

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: P564669

Luminaire Tested: **SQ4-PW1-050U-100D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564669
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-100D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17306.6 lumens
Efficiency: N/A
Efficacy: 128.8 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: Semi-Direct

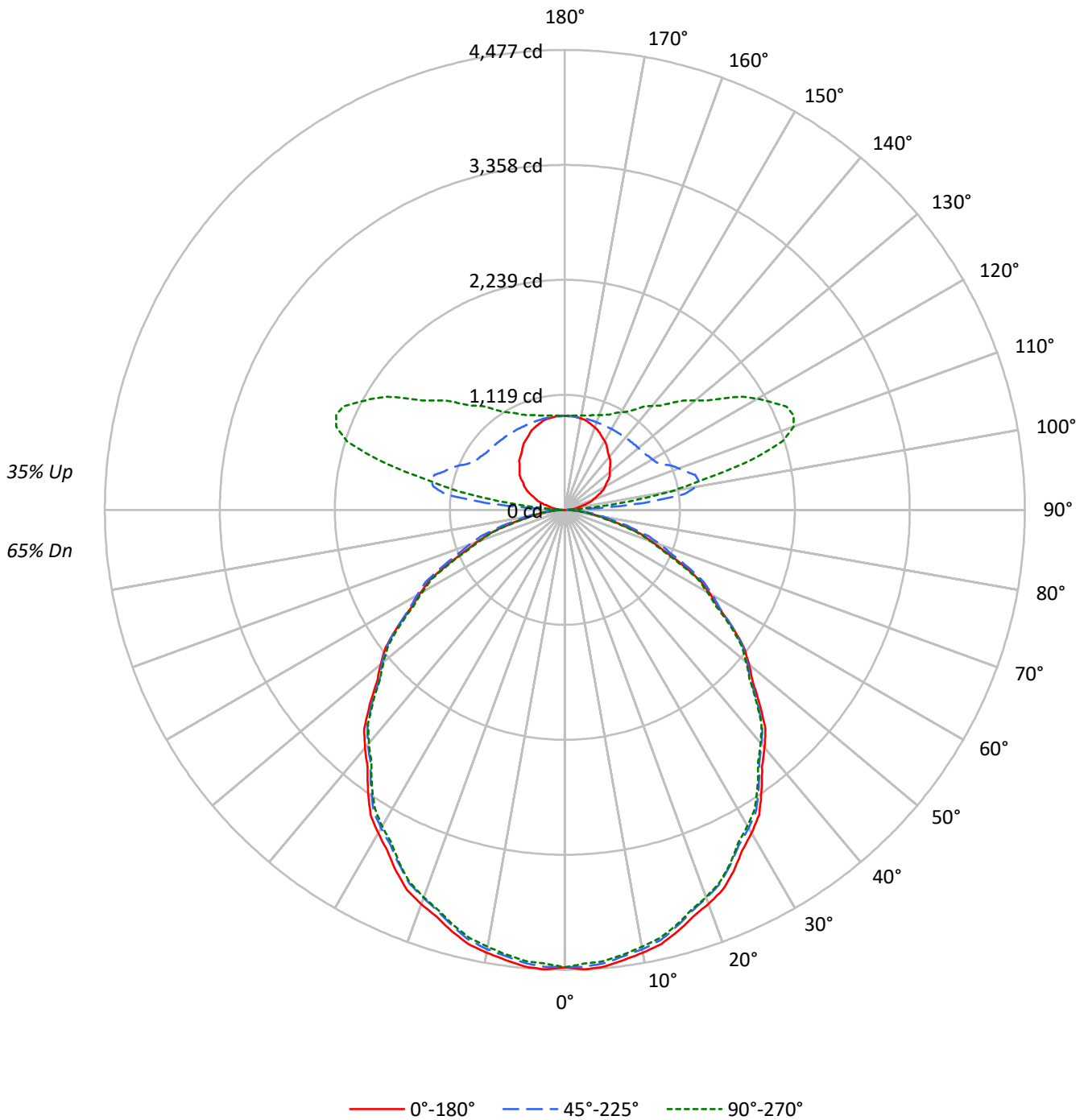
Input Watts (W): 134.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65				
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55				
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47				
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40				
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34				
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30				
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26				
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23				
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21				
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19				
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13692	13692	13692
5°	13781	13672	13611
10°	13671	13560	13487
15°	13526	13376	13326
20°	13364	13159	13133
25°	13178	12938	12898
30°	12899	12704	12620
35°	12532	12356	12282
40°	12142	11952	11905
45°	11669	11516	11465
50°	11186	11091	11017
55°	10663	10663	10495
60°	10013	10206	9844
65°	9162	9619	8935
70°	8077	8853	7865
75°	6898	7923	6712
80°	5349	6670	5419
85°	3462	5120	4566



