

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: P518799

Luminaire Tested: **SQ4-BB-125U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518799
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-050D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

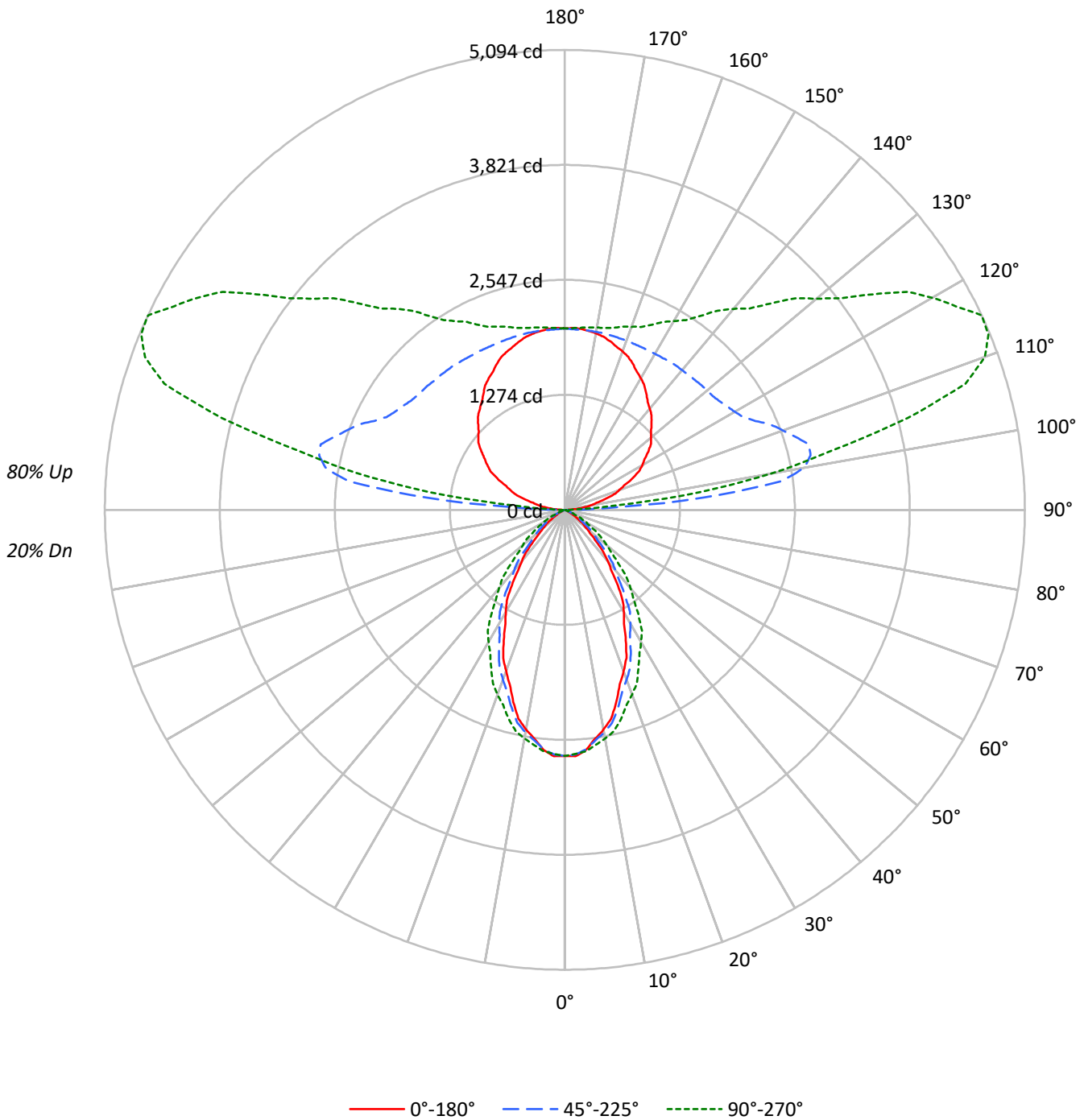
Lumens per Lamp: N/A
Luminaire Lumens: 16220.9 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 146.4
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8380	8380	8380
5°	8246	8225	8287
10°	7715	7818	8036
15°	7014	7236	7639
20°	6226	6550	7124
25°	5422	5851	6545
30°	4644	5155	5997
35°	3851	4375	5336
40°	2959	3498	4547
45°	2139	2649	3658
50°	1457	1974	2901
55°	947	1428	2255
60°	543	1006	1630
65°	144	614	825
70°	71	190	237
75°	31	15	0
80°	23	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.7	1.5
10°-20°	636.0	3.9
20°-30°	796.2	4.9
30°-40°	735.4	4.5
40°-50°	494.2	3.0
50°-60°	255.2	1.6
60°-70°	79.9	0.5
70°-80°	5.0	0.0
80°-90°	4.8	0.0
90°-100°	939.5	5.8
100°-110°	2530.9	15.6
110°-120°	2656.1	16.4
120°-130°	2155.4	13.3
130°-140°	1690.4	10.4
140°-150°	1297.8	8.0
150°-160°	933.1	5.8
160°-170°	570.1	3.5
170°-180°	192.2	1.2
0°-30°	1680.8	10.4
0°-40°	2416.2	14.9
0°-60°	3165.6	19.5
0°-90°	3255.4	20.1
90°-120°	6126.5	37.8
90°-150°	11270.0	69.5
90°-180°	12965.0	79.9
0°-180°	16220.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2725	2725	2725	2725	2725	
5°	2671	2644	2664	2674	2684	248
15°	2203	2195	2273	2349	2399	614
25°	1598	1611	1724	1842	1929	733
