

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: P701282

Luminaire Tested: SQ4P-WB-150U-125D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701282
REPORT IS A COMBINATION OF REPORTS P700158 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-150U-125D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 1250 LI
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

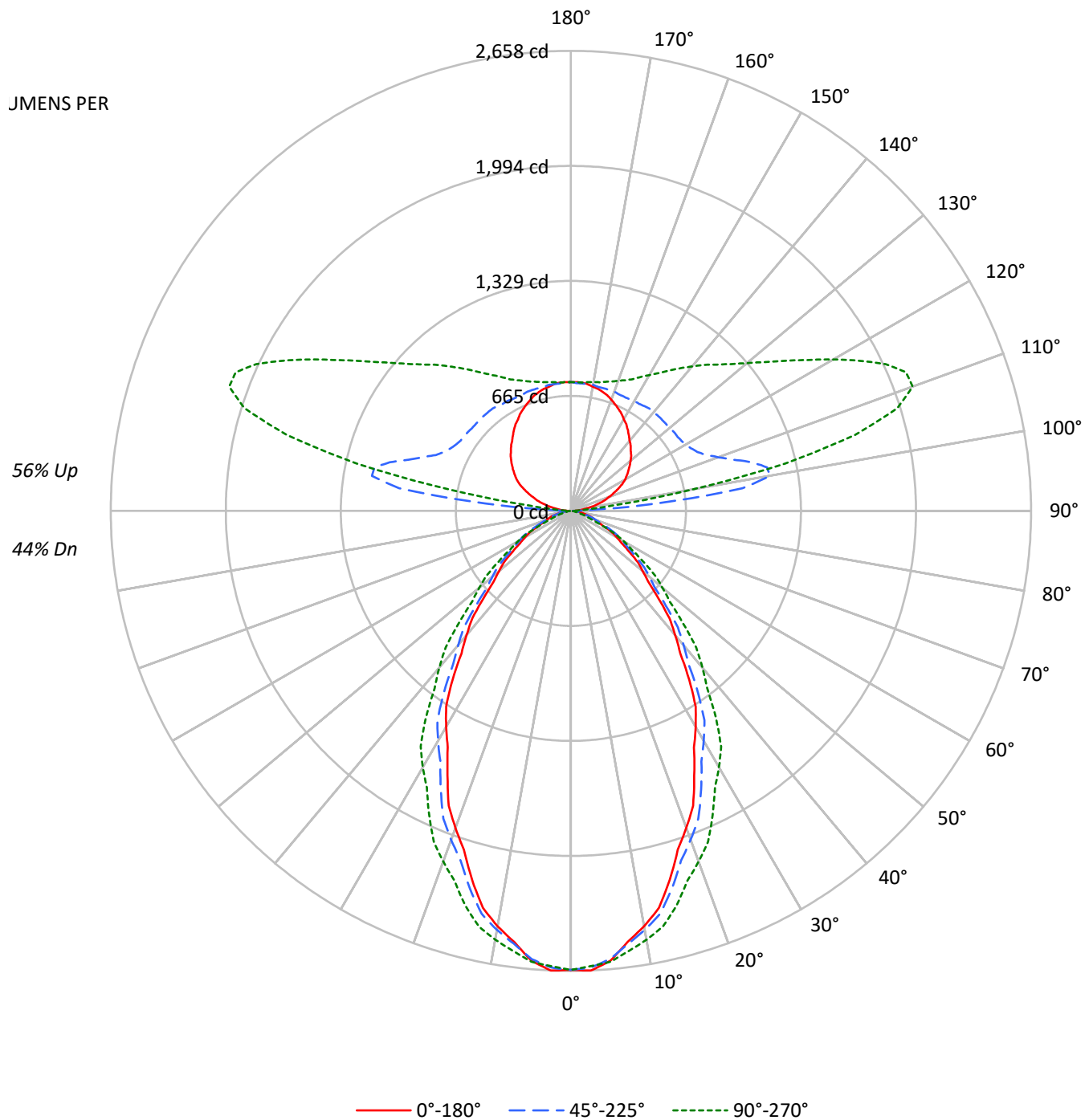
Lumens per Lamp: N/A
Luminaire Lumens: 8698.2 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 88.8
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	98	94	90	87	89	86	83	80	72	70	68	59	57	56	47	46	45
2	90	83	77	73	82	76	72	68	64	61	58	53	51	48	42	41	40
3	82	74	67	62	76	68	62	58	58	53	50	48	45	42	38	37	35
4	76	66	59	53	70	61	55	50	52	47	44	43	40	37	35	33	31
5	70	59	52	46	64	55	49	44	47	42	38	39	36	33	32	30	28
6	65	54	46	41	60	50	43	39	43	38	34	36	32	29	30	27	25
7	60	49	42	36	55	46	39	34	39	34	30	33	29	27	27	25	23
8	56	45	37	32	52	42	35	31	36	31	27	31	27	24	25	23	21
9	53	41	34	29	48	38	32	28	33	28	25	28	25	22	24	21	19
10	49	38	31	27	45	35	29	25	31	26	23	26	23	20	22	20	18

