

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: P518851

Luminaire Tested: **SQ4-BB-125U-125D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518851
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-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

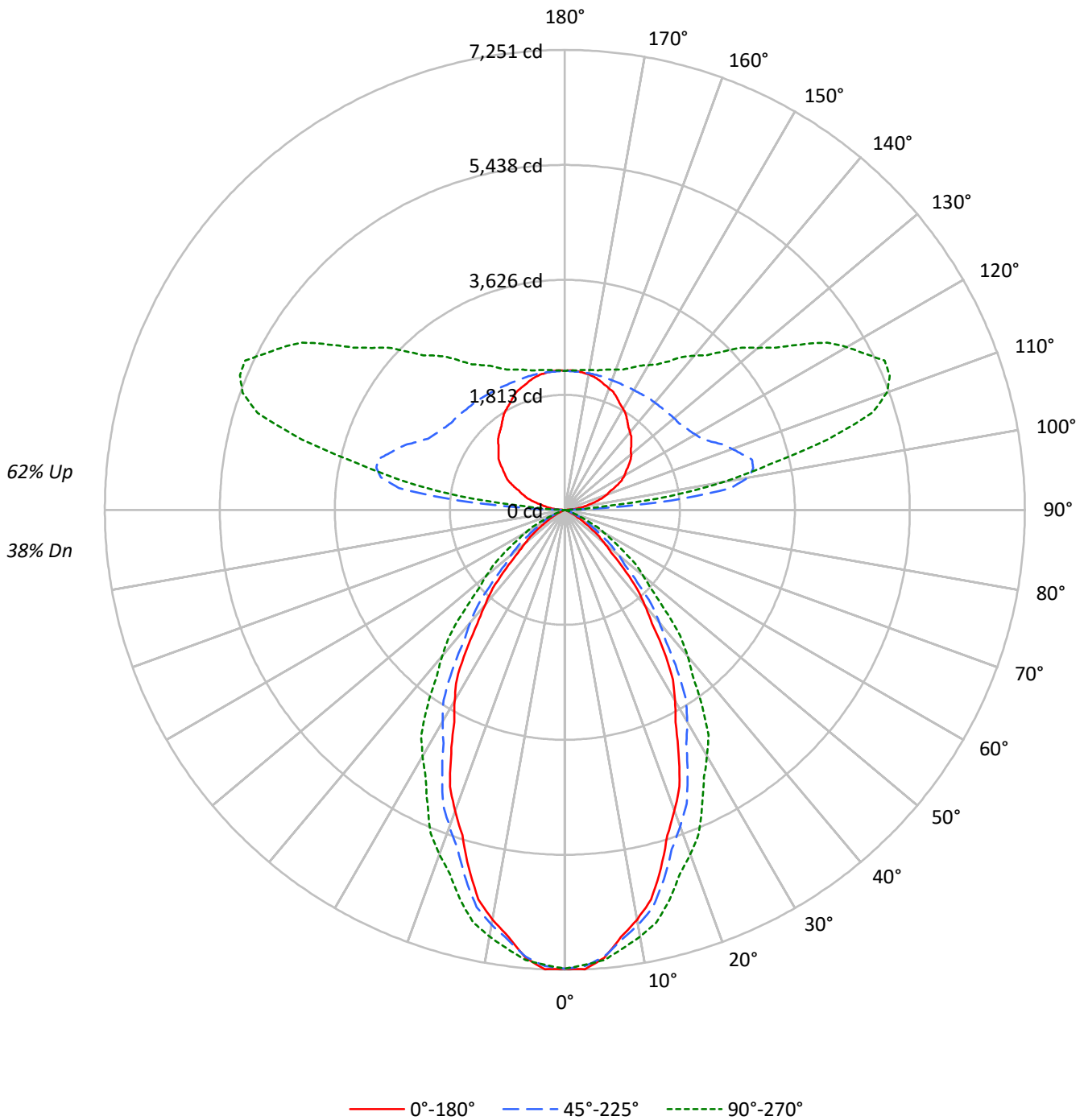
Lumens per Lamp: N/A
Luminaire Lumens: 22791.5 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 233.8
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°	22248	22248	22248
5°	21890	21836	21998
10°	20482	20755	21335
15°	18620	19211	20281
20°	16528	17388	18911
25°	14394	15534	17375
30°	12329	13684	15921
35°	10223	11616	14165
40°	7854	9287	12070
45°	5678	7033	9711
50°	3868	5241	7703
55°	2515	3791	5986
60°	1442	2669	4327
65°	382	1630	2190
70°	189	504	629
75°	83	42	0
80°	62	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	660.2	2.9
10°-20°	1688.4	7.4
20°-30°	2113.7	9.3
30°-40°	1952.3	8.6
40°-50°	1311.9	5.8
50°-60°	677.6	3.0
60°-70°	212.2	0.9
70°-80°	13.4	0.1
80°-90°	5.4	0.0
90°-100°	1025.9	4.5
100°-110°	2763.4	12.1
110°-120°	2900.1	12.7
120°-130°	2353.3	10.3
130°-140°	1845.6	8.1
140°-150°	1417.0	6.2
150°-160°	1018.8	4.5
160°-170°	622.4	2.7
170°-180°	209.9	0.9
0°-30°	4462.2	19.6
0°-40°	6414.5	28.1
0°-60°	8404.0	36.9
0°-90°	8635.0	37.9
90°-120°	6689.3	29.4
90°-150°	12305.3	54.0
90°-180°	14156.0	62.1
0°-180°	22791.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7234	7234	7234	7234	7234	
5°	7091	7019	7073	7098	7126	657
15°	5848	5828	6034	6236	6370	1629
25°	4242	4276	4578	4891	5120	1945
35°	2723	2791	3094	3458	3773	1687
45°	1306	1384	1617	1932	2233	1025
55°	469	548	707	908	1116	438
65°	52	100	224	270	301	89
75°	7	7	4	0	0	10
85°	0	0	0	0	0	1
90°	6	16	34	36	36	11
95°	156	558	1682	860	595	163
105°	511	795	3056	4572	4291	537
115°	902	1104	2545	4917	5562	888
125°	1232	1415	2285	3862	4545	1100
135°	1483	1655	2221	3116	3528	1145
145°	1715	1849	2193	2664	2861	1076
155°	1947	2018	2173	2390	2467	896
165°	2112	2136	2182	2269	2280	596
175°	2196	2193	2184	2215	2210	209
180°	2193	2193	2193	2193	2193	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7234.3	7234.3	7234.3	7234.3	7234.3
2.5°	7251.1	7182.6	7200.7	7200.2	7181.1
5°	7090.8	7018.9	7073.3	7098.4	7125.8
7.5°	6791.2	6735.1	6839.5	6917.8	6974.6
10°	6558.8	6510.9	6646.3	6753.1	6831.8
12.5°	6290.0	6253.1	6416.7	6563.2	6663.8
15°	5848.3	5827.8	6033.8	6236.3	6369.8
17.5°	5375.1	5374.5	5609.6	5861.1	6021.9
20°	5050.3	5060.6	5312.8	5590.1	5778.3
