

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: P518848

Luminaire Tested: **SQ4-BB-125U-100D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518848
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-4
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

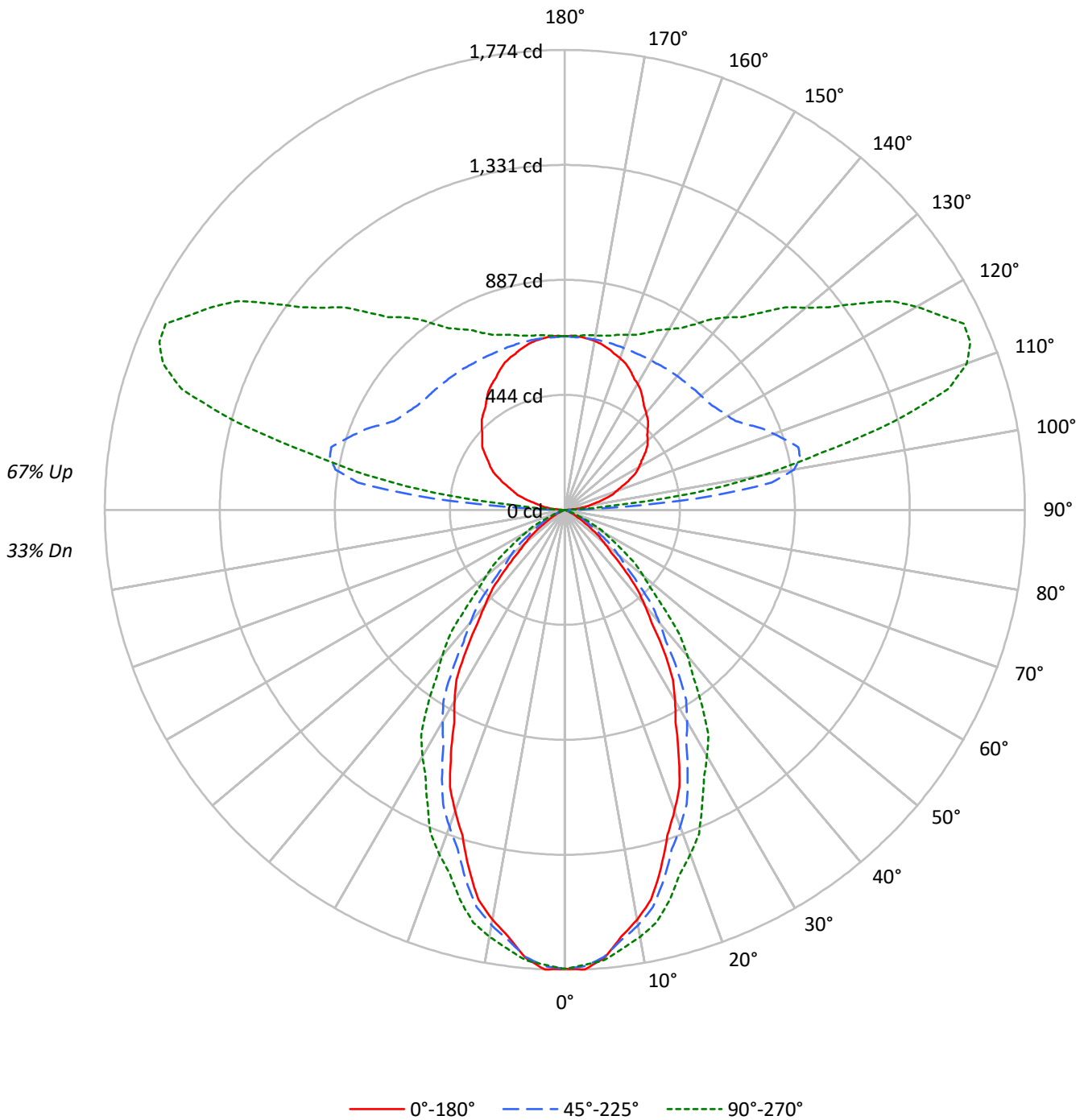
Lumens per Lamp: N/A
Luminaire Lumens: 6435.2 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64.5
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	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°	13669	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8527	10399
40°	5767	6818	8861
45°	4169	5163	7129
50°	2839	3848	5655
55°	1847	2783	4395
60°	1059	1960	3176
65°	279	1196	1609
70°	138	370	461
75°	61	32	0
80°	48	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	2.5
10°-20°	413.2	6.4
20°-30°	517.2	8.0
30°-40°	477.8	7.4
40°-50°	321.0	5.0
50°-60°	165.8	2.6
60°-70°	51.9	0.8
70°-80°	3.3	0.1
80°-90°	1.6	0.0
90°-100°	313.2	4.9
100°-110°	843.6	13.1
110°-120°	885.4	13.8
120°-130°	718.5	11.2
130°-140°	563.5	8.8
140°-150°	432.6	6.7
150°-160°	311.0	4.8
160°-170°	190.0	3.0
170°-180°	64.1	1.0
0°-30°	1091.9	17.0
0°-40°	1569.7	24.4
0°-60°	2056.5	32.0
0°-90°	2113.4	32.8
90°-120°	2042.2	31.7
90°-150°	3756.7	58.4
90°-180°	4322.0	67.2
0°-180°	6435.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1770	1770	1770	1770	1770	
5°	1735	1718	1731	1737	1744	161
15°	1431	1426	1476	1526	1559	399
25°	1038	1046	1120	1197	1253	476
35°	666	683	757	846	923	413
45°	320	339	396	473	546	251
55°	115	134	173	222	273	107
65°	13	25	55	66	74	22
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	5	10	11	11	3
95°	48	170	513	262	182	50
105°	156	243	933	1396	1310	164
115°	276	337	777	1501	1698	271
125°	376	432	698	1179	1388	336
135°	453	505	678	951	1077	350
145°	524	564	670	813	873	328
155°	594	616	664	730	753	274
165°	645	652	666	693	696	182
175°	670	670	667	676	675	64
180°	670	670	670	670	670	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1770.3	1770.3	1770.3	1770.3	1770.3
2.5°	1774.4	1757.7	1762.1	1762.0	1757.3
5°	1735.2	1717.6	1730.9	1737.0	1743.7
7.5°	1661.9	1648.1	1673.7	1692.8	1706.7
10°	1605.0	1593.3	1626.4	1652.5	1671.8
12.5°	1539.2	1530.2	1570.2	1606.1	1630.7
15°	1431.1	1426.1	1476.5	1526.1	1558.8
17.5°	1315.3	1315.2	1372.7	1434.3	1473.6
