

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: P521029

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

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521029  
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-050U-050D-92765-1D-UNV-STD-W-4\_3000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 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: 3395.5 lumens  
Efficiency: N/A  
Efficacy: 93.0 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: Semi-Indirect

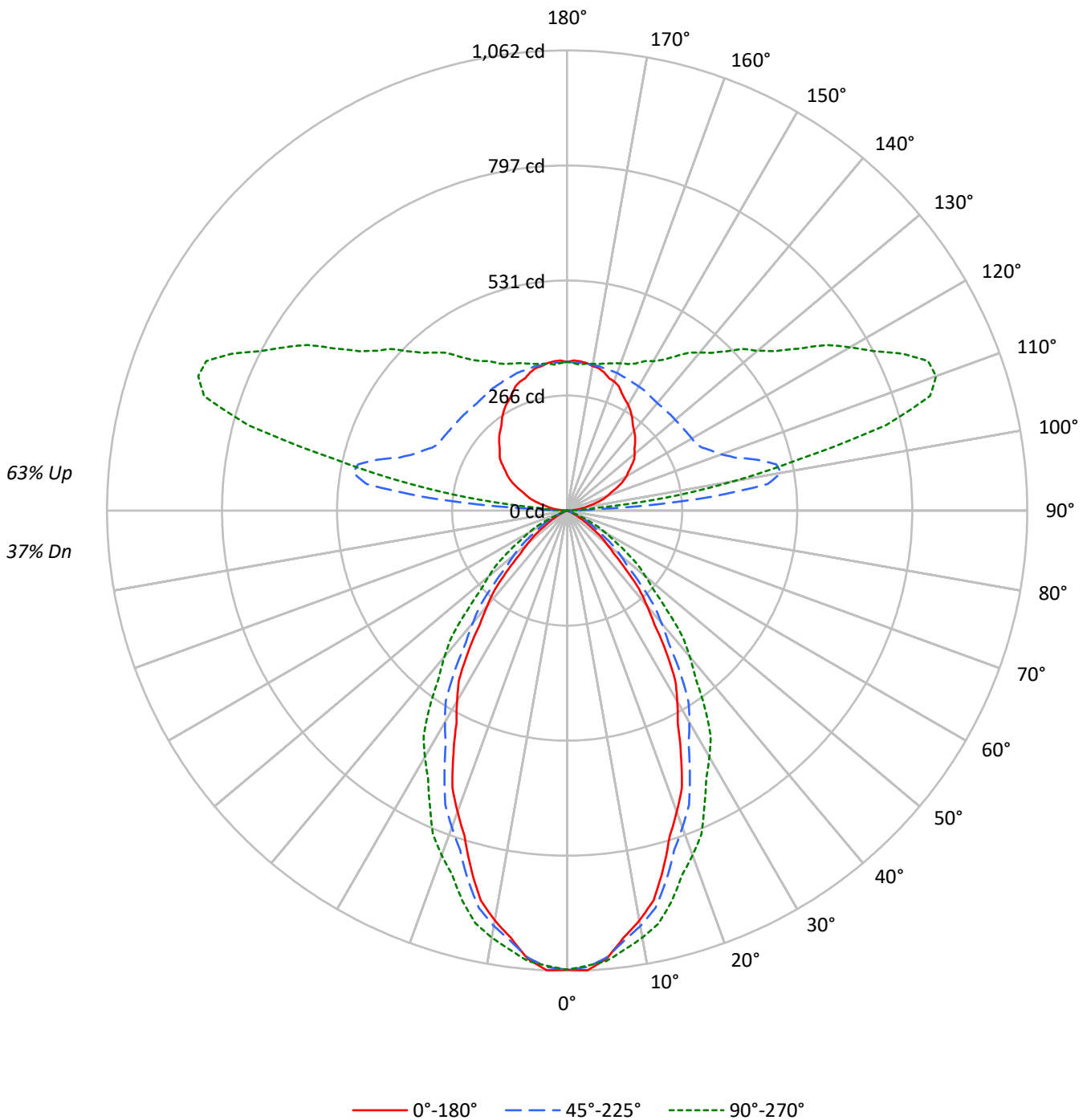
Input Watts (W): 36.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20			20			20			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	0
RCR																		
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44	37
1	96	93	89	86	87	84	81	79	69	67	65	54	53	52	41	41	40	34
2	89	82	77	73	81	75	71	67	62	59	56	49	47	46	38	37	36	31
3	82	74	67	62	74	67	62	58	56	52	49	45	42	40	35	33	32	28
4	76	66	59	54	69	61	55	50	50	46	43	41	38	36	32	30	29	25
5	70	60	52	47	64	55	49	44	46	41	38	38	34	32	30	28	26	23
6	65	54	47	42	59	50	43	39	42	37	34	34	31	29	28	25	24	21
7	60	49	42	37	55	45	39	35	38	34	30	32	28	26	26	23	22	19
8	56	45	38	33	51	42	35	31	35	31	27	29	26	24	24	22	20	18
9	52	41	34	30	48	38	32	28	33	28	25	27	24	22	22	20	18	16
10	49	38	31	27	45	35	30	26	30	26	23	25	22	20	21	19	17	15

