

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: P521047

Luminaire Tested: SQ4-BB-050U-075D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521047
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-075D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4372.7 lumens
Efficiency: N/A
Efficacy: 91.9 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

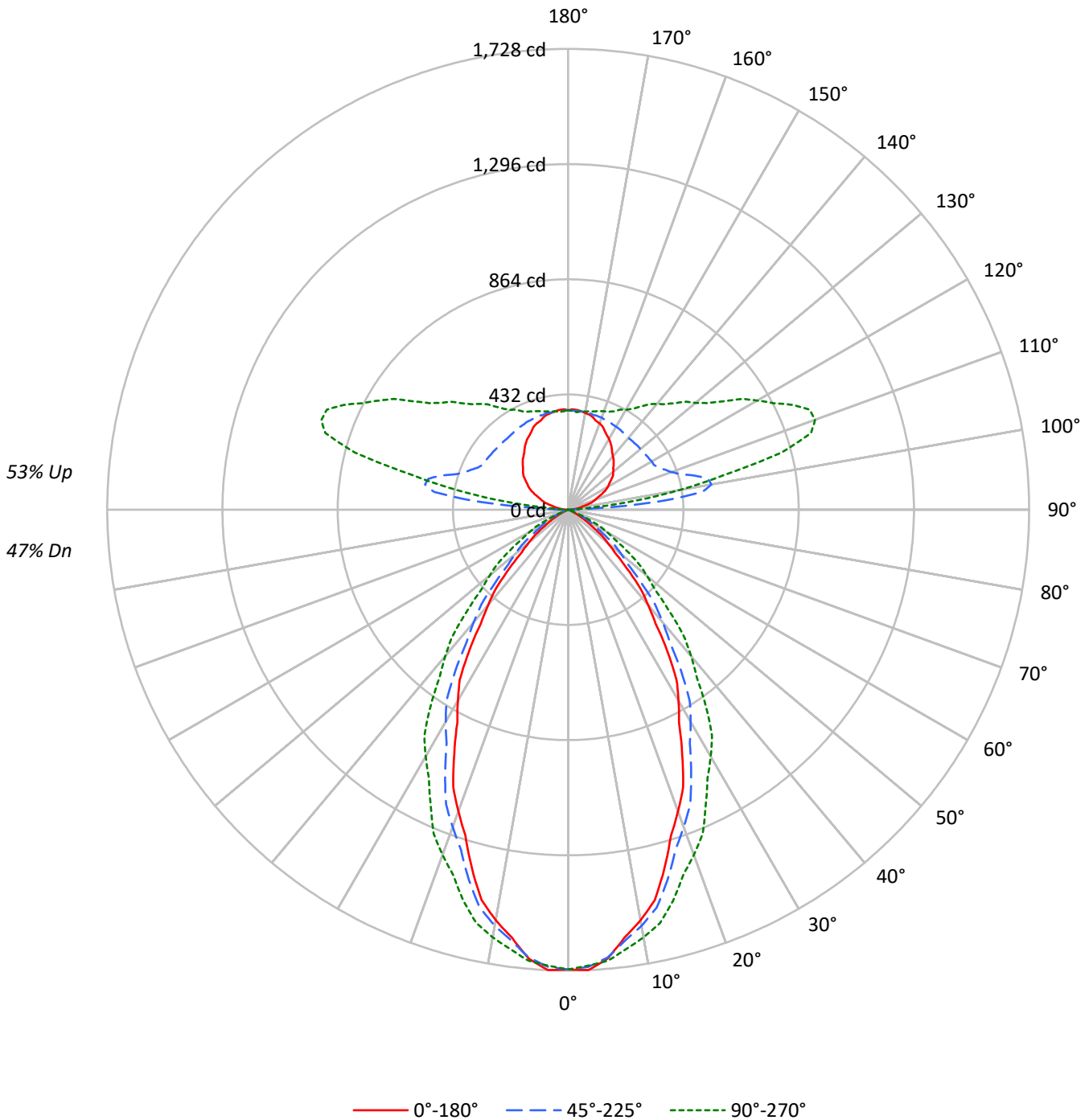
Input Watts (W): 47.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47				47
1	99	95	92	89	91	88	85	83	74	72	70	61	60	59	50	49	48	43				43
2	91	85	80	76	84	79	74	71	67	64	61	56	54	52	46	45	43	39				39
3	85	76	70	65	78	71	66	61	61	57	54	51	48	46	42	41	39	35				35
4	78	69	62	57	72	64	58	53	55	51	47	47	44	41	39	37	35	32				32
5	73	62	55	50	67	58	52	47	50	46	42	43	40	37	36	34	32	29				29
6	67	57	49	44	62	53	47	42	46	41	38	40	36	33	33	31	29	26				26
7	63	52	45	40	58	49	42	38	42	37	34	37	33	30	31	29	27	24				24
8	59	47	40	36	54	45	38	34	39	34	31	34	30	28	29	26	24	22				22
9	55	44	37	32	51	41	35	31	36	31	28	32	28	25	27	25	23	21				21
10	52	41	34	29	48	38	32	28	34	29	26	29	26	23	25	23	21	19				19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15906	15906	15906
5°	15650	15612	15728
10°	14644	14839	15253
15°	13312	13734	14499
20°	11817	12431	13521
25°	10291	11106	12423
30°	8815	9783	11383
35°	7309	8304	10127
40°	5615	6640	8629
45°	4059	5027	6943
50°	2766	3748	5507
55°	1798	2710	4280
60°	1031	1908	3093
65°	273	1166	1565
70°	135	359	450
75°	61	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6943 cd/sqm

