

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: P521006

Luminaire Tested: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521006
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-100D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 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: 4640.4 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

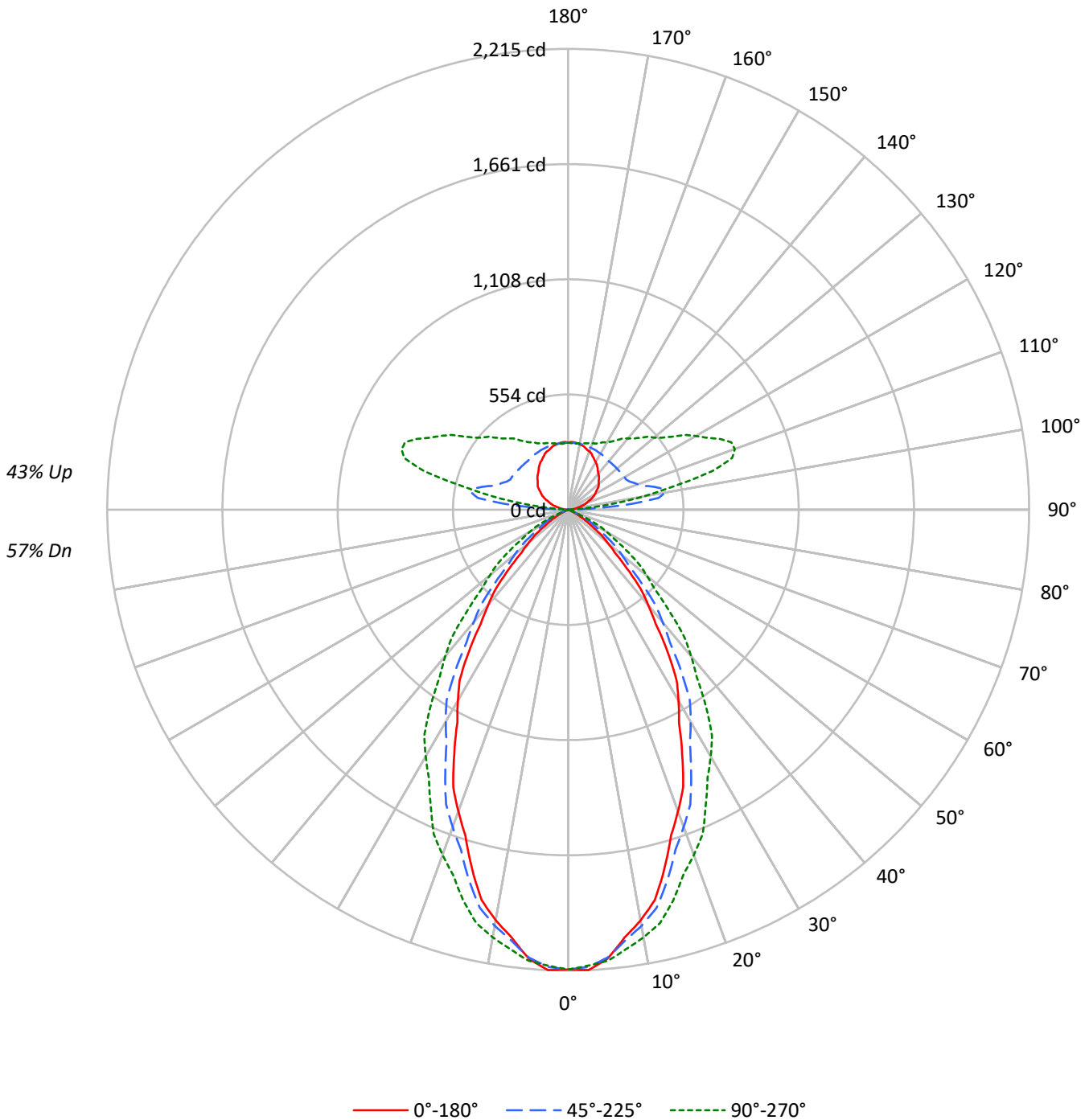
Input Watts (W): 56.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57																			
1	101	98	95	92	94	91	89	86	79	77	76	68	67	66	58	57	57	52																			
2	94	88	83	78	88	82	78	74	72	69	66	63	60	58	54	52	51	47																			
3	87	79	73	68	81	74	69	65	66	61	58	57	54	52	50	48	46	42																			
4	81	72	65	60	76	67	61	57	60	55	52	53	49	46	46	43	41	38																			
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	43	40	38	35																			
6	70	59	52	47	66	56	50	45	50	45	41	45	41	38	39	37	34	32																			
7	65	54	47	42	61	52	45	41	46	41	38	41	37	34	37	34	31	29																			
8	61	50	43	38	57	48	41	37	43	38	34	38	34	32	34	31	29	27																			
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25																			
10	54	43	36	32	51	41	35	31	37	32	29	34	30	27	30	27	25	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20391	20391	20391
5°	20062	20013	20161
10°	18772	19023	19553
15°	17066	17607	18588
20°	15149	15936	17332
25°	13192	14237	15925
30°	11300	12541	14592
35°	9370	10646	12982
40°	7199	8513	11062
45°	5203	6446	8901
50°	3545	4804	7059
55°	2305	3474	5487
60°	1321	2447	3965
65°	349	1493	2008
70°	173	461	577
75°	75	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8901 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.7	4.3
10°-20°	515.8	11.1
20°-30°	645.7	13.9
30°-40°	596.4	12.9
40°-50°	400.8	8.6
50°-60°	207.0	4.5
60°-70°	64.8	1.4
70°-80°	4.1	0.1
80°-90°	0.1	0.0
90°-100°	147.0	3.2
100°-110°	418.3	9.0
