

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: P937736

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937736
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-92765-1D-UNV-STD-W-4-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

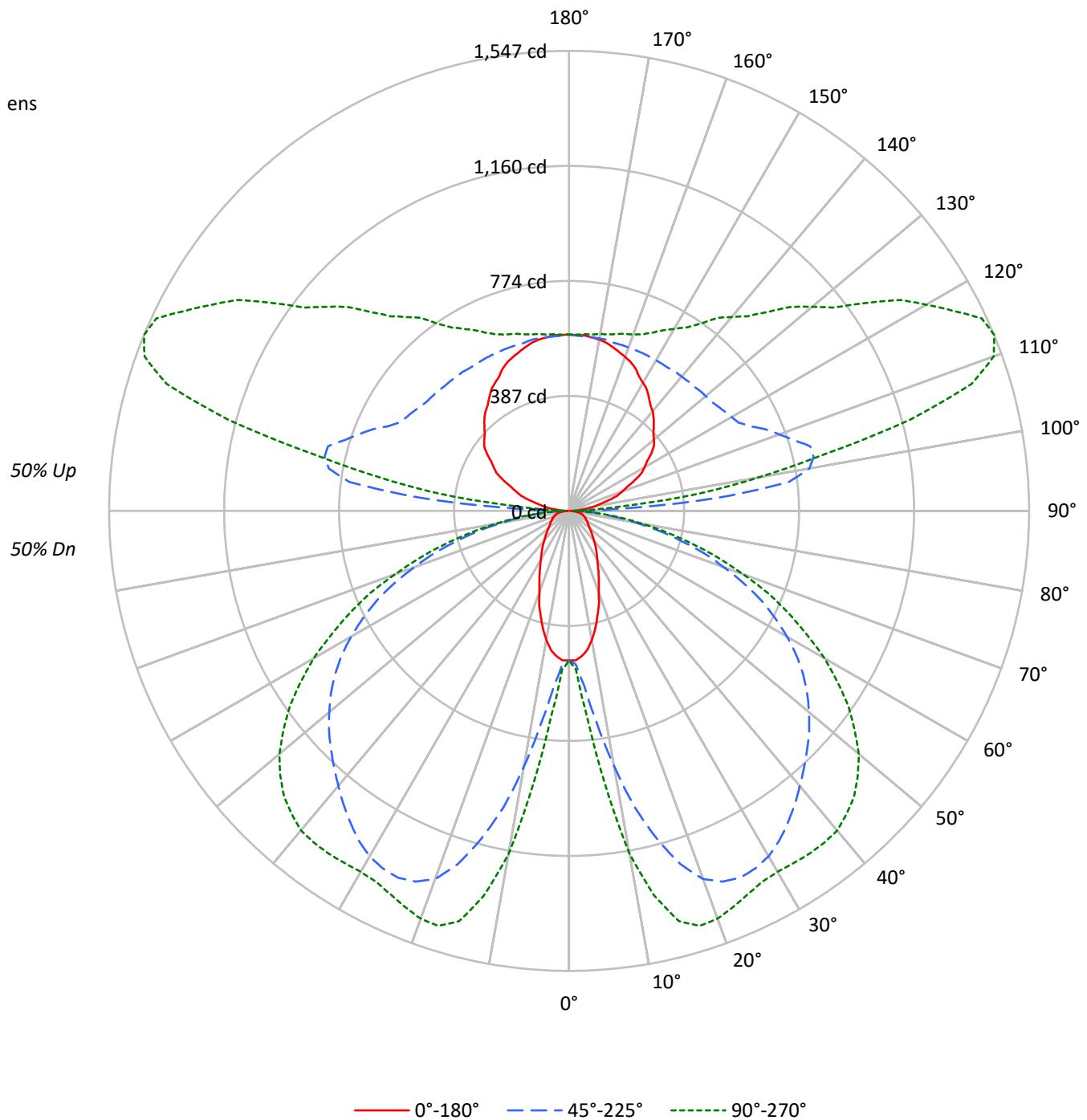
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7736.6 lumens
Efficiency: N/A
Efficacy: 112.4 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 (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

TEST NUMBER: P937736
CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-6500K

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°	4668	4668	4668
5°	4556	5393	6276
10°	4128	7854	10405
15°	3505	10255	12563
20°	2851	11876	12804
25°	2374	12418	12544
30°	1999	12486	12521
35°	1765	12269	12844
40°	1536	11990	13178
45°	1388	11782	13231
50°	1270	11593	13011
55°	1212	11321	12434
60°	1238	10809	11525
65°	1282	10037	10272
70°	1356	8735	8679
75°	1486	7105	6773
80°	1587	4909	4563
85°	1341	2592	2336

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13231 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.1	0.8
10°-20°	288.5	3.7
20°-30°	504.6	6.5
30°-40°	649.6	8.4
40°-50°	725.5	9.4
50°-60°	694.9	9.0
60°-70°	550.7	7.1
70°-80°	323.8	4.2
80°-90°	92.2	1.2
90°-100°	288.9	3.7
100°-110°	759.5	9.8
110°-120°	787.5	10.2
120°-130°	631.6	8.2
130°-140°	495.6	6.4
140°-150°	380.4	4.9
150°-160°	274.0	3.5
160°-170°	167.6	2.2
170°-180°	56.6	0.7
0°-30°	858.2	11.1
0°-40°	1507.7	19.5
0°-60°	2928.2	37.8
0°-90°	3894.9	50.3
90°-120°	1835.8	23.7
90°-150°	3343.4	43.2
90°-180°	3842.0	49.7
0°-180°	7736.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	490	526	592	670	694	45
15°	367	678	1142	1385	1429	102
25°	235	768	1361	1421	1422	108
35°	158	734	1281	1354	1408	99
45°	108	586	1133	1298	1356	84
55°	78	372	961	1116	1147	71
65°	62	197	714	802	814	61
75°	45	121	392	430	432	47
85°	16	37	97	107	108	17
90°	4	11	30	15	15	4
95°	38	150	498	256	175	42
105°	137	207	840	1275	1189	145
115°	243	295	673	1342	1531	240
125°	338	379	612	1034	1219	300
