

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: P518850

Luminaire Tested: **SQ4-BB-125U-100D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518850
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-8
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

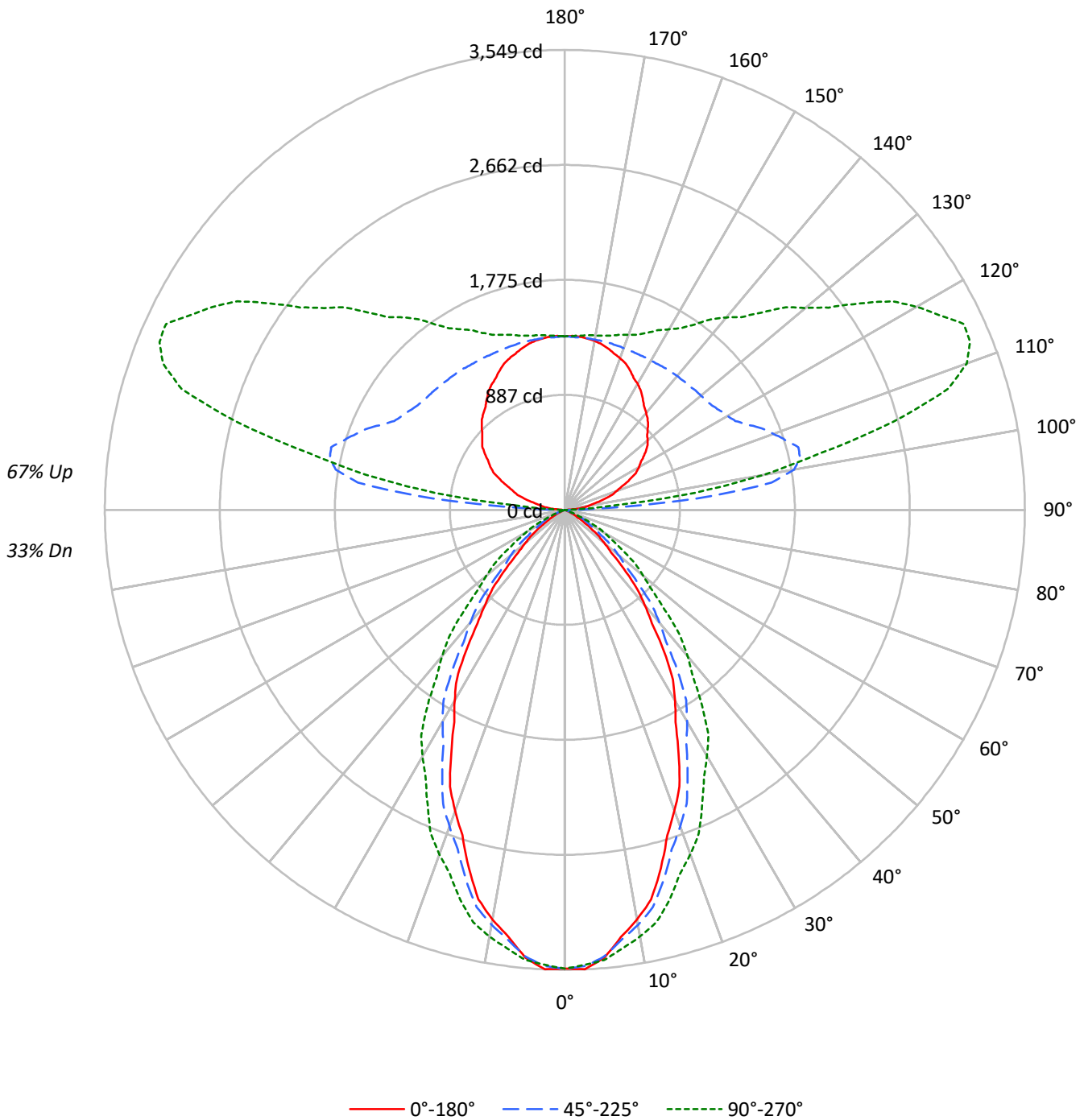
Lumens per Lamp: N/A
Luminaire Lumens: 12870.4 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 133.3
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: P518850
CATALOG NUMBER: SQ4-BB-125U-100D-940-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P518850

