

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: P521124

Luminaire Tested: SQ4-BB-075U-125D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521124
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-125D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6793.0 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

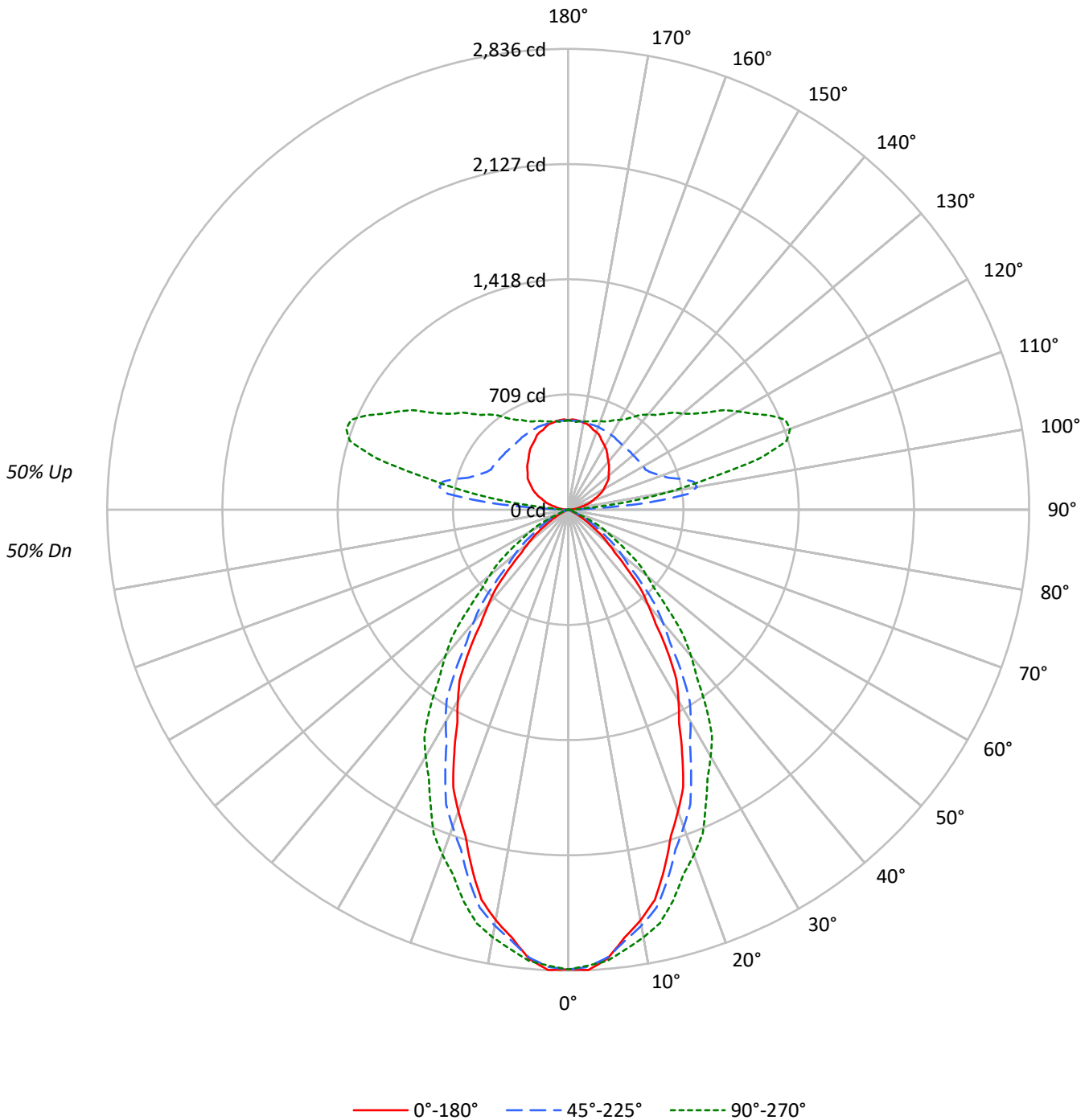
Input Watts (W): 79.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	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	99	96	93	90	92	89	86	84	75	74	72	63	62	61	52	51	51	45																				
2	92	86	81	76	85	80	75	72	68	65	62	58	56	54	48	47	45	41																				
3	85	77	71	66	79	72	66	62	62	58	55	53	50	48	44	42	41	37																				
4	79	70	63	57	73	65	59	54	56	52	48	48	45	43	41	39	37	33																				
5	73	63	56	51	68	59	53	48	51	47	43	44	41	38	38	35	33	30																				
6	68	57	50	45	63	54	47	43	47	42	39	41	37	35	35	33	30	28																				
7	63	52	45	40	59	49	43	39	43	38	35	38	34	31	33	30	28	25																				
8	59	48	41	36	55	45	39	35	40	35	32	35	31	29	30	28	26	23																				
9	56	44	38	33	52	42	36	32	37	32	29	33	29	26	28	26	24	22																				
10	52	41	35	30	49	39	33	29	35	30	27	31	27	24	27	24	22	20																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26102	26102	26102
5°	25682	25618	25808
10°	24029	24350	25030
15°	21846	22538	23793
20°	19391	20400	22186
25°	16888	18224	20384
30°	14464	16054	18679
35°	11993	13627	16618
40°	9215	10896	14160
45°	6661	8250	11393
50°	4539	6149	9037
55°	2950	4448	7023
60°	1692	3131	5076
65°	448	1912	2570
70°	221	591	739
75°	96	50	0
80°	74	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11393 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.2	3.8
10°-20°	660.3	9.7
20°-30°	826.6	12.2
30°-40°	763.5	11.2
40°-50°	513.0	7.6
50°-60°	265.0	3.9
60°-70°	83.0	1.2
70°-80°	5.2	0.1
80°-90°	0.1	0.0
90°-100°	250.8	3.7
100°-110°	713.5	10.5
110°-120°	683.6	10.1
120°-130°	541.0	8.0
130°-140°	434.3	6.4
140°-150°	340.0	5.0
150°-160°	248.8	3.7
160°-170°	154.1	2.3
170°-180°	52.3	0.8
0°-30°	1745.0	25.7
0°-40°	2508.5	36.9
0°-60°	3286.5	48.4
0°-90°	3374.8	49.7
90°-120°	1647.8	24.3
90°-150°	2963.1	43.6
90°-180°	3418.0	50.3
0°-180°	6793.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2829	2829	2829	2829	2829	
5°	2773	2745	2766	2776	2787	257
15°	2287	2279	2360	2439	2491	637
25°	1659	1672	1790	1913	2002	761
35°	1065	1092	1210	1352	1475	660
45°	510	541	632	756	873	401
55°	183	214	276	355	437	171
65°	20	39	88	106	118	35
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	27	108	485	168	104	31
105°	111	168	727	1284	1221	117
115°	206	249	551	1168	1372	203
125°	291	322	526	873	1044	260
135°	356	385	520	738	834	274
