

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: P521932

Luminaire Tested: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521932
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-075D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 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: 7479.7 lumens
Efficiency: N/A
Efficacy: 117.1 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: Semi-Indirect

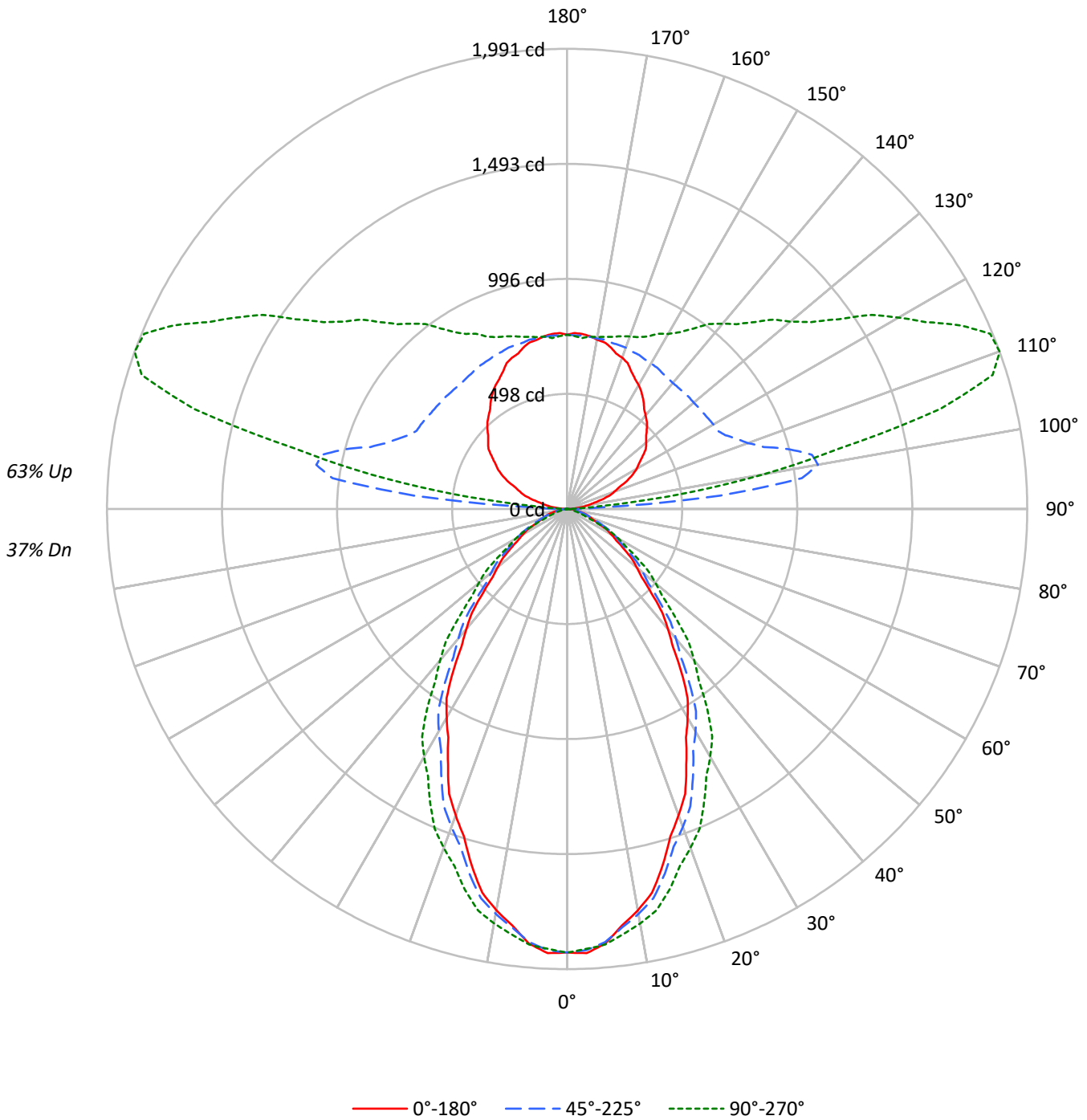
Input Watts (W): 63.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37				
1	96	92	88	85	87	84	81	78	68	66	64	54	53	51	41	40	39	33				
2	88	81	76	71	80	74	69	65	61	57	55	48	46	44	37	36	34	29				
3	81	72	66	60	73	66	60	56	54	50	47	44	41	39	33	32	30	26				
4	74	64	57	52	67	59	53	48	49	44	41	39	36	34	31	29	27	23				
5	69	58	50	45	62	53	47	42	44	39	36	36	32	30	28	26	24	21				
6	63	52	45	39	58	48	42	37	40	35	32	33	29	27	26	23	22	19				
7	59	47	40	35	53	44	37	33	37	32	28	30	27	24	24	21	20	17				
8	55	43	36	31	50	40	34	29	34	29	25	28	24	22	22	20	18	16				
9	51	40	33	28	47	37	30	26	31	26	23	26	22	20	21	18	16	14				
10	48	36	30	25	44	34	28	24	29	24	21	24	20	18	19	17	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17704	17704	17704
5°	17483	17421	17522
10°	16518	16668	17054
15°	15248	15602	16302
20°	13847	14368	15319
25°	12420	13098	14271
30°	11105	11832	13186
35°	9711	10413	11902
40°	8173	8822	10304
45°	6746	7328	8602
50°	5632	6139	7167
55°	4781	5268	5918
60°	4085	4567	4724
65°	3253	3842	3052
70°	2884	2997	1861
75°	2670	2431	1141
80°	2460	2237	983
85°	2223	2054	805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8602 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.0	2.4
10°-20°	457.8	6.1
20°-30°	593.0	7.9
30°-40°	580.7	7.8
40°-50°	444.5	5.9
50°-60°	296.2	4.0
60°-70°	161.6	2.2
70°-80°	67.3	0.9
80°-90°	19.1	0.3
90°-100°	343.6	4.6
100°-110°	977.6	13.1
