

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: P519407

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519407
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-100D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

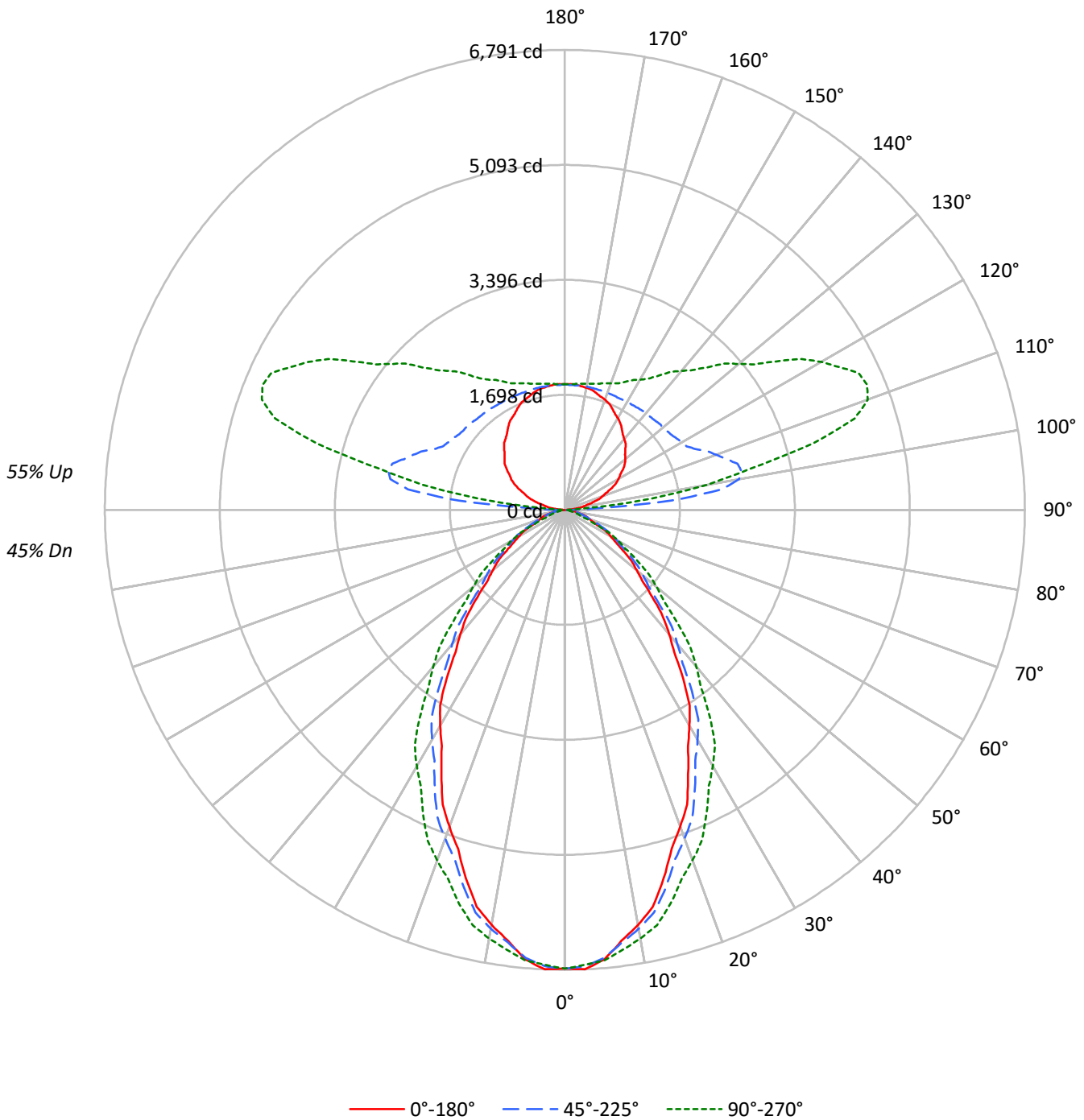
Lumens per Lamp: N/A
Luminaire Lumens: 21923.9 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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	0
RCR																		
0	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	46	40
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31
4	76	66	59	54	70	61	55	50	52	47	44	44	40	37	36	33	31	28
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22
7	61	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19
9	53	41	34	29	49	39	32	28	33	28	25	29	25	22	24	21	19	17
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20833	20833	20833
5°	20573	20500	20619
10°	19437	19614	20069
15°	17943	18360	19183
20°	16294	16907	18026
25°	14615	15412	16794
30°	13068	13923	15517
35°	11428	12253	14005
40°	9618	10382	12124
45°	7938	8623	10122
50°	6627	7225	8433
55°	5626	6200	6964
60°	4808	5375	5558
65°	3828	4520	3590
70°	3394	3528	2191
75°	3143	2861	1343
80°	2896	2632	1158
85°	2622	2414	946



