

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: P518779

Luminaire Tested: **SQ4-BB-125U-050D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518779
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-050D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

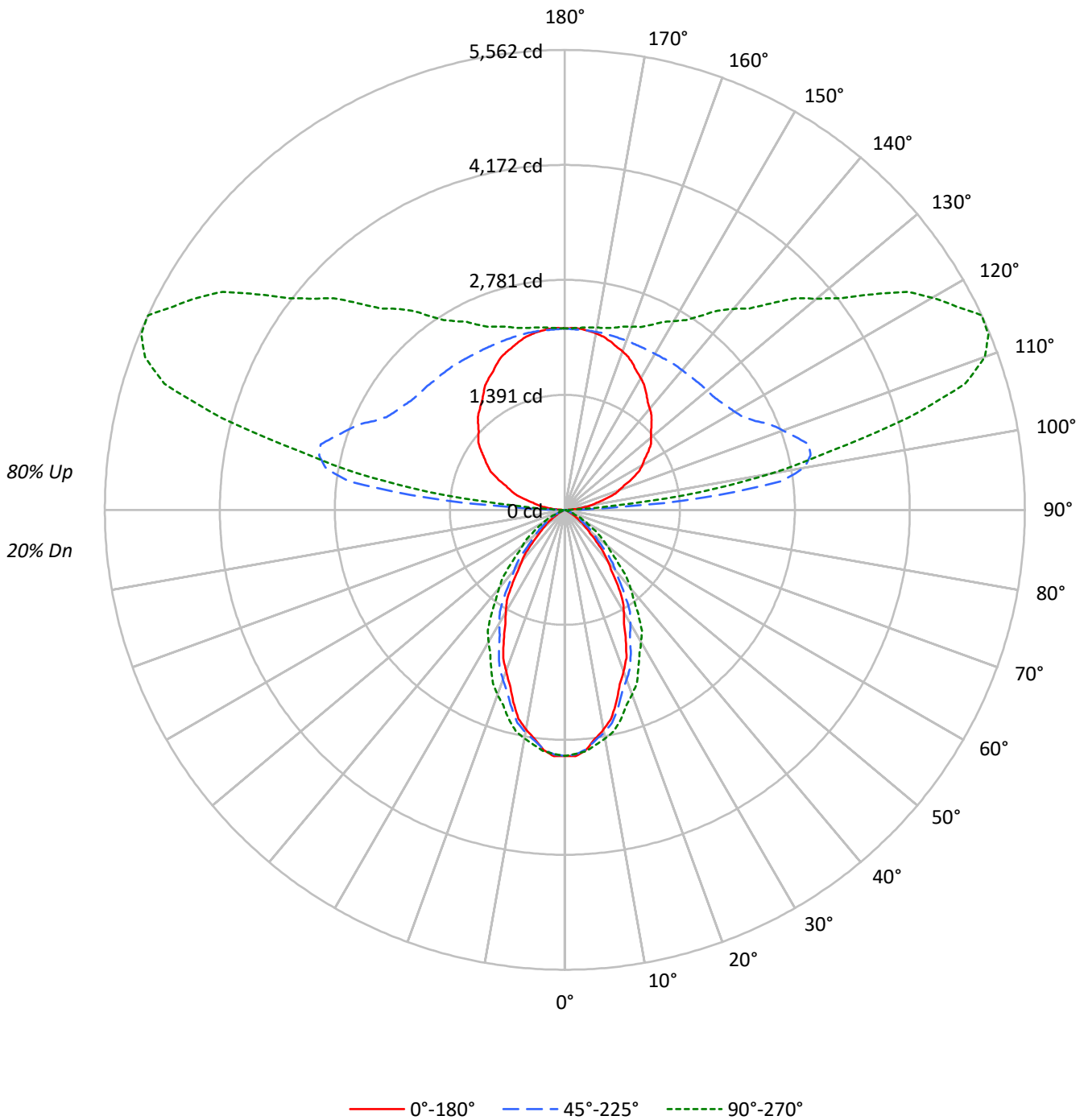
Lumens per Lamp: N/A
Luminaire Lumens: 17710.9 lumens
Efficiency: N/A
Efficacy: 121.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 146.4
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9150	9150	9150
5°	9003	8981	9048
10°	8424	8536	8775
15°	7658	7901	8341
20°	6798	7151	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4205	4777	5826
40°	3231	3820	4964
45°	2335	2892	3994
50°	1591	2155	3168
55°	1034	1559	2462
60°	593	1098	1779
65°	157	670	901
70°	77	207	259
75°	34	17	0
80°	25	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.5	1.5
10°-20°	694.4	3.9
20°-30°	869.3	4.9
30°-40°	803.0	4.5
40°-50°	539.5	3.0
50°-60°	278.7	1.6
60°-70°	87.3	0.5
70°-80°	5.5	0.0
80°-90°	5.2	0.0
90°-100°	1025.9	5.8
100°-110°	2763.4	15.6
110°-120°	2900.1	16.4
120°-130°	2353.3	13.3
130°-140°	1845.6	10.4
140°-150°	1417.0	8.0
150°-160°	1018.8	5.8
160°-170°	622.4	3.5
170°-180°	209.9	1.2
0°-30°	1835.2	10.4
0°-40°	2638.2	14.9
0°-60°	3456.4	19.5
0°-90°	3554.5	20.1
90°-120°	6689.3	37.8
90°-150°	12305.3	69.5
90°-180°	14156.0	79.9
0°-180°	17710.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2975	2975	2975	2975	2975	
5°	2916	2887	2909	2920	2931	270
15°	2405	2397	2482	2565	2620	670
