

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

(formerly Eaton)

Brand: CORELITE

Report Number: P518517

Luminaire Tested: **SQ4-BB-075U-075D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518517  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-075U-075D-830-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

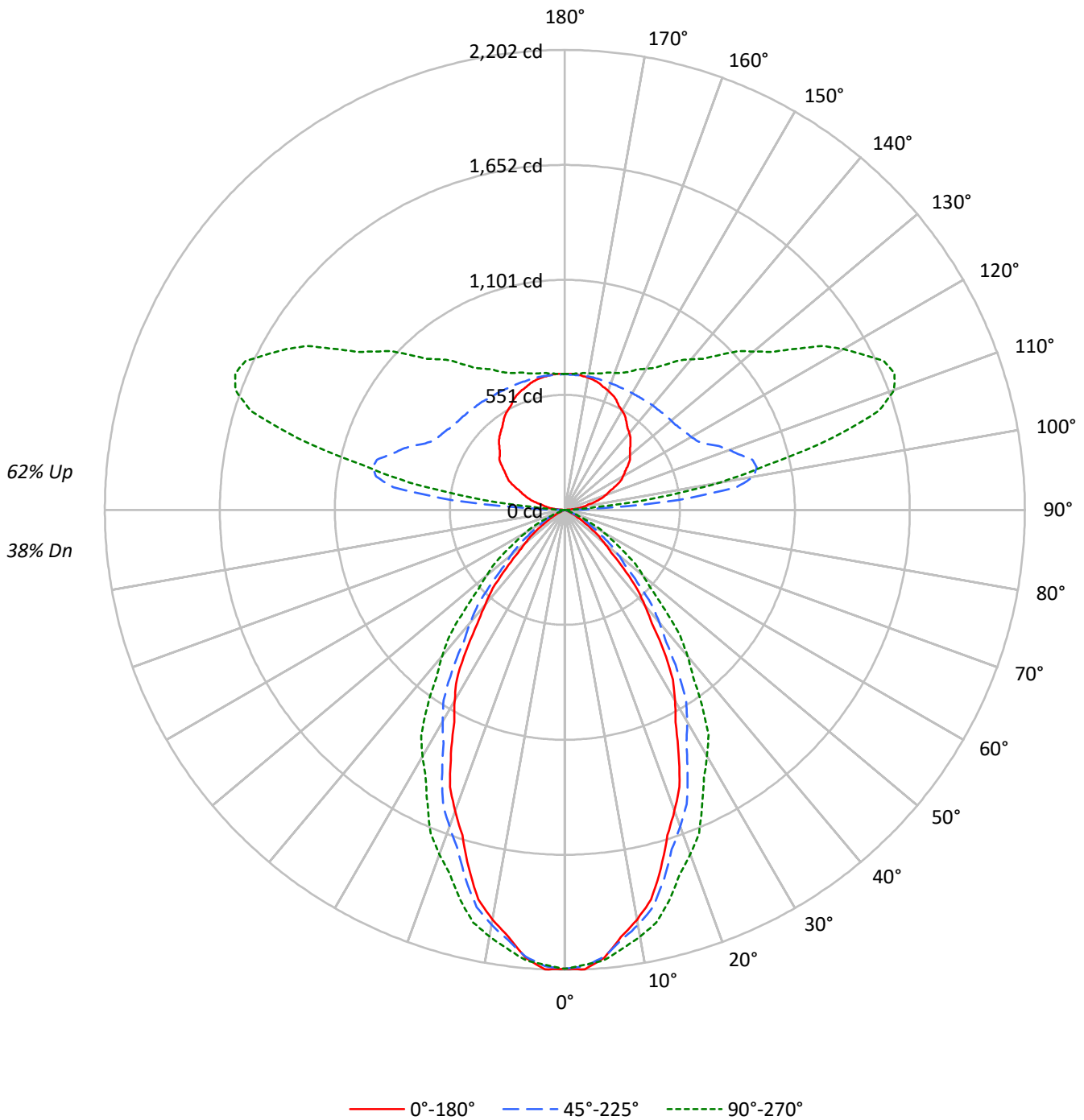
Lumens per Lamp: N/A  
Luminaire Lumens: 6861.3 lumens  
Efficiency: N/A  
Efficacy: 100.9 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 68  
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	95	95	95	95	77	77	77	60	60	60	45	45	45	38				
1	96	93	89	86	88	85	82	79	69	67	66	55	54	53	42	41	41	35				
2	89	83	77	73	81	76	71	67	62	59	57	50	48	46	39	38	37	32				
3	82	74	68	62	75	68	62	58	56	52	49	46	43	41	36	34	33	28				
4	76	66	59	54	69	61	55	50	51	47	43	42	39	36	33	31	30	26				
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23				
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	24	21				
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	20				
8	56	45	38	33	52	42	36	31	36	31	28	30	26	24	24	22	20	18				
9	53	42	35	30	48	39	33	28	33	28	25	28	24	22	23	20	19	17				
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	21	19	17	15				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13514	13514	13514
5°	13296	13264	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10561	11487
25°	8743	9435	10554
30°	7489	8312	9671
35°	6210	7055	8604
40°	4771	5641	7332
45°	3449	4272	5899
50°	2349	3184	4679
55°	1527	2302	3636
60°	876	1621	2629
65°	231	990	1330
70°	115	306	383
75°	50	26	0
80°	39	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.5	2.9
10°-20°	512.8	7.5
20°-30°	641.9	9.4
30°-40°	592.9	8.6
40°-50°	398.4	5.8
50°-60°	205.8	3.0
60°-70°	64.4	0.9
70°-80°	4.1	0.1
80°-90°	1.7	0.0
90°-100°	306.9	4.5
100°-110°	844.3	12.3
110°-120°	871.5	12.7
120°-130°	698.2	10.2
130°-140°	548.4	8.0
140°-150°	420.3	6.1
150°-160°	302.2	4.4
160°-170°	184.8	2.7
170°-180°	62.3	0.9
0°-30°	1355.2	19.8
0°-40°	1948.1	28.4
0°-60°	2552.4	37.2
0°-90°	2622.6	38.2
90°-120°	2022.6	29.5
90°-150°	3689.5	53.8
90°-180°	4239.0	61.8
0°-180°	6861.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2197	2197	2197	2197	2197	
5°	2154	2132	2148	2156	2164	200
15°	1776	1770	1832	1894	1935	495
25°	1288	1299	1390	1486	1555	591
35°	827	848	940	1050	1146	512
45°	396	420	491	587	678	311
55°	142	166	215	276	339	133
65°	16	30	68	82	91	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	5	10	12	12	3
95°	46	168	543	232	148	48
105°	151	232	930	1417	1322	159
115°	267	325	746	1486	1686	264
125°	368	420	677	1145	1341	328
135°	444	493	658	926	1048	343
145°	514	549	648	789	850	322
155°	581	600	644	709	730	267
