

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: P564689

Luminaire Tested: **SQ4-PW1-050U-125D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564689
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-125D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19288.0 lumens
Efficiency: N/A
Efficacy: 115.5 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

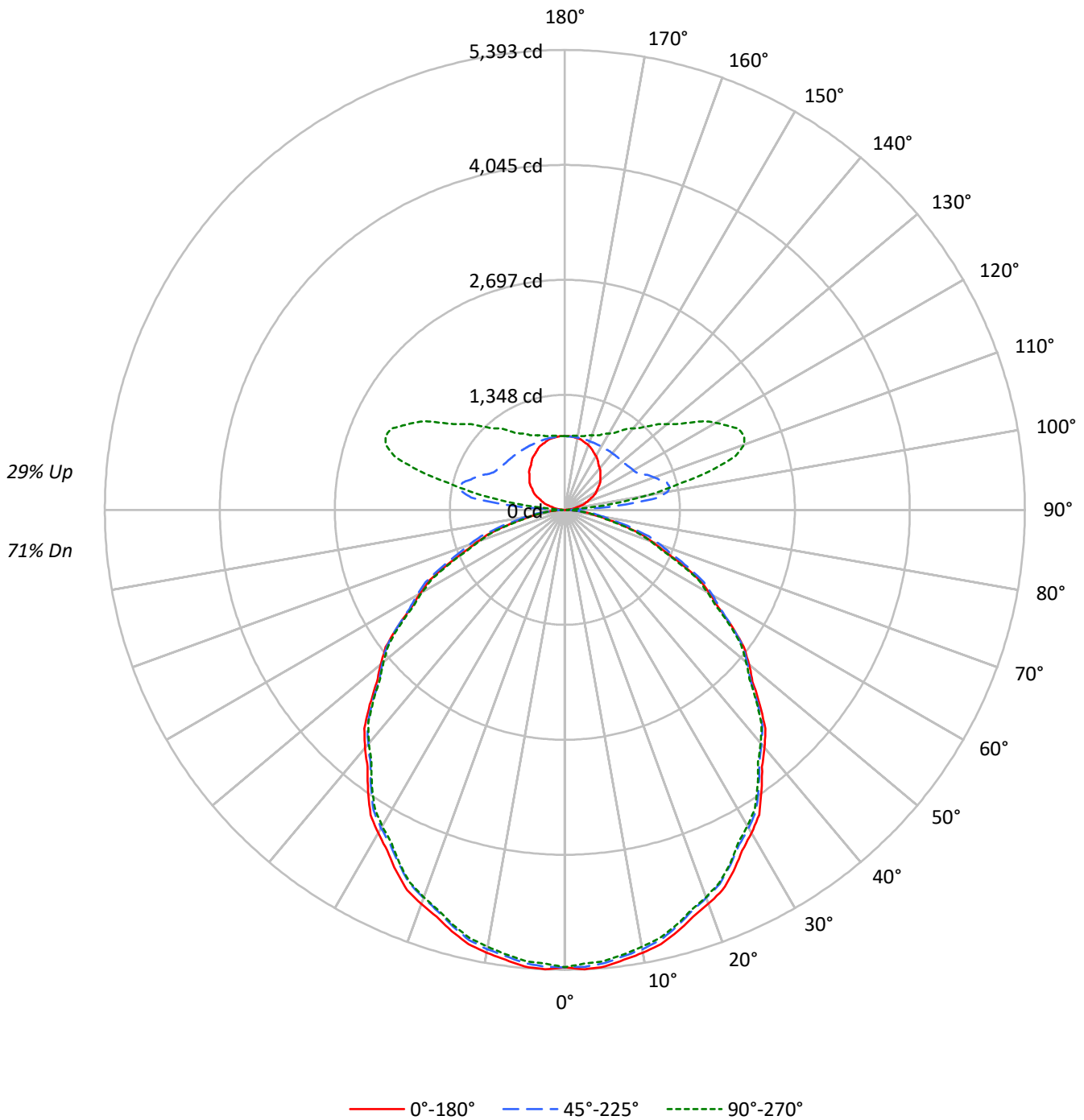
Input Watts (W): 167
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P564689

CATALOG NUMBER: SQ4-PW1-050U-125D-830-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P564689

