

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: P521721

Luminaire Tested: SQ4-WB-025U-075D-92765-1D-UNV-STD-W-4\_4500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521721  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-WB-025U-075D-92765-1D-UNV-STD-W-4\_4500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4705.1 lumens  
Efficiency: N/A  
Efficacy: 102.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

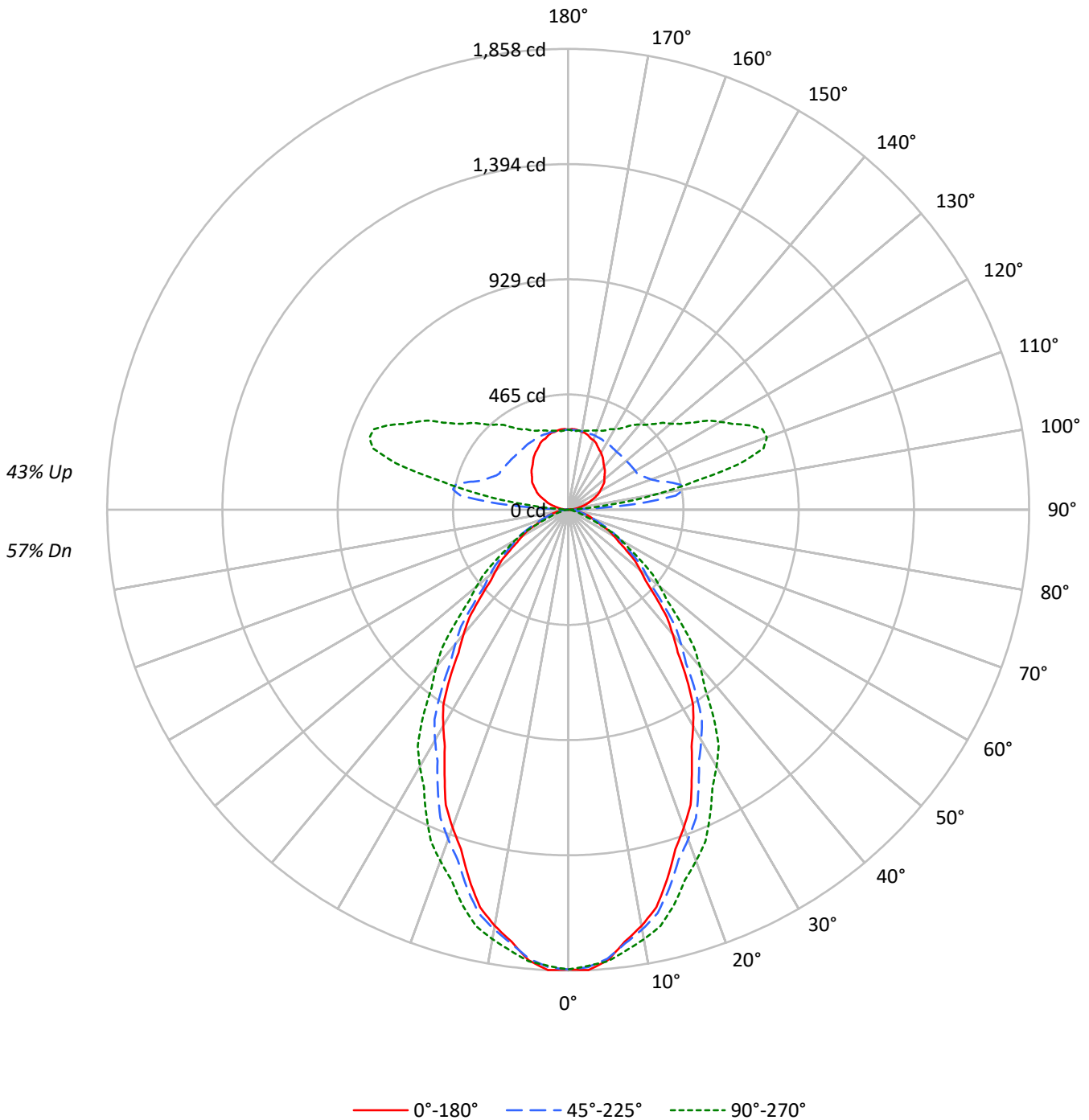
Input Watts (W): 45.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20				20				20			20			20			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	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57
1	101	97	93	90	94	91	88	85	79	76	75	68	66	65	58	57	56	51
2	93	86	81	76	86	81	76	72	71	67	64	61	59	56	52	51	49	45
3	86	77	70	65	80	72	67	62	64	59	55	55	52	49	48	45	43	40
4	79	69	62	56	74	65	59	54	57	52	49	50	47	44	44	41	39	35
5	73	62	55	49	68	59	52	47	52	47	43	46	42	39	40	37	35	32
6	68	57	49	44	63	54	47	42	48	42	38	42	38	35	37	34	31	29
7	63	52	44	39	59	49	42	38	44	38	34	39	35	31	34	31	28	26
8	59	47	40	35	55	45	38	34	40	35	31	36	32	29	32	28	26	24
9	55	44	37	32	52	42	35	31	37	32	28	33	29	26	30	26	24	22
10	52	40	34	29	49	38	32	28	35	30	26	31	27	24	28	24	22	20

