

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: P521619

Luminaire Tested: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521619
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9140.9 lumens
Efficiency: N/A
Efficacy: 124.9 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-Indirect

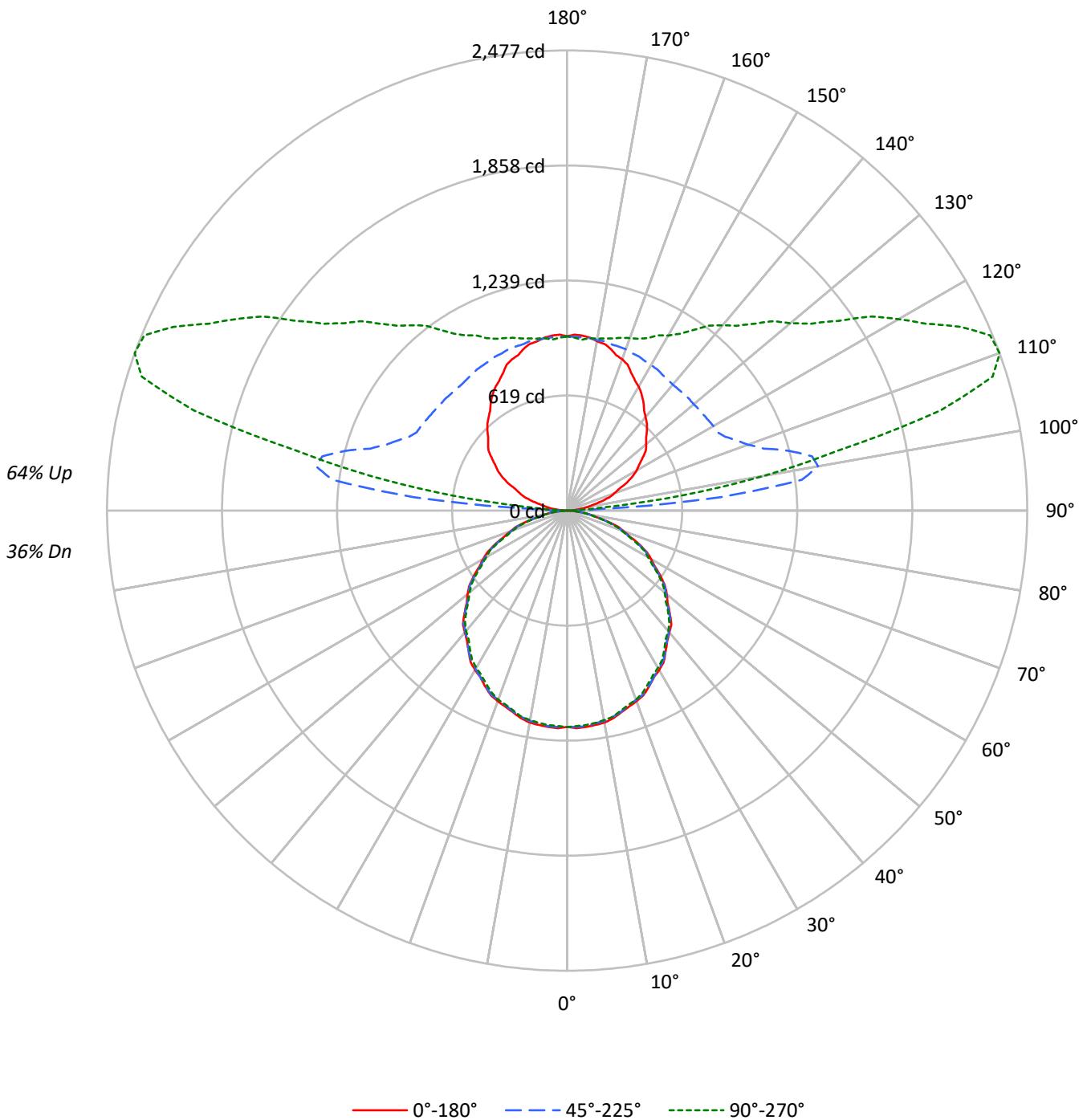
Input Watts (W): 73.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	104	104	104	104	94	94	94	94	76	76	76		59	59	59		43	43	43	36
1	95	90	86	83	86	82	79	76	66	64	62		52	50	49		38	37	37	30
2	86	79	73	68	78	71	66	62	58	54	51		45	43	41		34	32	31	25
3	78	69	62	56	71	63	57	52	51	46	43		40	37	34		30	28	26	21
4	72	61	53	47	64	55	49	43	45	40	36		35	32	29		26	24	22	18
5	66	54	46	40	59	49	42	37	40	35	31		32	28	25		24	21	19	16
6	60	48	40	35	54	44	37	32	36	31	27		28	25	22		21	19	17	14
7	56	44	36	30	50	40	33	28	33	27	24		26	22	19		19	17	15	12
8	52	39	32	27	47	36	29	25	30	24	21		24	20	17		18	15	13	11
9	48	36	29	24	43	33	26	22	27	22	18		22	18	15		16	14	12	10
10	45	33	26	21	40	30	24	19	25	20	17		20	16	14		15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10749	10749	10749
5°	10829	10791	10731
10°	10855	10776	10726
15°	10743	10703	10652
20°	10720	10647	10637
25°	10629	10608	10488
30°	10558	10491	10411
35°	10409	10397	10266
40°	10313	10261	10198
45°	10189	10134	10023
50°	10052	9976	9839
55°	9865	9746	9609
60°	9632	9477	9300
65°	9313	9104	8942
70°	8729	8530	8330
75°	7867	7639	7529
80°	6429	6482	6370
85°	4605	5282	5282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10189 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	1.2
10°-20°	315.7	3.5
20°-30°	477.7	5.2
30°-40°	574.5	6.3
40°-50°	596.5	6.5
50°-60°	540.4	5.9
60°-70°	411.1	4.5
70°-80°	228.5	2.5
80°-90°	58.9	0.6
90°-100°	427.5	4.7
100°-110°	1216.3	13.3
110°-120°	1165.4	12.7
120°-130°	922.3	10.1
130°-140°	740.3	8.1
