

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: P521428

Luminaire Tested: **SQ4-F-050U-100D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521428
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 (4000K)
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

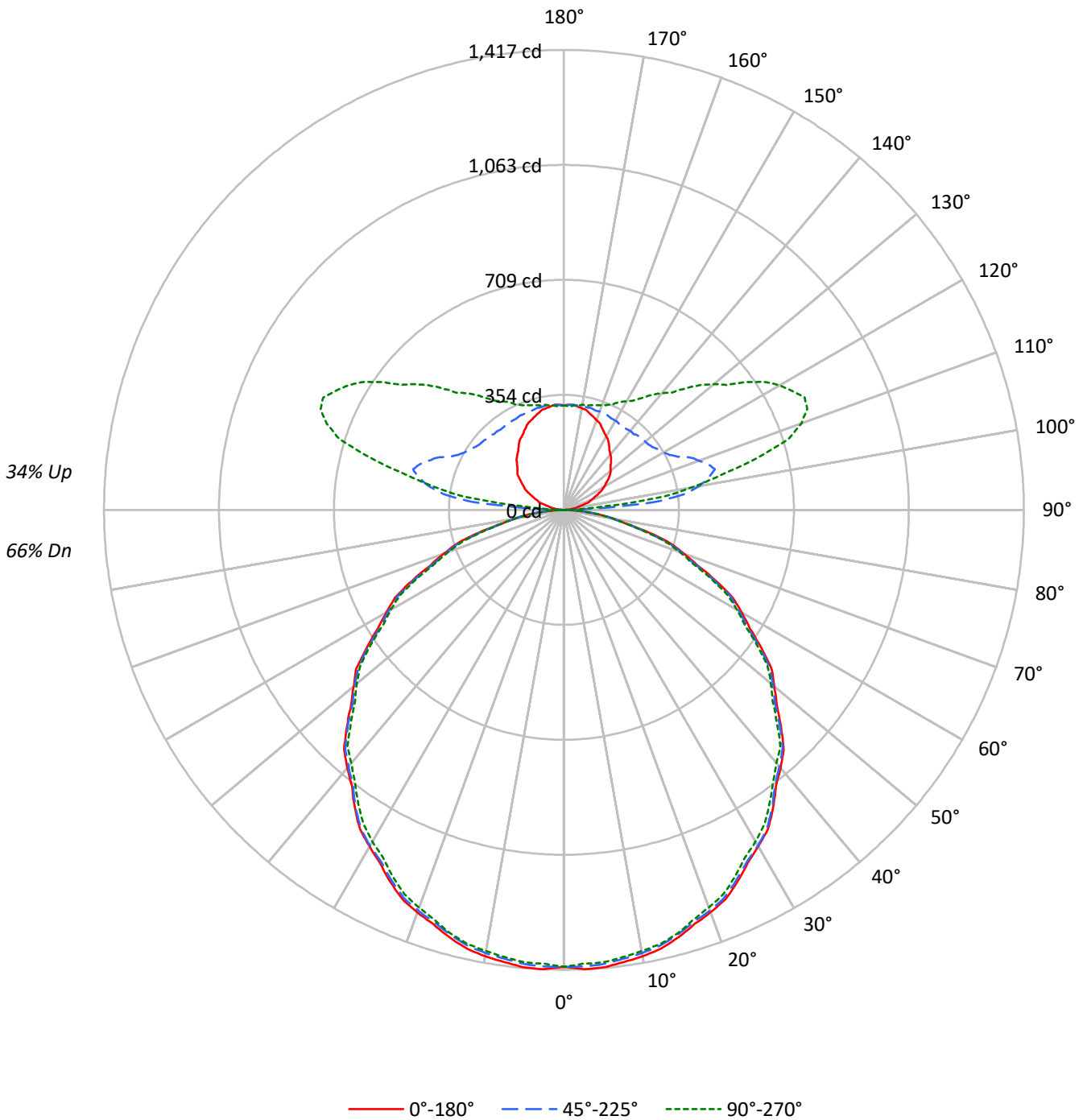
Lumens per Lamp: N/A
Luminaire Lumens: 6101.1 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	12989	12989	12989
5°	13104	13010	12963
10°	13085	12990	12933
15°	13023	12945	12906
20°	12959	12899	12800
25°	12881	12808	12695
30°	12759	12727	12575
35°	12646	12601	12441
40°	12500	12440	12269
45°	12343	12277	12106
50°	12142	12070	11954
55°	11932	11818	11689
60°	11656	11525	11357
65°	11274	11053	10854
70°	10634	10388	10197
75°	9693	9368	9186
80°	7948	7948	7948
85°	5674	6415	6743



