

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: P521005

Luminaire Tested: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521005
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_4000K
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4566.7 lumens
Efficiency: N/A
Efficacy: 81.0 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: General Diffuse

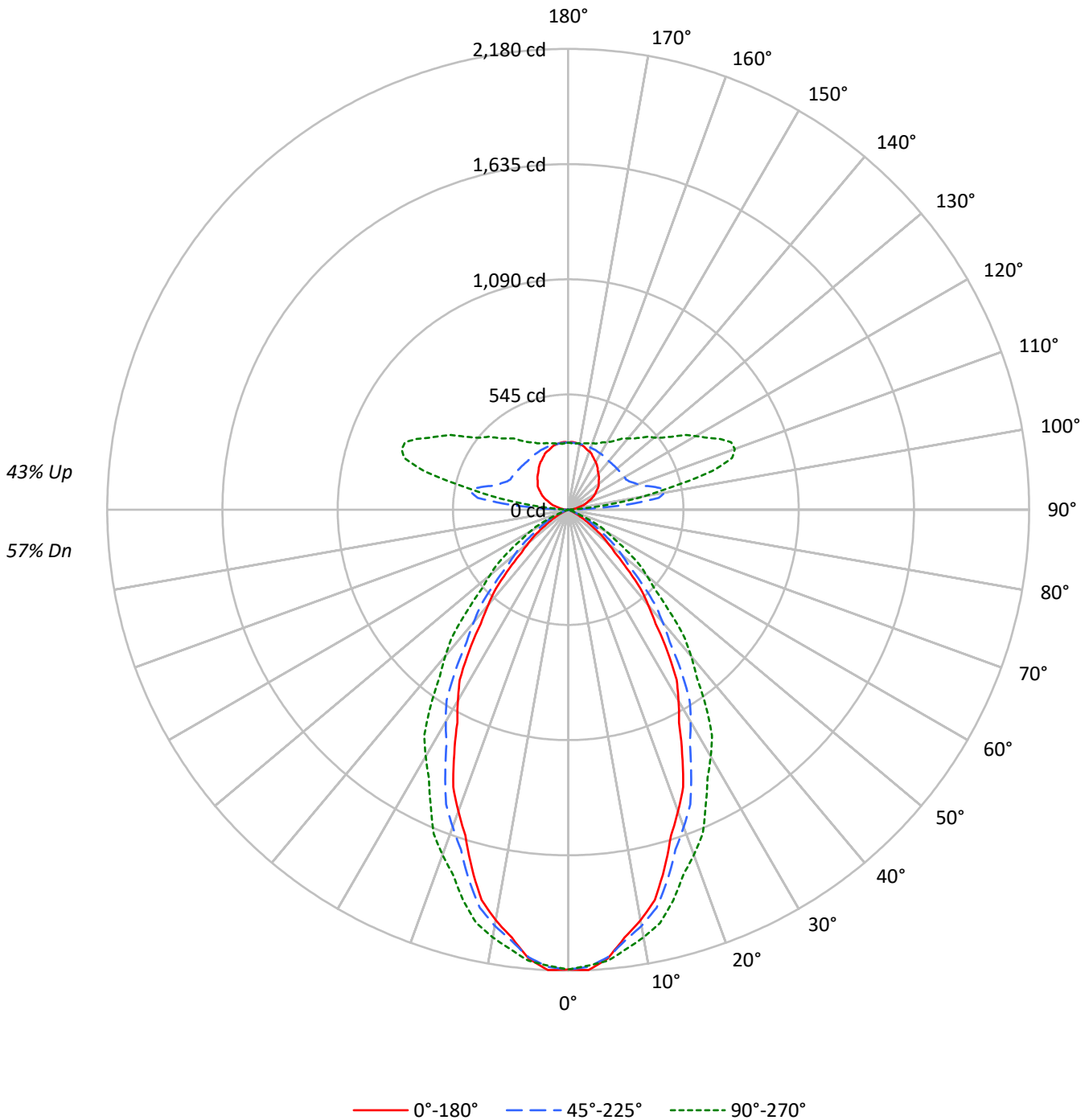
Input Watts (W): 56.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	20067	20067	20067
5°	19744	19695	19842
10°	18474	18720	19243
15°	16795	17328	18292
20°	14908	15683	17057
25°	12983	14011	15671
30°	11120	12342	14360
35°	9220	10477	12776
40°	7084	8377	10887
45°	5121	6343	8759
50°	3489	4728	6947
55°	2268	3420	5400
60°	1301	2408	3903
65°	345	1469	1976
70°	170	453	566
75°	75	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8759 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.5	4.3
10°-20°	507.6	11.1
20°-30°	635.5	13.9
30°-40°	587.0	12.9
40°-50°	394.4	8.6
50°-60°	203.7	4.5
60°-70°	63.8	1.4
70°-80°	4.0	0.1
80°-90°	0.1	0.0
90°-100°	144.7	3.2
100°-110°	411.6	9.0
110°-120°	394.4	8.6
120°-130°	312.1	6.8
130°-140°	250.5	5.5
140°-150°	196.1	4.3
150°-160°	143.5	3.1
160°-170°	88.9	1.9
170°-180°	30.2	0.7
0°-30°	1341.6	29.4
0°-40°	1928.5	42.2
0°-60°	2526.7	55.3
0°-90°	2594.6	56.8
90°-120°	950.7	20.8
90°-150°	1709.6	37.4
90°-180°	1972.0	43.2
0°-180°	4566.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2175	2175	2175	2175	2175	
5°	2132	2110	2127	2134	2142	198
15°	1758	1752	1814	1875	1915	490
25°	1275	1286	1376	1470	1539	585
35°	819	839	930	1040	1134	507
45°	392	416	486	581	671	308
55°	141	165	213	273	336	132
65°	16	30	67	81	90	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	62	280	97	60	18
105°	64	97	420	741	704	68
115°	119	144	318	674	791	117
125°	168	186	304	504	602	150
135°	205	222	300	426	481	158
145°	242	254	302	368	401	151
155°	276	283	310	333	346	128
165°	305	307	313	320	325	86
175°	320	318	317	315	313	30
180°	318	318	318	318	318	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2175.0	2175.0	2175.0	2175.0	2175.0
2.5°	2180.0	2159.5	2164.9	2164.8	2159.0
5°	2131.9	2110.2	2126.6	2134.1	2142.4
7.5°	2041.8	2024.9	2056.3	2079.8	2096.9
10°	1971.9	1957.5	1998.2	2030.3	2054.0
12.5°	1891.1	1880.0	1929.2	1973.2	2003.5
