

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: P936761

Luminaire Tested: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

**Test Information**

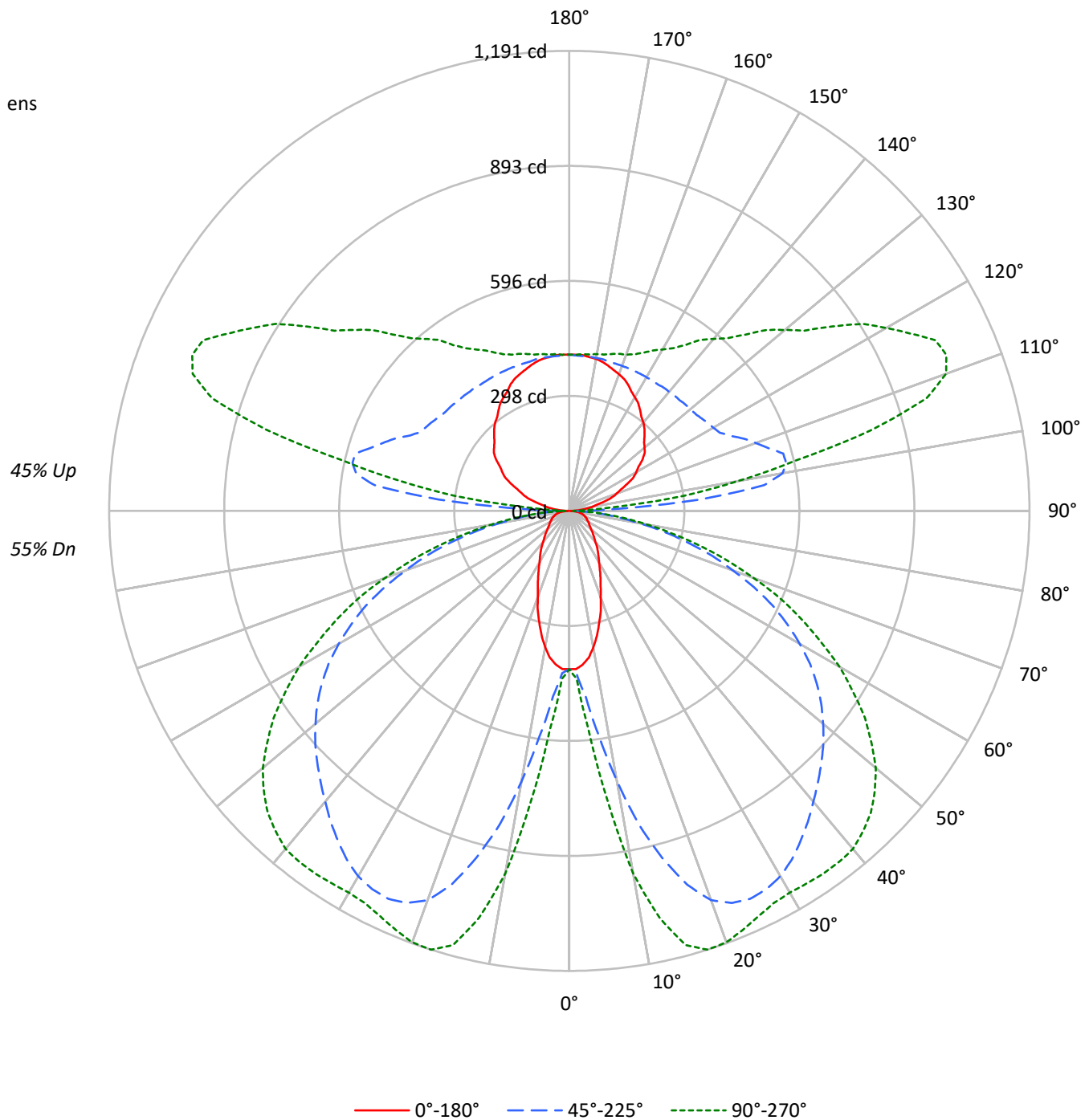
Test Method: LM-79-2019  
Report Number: P936761  
REPORT IS A COMBINATION OF REPORTS P933478 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-6-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5794.1 lumens  
Efficiency: N/A  
Efficacy: 106.1 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: General Diffuse  
  
Input Watts (W): 54.6  
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

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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	50	30	10
RCR																				
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55		
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45		
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37		
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30		
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25		
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21		
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18		
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16		
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14		
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12		
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11		

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

	0°	45°	90°
0°	2534	2534	2534
5°	2475	2929	3407
10°	2244	4268	5648
15°	1907	5575	6821
20°	1551	6459	6951
25°	1294	6758	6810
30°	1090	6799	6797
35°	964	6684	6973
40°	839	6535	7154
45°	760	6425	7183
50°	696	6327	7064
55°	666	6183	6750
60°	682	5909	6256
65°	708	5493	5577
70°	752	4788	4711
75°	830	3900	3677
80°	902	2702	2477
85°	787	1430	1268

