

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: P520350

Luminaire Tested: **SQ4-F-125U-125D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520350
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-125D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

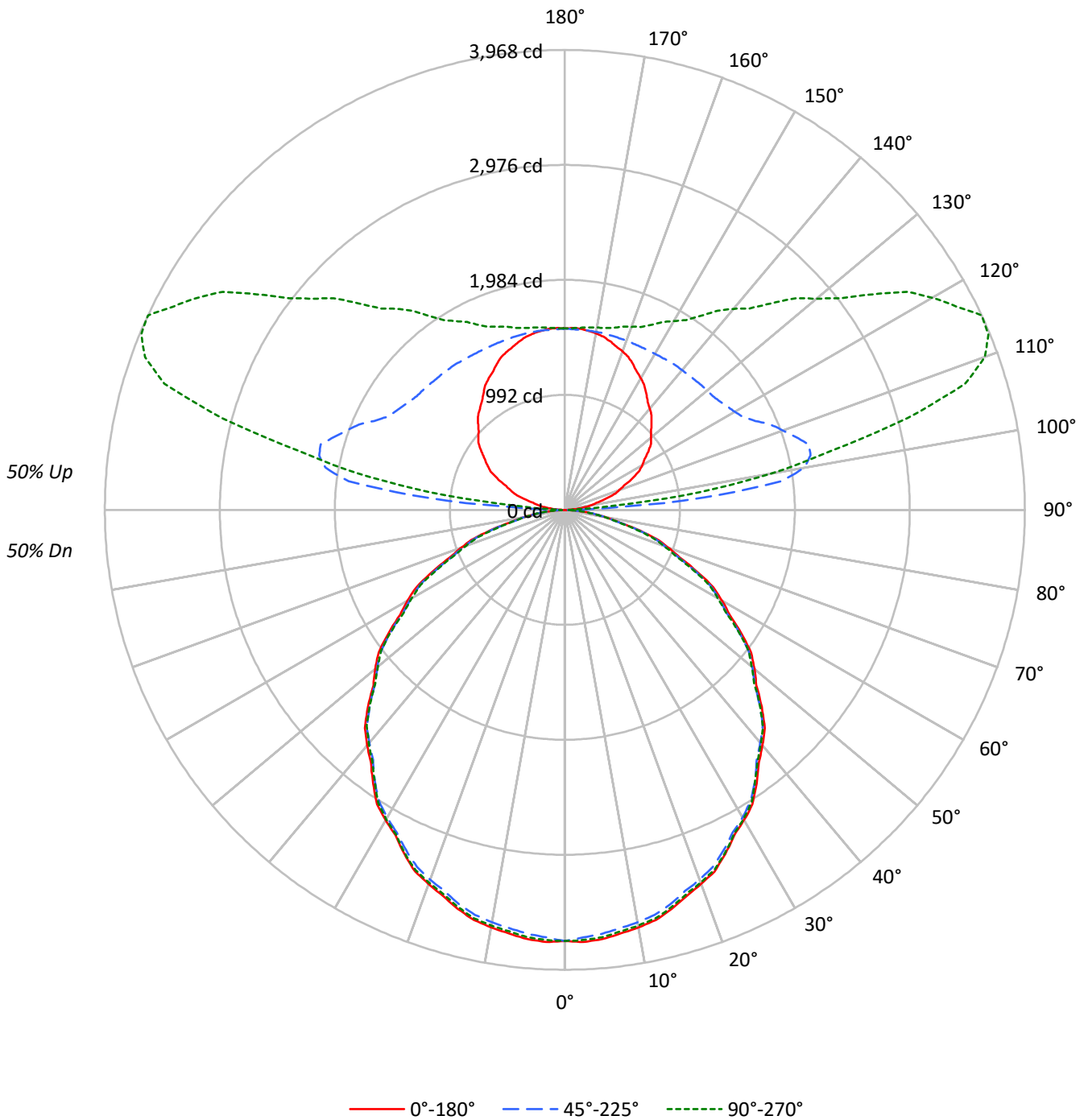
Lumens per Lamp: N/A
Luminaire Lumens: 20252.7 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 142
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	50	49	47	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17162	17162	17162
5°	17217	17000	17142
10°	17139	16928	17062
15°	17023	16819	16956
20°	16866	16675	16806
25°	16674	16497	16633
30°	16468	16326	16414
35°	16234	16096	16107
40°	15967	15794	15844
45°	15668	15494	15521
50°	15326	15149	15106
55°	14936	14721	14689
60°	14451	14130	14054
65°	13699	13410	13231
70°	12758	12428	12260
75°	11350	11093	10765
80°	9245	8974	8921
85°	5526	6288	6288



