

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: P518849

Luminaire Tested: **SQ4-BB-125U-100D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518849
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-100D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

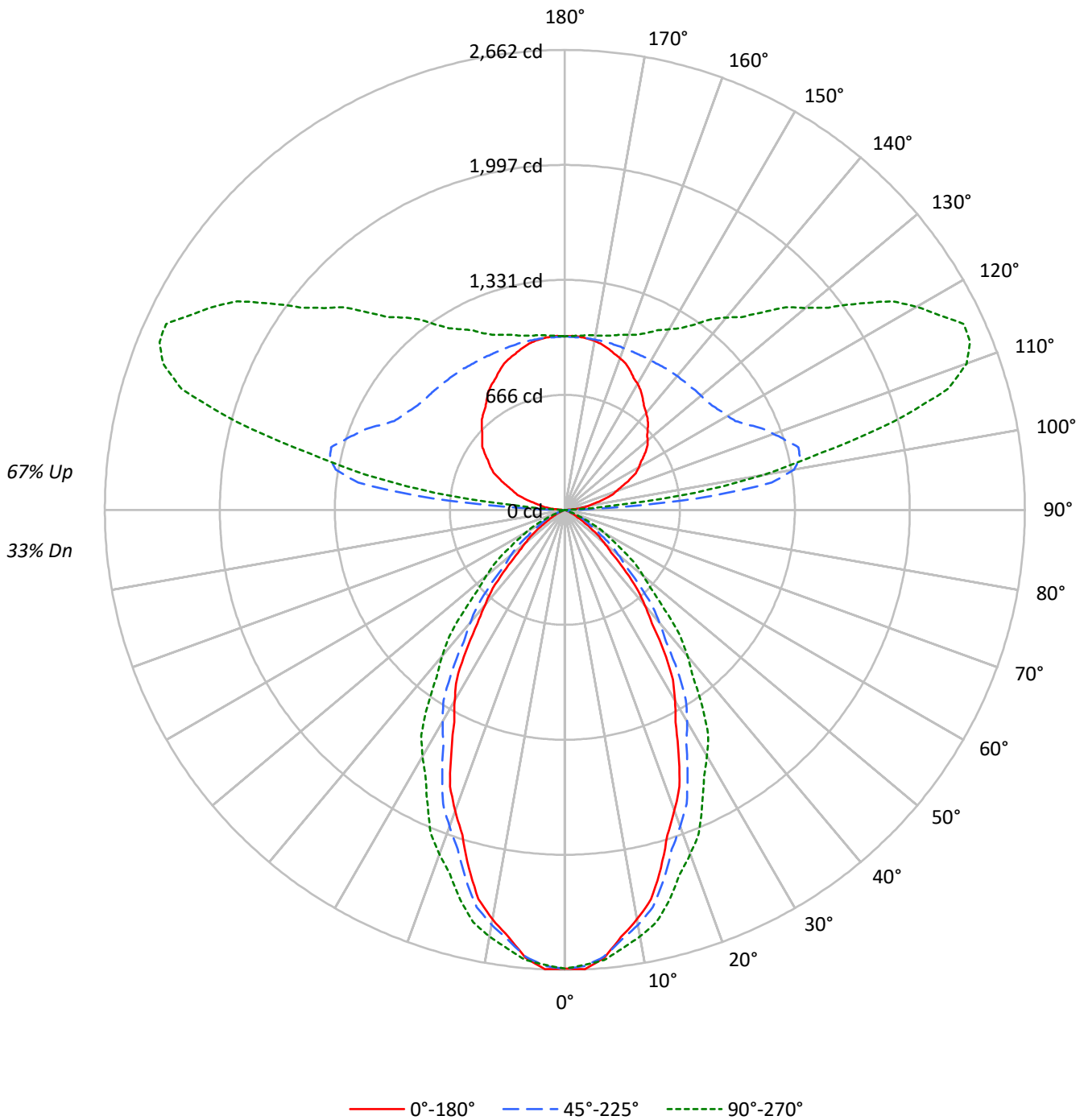
Lumens per Lamp: N/A
Luminaire Lumens: 9652.8 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 102.8
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



