

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: P520990

Luminaire Tested: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P520990
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-025U-075D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3784.2 lumens
Efficiency: N/A
Efficacy: 82.4 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

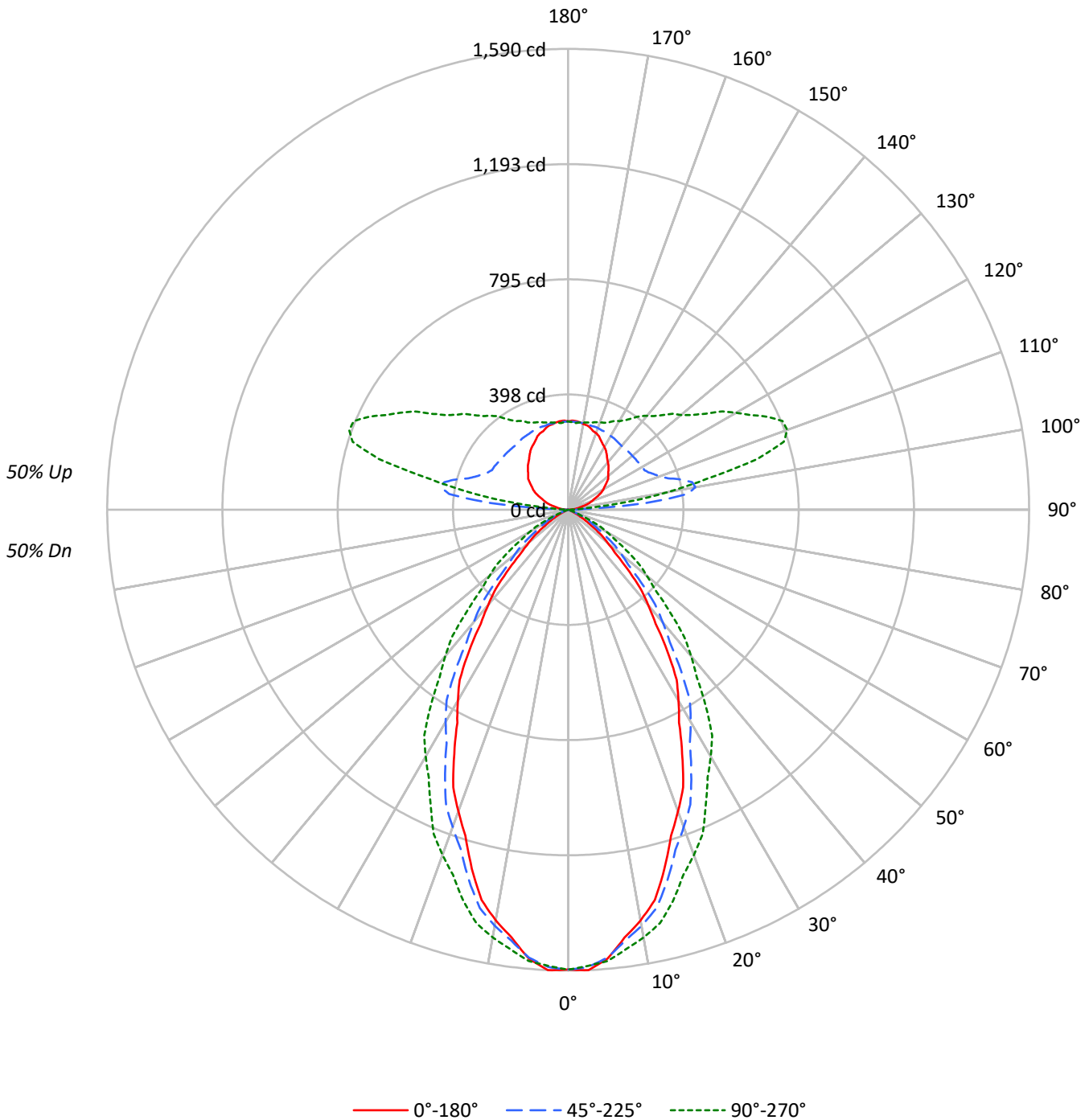
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	100	96	93	90	92	89	86	84	76	74	72	64	62	61	52	52	51	46				
2	92	86	81	76	85	80	75	72	69	65	63	58	56	54	48	47	46	41				
3	85	77	71	66	79	72	67	62	62	58	55	53	50	48	45	43	41	37				
4	79	70	63	58	73	65	59	55	57	52	49	49	45	43	41	39	37	34				
5	73	63	56	51	68	59	53	48	52	47	43	45	41	38	38	36	34	31				
6	68	57	50	45	63	54	48	43	47	42	39	41	37	35	35	33	31	28				
7	64	53	45	40	59	49	43	39	44	39	35	38	34	32	33	30	28	26				
8	59	48	41	36	55	46	39	35	40	35	32	35	32	29	31	28	26	24				
9	56	45	38	33	52	42	36	32	37	32	29	33	29	26	29	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°	14639	14639	14639
5°	14404	14368	14475
10°	13478	13657	14038
15°	12252	12641	13345
20°	10876	11441	12444
25°	9471	10222	11433
30°	8113	9004	10477
35°	6726	7643	9320
40°	5168	6111	7942
45°	3736	4628	6391
50°	2545	3449	5068
55°	1655	2495	3939
60°	948	1757	2847
65°	251	1072	1441
70°	124	332	415
75°	53	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6391 cd/sqm