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	621.4	2.8
10°-20°	1616.2	7.4
20°-30°	2093.4	9.5
30°-40°	2049.9	9.4
40°-50°	1569.1	7.2
50°-60°	1045.6	4.8
60°-70°	570.6	2.6
70°-80°	237.7	1.1
80°-90°	71.2	0.3
90°-100°	868.4	4.0
100°-110°	2397.4	10.9
110°-120°	2472.6	11.3
120°-130°	1986.9	9.1
130°-140°	1561.5	7.1
140°-150°	1197.6	5.5
150°-160°	860.7	3.9
160°-170°	526.4	2.4
170°-180°	177.5	0.8
0°-30°	4330.9	19.8
0°-40°	6380.8	29.1
0°-60°	8995.5	41.0
0°-90°	9875.0	45.0
90°-120°	5738.4	26.2
90°-150°	10484.4	47.8
90°-180°	12049.0	55.0
0°-180°	21923.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6774	6774	6774	6774	6774	
5°	6664	6597	6640	6656	6679	620
15°	5636	5615	5766	5923	6025	1574
25°	4307	4319	4542	4740	4949	1981
35°	3044	3058	3264	3483	3730	1892
45°	1825	1860	1983	2133	2327	1423
55°	1049	1093	1156	1200	1299	951
65°	526	570	621	543	493	547
75°	264	264	241	165	113	282
85°	74	74	68	44	27	81
90°	6	12	24	27	30	13
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°	6774.1	6774.1	6774.1	6774.1	6774.1
2.5°	6790.8	6730.3	6745.6	6745.2	6726.6
5°	6664.2	6597.3	6640.4	6655.8	6679.0
7.5°	6416.9	6366.3	6444.8	6502.9	6550.0
10°	6224.2	6180.7	6280.7	6365.3	6426.4
12.5°	6000.7	5964.1	6088.1	6201.7	6281.3
15°	5635.7	5615.4	5766.5	5923.4	6025.1
17.5°	5245.1	5235.3	5408.6	5591.7	5721.9
20°	4978.8	4975.9	5166.1	5356.8	5507.9
22.5°	4710.1	4716.5	4916.4	5114.7	5286.7
25°	4307.0	4318.7	4541.9	4739.8	4949.1
27.5°	3934.3	3939.5	4170.3	4379.3	4602.5
30°	3679.9	3694.4	3920.6	4136.9	4369.5
32.5°	3425.4	3442.3	3663.8	3887.4	4124.5
35°	3043.8	3058.3	3263.7	3483.3	3730.4
37.5°	2650.2	2670.0	2852.3	3060.0	3303.0
40°	2395.8	2424.8	2586.0	2781.7	3020.0
42.5°	2150.8	2186.9	2336.3	2521.9	2737.0
45°	1825.1	1859.9	1982.6	2132.7	2327.4
47.5°	1544.5	1584.6	1678.8	1808.0	1974.3
50°	1385.1	1422.9	1510.0	1605.7	1762.6
52.5°	1244.8	1282.6	1360.2	1434.0	1567.7
55°	1049.3	1092.9	1156.3	1200.1	1298.9
57.5°	888.8	930.6	980.9	1000.7	1060.6
60°	781.7	828.2	873.9	871.6	903.6
62.5°	684.3	723.8	769.3	737.8	739.5
65°	526.1	569.7	621.2	542.8	493.4
67.5°	425.1	434.4	487.5	378.5	319.8
70°	377.5	377.5	392.4	293.1	243.7
72.5°	332.3	332.3	318.6	238.4	186.7
75°	264.5	264.5	240.8	165.3	113.0
77.5°	203.9	201.6	184.3	123.3	82.0
80°	163.5	163.5	148.6	97.4	65.4
82.5°	127.8	127.8	115.3	76.1	48.7
85°	74.3	74.3	68.4	44.2	26.8
87.5°	27.3	28.5	28.5	19.6	17.8
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)