

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: P520458

Luminaire Tested: **SQ4-F-150U-125D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520458
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-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

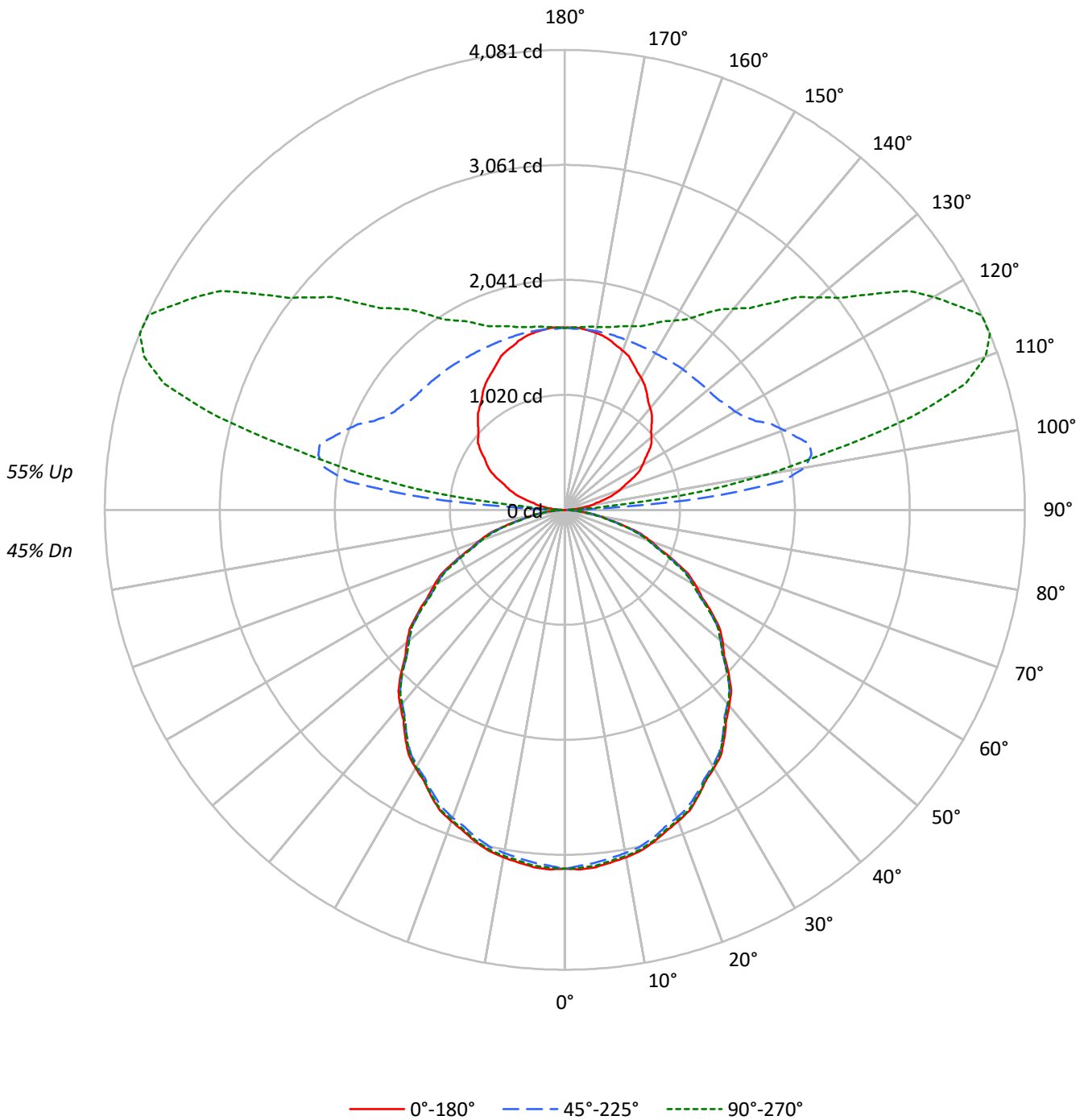
Lumens per Lamp: N/A
Luminaire Lumens: 19105.4 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 167.3
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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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°	14688	14688	14688
5°	14736	14549	14672
10°	14669	14488	14603
15°	14570	14394	14511
20°	14435	14271	14383
25°	14271	14119	14235
30°	14095	13974	14048
35°	13895	13776	13787
40°	13666	13518	13560
45°	13410	13261	13285
50°	13117	12966	12928
55°	12783	12600	12571
60°	12369	12094	12028
65°	11725	11477	11323
70°	10920	10635	10495
75°	9714	9495	9213
80°	7914	7683	7632
85°	4732	5383	5383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.4	1.6
10°-20°	855.6	4.5
20°-30°	1285.5	6.7
30°-40°	1533.8	8.0
40°-50°	1572.2	8.2
50°-60°	1401.3	7.3
60°-70°	1043.2	5.5
70°-80°	565.1	3.0
80°-90°	133.1	0.7
90°-100°	750.7	3.9
100°-110°	2029.9	10.6
110°-120°	2134.1	11.2
120°-130°	1733.5	9.1
130°-140°	1359.8	7.1
140°-150°	1043.6	5.5
150°-160°	750.6	3.9
160°-170°	458.5	2.4
170°-180°	154.6	0.8
0°-30°	2441.5	12.8
0°-40°	3975.3	20.8
0°-60°	6948.8	36.4
0°-90°	8690.2	45.5
90°-120°	4914.7	25.7
90°-150°	9051.6	47.4
90°-180°	10415.0	54.5
0°-180°	19105.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3184	3184	3184	3184	3184	
5°	3182	3177	3142	3170	3168	302
15°	3051	3044	3014	3040	3038	860
25°	2804	2799	2774	2790	2797	1291
35°	2467	2466	2446	2446	2448	1543
