

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: P521094

Luminaire Tested: SQ4-BB-075U-075D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521094
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5083.6 lumens
Efficiency: N/A
Efficacy: 91.4 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

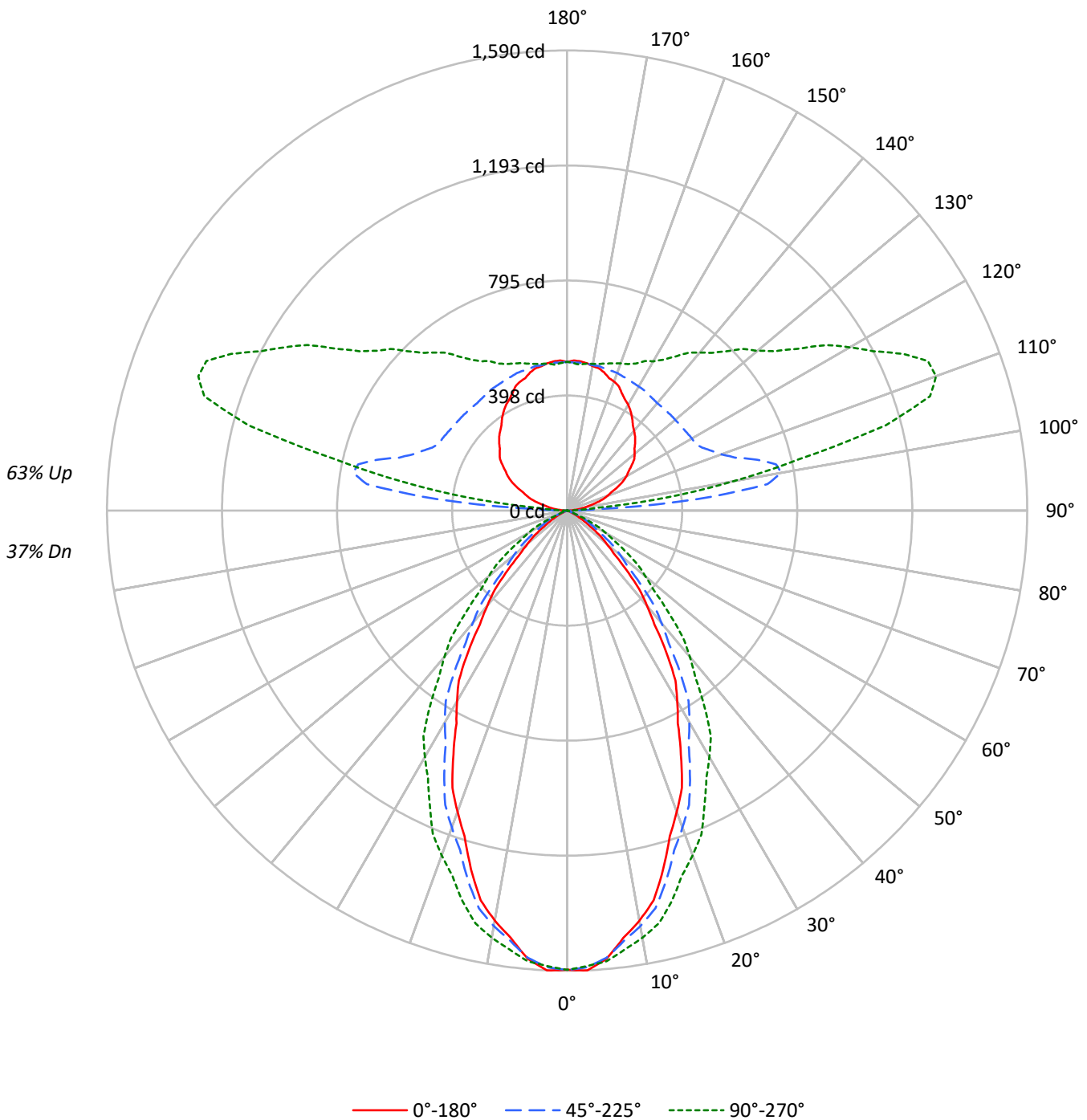
Input Watts (W): 55.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	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°	14639	14639	14639
5°	14404	14368	14475
10°	13478	13657	14038
15°	12252	12641	13345
20°	10876	11441	12444
25°	9471	10222	11433
30°	8113	9004	10477
35°	6726	7643	9320
40°	5168	6111	7942
45°	3736	4628	6391
50°	2545	3449	5068
55°	1655	2495	3939
60°	948	1757	2847
65°	251	1072	1441
70°	124	332	415
75°	53	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6391 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.8	2.8
10°-20°	370.3	7.3
20°-30°	463.6	9.1
30°-40°	428.2	8.4
40°-50°	287.7	5.7
50°-60°	148.6	2.9
60°-70°	46.5	0.9
70°-80°	2.9	0.1
80°-90°	0.1	0.0
90°-100°	234.1	4.6
100°-110°	666.0	13.1
110°-120°	638.1	12.6
120°-130°	505.0	9.9
130°-140°	405.4	8.0
140°-150°	317.4	6.2
150°-160°	232.2	4.6
160°-170°	143.8	2.8
170°-180°	48.8	1.0
0°-30°	978.7	19.3
0°-40°	1406.9	27.7
0°-60°	1843.3	36.3
0°-90°	1892.8	37.2
90°-120°	1538.2	30.3
90°-150°	2766.0	54.4
90°-180°	3191.0	62.8
0°-180°	5083.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1587	1587	1587	1587	1587	
5°	1555	1540	1551	1557	1563	144
15°	1283	1278	1323	1368	1397	357
25°	930	938	1004	1073	1123	427
35°	597	612	679	758	828	370
45°	286	304	355	424	490	225
55°	103	120	155	199	245	96
65°	12	22	49	59	66	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	25	101	453	157	97	29
105°	104	157	679	1199	1140	110
115°	192	232	515	1090	1280	189
125°	272	301	491	815	975	243
135°	332	360	485	689	778	256
145°	392	412	489	596	649	245
155°	447	458	501	539	560	207
165°	494	496	507	518	525	139
175°	518	515	513	510	506	49
180°	514	514	514	514	514	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1586.7	1586.7	1586.7	1586.7	1586.7
2.5°	1590.4	1575.4	1579.4	1579.3	1575.1
5°	1555.3	1539.5	1551.4	1556.9	1562.9
7.5°	1489.5	1477.2	1500.1	1517.3	1529.8
10°	1438.6	1428.1	1457.8	1481.2	1498.4
12.5°	1379.6	1371.5	1407.4	1439.5	1461.6