CATALOG NUMBER: SQ4-BB-125U-100D-940-1D-UNV-STD-W-8

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	16150
10°	15036	15237	15662
15°	13670	14104	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8527	10399
40°	5766	6818	8861
45°	4168	5163	7129
50°	2840	3847	5655
55°	1846	2783	4395
60°	1059	1960	3177
65°	281	1196	1608
70°	139	370	463
75°	61	30	0
80°	45	0	0
85°	0	0	0



TEST NUMBER: P518850

CATALOG NUMBER: SQ4-BB-125U-100D-940-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	323.1	2.5
10°-20°	826.3	6.4
20°-30°	1034.5	8.0
30°-40°	955.5	7.4
40°-50°	642.1	5.0
50°-60°	331.6	2.6
60°-70°	103.9	0.8
70°-80°	6.6	0.1
80°-90°	3.3	0.0
90°-100°	626.4	4.9
100°-110°	1687.3	13.1
110°-120°	1770.7	13.8
120°-130°	1436.9	11.2
130°-140°	1126.9	8.8
140°-150°	865.2	6.7
150°-160°	622.1	4.8
160°-170°	380.0	3.0
170°-180°	128.2	1.0
0°-30°	2183.9	17.0
0°-40°	3139.4	24.4
0°-60°	4113.1	32.0
0°-90°	4226.8	32.8
90°-120°	4084.4	31.7
90°-150°	7513.4	58.4
90°-180°	8644.0	67.2
0°-180°	12870.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3541	3541	3541	3541	3541	
5°	3470	3435	3462	3474	3488	322
15°	2862	2852	2953	3052	3118	797
25°	2076	2093	2240	2394	2506	952
35°	1333	1366	1514	1692	1846	826
45°	639	677	791	946	1093	502
55°	230	268	346	444	546	214
65°	26	49	110	132	147	43
75°	3	3	2	0	0	5
85°	0	0	0	0	0	0
90°	3	10	20	22	22	7
95°	96	341	1027	525	363	100
105°	312	486	1866	2792	2620	328
115°	551	674	1554	3002	3396	542
125°	752	864	1395	2358	2775	672
135°	906	1011	1356	1902	2154	699
145°	1047	1129	1339	1626	1747	657
155°	1189	1232	1327	1459	1506	547
165°	1290	1304	1332	1385	1392	364
175°	1341	1339	1334	1352	1349	127
180°	1339	1339	1339	1339	1339	



