

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: P519151

Luminaire Tested: **SQ4-WB-050U-125D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519151
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-125D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

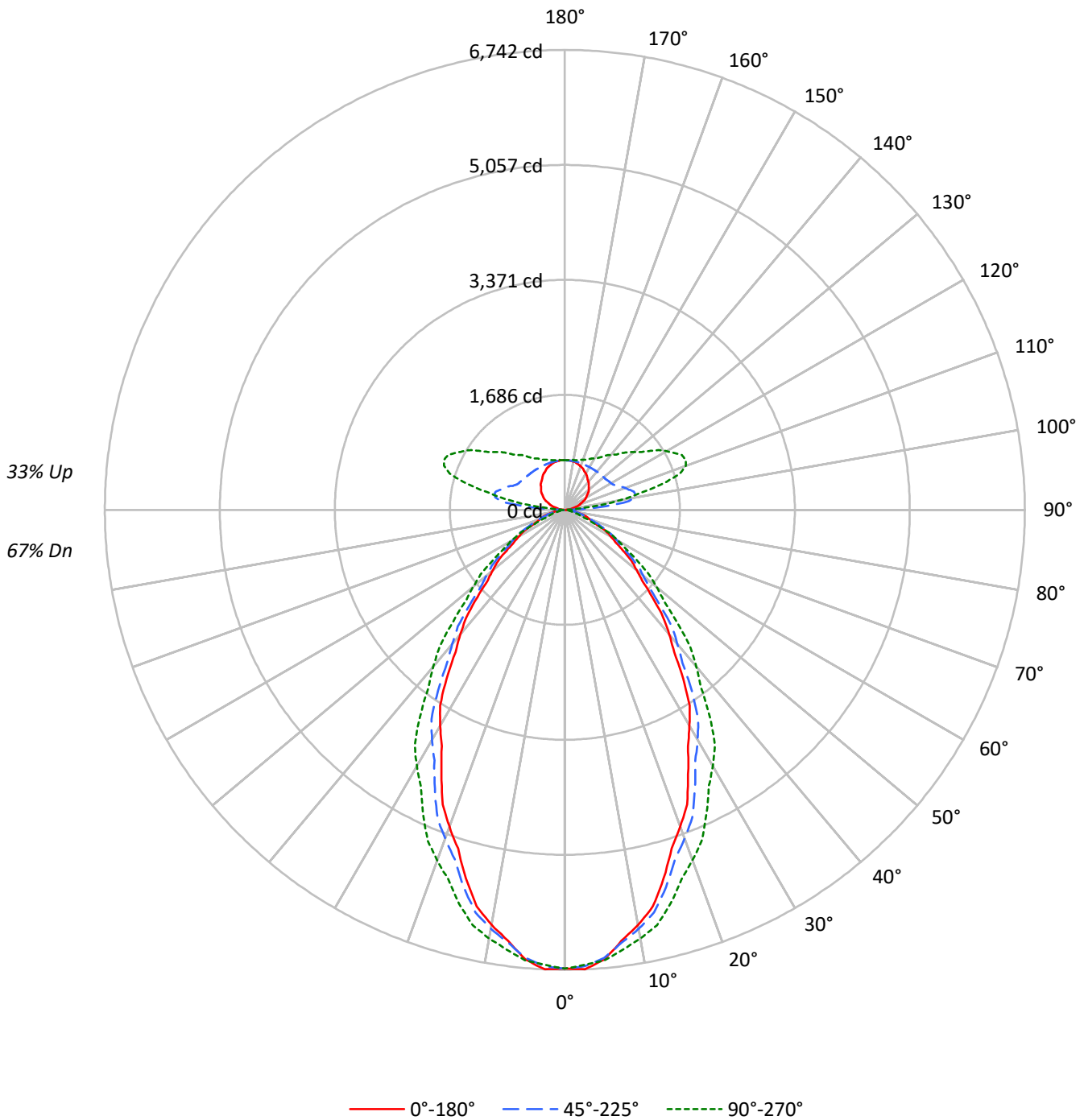
Lumens per Lamp: N/A
Luminaire Lumens: 14557.7 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

