

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: P518846

Luminaire Tested: **SQ4-BB-125U-100D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518846
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

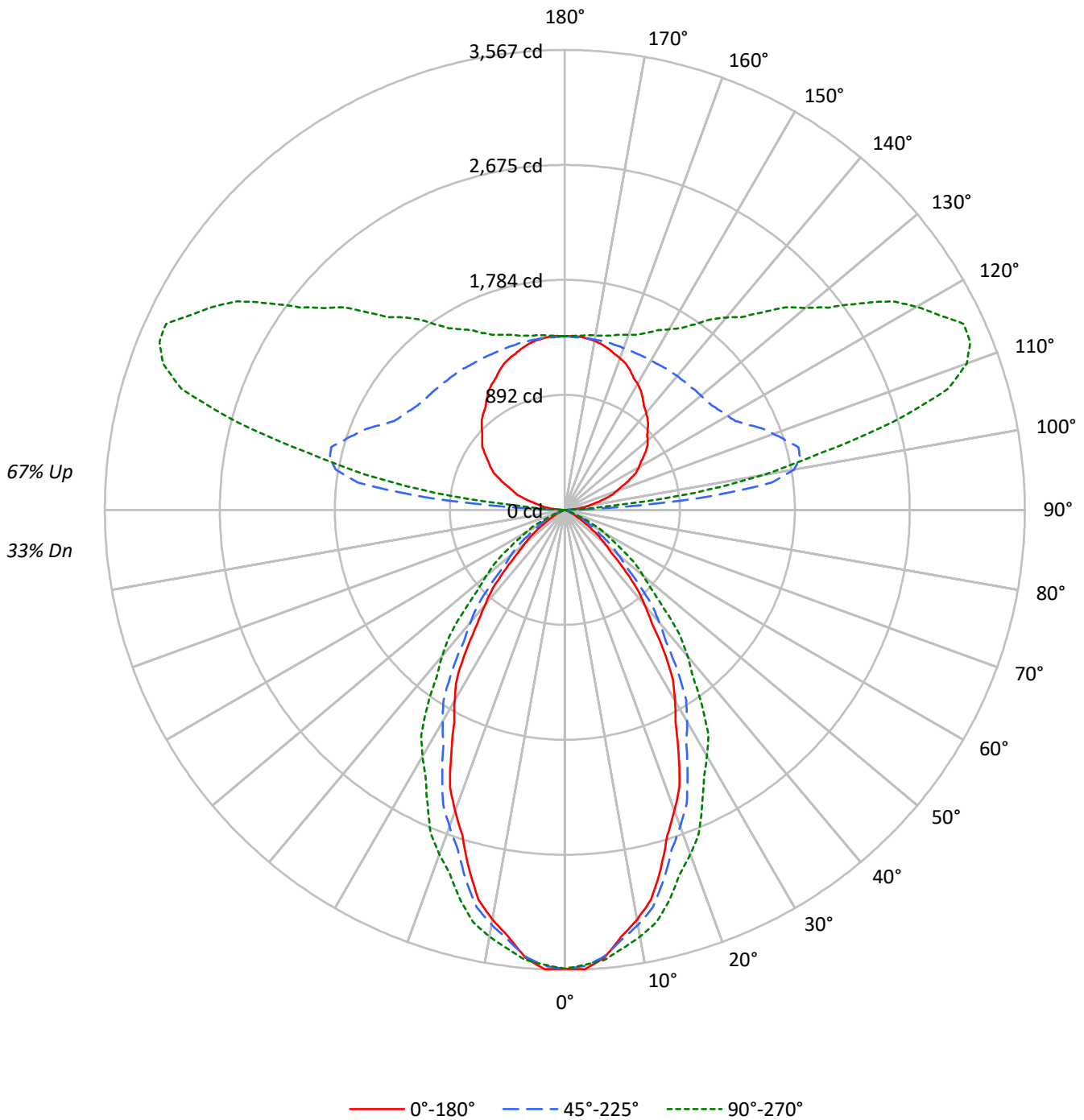
Lumens per Lamp: N/A
Luminaire Lumens: 12936.1 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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



