

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: P521944

Luminaire Tested: SQ4-WB-100U-100D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521944
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-100U-100D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8280.8 lumens
Efficiency: N/A
Efficacy: 111.0 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: General Diffuse

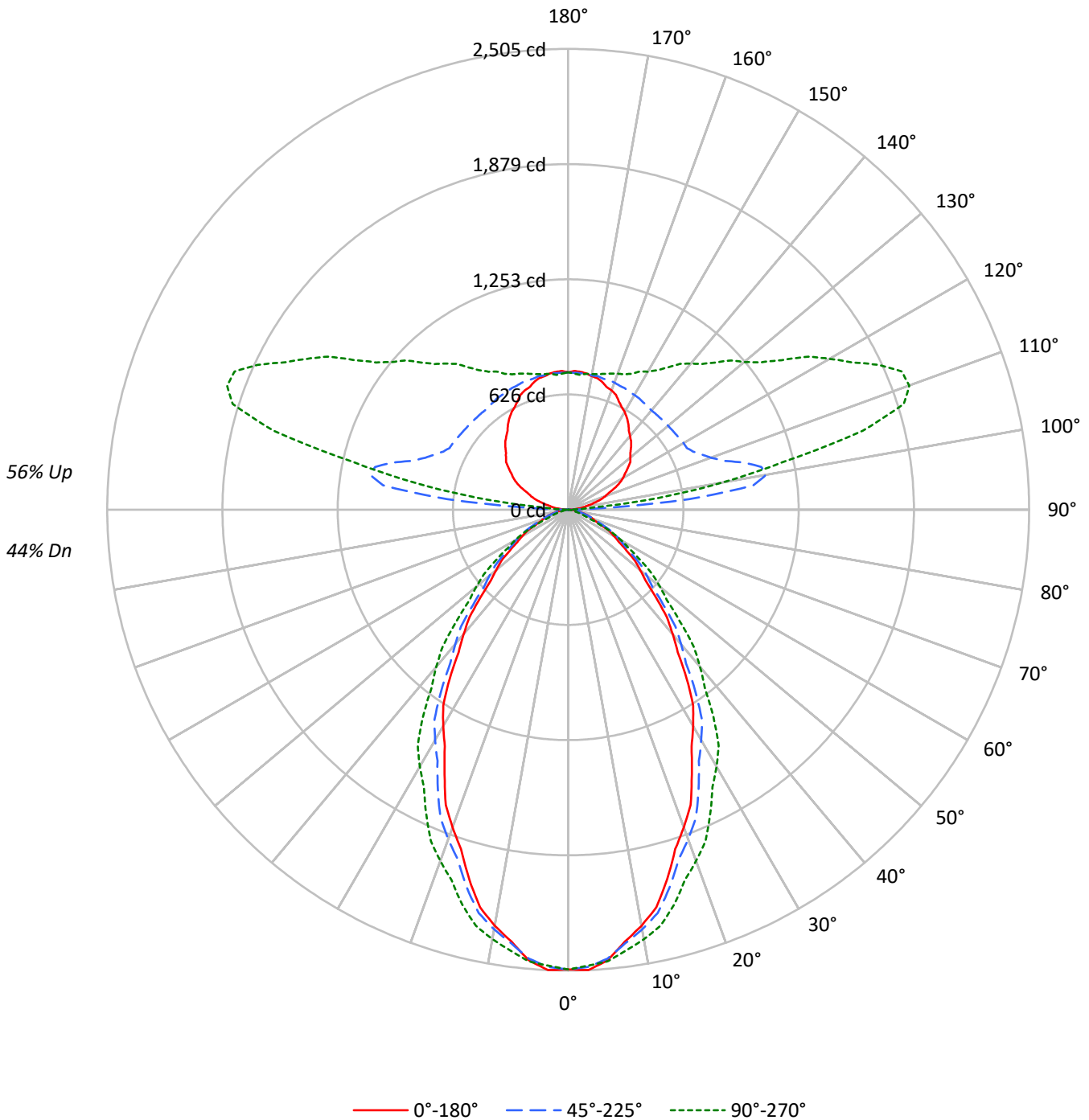
Input Watts (W): 74.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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	97	94	90	87	89	86	83	80	72	70	68	58	57	56	46	45	45	39				
2	90	83	77	73	82	76	72	68	64	61	58	53	50	48	42	41	39	34				
3	82	74	67	62	75	68	62	58	57	53	50	47	44	42	38	36	35	30				
4	76	66	59	53	69	61	55	50	52	47	43	43	40	37	35	33	31	27				
5	70	59	52	46	64	55	48	44	47	42	38	39	36	33	32	30	28	24				
6	65	54	46	41	60	50	43	38	43	38	34	36	32	29	29	27	25	22				
7	60	49	41	36	55	45	39	34	39	34	30	33	29	26	27	25	23	20				
8	56	45	37	32	52	42	35	31	36	31	27	30	27	24	25	23	21	18				
9	52	41	34	29	48	38	32	28	33	28	25	28	24	22	24	21	19	17				
10	49	38	31	26	45	35	29	25	31	26	23	26	23	20	22	19	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23054	23054	23054
5°	22766	22686	22817
10°	21510	21705	22208
15°	19857	20317	21229
20°	18032	18710	19948
25°	16174	17056	18585
30°	14461	15407	17171
35°	12646	13560	15498
40°	10643	11489	13417
45°	8784	9542	11202
50°	7333	7995	9333
55°	6225	6860	7707
60°	5322	5949	6150
65°	4237	5004	3973
70°	3755	3903	2425
75°	3479	3165	1486
80°	3204	2912	1280
85°	2901	2668	1048

