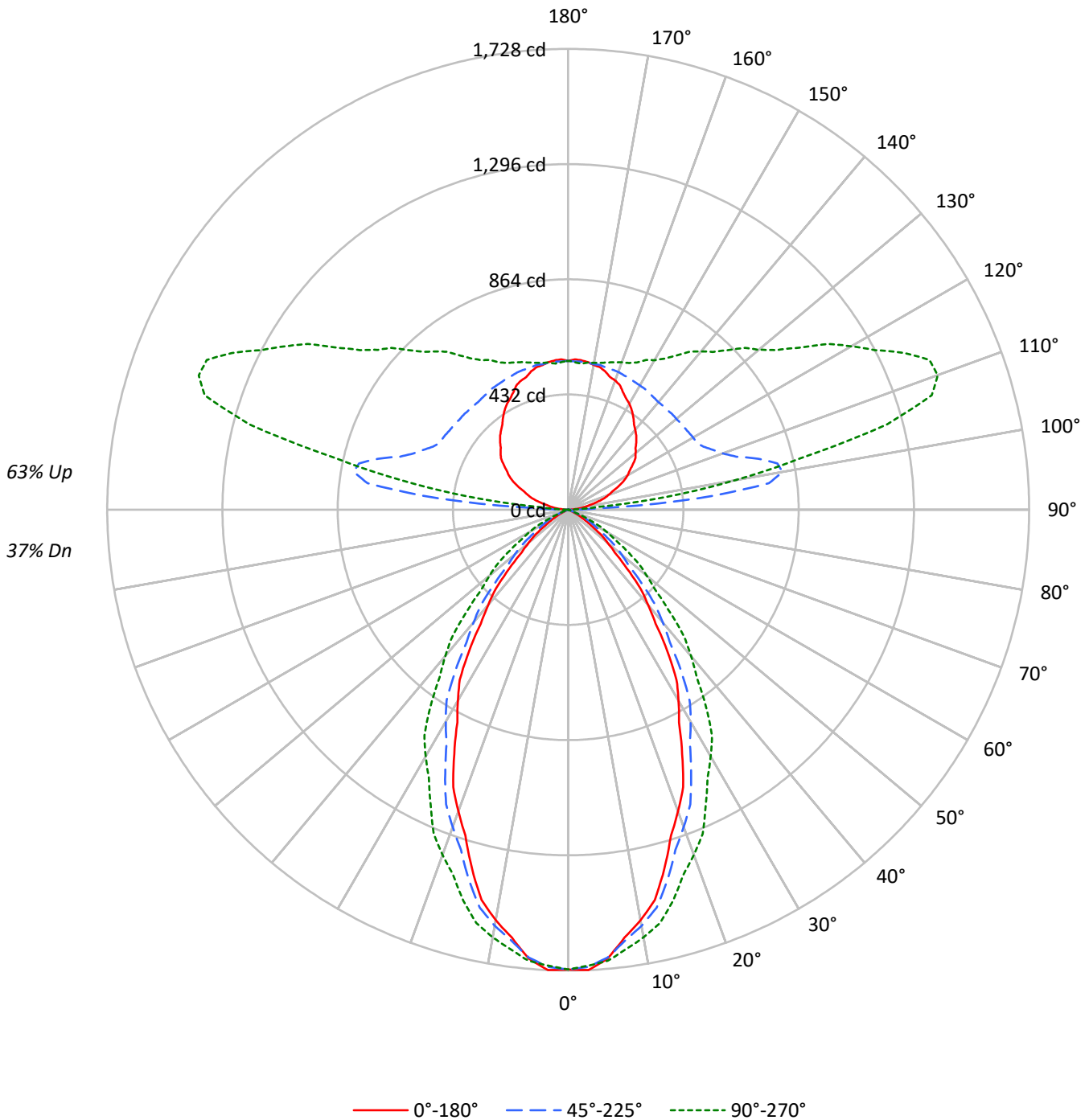
Input Watts (W): 55.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	60	60	60	44	44	44	37				
1	96	93	89	86	87	84	81	79	69	67	65	54	53	52	41	41	40	34				
2	89	82	77	73	81	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	76	66	59	54	69	61	55	50	50	46	43	41	38	36	32	30	29	25				
5	70	60	52	47	64	55	49	44	46	41	38	38	34	32	30	28	26	23				
6	65	54	47	42	59	50	43	39	42	37	34	34	31	29	28	25	24	21				
7	60	49	42	37	55	45	39	35	38	34	30	32	28	26	26	23	22	19				
8	56	45	38	33	51	42	35	31	35	31	27	29	26	24	24	22	20	18				
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°	15906	15906	15906
5°	15650	15612	15728
10°	14644	14839	15253
15°	13312	13734	14499
20°	11817	12431	13521
25°	10291	11106	12423
30°	8815	9783	11383
35°	7309	8304	10127
40°	5615	6640	8629
45°	4059	5027	6943
50°	2766	3748	5507
55°	1798	2710	4280
60°	1031	1908	3093
65°	273	1166	1565
70°	135	359	450
75°	61	29	0
80°	43	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6943 cd/sqm

