

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: P520315

Luminaire Tested: **SQ4-F-125U-100D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520315
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-125U-100D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

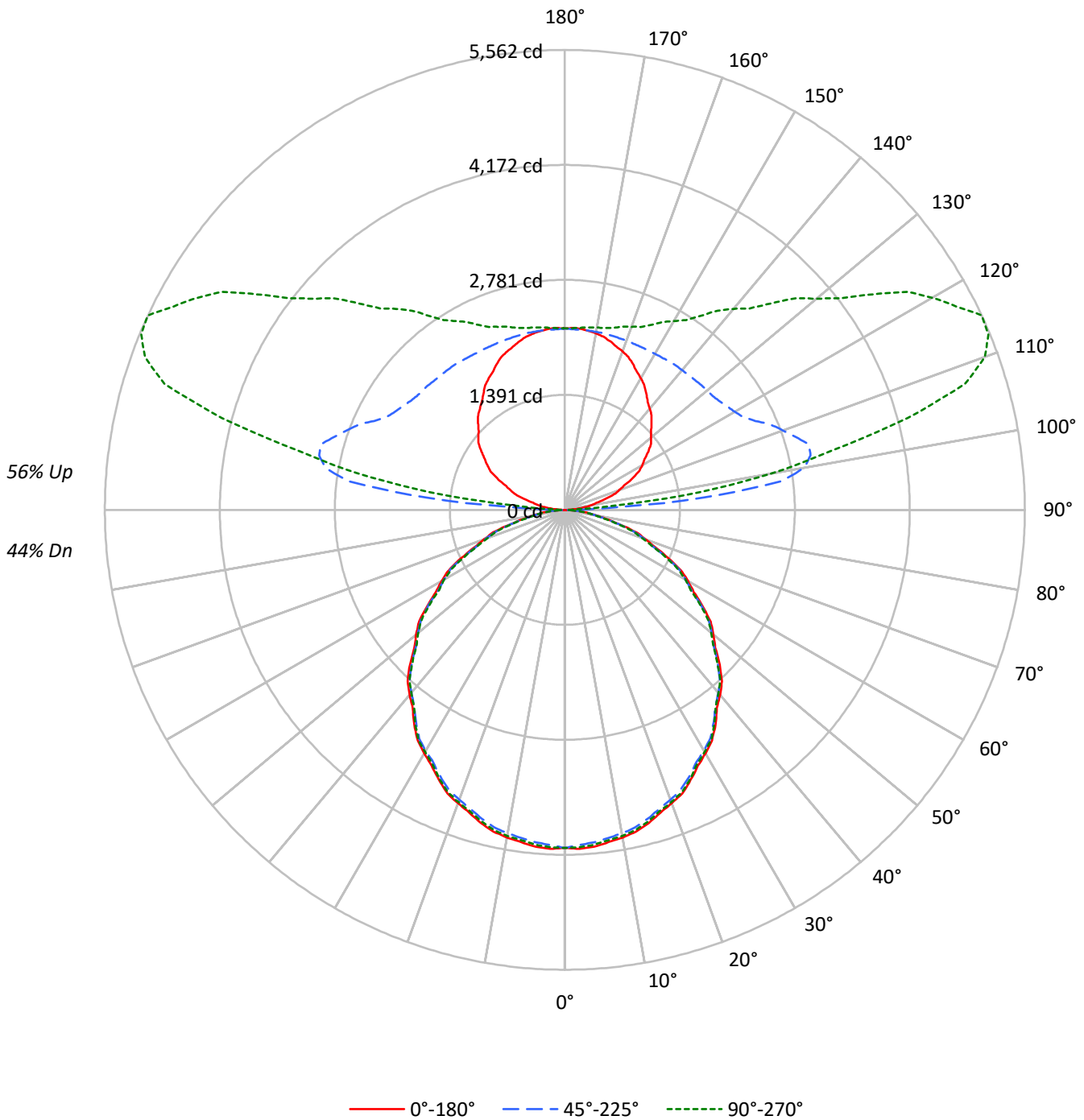
Lumens per Lamp: N/A
Luminaire Lumens: 25311.1 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 205.2
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	44	43	37				
2	88	80	74	69	80	74	69	64	61	58	54	50	47	45	39	38	36	31				
3	80	71	63	57	73	65	59	53	54	49	45	44	41	38	35	32	30	26				
4	73	62	54	48	67	57	50	45	48	43	39	39	35	32	31	28	26	22				
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19				
6	62	50	42	36	56	46	39	33	38	33	29	32	28	24	25	22	20	17				
7	57	45	37	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15				
8	53	41	33	28	48	38	31	26	32	26	22	26	22	19	21	18	16	13				
9	49	37	30	24	45	34	28	23	29	24	20	24	20	17	19	16	14	12				
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13	11				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12572	12572	12572
5°	12629	12455	12550
10°	12564	12407	12503
15°	12488	12319	12417
20°	12359	12212	12314
25°	12224	12082	12177
30°	12076	11946	12006
35°	11924	11776	11840
40°	11726	11591	11602
45°	11519	11361	11324
50°	11222	11088	11061
55°	10891	10771	10696
60°	10562	10371	10337
65°	10045	9820	9739
70°	9334	9107	8931
75°	8334	8068	7901
80°	6858	6608	6310
85°	4058	4453	4555



