

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: P521942

Luminaire Tested: SQ4-WB-100U-100D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521942
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_4500K
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8075.1 lumens
Efficiency: N/A
Efficacy: 108.1 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

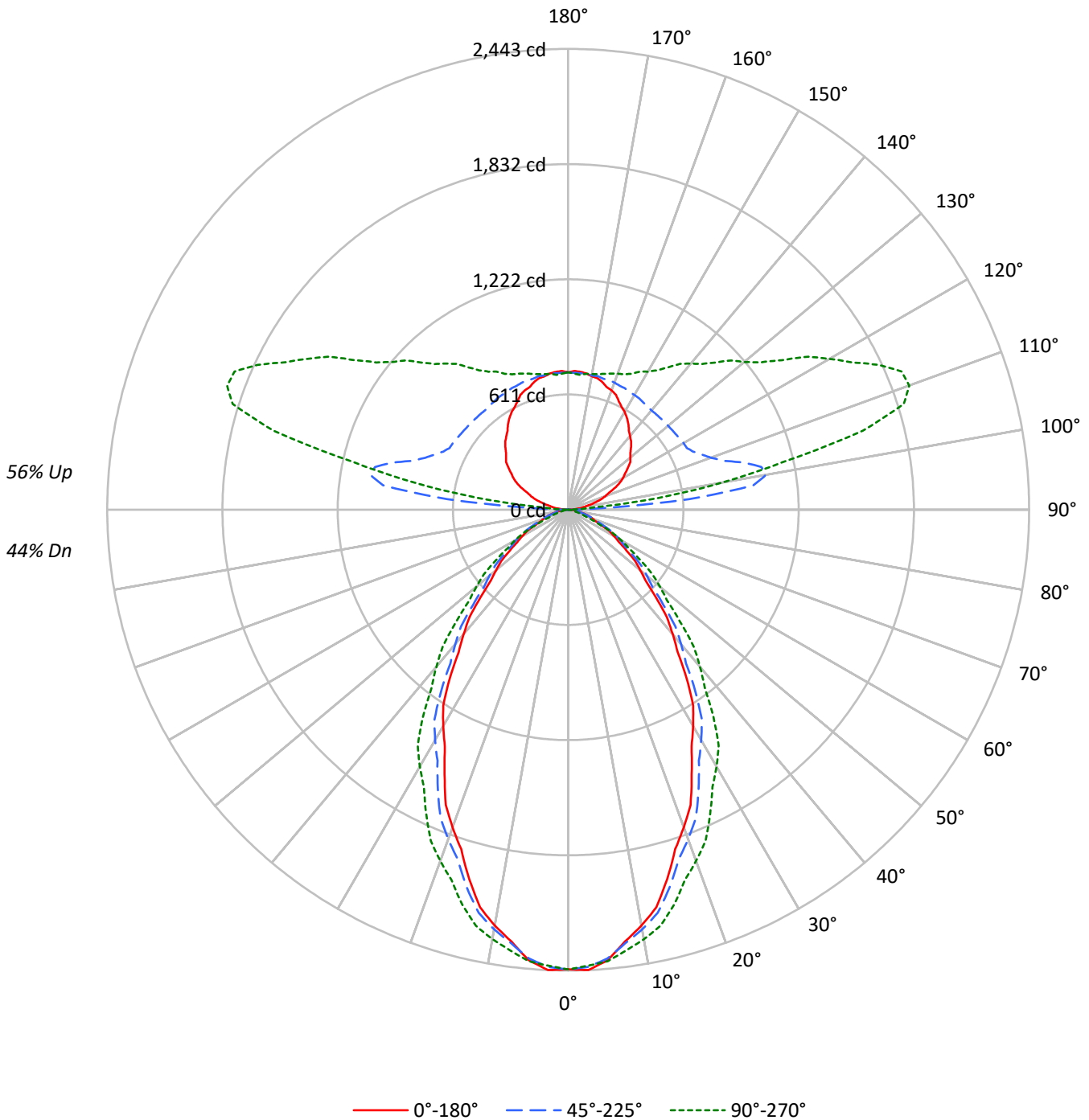
Input Watts (W): 74.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	22482	22482	22482
5°	22202	22122	22251
10°	20975	21166	21657
15°	19363	19813	20701
20°	17584	18245	19453
25°	15772	16632	18123
30°	14102	15025	16745
35°	12332	13223	15114
40°	10379	11203	13083
45°	8566	9306	10924
50°	7152	7797	9100
55°	6071	6690	7515
60°	5189	5801	5997
65°	4133	4879	3875
70°	3663	3806	2366
75°	3394	3087	1447
80°	3124	2843	1249
85°	2826	2604	1016

