

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: P521093

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

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521093  
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\_2700K  
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 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4980.4 lumens  
Efficiency: N/A  
Efficacy: 89.9 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

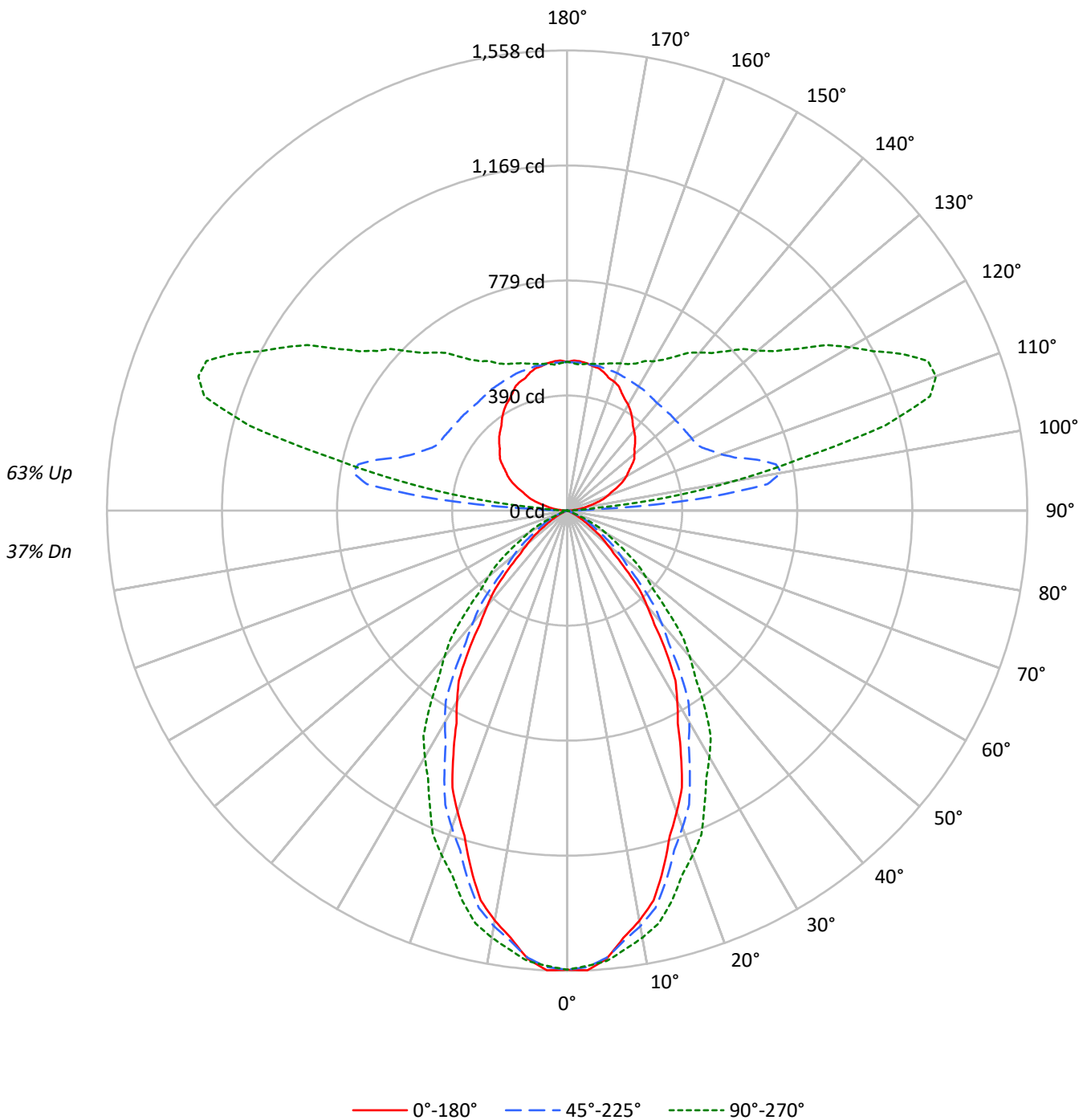
Input Watts (W): 55.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	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	2.8
10°-20°	362.8	7.3
20°-30°	454.2	9.1
30°-40°	419.5	8.4
40°-50°	281.9	5.7
50°-60°	145.6	2.9
60°-70°	45.6	0.9
70°-80°	2.9	0.1
80°-90°	0.1	0.0
90°-100°	229.3	4.6
100°-110°	652.5	13.1
110°-120°	625.2	12.6
120°-130°	494.8	9.9
130°-140°	397.1	8.0
140°-150°	310.9	6.2
150°-160°	227.5	4.6
160°-170°	140.9	2.8
170°-180°	47.8	1.0
0°-30°	958.8	19.3
0°-40°	1378.4	27.7
0°-60°	1805.8	36.3
0°-90°	1854.4	37.2
90°-120°	1507.0	30.3
90°-150°	2709.8	54.4
90°-180°	3126.0	62.8
0°-180°	4980.4	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°	25	99	444	154	95	28
105°	101	154	665	1174	1116	107
115°	188	228	504	1068	1254	186
125°	266	295	481	799	955	238
135°	325	352	476	675	762	251
145°	384	403	479	584	636	240
155°	438	448	491	528	549	203
165°	484	486	496	507	515	136
175°	507	504	502	499	496	48
180°	503	503	503	503	503	

TEST NUMBER: P521093

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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°	7.7	40.6	94.1	27.4	20.7
95°	24.9	98.8	443.9	153.7	94.7
97.5°	45.7	115.7	683.7	489.2	335.2
100°	60.3	125.8	735.7	745.2	574.0
102.5°	76.3	136.6	724.3	953.9	804.4
105°	101.4	153.8	664.9	1174.5	1116.5
107.5°	126.9	173.8	595.7	1236.7	1288.3
110°	144.5	188.4	555.9	1212.9	1328.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	161.3	203.0	529.1	1156.6	1322.0
115°	188.5	227.8	504.2	1068.1	1254.3
117.5°	212.4	249.3	489.5	971.4	1168.6
120°	231.5	262.4	487.9	916.1	1105.0
122.5°	246.8	277.7	484.1	867.5	1043.0
125°	266.0	295.0	481.2	798.6	954.8
127.5°	286.8	314.0	479.7	757.4	886.1
130°	297.5	324.7	477.4	728.7	841.0
132.5°	309.0	335.4	477.4	706.3	809.6
135°	325.3	352.4	475.5	674.6	762.5
137.5°	340.6	367.0	475.3	647.7	723.7
140°	352.1	379.2	474.5	625.5	698.4
142.5°	365.1	387.7	476.8	607.7	673.2
145°	383.7	403.3	479.3	583.8	636.2
147.5°	399.5	418.6	483.5	559.8	605.0
150°	413.3	426.4	485.1	551.8	583.6
152.5°	424.0	437.9	486.6	541.0	570.6
155°	438.2	448.5	490.8	527.7	549.2
157.5°	455.8	462.0	491.8	521.6	536.9
160°	465.0	469.7	495.6	516.9	530.0
162.5°	470.3	475.8	496.4	513.0	523.1
165°	484.1	486.0	496.5	507.2	514.7
167.5°	493.5	491.8	500.9	505.8	508.8
170°	496.5	495.6	499.4	500.5	504.2
172.5°	503.4	500.3	501.7	498.9	501.9
175°	507.1	504.3	502.3	499.3	495.6
177.5°	508.6	504.1	501.7	498.7	499.4
180°	503.2	503.2	503.2	503.2	503.2

(END OF REPORT)