

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: P518711

Luminaire Tested: **SQ4-BB-100U-075D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518711
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-075D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

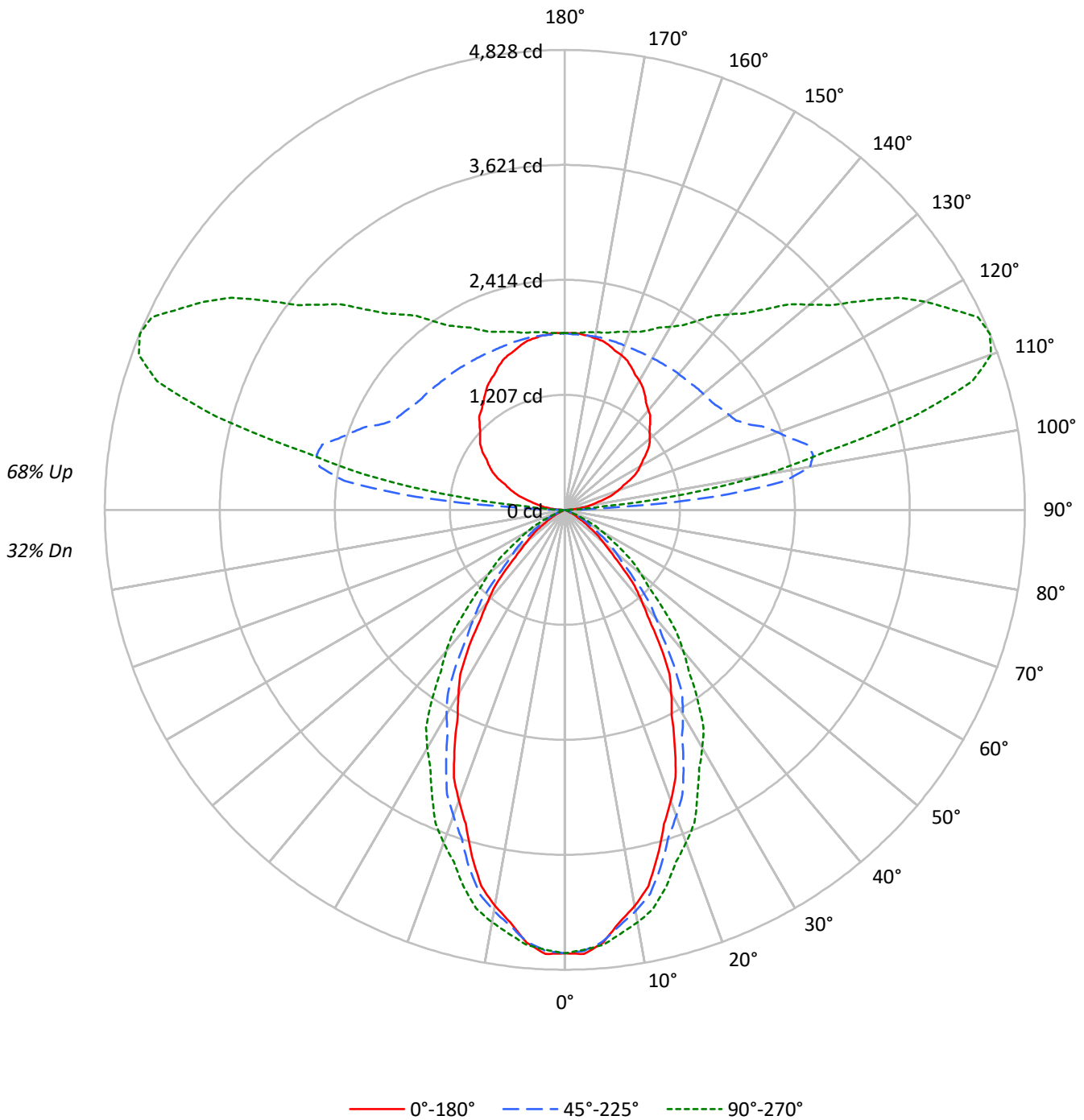
Lumens per Lamp: N/A
Luminaire Lumens: 17606.3 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 153.4
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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	16
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14317	14317	14317
5°	14087	14052	14156
10°	13181	13356	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	4525	6249
50°	2489	3373	4957
55°	1618	2440	3852
60°	928	1718	2784
65°	246	1049	1410
70°	121	324	405
75°	53	27	0
80°	41	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.9	2.4
10°-20°	1086.5	6.2
20°-30°	1360.2	7.7
30°-40°	1256.4	7.1
40°-50°	844.2	4.8
50°-60°	436.0	2.5
60°-70°	136.6	0.8
70°-80°	8.6	0.0
80°-90°	4.0	0.0
90°-100°	868.4	4.9
100°-110°	2397.4	13.6
110°-120°	2472.6	14.0
120°-130°	1986.9	11.3
130°-140°	1561.5	8.9
140°-150°	1197.6	6.8
150°-160°	860.7	4.9
160°-170°	526.4	3.0
170°-180°	177.5	1.0
0°-30°	2871.5	16.3
0°-40°	4127.9	23.4
0°-60°	5408.1	30.7
0°-90°	5557.3	31.6
90°-120°	5738.4	32.6
90°-150°	10484.4	59.5
90°-180°	12049.0	68.4
0°-180°	17606.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4655	4655	4655	4655	4655	
5°	4563	4517	4552	4568	4586	423
15°	3764	3750	3883	4013	4099	1048
25°	2730	2752	2946	3148	3295	1251
35°	1752	1796	1991	2225	2428	1085
45°	840	891	1040	1243	1437	660
55°	302	352	455	584	718	282
65°	34	65	144	174	194	57
75°	4	4	2	0	0	6
85°	0	0	0	0	0	1
90°	6	12	24	27	30	9
95°	128	470	1576	648	421	137
105°	427	659	2638	4027	3792	455
115°	766	925	2124	4206	4783	752
125°	1050	1195	1926	3259	3824	935
135°	1264	1400	1872	2639	2976	978
145°	1466	1567	1848	2247	2418	918
155°	1653	1708	1834	2016	2080	762
165°	1789	1812	1842	1914	1929	504
175°	1854	1857	1846	1872	1866	176
180°	1854	1854	1854	1854	1854	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4655.4	4655.4	4655.4	4655.4	4655.4
2.5°	4666.2	4622.2	4633.8	4633.5	4621.2
5°	4563.1	4516.8	4551.8	4568.0	4585.6
7.5°	4370.3	4334.2	4401.4	4451.7	4488.3
10°	4220.7	4189.9	4277.0	4345.8	4396.4
12.5°	4047.8	4024.0	4129.3	4223.5	4288.3
15°	3763.5	3750.3	3882.9	4013.2	4099.1
17.5°	3459.0	3458.6	3609.9	3771.7	3875.2
20°	3250.0	3256.6	3418.9	3597.4	3718.5
