

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: P518906

Luminaire Tested: **SQ4-BB-150U-075D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518906
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-075D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

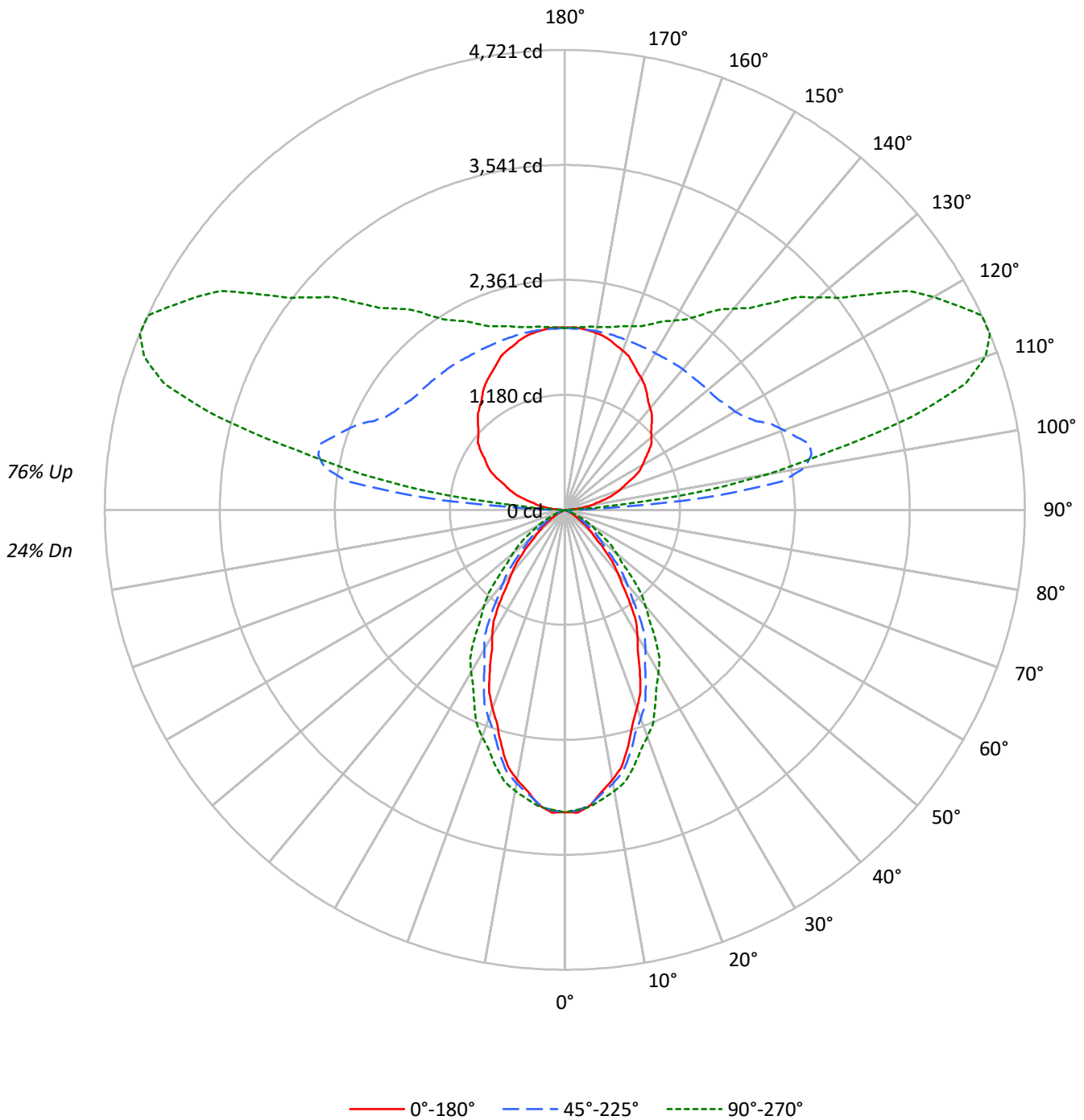
Lumens per Lamp: N/A
Luminaire Lumens: 15754.1 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 131.1
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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	24
1	93	89	85	82	82	79	76	74	61	59	58	45	44	43	29	29	28	21
2	85	79	73	69	76	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	23	23	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	30	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	18	20	17	15	14	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14317	14317	14317
5°	14087	14052	14157
10°	13181	13357	13729
15°	11983	12363	13051
20°	10637	11189	12170
25°	9263	9997	11181
30°	7934	8806	10245
35°	6579	7475	9115
40°	5054	5977	7767
45°	3654	4526	6250
50°	2489	3373	4957
55°	1618	2439	3852
60°	928	1718	2784
65°	246	1049	1409
70°	121	324	405
75°	53	27	0
80°	40	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.2	1.8
10°-20°	724.3	4.6
20°-30°	906.8	5.8
30°-40°	837.6	5.3
40°-50°	562.8	3.6
50°-60°	290.7	1.8
60°-70°	91.1	0.6
70°-80°	5.7	0.0
80°-90°	4.0	0.0
90°-100°	868.4	5.5
100°-110°	2348.1	14.9
110°-120°	2468.6	15.7
120°-130°	2005.2	12.7
130°-140°	1572.9	10.0
140°-150°	1207.2	7.7
150°-160°	868.2	5.5
160°-170°	530.4	3.4
170°-180°	178.8	1.1
0°-30°	1914.4	12.2
0°-40°	2751.9	17.5
0°-60°	3605.4	22.9
0°-90°	3706.2	23.5
90°-120°	5685.1	36.1
90°-150°	10470.5	66.5
90°-180°	12048.0	76.5
0°-180°	15754.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3104	3104	3104	3104	3104	
5°	3042	3011	3034	3045	3057	282
15°	2509	2500	2589	2676	2733	699
25°	1820	1834	1964	2098	2197	834
35°	1168	1198	1327	1484	1619	724
45°	560	594	694	829	958	440
55°	201	235	303	389	479	188
65°	22	43	96	116	129	38
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	4	12	26	28	26	9
95°	135	473	1444	747	444	141
105°	436	674	2605	3842	3685	460
115°	768	940	2160	4182	4721	759
125°	1052	1205	1947	3286	3860	938
135°	1261	1411	1895	2653	3003	975
145°	1466	1576	1869	2271	2444	917
155°	1655	1720	1853	2037	2104	764
165°	1802	1820	1861	1933	1943	508
175°	1871	1869	1863	1887	1883	178
180°	1869	1869	1869	1869	1869	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3103.6	3103.6	3103.6	3103.6	3103.6
2.5°	3110.8	3081.5	3089.2	3089.0	3080.8
5°	3042.0	3011.2	3034.5	3045.3	3057.1
7.5°	2913.5	2889.4	2934.2	2967.8	2992.2
