

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P937783

Luminaire Tested: SQ4-FB-100U-125D-B2750-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937783
REPORT IS A COMBINATION OF REPORTS P933568 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-B2750-1D-UNV-STD-W-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

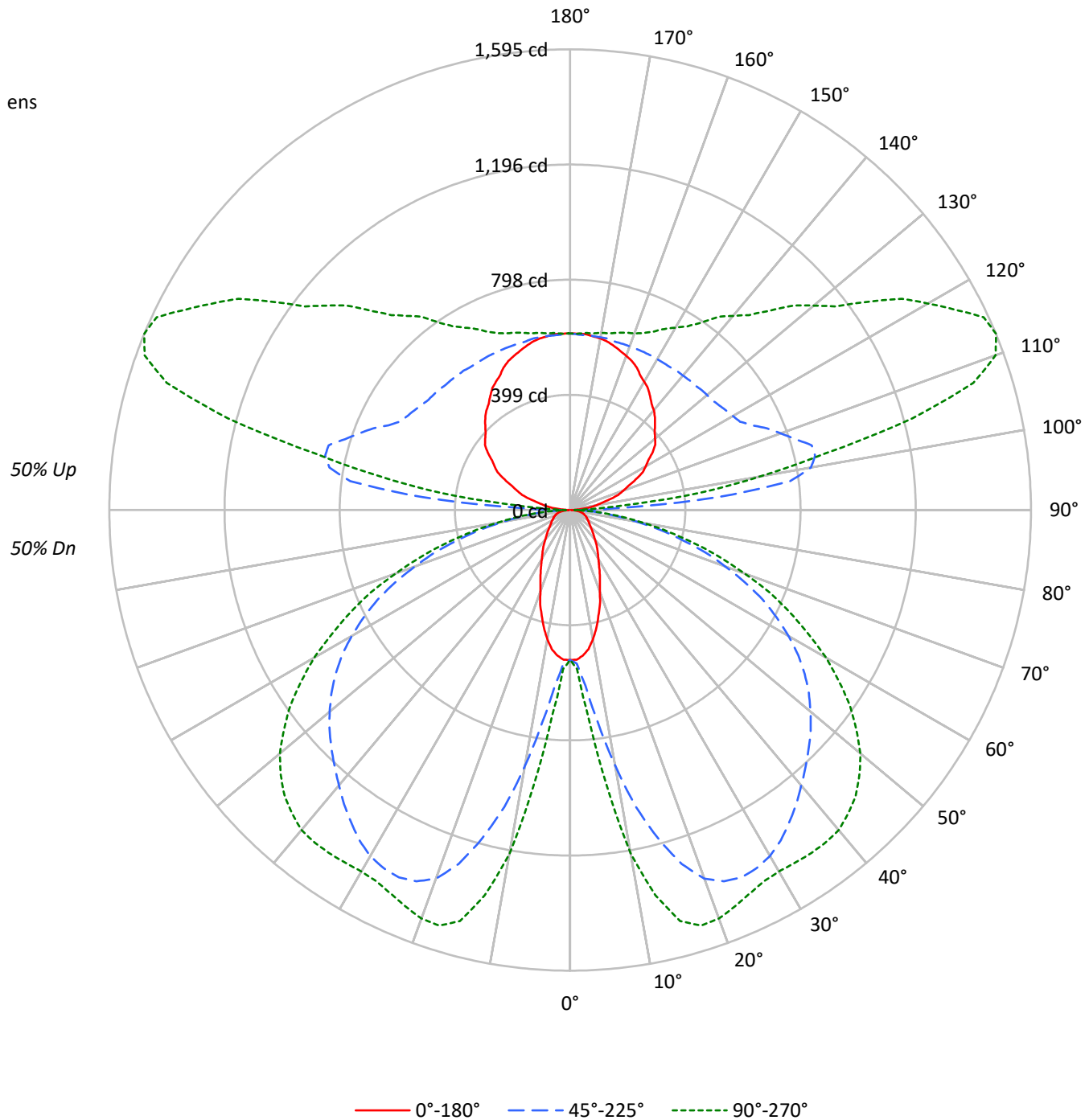
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7977.8 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 68.8
Input Voltage (V): NR
Input Current (A_{in}): 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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CATALOG NUMBER: SQ4-FB-100U-125D-B2750-1D-UNV-STD-W-4-3000K

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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4814	4814	4814
5°	4698	5560	6471
10°	4257	8099	10729
15°	3614	10575	12955
20°	2939	12245	13203
25°	2449	12805	12936
30°	2062	12876	12911
35°	1820	12651	13244
40°	1584	12363	13590
45°	1431	12149	13643
50°	1311	11955	13417
55°	1251	11673	12822
60°	1277	11146	11884
65°	1321	10351	10593
70°	1396	9008	8950
75°	1531	7327	6984
80°	1638	5064	4706
85°	1383	2672	2409

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13643 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.1	0.8
10°-20°	297.5	3.7
20°-30°	520.3	6.5
30°-40°	669.8	8.4
40°-50°	748.2	9.4
50°-60°	716.6	9.0
60°-70°	567.9	7.1
70°-80°	333.9	4.2
80°-90°	95.1	1.2
90°-100°	297.9	3.7
100°-110°	783.1	9.8
110°-120°	812.0	10.2
120°-130°	651.3	8.2
130°-140°	511.1	6.4
140°-150°	392.3	4.9
150°-160°	282.5	3.5
160°-170°	172.8	2.2
170°-180°	58.4	0.7
0°-30°	884.9	11.1
0°-40°	1554.7	19.5
0°-60°	3019.5	37.8
0°-90°	4016.4	50.3
90°-120°	1893.0	23.7
90°-150°	3447.6	43.2
90°-180°	3961.0	49.7
0°-180°	7977.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	519	519	519	519	519	
5°	506	542	611	691	716	47
15°	379	699	1178	1428	1473	105
25°	242	792	1403	1465	1467	111
35°	164	757	1321	1396	1452	102
45°	112	604	1168	1338	1398	86
55°	80	384	991	1151	1183	73
65°	63	204	736	828	839	63
75°	47	125	404	444	446	49
85°	17	38	100	110	112	18