45°	2056	2050	2033	2029	2036	1584
55°	1589	1584	1567	1554	1563	1419
65°	1074	1067	1051	1044	1037	1064
75°	545	545	533	522	517	579
85°	89	101	102	103	102	124
90°	4	10	23	24	23	10
95°	116	409	1248	646	384	122
105°	377	583	2252	3322	3186	397
115°	664	812	1868	3615	4081	656
125°	909	1042	1683	2840	3337	811
135°	1090	1220	1638	2294	2596	843
145°	1268	1363	1615	1963	2113	793
155°	1431	1487	1602	1761	1819	660
165°	1558	1573	1608	1671	1680	439
175°	1617	1615	1610	1631	1628	154
180°	1615	1615	1615	1615	1615	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3184.0	3184.0	3184.0	3184.0	3184.0
2.5°	3193.8	3188.3	3160.1	3183.9	3179.8
5°	3182.2	3177.1	3141.9	3170.0	3168.3
7.5°	3155.3	3148.7	3116.7	3142.9	3139.9
10°	3131.5	3126.3	3092.9	3119.1	3117.4
12.5°	3102.0	3096.8	3063.5	3089.7	3089.4
15°	3050.8	3044.0	3014.0	3040.2	3038.5
17.5°	2989.5	2981.6	2952.0	2972.7	2976.2
20°	2940.4	2935.2	2907.1	2926.4	2929.9
22.5°	2889.9	2883.5	2853.9	2876.0	2879.4
25°	2803.7	2798.6	2773.9	2789.9	2796.7
27.5°	2709.1	2709.1	2686.3	2697.7	2701.7
30°	2646.0	2646.0	2623.3	2630.4	2637.3
32.5°	2578.7	2573.2	2551.7	2557.5	2564.4
35°	2467.3	2465.6	2446.2	2446.3	2448.1
37.5°	2352.0	2347.2	2326.0	2327.6	2335.9
40°	2269.3	2265.8	2244.7	2244.9	2251.7
42.5°	2185.1	2181.7	2163.5	2160.7	2163.5
45°	2055.5	2050.3	2032.7	2029.4	2036.3
47.5°	1917.4	1918.8	1897.8	1892.9	1896.7
50°	1827.7	1827.7	1806.7	1796.3	1801.4
52.5°	1733.7	1731.0	1709.9	1698.3	1710.3
55°	1589.4	1584.2	1566.6	1554.5	1563.0
57.5°	1441.4	1433.6	1415.9	1402.7	1407.5
60°	1340.6	1328.5	1310.8	1300.3	1303.7
62.5°	1235.4	1228.9	1209.8	1193.8	1201.4
65°	1074.2	1067.3	1051.4	1044.2	1037.3
67.5°	916.1	911.7	893.7	886.2	881.8
70°	809.6	801.0	788.5	779.7	778.1
72.5°	705.8	695.9	683.4	675.9	671.5