**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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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.7	2.8
10°-20°	247.3	7.3
20°-30°	309.6	9.1
30°-40°	285.9	8.4
40°-50°	192.1	5.7
50°-60°	99.2	2.9
60°-70°	31.1	0.9
70°-80°	2.0	0.1
80°-90°	0.0	0.0
90°-100°	156.4	4.6
100°-110°	444.9	13.1
110°-120°	426.3	12.6
120°-130°	337.4	9.9
130°-140°	270.8	8.0
140°-150°	212.0	6.2
150°-160°	155.1	4.6
160°-170°	96.1	2.8
170°-180°	32.6	1.0
0°-30°	653.5	19.2
0°-40°	939.4	27.7
0°-60°	1230.8	36.2
0°-90°	1263.9	37.2
90°-120°	1027.6	30.3
90°-150°	1847.8	54.4
90°-180°	2132.0	62.8
0°-180°	3395.5	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°	17	67	303	105	65	19
105°	69	105	453	801	761	73
115°	128	155	344	728	855	127
125°	181	201	328	545	651	162
135°	222	240	324	460	520	171
145°	262	275	327	398	434	163
155°	299	306	335	360	374	138
165°	330	331	339	346	351	93
175°	346	344	342	340	338	33
180°	343	343	343	343	343	

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**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°	5.2	27.7	64.2	18.7	14.1
95°	17.0	67.4	302.7	104.8	64.6
97.5°	31.2	78.9	466.2	333.6	228.6
100°	41.1	85.8	501.7	508.2	391.4
102.5°	52.1	93.1	493.9	650.5	548.5
105°	69.2	104.9	453.4	800.9	761.3
107.5°	86.5	118.5	406.2	843.3	878.5
110°	98.5	128.5	379.0	827.1	906.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	<i>110.0</i>	138.4	360.8	788.7	901.5
115°	<i>128.5</i>	155.3	343.8	728.3	855.3
117.5°	<i>144.8</i>	170.0	333.8	662.4	796.8
120°	<i>157.9</i>	178.9	332.7	624.7	753.5
122.5°	<i>168.3</i>	189.4	330.1	591.6	711.2
125°	<i>181.4</i>	201.1	328.2	544.6	651.1
127.5°	<i>195.6</i>	214.1	327.1	516.5	604.2
130°	<i>202.9</i>	221.4	325.5	496.9	573.4
132.5°	<i>210.7</i>	228.7	325.5	481.6	552.1
135°	<i>221.8</i>	240.3	324.2	460.0	520.0
137.5°	<i>232.3</i>	250.2	324.1	441.7	493.5
140°	<i>240.1</i>	258.6	323.6	426.5	476.2
142.5°	<i>249.0</i>	264.4	325.2	414.4	459.0
145°	<i>261.6</i>	275.0	326.8	398.1	433.8
147.5°	<i>272.4</i>	285.5	329.7	381.7	412.6
150°	<i>281.8</i>	290.8	330.8	376.3	398.0
152.5°	<i>289.1</i>	298.6	331.8	368.9	389.1
155°	<i>298.8</i>	305.8	334.7	359.8	374.5
157.5°	<i>310.8</i>	315.0	335.3	355.7	366.1
160°	<i>317.1</i>	320.3	337.9	352.5	361.4
162.5°	<i>320.7</i>	324.4	338.5	349.8	356.7
165°	<i>330.1</i>	331.4	338.6	345.9	351.0
167.5°	<i>336.5</i>	335.4	341.6	344.9	346.9
170°	<i>338.6</i>	338.0	340.5	341.3	343.8
172.5°	<i>343.3</i>	341.1	342.1	340.2	342.2
175°	<i>345.8</i>	343.9	342.5	340.5	337.9
177.5°	<i>346.8</i>	343.7	342.1	340.0	340.5
180°	<i>343.2</i>	343.2	343.2	343.2	343.2

(END OF REPORT)