25°	1745	1759	1883	2012	2106	800
35°	1120	1148	1272	1422	1552	694
45°	537	569	665	794	918	422
55°	193	225	291	373	459	180
65°	22	41	92	111	124	36
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
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°	2975.3	2975.3	2975.3	2975.3	2975.3
2.5°	2982.3	2954.1	2961.5	2961.3	2953.5
5°	2916.3	2886.8	2909.1	2919.5	2930.7
7.5°	2793.1	2770.0	2813.0	2845.2	2868.5
10°	2697.5	2677.8	2733.5	2777.4	2809.8
12.5°	2587.0	2571.8	2639.1	2699.3	2740.7
15°	2405.3	2396.9	2481.6	2564.9	2619.8
17.5°	2210.7	2210.4	2307.2	2410.6	2476.7
20°	2077.1	2081.4	2185.1	2299.1	2376.5
22.5°	1943.5	1953.4	2064.2	2183.1	2271.7
25°	1744.6	1758.7	1882.8	2011.6	2105.9
27.5°	1553.5	1574.0	1704.6	1838.5	1953.3
30°	1427.9	1451.9	1584.8	1725.7	1843.9
32.5°	1304.7	1333.1	1462.8	1611.8	1732.2
35°	1119.9	1148.0	1272.5	1422.2	1551.7
37.5°	929.0	956.6	1078.1	1225.6	1365.5
40°	804.7	835.6	951.5	1094.3	1236.5
42.5°	691.8	722.8	831.7	972.1	1106.4
45°	536.9	569.3	665.0	794.5	918.4
47.5°	408.5	443.7	527.7	644.8	757.7
50°	332.5	367.7	450.5	553.8	662.1
52.5°	271.5	305.5	380.3	477.6	576.9
55°	192.9	225.3	290.8	373.3	459.2
57.5°	133.3	161.2	219.9	288.8	356.1
60°	96.4	123.2	178.5	234.4	289.3
62.5°	64.2	88.7	142.8	185.7	222.5
65°	21.6	41.3	92.1	111.1	123.8
67.5°	10.9	13.2	48.4	51.1	55.3
70°	8.6	8.6	23.0	24.6	28.8
72.5°	6.3	6.3	9.2	11.8	12.7
75°	2.9	2.9	1.4	0.0	0.0
77.5°	1.4	1.4	1.2	0.0	0.0
80°	1.4	1.4	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°	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)