

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: P521125

Luminaire Tested: SQ4-BB-075U-125D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521125
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_5700K
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 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6889.8 lumens
Efficiency: N/A
Efficacy: 87.0 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

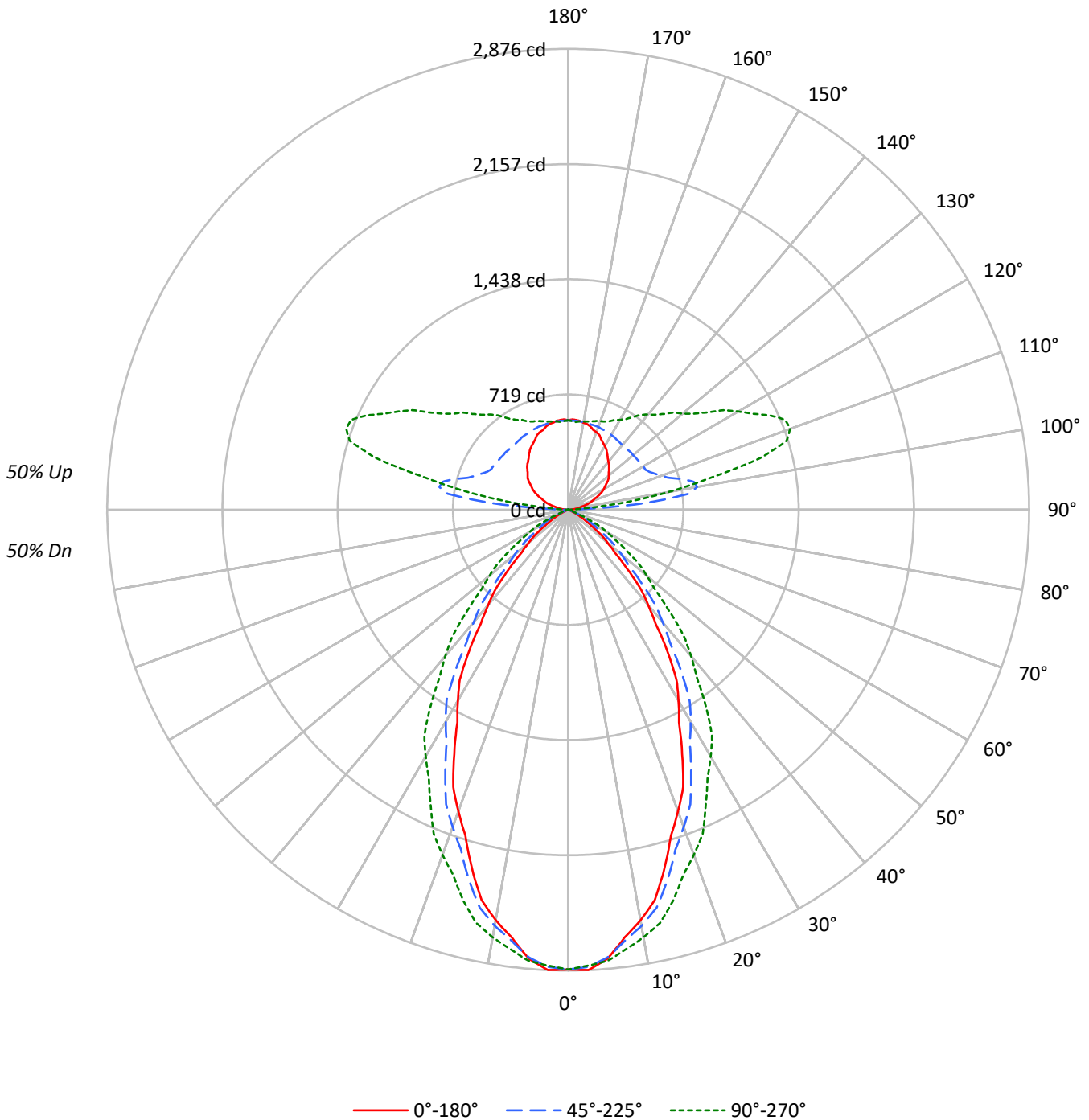
Input Watts (W): 79.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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°	26474	26474	26474
5°	26048	25983	26176
10°	24372	24697	25386
15°	22157	22859	24132
20°	19668	20690	22503
25°	17128	18484	20675
30°	14671	16283	18945
35°	12164	13822	16855
40°	9346	11052	14362
45°	6756	8368	11556
50°	4603	6237	9166
55°	2992	4510	7123
60°	1716	3176	5148
65°	454	1939	2607
70°	224	599	750
75°	100	50	0
80°	74	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11556 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.9	3.8
10°-20°	669.7	9.7
20°-30°	838.4	12.2
30°-40°	774.4	11.2
40°-50°	520.3	7.6
50°-60°	268.8	3.9
60°-70°	84.2	1.2
70°-80°	5.3	0.1
80°-90°	0.1	0.0
90°-100°	254.3	3.7
100°-110°	723.6	10.5
110°-120°	693.3	10.1
120°-130°	548.7	8.0
130°-140°	440.5	6.4
140°-150°	344.8	5.0
150°-160°	252.3	3.7
160°-170°	156.3	2.3
170°-180°	53.0	0.8
0°-30°	1769.9	25.7
0°-40°	2544.3	36.9
0°-60°	3333.3	48.4
0°-90°	3422.9	49.7
90°-120°	1671.3	24.3
90°-150°	3005.3	43.6
90°-180°	3467.0	50.3
0°-180°	6889.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2869	2869	2869	2869	2869	
5°	2812	2784	2806	2816	2826	261
15°	2320	2312	2393	2474	2526	646
25°	1682	1696	1816	1940	2031	771
35°	1080	1107	1227	1372	1496	669
45°	518	549	641	766	886	407
55°	186	217	280	360	443	174
65°	21	40	89	107	119	35
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	28	110	492	170	105	32
105°	112	171	737	1303	1238	119
115°	209	253	559	1185	1391	206
125°	295	327	534	886	1059	264
135°	361	391	527	748	846	278
145°	426	447	532	648	706	266
155°	486	497	544	585	609	225
165°	537	539	551	563	571	151
175°	562	559	557	554	550	53
180°	558	558	558	558	558	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2869.4	2869.4	2869.4	2869.4	2869.4
2.5°	2876.0	2848.9	2856.1	2855.9	2848.3
5°	2812.5	2784.0	2805.5	2815.5	2826.3
7.5°	2693.6	2671.4	2712.8	2743.8	2766.4
