

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: P518781

Luminaire Tested: **SQ4-BB-125U-050D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518781
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-6
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

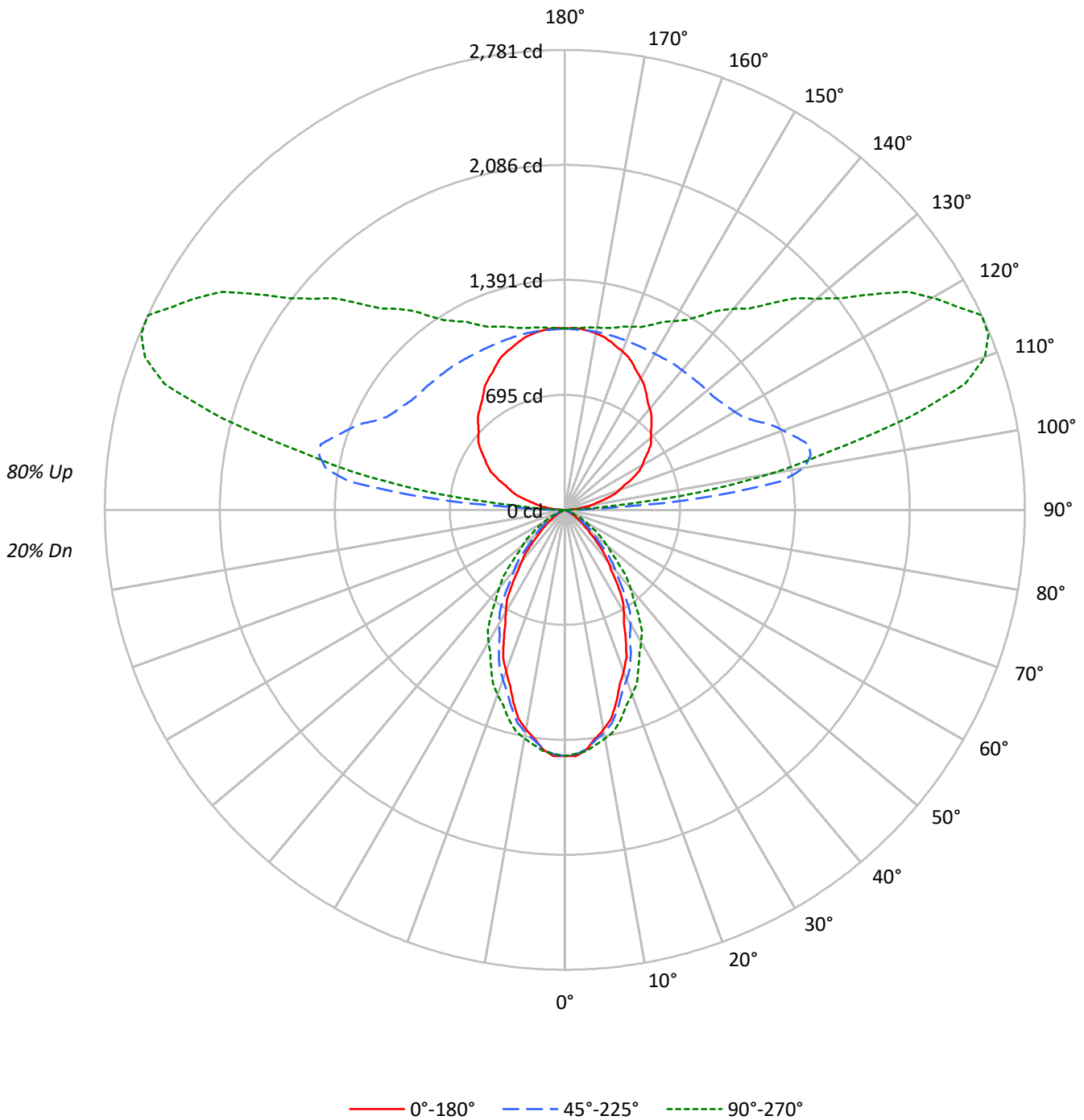
Lumens per Lamp: N/A
Luminaire Lumens: 8855.5 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.2
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°	9151	9151	9151
5°	9003	8981	9048
10°	8424	8537	8775
15°	7659	7901	8341
20°	6798	7151	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4204	4777	5826
40°	3230	3820	4964
45°	2336	2892	3994
50°	1591	2156	3168
55°	1034	1559	2462
60°	593	1097	1780
65°	157	671	901
70°	77	207	259
75°	33	17	0
80°	25	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.8	1.5
10°-20°	347.2	3.9
20°-30°	434.7	4.9
30°-40°	401.5	4.5
40°-50°	269.8	3.0
50°-60°	139.3	1.6
60°-70°	43.6	0.5
70°-80°	2.8	0.0
80°-90°	2.6	0.0
90°-100°	512.9	5.8
100°-110°	1381.7	15.6
110°-120°	1450.0	16.4
120°-130°	1176.7	13.3
130°-140°	922.8	10.4
140°-150°	708.5	8.0
150°-160°	509.4	5.8
160°-170°	311.2	3.5
170°-180°	105.0	1.2
0°-30°	917.6	10.4
0°-40°	1319.1	14.9
0°-60°	1728.2	19.5
0°-90°	1777.2	20.1
90°-120°	3344.6	37.8
90°-150°	6152.6	69.5
90°-180°	7078.0	79.9
0°-180°	8855.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1458	1443	1455	1460	1465	135
15°	1203	1198	1241	1282	1310	335
25°	872	879	941	1006	1053	400
35°	560	574	636	711	776	347
45°	268	285	332	397	459	211
55°	96	113	145	187	230	90
65°	11	21	46	56	62	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	3	8	17	18	18	6
95°	78	279	841	430	298	82
105°	256	398	1528	2286	2145	269
115°	451	552	1272	2459	2781	444
125°	616	708	1142	1931	2272	550
135°	742	828	1110	1558	1764	572
145°	858	924	1096	1332	1430	538
155°	974	1009	1087	1195	1233	448
165°	1056	1068	1091	1134	1140	298
175°	1098	1096	1092	1108	1105	104
180°	1096	1096	1096	1096	1096	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1487.7	1487.7	1487.7	1487.7	1487.7
2.5°	1491.1	1477.1	1480.8	1480.7	1476.7
5°	1458.2	1443.4	1454.6	1459.7	1465.4
7.5°	1396.6	1385.0	1406.5	1422.6	1434.3
10°	1348.8	1338.9	1366.8	1388.7	1404.9
12.5°	1293.5	1285.9	1319.5	1349.7	1370.4
15°	1202.7	1198.4	1240.8	1282.5	1309.9
17.5°	1105.4	1105.2	1153.6	1205.3	1238.4
