

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: P936342

Luminaire Tested: SQ4-FB-025U-075D-92765-1D-UNV-STD-W-6-6500K

Issue Date: 12/17/2024

**Test Information**

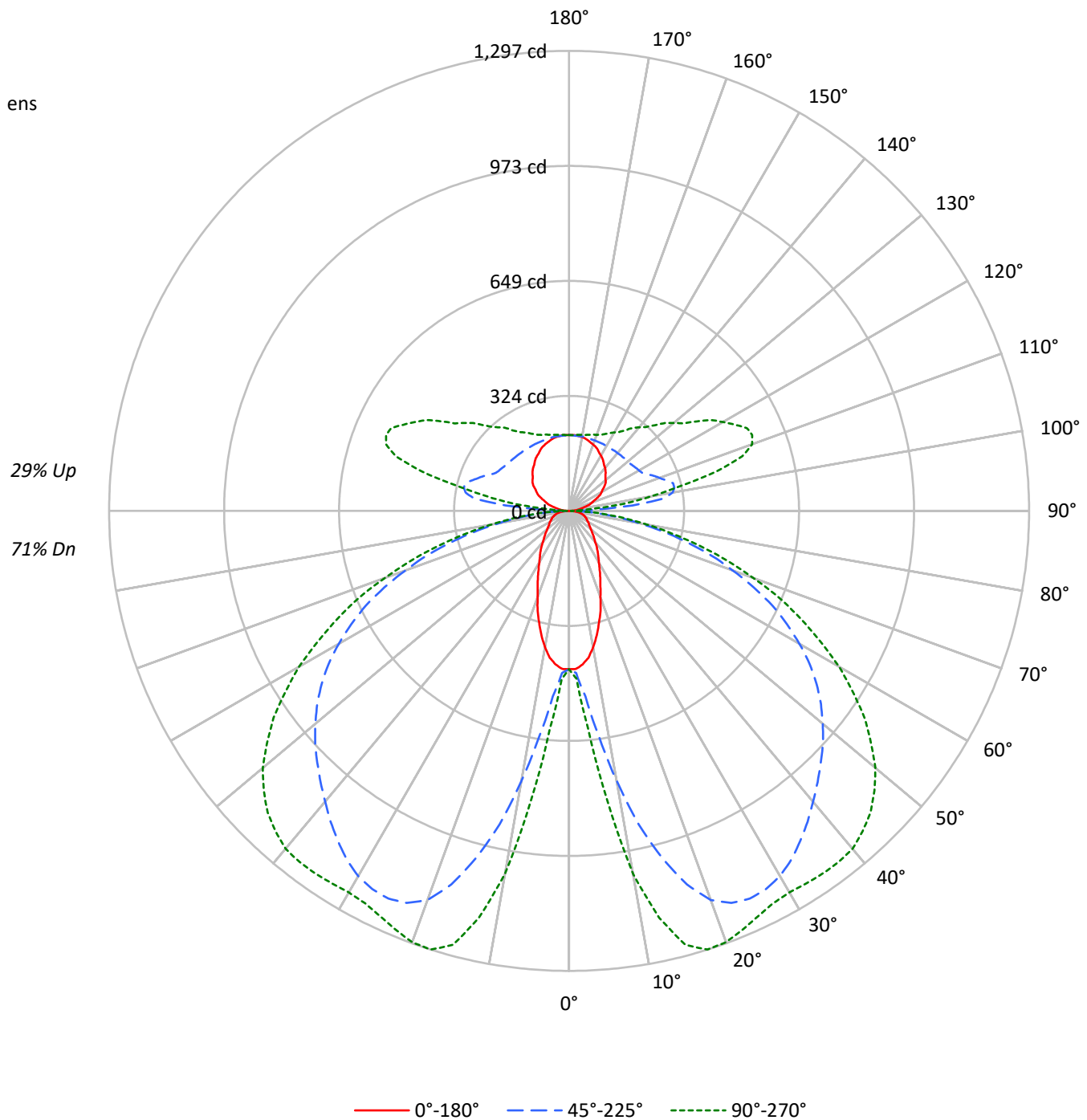
Test Method: LM-79-2019  
Report Number: P936342  
REPORT IS A COMBINATION OF REPORTS P933446 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-075D-92765-1D-UNV-STD-W-6-6500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4839.2 lumens  
Efficiency: N/A  
Efficacy: 107.5 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 45  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62	58
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51	48
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43	39
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36	33
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	28
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27	24
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23	21
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	18
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18	16
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2760	2760	2760
5°	2695	3188	3709
10°	2443	4647	6149
15°	2076	6069	7426
20°	1690	7032	7568
25°	1409	7357	7414
30°	1187	7402	7400
35°	1050	7277	7591
40°	913	7115	7789
45°	827	6995	7819
50°	758	6888	7690
55°	725	6732	7349
60°	742	6433	6810
65°	770	5980	6071
70°	818	5212	5129
75°	905	4246	4003
80°	980	2941	2696
85°	853	1558	1380

