

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: P518970

Luminaire Tested: **SQ4-BB-150U-125D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518970  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-125D-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

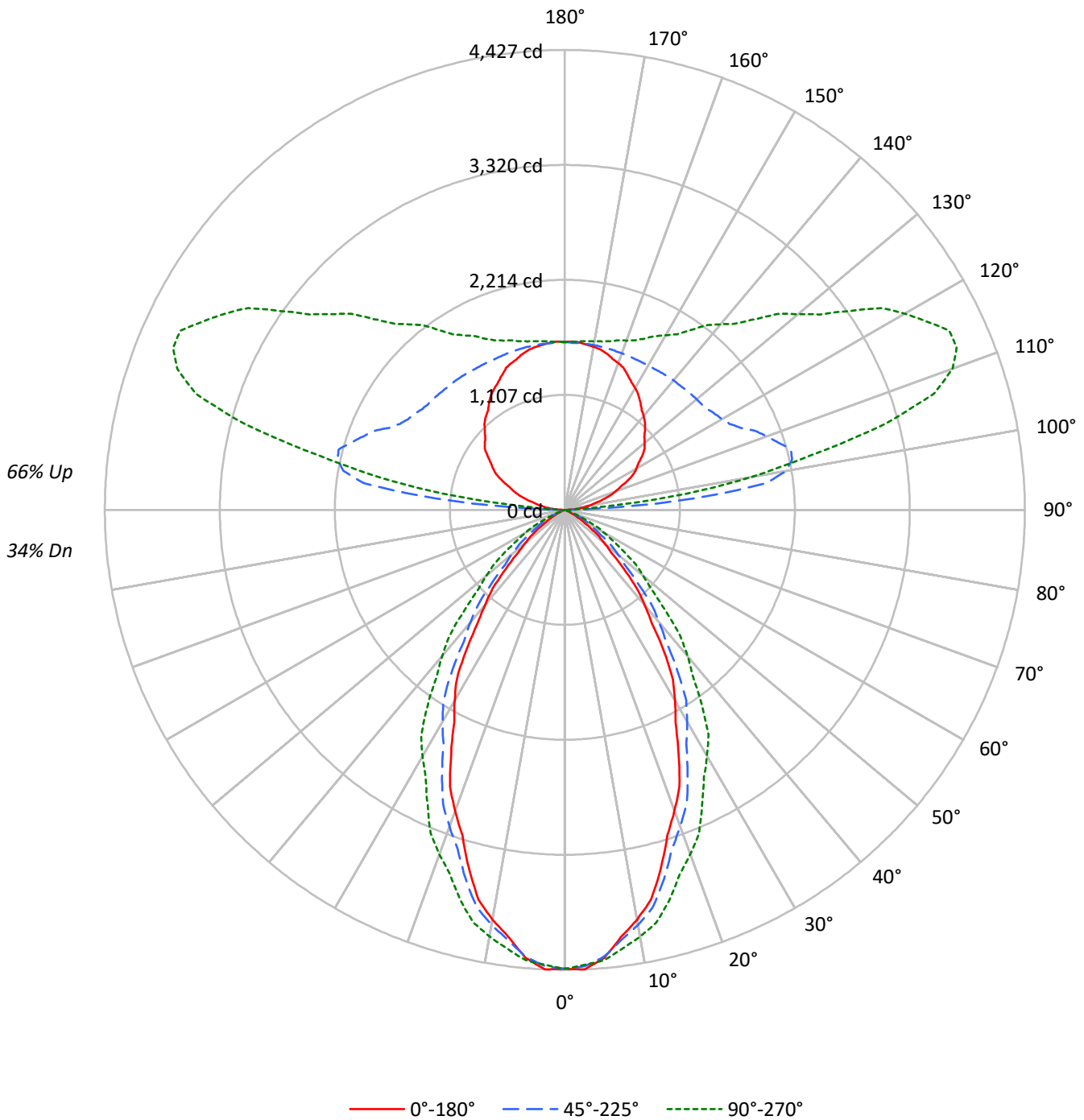
Lumens per Lamp: N/A  
Luminaire Lumens: 15687.8 lumens  
Efficiency: N/A  
Efficacy: 93.5 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 167.8  
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



