

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: P520445

Luminaire Tested: **SQ4-F-150U-125D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520445
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-125D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

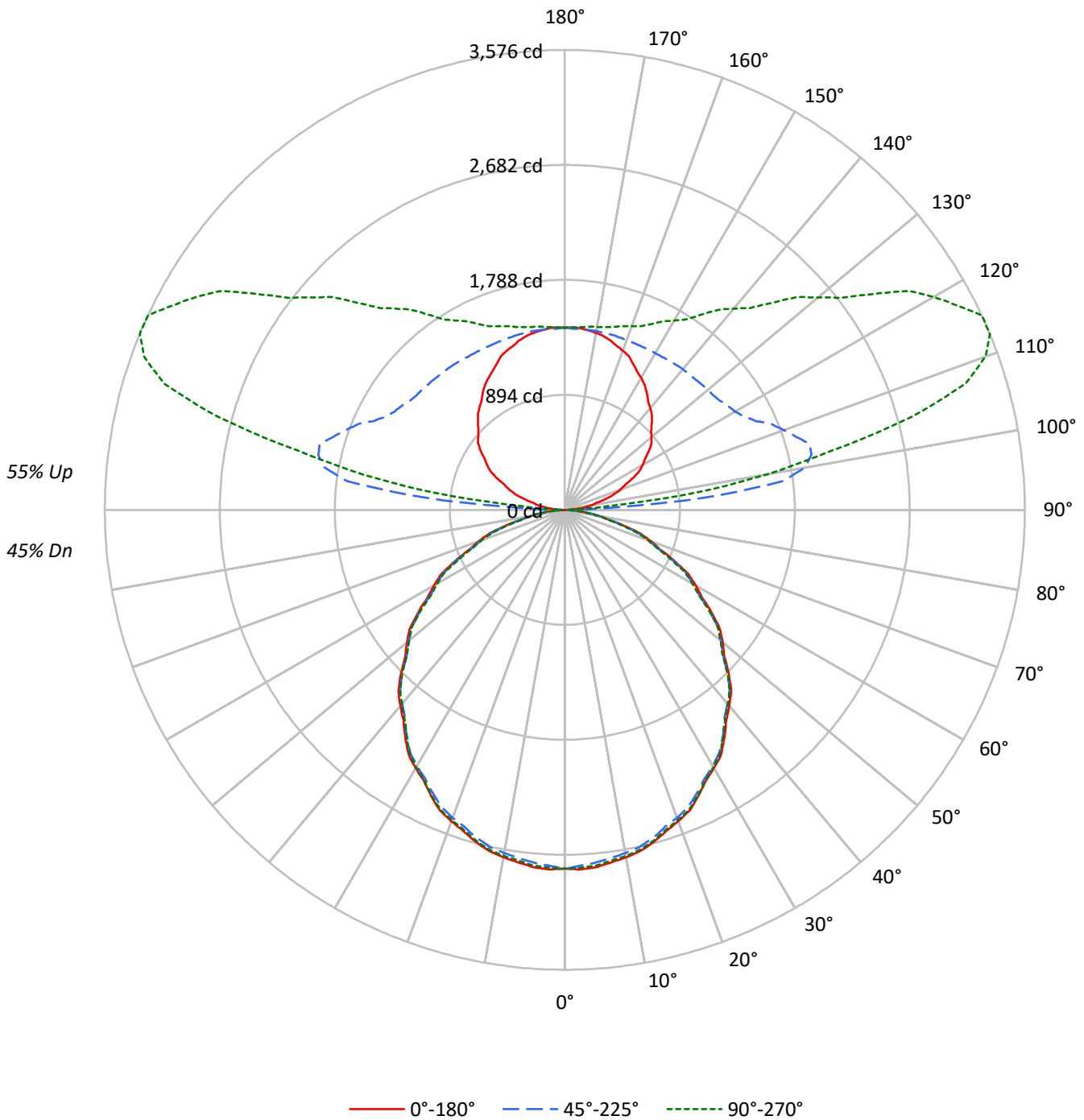
Lumens per Lamp: N/A
Luminaire Lumens: 16742.1 lumens
Efficiency: N/A
Efficacy: 134.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 124.4
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	0
RCR																		
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

