

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: P520977

Luminaire Tested: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4\_3000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520977  
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-050D-92765-1D-UNV-STD-W-4\_3000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 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: 3155.3 lumens  
Efficiency: N/A  
Efficacy: 90.9 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

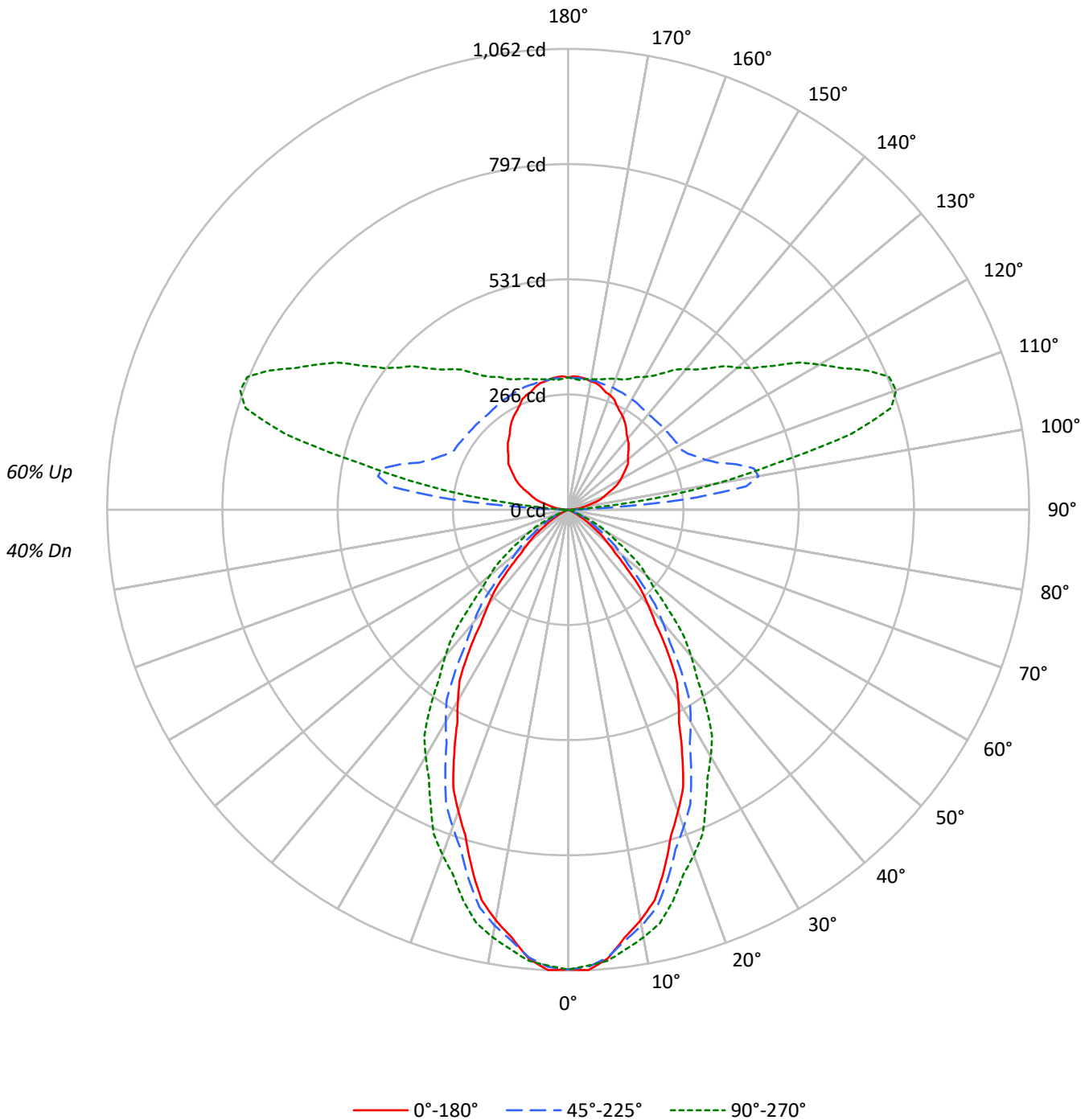
Input Watts (W): 34.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				
1	97	93	90	87	88	85	83	80	70	68	67	56	55	54	44	43	42	37				
2	89	83	78	73	82	76	72	68	63	60	58	51	49	48	40	39	38	33				
3	83	74	68	63	75	68	63	59	57	53	50	47	44	42	37	35	34	30				
4	76	67	60	55	70	62	56	51	52	48	44	43	40	37	34	32	31	27				
5	71	60	53	48	65	56	50	45	47	43	39	39	36	33	32	29	28	25				
6	66	55	47	42	60	51	44	40	43	38	35	36	33	30	29	27	25	22				
7	61	50	43	38	56	46	40	36	40	35	31	33	30	27	27	25	23	21				
8	57	46	39	34	52	42	36	32	36	32	28	31	27	25	25	23	21	19				
9	53	42	35	31	49	39	33	29	34	29	26	29	25	23	24	21	20	17				
10	50	39	32	28	46	36	30	26	31	27	24	27	23	21	22	20	18	16				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9775	9775	9775
5°	9618	9594	9665
10°	8999	9119	9373
15°	8181	8441	8911
20°	7262	7640	8309
25°	6324	6825	7634
30°	5417	6012	6995
35°	4492	5103	6224
40°	3451	4080	5303
45°	2495	3090	4267
50°	1699	2302	3385
55°	1105	1665	2630
60°	633	1174	1901
65°	168	716	963
70°	84	221	278
75°	36	18	0
80°	27	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4267 cd/sqm

