

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: P518967

Luminaire Tested: **SQ4-BB-150U-125D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518967
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-12
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

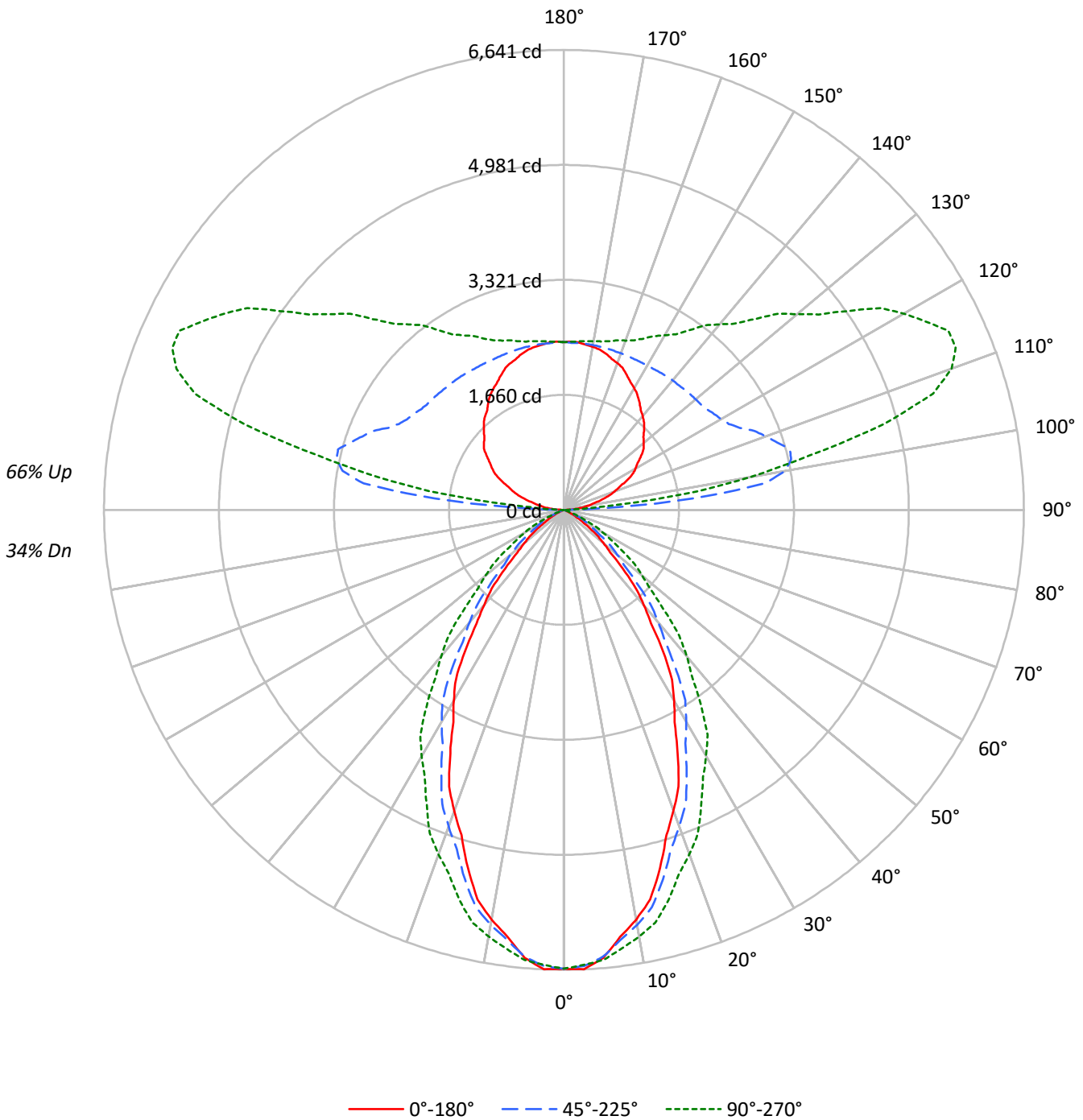
Lumens per Lamp: N/A
Luminaire Lumens: 23531.7 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 256.3
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	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°	20049	19999	20148
10°	18759	19009	19540
15°	17054	17595	18574
20°	15138	15925	17320
25°	13183	14227	15913
30°	11292	12533	14582
35°	9363	10638	12973
40°	7193	8506	11054
45°	5200	6441	8895
50°	3543	4800	7055
55°	2303	3472	5482
60°	1321	2445	3963
65°	350	1493	2006
70°	173	461	576
75°	76	38	0
80°	57	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	604.7	2.6
10°-20°	1546.3	6.6
20°-30°	1935.8	8.2
30°-40°	1788.1	7.6
40°-50°	1201.5	5.1
50°-60°	620.6	2.6
60°-70°	194.4	0.8
70°-80°	12.3	0.1
80°-90°	5.3	0.0
90°-100°	1126.1	4.8
100°-110°	3044.8	12.9
110°-120°	3201.2	13.6
120°-130°	2600.2	11.0
130°-140°	2039.6	8.7
140°-150°	1565.4	6.7
150°-160°	1125.8	4.8
160°-170°	687.8	2.9
170°-180°	231.9	1.0
0°-30°	4086.8	17.4
0°-40°	5874.9	25.0
0°-60°	7696.9	32.7
0°-90°	7908.9	33.6
90°-120°	7372.0	31.3
90°-150°	13577.3	57.7
90°-180°	15623.0	66.4
0°-180°	23531.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6626	6626	6626	6626	6626	
5°	6494	6428	6478	6501	6526	602
15°	5356	5338	5526	5712	5834	1492
25°	3885	3916	4193	4480	4690	1781
35°	2494	2556	2834	3167	3456	1545
45°	1196	1268	1481	1769	2045	939
55°	430	502	648	831	1022	401
65°	48	92	205	248	276	81
75°	6	6	3	0	0	9
85°	0	0	0	0	0	1
90°	5	15	34	36	34	12
95°	175	613	1873	969	576	183
105°	566	875	3378	4982	4778	596
115°	996	1218	2801	5423	6122	984
125°	1364	1563	2525	4261	5005	1216
135°	1635	1829	2457	3440	3894	1264
145°	1902	2044	2423	2945	3169	1190
155°	2147	2231	2402	2642	2728	990
165°	2337	2360	2413	2507	2520	658
175°	2426	2423	2415	2446	2441	230
180°	2423	2423	2423	2423	2423	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6625.6	6625.6	6625.6	6625.6	6625.6
2.5°	6641.0	6578.3	6594.9	6594.5	6576.9
5°	6494.2	6428.4	6478.2	6501.2	6526.3
7.5°	6219.8	6168.4	6264.1	6335.8	6387.8
10°	6007.0	5963.1	6087.1	6184.9	6257.0
12.5°	5760.8	5727.0	5876.9	6011.0	6103.2
15°	5356.3	5337.5	5526.2	5711.7	5833.9
17.5°	4922.9	4922.3	5137.7	5368.0	5515.3
20°	4625.5	4634.9	4865.9	5119.8	5292.2