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7819 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.7	1.2
10°-20°	255.7	5.3
20°-30°	447.3	9.2
30°-40°	575.9	11.9
40°-50°	643.2	13.3
50°-60°	616.0	12.7
60°-70°	488.2	10.1
70°-80°	287.1	5.9
80°-90°	80.6	1.7
90°-100°	104.3	2.2
100°-110°	274.3	5.7
110°-120°	284.4	5.9
120°-130°	228.1	4.7
130°-140°	179.0	3.7
140°-150°	137.4	2.8
150°-160°	99.0	2.0
160°-170°	60.5	1.3
170°-180°	20.5	0.4
0°-30°	760.8	15.7
0°-40°	1336.6	27.6
0°-60°	2595.8	53.6
0°-90°	3451.7	71.3
90°-120°	663.1	13.7
90°-150°	1207.6	25.0
90°-180°	1388.0	28.7
0°-180°	4839.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	435	466	525	594	615	40
15°	326	601	1013	1228	1267	91
25°	208	681	1206	1259	1261	96
35°	141	651	1136	1201	1248	88
45°	96	519	1004	1150	1202	74
55°	69	330	852	990	1017	63
65°	54	175	632	711	721	54
75°	40	108	347	382	383	42
85°	14	33	86	95	96	15
90°	1	4	11	6	6	2
95°	14	54	180	93	63	15
105°	49	75	303	460	430	52
115°	88	107	243	484	553	87
125°	122	137	221	373	440	108
135°	146	160	214	301	342	113
145°	169	180	211	257	277	106
155°	191	196	211	232	239	88
165°	206	208	211	220	222	58
175°	214	214	213	216	216	20
180°	214	214	214	214	214	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1
2.5°	446.1	446.1	448.9	450.4	453.2	454.7	457.5	460.4	469.0	470.4	473.3
5°	434.6	440.3	459.0	466.1	486.2	513.5	524.9	543.6	582.3	593.8	601.0
7.5°	417.4	430.3	476.2	487.7	537.9	609.6	639.7	679.9	741.5	771.6	796.0
10°	390.1	417.4	499.1	526.4	608.1	717.1	773.1	829.0	922.2	963.8	979.6
12.5°	360.0	404.5	523.5	560.8	678.4	837.6	905.0	966.7	1072.8	1128.9	1137.5
15°	325.6	385.8	546.5	601.0	753.0	938.0	1012.6	1088.7	1187.7	1227.8	1237.9
17.5°	295.5	371.5	568.0	625.4	810.4	1028.4	1104.5	1167.6	1247.9	1275.2	1282.4
20°	258.2	348.5	582.3	656.9	870.6	1094.5	1167.6	1216.4	1270.9	1288.1	1291.0
22.5°	230.9	324.1	590.9	668.4	910.8	1134.6	1196.3	1235.0	1272.3	1278.0	1279.5
25°	208.0	296.9	589.5	681.3	945.2	1159.0	1206.3	1235.0	1256.5	1259.4	1259.4
27.5°	186.5	266.8	583.8	684.2	971.0	1164.7	1202.0	1222.1	1232.2	1237.9	1237.9
30°	167.8	238.1	569.4	678.4	982.5	1159.0	1189.1	1199.2	1209.2	1217.8	1222.1
