

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: P853683

Luminaire Tested: SQ2-F-075U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853683
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G2-2308-131-13)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-F-075U-075D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

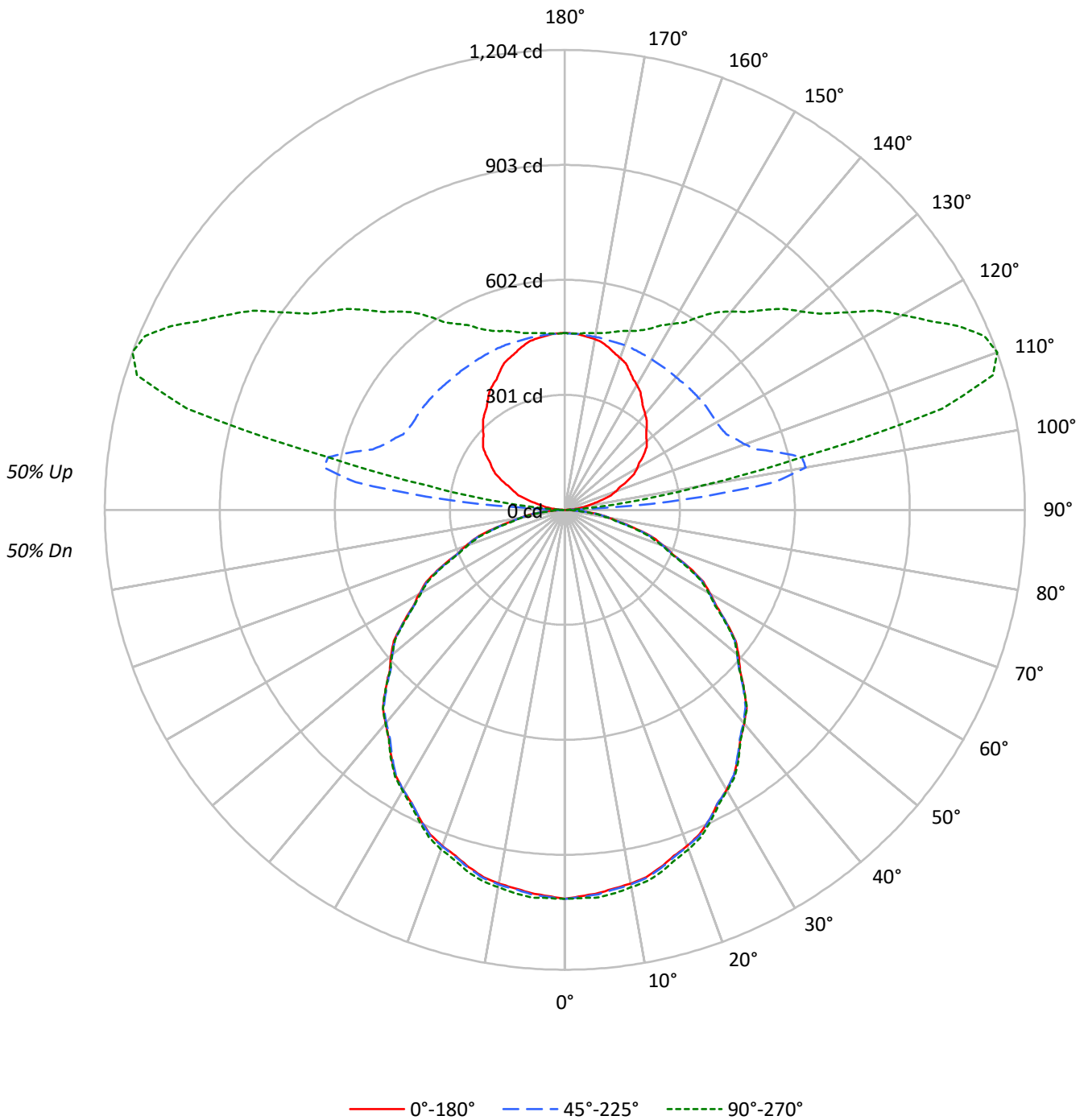
Lumens per Lamp: N/A
Luminaire Lumens: 5722.1 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	70	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39	35
3	81	71	64	58	74	66	59	54	56	51	47	47	43	40	38	36	33	29
4	74	63	55	49	68	58	51	46	50	44	40	42	37	34	34	31	29	25
5	68	56	48	42	62	52	45	39	44	39	34	37	33	30	31	27	25	22
6	62	50	42	36	57	47	39	34	40	34	30	34	29	26	28	24	22	19
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	25	22	19	17
8	53	41	33	28	49	38	31	26	33	27	23	28	23	20	23	20	17	15
9	50	37	30	25	46	35	28	23	30	25	21	26	21	18	21	18	16	13
10	46	34	27	22	43	32	25	21	28	22	19	24	19	16	20	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16443	16443	16443
5°	16326	16371	16506
10°	16287	16333	16446
15°	16187	16234	16396
20°	16091	16115	16258
25°	15943	15943	16042
30°	15778	15778	15830
35°	15589	15534	15642
40°	15382	15323	15382
45°	15143	15079	15143
50°	14915	14777	14812
55°	14567	14528	14452
60°	14202	14111	14024
65°	13780	13624	13463
70°	12968	12902	12642
75°	12202	11946	11597
80°	10832	10581	10191
85°	8744	7966	7447