22.5°	4328.0	4349.9	4596.6	4861.4	5058.8
25°	3885.0	3916.3	4192.7	4479.6	4689.6
27.5°	3459.3	3505.1	3795.9	4094.0	4349.8
30°	3179.8	3233.1	3529.2	3842.9	4106.2
32.5°	2905.4	2968.7	3257.4	3589.1	3857.4
35°	2493.8	2556.5	2833.6	3167.1	3455.5
37.5°	2068.8	2130.2	2400.9	2729.1	3040.7
40°	1791.8	1860.8	2118.8	2436.9	2753.5
42.5°	1540.5	1609.5	1852.1	2164.7	2463.7
45°	1195.6	1267.7	1480.9	1769.3	2045.1
47.5°	909.7	988.1	1175.1	1436.0	1687.3
50°	740.5	818.8	1003.3	1233.2	1474.5
52.5°	604.5	680.4	846.9	1063.5	1284.7
55°	429.5	501.6	647.5	831.3	1022.5
57.5°	296.8	358.9	489.8	643.2	793.0
60°	214.8	274.3	397.5	522.1	644.3
62.5°	143.0	197.5	318.0	413.4	495.6
65°	48.1	92.0	205.1	247.5	275.7
67.5°	24.4	29.4	107.7	113.7	123.1
70°	19.2	19.2	51.3	54.7	64.1
72.5°	14.1	14.1	20.5	26.3	28.2
75°	6.4	6.4	3.2	0.0	0.0
77.5°	3.2	3.2	2.6	0.0	0.0
80°	3.2	3.2	0.0	0.0	0.0
82.5°	0.6	0.6	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	3.1	6.8	7.3	6.8
90°	5.2	15.4	33.9	36.5	33.9
92.5°	74.1	269.9	532.6	231.2	167.5
95°	174.8	613.4	1872.8	969.2	576.4
97.5°	280.7	703.5	2919.2	2415.8	1774.2
100°	359.9	739.9	3244.7	3383.9	2736.1
102.5°	433.0	790.5	3359.5	4117.9	3633.4
105°	566.0	874.6	3377.8	4982.5	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.6
110°	785.1	1040.1	3098.7	5666.6	5954.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.7	5637.7	6121.7
115°	996.4	1218.3	2801.3	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5887.0
120°	1194.6	1398.6	2616.1	4859.4	5667.9
122.5°	1265.6	1465.5	2574.4	4607.1	5421.6
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1454.9	1650.3	2495.6	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.0
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.2	2457.0	3440.2	3894.2
137.5°	1714.2	1897.3	2445.6	3273.5	3643.3
140°	1768.4	1939.3	2441.4	3166.1	3495.1
142.5°	1820.6	1981.3	2433.0	3069.2	3357.4
145°	1901.5	2044.3	2423.1	2944.7	3169.1
147.5°	1975.0	2101.5	2411.6	2831.9	3004.3
150°	2029.3	2141.5	2407.5	2770.6	2908.3
152.5°	2079.3	2177.3	2405.4	2713.7	2826.9
155°	2146.6	2230.8	2402.3	2641.6	2728.3
157.5°	2216.5	2275.2	2402.8	2591.4	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2407.0	2534.4	2565.0
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2371.0	2386.8	2413.2	2483.3	2489.4
170°	2391.8	2399.5	2415.3	2472.7	2472.7
172.5°	2408.5	2410.0	2415.3	2460.1	2458.1
175°	2425.7	2423.2	2415.3	2446.5	2441.4
177.5°	2431.5	2425.3	2414.8	2435.5	2429.4
180°	2423.1	2423.1	2423.1	2423.1	2423.1

(END OF REPORT)