22.5°	3041.0	3056.4	3229.7	3415.8	3554.5
25°	2729.7	2751.8	2946.0	3147.5	3295.0
27.5°	2430.6	2462.8	2667.1	2876.6	3056.3
30°	2234.2	2271.7	2479.7	2700.2	2885.1
32.5°	2041.4	2085.9	2288.7	2521.9	2710.4
35°	1752.3	1796.3	1991.0	2225.3	2427.9
37.5°	1453.6	1496.8	1686.9	1917.6	2136.5
40°	1259.0	1307.5	1488.7	1712.3	1934.7
42.5°	1082.4	1130.9	1301.4	1521.0	1731.1
45°	840.1	890.7	1040.5	1243.1	1436.9
47.5°	639.2	694.2	825.7	1009.0	1185.6
50°	520.3	575.3	705.0	866.5	1036.0
52.5°	424.8	478.1	595.0	747.2	902.7
55°	301.8	352.5	455.0	584.1	718.5
57.5°	208.6	252.2	344.1	451.9	557.2
60°	150.9	192.7	279.3	366.8	452.7
62.5°	100.5	138.8	223.4	290.5	348.2
65°	33.8	64.6	144.1	173.9	193.7
67.5°	17.1	20.6	75.7	79.9	86.5
70°	13.5	13.5	36.0	38.4	45.0
72.5°	9.9	9.9	14.4	18.5	19.8
75°	4.5	4.5	2.3	0.0	0.0
77.5°	2.3	2.3	1.8	0.0	0.0
80°	2.3	2.3	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°	1.2	2.3	4.7	5.4	5.9
90°	5.9	11.7	23.7	26.8	29.7
92.5°	53.4	221.7	396.4	144.7	112.7
95°	127.6	469.9	1575.5	647.6	421.3
97.5°	211.3	526.3	2333.9	1796.9	1301.3
100°	273.0	560.2	2614.0	2632.4	2139.2
102.5°	332.3	598.6	2668.6	3252.5	2784.9
105°	427.3	659.3	2637.7	4026.9	3791.9
107.5°	528.1	734.7	2490.5	4400.3	4486.2
110°	599.3	785.0	2376.6	4480.6	4759.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	663.4	842.1	2269.8	4417.2	4828.0
115°	765.5	925.1	2124.4	4205.6	4782.9
117.5°	854.5	1013.5	2028.9	3907.7	4564.5
120°	913.9	1070.5	1990.9	3706.0	4367.5
122.5°	970.8	1120.5	1960.0	3517.7	4144.4
125°	1050.3	1195.4	1925.6	3258.8	3824.5
127.5°	1118.0	1263.0	1905.4	3039.9	3527.8
130°	1163.1	1308.1	1895.9	2905.9	3349.8
132.5°	1205.8	1343.9	1886.4	2793.4	3195.5
135°	1264.0	1400.3	1872.2	2639.4	2975.9
137.5°	1329.2	1453.4	1865.1	2510.1	2797.3
140°	1364.8	1486.7	1860.3	2423.9	2676.3
142.5°	1405.2	1517.8	1855.6	2347.2	2569.5
145°	1465.7	1567.3	1848.5	2247.0	2418.1
147.5°	1523.9	1612.6	1841.9	2162.4	2295.3
150°	1566.6	1639.1	1839.6	2112.0	2219.4
152.5°	1599.8	1667.7	1837.2	2068.9	2157.6
155°	1652.6	1707.8	1833.6	2016.1	2079.9
157.5°	1701.3	1743.7	1834.2	1977.6	2021.2
160°	1729.8	1767.5	1836.6	1956.0	1987.9
162.5°	1753.5	1786.6	1839.0	1936.9	1961.8
165°	1789.1	1812.3	1842.5	1914.1	1928.6
167.5°	1816.4	1830.4	1845.5	1900.2	1904.8
170°	1830.7	1842.3	1845.5	1893.0	1893.0
172.5°	1842.5	1849.5	1845.5	1883.4	1881.1
175°	1854.4	1857.3	1845.5	1872.1	1866.3
177.5°	1859.2	1856.8	1844.9	1861.4	1856.8
180°	1854.4	1854.4	1854.4	1854.4	1854.4

(END OF REPORT)