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	385.8	1.5
10°-20°	1098.7	4.3
20°-30°	1650.0	6.5
30°-40°	1969.1	7.8
40°-50°	2018.3	8.0
50°-60°	1797.3	7.1
60°-70°	1339.8	5.3
70°-80°	725.4	2.9
80°-90°	170.2	0.7
90°-100°	1025.8	4.1
100°-110°	2763.4	10.9
110°-120°	2900.1	11.5
120°-130°	2353.3	9.3
130°-140°	1845.6	7.3
140°-150°	1417.0	5.6
150°-160°	1018.8	4.0
160°-170°	622.4	2.5
170°-180°	209.9	0.8
0°-30°	3134.5	12.4
0°-40°	5103.6	20.2
0°-60°	8919.2	35.2
0°-90°	11154.6	44.1
90°-120°	6689.3	26.4
90°-150°	12305.3	48.6
90°-180°	14156.0	55.9
0°-180°	25311.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4088	4088	4088	4088	4088	
5°	4091	4082	4035	4071	4065	388
15°	3922	3909	3869	3900	3900	1105
25°	3602	3594	3560	3580	3588	1660
35°	3176	3162	3137	3143	3154	1983
45°	2649	2635	2612	2598	2604	2038
55°	2031	2034	2009	1989	1995	1818
65°	1380	1375	1350	1336	1338	1365
75°	701	693	679	665	665	747
85°	115	126	126	129	129	161
90°	6	16	34	36	36	14
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°	4087.9	4087.9	4087.9	4087.9	4087.9
2.5°	4103.6	4094.9	4058.7	4087.8	4083.4
5°	4090.7	4082.5	4034.6	4070.9	4065.4
7.5°	4052.6	4044.3	4002.0	4035.6	4030.7
10°	4023.3	4015.1	3972.9	4006.5	4003.7
12.5°	3985.2	3977.0	3934.7	3968.3	3965.6
15°	3922.4	3908.6	3869.1	3899.9	3899.9
17.5°	3839.3	3828.8	3792.2	3818.0	3818.5
20°	3776.4	3768.2	3731.5	3759.7	3762.5
22.5°	3713.6	3705.4	3664.3	3690.1	3695.1
25°	3602.5	3594.3	3560.4	3580.2	3588.5
27.5°	3488.0	3476.0	3442.6	3460.2	3466.2
30°	3400.5	3395.1	3364.0	3372.7	3380.9
32.5°	3308.5	3303.0	3276.5	3280.7	3295.6
35°	3176.1	3162.3	3136.7	3142.6	3153.6
37.5°	3019.5	3012.9	2988.0	2985.0	2995.4
40°	2920.7	2909.7	2887.1	2881.6	2889.8
42.5°	2812.9	2802.0	2774.8	2769.4	2779.9
45°	2648.6	2634.9	2612.1	2598.2	2603.7
47.5°	2464.5	2464.5	2441.0	2424.8	2433.1
50°	2345.6	2345.6	2317.5	2303.7	2311.9
52.5°	2222.1	2224.3	2194.1	2186.6	2184.0
55°	2031.3	2034.1	2008.9	1989.4	1994.8