TEST NUMBER: P521047

CATALOG NUMBER: SQ4-BB-050U-075D-92765-1D-UNV-STD-W-4_5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.3	3.6
10°-20°	402.4	9.2
20°-30°	503.7	11.5
30°-40°	465.3	10.6
40°-50°	312.6	7.1
50°-60°	161.5	3.7
60°-70°	50.6	1.2
70°-80°	3.2	0.1
80°-90°	0.1	0.0
90°-100°	169.9	3.9
100°-110°	483.4	11.1
110°-120°	463.2	10.6
120°-130°	366.6	8.4
130°-140°	294.2	6.7
140°-150°	230.4	5.3
150°-160°	168.5	3.9
160°-170°	104.4	2.4
170°-180°	35.4	0.8
0°-30°	1063.4	24.3
0°-40°	1528.7	35.0
0°-60°	2002.8	45.8
0°-90°	2056.6	47.0
90°-120°	1116.5	25.5
90°-150°	2007.7	45.9
90°-180°	2316.0	53.0
0°-180°	4372.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1724	1724	1724	1724	1724	
5°	1690	1673	1686	1692	1698	157
15°	1394	1389	1438	1486	1518	388
25°	1011	1019	1091	1166	1220	463
35°	649	665	737	824	899	402
45°	311	330	385	460	532	244
55°	112	130	168	216	266	104
65°	12	24	53	64	72	21
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	18	73	329	114	70	21
105°	75	114	493	870	827	79
115°	140	169	374	791	929	137
125°	197	218	356	592	707	176
135°	241	261	352	500	565	186
145°	284	299	355	433	471	178
155°	325	332	364	391	407	150
165°	359	360	368	376	381	101
175°	376	374	372	370	367	36
180°	373	373	373	373	373	