15°	1758.3	1752.1	1814.1	1875.0	1915.1
17.5°	1616.0	1615.8	1686.5	1762.1	1810.5
20°	1518.4	1521.5	1597.3	1680.7	1737.3
22.5°	1420.7	1427.9	1508.9	1595.8	1660.7
25°	1275.3	1285.6	1376.3	1470.5	1539.4
27.5°	1135.6	1150.6	1246.1	1343.9	1427.9
30°	1043.8	1061.3	1158.5	1261.5	1347.9
32.5°	953.8	974.5	1069.3	1178.2	1266.3
35°	818.6	839.2	930.2	1039.7	1134.3
37.5°	679.1	699.3	788.1	895.9	998.2
40°	588.2	610.8	695.5	800.0	903.9
42.5°	505.7	528.3	608.0	710.6	808.8
45°	392.5	416.2	486.1	580.8	671.3
47.5°	298.6	324.3	385.8	471.4	553.9
50°	243.1	268.8	329.4	404.8	484.0
52.5°	198.5	223.4	278.0	349.1	421.7
55°	141.0	164.7	212.6	272.9	335.7
57.5°	97.4	117.8	160.8	211.1	260.3
60°	70.5	90.0	130.5	171.4	211.5
62.5°	46.9	64.8	104.4	135.7	162.7
65°	15.8	30.2	67.3	81.2	90.5
67.5°	8.0	9.6	35.4	37.3	40.4
70°	6.3	6.3	16.8	18.0	21.0
72.5°	4.6	4.6	6.7	8.6	9.3
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.8	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°	4.8	25.6	59.4	17.3	13.0
95°	15.7	62.3	280.1	96.9	59.8
97.5°	28.9	73.0	431.3	308.6	211.5
100°	38.0	79.3	464.2	470.2	362.2
102.5°	48.2	86.2	456.9	601.8	507.5
105°	64.0	97.0	419.5	741.0	704.4
107.5°	80.0	109.7	375.8	780.2	812.8
110°	91.1	118.9	350.7	765.2	838.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.8	128.1	333.8	729.7	834.1
115°	118.9	143.7	318.1	673.9	791.3
117.5°	134.0	157.3	308.8	612.8	737.2
120°	146.1	165.5	307.8	577.9	697.2
122.5°	155.7	175.2	305.4	547.3	658.0
125°	167.8	186.1	303.6	503.8	602.4
127.5°	181.0	198.1	302.6	477.8	559.1
130°	187.7	204.8	301.2	459.7	530.6
132.5°	195.0	211.6	301.2	445.6	510.8
135°	205.2	222.3	300.0	425.6	481.1
137.5°	214.9	231.5	299.9	408.6	456.6
140°	222.1	239.2	299.4	394.6	440.6
142.5°	230.3	244.6	300.8	383.4	424.7
145°	242.0	254.4	302.4	368.3	401.4
147.5°	252.1	264.1	305.1	353.2	381.7
150°	260.8	269.0	306.0	348.1	368.2
152.5°	267.5	276.2	307.0	341.3	360.0
155°	276.4	282.9	309.6	332.9	346.5
157.5°	287.6	291.4	310.2	329.1	338.7
160°	293.3	296.3	312.7	326.1	334.4
162.5°	296.7	300.2	313.1	323.7	330.0
165°	305.4	306.6	313.3	320.0	324.7
167.5°	311.3	310.3	316.0	319.1	321.0
170°	313.3	312.7	315.1	315.7	318.1
172.5°	317.6	315.6	316.5	314.8	316.6
175°	319.9	318.1	316.9	315.0	312.7
177.5°	320.9	318.0	316.5	314.6	315.1
180°	317.5	317.5	317.5	317.5	317.5

(END OF REPORT)