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

	0°	45°	90°
0°	17103	17103	17103
5°	16889	16828	16926
10°	15956	16101	16475
15°	14730	15072	15748
20°	13376	13879	14798
25°	11998	12652	13786
30°	10727	11429	12737
35°	9381	10059	11497
40°	7896	8522	9953
45°	6516	7078	8310
50°	5440	5931	6923
55°	4618	5089	5717
60°	3947	4412	4563
65°	3144	3711	2947
70°	2787	2897	1799
75°	2581	2349	1102
80°	2375	2162	951
85°	2149	1980	773

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8310 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.0	3.6
10°-20°	442.2	9.4
20°-30°	572.8	12.2
30°-40°	560.9	11.9
40°-50°	429.4	9.1
50°-60°	286.1	6.1
60°-70°	156.1	3.3
70°-80°	65.0	1.4
80°-90°	18.4	0.4
90°-100°	147.0	3.1
100°-110°	418.3	8.9
110°-120°	400.8	8.5
120°-130°	317.2	6.7
130°-140°	254.6	5.4
140°-150°	199.3	4.2
150°-160°	145.8	3.1
160°-170°	90.3	1.9
170°-180°	30.7	0.7
0°-30°	1185.1	25.2
0°-40°	1746.0	37.1
0°-60°	2461.5	52.3
0°-90°	2701.1	57.4
90°-120°	966.1	20.5
90°-150°	1737.2	36.9
90°-180°	2004.0	42.6
0°-180°	4705.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1854	1854	1854	1854	1854	
5°	1824	1805	1817	1821	1828	170
15°	1542	1537	1578	1621	1649	431
25°	1179	1182	1243	1297	1354	542
35°	833	837	893	953	1021	518
45°	499	509	542	584	637	389
55°	287	299	316	328	355	260
65°	144	156	170	148	135	150
75°	72	72	66	45	31	77
85°	20	20	19	12	7	22
90°	0	0	0	0	0	2
95°	16	63	285	98	61	18
105°	65	99	426	753	716	69
115°	121	146	323	685	804	119
125°	170	189	308	512	612	153
135°	208	226	305	432	489	161
145°	246	258	307	374	408	154
155°	281	288	315	338	352	130
165°	310	312	318	325	330	87
175°	325	323	322	320	318	31
180°	323	323	323	323	323	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1853.7	1853.7	1853.7	1853.7	1853.7
2.5°	1858.2	1841.7	1845.8	1845.7	1840.6
5°	1823.6	1805.3	1817.0	1821.3	1827.6
7.5°	1755.9	1742.0	1763.5	1779.4	1792.3
10°	1703.2	1691.2	1718.6	1741.8	1758.5
12.5°	1642.0	1632.0	1665.9	1697.0	1718.8
15°	1542.1	1536.6	1577.9	1620.8	1648.7
17.5°	1435.3	1432.6	1480.0	1530.1	1565.7
20°	1362.4	1361.6	1413.6	1465.8	1507.2
22.5°	1288.9	1290.6	1345.3	1399.6	1446.6
25°	1178.6	1181.7	1242.8	1297.0	1354.2
27.5°	1076.6	1078.0	1141.1	1198.3	1259.4
