

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: P521442

Luminaire Tested: **SQ4-F-050U-125D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521442
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 (4500K)
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

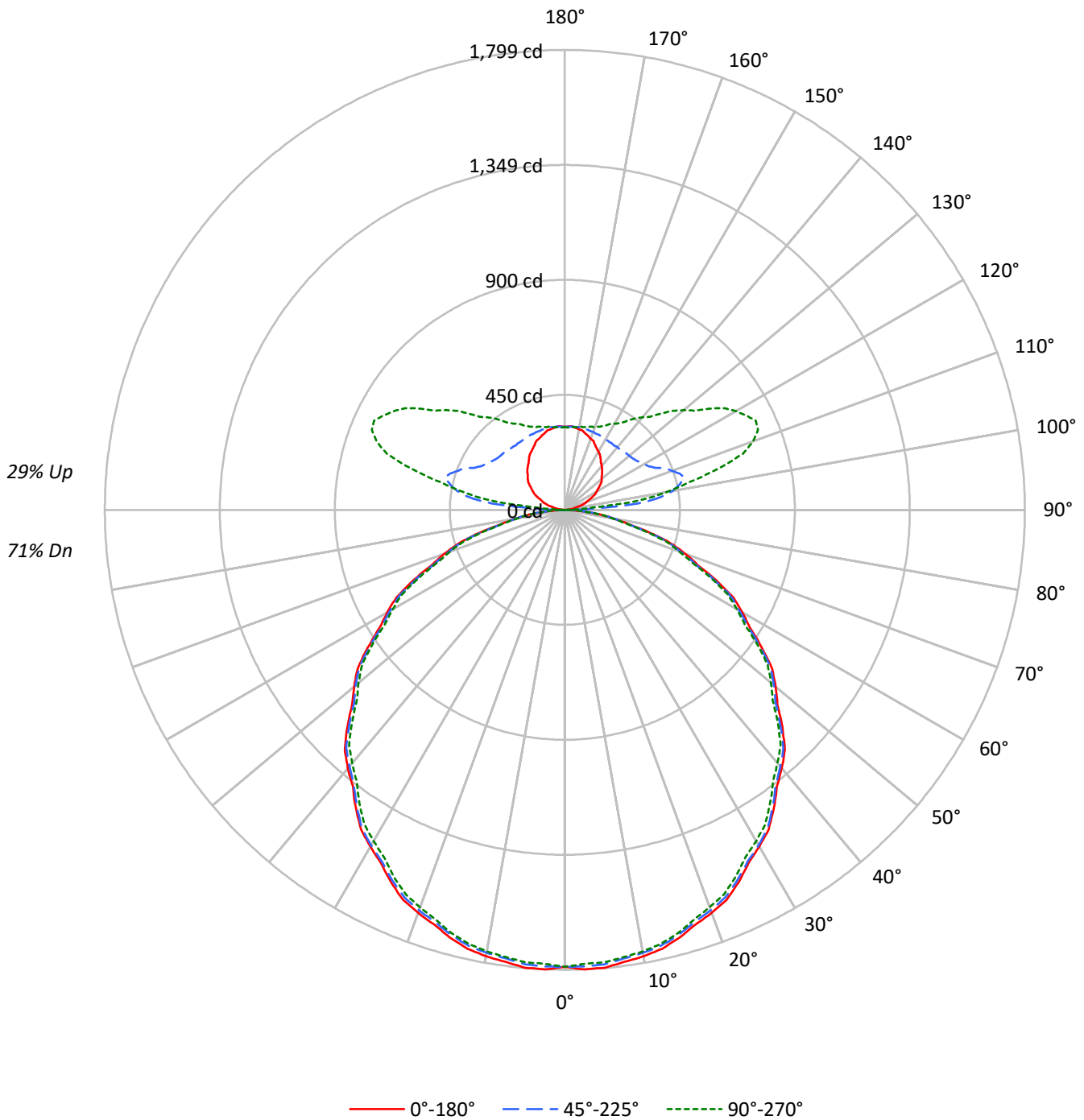
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7190.9 lumens
Efficiency: N/A
Efficacy: 100.6 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°	16489	16489	16489
5°	16647	16524	16448
10°	16610	16486	16429
15°	16546	16439	16371
20°	16478	16368	16248
25°	16360	16267	16112
30°	16200	16145	15939
35°	16049	15969	15774
40°	15899	15788	15580
45°	15697	15563	15365
50°	15441	15325	15106
55°	15144	14996	14800
60°	14780	14574	14330
65°	14286	13998	13732
70°	13453	13124	12875
75°	12263	11899	11646
80°	10111	10058	9840
85°	7220	8193	8193



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.2	2.4
10°-20°	484.6	6.7
20°-30°	732.8	10.2
30°-40°	882.3	12.3
40°-50°	916.2	12.7
50°-60°	830.3	11.5
60°-70°	632.3	8.8
70°-80°	353.4	4.9
80°-90°	91.9	1.3
90°-100°	167.0	2.3
100°-110°	403.7	5.6
110°-120°	430.6	6.0
120°-130°	348.7	4.8
130°-140°	270.0	3.8
140°-150°	206.0	2.9
150°-160°	149.1	2.1
160°-170°	91.8	1.3
170°-180°	31.1	0.4
0°-30°	1386.6	19.3
0°-40°	2268.8	31.6
0°-60°	4015.3	55.8
0°-90°	5092.9	70.8
90°-120°	1001.3	13.9
90°-150°	1826.0	25.4
90°-180°	2098.0	29.2
0°-180°	7190.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1787	1787	1787	1787	1787	
5°	1797	1778	1784	1777	1776	171
15°	1732	1714	1721	1717	1714	489
25°	1607	1589	1598	1584	1583	740
35°	1425	1412	1418	1402	1400	891
45°	1203	1193	1193	1178	1178	927
55°	942	938	932	920	920	841
65°	654	648	641	630	629	646
75°	344	336	334	329	327	362
85°	68	74	77	78	77	84
90°	0	0	0	0	0	3
95°	16	84	286	186	130	18
105°	64	112	485	628	620	68
115°	118	151	390	739	824	117
125°	168	194	338	588	690	150
135°	207	231	325	464	533	159
145°	244	262	318	394	425	153
155°	280	292	323	349	362	129
165°	310	314	327	332	336	87
175°	327	326	327	325	324	31
180°	324	324	324	324	324	

