

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: P937786

Luminaire Tested: SQ4-FB-100U-125D-B2750-1D-UNV-W2A-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937786
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-W2A-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

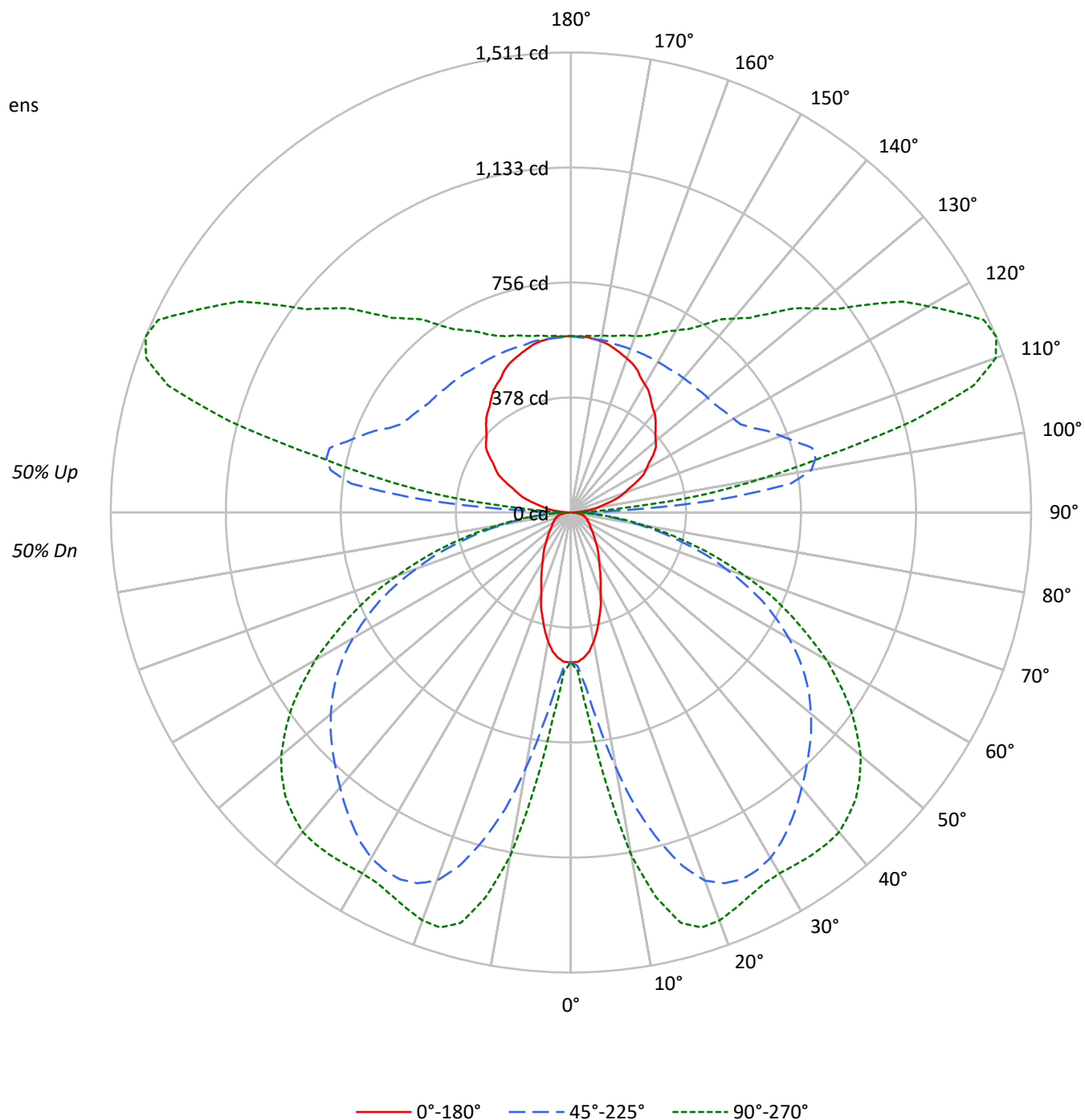
Lumens per Lamp: N/A
Luminaire Lumens: 7557.0 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P937786

