

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: P938018

Luminaire Tested: SQ4-FB-125U-100D-840-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938018
REPORT IS A COMBINATION OF REPORTS P933599 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

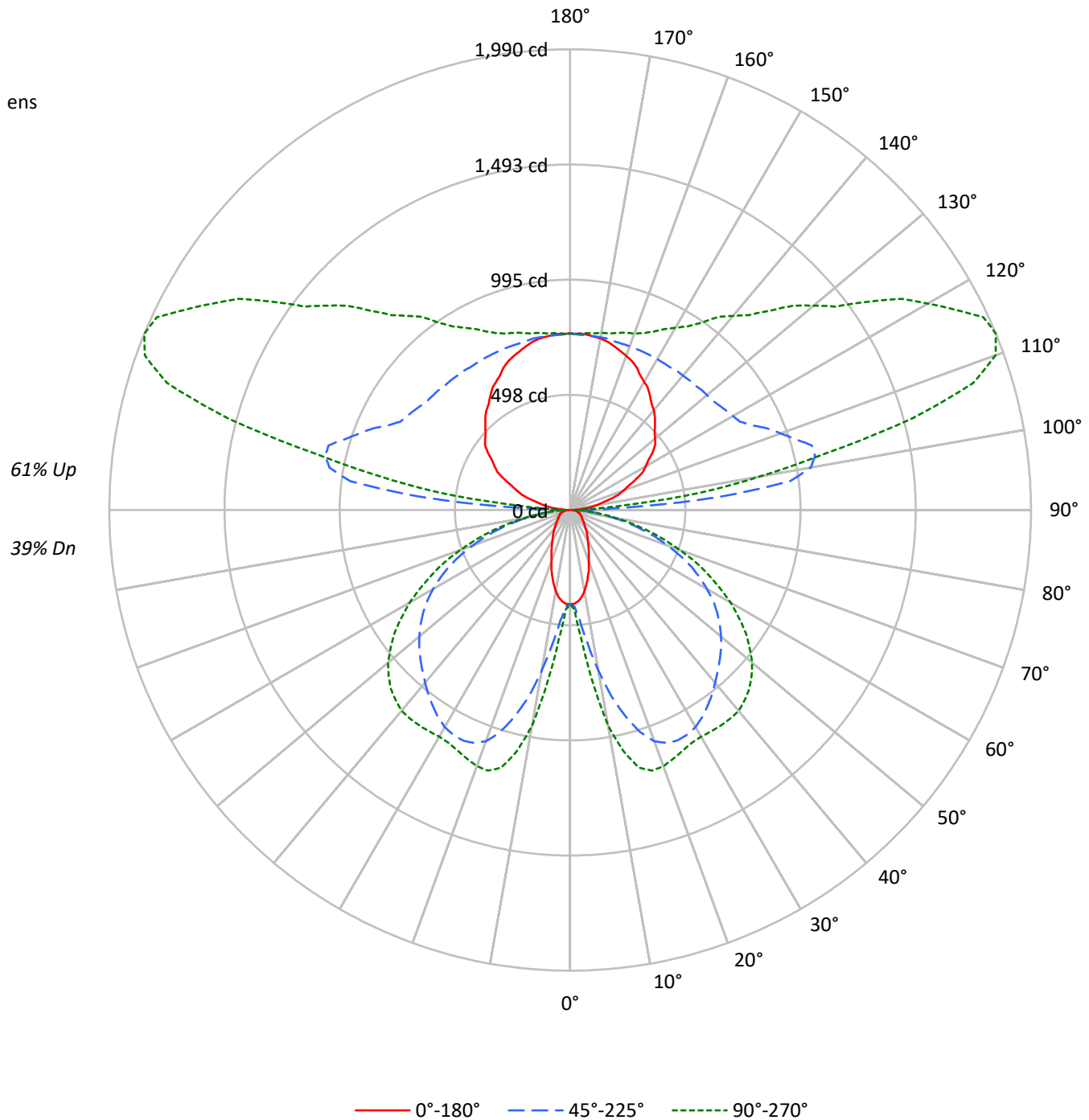
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8084.8 lumens
Efficiency: N/A
Efficacy: 125.5 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: Semi-Indirect

Input Watts (W): 64.4
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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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39				39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32				32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26				26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21				21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18				18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15				15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13				13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11				11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10				10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9				9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8				8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3767	3767	3767
5°	3677	4351	5064
10°	3331	6338	8395
15°	2827	8275	10137
20°	2299	9582	10331
25°	1916	10019	10122
30°	1613	10075	10103
35°	1424	9899	10364
40°	1239	9674	10634
45°	1119	9506	10675
50°	1025	9354	10498
55°	978	9134	10033
60°	998	8721	9299
65°	1034	8099	8288
70°	1094	7049	7002
75°	1200	5734	5465
80°	1282	3962	3681
85°	1076	2090	1883

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10675 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	0.6
10°-20°	232.8	2.9
20°-30°	407.1	5.0
30°-40°	524.1	6.5
40°-50°	585.4	7.2
50°-60°	560.7	6.9
60°-70°	444.4	5.5
70°-80°	261.3	3.2
80°-90°	75.5	0.9
90°-100°	371.5	4.6
100°-110°	976.8	12.1
110°-120°	1012.8	12.5
120°-130°	812.4	10.0
130°-140°	637.5	7.9
140°-150°	489.3	6.1
150°-160°	352.4	4.4
160°-170°	215.6	2.7
170°-180°	72.8	0.9
0°-30°	692.4	8.6
0°-40°	1216.5	15.0
0°-60°	2362.6	29.2