90°	4	11	31	16	16	5
95°	39	154	513	264	180	44
105°	141	214	866	1314	1226	150
115°	250	304	694	1383	1579	247
125°	349	391	631	1066	1257	309
135°	416	457	611	860	976	321
145°	482	513	603	734	792	302
155°	545	560	603	662	682	250
165°	588	595	603	627	635	166
175°	611	611	607	615	615	58
180°	611	611	611	611	611	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	518.8	518.8	518.8	518.8	518.8	518.8	518.8	518.8	518.8	518.8	518.8
2.5°	518.8	518.8	522.2	523.9	527.2	528.9	532.2	535.6	545.6	547.2	550.6
5°	505.5	512.2	533.9	542.2	565.6	597.3	610.6	632.3	677.4	690.7	699.1
7.5°	485.5	500.5	553.9	567.2	625.6	709.0	744.1	790.9	862.6	897.6	926.0
10°	453.8	485.5	580.6	612.3	707.4	834.2	899.2	964.3	1072.8	1121.2	1139.5
12.5°	418.8	470.5	609.0	652.3	789.2	974.4	1052.8	1124.5	1248.0	1313.1	1323.0
15°	378.7	448.8	635.7	699.1	875.9	1091.1	1177.9	1266.3	1381.5	1428.1	1439.9
17.5°	343.7	432.2	660.7	727.5	942.6	1196.2	1284.7	1358.1	1451.5	1483.2	1491.5
20°	300.3	405.4	677.4	764.2	1012.7	1273.0	1358.1	1414.8	1478.2	1498.2	1501.6
22.5°	268.6	377.0	687.3	777.5	1059.5	1319.7	1391.4	1436.5	1479.9	1486.6	1488.2
25°	242.0	345.4	685.8	792.4	1099.5	1348.1	1403.2	1436.5	1461.5	1464.9	1464.9
27.5°	216.9	310.3	679.1	795.8	1129.5	1354.8	1398.1	1421.5	1433.2	1439.9	1439.9
30°	195.2	277.0	662.4	789.2	1142.9	1348.1	1383.1	1394.8	1406.4	1416.5	1421.5
32.5°	178.6	245.2	637.4	775.8	1144.5	1331.4	1356.4	1363.0	1379.8	1403.2	1411.5
35°	163.5	213.6	609.0	757.4	1134.5	1304.7	1321.3	1328.0	1361.4	1396.5	1408.1
37.5°	148.5	190.2	572.3	725.8	1119.5	1273.0	1284.7	1296.4	1348.1	1389.8	1403.2
40°	133.5	170.2	528.9	690.7	1096.1	1234.6	1244.6	1263.0	1331.4	1379.8	1393.1
42.5°	121.8	153.5	482.2	654.0	1066.1	1191.3	1206.3	1233.0	1311.4	1363.0	1378.1
45°	111.8	136.9	432.2	603.9	1027.7	1146.2	1167.9	1204.6	1288.0	1338.1	1351.4
47.5°	101.8	125.1	380.4	552.3	986.0	1101.2	1129.5	1171.3	1256.3	1304.7	1316.4
50°	93.5	113.5	328.6	497.1	940.9	1052.8	1086.2	1129.5	1216.2	1261.3	1276.4
52.5°	86.8	103.4	280.3	442.1	889.3	1002.7	1041.1	1086.2	1167.9	1211.3	1221.3
55°	80.1	95.1	238.6	383.8	835.8	949.3	991.0	1034.4	1114.5	1151.2	1157.9