CATALOG NUMBER: SQ4-FB-100U-125D-B2750-1D-UNV-W2A-W-4-5000K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4561	4561	4561
5°	4451	5267	6130
10°	4032	7672	10163
15°	3423	10017	12272
20°	2784	11600	12508
25°	2320	12130	12253
30°	1953	12196	12230
35°	1724	11985	12546
40°	1501	11712	12873
45°	1356	11508	12923
50°	1241	11324	12709
55°	1184	11058	12146
60°	1210	10558	11256
65°	1252	9805	10034
70°	1323	8533	8477
75°	1453	6940	6616
80°	1554	4797	4458
85°	1308	2530	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12923 cd/sqm

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CATALOG NUMBER: SQ4-FB-100U-125D-B2750-1D-UNV-W2A-W-4-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.6	0.8
10°-20°	281.8	3.7
20°-30°	492.9	6.5
30°-40°	634.5	8.4
40°-50°	708.7	9.4
50°-60°	678.8	9.0
60°-70°	537.9	7.1
70°-80°	316.3	4.2
80°-90°	90.1	1.2
90°-100°	282.1	3.7
100°-110°	741.8	9.8
110°-120°	769.2	10.2
120°-130°	617.0	8.2
130°-140°	484.1	6.4
140°-150°	371.6	4.9
150°-160°	267.6	3.5
160°-170°	163.7	2.2
170°-180°	55.3	0.7
0°-30°	838.2	11.1
0°-40°	1472.7	19.5
0°-60°	2860.2	37.8
0°-90°	3804.6	50.3
90°-120°	1793.2	23.7
90°-150°	3265.8	43.2
90°-180°	3752.0	49.6
0°-180°	7557.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	479	514	578	654	678	44
15°	359	662	1116	1353	1396	100
25°	229	751	1329	1388	1389	106
35°	155	718	1252	1323	1375	97
45°	106	572	1106	1268	1324	82
55°	76	364	939	1090	1120	69
65°	60	193	697	784	795	60
75°	44	118	382	420	422	46
85°	16	36	95	104	106	17
90°	4	11	30	15	15	4
95°	37	146	486	251	170	41
105°	134	202	820	1245	1162	142
115°	237	288	657	1310	1496	234
125°	330	370	598	1010	1191	293
135°	394	433	579	815	924	304
145°	456	486	572	695	750	286
155°	516	530	572	627	646	237
165°	557	564	572	594	601	157
175°	579	579	575	583	583	55
180°	579	579	579	579	579	

