

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: P701262

Luminaire Tested: SQ4P-WB-050U-125D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701262
REPORT IS A COMBINATION OF REPORTS P700214 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-050U-125D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 1250 LU
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

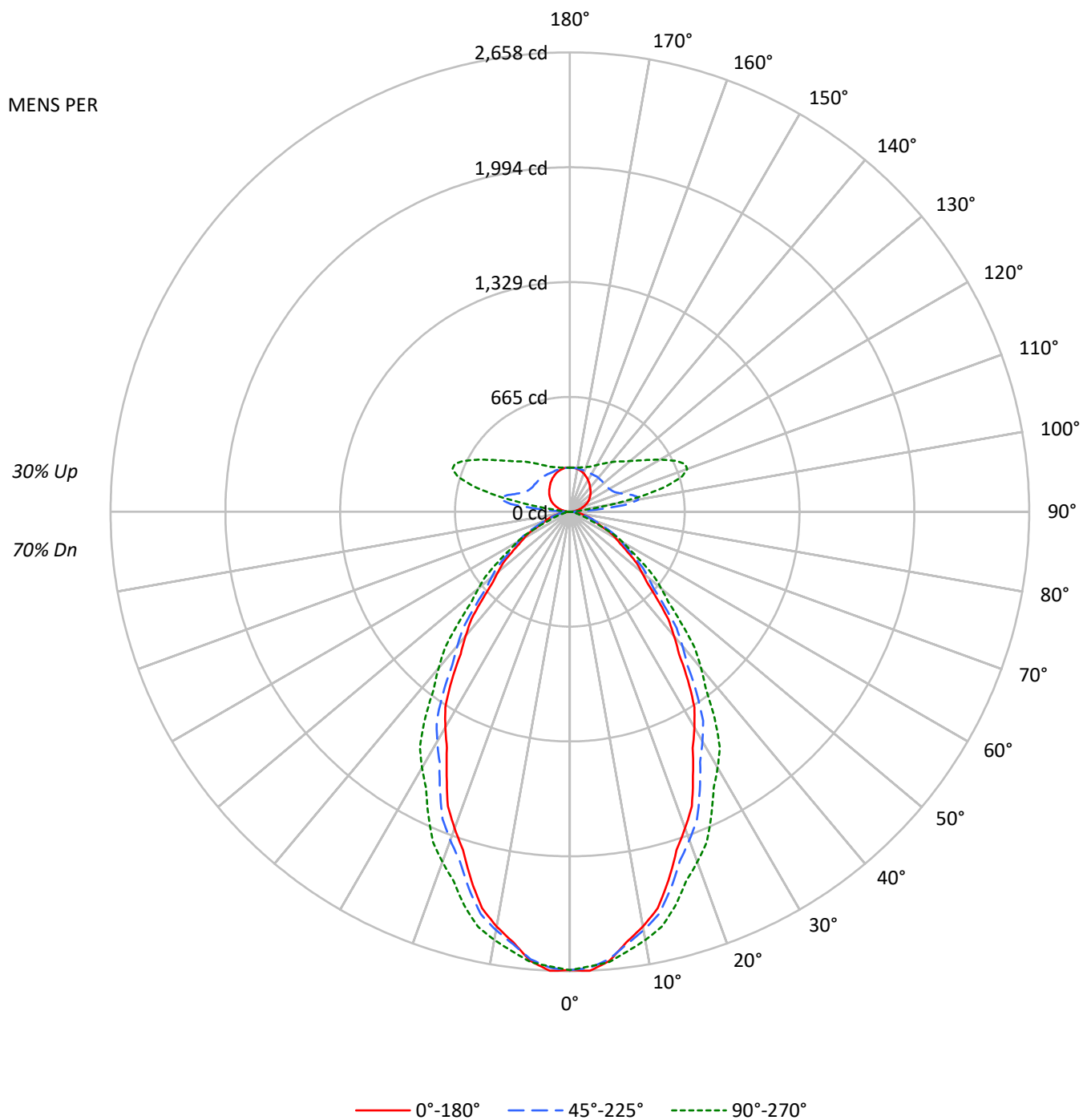
Lumens per Lamp: N/A
Luminaire Lumens: 5528.7 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 58.8
Input Voltage (V): NR
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74
1	104	100	97	93	98	95	92	89	85	83	81	76	75	73	68	67	66
2	96	89	84	79	91	85	80	76	77	73	70	69	66	64	62	60	58
3	89	80	73	68	84	76	70	66	69	65	61	63	59	56	57	54	51
4	82	72	65	59	78	69	62	57	63	58	53	57	53	50	52	49	46
5	76	65	58	52	72	63	56	51	57	52	47	52	48	44	48	44	41
6	71	60	52	47	67	57	50	45	52	47	42	48	43	40	44	40	37
7	66	55	47	42	63	52	45	41	48	42	38	44	40	36	41	37	34
8	62	50	43	38	59	48	41	37	45	39	35	41	36	33	38	34	31
9	58	46	39	34	55	45	38	33	41	36	32	38	34	30	35	31	29
10	55	43	36	31	52	41	35	31	38	33	29	36	31	28	33	29	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24467	24467	24467
5°	24162	24074	24216
10°	22827	23035	23567
15°	21072	21563	22529
20°	19137	19856	21169
25°	17164	18101	19724
30°	15347	16350	18222
35°	13420	14390	16449
40°	11294	12192	14238
45°	9321	10125	11889
50°	7781	8484	9902
55°	6606	7280	8178
60°	5648	6314	6528
65°	4497	5307	4216
70°	3987	4143	2573
75°	3689	3362	1579
80°	3400	3092	1355
85°	3059	2837	1122