0°-90°	3143.8	38.9
90°-120°	2361.2	29.2
90°-150°	4300.3	53.2
90°-180°	4941.0	61.1
0°-180°	8084.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	396	424	478	540	560	37
15°	296	547	922	1118	1153	82
25°	189	620	1098	1146	1148	87
35°	128	593	1034	1093	1136	80
45°	87	473	914	1047	1094	68
55°	63	300	776	901	926	57
65°	50	159	576	648	657	49
75°	37	98	316	347	349	38
85°	13	30	78	86	87	14
90°	5	14	39	20	20	5
95°	49	192	640	330	225	55
105°	176	267	1080	1640	1530	187
115°	312	380	865	1725	1970	309
125°	435	488	787	1330	1568	386
135°	518	570	762	1073	1217	401
145°	601	639	752	916	987	377
155°	679	698	752	826	850	312
165°	733	743	752	782	792	207
175°	762	762	758	767	767	72
180°	762	762	762	762	762	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0
2.5°	406.0	406.0	408.6	409.9	412.5	413.9	416.4	419.0	426.9	428.2	430.8
5°	395.6	400.8	417.7	424.2	442.5	467.3	477.8	494.8	530.1	540.4	547.0
7.5°	379.9	391.6	433.4	443.9	489.6	554.9	582.2	618.8	674.9	702.4	724.5
10°	355.1	379.9	454.3	479.1	553.5	652.8	703.7	754.5	839.4	877.2	891.7
12.5°	327.7	368.1	476.5	510.4	617.5	762.4	823.8	879.9	976.5	1027.4	1035.2
15°	296.3	351.1	497.4	547.0	685.4	853.8	921.7	990.9	1081.0	1117.5	1126.6
17.5°	268.9	338.1	516.9	569.2	737.6	936.0	1005.2	1062.7	1135.8	1160.6	1167.1
20°	234.9	317.2	530.1	597.9	792.5	996.1	1062.7	1107.1	1156.7	1172.4	1174.9
22.5°	210.1	295.0	537.9	608.3	828.9	1032.7	1088.8	1124.0	1157.9	1163.2	1164.5
25°	189.3	270.2	536.6	620.1	860.4	1054.8	1097.9	1124.0	1143.6	1146.2	1146.2
27.5°	169.7	242.9	531.3	622.7	883.8	1060.0	1094.0	1112.3	1121.4	1126.6	1126.6
30°	152.7	216.7	518.3	617.5	894.2	1054.8	1082.3	1091.3	1100.5	1108.3	1112.3
32.5°	139.7	191.9	498.7	607.0	895.5	1041.7	1061.3	1066.5	1079.6	1097.9	1104.5
35°	127.9	167.1	476.5	592.7	887.7	1020.9	1033.9	1039.2	1065.3	1092.7	1101.8
37.5°	116.2	148.8	447.8	567.9	876.0	996.1	1005.2	1014.4	1054.8	1087.5	1097.9
40°	104.4	133.2	413.9	540.4	857.7	966.1	973.9	988.3	1041.7	1079.6	1090.1
42.5°	95.3	120.1	377.3	511.8	834.2	932.1	943.8	964.8	1026.1	1066.5	1078.3
45°	87.4	107.0	338.1	472.6	804.1	896.9	913.8	942.6	1007.9	1047.0	1057.5
47.5°	79.6	97.9	297.7	432.2	771.5	861.6	883.8	916.5	983.1	1020.9	1030.0
