

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: P518858

Luminaire Tested: **SQ4-BB-125U-125D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518858
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-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

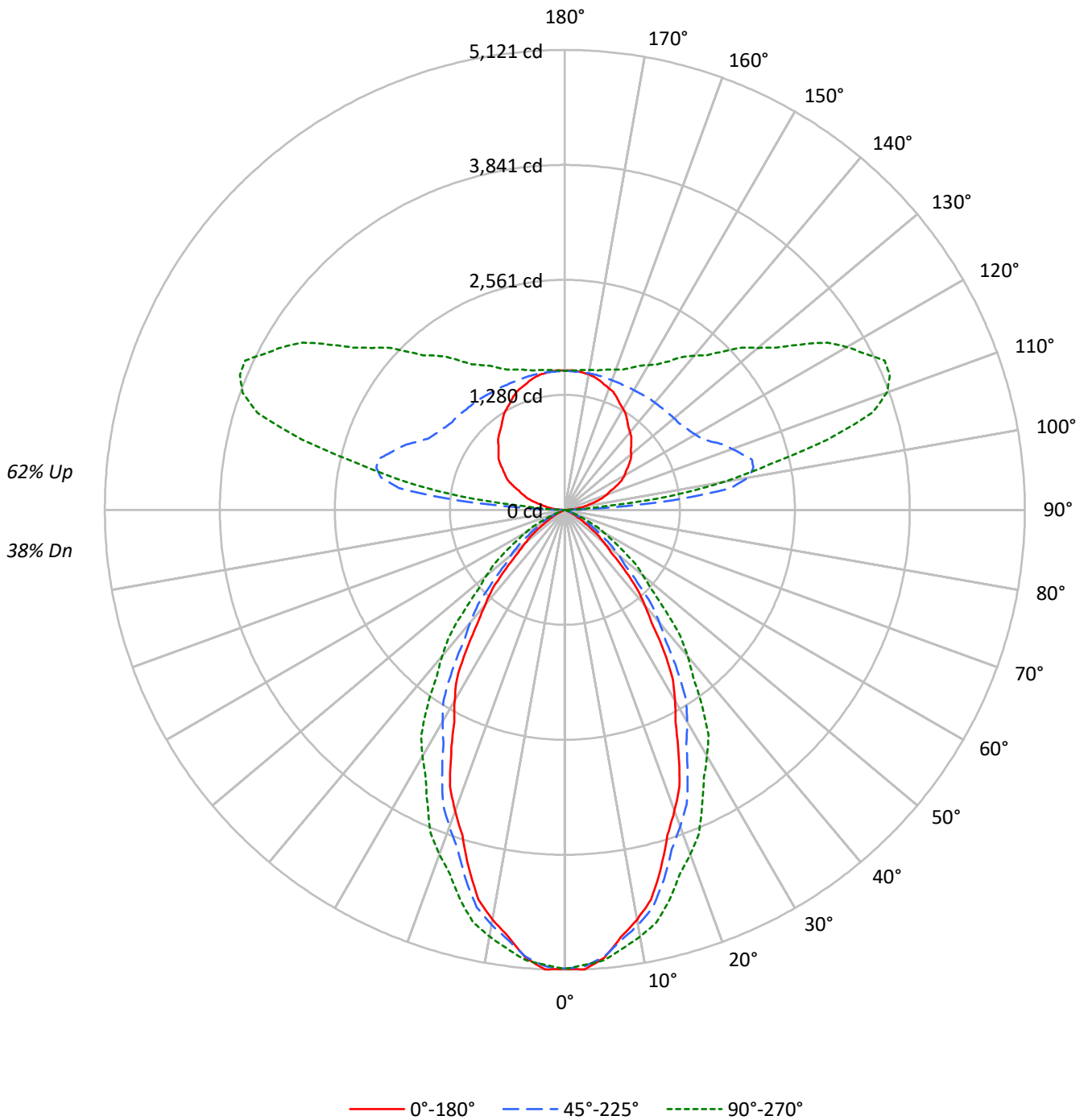
Lumens per Lamp: N/A
Luminaire Lumens: 16097.5 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 152.7
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°	23571	23571	23571
5°	23192	23134	23306
10°	21700	21989	22603
15°	19727	20353	21486
20°	17511	18421	20035
25°	15250	16457	18408
30°	13062	14497	16868
35°	10831	12306	15007
40°	8321	9840	12787
45°	6015	7450	10289
50°	4098	5553	8161
55°	2664	4016	6342
60°	1528	2828	4584
65°	405	1727	2321
70°	200	534	666
75°	87	45	0
80°	66	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	466.3	2.9
10°-20°	1192.5	7.4
20°-30°	1492.9	9.3
30°-40°	1378.9	8.6
40°-50°	926.5	5.8
50°-60°	478.6	3.0
60°-70°	149.9	0.9
70°-80°	9.5	0.1
80°-90°	3.8	0.0
90°-100°	724.6	4.5
100°-110°	1951.8	12.1
110°-120°	2048.3	12.7
120°-130°	1662.1	10.3
130°-140°	1303.6	8.1
140°-150°	1000.8	6.2
150°-160°	719.6	4.5
160°-170°	439.6	2.7
170°-180°	148.3	0.9
0°-30°	3151.6	19.6
0°-40°	4530.6	28.1
0°-60°	5935.7	36.9
0°-90°	6098.9	37.9
90°-120°	4724.6	29.4
90°-150°	8691.2	54.0
90°-180°	9999.0	62.1
0°-180°	16097.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5110	5110	5110	5110	5110	
5°	5008	4957	4996	5014	5033	464
15°	4131	4116	4262	4405	4499	1150
25°	2996	3020	3233	3454	3616	1374
35°	1923	1972	2185	2442	2665	1191
45°	922	978	1142	1364	1577	724
55°	331	387	499	641	789	309
65°	37	71	158	191	213	63
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	4	12	24	26	26	8
95°	110	394	1188	607	420	115
105°	361	562	2158	3229	3031	380
115°	637	780	1797	3473	3928	627
125°	870	999	1614	2728	3210	777
135°	1048	1169	1569	2201	2492	809
145°	1211	1306	1549	1882	2020	760
155°	1375	1425	1535	1688	1742	633
165°	1492	1509	1541	1602	1610	421
175°	1551	1549	1543	1564	1561	147
180°	1549	1549	1549	1549	1549	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5109.5	5109.5	5109.5	5109.5	5109.5
2.5°	5121.4	5073.1	5085.8	5085.5	5072.0
5°	5008.2	4957.4	4995.8	5013.6	5032.9
7.5°	4796.6	4756.9	4830.7	4886.0	4926.1
10°	4632.5	4598.6	4694.2	4769.7	4825.3
12.5°	4442.6	4416.5	4532.1	4635.5	4706.6
15°	4130.6	4116.1	4261.7	4404.7	4499.0
17.5°	3796.4	3796.0	3962.1	4139.7	4253.3
20°	3567.0	3574.3	3752.4	3948.3	4081.2