TEST NUMBER: P521047

CATALOG NUMBER: SQ4-BB-050U-075D-92765-1D-UNV-STD-W-4_5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1724.0	1724.0	1724.0	1724.0	1724.0
2.5°	1728.0	1711.7	1716.0	1715.9	1711.4
5°	1689.8	1672.7	1685.7	1691.7	1698.2
7.5°	1618.4	1605.1	1629.9	1648.6	1662.1
10°	1563.1	1551.6	1583.9	1609.4	1628.1
12.5°	1499.0	1490.2	1529.2	1564.1	1588.1
15°	1393.7	1388.8	1437.9	1486.2	1518.0
17.5°	1281.0	1280.8	1336.9	1396.8	1435.1
20°	1203.6	1206.0	1266.1	1332.2	1377.1
22.5°	1126.2	1131.9	1196.1	1265.0	1316.3
25°	1010.9	1019.1	1091.0	1165.6	1220.3
27.5°	900.1	912.0	987.7	1065.3	1131.8
30°	827.4	841.3	918.3	999.9	1068.5
32.5°	756.0	772.5	847.6	933.9	1003.7
35°	648.9	665.2	737.3	824.1	899.1
37.5°	538.3	554.3	624.7	710.1	791.2
40°	466.2	484.2	551.3	634.1	716.5
42.5°	400.9	418.8	481.9	563.3	641.1
45°	311.1	329.9	385.3	460.4	532.1
47.5°	236.7	257.1	305.8	373.7	439.1
50°	192.7	213.1	261.1	320.9	383.7
52.5°	157.3	177.0	220.4	276.7	334.3
55°	111.8	130.5	168.5	216.3	266.1
57.5°	77.2	93.4	127.4	167.4	206.4
60°	55.9	71.4	103.4	135.8	167.6
62.5°	37.2	51.4	82.7	107.6	128.9
65°	12.5	23.9	53.4	64.4	71.7
67.5°	6.3	7.6	28.0	29.6	32.0
70°	5.0	5.0	13.3	14.2	16.7
72.5°	3.7	3.7	5.3	6.9	7.3
75°	1.7	1.7	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	0.0	0.0
80°	0.8	0.8	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°	5.7	30.1	69.8	20.3	15.3
95°	18.4	73.2	328.9	113.8	70.2
97.5°	33.9	85.7	506.5	362.5	248.4
100°	44.7	93.2	545.1	552.1	425.3
102.5°	56.6	101.2	536.6	706.7	596.0
105°	75.1	114.0	492.6	870.2	827.2
107.5°	94.0	128.8	441.3	916.3	954.5
110°	107.0	139.6	411.8	898.6	984.6

TEST NUMBER: P521047

CATALOG NUMBER: SQ4-BB-050U-075D-92765-1D-UNV-STD-W-4_5700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	119.5	150.4	392.0	856.9	979.5
115°	139.6	168.8	373.6	791.4	929.3
117.5°	157.4	184.7	362.6	719.7	865.8
120°	171.5	194.4	361.5	678.7	818.7
122.5°	182.9	205.8	358.7	642.8	772.8
125°	197.1	218.5	356.5	591.7	707.4
127.5°	212.5	232.6	355.4	561.2	656.5
130°	220.4	240.5	353.7	539.9	623.1
132.5°	229.0	248.5	353.7	523.3	599.8
135°	241.0	261.1	352.3	499.8	564.9
137.5°	252.3	271.9	352.2	479.9	536.2
140°	260.9	281.0	351.6	463.4	517.5
142.5°	270.5	287.3	353.3	450.2	498.7
145°	284.2	298.8	355.1	432.6	471.4
147.5°	296.0	310.2	358.2	414.7	448.3
150°	306.2	315.9	359.4	408.8	432.4
152.5°	314.2	324.4	360.5	400.9	422.8
155°	324.6	332.3	363.6	390.9	406.9
157.5°	337.7	342.3	364.3	386.4	397.8
160°	344.5	348.0	367.2	383.0	392.7
162.5°	348.5	352.5	367.7	380.1	387.6
165°	358.7	360.1	367.9	375.8	381.4
167.5°	365.6	364.4	371.1	374.7	377.0
170°	367.9	367.2	370.0	370.8	373.6
172.5°	373.0	370.6	371.7	369.6	371.9
175°	375.7	373.6	372.1	370.0	367.2
177.5°	376.8	373.5	371.7	369.5	370.0
180°	372.9	372.9	372.9	372.9	372.9

(END OF REPORT)