

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: P518847

Luminaire Tested: **SQ4-BB-125U-100D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518847
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-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

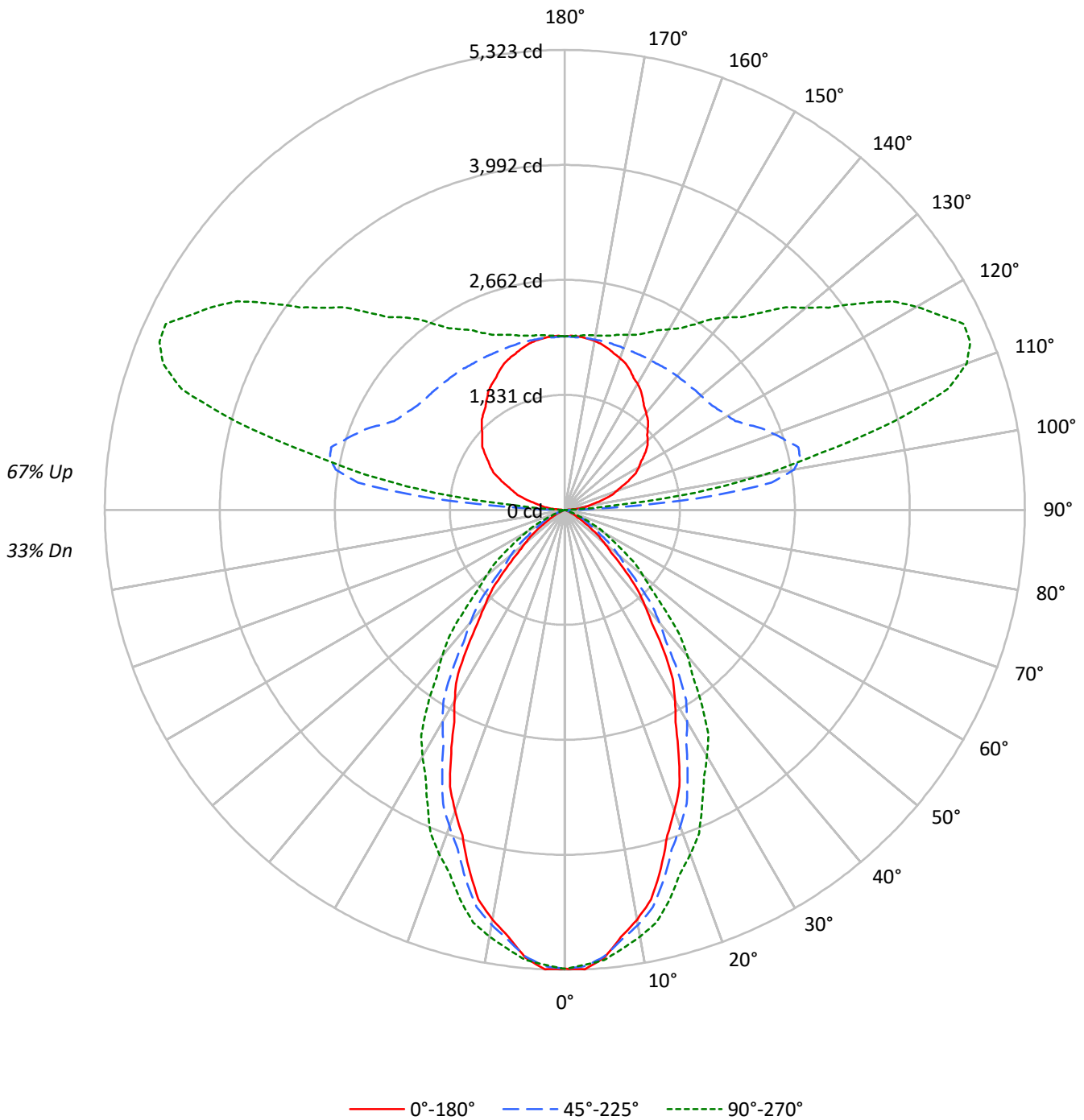
Lumens per Lamp: N/A
Luminaire Lumens: 19305.6 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 201.2
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°	16333	16333	16333
5°	16070	16031	16149
10°	15036	15237	15662
15°	13670	14103	14889
20°	12134	12765	13883
25°	10567	11404	12756
30°	9051	10046	11688
35°	7505	8527	10399
40°	5766	6818	8861
45°	4168	5163	7130
50°	2840	3848	5655
55°	1846	2783	4395
60°	1059	1960	3176
65°	280	1196	1608
70°	138	370	462
75°	61	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	484.7	2.5
10°-20°	1239.5	6.4
20°-30°	1551.7	8.0
30°-40°	1433.3	7.4
40°-50°	963.1	5.0
50°-60°	497.4	2.6
60°-70°	155.8	0.8
70°-80°	9.8	0.1
80°-90°	4.9	0.0
90°-100°	939.5	4.9
100°-110°	2530.9	13.1
110°-120°	2656.1	13.8
120°-130°	2155.4	11.2
130°-140°	1690.4	8.8
140°-150°	1297.8	6.7
150°-160°	933.1	4.8
160°-170°	570.1	3.0
170°-180°	192.2	1.0
0°-30°	3275.8	17.0
0°-40°	4709.1	24.4
0°-60°	6169.6	32.0
0°-90°	6340.1	32.8
90°-120°	6126.5	31.7
90°-150°	11270.0	58.4
90°-180°	12965.0	67.2
0°-180°	19305.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5311	5311	5311	5311	5311	
5°	5206	5153	5193	5211	5231	483
15°	4293	4278	4430	4578	4676	1196