57.5°	76.7	88.4	203.5	328.6	779.1	889.3	936.0	976.0	1051.1	1079.5	1086.2
60°	71.8	83.4	176.9	282.0	717.4	832.6	872.6	912.6	976.0	999.4	1004.3
62.5°	66.8	80.1	156.9	236.9	654.0	765.8	805.9	842.5	896.0	912.6	919.2
65°	63.4	76.7	141.8	203.5	588.9	695.7	735.8	767.5	810.9	827.5	830.9
67.5°	60.0	73.5	130.2	175.2	523.9	625.6	655.7	685.8	719.1	735.8	737.4
70°	55.0	70.1	120.1	155.2	457.1	545.6	570.6	602.2	629.0	637.4	642.4
72.5°	51.8	65.1	113.5	140.1	388.8	468.8	492.2	510.6	533.9	542.2	542.2
75°	46.7	58.4	106.8	125.1	318.7	383.8	403.8	422.1	440.4	443.8	438.8
77.5°	41.7	51.8	91.8	105.1	248.6	303.7	320.4	330.3	345.4	348.6	350.3
80°	35.0	45.1	71.8	81.7	180.1	223.5	235.3	243.5	257.0	257.0	260.3
82.5°	26.7	35.0	51.8	58.4	121.8	153.5	163.5	168.5	176.9	176.9	176.9
85°	16.7	21.7	33.3	38.4	73.5	93.5	100.1	101.8	108.5	110.1	110.1
87.5°	8.4	11.6	21.7	23.4	38.4	48.4	48.4	51.8	51.8	50.1	48.4
90°	4.1	7.4	10.6	11.4	18.0	26.8	31.2	27.7	20.8	15.6	15.6
92.5°	16.4	44.3	72.2	79.2	111.3	154.1	175.5	153.8	110.4	77.9	74.8
95°	39.3	90.4	141.5	154.2	273.8	433.2	513.0	457.8	347.4	264.5	255.2
97.5°	68.0	113.1	158.2	169.4	368.9	634.8	767.7	732.8	663.0	610.6	592.8
100°	90.2	131.0	171.9	182.1	403.5	698.6	846.1	848.7	853.7	857.5	836.2
102.5°	109.1	147.2	185.3	194.8	419.3	718.6	868.3	912.7	1001.7	1068.3	1050.1
105°	141.1	173.3	205.6	213.7	431.1	720.9	865.8	965.5	1164.9	1314.4	1304.7
107.5°	173.9	204.0	234.1	241.6	433.2	688.7	816.5	955.6	1233.8	1442.4	1444.8
110°	196.0	223.2	250.3	257.1	429.9	660.3	775.5	931.0	1242.0	1475.2	1485.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	217.8	243.6	269.5	276.0	430.1	635.5	738.2	897.4	1215.5	1454.3	1469.9
115°	250.5	274.4	298.3	304.3	434.0	607.1	693.6	846.9	1153.4	1383.4	1405.0
117.5°	283.0	304.7	326.4	331.8	442.1	589.2	662.8	801.1	1077.8	1285.3	1309.4
120°	301.8	322.2	342.6	347.8	448.6	583.2	650.5	776.9	1029.7	1219.3	1242.8
122.5°	320.4	341.0	361.6	366.7	458.1	580.1	641.0	754.8	982.5	1153.2	1176.3
125°	348.6	367.4	386.1	390.9	470.8	577.4	630.7	727.5	920.8	1065.9	1087.2
127.5°	371.5	390.5	409.5	414.2	483.5	575.9	622.2	705.2	871.2	995.8	1013.7