50°	73.1	88.8	257.2	389.1	736.3	823.8	849.9	883.8	951.7	986.9	998.7
52.5°	67.9	80.9	219.3	346.0	695.8	784.6	814.6	849.9	913.8	947.8	955.6
55°	62.6	74.4	186.7	300.3	654.1	742.8	775.5	809.4	872.1	900.8	906.0
57.5°	60.1	69.2	159.3	257.2	609.7	695.8	732.4	763.7	822.4	844.6	849.9
60°	56.1	65.3	138.4	220.6	561.4	651.4	682.8	714.1	763.7	782.0	785.9
62.5°	52.3	62.6	122.7	185.3	511.8	599.2	630.5	659.3	701.1	714.1	719.4
65°	49.6	60.1	111.0	159.3	460.8	544.4	575.7	600.5	634.5	647.5	650.1
67.5°	47.0	57.4	101.9	137.0	409.9	489.6	513.1	536.6	562.7	575.7	577.0
70°	43.1	54.8	94.0	121.4	357.7	426.9	446.5	471.3	492.1	498.7	502.6
72.5°	40.5	50.9	88.8	109.7	304.2	366.8	385.1	399.4	417.7	424.2	424.2
75°	36.6	45.6	83.6	97.9	249.4	300.3	316.0	330.3	344.6	347.3	343.3
77.5°	32.6	40.5	71.8	82.2	194.5	237.6	250.7	258.5	270.2	272.9	274.2
80°	27.4	35.3	56.1	63.9	141.0	175.0	184.1	190.6	201.1	201.1	203.6
82.5°	20.8	27.4	40.5	45.6	95.3	120.1	127.9	131.9	138.4	138.4	138.4
85°	13.0	17.0	26.1	30.0	57.4	73.1	78.3	79.6	84.9	86.2	86.2
87.5°	6.5	9.1	17.0	18.3	30.0	37.8	37.8	40.5	40.5	39.1	37.8
90°	5.1	9.2	13.3	14.3	22.5	33.4	38.8	34.5	25.9	19.5	19.5
92.5°	20.5	55.2	90.0	98.7	138.8	192.3	218.9	191.9	137.8	97.2	93.4
95°	49.1	112.7	176.5	192.4	341.6	540.4	639.9	571.1	433.3	330.0	318.2
97.5°	84.9	141.0	197.2	211.2	460.0	791.7	957.6	914.0	827.0	761.6	739.4
100°	112.5	163.5	214.4	227.1	503.2	871.2	1055.3	1058.4	1064.9	1069.6	1043.0
102.5°	136.0	183.6	231.1	242.9	522.9	896.3	1082.9	1138.5	1249.4	1332.6	1309.9
105°	176.0	216.3	256.5	266.6	537.7	899.2	1079.9	1204.3	1453.0	1639.5	1627.2
107.5°	216.9	254.4	292.0	301.3	540.4	859.2	1018.5	1192.0	1538.9	1799.0	1802.0
110°	244.5	278.4	312.2	320.7	536.3	823.7	967.4	1161.3	1549.2	1840.1	1852.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	271.6	303.9	336.1	344.2	536.4	792.7	920.8	1119.3	1516.3	1814.0	1833.5
115°	312.5	342.3	372.2	379.6	541.4	757.1	865.0	1056.2	1438.6	1725.4	1752.5
117.5°	353.0	380.1	407.2	413.9	551.5	735.0	826.7	999.2	1344.3	1603.1	1633.2
120°	376.5	402.0	427.5	433.8	559.7	727.5	811.3	969.0	1284.3	1520.8	1550.1
122.5°	399.5	425.2	450.9	457.3	571.5	723.5	799.6	941.6	1225.5	1438.4	1467.3
125°	434.8	458.2	481.6	487.5	587.3	720.3	786.7	907.4	1148.6	1329.5	1356.0
