

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: P518838

Luminaire Tested: **SQ4-BB-125U-100D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518838
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-840-1D-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

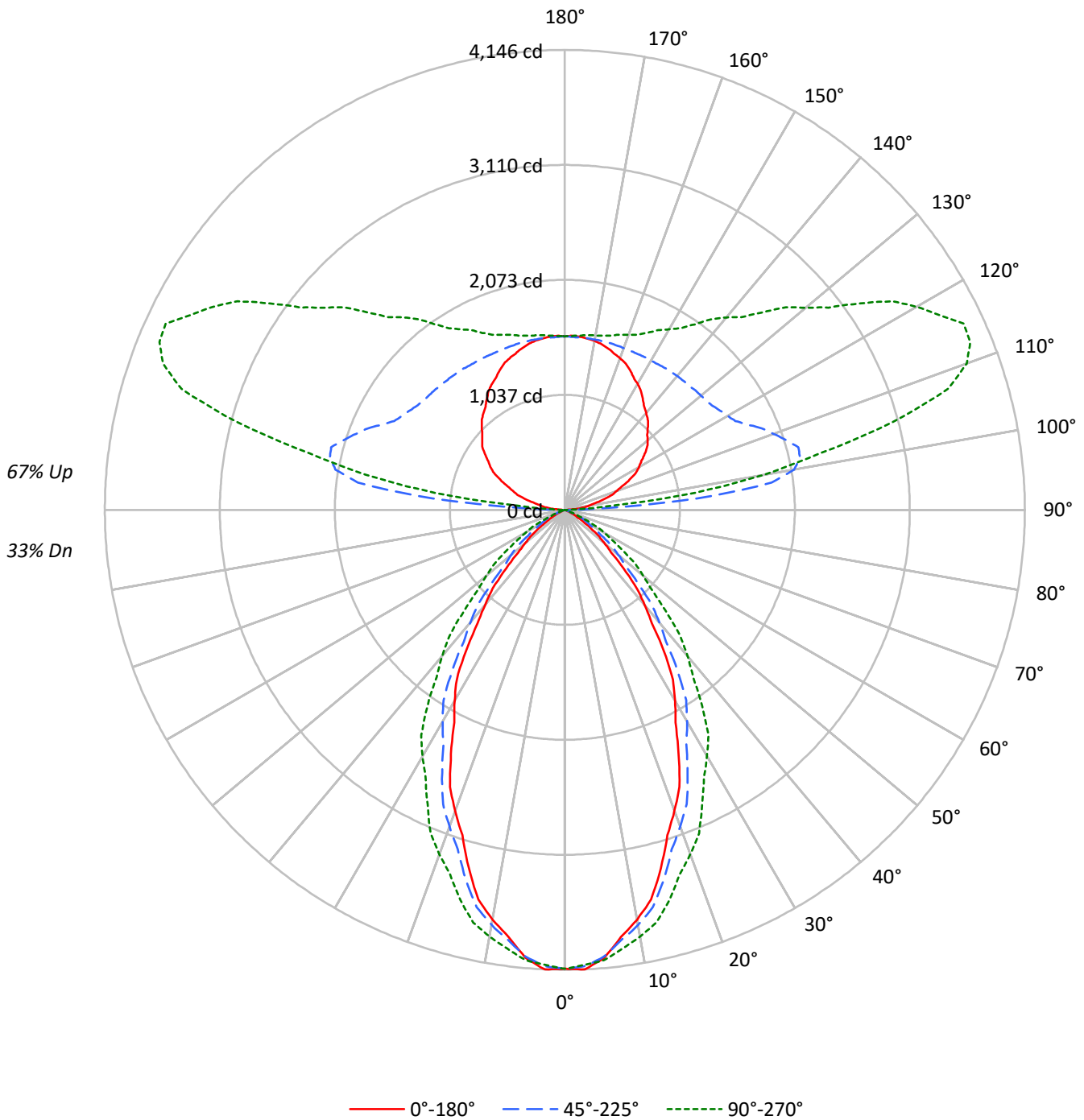
Lumens per Lamp: N/A
Luminaire Lumens: 15037.8 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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°	19083	19083	19083
5°	18777	18730	18869
10°	17569	17803	18300
15°	15972	16479	17396
20°	14178	14915	16221
25°	12347	13325	14904
30°	10576	11737	13657
35°	8769	9963	12150
40°	6737	7966	10353
45°	4870	6032	8330
50°	3318	4495	6607
55°	2157	3252	5134
60°	1237	2290	3712
65°	327	1398	1879
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	377.5	2.5
10°-20°	965.5	6.4
20°-30°	1208.7	8.0
30°-40°	1116.4	7.4
40°-50°	750.2	5.0
50°-60°	387.5	2.6
60°-70°	121.4	0.8
70°-80°	7.7	0.1
80°-90°	3.8	0.0
90°-100°	731.8	4.9
100°-110°	1971.4	13.1
110°-120°	2068.9	13.8
120°-130°	1678.9	11.2
130°-140°	1316.7	8.8
140°-150°	1010.9	6.7
150°-160°	726.8	4.8
160°-170°	444.1	3.0
170°-180°	149.7	1.0
0°-30°	2551.7	17.0
0°-40°	3668.1	24.4
0°-60°	4805.7	32.0
0°-90°	4938.6	32.8
90°-120°	4772.2	31.7
90°-150°	8778.6	58.4
90°-180°	10099.0	67.2
0°-180°	15037.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4137	4137	4137	4137	4137	
5°	4055	4014	4045	4059	4075	376
15°	3344	3333	3450	3566	3642	931
25°	2426	2445	2618	2797	2928	1112
35°	1557	1596	1769	1977	2158	965
45°	746	792	925	1105	1277	586
55°	268	313	404	519	638	250
65°	30	57	128	154	172	51
75°	4	4	2	0	0	6
85°	0	0	0	0	0	0
90°	4	12	24	26	26	8
95°	112	398	1200	614	424	117
105°	365	567	2180	3262	3061	383
115°	644	788	1816	3508	3968	633
125°	879	1009	1630	2755	3242	785
135°	1058	1181	1584	2223	2517	817
145°	1224	1319	1564	1900	2041	767
155°	1389	1440	1550	1705	1760	639
165°	1507	1524	1556	1618	1626	425
175°	1566	1564	1558	1580	1576	149
180°	1564	1564	1564	1564	1564	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4136.8	4136.8	4136.8	4136.8	4136.8
2.5°	4146.5	4107.3	4117.6	4117.4	4106.4
5°	4054.8	4013.7	4044.8	4059.1	4074.8
7.5°	3883.5	3851.4	3911.1	3955.9	3988.3
10°	3750.6	3723.2	3800.6	3861.7	3906.7
12.5°	3596.9	3575.7	3669.3	3753.1	3810.6
15°	3344.3	3332.6	3450.4	3566.2	3642.5
17.5°	3073.7	3073.3	3207.8	3351.6	3443.6
20°	2888.0	2893.9	3038.1	3196.6	3304.3
