

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521440

Luminaire Tested: **SQ4-F-050U-125D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521440
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-125D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

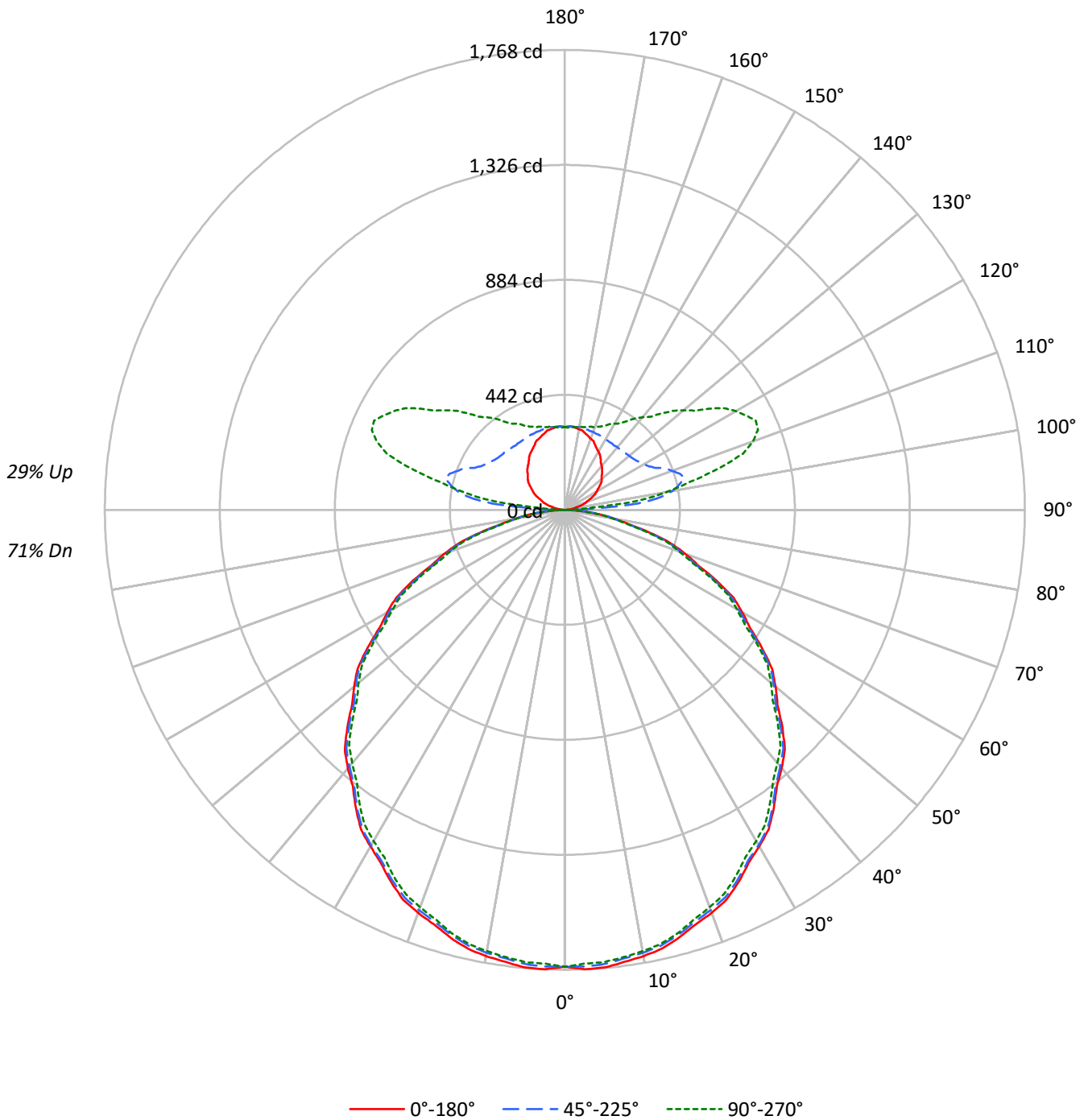
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7065.3 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 71.6
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	75	75	75	71
1	102	98	94	90	97	93	89	86	83	80	78	74	72	70	66	65	63	59
2	93	85	79	73	88	81	75	70	73	68	64	65	61	58	58	55	53	49
3	85	75	67	61	80	71	64	58	64	58	54	57	53	49	51	48	45	41
4	77	66	58	51	73	63	55	49	57	50	46	51	46	42	46	42	38	35
5	71	59	50	44	67	56	48	42	51	44	39	46	40	36	41	37	33	30
6	65	53	44	38	62	50	42	37	46	39	34	41	36	32	37	33	29	27
7	61	48	39	33	57	45	38	32	41	35	30	37	32	28	34	29	26	24
8	56	43	35	30	53	41	34	29	38	31	27	34	29	25	31	27	23	21
9	52	40	32	26	50	38	31	26	35	28	24	32	26	22	29	24	21	19
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	27	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16201	16201	16201
5°	16356	16235	16161
10°	16320	16198	16142
15°	16257	16152	16085
20°	16190	16082	15965
25°	16074	15983	15830
30°	15916	15863	15661
35°	15768	15690	15498
40°	15621	15513	15308
45°	15423	15292	15096
50°	15172	15057	14841
55°	14879	14734	14541
60°	14522	14319	14079
65°	14037	13754	13492
70°	13218	12894	12652
75°	12049	11692	11443
80°	9936	9882	9670
85°	7093	8045	8045



