

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: P518949

Luminaire Tested: **SQ4-BB-150U-125D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518949  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-125D-830-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

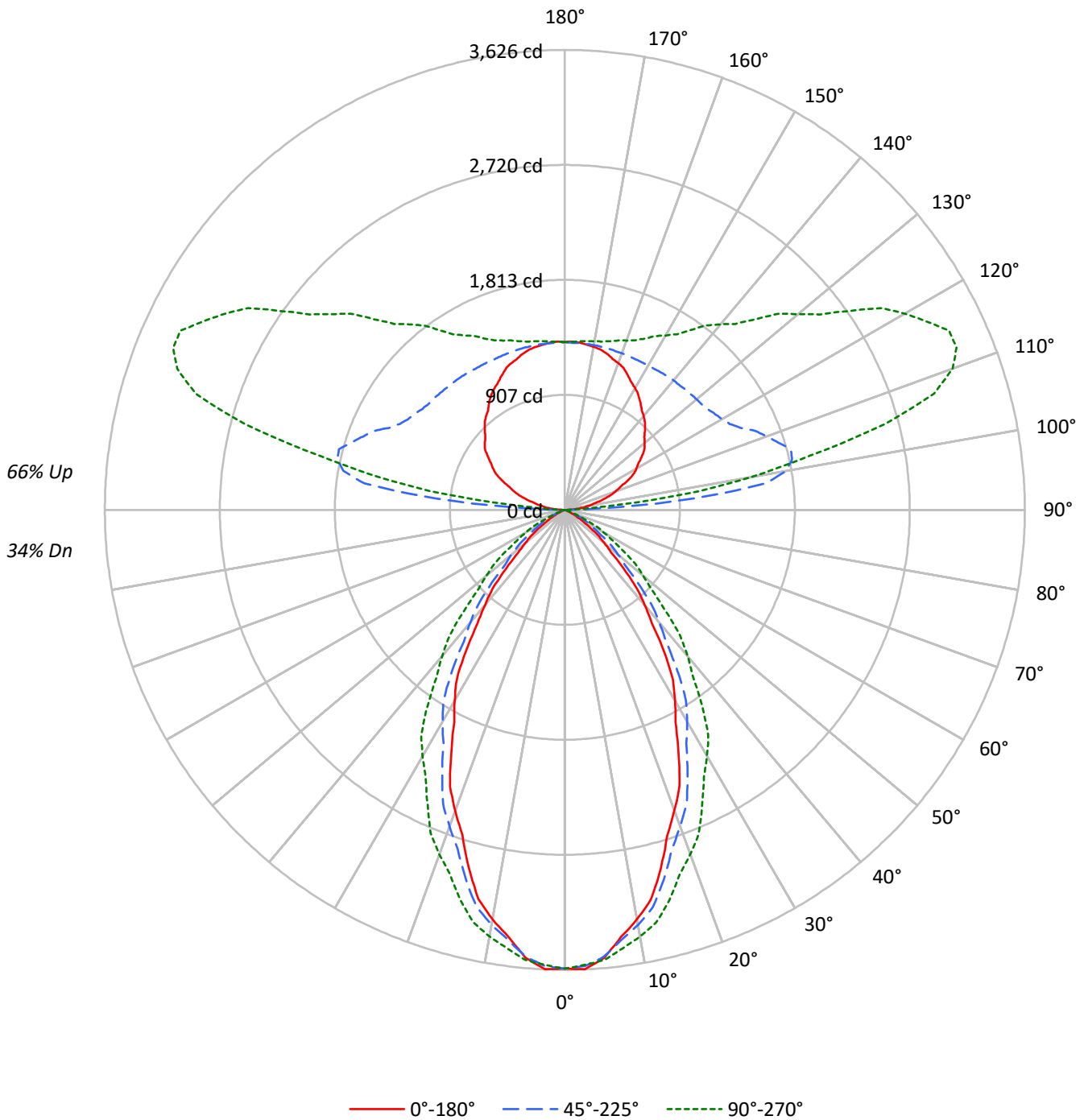
Lumens per Lamp: N/A  
Luminaire Lumens: 12846.6 lumens  
Efficiency: N/A  
Efficacy: 101.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 127.1  
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23
5	69	59	51	46	62	54	47	43	44	40	36	35	32	30	27	26	24	21
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14

