

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: P518958

Luminaire Tested: **SQ4-BB-150U-125D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518958
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-125D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

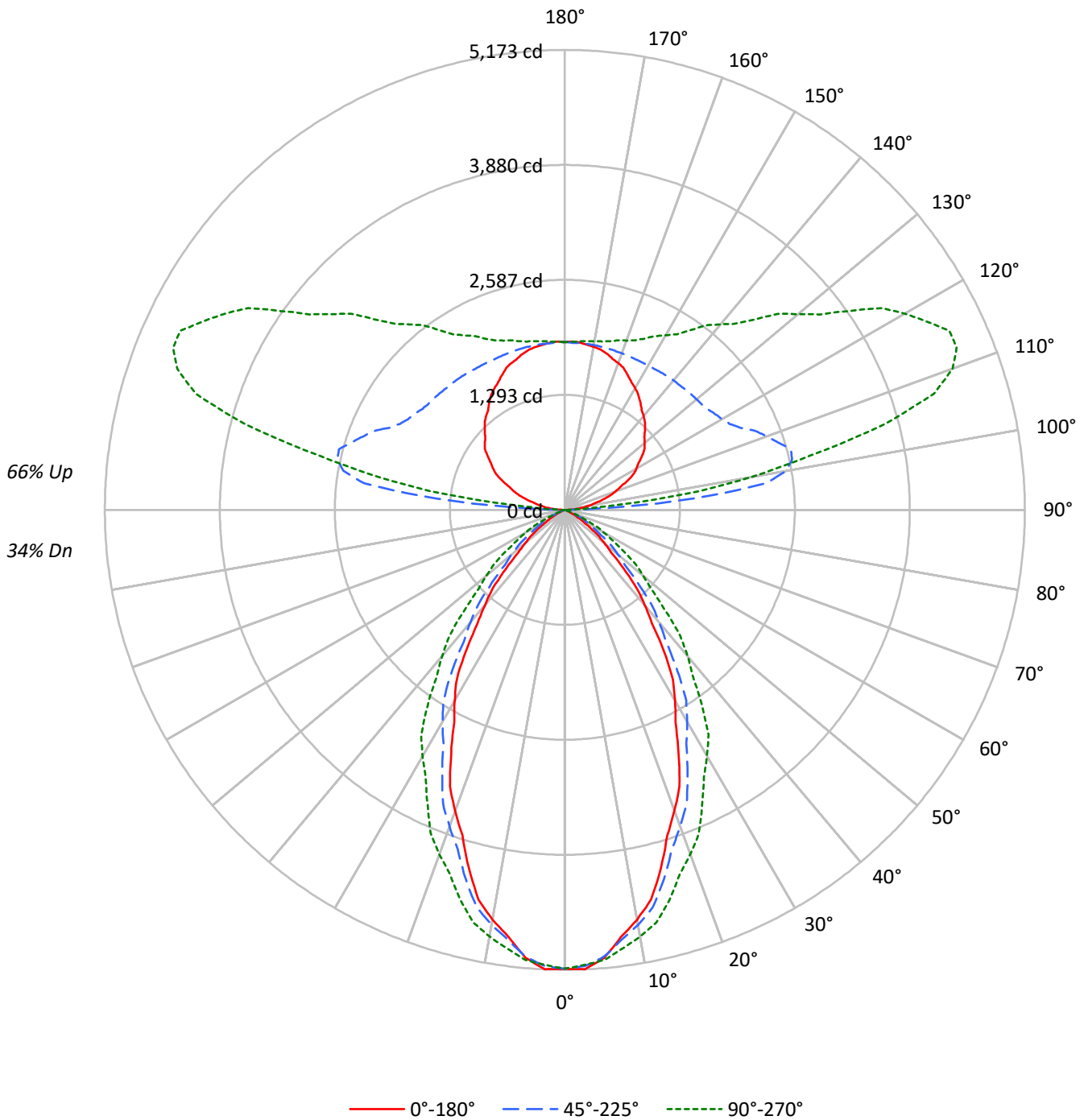
Lumens per Lamp: N/A
Luminaire Lumens: 18329.7 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 167.8
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23
5	69	59	51	46	62	54	47	43	44	40	36	35	32	30	27	26	24	21
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21702
20°	17687	18607	20237
25°	15403	16623	18593
30°	13194	14643	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7525	10393
50°	4140	5609	8242
55°	2691	4057	6406
60°	1544	2856	4631
65°	409	1744	2344
70°	202	538	673
75°	89	45	0
80°	66	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	471.0	2.6
10°-20°	1204.5	6.6
20°-30°	1507.9	8.2
30°-40°	1392.8	7.6
40°-50°	935.9	5.1
50°-60°	483.4	2.6
60°-70°	151.4	0.8
70°-80°	9.6	0.1
80°-90°	4.1	0.0
90°-100°	877.2	4.8
100°-110°	2371.7	12.9
110°-120°	2493.5	13.6
120°-130°	2025.4	11.0
130°-140°	1588.7	8.7
140°-150°	1219.4	6.7
150°-160°	877.0	4.8
160°-170°	535.7	2.9
170°-180°	180.6	1.0
0°-30°	3183.4	17.4
0°-40°	4576.2	25.0
0°-60°	5995.4	32.7
0°-90°	6160.5	33.6
90°-120°	5742.4	31.3
90°-150°	10575.8	57.7
90°-180°	12169.0	66.4
0°-180°	18329.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5161	5161	5161	5161	5161	
5°	5059	5007	5046	5064	5084	469
15°	4172	4158	4304	4449	4544	1162
25°	3026	3051	3266	3489	3653	1387
35°	1942	1991	2207	2467	2692	1203
45°	931	988	1154	1378	1593	731
55°	335	391	504	648	796	312
65°	38	72	160	193	215	63
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	4	12	26	28	26	9
95°	136	478	1459	755	449	142
105°	441	681	2631	3881	3722	464
115°	776	949	2182	4224	4768	766
125°	1063	1218	1967	3319	3899	947
135°	1274	1425	1914	2680	3033	984
145°	1481	1592	1888	2294	2468	927
155°	1672	1738	1871	2058	2125	771
165°	1820	1838	1879	1953	1963	513
175°	1890	1888	1881	1906	1902	179
180°	1888	1888	1888	1888	1888	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5161.0	5161.0	5161.0	5161.0	5161.0
2.5°	5172.9	5124.1	5137.0	5136.7	5123.0
5°	5058.6	5007.3	5046.1	5064.0	5083.6
7.5°	4844.9	4804.8	4879.3	4935.2	4975.7
10°	4679.1	4644.9	4741.5	4817.7	4873.8
12.5°	4487.3	4460.9	4577.7	4682.2	4754.0
15°	4172.2	4157.6	4304.5	4449.0	4544.2
17.5°	3834.6	3834.1	4001.9	4181.3	4296.1
20°	3602.9	3610.3	3790.2	3988.0	4122.3