CATALOG NUMBER: SQ4-PW1-050U-125D-830-1D-UNV-STD-W-12

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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71
1	103	98	94	91	97	93	90	86	84	81	78	75	73	71	67	65	64	60
2	94	86	80	74	88	82	76	71	73	69	65	66	62	59	59	56	54	50
3	85	76	68	62	81	72	65	60	65	59	55	58	54	50	52	49	46	43
4	78	67	59	53	74	64	56	51	58	52	47	52	47	43	47	43	40	37
5	72	60	52	45	68	57	49	44	52	45	41	47	42	38	42	38	35	32
6	66	54	46	40	63	51	44	38	47	40	36	42	37	33	38	34	31	28
7	61	49	41	35	58	47	39	34	42	36	32	39	33	29	35	31	27	25
8	57	44	36	31	54	43	35	30	39	33	28	35	30	26	32	28	24	22
9	53	41	33	28	50	39	32	27	36	30	25	33	27	24	30	25	22	20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	28	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16492	16492	16492
5°	16599	16468	16395
10°	16467	16334	16245
15°	16292	16111	16051
20°	16097	15850	15819
25°	15873	15584	15536
30°	15537	15302	15201
35°	15096	14883	14794
40°	14625	14397	14340
45°	14056	13871	13809
50°	13473	13360	13270
55°	12844	12844	12642
60°	12060	12293	11858
65°	11037	11587	10762
70°	9729	10663	9474
75°	8309	9544	8085
80°	6443	8033	6526
85°	4167	6168	5501



TEST NUMBER: P564689

CATALOG NUMBER: SQ4-PW1-050U-125D-830-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	505.0	2.6
10°-20°	1425.7	7.4
20°-30°	2114.8	11.0
30°-40°	2474.5	12.8
40°-50°	2463.5	12.8
50°-60°	2127.3	11.0
60°-70°	1531.3	7.9
70°-80°	803.0	4.2
80°-90°	202.4	1.0
90°-100°	414.7	2.2
100°-110°	1126.6	5.8
110°-120°	1158.3	6.0
120°-130°	926.1	4.8
130°-140°	727.6	3.8
140°-150°	557.9	2.9
150°-160°	401.2	2.1
160°-170°	245.4	1.3
170°-180°	82.7	0.4
0°-30°	4045.5	21.0
0°-40°	6520.0	33.8
0°-60°	11110.8	57.6
0°-90°	13647.5	70.8
90°-120°	2699.5	14.0
90°-150°	4911.2	25.5
90°-180°	5640.0	29.2
0°-180°	19288.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5363	5363	5363	5363	5363	
5°	5377	5317	5334	5320	5311	509
15°	5117	5052	5060	5051	5041	1442
25°	4678	4599	4593	4564	4578	2151
35°	4021	3965	3964	3927	3940	2514
45°	3232	3204	3189	3180	3175	2494
55°	2396	2391	2396	2362	2358	2137
65°	1517	1563	1592	1530	1479	1503
75°	699	764	803	750	680	750
85°	118	155	175	165	156	156
90°	3	11	19	25	25	8
95°	61	227	722	314	211	65
105°	200	311	1239	1886	1775	212
115°	356	432	992	1973	2247	351
125°	489	557	897	1512	1783	436
135°	589	654	872	1231	1389	455
145°	680	729	861	1046	1125	427
155°	769	797	856	940	967	355
165°	833	844	858	894	897	235
175°	864	867	861	872	869	82
180°	864	864	864	864	864	