127.5°	463.5	487.1	510.7	516.6	603.1	718.4	776.0	879.5	1086.7	1242.0	1264.4
130°	478.8	504.3	529.8	536.1	614.7	719.6	771.9	864.1	1048.5	1186.8	1207.4
132.5°	494.7	520.2	545.7	552.0	624.1	720.3	768.4	850.9	1016.0	1139.8	1158.2
135°	518.2	541.4	564.5	570.4	634.3	719.6	762.2	831.4	969.6	1073.3	1089.3
137.5°	542.2	565.1	588.2	593.9	649.6	724.0	761.2	819.5	936.4	1024.1	1037.1
140°	562.2	583.3	604.5	609.8	659.1	724.8	757.6	808.1	909.1	984.7	997.0
142.5°	577.5	597.0	616.6	621.6	666.9	727.4	757.6	802.0	890.6	957.1	967.5
145°	601.1	618.1	635.2	639.4	677.1	727.4	752.5	788.7	861.2	915.7	923.7
147.5°	624.6	641.2	657.8	662.0	692.1	732.3	752.5	781.0	838.1	880.9	887.5
150°	639.9	654.9	670.0	673.7	700.0	735.0	752.5	776.6	824.8	860.9	866.3
152.5°	655.8	667.2	678.6	681.4	705.1	736.7	752.5	773.0	814.2	845.0	849.1
155°	679.3	687.7	696.1	698.2	716.3	740.4	752.5	768.9	801.6	826.2	828.8
157.5°	696.7	704.9	713.0	715.1	727.6	744.2	752.5	765.2	790.7	809.8	811.6
160°	708.5	714.8	721.2	722.8	732.7	745.8	752.5	763.3	785.2	801.6	802.7
162.5°	720.3	725.0	729.8	731.0	738.1	747.7	752.5	761.6	780.1	794.0	794.9
165°	733.0	737.3	741.7	742.8	746.0	750.3	752.5	759.1	772.2	782.1	783.2
167.5°	744.9	746.8	748.9	749.4	752.2	755.8	757.6	761.9	770.5	777.1	777.6
170°	752.5	754.5	756.6	757.1	757.3	757.5	757.6	761.9	770.5	777.1	777.1
172.5°	756.6	757.0	757.5	757.6	757.6	757.6	757.6	761.0	767.8	772.9	772.5
175°	762.2	762.2	762.2	762.2	760.7	758.6	757.6	759.8	764.0	767.3	767.3
177.5°	762.2	762.2	762.2	762.2	761.1	759.4	758.6	760.3	763.7	766.3	765.8
180°	762.2	762.2	762.2	762.2	762.2	762.2	762.2	762.2	762.2	762.2	762.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	406.0	406.0
2.5°	433.4	430.8
5°	557.4	560.1
7.5°	750.7	749.3
10°	933.5	945.1
12.5°	1066.5	1069.2
15°	1147.6	1152.7
17.5°	1178.9	1180.2
20°	1180.2	1177.5
22.5°	1165.8	1163.2
25°	1148.8	1147.6
27.5°	1133.1	1134.4
30°	1126.6	1130.6
32.5°	1126.6	1133.1
35°	1129.3	1135.8
37.5°	1127.9	1135.8
40°	1122.8	1131.9
42.5°	1108.3	1114.9
45°	1086.2	1094.0
47.5°	1057.5	1062.7
50°	1020.9	1026.1
52.5°	975.2	976.5
55°	920.3	925.6
57.5°	861.6	862.9
60°	796.3	800.3
62.5°	727.2	727.2
65°	654.1	656.6
67.5°	578.4	584.9