135°	403	444	593	834	946	312
145°	467	497	585	712	768	293
155°	528	543	585	642	661	243
165°	570	577	585	608	616	161
175°	593	593	589	597	597	56
180°	593	593	593	593	593	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	503.1	503.1	503.1	503.1	503.1	503.1	503.1	503.1	503.1	503.1	503.1
2.5°	503.1	503.1	506.4	508.0	511.3	512.9	516.2	519.4	529.1	530.7	533.9
5°	490.2	496.7	517.8	525.8	548.5	579.3	592.2	613.2	656.9	669.8	677.9
7.5°	470.8	485.4	537.2	550.1	606.7	687.6	721.6	767.0	836.5	870.4	898.0
10°	440.0	470.8	563.0	593.8	686.0	808.9	872.0	935.2	1040.3	1087.3	1105.1
12.5°	406.1	456.3	590.5	632.6	765.3	944.9	1020.9	1090.5	1210.3	1273.4	1283.0
15°	367.3	435.3	616.5	677.9	849.4	1058.1	1142.3	1228.0	1339.7	1384.9	1396.3
17.5°	333.3	419.1	640.7	705.5	914.1	1160.1	1245.8	1317.1	1407.6	1438.4	1446.4
20°	291.3	393.2	656.9	741.0	982.1	1234.5	1317.1	1372.0	1433.5	1452.9	1456.2
22.5°	260.5	365.6	666.6	754.0	1027.4	1279.8	1349.4	1393.1	1435.2	1441.7	1443.2
25°	234.6	335.0	665.0	768.5	1066.3	1307.3	1360.8	1393.1	1417.4	1420.6	1420.6
27.5°	210.4	300.9	658.5	771.7	1095.3	1313.8	1355.9	1378.5	1389.8	1396.3	1396.3
30°	189.3	268.6	642.4	765.3	1108.3	1307.3	1341.3	1352.6	1363.9	1373.7	1378.5
32.5°	173.2	237.8	618.1	752.3	1109.9	1291.1	1315.4	1321.8	1338.1	1360.8	1368.8
35°	158.5	207.1	590.5	734.5	1100.2	1265.2	1281.4	1287.9	1320.2	1354.3	1365.5
37.5°	144.0	184.4	555.0	703.9	1085.7	1234.5	1245.8	1257.2	1307.3	1347.8	1360.8
40°	129.5	165.0	512.9	669.8	1063.0	1197.2	1207.0	1224.8	1291.1	1338.1	1351.0
42.5°	118.1	148.9	467.6	634.2	1033.8	1155.3	1169.8	1195.7	1271.7	1321.8	1336.5
45°	108.4	132.7	419.1	585.7	996.6	1111.6	1132.6	1168.2	1249.1	1297.6	1310.6
47.5°	98.7	121.3	368.9	535.6	956.2	1067.9	1095.3	1135.9	1218.3	1265.2	1276.6
50°	90.6	110.1	318.7	482.1	912.5	1020.9	1053.3	1095.3	1179.5	1223.2	1237.8
52.5°	84.1	100.3	271.8	428.8	862.4	972.4	1009.6	1053.3	1132.6	1174.7	1184.3
55°	77.6	92.2	231.4	372.2	810.6	920.6	961.1	1003.1	1080.8	1116.4	1122.9
57.5°	74.4	85.8	197.4	318.7	755.6	862.4	907.7	946.5	1019.3	1046.8	1053.3
