

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: P519451

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519451
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-050D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

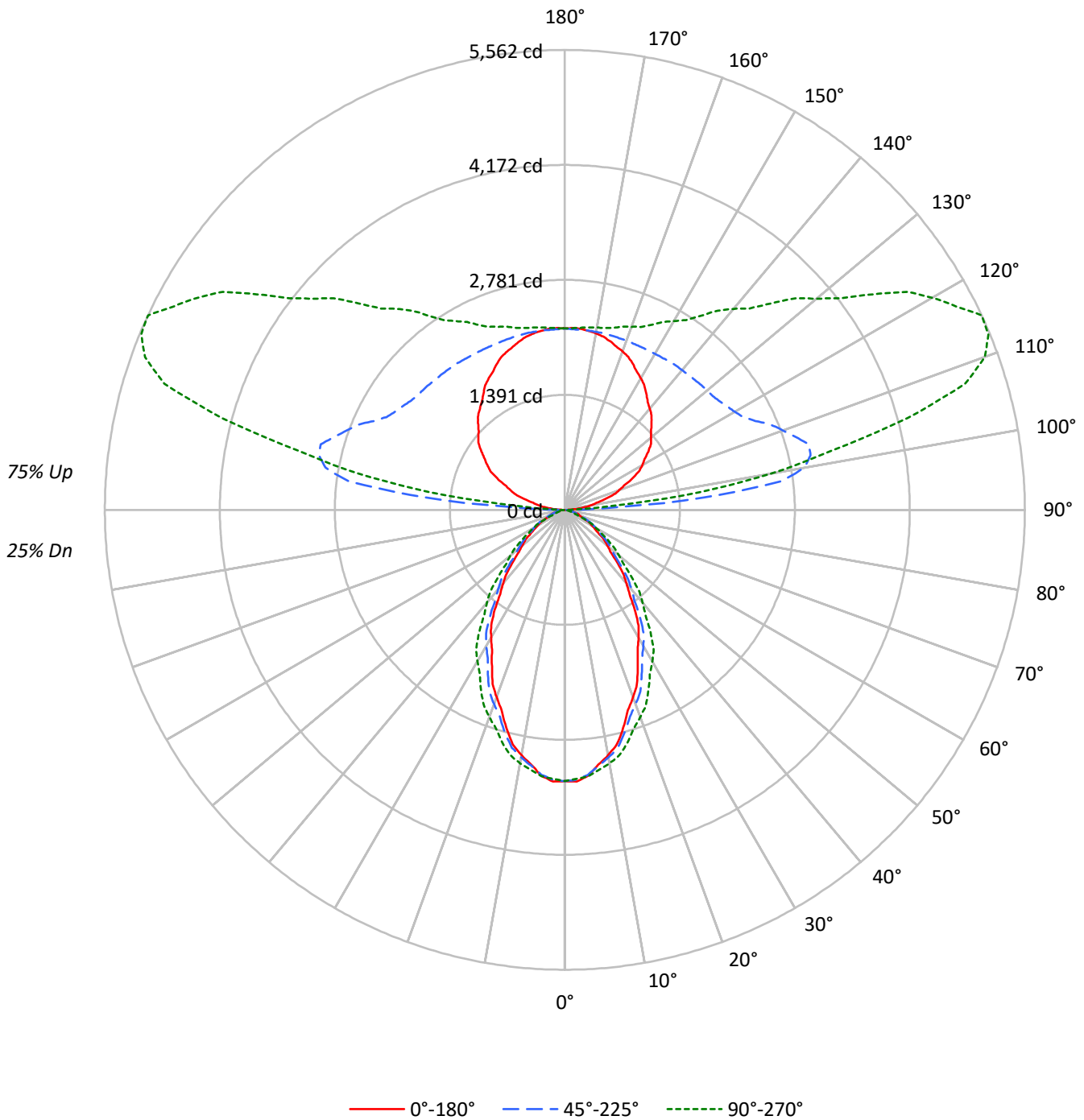
Lumens per Lamp: N/A
Luminaire Lumens: 18942.3 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 146.4
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	50	30	10	0	
RCR																						
0	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33	25				
1	93	89	85	82	83	79	76	74	62	60	58	45	44	43	30	30	29	22				
2	85	78	73	68	76	70	65	62	55	52	49	41	39	37	27	26	26	20				
3	78	69	63	57	69	62	57	52	49	45	42	36	34	32	25	24	22	17				
4	71	62	54	49	64	55	49	45	44	39	36	33	30	28	23	21	20	16				
5	66	55	48	42	59	50	43	38	39	35	31	30	27	24	21	19	18	14				
6	61	49	42	37	54	45	38	34	36	31	28	27	24	22	19	17	16	13				
7	56	45	37	32	50	40	34	30	32	28	24	25	22	19	17	16	14	11				
8	52	41	33	29	46	37	31	26	30	25	22	23	20	17	16	14	13	10				
9	48	37	30	25	43	34	28	23	27	23	20	21	18	16	15	13	12	10				
10	45	34	27	23	41	31	25	21	25	21	18	19	16	14	14	12	11	9				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10090	10090	10090
5°	9964	9928	9986
10°	9414	9499	9720
15°	8690	8892	9291
20°	7892	8188	8730
25°	7078	7464	8133
30°	6329	6743	7515
35°	5534	5935	6783
40°	4658	5028	5872
45°	3844	4176	4903
50°	3209	3499	4085
55°	2725	3003	3373
60°	2329	2603	2692
65°	1854	2190	1739
70°	1644	1708	1061
75°	1522	1385	650
80°	1403	1275	561
85°	1270	1168	459