32.5°	153.5	210.8	547.9	666.9	983.9	1144.7	1166.2	1171.9	1186.3	1206.3	1213.5
35°	140.6	183.6	523.5	651.2	975.3	1121.7	1136.1	1141.8	1170.5	1200.6	1210.6
37.5°	127.7	163.5	492.0	623.9	962.4	1094.5	1104.5	1114.5	1159.0	1194.9	1206.3
40°	114.7	146.3	454.7	593.8	942.3	1061.4	1070.0	1085.8	1144.7	1186.3	1197.7
42.5°	104.7	132.0	414.5	562.2	916.5	1024.1	1037.0	1059.9	1127.4	1171.9	1184.8
45°	96.1	117.6	371.5	519.2	883.5	985.4	1004.0	1035.6	1107.4	1150.4	1161.9
47.5°	87.5	107.6	327.0	474.7	847.7	946.6	971.0	1006.9	1080.0	1121.7	1131.8
50°	80.3	97.5	282.6	427.4	808.9	905.0	933.7	971.0	1045.6	1084.3	1097.3
52.5°	74.6	88.9	241.0	380.1	764.5	862.0	895.0	933.7	1004.0	1041.3	1049.9
55°	68.8	81.8	205.1	329.9	718.6	816.1	852.0	889.3	958.1	989.7	995.4
57.5°	66.0	76.0	175.0	282.6	669.8	764.5	804.6	839.1	903.6	928.0	933.7
60°	61.7	71.7	152.0	242.4	616.7	715.7	750.1	784.6	839.1	859.1	863.4
62.5°	57.4	68.8	134.8	203.7	562.2	658.3	692.8	724.3	770.2	784.6	790.3
65°	54.5	66.0	121.9	175.0	506.3	598.1	632.5	659.8	697.1	711.4	714.3
67.5°	51.6	63.1	111.9	150.6	450.4	537.9	563.7	589.5	618.2	632.5	634.0
70°	47.3	60.2	103.3	133.4	393.0	469.0	490.5	517.8	540.7	547.9	552.2
72.5°	44.5	55.9	97.5	120.5	334.2	403.0	423.1	438.9	459.0	466.1	466.1
75°	40.2	50.2	91.8	107.6	273.9	329.9	347.1	362.9	378.7	381.5	377.2
77.5°	35.9	44.5	78.9	90.4	213.7	261.0	275.4	284.0	296.9	299.8	301.2
80°	30.1	38.7	61.7	70.3	154.9	192.2	202.2	209.4	220.9	220.9	223.7
82.5°	22.9	30.1	44.5	50.2	104.7	132.0	140.6	144.9	152.0	152.0	152.0
85°	14.3	18.6	28.7	33.0	63.1	80.3	86.1	87.5	93.2	94.7	94.7
87.5°	7.2	10.0	18.6	20.1	33.0	41.6	41.6	44.5	44.5	43.0	41.6
90°	1.4	2.6	3.7	4.0	6.3	9.4	10.9	9.7	7.3	5.5	5.5
92.5°	5.7	15.5	25.2	27.7	39.0	54.0	61.5	53.8	38.6	27.3	26.2
95°	13.8	31.6	49.5	54.0	95.9	151.7	179.7	160.4	121.6	92.7	89.4
97.5°	23.8	39.6	55.4	59.3	129.2	222.3	268.9	256.6	232.3	213.9	207.7
100°	31.6	45.9	60.2	63.8	141.3	244.7	296.3	297.2	299.0	300.3	292.9
102.5°	38.2	51.6	64.9	68.3	146.9	251.7	304.1	319.7	350.8	374.3	367.8
105°	49.4	60.7	72.0	74.9	151.0	252.4	303.2	338.1	408.0	460.4	457.0
107.5°	60.9	71.4	81.9	84.6	151.7	241.2	286.0	334.8	432.2	505.3	506.1
110°	68.7	78.2	87.7	90.1	150.6	231.3	271.7	326.2	435.1	516.7	520.3



