

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: P521722

Luminaire Tested: SQ4-WB-025U-075D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521722
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-025U-075D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4757.2 lumens
Efficiency: N/A
Efficacy: 103.9 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

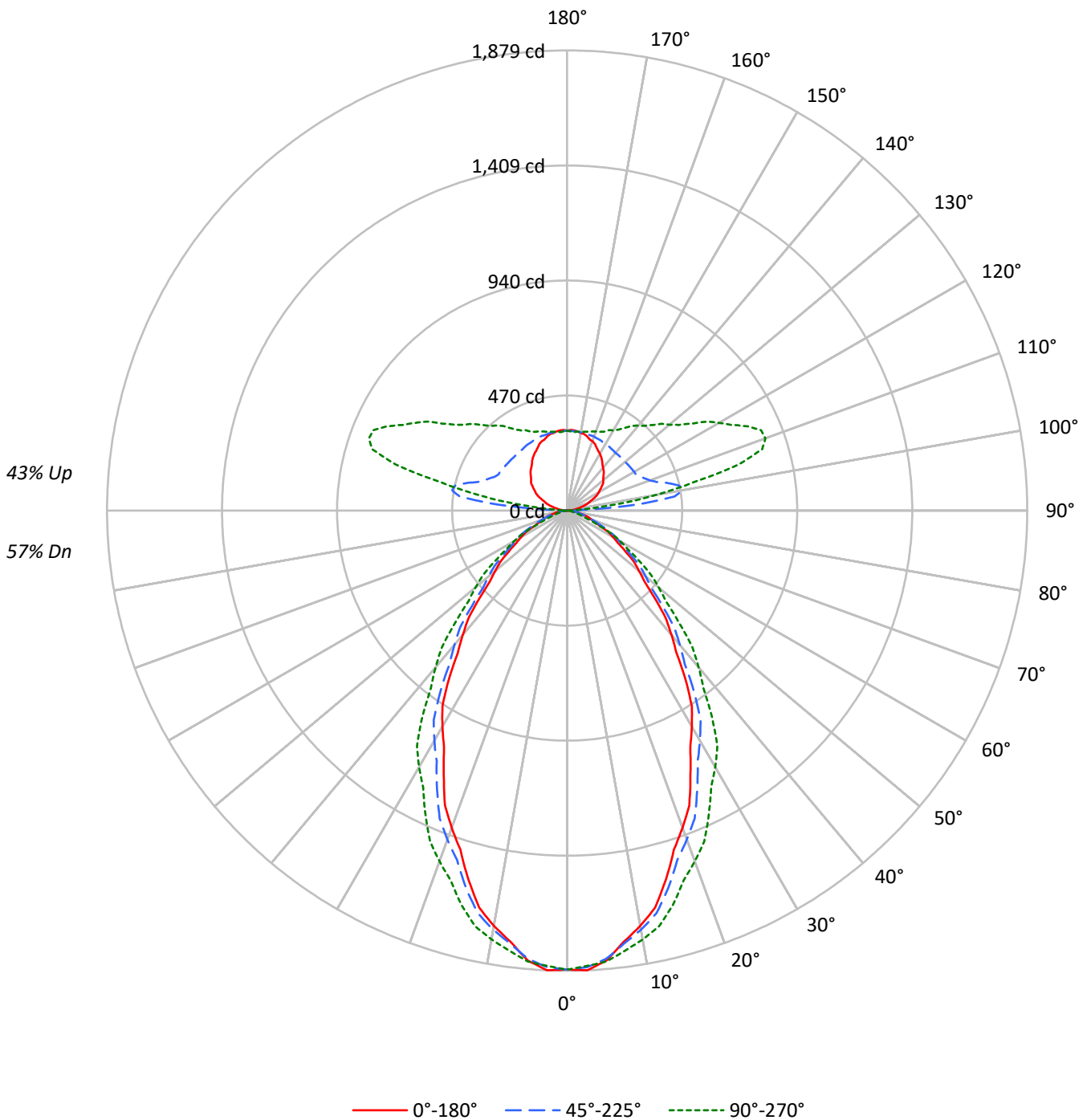
Input Watts (W): 45.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																		
0	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57
1	101	97	93	90	94	91	88	85	79	76	75	68	66	65	58	57	56	51
2	93	86	81	76	86	81	76	72	71	67	64	61	59	56	52	51	49	45
3	86	77	70	65	80	72	67	62	64	59	55	55	52	49	48	45	43	40
4	79	69	62	56	74	65	59	54	57	52	49	50	47	44	44	41	39	35
5	73	62	55	49	68	59	52	47	52	47	43	46	42	39	40	37	35	32
6	68	57	49	44	63	54	47	42	48	42	38	42	38	35	37	34	31	29
7	63	52	44	39	59	49	42	38	44	38	34	39	35	31	34	31	28	26
8	59	47	40	35	55	45	38	34	40	35	31	36	32	29	32	28	26	24
9	55	44	37	32	52	42	35	31	37	32	28	33	29	26	30	26	24	22
10	52	40	34	29	49	38	32	28	35	30	26	31	27	24	28	24	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17292	17292	17292
5°	17075	17015	17113
10°	16133	16279	16656
15°	14893	15239	15922
20°	13525	14033	14961
25°	12130	12792	13938
30°	10846	11556	12879
35°	9485	10171	11625
40°	7983	8617	10063
45°	6588	7157	8401
50°	5500	5997	7000
55°	4670	5146	5781
60°	3991	4462	4613
65°	3179	3753	2980
70°	2816	2930	1818
75°	2609	2374	1112
80°	2402	2184	962
85°	2181	2001	783

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8401 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.9	3.6
10°-20°	447.1	9.4
20°-30°	579.2	12.2
30°-40°	567.1	11.9
40°-50°	434.1	9.1
50°-60°	289.3	6.1
60°-70°	157.9	3.3
70°-80°	65.8	1.4
80°-90°	18.6	0.4
90°-100°	148.6	3.1
