

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: P518803

Luminaire Tested: **SQ4-BB-125U-075D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518803
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-075D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

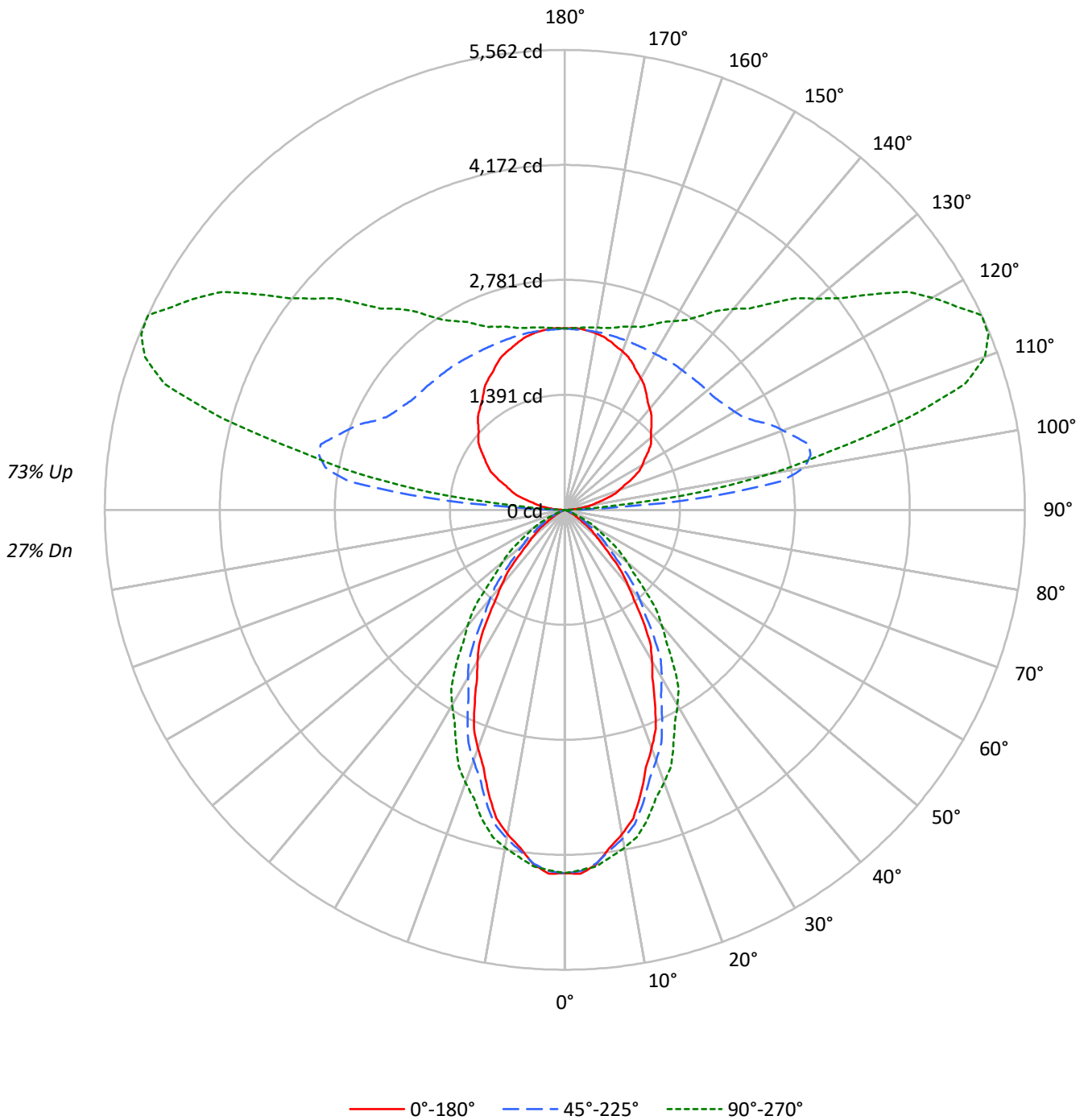
Lumens per Lamp: N/A
Luminaire Lumens: 19403.6 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 172.4
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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	27
1	94	90	86	83	84	81	78	75	63	61	60	47	46	45	32	32	31	25
2	86	80	74	70	77	71	67	63	56	53	51	43	41	39	30	29	28	22
3	79	71	64	59	71	64	58	54	51	47	44	39	36	34	27	26	25	20
4	73	63	56	51	65	57	51	47	46	42	38	35	32	30	25	24	22	18
5	67	57	49	44	60	51	45	41	41	37	34	32	29	27	23	21	20	17
6	62	51	44	39	56	46	40	36	37	33	30	29	26	24	21	20	18	15
7	58	46	39	34	52	42	36	32	34	30	27	27	24	22	20	18	17	14
8	53	42	35	30	48	39	32	28	31	27	24	25	22	20	18	17	15	13
9	50	39	32	27	45	35	29	25	29	25	22	23	20	18	17	15	14	12
10	47	36	29	25	42	33	27	23	27	22	20	21	18	16	16	14	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13514	13514	13514
5°	13296	13264	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10562	11487
25°	8743	9436	10554
30°	7489	8312	9671
35°	6209	7056	8604
40°	4771	5641	7331
45°	3449	4272	5899
50°	2350	3184	4679
55°	1528	2302	3636
60°	876	1621	2628
65°	232	990	1330
70°	115	306	382
75°	51	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	401.0	2.1
10°-20°	1025.5	5.3
20°-30°	1283.9	6.6
30°-40°	1185.9	6.1
40°-50°	796.8	4.1
50°-60°	411.6	2.1
60°-70°	128.9	0.7
70°-80°	8.2	0.0
80°-90°	5.3	0.0
90°-100°	1025.9	5.3
100°-110°	2763.4	14.2
110°-120°	2900.1	14.9
120°-130°	2353.3	12.1
130°-140°	1845.6	9.5
140°-150°	1417.0	7.3
150°-160°	1018.8	5.3
160°-170°	622.4	3.2
170°-180°	209.9	1.1
