

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: P521041

Luminaire Tested: SQ4-BB-050U-075D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521041
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3942.7 lumens
Efficiency: N/A
Efficacy: 82.8 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

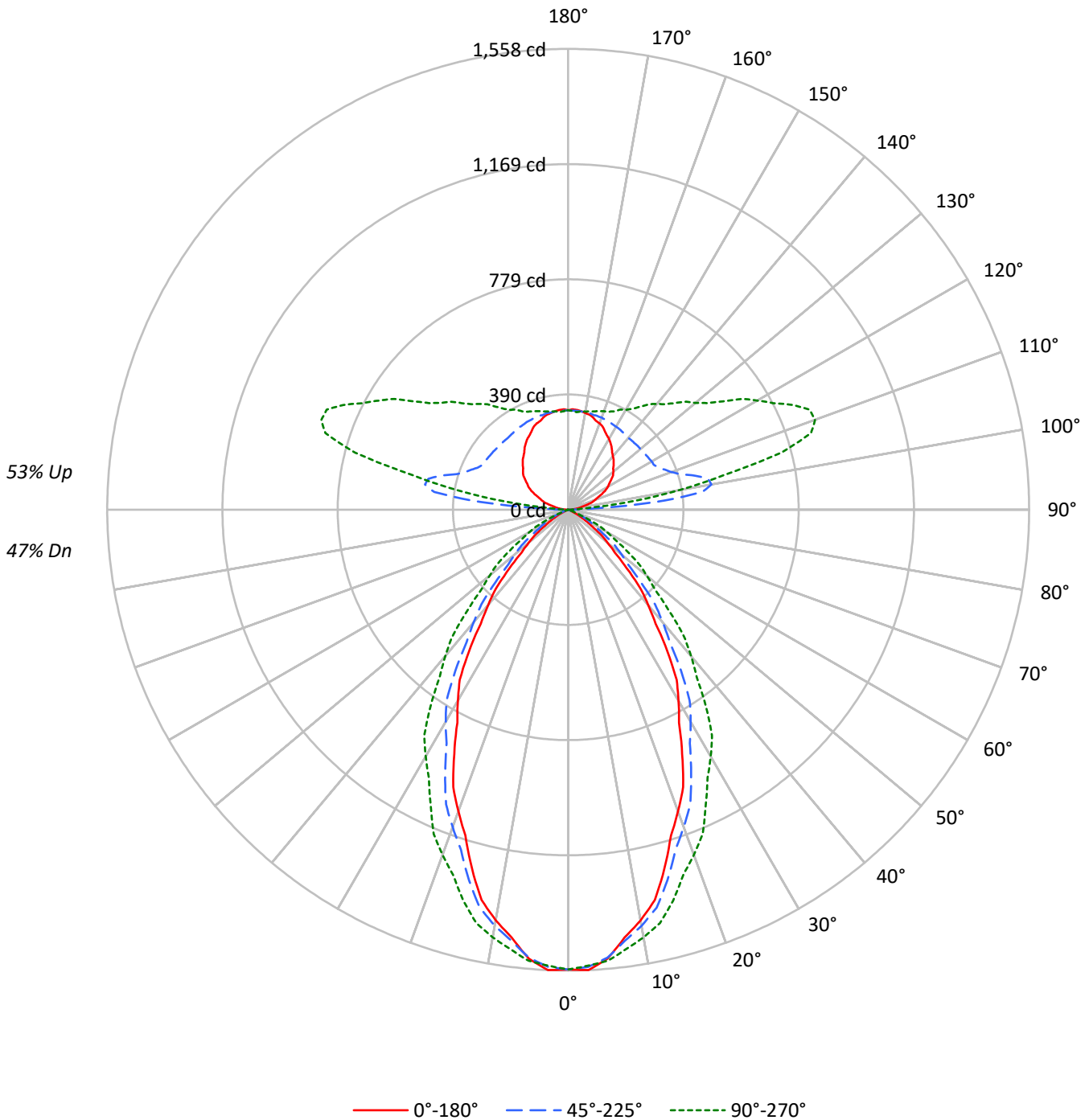
Input Watts (W): 47.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																				
0	106	106	106	106	98	98	98	98	82	82	82		67	67	67		53	53	53	47
1	99	95	92	89	91	88	85	83	74	72	70		61	60	59		50	49	48	43
2	91	85	80	76	84	79	74	71	67	64	61		56	54	52		46	45	43	39
3	85	76	70	65	78	71	66	61	61	57	54		51	48	46		42	41	39	35
4	78	69	62	57	72	64	58	53	55	51	47		47	44	41		39	37	35	32
5	73	62	55	50	67	58	52	47	50	46	42		43	40	37		36	34	32	29
6	67	57	49	44	62	53	47	42	46	41	38		40	36	33		33	31	29	26
7	63	52	45	40	58	49	42	38	42	37	34		37	33	30		31	29	27	24
8	59	47	40	36	54	45	38	34	39	34	31		34	30	28		29	26	24	22
9	55	44	37	32	51	41	35	31	36	31	28		32	28	25		27	25	23	21
10	52	41	34	29	48	38	32	28	34	29	26		29	26	23		25	23	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14342	14342	14342
5°	14112	14076	14181
10°	13204	13380	13753
15°	12004	12385	13074
20°	10655	11209	12191
25°	9279	10014	11201
30°	7948	8821	10264
35°	6590	7488	9131
40°	5063	5987	7780
45°	3660	4534	6260
50°	2493	3379	4965
55°	1621	2443	3859
60°	930	1722	2790
65°	247	1050	1412
70°	121	324	405
75°	53	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6260 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.9	3.6
10°-20°	362.8	9.2
20°-30°	454.2	11.5
30°-40°	419.5	10.6
40°-50°	281.9	7.1
50°-60°	145.6	3.7
60°-70°	45.6	1.2
70°-80°	2.9	0.1
80°-90°	0.1	0.0
90°-100°	153.2	3.9
100°-110°	435.9	11.1
110°-120°	417.6	10.6
120°-130°	330.5	8.4
130°-140°	265.3	6.7
140°-150°	207.7	5.3
150°-160°	152.0	3.9
160°-170°	94.1	2.4
170°-180°	31.9	0.8
0°-30°	958.8	24.3
0°-40°	1378.4	35.0
0°-60°	1805.8	45.8
0°-90°	1854.4	47.0
90°-120°	1006.7	25.5
90°-150°	1810.2	45.9
90°-180°	2088.0	53.0
0°-180°	3942.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1554	1554	1554	1554	1554	
5°	1524	1508	1520	1525	1531	141
15°	1257	1252	1297	1340	1369	350
25°	912	919	984	1051	1100	418
35°	585	600	665	743	811	362
45°	280	297	348	415	480	220
55°	101	118	152	195	240	94
65°	11	22	48	58	65	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	17	66	297	103	63	19
105°	68	103	444	785	746	72
115°	126	152	337	714	838	124
125°	178	197	322	534	638	159
135°	217	235	318	451	509	168
145°	256	269	320	390	425	160
155°	293	300	328	352	367	135
165°	323	325	332	339	344	91
