

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: P564981

Luminaire Tested: **SQ4-PW1-100U-125D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564981
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-125D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1250 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: 26508.0 lumens
Efficiency: N/A
Efficacy: 123.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

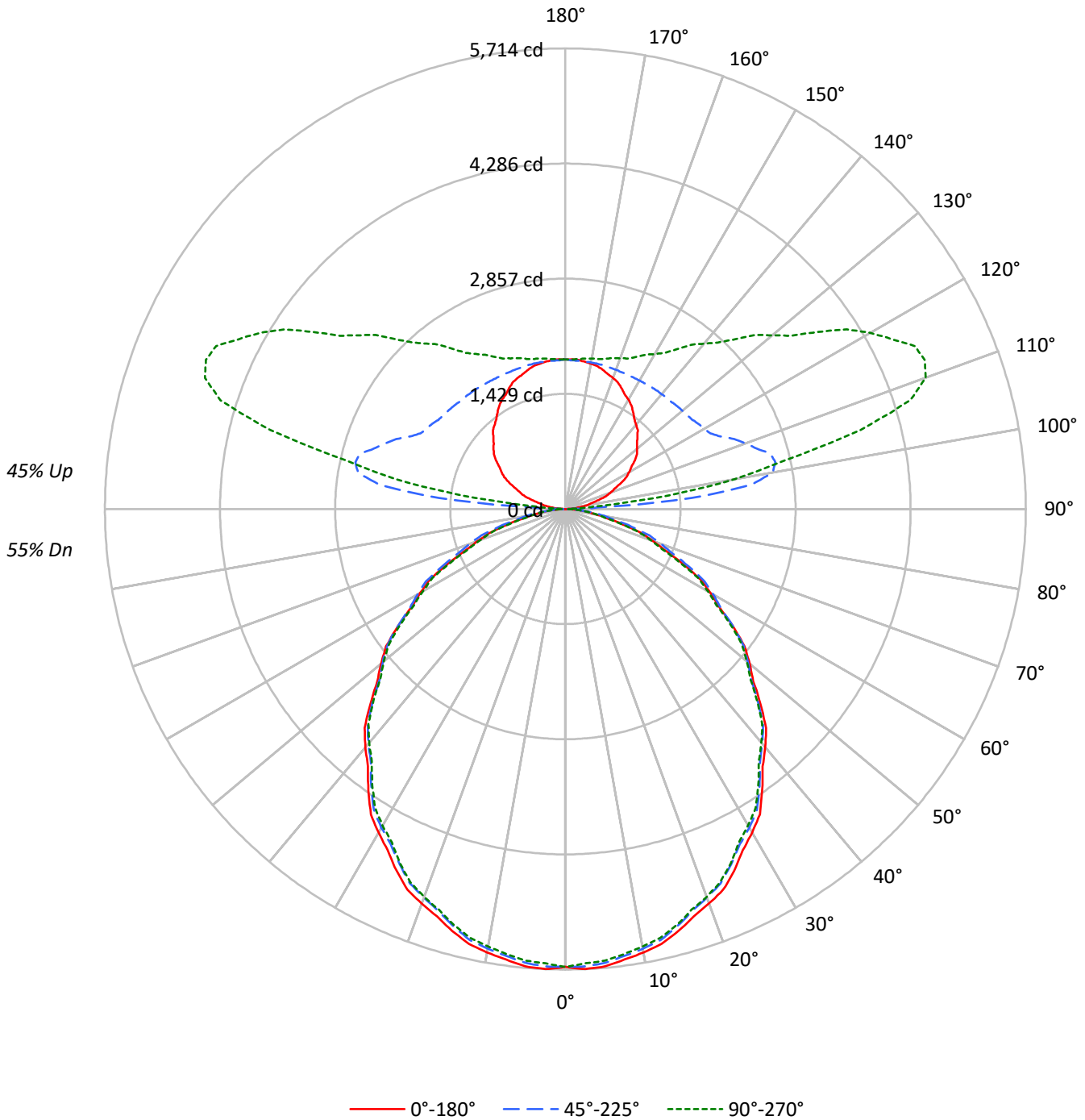
Input Watts (W): 214.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	99	95	91	87	92	88	85	82	76	73	71	64	62	61	53	52	51	46
2	90	83	77	71	83	77	72	67	66	62	59	56	53	51	47	45	43	39
3	82	73	65	60	76	68	61	56	59	54	49	50	46	43	42	39	37	33
4	75	64	57	50	70	60	53	48	52	47	42	44	40	37	37	34	32	28
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	30	28	25
6	64	52	43	38	59	48	41	36	42	36	32	36	32	28	31	27	24	22
7	59	47	39	33	55	44	36	31	38	32	28	33	28	25	28	24	22	19
8	55	42	35	29	51	40	33	28	35	29	25	30	26	22	26	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	18	15
10	48	36	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17473	17473	17473
5°	17586	17447	17370
10°	17445	17305	17211
15°	17261	17069	17005
20°	17054	16792	16760
25°	16816	16511	16460
30°	16461	16212	16105
35°	15993	15768	15674
40°	15494	15253	15193
45°	14891	14696	14631
50°	14274	14154	14059
55°	13608	13608	13393
60°	12778	13024	12562
65°	11693	12276	11402
70°	10307	11297	10038
75°	8803	10112	8565
80°	6826	8512	6914
85°	4414	6535	5829