25°	3114	3139	3361	3591	3759	1428
35°	1999	2049	2271	2539	2770	1238
45°	958	1016	1187	1418	1639	753
55°	344	402	519	666	820	321
65°	38	74	164	198	221	65
75°	5	5	3	0	0	7
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°	5310.9	5310.9	5310.9	5310.9	5310.9
2.5°	5323.2	5273.0	5286.2	5285.9	5271.8
5°	5205.5	5152.8	5192.7	5211.1	5231.2
7.5°	4985.6	4944.4	5021.1	5078.5	5120.2
10°	4815.0	4779.8	4879.2	4957.6	5015.4
12.5°	4617.7	4590.5	4710.7	4818.2	4892.1
15°	4293.4	4278.3	4429.6	4578.3	4676.3
17.5°	3946.0	3945.5	4118.2	4302.8	4420.9
20°	3707.6	3715.1	3900.3	4103.9	4242.0
22.5°	3469.2	3486.8	3684.5	3896.7	4055.0
25°	3114.1	3139.2	3360.7	3590.7	3759.0
27.5°	2772.9	2809.5	3042.7	3281.6	3486.6
30°	2548.8	2591.5	2828.9	3080.3	3291.4
32.5°	2328.9	2379.6	2611.0	2876.9	3092.0
35°	1999.0	2049.2	2271.3	2538.7	2769.8
37.5°	1658.3	1707.5	1924.5	2187.6	2437.3
40°	1436.3	1491.5	1698.4	1953.4	2207.1
42.5°	1234.8	1290.1	1484.6	1735.1	1974.8
45°	958.4	1016.2	1187.0	1418.2	1639.3
47.5°	729.2	792.0	941.9	1151.0	1352.5
50°	593.5	656.3	804.2	988.5	1181.9
52.5°	484.6	545.4	678.8	852.4	1029.8
55°	344.3	402.1	519.0	666.4	819.6
57.5°	237.9	287.7	392.6	515.6	635.7
60°	172.1	219.9	318.6	418.5	516.4
62.5°	114.6	158.3	254.9	331.4	397.2
65°	38.5	73.7	164.4	198.4	221.0
67.5°	19.5	23.5	86.3	91.1	98.7
70°	15.4	15.4	41.1	43.9	51.4
72.5°	11.3	11.3	16.4	21.1	22.6
75°	5.1	5.1	2.6	0.0	0.0
77.5°	2.6	2.6	2.1	0.0	0.0
80°	2.6	2.6	0.0	0.0	0.0
82.5°	0.5	0.5	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)