TEST NUMBER: P564689

CATALOG NUMBER: SQ4-PW1-050U-125D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5362.7	5362.7	5362.7	5362.7	5362.7
2.5°	5393.0	5348.6	5362.7	5350.8	5324.9
5°	5376.9	5316.9	5334.4	5320.0	5310.8
7.5°	5322.1	5266.7	5279.6	5264.3	5258.8
10°	5273.0	5217.5	5230.4	5211.3	5202.1
12.5°	5216.3	5157.1	5170.0	5150.9	5145.4
15°	5117.0	5052.4	5060.3	5050.7	5041.4
17.5°	5001.8	4936.2	4937.5	4922.3	4920.5
20°	4918.6	4849.3	4843.0	4824.3	4833.6
22.5°	4827.9	4754.9	4748.5	4722.3	4735.3
25°	4677.6	4599.1	4592.6	4564.5	4578.4
27.5°	4503.8	4426.1	4426.3	4386.9	4401.7
30°	4375.2	4301.3	4309.1	4262.3	4280.7
32.5°	4239.2	4172.6	4176.8	4130.0	4148.4
35°	4020.9	3965.4	3964.2	3926.7	3940.5
37.5°	3797.9	3748.9	3741.2	3719.5	3723.2
40°	3642.9	3601.3	3586.2	3572.0	3572.0
42.5°	3480.3	3442.5	3427.4	3416.9	3413.3
45°	3231.8	3204.1	3189.3	3179.7	3175.1
47.5°	2986.1	2960.3	2947.4	2940.7	2936.0
50°	2816.0	2797.5	2792.4	2778.1	2773.5
52.5°	2645.9	2634.8	2629.9	2611.8	2607.2
55°	2395.5	2390.9	2395.5	2362.3	2357.7
57.5°	2134.7	2142.1	2157.4	2112.7	2101.6
60°	1960.8	1979.3	1998.6	1946.2	1927.8
62.5°	1783.2	1812.7	1839.9	1779.7	1753.9
65°	1516.7	1562.9	1592.3	1529.7	1478.9
67.5°	1259.7	1316.9	1352.3	1284.8	1227.5
70°	1082.0	1146.7	1185.9	1118.3	1053.6
72.5°	927.0	999.1	1031.0	967.1	902.5
75°	699.3	764.0	803.2	749.7	680.4
77.5°	496.1	557.1	589.7	543.0	485.7
80°	363.8	428.5	453.6	414.7	368.5
82.5°	258.0	311.6	328.9	305.5	274.0
85°	118.1	155.1	174.8	165.2	155.9
87.5°	30.8	58.3	75.7	76.9	80.6
90°	2.8	10.9	19.4	25.0	25.0
92.5°	25.0	113.5	197.2	84.7	71.7
95°	61.1	226.8	722.2	314.3	211.1
97.5°	101.1	250.5	1107.2	861.4	605.0
100°	127.8	266.3	1225.0	1241.8	1002.8
102.5°	154.4	282.1	1256.1	1535.7	1325.0
105°	200.0	311.4	1238.9	1886.3	1775.0
107.5°	247.2	345.5	1167.2	2067.3	2098.3
110°	280.6	370.2	1113.9	2103.0	2236.1

TEST NUMBER: P564689

CATALOG NUMBER: SQ4-PW1-050U-125D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	309.4	394.7	1060.5	2073.4	2273.8
115°	355.5	431.6	991.6	1972.9	2247.2
117.5°	398.9	471.7	947.8	1830.3	2139.4
120°	427.8	498.4	927.8	1734.7	2041.6
122.5°	452.2	522.8	914.4	1638.9	1935.0
125°	488.9	556.8	897.2	1511.7	1783.3
127.5°	521.7	589.0	887.8	1415.3	1648.3
130°	541.7	606.8	883.3	1354.7	1563.9
132.5°	561.7	626.8	878.9	1303.1	1488.3
135°	588.9	654.1	872.2	1231.3	1388.9
137.5°	618.3	677.5	868.9	1168.0	1300.5
140°	636.1	693.1	866.6	1127.7	1247.2
142.5°	653.9	706.6	864.4	1096.1	1196.1
145°	680.5	729.4	861.1	1046.2	1125.0
147.5°	710.5	752.4	858.3	1006.9	1068.9
150°	730.5	765.8	858.3	984.4	1033.3
152.5°	746.1	777.1	856.1	964.2	1004.4
155°	769.4	796.6	855.5	939.5	966.6
157.5°	792.2	813.4	855.5	922.7	943.3
160°	805.5	824.6	855.5	911.5	927.8
162.5°	818.9	833.5	857.8	902.5	914.4
165°	833.3	844.2	858.3	894.5	897.2
167.5°	848.3	853.7	861.1	885.0	887.2
170°	852.8	858.2	861.1	880.5	880.5
172.5°	857.2	860.5	861.1	876.1	876.1
175°	863.9	866.6	861.1	872.1	869.4
177.5°	866.1	866.1	859.4	868.2	863.9
180°	863.9	863.9	863.9	863.9	863.9

(END OF REPORT)