TEST NUMBER: P937786

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5
2.5°	491.5	491.5	494.6	496.2	499.4	501.0	504.2	507.3	516.8	518.4	521.5
5°	478.9	485.2	505.8	513.6	535.7	565.8	578.4	599.0	641.7	654.3	662.2
7.5°	459.9	474.1	524.7	537.3	592.6	671.6	704.9	749.2	817.1	850.2	877.1
10°	429.8	459.9	549.9	580.0	670.1	790.2	851.8	913.5	1016.2	1062.1	1079.4
12.5°	396.7	445.7	576.8	617.9	747.6	923.0	997.2	1065.2	1182.2	1243.8	1253.2
15°	358.7	425.2	602.1	662.2	829.7	1033.6	1115.8	1199.5	1308.6	1352.8	1363.9
17.5°	325.6	409.4	625.9	689.1	892.9	1133.1	1216.9	1286.5	1374.9	1405.0	1412.9
20°	284.5	384.1	641.7	723.8	959.3	1205.9	1286.5	1340.2	1400.3	1419.2	1422.4
22.5°	254.4	357.2	651.1	736.5	1003.6	1250.1	1318.1	1360.7	1401.8	1408.2	1409.7
25°	229.2	327.2	649.6	750.7	1041.5	1277.0	1329.2	1360.7	1384.5	1387.6	1387.6
27.5°	205.5	293.9	643.2	753.8	1069.9	1283.3	1324.4	1346.5	1357.6	1363.9	1363.9
30°	184.9	262.4	627.5	747.6	1082.6	1277.0	1310.1	1321.2	1332.3	1341.8	1346.5
32.5°	169.1	232.3	603.7	734.9	1084.2	1261.2	1284.9	1291.2	1307.0	1329.2	1337.0
35°	154.9	202.3	576.8	717.5	1074.7	1235.9	1251.7	1258.0	1289.6	1322.8	1333.8
37.5°	140.7	180.2	542.1	687.5	1060.5	1205.9	1216.9	1228.0	1277.0	1316.5	1329.2
40°	126.5	161.2	501.0	654.3	1038.3	1169.5	1179.0	1196.4	1261.2	1307.0	1319.6
42.5°	115.3	145.4	456.7	619.5	1009.8	1128.5	1142.7	1168.0	1242.2	1291.2	1305.5
45°	105.9	129.6	409.4	572.1	973.5	1085.8	1106.3	1141.1	1220.1	1267.5	1280.1
47.5°	96.4	118.5	360.3	523.1	934.0	1043.1	1069.9	1109.5	1190.0	1235.9	1247.0
50°	88.5	107.5	311.3	470.9	891.3	997.2	1028.9	1069.9	1152.1	1194.8	1209.1
52.5°	82.2	98.0	265.5	418.8	842.4	949.8	986.2	1028.9	1106.3	1147.4	1156.9
55°	75.8	90.0	226.0	363.5	791.8	899.3	938.8	979.9	1055.7	1090.4	1096.8
57.5°	72.7	83.8	192.8	311.3	738.0	842.4	886.6	924.6	995.6	1022.5	1028.9
60°	68.0	79.0	167.6	267.1	679.6	788.7	826.6	864.5	924.6	946.7	951.4
62.5°	63.2	75.8	148.6	224.4	619.5	725.4	763.4	798.1	848.7	864.5	870.8
65°	60.1	72.7	134.3	192.8	557.9	659.0	697.0	727.0	768.1	783.9	787.1
67.5°	56.9	69.6	123.3	166.0	496.2	592.6	621.1	649.6	681.2	697.0	698.5
70°	52.1	66.4	113.8	147.0	433.0	516.8	540.5	570.5	595.8	603.7	608.5
72.5°	49.0	61.6	107.5	132.7	368.3	444.1	466.3	483.6	505.8	513.6	513.6
75°	44.3	55.3	101.2	118.5	301.9	363.5	382.5	399.8	417.2	420.4	415.6
77.5°	39.5	49.0	87.0	99.6	235.5	287.7	303.5	312.9	327.2	330.3	331.9
80°	33.2	42.7	68.0	77.4	170.6	211.7	222.9	230.7	243.4	243.4	246.6
82.5°	25.3	33.2	49.0	55.3	115.3	145.4	154.9	159.6	167.6	167.6	167.6
85°	15.8	20.5	31.6	36.3	69.6	88.5	94.8	96.4	102.7	104.3	104.3
87.5°	7.9	11.0	20.5	22.1	36.3	45.9	45.9	49.0	49.0	47.4	45.9
90°	3.9	7.0	10.1	10.8	17.1	25.4	29.5	26.2	19.7	14.8	14.8
92.5°	15.5	41.9	68.4	75.0	105.4	146.0	166.3	145.7	104.6	73.8	70.9
95°	37.3	85.6	134.0	146.1	259.4	410.4	486.0	433.7	329.0	250.6	241.7
97.5°	64.4	107.1	149.8	160.5	349.4	601.3	727.2	694.1	628.0	578.4	561.5
100°	85.5	124.1	162.8	172.5	382.2	661.7	801.5	803.9	808.7	812.3	792.1
102.5°	103.3	139.4	175.5	184.6	397.2	680.7	822.5	864.6	948.9	1012.0	994.7
105°	133.7	164.2	194.7	202.4	408.3	682.8	820.1	914.6	1103.4	1245.1	1235.9
107.5°	164.8	193.2	221.7	228.8	410.4	652.4	773.4	905.2	1168.7	1366.3	1368.6
110°	185.7	211.5	237.1	243.6	407.2	625.5	734.6	881.9	1176.5	1397.4	1407.1

