

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: P701278

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701278
REPORT IS A COMBINATION OF REPORTS P700130 AND P700247
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-WB-125U-125D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT UPLIGHT, 1250 LI
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

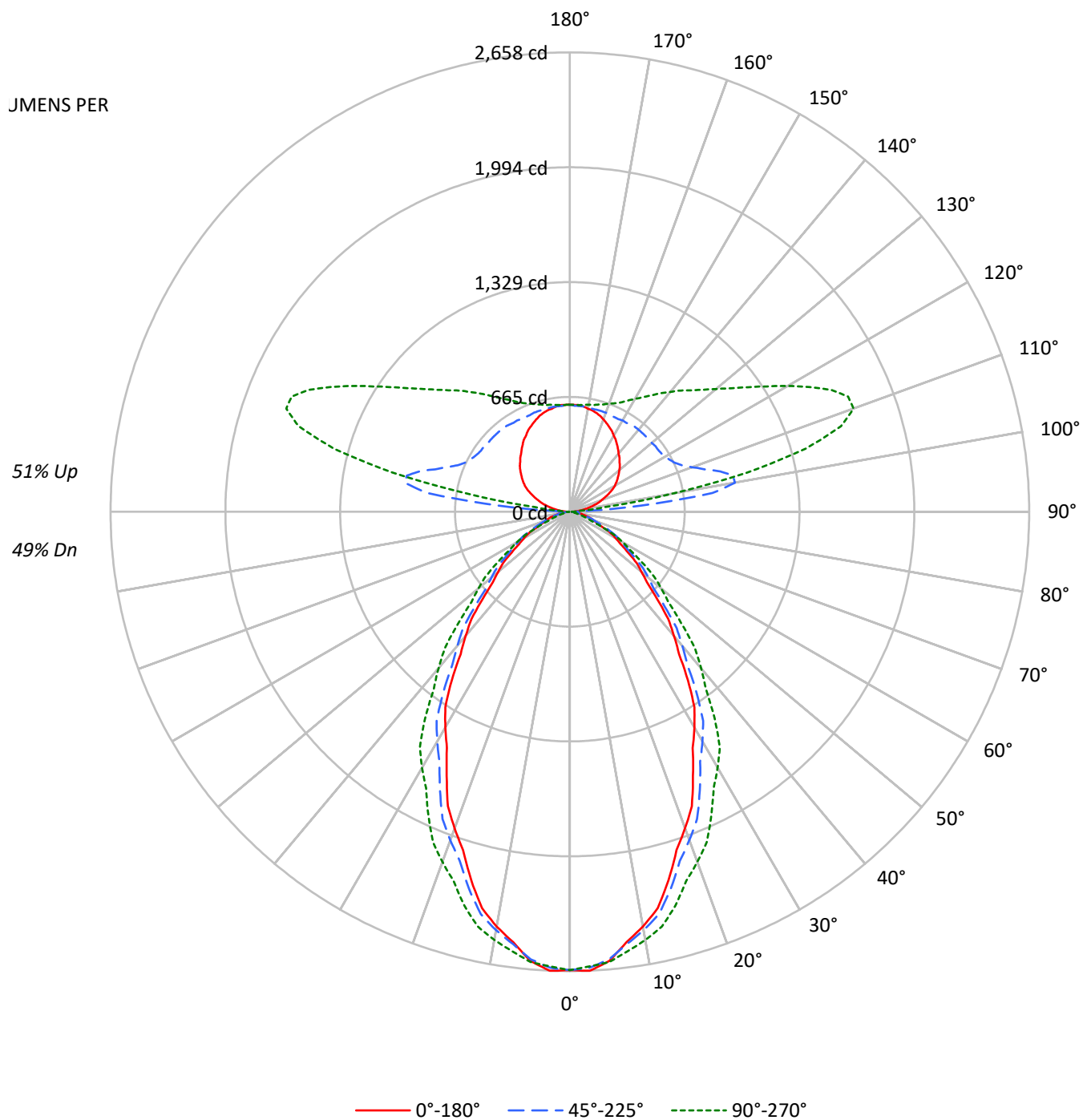
Lumens per Lamp: N/A
Luminaire Lumens: 7884.1 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 79.8
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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	99	95	91	88	91	88	85	82	74	72	70	62	60	59	51	50	49
2	91	84	79	74	84	78	73	69	66	63	60	56	53	51	46	44	43
3	84	75	68	63	77	70	64	59	60	55	52	50	47	45	42	40	38
4	77	67	60	54	71	63	56	51	54	49	45	46	42	39	38	36	34
5	71	61	53	48	66	56	50	45	49	44	40	42	38	35	35	32	30
6	66	55	47	42	61	51	45	40	44	39	36	38	34	31	32	29	27
7	61	50	43	37	57	47	40	35	41	36	32	35	31	28	30	27	25
8	57	46	38	33	53	43	36	32	37	32	29	32	29	26	28	25	23
9	54	42	35	30	50	39	33	29	35	30	26	30	26	23	26	23	21
10	50	39	32	27	47	36	30	26	32	27	24	28	24	21	24	21	19

