

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: P518871

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518871
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-125D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

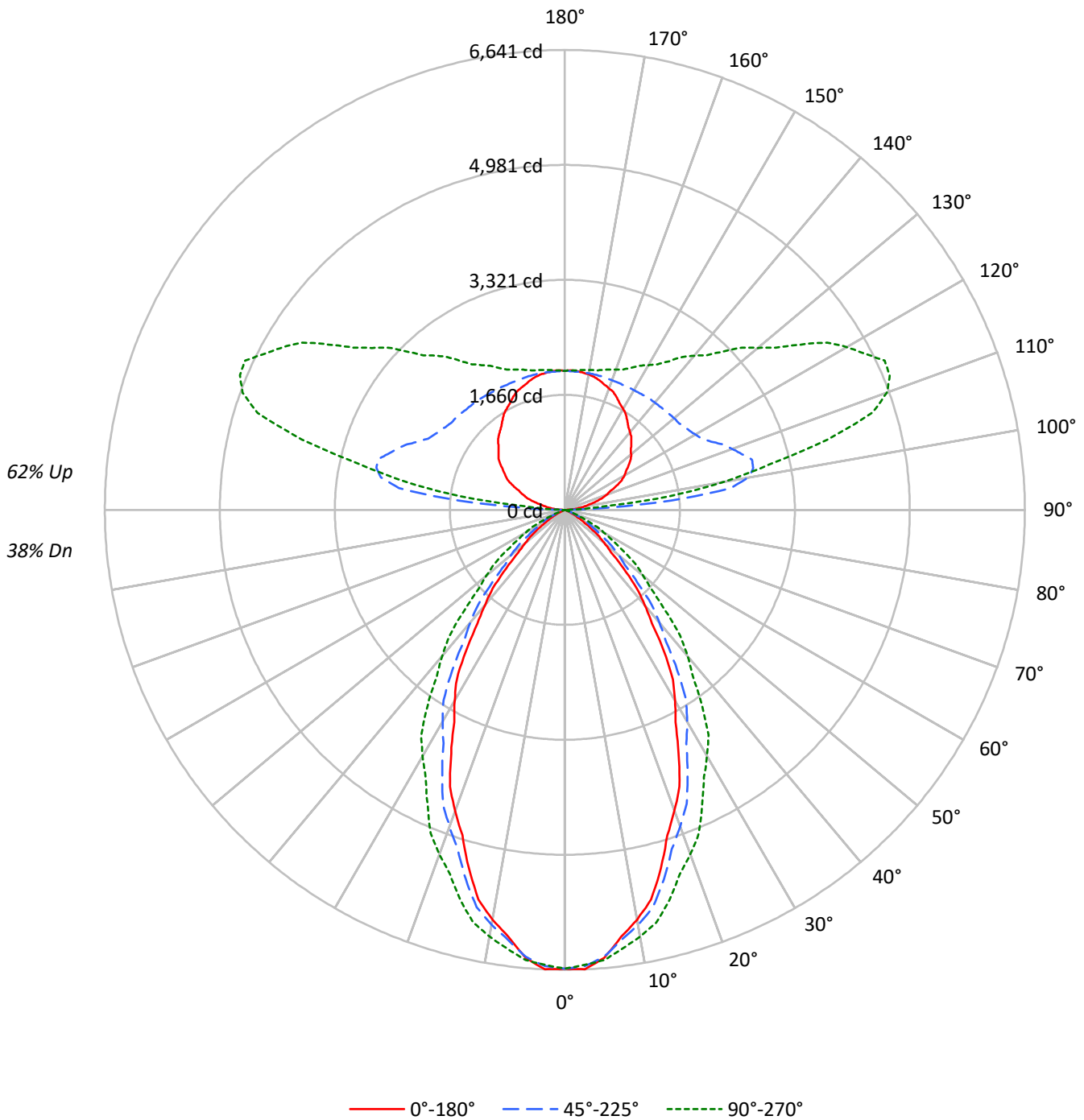
Lumens per Lamp: N/A
Luminaire Lumens: 20874.0 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 233.8
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	88	84	82	79	69	67	66	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	39	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	47	43	41	38	36	33	31	29	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	37	34	35	32	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	39	32	28	33	28	25	28	24	22	23	20	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	22	20	21	19	17	15