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	76.3	85.4	94.4	96.7	150.6	222.6	258.6	314.3	425.8	509.4	514.8
115°	87.8	96.2	104.5	106.6	152.0	212.6	242.9	296.6	404.0	484.5	492.2
117.5°	99.2	106.7	114.3	116.2	154.8	206.3	232.2	280.6	377.5	450.2	458.6
120°	105.8	112.9	120.0	121.8	157.2	204.3	227.9	272.1	360.7	427.1	435.4
122.5°	112.2	119.4	126.6	128.4	160.4	203.2	224.5	264.4	344.1	404.0	412.1
125°	122.1	128.7	135.3	136.9	164.9	202.3	221.0	254.8	322.6	373.4	380.9
127.5°	130.1	136.7	143.4	145.1	169.3	201.8	217.9	247.0	305.2	348.8	355.1
130°	134.4	141.6	148.7	150.5	172.6	202.0	216.8	242.7	294.4	333.2	339.1
132.5°	138.9	146.1	153.2	155.0	175.3	202.3	215.8	239.0	285.3	320.0	325.2
135°	145.5	152.0	158.5	160.2	178.1	202.1	214.1	233.5	272.3	301.4	305.9
137.5°	152.3	158.7	165.1	166.8	182.4	203.4	213.8	230.3	263.0	287.6	291.3
140°	157.9	163.8	169.7	171.3	185.1	203.6	212.8	226.9	255.3	276.5	280.0
142.5°	162.2	167.6	173.2	174.5	187.2	204.2	212.8	225.2	250.1	268.8	271.8
145°	168.8	173.5	178.3	179.6	190.2	204.2	211.3	221.5	241.8	257.1	259.3
147.5°	175.4	180.1	184.7	185.9	194.4	205.7	211.3	219.4	235.3	247.4	249.2
150°	179.7	183.9	188.2	189.2	196.6	206.4	211.3	218.1	231.6	241.7	243.3
152.5°	184.2	187.3	190.6	191.3	198.0	206.9	211.3	217.1	228.6	237.3	238.5
155°	190.8	193.2	195.5	196.1	201.2	208.0	211.3	215.9	225.1	232.0	232.7
157.5°	195.6	197.9	200.2	200.8	204.3	209.0	211.3	214.9	222.0	227.4	228.0
160°	199.0	200.8	202.5	203.0	205.8	209.5	211.3	214.4	220.5	225.1	225.4
162.5°	202.2	203.6	204.9	205.3	207.3	210.0	211.3	213.9	219.1	223.0	223.3
165°	205.9	207.0	208.3	208.5	209.5	210.7	211.3	213.1	216.9	219.6	219.9
167.5°	209.1	209.7	210.3	210.5	211.2	212.3	212.8	214.0	216.4	218.2	218.3
170°	211.3	211.9	212.5	212.6	212.7	212.8	212.8	214.0	216.4	218.2	218.2
172.5°	212.5	212.6	212.8	212.8	212.8	212.8	212.8	213.7	215.6	217.1	217.0
175°	214.1	214.1	214.1	214.1	213.6	213.0	212.8	213.3	214.6	215.5	215.5
177.5°	214.1	214.1	214.1	214.1	213.7	213.2	213.0	213.5	214.5	215.2	215.1
180°	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	446.1	446.1
2.5°	476.2	473.3
5°	612.4	615.3
7.5°	824.7	823.3
10°	1025.5	1038.4
12.5°	1171.9	1174.8
15°	1260.8	1266.6
17.5°	1295.3	1296.7
20°	1296.7	1293.8
22.5°	1280.9	1278.0
25°	1262.3	1260.8
27.5°	1245.1	1246.5
30°	1237.9	1242.2
32.5°	1237.9	1245.1
35°	1240.8	1247.9
37.5°	1239.3	1247.9
40°	1233.6	1243.6
42.5°	1217.8	1225.0
45°	1193.4	1202.0
47.5°	1161.9	1167.6
50°	1121.7	1127.4
52.5°	1071.4	1072.8
55°	1011.2	1016.9
57.5°	946.6	948.1
60°	874.9	879.2
62.5°	798.9	798.9
65°	718.6	721.4
67.5°	635.4	642.6
70°	550.8	552.2
72.5°	467.6	467.6
75°	381.5	383.0
77.5°	299.8	299.8
80°	222.3	223.7
82.5°	153.5	156.3
85°	96.1	96.1
87.5°	44.5	40.2
90°	5.5	5.5
92.5°	21.8	17.5
95°	76.2	63.1
97.5°	182.6	157.6
100°	263.1	233.3
102.5°	342.3	316.8
105°	443.3	429.5
107.5°	509.4	512.7
110°	534.6	549.0





