

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: P518968

Luminaire Tested: **SQ4-BB-150U-125D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518968
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-4
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

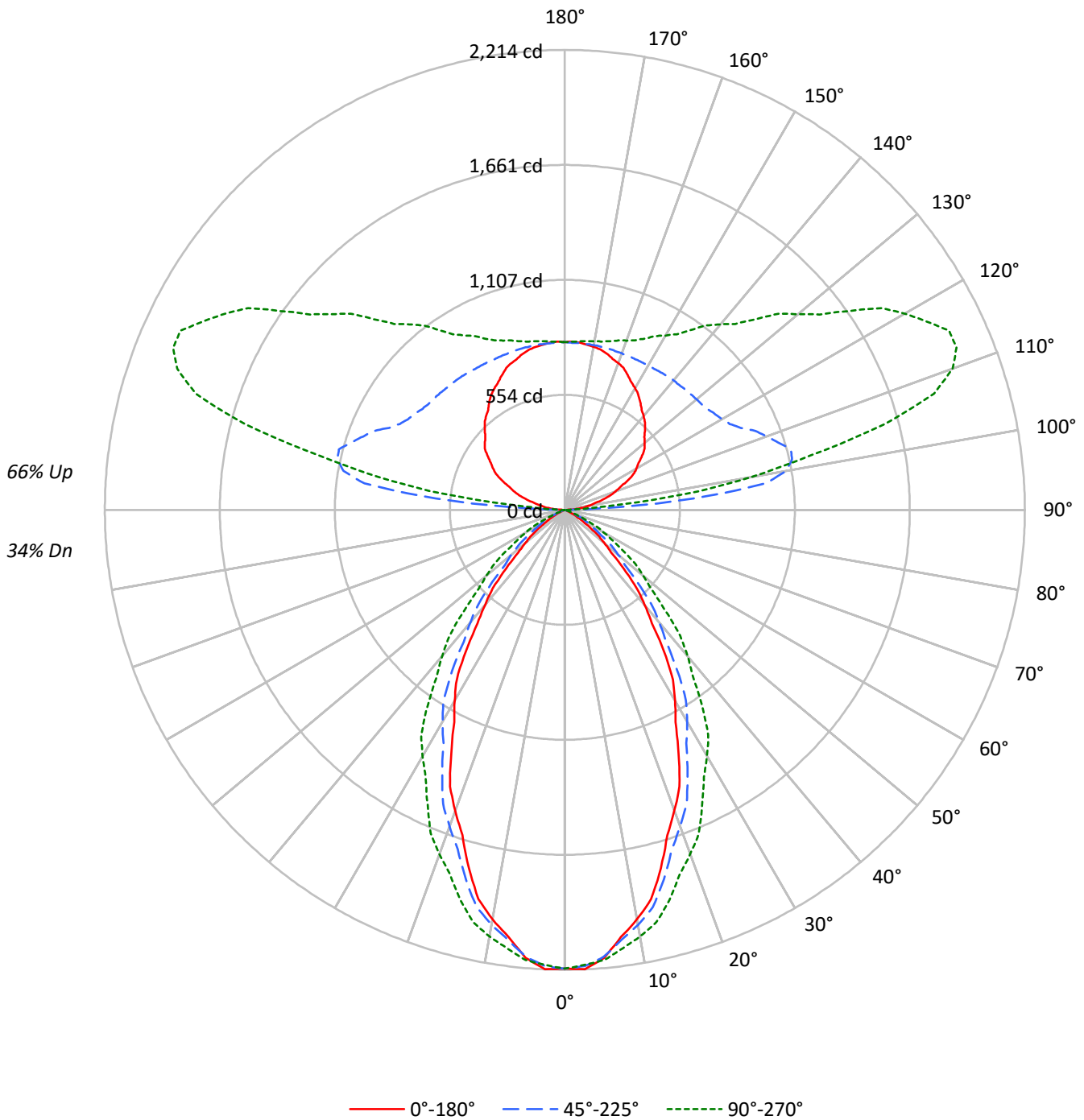
Lumens per Lamp: N/A
Luminaire Lumens: 7843.9 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 83.1
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°	20376	20376	20376
5°	20048	19999	20147
10°	18759	19009	19540
15°	17054	17595	18574
20°	15138	15925	17320
25°	13183	14228	15913
30°	11292	12533	14581
35°	9363	10638	12973
40°	7194	8507	11054
45°	5200	6440	8895
50°	3542	4800	7055
55°	2303	3471	5482
60°	1321	2445	3964
65°	349	1493	2006
70°	173	461	577
75°	75	39	0
80°	58	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.6	2.6
10°-20°	515.4	6.6
20°-30°	645.3	8.2
30°-40°	596.0	7.6
40°-50°	400.5	5.1
50°-60°	206.9	2.6
60°-70°	64.8	0.8
70°-80°	4.1	0.1
80°-90°	1.8	0.0
90°-100°	375.4	4.8
100°-110°	1014.9	12.9
110°-120°	1067.1	13.6
120°-130°	866.7	11.0
130°-140°	679.9	8.7
140°-150°	521.8	6.7
150°-160°	375.3	4.8
160°-170°	229.3	2.9
170°-180°	77.3	1.0
0°-30°	1362.3	17.4
0°-40°	1958.3	25.0
0°-60°	2565.7	32.7
0°-90°	2636.3	33.6
90°-120°	2457.4	31.3
90°-150°	4525.8	57.7
90°-180°	5208.0	66.4
0°-180°	7843.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2208	2208	2208	2208	2208	
5°	2165	2143	2159	2167	2175	201
15°	1785	1779	1842	1904	1945	497
25°	1295	1305	1398	1493	1563	594
35°	831	852	944	1056	1152	515
45°	398	423	494	590	682	313
55°	143	167	216	277	341	134
65°	16	31	68	82	92	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	5	11	12	11	4
95°	58	204	624	323	192	61
105°	189	292	1126	1661	1593	199
115°	332	406	934	1808	2041	328
125°	455	521	842	1420	1668	405
135°	545	610	819	1147	1298	421
145°	634	681	808	982	1056	397
155°	716	744	801	880	909	330
165°	779	787	804	836	840	219
175°	809	808	805	816	814	77
180°	808	808	808	808	808	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2208.5	2208.5	2208.5	2208.5	2208.5
2.5°	2213.7	2192.8	2198.3	2198.2	2192.3
5°	2164.7	2142.8	2159.4	2167.1	2175.4
7.5°	2073.3	2056.1	2088.0	2111.9	2129.3
10°	2002.3	1987.7	2029.0	2061.6	2085.7
12.5°	1920.3	1909.0	1959.0	2003.7	2034.4
15°	1785.4	1779.2	1842.1	1903.9	1944.6
17.5°	1641.0	1640.8	1712.6	1789.3	1838.4
