

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: P520038

Luminaire Tested: **SQ4-F-075U-100D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520038
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

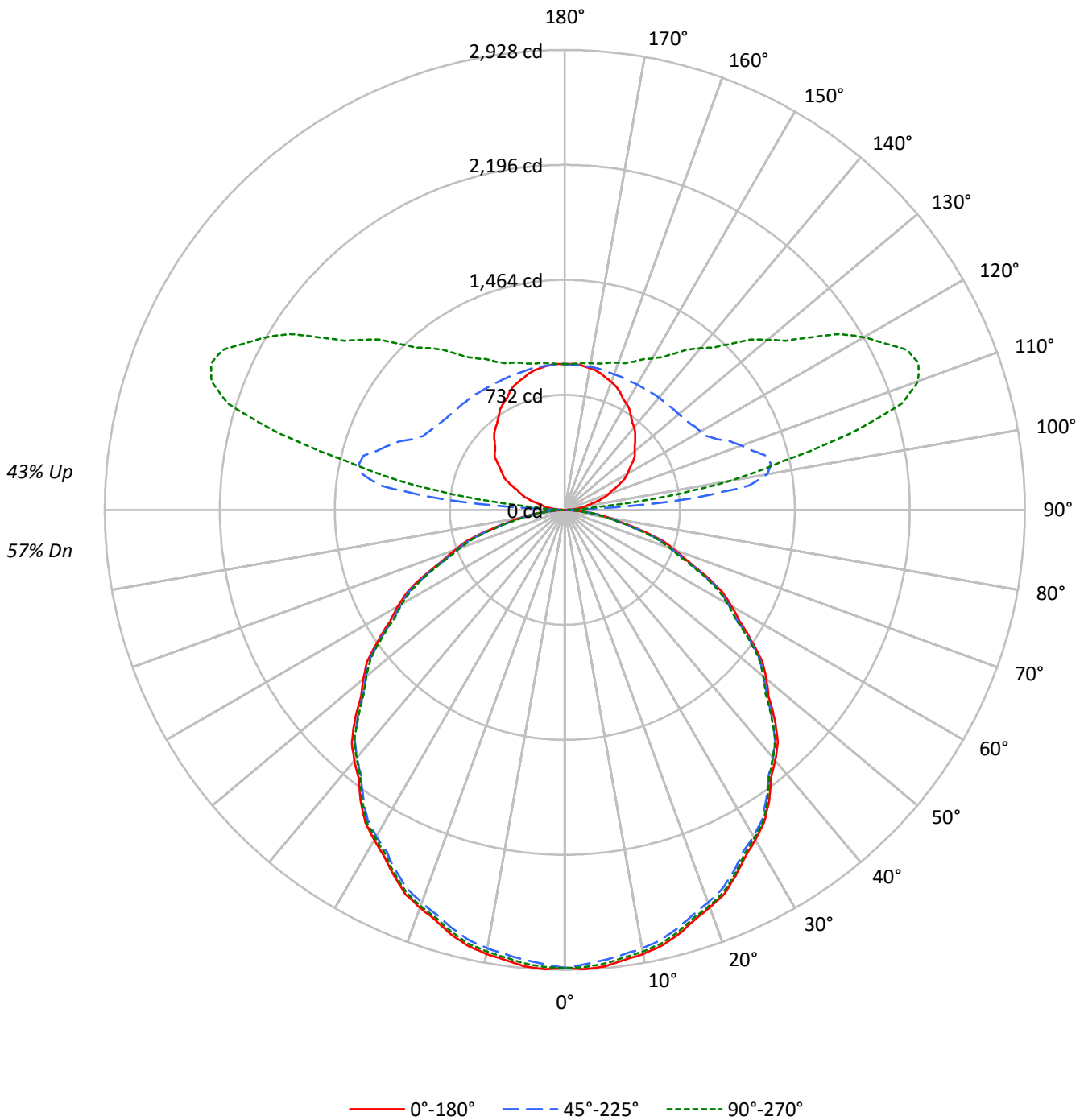
Lumens per Lamp: N/A
Luminaire Lumens: 14004.2 lumens
Efficiency: N/A
Efficacy: 131.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 106.3
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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CATALOG NUMBER: SQ4-F-075U-100D-840-1D-UNV-STD-W-8

