

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: P521821

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521821
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-075D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 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: 5623.5 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

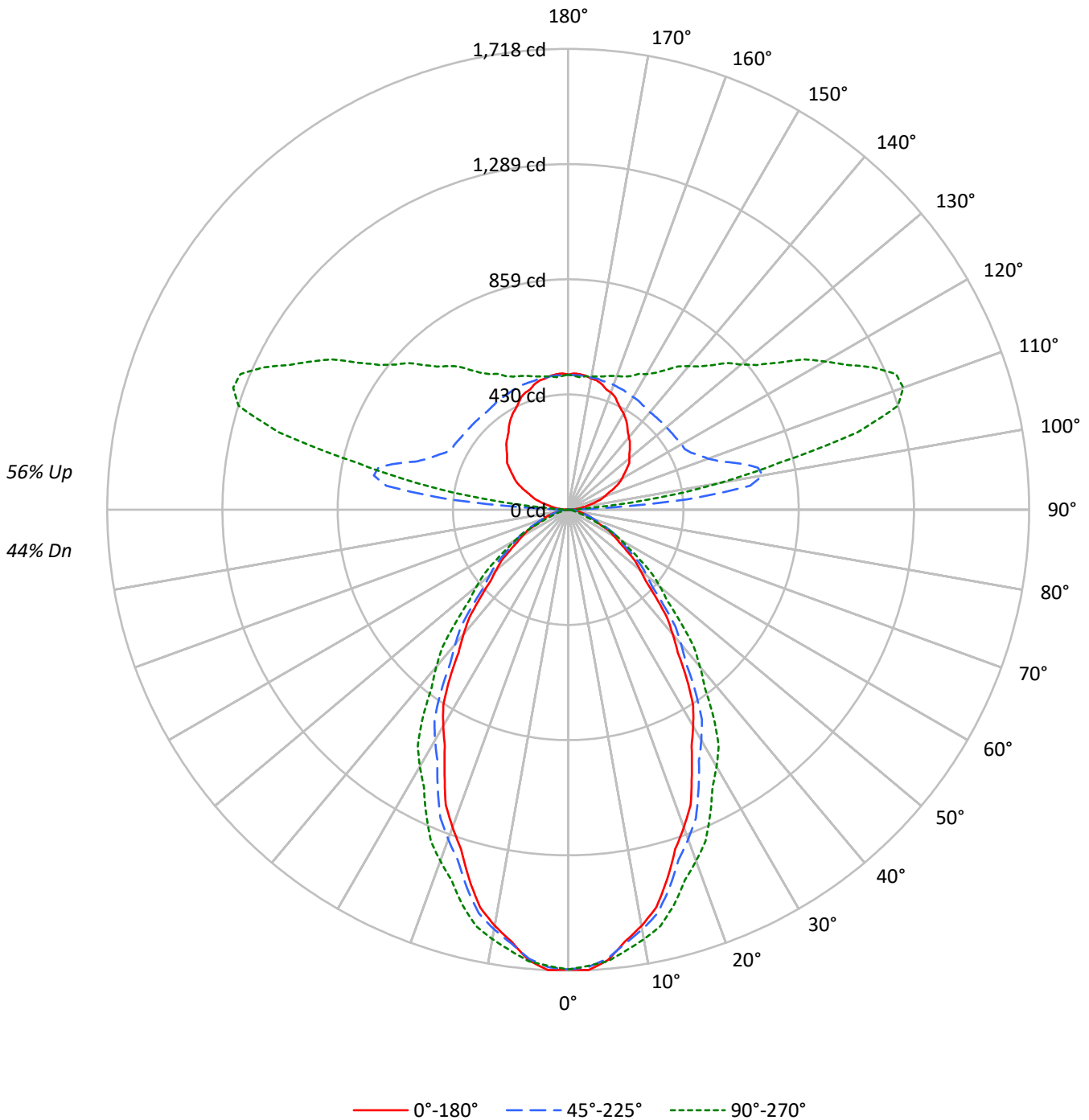
Input Watts (W): 55.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	98	94	90	87	89	86	83	80	72	70	68	59	57	56	47	46	45	39				
2	90	83	77	73	82	76	72	68	64	61	58	53	51	48	42	41	40	35				
3	82	74	67	62	76	68	62	58	58	53	50	48	45	42	38	37	35	31				
4	76	66	59	53	70	61	55	50	52	47	44	43	40	37	35	33	31	27				
5	70	59	52	46	64	55	49	44	47	42	38	39	36	33	32	30	28	25				
6	65	54	46	41	60	50	43	39	43	38	34	36	32	29	30	27	25	22				
7	60	49	42	36	55	46	39	34	39	34	30	33	29	27	27	25	23	20				
8	56	45	37	32	52	42	35	31	36	31	27	31	27	24	25	23	21	18				
9	53	41	34	29	48	38	32	28	33	28	25	28	25	22	24	21	19	17				
10	49	38	31	27	45	35	29	25	31	26	23	26	23	20	22	19	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15813	15813	15813
5°	15616	15560	15651
10°	14754	14888	15233
15°	13620	13936	14561
20°	12368	12834	13683
25°	11093	11699	12747
30°	9919	10568	11777
35°	8674	9301	10630
40°	7301	7880	9203
45°	6025	6545	7684
50°	5031	5483	6402
55°	4271	4707	5287
60°	3650	4080	4218
65°	2906	3432	2725
70°	2576	2679	1664
75°	2385	2171	1020
80°	2200	1998	877
85°	1990	1831	720

