

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P521640

Luminaire Tested: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521640
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-39)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10438.9 lumens
Efficiency: N/A
Efficacy: 107.4 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

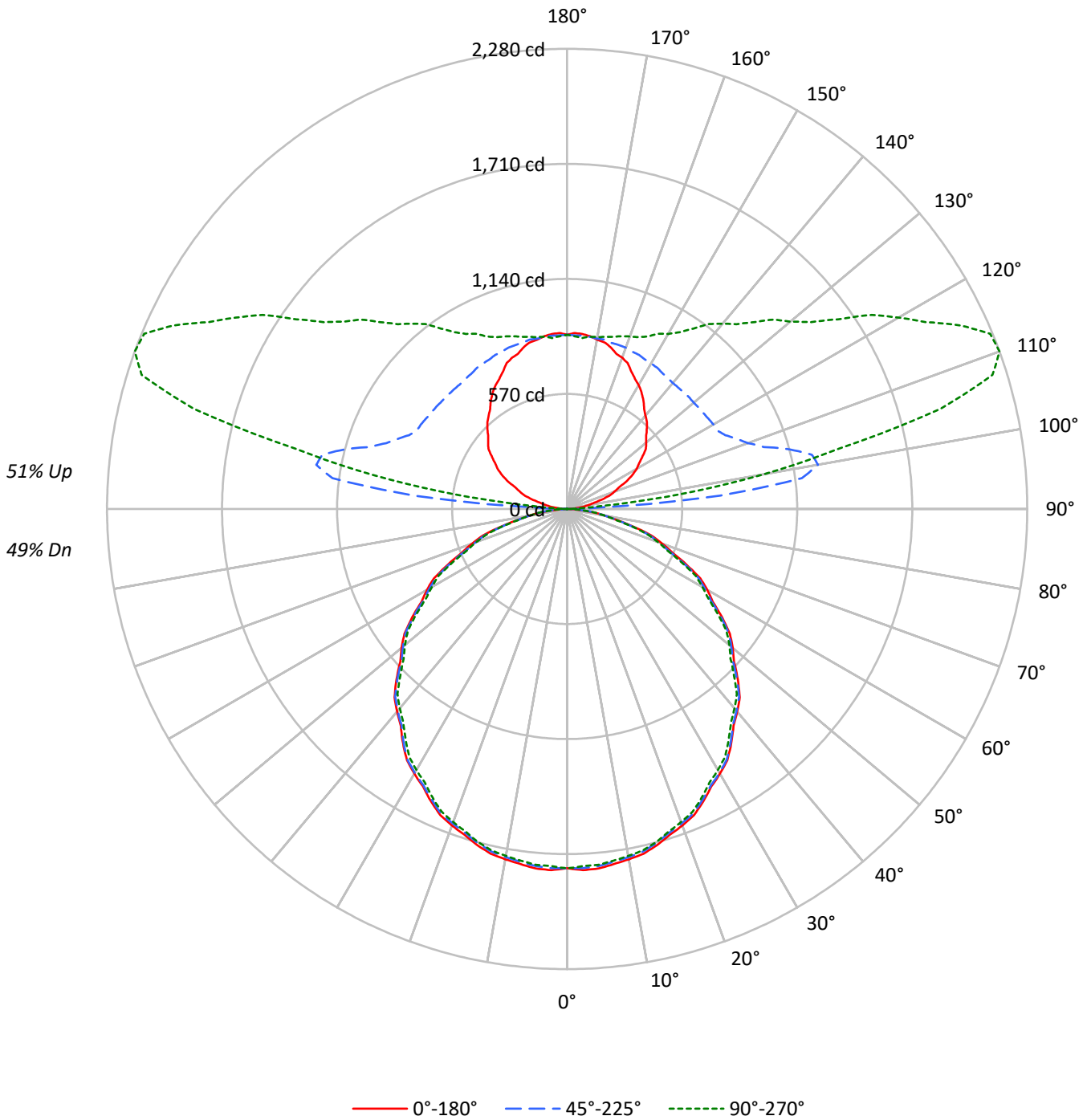
Input Watts (W): 97.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0														
RCR																																						
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49																				
1	97	93	89	85	89	86	82	79	72	70	68	60	58	56	48	47	46	41																				
2	88	81	75	70	81	75	69	65	63	59	56	52	49	47	42	40	39	34																				
3	81	71	64	58	74	66	59	54	55	51	47	46	42	39	37	35	33	28																				
4	74	63	55	49	67	58	51	46	49	44	40	41	37	34	33	30	28	24																				
5	68	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21																				
6	62	50	42	36	57	46	39	34	39	34	29	33	29	25	27	24	21	18																				
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16																				
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	23	19	17	14																				
9	50	37	30	25	46	35	28	23	30	24	20	25	21	18	21	18	15	13																				
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16425	16425	16425
5°	16560	16452	16388
10°	16514	16414	16349
15°	16463	16361	16314
20°	16387	16281	16204
25°	16265	16175	16065
30°	16137	16085	15917
35°	15971	15916	15718
40°	15785	15726	15537
45°	15609	15507	15265
50°	15362	15236	15054
55°	15080	14939	14704
60°	14795	14524	14271
65°	14221	13922	13644
70°	13515	13040	12881
75°	12220	11871	11660
80°	10068	10068	9909
85°	7135	8162	8585