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11202 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.2	2.8
10°-20°	596.2	7.2
20°-30°	772.2	9.3
30°-40°	756.2	9.1
40°-50°	578.8	7.0
50°-60°	385.7	4.7
60°-70°	210.5	2.5
70°-80°	87.7	1.1
80°-90°	24.8	0.3
90°-100°	340.3	4.1
100°-110°	968.4	11.7
110°-120°	927.8	11.2
120°-130°	734.4	8.9
130°-140°	589.4	7.1
140°-150°	461.5	5.6
150°-160°	337.6	4.1
160°-170°	209.1	2.5
170°-180°	71.0	0.9
0°-30°	1597.6	19.3
0°-40°	2353.7	28.4
0°-60°	3318.2	40.1
0°-90°	3641.2	44.0
90°-120°	2236.6	27.0
90°-150°	4021.8	48.6
90°-180°	4640.0	56.0
0°-180°	8280.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2499	2499	2499	2499	2499	
5°	2458	2434	2450	2455	2464	229
15°	2079	2071	2127	2185	2222	581
25°	1589	1593	1675	1748	1826	731
35°	1123	1128	1204	1285	1376	698
45°	673	686	731	787	858	525
55°	387	403	426	443	479	351
65°	194	210	229	200	182	202
75°	98	98	89	61	42	104
85°	27	27	25	16	10	30
90°	0	0	0	0	0	3
95°	37	147	659	228	141	42
105°	150	228	987	1743	1657	159
115°	280	338	748	1585	1862	275
125°	395	438	714	1185	1417	353
135°	483	523	706	1001	1132	373
145°	569	599	711	866	944	356
155°	650	666	728	783	815	301
165°	718	721	737	753	764	202
175°	753	748	746	741	736	71
180°	747	747	747	747	747	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2498.8	2498.8	2498.8	2498.8	2498.8
2.5°	2504.9	2482.7	2488.3	2488.1	2481.3
5°	2458.2	2433.6	2449.5	2455.1	2463.7
7.5°	2367.0	2348.4	2377.3	2398.8	2416.1
10°	2296.0	2279.9	2316.8	2348.0	2370.5
12.5°	2213.5	2200.0	2245.7	2287.6	2317.0
15°	2078.9	2071.4	2127.1	2185.0	2222.5
17.5°	1934.8	1931.2	1995.1	2062.6	2110.7
20°	1836.6	1835.5	1905.6	1976.0	2031.7
22.5°	1737.4	1739.8	1813.5	1886.7	1950.1
25°	1588.8	1593.0	1675.4	1748.4	1825.6
27.5°	1451.3	1453.2	1538.3	1615.4	1697.7
30°	1357.4	1362.8	1446.2	1526.0	1611.8
32.5°	1263.5	1269.8	1351.5	1434.0	1521.4
35°	1122.8	1128.1	1203.9	1284.9	1376.0
37.5°	977.6	984.9	1052.2	1128.7	1218.4
40°	883.7	894.5	953.9	1026.1	1114.0
42.5°	793.4	806.7	861.8	930.3	1009.6