**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	2.6
10°-20°	844.2	6.6
20°-30°	1056.8	8.2
30°-40°	976.2	7.6
40°-50°	655.9	5.1
50°-60°	338.8	2.6
60°-70°	106.1	0.8
70°-80°	6.7	0.1
80°-90°	2.9	0.0
90°-100°	614.8	4.8
100°-110°	1662.2	12.9
110°-120°	1747.6	13.6
120°-130°	1419.5	11.0
130°-140°	1113.5	8.7
140°-150°	854.6	6.7
150°-160°	614.6	4.8
160°-170°	375.5	2.9
170°-180°	126.6	1.0
0°-30°	2231.1	17.4
0°-40°	3207.3	25.0
0°-60°	4202.0	32.7
0°-90°	4317.7	33.6
90°-120°	4024.6	31.3
90°-150°	7412.3	57.7
90°-180°	8529.0	66.4
0°-180°	12846.6	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°	3	8	18	20	18	6
95°	95	335	1022	529	315	100
105°	309	478	1844	2720	2609	325
115°	544	665	1529	2960	3342	537
125°	745	853	1378	2326	2733	664
135°	893	999	1341	1878	2126	690
145°	1038	1116	1323	1608	1730	649
155°	1172	1218	1312	1442	1490	541
165°	1276	1288	1317	1369	1376	359
175°	1324	1323	1319	1336	1333	126
180°	1323	1323	1323	1323	1323	



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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°	0.6	1.7	3.7	4.0	3.7
90°	2.8	8.4	18.5	19.9	18.5
92.5°	40.4	147.4	290.8	126.2	91.4
95°	95.4	334.9	1022.4	529.1	314.7
97.5°	153.2	384.1	1593.7	1318.9	968.6
100°	196.5	404.0	1771.4	1847.4	1493.7
102.5°	236.4	431.6	1834.1	2248.1	1983.6
105°	309.0	477.5	1844.0	2720.1	2608.7
107.5°	376.2	529.9	1763.4	3014.5	3051.5
110°	428.6	567.8	1691.7	3093.6	3250.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	475.3	605.6	1625.6	3077.8	3342.0
115°	544.0	665.1	1529.3	2960.5	3342.0
117.5°	611.2	724.8	1465.8	2781.4	3213.9
120°	652.2	763.6	1428.2	2652.9	3094.3
122.5°	690.9	800.1	1405.4	2515.1	2959.8
125°	744.7	853.3	1378.4	2326.0	2732.6
127.5°	794.3	900.9	1362.4	2171.7	2529.2
130°	821.6	931.6	1355.6	2076.4	2399.4
132.5°	850.1	959.0	1348.8	1990.3	2287.7
135°	892.8	998.6	1341.4	1878.1	2126.0
137.5°	935.8	1035.8	1335.1	1787.1	1989.0
140°	965.4	1058.7	1332.8	1728.5	1908.1
142.5°	993.9	1081.6	1328.3	1675.6	1832.9
145°	1038.1	1116.0	1322.9	1607.6	1730.1
147.5°	1078.2	1147.3	1316.6	1546.0	1640.1
150°	1107.8	1169.1	1314.3	1512.5	1587.7
152.5°	1135.2	1188.6	1313.2	1481.5	1543.3
155°	1171.9	1217.9	1311.5	1442.1	1489.5
157.5°	1210.1	1242.1	1311.7	1414.7	1445.9
160°	1231.7	1258.2	1312.9	1397.4	1419.7
162.5°	1248.8	1270.8	1314.0	1383.6	1400.3
165°	1275.9	1288.4	1317.2	1368.6	1375.5
167.5°	1294.4	1303.0	1317.4	1355.7	1359.0
170°	1305.8	1309.9	1318.6	1349.9	1349.9
172.5°	1314.9	1315.7	1318.6	1343.1	1341.9
175°	1324.3	1322.9	1318.6	1335.6	1332.8
177.5°	1327.4	1324.1	1318.3	1329.6	1326.3
180°	1322.9	1322.9	1322.9	1322.9	1322.9

(END OF REPORT)