

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: P521789

Luminaire Tested: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521789
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-050U-100D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

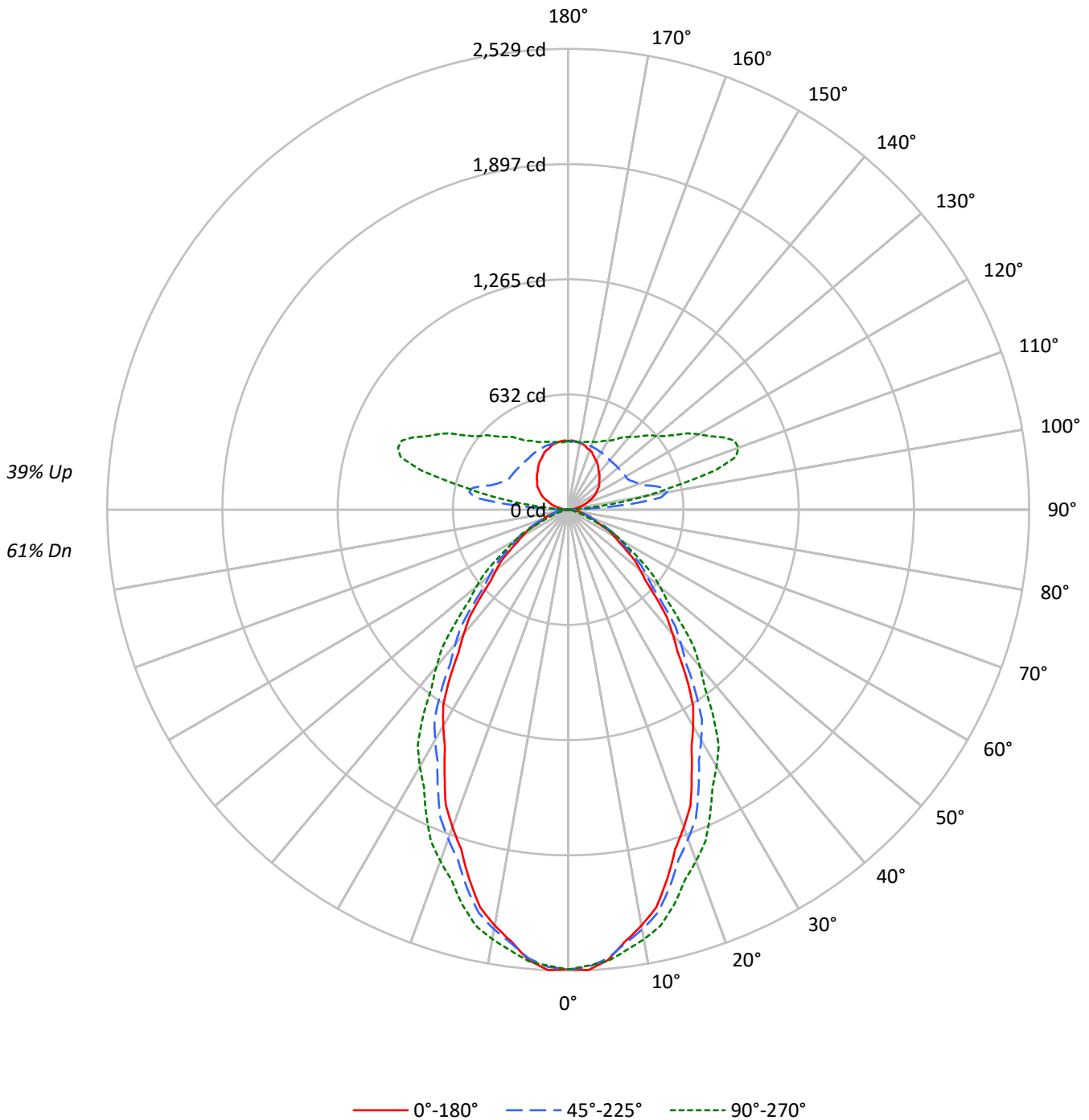
Lumens per Lamp: N/A
Luminaire Lumens: 6013.8 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 57.8
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																										
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	50	30	10	50	30	10	0																								
RCR																																																						
0	110	110	110	110	103	103	103	103	90	90	90	77	77	77	66	66	66	61									61																											
1	102	98	94	91	95	92	89	86	81	78	76	70	69	67	61	60	59	54									54																											
2	94	87	82	77	88	82	77	73	72	69	66	63	61	59	55	53	52	48									48																											
3	87	78	71	66	81	74	68	63	65	61	57	58	54	51	50	48	46	42									42																											
4	80	70	63	57	75	66	60	55	59	54	50	52	48	45	46	43	41	38									38																											
5	74	63	56	50	69	60	53	48	54	48	44	48	44	40	42	39	37	34									34																											
6	69	58	50	45	65	55	48	43	49	44	40	44	40	36	39	36	33	31									31																											
7	64	53	45	40	60	50	43	38	45	40	36	40	36	33	36	33	30	28									28																											
8	60	48	41	36	56	46	39	35	42	36	32	37	33	30	34	30	27	25									25																											
9	56	45	37	33	53	42	36	32	39	33	29	35	30	27	31	28	25	23									23																											
10	53	41	34	30	50	39	33	29	36	31	27	32	28	25	29	26	23	22									22																											

