

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: P520456

Luminaire Tested: **SQ4-F-150U-125D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520456
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-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

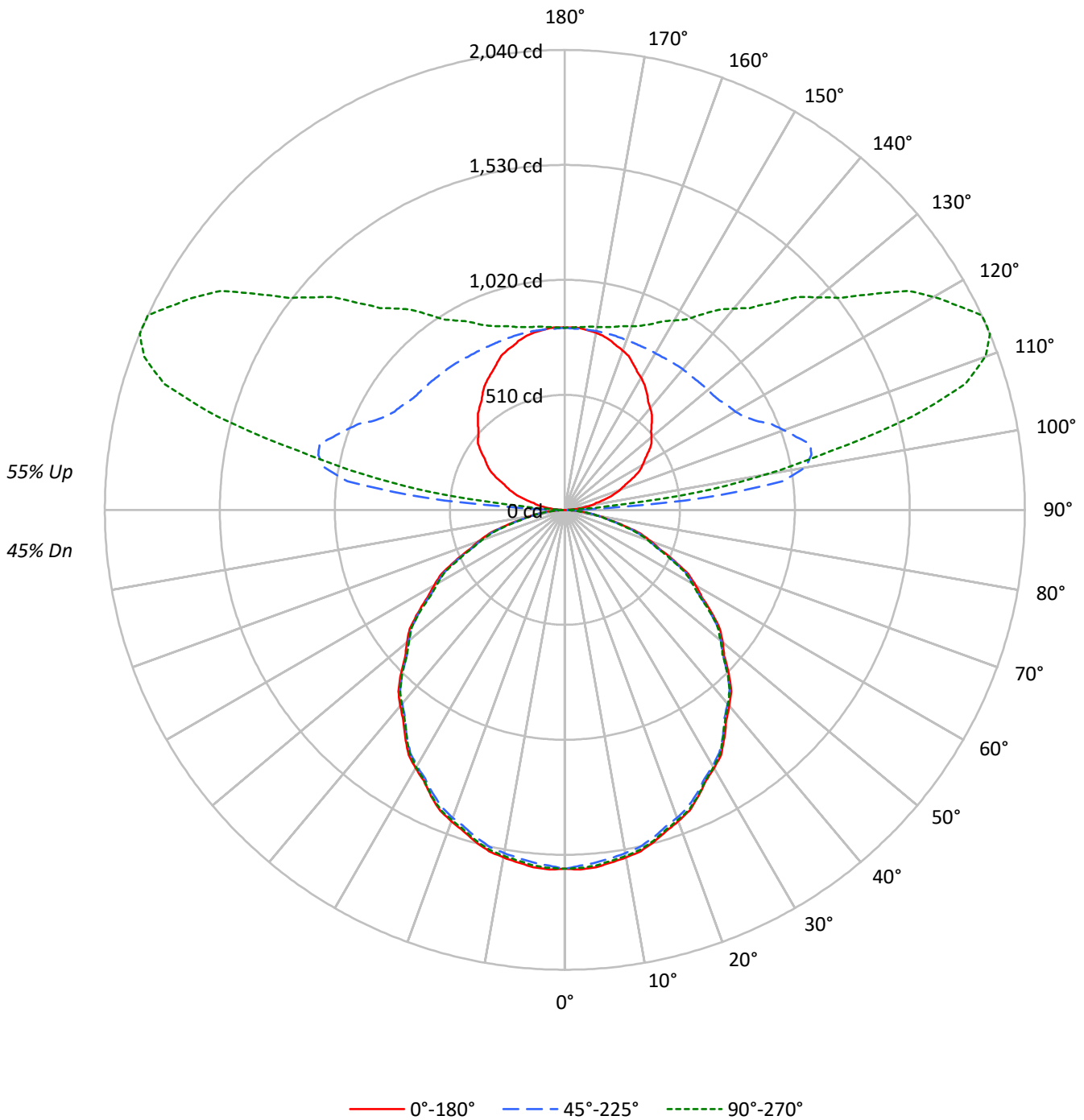
Lumens per Lamp: N/A
Luminaire Lumens: 9552.7 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 83.1
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	14550	14671
10°	14668	14487	14603
15°	14570	14394	14512
20°	14435	14272	14383
25°	14271	14120	14236
30°	14095	13973	14048
35°	13895	13776	13786
40°	13665	13518	13560
45°	13409	13262	13284
50°	13118	12965	12928
55°	12783	12598	12571
60°	12367	12092	12029
65°	11725	11477	11324
70°	10920	10636	10494
75°	9714	9496	9211
80°	7917	7678	7635
85°	4732	5378	5378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.2	1.6
10°-20°	427.8	4.5
20°-30°	642.7	6.7
30°-40°	766.9	8.0
40°-50°	786.1	8.2
50°-60°	700.7	7.3
60°-70°	521.6	5.5
70°-80°	282.6	3.0
80°-90°	66.6	0.7
90°-100°	375.4	3.9
100°-110°	1014.9	10.6
110°-120°	1067.0	11.2
120°-130°	866.7	9.1
130°-140°	679.9	7.1
140°-150°	521.8	5.5
150°-160°	375.3	3.9
160°-170°	229.3	2.4
170°-180°	77.3	0.8
0°-30°	1220.7	12.8
0°-40°	1987.6	20.8
0°-60°	3474.4	36.4
0°-90°	4345.1	45.5
90°-120°	2457.3	25.7
90°-150°	4525.7	47.4
90°-180°	5208.0	54.5
0°-180°	9552.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1592	1592	1592	1592	1592	
5°	1591	1589	1571	1585	1584	151
15°	1525	1522	1507	1520	1519	430
25°	1402	1399	1387	1395	1398	646
35°	1234	1233	1223	1223	1224	771
45°	1028	1025	1016	1015	1018	792
55°	795	792	783	777	782	710
65°	537	534	526	522	519	532
75°	272	272	266	261	258	289
85°	45	51	51	52	51	62
90°	2	5	11	12	11	5
95°	58	204	624	323	192	61
105°	189	292	1126	1661	1593	199
115°	332	406	934	1808	2040	328
125°	455	521	842	1420	1668	405
135°	545	610	819	1147	1298	421
145°	634	682	808	982	1056	397
155°	716	744	801	880	909	330
165°	779	787	804	836	840	219
175°	809	808	805	816	814	77
180°	808	808	808	808	808	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1592.0	1592.0	1592.0	1592.0	1592.0
2.5°	1596.9	1594.2	1580.1	1591.9	1589.9
5°	1591.1	1588.6	1571.0	1584.9	1584.1
7.5°	1577.6	1574.4	1558.4	1571.5	1569.9
10°	1565.7	1563.1	1546.4	1559.6	1558.7
12.5°	1551.0	1548.5	1531.7	1544.8	1544.7
15°	1525.4	1522.0	1507.0	1520.2	1519.3
17.5°	1494.7	1490.8	1476.0	1486.3	1488.0
20°	1470.2	1467.7	1453.6	1463.2	1464.9