22.5°	3337.6	3354.6	3544.8	3749.0	3901.2
25°	2996.0	3020.2	3233.3	3454.5	3616.5
27.5°	2667.7	2703.0	2927.3	3157.2	3354.4
30°	2452.2	2493.3	2721.6	2963.5	3166.6
32.5°	2240.6	2289.4	2512.0	2767.9	2974.8
35°	1923.2	1971.5	2185.2	2442.4	2664.8
37.5°	1595.4	1642.8	1851.5	2104.6	2344.9
40°	1381.8	1435.0	1634.0	1879.3	2123.4
42.5°	1188.0	1241.2	1428.3	1669.4	1899.9
45°	922.0	977.6	1142.0	1364.4	1577.1
47.5°	701.5	762.0	906.2	1107.4	1301.2
50°	571.0	631.4	773.7	951.0	1137.1
52.5°	466.2	524.7	653.1	820.1	990.8
55°	331.2	386.8	499.3	641.1	788.6
57.5°	228.9	276.8	377.7	496.0	611.6
60°	165.6	211.5	306.5	402.6	496.9
62.5°	110.2	152.3	245.2	318.8	382.2
65°	37.1	70.9	158.2	190.8	212.6
67.5°	18.8	22.7	83.1	87.7	94.9
70°	14.8	14.8	39.6	42.2	49.4
72.5°	10.9	10.9	15.8	20.3	21.8
75°	4.9	4.9	2.5	0.0	0.0
77.5°	2.5	2.5	2.0	0.0	0.0
80°	2.5	2.5	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	2.3	4.7	5.1	5.1
90°	3.9	11.7	23.7	25.6	25.6
92.5°	48.1	170.1	336.2	161.9	112.5
95°	110.5	394.1	1187.8	607.4	420.3
97.5°	176.4	451.1	1862.9	1556.3	1173.6
100°	226.9	473.8	2077.6	2173.8	1803.4
102.5°	275.8	505.8	2148.6	2636.2	2332.1
105°	361.1	561.7	2158.5	3229.3	3030.6
107.5°	441.6	620.6	2066.6	3534.1	3585.4
110°	495.2	665.0	1982.9	3628.7	3815.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	552.1	709.5	1902.4	3607.8	3915.3
115°	637.3	780.1	1797.4	3473.0	3928.3
117.5°	715.0	848.9	1716.2	3258.0	3765.0
120°	765.5	894.8	1675.1	3103.6	3624.5
122.5°	809.7	937.4	1645.1	2945.7	3465.1
125°	870.1	999.4	1613.9	2727.8	3210.1
127.5°	928.1	1055.4	1594.2	2535.7	2966.3
130°	962.8	1090.2	1586.3	2425.6	2803.7
132.5°	997.6	1123.4	1578.4	2328.6	2675.8
135°	1047.7	1169.2	1568.6	2200.6	2491.9
137.5°	1095.4	1212.0	1563.4	2092.1	2331.3
140°	1128.6	1240.5	1558.7	2025.3	2241.4
142.5°	1163.3	1267.5	1555.5	1963.0	2145.1
145°	1211.4	1306.0	1548.8	1881.5	2020.4
147.5°	1263.5	1345.7	1542.1	1812.9	1922.1
150°	1298.3	1369.6	1539.0	1769.9	1860.6
152.5°	1329.8	1391.9	1537.4	1734.8	1808.5
155°	1375.2	1425.4	1535.0	1688.2	1742.2
157.5°	1415.1	1454.0	1535.4	1655.4	1691.7
160°	1440.3	1473.1	1537.0	1636.3	1663.3
162.5°	1462.4	1489.0	1538.6	1620.3	1639.6
165°	1491.6	1509.0	1540.9	1602.3	1610.0
167.5°	1515.3	1525.3	1542.9	1588.4	1591.5
170°	1531.1	1534.9	1542.9	1580.4	1580.4
172.5°	1540.5	1541.3	1544.5	1572.5	1572.5
175°	1550.8	1548.9	1542.9	1564.5	1560.7
177.5°	1555.2	1552.1	1544.1	1556.7	1553.6
180°	1548.8	1548.8	1548.8	1548.8	1548.8

(END OF REPORT)