35°	1026	1052	1165	1303	1421	635
45°	492	521	609	728	841	386
55°	177	206	266	342	421	165
65°	20	38	84	102	113	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
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°	2725.0	2725.0	2725.0	2725.0	2725.0
2.5°	2731.4	2705.6	2712.4	2712.2	2705.0
5°	2671.0	2643.9	2664.4	2673.8	2684.2
7.5°	2558.1	2537.0	2576.3	2605.8	2627.2
10°	2470.6	2452.5	2503.5	2543.8	2573.4
12.5°	2369.3	2355.4	2417.1	2472.2	2510.1
15°	2203.0	2195.2	2272.8	2349.1	2399.4
17.5°	2024.7	2024.5	2113.0	2207.8	2268.3
20°	1902.4	1906.2	2001.3	2105.7	2176.6
22.5°	1780.0	1789.1	1890.5	1999.4	2080.6
25°	1597.8	1610.7	1724.4	1842.4	1928.7
27.5°	1422.8	1441.6	1561.2	1683.8	1789.0
30°	1307.8	1329.7	1451.5	1580.5	1688.8
32.5°	1195.0	1221.0	1339.7	1476.2	1586.5
35°	1025.7	1051.5	1165.4	1302.6	1421.2
37.5°	850.9	876.1	987.4	1122.5	1250.6
40°	737.0	765.3	871.4	1002.3	1132.5
42.5°	633.6	662.0	761.7	890.3	1013.3
45°	491.7	521.4	609.1	727.7	841.1
47.5°	374.1	406.4	483.3	590.6	694.0
50°	304.5	336.8	412.6	507.2	606.4
52.5°	248.6	279.8	348.3	437.4	528.4
55°	176.7	206.3	266.3	341.9	420.6
57.5°	122.1	147.6	201.4	264.5	326.2
60°	88.3	112.8	163.5	214.7	265.0
62.5°	58.8	81.2	130.8	170.0	203.8
65°	19.8	37.8	84.4	101.8	113.4
67.5°	10.0	12.1	44.3	46.8	50.6
70°	7.9	7.9	21.1	22.5	26.4
72.5°	5.8	5.8	8.4	10.8	11.6
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.1	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	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)