

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: P521095

Luminaire Tested: SQ4-BB-075U-075D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521095
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-075U-075D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5205.6 lumens
Efficiency: N/A
Efficacy: 93.6 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: Semi-Indirect

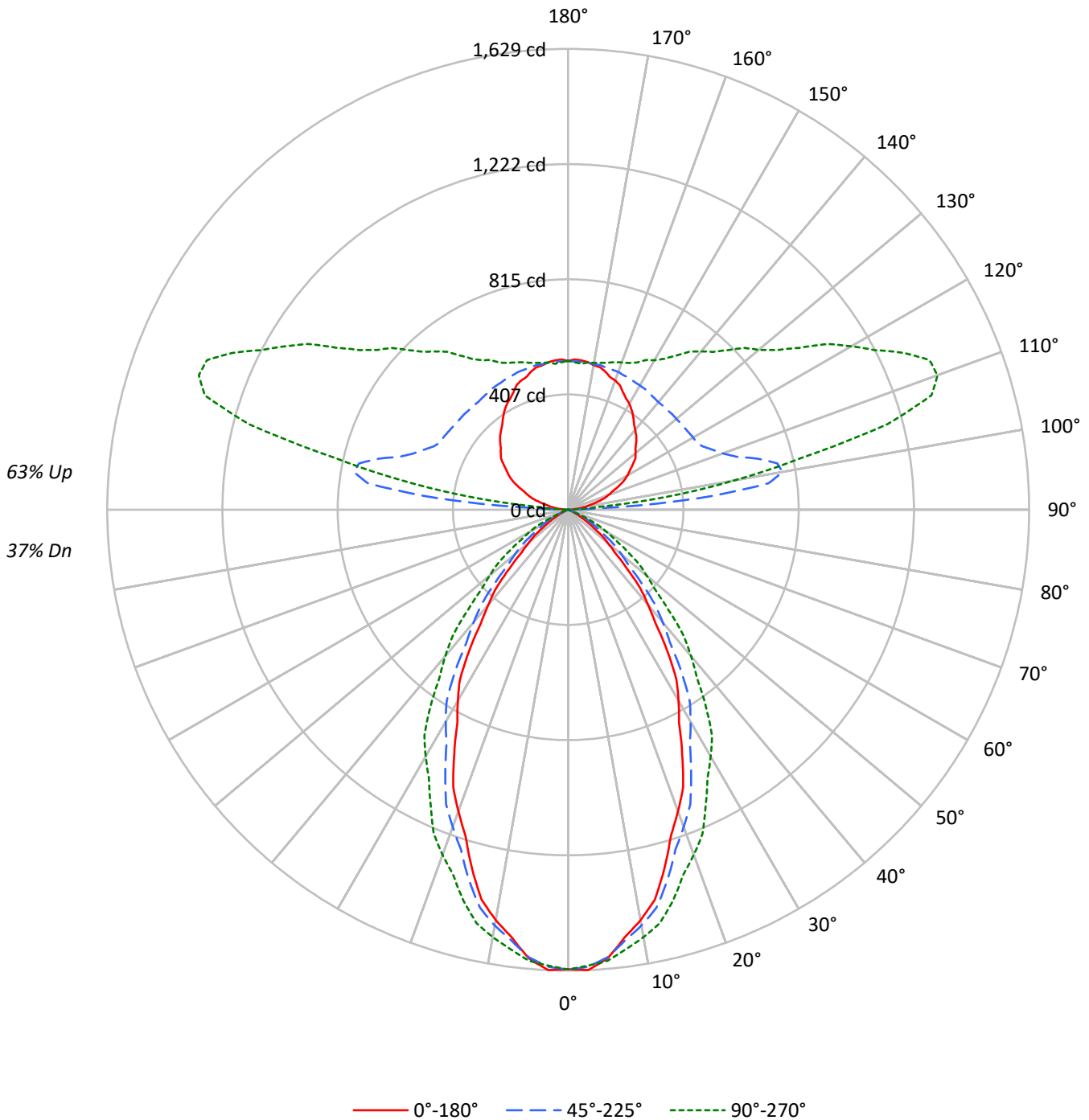
Input Watts (W): 55.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	104	104	104	104	94	94	94	94	76	76	76		60	60	60		44	44	44	37
1	96	93	89	86	87	84	81	79	69	67	65		54	53	52		41	41	40	34
2	89	82	77	73	81	75	71	67	62	59	56		49	47	46		38	37	36	31
3	82	74	67	62	74	67	62	58	56	52	49		45	42	40		35	33	32	28
4	76	66	59	54	69	61	55	50	50	46	43		41	38	36		32	30	29	25
5	70	60	52	47	64	55	49	44	46	41	38		38	34	32		30	28	26	23
6	65	54	47	42	59	50	43	39	42	37	34		34	31	29		28	25	24	21
7	60	49	42	37	55	45	39	35	38	34	30		32	28	26		26	23	22	19
8	56	45	38	33	51	42	35	31	35	31	27		29	26	24		24	22	20	18
9	52	41	34	30	48	38	32	28	33	28	25		27	24	22		22	20	18	16
10	49	38	31	27	45	35	30	26	30	26	23		25	22	20		21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14991	14991	14991
5°	14750	14713	14822
10°	13801	13984	14375
15°	12546	12944	13665
20°	11137	11716	12742
25°	9698	10467	11707
30°	8308	9221	10728
35°	6889	7827	9544
40°	5292	6258	8132
45°	3826	4739	6543
50°	2607	3531	5190
55°	1694	2554	4034
60°	972	1799	2915
65°	258	1098	1476
70°	127	340	424
75°	57	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6543 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.3	2.8
10°-20°	379.2	7.3
20°-30°	474.7	9.1
30°-40°	438.5	8.4
40°-50°	294.6	5.7
50°-60°	152.2	2.9
60°-70°	47.7	0.9
70°-80°	3.0	0.1
80°-90°	0.1	0.0
90°-100°	239.7	4.6
100°-110°	682.0	13.1
110°-120°	653.4	12.6
120°-130°	517.2	9.9
130°-140°	415.1	8.0
140°-150°	325.0	6.2
150°-160°	237.8	4.6
160°-170°	147.3	2.8
170°-180°	50.0	1.0
0°-30°	1002.2	19.3
0°-40°	1440.7	27.7
0°-60°	1887.5	36.3
0°-90°	1938.3	37.2
90°-120°	1575.1	30.3
90°-150°	2832.3	54.4
90°-180°	3267.0	62.8
0°-180°	5205.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1625	1625	1625	1625	1625	
5°	1593	1576	1589	1594	1600	148
15°	1314	1309	1355	1401	1431	366
25°	953	960	1028	1098	1150	437
35°	612	627	695	777	847	379
45°	293	311	363	434	502	230
55°	105	123	159	204	251	98
65°	12	23	50	61	68	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	26	103	464	161	99	30
105°	106	161	695	1228	1167	112
115°	197	238	527	1116	1311	194
125°	278	308	503	835	998	249
135°	340	368	497	705	797	262
145°	401	422	501	610	665	250
155°	458	469	513	552	574	212