110°-120°	936.6	12.5
120°-130°	741.3	9.9
130°-140°	595.0	8.0
140°-150°	465.8	6.2
150°-160°	340.8	4.6
160°-170°	211.1	2.8
170°-180°	71.6	1.0
0°-30°	1226.8	16.4
0°-40°	1807.5	24.2
0°-60°	2548.1	34.1
0°-90°	2796.1	37.4
90°-120°	2257.8	30.2
90°-150°	4059.9	54.3
90°-180°	4684.0	62.6
0°-180°	7479.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1919	1919	1919	1919	1919	
5°	1888	1869	1881	1885	1892	176
15°	1596	1591	1633	1678	1707	446
25°	1220	1223	1287	1343	1402	561
35°	862	866	924	987	1057	536
45°	517	527	562	604	659	403
55°	297	310	328	340	368	269
65°	149	161	176	154	140	155
75°	75	75	68	47	32	80
85°	21	21	19	12	8	23
90°	0	0	0	0	0	3
95°	37	148	665	230	142	43
105°	152	230	996	1760	1673	161
115°	282	341	755	1600	1879	278
125°	398	442	721	1196	1431	357
135°	487	528	712	1011	1142	376
145°	575	604	718	875	953	359
155°	656	672	735	791	823	303
165°	725	728	744	760	771	204
175°	760	756	753	748	742	72
180°	754	754	754	754	754	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1918.9	1918.9	1918.9	1918.9	1918.9
2.5°	1923.6	1906.5	1910.8	1910.7	1905.4
5°	1887.7	1868.8	1881.0	1885.4	1891.9
7.5°	1817.7	1803.3	1825.6	1842.1	1855.4
10°	1763.1	1750.8	1779.1	1803.1	1820.4
12.5°	1699.8	1689.4	1724.6	1756.7	1779.3
15°	1596.4	1590.6	1633.4	1677.9	1706.7
17.5°	1485.8	1483.0	1532.1	1583.9	1620.8
20°	1410.3	1409.5	1463.4	1517.4	1560.2
22.5°	1334.2	1336.0	1392.6	1448.8	1497.6
25°	1220.0	1223.3	1286.6	1342.6	1401.9
27.5°	1114.4	1115.9	1181.3	1240.5	1303.7
30°	1042.4	1046.5	1110.6	1171.9	1237.7
32.5°	970.3	975.1	1037.8	1101.2	1168.3
35°	862.2	866.3	924.5	986.7	1056.7
37.5°	750.7	756.3	808.0	866.8	935.6
40°	678.6	686.9	732.5	787.9	855.5
42.5°	609.3	619.5	661.8	714.4	775.3
45°	517.0	526.9	561.6	604.1	659.3
47.5°	437.5	448.9	475.6	512.2	559.2
50°	392.4	403.1	427.7	454.8	499.3
52.5°	352.6	363.3	385.3	406.2	444.1
55°	297.2	309.6	327.5	340.0	367.9