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	2.8
10°-20°	632.7	7.3
20°-30°	819.5	9.4
30°-40°	802.5	9.2
40°-50°	614.2	7.1
50°-60°	409.3	4.7
60°-70°	223.4	2.6
70°-80°	93.1	1.1
80°-90°	28.2	0.3
90°-100°	296.3	3.4
100°-110°	1031.0	11.9
110°-120°	998.8	11.5
120°-130°	783.5	9.0
130°-140°	620.1	7.1
140°-150°	478.6	5.5
150°-160°	343.1	3.9
160°-170°	209.8	2.4
170°-180°	71.0	0.8
0°-30°	1695.4	19.5
0°-40°	2497.9	28.7
0°-60°	3521.5	40.5
0°-90°	3866.0	44.4
90°-120°	2326.1	26.7
90°-150°	4208.3	48.4
90°-180°	4832.0	55.6
0°-180°	8698.2	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°	11	17	17	11	6	8
95°	50	172	500	128	78	53
105°	172	244	1084	1828	1700	181
115°	300	361	806	1700	2006	296
125°	406	500	750	1267	1511	363
135°	489	550	745	1056	1195	379
145°	572	611	739	911	989	358
155°	650	672	728	811	839	300
165°	711	717	733	767	772	201
175°	745	745	739	750	745	71
180°	745	745	745	745	745	

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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°	11.1	16.7	16.7	11.1	5.5
92.5°	27.8	83.3	77.8	33.3	27.8
95°	50.0	172.2	500.1	127.8	77.8
97.5°	77.8	194.5	1000.2	455.6	244.5
100°	105.6	205.5	1166.9	1094.6	705.6
102.5°	138.9	222.3	1161.3	1539.1	1266.9
105°	172.2	244.5	1083.5	1828.1	1700.3
107.5°	205.5	272.3	983.5	1955.8	1978.1
110°	233.3	300.1	905.7	1939.2	2100.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	266.7	327.9	844.5	1839.2	2094.7
115°	300.1	361.2	805.7	1700.3	2005.9
117.5°	333.4	400.0	783.4	1572.5	1878.1
120°	361.2	433.4	766.8	1450.2	1750.3
122.5°	383.4	466.8	755.7	1350.3	1622.4
125°	405.7	500.1	750.1	1266.9	1511.3
127.5°	427.8	522.3	750.1	1205.7	1411.4
130°	450.1	533.4	744.6	1144.6	1328.0
132.5°	472.3	538.9	744.6	1100.2	1255.7
135°	489.0	550.1	744.6	1055.7	1194.6
137.5°	511.2	561.2	744.6	1016.9	1144.6
140°	527.9	577.9	744.6	977.9	1089.0
142.5°	550.1	594.5	744.6	939.1	1039.0
145°	572.4	611.2	739.0	911.3	989.1
147.5°	594.5	627.9	733.4	883.5	944.6
150°	611.2	644.5	733.4	855.7	905.7
152.5°	633.5	661.2	727.9	827.9	872.3
155°	650.1	672.3	727.9	811.2	839.0
157.5°	666.8	689.0	727.9	794.6	816.8
160°	683.5	700.1	733.4	783.4	800.1
162.5°	700.1	711.3	733.4	772.4	783.4
165°	711.3	716.8	733.4	766.8	772.4
167.5°	722.3	727.9	733.4	761.2	761.2
170°	727.9	733.4	739.0	755.7	755.7
172.5°	739.0	739.0	739.0	750.1	750.1
175°	744.6	744.6	739.0	750.1	744.6
177.5°	744.6	744.6	739.0	750.1	744.6
180°	744.6	744.6	744.6	744.6	744.6

(END OF REPORT)