140°-150°	579.6	6.3
150°-160°	424.1	4.6
160°-170°	262.7	2.9
170°-180°	89.1	1.0
0°-30°	903.8	9.9
0°-40°	1478.3	16.2
0°-60°	2615.3	28.6
0°-90°	3313.7	36.3
90°-120°	2809.1	30.7
90°-150°	5051.4	55.3
90°-180°	5827.0	63.7
0°-180°	9140.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1165	1165	1165	1165	1165	
5°	1169	1159	1165	1160	1159	111
15°	1125	1115	1120	1119	1115	318
25°	1044	1035	1042	1031	1030	481
35°	924	920	923	912	912	579
45°	781	776	777	768	768	603
55°	613	612	606	600	597	547
65°	427	420	417	411	410	420
75°	221	218	214	212	211	234
85°	44	47	50	50	50	54
90°	0	0	0	0	0	4
95°	46	184	828	286	177	53
105°	189	287	1240	2189	2081	200
115°	351	425	940	1991	2338	346
125°	496	550	897	1489	1780	444
135°	606	657	886	1258	1421	468
145°	715	752	894	1088	1186	447
155°	817	836	915	984	1024	378
165°	902	906	926	946	960	254
175°	945	940	936	931	924	90
180°	938	938	938	938	938	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1165.1	1165.1	1165.1	1165.1	1165.1
2.5°	1172.7	1162.7	1165.9	1163.3	1160.8
5°	1169.3	1158.9	1165.1	1159.7	1158.7
7.5°	1163.8	1151.5	1154.4	1153.4	1153.4
10°	1158.7	1143.1	1150.2	1144.9	1144.9
12.5°	1145.1	1132.0	1137.5	1134.7	1136.4
15°	1124.7	1115.4	1120.5	1119.3	1115.2
17.5°	1107.1	1095.9	1099.7	1097.7	1096.1
20°	1091.8	1081.5	1084.4	1079.2	1083.4
22.5°	1074.9	1064.5	1070.0	1061.3	1061.3
25°	1044.1	1034.8	1042.0	1031.3	1030.3
27.5°	1011.4	1005.4	1010.1	1002.2	999.3
30°	991.0	981.7	984.7	979.3	977.2
32.5°	967.3	957.9	960.9	951.4	952.6
35°	924.2	920.0	923.1	912.5	911.5
37.5°	885.1	876.8	881.8	873.0	872.2
40°	856.3	848.0	852.0	846.7	846.7
42.5°	830.0	820.8	823.2	816.1	813.6
45°	780.9	775.8	776.7	768.2	768.2
47.5°	732.6	728.8	727.3	718.6	720.3
50°	700.3	694.1	695.0	685.5	685.5
52.5°	663.0	663.4	659.4	653.1	648.1
55°	613.3	612.3	605.9	600.5	597.4
57.5°	560.2	555.5	550.9	543.7	543.1
