

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: P518769

Luminaire Tested: **SQ4-BB-100U-125D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518769  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-930-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

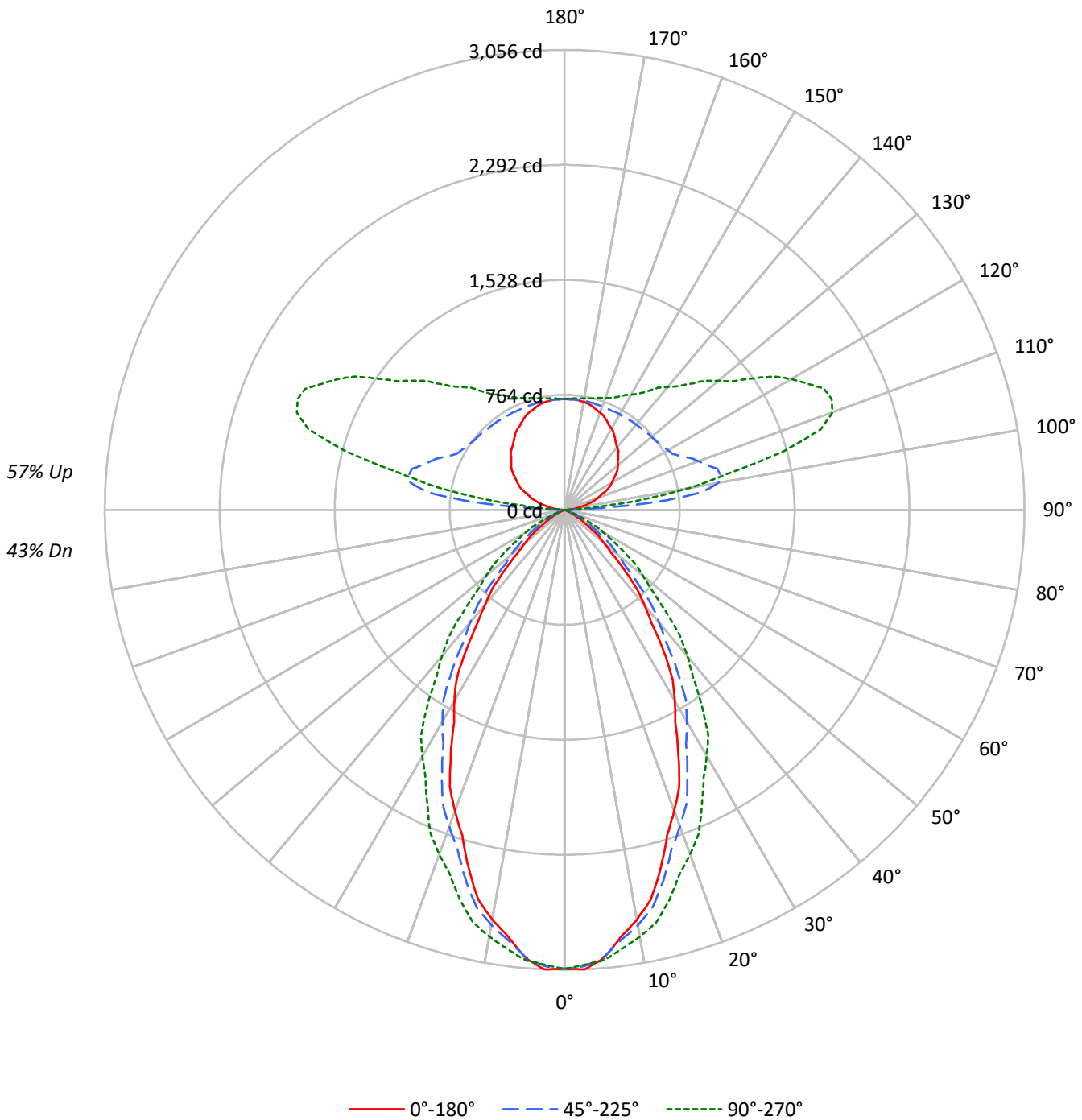
Lumens per Lamp: N/A  
Luminaire Lumens: 8433.3 lumens  
Efficiency: N/A  
Efficacy: 78.6 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 107.3  
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	50	30	10	0	
RCR																						
0	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43				43
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45				39	
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40				36	
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36				32	
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33				29	
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30				26	
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27				24	
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25				22	
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23				20	
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21				19	
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19				17	

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

	0°	45°	90°
0°	18757	18757	18757
5°	18455	18409	18546
10°	17267	17498	17986
15°	15698	16196	17098
20°	13935	14659	15943
25°	12135	13096	14648
30°	10394	11536	13423
35°	8619	9793	11942
40°	6622	7830	10176
45°	4787	5929	8187
50°	3261	4419	6493
55°	2120	3196	5047
60°	1215	2250	3647
65°	322	1374	1847
70°	160	424	531
75°	71	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	278.3	3.3
10°-20°	711.7	8.4
20°-30°	891.0	10.6
30°-40°	823.0	9.8
40°-50°	553.0	6.6
50°-60°	285.6	3.4
60°-70°	89.5	1.1
70°-80°	5.7	0.1
80°-90°	1.6	0.0
90°-100°	345.5	4.1
100°-110°	953.9	11.3
110°-120°	983.8	11.7
120°-130°	790.5	9.4
130°-140°	621.3	7.4
140°-150°	476.5	5.7
150°-160°	342.5	4.1
160°-170°	209.4	2.5
170°-180°	70.6	0.8
0°-30°	1881.0	22.3
0°-40°	2703.9	32.1
0°-60°	3542.5	42.0
0°-90°	3639.3	43.2
90°-120°	2283.2	27.1
90°-150°	4171.5	49.5
90°-180°	4794.0	56.8
0°-180°	8433.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3050	3050	3050	3050	3050	
5°	2989	2959	2982	2992	3004	277
15°	2465	2457	2543	2629	2685	687
25°	1788	1802	1930	2062	2158	820
35°	1148	1177	1304	1458	1590	711
45°	550	584	682	814	941	432
55°	198	231	298	383	471	184
65°	22	42	94	114	127	37
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	2	5	9	11	12	4
95°	51	187	627	258	168	54
105°	170	262	1050	1602	1509	181
115°	305	368	845	1673	1903	299
125°	418	476	766	1297	1522	372
135°	503	557	745	1050	1184	389
145°	583	624	736	894	962	365
155°	658	680	730	802	828	303
165°	712	721	733	762	767	201
175°	738	739	734	745	742	70
180°	738	738	738	738	738	