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 11889 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.2	4.4
10°-20°	632.7	11.4
20°-30°	819.5	14.8
30°-40°	802.5	14.5
40°-50°	614.2	11.1
50°-60°	409.3	7.4
60°-70°	223.4	4.0
70°-80°	93.1	1.7
80°-90°	27.0	0.5
90°-100°	102.0	1.8
100°-110°	355.0	6.4
110°-120°	343.9	6.2
120°-130°	269.8	4.9
130°-140°	213.5	3.9
140°-150°	164.8	3.0
150°-160°	118.1	2.1
160°-170°	72.3	1.3
170°-180°	24.4	0.4
0°-30°	1695.4	30.7
0°-40°	2497.9	45.2
0°-60°	3521.5	63.7
0°-90°	3864.9	69.9
90°-120°	800.9	14.5
90°-150°	1449.0	26.2
90°-180°	1664.0	30.1
0°-180°	5528.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2652	2652	2652	2652	2652	
5°	2609	2583	2599	2606	2615	243
15°	2206	2198	2258	2319	2359	616
25°	1686	1691	1778	1856	1938	775
35°	1192	1197	1278	1364	1460	741
45°	714	728	776	835	911	557
55°	411	428	453	470	508	372
65°	206	223	243	213	193	214
75°	104	104	94	65	44	111
85°	29	29	27	17	11	32
90°	4	6	6	4	2	4
95°	17	59	172	44	27	18
105°	59	84	373	629	585	62
115°	103	124	277	585	691	102
125°	140	172	258	436	520	125
135°	168	189	256	364	411	130
145°	197	210	254	314	340	123
155°	224	232	251	279	289	103
165°	245	247	253	264	266	69
175°	256	256	254	258	256	24
180°	256	256	256	256	256	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2651.9	2651.9	2651.9	2651.9	2651.9
2.5°	2658.4	2634.7	2640.8	2640.5	2633.1
5°	2608.9	2582.6	2599.4	2605.5	2614.7
7.5°	2512.0	2492.2	2523.1	2545.7	2564.1
10°	2436.6	2419.5	2458.8	2491.9	2515.6
12.5°	2349.2	2334.7	2383.4	2427.7	2459.0
15°	2206.1	2198.2	2257.5	2318.8	2358.6
17.5°	2053.3	2049.4	2117.4	2189.0	2239.8
20°	1949.1	1948.0	2022.3	2097.1	2156.1
22.5°	1844.0	1846.3	1924.5	2002.3	2069.7
25°	1686.1	1690.6	1778.1	1855.5	1937.5
27.5°	1540.2	1542.3	1632.4	1714.3	1801.8
30°	1440.6	1446.2	1534.7	1619.5	1710.4
32.5°	1341.0	1347.7	1434.3	1521.8	1614.5
35°	1191.5	1197.3	1277.6	1363.7	1460.4
37.5°	1037.3	1045.2	1116.6	1197.7	1293.1
40°	937.7	949.4	1012.3	1089.0	1182.2