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23273	23273	23273
5°	22982	22901	23034
10°	21713	21911	22419
15°	20045	20510	21430
20°	18203	18888	20137
25°	16327	17217	18761
30°	14598	15553	17334
35°	12766	13688	15646
40°	10744	11598	13545
45°	8867	9633	11309
50°	7403	8071	9422
55°	6285	6926	7781
60°	5371	6004	6209
65°	4277	5050	4010
70°	3793	3941	2449
75°	3511	3198	1501
80°	3236	2938	1296
85°	2932	2699	1059

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11309 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.4	3.8
10°-20°	601.8	10.0
20°-30°	779.5	13.0
30°-40°	763.3	12.7
40°-50°	584.3	9.7
50°-60°	389.4	6.5
60°-70°	212.5	3.5
70°-80°	88.5	1.5
80°-90°	25.1	0.4
90°-100°	171.5	2.9
100°-110°	488.0	8.1
110°-120°	467.6	7.8
120°-130°	370.1	6.2
130°-140°	297.0	4.9
140°-150°	232.5	3.9
150°-160°	170.1	2.8
160°-170°	105.4	1.8
170°-180°	35.8	0.6
0°-30°	1612.7	26.8
0°-40°	2376.0	39.5
0°-60°	3349.7	55.7
0°-90°	3675.8	61.1
90°-120°	1127.1	18.7
90°-150°	2026.7	33.7
90°-180°	2338.0	38.9
0°-180°	6013.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2522	2522	2522	2522	2522	
5°	2482	2457	2473	2478	2487	231
15°	2099	2091	2147	2206	2244	586
25°	1604	1608	1691	1765	1843	738
35°	1133	1139	1215	1297	1389	705
45°	680	693	738	794	867	530
55°	391	407	431	447	484	354
65°	196	212	231	202	184	204
75°	98	98	90	62	42	105
85°	28	28	26	16	10	30
90°	0	0	0	0	0	2
95°	19	74	332	115	71	21
105°	76	115	497	878	835	80
115°	141	170	377	799	938	139
125°	199	221	360	597	714	178
135°	243	264	356	504	570	188
145°	287	302	358	437	476	179
155°	328	335	367	395	411	151
165°	362	364	371	379	385	102
175°	379	377	376	374	371	36
180°	376	376	376	376	376	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2522.5	2522.5	2522.5	2522.5	2522.5
2.5°	2528.7	2506.2	2511.9	2511.7	2504.8
5°	2481.5	2456.7	2472.7	2478.4	2487.1
7.5°	2389.5	2370.6	2399.9	2421.5	2439.0
10°	2317.7	2301.5	2338.8	2370.3	2393.0
12.5°	2234.5	2220.9	2267.0	2309.3	2339.0
15°	2098.6	2091.0	2147.3	2205.7	2243.6
17.5°	1953.1	1949.5	2014.0	2082.2	2130.7
20°	1854.0	1852.9	1923.7	1994.7	2051.0
22.5°	1753.9	1756.3	1830.7	1904.6	1968.6
25°	1603.8	1608.1	1691.3	1765.0	1842.9
27.5°	1465.0	1467.0	1552.9	1630.7	1713.8