75°	545.0	545.0	532.7	522.1	516.9
77.5°	391.8	393.1	383.1	379.5	377.1
80°	297.9	297.9	289.2	285.7	287.3
82.5°	208.2	212.3	209.2	204.2	201.9
85°	89.4	101.4	101.7	103.4	101.7
87.5°	16.1	27.1	31.2	28.7	25.5
90°	3.5	10.3	22.6	24.3	22.6
92.5°	49.4	180.0	355.1	154.1	111.7
95°	116.5	408.9	1248.5	646.1	384.3
97.5°	187.1	469.0	1946.2	1610.6	1182.7
100°	239.9	493.3	2163.2	2255.9	1824.1
102.5°	288.6	527.0	2239.6	2745.3	2422.2
105°	377.3	583.1	2251.8	3321.7	3185.7
107.5°	459.4	647.2	2153.4	3681.2	3726.4
110°	523.4	693.4	2065.8	3777.7	3969.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	580.5	739.6	1985.1	3758.5	4081.2
115°	664.3	812.1	1867.5	3615.3	4081.2
117.5°	746.3	885.1	1790.0	3396.5	3924.7
120°	796.4	932.4	1744.1	3239.6	3778.6
122.5°	843.7	977.0	1716.3	3071.4	3614.4
125°	909.4	1042.0	1683.2	2840.4	3336.9
127.5°	970.0	1100.1	1663.8	2652.0	3088.6
130°	1003.4	1137.7	1655.5	2535.6	2930.0
132.5°	1038.1	1171.1	1647.1	2430.5	2793.7
135°	1090.3	1219.5	1638.0	2293.5	2596.1
137.5°	1142.8	1264.8	1630.4	2182.3	2428.9
140°	1178.9	1292.9	1627.6	2110.8	2330.1
142.5°	1213.7	1320.9	1622.1	2046.2	2238.3
145°	1267.6	1362.8	1615.4	1963.1	2112.8
147.5°	1316.6	1401.0	1607.8	1887.9	2002.8
150°	1352.9	1427.7	1605.0	1847.0	1938.8
152.5°	1386.2	1451.5	1603.5	1809.1	1884.6
155°	1431.1	1487.3	1601.5	1761.1	1818.8
157.5°	1477.7	1516.8	1601.8	1727.6	1765.6
160°	1504.2	1536.4	1603.2	1706.5	1733.6
162.5°	1525.0	1551.8	1604.6	1689.7	1710.0
165°	1558.1	1573.4	1608.5	1671.2	1679.8
167.5°	1580.6	1591.2	1608.8	1655.6	1659.6
170°	1594.6	1599.6	1610.2	1648.4	1648.4
172.5°	1605.7	1606.7	1610.2	1640.1	1638.8
175°	1617.1	1615.4	1610.2	1631.0	1627.6
177.5°	1620.9	1616.9	1609.9	1623.7	1619.6
180°	1615.4	1615.4	1615.4	1615.4	1615.4

(END OF REPORT)