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7684 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.2	2.8
10°-20°	408.9	7.3
20°-30°	529.7	9.4
30°-40°	518.7	9.2
40°-50°	397.0	7.1
50°-60°	264.5	4.7
60°-70°	144.4	2.6
70°-80°	60.1	1.1
80°-90°	17.0	0.3
90°-100°	229.3	4.1
100°-110°	652.5	11.6
110°-120°	625.2	11.1
120°-130°	494.8	8.8
130°-140°	397.1	7.1
140°-150°	310.9	5.5
150°-160°	227.5	4.0
160°-170°	140.9	2.5
170°-180°	47.8	0.9
0°-30°	1095.8	19.5
0°-40°	1614.4	28.7
0°-60°	2276.0	40.5
0°-90°	2497.5	44.4
90°-120°	1507.0	26.8
90°-150°	2709.8	48.2
90°-180°	3126.0	55.6
0°-180°	5623.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1714	1714	1714	1714	1714	
5°	1686	1669	1680	1684	1690	157
15°	1426	1421	1459	1499	1524	398
25°	1090	1093	1149	1199	1252	501
35°	770	774	826	881	944	479
45°	462	471	502	540	589	360
55°	266	276	293	304	329	241
65°	133	144	157	137	125	138
75°	67	67	61	42	29	71
85°	19	19	17	11	7	20
90°	0	0	0	0	0	2
95°	25	99	444	154	95	28
105°	101	154	665	1174	1116	107
115°	188	228	504	1068	1254	186
125°	266	295	481	799	955	238
135°	325	352	476	675	762	251
145°	384	403	479	584	636	240
155°	438	448	491	528	549	203
165°	484	486	496	507	515	136
175°	507	504	502	499	496	48
180°	503	503	503	503	503	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1713.9	1713.9	1713.9	1713.9	1713.9
2.5°	1718.2	1702.9	1706.7	1706.6	1701.9
5°	1686.1	1669.2	1680.1	1684.0	1689.9
7.5°	1623.6	1610.8	1630.6	1645.3	1657.2
10°	1574.8	1563.8	1589.1	1610.5	1626.0
12.5°	1518.3	1509.0	1540.4	1569.1	1589.3
15°	1425.9	1420.8	1459.0	1498.7	1524.4
17.5°	1327.1	1324.6	1368.5	1414.8	1447.7
20°	1259.7	1259.0	1307.1	1355.3	1393.6
22.5°	1191.7	1193.3	1243.9	1294.1	1337.6
25°	1089.7	1092.7	1149.2	1199.2	1252.2
27.5°	995.4	996.8	1055.1	1108.0	1164.5
30°	931.1	934.7	992.0	1046.7	1105.5
32.5°	866.7	870.9	927.0	983.6	1043.6
35°	770.1	773.8	825.8	881.3	943.8
37.5°	670.5	675.5	721.7	774.2	835.7
40°	606.2	613.5	654.3	703.8	764.1
42.5°	544.2	553.3	591.1	638.1	692.5