22.5°	4725.6	4749.5	5018.8	5307.9	5523.5
25°	4241.9	4276.1	4577.9	4891.1	5120.3
27.5°	3777.1	3827.0	4144.6	4470.1	4749.4
30°	3471.9	3530.1	3853.4	4195.9	4483.4
32.5°	3172.3	3241.4	3556.6	3918.8	4211.8
35°	2722.9	2791.4	3093.9	3458.1	3772.9
37.5°	2258.8	2325.9	2621.4	2979.8	3320.0
40°	1956.4	2031.7	2313.4	2660.8	3006.4
42.5°	1682.0	1757.3	2022.2	2363.5	2690.0
45°	1305.5	1384.2	1617.0	1931.8	2232.9
47.5°	993.3	1078.8	1283.1	1567.9	1842.3
50°	808.5	894.0	1095.5	1346.4	1610.0
52.5°	660.1	742.9	924.7	1161.2	1402.8
55°	469.0	547.7	707.0	907.7	1116.5
57.5°	324.1	391.8	534.8	702.3	865.9
60°	234.5	299.5	434.0	570.0	703.5
62.5°	156.1	215.6	347.2	451.4	541.1
65°	52.5	100.4	224.0	270.2	301.0
67.5°	26.6	32.1	117.6	124.1	134.4
70°	21.0	21.0	56.0	59.7	70.0
72.5°	15.4	15.4	22.4	28.7	30.8
75°	7.0	7.0	3.5	0.0	0.0
77.5°	3.5	3.5	2.8	0.0	0.0
80°	3.5	3.5	0.0	0.0	0.0
82.5°	0.7	0.7	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	3.3	6.7	7.3	7.3
90°	5.6	16.5	33.5	36.3	36.3
92.5°	68.2	240.8	476.0	229.2	159.2
95°	156.4	558.0	1681.7	860.0	595.0
97.5°	249.7	638.7	2637.6	2203.5	1661.6
100°	321.3	670.9	2941.6	3077.7	2553.3
102.5°	390.5	716.1	3042.1	3732.4	3301.9
105°	511.2	795.3	3056.1	4572.2	4290.8
107.5°	625.2	878.7	2925.9	5003.7	5076.4
110°	701.2	941.5	2807.5	5137.7	5402.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	781.6	1004.5	2693.5	5108.0	5543.4
115°	902.3	1104.4	2544.9	4917.3	5561.9
117.5°	1012.4	1201.9	2429.8	4612.7	5330.6
120°	1083.9	1266.9	2371.7	4394.2	5131.7
122.5°	1146.5	1327.3	2329.2	4170.7	4906.0
125°	1231.9	1414.9	2285.1	3862.2	4545.0
127.5°	1314.1	1494.3	2257.2	3590.1	4199.8
130°	1363.2	1543.5	2246.0	3434.2	3969.6
132.5°	1412.4	1590.5	2234.8	3296.9	3788.6
135°	1483.4	1655.4	2220.8	3115.8	3528.2
137.5°	1551.0	1715.9	2213.6	2962.1	3300.8
140°	1597.9	1756.3	2206.9	2867.5	3173.4
142.5°	1647.1	1794.5	2202.4	2779.3	3037.1
145°	1715.2	1849.1	2192.9	2663.9	2860.6
147.5°	1789.0	1905.3	2183.4	2566.8	2721.4
150°	1838.1	1939.2	2178.9	2505.9	2634.3
152.5°	1882.8	1970.8	2176.7	2456.2	2560.5
155°	1947.1	2018.1	2173.3	2390.2	2466.7
157.5°	2003.5	2058.7	2173.9	2343.8	2395.2
160°	2039.3	2085.7	2176.1	2316.7	2354.9
162.5°	2070.5	2108.2	2178.4	2294.1	2321.4
165°	2111.9	2136.5	2181.7	2268.6	2279.5
167.5°	2145.4	2159.6	2184.5	2248.9	2253.2
170°	2167.8	2173.2	2184.5	2237.6	2237.6
172.5°	2181.2	2182.3	2186.8	2226.4	2226.4
175°	2195.7	2193.0	2184.5	2215.1	2209.7
177.5°	2201.8	2197.5	2186.2	2204.0	2199.6
180°	2192.9	2192.9	2192.9	2192.9	2192.9

(END OF REPORT)