TEST NUMBER: P518849
CATALOG NUMBER: SQ4-BB-125U-100D-940-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P518849

CATALOG NUMBER: SQ4-BB-125U-100D-940-1D-UNV-STD-W-6

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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30
2	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27
3	81	72	66	61	73	66	60	56	54	50	47	42	40	38	32	30	29	24
4	74	65	58	53	67	59	53	49	48	44	41	38	36	33	29	27	26	22
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	24	20
6	64	53	45	40	58	48	42	38	40	35	32	32	29	27	25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	20	17
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15
9	51	40	33	29	47	37	31	27	31	27	23	25	22	20	20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16333	16333	16333
5°	16070	16031	16149
10°	15036	15237	15662
15°	13670	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8528	10399
40°	5766	6818	8860
45°	4168	5163	7129
50°	2840	3848	5655
55°	1846	2783	4395
60°	1059	1960	3176
65°	281	1196	1608
70°	138	370	462
75°	62	31	0
80°	46	0	0
85°	0	0	0



TEST NUMBER: P518849

CATALOG NUMBER: SQ4-BB-125U-100D-940-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.3	2.5
10°-20°	619.7	6.4
20°-30°	775.8	8.0
30°-40°	716.6	7.4
40°-50°	481.5	5.0
50°-60°	248.7	2.6
60°-70°	77.9	0.8
70°-80°	4.9	0.1
80°-90°	2.5	0.0
90°-100°	469.8	4.9
100°-110°	1265.4	13.1
110°-120°	1328.0	13.8
120°-130°	1077.7	11.2
130°-140°	845.2	8.8
140°-150°	648.9	6.7
150°-160°	466.6	4.8
160°-170°	285.0	3.0
170°-180°	96.1	1.0
0°-30°	1637.9	17.0
0°-40°	2354.6	24.4
0°-60°	3084.8	32.0
0°-90°	3170.1	32.8
90°-120°	3063.3	31.7
90°-150°	5635.0	58.4
90°-180°	6483.0	67.2
0°-180°	9652.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2655	2655	2655	2655	2655	
5°	2603	2576	2596	2606	2616	241
15°	2147	2139	2215	2289	2338	598
25°	1557	1570	1680	1795	1880	714
35°	1000	1025	1136	1269	1385	619
45°	479	508	594	709	820	376
55°	172	201	260	333	410	161
65°	19	37	82	99	110	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	3	8	15	17	17	5
95°	72	256	770	394	272	75
105°	234	364	1400	2094	1965	246
115°	413	506	1165	2252	2547	407
125°	564	648	1046	1769	2081	504
135°	679	758	1017	1427	1616	524
145°	786	847	1004	1220	1310	493
155°	892	924	995	1094	1130	410
165°	967	978	999	1039	1044	273
175°	1006	1004	1000	1014	1012	96
180°	1004	1004	1004	1004	1004	