57.5°	251.8	263.6	277.9	283.5	300.4
60°	221.4	234.6	247.5	246.9	256.0
62.5°	193.8	205.0	217.9	209.0	209.5
65°	149.0	161.4	176.0	153.8	139.8
67.5°	120.4	123.0	138.1	107.2	90.6
70°	106.9	106.9	111.1	83.0	69.0
72.5°	94.1	94.1	90.3	67.5	52.9
75°	74.9	74.9	68.2	46.8	32.0
77.5°	57.8	57.1	52.2	34.9	23.2
80°	46.3	46.3	42.1	27.6	18.5
82.5°	36.2	36.2	32.7	21.5	13.8
85°	21.0	21.0	19.4	12.5	7.6
87.5°	7.4	7.4	6.7	4.0	3.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.5	60.8	141.1	41.1	31.0
95°	37.3	148.0	665.1	230.2	141.9
97.5°	68.5	173.4	1024.3	733.0	502.3
100°	90.3	188.4	1102.3	1116.6	860.1
102.5°	114.4	204.7	1085.1	1429.2	1205.2
105°	151.9	230.4	996.2	1759.7	1672.8
107.5°	190.1	260.4	892.5	1852.9	1930.3
110°	216.4	282.3	832.8	1817.3	1991.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	241.7	304.2	792.7	1732.9	1980.7
115°	282.4	341.3	755.4	1600.3	1879.2
117.5°	318.2	373.4	733.3	1455.4	1750.8
120°	346.9	393.1	731.1	1372.5	1655.6
122.5°	369.8	416.1	725.3	1299.8	1562.7
125°	398.5	441.9	721.0	1196.5	1430.6
127.5°	429.7	470.4	718.7	1134.8	1327.7
130°	445.8	486.4	715.3	1091.8	1260.0
132.5°	463.0	502.5	715.3	1058.2	1213.0
135°	487.4	528.0	712.4	1010.7	1142.5
137.5°	510.3	549.8	712.1	970.4	1084.3
140°	527.5	568.2	711.0	937.1	1046.4
142.5°	547.0	580.9	714.4	910.5	1008.6
145°	574.8	604.2	718.2	874.7	953.2
147.5°	598.6	627.2	724.5	838.7	906.5
150°	619.2	638.9	726.8	826.7	874.4
152.5°	635.3	656.0	729.0	810.6	854.9
155°	656.5	671.9	735.4	790.6	822.8
157.5°	682.9	692.1	736.8	781.5	804.4
160°	696.7	703.7	742.5	774.5	794.1
162.5°	704.7	712.8	743.7	768.7	783.8
165°	725.3	728.1	744.0	760.0	771.2
167.5°	739.4	736.8	750.6	757.8	762.3
170°	744.0	742.6	748.3	749.8	755.4
172.5°	754.3	749.5	751.7	747.5	752.0
175°	759.7	755.5	752.6	748.1	742.5
177.5°	762.0	755.3	751.7	747.1	748.3
180°	754.0	754.0	754.0	754.0	754.0

(END OF REPORT)