45°	673.2	686.1	731.3	786.7	858.5
47.5°	569.7	584.5	619.3	666.9	728.3
50°	510.9	524.9	557.0	592.3	650.2
52.5°	459.2	473.1	501.7	529.0	578.3
55°	387.0	403.1	426.5	442.7	479.1
57.5°	327.8	343.3	361.8	369.1	391.2
60°	288.4	305.5	322.4	321.5	333.3
62.5°	252.4	267.0	283.8	272.2	272.8
65°	194.1	210.2	229.2	200.2	182.0
67.5°	156.8	160.2	179.8	139.6	118.0
70°	139.2	139.2	144.7	108.1	89.9
72.5°	122.6	122.6	117.5	87.9	68.9
75°	97.6	97.6	88.8	61.0	41.7
77.5°	75.2	74.4	68.0	45.5	30.3
80°	60.3	60.3	54.8	35.9	24.1
82.5°	47.1	47.1	42.5	28.1	18.0
85°	27.4	27.4	25.2	16.3	9.9
87.5°	9.6	9.6	8.8	5.2	4.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.4	60.2	139.7	40.7	30.7
95°	36.9	146.6	658.9	228.0	140.6
97.5°	67.9	171.7	1014.7	726.1	497.6
100°	89.5	186.6	1092.0	1106.1	852.0
102.5°	113.3	202.7	1074.9	1415.8	1193.9
105°	150.5	228.3	986.9	1743.2	1657.1
107.5°	188.3	258.0	884.1	1835.5	1912.1
110°	214.4	279.7	825.0	1800.2	1972.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	239.4	301.3	785.2	1716.7	1962.1
115°	279.7	338.0	748.3	1585.3	1861.6
117.5°	315.2	369.9	726.5	1441.7	1734.4
120°	343.6	389.5	724.2	1359.6	1640.1
122.5°	366.4	412.2	718.5	1287.6	1548.1
125°	394.8	437.8	714.2	1185.3	1417.1
127.5°	425.7	466.0	712.0	1124.1	1315.2
130°	441.6	481.9	708.6	1081.5	1248.2
132.5°	458.7	497.8	708.6	1048.3	1201.6
135°	482.8	523.1	705.7	1001.2	1131.7
137.5°	505.5	544.7	705.4	961.3	1074.1
140°	522.6	562.8	704.3	928.3	1036.6
142.5°	541.9	575.5	707.7	901.9	999.1
145°	569.4	598.6	711.4	866.5	944.3
147.5°	593.0	621.3	717.7	830.8	898.0
150°	613.4	632.9	719.9	819.0	866.2
152.5°	629.3	649.9	722.2	803.0	846.9
155°	650.3	665.6	728.4	783.1	815.1
157.5°	676.5	685.6	729.9	774.1	796.9
160°	690.1	697.1	735.5	767.2	786.7
162.5°	698.1	706.1	736.7	761.4	776.4
165°	718.5	721.3	737.0	752.8	763.9
167.5°	732.4	729.9	743.5	750.7	755.1
170°	737.0	735.6	741.2	742.8	748.3
172.5°	747.2	742.5	744.6	740.5	744.9
175°	752.6	748.4	745.5	741.1	735.5
177.5°	754.9	748.2	744.6	740.1	741.2
180°	746.9	746.9	746.9	746.9	746.9

(END OF REPORT)