

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: P518861

Luminaire Tested: **SQ4-BB-125U-125D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518861  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-125D-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

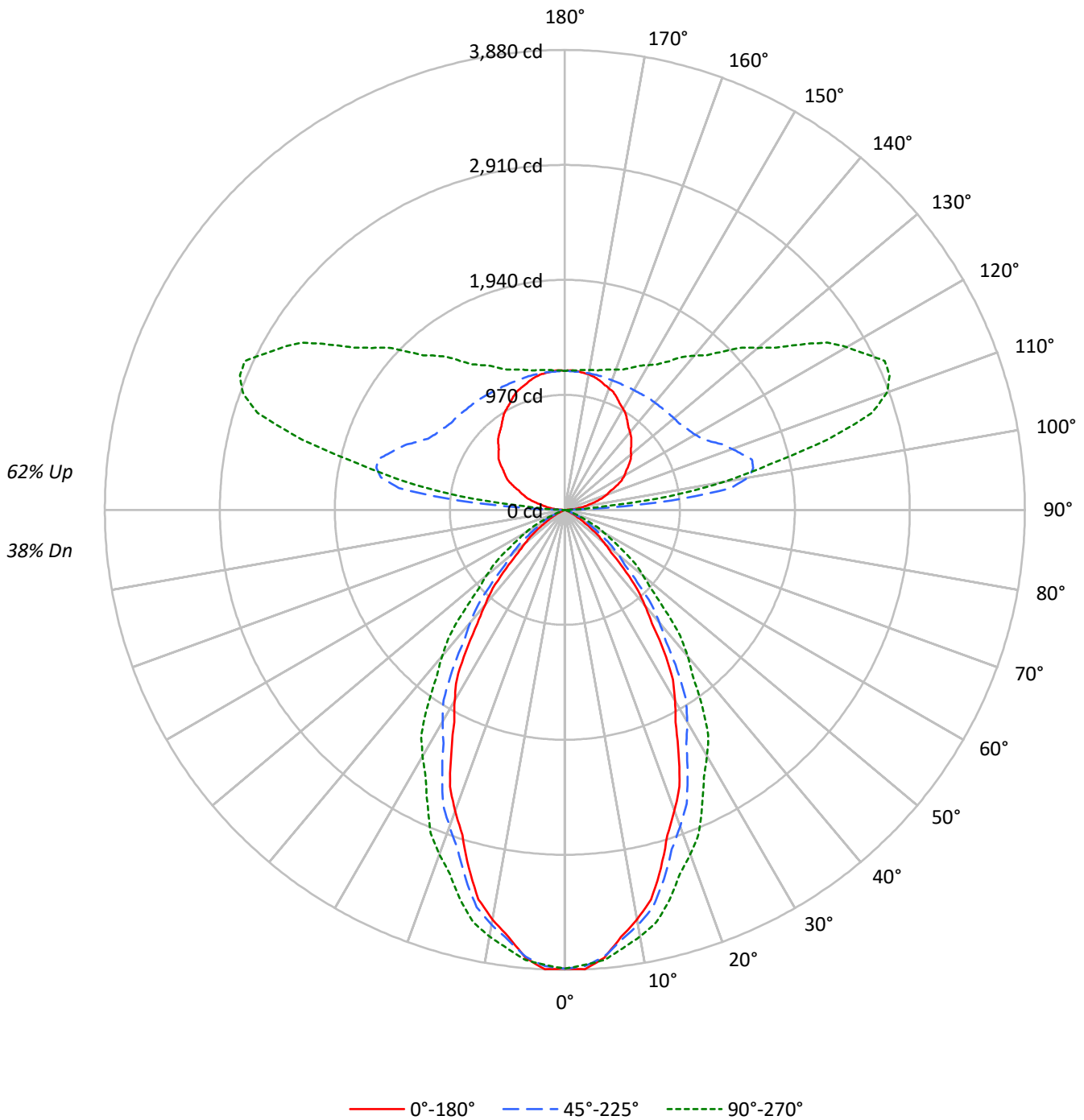
Lumens per Lamp: N/A  
Luminaire Lumens: 12194.6 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 117.2  
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	88	84	82	79	69	67	66	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	39	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	47	43	41	38	36	33	31	29	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	37	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	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	39	32	28	33	28	25	28	24	22	23	20	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	22	20	21	19	17	15

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

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21703
20°	17687	18606	20237
25°	15403	16623	18593
30°	13193	14644	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7526	10392
50°	4140	5608	8243
55°	2691	4057	6406
60°	1544	2856	4630
65°	409	1744	2343
70°	201	540	674
75°	88	45	0
80°	67	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	353.2	2.9
10°-20°	903.4	7.4
20°-30°	1130.9	9.3
30°-40°	1044.6	8.6
40°-50°	701.9	5.8
50°-60°	362.6	3.0
60°-70°	113.6	0.9
70°-80°	7.2	0.1
80°-90°	2.9	0.0
90°-100°	548.9	4.5
100°-110°	1478.5	12.1
110°-120°	1551.7	12.7
120°-130°	1259.2	10.3
130°-140°	987.5	8.1
140°-150°	758.2	6.2
150°-160°	545.1	4.5
160°-170°	333.0	2.7
170°-180°	112.3	0.9
0°-30°	2387.5	19.6
0°-40°	3432.1	28.1
0°-60°	4496.6	36.9
0°-90°	4620.2	37.9
90°-120°	3579.1	29.3
90°-150°	6584.0	54.0
90°-180°	7574.0	62.1
0°-180°	12194.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3871	3871	3871	3871	3871	
5°	3794	3756	3785	3798	3813	352
15°	3129	3118	3228	3337	3408	872
25°	2270	2288	2449	2617	2740	1041
35°	1457	1494	1655	1850	2019	903
45°	698	741	865	1034	1195	549
55°	251	293	378	486	597	234
65°	28	54	120	145	161	47
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	3	9	18	19	19	6
95°	84	298	900	460	318	87
105°	274	426	1635	2446	2296	288
115°	483	591	1362	2631	2976	475
125°	659	757	1223	2066	2432	589
135°	794	886	1188	1667	1888	613
145°	918	989	1173	1425	1530	576
155°	1042	1080	1163	1279	1320	480
165°	1130	1143	1167	1214	1220	319
175°	1175	1173	1169	1185	1182	112
180°	1173	1173	1173	1173	1173	