10°	2601.5	2582.5	2636.2	2678.5	2709.7
12.5°	2494.8	2480.2	2545.1	2603.2	2643.1
15°	2319.7	2311.5	2393.2	2473.6	2526.5
17.5°	2132.0	2131.7	2225.0	2324.7	2388.5
20°	2003.2	2007.2	2107.3	2217.2	2291.9
22.5°	1874.3	1883.8	1990.7	2105.3	2190.8
25°	1682.5	1696.1	1815.7	1940.0	2030.9
27.5°	1498.1	1517.9	1643.9	1773.0	1883.8
30°	1377.1	1400.2	1528.4	1664.2	1778.3
32.5°	1258.3	1285.7	1410.7	1554.4	1670.5
35°	1080.0	1107.2	1227.2	1371.6	1496.5
37.5°	895.9	922.5	1039.8	1181.9	1316.8
40°	776.0	805.9	917.6	1055.4	1192.5
42.5°	667.2	697.0	802.1	937.5	1067.0
45°	517.8	549.0	641.3	766.2	885.7
47.5°	394.0	427.9	508.9	621.9	730.7
50°	320.7	354.6	434.5	534.0	638.6
52.5°	261.8	294.7	366.8	460.6	556.4
55°	186.0	217.2	280.4	360.0	442.8
57.5°	128.5	155.4	212.1	278.6	343.4
60°	93.0	118.8	172.1	226.1	279.0
62.5°	61.9	85.5	137.7	179.1	214.6
65°	20.8	39.8	88.8	107.2	119.4
67.5°	10.6	12.7	46.6	49.2	53.3
70°	8.3	8.3	22.2	23.7	27.8
72.5°	6.1	6.1	8.9	11.4	12.2
75°	2.8	2.8	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°	8.5	45.0	104.4	30.4	22.9
95°	27.6	109.5	492.3	170.4	105.0
97.5°	50.7	128.3	758.2	542.6	371.8
100°	66.8	139.5	816.0	826.5	636.6
102.5°	84.7	151.5	803.2	1057.9	892.1
105°	112.5	170.6	737.4	1302.6	1238.3
107.5°	140.7	192.8	660.6	1371.6	1428.8
110°	160.2	209.0	616.5	1345.2	1473.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.9	225.2	586.8	1282.8	1466.2
115°	209.0	252.6	559.2	1184.6	1391.1
117.5°	235.6	276.4	542.8	1077.3	1296.0
120°	256.8	291.0	541.1	1016.0	1225.5
122.5°	273.8	308.0	536.9	962.1	1156.8
125°	295.0	327.1	533.7	885.7	1058.9
127.5°	318.1	348.2	532.0	840.0	982.8
130°	330.0	360.1	529.5	808.2	932.7
132.5°	342.7	372.0	529.5	783.3	897.9
135°	360.8	390.9	527.4	748.1	845.7
137.5°	377.7	407.0	527.1	718.4	802.6
140°	390.5	420.6	526.3	693.7	774.6
142.5°	404.9	430.0	528.8	673.9	746.6
145°	425.5	447.3	531.6	647.5	705.6
147.5°	443.1	464.3	536.3	620.8	671.0
150°	458.4	472.9	538.0	612.0	647.3
152.5°	470.3	485.6	539.7	600.0	632.8
155°	486.0	497.4	544.3	585.2	609.1
157.5°	505.5	512.3	545.4	578.5	595.5
160°	515.7	520.9	549.6	573.3	587.8
162.5°	521.6	527.6	550.5	569.0	580.2
165°	536.9	539.0	550.7	562.6	570.9
167.5°	547.3	545.4	555.6	561.0	564.3
170°	550.7	549.7	553.9	555.0	559.2
172.5°	558.3	554.8	556.4	553.3	556.6
175°	562.4	559.3	557.1	553.8	549.6
177.5°	564.1	559.1	556.4	553.0	553.9
180°	558.1	558.1	558.1	558.1	558.1

(END OF REPORT)