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.9	1.6
10°-20°	782.7	4.1
20°-30°	1013.9	5.4
30°-40°	992.8	5.2
40°-50°	759.9	4.0
50°-60°	506.4	2.7
60°-70°	276.3	1.5
70°-80°	115.1	0.6
80°-90°	37.8	0.2
90°-100°	1025.9	5.4
100°-110°	2763.4	14.6
110°-120°	2900.1	15.3
120°-130°	2353.3	12.4
130°-140°	1845.6	9.7
140°-150°	1417.0	7.5
150°-160°	1018.8	5.4
160°-170°	622.4	3.3
170°-180°	209.9	1.1
0°-30°	2097.5	11.1
0°-40°	3090.3	16.3
0°-60°	4356.6	23.0
0°-90°	4785.9	25.3
90°-120°	6689.3	35.3
90°-150°	12305.3	65.0
90°-180°	14156.0	74.7
0°-180°	18942.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3281	3281	3281	3281	3281	
5°	3228	3195	3216	3224	3235	300
15°	2729	2720	2793	2869	2918	762
25°	2086	2092	2200	2296	2397	959
35°	1474	1481	1581	1687	1807	916
45°	884	901	960	1033	1127	689
55°	508	529	560	581	629	461
65°	255	276	301	263	239	265
75°	128	128	117	80	55	137
85°	36	36	33	21	13	39
90°	6	16	34	36	36	13
95°	156	558	1682	860	595	163
105°	511	795	3056	4572	4291	537
115°	902	1104	2545	4917	5562	888
125°	1232	1415	2285	3862	4545	1100
135°	1483	1655	2221	3116	3528	1145
145°	1715	1849	2193	2664	2861	1076
155°	1947	2018	2173	2390	2467	896
165°	2112	2136	2182	2269	2280	596
175°	2196	2193	2184	2215	2210	209
180°	2193	2193	2193	2193	2193	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3280.8	3280.8	3280.8	3280.8	3280.8
2.5°	3288.9	3259.6	3267.0	3266.8	3257.8
5°	3227.5	3195.2	3216.0	3223.5	3234.7
7.5°	3107.8	3083.3	3121.3	3149.5	3172.3
10°	3014.5	2993.4	3041.8	3082.8	3112.4
12.5°	2906.2	2888.5	2948.5	3003.5	3042.1
15°	2729.4	2719.6	2792.8	2868.8	2918.0
17.5°	2540.3	2535.5	2619.5	2708.1	2771.2
20°	2411.3	2409.9	2502.0	2594.3	2667.5
22.5°	2281.2	2284.3	2381.1	2477.1	2560.4
25°	2085.9	2091.6	2199.7	2295.6	2396.9
27.5°	1905.4	1908.0	2019.7	2120.9	2229.0
30°	1782.2	1789.2	1898.8	2003.6	2116.2
32.5°	1659.0	1667.1	1774.4	1882.7	1997.6
35°	1474.1	1481.2	1580.7	1687.0	1806.7
37.5°	1283.5	1293.1	1381.4	1482.0	1599.7
40°	1160.3	1174.4	1252.4	1347.2	1462.6
42.5°	1041.7	1059.1	1131.5	1221.4	1325.6
45°	883.9	900.8	960.2	1032.9	1127.2
47.5°	748.0	767.4	813.1	875.7	956.2