130°	383.8	404.3	424.7	429.8	492.8	576.9	618.9	692.9	840.7	951.5	968.1
132.5°	396.6	417.0	437.4	442.5	500.3	577.4	616.0	682.1	814.4	913.7	928.6
135°	415.5	434.0	452.7	457.3	508.6	576.9	611.1	666.5	777.3	860.4	873.2
137.5°	434.7	453.2	471.5	476.1	520.8	580.5	610.2	657.1	750.7	821.0	831.5
140°	450.7	467.7	484.6	488.9	528.4	581.0	607.4	647.8	728.8	789.5	799.3
142.5°	463.0	478.7	494.4	498.3	534.7	583.1	607.4	642.9	714.0	767.3	775.8
145°	481.9	495.6	509.2	512.6	542.9	583.2	603.3	632.4	690.5	734.1	740.5
147.5°	500.8	514.1	527.3	530.7	554.9	587.2	603.3	626.2	672.0	706.3	711.6
150°	513.0	525.0	537.1	540.1	561.2	589.3	603.3	622.7	661.2	690.2	694.4
152.5°	525.7	534.8	544.0	546.2	565.3	590.6	603.3	619.8	652.7	677.5	680.7
155°	544.7	551.4	558.2	559.9	574.3	593.7	603.3	616.4	642.7	662.3	664.5
157.5°	558.6	565.2	571.7	573.4	583.3	596.6	603.3	613.5	633.9	649.2	650.7
160°	568.0	573.2	578.2	579.5	587.5	598.0	603.3	612.1	629.6	642.7	643.6
162.5°	577.4	581.2	585.1	586.1	591.8	599.5	603.3	610.7	625.4	636.5	637.3
165°	587.7	591.1	594.6	595.4	598.1	601.6	603.3	608.7	619.2	627.1	628.0
167.5°	597.1	598.8	600.5	600.9	603.0	605.9	607.4	610.8	617.7	623.0	623.3
170°	603.3	604.9	606.6	607.0	607.1	607.3	607.4	610.8	617.7	623.0	623.0
172.5°	606.6	607.0	607.3	607.4	607.4	607.4	607.4	610.1	615.6	619.7	619.4
175°	611.1	611.1	611.1	611.1	609.8	608.2	607.4	609.2	612.6	615.2	615.2
177.5°	611.1	611.1	611.1	611.1	610.1	608.9	608.2	609.5	612.3	614.4	614.0
180°	611.1	611.1	611.1	611.1	611.1	611.1	611.1	611.1	611.1	611.1	611.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	518.8	518.8
2.5°	553.9	550.6
5°	712.4	715.7
7.5°	959.4	957.7
10°	1192.9	1207.9
12.5°	1363.0	1366.4
15°	1466.6	1473.2
17.5°	1506.6	1508.3
20°	1508.3	1504.9
22.5°	1489.8	1486.6
25°	1468.2	1466.6
27.5°	1448.1	1449.8
30°	1439.9	1444.9
32.5°	1439.9	1448.1
35°	1443.2	1451.5
37.5°	1441.5	1451.5
40°	1434.8	1446.5
42.5°	1416.5	1424.8
45°	1388.1	1398.1
47.5°	1351.4	1358.1
50°	1304.7	1311.4
52.5°	1246.3	1248.0
55°	1176.2	1182.9
57.5°	1101.2	1102.8
60°	1017.7	1022.8
62.5°	929.3	929.3
65°	835.8	839.2
67.5°	739.1	747.5
70°	640.7	642.4