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CATALOG NUMBER: SQ4-BB-075U-075D-92765-1D-UNV-STD-W-4\_5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.3	2.8
10°-20°	402.4	7.3
20°-30°	503.7	9.1
30°-40°	465.3	8.4
40°-50°	312.6	5.7
50°-60°	161.5	2.9
60°-70°	50.6	0.9
70°-80°	3.2	0.1
80°-90°	0.1	0.0
90°-100°	254.3	4.6
100°-110°	723.6	13.1
110°-120°	693.3	12.6
120°-130°	548.7	9.9
130°-140°	440.5	8.0
140°-150°	344.8	6.2
150°-160°	252.3	4.6
160°-170°	156.3	2.8
170°-180°	53.0	1.0
0°-30°	1063.4	19.3
0°-40°	1528.7	27.7
0°-60°	2002.8	36.3
0°-90°	2056.6	37.2
90°-120°	1671.3	30.3
90°-150°	3005.3	54.4
90°-180°	3467.0	62.8
0°-180°	5523.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1724	1724	1724	1724	1724	
5°	1690	1673	1686	1692	1698	157
15°	1394	1389	1438	1486	1518	388
25°	1011	1019	1091	1166	1220	463
35°	649	665	737	824	899	402
45°	311	330	385	460	532	244
55°	112	130	168	216	266	104
65°	12	24	53	64	72	21
75°	2	2	1	0	0	2
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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CATALOG NUMBER: SQ4-BB-075U-075D-92765-1D-UNV-STD-W-4\_5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1724.0	1724.0	1724.0	1724.0	1724.0
2.5°	1728.0	1711.7	1716.0	1715.9	1711.4
5°	1689.8	1672.7	1685.7	1691.7	1698.2
7.5°	1618.4	1605.1	1629.9	1648.6	1662.1
10°	1563.1	1551.6	1583.9	1609.4	1628.1
12.5°	1499.0	1490.2	1529.2	1564.1	1588.1
15°	1393.7	1388.8	1437.9	1486.2	1518.0
17.5°	1281.0	1280.8	1336.9	1396.8	1435.1
20°	1203.6	1206.0	1266.1	1332.2	1377.1
22.5°	1126.2	1131.9	1196.1	1265.0	1316.3
25°	1010.9	1019.1	1091.0	1165.6	1220.3
27.5°	900.1	912.0	987.7	1065.3	1131.8
30°	827.4	841.3	918.3	999.9	1068.5
32.5°	756.0	772.5	847.6	933.9	1003.7
35°	648.9	665.2	737.3	824.1	899.1
37.5°	538.3	554.3	624.7	710.1	791.2
40°	466.2	484.2	551.3	634.1	716.5
42.5°	400.9	418.8	481.9	563.3	641.1
45°	311.1	329.9	385.3	460.4	532.1
47.5°	236.7	257.1	305.8	373.7	439.1
50°	192.7	213.1	261.1	320.9	383.7
52.5°	157.3	177.0	220.4	276.7	334.3
55°	111.8	130.5	168.5	216.3	266.1
57.5°	77.2	93.4	127.4	167.4	206.4
60°	55.9	71.4	103.4	135.8	167.6
62.5°	37.2	51.4	82.7	107.6	128.9
65°	12.5	23.9	53.4	64.4	71.7
67.5°	6.3	7.6	28.0	29.6	32.0
70°	5.0	5.0	13.3	14.2	16.7
72.5°	3.7	3.7	5.3	6.9	7.3
75°	1.7	1.7	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	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°	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

TEST NUMBER: P521099

CATALOG NUMBER: SQ4-BB-075U-075D-92765-1D-UNV-STD-W-4\_5700K

**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)