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	2.9
10°-20°	1546.3	7.4
20°-30°	1935.8	9.3
30°-40°	1788.1	8.6
40°-50°	1201.5	5.8
50°-60°	620.6	3.0
60°-70°	194.4	0.9
70°-80°	12.3	0.1
80°-90°	4.9	0.0
90°-100°	939.5	4.5
100°-110°	2530.9	12.1
110°-120°	2656.1	12.7
120°-130°	2155.4	10.3
130°-140°	1690.4	8.1
140°-150°	1297.8	6.2
150°-160°	933.1	4.5
160°-170°	570.1	2.7
170°-180°	192.2	0.9
0°-30°	4086.8	19.6
0°-40°	5874.9	28.1
0°-60°	7696.9	36.9
0°-90°	7908.5	37.9
90°-120°	6126.5	29.4
90°-150°	11270.0	54.0
90°-180°	12965.0	62.1
0°-180°	20874.0	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	31	33	33	10
95°	143	511	1540	788	545	150
105°	468	728	2799	4188	3930	492
115°	826	1012	2331	4504	5094	813
125°	1128	1296	2093	3537	4163	1007
135°	1359	1516	2034	2854	3231	1049
145°	1571	1694	2008	2440	2620	985
155°	1783	1848	1990	2189	2259	821
165°	1934	1957	1998	2078	2088	545
175°	2011	2008	2001	2029	2024	191
180°	2008	2008	2008	2008	2008	



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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	3.0	6.1	6.7	6.7
90°	5.1	15.1	30.7	33.3	33.3
92.5°	62.4	220.5	436.0	209.9	145.8
95°	143.3	511.0	1540.2	787.6	545.0
97.5°	228.7	585.0	2415.7	2018.1	1521.8
100°	294.2	614.4	2694.1	2818.8	2338.5
102.5°	357.7	655.9	2786.2	3418.4	3024.1
105°	468.2	728.4	2799.0	4187.5	3929.8
107.5°	572.6	804.7	2679.8	4582.7	4649.3
110°	642.2	862.3	2571.3	4705.4	4948.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	715.9	920.0	2466.9	4678.3	5077.1
115°	826.4	1011.5	2330.8	4503.6	5093.9
117.5°	927.2	1100.8	2225.4	4224.7	4882.1
120°	992.7	1160.3	2172.2	4024.5	4699.9
122.5°	1050.0	1215.6	2133.3	3819.8	4493.2
125°	1128.3	1295.9	2092.8	3537.2	4162.7
127.5°	1203.5	1368.6	2067.3	3288.1	3846.4
130°	1248.5	1413.6	2057.0	3145.3	3635.6
132.5°	1293.6	1456.7	2046.8	3019.5	3469.8
135°	1358.6	1516.2	2034.0	2853.6	3231.4
137.5°	1420.5	1571.6	2027.3	2712.9	3023.1
140°	1463.5	1608.5	2021.2	2626.3	2906.4
142.5°	1508.5	1643.6	2017.1	2545.4	2781.6
145°	1570.9	1693.5	2008.4	2439.8	2619.9
147.5°	1638.5	1745.0	1999.7	2350.9	2492.5
150°	1683.5	1776.0	1995.6	2295.1	2412.6
152.5°	1724.4	1805.0	1993.6	2249.5	2345.1
155°	1783.3	1848.3	1990.5	2189.1	2259.1
157.5°	1834.9	1885.5	1991.0	2146.6	2193.6
160°	1867.7	1910.2	1993.1	2121.8	2156.8
162.5°	1896.3	1930.9	1995.1	2101.1	2126.1
165°	1934.2	1956.7	1998.2	2077.7	2087.7
167.5°	1964.9	1977.9	2000.7	2059.7	2063.7
170°	1985.4	1990.4	2000.7	2049.3	2049.3
172.5°	1997.7	1998.7	2002.8	2039.1	2039.1
175°	2011.0	2008.5	2000.7	2028.8	2023.8
177.5°	2016.6	2012.6	2002.3	2018.6	2014.5
180°	2008.4	2008.4	2008.4	2008.4	2008.4

(END OF REPORT)