22.5°	2702.3	2716.0	2870.0	3035.3	3158.6
25°	2425.7	2445.2	2617.8	2796.9	2928.0
27.5°	2159.9	2188.5	2370.0	2556.2	2715.9
30°	1985.4	2018.6	2203.5	2399.4	2563.8
32.5°	1814.0	1853.6	2033.8	2240.9	2408.5
35°	1557.1	1596.2	1769.2	1977.4	2157.5
37.5°	1291.7	1330.0	1499.0	1704.0	1898.5
40°	1118.8	1161.8	1322.9	1521.5	1719.2
42.5°	961.9	1004.9	1156.4	1351.6	1538.3
45°	746.5	791.5	924.6	1104.7	1276.9
47.5°	568.0	616.9	733.7	896.6	1053.5
50°	462.3	511.2	626.4	770.0	920.6
52.5°	377.5	424.8	528.8	664.0	802.2
55°	268.2	313.2	404.3	519.1	638.4
57.5°	185.3	224.1	305.8	401.6	495.1
60°	134.1	171.3	248.2	326.0	402.3
62.5°	89.3	123.3	198.5	258.1	309.4
65°	30.0	57.4	128.1	154.5	172.1
67.5°	15.2	18.3	67.2	71.0	76.9
70°	12.0	12.0	32.0	34.2	40.0
72.5°	8.8	8.8	12.8	16.4	17.6
75°	4.0	4.0	2.0	0.0	0.0
77.5°	2.0	2.0	1.6	0.0	0.0
80°	2.0	2.0	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	2.4	4.8	5.2	5.2
90°	4.0	11.8	23.9	25.9	25.9
92.5°	48.6	171.8	339.6	163.5	113.6
95°	111.6	398.0	1199.7	613.5	424.5
97.5°	178.2	455.6	1881.7	1572.0	1185.4
100°	229.2	478.6	2098.5	2195.6	1821.5
102.5°	278.6	510.9	2170.3	2662.7	2355.6
105°	364.7	567.4	2180.2	3261.8	3061.1
107.5°	446.0	626.8	2087.4	3569.7	3621.5
110°	500.2	671.7	2002.9	3665.2	3854.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	557.6	716.6	1921.5	3644.1	3954.7
115°	643.7	787.9	1815.5	3508.0	3967.9
117.5°	722.2	857.5	1733.4	3290.7	3802.8
120°	773.2	903.8	1692.0	3134.8	3660.9
122.5°	817.9	946.9	1661.7	2975.4	3499.9
125°	878.9	1009.4	1630.2	2755.3	3242.4
127.5°	937.5	1066.1	1610.3	2561.2	2996.1
130°	972.5	1101.1	1602.3	2450.0	2831.9
132.5°	1007.6	1134.7	1594.3	2352.0	2702.8
135°	1058.2	1181.0	1584.4	2222.8	2517.0
137.5°	1106.5	1224.2	1579.2	2113.2	2354.8
140°	1139.9	1253.0	1574.4	2045.7	2263.9
142.5°	1175.0	1280.2	1571.2	1982.7	2166.7
145°	1223.6	1319.1	1564.4	1900.4	2040.7
147.5°	1276.2	1359.3	1557.6	1831.2	1941.5
150°	1311.3	1383.4	1554.5	1787.7	1879.3
152.5°	1343.2	1406.0	1552.9	1752.3	1826.7
155°	1389.0	1439.7	1550.5	1705.2	1759.7
157.5°	1429.3	1468.7	1550.9	1672.1	1708.7
160°	1454.8	1487.9	1552.5	1652.7	1680.0
162.5°	1477.1	1504.0	1554.1	1636.6	1656.1
165°	1506.6	1524.2	1556.5	1618.4	1626.2
167.5°	1530.5	1540.7	1558.4	1604.4	1607.5
170°	1546.5	1550.4	1558.4	1596.3	1596.3
172.5°	1556.1	1556.8	1560.0	1588.3	1588.3
175°	1566.4	1564.5	1558.4	1580.3	1576.4
177.5°	1570.8	1567.7	1559.6	1572.3	1569.2
180°	1564.4	1564.4	1564.4	1564.4	1564.4

(END OF REPORT)