165°	628	637	646	673	677	177
175°	651	652	648	656	655	62
180°	651	651	651	651	651	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2197.1	2197.1	2197.1	2197.1	2197.1
2.5°	2202.2	2181.4	2186.9	2186.8	2180.9
5°	2153.5	2131.7	2148.2	2155.8	2164.2
7.5°	2062.5	2045.5	2077.2	2101.0	2118.2
10°	1992.0	1977.4	2018.5	2051.0	2074.9
12.5°	1910.3	1899.1	1948.8	1993.3	2023.8
15°	1776.2	1769.9	1832.5	1894.0	1934.6
17.5°	1632.5	1632.3	1703.7	1780.1	1828.9
20°	1533.8	1536.9	1613.5	1697.8	1754.9
22.5°	1435.2	1442.5	1524.3	1612.1	1677.5
25°	1288.3	1298.7	1390.3	1485.5	1555.1
27.5°	1147.1	1162.3	1258.7	1357.6	1442.4
30°	1054.4	1072.1	1170.3	1274.3	1361.6
32.5°	963.5	984.4	1080.2	1190.2	1279.1
35°	827.0	847.8	939.6	1050.2	1145.9
37.5°	686.0	706.4	796.1	905.0	1008.3
40°	594.2	617.1	702.6	808.1	913.1
42.5°	510.9	533.7	614.2	717.8	817.0
45°	396.5	420.4	491.1	586.7	678.2
47.5°	301.7	327.6	389.7	476.2	559.5
50°	245.5	271.5	332.7	408.9	489.0
52.5°	200.5	225.6	280.8	352.7	426.0
55°	142.4	166.3	214.7	275.7	339.1
57.5°	98.4	119.0	162.4	213.3	263.0
60°	71.2	91.0	131.8	173.1	213.7
62.5°	47.4	65.5	105.4	137.1	164.3
65°	15.9	30.5	68.0	82.1	91.4
67.5°	8.1	9.7	35.7	37.7	40.8
70°	6.4	6.4	17.0	18.1	21.3
72.5°	4.7	4.7	6.8	8.7	9.4
75°	2.1	2.1	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°	0.3	1.1	1.9	2.5	2.5
90°	1.4	5.4	9.7	12.5	12.5
92.5°	19.1	81.6	141.5	54.3	44.6
95°	45.7	167.5	542.7	232.0	148.1
97.5°	74.5	185.7	828.1	638.1	450.2
100°	95.5	197.0	917.8	926.4	755.9
102.5°	115.5	210.5	941.1	1149.3	992.9
105°	150.9	232.1	930.3	1416.8	1322.1
107.5°	184.7	258.9	877.4	1547.8	1576.0
110°	209.0	276.7	837.5	1580.4	1677.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	231.2	296.7	797.7	1559.4	1707.7
115°	267.2	325.4	746.2	1485.8	1686.1
117.5°	301.5	355.1	713.5	1382.6	1609.2
120°	322.6	374.0	699.1	1305.2	1539.4
122.5°	341.4	392.8	689.1	1237.4	1459.7
125°	368.2	419.7	677.0	1145.2	1341.4
127.5°	393.7	442.7	668.9	1068.2	1240.4
130°	407.0	457.1	664.5	1022.5	1179.5
132.5°	422.5	472.6	661.2	982.2	1124.1
135°	444.4	493.1	657.6	926.1	1048.0
137.5°	464.9	510.1	654.5	880.8	981.2
140°	480.4	522.3	653.4	850.7	941.4
142.5°	493.7	532.4	651.2	823.8	901.5
145°	513.6	548.8	647.9	789.1	850.0
147.5°	534.9	565.2	646.2	758.4	807.1
150°	548.2	575.3	645.1	741.5	779.4
152.5°	560.4	585.3	644.0	726.9	758.4
155°	581.4	600.4	643.7	709.3	729.6
157.5°	596.7	612.1	643.7	694.7	708.8
160°	607.7	619.9	643.7	686.9	697.7
162.5°	616.6	626.6	644.8	680.2	688.9
165°	628.5	636.6	646.5	672.9	677.0
167.5°	636.8	643.0	647.9	666.7	667.8
170°	642.3	646.4	647.9	664.5	664.5
172.5°	646.8	648.7	647.9	661.1	660.1
175°	650.6	652.0	647.9	656.2	654.8
177.5°	651.8	651.8	647.3	653.9	651.8
180°	650.6	650.6	650.6	650.6	650.6

(END OF REPORT)