50°	670.8	689.1	731.3	777.7	853.7
52.5°	602.9	621.2	658.8	694.5	759.2
55°	508.2	529.3	560.0	581.2	629.1
57.5°	430.4	450.7	475.1	484.6	513.6
60°	378.6	401.1	423.2	422.1	437.6
62.5°	331.4	350.5	372.6	357.3	358.2
65°	254.8	275.9	300.9	262.9	239.0
67.5°	205.9	210.4	236.1	183.3	154.9
70°	182.8	182.8	190.0	142.0	118.0
72.5°	160.9	160.9	154.3	115.5	90.4
75°	128.1	128.1	116.6	80.0	54.7
77.5°	98.8	97.6	89.3	59.7	39.7
80°	79.2	79.2	72.0	47.2	31.7
82.5°	61.9	61.9	55.9	36.8	23.6
85°	36.0	36.0	33.1	21.4	13.0
87.5°	13.8	16.0	18.2	14.1	13.0
90°	5.6	16.5	33.5	36.3	36.3
92.5°	68.2	240.8	476.0	229.2	159.2
95°	156.4	558.0	1681.7	860.0	595.0
97.5°	249.7	638.7	2637.6	2203.5	1661.6
100°	321.3	670.9	2941.6	3077.7	2553.3
102.5°	390.5	716.1	3042.1	3732.4	3301.9
105°	511.2	795.3	3056.1	4572.2	4290.8
107.5°	625.2	878.7	2925.9	5003.7	5076.4
110°	701.2	941.5	2807.5	5137.7	5402.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	781.6	1004.5	2693.5	5108.0	5543.4
115°	902.3	1104.4	2544.9	4917.3	5561.9
117.5°	1012.4	1201.9	2429.8	4612.7	5330.6
120°	1083.9	1266.9	2371.7	4394.2	5131.7
122.5°	1146.5	1327.3	2329.2	4170.7	4906.0
125°	1231.9	1414.9	2285.1	3862.2	4545.0
127.5°	1314.1	1494.3	2257.2	3590.1	4199.8
130°	1363.2	1543.5	2246.0	3434.2	3969.6
132.5°	1412.4	1590.5	2234.8	3296.9	3788.6
135°	1483.4	1655.4	2220.8	3115.8	3528.2
137.5°	1551.0	1715.9	2213.6	2962.1	3300.8
140°	1597.9	1756.3	2206.9	2867.5	3173.4
142.5°	1647.1	1794.5	2202.4	2779.3	3037.1
145°	1715.2	1849.1	2192.9	2663.9	2860.6
147.5°	1789.0	1905.3	2183.4	2566.8	2721.4
150°	1838.1	1939.2	2178.9	2505.9	2634.3
152.5°	1882.8	1970.8	2176.7	2456.2	2560.5
155°	1947.1	2018.1	2173.3	2390.2	2466.7
157.5°	2003.5	2058.7	2173.9	2343.8	2395.2
160°	2039.3	2085.7	2176.1	2316.7	2354.9
162.5°	2070.5	2108.2	2178.4	2294.1	2321.4
165°	2111.9	2136.5	2181.7	2268.6	2279.5
167.5°	2145.4	2159.6	2184.5	2248.9	2253.2
170°	2167.8	2173.2	2184.5	2237.6	2237.6
172.5°	2181.2	2182.3	2186.8	2226.4	2226.4
175°	2195.7	2193.0	2184.5	2215.1	2209.7
177.5°	2201.8	2197.5	2186.2	2204.0	2199.6
180°	2192.9	2192.9	2192.9	2192.9	2192.9

(END OF REPORT)