

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: P521827

Luminaire Tested: SQ4-WB-075U-075D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521827
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_5700K
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 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6236.8 lumens
Efficiency: N/A
Efficacy: 112.6 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

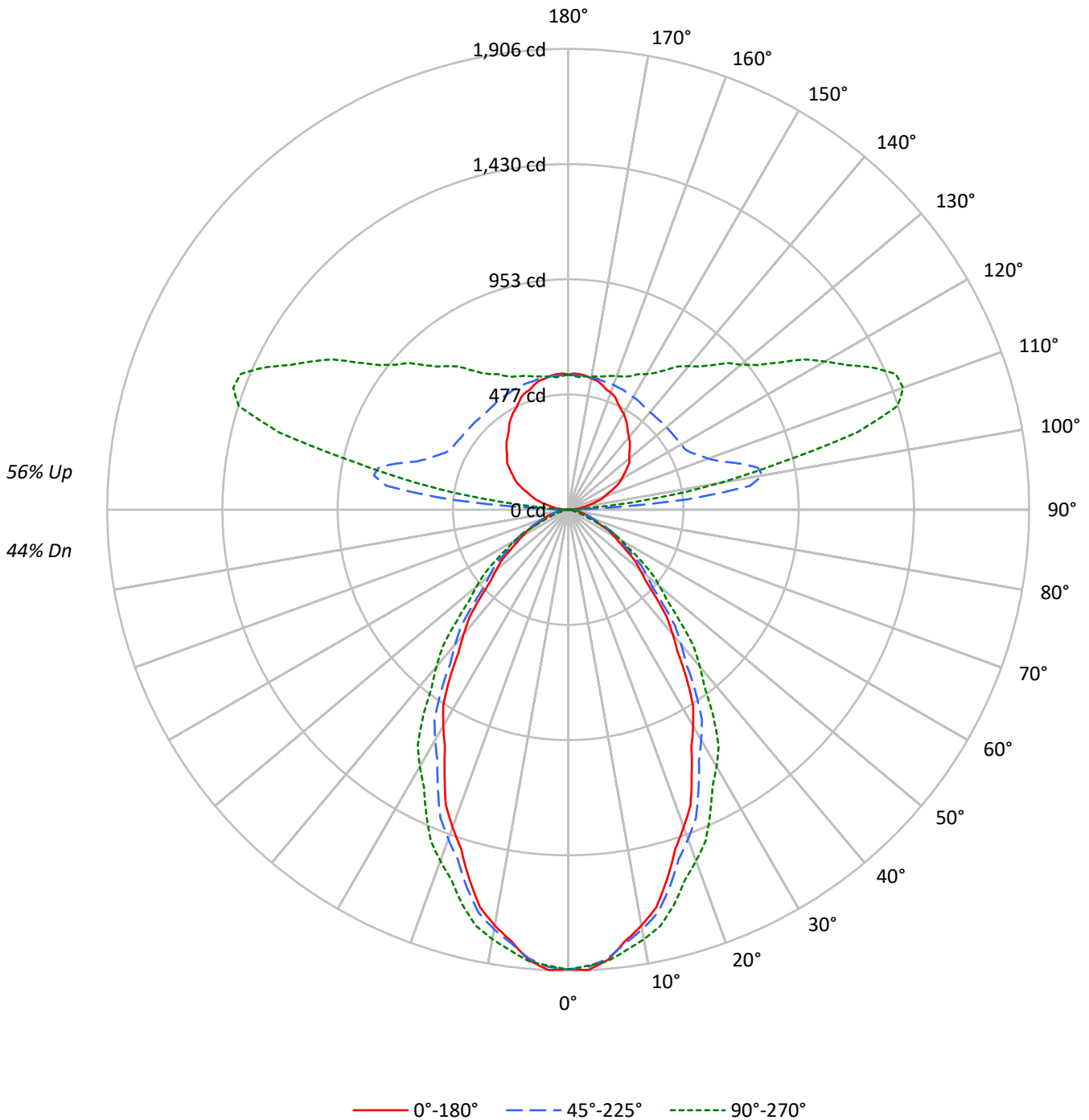
Input Watts (W): 55.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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				44
1	98	94	90	87	89	86	83	80	72	70	68	59	57	56	47	46	45	39				39
2	90	83	77	73	82	76	72	68	64	61	58	53	51	48	42	41	40	35				35
3	82	74	67	62	76	68	62	58	58	53	50	48	45	42	38	37	35	31				31
4	76	66	59	53	70	61	55	50	52	47	44	43	40	37	35	33	31	27				27
5	70	59	52	46	64	55	49	44	47	42	38	39	36	33	32	30	28	25				25
6	65	54	46	41	60	50	43	39	43	38	34	36	32	29	30	27	25	22				22
7	60	49	42	36	55	46	39	34	39	34	30	33	29	27	27	25	23	20				20
8	56	45	37	32	52	42	35	31	36	31	27	31	27	24	25	23	21	18				18
9	53	41	34	29	48	38	32	28	33	28	25	28	25	22	24	21	19	17				17
10	49	38	31	27	45	35	29	25	31	26	23	26	23	20	22	19	18	16				16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17538	17538	17538
5°	17319	17257	17358
10°	16363	16511	16894
15°	15105	15456	16149
20°	13717	14233	15174
25°	12304	12974	14137
30°	11001	11720	13062
35°	9620	10315	11790
40°	8097	8739	10206
45°	6682	7259	8522
50°	5579	6082	7099
55°	4736	5220	5863
60°	4048	4525	4680
65°	3222	3805	3024
70°	2857	2970	1845
75°	2645	2410	1130
80°	2439	2216	972
85°	2212	2032	794