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	536.8	558.8
115°	522.6	553.1
117.5°	492.4	526.2
120°	468.2	500.9
122.5°	444.4	476.8
125°	410.6	440.4
127.5°	380.3	405.4
130°	362.3	385.5
132.5°	346.0	366.9
135°	323.8	341.7
137.5°	306.0	320.6
140°	293.6	307.4
142.5°	283.5	295.4
145°	268.3	277.3
147.5°	256.6	264.0
150°	249.3	255.3
152.5°	243.0	247.6
155°	235.7	238.8
157.5°	230.1	232.2
160°	226.6	227.9
162.5°	224.4	225.6
165°	221.2	222.4
167.5°	218.9	219.4
170°	218.2	218.2
172.5°	216.5	216.1
175°	215.5	215.5
177.5°	214.6	214.1
180°	214.1	214.1



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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	6.27	7.42	7.01	8.19	9.12	19.43	20.59	20.17	21.36	22.28
	3H	6.99	8.04	7.75	8.81	9.77	21.29	22.33	22.04	23.11	24.06
	4H	7.31	8.29	8.08	9.08	10.05	21.94	22.93	22.71	23.72	24.68
	6H	7.57	8.48	8.36	9.28	10.26	22.38	23.30	23.17	24.09	25.08
	8H	7.65	8.52	8.44	9.33	10.32	22.51	23.38	23.31	24.20	25.18
	12H	7.68	8.51	8.48	9.32	10.33	22.59	23.42	23.39	24.23	25.24
4H	2H	13.51	14.49	14.28	15.28	16.25	19.74	20.73	20.52	21.51	22.48
	3H	15.10	15.93	15.89	16.75	17.74	21.81	22.64	22.60	23.46	24.44
	4H	15.21	15.96	16.01	16.79	17.80	22.58	23.34	23.39	24.16	25.17
	6H	15.24	15.89	16.06	16.74	17.76	23.14	23.79	23.96	24.64	25.66
	8H	15.22	15.84	16.05	16.68	17.71	23.30	23.92	24.13	24.76	25.79
	12H	15.20	15.75	16.04	16.61	17.65	23.41	23.96	24.26	24.83	25.86
8H	4H	16.68	17.29	17.50	18.13	19.16	22.67	23.28	23.50	24.13	25.16
	6H	16.93	17.44	17.79	18.33	19.36	23.31	23.82	24.16	24.70	25.73
	8H	16.96	17.41	17.82	18.29	19.34	23.53	23.98	24.40	24.86	25.91
	12H	16.94	17.34	17.81	18.21	19.31	23.69	24.09	24.56	24.96	26.06
12H	4H	16.83	17.39	17.68	18.25	19.29	22.64	23.19	23.48	24.05	25.09
	6H	17.20	17.65	18.06	18.53	19.58	23.30	23.75	24.16	24.63	25.68
	8H	17.28	17.68	18.15	18.55	19.65	23.54	23.94	24.41	24.81	25.91