

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: P521439

Luminaire Tested: **SQ4-F-050U-125D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521439
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 (3000K)
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

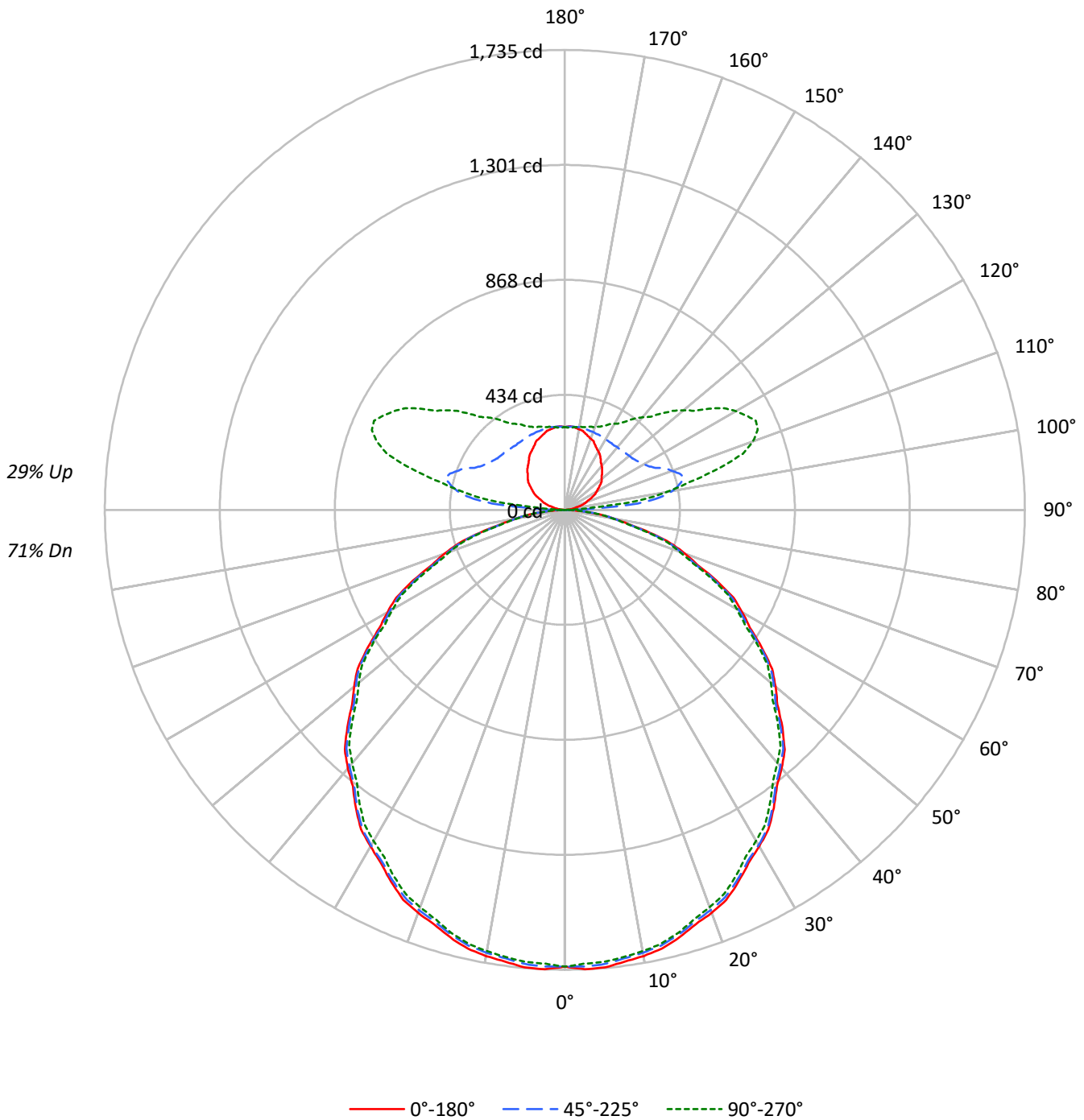
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6932.6 lumens
Efficiency: N/A
Efficacy: 97.0 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): 71.5
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°	15897	15897	15897
5°	16048	15931	15857
10°	16014	15894	15838
15°	15951	15848	15783
20°	15886	15780	15665
25°	15772	15682	15533
30°	15617	15565	15367
35°	15472	15394	15206
40°	15327	15221	15020
45°	15133	15005	14813
50°	14886	14774	14563
55°	14599	14458	14268
60°	14249	14050	13815
65°	13773	13496	13238
70°	12970	12652	12414
75°	11821	11471	11229
80°	9750	9697	9489
85°	6955	7897	7897



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.1	2.4
10°-20°	467.2	6.7
20°-30°	706.5	10.2
30°-40°	850.6	12.3
40°-50°	883.3	12.7
50°-60°	800.5	11.5
60°-70°	609.6	8.8
70°-80°	340.7	4.9
80°-90°	88.6	1.3
90°-100°	161.0	2.3
100°-110°	389.2	5.6
110°-120°	415.1	6.0
120°-130°	336.2	4.8
130°-140°	260.3	3.8
140°-150°	198.6	2.9
150°-160°	143.7	2.1
160°-170°	88.5	1.3
170°-180°	30.0	0.4
0°-30°	1336.7	19.3
0°-40°	2187.3	31.6
0°-60°	3871.0	55.8
0°-90°	4909.9	70.8
90°-120°	965.3	13.9
90°-150°	1760.4	25.4
90°-180°	2023.0	29.2
0°-180°	6932.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1723	1723	1723	1723	1723	
5°	1733	1715	1720	1713	1712	164
15°	1670	1653	1659	1655	1652	471
25°	1549	1532	1540	1527	1526	713
35°	1374	1361	1367	1351	1350	859
45°	1160	1150	1150	1135	1135	894
55°	908	904	899	887	887	811
65°	631	624	618	607	606	622
75°	332	324	322	317	315	349
85°	66	72	75	76	75	81
90°	0	0	0	0	0	3
95°	16	81	276	179	126	18
105°	62	108	468	605	598	66
115°	114	146	376	712	795	113
125°	162	187	326	567	666	145
135°	199	222	313	447	514	154
145°	236	253	307	380	410	147
155°	270	282	311	336	349	125
165°	298	303	315	320	324	84
175°	316	314	316	313	312	30
180°	312	312	312	312	312	