30°	1370.3	1375.7	1459.9	1540.5	1627.1
32.5°	1275.5	1281.8	1364.3	1447.5	1535.9
35°	1133.4	1138.8	1215.3	1297.1	1389.1
37.5°	986.9	994.2	1062.1	1139.5	1229.9
40°	892.1	902.9	963.0	1035.8	1124.6
42.5°	800.9	814.3	870.0	939.1	1019.2
45°	679.6	692.6	738.3	794.2	866.7
47.5°	575.1	590.1	625.1	673.3	735.2
50°	515.8	529.9	562.3	597.9	656.4
52.5°	463.5	477.6	506.5	534.0	583.8
55°	390.7	407.0	430.6	446.9	483.7
57.5°	330.9	346.5	365.3	372.6	394.9
60°	291.1	308.4	325.4	324.6	336.5
62.5°	254.8	269.5	286.5	274.7	275.4
65°	195.9	212.1	231.3	202.1	183.7
67.5°	158.3	161.7	181.5	141.0	119.1
70°	140.6	140.6	146.1	109.2	90.8
72.5°	123.7	123.7	118.7	88.8	69.5
75°	98.5	98.5	89.7	61.5	42.1
77.5°	75.9	75.1	68.6	45.9	30.5
80°	60.9	60.9	55.3	36.3	24.4
82.5°	47.6	47.6	42.9	28.3	18.2
85°	27.7	27.7	25.5	16.5	10.0
87.5°	9.7	9.7	8.9	5.3	4.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.7	30.4	70.4	20.5	15.5
95°	18.6	73.9	332.0	114.9	70.8
97.5°	34.2	86.5	511.3	365.9	250.7
100°	45.1	94.1	550.3	557.4	429.3
102.5°	57.1	102.2	541.7	713.5	601.6
105°	75.8	115.0	497.3	878.4	835.1
107.5°	94.9	130.0	445.5	925.0	963.6
110°	108.1	140.9	415.7	907.2	993.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	120.6	151.8	395.7	865.1	988.8
115°	141.0	170.4	377.1	798.9	938.1
117.5°	158.9	186.4	366.1	726.5	874.0
120°	173.2	196.3	364.9	685.1	826.5
122.5°	184.6	207.7	362.1	648.9	780.1
125°	198.9	220.6	359.9	597.3	714.1
127.5°	214.5	234.8	358.8	566.5	662.8
130°	222.5	242.8	357.1	545.0	629.0
132.5°	231.1	250.9	357.1	528.3	605.5
135°	243.3	263.6	355.6	504.5	570.3
137.5°	254.7	274.5	355.5	484.4	541.3
140°	263.3	283.6	354.9	467.8	522.4
142.5°	273.1	290.0	356.6	454.5	503.5
145°	286.9	301.6	358.5	436.7	475.8
147.5°	298.8	313.1	361.6	418.7	452.5
150°	309.1	318.9	362.8	412.7	436.5
152.5°	317.1	327.5	363.9	404.7	426.8
155°	327.7	335.4	367.1	394.6	410.7
157.5°	340.9	345.5	367.8	390.1	401.6
160°	347.8	351.3	370.7	386.6	396.4
162.5°	351.8	355.8	371.2	383.7	391.3
165°	362.1	363.5	371.4	379.4	385.0
167.5°	369.1	367.8	374.7	378.3	380.5
170°	371.4	370.7	373.5	374.3	377.1
172.5°	376.5	374.2	375.2	373.1	375.4
175°	379.2	377.1	375.7	373.5	370.7
177.5°	380.4	377.0	375.2	373.0	373.5
180°	376.4	376.4	376.4	376.4	376.4

(END OF REPORT)