20°	1541.8	1545.0	1622.0	1706.6	1764.1
22.5°	1442.7	1450.0	1532.2	1620.5	1686.3
25°	1295.0	1305.4	1397.6	1493.2	1563.2
27.5°	1153.1	1168.4	1265.3	1364.7	1449.9
30°	1059.9	1077.7	1176.4	1281.0	1368.7
32.5°	968.5	989.6	1085.8	1196.4	1285.8
35°	831.3	852.2	944.5	1055.7	1151.8
37.5°	689.6	710.1	800.3	909.7	1013.6
40°	597.3	620.3	706.3	812.3	917.8
42.5°	513.5	536.5	617.4	721.6	821.2
45°	398.5	422.6	493.6	589.8	681.7
47.5°	303.2	329.4	391.7	478.7	562.4
50°	246.8	272.9	334.4	411.1	491.5
52.5°	201.5	226.8	282.3	354.5	428.2
55°	143.2	167.2	215.8	277.1	340.8
57.5°	98.9	119.6	163.3	214.4	264.3
60°	71.6	91.4	132.5	174.0	214.8
62.5°	47.7	65.8	106.0	137.8	165.2
65°	16.0	30.7	68.4	82.5	91.9
67.5°	8.1	9.8	35.9	37.9	41.0
70°	6.4	6.4	17.1	18.2	21.4
72.5°	4.7	4.7	6.8	8.8	9.4
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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	2.3	2.4	2.3
90°	1.7	5.1	11.3	12.2	11.3
92.5°	24.7	90.0	177.5	77.1	55.8
95°	58.3	204.5	624.3	323.1	192.1
97.5°	93.6	234.5	973.1	805.3	591.4
100°	120.0	246.6	1081.6	1128.0	912.0
102.5°	144.3	263.5	1119.8	1372.6	1211.1
105°	188.7	291.5	1125.9	1660.8	1592.8
107.5°	229.7	323.6	1076.7	1840.6	1863.2
110°	261.7	346.7	1032.9	1888.9	1984.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	290.2	369.8	992.6	1879.2	2040.6
115°	332.1	406.1	933.8	1807.6	2040.6
117.5°	373.2	442.5	895.0	1698.3	1962.3
120°	398.2	466.2	872.0	1619.8	1889.3
122.5°	421.9	488.5	858.1	1535.7	1807.2
125°	454.7	521.0	841.6	1420.2	1668.5
127.5°	485.0	550.1	831.9	1326.0	1544.3
130°	501.7	568.8	827.7	1267.8	1465.0
132.5°	519.1	585.5	823.5	1215.3	1396.8
135°	545.1	609.7	819.0	1146.7	1298.1
137.5°	571.4	632.4	815.2	1091.2	1214.4
140°	589.5	646.4	813.8	1055.4	1165.0
142.5°	606.9	660.4	811.0	1023.1	1119.1
145°	633.8	681.4	807.7	981.6	1056.4
147.5°	658.3	700.5	803.9	944.0	1001.4
150°	676.4	713.8	802.5	923.5	969.4
152.5°	693.1	725.8	801.8	904.6	942.3
155°	715.5	743.6	800.8	880.5	909.4
157.5°	738.8	758.4	800.9	863.8	882.8
160°	752.1	768.2	801.6	853.2	866.8
162.5°	762.5	775.9	802.3	844.8	855.0
165°	779.0	786.7	804.2	835.6	839.9
167.5°	790.3	795.6	804.4	827.8	829.8
170°	797.3	799.8	805.1	824.2	824.2
172.5°	802.8	803.3	805.1	820.0	819.4
175°	808.6	807.7	805.1	815.5	813.8
177.5°	810.5	808.4	804.9	811.8	809.8
180°	807.7	807.7	807.7	807.7	807.7

(END OF REPORT)