TEST NUMBER: P521442

CATALOG NUMBER: SQ4-F-050U-125D-93050-1D-UNV-STD-W-4 (4500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1787.2	1787.2	1787.2	1787.2	1787.2
2.5°	1799.4	1783.5	1788.0	1784.6	1777.5
5°	1797.4	1778.5	1784.2	1777.0	1776.0
7.5°	1783.6	1764.7	1770.3	1766.0	1765.0
10°	1773.0	1754.1	1759.7	1754.6	1753.6
12.5°	1758.3	1740.2	1745.9	1740.0	1739.0
15°	1732.3	1714.4	1721.1	1716.9	1713.9
17.5°	1700.3	1682.0	1689.9	1683.7	1680.2
20°	1678.3	1658.4	1667.1	1656.9	1654.9
22.5°	1651.5	1631.6	1640.3	1627.6	1627.2
25°	1607.1	1589.2	1597.9	1583.6	1582.7
27.5°	1557.2	1540.5	1549.7	1532.3	1531.2
30°	1520.6	1504.6	1515.5	1498.1	1496.1
32.5°	1483.1	1469.6	1476.4	1461.5	1458.7
35°	1424.9	1412.0	1417.8	1401.5	1400.5
37.5°	1362.4	1349.5	1354.9	1339.4	1337.6
40°	1320.1	1307.1	1310.9	1294.6	1293.6
42.5°	1273.7	1263.1	1265.3	1248.2	1248.8
45°	1203.0	1193.1	1192.8	1177.6	1177.6
47.5°	1127.9	1118.0	1118.1	1104.1	1102.9
50°	1075.8	1069.8	1067.7	1054.4	1052.4
52.5°	1022.1	1017.7	1013.9	1000.7	1000.3
55°	941.5	937.5	932.3	920.1	920.1
57.5°	858.8	854.2	847.6	835.4	834.4
60°	801.0	798.0	789.8	777.6	776.6
62.5°	743.2	737.8	731.2	719.8	718.8
65°	654.4	647.5	641.2	630.0	629.0
67.5°	562.2	554.5	549.2	541.4	538.4
70°	498.7	491.7	486.5	480.3	477.3
72.5°	435.2	429.0	425.4	419.3	416.3
75°	344.0	336.0	333.8	328.7	326.7
77.5°	251.4	247.4	245.5	241.8	239.0
80°	190.3	190.3	189.3	187.2	185.2
82.5°	137.4	139.0	140.5	140.0	138.0
85°	68.2	74.2	77.4	78.3	77.4
87.5°	19.5	25.9	30.9	31.7	30.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	45.2	106.5	51.8	35.1
95°	16.5	83.6	286.2	186.1	130.4
97.5°	29.2	92.6	376.9	363.1	311.7
100°	39.1	98.2	426.9	450.6	408.3
102.5°	48.5	103.2	459.8	523.5	498.4
105°	64.5	111.5	485.2	627.8	619.7
107.5°	80.3	121.2	470.2	711.4	730.4
110°	91.3	129.5	446.1	747.5	783.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	102.3	137.8	424.7	756.3	817.1
115°	118.0	150.9	389.8	739.0	824.2
117.5°	133.7	164.7	369.4	699.3	799.1
120°	144.1	173.0	356.2	668.1	772.8
122.5°	155.1	181.8	348.0	636.2	739.3
125°	168.1	193.6	338.3	587.7	690.4
127.5°	181.0	205.1	331.6	546.7	636.9
130°	188.7	212.2	329.4	518.1	606.7
132.5°	195.9	220.4	326.1	497.5	572.6
135°	206.6	230.7	324.6	463.5	533.2
137.5°	216.7	241.0	319.8	440.4	493.0
140°	224.4	246.6	319.8	423.9	472.2
142.5°	232.1	254.2	317.1	409.4	450.2
145°	244.3	262.4	318.4	393.9	424.8
147.5°	255.7	273.3	317.6	376.1	401.6
150°	262.9	278.3	319.8	368.3	388.4
152.5°	270.5	285.4	319.3	360.0	378.0
155°	280.0	292.1	322.6	348.9	361.7
157.5°	291.4	301.7	321.9	344.7	352.2
160°	295.8	304.5	324.6	339.2	344.5
162.5°	302.9	310.6	323.5	337.5	340.7
165°	309.5	314.2	326.7	331.6	336.3
167.5°	317.6	320.7	325.9	331.2	331.3
170°	319.8	321.8	328.0	327.4	330.8
172.5°	323.7	325.1	326.4	327.9	325.9
175°	327.4	326.0	327.4	324.6	323.9
177.5°	326.7	326.7	325.6	324.4	321.7
180°	323.9	323.9	323.9	323.9	323.9

(END OF REPORT)