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8522 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.4	2.8
10°-20°	453.5	7.3
20°-30°	587.4	9.4
30°-40°	575.2	9.2
40°-50°	440.3	7.1
50°-60°	293.4	4.7
60°-70°	160.1	2.6
70°-80°	66.7	1.1
80°-90°	18.9	0.3
90°-100°	254.3	4.1
100°-110°	723.6	11.6
110°-120°	693.3	11.1
120°-130°	548.7	8.8
130°-140°	440.5	7.1
140°-150°	344.8	5.5
150°-160°	252.3	4.0
160°-170°	156.3	2.5
170°-180°	53.0	0.9
0°-30°	1215.3	19.5
0°-40°	1790.5	28.7
0°-60°	2524.2	40.5
0°-90°	2769.9	44.4
90°-120°	1671.3	26.8
90°-150°	3005.3	48.2
90°-180°	3467.0	55.6
0°-180°	6236.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1901	1901	1901	1901	1901	
5°	1870	1851	1863	1868	1874	174
15°	1581	1576	1618	1662	1691	442
25°	1209	1212	1274	1330	1389	556
35°	854	858	916	977	1047	531
45°	512	522	556	598	653	399
55°	294	307	324	337	364	267
65°	148	160	174	152	138	153
75°	74	74	68	46	32	79
85°	21	21	19	12	8	23
90°	0	0	0	0	0	2
95°	28	110	492	170	105	32
105°	112	171	737	1303	1238	119
115°	209	253	559	1185	1391	206
125°	295	327	534	886	1059	264
135°	361	391	527	748	846	278
145°	426	447	532	648	706	266
155°	486	497	544	585	609	225
165°	537	539	551	563	571	151
175°	562	559	557	554	550	53
180°	558	558	558	558	558	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1900.9	1900.9	1900.9	1900.9	1900.9
2.5°	1905.5	1888.6	1892.8	1892.7	1887.5
5°	1870.0	1851.2	1863.3	1867.6	1874.2
7.5°	1800.6	1786.4	1808.4	1824.8	1838.0
10°	1746.6	1734.3	1762.4	1786.1	1803.3
12.5°	1683.8	1673.6	1708.4	1740.2	1762.6
15°	1581.4	1575.7	1618.1	1662.1	1690.7
17.5°	1471.8	1469.0	1517.7	1569.1	1605.6
20°	1397.1	1396.3	1449.6	1503.1	1545.5
22.5°	1321.7	1323.5	1379.6	1435.2	1483.5
25°	1208.6	1211.8	1274.5	1330.0	1388.7
27.5°	1104.0	1105.4	1170.2	1228.8	1291.5
30°	1032.6	1036.7	1100.1	1160.8	1226.1
32.5°	961.2	965.9	1028.1	1090.8	1157.4
35°	854.1	858.2	915.8	977.4	1046.8
37.5°	743.7	749.2	800.4	858.6	926.8
40°	672.3	680.4	725.6	780.5	847.4
42.5°	603.5	613.6	655.6	707.7	768.0