175°	339	337	336	334	331	32
180°	336	336	336	336	336	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1554.5	1554.5	1554.5	1554.5	1554.5
2.5°	1558.1	1543.4	1547.3	1547.2	1543.1
5°	1523.7	1508.2	1519.9	1525.3	1531.2
7.5°	1459.3	1447.2	1469.7	1486.5	1498.7
10°	1409.4	1399.1	1428.2	1451.1	1468.0
12.5°	1351.6	1343.7	1378.8	1410.3	1431.9
15°	1256.7	1252.3	1296.6	1340.1	1368.8
17.5°	1155.0	1154.9	1205.4	1259.4	1294.0
20°	1085.2	1087.4	1141.6	1201.2	1241.7
22.5°	1015.4	1020.6	1078.5	1140.6	1186.9
25°	911.5	918.9	983.7	1051.0	1100.3
27.5°	811.6	822.4	890.6	960.5	1020.5
30°	746.0	758.5	828.0	901.6	963.4
32.5°	681.7	696.5	764.2	842.1	905.0
35°	585.1	599.8	664.8	743.1	810.7
37.5°	485.4	499.8	563.3	640.3	713.4
40°	420.4	436.6	497.1	571.8	646.0
42.5°	361.4	377.6	434.5	507.9	578.0
45°	280.5	297.4	347.5	415.1	479.8
47.5°	213.4	231.8	275.7	336.9	395.9
50°	173.7	192.1	235.4	289.3	345.9
52.5°	141.8	159.6	198.7	249.5	301.4
55°	100.8	117.7	151.9	195.1	239.9
57.5°	69.6	84.2	114.9	150.9	186.1
60°	50.4	64.4	93.3	122.5	151.2
62.5°	33.5	46.3	74.6	97.0	116.3
65°	11.3	21.6	48.1	58.1	64.7
67.5°	5.7	6.9	25.3	26.7	28.9
70°	4.5	4.5	12.0	12.8	15.0
72.5°	3.3	3.3	4.8	6.2	6.6
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	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°	5.1	27.1	62.9	18.3	13.8
95°	16.6	66.0	296.6	102.6	63.3
97.5°	30.6	77.3	456.7	326.8	224.0
100°	40.3	84.0	491.5	497.8	383.5
102.5°	51.0	91.2	483.8	637.3	537.4
105°	67.7	102.7	444.2	784.6	745.9
107.5°	84.8	116.1	397.9	826.2	860.7
110°	96.5	125.9	371.3	810.3	887.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.8	135.6	353.4	772.7	883.2
115°	125.9	152.2	336.8	713.6	837.9
117.5°	141.9	166.5	327.0	648.9	780.6
120°	154.7	175.3	326.0	612.0	738.2
122.5°	164.9	185.5	323.4	579.6	696.8
125°	177.7	197.1	321.5	533.5	637.9
127.5°	191.6	209.7	320.5	506.0	592.0
130°	198.8	216.9	318.9	486.8	561.8
132.5°	206.4	224.1	318.9	471.8	540.8
135°	217.3	235.4	317.7	450.7	509.4
137.5°	227.5	245.2	317.5	432.7	483.4
140°	235.2	253.3	317.0	417.8	466.6
142.5°	243.9	259.0	318.5	406.0	449.7
145°	256.3	269.4	320.2	390.0	425.0
147.5°	266.9	279.7	323.0	373.9	404.2
150°	276.1	284.9	324.0	368.6	389.9
152.5°	283.3	292.5	325.1	361.4	381.2
155°	292.7	299.6	327.9	352.5	366.9
157.5°	304.5	308.6	328.5	348.4	358.7
160°	310.6	313.7	331.1	345.3	354.1
162.5°	314.2	317.8	331.6	342.7	349.5
165°	323.4	324.7	331.7	338.9	343.9
167.5°	329.7	328.5	334.7	337.9	339.9
170°	331.7	331.1	333.6	334.3	336.8
172.5°	336.3	334.2	335.2	333.3	335.3
175°	338.7	336.9	335.5	333.6	331.1
177.5°	339.8	336.8	335.2	333.1	333.6
180°	336.2	336.2	336.2	336.2	336.2

(END OF REPORT)