20°	1038.6	1040.7	1092.5	1149.6	1188.3
22.5°	971.8	976.7	1032.1	1091.5	1135.9
25°	872.3	879.3	941.4	1005.8	1053.0
27.5°	776.7	787.0	852.3	919.2	976.7
30°	714.0	725.9	792.4	862.9	922.0
32.5°	652.4	666.6	731.4	805.9	866.1
35°	559.9	574.0	636.2	711.1	775.9
37.5°	464.5	478.3	539.1	612.8	682.7
40°	402.3	417.8	475.7	547.2	618.2
42.5°	345.9	361.4	415.9	486.0	553.2
45°	268.5	284.6	332.5	397.3	459.2
47.5°	204.3	221.9	263.9	322.4	378.9
50°	166.3	183.8	225.3	276.9	331.1
52.5°	135.7	152.8	190.2	238.8	288.5
55°	96.4	112.6	145.4	186.7	229.6
57.5°	66.6	80.6	110.0	144.4	178.1
60°	48.2	61.6	89.2	117.2	144.7
62.5°	32.1	44.3	71.4	92.8	111.3
65°	10.8	20.6	46.1	55.6	61.9
67.5°	5.5	6.6	24.2	25.5	27.6
70°	4.3	4.3	11.5	12.3	14.4
72.5°	3.2	3.2	4.6	5.9	6.3
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	1.7	3.4	3.6	3.6
90°	2.8	8.3	16.8	18.2	18.2
92.5°	34.1	120.4	238.0	114.6	79.6
95°	78.2	279.0	840.8	430.0	297.5
97.5°	124.9	319.3	1318.8	1101.7	830.8
100°	160.6	335.4	1470.8	1538.8	1276.6
102.5°	195.3	358.1	1521.1	1866.2	1651.0
105°	255.6	397.6	1528.0	2286.1	2145.4
107.5°	312.6	439.3	1463.0	2501.9	2538.2
110°	350.6	470.8	1403.7	2568.8	2701.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	390.8	502.3	1346.7	2554.0	2771.7
115°	451.2	552.2	1272.4	2458.6	2780.9
117.5°	506.2	601.0	1214.9	2306.4	2665.3
120°	541.9	633.4	1185.8	2197.1	2565.8
122.5°	573.2	663.6	1164.6	2085.3	2453.0
125°	616.0	707.5	1142.5	1931.1	2272.5
127.5°	657.0	747.2	1128.6	1795.1	2099.9
130°	681.6	771.8	1123.0	1717.1	1984.8
132.5°	706.2	795.2	1117.4	1648.4	1894.3
135°	741.7	827.7	1110.4	1557.9	1764.1
137.5°	775.5	858.0	1106.8	1481.1	1650.4
140°	798.9	878.2	1103.4	1433.8	1586.7
142.5°	823.5	897.3	1101.2	1389.6	1518.5
145°	857.6	924.5	1096.5	1331.9	1430.3
147.5°	894.5	952.7	1091.7	1283.4	1360.7
150°	919.1	969.6	1089.5	1252.9	1317.1
152.5°	941.4	985.4	1088.3	1228.1	1280.3
155°	973.5	1009.0	1086.7	1195.1	1233.3
157.5°	1001.8	1029.3	1087.0	1171.9	1197.6
160°	1019.6	1042.8	1088.1	1158.3	1177.5
162.5°	1035.3	1054.1	1089.2	1147.0	1160.7
165°	1055.9	1068.2	1090.9	1134.3	1139.8
167.5°	1072.7	1079.8	1092.3	1124.4	1126.6
170°	1083.9	1086.6	1092.3	1118.8	1118.8
172.5°	1090.6	1091.1	1093.4	1113.2	1113.2
175°	1097.8	1096.5	1092.3	1107.6	1104.8
177.5°	1100.9	1098.7	1093.1	1102.0	1099.8
180°	1096.5	1096.5	1096.5	1096.5	1096.5

(END OF REPORT)