15°	1282.7	1278.2	1323.4	1367.8	1397.1
17.5°	1179.0	1178.8	1230.4	1285.5	1320.8
20°	1107.7	1110.0	1165.3	1226.1	1267.4
22.5°	1036.5	1041.7	1100.8	1164.2	1211.5
25°	930.4	937.9	1004.1	1072.8	1123.1
27.5°	828.4	839.4	909.0	980.5	1041.7
30°	761.5	774.3	845.2	920.3	983.4
32.5°	695.8	711.0	780.1	859.5	923.8
35°	597.2	612.2	678.6	758.5	827.5
37.5°	495.4	510.2	575.0	653.6	728.2
40°	429.1	445.6	507.4	583.6	659.4
42.5°	368.9	385.4	443.5	518.4	590.0
45°	286.3	303.6	354.7	423.7	489.8
47.5°	217.9	236.6	281.4	343.9	404.1
50°	177.3	196.1	240.3	295.3	353.1
52.5°	144.8	162.9	202.8	254.7	307.7
55°	102.9	120.1	155.1	199.1	244.9
57.5°	71.1	85.9	117.3	154.0	189.9
60°	51.4	65.7	95.2	125.0	154.3
62.5°	34.2	47.3	76.2	99.0	118.7
65°	11.5	22.0	49.1	59.3	66.0
67.5°	5.8	7.0	25.8	27.2	29.5
70°	4.6	4.6	12.3	13.1	15.4
72.5°	3.4	3.4	4.9	6.3	6.8
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°	7.8	41.4	96.1	28.0	21.1
95°	25.4	100.8	453.1	156.8	96.7
97.5°	46.7	118.1	697.9	499.4	342.2
100°	61.5	128.4	751.0	760.7	585.9
102.5°	77.9	139.4	739.3	973.7	821.1
105°	103.5	157.0	678.7	1198.9	1139.7
107.5°	129.5	177.4	608.0	1262.3	1315.0
110°	147.5	192.3	567.4	1238.0	1356.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	164.6	207.2	540.0	1180.6	1349.4
115°	192.4	232.5	514.7	1090.3	1280.3
117.5°	216.8	254.4	499.6	991.5	1192.8
120°	236.3	267.8	498.0	935.1	1127.9
122.5°	252.0	283.5	494.1	885.5	1064.7
125°	271.5	301.1	491.2	815.2	974.6
127.5°	292.8	320.5	489.7	773.1	904.5
130°	303.7	331.4	487.3	743.8	858.4
132.5°	315.4	342.4	487.3	721.0	826.4
135°	332.0	359.7	485.4	688.6	778.3
137.5°	347.7	374.6	485.2	661.1	738.7
140°	359.4	387.1	484.4	638.4	712.9
142.5°	372.7	395.8	486.7	620.3	687.1
145°	391.6	411.7	489.3	595.9	649.4
147.5°	407.8	427.3	493.6	571.4	617.6
150°	421.9	435.2	495.1	563.2	595.7
152.5°	432.8	446.9	496.7	552.3	582.4
155°	447.3	457.8	501.0	538.6	560.5
157.5°	465.2	471.5	502.0	532.4	548.0
160°	474.6	479.4	505.9	527.6	541.0
162.5°	480.1	485.6	506.6	523.7	534.0
165°	494.1	496.1	506.8	517.8	525.4
167.5°	503.7	502.0	511.3	516.3	519.3
170°	506.8	505.9	509.8	510.8	514.7
172.5°	513.9	510.6	512.1	509.3	512.3
175°	517.6	514.7	512.7	509.7	505.9
177.5°	519.1	514.6	512.1	509.0	509.8
180°	513.7	513.7	513.7	513.7	513.7

(END OF REPORT)