110°-120°	400.8	8.6
120°-130°	317.2	6.8
130°-140°	254.6	5.5
140°-150°	199.3	4.3
150°-160°	145.8	3.1
160°-170°	90.3	1.9
170°-180°	30.7	0.7
0°-30°	1363.2	29.4
0°-40°	1959.7	42.2
0°-60°	2567.4	55.3
0°-90°	2636.4	56.8
90°-120°	966.1	20.8
90°-150°	1737.2	37.4
90°-180°	2004.0	43.2
0°-180°	4640.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2210	2210	2210	2210	2210	
5°	2166	2144	2161	2169	2177	201
15°	1787	1780	1843	1905	1946	498
25°	1296	1306	1398	1494	1564	594
35°	832	853	945	1056	1153	515
45°	399	423	494	590	682	313
55°	143	167	216	277	341	134
65°	16	31	68	82	92	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
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°	2210.1	2210.1	2210.1	2210.1	2210.1
2.5°	2215.2	2194.3	2199.8	2199.7	2193.8
5°	2166.2	2144.3	2160.9	2168.6	2176.9
7.5°	2074.7	2057.6	2089.5	2113.4	2130.7
10°	2003.7	1989.1	2030.5	2063.1	2087.1
12.5°	1921.6	1910.3	1960.3	2005.1	2035.8
15°	1786.7	1780.4	1843.3	1905.2	1946.0
17.5°	1642.1	1641.9	1713.7	1790.6	1839.7
20°	1542.9	1546.0	1623.1	1707.8	1765.3
22.5°	1443.7	1451.0	1533.3	1621.6	1687.4
25°	1295.9	1306.4	1398.5	1494.2	1564.3
27.5°	1153.9	1169.2	1266.2	1365.6	1450.9
30°	1060.7	1078.4	1177.2	1281.9	1369.7
32.5°	969.1	990.3	1086.5	1197.2	1286.7
35°	831.9	852.8	945.2	1056.4	1152.6
37.5°	690.1	710.6	800.8	910.3	1014.3
40°	597.7	620.7	706.8	812.9	918.5
42.5°	513.9	536.9	617.8	722.1	821.8
45°	398.8	422.9	494.0	590.2	682.2
47.5°	303.4	329.6	392.0	479.0	562.8
50°	247.0	273.1	334.7	411.3	491.8
52.5°	201.7	227.0	282.5	354.7	428.5
55°	143.3	167.3	216.0	277.3	341.1
57.5°	99.0	119.7	163.4	214.6	264.5
60°	71.6	91.5	132.6	174.1	214.9
62.5°	47.7	65.9	106.1	137.9	165.3
65°	16.0	30.7	68.4	82.5	92.0
67.5°	8.1	9.8	35.9	37.9	41.1
70°	6.4	6.4	17.1	18.2	21.4
72.5°	4.7	4.7	6.8	8.8	9.4
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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°	4.9	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)