145°	420	441	524	638	696	262
155°	479	490	537	577	600	221
165°	529	531	543	555	563	149
175°	554	551	549	546	542	53
180°	550	550	550	550	550	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2829.1	2829.1	2829.1	2829.1	2829.1
2.5°	2835.6	2808.9	2815.9	2815.8	2808.3
5°	2773.0	2744.9	2766.1	2775.9	2786.6
7.5°	2655.8	2633.9	2674.7	2705.3	2727.5
10°	2564.9	2546.2	2599.1	2640.9	2671.7
12.5°	2459.8	2445.4	2509.4	2566.6	2606.0
15°	2287.1	2279.0	2359.6	2438.8	2491.0
17.5°	2102.0	2101.8	2193.7	2292.1	2355.0
20°	1975.0	1979.0	2077.7	2186.1	2259.7
22.5°	1848.0	1857.4	1962.7	2075.8	2160.1
25°	1658.9	1672.2	1790.2	1912.7	2002.4
27.5°	1477.1	1496.6	1620.8	1748.1	1857.3
30°	1357.7	1380.5	1506.9	1640.9	1753.3
32.5°	1240.6	1267.6	1390.9	1532.5	1647.1
35°	1064.8	1091.6	1209.9	1352.3	1475.4
37.5°	883.4	909.6	1025.1	1165.3	1298.3
40°	765.1	794.5	904.7	1040.5	1175.7
42.5°	657.8	687.2	790.8	924.3	1052.0
45°	510.5	541.3	632.3	755.5	873.2
47.5°	388.4	421.9	501.8	613.1	720.5
50°	316.2	349.6	428.4	526.5	629.6
52.5°	258.1	290.5	361.6	454.1	548.6
55°	183.4	214.2	276.5	355.0	436.6
57.5°	126.7	153.2	209.1	274.6	338.6
60°	91.7	117.1	169.7	222.9	275.1
62.5°	61.0	84.3	135.8	176.5	211.6
65°	20.5	39.3	87.6	105.7	117.7
67.5°	10.4	12.5	46.0	48.5	52.6
70°	8.2	8.2	21.9	23.4	27.4
72.5°	6.0	6.0	8.8	11.2	12.0
75°	2.7	2.7	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.4	44.4	102.9	30.0	22.6
95°	27.2	108.0	485.4	168.0	103.6
97.5°	50.0	126.5	747.6	535.0	366.6
100°	65.9	137.5	804.5	814.9	627.7
102.5°	83.5	149.4	792.0	1043.1	879.6
105°	110.9	168.2	727.1	1284.3	1220.9
107.5°	138.7	190.1	651.3	1352.3	1408.8
110°	158.0	206.0	607.8	1326.3	1453.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.4	222.0	578.5	1264.7	1445.6
115°	206.1	249.1	551.3	1168.0	1371.5
117.5°	232.2	272.6	535.2	1062.2	1277.8
120°	253.2	286.9	533.5	1001.7	1208.3
122.5°	269.9	303.7	529.4	948.6	1140.5
125°	290.8	322.5	526.2	873.2	1044.1
127.5°	313.6	343.3	524.5	828.2	969.0
130°	325.4	355.0	522.0	796.8	919.6
132.5°	337.9	366.8	522.0	772.3	885.3
135°	355.7	385.4	519.9	737.6	833.8
137.5°	372.4	401.3	519.7	708.3	791.3
140°	385.0	414.7	518.9	683.9	763.7
142.5°	399.2	424.0	521.4	664.5	736.1
145°	419.5	441.0	524.1	638.4	695.7
147.5°	436.9	457.7	528.7	612.1	661.6
150°	451.9	466.3	530.4	603.4	638.2
152.5°	463.7	478.8	532.1	591.6	623.9
155°	479.1	490.4	536.7	577.0	600.5
157.5°	498.4	505.1	537.7	570.3	587.1
160°	508.4	513.6	541.9	565.3	579.6
162.5°	514.3	520.2	542.8	561.0	572.0
165°	529.4	531.4	543.0	554.7	562.8
167.5°	539.6	537.8	547.8	553.1	556.4
170°	543.0	541.9	546.1	547.2	551.3
172.5°	550.5	547.0	548.6	545.5	548.8
175°	554.5	551.4	549.2	546.0	541.9
177.5°	556.1	551.2	548.6	545.3	546.1
180°	550.3	550.3	550.3	550.3	550.3

(END OF REPORT)