

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: P518757

Luminaire Tested: **SQ4-BB-100U-125D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518757
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-830-1D-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

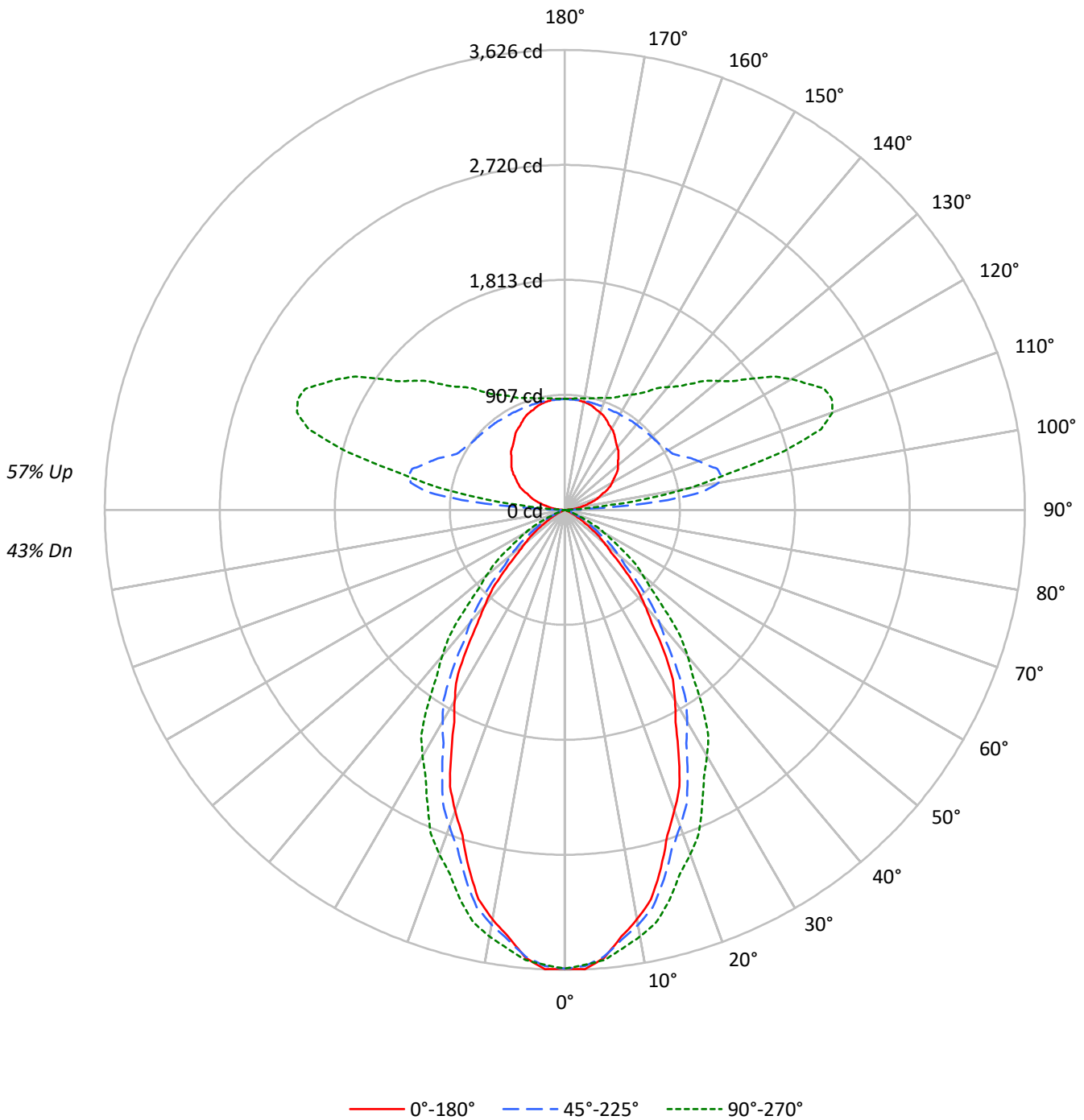
Lumens per Lamp: N/A
Luminaire Lumens: 10003.2 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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	0
RCR																		
0	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	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°	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	3.3
10°-20°	844.2	8.4
20°-30°	1056.8	10.6
30°-40°	976.2	9.8
40°-50°	655.9	6.6
50°-60°	338.8	3.4
60°-70°	106.1	1.1
70°-80°	6.7	0.1
80°-90°	1.9	0.0
90°-100°	409.9	4.1
100°-110°	1131.5	11.3
110°-120°	1166.9	11.7
120°-130°	937.7	9.4
130°-140°	736.9	7.4
140°-150°	565.2	5.7
150°-160°	406.2	4.1
160°-170°	248.4	2.5
170°-180°	83.8	0.8
0°-30°	2231.1	22.3
0°-40°	3207.3	32.1
0°-60°	4202.0	42.0
0°-90°	4316.7	43.2
90°-120°	2708.2	27.1
90°-150°	4948.1	49.5
90°-180°	5686.0	56.8
0°-180°	10003.2	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	6	11	13	14	4
95°	60	222	744	306	199	64
105°	202	311	1245	1900	1790	215
115°	361	437	1003	1985	2257	355
125°	496	564	909	1538	1805	441
135°	596	661	884	1246	1404	462
145°	692	740	872	1060	1141	433
155°	780	806	865	952	982	359
165°	844	855	870	903	910	238
175°	875	876	871	884	881	83
180°	875	875	875	875	875	