20°	1235.9	1238.4	1300.1	1368.0	1414.0
22.5°	1156.4	1162.3	1228.2	1298.9	1351.7
25°	1038.0	1046.4	1120.2	1196.9	1253.0
27.5°	924.3	936.5	1014.2	1093.9	1162.2
30°	849.6	863.8	943.0	1026.8	1097.1
32.5°	776.3	793.2	870.3	959.0	1030.7
35°	666.3	683.1	757.1	846.2	923.3
37.5°	552.8	569.2	641.5	729.2	812.4
40°	478.8	497.2	566.1	651.1	735.7
42.5°	411.6	430.0	494.9	578.4	658.3
45°	319.5	338.7	395.7	472.7	546.4
47.5°	243.1	264.0	314.0	383.7	450.8
50°	197.8	218.8	268.1	329.5	394.0
52.5°	161.5	181.8	226.3	284.1	343.3
55°	114.8	134.0	173.0	222.1	273.2
57.5°	79.3	95.9	130.9	171.9	211.9
60°	57.4	73.3	106.2	139.5	172.1
62.5°	38.2	52.8	85.0	110.5	132.4
65°	12.8	24.6	54.8	66.1	73.7
67.5°	6.5	7.8	28.8	30.4	32.9
70°	5.1	5.1	13.7	14.6	17.1
72.5°	3.8	3.8	5.5	7.0	7.5
75°	1.7	1.7	0.9	0.0	0.0
77.5°	0.9	0.9	0.7	0.0	0.0
80°	0.9	0.9	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.0	2.0	2.2	2.2
90°	1.7	5.0	10.2	11.1	11.1
92.5°	20.8	73.5	145.3	70.0	48.6
95°	47.8	170.3	513.4	262.5	181.7
97.5°	76.2	195.0	805.2	672.7	507.3
100°	98.1	204.8	898.0	939.6	779.5
102.5°	119.2	218.6	928.7	1139.5	1008.0
105°	156.1	242.8	933.0	1395.8	1309.9
107.5°	190.9	268.2	893.3	1527.6	1549.8
110°	214.1	287.4	857.1	1568.5	1649.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	238.6	306.7	822.3	1559.4	1692.4
115°	275.5	337.2	776.9	1501.2	1698.0
117.5°	309.1	366.9	741.8	1408.2	1627.4
120°	330.9	386.8	724.1	1341.5	1566.6
122.5°	350.0	405.2	711.1	1273.3	1497.7
125°	376.1	432.0	697.6	1179.1	1387.6
127.5°	401.2	456.2	689.1	1096.0	1282.1
130°	416.2	471.2	685.7	1048.4	1211.9
132.5°	431.2	485.6	682.3	1006.5	1156.6
135°	452.9	505.4	678.0	951.2	1077.1
137.5°	473.5	523.9	675.8	904.3	1007.7
140°	487.8	536.2	673.7	875.4	968.8
142.5°	502.8	547.9	672.4	848.5	927.2
145°	523.6	564.5	669.5	813.3	873.3
147.5°	546.2	581.7	666.6	783.6	830.8
150°	561.2	592.0	665.2	765.0	804.2
152.5°	574.8	601.7	664.5	749.8	781.7
155°	594.4	616.1	663.5	729.7	753.0
157.5°	611.6	628.5	663.7	715.5	731.2
160°	622.6	636.7	664.4	707.3	718.9
162.5°	632.1	643.6	665.0	700.4	708.7
165°	644.7	652.2	666.1	692.6	695.9
167.5°	655.0	659.3	666.9	686.6	687.9
170°	661.8	663.5	666.9	683.1	683.1
172.5°	665.9	666.2	667.6	679.7	679.7
175°	670.3	669.5	666.9	676.3	674.6
177.5°	672.2	670.9	667.4	672.9	671.5
180°	669.5	669.5	669.5	669.5	669.5

(END OF REPORT)