

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: P520989

Luminaire Tested: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P520989
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-075D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 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: 3707.3 lumens
Efficiency: N/A
Efficacy: 80.9 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

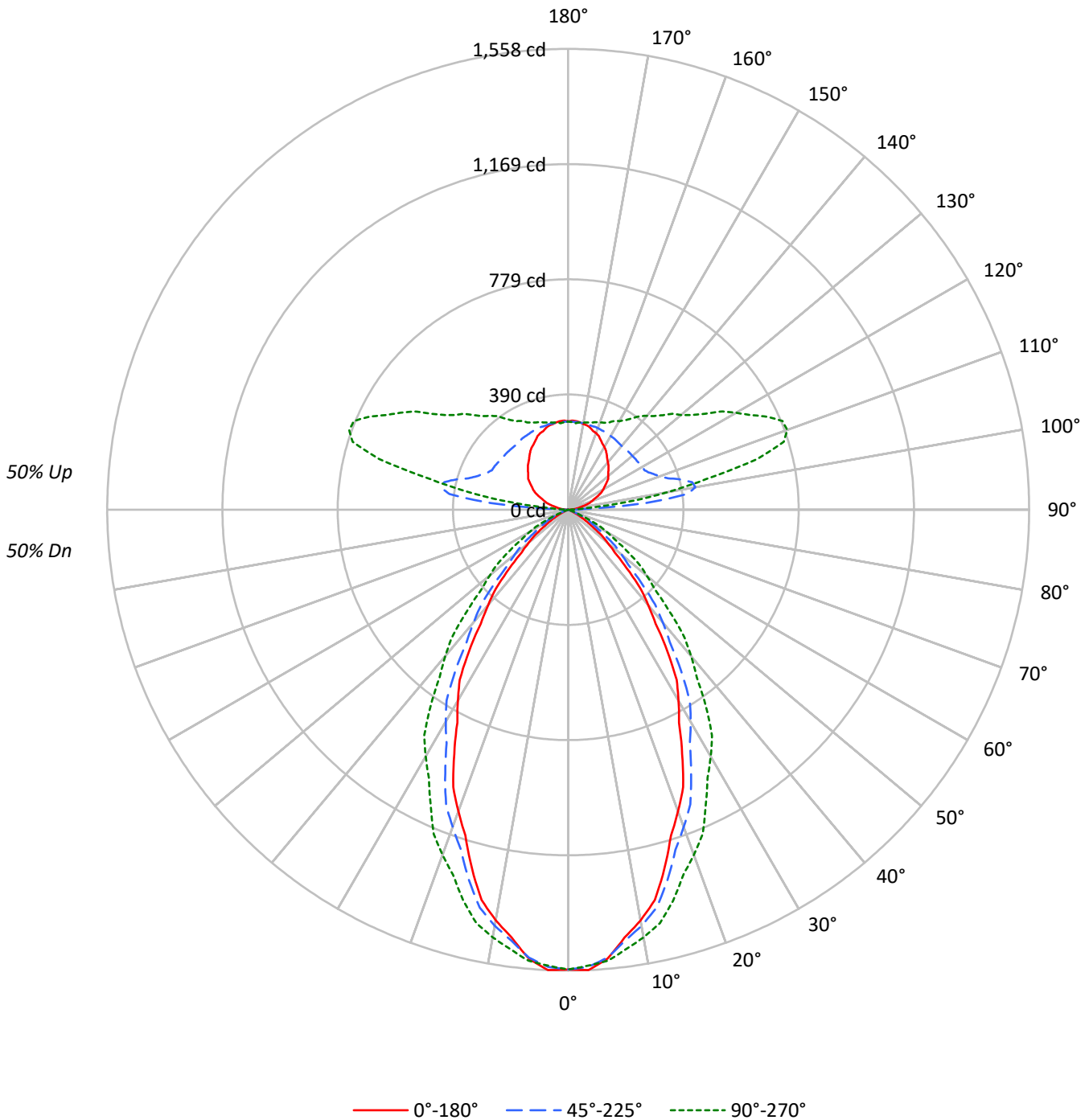
Input Watts (W): 45.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	107	107	107	107	99	99	99	99	83	83	83		69	69	69		56	56	56	50
1	100	96	93	90	92	89	86	84	76	74	72		64	62	61		52	52	51	46
2	92	86	81	76	85	80	75	72	69	65	63		58	56	54		48	47	46	41
3	85	77	71	66	79	72	67	62	62	58	55		53	50	48		45	43	41	37
4	79	70	63	58	73	65	59	55	57	52	49		49	45	43		41	39	37	34
5	73	63	56	51	68	59	53	48	52	47	43		45	41	38		38	36	34	31
6	68	57	50	45	63	54	48	43	47	42	39		41	37	35		35	33	31	28
7	64	53	45	40	59	49	43	39	44	39	35		38	34	32		33	30	28	26
8	59	48	41	36	55	46	39	35	40	35	32		35	32	29		31	28	26	24
9	56	45	38	33	52	42	36	32	37	32	29		33	29	26		29	26	24	22
10	52	41	35	30	49	39	33	29	35	30	27		31	27	24		27	24	22	20

