

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: P521851

Luminaire Tested: SQ4-WB-075U-125D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521851
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-125D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7876.3 lumens
Efficiency: N/A
Efficacy: 99.2 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

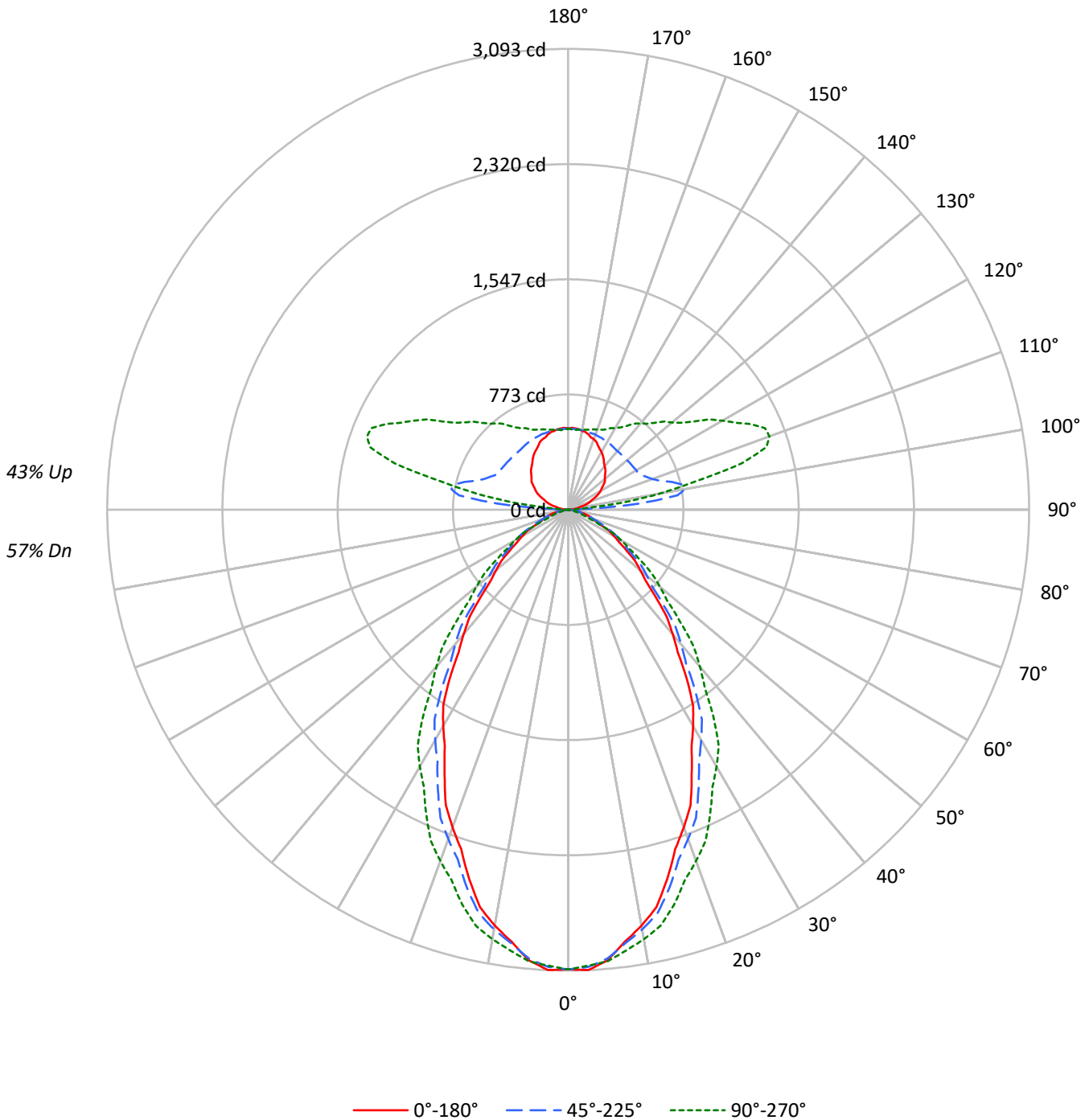
Input Watts (W): 79.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	63	63	63	57				57
1	101	97	93	90	94	90	87	85	78	76	74	67	66	65	57	56	55	51				51
2	93	86	81	76	86	81	76	72	70	67	64	61	58	56	52	50	49	45				45
3	86	77	70	65	80	72	66	62	63	59	55	55	52	49	47	45	43	39				39
4	79	69	62	56	74	65	59	54	57	52	48	50	46	43	43	41	38	35				35
5	73	62	55	49	68	59	52	47	52	47	43	46	42	39	40	37	34	32				32
6	68	57	49	44	63	54	47	42	48	42	38	42	38	35	37	34	31	28				28
7	63	52	44	39	59	49	42	37	44	38	34	39	34	31	34	31	28	26				26
8	59	47	40	35	55	45	38	34	40	35	31	36	32	28	32	28	26	24				24
9	55	44	37	32	52	41	35	31	37	32	28	33	29	26	29	26	24	22				22
10	52	40	34	29	49	38	32	28	35	29	26	31	27	24	28	24	22	20				20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28464	28464	28464
5°	28108	28008	28171
10°	26557	26798	27419
15°	24515	25085	26210
20°	22263	23100	24628
25°	19968	21057	22945
30°	17854	19022	21200
35°	15613	16741	19135
40°	13141	14184	16565
45°	10845	11781	13831
50°	9054	9871	11523
55°	7687	8471	9516
60°	6569	7344	7593
65°	5231	6176	4905
70°	4637	4821	2994
75°	4296	3911	1832
80°	3958	3597	1583
85°	3578	3292	1291

