

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: P521598

Luminaire Tested: **SQ4-F-100U-125D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521598
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-100U-125D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

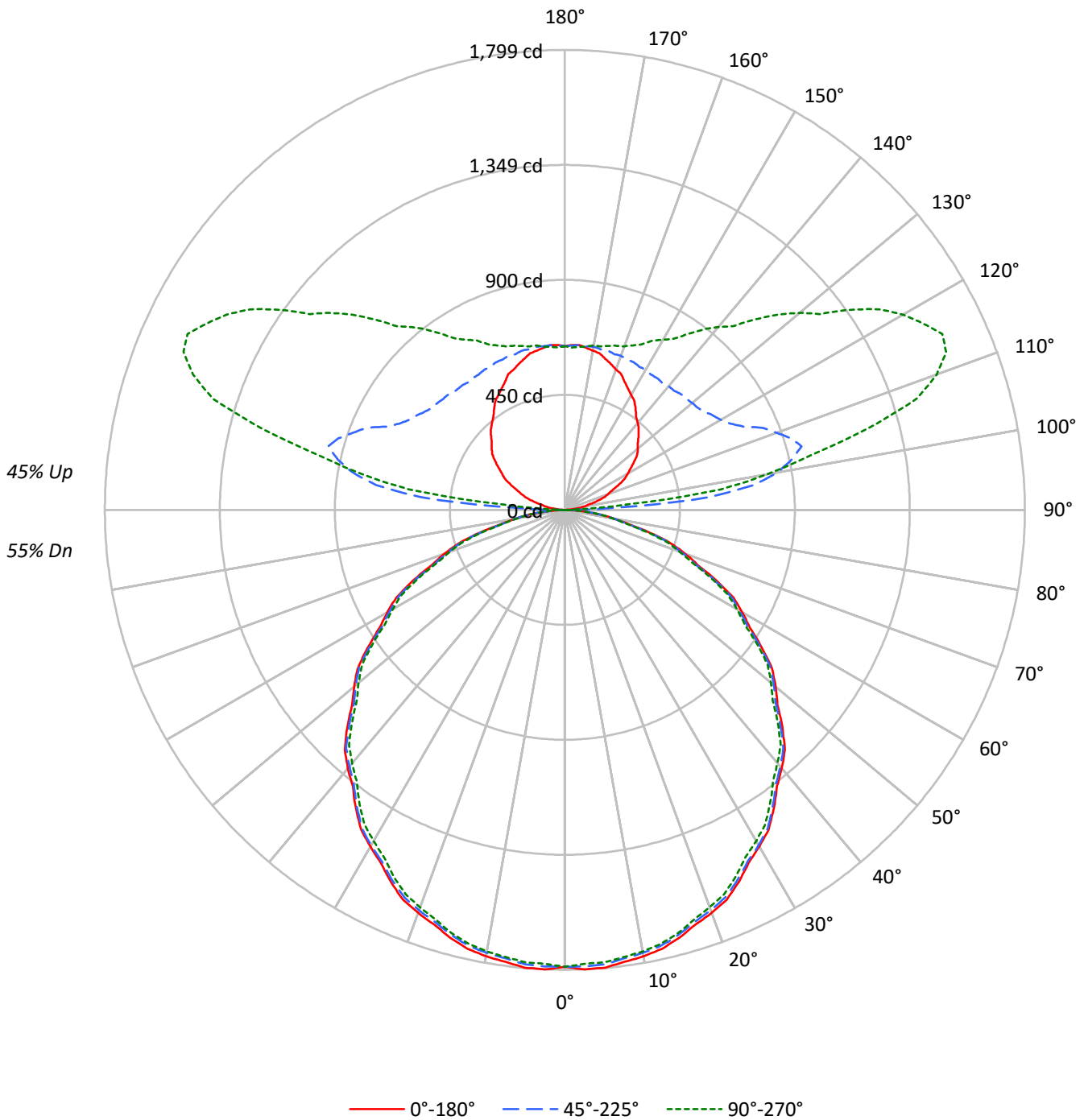
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9237.3 lumens
Efficiency: N/A
Efficacy: 105.2 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: General Diffuse