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	3.8
10°-20°	362.8	9.8
20°-30°	454.2	12.3
30°-40°	419.5	11.3
40°-50°	281.9	7.6
50°-60°	145.6	3.9
60°-70°	45.6	1.2
70°-80°	2.9	0.1
80°-90°	0.1	0.0
90°-100°	135.9	3.7
100°-110°	386.8	10.4
110°-120°	370.6	10.0
120°-130°	293.3	7.9
130°-140°	235.4	6.3
140°-150°	184.3	5.0
150°-160°	134.8	3.6
160°-170°	83.5	2.3
170°-180°	28.3	0.8
0°-30°	958.8	25.9
0°-40°	1378.4	37.2
0°-60°	1805.8	48.7
0°-90°	1854.4	50.0
90°-120°	893.2	24.1
90°-150°	1606.2	43.3
90°-180°	1853.0	50.0
0°-180°	3707.3	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°	15	59	263	91	56	17
105°	60	91	394	696	662	64
115°	112	135	299	633	744	110
125°	158	175	285	473	566	141
135°	193	209	282	400	452	149
145°	227	239	284	346	377	142
155°	260	266	291	313	326	120
165°	287	288	294	301	305	81
175°	301	299	298	296	294	28
180°	298	298	298	298	298	

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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°	4.5	24.1	55.8	16.2	12.2
95°	14.7	58.6	263.1	91.1	56.1
97.5°	27.1	68.6	405.3	290.0	198.7
100°	35.7	74.5	436.1	441.7	340.3
102.5°	45.3	81.0	429.3	565.4	476.8
105°	60.1	91.2	394.1	696.2	661.8
107.5°	75.2	103.0	353.1	733.1	763.7
110°	85.6	111.7	329.5	719.0	787.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.6	120.3	313.6	685.6	783.6
115°	111.7	135.0	298.9	633.1	743.5
117.5°	125.9	147.7	290.1	575.8	692.7
120°	137.2	155.5	289.2	543.0	655.0
122.5°	146.3	164.6	287.0	514.2	618.3
125°	157.7	174.8	285.3	473.4	566.0
127.5°	170.0	186.1	284.3	449.0	525.3
130°	176.4	192.5	283.0	431.9	498.5
132.5°	183.2	198.8	283.0	418.7	479.9
135°	192.8	208.9	281.9	399.9	452.0
137.5°	201.9	217.5	281.7	383.9	429.0
140°	208.7	224.8	281.3	370.7	414.0
142.5°	216.4	229.8	282.6	360.2	399.0
145°	227.4	239.1	284.1	346.1	377.1
147.5°	236.8	248.1	286.6	331.8	358.6
150°	245.0	252.8	287.5	327.1	345.9
152.5°	251.3	259.6	288.4	320.7	338.2
155°	259.7	265.8	290.9	312.8	325.5
157.5°	270.2	273.8	291.5	309.2	318.3
160°	275.6	278.4	293.8	306.4	314.2
162.5°	278.8	282.0	294.2	304.1	310.1
165°	287.0	288.1	294.3	300.7	305.1
167.5°	292.5	291.5	296.9	299.8	301.6
170°	294.3	293.8	296.0	296.6	298.9
172.5°	298.4	296.5	297.4	295.7	297.5
175°	300.6	298.9	297.7	296.0	293.8
177.5°	301.5	298.8	297.4	295.6	296.0
180°	298.3	298.3	298.3	298.3	298.3

(END OF REPORT)