

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: P563997

Luminaire Tested: **SQ4-PR1-050U-100D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563997
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-100D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE 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: 17364.0 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

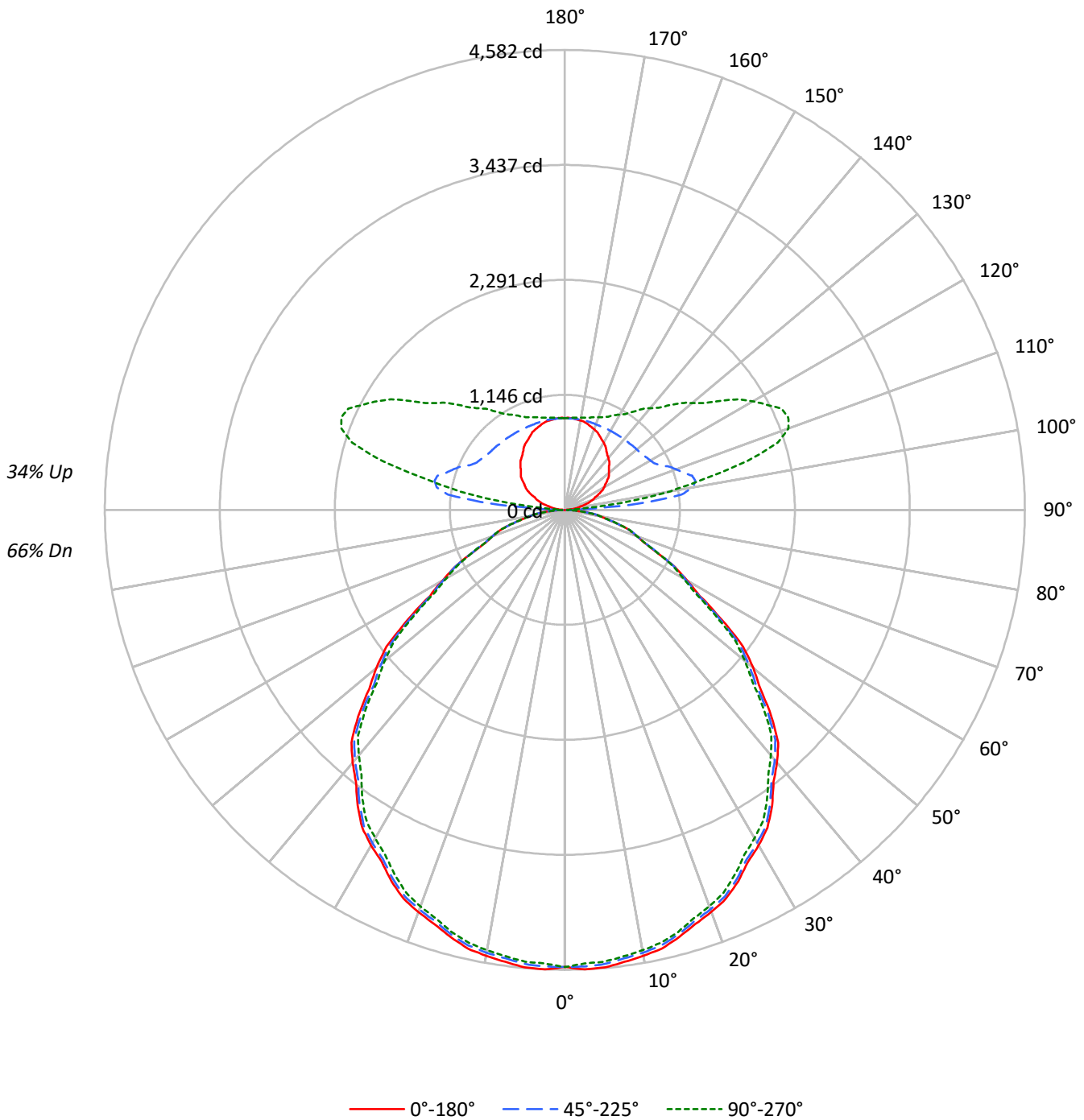
Input Watts (W): 134.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																		
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66
1	102	97	94	90	95	92	88	85	81	79	76	72	70	68	63	62	60	56
2	93	85	79	74	87	81	75	71	72	68	64	63	60	57	56	53	51	48
3	85	76	68	62	80	71	65	60	64	58	54	56	52	49	50	47	44	41
4	78	67	59	53	73	64	56	51	57	51	47	51	46	42	45	41	38	35
5	72	60	52	46	67	57	50	44	51	45	40	46	41	37	40	37	34	31
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27
7	61	49	41	35	58	47	39	34	42	36	31	38	33	29	34	30	26	24
8	57	45	37	31	54	42	35	30	38	32	28	34	30	26	31	27	24	22
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	24	21	19
10	50	37	30	25	47	36	29	24	33	27	23	29	25	21	26	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14006	14006	14006
5°	14132	14023	13950
10°	14087	13989	13915
15°	14025	13938	13863
20°	13954	13865	13762
25°	13856	13763	13604
30°	13707	13609	13414
35°	13504	13387	13195
40°	13197	13055	12819
45°	12659	12437	12181
50°	11711	11429	11204
55°	10222	9990	9780
60°	8614	8541	8372
65°	7450	7479	7422
70°	6843	6878	6878
75°	6572	6572	6619
80°	6183	6252	6183
85°	4982	5536	5536