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	3.1
10°-20°	632.7	8.0
20°-30°	819.5	10.4
30°-40°	802.5	10.2
40°-50°	614.2	7.8
50°-60°	409.3	5.2
60°-70°	223.4	2.8
70°-80°	93.1	1.2
80°-90°	27.8	0.4
90°-100°	246.4	3.1
100°-110°	857.4	10.9
110°-120°	830.6	10.5
120°-130°	651.5	8.3
130°-140°	515.7	6.5
140°-150°	398.0	5.0
150°-160°	285.3	3.6
160°-170°	174.5	2.2
170°-180°	59.0	0.7
0°-30°	1695.4	21.5
0°-40°	2497.9	31.7
0°-60°	3521.5	44.7
0°-90°	3865.7	49.0
90°-120°	1934.4	24.5
90°-150°	3499.5	44.4
90°-180°	4018.0	51.0
0°-180°	7884.1	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°	9	14	14	9	5	7
95°	42	143	416	106	65	44
105°	143	203	901	1520	1414	151
115°	250	300	670	1414	1668	246
125°	337	416	624	1054	1257	302
135°	407	457	619	878	993	315
145°	476	508	614	758	822	298
155°	541	559	605	675	698	249
165°	592	596	610	638	642	167
175°	619	619	614	624	619	59
180°	619	619	619	619	619	

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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°	9.2	13.9	13.9	9.2	4.7
92.5°	23.1	69.3	64.6	27.7	23.1
95°	41.6	143.3	415.8	106.2	64.6
97.5°	64.6	161.7	831.7	378.9	203.4
100°	87.8	171.0	970.3	910.2	586.8
102.5°	115.5	184.8	965.7	1279.9	1053.5
105°	143.3	203.4	901.0	1520.2	1413.9
107.5°	171.0	226.4	817.9	1626.4	1645.0
110°	194.0	249.5	753.1	1612.6	1746.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.8	272.7	702.3	1529.4	1742.0
115°	249.5	300.4	670.0	1413.9	1668.0
117.5°	277.2	332.7	651.5	1307.7	1561.8
120°	300.4	360.4	637.7	1206.0	1455.6
122.5°	318.8	388.1	628.4	1122.8	1349.2
125°	337.3	415.8	623.8	1053.5	1256.9
127.5°	355.8	434.3	623.8	1002.7	1173.7
130°	374.2	443.5	619.2	951.8	1104.3
132.5°	392.8	448.2	619.2	914.9	1044.3
135°	406.6	457.4	619.2	878.0	993.4
137.5°	425.1	466.7	619.2	845.6	951.8
140°	439.0	480.6	619.2	813.2	905.7
142.5°	457.4	494.4	619.2	780.9	864.1
145°	475.9	508.3	614.5	757.8	822.5
147.5°	494.4	522.1	610.0	734.7	785.5
150°	508.3	536.0	610.0	711.5	753.1
152.5°	526.8	549.9	605.3	688.5	725.4
155°	540.7	559.1	605.3	674.6	697.7
157.5°	554.5	572.9	605.3	660.8	679.3
160°	568.4	582.2	610.0	651.5	665.4
162.5°	582.2	591.5	610.0	642.2	651.5
165°	591.5	596.1	610.0	637.7	642.2
167.5°	600.7	605.3	610.0	633.0	633.0
170°	605.3	610.0	614.5	628.4	628.4
172.5°	614.5	614.5	614.5	623.8	623.8
175°	619.2	619.2	614.5	623.8	619.2
177.5°	619.2	619.2	614.5	623.8	619.2
180°	619.2	619.2	619.2	619.2	619.2

(END OF REPORT)