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	1.6
10°-20°	749.8	4.5
20°-30°	1126.4	6.7
30°-40°	1344.1	8.0
40°-50°	1377.7	8.2
50°-60°	1228.0	7.3
60°-70°	914.1	5.5
70°-80°	495.3	3.0
80°-90°	116.7	0.7
90°-100°	657.9	3.9
100°-110°	1778.8	10.6
110°-120°	1870.1	11.2
120°-130°	1519.0	9.1
130°-140°	1191.6	7.1
140°-150°	914.5	5.5
150°-160°	657.7	3.9
160°-170°	401.8	2.4
170°-180°	135.5	0.8
0°-30°	2139.5	12.8
0°-40°	3483.5	20.8
0°-60°	6089.2	36.4
0°-90°	7615.3	45.5
90°-120°	4306.7	25.7
90°-150°	7931.9	47.4
90°-180°	9127.0	54.5
0°-180°	16742.1	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	9	20	21	20	9
95°	102	358	1094	566	337	107
105°	331	511	1973	2911	2792	348
115°	582	712	1636	3168	3576	575
125°	797	913	1475	2489	2924	710
135°	955	1069	1435	2010	2275	738
145°	1111	1194	1416	1720	1851	695
155°	1254	1303	1404	1543	1594	578
165°	1365	1379	1410	1464	1472	385
175°	1417	1416	1411	1429	1426	135
180°	1416	1416	1416	1416	1416	

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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	23.7	27.4	25.1	22.4
90°	3.0	9.1	19.8	21.3	19.8
92.5°	43.3	157.7	311.2	135.1	97.8
95°	102.1	358.3	1094.1	566.2	336.8
97.5°	164.0	410.9	1705.4	1411.3	1036.5
100°	210.3	432.3	1895.6	1976.9	1598.4
102.5°	252.9	461.8	1962.7	2405.7	2122.6
105°	330.7	510.9	1973.3	2910.7	2791.6
107.5°	402.6	567.1	1887.0	3225.8	3265.4
110°	458.6	607.6	1810.3	3310.4	3478.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	508.6	648.1	1739.6	3293.5	3576.3
115°	582.1	711.7	1636.5	3168.1	3576.3
117.5°	654.0	775.6	1568.5	2976.4	3439.2
120°	697.9	817.1	1528.4	2838.9	3311.2
122.5°	739.3	856.2	1503.9	2691.4	3167.3
125°	796.9	913.1	1475.0	2489.1	2924.1
127.5°	850.0	964.1	1458.0	2323.9	2706.5
130°	879.2	996.9	1450.6	2221.9	2567.6
132.5°	909.7	1026.2	1443.3	2129.9	2448.1
135°	955.4	1068.7	1435.4	2009.8	2275.0
137.5°	1001.5	1108.4	1428.7	1912.4	2128.5
140°	1033.1	1132.9	1426.3	1849.7	2041.9
142.5°	1063.6	1157.5	1421.4	1793.1	1961.4
145°	1110.8	1194.3	1415.6	1720.2	1851.4
147.5°	1153.8	1227.7	1408.9	1654.3	1755.0
150°	1185.5	1251.0	1406.5	1618.5	1699.0
152.5°	1214.7	1272.0	1405.3	1585.3	1651.4
155°	1254.1	1303.3	1403.5	1543.2	1593.9
157.5°	1294.9	1329.2	1403.8	1513.9	1547.2
160°	1318.0	1346.4	1405.0	1495.4	1519.2
162.5°	1336.4	1359.9	1406.2	1480.6	1498.5
165°	1365.3	1378.7	1409.5	1464.5	1472.0
167.5°	1385.1	1394.4	1409.8	1450.7	1454.3
170°	1397.3	1401.7	1411.0	1444.5	1444.5
172.5°	1407.1	1408.0	1411.0	1437.3	1436.0
175°	1417.1	1415.6	1411.0	1429.2	1426.3
177.5°	1420.5	1416.9	1410.7	1422.9	1419.2
180°	1415.6	1415.6	1415.6	1415.6	1415.6

(END OF REPORT)