

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: P521427

Luminaire Tested: **SQ4-F-050U-100D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521427
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-100D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

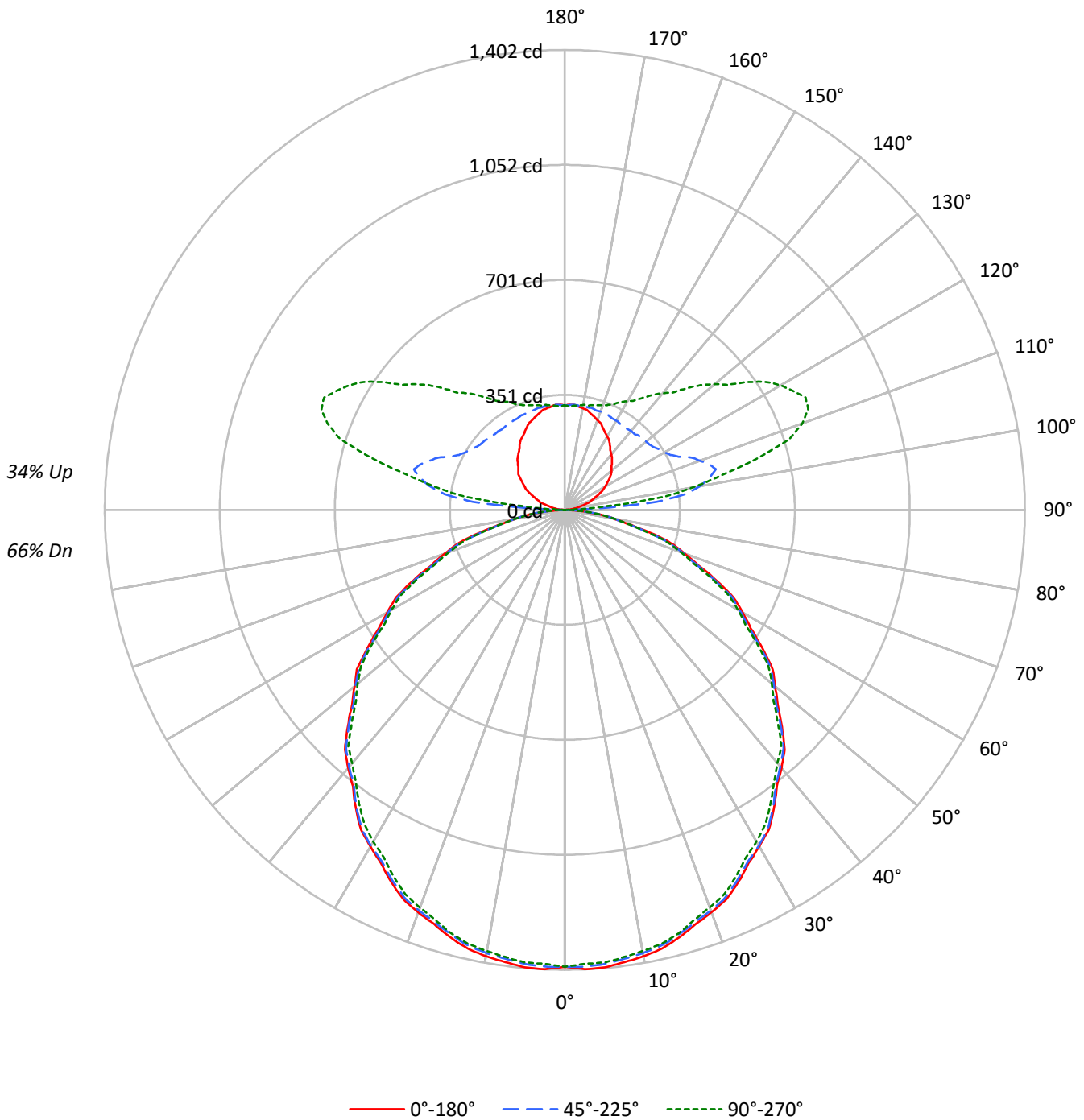
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6036.8 lumens
Efficiency: N/A
Efficacy: 103.2 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): 58.5
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	84	81	78	75	71	69	67	62	61	59	55
2	92	84	78	72	86	79	74	69	70	66	62	62	59	56	54	52	50	46
3	84	74	66	60	78	70	63	57	62	56	52	55	50	47	48	45	42	38
4	77	65	57	51	72	62	54	48	55	49	44	49	44	40	43	39	36	33
5	70	58	50	43	66	55	47	42	49	43	38	44	39	35	38	34	31	28
6	65	52	44	38	61	49	42	36	44	38	33	39	34	30	35	31	27	25
7	60	47	39	33	56	45	37	32	40	34	29	36	31	27	32	28	24	22
8	56	43	35	29	52	41	33	28	37	30	26	33	28	24	29	25	22	19
9	52	39	31	26	49	37	30	25	34	27	23	30	25	21	27	23	20	17
10	48	36	28	23	46	34	27	23	31	25	21	28	23	19	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12852	12852	12852
5°	12966	12873	12827
10°	12947	12854	12797
15°	12885	12809	12771
20°	12823	12764	12666
25°	12745	12674	12562
30°	12624	12592	12443
35°	12513	12468	12311
40°	12369	12309	12140
45°	12213	12148	11978
50°	12014	11942	11827
55°	11807	11694	11565
60°	11533	11404	11238
65°	11156	10937	10741
70°	10520	10278	10089
75°	9589	9268	9090
80°	7863	7863	7863
85°	5611	6352	6669