42.5°	841.9	856.2	914.6	987.2	1071.3
45°	714.4	728.1	776.0	834.7	911.2
47.5°	604.5	620.3	657.3	707.8	772.9
50°	542.1	557.1	591.1	628.5	689.9
52.5°	487.3	502.1	532.4	561.3	613.8
55°	410.7	427.8	452.6	469.9	508.4
57.5°	348.0	364.3	384.0	391.7	415.2
60°	306.1	324.3	342.2	341.1	353.8
62.5°	267.9	283.4	301.1	288.7	289.5
65°	206.0	223.2	243.1	212.6	193.1
67.5°	166.5	169.9	190.7	148.3	125.1
70°	147.8	147.8	153.6	114.8	95.4
72.5°	130.1	130.1	124.9	93.2	72.9
75°	103.5	103.5	94.3	64.8	44.3
77.5°	79.8	79.0	72.2	48.2	32.2
80°	64.0	64.0	58.2	38.2	25.5
82.5°	50.1	50.1	45.0	29.8	18.9
85°	28.9	28.9	26.8	17.4	10.6
87.5°	10.3	10.3	9.2	5.5	4.8
90°	3.8	5.7	5.7	3.8	1.9
92.5°	9.5	28.7	26.8	11.5	9.5
95°	17.2	59.3	172.2	44.0	26.8
97.5°	26.8	66.9	344.3	156.9	84.2
100°	36.4	70.8	401.8	376.9	243.0
102.5°	47.8	76.5	399.9	529.9	436.2
105°	59.3	84.2	373.1	629.4	585.4
107.5°	70.8	93.8	338.6	673.5	681.1
110°	80.4	103.3	311.9	667.7	723.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	112.9	290.8	633.3	721.3
115°	103.3	124.3	277.4	585.4	690.6
117.5°	114.8	137.8	269.7	541.4	646.6
120°	124.3	149.2	264.0	499.3	602.6
122.5°	132.0	160.7	260.2	464.9	558.6
125°	139.7	172.2	258.3	436.2	520.4
127.5°	147.3	179.8	258.3	415.2	485.9
130°	155.0	183.6	256.4	394.1	457.3
132.5°	162.6	185.5	256.4	378.8	432.4
135°	168.3	189.4	256.4	363.5	411.4
137.5°	176.0	193.3	256.4	350.1	394.1
140°	181.7	199.0	256.4	336.7	375.0
142.5°	189.4	204.7	256.4	323.3	357.8
145°	197.1	210.5	254.5	313.8	340.5
147.5°	204.7	216.2	252.6	304.2	325.2
150°	210.5	221.9	252.6	294.7	311.9
152.5°	218.1	227.6	250.7	285.0	300.4
155°	223.8	231.5	250.7	279.3	288.8
157.5°	229.5	237.2	250.7	273.6	281.2
160°	235.3	241.1	252.6	269.7	275.5
162.5°	241.1	244.9	252.6	265.9	269.7
165°	244.9	246.8	252.6	264.0	265.9
167.5°	248.7	250.7	252.6	262.1	262.1
170°	250.7	252.6	254.5	260.2	260.2
172.5°	254.5	254.5	254.5	258.3	258.3
175°	256.4	256.4	254.5	258.3	256.4
177.5°	256.4	256.4	254.5	258.3	256.4
180°	256.4	256.4	256.4	256.4	256.4

(END OF REPORT)