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



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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	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	103	99	96	93	97	94	91	88	84	82	80	75	73	71	66	65	64	60				
2	95	89	83	79	90	84	79	75	75	72	69	67	65	62	60	58	56	53				
3	88	79	73	67	83	75	70	65	68	63	60	61	58	55	55	52	50	47				
4	81	72	64	59	77	68	62	57	62	57	52	56	52	48	50	47	44	41				
5	76	65	57	52	71	62	55	50	56	51	47	51	47	43	46	43	40	37				
6	70	59	51	46	66	56	49	44	51	46	42	47	42	39	42	39	36	34				
7	65	54	46	41	62	52	45	40	47	42	38	43	39	35	39	36	33	31				
8	61	50	42	37	58	48	41	36	44	38	34	40	35	32	37	33	30	28				
9	57	46	39	34	54	44	37	33	40	35	31	37	33	29	34	30	28	26				
10	54	42	36	31	51	41	34	30	38	32	29	35	30	27	32	28	25	24				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20682	20682	20682
5°	20424	20351	20470
10°	19296	19472	19923
15°	17814	18227	19044
20°	16176	16785	17896
25°	14509	15300	16672
30°	12973	13822	15404
35°	11345	12165	13904
40°	9548	10307	12036
45°	7880	8560	10049
50°	6579	7172	8372
55°	5585	6155	6914
60°	4774	5336	5518
65°	3801	4488	3564
70°	3370	3502	2176
75°	3120	2840	1332
80°	2874	2612	1149
85°	2604	2396	939



