

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: P563321

Luminaire Tested: **SQ4-PP3-050U-100D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563321  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2103-172-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PP3-050U-100D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.  
DOWNLIGHT 1000 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: 16453.7 lumens  
Efficiency: N/A  
Efficacy: 122.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

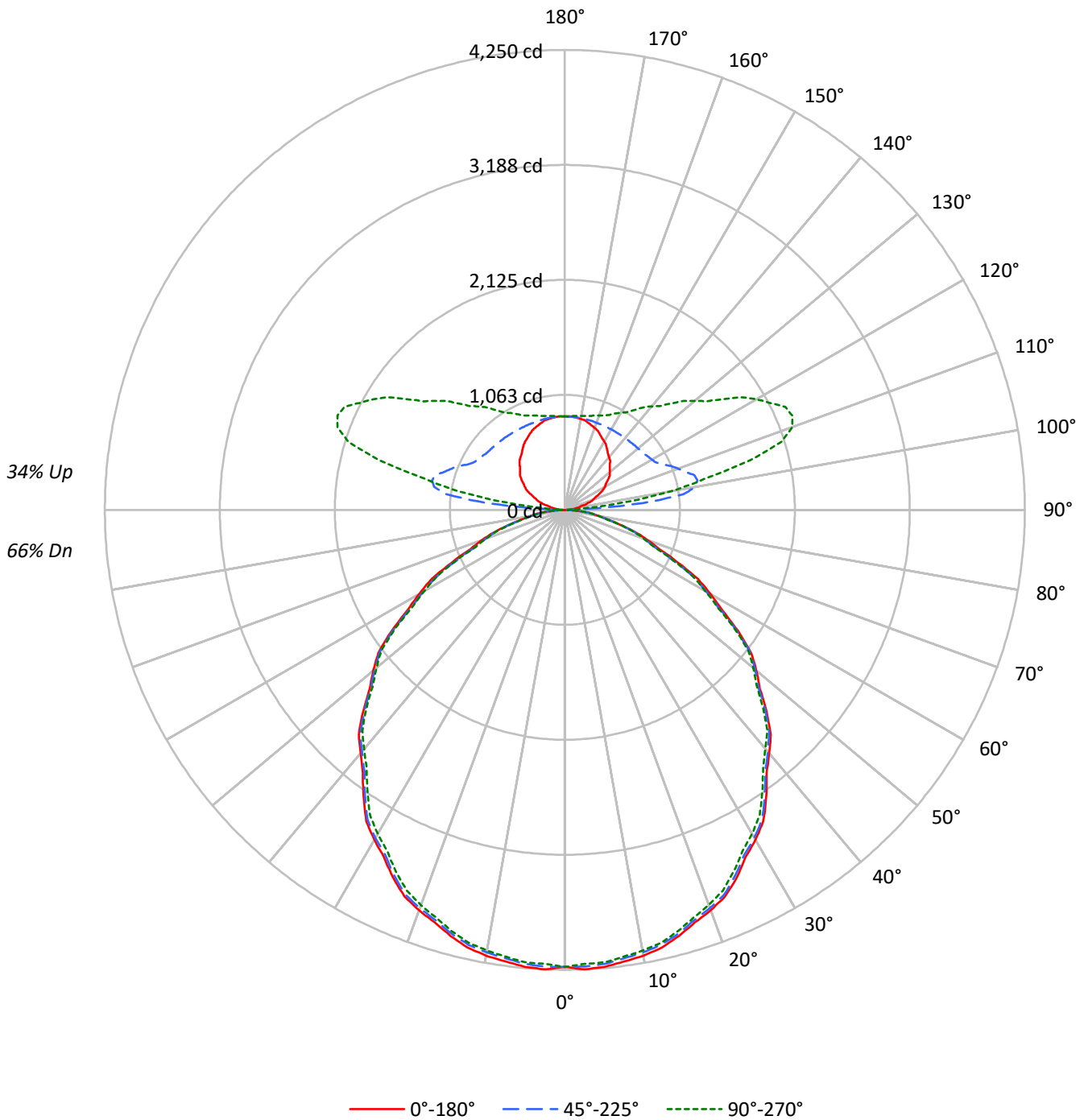
Input Watts (W): 134.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P563321

CATALOG NUMBER: SQ4-PP3-050U-100D-830-1D-UNV-STD-W-12

### Luminous Intensity Polar Plot





TEST NUMBER: P563321

CATALOG NUMBER: SQ4-PP3-050U-100D-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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	102	97	93	90	95	92	88	85	81	79	76	72	70	68	63	61	60	56
2	93	85	79	74	87	80	75	70	72	67	64	63	60	57	56	53	51	47
3	85	75	68	62	79	71	64	59	63	58	54	56	52	49	49	46	44	40
4	78	67	59	52	73	63	56	50	56	51	46	50	46	42	44	41	38	35
5	71	60	51	45	67	56	49	43	51	44	40	45	40	36	40	36	33	30
6	66	54	45	39	62	51	43	38	46	39	35	41	36	32	36	32	29	26
7	61	48	40	35	57	46	39	33	41	35	31	37	32	28	33	29	26	23
8	57	44	36	31	53	42	35	30	38	32	27	34	29	25	30	26	23	21
9	53	40	33	27	50	38	31	27	35	29	25	31	26	23	28	24	21	19
10	49	37	30	25	47	35	29	24	32	26	22	29	24	21	26	22	19	17