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57				57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48				48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40				40
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34				34
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29				29
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25				25
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22				22
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19				19
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17				17
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15				15
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14				14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13453	13453	13453
5°	13514	13328	13430
10°	13445	13276	13379
15°	13364	13182	13287
20°	13226	13069	13177
25°	13081	12929	13030
30°	12922	12784	12848
35°	12760	12602	12670
40°	12548	12403	12415
45°	12327	12157	12118
50°	12009	11865	11837
55°	11655	11526	11446
60°	11302	11099	11062
65°	10750	10509	10422
70°	9988	9746	9556
75°	8919	8634	8456
80°	7337	7072	6753
85°	4340	4769	4870



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.2	2.0
10°-20°	783.8	5.6
20°-30°	1177.1	8.4
30°-40°	1404.7	10.0
40°-50°	1439.9	10.3
50°-60°	1282.2	9.2
60°-70°	955.8	6.8
70°-80°	517.5	3.7
80°-90°	120.1	0.9
90°-100°	437.8	3.1
100°-110°	1204.7	8.6
110°-120°	1243.4	8.9
120°-130°	996.2	7.1
130°-140°	782.5	5.6
140°-150°	599.6	4.3
150°-160°	431.1	3.1
160°-170°	263.6	1.9
170°-180°	88.9	0.6
0°-30°	2236.2	16.0
0°-40°	3640.9	26.0
0°-60°	6363.0	45.4
0°-90°	7956.4	56.8
90°-120°	2885.9	20.6
90°-150°	5264.2	37.6
90°-180°	6048.0	43.2
0°-180°	14004.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2916	2916	2916	2916	2916	
5°	2918	2912	2878	2904	2900	277
15°	2798	2788	2760	2782	2782	788
25°	2570	2564	2540	2554	2560	1184
35°	2266	2256	2238	2242	2250	1414
45°	1890	1880	1863	1854	1858	1454
55°	1449	1451	1433	1419	1423	1297
65°	985	981	963	953	955	974
75°	500	494	484	474	474	533
85°	82	90	90	92	92	115
90°	2	8	14	18	18	6
95°	65	239	774	331	211	69
105°	215	331	1327	2022	1886	227
115°	381	464	1065	2120	2406	376
125°	525	599	966	1634	1914	469
135°	634	704	938	1321	1495	489
145°	733	783	924	1126	1213	460
155°	830	857	918	1012	1041	381
165°	897	908	922	960	966	253
175°	928	930	924	936	934	88
180°	928	928	928	928	928	