100°-110°	422.9	8.9
110°-120°	405.2	8.5
120°-130°	320.7	6.7
130°-140°	257.4	5.4
140°-150°	201.5	4.2
150°-160°	147.4	3.1
160°-170°	91.3	1.9
170°-180°	31.0	0.7
0°-30°	1198.2	25.2
0°-40°	1765.3	37.1
0°-60°	2488.8	52.3
0°-90°	2731.0	57.4
90°-120°	976.8	20.5
90°-150°	1756.4	36.9
90°-180°	2026.0	42.6
0°-180°	4757.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1874	1874	1874	1874	1874	
5°	1844	1825	1837	1841	1848	172
15°	1559	1554	1595	1639	1667	435
25°	1192	1195	1257	1311	1369	548
35°	842	846	903	964	1032	524
45°	505	515	548	590	644	394
55°	290	302	320	332	359	263
65°	146	158	172	150	136	151
75°	73	73	67	46	31	78
85°	21	21	19	12	7	22
90°	0	0	0	0	0	2
95°	16	64	288	100	61	18
105°	66	100	431	761	724	70
115°	122	148	327	692	813	120
125°	172	191	312	518	619	154
135°	211	228	308	437	494	163
145°	249	261	311	378	412	155
155°	284	291	318	342	356	131
165°	314	315	322	329	334	88
175°	329	327	326	324	321	31
180°	326	326	326	326	326	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1874.2	1874.2	1874.2	1874.2	1874.2
2.5°	1878.8	1862.0	1866.3	1866.1	1861.0
5°	1843.7	1825.2	1837.2	1841.4	1847.8
7.5°	1775.3	1761.3	1783.0	1799.1	1812.2
10°	1722.0	1710.0	1737.6	1761.1	1777.9
12.5°	1660.2	1650.1	1684.4	1715.8	1737.8
15°	1559.2	1553.6	1595.4	1638.8	1666.9
17.5°	1451.1	1448.4	1496.4	1547.0	1583.0
20°	1377.5	1376.7	1429.3	1482.0	1523.8
22.5°	1303.1	1304.9	1360.2	1415.0	1462.7
25°	1191.6	1194.8	1256.6	1311.3	1369.2
27.5°	1088.5	1089.9	1153.8	1211.6	1273.3
30°	1018.1	1022.1	1084.7	1144.5	1208.9
32.5°	947.7	952.4	1013.6	1075.5	1141.1
35°	842.1	846.1	903.0	963.7	1032.1
37.5°	733.2	738.7	789.1	846.6	913.8
40°	662.8	670.9	715.5	769.6	835.5
42.5°	595.1	605.0	646.4	697.7	757.2
45°	504.9	514.6	548.5	590.0	643.9
47.5°	427.3	438.4	464.5	500.2	546.2
50°	383.2	393.7	417.8	444.2	487.7
52.5°	344.4	354.9	376.3	396.7	433.7