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	206.3	230.8	255.3	261.4	407.4	602.0	699.3	850.0	1151.4	1377.6	1392.4
115°	237.3	259.9	282.5	288.2	411.1	575.1	657.0	802.2	1092.6	1310.4	1331.0
117.5°	268.1	288.6	309.2	314.3	418.8	558.2	627.8	758.9	1021.0	1217.6	1240.4
120°	285.9	305.2	324.6	329.4	425.0	552.5	616.2	735.9	975.4	1155.0	1177.2
122.5°	303.5	323.0	342.5	347.4	433.9	549.5	607.2	715.0	930.6	1092.4	1114.3
125°	330.3	348.0	365.8	370.2	446.0	547.0	597.5	689.1	872.3	1009.7	1029.8
127.5°	351.9	369.9	387.9	392.4	458.0	545.5	589.4	668.0	825.3	943.2	960.2
130°	363.6	382.9	402.3	407.1	466.8	546.5	586.3	656.3	796.3	901.3	917.0
132.5°	375.7	395.0	414.3	419.2	473.9	547.0	583.5	646.1	771.5	865.5	879.6
135°	393.6	411.1	428.8	433.2	481.8	546.5	578.9	631.4	736.3	815.0	827.2
137.5°	411.8	429.3	446.6	451.0	493.3	549.8	578.1	622.4	711.1	777.7	787.6
140°	426.9	443.0	459.1	463.1	500.5	550.4	575.3	613.6	690.3	747.9	757.1
142.5°	438.6	453.5	468.3	472.0	506.5	552.4	575.3	609.0	676.3	726.8	734.9
145°	456.4	469.4	482.3	485.6	514.3	552.5	571.5	599.1	654.1	695.4	701.4
147.5°	474.4	487.0	499.5	502.7	525.7	556.2	571.5	593.2	636.5	669.0	674.1
150°	486.0	497.4	508.7	511.6	531.6	558.3	571.5	589.8	626.3	653.8	657.8
152.5°	498.0	506.6	515.3	517.4	535.5	559.5	571.5	587.1	618.3	641.8	644.8
155°	515.9	522.3	528.7	530.3	544.1	562.4	571.5	583.9	608.8	627.4	629.4
157.5°	529.1	535.4	541.5	543.1	552.6	565.2	571.5	581.1	600.5	614.9	616.3
160°	538.1	542.9	547.7	548.9	556.5	566.5	571.5	579.8	596.4	608.8	609.6
162.5°	547.0	550.6	554.2	555.2	560.6	567.9	571.5	578.5	592.4	602.9	603.6
165°	556.7	559.9	563.2	564.0	566.6	569.8	571.5	576.6	586.6	594.0	594.9
167.5°	565.6	567.2	568.8	569.2	571.2	573.9	575.3	578.6	585.2	590.1	590.5
170°	571.5	573.0	574.6	575.0	575.1	575.3	575.3	578.6	585.2	590.1	590.1
172.5°	574.6	575.0	575.3	575.3	575.3	575.3	575.3	578.0	583.1	587.0	586.7
175°	578.9	578.9	578.9	578.9	577.7	576.1	575.3	577.0	580.3	582.7	582.7
177.5°	578.9	578.9	578.9	578.9	578.0	576.7	576.1	577.4	580.0	582.0	581.6
180°	578.9	578.9	578.9	578.9	578.9	578.9	578.9	578.9	578.9	578.9	578.9