TEST NUMBER: P520990

CATALOG NUMBER: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.8	3.8
10°-20°	370.3	9.8
20°-30°	463.6	12.3
30°-40°	428.2	11.3
40°-50°	287.7	7.6
50°-60°	148.6	3.9
60°-70°	46.5	1.2
70°-80°	2.9	0.1
80°-90°	0.1	0.0
90°-100°	138.8	3.7
100°-110°	394.8	10.4
110°-120°	378.2	10.0
120°-130°	299.4	7.9
130°-140°	240.3	6.3
140°-150°	188.1	5.0
150°-160°	137.6	3.6
160°-170°	85.3	2.3
170°-180°	28.9	0.8
0°-30°	978.7	25.9
0°-40°	1406.9	37.2
0°-60°	1843.3	48.7
0°-90°	1892.8	50.0
90°-120°	911.8	24.1
90°-150°	1639.5	43.3
90°-180°	1891.0	50.0
0°-180°	3784.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1587	1587	1587	1587	1587	
5°	1555	1540	1551	1557	1563	144
15°	1283	1278	1323	1368	1397	357
25°	930	938	1004	1073	1123	427
35°	597	612	679	758	828	370
45°	286	304	355	424	490	225
55°	103	120	155	199	245	96
65°	12	22	49	59	66	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	15	60	269	93	57	17
105°	61	93	402	711	676	65
115°	114	138	305	646	759	112
125°	161	178	291	483	578	144
135°	197	213	288	408	461	152
145°	232	244	290	353	385	145
155°	265	271	297	319	332	123
165°	293	294	300	307	311	82
175°	307	305	304	302	300	29
180°	304	304	304	304	304	

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CATALOG NUMBER: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4_3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1586.7	1586.7	1586.7	1586.7	1586.7
2.5°	1590.4	1575.4	1579.4	1579.3	1575.1
5°	1555.3	1539.5	1551.4	1556.9	1562.9
7.5°	1489.5	1477.2	1500.1	1517.3	1529.8
10°	1438.6	1428.1	1457.8	1481.2	1498.4
12.5°	1379.6	1371.5	1407.4	1439.5	1461.6
15°	1282.7	1278.2	1323.4	1367.8	1397.1
17.5°	1179.0	1178.8	1230.4	1285.5	1320.8
20°	1107.7	1110.0	1165.3	1226.1	1267.4
22.5°	1036.5	1041.7	1100.8	1164.2	1211.5
25°	930.4	937.9	1004.1	1072.8	1123.1
27.5°	828.4	839.4	909.0	980.5	1041.7
30°	761.5	774.3	845.2	920.3	983.4
32.5°	695.8	711.0	780.1	859.5	923.8
35°	597.2	612.2	678.6	758.5	827.5
37.5°	495.4	510.2	575.0	653.6	728.2
40°	429.1	445.6	507.4	583.6	659.4
42.5°	368.9	385.4	443.5	518.4	590.0
45°	286.3	303.6	354.7	423.7	489.8
47.5°	217.9	236.6	281.4	343.9	404.1
50°	177.3	196.1	240.3	295.3	353.1
52.5°	144.8	162.9	202.8	254.7	307.7
55°	102.9	120.1	155.1	199.1	244.9
57.5°	71.1	85.9	117.3	154.0	189.9
60°	51.4	65.7	95.2	125.0	154.3
62.5°	34.2	47.3	76.2	99.0	118.7
65°	11.5	22.0	49.1	59.3	66.0
67.5°	5.8	7.0	25.8	27.2	29.5
70°	4.6	4.6	12.3	13.1	15.4
72.5°	3.4	3.4	4.9	6.3	6.8
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	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°	4.6	24.6	57.0	16.6	12.5
95°	15.1	59.8	268.6	93.0	57.3
97.5°	27.7	70.0	413.7	296.0	202.8
100°	36.5	76.1	445.1	450.9	347.3
102.5°	46.2	82.6	438.2	577.2	486.7
105°	61.4	93.1	402.3	710.6	675.5
107.5°	76.8	105.2	360.4	748.3	779.5
110°	87.4	114.0	336.3	733.9	804.0

TEST NUMBER: P520990

CATALOG NUMBER: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4_3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	97.6	122.8	320.1	699.8	799.9
115°	114.0	137.8	305.1	646.3	758.9
117.5°	128.5	150.8	296.1	587.7	707.0
120°	140.1	158.8	295.2	554.3	668.6
122.5°	149.3	168.0	292.9	524.9	631.1
125°	160.9	178.5	291.2	483.2	577.7
127.5°	173.5	190.0	290.2	458.3	536.1
130°	180.0	196.4	288.9	440.9	508.8
132.5°	187.0	202.9	288.9	427.3	489.8
135°	196.8	213.2	287.7	408.2	461.4
137.5°	206.1	222.0	287.6	391.9	437.9
140°	213.0	229.4	287.1	378.4	422.6
142.5°	220.9	234.6	288.5	367.7	407.3
145°	232.1	244.0	290.0	353.2	384.9
147.5°	241.7	253.3	292.6	338.7	366.1
150°	250.1	258.0	293.5	333.9	353.1
152.5°	256.6	264.9	294.4	327.3	345.2
155°	265.1	271.3	297.0	319.3	332.3
157.5°	275.8	279.5	297.5	315.6	324.9
160°	281.3	284.2	299.9	312.8	320.7
162.5°	284.6	287.9	300.3	310.4	316.5
165°	292.9	294.0	300.4	306.9	311.4
167.5°	298.6	297.6	303.1	306.0	307.8
170°	300.4	299.9	302.2	302.8	305.1
172.5°	304.6	302.7	303.6	301.9	303.7
175°	306.8	305.1	303.9	302.1	299.9
177.5°	307.7	305.0	303.6	301.7	302.2
180°	304.5	304.5	304.5	304.5	304.5

(END OF REPORT)