60°	522.0	518.9	513.6	507.1	504.0
62.5°	483.0	479.9	474.5	469.0	468.4
65°	426.6	420.3	417.0	410.6	409.6
67.5°	365.2	360.2	356.1	351.0	350.4
70°	323.6	319.5	316.2	311.9	308.8
72.5°	285.4	278.8	275.5	272.0	269.7
75°	220.7	217.6	214.3	212.2	211.2
77.5°	158.3	158.5	158.5	155.7	154.7
80°	121.0	122.0	122.0	120.9	119.9
82.5°	87.9	89.7	90.6	89.5	89.3
85°	43.5	46.6	49.9	49.9	49.9
87.5°	11.9	16.0	19.5	20.4	19.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	14.3	75.7	175.5	51.1	38.5
95°	46.4	184.1	827.5	286.4	176.6
97.5°	85.2	215.7	1274.5	912.0	624.9
100°	112.4	234.4	1371.5	1389.2	1070.1
102.5°	142.3	254.6	1350.1	1778.2	1499.5
105°	189.0	286.7	1239.5	2189.4	2081.3
107.5°	236.5	324.0	1110.4	2305.4	2401.6
110°	269.3	351.3	1036.2	2261.0	2477.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	300.7	378.5	986.3	2156.1	2464.4
115°	351.3	424.6	939.9	1991.1	2338.1
117.5°	395.9	464.6	912.4	1810.7	2178.3
120°	431.6	489.1	909.6	1707.7	2059.9
122.5°	460.1	517.7	902.4	1617.2	1944.3
125°	495.8	549.9	897.1	1488.7	1779.9
127.5°	534.7	585.3	894.2	1411.9	1651.8
130°	554.7	605.2	890.0	1358.4	1567.7
132.5°	576.1	625.2	890.0	1316.7	1509.2
135°	606.4	657.0	886.4	1257.5	1421.4
137.5°	634.9	684.1	886.0	1207.4	1349.0
140°	656.3	706.9	884.6	1165.9	1301.9
142.5°	680.6	722.8	888.9	1132.8	1254.8
145°	715.2	751.8	893.5	1088.4	1186.0
147.5°	744.8	780.4	901.4	1043.5	1127.9
150°	770.5	794.9	904.2	1028.6	1087.9
152.5°	790.4	816.2	907.1	1008.6	1063.7
155°	816.8	836.0	914.9	983.6	1023.7
157.5°	849.6	861.2	916.7	972.3	1000.9
160°	866.8	875.5	923.8	963.6	988.0
162.5°	876.8	886.9	925.3	956.4	975.2
165°	902.4	905.9	925.6	945.6	959.5
167.5°	919.9	916.8	933.8	942.9	948.4
170°	925.6	923.9	931.0	932.9	939.9
172.5°	938.5	932.5	935.3	930.0	935.6
175°	945.2	940.0	936.3	930.8	923.8
177.5°	948.1	939.7	935.3	929.6	931.0
180°	938.1	938.1	938.1	938.1	938.1

(END OF REPORT)