

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: P564641

Luminaire Tested: **SQ4-PW1-050U-075D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564641
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-075D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 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: 13690.6 lumens
Efficiency: N/A
Efficacy: 129.6 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

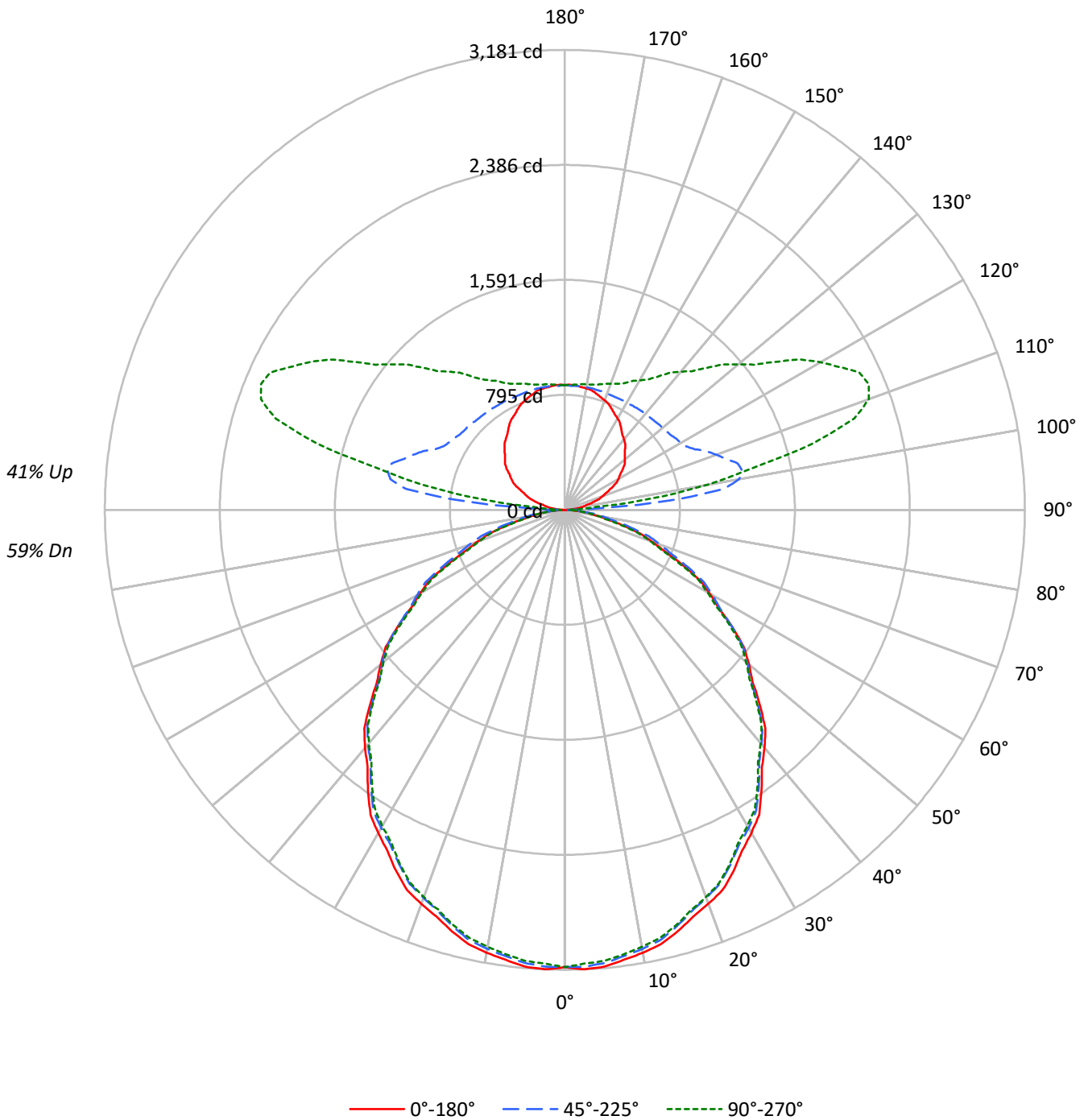
Input Watts (W): 105.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	96	92	88	93	89	86	83	78	75	73	67	65	63	57	56	55	50
2	91	84	77	72	85	78	73	68	68	64	60	59	56	53	50	48	46	42
3	83	74	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	36
4	76	65	57	51	71	61	54	48	54	48	43	46	42	39	40	37	34	31
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	36	32	30	27
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26	23
7	60	47	39	33	55	44	37	32	39	33	29	34	30	26	30	26	23	21
8	55	43	35	30	52	40	33	28	36	30	26	31	27	23	27	24	21	19
9	52	39	32	26	48	37	30	25	33	27	23	29	24	21	25	22	19	17
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9727	9727	9727
5°	9790	9712	9669
10°	9711	9633	9581
15°	9608	9502	9466
20°	9494	9348	9329
25°	9361	9191	9163
30°	9163	9025	8965
35°	8903	8777	8725
40°	8625	8491	8457
45°	8290	8181	8144
50°	7946	7879	7826
55°	7575	7575	7456
60°	7113	7250	6993
65°	6509	6834	6347
70°	5738	6289	5588
75°	4900	5629	4768
80°	3801	4738	3850
85°	2459	3638	3246



