

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: P519965

Luminaire Tested: **SQ4-F-050U-125D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519965
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-125D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

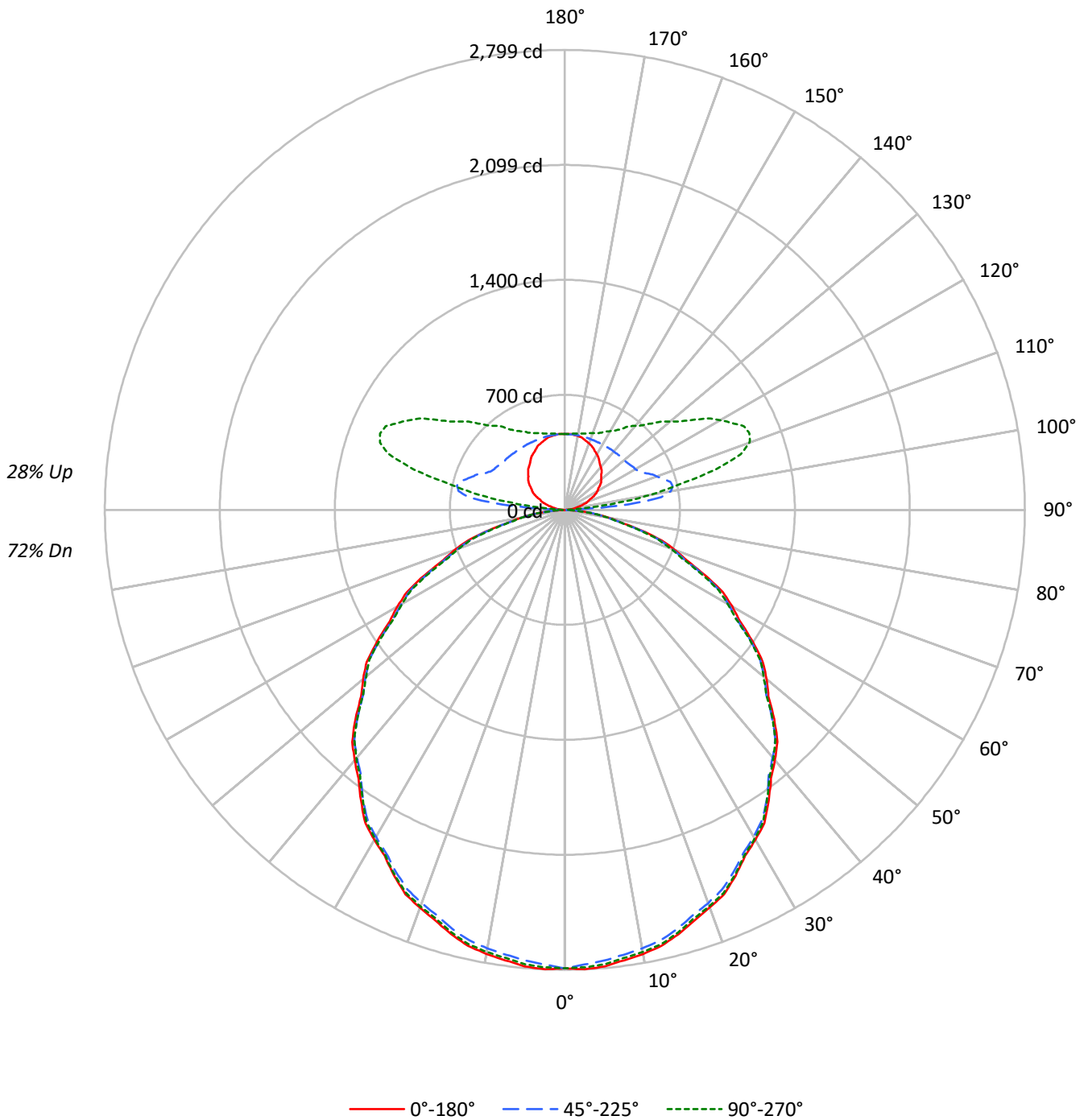
Lumens per Lamp: N/A
Luminaire Lumens: 10632.0 lumens
Efficiency: N/A
Efficacy: 126.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 83.8
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	0
RCR																		
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