TEST NUMBER: P518769

CATALOG NUMBER: SQ4-BB-100U-125D-930-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3049.5	3049.5	3049.5	3049.5	3049.5
2.5°	3056.5	3027.7	3035.3	3035.1	3027.0
5°	2989.0	2958.7	2981.6	2992.2	3003.7
7.5°	2862.7	2839.0	2883.0	2916.0	2940.0
10°	2764.7	2744.5	2801.6	2846.6	2879.8
12.5°	2651.4	2635.8	2704.8	2766.6	2809.0
15°	2465.2	2456.6	2543.4	2628.8	2685.1
17.5°	2265.8	2265.5	2364.6	2470.6	2538.4
20°	2128.9	2133.2	2239.5	2356.4	2435.7
22.5°	1992.0	2002.1	2115.6	2237.4	2328.3
25°	1788.1	1802.5	1929.7	2061.7	2158.4
27.5°	1592.1	1613.2	1747.1	1884.3	2002.0
30°	1463.5	1488.0	1624.3	1768.7	1889.9
32.5°	1337.2	1366.4	1499.2	1651.9	1775.4
35°	1147.8	1176.6	1304.2	1457.7	1590.4
37.5°	952.2	980.4	1105.0	1256.1	1399.5
40°	824.7	856.4	975.2	1121.6	1267.3
42.5°	709.0	740.8	852.4	996.3	1133.9
45°	550.3	583.5	681.6	814.3	941.2
47.5°	418.7	454.8	540.8	660.9	776.6
50°	340.8	376.9	461.8	567.6	678.6
52.5°	278.2	313.2	389.8	489.5	591.3
55°	197.7	230.9	298.0	382.6	470.6
57.5°	136.6	165.2	225.4	296.0	365.0
60°	98.8	126.3	182.9	240.3	296.5
62.5°	65.8	90.9	146.4	190.3	228.1
65°	22.1	42.3	94.4	113.9	126.9
67.5°	11.2	13.5	49.6	52.3	56.7
70°	8.9	8.9	23.6	25.2	29.5
72.5°	6.5	6.5	9.4	12.1	13.0
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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°	0.5	0.9	1.9	2.1	2.4
90°	2.4	4.7	9.4	10.7	11.8
92.5°	21.2	88.2	157.7	57.6	44.9
95°	50.8	187.0	626.9	257.7	167.6
97.5°	84.1	209.4	928.6	714.9	517.8
100°	108.6	222.9	1040.0	1047.4	851.2
102.5°	132.2	238.2	1061.8	1294.1	1108.0
105°	170.0	262.3	1049.5	1602.2	1508.7
107.5°	210.1	292.3	990.9	1750.8	1784.9
110°	238.5	312.3	945.6	1782.7	1893.6

TEST NUMBER: P518769

CATALOG NUMBER: SQ4-BB-100U-125D-930-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	264.0	335.1	903.1	1757.5	1920.9
115°	304.6	368.1	845.3	1673.3	1903.0
117.5°	340.0	403.2	807.2	1554.8	1816.1
120°	363.6	425.9	792.1	1474.6	1737.7
122.5°	386.3	445.8	779.9	1399.6	1649.0
125°	417.9	475.6	766.2	1296.6	1521.7
127.5°	444.8	502.5	758.1	1209.5	1403.6
130°	462.8	520.5	754.4	1156.2	1332.8
132.5°	479.8	534.7	750.6	1111.4	1271.4
135°	502.9	557.2	744.9	1050.2	1184.1
137.5°	528.9	578.3	742.1	998.7	1113.0
140°	543.0	591.5	740.2	964.4	1064.8
142.5°	559.1	603.9	738.3	933.9	1022.3
145°	583.2	623.6	735.5	894.0	962.1
147.5°	606.3	641.6	732.9	860.4	913.3
150°	623.3	652.2	731.9	840.3	883.0
152.5°	636.5	663.5	731.0	823.2	858.5
155°	657.6	679.5	729.6	802.2	827.5
157.5°	676.9	693.8	729.8	786.9	804.2
160°	688.2	703.2	730.7	778.3	790.9
162.5°	697.7	710.8	731.7	770.6	780.6
165°	711.9	721.1	733.1	761.6	767.3
167.5°	722.7	728.3	734.3	756.0	757.9
170°	728.4	733.0	734.3	753.2	753.2
172.5°	733.1	735.9	734.3	749.4	748.5
175°	737.8	739.0	734.3	744.9	742.5
177.5°	739.7	738.8	734.0	740.6	738.8
180°	737.8	737.8	737.8	737.8	737.8

(END OF REPORT)