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15237 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.3	1.7
10°-20°	275.1	4.8
20°-30°	413.8	7.2
30°-40°	495.2	8.7
40°-50°	510.9	8.9
50°-60°	460.9	8.1
60°-70°	351.7	6.1
70°-80°	202.2	3.5
80°-90°	53.2	0.9
90°-100°	174.9	3.1
100°-110°	579.7	10.1
110°-120°	575.3	10.1
120°-130°	468.6	8.2
130°-140°	380.8	6.7
140°-150°	295.8	5.2
150°-160°	213.1	3.7
160°-170°	130.5	2.3
170°-180°	44.1	0.8
0°-30°	785.2	13.7
0°-40°	1280.3	22.4
0°-60°	2252.1	39.4
0°-90°	2859.3	50.0
90°-120°	1329.9	23.2
90°-150°	2475.1	43.3
90°-180°	2863.0	50.0
0°-180°	5722.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1018	1018	1018	1018	1018	
5°	1007	1021	1010	1012	1018	96
15°	968	981	971	976	981	273
25°	895	904	895	896	900	412
35°	791	796	788	791	794	495
45°	663	667	660	662	663	512
55°	518	520	516	513	513	463
65°	361	359	357	354	352	355
75°	196	194	192	187	186	206
85°	47	44	43	39	40	55
90°	0	1	3	4	4	3
95°	25	74	317	113	76	28
105°	102	144	580	1094	1023	107
115°	181	216	467	972	1137	179
125°	253	281	458	764	901	225
135°	302	333	455	656	740	234
145°	351	378	454	564	618	220
155°	401	415	457	504	523	185
165°	440	445	458	477	482	124
175°	460	460	461	464	463	44
180°	462	462	462	462	462	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1018.4	1018.4	1018.4	1018.4	1018.4
2.5°	1011.7	1023.7	1014.0	1016.2	1017.3
5°	1007.3	1020.9	1010.1	1011.6	1018.4
7.5°	999.0	1013.6	1001.7	1004.4	1012.0
10°	993.4	1007.0	996.2	997.7	1003.1
12.5°	984.5	998.1	987.3	989.9	995.4
15°	968.4	980.7	971.2	975.5	980.9
17.5°	949.9	962.9	952.4	956.1	960.7
20°	936.5	947.4	937.9	939.5	946.2
22.5°	919.9	930.7	922.4	922.8	928.5
25°	894.9	904.4	894.9	896.4	900.5
27.5°	866.3	874.5	866.3	867.8	871.3
30°	846.3	854.5	846.3	847.8	849.1
32.5°	824.2	831.2	823.0	824.5	828.0
35°	790.9	796.3	788.1	790.9	793.6
37.5°	755.3	759.4	752.6	754.0	756.4
40°	729.8	733.9	727.0	728.4	729.8
42.5°	704.3	707.3	700.4	701.8	704.3
45°	663.2	667.3	660.4	661.8	663.2
47.5°	621.6	624.0	618.3	617.2	619.6
50°	593.8	595.2	588.3	588.3	589.7
52.5°	563.9	565.2	560.5	558.3	559.7
55°	517.5	520.2	516.1	513.4	513.4
57.5°	470.9	473.3	468.1	466.7	466.5
60°	439.8	441.2	437.0	435.6	434.3
62.5°	408.7	409.0	404.9	403.4	402.1
65°	360.7	359.4	356.6	353.8	352.4
67.5°	306.9	308.3	305.5	301.1	301.1
70°	274.7	276.1	273.3	267.8	267.8
72.5°	243.6	242.8	241.1	236.7	234.5
75°	195.6	194.3	191.5	187.3	185.9
77.5°	147.6	146.3	144.9	139.6	140.7
80°	116.5	115.2	113.8	109.6	109.6
82.5°	88.8	86.4	84.9	80.8	80.8
85°	47.2	44.5	43.0	38.9	40.2
87.5°	13.3	12.4	11.7	9.6	9.6
90°	0.0	0.9	2.9	3.8	3.8
92.5°	7.7	29.6	87.1	28.2	23.7
95°	24.9	73.6	316.9	113.1	75.6
97.5°	45.8	96.7	553.1	322.6	203.9
100°	60.3	109.0	640.4	550.1	364.7
102.5°	76.4	123.6	635.1	840.6	635.1
105°	101.5	144.5	580.1	1094.5	1023.3
107.5°	127.1	165.5	527.5	1120.3	1174.4
110°	141.7	180.1	500.7	1094.8	1204.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	157.0	194.6	484.6	1049.5	1189.0
115°	180.9	216.5	467.2	972.5	1137.3
117.5°	204.7	236.3	460.8	899.0	1071.8
120°	219.2	250.1	458.5	852.9	1020.5
122.5°	232.2	262.4	458.5	815.1	969.9
125°	252.7	280.8	458.5	764.2	900.8
127.5°	269.6	297.1	457.4	725.6	842.4
130°	279.5	308.5	456.6	703.1	808.0
132.5°	288.7	318.5	455.9	684.5	778.9
135°	302.5	333.4	454.7	655.7	740.0
137.5°	317.4	347.2	453.6	628.0	702.3
140°	327.4	356.4	452.8	609.4	677.8
142.5°	336.6	364.9	453.6	590.9	651.7
145°	351.3	377.5	453.8	564.1	617.5
147.5°	367.2	389.1	453.9	541.4	581.1
150°	377.2	396.8	454.7	528.2	561.9
152.5°	386.4	405.3	455.5	517.4	544.3
155°	401.1	415.1	456.6	504.0	522.7
157.5°	415.5	426.3	457.8	494.5	507.7
160°	423.1	432.5	458.5	487.5	497.8
162.5°	430.8	437.9	458.5	482.9	490.9
165°	440.4	445.0	458.5	476.8	481.5
167.5°	449.2	451.6	459.5	471.4	473.9
170°	453.8	454.7	459.5	469.1	470.0
172.5°	456.8	457.8	460.3	466.8	467.0
175°	460.5	460.5	461.4	464.3	463.3
177.5°	462.4	462.4	461.6	463.1	461.6
180°	462.4	462.4	462.4	462.4	462.4