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	2.5
10°-20°	749.8	7.1
20°-30°	1126.4	10.6
30°-40°	1344.1	12.6
40°-50°	1377.7	13.0
50°-60°	1228.0	11.5
60°-70°	914.1	8.6
70°-80°	495.3	4.7
80°-90°	115.5	1.1
90°-100°	221.9	2.1
100°-110°	602.8	5.7
110°-120°	619.7	5.8
120°-130°	495.5	4.7
130°-140°	389.3	3.7
140°-150°	298.5	2.8
150°-160°	214.7	2.0
160°-170°	131.3	1.2
170°-180°	44.2	0.4
0°-30°	2139.5	20.1
0°-40°	3483.5	32.8
0°-60°	6089.2	57.3
0°-90°	7614.1	71.6
90°-120°	1444.4	13.6
90°-150°	2627.7	24.7
90°-180°	3018.0	28.4
0°-180°	10632.0	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°	2	6	10	13	13	4
95°	33	121	386	168	113	35
105°	107	167	663	1009	950	114
115°	190	231	531	1056	1202	188
125°	262	298	480	809	954	233
135°	315	350	467	659	743	244
145°	364	390	461	560	602	229
155°	412	426	458	503	517	190
165°	446	452	459	479	480	126
175°	462	464	461	467	465	44
180°	462	462	462	462	462	

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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°	13.8	23.1	25.4	23.6	21.2
90°	1.5	5.9	10.4	13.3	13.3
92.5°	13.3	60.7	105.5	45.3	38.4
95°	32.7	121.4	386.4	168.2	112.9
97.5°	54.1	134.0	592.4	460.9	323.7
100°	68.4	142.5	655.4	664.4	536.6
102.5°	82.6	150.9	672.1	821.7	708.9
105°	107.0	166.6	662.9	1009.3	949.7
107.5°	132.3	184.9	624.5	1106.1	1122.7
110°	150.1	198.0	595.9	1125.2	1196.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.5	211.2	567.5	1109.3	1216.6
115°	190.3	230.9	530.6	1055.6	1202.4
117.5°	213.4	252.4	507.1	979.3	1144.7
120°	228.8	266.6	496.4	928.2	1092.4
122.5°	242.0	279.8	489.3	876.9	1035.3
125°	261.6	297.9	480.0	808.9	954.2
127.5°	279.1	315.2	475.0	757.3	881.9
130°	289.8	324.7	472.6	724.9	836.7
132.5°	300.5	335.4	470.2	697.2	796.3
135°	315.1	349.9	466.7	658.8	743.1
137.5°	330.8	362.5	464.9	625.0	695.8
140°	340.3	370.8	463.7	603.4	667.3
142.5°	349.8	378.1	462.5	586.5	640.0
145°	364.2	390.3	460.7	559.8	601.9
147.5°	380.2	402.5	459.2	538.7	571.9
150°	390.8	409.8	459.2	526.8	552.9
152.5°	399.2	415.8	458.1	516.0	537.5
155°	411.6	426.2	457.8	502.7	517.2
157.5°	423.9	435.2	457.8	493.7	504.7
160°	431.0	441.2	457.8	487.7	496.4
162.5°	438.1	446.0	458.9	482.9	489.3
165°	445.9	451.7	459.2	478.6	480.0
167.5°	453.8	456.8	460.7	473.6	474.7
170°	456.3	459.1	460.7	471.1	471.1
172.5°	458.7	460.4	460.7	468.8	468.8
175°	462.2	463.7	460.7	466.6	465.2
177.5°	463.4	463.4	459.8	464.5	462.2
180°	462.2	462.2	462.2	462.2	462.2

(END OF REPORT)