45°	461.8	470.6	501.6	539.6	588.9
47.5°	390.8	400.9	424.8	457.5	499.5
50°	350.5	360.0	382.0	406.3	446.0
52.5°	315.0	324.5	344.1	362.8	396.6
55°	265.5	276.5	292.6	303.6	328.7
57.5°	224.9	235.5	248.2	253.2	268.3
60°	197.8	209.6	221.1	220.5	228.6
62.5°	173.1	183.1	194.6	186.7	187.1
65°	133.1	144.1	157.2	137.3	124.8
67.5°	107.5	109.9	123.3	95.8	80.9
70°	95.5	95.5	99.3	74.2	61.7
72.5°	84.1	84.1	80.6	60.3	47.2
75°	66.9	66.9	60.9	41.8	28.6
77.5°	51.6	51.0	46.6	31.2	20.8
80°	41.4	41.4	37.6	24.6	16.5
82.5°	32.3	32.3	29.2	19.2	12.3
85°	18.8	18.8	17.3	11.2	6.8
87.5°	6.6	6.6	6.0	3.6	3.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	7.7	40.6	94.1	27.4	20.7
95°	24.9	98.8	443.9	153.7	94.7
97.5°	45.7	115.7	683.7	489.2	335.2
100°	60.3	125.8	735.7	745.2	574.0
102.5°	76.3	136.6	724.3	953.9	804.4
105°	101.4	153.8	664.9	1174.5	1116.5
107.5°	126.9	173.8	595.7	1236.7	1288.3
110°	144.5	188.4	555.9	1212.9	1328.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	161.3	203.0	529.1	1156.6	1322.0
115°	188.5	227.8	504.2	1068.1	1254.3
117.5°	212.4	249.3	489.5	971.4	1168.6
120°	231.5	262.4	487.9	916.1	1105.0
122.5°	246.8	277.7	484.1	867.5	1043.0
125°	266.0	295.0	481.2	798.6	954.8
127.5°	286.8	314.0	479.7	757.4	886.1
130°	297.5	324.7	477.4	728.7	841.0
132.5°	309.0	335.4	477.4	706.3	809.6
135°	325.3	352.4	475.5	674.6	762.5
137.5°	340.6	367.0	475.3	647.7	723.7
140°	352.1	379.2	474.5	625.5	698.4
142.5°	365.1	387.7	476.8	607.7	673.2
145°	383.7	403.3	479.3	583.8	636.2
147.5°	399.5	418.6	483.5	559.8	605.0
150°	413.3	426.4	485.1	551.8	583.6
152.5°	424.0	437.9	486.6	541.0	570.6
155°	438.2	448.5	490.8	527.7	549.2
157.5°	455.8	462.0	491.8	521.6	536.9
160°	465.0	469.7	495.6	516.9	530.0
162.5°	470.3	475.8	496.4	513.0	523.1
165°	484.1	486.0	496.5	507.2	514.7
167.5°	493.5	491.8	500.9	505.8	508.8
170°	496.5	495.6	499.4	500.5	504.2
172.5°	503.4	500.3	501.7	498.9	501.9
175°	507.1	504.3	502.3	499.3	495.6
177.5°	508.6	504.1	501.7	498.7	499.4
180°	503.2	503.2	503.2	503.2	503.2

(END OF REPORT)