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	351.0	1.7
10°-20°	999.7	4.9
20°-30°	1501.9	7.4
30°-40°	1792.1	8.8
40°-50°	1836.9	9.1
50°-60°	1637.3	8.1
60°-70°	1218.9	6.0
70°-80°	660.3	3.3
80°-90°	155.3	0.8
90°-100°	731.8	3.6
100°-110°	1971.4	9.7
110°-120°	2068.9	10.2
120°-130°	1678.9	8.3
130°-140°	1316.7	6.5
140°-150°	1010.9	5.0
150°-160°	726.8	3.6
160°-170°	444.1	2.2
170°-180°	149.7	0.7
0°-30°	2852.6	14.1
0°-40°	4644.7	22.9
0°-60°	8119.0	40.1
0°-90°	10153.5	50.1
90°-120°	4772.2	23.6
90°-150°	8778.6	43.3
90°-180°	10099.0	49.9
0°-180°	20252.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3720	3720	3720	3720	3720	
5°	3718	3712	3671	3704	3702	353
15°	3564	3556	3522	3552	3550	1005
25°	3276	3270	3241	3260	3268	1509
35°	2883	2881	2858	2858	2860	1803
45°	2402	2396	2375	2371	2379	1851
55°	1857	1851	1830	1816	1826	1659
65°	1255	1247	1228	1220	1212	1243
75°	637	637	622	610	604	676
85°	104	118	119	121	119	144
90°	4	12	24	26	26	10
95°	112	398	1200	614	424	117
105°	365	567	2180	3262	3061	383
115°	644	788	1816	3508	3968	633
125°	879	1009	1630	2755	3242	785
135°	1058	1181	1584	2223	2517	817
145°	1224	1319	1564	1900	2041	767
155°	1389	1440	1550	1705	1760	639
165°	1507	1524	1556	1618	1626	425
175°	1566	1564	1558	1580	1576	149
180°	1564	1564	1564	1564	1564	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3720.2	3720.2	3720.2	3720.2	3720.2
2.5°	3731.7	3725.3	3692.3	3720.1	3715.3
5°	3718.1	3712.1	3671.1	3703.8	3701.8
7.5°	3686.6	3679.0	3641.6	3672.2	3668.6
10°	3658.8	3652.7	3613.7	3644.4	3642.4
12.5°	3624.3	3618.4	3579.3	3610.0	3609.6
15°	3564.5	3556.5	3521.6	3552.3	3550.3
17.5°	3492.9	3483.7	3449.1	3473.3	3477.4
20°	3435.6	3429.5	3396.7	3419.3	3423.3
22.5°	3376.6	3369.0	3334.5	3360.3	3364.4
25°	3275.9	3269.9	3241.1	3259.7	3267.7
27.5°	3165.3	3165.3	3138.7	3151.9	3156.7
30°	3091.6	3091.6	3065.0	3073.4	3081.4
32.5°	3013.0	3006.6	2981.5	2988.2	2996.2
35°	2882.7	2880.8	2858.2	2858.2	2860.2
37.5°	2748.1	2742.5	2717.7	2719.6	2729.2
40°	2651.5	2647.4	2622.8	2623.0	2631.0
42.5°	2553.2	2549.1	2527.7	2524.6	2527.7
45°	2401.6	2395.7	2375.0	2371.1	2379.1
47.5°	2240.3	2241.9	2217.4	2211.7	2216.2