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.69	18.57	18.65	19.54	20.81	17.61	18.49	18.57	19.46	20.73
	3H	19.47	20.26	20.44	21.24	22.53	19.36	20.14	20.32	21.12	22.41
	4H	20.13	20.87	21.11	21.86	23.16	19.98	20.72	20.96	21.71	23.01
	6H	20.60	21.29	21.59	22.28	23.59	20.42	21.10	21.41	22.09	23.41
	8H	20.74	21.39	21.74	22.40	23.71	20.54	21.19	21.54	22.20	23.51
	12H	20.82	21.44	21.82	22.44	23.77	20.59	21.21	21.60	22.21	23.55
4H	2H	18.25	18.99	19.23	19.97	21.27	18.18	18.93	19.17	19.91	21.21
	3H	20.23	20.85	21.23	21.87	23.18	20.13	20.75	21.12	21.76	23.08
	4H	21.02	21.59	22.03	22.60	23.94	20.88	21.45	21.89	22.46	23.79
	6H	21.61	22.10	22.63	23.13	24.47	21.43	21.92	22.45	22.95	24.29
	8H	21.80	22.26	22.82	23.28	24.63	21.60	22.06	22.62	23.08	24.43
	12H	21.91	22.32	22.94	23.36	24.71	21.68	22.09	22.71	23.13	24.49
8H	4H	21.27	21.73	22.29	22.75	24.10	21.15	21.60	22.16	22.63	23.98
	6H	21.99	22.37	23.03	23.43	24.78	21.82	22.20	22.87	23.27	24.62
	8H	22.26	22.59	23.31	23.64	25.01	22.07	22.40	23.11	23.45	24.82
	12H	22.43	22.72	23.48	23.76	25.18	22.20	22.49	23.25	23.54	24.95
12H	4H	21.27	21.68	22.30	22.72	24.07	21.15	21.56	22.18	22.60	23.95
	6H	22.03	22.37	23.08	23.42	24.79	21.88	22.21	22.92	23.26	24.63
	8H	22.33	22.62	23.38	23.67	25.08	22.14	22.43	23.19	23.48	24.89