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.8	2.2
10°-20°	840.8	6.1
20°-30°	1247.2	9.1
30°-40°	1459.4	10.7
40°-50°	1452.9	10.6
50°-60°	1254.6	9.2
60°-70°	903.1	6.6
70°-80°	473.6	3.5
80°-90°	120.7	0.9
90°-100°	414.7	3.0
100°-110°	1126.6	8.2
110°-120°	1158.3	8.5
120°-130°	926.1	6.8
130°-140°	727.6	5.3
140°-150°	557.9	4.1
150°-160°	401.2	2.9
160°-170°	245.4	1.8
170°-180°	82.7	0.6
0°-30°	2385.9	17.4
0°-40°	3845.2	28.1
0°-60°	6552.7	47.9
0°-90°	8050.1	58.8
90°-120°	2699.5	19.7
90°-150°	4911.2	35.9
90°-180°	5640.0	41.2
0°-180°	13690.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3163	3163	3163	3163	3163	
5°	3171	3136	3146	3138	3132	300
15°	3018	2980	2984	2979	2973	851
25°	2759	2712	2708	2692	2700	1269
35°	2371	2339	2338	2316	2324	1482
45°	1906	1890	1881	1875	1873	1471
55°	1413	1410	1413	1393	1390	1261
65°	894	922	939	902	872	886
75°	412	451	474	442	401	442
85°	70	92	103	97	92	92
90°	3	11	19	25	25	7
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3162.7	3162.7	3162.7	3162.7	3162.7
2.5°	3180.6	3154.4	3162.7	3155.7	3140.4
5°	3171.1	3135.7	3146.0	3137.5	3132.1
7.5°	3138.8	3106.1	3113.7	3104.7	3101.4
10°	3109.8	3077.1	3084.7	3073.4	3068.0
12.5°	3076.3	3041.5	3049.0	3037.8	3034.6
15°	3017.8	2979.7	2984.4	2978.7	2973.2
17.5°	2949.8	2911.1	2911.9	2903.0	2901.9
20°	2900.8	2859.9	2856.2	2845.2	2850.6
22.5°	2847.3	2804.2	2800.5	2785.0	2792.7
25°	2758.7	2712.4	2708.5	2692.0	2700.2
27.5°	2656.1	2610.4	2610.4	2587.2	2595.9
30°	2580.3	2536.7	2541.3	2513.7	2524.6
32.5°	2500.1	2460.9	2463.3	2435.7	2446.6
35°	2371.4	2338.7	2337.9	2315.8	2324.0
37.5°	2239.8	2210.9	2206.4	2193.6	2195.8
40°	2148.4	2123.9	2115.0	2106.6	2106.6
42.5°	2052.6	2030.2	2021.4	2015.2	2013.0
45°	1906.0	1889.7	1880.9	1875.3	1872.6
47.5°	1761.1	1745.8	1738.2	1734.3	1731.6
50°	1660.8	1649.9	1646.8	1638.4	1635.7
52.5°	1560.5	1553.9	1551.0	1540.3	1537.6
55°	1412.8	1410.1	1412.8	1393.2	1390.5
57.5°	1259.0	1263.3	1272.3	1246.0	1239.5
60°	1156.4	1167.3	1178.7	1147.8	1136.9
62.5°	1051.6	1069.1	1085.1	1049.6	1034.4
65°	894.5	921.7	939.1	902.2	872.2
67.5°	742.9	776.7	797.5	757.7	723.9
70°	638.1	676.3	699.4	659.5	621.4
72.5°	546.7	589.2	608.0	570.4	532.2
75°	412.4	450.6	473.7	442.1	401.3
77.5°	292.6	328.6	347.8	320.2	286.5
80°	214.6	252.7	267.5	244.6	217.4
82.5°	152.1	183.8	193.9	180.1	161.6
85°	69.7	91.5	103.1	97.4	92.0
87.5°	18.4	35.3	46.2	47.4	49.6
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



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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)