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CATALOG NUMBER: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4\_3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.7	3.1
10°-20°	247.3	7.8
20°-30°	309.6	9.8
30°-40°	285.9	9.1
40°-50°	192.1	6.1
50°-60°	99.2	3.1
60°-70°	31.1	1.0
70°-80°	2.0	0.1
80°-90°	0.0	0.0
90°-100°	138.8	4.4
100°-110°	394.8	12.5
110°-120°	378.2	12.0
120°-130°	299.4	9.5
130°-140°	240.3	7.6
140°-150°	188.1	6.0
150°-160°	137.6	4.4
160°-170°	85.3	2.7
170°-180°	28.9	0.9
0°-30°	653.5	20.7
0°-40°	939.4	29.8
0°-60°	1230.8	39.0
0°-90°	1263.9	40.1
90°-120°	911.8	28.9
90°-150°	1639.5	52.0
90°-180°	1891.0	59.9
0°-180°	3155.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1038	1028	1036	1040	1044	96
15°	856	854	884	913	933	239
25°	621	626	670	716	750	285
35°	399	409	453	506	553	247
45°	191	203	237	283	327	150
55°	69	80	104	133	164	64
65°	8	15	33	40	44	13
75°	1	1	0	0	0	1
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-050D-92765-1D-UNV-STD-W-4\_3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1059.5	1059.5	1059.5	1059.5	1059.5
2.5°	1062.0	1051.9	1054.6	1054.5	1051.7
5°	1038.5	1028.0	1035.9	1039.6	1043.6
7.5°	994.6	986.4	1001.7	1013.1	1021.5
10°	960.6	953.5	973.4	989.0	1000.5
12.5°	921.2	915.8	939.8	961.2	975.9
15°	856.5	853.5	883.7	913.3	932.9
17.5°	787.2	787.1	821.6	858.4	881.9
20°	739.6	741.1	778.1	818.7	846.3
22.5°	692.1	695.6	735.0	777.4	808.9
25°	621.2	626.3	670.4	716.3	749.9
27.5°	553.2	560.5	607.0	654.7	695.6
30°	508.5	517.0	564.3	614.5	656.6
32.5°	464.6	474.7	520.9	573.9	616.8
35°	398.8	408.8	453.1	506.4	552.6
37.5°	330.8	340.6	383.9	436.4	486.2
40°	286.5	297.6	338.8	389.7	440.3
42.5°	246.3	257.4	296.2	346.2	394.0
45°	191.2	202.7	236.8	282.9	327.0
47.5°	145.5	158.0	187.9	229.6	269.8
50°	118.4	130.9	160.4	197.2	235.8
52.5°	96.7	108.8	135.4	170.1	205.4
55°	68.7	80.2	103.5	132.9	163.5
57.5°	47.5	57.4	78.3	102.9	126.8
60°	34.3	43.9	63.6	83.5	103.0
62.5°	22.9	31.6	50.8	66.1	79.2
65°	7.7	14.7	32.8	39.6	44.1
67.5°	3.9	4.7	17.2	18.2	19.7
70°	3.1	3.1	8.2	8.7	10.3
72.5°	2.3	2.3	3.3	4.2	4.5
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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: P520977

CATALOG NUMBER: SQ4-BB-025U-050D-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)