165°	506	508	519	530	538	142
175°	530	527	525	522	518	50
180°	526	526	526	526	526	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1624.8	1624.8	1624.8	1624.8	1624.8
2.5°	1628.6	1613.2	1617.3	1617.2	1612.9
5°	1592.6	1576.4	1588.6	1594.3	1600.4
7.5°	1525.3	1512.7	1536.1	1553.7	1566.5
10°	1473.1	1462.3	1492.7	1516.7	1534.4
12.5°	1412.7	1404.4	1441.2	1474.1	1496.7
15°	1313.5	1308.9	1355.2	1400.7	1430.6
17.5°	1207.2	1207.1	1259.9	1316.4	1352.5
20°	1134.3	1136.6	1193.3	1255.5	1297.8
22.5°	1061.4	1066.7	1127.2	1192.2	1240.6
25°	952.7	960.4	1028.2	1098.5	1150.0
27.5°	848.3	859.5	930.9	1004.0	1066.7
30°	779.8	792.8	865.5	942.4	1007.0
32.5°	712.5	728.0	798.8	880.2	946.0
35°	611.6	626.9	694.9	776.7	847.4
37.5°	507.3	522.4	588.8	669.3	745.7
40°	439.4	456.3	519.6	597.6	675.2
42.5°	377.8	394.7	454.2	530.8	604.2
45°	293.2	310.9	363.2	433.9	501.5
47.5°	223.1	242.3	288.2	352.1	413.8
50°	181.6	200.8	246.0	302.4	361.6
52.5°	148.3	166.9	207.7	260.8	315.1
55°	105.3	123.0	158.8	203.9	250.8
57.5°	72.8	88.0	120.1	157.7	194.5
60°	52.7	67.3	97.5	128.0	158.0
62.5°	35.1	48.4	78.0	101.4	121.5
65°	11.8	22.6	50.3	60.7	67.6
67.5°	6.0	7.2	26.4	27.9	30.2
70°	4.7	4.7	12.6	13.4	15.7
72.5°	3.5	3.5	5.0	6.5	6.9
75°	1.6	1.6	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°	8.0	42.4	98.4	28.6	21.6
95°	26.0	103.2	464.0	160.6	99.0
97.5°	47.8	120.9	714.6	511.3	350.4
100°	63.0	131.4	769.0	778.9	600.0
102.5°	79.8	142.8	757.0	997.0	840.8
105°	106.0	160.8	695.0	1227.6	1167.0
107.5°	132.6	181.7	622.6	1292.6	1346.6
110°	151.0	197.0	581.0	1267.8	1389.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	168.6	212.2	553.0	1208.9	1381.8
115°	197.0	238.1	527.0	1116.4	1311.0
117.5°	222.0	260.5	511.6	1015.3	1221.4
120°	242.0	274.3	510.0	957.5	1155.0
122.5°	258.0	290.3	506.0	906.8	1090.2
125°	278.0	308.3	503.0	834.7	998.0
127.5°	299.8	328.2	501.4	791.7	926.2
130°	311.0	339.4	499.0	761.7	879.0
132.5°	323.0	350.6	499.0	738.3	846.2
135°	340.0	368.4	497.0	705.1	797.0
137.5°	356.0	383.6	496.8	677.0	756.4
140°	368.0	396.4	496.0	653.7	730.0
142.5°	381.6	405.3	498.4	635.2	703.6
145°	401.0	421.5	501.0	610.2	665.0
147.5°	417.6	437.5	505.4	585.1	632.4
150°	432.0	445.7	507.0	576.8	610.0
152.5°	443.2	457.7	508.6	565.5	596.4
155°	458.0	468.8	513.0	551.5	574.0
157.5°	476.4	482.9	514.0	545.2	561.2
160°	486.0	490.9	518.0	540.3	554.0
162.5°	491.6	497.3	518.8	536.2	546.8
165°	506.0	508.0	519.0	530.2	538.0
167.5°	515.8	514.0	523.6	528.7	531.8
170°	519.0	518.0	522.0	523.1	527.0
172.5°	526.2	522.9	524.4	521.5	524.6
175°	530.0	527.1	525.0	521.9	518.0
177.5°	531.6	526.9	524.4	521.2	522.0
180°	526.0	526.0	526.0	526.0	526.0

(END OF REPORT)