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10924 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.5	2.8
10°-20°	581.4	7.2
20°-30°	753.0	9.3
30°-40°	737.4	9.1
40°-50°	564.4	7.0
50°-60°	376.1	4.7
60°-70°	205.2	2.5
70°-80°	85.5	1.1
80°-90°	24.2	0.3
90°-100°	331.9	4.1
100°-110°	944.4	11.7
110°-120°	904.8	11.2
120°-130°	716.1	8.9
130°-140°	574.8	7.1
140°-150°	450.0	5.6
150°-160°	329.3	4.1
160°-170°	203.9	2.5
170°-180°	69.2	0.9
0°-30°	1557.9	19.3
0°-40°	2295.3	28.4
0°-60°	3235.8	40.1
0°-90°	3550.8	44.0
90°-120°	2181.1	27.0
90°-150°	3921.9	48.6
90°-180°	4524.0	56.0
0°-180°	8075.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2437	2437	2437	2437	2437	
5°	2397	2373	2389	2394	2402	223
15°	2027	2020	2074	2131	2167	566
25°	1549	1554	1634	1705	1780	712
35°	1095	1100	1174	1253	1342	681
45°	656	669	713	767	837	512
55°	377	393	416	432	467	342
65°	189	205	224	195	178	197
75°	95	95	87	59	41	102
85°	27	27	25	16	10	29
90°	0	0	0	0	0	3
95°	36	143	642	222	137	41
105°	147	223	962	1700	1616	155
115°	273	330	730	1546	1815	269
125°	385	427	696	1156	1382	345
135°	471	510	688	976	1104	363
145°	555	584	694	845	921	347
155°	634	649	710	764	795	293
165°	701	703	719	734	745	197
175°	734	730	727	723	717	70
180°	728	728	728	728	728	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2436.8	2436.8	2436.8	2436.8	2436.8
2.5°	2442.7	2421.0	2426.5	2426.3	2419.6
5°	2397.2	2373.1	2388.6	2394.2	2402.5
7.5°	2308.2	2290.0	2318.3	2339.2	2356.1
10°	2238.9	2223.3	2259.3	2289.7	2311.7
12.5°	2158.5	2145.4	2190.0	2230.8	2259.5
15°	2027.2	2019.9	2074.3	2130.7	2167.3
17.5°	1886.7	1883.2	1945.6	2011.4	2058.3
20°	1790.9	1789.9	1858.3	1926.9	1981.3
22.5°	1694.3	1696.6	1768.5	1839.8	1901.7
25°	1549.3	1553.5	1633.8	1705.0	1780.3
27.5°	1415.2	1417.1	1500.1	1575.3	1655.6
30°	1323.7	1328.9	1410.3	1488.1	1571.8
32.5°	1232.2	1238.2	1317.9	1398.3	1483.7
35°	1094.9	1100.1	1174.0	1253.0	1341.9
37.5°	953.3	960.4	1026.0	1100.7	1188.1
40°	861.8	872.2	930.2	1000.6	1086.3
42.5°	773.7	786.7	840.4	907.2	984.5
45°	656.5	669.0	713.2	767.2	837.2
47.5°	555.6	570.0	603.9	650.4	710.2
50°	498.3	511.8	543.2	577.6	634.0
52.5°	447.8	461.4	489.3	515.8	563.9
55°	377.4	393.1	415.9	431.7	467.2
57.5°	319.7	334.8	352.8	360.0	381.5
60°	281.2	297.9	314.4	313.5	325.0
62.5°	246.1	260.4	276.7	265.4	266.0
65°	189.3	204.9	223.5	195.3	177.5
67.5°	152.9	156.2	175.4	136.2	115.0
70°	135.8	135.8	141.1	105.4	87.7
72.5°	119.5	119.5	114.6	85.8	67.1
75°	95.2	95.2	86.6	59.4	40.6
77.5°	73.3	72.5	66.3	44.4	29.5
80°	58.8	58.8	53.5	35.0	23.5
82.5°	46.0	46.0	41.5	27.4	17.5
85°	26.7	26.7	24.6	15.9	9.6
87.5°	9.4	9.4	8.6	5.1	4.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.1	58.7	136.3	39.7	29.9
95°	36.0	143.0	642.5	222.4	137.1
97.5°	66.2	167.5	989.5	708.1	485.2
100°	87.2	182.0	1064.8	1078.6	830.8
102.5°	110.5	197.7	1048.2	1380.6	1164.3
105°	146.8	222.6	962.4	1699.9	1616.0
107.5°	183.6	251.6	862.1	1789.9	1864.7
110°	209.1	272.7	804.5	1755.5	1923.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	233.5	293.8	765.7	1674.0	1913.4
115°	272.8	329.7	729.7	1545.9	1815.4
117.5°	307.4	360.8	708.4	1405.9	1691.3
120°	335.1	379.8	706.2	1325.8	1599.3
122.5°	357.3	401.9	700.7	1255.6	1509.6
125°	385.0	426.9	696.5	1155.8	1381.9
127.5°	415.1	454.4	694.3	1096.2	1282.5
130°	430.6	469.9	691.0	1054.7	1217.2
132.5°	447.3	485.4	691.0	1022.3	1171.7
135°	470.8	510.1	688.2	976.3	1103.6
137.5°	493.0	531.1	687.9	937.5	1047.4
140°	509.6	548.8	686.8	905.2	1010.8
142.5°	528.4	561.2	690.1	879.5	974.3
145°	555.3	583.7	693.7	845.0	920.8
147.5°	578.3	605.9	699.8	810.2	875.7
150°	598.2	617.2	702.0	798.6	844.7
152.5°	613.7	633.7	704.3	783.1	825.8
155°	634.2	649.1	710.4	763.7	794.8
157.5°	659.7	668.6	711.7	754.9	777.1
160°	673.0	679.7	717.3	748.2	767.1
162.5°	680.7	688.6	718.4	742.5	757.2
165°	700.7	703.4	718.7	734.1	745.0
167.5°	714.2	711.8	725.0	732.1	736.4
170°	718.7	717.3	722.8	724.3	729.7
172.5°	728.6	724.0	726.1	722.1	726.4
175°	733.9	729.8	727.0	722.7	717.3
177.5°	736.1	729.6	726.1	721.7	722.8
180°	728.4	728.4	728.4	728.4	728.4

(END OF REPORT)