60°	69.6	80.9	171.5	273.5	695.7	807.4	846.2	885.1	946.5	969.2	974.0
62.5°	64.7	77.6	152.1	229.8	634.2	742.7	781.5	817.1	868.9	885.1	891.5
65°	61.5	74.4	137.5	197.4	571.1	674.7	713.5	744.3	786.4	802.5	805.8
67.5°	58.2	71.2	126.2	169.9	508.0	606.7	635.9	665.0	697.4	713.5	715.1
70°	53.4	68.0	116.5	150.5	443.3	529.1	553.3	584.0	610.0	618.1	623.0
72.5°	50.2	63.1	110.1	135.9	377.0	454.7	477.3	495.1	517.8	525.8	525.8
75°	45.3	56.6	103.6	121.3	309.0	372.2	391.6	409.3	427.1	430.4	425.5
77.5°	40.4	50.2	89.0	101.9	241.1	294.5	310.7	320.3	335.0	338.1	339.7
80°	33.9	43.7	69.6	79.3	174.7	216.8	228.1	236.2	249.2	249.2	252.4
82.5°	25.9	33.9	50.2	56.6	118.1	148.9	158.5	163.4	171.5	171.5	171.5
85°	16.2	21.0	32.3	37.2	71.2	90.6	97.1	98.7	105.2	106.8	106.8
87.5°	8.1	11.3	21.0	22.7	37.2	46.9	46.9	50.2	50.2	48.6	46.9
90°	4.0	7.2	10.3	11.1	17.5	26.0	30.2	26.9	20.2	15.1	15.1
92.5°	15.9	42.9	70.0	76.8	108.0	149.5	170.2	149.2	107.1	75.5	72.6
95°	38.2	87.7	137.2	149.5	265.5	420.2	497.5	444.0	336.9	256.5	247.5
97.5°	66.0	109.7	153.4	164.3	357.7	615.6	744.5	710.6	642.9	592.2	574.9
100°	87.5	127.1	166.7	176.6	391.3	677.5	820.5	823.0	827.9	831.6	810.9
102.5°	105.8	142.8	179.7	188.9	406.7	696.9	842.0	885.1	971.4	1036.0	1018.3
105°	136.8	168.1	199.4	207.2	418.0	699.1	839.6	936.3	1129.6	1274.7	1265.2
107.5°	168.7	197.8	227.0	234.3	420.2	667.9	791.8	926.7	1196.5	1398.8	1401.1
110°	190.1	216.5	242.8	249.4	416.9	640.4	752.0	902.8	1204.4	1430.6	1440.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	211.2	236.3	261.3	267.6	417.1	616.3	715.9	870.2	1178.8	1410.3	1425.5
115°	243.0	266.1	289.2	295.1	420.9	588.7	672.6	821.3	1118.6	1341.5	1362.6
117.5°	274.4	295.5	316.5	321.8	428.8	571.4	642.8	776.9	1045.2	1246.5	1269.8
120°	292.7	312.5	332.3	337.2	435.1	565.6	630.8	753.4	998.6	1182.4	1205.2
122.5°	310.7	330.7	350.6	355.6	444.2	562.5	621.6	732.0	952.8	1118.4	1140.7
125°	338.1	356.3	374.4	379.0	456.6	559.9	611.7	705.5	893.0	1033.6	1054.3
127.5°	360.3	378.7	397.1	401.7	468.9	558.5	603.4	683.9	844.9	965.7	983.1
130°	372.2	392.0	411.8	416.8	477.9	559.5	600.2	671.9	815.3	922.7	938.8