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.2	2.4
10°-20°	476.1	6.7
20°-30°	720.0	10.2
30°-40°	866.9	12.3
40°-50°	900.2	12.7
50°-60°	815.8	11.5
60°-70°	621.3	8.8
70°-80°	347.2	4.9
80°-90°	90.3	1.3
90°-100°	164.1	2.3
100°-110°	396.6	5.6
110°-120°	423.1	6.0
120°-130°	342.6	4.8
130°-140°	265.3	3.8
140°-150°	202.4	2.9
150°-160°	146.5	2.1
160°-170°	90.2	1.3
170°-180°	30.6	0.4
0°-30°	1362.3	19.3
0°-40°	2229.2	31.6
0°-60°	3945.1	55.8
0°-90°	5003.9	70.8
90°-120°	983.8	13.9
90°-150°	1794.1	25.4
90°-180°	2061.0	29.2
0°-180°	7065.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1756	1756	1756	1756	1756	
5°	1766	1747	1753	1746	1745	168
15°	1702	1684	1691	1687	1684	480
25°	1579	1561	1570	1556	1555	727
35°	1400	1387	1393	1377	1376	876
45°	1182	1172	1172	1157	1157	911
55°	925	921	916	904	904	826
65°	643	636	630	619	618	634
75°	338	330	328	323	321	356
85°	67	73	76	77	76	83
90°	0	0	0	0	0	3
95°	16	82	281	183	128	18
105°	63	110	477	617	609	67
115°	116	148	383	726	810	115
125°	165	190	332	578	678	147
135°	203	227	319	455	524	157
145°	240	258	313	387	417	150
155°	275	287	317	343	355	127
165°	304	309	321	326	330	86
175°	322	320	322	319	318	30
180°	318	318	318	318	318	