50°	2135.5	2135.5	2110.9	2098.8	2104.8
52.5°	2025.7	2022.6	1997.8	1984.3	1998.3
55°	1857.1	1851.0	1830.4	1816.3	1826.4
57.5°	1684.3	1675.0	1654.4	1638.9	1644.5
60°	1566.3	1552.3	1531.5	1519.3	1523.3
62.5°	1443.5	1435.9	1413.6	1394.9	1403.7
65°	1255.0	1247.0	1228.5	1220.1	1212.1
67.5°	1070.4	1065.2	1044.2	1035.5	1030.2
70°	945.9	935.9	921.4	911.1	909.0
72.5°	824.7	813.0	798.4	789.7	784.6
75°	636.8	636.8	622.4	610.0	604.0
77.5°	457.8	459.4	447.6	443.4	440.6
80°	348.0	348.0	337.8	333.8	335.8
82.5°	243.2	248.0	244.5	238.7	235.8
85°	104.4	118.5	118.8	120.7	118.8
87.5°	18.9	31.6	36.1	33.1	29.9
90°	3.9	11.7	23.9	26.0	26.0
92.5°	48.6	171.8	339.6	163.5	113.6
95°	111.6	398.0	1199.7	613.5	424.5
97.5°	178.2	455.7	1881.7	1571.9	1185.3
100°	229.2	478.6	2098.5	2195.6	1821.5
102.5°	278.6	510.9	2170.3	2662.7	2355.6
105°	364.7	567.4	2180.2	3261.8	3061.1
107.5°	446.0	626.9	2087.4	3569.6	3621.4
110°	500.3	671.7	2002.8	3665.3	3854.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	557.6	716.7	1921.5	3644.1	3954.7
115°	643.7	787.9	1815.6	3508.0	3967.9
117.5°	722.2	857.5	1733.5	3290.7	3802.8
120°	773.3	903.8	1691.9	3134.8	3660.9
122.5°	817.9	946.9	1661.6	2975.3	3499.9
125°	878.9	1009.4	1630.2	2755.3	3242.4
127.5°	937.5	1066.0	1610.2	2561.2	2996.2
130°	972.5	1101.2	1602.3	2450.0	2831.9
132.5°	1007.6	1134.6	1594.3	2352.0	2702.7
135°	1058.3	1181.0	1584.4	2222.8	2517.0
137.5°	1106.5	1224.1	1579.1	2113.2	2354.8
140°	1140.0	1252.9	1574.4	2045.7	2263.9
142.5°	1175.0	1280.3	1571.2	1982.7	2166.6
145°	1223.6	1319.1	1564.4	1900.4	2040.7
147.5°	1276.2	1359.3	1557.6	1831.1	1941.5
150°	1311.3	1383.4	1554.5	1787.7	1879.3
152.5°	1343.2	1406.0	1552.9	1752.2	1826.7
155°	1389.0	1439.7	1550.4	1705.1	1759.7
157.5°	1429.3	1468.6	1550.8	1672.1	1708.7
160°	1454.8	1488.0	1552.5	1652.7	1680.0
162.5°	1477.1	1504.1	1554.1	1636.6	1656.1
165°	1506.6	1524.2	1556.4	1618.4	1626.2
167.5°	1530.5	1540.7	1558.4	1604.3	1607.5
170°	1546.5	1550.4	1558.4	1596.3	1596.3
172.5°	1556.1	1556.8	1560.0	1588.3	1588.3
175°	1566.4	1564.4	1558.4	1580.3	1576.4
177.5°	1570.8	1567.7	1559.6	1572.3	1569.2
180°	1564.4	1564.4	1564.4	1564.4	1564.4

(END OF REPORT)