45°	512.1	521.9	556.3	598.4	653.1
47.5°	433.4	444.6	471.1	507.3	554.0
50°	388.7	399.3	423.7	450.6	494.6
52.5°	349.3	359.9	381.7	402.4	439.9
55°	294.4	306.7	324.5	336.8	364.5
57.5°	249.4	261.1	275.2	280.8	297.6
60°	219.4	232.4	245.2	244.6	253.6
62.5°	192.0	203.1	215.9	207.0	207.5
65°	147.6	159.9	174.3	152.3	138.5
67.5°	119.3	121.9	136.8	106.2	89.7
70°	105.9	105.9	110.1	82.3	68.4
72.5°	93.2	93.2	89.4	66.9	52.4
75°	74.2	74.2	67.6	46.4	31.7
77.5°	57.2	56.6	51.7	34.6	23.0
80°	45.9	45.9	41.7	27.3	18.3
82.5°	35.9	35.9	32.4	21.3	13.7
85°	20.9	20.9	19.2	12.4	7.5
87.5°	7.3	7.3	6.7	4.0	3.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.5	45.0	104.4	30.4	22.9
95°	27.6	109.5	492.3	170.4	105.0
97.5°	50.7	128.3	758.2	542.6	371.8
100°	66.8	139.5	816.0	826.5	636.6
102.5°	84.7	151.5	803.2	1057.9	892.1
105°	112.5	170.6	737.4	1302.6	1238.3
107.5°	140.7	192.8	660.6	1371.6	1428.8
110°	160.2	209.0	616.5	1345.2	1473.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.9	225.2	586.8	1282.8	1466.2
115°	209.0	252.6	559.2	1184.6	1391.1
117.5°	235.6	276.4	542.8	1077.3	1296.0
120°	256.8	291.0	541.1	1016.0	1225.5
122.5°	273.8	308.0	536.9	962.1	1156.8
125°	295.0	327.1	533.7	885.7	1058.9
127.5°	318.1	348.2	532.0	840.0	982.8
130°	330.0	360.1	529.5	808.2	932.7
132.5°	342.7	372.0	529.5	783.3	897.9
135°	360.8	390.9	527.4	748.1	845.7
137.5°	377.7	407.0	527.1	718.4	802.6
140°	390.5	420.6	526.3	693.7	774.6
142.5°	404.9	430.0	528.8	673.9	746.6
145°	425.5	447.3	531.6	647.5	705.6
147.5°	443.1	464.3	536.3	620.8	671.0
150°	458.4	472.9	538.0	612.0	647.3
152.5°	470.3	485.6	539.7	600.0	632.8
155°	486.0	497.4	544.3	585.2	609.1
157.5°	505.5	512.3	545.4	578.5	595.5
160°	515.7	520.9	549.6	573.3	587.8
162.5°	521.6	527.6	550.5	569.0	580.2
165°	536.9	539.0	550.7	562.6	570.9
167.5°	547.3	545.4	555.6	561.0	564.3
170°	550.7	549.7	553.9	555.0	559.2
172.5°	558.3	554.8	556.4	553.3	556.6
175°	562.4	559.3	557.1	553.8	549.6
177.5°	564.1	559.1	556.4	553.0	553.9
180°	558.1	558.1	558.1	558.1	558.1

(END OF REPORT)