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	616.8	4.2
10°-20°	1604.4	11.0
20°-30°	2078.2	14.3
30°-40°	2035.1	14.0
40°-50°	1557.7	10.7
50°-60°	1038.0	7.1
60°-70°	566.4	3.9
70°-80°	236.0	1.6
80°-90°	69.6	0.5
90°-100°	349.6	2.4
100°-110°	949.7	6.5
110°-120°	976.5	6.7
120°-130°	780.7	5.4
130°-140°	613.5	4.2
140°-150°	470.4	3.2
150°-160°	338.3	2.3
160°-170°	206.9	1.4
170°-180°	69.7	0.5
0°-30°	4299.5	29.5
0°-40°	6334.6	43.5
0°-60°	8930.3	61.3
0°-90°	9802.4	67.3
90°-120°	2275.9	15.6
90°-150°	4140.4	28.4
90°-180°	4755.0	32.7
0°-180°	14557.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6725	6725	6725	6725	6725	
5°	6616	6550	6592	6608	6631	615
15°	5595	5575	5725	5880	5981	1562
25°	4276	4287	4509	4706	4913	1966
35°	3022	3036	3240	3458	3703	1879
45°	1812	1846	1968	2117	2310	1413
55°	1042	1085	1148	1191	1290	944
65°	522	566	617	539	490	543
75°	263	263	239	164	112	280
85°	74	74	68	44	27	80
90°	2	9	16	21	21	7
95°	52	191	609	265	178	55
105°	169	262	1044	1590	1496	179
115°	300	364	836	1663	1894	296
125°	412	469	756	1274	1503	367
135°	496	551	735	1038	1171	384
145°	574	615	726	882	948	360
155°	649	672	721	792	815	299
165°	702	712	724	754	756	198
175°	728	731	726	735	733	69
180°	728	728	728	728	728	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6725.0	6725.0	6725.0	6725.0	6725.0
2.5°	6741.6	6681.5	6696.7	6696.3	6677.8
5°	6615.9	6549.5	6592.2	6607.5	6630.6
7.5°	6370.3	6320.1	6398.1	6455.8	6502.5
10°	6179.1	6135.8	6235.2	6319.2	6379.8
12.5°	5957.2	5920.9	6044.0	6156.7	6235.8
15°	5594.9	5574.7	5724.7	5880.4	5981.4
17.5°	5207.1	5197.3	5369.4	5551.2	5680.4
20°	4942.7	4939.8	5128.6	5317.9	5468.0
22.5°	4676.0	4682.3	4880.7	5077.6	5248.4
25°	4275.8	4287.4	4508.9	4705.5	4913.2
27.5°	3905.8	3911.0	4140.1	4347.5	4569.1
30°	3653.2	3667.6	3892.2	4107.0	4337.8
32.5°	3400.6	3417.3	3637.2	3859.2	4094.6
35°	3021.7	3036.1	3240.1	3458.1	3703.3
37.5°	2631.0	2650.6	2831.7	3037.8	3279.0
40°	2378.4	2407.3	2567.3	2761.5	2998.1
42.5°	2135.3	2171.0	2319.4	2503.7	2717.2
45°	1811.8	1846.5	1968.2	2117.2	2310.5
47.5°	1533.3	1573.1	1666.7	1794.9	1960.0
50°	1375.1	1412.6	1499.0	1594.1	1749.9
52.5°	1235.8	1273.3	1350.3	1423.6	1556.3
55°	1041.7	1084.9	1147.9	1191.4	1289.5
57.5°	882.3	923.9	973.8	993.4	1052.9
60°	776.1	822.2	867.6	865.3	897.1
62.5°	679.3	718.5	763.7	732.4	734.2
65°	522.3	565.6	616.7	538.9	489.8
67.5°	422.0	431.2	483.9	375.8	317.5
70°	374.8	374.8	389.5	291.0	242.0
72.5°	329.9	329.9	316.3	236.7	185.3
75°	262.6	262.6	239.0	164.1	112.1
77.5°	202.4	200.1	183.0	122.4	81.4
80°	162.3	162.3	147.5	96.7	64.9
82.5°	126.9	126.9	114.5	75.5	48.4
85°	73.8	73.8	67.9	43.9	26.6
87.5°	26.4	27.8	26.9	18.3	16.0
90°	2.3	9.2	16.4	21.1	21.1
92.5°	21.1	95.7	166.3	71.4	60.4
95°	51.5	191.2	608.9	265.0	178.0
97.5°	85.2	211.2	933.4	726.2	510.0
100°	107.7	224.5	1032.7	1046.9	845.4
102.5°	130.2	237.8	1059.0	1294.7	1117.0
105°	168.6	262.5	1044.4	1590.3	1496.4
107.5°	208.4	291.3	984.0	1742.9	1769.0
110°	236.5	312.1	939.1	1772.9	1885.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	260.9	332.8	894.1	1748.0	1917.0
115°	299.7	363.9	836.0	1663.2	1894.5
117.5°	336.3	397.6	799.0	1543.1	1803.6
120°	360.6	420.2	782.2	1462.5	1721.2
122.5°	381.2	440.8	770.9	1381.7	1631.3
125°	412.2	469.4	756.4	1274.4	1503.4
127.5°	439.8	496.6	748.4	1193.2	1389.6
130°	456.6	511.6	744.7	1142.1	1318.4
132.5°	473.5	528.5	740.9	1098.6	1254.7
135°	496.5	551.4	735.3	1038.1	1170.9
137.5°	521.3	571.2	732.5	984.7	1096.4
140°	536.3	584.4	730.6	950.7	1051.5
142.5°	551.3	595.7	728.8	924.1	1008.4
145°	573.7	615.0	726.0	882.0	948.4
147.5°	599.0	634.3	723.6	848.9	901.1
150°	615.9	645.7	723.6	829.9	871.1
152.5°	629.0	655.1	721.7	812.9	846.8
155°	648.7	671.6	721.3	792.0	814.9
157.5°	667.9	685.7	721.3	777.9	795.3
160°	679.1	695.1	721.3	768.4	782.2
162.5°	690.4	702.7	723.1	760.8	770.9
165°	702.5	711.7	723.6	754.1	756.4
167.5°	715.2	719.8	726.0	746.1	748.0
170°	718.9	723.5	726.0	742.3	742.3
172.5°	722.7	725.4	726.0	738.6	738.6
175°	728.3	730.6	726.0	735.3	733.0
177.5°	730.2	730.2	724.5	732.0	728.3
180°	728.3	728.3	728.3	728.3	728.3

(END OF REPORT)