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13831 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.0	3.6
10°-20°	736.0	9.3
20°-30°	953.4	12.1
30°-40°	933.6	11.9
40°-50°	714.6	9.1
50°-60°	476.2	6.0
60°-70°	259.8	3.3
70°-80°	108.3	1.4
80°-90°	30.6	0.4
90°-100°	248.0	3.1
100°-110°	705.7	9.0
110°-120°	676.1	8.6
120°-130°	535.1	6.8
130°-140°	429.5	5.5
140°-150°	336.2	4.3
150°-160°	246.0	3.1
160°-170°	152.4	1.9
170°-180°	51.7	0.7
0°-30°	1972.4	25.0
0°-40°	2906.0	36.9
0°-60°	4096.8	52.0
0°-90°	4495.6	57.1
90°-120°	1629.8	20.7
90°-150°	2930.6	37.2
90°-180°	3381.0	42.9
0°-180°	7876.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3085	3085	3085	3085	3085	
5°	3035	3005	3024	3031	3042	282
15°	2567	2557	2626	2698	2744	717
25°	1962	1967	2068	2159	2254	902
35°	1386	1393	1486	1586	1699	862
45°	831	847	903	971	1060	648
55°	478	498	527	547	592	433
65°	240	260	283	247	225	249
75°	120	120	110	75	51	129
85°	34	34	31	20	12	37
90°	0	0	0	0	0	3
95°	27	107	480	166	102	31
105°	110	166	719	1270	1208	116
115°	204	246	545	1155	1356	201
125°	288	319	520	864	1033	257
135°	352	381	514	730	825	271
145°	415	436	518	631	688	259
155°	474	485	531	571	594	219
165°	524	526	537	549	557	147
175°	548	545	543	540	536	52
180°	544	544	544	544	544	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3085.1	3085.1	3085.1	3085.1	3085.1
2.5°	3092.7	3065.2	3072.1	3071.9	3063.4
5°	3035.0	3004.6	3024.2	3031.2	3041.8
7.5°	2922.4	2899.4	2935.1	2961.6	2983.0
10°	2834.7	2814.8	2860.4	2898.9	2926.7
12.5°	2732.9	2716.2	2772.7	2824.4	2860.7
15°	2566.6	2557.4	2626.2	2697.6	2744.0
17.5°	2388.8	2384.3	2463.2	2546.6	2605.9
20°	2267.5	2266.1	2352.7	2439.6	2508.4
22.5°	2145.1	2148.0	2239.0	2329.4	2407.7
25°	1961.5	1966.8	2068.5	2158.6	2253.9
27.5°	1791.8	1794.2	1899.3	1994.4	2096.1
30°	1675.9	1682.5	1785.5	1884.1	1990.0
32.5°	1560.0	1567.7	1668.6	1770.4	1878.4
35°	1386.2	1392.8	1486.4	1586.4	1698.9
37.5°	1207.0	1216.0	1299.0	1393.6	1504.2
40°	1091.1	1104.3	1177.7	1266.8	1375.4
42.5°	979.5	996.0	1064.0	1148.5	1246.5