Input Watts (W): 87.8
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55		
1	99	94	90	87	92	88	84	81	75	73	71	64	62	61	54	52	51	46		
2	90	82	76	71	83	77	71	66	66	62	58	56	53	50	47	45	43	38		
3	82	72	65	59	76	67	61	55	58	53	49	49	46	42	41	39	36	32		
4	75	64	56	49	69	59	52	47	51	46	41	44	40	36	37	34	31	27		
5	69	57	48	42	63	53	46	40	46	40	36	39	35	31	33	30	27	24		
6	63	51	42	37	58	47	40	35	41	35	31	35	31	27	30	26	24	21		
7	58	46	38	32	54	43	36	30	37	31	27	32	27	24	27	24	21	18		
8	54	42	34	28	50	39	32	27	34	28	24	29	25	21	25	21	19	16		
9	50	38	30	25	47	36	29	24	31	26	22	27	22	19	23	19	17	15		
10	47	35	27	23	44	33	26	21	29	23	19	25	20	17	21	18	15	13		

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	1.8
10°-20°	484.6	5.2
20°-30°	732.8	7.9
30°-40°	882.3	9.6
40°-50°	916.2	9.9
50°-60°	830.3	9.0
60°-70°	632.3	6.8
70°-80°	353.4	3.8
80°-90°	91.9	1.0
90°-100°	330.0	3.6
100°-110°	797.5	8.6
110°-120°	850.5	9.2
120°-130°	688.9	7.5
130°-140°	533.4	5.8
140°-150°	406.9	4.4
150°-160°	294.5	3.2
160°-170°	181.4	2.0
170°-180°	61.4	0.7
0°-30°	1386.6	15.0
0°-40°	2268.8	24.6
0°-60°	4015.3	43.5
0°-90°	5092.9	55.1
90°-120°	1978.0	21.4
90°-150°	3607.1	39.0
90°-180°	4144.0	44.9
0°-180°	9237.3	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	4
95°	32	165	565	368	258	37
105°	127	220	958	1240	1224	135
115°	233	298	770	1460	1628	231
125°	332	382	668	1161	1364	296
135°	408	456	641	916	1053	315
145°	483	518	629	778	839	302
155°	553	577	637	689	714	255
165°	611	621	645	655	664	173
175°	647	644	647	641	640	61
180°	640	640	640	640	640	

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CATALOG NUMBER: SQ4-F-100U-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°	10.8	89.3	210.4	102.3	69.4
95°	32.5	165.1	565.3	367.6	257.6
97.5°	57.8	182.9	744.6	717.3	615.8
100°	77.3	193.9	843.3	890.2	806.6
102.5°	95.7	203.9	908.3	1034.1	984.5
105°	127.4	220.2	958.5	1240.1	1224.2
107.5°	158.6	239.5	928.9	1405.4	1442.7
110°	180.3	255.9	881.2	1476.6	1546.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	202.0	272.3	838.9	1494.0	1614.1
115°	233.2	298.1	770.0	1459.9	1628.2
117.5°	264.1	325.3	729.6	1381.3	1578.6
120°	284.7	341.7	703.6	1319.7	1526.5
122.5°	306.4	359.1	687.3	1256.8	1460.4
125°	332.1	382.5	668.4	1161.0	1363.8
127.5°	357.6	405.1	655.1	1079.9	1258.1
130°	372.8	419.2	650.7	1023.5	1198.4
132.5°	386.9	435.4	644.2	982.7	1131.2
135°	408.1	455.8	641.2	915.5	1053.4
137.5°	428.1	476.1	631.8	870.0	973.9
140°	443.3	487.1	631.8	837.3	932.7
142.5°	458.5	502.2	626.3	808.7	889.3
145°	482.6	518.4	629.0	778.2	839.2
147.5°	505.1	539.9	627.4	743.0	793.4
150°	519.2	549.7	631.8	727.6	767.3
152.5°	534.4	563.8	630.7	711.2	746.7
155°	553.1	577.0	637.2	689.3	714.5
157.5°	575.6	596.0	635.8	680.9	695.7
160°	584.3	601.5	641.2	670.0	680.6
162.5°	598.4	613.5	639.1	666.6	673.0
165°	611.4	620.7	645.3	655.0	664.3
167.5°	627.4	633.5	643.7	654.3	654.5
170°	631.8	635.7	648.0	646.8	653.5
172.5°	639.4	642.3	644.8	647.7	643.7
175°	646.7	644.0	646.7	641.2	639.9
177.5°	645.3	645.3	643.1	640.9	635.6
180°	639.9	639.9	639.9	639.9	639.9

(END OF REPORT)