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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	1.1	2.2	2.5	2.8
90°	2.8	5.5	11.2	12.6	14.0
92.5°	25.2	104.6	187.1	68.3	53.2
95°	60.2	221.8	743.6	305.6	198.8
97.5°	99.7	248.4	1101.5	848.0	614.2
100°	128.8	264.4	1233.7	1242.4	1009.6
102.5°	156.8	282.5	1259.4	1535.0	1314.3
105°	201.6	311.2	1244.9	1900.5	1789.6
107.5°	249.3	346.7	1175.4	2076.7	2117.2
110°	282.9	370.5	1121.6	2114.6	2246.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	313.1	397.4	1071.2	2084.7	2278.5
115°	361.3	436.6	1002.6	1984.8	2257.3
117.5°	403.3	478.3	957.5	1844.2	2154.2
120°	431.3	505.2	939.6	1749.1	2061.2
122.5°	458.2	528.8	925.0	1660.2	1955.9
125°	495.7	564.2	908.8	1538.0	1805.0
127.5°	527.6	596.1	899.3	1434.6	1664.9
130°	548.9	617.4	894.8	1371.4	1580.9
132.5°	569.1	634.2	890.3	1318.3	1508.1
135°	596.5	660.9	883.6	1245.7	1404.5
137.5°	627.3	685.9	880.2	1184.6	1320.2
140°	644.1	701.6	878.0	1143.9	1263.1
142.5°	663.2	716.3	875.7	1107.8	1212.6
145°	691.7	739.7	872.4	1060.5	1141.2
147.5°	719.2	761.1	869.3	1020.6	1083.3
150°	739.4	773.6	868.2	996.8	1047.4
152.5°	755.0	787.1	867.1	976.4	1018.3
155°	780.0	806.0	865.4	951.5	981.6
157.5°	802.9	822.9	865.7	933.3	953.9
160°	816.4	834.2	866.8	923.1	938.2
162.5°	827.6	843.2	867.9	914.1	925.9
165°	844.4	855.3	869.6	903.3	910.2
167.5°	857.3	863.8	871.0	896.8	899.0
170°	864.0	869.5	871.0	893.4	893.4
172.5°	869.6	872.9	871.0	888.9	887.8
175°	875.2	876.5	871.0	883.5	880.8
177.5°	877.4	876.3	870.7	878.5	876.3
180°	875.2	875.2	875.2	875.2	875.2

(END OF REPORT)