

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: P518735

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518735
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-100D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

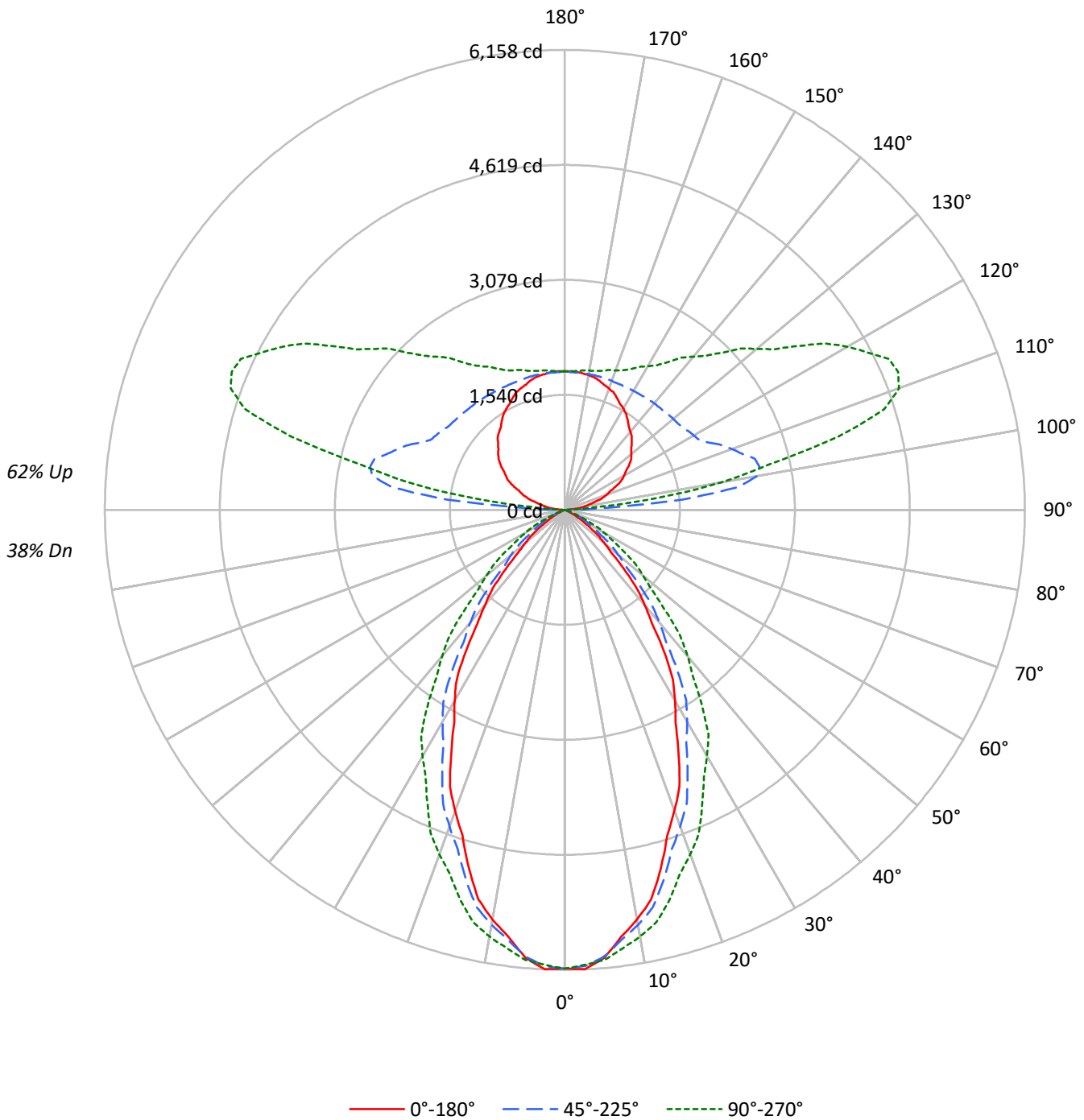
Lumens per Lamp: N/A
Luminaire Lumens: 19381.4 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 182.2
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38				
1	96	93	89	86	87	84	82	79	69	67	65	55	54	53	42	41	41	35				
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31				
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28				
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25				
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23				
6	65	54	47	42	59	50	44	39	42	37	34	35	31	29	28	26	24	21				
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19				
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18				
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16				
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18544	18681
10°	17394	17626	18117
15°	15813	16314	17223
20°	14036	14766	16059
25°	12224	13192	14755
30°	10470	11620	13520
35°	8681	9864	12029
40°	6670	7887	10250
45°	4822	5972	8247
50°	3285	4451	6541
55°	2136	3219	5084
60°	1225	2267	3674
65°	325	1384	1860
70°	160	428	534
75°	70	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	560.7	2.9
10°-20°	1433.8	7.4
20°-30°	1794.9	9.3
30°-40°	1657.9	8.6
40°-50°	1114.0	5.7
50°-60°	575.4	3.0
60°-70°	180.2	0.9
70°-80°	11.4	0.1
80°-90°	4.0	0.0
90°-100°	868.4	4.5
100°-110°	2397.4	12.4
110°-120°	2472.6	12.8
120°-130°	1986.9	10.3
130°-140°	1561.5	8.1
140°-150°	1197.6	6.2
150°-160°	860.7	4.4
160°-170°	526.4	2.7
170°-180°	177.5	0.9
0°-30°	3789.4	19.6
0°-40°	5447.3	28.1