TEST NUMBER: P521439

CATALOG NUMBER: SQ4-F-050U-125D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1723.0	1723.0	1723.0	1723.0	1723.0
2.5°	1734.8	1719.4	1723.8	1720.5	1713.6
5°	1732.8	1714.6	1720.1	1713.2	1712.2
7.5°	1719.5	1701.2	1706.7	1702.6	1701.6
10°	1709.3	1691.0	1696.5	1691.6	1690.6
12.5°	1695.1	1677.7	1683.2	1677.5	1676.5
15°	1670.0	1652.8	1659.2	1655.2	1652.4
17.5°	1639.2	1621.6	1629.2	1623.2	1619.8
20°	1618.0	1598.8	1607.2	1597.4	1595.5
22.5°	1592.1	1572.9	1581.3	1569.1	1568.8
25°	1549.3	1532.1	1540.5	1526.7	1525.8
27.5°	1501.3	1485.1	1494.0	1477.3	1476.1
30°	1465.9	1450.6	1461.0	1444.3	1442.4
32.5°	1429.8	1416.8	1423.3	1409.0	1406.3
35°	1373.7	1361.2	1366.8	1351.1	1350.1
37.5°	1313.5	1301.0	1306.2	1291.2	1289.5
40°	1272.6	1260.2	1263.8	1248.1	1247.1
42.5°	1227.9	1217.7	1219.8	1203.4	1203.9
45°	1159.8	1150.2	1150.0	1135.3	1135.3
47.5°	1087.4	1077.8	1078.0	1064.4	1063.2
50°	1037.1	1031.4	1029.3	1016.5	1014.6
52.5°	985.3	981.1	977.5	964.7	964.3
55°	907.6	903.8	898.8	887.0	887.0
57.5°	827.9	823.5	817.2	805.4	804.4
60°	772.2	769.3	761.4	749.6	748.7
62.5°	716.5	711.3	704.9	693.9	692.9
65°	630.9	624.2	618.2	607.3	606.4
67.5°	542.0	534.5	529.5	521.9	519.1
70°	480.8	474.1	469.0	463.1	460.2
72.5°	419.6	413.6	410.1	404.2	401.3
75°	331.6	324.0	321.8	316.9	315.0
77.5°	242.4	238.5	236.7	233.1	230.4
80°	183.5	183.5	182.5	180.5	178.6
82.5°	132.5	134.0	135.4	135.0	133.1
85°	65.7	71.5	74.6	75.5	74.6
87.5°	18.8	25.0	29.8	30.6	29.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.3	43.6	102.7	49.9	33.9
95°	15.9	80.6	275.9	179.4	125.7
97.5°	28.2	89.3	363.4	350.1	300.5
100°	37.7	94.6	411.5	434.4	393.7
102.5°	46.7	99.5	443.3	504.7	480.5
105°	62.2	107.5	467.8	605.2	597.5
107.5°	77.4	116.9	453.4	685.9	704.1
110°	88.0	124.9	430.1	720.6	754.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	98.6	132.9	409.4	729.1	787.7
115°	113.8	145.5	375.8	712.5	794.6
117.5°	128.9	158.8	356.1	674.1	770.4
120°	138.9	166.8	343.4	644.1	745.0
122.5°	149.5	175.3	335.4	613.3	712.7
125°	162.1	186.7	326.2	566.6	665.6
127.5°	174.5	197.7	319.7	527.0	614.0
130°	181.9	204.6	317.6	499.5	584.9
132.5°	188.8	212.5	314.4	479.6	552.1
135°	199.2	222.4	313.0	446.8	514.1
137.5°	208.9	232.4	308.3	424.6	475.3
140°	216.4	237.7	308.3	408.6	455.2
142.5°	223.8	245.1	305.7	394.7	434.0
145°	235.5	253.0	307.0	379.8	409.6
147.5°	246.5	263.5	306.2	362.6	387.2
150°	253.4	268.3	308.3	355.1	374.5
152.5°	260.8	275.2	307.8	347.1	364.4
155°	269.9	281.6	311.0	336.4	348.7
157.5°	280.9	290.9	310.3	332.3	339.5
160°	285.2	293.6	313.0	327.0	332.1
162.5°	292.0	299.4	311.9	325.3	328.4
165°	298.4	302.9	314.9	319.7	324.2
167.5°	306.2	309.2	314.1	319.3	319.4
170°	308.3	310.3	316.3	315.7	318.9
172.5°	312.0	313.4	314.7	316.1	314.1
175°	315.6	314.3	315.6	312.9	312.3
177.5°	314.9	314.9	313.9	312.8	310.2
180°	312.3	312.3	312.3	312.3	312.3

(END OF REPORT)