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CATALOG NUMBER: SQ4-FB-100U-125D-B2750-1D-UNV-W2A-W-4-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	491.5	491.5
2.5°	524.7	521.5
5°	674.8	678.0
7.5°	908.8	907.2
10°	1130.0	1144.2
12.5°	1291.2	1294.3
15°	1389.2	1395.5
17.5°	1427.2	1428.7
20°	1428.7	1425.6
22.5°	1411.3	1408.2
25°	1390.7	1389.2
27.5°	1371.8	1373.4
30°	1363.9	1368.7
32.5°	1363.9	1371.8
35°	1367.1	1374.9
37.5°	1365.5	1374.9
40°	1359.2	1370.2
42.5°	1341.8	1349.6
45°	1314.9	1324.4
47.5°	1280.1	1286.5
50°	1235.9	1242.2
52.5°	1180.6	1182.2
55°	1114.2	1120.5
57.5°	1043.1	1044.7
60°	964.1	968.8
62.5°	880.3	880.3
65°	791.8	794.9
67.5°	700.1	708.1
70°	606.9	608.5
72.5°	515.2	515.2
75°	420.4	422.0
77.5°	330.3	330.3
80°	245.0	246.6
82.5°	169.1	172.2
85°	105.9	105.9
87.5°	49.0	44.3
90°	14.8	14.8
92.5°	59.1	47.4
95°	206.1	170.5
97.5°	493.8	426.2
100°	711.5	630.9
102.5°	925.7	856.7
105°	1198.7	1161.6
107.5°	1377.6	1386.5
110°	1445.7	1484.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1451.8	1511.2
115°	1413.3	1495.7
117.5°	1331.7	1423.0
120°	1265.9	1354.7
122.5°	1201.9	1289.4
125°	1110.4	1191.1
127.5°	1028.3	1096.3
130°	979.9	1042.7
132.5°	935.9	992.2
135°	875.6	924.2
137.5°	827.4	867.1
140°	794.3	831.4
142.5°	766.8	798.8
145°	725.6	749.8
147.5°	694.1	714.0
150°	674.1	690.3
152.5°	657.1	669.4
155°	637.5	645.7
157.5°	622.1	627.8
160°	612.9	616.2
162.5°	606.8	609.9
165°	598.1	601.4
167.5°	591.8	593.2
170°	590.1	590.1
172.5°	585.5	584.3
175°	582.7	582.7
177.5°	580.3	578.9
180°	578.9	578.9

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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	6.30	7.20	7.24	8.17	9.43	19.43	20.34	20.38	21.31	22.57
	3H	7.01	7.82	7.96	8.79	10.08	21.26	22.07	22.22	23.05	24.34
	4H	7.31	8.08	8.28	9.06	10.35	21.90	22.67	22.87	23.65	24.94
	6H	7.56	8.27	8.54	9.26	10.56	22.32	23.03	23.30	24.01	25.32
	8H	7.63	8.31	8.62	9.31	10.61	22.43	23.11	23.42	24.11	25.42
	12H	7.65	8.29	8.64	9.29	10.62	22.50	23.14	23.49	24.14	25.47
4H	2H	13.49	14.26	14.47	15.24	16.54	19.72	20.48	20.69	21.47	22.76
	3H	15.07	15.71	16.05	16.72	18.03	21.75	22.39	22.74	23.40	24.71
	4H	15.16	15.75	16.16	16.76	18.09	22.51	23.10	23.50	24.10	25.43
	6H	15.18	15.69	16.18	16.71	18.04	23.04	23.55	24.05	24.57	25.90
	8H	15.15	15.63	16.16	16.65	18.00	23.19	23.67	24.20	24.69	26.03
	12H	15.11	15.54	16.14	16.58	17.93	23.28	23.71	24.31	24.75	26.10
8H	4H	16.60	17.08	17.61	18.10	19.44	22.57	23.05	23.58	24.07	25.41
	6H	16.84	17.24	17.88	18.30	19.64	23.19	23.59	24.23	24.65	25.99
	8H	16.86	17.21	17.91	18.26	19.62	23.40	23.75	24.45	24.80	26.16
	12H	16.83	17.14	17.88	18.18	19.59	23.54	23.85	24.59	24.89	26.29
12H	4H	16.74	17.17	17.77	18.21	19.56	22.53	22.96	23.56	23.99	25.34
	6H	17.10	17.45	18.14	18.50	19.86	23.18	23.52	24.22	24.57	25.93
	8H	17.17	17.48	18.22	18.52	19.92	23.40	23.71	24.45	24.75	26.15