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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°	16417	16417	16417
5°	16152	16113	16232
10°	15113	15315	15742
15°	13740	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9098	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4190	5189	7166
50°	2854	3868	5684
55°	1855	2797	4417
60°	1065	1970	3193
65°	282	1203	1617
70°	139	371	464
75°	61	30	0
80°	45	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	324.8	2.5
10°-20°	830.5	6.4
20°-30°	1039.7	8.0
30°-40°	960.4	7.4
40°-50°	645.3	5.0
50°-60°	333.3	2.6
60°-70°	104.4	0.8
70°-80°	6.6	0.1
80°-90°	3.3	0.0
90°-100°	629.6	4.9
100°-110°	1695.9	13.1
110°-120°	1779.8	13.8
120°-130°	1444.2	11.2
130°-140°	1132.7	8.8
140°-150°	869.6	6.7
150°-160°	625.2	4.8
160°-170°	382.0	3.0
170°-180°	128.8	1.0
0°-30°	2195.0	17.0
0°-40°	3155.4	24.4
0°-60°	4134.1	32.0
0°-90°	4248.3	32.8
90°-120°	4105.2	31.7
90°-150°	7551.7	58.4
90°-180°	8688.0	67.2
0°-180°	12936.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3559	3559	3559	3559	3559	
5°	3488	3453	3480	3492	3505	323
15°	2877	2867	2968	3068	3133	801
25°	2087	2104	2252	2406	2519	957
35°	1339	1373	1522	1701	1856	830
45°	642	681	795	950	1098	504
55°	231	269	348	446	549	215
65°	26	49	110	133	148	44
75°	3	3	2	0	0	5
85°	0	0	0	0	0	0
90°	3	10	21	22	22	7
95°	96	342	1032	528	365	100
105°	314	488	1876	2806	2633	330
115°	554	678	1562	3018	3413	545
125°	756	868	1402	2370	2789	675
135°	910	1016	1363	1912	2165	703
145°	1053	1135	1346	1635	1756	660
155°	1195	1238	1334	1467	1514	550
165°	1296	1311	1339	1392	1399	365
175°	1348	1346	1341	1359	1356	128
180°	1346	1346	1346	1346	1346	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3558.7	3558.7	3558.7	3558.7	3558.7
2.5°	3566.9	3533.3	3542.1	3541.9	3532.5
5°	3488.1	3452.7	3479.5	3491.8	3505.3
7.5°	3340.7	3313.1	3364.5	3403.0	3430.9
10°	3226.4	3202.8	3269.4	3322.0	3360.7
12.5°	3094.2	3076.0	3156.5	3228.5	3278.0
15°	2876.9	2866.8	2968.1	3067.8	3133.4
17.5°	2644.1	2643.8	2759.5	2883.2	2962.3
20°	2484.4	2489.4	2613.5	2749.9	2842.5
22.5°	2324.6	2336.4	2468.9	2611.1	2717.1
25°	2086.6	2103.5	2251.9	2406.0	2518.8
27.5°	1858.0	1882.6	2038.8	2198.9	2336.3
30°	1707.9	1736.5	1895.5	2064.0	2205.4
32.5°	1560.5	1594.5	1749.5	1927.7	2071.8
35°	1339.4	1373.1	1521.9	1701.1	1855.9
37.5°	1111.2	1144.2	1289.5	1465.8	1633.2
40°	962.4	999.4	1138.0	1308.9	1478.9
42.5°	827.4	864.5	994.8	1162.7	1323.3
45°	642.2	680.9	795.4	950.3	1098.4
47.5°	488.6	530.7	631.2	771.3	906.3
50°	397.7	439.8	538.9	662.3	792.0
52.5°	324.7	365.4	454.9	571.2	690.0
55°	230.7	269.4	347.8	446.5	549.2
57.5°	159.4	192.8	263.1	345.5	425.9
60°	115.4	147.3	213.5	280.4	346.1
62.5°	76.8	106.1	170.8	222.1	266.2
65°	25.8	49.4	110.2	132.9	148.1
67.5°	13.1	15.8	57.8	61.1	66.1
70°	10.3	10.3	27.5	29.4	34.4
72.5°	7.6	7.6	11.0	14.1	15.2
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	4.5	4.5
90°	3.4	10.1	20.6	22.3	22.3
92.5°	41.8	147.8	292.1	140.6	97.7
95°	96.0	342.4	1032.0	527.8	365.2
97.5°	153.3	392.0	1618.7	1352.3	1019.7
100°	197.2	411.7	1805.2	1888.8	1566.9
102.5°	239.7	439.5	1866.9	2290.6	2026.4
105°	313.7	488.1	1875.5	2805.9	2633.3
107.5°	383.7	539.2	1795.6	3070.7	3115.3
110°	430.3	577.8	1722.9	3153.0	3315.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	479.7	616.5	1653.0	3134.8	3402.0
115°	553.7	677.8	1561.8	3017.7	3413.3
117.5°	621.3	737.6	1491.2	2830.8	3271.3
120°	665.2	777.5	1455.5	2696.7	3149.3
122.5°	703.6	814.5	1429.4	2559.5	3010.8
125°	756.0	868.3	1402.3	2370.2	2789.3
127.5°	806.4	917.1	1385.2	2203.2	2577.4
130°	836.6	947.2	1378.3	2107.6	2436.1
132.5°	866.8	976.1	1371.5	2023.3	2325.0
135°	910.3	1015.9	1362.9	1912.1	2165.2
137.5°	951.8	1053.1	1358.5	1817.8	2025.7
140°	980.6	1077.8	1354.3	1759.8	1947.5
142.5°	1010.8	1101.3	1351.6	1705.6	1863.9
145°	1052.6	1134.8	1345.8	1634.8	1755.5
147.5°	1097.9	1169.3	1339.9	1575.3	1670.1
150°	1128.0	1190.1	1337.2	1537.9	1616.6
152.5°	1155.5	1209.5	1335.8	1507.3	1571.4
155°	1194.9	1238.5	1333.8	1466.8	1513.8
157.5°	1229.5	1263.4	1334.1	1438.4	1469.9
160°	1251.5	1280.0	1335.5	1421.7	1445.2
162.5°	1270.7	1293.8	1336.9	1407.9	1424.6
165°	1296.1	1311.1	1338.9	1392.2	1398.9
167.5°	1316.6	1325.3	1340.6	1380.1	1382.8
170°	1330.3	1333.7	1340.6	1373.2	1373.2
172.5°	1338.6	1339.2	1342.0	1366.3	1366.3
175°	1347.5	1345.8	1340.6	1359.4	1356.1
177.5°	1351.3	1348.6	1341.7	1352.6	1349.9
180°	1345.8	1345.8	1345.8	1345.8	1345.8

(END OF REPORT)