132.5°	384.6	404.4	424.2	429.1	485.2	559.9	597.3	661.5	789.8	886.1	900.5
135°	402.9	420.9	439.0	443.5	493.2	559.5	592.6	646.4	753.8	834.4	846.8
137.5°	421.6	439.5	457.3	461.7	505.1	562.9	591.8	637.2	728.0	796.2	806.4
140°	437.1	453.5	470.0	474.1	512.4	563.5	589.0	628.2	706.7	765.6	775.1
142.5°	449.0	464.2	479.4	483.3	518.5	565.5	589.0	623.4	692.4	744.1	752.3
145°	467.3	480.6	493.8	497.1	526.5	565.6	585.1	613.3	669.6	711.9	718.1
147.5°	485.7	498.6	511.4	514.6	538.1	569.4	585.1	607.3	651.6	684.9	690.1
150°	497.5	509.2	520.8	523.8	544.3	571.5	585.1	603.8	641.2	669.3	673.4
152.5°	509.8	518.6	527.5	529.7	548.2	572.8	585.1	601.1	633.0	657.0	660.2
155°	528.2	534.7	541.3	542.9	557.0	575.7	585.1	597.8	623.2	642.3	644.4
157.5°	541.7	548.1	554.4	556.0	565.7	578.6	585.1	594.9	614.7	629.6	631.0
160°	550.9	555.8	560.7	562.0	569.7	579.9	585.1	593.6	610.5	623.2	624.1
162.5°	559.9	563.7	567.4	568.4	573.9	581.4	585.1	592.3	606.5	617.2	618.0
165°	569.9	573.2	576.6	577.4	580.0	583.4	585.1	590.3	600.5	608.1	609.0
167.5°	579.1	580.7	582.3	582.7	584.8	587.6	589.0	592.4	599.1	604.1	604.5
170°	585.1	586.6	588.2	588.6	588.7	588.9	589.0	592.4	599.1	604.1	604.1
172.5°	588.2	588.6	588.9	589.0	589.0	589.0	589.0	591.7	597.0	601.0	600.7
175°	592.6	592.6	592.6	592.6	591.4	589.8	589.0	590.7	594.1	596.6	596.6
177.5°	592.6	592.6	592.6	592.6	591.7	590.4	589.8	591.1	593.8	595.8	595.4
180°	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	503.1	503.1
2.5°	537.2	533.9
5°	690.8	694.1
7.5°	930.4	928.8
10°	1156.8	1171.4
12.5°	1321.8	1325.1
15°	1422.2	1428.6
17.5°	1461.1	1462.7
20°	1462.7	1459.4
22.5°	1444.8	1441.7
25°	1423.8	1422.2
27.5°	1404.4	1406.0
30°	1396.3	1401.2
32.5°	1396.3	1404.4
35°	1399.6	1407.6
37.5°	1398.0	1407.6
40°	1391.5	1402.7
42.5°	1373.7	1381.7
45°	1346.1	1355.9
47.5°	1310.6	1317.1
50°	1265.2	1271.7
52.5°	1208.6	1210.3
55°	1140.6	1147.1
57.5°	1067.9	1069.5
60°	987.0	991.9
62.5°	901.2	901.2
65°	810.6	813.8
67.5°	716.8	724.9
70°	621.3	623.0
72.5°	527.4	527.4
75°	430.4	432.0
77.5°	338.1	338.1
80°	250.8	252.4
82.5°	173.2	176.3
85°	108.4	108.4