0°-60°	7136.8	36.8
0°-90°	7332.4	37.8
90°-120°	5738.4	29.6
90°-150°	10484.4	54.1
90°-180°	12049.0	62.2
0°-180°	19381.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6143	6143	6143	6143	6143	
5°	6022	5961	6007	6028	6051	558
15°	4966	4949	5124	5296	5409	1383
25°	3602	3631	3888	4154	4348	1651
35°	2312	2370	2627	2937	3204	1432
45°	1109	1176	1373	1640	1896	871
55°	398	465	600	771	948	372
65°	45	85	190	230	256	75
75°	6	6	3	0	0	9
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°	6143.4	6143.4	6143.4	6143.4	6143.4
2.5°	6157.7	6099.6	6114.9	6114.5	6098.3
5°	6021.6	5960.6	6006.7	6028.1	6051.3
7.5°	5767.2	5719.5	5808.2	5874.7	5922.9
10°	5569.8	5529.1	5644.1	5734.8	5801.6
12.5°	5341.6	5310.2	5449.2	5573.5	5659.0
15°	4966.5	4949.0	5124.0	5296.0	5409.3
17.5°	4564.6	4564.1	4763.8	4977.3	5113.9
20°	4288.8	4297.5	4511.7	4747.2	4907.0
22.5°	4013.0	4033.3	4262.1	4507.6	4690.7
25°	3602.3	3631.3	3887.6	4153.6	4348.3
27.5°	3207.6	3250.0	3519.6	3796.1	4033.2
30°	2948.4	2997.8	3272.3	3563.2	3807.3
32.5°	2694.0	2752.7	3020.3	3327.9	3576.7
35°	2312.3	2370.5	2627.4	2936.6	3204.0
37.5°	1918.2	1975.2	2226.1	2530.5	2819.4
40°	1661.4	1725.4	1964.6	2259.6	2553.1
42.5°	1428.4	1492.4	1717.3	2007.2	2284.4
45°	1108.6	1175.5	1373.1	1640.5	1896.2
47.5°	843.5	916.2	1089.6	1331.5	1564.5
50°	686.6	759.2	930.3	1143.4	1367.2
52.5°	560.5	630.9	785.2	986.1	1191.2
55°	398.3	465.1	600.4	770.8	948.1
57.5°	275.2	332.8	454.1	596.4	735.3
60°	199.1	254.4	368.5	484.1	597.4
62.5°	132.6	183.1	294.8	383.4	459.5
65°	44.6	85.3	190.2	229.5	255.6
67.5°	22.6	27.2	99.9	105.4	114.1
70°	17.8	17.8	47.6	50.7	59.4
72.5°	13.1	13.1	19.0	24.4	26.2
75°	5.9	5.9	3.0	0.0	0.0
77.5°	3.0	3.0	2.4	0.0	0.0
80°	3.0	3.0	0.0	0.0	0.0
82.5°	0.6	0.6	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)