TEST NUMBER: P520038

CATALOG NUMBER: SQ4-F-075U-100D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2916.3	2916.3	2916.3	2916.3	2916.3
2.5°	2927.5	2921.2	2895.5	2916.3	2913.1
5°	2918.3	2912.4	2878.2	2904.2	2900.3
7.5°	2891.1	2885.2	2855.1	2879.0	2875.5
10°	2870.3	2864.4	2834.2	2858.2	2856.2
12.5°	2843.1	2837.2	2807.0	2831.0	2829.0
15°	2798.2	2788.5	2760.2	2782.2	2782.2
17.5°	2738.9	2731.5	2705.3	2723.8	2724.2
20°	2694.1	2688.3	2662.1	2682.2	2684.1
22.5°	2649.3	2643.4	2614.1	2632.6	2636.1
25°	2570.0	2564.1	2540.0	2554.1	2560.0
27.5°	2488.4	2479.7	2456.0	2468.4	2472.8
30°	2425.9	2422.0	2399.9	2406.0	2412.0
32.5°	2360.2	2356.4	2337.4	2340.5	2351.0
35°	2265.8	2256.0	2237.8	2241.9	2249.8
37.5°	2154.1	2149.4	2131.7	2129.5	2136.9
40°	2083.7	2075.9	2059.6	2055.8	2061.6
42.5°	2006.8	1999.0	1979.6	1975.7	1983.1
45°	1889.5	1879.7	1863.4	1853.5	1857.5
47.5°	1758.2	1758.2	1741.4	1729.9	1735.8
50°	1673.3	1673.3	1653.3	1643.5	1649.3
52.5°	1585.2	1586.8	1565.2	1560.0	1558.1
55°	1449.2	1451.1	1433.1	1419.3	1423.1
57.5°	1317.9	1313.5	1292.6	1283.4	1285.4
60°	1225.0	1219.1	1203.0	1189.2	1199.0
62.5°	1130.5	1127.8	1111.7	1096.0	1094.9
65°	984.8	980.9	962.8	952.8	954.8
67.5°	839.8	835.2	818.6	804.3	809.4
70°	740.5	740.5	722.6	714.5	708.5
72.5°	649.3	641.5	628.1	616.8	612.5
75°	500.4	494.5	484.4	474.4	474.4
77.5°	364.3	359.2	352.6	345.8	343.9
80°	276.2	274.3	266.2	264.0	254.2
82.5°	194.6	194.2	189.3	184.1	183.7
85°	82.0	89.9	90.1	92.0	92.0
87.5°	14.8	25.4	25.3	22.8	22.8
90°	2.0	7.7	13.8	17.8	17.8
92.5°	27.3	116.5	201.9	77.5	63.6
95°	65.1	239.0	774.3	331.1	211.4
97.5°	106.2	265.0	1181.6	910.4	642.3
100°	136.3	281.1	1309.6	1321.8	1078.5
102.5°	164.7	300.3	1342.8	1639.9	1416.6
105°	215.3	331.2	1327.3	2021.5	1886.3
107.5°	263.5	369.3	1251.9	2208.4	2248.6
110°	298.2	394.9	1195.0	2254.9	2393.9

TEST NUMBER: P520038

CATALOG NUMBER: SQ4-F-075U-100D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	329.8	423.3	1138.1	2224.9	2436.6
115°	381.2	464.2	1064.7	2120.0	2405.8
117.5°	430.2	506.7	1018.0	1972.7	2295.9
120°	460.2	533.7	997.5	1862.3	2196.5
122.5°	487.1	560.5	983.3	1765.5	2082.7
125°	525.4	598.8	965.9	1633.9	1914.0
127.5°	561.7	631.7	954.4	1524.1	1769.8
130°	580.7	652.2	948.1	1458.9	1682.9
132.5°	602.8	674.3	943.4	1401.4	1603.8
135°	634.0	703.6	938.2	1321.4	1495.3
137.5°	663.3	727.8	933.9	1256.7	1400.0
140°	685.4	745.2	932.3	1213.7	1343.2
142.5°	704.3	759.6	929.1	1175.4	1286.2
145°	732.8	783.0	924.4	1125.9	1212.8
147.5°	763.2	806.5	922.1	1082.0	1151.5
150°	782.2	820.8	920.4	1057.9	1112.0
152.5°	799.6	835.1	918.8	1037.2	1082.0
155°	829.5	856.6	918.5	1012.0	1040.9
157.5°	851.4	873.4	918.5	991.2	1011.3
160°	867.1	884.5	918.5	980.1	995.5
162.5°	879.7	894.1	920.0	970.5	982.9
165°	896.7	908.4	922.5	960.1	965.9
167.5°	908.6	917.5	924.4	951.3	952.9
170°	916.5	922.3	924.4	948.1	948.1
172.5°	922.9	925.5	924.4	943.3	941.7
175°	928.3	930.3	924.4	936.2	934.3
177.5°	929.9	929.9	923.6	933.0	929.9
180°	928.3	928.3	928.3	928.3	928.3

(END OF REPORT)