22.5°	3371.2	3388.3	3580.5	3786.7	3940.5
25°	3026.2	3050.6	3265.9	3489.3	3652.9
27.5°	2694.6	2730.2	2956.7	3189.0	3388.2
30°	2476.9	2518.4	2749.0	2993.4	3198.4
32.5°	2263.1	2312.4	2537.3	2795.7	3004.7
35°	1942.5	1991.4	2207.2	2467.0	2691.6
37.5°	1611.5	1659.3	1870.1	2125.8	2368.5
40°	1395.7	1449.4	1650.4	1898.2	2144.8
42.5°	1200.0	1253.7	1442.7	1686.2	1919.1
45°	931.3	987.5	1153.5	1378.1	1593.0
47.5°	708.6	769.6	915.3	1118.5	1314.3
50°	576.8	637.8	781.5	960.6	1148.5
52.5°	470.9	530.0	659.7	828.4	1000.7
55°	334.6	390.7	504.4	647.6	796.5
57.5°	231.2	279.5	381.5	501.0	617.7
60°	167.3	213.7	309.6	406.7	501.9
62.5°	111.4	153.8	247.7	322.0	386.0
65°	37.5	71.6	159.8	192.8	214.7
67.5°	19.0	22.9	83.9	88.6	95.9
70°	15.0	15.0	39.9	42.6	49.9
72.5°	11.0	11.0	16.0	20.5	22.0
75°	5.0	5.0	2.5	0.0	0.0
77.5°	2.5	2.5	2.0	0.0	0.0
80°	2.5	2.5	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°	0.8	2.4	5.3	5.7	5.3
90°	4.1	12.0	26.4	28.4	26.4
92.5°	57.7	210.3	414.9	180.1	130.4
95°	136.1	477.8	1458.8	754.9	449.0
97.5°	218.6	548.0	2273.9	1881.8	1382.0
100°	280.4	576.4	2527.4	2635.8	2131.3
102.5°	337.3	615.8	2616.8	3207.6	2830.2
105°	440.9	681.3	2631.1	3881.0	3722.1
107.5°	536.8	756.1	2516.1	4301.1	4354.0
110°	611.5	810.2	2413.7	4413.9	4638.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	678.2	864.1	2319.4	4391.4	4768.4
115°	776.1	948.9	2182.1	4224.1	4768.4
117.5°	872.0	1034.1	2091.4	3968.5	4585.6
120°	930.5	1089.4	2037.8	3785.2	4414.9
122.5°	985.8	1141.5	2005.3	3588.6	4223.1
125°	1062.6	1217.5	1966.7	3318.8	3898.8
127.5°	1133.3	1285.5	1943.9	3098.6	3608.7
130°	1172.3	1329.2	1934.2	2962.5	3423.4
132.5°	1212.9	1368.3	1924.4	2839.8	3264.1
135°	1273.9	1424.9	1913.9	2679.7	3033.3
137.5°	1335.2	1477.9	1904.9	2549.8	2837.9
140°	1377.5	1510.6	1901.7	2466.2	2722.5
142.5°	1418.1	1543.3	1895.2	2390.7	2615.2
145°	1481.1	1592.4	1887.5	2293.7	2468.5
147.5°	1538.4	1636.9	1878.5	2205.8	2340.1
150°	1580.7	1668.1	1875.3	2158.1	2265.4
152.5°	1619.7	1696.0	1873.6	2113.8	2202.0
155°	1672.1	1737.7	1871.2	2057.6	2125.2
157.5°	1726.5	1772.2	1871.6	2018.5	2063.0
160°	1757.4	1795.2	1873.2	1993.8	2025.6
162.5°	1781.8	1813.2	1874.9	1974.1	1998.0
165°	1820.4	1838.3	1879.3	1952.7	1962.6
167.5°	1846.8	1859.1	1879.7	1934.3	1939.1
170°	1863.1	1869.0	1881.4	1926.1	1926.1
172.5°	1876.1	1877.3	1881.4	1916.3	1914.7
175°	1889.5	1887.5	1881.4	1905.7	1901.7
177.5°	1894.0	1889.2	1881.0	1897.1	1892.3
180°	1887.5	1887.5	1887.5	1887.5	1887.5

(END OF REPORT)