22.5°	1445.0	1441.7	1426.9	1438.0	1439.7
25°	1401.9	1399.3	1387.0	1394.9	1398.4
27.5°	1354.6	1354.6	1343.1	1348.8	1350.9
30°	1323.0	1323.0	1311.6	1315.2	1318.6
32.5°	1289.4	1286.7	1275.9	1278.8	1282.2
35°	1233.7	1232.7	1223.1	1223.1	1224.0
37.5°	1176.0	1173.6	1163.0	1163.8	1168.0
40°	1134.6	1132.9	1122.4	1122.5	1125.9
42.5°	1092.6	1090.8	1081.7	1080.3	1081.7
45°	1027.7	1025.2	1016.4	1014.6	1018.1
47.5°	958.7	959.4	948.9	946.5	948.3
50°	913.9	913.9	903.3	898.1	900.7
52.5°	866.9	865.5	855.0	849.1	855.1
55°	794.7	792.1	783.2	777.3	781.5
57.5°	720.7	716.8	707.9	701.4	703.8
60°	670.2	664.3	655.3	650.2	651.9
62.5°	617.7	614.4	604.9	597.0	600.7
65°	537.1	533.6	525.7	522.2	518.7
67.5°	458.1	455.9	446.9	443.1	440.9
70°	404.8	400.5	394.3	389.9	389.0
72.5°	352.9	347.9	341.7	338.0	335.8
75°	272.5	272.5	266.4	261.1	258.4
77.5°	195.9	196.6	191.6	189.7	188.5
80°	149.0	149.0	144.5	142.8	143.7
82.5°	104.1	106.1	104.6	102.2	100.9
85°	44.7	50.7	50.8	51.7	50.8
87.5°	8.1	13.6	15.6	14.3	12.8
90°	1.7	5.1	11.3	12.2	11.3
92.5°	24.6	89.9	177.6	77.1	55.8
95°	58.2	204.5	624.2	323.0	192.1
97.5°	93.6	234.5	973.1	805.3	591.4
100°	120.0	246.7	1081.5	1128.0	912.0
102.5°	144.4	263.5	1119.9	1372.7	1211.1
105°	188.6	291.5	1125.9	1660.8	1592.8
107.5°	229.7	323.5	1076.7	1840.6	1863.2
110°	261.7	346.7	1032.8	1888.8	1984.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	290.2	369.8	992.5	1879.2	2040.5
115°	332.1	406.1	933.8	1807.7	2040.5
117.5°	373.1	442.5	895.0	1698.3	1962.3
120°	398.2	466.2	872.1	1619.8	1889.2
122.5°	421.8	488.5	858.1	1535.6	1807.3
125°	454.7	521.0	841.6	1420.3	1668.4
127.5°	485.0	550.1	831.9	1326.0	1544.3
130°	501.7	568.8	827.7	1267.7	1465.0
132.5°	519.1	585.5	823.5	1215.2	1396.8
135°	545.1	609.7	819.0	1146.7	1298.0
137.5°	571.4	632.5	815.2	1091.2	1214.4
140°	589.5	646.4	813.8	1055.4	1165.0
142.5°	606.9	660.4	811.0	1023.1	1119.2
145°	633.8	681.5	807.7	981.5	1056.4
147.5°	658.3	700.5	803.9	943.9	1001.5
150°	676.4	713.8	802.5	923.5	969.5
152.5°	693.1	725.7	801.8	904.6	942.3
155°	715.6	743.6	800.8	880.5	909.4
157.5°	738.9	758.4	801.0	863.7	882.9
160°	752.1	768.2	801.7	853.3	866.9
162.5°	762.5	775.9	802.3	844.8	855.0
165°	779.0	786.7	804.2	835.7	839.9
167.5°	790.3	795.6	804.4	827.7	829.8
170°	797.2	799.9	805.1	824.2	824.2
172.5°	802.9	803.4	805.1	820.1	819.4
175°	808.6	807.7	805.1	815.5	813.8
177.5°	810.5	808.4	804.9	811.8	809.8
180°	807.7	807.7	807.7	807.7	807.7

(END OF REPORT)