70°	501.3	502.6
72.5°	425.6	425.6
75°	347.3	348.6
77.5°	272.9	272.9
80°	202.3	203.6
82.5°	139.7	142.3
85°	87.4	87.4
87.5°	40.5	36.6
90°	19.5	19.5
92.5°	77.9	62.4
95°	271.4	224.6
97.5°	650.3	561.2
100°	936.9	830.7
102.5°	1218.9	1128.0
105°	1578.4	1529.5
107.5°	1813.9	1825.7
110°	1903.7	1954.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1911.7	1989.9
115°	1861.0	1969.5
117.5°	1753.5	1873.7
120°	1666.9	1783.7
122.5°	1582.5	1697.8
125°	1462.1	1568.4
127.5°	1354.0	1443.6
130°	1290.2	1373.0
132.5°	1232.3	1306.4
135°	1153.1	1216.9
137.5°	1089.5	1141.7
140°	1045.8	1094.7
142.5°	1009.6	1051.7
145°	955.5	987.3
147.5°	913.8	940.2
150°	887.7	909.1
152.5°	865.2	881.4
155°	839.5	850.2
157.5°	819.2	826.7
160°	807.0	811.3
162.5°	799.1	803.1
165°	787.5	791.9
167.5°	779.3	781.1
170°	777.1	777.1
172.5°	770.9	769.4
175°	767.3	767.3
177.5°	764.0	762.2
180°	762.2	762.2



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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	4.49	5.29	5.53	6.34	7.76	17.63	18.42	18.67	19.48	20.89
	3H	5.19	5.91	6.24	6.97	8.40	19.45	20.16	20.50	21.22	22.66
	4H	5.49	6.16	6.55	7.23	8.67	20.08	20.76	21.14	21.82	23.26
	6H	5.73	6.36	6.80	7.42	8.88	20.49	21.12	21.57	22.19	23.64
	8H	5.80	6.40	6.88	7.48	8.93	20.61	21.20	21.68	22.28	23.74
	12H	5.81	6.38	6.90	7.46	8.93	20.66	21.23	21.75	22.31	23.78
4H	2H	11.67	12.35	12.74	13.41	14.86	17.90	18.58	18.96	19.64	21.08
	3H	13.24	13.80	14.31	14.89	16.35	19.92	20.49	21.00	21.58	23.04
	4H	13.33	13.85	14.41	14.93	16.41	20.67	21.20	21.76	22.28	23.75
	6H	13.34	13.78	14.43	14.89	16.36	21.20	21.65	22.29	22.75	24.22
	8H	13.31	13.73	14.40	14.82	16.31	21.35	21.77	22.44	22.86	24.35
	12H	13.26	13.64	14.37	14.75	16.25	21.43	21.81	22.54	22.92	24.41
8H	4H	14.76	15.18	15.85	16.27	17.76	20.73	21.15	21.82	22.24	23.73
	6H	15.00	15.34	16.11	16.48	17.97	21.34	21.69	22.46	22.83	24.31
	8H	15.01	15.32	16.13	16.44	17.94	21.55	21.86	22.68	22.98	24.48
	12H	14.98	15.25	16.10	16.36	17.90	21.69	21.96	22.81	23.07	24.61
12H	4H	14.89	15.27	16.00	16.38	17.88	20.68	21.06	21.79	22.17	23.66
	6H	15.25	15.56	16.37	16.67	18.18	21.33	21.63	22.45	22.75	24.25
	8H	15.32	15.58	16.44	16.70	18.24	21.55	21.81	22.67	22.93	24.47