TEST NUMBER: P521440

CATALOG NUMBER: SQ4-F-050U-125D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1756.0	1756.0	1756.0	1756.0	1756.0
2.5°	1768.0	1752.4	1756.8	1753.4	1746.4
5°	1766.0	1747.4	1753.0	1746.0	1745.0
7.5°	1752.4	1733.8	1739.4	1735.2	1734.2
10°	1742.0	1723.4	1729.0	1724.0	1723.0
12.5°	1727.6	1709.8	1715.4	1709.6	1708.6
15°	1702.0	1684.4	1691.0	1686.9	1684.0
17.5°	1670.6	1652.6	1660.4	1654.3	1650.8
20°	1649.0	1629.4	1638.0	1628.0	1626.0
22.5°	1622.6	1603.0	1611.6	1599.2	1598.8
25°	1579.0	1561.4	1570.0	1556.0	1555.0
27.5°	1530.0	1513.6	1522.6	1505.6	1504.4
30°	1494.0	1478.4	1489.0	1472.0	1470.0
32.5°	1457.2	1443.9	1450.6	1435.9	1433.2
35°	1400.0	1387.3	1393.0	1377.0	1376.0
37.5°	1338.6	1325.9	1331.2	1316.0	1314.2
40°	1297.0	1284.3	1288.0	1272.0	1271.0
42.5°	1251.4	1241.0	1243.2	1226.4	1227.0
45°	1182.0	1172.2	1172.0	1157.0	1157.0
47.5°	1108.2	1098.4	1098.6	1084.8	1083.6
50°	1057.0	1051.1	1049.0	1036.0	1034.0
52.5°	1004.2	999.9	996.2	983.2	982.8
55°	925.0	921.1	916.0	904.0	904.0
57.5°	843.8	839.3	832.8	820.8	819.8
60°	787.0	784.1	776.0	764.0	763.0
62.5°	730.2	724.9	718.4	707.2	706.2
65°	643.0	636.2	630.0	619.0	618.0
67.5°	552.4	544.8	539.6	531.9	529.0
70°	490.0	483.2	478.0	471.9	469.0
72.5°	427.6	421.5	418.0	411.9	409.0
75°	338.0	330.2	328.0	323.0	321.0
77.5°	247.0	243.1	241.2	237.5	234.8
80°	187.0	187.0	186.0	184.0	182.0
82.5°	135.0	136.6	138.0	137.6	135.6
85°	67.0	72.9	76.0	77.0	76.0
87.5°	19.2	25.5	30.4	31.2	30.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.4	44.4	104.7	50.9	34.5
95°	16.2	82.1	281.2	182.8	128.1
97.5°	28.7	91.0	370.3	356.8	306.3
100°	38.4	96.5	419.4	442.7	401.2
102.5°	47.6	101.4	451.8	514.3	489.7
105°	63.4	109.5	476.7	616.8	608.9
107.5°	78.9	119.1	462.0	699.0	717.6
110°	89.7	127.3	438.3	734.4	769.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	100.5	135.4	417.3	743.1	802.8
115°	116.0	148.3	383.0	726.1	809.8
117.5°	131.4	161.8	362.9	687.1	785.2
120°	141.6	170.0	350.0	656.4	759.3
122.5°	152.4	178.6	341.9	625.1	726.4
125°	165.2	190.3	332.4	577.5	678.3
127.5°	177.9	201.5	325.8	537.1	625.8
130°	185.4	208.5	323.7	509.1	596.1
132.5°	192.4	216.6	320.4	488.8	562.6
135°	203.0	226.7	318.9	455.4	523.9
137.5°	212.9	236.8	314.2	432.7	484.4
140°	220.5	242.3	314.2	416.4	463.9
142.5°	228.0	249.8	311.5	402.3	442.3
145°	240.1	257.9	312.9	387.1	417.4
147.5°	251.2	268.5	312.1	369.5	394.6
150°	258.3	273.4	314.2	361.9	381.7
152.5°	265.8	280.4	313.7	353.7	371.4
155°	275.1	287.0	316.9	342.8	355.4
157.5°	286.3	296.5	316.2	338.7	346.1
160°	290.6	299.2	318.9	333.2	338.5
162.5°	297.6	305.2	317.9	331.6	334.7
165°	304.1	308.7	321.0	325.8	330.4
167.5°	312.1	315.1	320.2	325.4	325.6
170°	314.2	316.2	322.3	321.7	325.0
172.5°	318.0	319.5	320.7	322.1	320.2
175°	321.6	320.3	321.6	318.9	318.3
177.5°	321.0	321.0	319.9	318.7	316.1
180°	318.3	318.3	318.3	318.3	318.3

(END OF REPORT)