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	2.2
10°-20°	377.7	6.3
20°-30°	571.3	9.5
30°-40°	688.1	11.4
40°-50°	714.6	11.8
50°-60°	648.5	10.7
60°-70°	494.8	8.2
70°-80°	276.6	4.6
80°-90°	72.0	1.2
90°-100°	164.1	2.7
100°-110°	396.6	6.6
110°-120°	423.1	7.0
120°-130°	342.6	5.7
130°-140°	265.3	4.4
140°-150°	202.4	3.4
150°-160°	146.5	2.4
160°-170°	90.2	1.5
170°-180°	30.6	0.5
0°-30°	1080.9	17.9
0°-40°	1768.9	29.3
0°-60°	3132.0	51.9
0°-90°	3975.4	65.9
90°-120°	983.8	16.3
90°-150°	1794.1	29.7
90°-180°	2061.0	34.1
0°-180°	6036.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1393	1393	1393	1393	1393	
5°	1400	1385	1390	1387	1385	133
15°	1349	1335	1341	1337	1337	381
25°	1252	1239	1245	1234	1234	576
35°	1111	1101	1107	1093	1093	694
45°	936	929	931	918	918	722
55°	734	732	727	719	719	657
65°	511	507	501	494	492	504
75°	269	265	260	256	255	283
85°	53	58	60	61	63	66
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: P521427

CATALOG NUMBER: SQ4-F-050U-100D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.0	1393.0	1393.0	1393.0	1393.0
2.5°	1401.8	1390.1	1393.8	1392.0	1385.0
5°	1400.0	1385.3	1390.0	1387.0	1385.0
7.5°	1390.8	1376.1	1380.8	1376.8	1375.6
10°	1382.0	1367.3	1372.0	1368.0	1366.0
12.5°	1370.0	1356.1	1360.8	1356.0	1355.6
15°	1349.0	1335.3	1341.0	1337.0	1337.0
17.5°	1324.4	1311.7	1317.6	1311.8	1310.8
20°	1306.0	1293.3	1300.0	1291.0	1290.0
22.5°	1285.2	1273.3	1279.2	1268.6	1269.2
25°	1252.0	1239.3	1245.0	1234.0	1234.0
27.5°	1213.8	1201.3	1208.4	1195.2	1194.4
30°	1185.0	1173.3	1182.0	1168.0	1168.0
32.5°	1156.2	1146.0	1152.4	1139.1	1136.8
35°	1111.0	1101.2	1107.0	1093.0	1093.0
37.5°	1061.4	1053.4	1056.4	1043.5	1046.4
40°	1027.0	1018.2	1022.0	1009.0	1008.0
42.5°	991.8	983.8	986.8	973.9	976.8
45°	936.0	929.2	931.0	918.0	918.0
47.5°	879.4	874.3	872.8	861.2	863.2
50°	837.0	835.0	832.0	822.0	824.0
52.5°	798.6	794.3	790.4	781.2	782.4
55°	734.0	732.0	727.0	719.0	719.0
57.5°	672.2	667.9	662.0	653.8	653.8
60°	625.0	623.0	618.0	609.0	609.0
62.5°	580.2	577.5	571.6	563.4	562.6
65°	511.0	507.1	501.0	494.0	492.0
67.5°	438.8	434.7	429.8	423.2	422.0
70°	390.0	385.1	381.0	376.0	374.0
72.5°	340.4	337.9	333.0	328.0	326.8
75°	269.0	265.1	260.0	256.0	255.0
77.5°	193.6	193.0	191.2	188.6	189.6
80°	148.0	149.0	148.0	147.0	148.0
82.5°	107.2	109.7	109.6	109.4	110.4
85°	53.0	57.9	60.0	61.0	63.0
87.5°	15.2	19.9	24.0	24.8	25.6
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)