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12989	12989	12989
5°	13084	13004	12959
10°	13062	12970	12912
15°	12976	12905	12835
20°	12890	12817	12720
25°	12737	12649	12523
30°	12501	12435	12277
35°	12174	12091	11938
40°	11785	11710	11577
45°	11463	11382	11269
50°	11051	10980	10874
55°	10480	10340	10261
60°	9540	9267	9221
65°	8404	8054	8027
70°	7256	6956	6956
75°	6245	6157	6070
80°	5506	5572	5441
85°	4312	4704	4704



TEST NUMBER: P563321

CATALOG NUMBER: SQ4-PP3-050U-100D-830-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	399.4	2.4
10°-20°	1140.4	6.9
20°-30°	1708.1	10.4
30°-40°	2003.5	12.2
40°-50°	2009.8	12.2
50°-60°	1714.5	10.4
60°-70°	1118.1	6.8
70°-80°	561.0	3.4
80°-90°	158.6	1.0
90°-100°	414.7	2.5
100°-110°	1126.6	6.8
110°-120°	1158.3	7.0
120°-130°	926.1	5.6
130°-140°	727.6	4.4
140°-150°	557.9	3.4
150°-160°	401.2	2.4
160°-170°	245.4	1.5
170°-180°	82.7	0.5
0°-30°	3247.8	19.7
0°-40°	5251.3	31.9
0°-60°	8975.6	54.6
0°-90°	10813.2	65.7
90°-120°	2699.5	16.4
90°-150°	4911.2	29.8
90°-180°	5640.0	34.3
0°-180°	16453.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4224	4224	4224	4224	4224	
5°	4238	4198	4212	4198	4198	402
15°	4076	4036	4053	4038	4031	1150
25°	3753	3710	3728	3694	3690	1726
35°	3243	3210	3220	3183	3180	2026
45°	2636	2618	2617	2591	2591	2029
55°	1954	1947	1928	1917	1914	1737
65°	1155	1133	1107	1100	1103	1153
75°	526	526	518	514	511	570
85°	122	133	133	133	133	144
90°	3	11	19	25	25	9
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: P563321

CATALOG NUMBER: SQ4-PP3-050U-100D-830-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4223.5	4223.5	4223.5	4223.5	4223.5
2.5°	4250.2	4215.4	4223.5	4217.2	4199.9
5°	4238.3	4198.5	4212.4	4197.6	4197.6
7.5°	4209.5	4166.0	4179.9	4165.0	4164.3
10°	4182.8	4139.4	4153.2	4138.3	4134.7
12.5°	4144.3	4100.9	4117.7	4099.9	4099.2
15°	4075.5	4035.7	4053.3	4038.3	4031.1
17.5°	3997.7	3954.3	3975.5	3954.7	3951.8
20°	3938.5	3895.1	3916.3	3886.7	3886.7
22.5°	3867.4	3824.0	3848.2	3809.7	3809.7
25°	3753.4	3710.0	3727.5	3694.1	3690.5
27.5°	3618.0	3575.2	3593.5	3555.8	3555.0
30°	3520.2	3480.4	3501.7	3460.9	3457.3
32.5°	3413.6	3376.7	3392.2	3351.4	3347.7
35°	3242.6	3210.0	3220.4	3183.3	3179.7
37.5°	3062.7	3029.4	3041.2	3009.4	3007.9
40°	2935.4	2913.7	2916.9	2890.8	2883.6
42.5°	2816.9	2792.3	2795.5	2769.5	2768.1
45°	2635.5	2617.5	2617.0	2591.1	2591.1
47.5°	2443.1	2429.3	2425.3	2403.8	2403.1
50°	2309.8	2298.9	2295.0	2276.4	2272.8
52.5°	2170.6	2165.6	2152.9	2137.3	2136.6
55°	1954.5	1947.2	1928.5	1917.4	1913.7
57.5°	1719.8	1705.3	1684.2	1668.0	1670.9
60°	1551.0	1536.5	1506.6	1499.2	1499.2
62.5°	1388.1	1370.7	1340.7	1330.5	1336.3
65°	1154.9	1133.2	1106.8	1099.5	1103.1
67.5°	943.2	923.6	895.1	895.0	892.1
70°	807.0	796.1	773.6	773.6	773.6
72.5°	685.5	680.5	664.1	664.0	661.1
75°	525.6	525.6	518.2	514.4	510.8
77.5°	393.9	395.3	391.6	387.8	381.3
80°	310.9	318.2	314.6	310.9	307.2
82.5°	233.9	241.2	240.6	233.9	233.2
85°	122.2	133.0	133.3	133.3	133.3
87.5°	33.1	46.3	51.3	52.4	55.3
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: P563321

CATALOG NUMBER: SQ4-PP3-050U-100D-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)