30°	1006.9	1010.9	1072.8	1132.0	1195.6
32.5°	937.3	941.9	1002.5	1063.7	1128.6
35°	832.9	836.9	893.1	953.2	1020.8
37.5°	725.2	730.6	780.5	837.3	903.8
40°	655.6	663.5	707.6	761.2	826.4
42.5°	588.5	598.4	639.3	690.1	748.9
45°	499.4	508.9	542.5	583.6	636.9
47.5°	422.6	433.6	459.4	494.7	540.2
50°	379.0	389.4	413.2	439.4	482.3
52.5°	340.6	351.0	372.2	392.4	429.0
55°	287.1	299.0	316.4	328.4	355.4
57.5°	243.2	254.6	268.4	273.8	290.2
60°	213.9	226.6	239.1	238.5	247.3
62.5°	187.2	198.1	210.5	201.9	202.4
65°	144.0	155.9	170.0	148.5	135.0
67.5°	116.3	118.9	133.4	103.6	87.5
70°	103.3	103.3	107.4	80.2	66.7
72.5°	90.9	90.9	87.2	65.2	51.1
75°	72.4	72.4	65.9	45.2	30.9
77.5°	55.8	55.2	50.4	33.7	22.4
80°	44.7	44.7	40.7	26.6	17.9
82.5°	35.0	35.0	31.6	20.8	13.3
85°	20.3	20.3	18.7	12.1	7.3
87.5°	7.2	7.2	6.5	3.9	3.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	4.9	26.0	60.4	17.6	13.2
95°	15.9	63.3	284.6	98.5	60.7
97.5°	29.3	74.2	438.3	313.6	214.9
100°	38.6	80.6	471.7	477.7	368.0
102.5°	48.9	87.6	464.3	611.5	515.7
105°	65.0	98.6	426.3	752.9	715.8
107.5°	81.3	111.4	381.9	792.8	825.9
110°	92.6	120.8	356.3	777.6	851.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	103.4	130.2	339.2	741.5	847.5
115°	120.8	146.0	323.2	684.7	804.1
117.5°	136.2	159.8	313.8	622.7	749.1
120°	148.4	168.2	312.8	587.3	708.4
122.5°	158.2	178.0	310.3	556.2	668.7
125°	170.5	189.1	308.5	512.0	612.1
127.5°	183.9	201.3	307.5	485.6	568.1
130°	190.7	208.1	306.1	467.2	539.1
132.5°	198.1	215.0	306.1	452.8	519.0
135°	208.5	225.9	304.8	432.5	488.8
137.5°	218.3	235.3	304.7	415.2	463.9
140°	225.7	243.1	304.2	401.0	447.7
142.5°	234.0	248.6	305.7	389.6	431.5
145°	245.9	258.5	307.3	374.3	407.9
147.5°	256.1	268.4	310.0	358.8	387.9
150°	265.0	273.4	311.0	353.7	374.1
152.5°	271.8	280.7	311.9	346.8	365.8
155°	280.9	287.5	314.6	338.3	352.1
157.5°	292.2	296.2	315.3	334.4	344.2
160°	298.1	301.1	317.7	331.4	339.8
162.5°	301.5	305.0	318.2	328.9	335.4
165°	310.3	311.5	318.3	325.2	330.0
167.5°	316.4	315.3	321.1	324.3	326.2
170°	318.3	317.7	320.2	320.8	323.2
172.5°	322.7	320.7	321.6	319.8	321.8
175°	325.1	323.3	322.0	320.1	317.7
177.5°	326.0	323.2	321.6	319.7	320.2
180°	322.6	322.6	322.6	322.6	322.6

(END OF REPORT)