

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: P521828

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

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521828  
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\_6500K  
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 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6295.9 lumens  
Efficiency: N/A  
Efficacy: 114.1 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

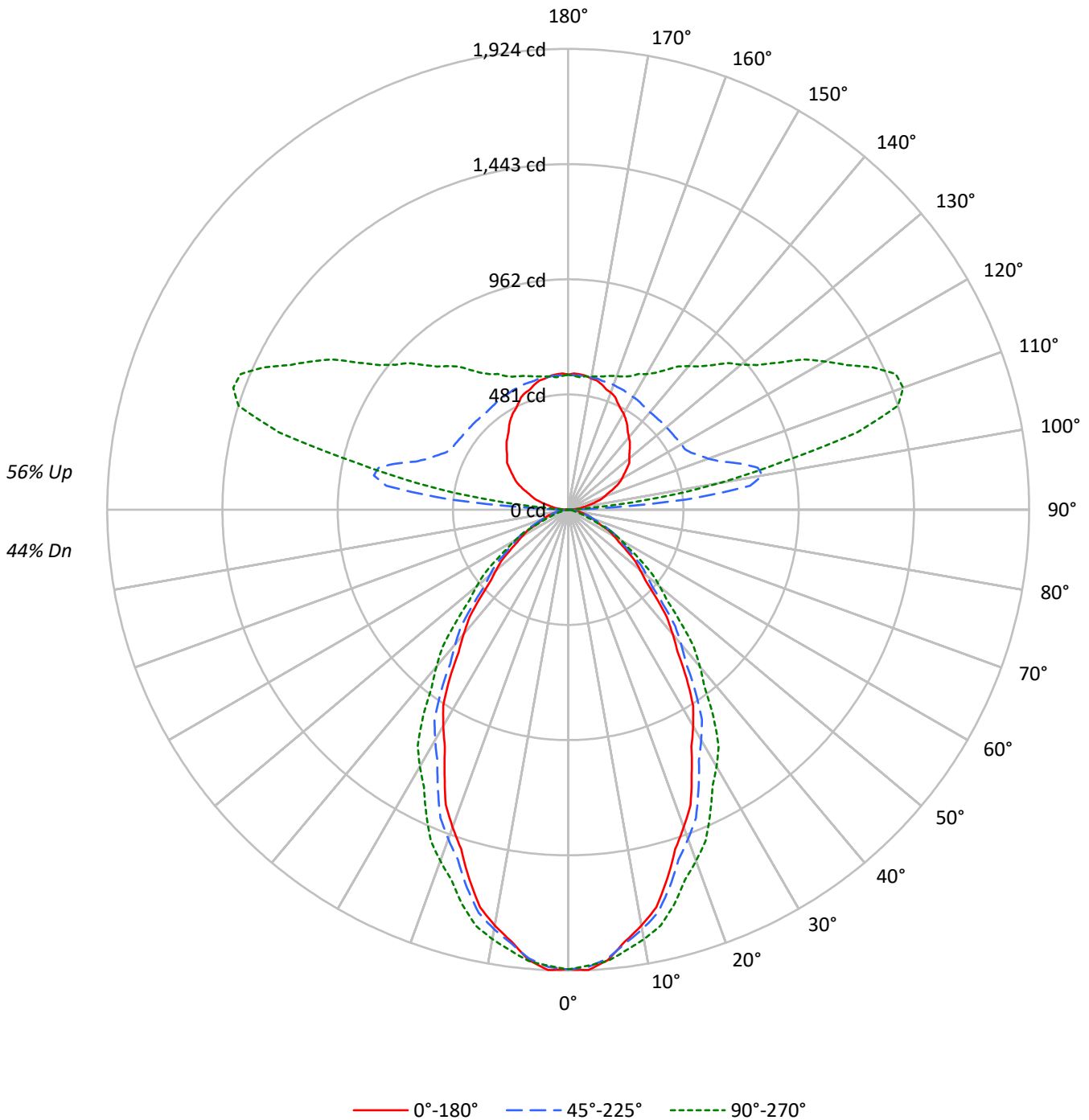
Input Watts (W): 55.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	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	2.8
10°-20°	457.8	7.3
20°-30°	593.0	9.4
30°-40°	580.7	9.2
40°-50°	444.5	7.1
50°-60°	296.2	4.7
60°-70°	161.6	2.6
70°-80°	67.3	1.1
80°-90°	19.1	0.3
90°-100°	256.7	4.1
100°-110°	730.5	11.6
110°-120°	699.9	11.1
120°-130°	553.9	8.8
130°-140°	444.6	7.1
140°-150°	348.1	5.5
150°-160°	254.7	4.0
160°-170°	157.8	2.5
170°-180°	53.5	0.9
0°-30°	1226.8	19.5
0°-40°	1807.5	28.7
0°-60°	2548.1	40.5
0°-90°	2796.1	44.4
90°-120°	1687.1	26.8
90°-150°	3033.8	48.2
90°-180°	3500.0	55.6
0°-180°	6295.9	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	2
95°	28	111	497	172	106	32
105°	114	172	744	1315	1250	120
115°	211	255	564	1196	1404	208
125°	298	330	539	894	1069	267
135°	364	395	532	755	854	281
145°	430	452	537	654	712	268
155°	491	502	550	591	615	227
165°	542	544	556	568	576	152
175°	568	565	562	559	555	54
180°	563	563	563	563	563	

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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°	8.6	45.4	105.4	30.7	23.1
95°	27.8	110.6	497.0	172.0	106.0
97.5°	51.2	129.5	765.4	547.7	375.3
100°	67.5	140.8	823.7	834.3	642.7
102.5°	85.5	152.9	810.8	1068.0	900.6
105°	113.5	172.2	744.4	1314.9	1250.0
107.5°	142.0	194.6	666.9	1384.6	1442.4
110°	161.7	211.0	622.3	1357.9	1487.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	180.6	227.3	592.3	1294.9	1480.1
115°	211.0	255.0	564.5	1195.8	1404.3
117.5°	237.8	279.1	548.0	1087.5	1308.3
120°	259.2	293.8	546.3	1025.6	1237.2
122.5°	276.4	310.9	542.0	971.3	1167.7
125°	297.8	330.2	538.8	894.1	1069.0
127.5°	321.1	351.5	537.1	848.0	992.1
130°	333.1	363.5	534.5	815.8	941.5
132.5°	346.0	375.5	534.5	790.8	906.4
135°	364.2	394.6	532.4	755.2	853.7
137.5°	381.3	410.9	532.1	725.2	810.2
140°	394.2	424.5	531.3	700.2	781.9
142.5°	408.7	434.1	533.9	680.3	753.6
145°	429.5	451.5	536.6	653.7	712.3
147.5°	447.3	468.7	541.4	626.7	677.4
150°	462.7	477.4	543.1	617.8	653.4
152.5°	474.7	490.2	544.8	605.7	638.8
155°	490.6	502.1	549.5	590.7	614.8
157.5°	510.3	517.2	550.6	583.9	601.1
160°	520.6	525.8	554.8	578.7	593.4
162.5°	526.6	532.6	555.7	574.4	585.7
165°	542.0	544.1	555.9	567.9	576.3
167.5°	552.5	550.6	560.8	566.3	569.6
170°	555.9	554.9	559.1	560.3	564.5
172.5°	563.6	560.1	561.7	558.6	561.9
175°	567.7	564.6	562.3	559.0	554.8
177.5°	569.4	564.4	561.7	558.3	559.1
180°	563.4	563.4	563.4	563.4	563.4

(END OF REPORT)