

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: P518565

Luminaire Tested: **SQ4-BB-075U-125D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518565  
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-125D-830-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

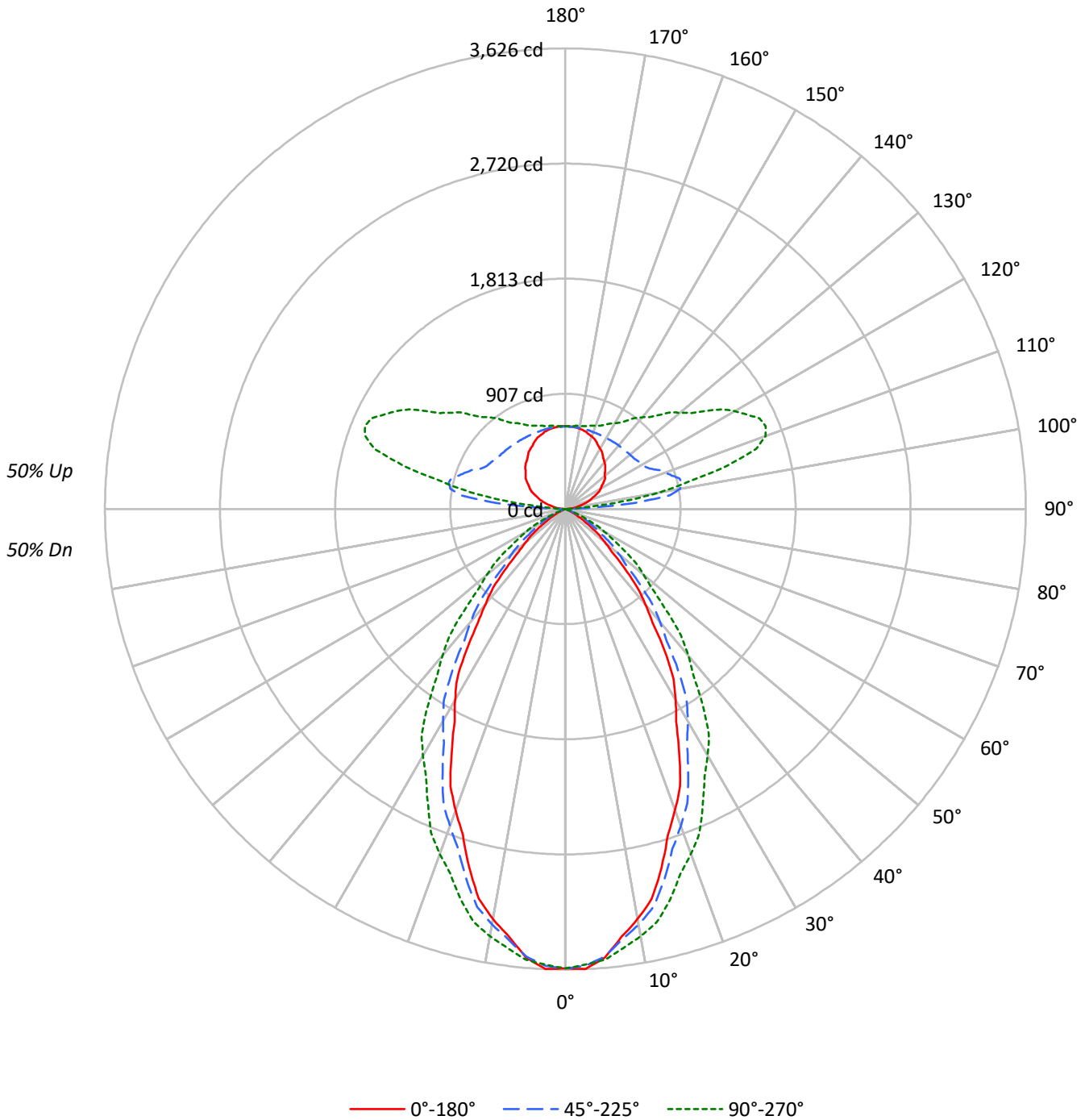
Lumens per Lamp: N/A  
Luminaire Lumens: 8555.3 lumens  
Efficiency: N/A  
Efficacy: 87.9 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 97.3  
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	57	57	57	50
1	100	96	93	90	92	89	86	84	76	74	72	64	63	61	53	52	51	46
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46	42
3	85	77	71	66	79	72	67	62	62	58	55	53	51	48	45	43	41	38
4	79	70	63	58	73	65	59	55	57	52	49	49	46	43	41	39	37	34
5	73	63	56	51	68	59	53	48	52	47	43	45	41	39	38	36	34	31
6	68	58	50	45	63	54	48	43	47	43	39	41	38	35	36	33	31	28
7	64	53	46	41	59	50	43	39	44	39	35	38	34	32	33	30	28	26
8	60	48	41	37	55	46	39	35	40	35	32	35	32	29	31	28	26	24
9	56	45	38	33	52	42	36	32	37	33	29	33	29	27	29	26	24	22
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	20