TEST NUMBER: P518861

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3870.7	3870.7	3870.7	3870.7	3870.7
2.5°	3879.7	3843.1	3852.7	3852.5	3842.3
5°	3793.9	3755.5	3784.6	3798.0	3812.7
7.5°	3633.6	3603.6	3659.5	3701.4	3731.8
10°	3509.3	3483.7	3556.1	3613.3	3655.4
12.5°	3365.5	3345.7	3433.3	3511.6	3565.5
15°	3129.2	3118.2	3228.4	3336.8	3408.2
17.5°	2876.0	2875.6	3001.4	3136.0	3222.0
20°	2702.2	2707.7	2842.6	2991.0	3091.7
22.5°	2528.4	2541.2	2685.3	2840.0	2955.4
25°	2269.6	2287.9	2449.4	2617.0	2739.7
27.5°	2020.9	2047.7	2217.6	2391.7	2541.2
30°	1857.6	1888.8	2061.8	2245.0	2398.8
32.5°	1697.3	1734.3	1903.0	2096.8	2253.5
35°	1456.9	1493.5	1655.4	1850.2	2018.7
37.5°	1208.6	1244.5	1402.6	1594.4	1776.4
40°	1046.8	1087.1	1237.8	1423.7	1608.6
42.5°	900.0	940.3	1082.0	1264.6	1439.3
45°	698.5	740.6	865.2	1033.6	1194.7
47.5°	531.5	577.2	686.5	838.9	985.7
50°	432.6	478.4	586.1	720.4	861.4
52.5°	353.2	397.5	494.7	621.3	750.5
55°	250.9	293.0	378.3	485.7	597.4
57.5°	173.4	209.7	286.1	375.8	463.3
60°	125.5	160.3	232.2	305.0	376.4
62.5°	83.5	115.4	185.8	241.5	289.5
65°	28.1	53.7	119.8	144.6	161.0
67.5°	14.2	17.2	62.9	66.4	71.9
70°	11.2	11.2	30.0	32.0	37.5
72.5°	8.2	8.2	12.0	15.4	16.5
75°	3.7	3.7	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	1.8	3.6	3.9	3.9
90°	3.0	8.8	17.9	19.4	19.4
92.5°	36.5	128.8	254.7	122.6	85.2
95°	83.7	298.5	899.8	460.1	318.4
97.5°	133.6	341.7	1411.3	1179.0	889.0
100°	171.9	359.0	1573.9	1646.7	1366.1
102.5°	209.0	383.2	1627.7	1997.0	1766.7
105°	273.5	425.5	1635.2	2446.3	2295.8
107.5°	334.5	470.1	1565.5	2677.2	2716.1
110°	375.2	503.8	1502.1	2748.9	2890.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	418.2	537.5	1441.2	2733.1	2966.0
115°	482.8	590.9	1361.6	2631.0	2975.9
117.5°	541.7	643.1	1300.1	2468.1	2852.1
120°	579.9	677.8	1269.0	2351.1	2745.7
122.5°	613.4	710.2	1246.3	2231.5	2624.9
125°	659.1	757.1	1222.6	2066.5	2431.8
127.5°	703.1	799.5	1207.7	1920.9	2247.1
130°	729.4	825.9	1201.7	1837.5	2123.9
132.5°	755.7	851.0	1195.7	1764.0	2027.1
135°	793.7	885.7	1188.3	1667.1	1887.8
137.5°	829.8	918.1	1184.4	1584.9	1766.1
140°	855.0	939.7	1180.8	1534.3	1697.9
142.5°	881.3	960.2	1178.4	1487.0	1625.0
145°	917.7	989.3	1173.3	1425.3	1530.5
147.5°	957.2	1019.4	1168.2	1373.4	1456.1
150°	983.5	1037.6	1165.8	1340.8	1409.5
152.5°	1007.4	1054.5	1164.6	1314.2	1370.0
155°	1041.8	1079.8	1162.9	1278.9	1319.8
157.5°	1072.0	1101.5	1163.2	1254.1	1281.5
160°	1091.1	1116.0	1164.3	1239.5	1260.0
162.5°	1107.8	1128.0	1165.5	1227.5	1242.1
165°	1130.0	1143.1	1167.3	1213.8	1219.7
167.5°	1147.9	1155.5	1168.8	1203.3	1205.6
170°	1159.9	1162.8	1168.8	1197.2	1197.2
172.5°	1167.0	1167.6	1170.0	1191.3	1191.3
175°	1174.8	1173.3	1168.8	1185.2	1182.3
177.5°	1178.1	1175.8	1169.7	1179.2	1176.9
180°	1173.3	1173.3	1173.3	1173.3	1173.3

(END OF REPORT)