

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: P521826

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521826
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6149.2 lumens
Efficiency: N/A
Efficacy: 111.0 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

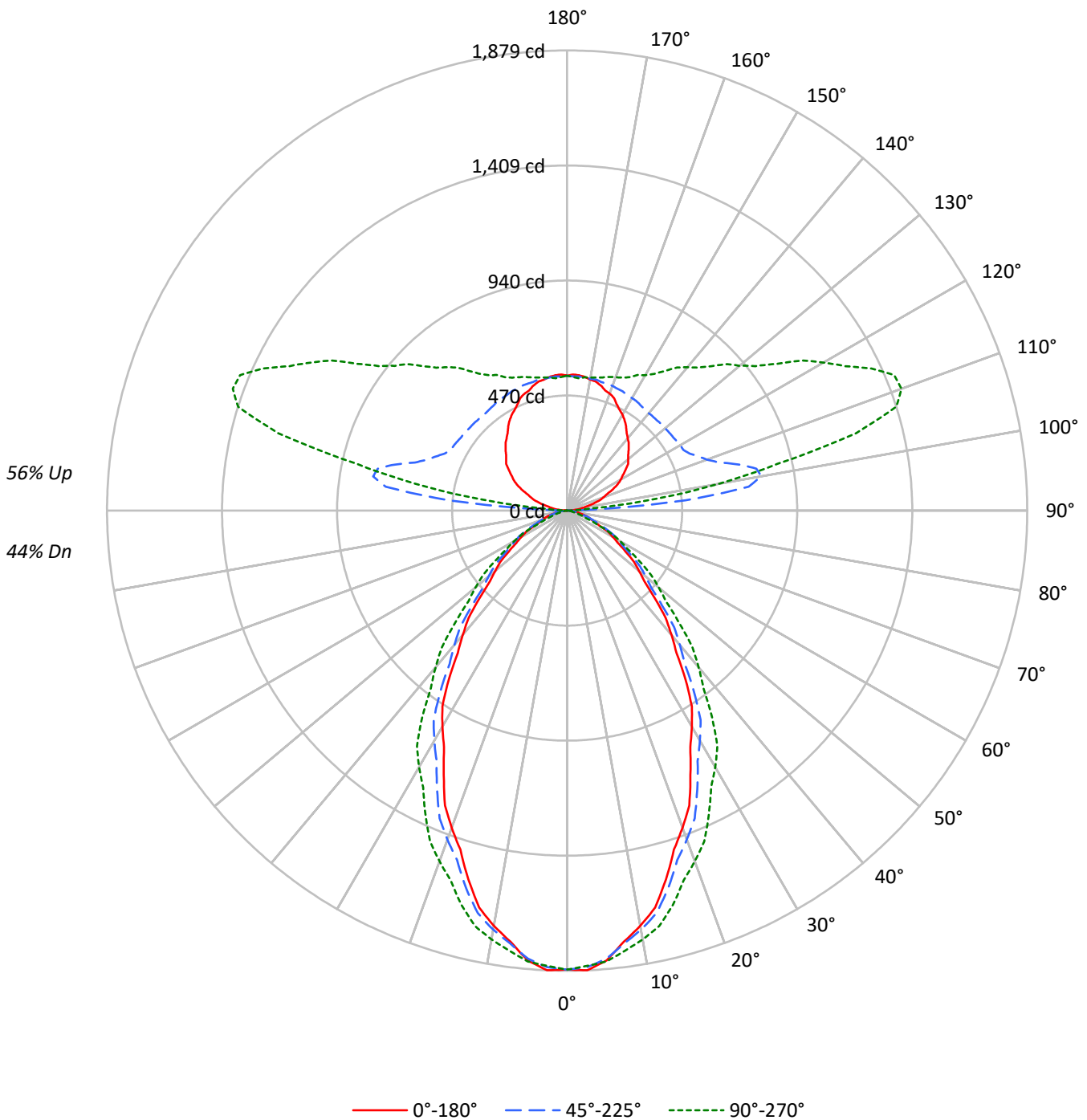
Input Watts (W): 55.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	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	2.8
10°-20°	447.1	7.3
20°-30°	579.2	9.4
30°-40°	567.1	9.2
40°-50°	434.1	7.1
50°-60°	289.3	4.7
60°-70°	157.9	2.6
70°-80°	65.8	1.1
80°-90°	18.6	0.3
90°-100°	250.8	4.1
100°-110°	713.5	11.6
110°-120°	683.6	11.1
120°-130°	541.0	8.8
130°-140°	434.3	7.1
140°-150°	340.0	5.5
150°-160°	248.8	4.0
160°-170°	154.1	2.5
170°-180°	52.3	0.9
0°-30°	1198.2	19.5
0°-40°	1765.3	28.7
0°-60°	2488.8	40.5
0°-90°	2731.0	44.4
90°-120°	1647.8	26.8
90°-150°	2963.1	48.2
90°-180°	3418.0	55.6
0°-180°	6149.2	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°	27	108	485	168	104	31
105°	111	168	727	1284	1221	117
115°	206	249	551	1168	1372	203
125°	291	322	526	873	1044	260
135°	356	385	520	738	834	274
145°	420	441	524	638	696	262
155°	479	490	537	577	600	221
165°	529	531	543	555	563	149
175°	554	551	549	546	542	53
180°	550	550	550	550	550	

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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°	8.4	44.4	102.9	30.0	22.6
95°	27.2	108.0	485.4	168.0	103.6
97.5°	50.0	126.5	747.6	535.0	366.6
100°	65.9	137.5	804.5	814.9	627.7
102.5°	83.5	149.4	792.0	1043.1	879.6
105°	110.9	168.2	727.1	1284.3	1220.9
107.5°	138.7	190.1	651.3	1352.3	1408.8
110°	158.0	206.0	607.8	1326.3	1453.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.4	222.0	578.5	1264.7	1445.6
115°	206.1	249.1	551.3	1168.0	1371.5
117.5°	232.2	272.6	535.2	1062.2	1277.8
120°	253.2	286.9	533.5	1001.7	1208.3
122.5°	269.9	303.7	529.4	948.6	1140.5
125°	290.8	322.5	526.2	873.2	1044.1
127.5°	313.6	343.3	524.5	828.2	969.0
130°	325.4	355.0	522.0	796.8	919.6
132.5°	337.9	366.8	522.0	772.3	885.3
135°	355.7	385.4	519.9	737.6	833.8
137.5°	372.4	401.3	519.7	708.3	791.3
140°	385.0	414.7	518.9	683.9	763.7
142.5°	399.2	424.0	521.4	664.5	736.1
145°	419.5	441.0	524.1	638.4	695.7
147.5°	436.9	457.7	528.7	612.1	661.6
150°	451.9	466.3	530.4	603.4	638.2
152.5°	463.7	478.8	532.1	591.6	623.9
155°	479.1	490.4	536.7	577.0	600.5
157.5°	498.4	505.1	537.7	570.3	587.1
160°	508.4	513.6	541.9	565.3	579.6
162.5°	514.3	520.2	542.8	561.0	572.0
165°	529.4	531.4	543.0	554.7	562.8
167.5°	539.6	537.8	547.8	553.1	556.4
170°	543.0	541.9	546.1	547.2	551.3
172.5°	550.5	547.0	548.6	545.5	548.8
175°	554.5	551.4	549.2	546.0	541.9
177.5°	556.1	551.2	548.6	545.3	546.1
180°	550.3	550.3	550.3	550.3	550.3

(END OF REPORT)