

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: P518823

Luminaire Tested: **SQ4-BB-125U-075D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518823
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-075D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

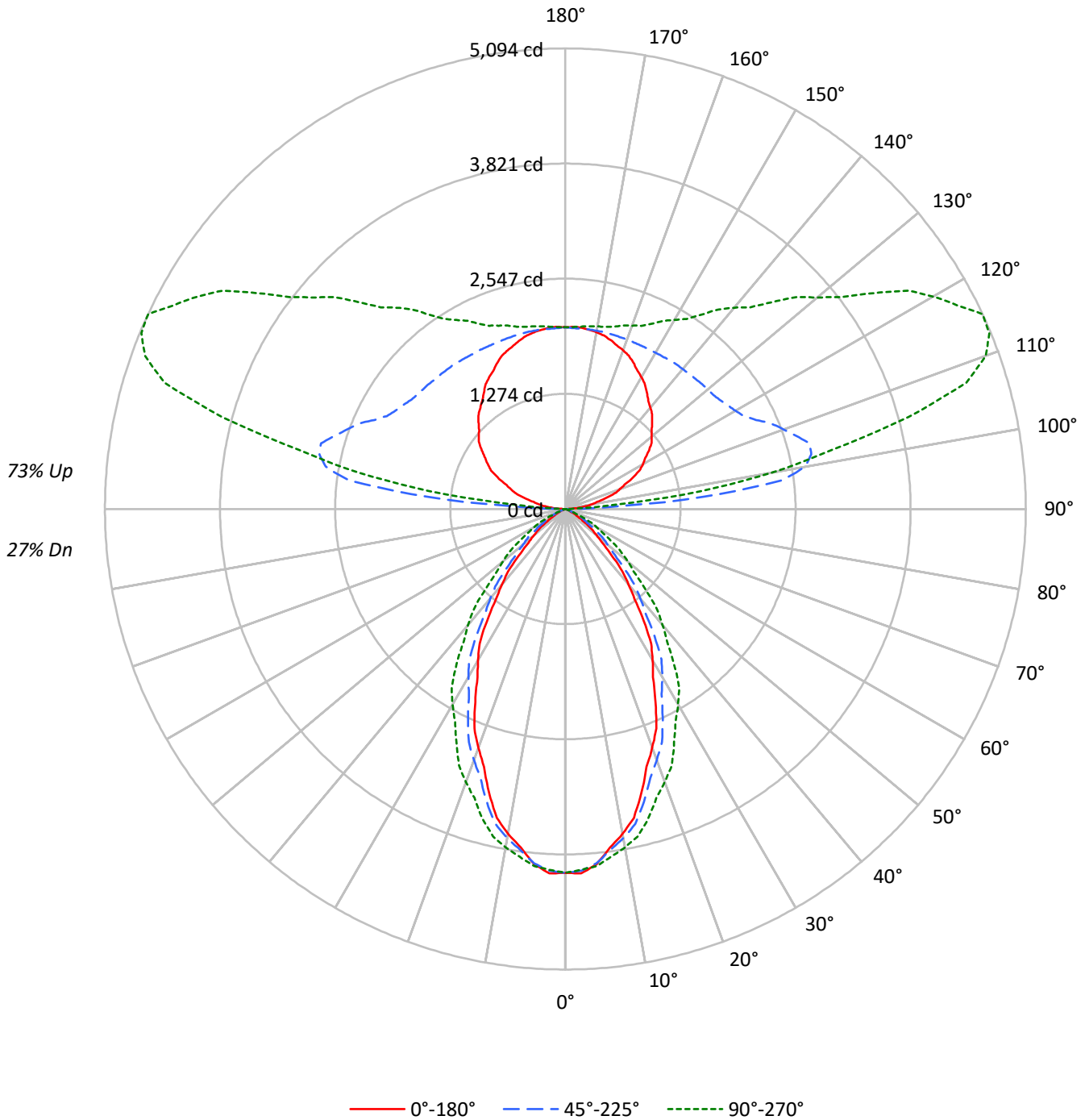
Lumens per Lamp: N/A
Luminaire Lumens: 17771.1 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 172.4
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	50	30	10	0	
RCR																						
0	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	27				
1	94	90	86	83	84	81	78	75	63	61	60	47	46	45	32	32	31	25				
2	86	80	74	70	77	71	67	63	56	53	51	43	41	39	30	29	28	22				
3	79	71	64	59	71	64	58	54	51	47	44	39	36	34	27	26	25	20				
4	73	63	56	51	65	57	51	47	46	42	38	35	32	30	25	24	22	18				
5	67	57	49	44	60	51	45	41	41	37	34	32	29	27	23	21	20	17				
6	62	51	44	39	56	46	40	36	37	33	30	29	26	24	21	20	18	15				
7	58	46	39	34	52	42	36	32	34	30	27	27	24	22	20	18	17	14				
8	53	42	35	30	48	39	32	28	31	27	24	25	22	20	18	17	15	13				
9	50	39	32	27	45	35	29	25	29	25	22	23	20	18	17	15	14	12				
10	47	36	29	25	42	33	27	23	27	22	20	21	18	16	16	14	13	11				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12377	12377	12377
5°	12178	12148	12238
10°	11394	11546	11869
15°	10359	10687	11282
20°	9195	9673	10520
25°	8008	8642	9666
30°	6859	7613	8857
35°	5687	6462	7880
40°	4370	5167	6715
45°	3158	3912	5403
50°	2152	2916	4285
55°	1399	2109	3330
60°	803	1485	2407
65°	212	907	1218
70°	105	281	350
75°	46	23	0
80°	34	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	367.3	2.1
10°-20°	939.3	5.3
20°-30°	1175.8	6.6
30°-40°	1086.1	6.1
40°-50°	729.8	4.1
50°-60°	377.0	2.1
60°-70°	118.1	0.7
70°-80°	7.5	0.0
80°-90°	4.8	0.0
90°-100°	939.5	5.3
100°-110°	2530.9	14.2
110°-120°	2656.1	14.9
120°-130°	2155.4	12.1
130°-140°	1690.4	9.5