10°	2813.8	2793.3	2851.4	2897.2	2930.9
12.5°	2698.5	2682.6	2752.9	2815.7	2858.9
15°	2509.0	2500.2	2588.6	2675.5	2732.7
17.5°	2306.0	2305.7	2406.6	2514.5	2583.5
20°	2166.7	2171.1	2279.3	2398.2	2479.0
22.5°	2027.3	2037.6	2153.2	2277.2	2369.7
25°	1819.8	1834.5	1964.0	2098.3	2196.7
27.5°	1620.4	1641.9	1778.1	1917.7	2037.5
30°	1489.5	1514.5	1653.2	1800.1	1923.4
32.5°	1361.0	1390.6	1525.8	1681.2	1806.9
35°	1168.2	1197.5	1327.3	1483.6	1618.6
37.5°	969.1	997.8	1124.6	1278.4	1424.3
40°	839.3	871.6	992.5	1141.5	1289.8
42.5°	721.6	753.9	867.6	1014.0	1154.1
45°	560.1	593.8	693.7	828.8	958.0
47.5°	426.1	462.8	550.5	672.6	790.4
50°	346.8	383.6	470.0	577.6	690.7
52.5°	283.2	318.7	396.7	498.2	601.8
55°	201.2	235.0	303.3	389.4	479.0
57.5°	139.0	168.1	229.4	301.3	371.5
60°	100.6	128.5	186.2	244.5	301.8
62.5°	67.0	92.5	148.9	193.7	232.1
65°	22.5	43.1	96.1	115.9	129.1
67.5°	11.4	13.8	50.5	53.3	57.7
70°	9.0	9.0	24.0	25.6	30.0
72.5°	6.6	6.6	9.6	12.3	13.2
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	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°	0.8	2.4	5.2	5.6	5.2
90°	4.0	11.9	26.1	28.1	26.1
92.5°	57.1	208.2	410.7	178.3	129.1
95°	134.8	473.1	1444.2	747.4	444.5
97.5°	216.4	542.5	2251.2	1863.0	1368.2
100°	277.6	570.6	2502.3	2609.6	2110.0
102.5°	333.9	609.6	2590.8	3175.7	2802.0
105°	436.5	674.5	2604.9	3842.4	3685.0
107.5°	531.4	748.6	2491.0	4258.3	4310.6
110°	605.5	802.1	2389.6	4369.9	4592.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	671.4	855.5	2296.3	4347.6	4720.9
115°	768.4	939.5	2160.3	4182.0	4720.9
117.5°	863.3	1023.8	2070.6	3929.0	4539.9
120°	921.3	1078.6	2017.5	3747.5	4370.9
122.5°	976.0	1130.2	1985.3	3552.9	4181.0
125°	1052.0	1205.4	1947.1	3285.7	3860.0
127.5°	1122.0	1272.7	1924.6	3067.7	3572.8
130°	1160.6	1316.0	1914.9	2933.0	3389.3
132.5°	1200.8	1354.6	1905.3	2811.5	3231.6
135°	1261.2	1410.7	1894.8	2653.0	3003.1
137.5°	1321.9	1463.2	1886.0	2524.4	2809.6
140°	1363.8	1495.5	1882.7	2441.7	2695.4
142.5°	1404.0	1527.9	1876.3	2366.9	2589.2
145°	1466.4	1576.5	1868.7	2270.9	2443.9
147.5°	1523.1	1620.6	1859.8	2183.9	2316.8
150°	1564.9	1651.5	1856.6	2136.6	2242.8
152.5°	1603.5	1679.1	1855.0	2092.7	2180.0
155°	1655.4	1720.3	1852.6	2037.1	2104.0
157.5°	1709.3	1754.6	1853.0	1998.4	2042.4
160°	1739.9	1777.3	1854.6	1974.0	2005.4
162.5°	1764.1	1795.1	1856.2	1954.5	1978.1
165°	1802.3	1820.0	1860.6	1933.2	1943.1
167.5°	1828.4	1840.6	1861.0	1915.0	1919.7
170°	1844.5	1850.4	1862.6	1906.9	1906.9
172.5°	1857.4	1858.6	1862.6	1897.2	1895.6
175°	1870.7	1868.7	1862.6	1886.7	1882.7
177.5°	1875.1	1870.4	1862.2	1878.2	1873.5
180°	1868.7	1868.7	1868.7	1868.7	1868.7

(END OF REPORT)