TEST NUMBER: P518849

CATALOG NUMBER: SQ4-BB-125U-100D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2655.4	2655.4	2655.4	2655.4	2655.4
2.5°	2661.6	2636.5	2643.1	2643.0	2635.9
5°	2602.8	2576.4	2596.4	2605.6	2615.6
7.5°	2492.8	2472.2	2510.5	2539.3	2560.1
10°	2407.5	2389.9	2439.6	2478.8	2507.7
12.5°	2308.8	2295.3	2355.3	2409.1	2446.0
15°	2146.7	2139.2	2214.8	2289.1	2338.1
17.5°	1973.0	1972.8	2059.1	2151.4	2210.4
20°	1853.8	1857.6	1950.2	2051.9	2121.0
22.5°	1734.6	1743.4	1842.2	1948.4	2027.5
25°	1557.0	1569.6	1680.4	1795.3	1879.5
27.5°	1386.4	1404.8	1521.3	1640.8	1743.3
30°	1274.4	1295.8	1414.4	1540.2	1645.7
32.5°	1164.4	1189.8	1305.5	1438.5	1546.0
35°	999.5	1024.6	1135.7	1269.3	1384.9
37.5°	829.1	853.8	962.2	1093.8	1218.7
40°	718.1	745.8	849.2	976.7	1103.5
42.5°	617.4	645.1	742.3	867.6	987.4
45°	479.2	508.1	593.5	709.1	819.6
47.5°	364.6	396.0	471.0	575.5	676.3
50°	296.8	328.2	402.1	494.2	591.0
52.5°	242.3	272.7	339.4	426.2	514.9
55°	172.1	201.0	259.5	333.2	409.8
57.5°	119.0	143.8	196.3	257.8	317.8
60°	86.1	109.9	159.3	209.2	258.2
62.5°	57.3	79.2	127.4	165.7	198.6
65°	19.3	36.9	82.2	99.2	110.5
67.5°	9.8	11.8	43.2	45.6	49.3
70°	7.7	7.7	20.6	21.9	25.7
72.5°	5.7	5.7	8.2	10.6	11.3
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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°	0.5	1.5	3.1	3.3	3.3
90°	2.6	7.6	15.4	16.6	16.6
92.5°	31.2	110.3	218.0	104.9	72.9
95°	71.6	255.5	770.1	393.8	272.5
97.5°	114.4	292.5	1207.9	1009.1	760.9
100°	147.1	307.2	1347.0	1409.4	1169.2
102.5°	178.8	327.9	1393.1	1709.2	1512.1
105°	234.1	364.2	1399.5	2093.7	1964.9
107.5°	286.3	402.4	1339.9	2291.4	2324.6
110°	321.1	431.2	1285.6	2352.7	2474.1

TEST NUMBER: P518849

CATALOG NUMBER: SQ4-BB-125U-100D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	357.9	460.0	1233.4	2339.1	2538.5
115°	413.2	505.8	1165.4	2251.8	2547.0
117.5°	463.6	550.4	1112.7	2112.3	2441.0
120°	496.3	580.2	1086.1	2012.2	2350.0
122.5°	525.0	607.8	1066.6	1909.9	2246.6
125°	564.1	648.0	1046.4	1768.6	2081.3
127.5°	601.8	684.3	1033.6	1644.0	1923.2
130°	624.3	706.8	1028.5	1572.6	1817.8
132.5°	646.8	728.3	1023.4	1509.8	1734.9
135°	679.3	758.1	1017.0	1426.8	1615.7
137.5°	710.2	785.8	1013.7	1356.5	1511.6
140°	731.7	804.3	1010.6	1313.1	1453.2
142.5°	754.2	821.8	1008.6	1272.7	1390.8
145°	785.5	846.7	1004.2	1219.9	1309.9
147.5°	819.2	872.5	999.9	1175.4	1246.2
150°	841.7	888.0	997.8	1147.5	1206.3
152.5°	862.2	902.5	996.8	1124.8	1172.6
155°	891.6	924.2	995.2	1094.5	1129.6
157.5°	917.5	942.7	995.5	1073.3	1096.8
160°	933.8	955.1	996.5	1060.9	1078.4
162.5°	948.2	965.4	997.6	1050.5	1063.0
165°	967.1	978.4	999.1	1038.9	1043.9
167.5°	982.5	989.0	1000.4	1029.8	1031.8
170°	992.7	995.2	1000.4	1024.7	1024.7
172.5°	998.8	999.3	1001.4	1019.6	1019.6
175°	1005.5	1004.2	1000.4	1014.4	1011.9
177.5°	1008.3	1006.3	1001.1	1009.3	1007.3
180°	1004.2	1004.2	1004.2	1004.2	1004.2

(END OF REPORT)