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15609 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.5	1.6
10°-20°	482.5	4.6
20°-30°	729.8	7.0
30°-40°	879.0	8.4
40°-50°	912.6	8.7
50°-60°	827.3	7.9
60°-70°	631.1	6.0
70°-80°	353.0	3.4
80°-90°	91.8	0.9
90°-100°	393.4	3.8
100°-110°	1119.5	10.7
110°-120°	1072.5	10.3
120°-130°	848.9	8.1
130°-140°	681.4	6.5
140°-150°	533.4	5.1
150°-160°	390.3	3.7
160°-170°	241.8	2.3
170°-180°	82.0	0.8
0°-30°	1380.8	13.2
0°-40°	2259.9	21.6
0°-60°	3999.8	38.3
0°-90°	5075.8	48.6
90°-120°	2585.4	24.8
90°-150°	4649.1	44.5
90°-180°	5363.0	51.4
0°-180°	10438.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1780	1780	1780	1780	1780	
5°	1788	1770	1776	1771	1770	170
15°	1724	1706	1713	1711	1708	486
25°	1598	1581	1589	1577	1578	736
35°	1418	1406	1413	1397	1396	886
45°	1196	1190	1188	1174	1170	922
55°	938	936	929	917	914	837
65°	651	648	638	630	625	646
75°	343	337	333	328	327	362
85°	67	74	77	77	81	84
90°	0	0	0	0	0	4
95°	43	170	762	264	162	49
105°	174	264	1141	2015	1916	184
115°	323	391	865	1832	2152	318
125°	456	506	826	1370	1638	408
135°	558	605	816	1157	1308	431
145°	658	692	822	1002	1092	411
155°	752	769	842	905	942	348
165°	831	834	852	870	883	234
175°	870	865	862	857	850	82
180°	863	863	863	863	863	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1780.3	1780.3	1780.3	1780.3	1780.3
2.5°	1791.2	1776.7	1781.1	1777.8	1771.7
5°	1788.1	1770.0	1776.4	1771.4	1769.5
7.5°	1774.4	1757.4	1762.9	1759.9	1757.6
10°	1762.7	1746.5	1752.0	1748.9	1745.1
12.5°	1749.4	1732.4	1738.7	1734.2	1732.6
15°	1723.6	1706.5	1712.9	1710.9	1708.0
17.5°	1692.4	1675.0	1681.6	1677.7	1675.4
20°	1669.0	1650.8	1658.2	1650.4	1650.4
22.5°	1642.4	1624.2	1633.2	1621.5	1623.8
25°	1597.7	1581.4	1588.9	1577.2	1578.1
27.5°	1549.0	1533.8	1543.4	1528.3	1527.7
30°	1514.7	1499.4	1509.8	1493.2	1494.1
32.5°	1476.4	1463.4	1472.3	1456.4	1455.9
35°	1418.0	1406.5	1413.1	1397.4	1395.5
37.5°	1354.3	1345.9	1348.6	1333.8	1333.0
40°	1310.6	1302.9	1305.7	1290.0	1290.0
42.5°	1266.0	1259.1	1261.1	1244.0	1244.0
45°	1196.3	1189.6	1188.5	1173.7	1169.9