55°	290.3	302.4	319.9	332.0	359.4
57.5°	245.9	257.5	271.4	276.9	293.4
60°	216.3	229.1	241.8	241.2	250.0
62.5°	189.3	200.2	212.8	204.1	204.6
65°	145.6	157.6	171.9	150.2	136.5
67.5°	117.6	120.2	134.9	104.7	88.5
70°	104.4	104.4	108.6	81.1	67.4
72.5°	91.9	91.9	88.2	66.0	51.6
75°	73.2	73.2	66.6	45.7	31.2
77.5°	56.4	55.8	51.0	34.1	22.7
80°	45.2	45.2	41.1	26.9	18.1
82.5°	35.4	35.4	31.9	21.0	13.5
85°	20.6	20.6	18.9	12.2	7.4
87.5°	7.2	7.2	6.6	3.9	3.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.0	26.3	61.0	17.8	13.4
95°	16.1	64.0	287.7	99.6	61.4
97.5°	29.6	75.0	443.1	317.1	217.3
100°	39.1	81.5	476.9	483.0	372.1
102.5°	49.5	88.5	469.4	618.3	521.4
105°	65.7	99.7	431.0	761.3	723.7
107.5°	82.2	112.7	386.1	801.6	835.1
110°	93.6	122.1	360.3	786.2	861.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.6	131.6	342.9	749.7	856.9
115°	122.2	147.6	326.8	692.3	813.0
117.5°	137.7	161.6	317.3	629.6	757.4
120°	150.1	170.1	316.3	593.8	716.2
122.5°	160.0	180.0	313.8	562.3	676.1
125°	172.4	191.2	311.9	517.6	618.9
127.5°	185.9	203.5	310.9	490.9	574.4
130°	192.9	210.4	309.4	472.3	545.1
132.5°	200.3	217.4	309.4	457.8	524.7
135°	210.8	228.4	308.2	437.2	494.2
137.5°	220.8	237.9	308.1	419.8	469.1
140°	228.2	245.8	307.6	405.4	452.7
142.5°	236.6	251.3	309.1	393.9	436.3
145°	248.7	261.4	310.7	378.4	412.4
147.5°	259.0	271.3	313.4	362.8	392.2
150°	267.9	276.4	314.4	357.7	378.3
152.5°	274.8	283.8	315.4	350.7	369.8
155°	284.0	290.7	318.1	342.0	355.9
157.5°	295.4	299.4	318.7	338.1	348.0
160°	301.4	304.4	321.2	335.1	343.5
162.5°	304.9	308.4	321.7	332.5	339.1
165°	313.8	315.0	321.8	328.8	333.6
167.5°	319.9	318.8	324.7	327.8	329.8
170°	321.8	321.2	323.7	324.4	326.8
172.5°	326.3	324.2	325.2	323.4	325.3
175°	328.7	326.8	325.6	323.6	321.2
177.5°	329.7	326.7	325.2	323.2	323.7
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)