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	535.0	2.0
10°-20°	1510.5	5.7
20°-30°	2240.5	8.5
30°-40°	2621.6	9.9
40°-50°	2609.9	9.8
50°-60°	2253.8	8.5
60°-70°	1622.3	6.1
70°-80°	850.7	3.2
80°-90°	214.8	0.8
90°-100°	868.4	3.3
100°-110°	2397.4	9.0
110°-120°	2472.6	9.3
120°-130°	1986.9	7.5
130°-140°	1561.5	5.9
140°-150°	1197.6	4.5
150°-160°	860.7	3.2
160°-170°	526.4	2.0
170°-180°	177.5	0.7
0°-30°	4286.0	16.2
0°-40°	6907.6	26.1
0°-60°	11771.3	44.4
0°-90°	14459.1	54.5
90°-120°	5738.4	21.6
90°-150°	10484.4	39.6
90°-180°	12049.0	45.5
0°-180°	26508.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5682	5682	5682	5682	5682	
5°	5696	5633	5652	5636	5626	540
15°	5421	5353	5361	5351	5341	1528
25°	4956	4872	4866	4836	4851	2279
35°	4260	4201	4200	4160	4175	2663
45°	3424	3395	3379	3369	3364	2642
55°	2538	2533	2538	2503	2498	2264
65°	1607	1656	1687	1621	1567	1592
75°	741	809	851	794	721	794
85°	125	164	185	175	165	165
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°	5681.5	5681.5	5681.5	5681.5	5681.5
2.5°	5713.5	5666.6	5681.5	5668.9	5641.5
5°	5696.5	5632.9	5651.5	5636.2	5626.4
7.5°	5638.5	5579.7	5593.4	5577.3	5571.4
10°	5586.4	5527.7	5541.4	5521.1	5511.3
12.5°	5526.3	5463.7	5477.3	5457.1	5451.2
15°	5421.2	5352.7	5361.1	5350.9	5341.1
17.5°	5299.1	5229.6	5231.0	5214.9	5213.0
20°	5211.0	5137.6	5130.9	5111.1	5120.9
22.5°	5114.9	5037.5	5030.8	5003.0	5016.8
25°	4955.7	4872.5	4865.6	4835.9	4850.6
27.5°	4771.5	4689.2	4689.4	4647.7	4663.3
30°	4635.3	4557.0	4565.2	4515.6	4535.2
32.5°	4491.1	4420.7	4425.1	4375.5	4395.0
35°	4259.9	4201.1	4199.8	4160.1	4174.8
37.5°	4023.6	3971.7	3963.5	3940.6	3944.5
40°	3859.4	3815.4	3799.4	3784.3	3784.3
42.5°	3687.2	3647.1	3631.2	3620.1	3616.1
45°	3423.9	3394.6	3378.9	3368.8	3363.9
47.5°	3163.6	3136.2	3122.6	3115.5	3110.6
50°	2983.4	2963.8	2958.4	2943.3	2938.4
52.5°	2803.2	2791.5	2786.2	2767.1	2762.2
55°	2537.9	2533.0	2537.9	2502.8	2497.9
57.5°	2261.6	2269.4	2285.6	2238.3	2226.6
60°	2077.4	2097.0	2117.4	2061.9	2042.3
62.5°	1889.2	1920.5	1949.2	1885.5	1858.1
65°	1606.8	1655.8	1686.9	1620.6	1566.8
67.5°	1334.5	1395.2	1432.6	1361.2	1300.5
70°	1146.3	1214.8	1256.4	1184.8	1116.3
72.5°	982.1	1058.5	1092.3	1024.6	956.1
75°	740.8	809.4	851.0	794.2	720.8
77.5°	525.6	590.2	624.7	575.3	514.6
80°	385.4	454.0	480.6	439.4	390.4
82.5°	273.3	330.1	348.4	323.6	290.3
85°	125.1	164.3	185.2	175.0	165.2
87.5°	33.2	61.8	80.8	81.5	86.0
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)