87.5°	50.2	45.3
90°	15.1	15.1
92.5°	60.5	48.5
95°	211.0	174.6
97.5°	505.5	436.3
100°	728.4	645.9
102.5°	947.7	877.0
105°	1227.2	1189.2
107.5°	1410.3	1419.5
110°	1480.1	1519.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1486.3	1547.1
115°	1446.9	1531.2
117.5°	1363.3	1456.9
120°	1296.0	1386.9
122.5°	1230.4	1320.0
125°	1136.8	1219.4
127.5°	1052.8	1122.4
130°	1003.1	1067.5
132.5°	958.1	1015.8
135°	896.4	946.2
137.5°	847.1	887.7
140°	813.1	851.1
142.5°	785.0	817.7
145°	742.9	767.6
147.5°	710.5	731.0
150°	690.1	706.7
152.5°	672.7	685.3
155°	652.7	661.0
157.5°	636.9	642.8
160°	627.5	630.8
162.5°	621.2	624.4
165°	612.3	615.7
167.5°	605.8	607.3
170°	604.1	604.1
172.5°	599.4	598.2
175°	596.6	596.6
177.5°	594.1	592.6
180°	592.6	592.6



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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	6.38	7.28	7.32	8.25	9.51	19.52	20.42	20.46	21.39	22.65
	3H	7.09	7.90	8.04	8.88	10.16	21.34	22.15	22.30	23.13	24.42
	4H	7.39	8.16	8.36	9.14	10.43	21.98	22.75	22.95	23.73	25.02
	6H	7.64	8.35	8.62	9.34	10.64	22.40	23.11	23.38	24.10	25.40
	8H	7.71	8.39	8.70	9.39	10.69	22.52	23.19	23.50	24.20	25.50
	12H	7.73	8.37	8.72	9.37	10.70	22.58	23.22	23.57	24.22	25.55
4H	2H	13.57	14.34	14.55	15.32	16.62	19.80	20.57	20.77	21.55	22.84
	3H	15.15	15.79	16.13	16.80	18.11	21.83	22.48	22.82	23.49	24.79
	4H	15.24	15.83	16.24	16.84	18.17	22.59	23.18	23.59	24.18	25.51
	6H	15.26	15.77	16.26	16.79	18.12	23.12	23.63	24.13	24.66	25.98
	8H	15.24	15.71	16.24	16.73	18.08	23.28	23.75	24.28	24.77	26.12
	12H	15.19	15.62	16.22	16.66	18.01	23.36	23.79	24.39	24.83	26.18
8H	4H	16.68	17.16	17.69	18.18	19.52	22.65	23.13	23.66	24.15	25.50
	6H	16.93	17.32	17.96	18.38	19.72	23.27	23.67	24.31	24.73	26.07
	8H	16.94	17.29	17.99	18.34	19.70	23.49	23.83	24.53	24.88	26.24
	12H	16.92	17.22	17.96	18.26	19.67	23.62	23.93	24.67	24.97	26.38
12H	4H	16.82	17.25	17.85	18.29	19.64	22.61	23.04	23.64	24.08	25.43
	6H	17.18	17.53	18.22	18.58	19.94	23.26	23.61	24.30	24.65	26.01
	8H	17.25	17.56	18.30	18.60	20.01	23.48	23.79	24.53	24.83	26.23