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.3	2.2
10°-20°	381.7	6.3
20°-30°	577.4	9.5
30°-40°	695.4	11.4
40°-50°	722.2	11.8
50°-60°	655.4	10.7
60°-70°	500.0	8.2
70°-80°	279.5	4.6
80°-90°	72.8	1.2
90°-100°	165.9	2.7
100°-110°	400.9	6.6
110°-120°	427.6	7.0
120°-130°	346.3	5.7
130°-140°	268.1	4.4
140°-150°	204.5	3.4
150°-160°	148.0	2.4
160°-170°	91.2	1.5
170°-180°	30.9	0.5
0°-30°	1092.4	17.9
0°-40°	1787.7	29.3
0°-60°	3165.3	51.9
0°-90°	4017.7	65.9
90°-120°	994.3	16.3
90°-150°	1813.2	29.7
90°-180°	2083.0	34.1
0°-180°	6101.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1408	1408	1408	1408	1408	
5°	1415	1400	1405	1402	1400	134
15°	1363	1350	1355	1351	1351	385
25°	1265	1252	1258	1247	1247	583
35°	1123	1113	1119	1105	1105	702
45°	946	939	941	928	928	730
55°	742	740	735	727	727	664
65°	516	512	506	499	497	509
75°	272	268	263	259	258	286
85°	54	58	61	62	64	66
90°	0	0	0	0	0	3
95°	16	83	284	185	130	18
105°	64	111	482	623	615	68
115°	117	150	387	734	818	116
125°	167	192	336	584	686	149
135°	205	229	322	460	530	158
145°	243	261	316	391	422	152
155°	278	290	320	346	359	128
165°	307	312	324	329	334	87
175°	325	324	325	322	322	31
180°	322	322	322	322	322	

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CATALOG NUMBER: SQ4-F-050U-100D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1407.8	1407.8	1407.8	1407.8	1407.8
2.5°	1416.7	1404.9	1408.6	1406.9	1399.7
5°	1414.9	1400.1	1404.8	1401.7	1399.7
7.5°	1405.6	1390.8	1395.5	1391.4	1390.2
10°	1396.7	1381.9	1386.6	1382.5	1380.5
12.5°	1384.6	1370.5	1375.3	1370.4	1370.0
15°	1363.4	1349.5	1355.3	1351.2	1351.2
17.5°	1338.5	1325.6	1331.6	1325.7	1324.7
20°	1319.9	1307.1	1313.8	1304.7	1303.7
22.5°	1298.9	1286.8	1292.8	1282.1	1282.7
25°	1265.3	1252.5	1258.2	1247.1	1247.1
27.5°	1226.7	1214.1	1221.3	1207.9	1207.1
30°	1197.6	1185.8	1194.6	1180.4	1180.4
32.5°	1168.5	1158.2	1164.7	1151.3	1148.9
35°	1122.8	1112.9	1118.8	1104.6	1104.6
37.5°	1072.7	1064.6	1067.6	1054.6	1057.5
40°	1037.9	1029.0	1032.9	1019.7	1018.7
42.5°	1002.4	994.3	997.3	984.2	987.2
45°	946.0	939.0	940.9	927.8	927.8
47.5°	888.8	883.6	882.1	870.4	872.4
50°	845.9	843.9	840.9	830.8	832.8
52.5°	807.1	802.8	798.8	789.5	790.7
55°	741.8	739.8	734.7	726.7	726.7
57.5°	679.4	675.0	669.0	660.8	660.8
60°	631.7	629.7	624.6	615.5	615.5
62.5°	586.4	583.6	577.7	569.4	568.6
65°	516.4	512.5	506.3	499.2	497.2
67.5°	443.5	439.3	434.4	427.7	426.5
70°	394.2	389.2	385.1	380.0	378.0
72.5°	344.0	341.5	336.5	331.5	330.3
75°	271.9	267.9	262.8	258.7	257.7
77.5°	195.7	195.1	193.2	190.6	191.6
80°	149.6	150.6	149.6	148.6	149.6
82.5°	108.3	110.9	110.8	110.6	111.6
85°	53.6	58.5	60.6	61.7	63.7
87.5°	15.4	20.1	24.3	25.1	25.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	44.9	105.8	51.4	34.9
95°	16.4	83.0	284.2	184.8	129.5
97.5°	29.0	91.9	374.3	360.6	309.5
100°	38.8	97.5	423.9	447.5	405.5
102.5°	48.1	102.5	456.6	519.8	494.9
105°	64.1	110.7	481.8	623.4	615.4
107.5°	79.7	120.4	466.9	706.4	725.2
110°	90.6	128.6	443.0	742.3	777.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.5	136.9	421.7	751.0	811.4
115°	117.2	149.9	387.1	733.8	818.5
117.5°	132.8	163.5	366.8	694.4	793.5
120°	143.1	171.8	353.7	663.4	767.3
122.5°	154.0	180.5	345.5	631.7	734.1
125°	167.0	192.3	336.0	583.6	685.6
127.5°	179.8	203.6	329.3	542.9	632.4
130°	187.4	210.7	327.1	514.5	602.4
132.5°	194.5	218.9	323.8	494.0	568.6
135°	205.1	229.1	322.3	460.2	529.5
137.5°	215.2	239.3	317.6	437.3	489.6
140°	222.8	244.8	317.6	420.9	468.9
142.5°	230.5	252.5	314.8	406.5	447.0
145°	242.6	260.6	316.2	391.2	421.8
147.5°	253.9	271.4	315.4	373.5	398.8
150°	261.0	276.3	317.6	365.7	385.7
152.5°	268.6	283.4	317.0	357.5	375.4
155°	278.0	290.0	320.3	346.5	359.1
157.5°	289.4	299.6	319.6	342.3	349.7
160°	293.7	302.4	322.3	336.8	342.1
162.5°	300.8	308.4	321.2	335.1	338.3
165°	307.3	312.0	324.4	329.3	333.9
167.5°	315.4	318.5	323.6	328.9	329.0
170°	317.6	319.6	325.7	325.1	328.5
172.5°	321.4	322.9	324.1	325.6	323.6
175°	325.1	323.7	325.1	322.3	321.7
177.5°	324.4	324.4	323.3	322.1	319.5
180°	321.7	321.7	321.7	321.7	321.7

(END OF REPORT)