72.5°	543.9	543.9
75°	443.8	445.5
77.5°	348.6	348.6
80°	258.6	260.3
82.5°	178.6	181.8
85°	111.8	111.8
87.5°	51.8	46.7
90°	15.6	15.6
92.5°	62.4	50.0
95°	217.6	180.0
97.5°	521.3	449.9
100°	751.1	666.0
102.5°	977.2	904.4
105°	1265.4	1226.3
107.5°	1454.3	1463.7
110°	1526.2	1567.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1532.6	1595.3
115°	1492.0	1579.0
117.5°	1405.8	1502.3
120°	1336.4	1430.1
122.5°	1268.8	1361.2
125°	1172.3	1257.4
127.5°	1085.6	1157.4
130°	1034.4	1100.8
132.5°	988.0	1047.4
135°	924.4	975.6
137.5°	873.5	915.4
140°	838.5	877.6
142.5°	809.5	843.2
145°	766.0	791.6
147.5°	732.7	753.8
150°	711.6	728.8
152.5°	693.7	706.7
155°	673.0	681.6
157.5°	656.8	662.8
160°	647.0	650.5
162.5°	640.6	643.9
165°	631.4	634.9
167.5°	624.7	626.2
170°	623.0	623.0
172.5°	618.1	616.8
175°	615.2	615.2
177.5°	612.6	611.1
180°	611.1	611.1



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	6.48	7.39	7.43	8.35	9.62	19.62	20.53	20.57	21.49	22.76
	3H	7.19	8.00	8.15	8.98	10.27	21.45	22.26	22.41	23.24	24.52
	4H	7.49	8.26	8.46	9.24	10.54	22.09	22.86	23.06	23.84	25.13
	6H	7.75	8.46	8.73	9.44	10.75	22.51	23.22	23.49	24.20	25.51
	8H	7.82	8.49	8.81	9.50	10.80	22.62	23.30	23.61	24.30	25.61
	12H	7.84	8.48	8.83	9.48	10.81	22.69	23.33	23.68	24.33	25.66
4H	2H	13.68	14.45	14.66	15.43	16.72	19.90	20.67	20.88	21.65	22.95
	3H	15.25	15.90	16.24	16.91	18.22	21.94	22.58	22.93	23.59	24.90
	4H	15.35	15.94	16.35	16.94	18.28	22.70	23.29	23.69	24.29	25.62
	6H	15.36	15.87	16.37	16.90	18.23	23.23	23.74	24.23	24.76	26.09
	8H	15.34	15.82	16.35	16.84	18.18	23.38	23.86	24.39	24.88	26.22
	12H	15.30	15.73	16.33	16.77	18.12	23.47	23.90	24.50	24.94	26.29
8H	4H	16.79	17.26	17.80	18.28	19.63	22.76	23.24	23.77	24.26	25.60
	6H	17.03	17.43	18.07	18.49	19.83	23.38	23.77	24.41	24.84	26.18
	8H	17.05	17.40	18.09	18.45	19.81	23.59	23.94	24.64	24.99	26.35
	12H	17.02	17.33	18.07	18.37	19.77	23.73	24.04	24.78	25.08	26.48
12H	4H	16.93	17.36	17.96	18.40	19.75	22.72	23.15	23.75	24.18	25.53
	6H	17.29	17.64	18.33	18.68	20.04	23.36	23.71	24.41	24.76	26.12
	8H	17.36	17.67	18.41	18.71	20.11	23.59	23.89	24.64	24.94	26.34