0°-30°	2710.4	14.0
0°-40°	3896.3	20.1
0°-60°	5104.7	26.3
0°-90°	5247.1	27.0
90°-120°	6689.3	34.5
90°-150°	12305.3	63.4
90°-180°	14156.0	73.0
0°-180°	19403.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4394	4394	4394	4394	4394	
5°	4307	4263	4296	4312	4328	399
15°	3552	3540	3665	3788	3869	989
25°	2577	2597	2781	2971	3110	1181
35°	1654	1696	1879	2100	2292	1025
45°	793	841	982	1173	1356	623
55°	285	333	429	551	678	266
65°	32	61	136	164	183	54
75°	4	4	2	0	0	6
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°	4394.2	4394.2	4394.2	4394.2	4394.2
2.5°	4404.4	4362.8	4373.8	4373.5	4361.9
5°	4307.0	4263.4	4296.4	4311.7	4328.3
7.5°	4125.1	4091.0	4154.4	4202.0	4236.5
10°	3983.9	3954.8	4037.1	4101.9	4149.7
12.5°	3820.6	3798.2	3897.6	3986.6	4047.7
15°	3552.4	3539.9	3665.0	3788.0	3869.1
17.5°	3264.9	3264.5	3407.4	3560.1	3657.8
20°	3067.7	3073.9	3227.1	3395.5	3509.8
22.5°	2870.4	2884.9	3048.5	3224.1	3355.1
25°	2576.6	2597.4	2780.7	2970.9	3110.2
27.5°	2294.3	2324.6	2517.5	2715.2	2884.8
30°	2108.9	2144.2	2340.6	2548.7	2723.3
32.5°	1926.9	1968.9	2160.3	2380.4	2558.3
35°	1653.9	1695.5	1879.3	2100.5	2291.7
37.5°	1372.0	1412.8	1592.3	1810.0	2016.6
40°	1188.4	1234.1	1405.2	1616.2	1826.1
42.5°	1021.7	1067.4	1228.3	1435.7	1634.0
45°	793.0	840.8	982.2	1173.4	1356.3
47.5°	603.3	655.3	779.4	952.4	1119.1
50°	491.1	543.0	665.4	817.9	977.9
52.5°	400.9	451.2	561.7	705.3	852.1
55°	284.9	332.7	429.4	551.4	678.2
57.5°	196.9	238.0	324.8	426.6	525.9
60°	142.4	181.9	263.6	346.2	427.3
62.5°	94.8	131.0	210.9	274.2	328.7
65°	31.9	61.0	136.1	164.1	182.8
67.5°	16.2	19.5	71.4	75.4	81.6
70°	12.8	12.8	34.0	36.3	42.5
72.5°	9.4	9.4	13.6	17.5	18.7
75°	4.3	4.3	2.1	0.0	0.0
77.5°	2.1	2.1	1.7	0.0	0.0
80°	2.1	2.1	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°	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)