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

	0°	45°	90°
0°	22248	22248	22248
5°	21890	21836	21998
10°	20482	20755	21335
15°	18621	19211	20281
20°	16529	17388	18911
25°	14394	15534	17375
30°	12329	13684	15921
35°	10223	11616	14164
40°	7854	9287	12070
45°	5678	7033	9712
50°	3868	5241	7703
55°	2515	3791	5986
60°	1442	2669	4326
65°	381	1630	2190
70°	189	504	629
75°	83	40	0
80°	60	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	330.1	3.9
10°-20°	844.2	9.9
20°-30°	1056.8	12.4
30°-40°	976.2	11.4
40°-50°	655.9	7.7
50°-60°	338.8	4.0
60°-70°	106.1	1.2
70°-80°	6.7	0.1
80°-90°	1.8	0.0
90°-100°	306.9	3.6
100°-110°	844.3	9.9
110°-120°	871.5	10.2
120°-130°	698.2	8.2
130°-140°	548.4	6.4
140°-150°	420.3	4.9
150°-160°	302.2	3.5
160°-170°	184.8	2.2
170°-180°	62.3	0.7
0°-30°	2231.1	26.1
0°-40°	3207.3	37.5
0°-60°	4202.0	49.1
0°-90°	4316.6	50.5
90°-120°	2022.6	23.6
90°-150°	3689.5	43.1
90°-180°	4239.0	49.5
0°-180°	8555.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3617	3617	3617	3617	3617	
5°	3545	3510	3537	3549	3563	329
15°	2924	2914	3017	3118	3185	814
25°	2121	2138	2289	2446	2560	972
35°	1362	1396	1547	1729	1886	843
45°	653	692	808	966	1116	513
55°	234	274	354	454	558	219
65°	26	50	112	135	150	44
75°	4	4	2	0	0	5
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°	3617.1	3617.1	3617.1	3617.1	3617.1
2.5°	3625.5	3591.3	3600.3	3600.1	3590.5
5°	3545.4	3509.5	3536.6	3549.2	3562.9
7.5°	3395.6	3367.5	3419.7	3458.9	3487.3
10°	3279.4	3255.4	3323.1	3376.5	3415.9
12.5°	3145.0	3126.5	3208.4	3281.6	3331.9
15°	2924.2	2913.9	3016.9	3118.2	3184.9
17.5°	2687.6	2687.2	2804.8	2930.5	3011.0
20°	2525.2	2530.3	2656.4	2795.1	2889.2
22.5°	2362.8	2374.8	2509.4	2654.0	2761.8
25°	2120.9	2138.0	2288.9	2445.5	2560.2
27.5°	1888.5	1913.5	2072.3	2235.1	2374.7
30°	1735.9	1765.0	1926.7	2098.0	2241.7
32.5°	1586.2	1620.7	1778.3	1959.4	2105.9
35°	1361.5	1395.7	1547.0	1729.0	1886.4
37.5°	1129.4	1163.0	1310.7	1489.9	1660.0
40°	978.2	1015.9	1156.7	1330.4	1503.2
42.5°	841.0	878.7	1011.1	1181.8	1345.0
45°	652.7	692.1	808.5	965.9	1116.5
47.5°	496.6	539.4	641.5	783.9	921.2
50°	404.2	447.0	547.7	673.2	805.0
52.5°	330.0	371.4	462.3	580.6	701.4
55°	234.5	273.8	353.5	453.9	558.2
57.5°	162.0	195.9	267.4	351.1	432.9
60°	117.2	149.8	217.0	285.0	351.7
62.5°	78.0	107.8	173.6	225.7	270.5
65°	26.2	50.2	112.0	135.1	150.5
67.5°	13.3	16.0	58.8	62.1	67.2
70°	10.5	10.5	28.0	29.9	35.0
72.5°	7.7	7.7	11.2	14.4	15.4
75°	3.5	3.5	1.7	0.0	0.0
77.5°	1.7	1.7	1.4	0.0	0.0
80°	1.7	1.7	0.0	0.0	0.0
82.5°	0.3	0.3	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)