140°-150°	1297.8	7.3
150°-160°	933.1	5.3
160°-170°	570.1	3.2
170°-180°	192.2	1.1
0°-30°	2482.4	14.0
0°-40°	3568.5	20.1
0°-60°	4675.2	26.3
0°-90°	4805.6	27.0
90°-120°	6126.5	34.5
90°-150°	11270.0	63.4
90°-180°	12965.0	73.0
0°-180°	17771.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4024	4024	4024	4024	4024	
5°	3945	3905	3935	3949	3964	366
15°	3254	3242	3357	3469	3544	906
25°	2360	2379	2547	2721	2848	1082
35°	1515	1553	1721	1924	2099	938
45°	726	770	900	1075	1242	570
55°	261	305	393	505	621	243
65°	29	56	125	150	167	49
75°	4	4	2	0	0	6
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°	4024.5	4024.5	4024.5	4024.5	4024.5
2.5°	4033.9	3995.8	4005.8	4005.6	3994.9
5°	3944.7	3904.7	3935.0	3948.9	3964.2
7.5°	3778.0	3746.8	3804.9	3848.4	3880.0
10°	3648.7	3622.1	3697.4	3756.8	3800.6
12.5°	3499.2	3478.6	3569.7	3651.2	3707.1
15°	3253.5	3242.1	3356.7	3469.4	3543.6
17.5°	2990.3	2989.9	3120.7	3260.6	3350.1
20°	2809.6	2815.3	2955.6	3109.8	3214.5
22.5°	2628.9	2642.2	2792.0	2952.9	3072.8
25°	2359.8	2378.8	2546.7	2721.0	2848.5
27.5°	2101.2	2129.0	2305.7	2486.8	2642.1
30°	1931.5	1963.8	2143.7	2334.2	2494.1
32.5°	1764.8	1803.2	1978.6	2180.1	2343.1
35°	1514.8	1552.9	1721.2	1923.8	2098.9
37.5°	1256.6	1293.9	1458.3	1657.7	1847.0
40°	1088.4	1130.3	1287.0	1480.2	1672.5
42.5°	935.7	977.6	1125.0	1314.9	1496.5
45°	726.2	770.0	899.5	1074.7	1242.2
47.5°	552.6	600.2	713.8	872.2	1024.9
50°	449.8	497.4	609.4	749.0	895.6
52.5°	367.2	413.3	514.4	646.0	780.4
55°	260.9	304.7	393.3	505.0	621.1
57.5°	180.3	218.0	297.5	390.7	481.7
60°	130.5	166.6	241.4	317.1	391.4
62.5°	86.8	120.0	193.1	251.1	301.0
65°	29.2	55.9	124.6	150.3	167.4
67.5°	14.8	17.8	65.4	69.1	74.8
70°	11.7	11.7	31.2	33.2	38.9
72.5°	8.6	8.6	12.5	16.0	17.1
75°	3.9	3.9	1.9	0.0	0.0
77.5°	1.9	1.9	1.6	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	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)