

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: P520253

Luminaire Tested: **SQ4-F-100U-125D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520253
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

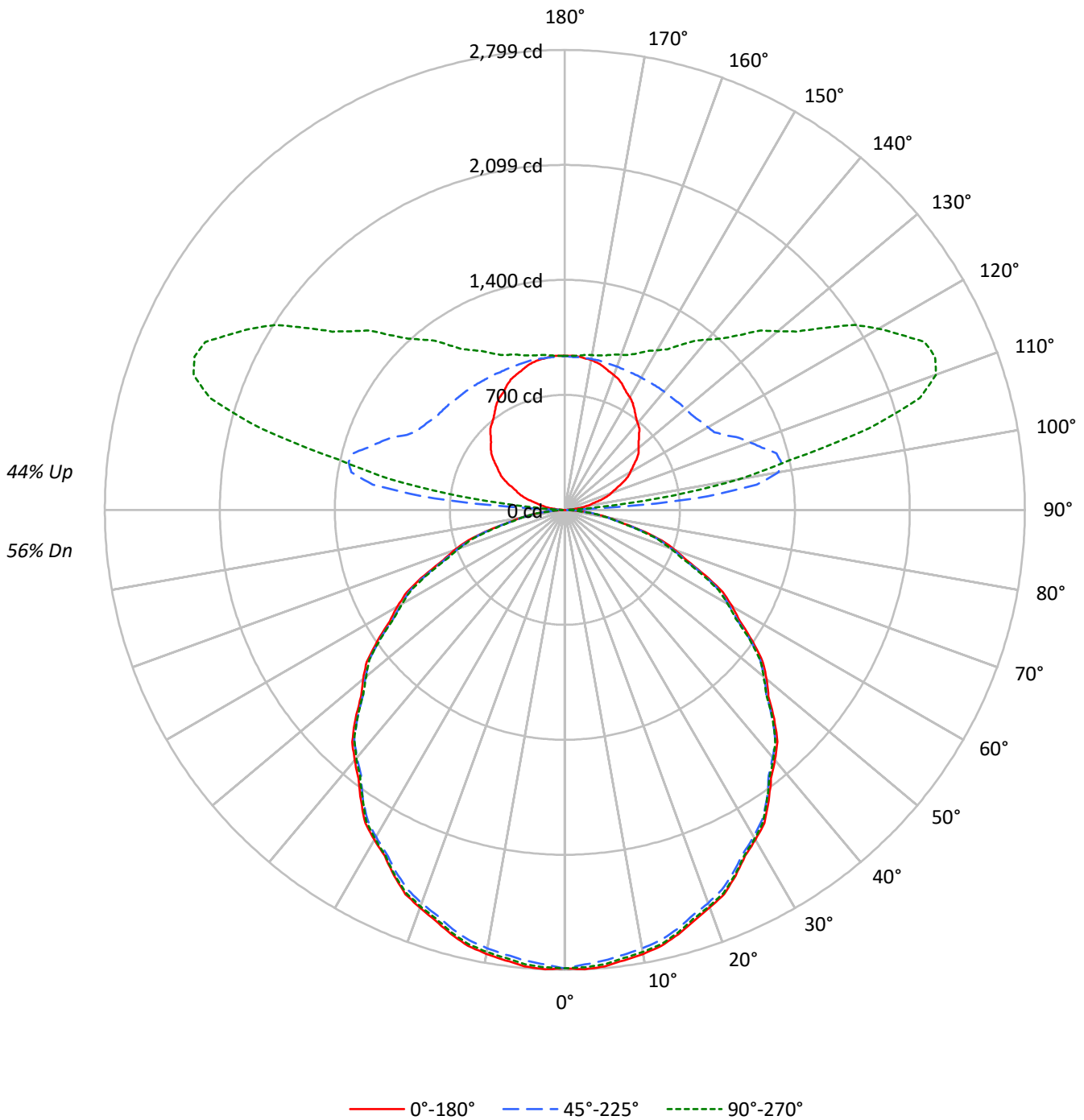
Lumens per Lamp: N/A
Luminaire Lumens: 13699.4 lumens
Efficiency: N/A
Efficacy: 131.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 104
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR	0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56	
	1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47	
	2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39	
	3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33	
	4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28	
	5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24	
	6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21	
	7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19	
	8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17	
	9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15	
	10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17161	17161	17161
5°	17218	17000	17142
10°	17139	16927	17062
15°	17024	16819	16955
20°	16866	16675	16805
25°	16674	16497	16633
30°	16468	16327	16413
35°	16235	16096	16108
40°	15966	15794	15843
45°	15668	15495	15521
50°	15326	15150	15106
55°	14936	14721	14689
60°	14451	14130	14053
65°	13701	13410	13230
70°	12759	12427	12261
75°	11350	11093	10765
80°	9248	8976	8923
85°	5526	6288	6288