45°	831.2	847.1	902.9	971.3	1060.0
47.5°	703.4	721.7	764.6	823.4	899.1
50°	630.8	648.0	687.7	731.3	802.8
52.5°	566.9	584.1	619.5	653.1	713.9
55°	477.9	497.7	526.6	546.6	591.6
57.5°	404.8	423.8	446.7	455.7	483.0
60°	356.0	377.2	398.0	397.0	411.5
62.5°	311.6	329.6	350.3	336.0	336.8
65°	239.6	259.5	282.9	247.2	224.7
67.5°	193.6	197.8	222.0	172.4	145.7
70°	171.9	171.9	178.7	133.5	111.0
72.5°	151.3	151.3	145.1	108.6	85.0
75°	120.5	120.5	109.7	75.3	51.4
77.5°	92.9	91.8	83.9	56.2	37.4
80°	74.5	74.5	67.7	44.3	29.8
82.5°	58.2	58.2	52.5	34.6	22.2
85°	33.8	33.8	31.1	20.1	12.2
87.5°	11.9	11.9	10.8	6.5	5.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.3	43.9	101.8	29.6	22.3
95°	26.9	106.8	480.1	166.2	102.4
97.5°	49.5	125.1	739.4	529.1	362.6
100°	65.2	136.0	795.7	806.0	620.8
102.5°	82.6	147.7	783.3	1031.7	870.0
105°	109.7	166.3	719.1	1270.2	1207.5
107.5°	137.2	188.0	644.2	1337.5	1393.4
110°	156.2	203.8	601.2	1311.8	1437.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.5	219.6	572.2	1250.9	1429.8
115°	203.8	246.3	545.3	1155.2	1356.5
117.5°	229.7	269.6	529.4	1050.5	1263.8
120°	250.4	283.8	527.7	990.7	1195.1
122.5°	267.0	300.3	523.6	938.3	1128.1
125°	287.7	319.0	520.5	863.7	1032.7
127.5°	310.2	339.5	518.8	819.1	958.4
130°	321.8	351.1	516.3	788.1	909.5
132.5°	334.2	362.7	516.3	763.9	875.6
135°	351.8	381.1	514.3	729.6	824.7
137.5°	368.4	396.9	514.0	700.5	782.7
140°	380.8	410.1	513.2	676.4	755.3
142.5°	394.8	419.3	515.7	657.2	728.0
145°	414.9	436.2	518.4	631.4	688.1
147.5°	432.1	452.7	522.9	605.4	654.4
150°	447.0	461.2	524.6	596.8	631.2
152.5°	458.6	473.6	526.3	585.1	617.1
155°	473.9	485.0	530.8	570.7	593.9
157.5°	492.9	499.6	531.8	564.1	580.7
160°	502.9	507.9	536.0	559.1	573.2
162.5°	508.7	514.5	536.8	554.9	565.8
165°	523.6	525.6	537.0	548.6	556.7
167.5°	533.7	531.9	541.8	547.0	550.3
170°	537.0	536.0	540.1	541.3	545.3
172.5°	544.5	541.0	542.6	539.6	542.8
175°	548.4	545.4	543.2	540.0	536.0
177.5°	550.1	545.2	542.6	539.3	540.1
180°	544.3	544.3	544.3	544.3	544.3

(END OF REPORT)