47.5°	1121.9	1116.5	1113.1	1099.8	1098.1
50°	1070.3	1066.5	1061.5	1049.8	1048.8
52.5°	1016.4	1014.9	1009.2	996.7	995.7
55°	937.5	935.6	928.7	916.9	914.1
57.5°	854.9	853.0	844.9	833.3	830.5
60°	801.8	796.0	787.1	776.3	773.4
62.5°	743.9	737.5	728.5	718.5	718.0
65°	651.4	647.6	637.7	629.8	625.0
67.5°	564.3	555.7	545.9	539.4	538.5
70°	501.0	492.4	483.4	478.5	477.5
72.5°	437.7	430.6	422.5	417.6	417.4
75°	342.8	337.0	333.0	328.1	327.1
77.5°	248.8	247.3	245.7	240.4	240.4
80°	189.5	189.5	189.5	186.5	186.5
82.5°	136.3	140.1	140.2	138.9	138.9
85°	67.4	74.1	77.1	77.2	81.1
87.5°	18.8	25.6	30.5	31.3	33.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.1	69.6	161.5	47.0	35.5
95°	42.7	169.5	761.6	263.6	162.5
97.5°	78.5	198.5	1173.0	839.3	575.2
100°	103.4	215.8	1262.3	1278.6	984.9
102.5°	131.0	234.3	1242.6	1636.6	1380.1
105°	174.0	263.9	1140.8	2015.1	1915.6
107.5°	217.7	298.2	1022.0	2121.8	2210.4
110°	247.9	323.3	953.7	2080.9	2279.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	276.7	348.3	907.7	1984.4	2268.1
115°	323.4	390.8	865.0	1832.5	2151.9
117.5°	364.4	427.6	839.8	1666.5	2004.8
120°	397.2	450.2	837.1	1571.7	1895.9
122.5°	423.5	476.5	830.6	1488.4	1789.5
125°	456.3	506.1	825.6	1370.1	1638.1
127.5°	492.1	538.6	823.0	1299.5	1520.3
130°	510.5	557.0	819.1	1250.2	1442.8
132.5°	530.2	575.4	819.1	1211.8	1389.0
135°	558.1	604.6	815.8	1157.4	1308.2
137.5°	584.3	629.6	815.5	1111.3	1241.6
140°	604.0	650.6	814.2	1073.1	1198.2
142.5°	626.4	665.2	818.1	1042.6	1154.9
145°	658.2	691.9	822.4	1001.7	1091.6
147.5°	685.5	718.2	829.6	960.4	1038.0
150°	709.1	731.6	832.2	946.7	1001.3
152.5°	727.5	751.2	834.8	928.2	978.9
155°	751.8	769.4	842.1	905.3	942.2
157.5°	782.0	792.6	843.7	894.9	921.2
160°	797.7	805.8	850.3	886.9	909.4
162.5°	806.9	816.2	851.6	880.2	897.5
165°	830.6	833.8	851.9	870.3	883.1
167.5°	846.7	843.8	859.5	867.8	872.9
170°	851.9	850.3	856.8	858.6	865.0
172.5°	863.7	858.3	860.8	856.0	861.1
175°	870.0	865.1	861.8	856.7	850.3
177.5°	872.6	864.9	860.8	855.5	856.8
180°	863.4	863.4	863.4	863.4	863.4

(END OF REPORT)