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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	57	57	57	41	41	41	34
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23
5	69	59	51	46	62	54	47	43	44	40	36	35	32	30	27	26	24	21
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	20377	20377	20377
5°	20049	19999	20148
10°	18759	19009	19539
15°	17054	17595	18575
20°	15138	15925	17320
25°	13183	14227	15913
30°	11292	12533	14581
35°	9363	10639	12973
40°	7194	8506	11054
45°	5200	6441	8895
50°	3542	4801	7055
55°	2303	3472	5483
60°	1321	2445	3963
65°	350	1493	2006
70°	173	461	576
75°	77	37	0
80°	56	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	403.1	2.6
10°-20°	1030.9	6.6
20°-30°	1290.6	8.2
30°-40°	1192.0	7.6
40°-50°	801.0	5.1
50°-60°	413.7	2.6
60°-70°	129.6	0.8
70°-80°	8.2	0.1
80°-90°	3.5	0.0
90°-100°	750.7	4.8
100°-110°	2029.9	12.9
110°-120°	2134.1	13.6
120°-130°	1733.5	11.0
130°-140°	1359.8	8.7
140°-150°	1043.6	6.7
150°-160°	750.6	4.8
160°-170°	458.5	2.9
170°-180°	154.6	1.0
0°-30°	2724.5	17.4
0°-40°	3916.6	25.0
0°-60°	5131.3	32.7
0°-90°	5272.6	33.6
90°-120°	4914.7	31.3
90°-150°	9051.5	57.7
90°-180°	10415.0	66.4
0°-180°	15687.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4417	4417	4417	4417	4417	
5°	4330	4286	4319	4334	4351	401
15°	3571	3558	3684	3808	3889	995
25°	2590	2611	2795	2986	3126	1187
35°	1663	1704	1889	2111	2304	1030
45°	797	845	987	1180	1363	626
55°	286	334	432	554	682	267
65°	32	61	137	165	184	54
75°	4	4	2	0	0	6
85°	0	0	0	0	0	0
90°	4	10	23	24	23	8
95°	116	409	1248	646	384	122
105°	377	583	2252	3322	3186	397
115°	664	812	1868	3615	4081	656
125°	909	1042	1683	2840	3337	811
135°	1090	1220	1638	2294	2596	843
145°	1268	1363	1615	1963	2113	793
155°	1431	1487	1602	1761	1819	660
165°	1558	1573	1608	1671	1680	439
175°	1617	1616	1610	1631	1628	154
180°	1615	1615	1615	1615	1615	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4417.1	4417.1	4417.1	4417.1	4417.1
2.5°	4427.4	4385.6	4396.6	4396.3	4384.6
5°	4329.5	4285.6	4318.8	4334.1	4350.9
7.5°	4146.6	4112.3	4176.0	4223.9	4258.5
10°	4004.7	3975.4	4058.1	4123.3	4171.3
12.5°	3840.5	3818.0	3917.9	4007.3	4068.8
15°	3570.9	3558.3	3684.1	3807.8	3889.3
17.5°	3281.9	3281.5	3425.1	3578.6	3676.9
20°	3083.6	3089.9	3243.9	3413.2	3528.1
22.5°	2885.3	2900.0	3064.4	3240.9	3372.6
25°	2590.0	2610.9	2795.1	2986.4	3126.4
27.5°	2306.2	2336.7	2530.6	2729.4	2899.9
30°	2119.9	2155.4	2352.8	2561.9	2737.4
32.5°	1936.9	1979.1	2171.6	2392.8	2571.6
35°	1662.6	1704.3	1889.1	2111.4	2303.6
37.5°	1379.2	1420.1	1600.6	1819.4	2027.1
40°	1194.6	1240.5	1412.5	1624.6	1835.6
42.5°	1027.0	1073.0	1234.7	1443.1	1642.5
45°	797.1	845.1	987.3	1179.5	1363.4
47.5°	606.5	658.7	783.4	957.3	1124.9
50°	493.6	545.9	668.9	822.1	983.0
52.5°	403.0	453.6	564.6	709.0	856.5
55°	286.4	334.4	431.7	554.2	681.7
57.5°	197.9	239.3	326.5	428.8	528.7
60°	143.2	182.9	265.0	348.0	429.5
62.5°	95.3	131.7	212.0	275.6	330.4
65°	32.1	61.3	136.8	165.0	183.8
67.5°	16.2	19.6	71.8	75.8	82.1
70°	12.8	12.8	34.2	36.5	42.7
72.5°	9.4	9.4	13.7	17.6	18.8
75°	4.3	4.3	2.1	0.0	0.0
77.5°	2.1	2.1	1.7	0.0	0.0
80°	2.1	2.1	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°	0.7	2.1	4.5	4.9	4.5
90°	3.5	10.3	22.6	24.3	22.6
92.5°	49.4	180.0	355.1	154.1	111.6
95°	116.5	408.9	1248.5	646.1	384.3
97.5°	187.1	469.0	1946.1	1610.6	1182.8
100°	240.0	493.3	2163.2	2255.9	1824.1
102.5°	288.7	527.0	2239.7	2745.3	2422.3
105°	377.3	583.1	2251.8	3321.6	3185.6
107.5°	459.4	647.1	2153.4	3681.2	3726.4
110°	523.4	693.4	2065.8	3777.7	3969.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	580.4	739.6	1985.1	3758.4	4081.1
115°	664.3	812.2	1867.6	3615.3	4081.1
117.5°	746.3	885.1	1790.0	3396.5	3924.6
120°	796.4	932.4	1744.1	3239.6	3778.6
122.5°	843.7	977.0	1716.3	3071.4	3614.4
125°	909.4	1042.1	1683.2	2840.4	3336.9
127.5°	969.9	1100.2	1663.8	2652.0	3088.6
130°	1003.3	1137.6	1655.4	2535.6	2930.0
132.5°	1038.1	1171.1	1647.1	2430.5	2793.7
135°	1090.3	1219.5	1638.0	2293.5	2596.1
137.5°	1142.8	1264.9	1630.4	2182.3	2428.9
140°	1179.0	1292.9	1627.6	2110.8	2330.1
142.5°	1213.7	1320.8	1622.0	2046.2	2238.3
145°	1267.6	1362.9	1615.4	1963.1	2112.7
147.5°	1316.7	1401.0	1607.8	1887.9	2002.8
150°	1352.8	1427.7	1605.0	1847.0	1938.8
152.5°	1386.2	1451.5	1603.6	1809.1	1884.6
155°	1431.1	1487.2	1601.5	1761.1	1818.9
157.5°	1477.7	1516.8	1601.9	1727.6	1765.7
160°	1504.1	1536.4	1603.2	1706.5	1733.7
162.5°	1525.0	1551.9	1604.6	1689.6	1710.0
165°	1558.0	1573.3	1608.5	1671.3	1679.8
167.5°	1580.6	1591.2	1608.8	1655.5	1659.6
170°	1594.5	1599.6	1610.2	1648.5	1648.5
172.5°	1605.7	1606.7	1610.2	1640.1	1638.7
175°	1617.2	1615.5	1610.2	1631.0	1627.6
177.5°	1621.0	1616.9	1609.9	1623.7	1619.6
180°	1615.4	1615.4	1615.4	1615.4	1615.4

(END OF REPORT)