57.5°	1847.3	1841.2	1811.9	1799.0	1801.8
60°	1717.1	1708.9	1686.2	1666.9	1680.6
62.5°	1584.6	1580.9	1558.3	1536.4	1534.7
65°	1380.4	1374.9	1349.5	1335.5	1338.3
67.5°	1177.3	1170.7	1147.6	1127.5	1134.6
70°	1038.1	1038.1	1012.8	1001.4	993.2
72.5°	910.2	899.2	880.4	864.6	858.5
75°	701.4	693.2	679.0	664.9	664.9
77.5°	510.7	503.5	494.3	484.8	482.0
80°	387.2	384.4	373.1	370.1	356.3
82.5°	272.7	272.2	265.4	258.1	257.5
85°	115.0	126.0	126.2	129.1	129.1
87.5°	21.3	36.7	38.1	34.2	34.2
90°	5.6	16.5	33.5	36.3	36.3
92.5°	68.2	240.8	476.0	229.1	159.3
95°	156.4	558.0	1681.7	859.9	595.0
97.5°	249.7	638.7	2637.6	2203.5	1661.5
100°	321.3	670.9	2941.6	3077.7	2553.2
102.5°	390.5	716.2	3042.1	3732.4	3301.9
105°	511.2	795.3	3056.1	4572.1	4290.8
107.5°	625.2	878.7	2925.9	5003.7	5076.4
110°	701.2	941.5	2807.5	5137.7	5402.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	781.6	1004.5	2693.5	5108.0	5543.5
115°	902.3	1104.4	2544.8	4917.3	5561.8
117.5°	1012.4	1201.9	2429.8	4612.7	5330.5
120°	1083.9	1266.8	2371.7	4394.1	5131.7
122.5°	1146.5	1327.2	2329.2	4170.7	4906.0
125°	1231.9	1415.0	2285.1	3862.2	4545.0
127.5°	1314.1	1494.4	2257.1	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°	1483.3	1655.4	2220.8	3115.8	3528.2
137.5°	1550.9	1715.9	2213.6	2962.1	3300.8
140°	1597.9	1756.4	2206.9	2867.5	3173.4
142.5°	1647.0	1794.5	2202.4	2779.3	3037.1
145°	1715.2	1849.0	2192.9	2663.9	2860.6
147.5°	1788.9	1905.3	2183.4	2566.8	2721.5
150°	1838.2	1939.2	2179.0	2505.9	2634.2
152.5°	1882.9	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°	2039.2	2085.7	2176.1	2316.7	2354.9
162.5°	2070.5	2108.2	2178.4	2294.1	2321.4
165°	2111.9	2136.4	2181.7	2268.6	2279.5
167.5°	2145.4	2159.6	2184.5	2248.8	2253.3
170°	2167.7	2173.2	2184.5	2237.6	2237.6
172.5°	2181.1	2182.2	2186.8	2226.4	2226.4
175°	2195.7	2193.0	2184.5	2215.1	2209.7
177.5°	2201.9	2197.5	2186.2	2203.9	2199.6
180°	2192.9	2192.9	2192.9	2192.9	2192.9

(END OF REPORT)