TEST NUMBER: P518850

CATALOG NUMBER: SQ4-BB-125U-100D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3540.6	3540.6	3540.6	3540.6	3540.6
2.5°	3548.8	3515.3	3524.2	3523.9	3514.6
5°	3470.4	3435.2	3461.8	3474.1	3487.5
7.5°	3323.7	3296.3	3347.4	3385.7	3413.5
10°	3210.0	3186.6	3252.8	3305.1	3343.6
12.5°	3078.5	3060.4	3140.5	3212.1	3261.4
15°	2862.3	2852.2	2953.1	3052.2	3117.5
17.5°	2630.7	2630.4	2745.5	2868.5	2947.2
20°	2471.7	2476.8	2600.2	2735.9	2828.0
22.5°	2312.8	2324.5	2456.3	2597.8	2703.3
25°	2076.1	2092.8	2240.5	2393.8	2506.0
27.5°	1848.6	1873.0	2028.4	2187.8	2324.4
30°	1699.2	1727.7	1885.9	2053.6	2194.2
32.5°	1552.6	1586.4	1740.7	1918.0	2061.3
35°	1332.6	1366.1	1514.2	1692.4	1846.5
37.5°	1105.5	1138.3	1283.0	1458.4	1624.9
40°	957.5	994.4	1132.2	1302.2	1471.4
42.5°	823.2	860.1	989.7	1156.8	1316.5
45°	638.9	677.4	791.4	945.5	1092.8
47.5°	486.1	528.0	628.0	767.4	901.7
50°	395.7	437.6	536.1	659.0	787.9
52.5°	323.1	363.6	452.6	568.3	686.5
55°	229.5	268.1	346.0	444.3	546.4
57.5°	158.6	191.8	261.7	343.7	423.8
60°	114.8	146.6	212.4	279.0	344.3
62.5°	76.4	105.5	169.9	220.9	264.8
65°	25.7	49.1	109.6	132.2	147.3
67.5°	13.0	15.7	57.6	60.8	65.8
70°	10.3	10.3	27.4	29.2	34.3
72.5°	7.5	7.5	11.0	14.1	15.1
75°	3.4	3.4	1.7	0.0	0.0
77.5°	1.7	1.7	1.4	0.0	0.0
80°	1.7	1.7	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°	0.7	2.0	4.1	4.4	4.4
90°	3.4	10.1	20.5	22.2	22.2
92.5°	41.6	147.0	290.6	139.9	97.2
95°	95.5	340.7	1026.8	525.1	363.3
97.5°	152.5	390.0	1610.5	1345.4	1014.5
100°	196.2	409.6	1796.1	1879.2	1559.0
102.5°	238.5	437.2	1857.5	2278.9	2016.1
105°	312.1	485.6	1866.0	2791.7	2619.9
107.5°	381.7	536.5	1786.5	3055.2	3099.5
110°	428.1	574.9	1714.2	3137.0	3298.7



TEST NUMBER: P518850

CATALOG NUMBER: SQ4-BB-125U-100D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	477.2	613.3	1644.6	3118.9	3384.7
115°	550.9	674.3	1553.9	3002.4	3396.0
117.5°	618.1	733.9	1483.6	2816.4	3254.7
120°	661.8	773.5	1448.1	2683.0	3133.3
122.5°	700.0	810.4	1422.2	2546.5	2995.5
125°	752.2	863.9	1395.2	2358.2	2775.1
127.5°	802.3	912.4	1378.2	2192.0	2564.3
130°	832.4	942.4	1371.3	2096.9	2423.7
132.5°	862.4	971.1	1364.5	2013.0	2313.2
135°	905.7	1010.8	1356.0	1902.4	2154.2
137.5°	947.0	1047.7	1351.6	1808.6	2015.4
140°	975.6	1072.4	1347.5	1750.8	1937.6
142.5°	1005.7	1095.7	1344.7	1697.0	1854.4
145°	1047.3	1129.0	1338.9	1626.5	1746.6
147.5°	1092.3	1163.3	1333.1	1567.3	1661.6
150°	1122.3	1184.0	1330.4	1530.0	1608.4
152.5°	1149.6	1203.3	1329.0	1499.7	1563.4
155°	1188.8	1232.2	1327.0	1459.4	1506.1
157.5°	1223.3	1257.0	1327.3	1431.1	1462.4
160°	1245.1	1273.5	1328.7	1414.5	1437.9
162.5°	1264.2	1287.2	1330.1	1400.7	1417.4
165°	1289.5	1304.5	1332.1	1385.1	1391.8
167.5°	1309.9	1318.6	1333.8	1373.1	1375.8
170°	1323.6	1326.9	1333.8	1366.2	1366.2
172.5°	1331.8	1332.4	1335.2	1359.4	1359.4
175°	1340.6	1339.0	1333.8	1352.5	1349.2
177.5°	1344.4	1341.7	1334.8	1345.7	1343.0
180°	1338.9	1338.9	1338.9	1338.9	1338.9

(END OF REPORT)