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	419.2	2.4
10°-20°	1183.6	6.8
20°-30°	1755.7	10.1
30°-40°	2054.3	11.9
40°-50°	2045.2	11.8
50°-60°	1766.1	10.2
60°-70°	1271.3	7.3
70°-80°	666.6	3.9
80°-90°	168.8	1.0
90°-100°	439.4	2.5
100°-110°	1193.5	6.9
110°-120°	1227.1	7.1
120°-130°	981.1	5.7
130°-140°	770.9	4.5
140°-150°	591.1	3.4
150°-160°	425.1	2.5
160°-170°	260.0	1.5
170°-180°	87.6	0.5
0°-30°	3358.6	19.4
0°-40°	5412.9	31.3
0°-60°	9224.2	53.3
0°-90°	11330.9	65.5
90°-120°	2860.0	16.5
90°-150°	5203.1	30.1
90°-180°	5976.0	34.5
0°-180°	17306.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4452	4452	4452	4452	4452	
5°	4464	4414	4429	4417	4409	423
15°	4248	4194	4201	4193	4185	1197
25°	3883	3818	3813	3790	3801	1786
35°	3338	3292	3291	3260	3271	2087
45°	2683	2660	2648	2640	2636	2070
55°	1989	1985	1989	1961	1957	1774
65°	1259	1298	1322	1270	1228	1248
75°	580	634	667	622	565	622
85°	98	129	145	137	129	129
90°	3	12	21	26	26	8
95°	65	240	765	333	224	69
105°	212	330	1312	1998	1880	225
115°	377	457	1051	2090	2381	372
125°	518	590	950	1602	1889	462
135°	624	693	924	1304	1471	482
145°	721	773	912	1108	1192	453
155°	815	844	906	995	1024	376
165°	883	894	909	948	950	249
175°	915	918	912	924	921	87
180°	915	915	915	915	915	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4452.1	4452.1	4452.1	4452.1	4452.1
2.5°	4477.2	4440.4	4452.1	4442.2	4420.7
5°	4463.9	4414.0	4428.6	4416.7	4409.0
7.5°	4418.4	4372.4	4383.1	4370.4	4365.8
10°	4377.6	4331.6	4342.3	4326.4	4318.8
12.5°	4330.5	4281.4	4292.1	4276.3	4271.7
15°	4248.2	4194.5	4201.1	4193.1	4185.4
17.5°	4152.4	4098.0	4099.1	4086.5	4085.0
20°	4083.4	4025.9	4020.6	4005.1	4012.8
22.5°	4008.1	3947.5	3942.2	3920.5	3931.2
25°	3883.4	3818.2	3812.7	3789.5	3801.0
27.5°	3739.0	3674.6	3674.7	3642.0	3654.3
30°	3632.3	3570.9	3577.4	3538.5	3553.9
32.5°	3519.3	3464.1	3467.6	3428.7	3444.0
35°	3338.1	3292.1	3291.0	3259.9	3271.4
37.5°	3153.0	3112.3	3105.9	3087.9	3091.0
40°	3024.3	2989.8	2977.2	2965.5	2965.5
42.5°	2889.4	2857.9	2845.4	2836.7	2833.7
45°	2683.0	2660.0	2647.7	2639.8	2636.0
47.5°	2479.1	2457.6	2446.9	2441.3	2437.5
50°	2337.9	2322.5	2318.2	2306.4	2302.6
52.5°	2196.6	2187.4	2183.3	2168.3	2164.5
55°	1988.7	1984.9	1988.7	1961.2	1957.4
57.5°	1772.2	1778.4	1791.1	1754.0	1744.8
60°	1627.9	1643.2	1659.3	1615.8	1600.4
62.5°	1480.4	1504.9	1527.5	1477.5	1456.1
65°	1259.1	1297.5	1321.9	1270.0	1227.8
67.5°	1045.8	1093.3	1122.6	1066.6	1019.1
70°	898.3	952.0	984.6	928.4	874.7
72.5°	769.6	829.4	855.9	802.9	749.2
75°	580.5	634.2	666.8	622.4	564.9
77.5°	411.9	462.5	489.5	450.8	403.2
80°	302.0	355.7	376.6	344.3	306.0
82.5°	214.2	258.7	273.0	253.6	227.5
85°	98.1	128.7	145.1	137.1	129.4
87.5°	25.7	48.9	63.7	65.0	68.1
90°	2.9	11.6	20.6	26.5	26.5
92.5°	26.5	120.3	208.9	89.7	75.9
95°	64.7	240.3	765.1	333.0	223.7
97.5°	107.1	265.4	1173.0	912.6	641.0
100°	135.4	282.1	1297.8	1315.6	1062.4
102.5°	163.6	298.9	1330.8	1627.0	1403.7
105°	211.9	329.9	1312.5	1998.4	1880.5
107.5°	261.9	366.1	1236.6	2190.2	2223.0
110°	297.2	392.2	1180.1	2228.0	2369.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	327.8	418.2	1123.6	2196.7	2409.0
115°	376.7	457.3	1050.6	2090.1	2380.8
117.5°	422.6	499.7	1004.1	1939.1	2266.6
120°	453.2	528.0	982.9	1837.8	2163.0
122.5°	479.1	553.9	968.8	1736.3	2050.0
125°	517.9	589.9	950.5	1601.6	1889.3
127.5°	552.7	624.0	940.5	1499.4	1746.3
130°	573.9	642.9	935.8	1435.3	1656.8
132.5°	595.0	664.1	931.1	1380.5	1576.8
135°	623.9	692.9	924.1	1304.5	1471.4
137.5°	655.1	717.8	920.5	1237.4	1377.8
140°	673.9	734.3	918.2	1194.7	1321.3
142.5°	692.7	748.6	915.8	1161.3	1267.2
145°	721.0	772.8	912.3	1108.4	1191.8
147.5°	752.8	797.1	909.3	1066.8	1132.4
150°	774.0	811.4	909.3	1042.9	1094.7
152.5°	790.4	823.2	907.0	1021.5	1064.1
155°	815.2	843.9	906.4	995.3	1024.1
157.5°	839.3	861.7	906.4	977.5	999.4
160°	853.4	873.6	906.4	965.6	982.9
162.5°	867.5	883.1	908.7	956.1	968.8
165°	882.9	894.4	909.3	947.7	950.5
167.5°	898.7	904.5	912.3	937.6	939.9
170°	903.5	909.2	912.3	932.9	932.9
172.5°	908.2	911.6	912.3	928.2	928.2
175°	915.2	918.1	912.3	924.0	921.1
177.5°	917.6	917.6	910.5	919.8	915.2
180°	915.2	915.2	915.2	915.2	915.2

(END OF REPORT)