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	430.7	2.5
10°-20°	1232.2	7.1
20°-30°	1858.5	10.7
30°-40°	2214.4	12.8
40°-50°	2183.2	12.6
50°-60°	1668.5	9.6
60°-70°	1032.5	5.9
70°-80°	586.5	3.4
80°-90°	181.9	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	4.4
140°-150°	591.1	3.4
150°-160°	425.1	2.4
160°-170°	260.0	1.5
170°-180°	87.6	0.5
0°-30°	3521.3	20.3
0°-40°	5735.7	33.0
0°-60°	9587.4	55.2
0°-90°	11388.3	65.6
90°-120°	2860.0	16.5
90°-150°	5203.1	30.0
90°-180°	5976.0	34.4
0°-180°	17364.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4554	4554	4554	4554	4554	
5°	4578	4528	4542	4526	4519	434
15°	4405	4359	4378	4362	4354	1243
25°	4083	4034	4056	4013	4009	1879
35°	3597	3555	3566	3518	3515	2245
45°	2910	2872	2860	2808	2801	2230
55°	1906	1876	1863	1832	1824	1708
65°	1024	1016	1028	1020	1020	1037
75°	553	553	553	557	557	584
85°	141	149	157	157	157	164
90°	3	12	21	26	26	10
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	

TEST NUMBER: P563997

CATALOG NUMBER: SQ4-PR1-050U-100D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4554.1	4554.1	4554.1	4554.1	4554.1
2.5°	4582.3	4542.5	4554.1	4544.2	4522.7
5°	4577.6	4527.8	4542.3	4526.5	4518.8
7.5°	4542.3	4493.2	4507.8	4492.0	4487.4
10°	4511.0	4464.9	4479.6	4463.7	4456.0
12.5°	4476.4	4427.3	4445.1	4426.1	4418.4
15°	4405.0	4359.0	4377.6	4361.7	4354.1
17.5°	4326.6	4277.5	4296.0	4277.7	4267.8
20°	4263.8	4217.8	4236.4	4208.8	4205.0
22.5°	4194.8	4148.8	4167.3	4130.4	4129.7
25°	4083.4	4033.5	4055.9	4012.7	4008.9
27.5°	3950.8	3904.8	3923.4	3879.3	3874.7
30°	3859.8	3813.8	3832.4	3785.1	3777.4
32.5°	3756.3	3713.3	3728.8	3681.6	3677.0
35°	3597.0	3554.8	3565.6	3518.5	3514.6
37.5°	3415.8	3377.4	3383.6	3331.7	3327.9
40°	3287.1	3248.8	3251.8	3196.8	3193.0
42.5°	3145.9	3107.5	3104.3	3049.3	3045.5
45°	2910.5	2872.2	2859.6	2808.4	2800.7
47.5°	2642.2	2603.9	2580.3	2538.6	2533.2
50°	2447.7	2409.3	2388.8	2353.3	2341.8
52.5°	2237.4	2199.1	2181.7	2149.3	2137.8
55°	1906.4	1875.7	1863.2	1831.7	1824.0
57.5°	1591.8	1571.1	1567.5	1536.8	1533.7
60°	1400.4	1388.9	1388.6	1361.1	1361.1
62.5°	1237.2	1228.7	1234.8	1216.7	1213.6
65°	1023.8	1016.1	1027.7	1019.9	1019.9
67.5°	855.1	855.1	862.2	859.0	859.0
70°	761.0	761.0	764.9	764.9	764.9
72.5°	676.3	673.2	683.3	683.2	680.2
75°	553.1	553.1	553.1	557.0	557.0
77.5°	430.7	431.5	434.6	433.8	430.7
80°	349.1	352.9	353.0	349.1	349.1
82.5°	267.5	271.4	271.4	270.6	267.5
85°	141.2	148.9	156.9	156.9	156.9
87.5°	41.4	55.4	66.9	68.0	64.9
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

TEST NUMBER: P563997

CATALOG NUMBER: SQ4-PR1-050U-100D-835-1D-UNV-STD-W-12

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)