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.3	1.9
10°-20°	749.8	5.5
20°-30°	1126.4	8.2
30°-40°	1344.1	9.8
40°-50°	1377.7	10.1
50°-60°	1228.0	9.0
60°-70°	914.1	6.7
70°-80°	495.3	3.6
80°-90°	115.6	0.8
90°-100°	438.6	3.2
100°-110°	1210.8	8.8
110°-120°	1248.7	9.1
120°-130°	1003.5	7.3
130°-140°	788.6	5.8
140°-150°	604.8	4.4
150°-160°	434.7	3.2
160°-170°	265.8	1.9
170°-180°	89.6	0.7
0°-30°	2139.5	15.6
0°-40°	3483.5	25.4
0°-60°	6089.2	44.4
0°-90°	7614.3	55.6
90°-120°	2898.1	21.2
90°-150°	5295.0	38.7
90°-180°	6085.0	44.4
0°-180°	13699.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2790	2790	2790	2790	2790	
5°	2789	2784	2753	2778	2776	265
15°	2674	2668	2641	2664	2663	754
25°	2457	2452	2431	2445	2451	1131
35°	2162	2161	2144	2144	2145	1352
45°	1801	1797	1781	1778	1784	1388
55°	1393	1388	1373	1362	1370	1244
65°	941	935	921	915	909	932
75°	478	478	467	458	453	507
85°	78	89	89	91	89	108
90°	3	6	12	14	15	6
95°	64	237	796	327	213	69
105°	216	333	1332	2034	1915	230
115°	387	467	1073	2124	2416	380
125°	530	604	972	1646	1932	472
135°	638	707	946	1333	1503	494
145°	740	792	934	1135	1221	463
155°	835	862	926	1018	1050	385
165°	904	915	931	967	974	255
175°	936	938	932	946	942	89
180°	936	936	936	936	936	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2790.1	2790.1	2790.1	2790.1	2790.1
2.5°	2798.7	2794.0	2769.2	2790.0	2786.5
5°	2788.6	2784.1	2753.3	2777.8	2776.3
7.5°	2765.0	2759.2	2731.1	2754.1	2751.4
10°	2744.1	2739.5	2710.2	2733.3	2731.8
12.5°	2718.3	2713.8	2684.5	2707.5	2707.2
15°	2673.5	2667.5	2641.2	2664.2	2662.7
17.5°	2619.6	2612.7	2586.8	2605.0	2608.0
20°	2576.7	2572.2	2547.5	2564.5	2567.4
22.5°	2532.5	2526.8	2500.9	2520.2	2523.3
25°	2456.9	2452.4	2430.8	2444.8	2450.8
27.5°	2374.0	2374.0	2354.0	2363.9	2367.6
30°	2318.7	2318.7	2298.8	2305.0	2311.0
32.5°	2259.7	2255.0	2236.1	2241.2	2247.2
35°	2162.1	2160.6	2143.7	2143.7	2145.2
37.5°	2061.1	2056.8	2038.3	2039.7	2046.9
40°	1988.5	1985.6	1967.0	1967.2	1973.2
42.5°	1914.8	1911.9	1895.8	1893.5	1895.8
45°	1801.2	1796.8	1781.3	1778.3	1784.3
47.5°	1680.2	1681.4	1663.0	1658.8	1662.1
50°	1601.6	1601.6	1583.2	1574.1	1578.6
52.5°	1519.3	1516.9	1498.4	1488.2	1498.7
55°	1392.8	1388.2	1372.8	1362.3	1369.8
57.5°	1263.1	1256.3	1240.7	1229.2	1233.3
60°	1174.7	1164.2	1148.6	1139.5	1142.4
62.5°	1082.5	1076.9	1060.1	1046.2	1052.7
65°	941.4	935.3	921.4	915.1	909.0
67.5°	802.8	798.9	783.1	776.6	772.7
70°	709.5	702.0	691.0	683.3	681.8
72.5°	618.5	609.8	598.9	592.3	588.4
75°	477.6	477.6	466.8	457.5	453.0
77.5°	343.4	344.6	335.7	332.5	330.4
80°	261.1	261.1	253.4	250.3	251.9
82.5°	182.4	186.0	183.3	179.0	176.9
85°	78.3	88.8	89.1	90.6	89.1
87.5°	14.1	23.1	25.8	23.6	21.5
90°	3.0	5.9	12.0	13.6	14.9
92.5°	27.0	112.0	200.2	73.1	57.0
95°	64.4	237.3	795.7	327.0	212.8
97.5°	106.7	265.8	1178.7	907.5	657.2
100°	137.9	282.9	1320.1	1329.4	1080.4
102.5°	167.9	302.3	1347.7	1642.6	1406.5
105°	215.7	333.0	1332.1	2033.7	1915.0
107.5°	266.7	371.1	1257.8	2222.3	2265.7
110°	302.7	396.5	1200.2	2262.8	2403.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	335.0	425.3	1146.3	2230.8	2438.3
115°	386.6	467.2	1072.9	2124.0	2415.5
117.5°	431.6	511.8	1024.6	1973.5	2305.2
120°	461.6	540.6	1005.4	1871.7	2205.8
122.5°	490.3	565.9	989.9	1776.5	2093.1
125°	530.4	603.7	972.5	1645.8	1931.5
127.5°	564.6	637.8	962.3	1535.3	1781.7
130°	587.4	660.7	957.5	1467.6	1691.8
132.5°	609.0	678.7	952.7	1410.7	1613.8
135°	638.3	707.2	945.5	1333.0	1502.9
137.5°	671.3	734.0	941.9	1267.7	1412.7
140°	689.3	750.8	939.6	1224.2	1351.6
142.5°	709.7	766.5	937.1	1185.4	1297.7
145°	740.2	791.5	933.5	1134.8	1221.2
147.5°	769.6	814.4	930.3	1092.1	1159.2
150°	791.2	827.8	929.1	1066.7	1120.9
152.5°	808.0	842.2	927.9	1044.8	1089.7
155°	834.6	862.5	926.0	1018.2	1050.5
157.5°	859.2	880.6	926.3	998.8	1020.8
160°	873.6	892.7	927.6	987.8	1004.0
162.5°	885.5	902.3	928.8	978.1	990.8
165°	903.6	915.3	930.6	966.7	974.0
167.5°	917.4	924.4	932.0	959.6	962.0
170°	924.5	930.4	932.0	956.0	956.0
172.5°	930.6	934.0	932.0	951.2	950.0
175°	936.5	938.0	932.0	945.5	942.5
177.5°	939.0	937.8	931.7	940.1	937.8
180°	936.5	936.5	936.5	936.5	936.5

(END OF REPORT)