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7183 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.0	0.9
10°-20°	234.9	4.1
20°-30°	410.9	7.1
30°-40°	528.9	9.1
40°-50°	590.8	10.2
50°-60°	565.8	9.8
60°-70°	448.4	7.7
70°-80°	263.7	4.6
80°-90°	74.8	1.3
90°-100°	197.2	3.4
100°-110°	518.5	8.9
110°-120°	537.6	9.3
120°-130°	431.2	7.4
130°-140°	338.4	5.8
140°-150°	259.7	4.5
150°-160°	187.0	3.2
160°-170°	114.4	2.0
170°-180°	38.7	0.7
0°-30°	698.8	12.1
0°-40°	1227.8	21.2
0°-60°	2384.4	41.2
0°-90°	3171.3	54.7
90°-120°	1253.4	21.6
90°-150°	2282.7	39.4
90°-180°	2623.0	45.3
0°-180°	5794.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	410	410	410	410	410	
5°	399	428	482	545	565	37
15°	299	552	930	1128	1163	83
25°	191	626	1108	1157	1158	88
35°	129	598	1044	1103	1146	81
45°	88	477	922	1057	1104	68
55°	63	303	783	909	934	58
65°	50	161	581	654	663	50
75°	37	99	319	350	352	39
85°	13	30	79	87	88	14
90°	3	8	21	10	10	3
95°	26	102	340	175	119	29
105°	94	142	573	870	812	99
115°	166	202	459	916	1045	164
125°	231	259	418	706	832	205
135°	275	303	405	570	646	213
145°	319	340	400	486	524	200
155°	361	371	400	438	451	166
165°	389	394	400	415	420	110
175°	405	405	402	407	407	38
180°	405	405	405	405	405	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	409.7	409.7	409.7	409.7	409.7	409.7	409.7	409.7	409.7	409.7	409.7
2.5°	409.7	409.7	412.4	413.7	416.3	417.6	420.3	422.9	430.8	432.1	434.8
5°	399.2	404.5	421.6	428.2	446.6	471.6	482.2	499.3	534.9	545.4	552.0
7.5°	383.4	395.2	437.4	447.9	494.0	559.9	587.6	624.5	681.1	708.8	731.2
10°	358.3	383.4	458.5	483.5	558.6	658.7	710.1	761.5	847.1	885.3	899.8
12.5°	330.7	371.5	480.9	515.1	623.2	769.4	831.3	888.0	985.5	1036.9	1044.8
15°	299.1	354.4	501.9	552.0	691.7	861.6	930.1	1000.0	1090.9	1127.8	1137.0
17.5°	271.4	341.2	521.7	574.4	744.4	944.6	1014.5	1072.5	1146.3	1171.3	1177.9
20°	237.1	320.1	534.9	603.4	799.7	1005.3	1072.5	1117.3	1167.3	1183.2	1185.8
22.5°	212.1	297.7	542.8	613.9	836.6	1042.2	1098.8	1134.4	1168.7	1173.9	1175.3
25°	191.0	272.7	541.5	625.8	868.2	1064.6	1108.1	1134.4	1154.2	1156.8	1156.8
27.5°	171.3	245.0	536.2	628.4	891.9	1069.9	1104.1	1122.6	1131.8	1137.0	1137.0
30°	154.1	218.7	523.0	623.2	902.5	1064.6	1092.3	1101.5	1110.7	1118.6	1122.6
32.5°	141.0	193.7	503.3	612.6	903.8	1051.4	1071.2	1076.4	1089.6	1108.1	1114.7
35°	129.1	168.6	480.9	598.1	895.9	1030.3	1043.5	1048.8	1075.1	1102.8	1112.0
37.5°	117.3	150.2	451.9	573.1	884.0	1005.3	1014.5	1023.7	1064.6	1097.5	1108.1
40°	105.4	134.4	417.6	545.4	865.6	974.9	982.8	997.3	1051.4	1089.6	1100.2
42.5°	96.2	121.2	380.7	516.4	841.9	940.7	952.5	973.6	1035.6	1076.4	1088.3
45°	88.3	108.0	341.2	476.9	811.6	905.1	922.2	951.2	1017.2	1056.7	1067.2
47.5°	80.4	98.8	300.4	436.1	778.6	869.5	891.9	924.9	992.0	1030.3	1039.6
50°	73.8	89.6	259.5	392.6	743.0	831.3	857.7	891.9	960.4	996.0	1007.9
52.5°	68.5	81.7	221.3	349.1	702.2	791.8	822.1	857.7	922.2	956.5	964.4
55°	63.2	75.1	188.4	303.0	660.0	749.6	782.6	816.8	880.1	909.0	914.3
57.5°	60.6	69.8	160.7	259.5	615.2	702.2	739.1	770.7	830.0	852.4	857.7
60°	56.7	65.9	139.6	222.6	566.5	657.4	689.0	720.6	770.7	789.2	793.1
62.5°	52.7	63.2	123.8	187.1	516.4	604.7	636.3	665.3	707.5	720.6	725.9
65°	50.1	60.6	112.0	160.7	465.1	549.4	581.0	606.0	640.3	653.5	656.1
67.5°	47.4	58.0	102.8	138.3	413.7	494.0	517.8	541.5	567.8	581.0	582.3
70°	43.5	55.3	94.9	122.5	361.0	430.8	450.6	475.6	496.7	503.3	507.2
72.5°	40.8	51.4	89.6	110.7	307.0	370.2	388.6	403.1	421.6	428.2	428.2
75°	36.9	46.1	84.3	98.8	251.6	303.0	318.8	333.3	347.8	350.4	346.5
77.5°	32.9	40.8	72.5	83.0	196.3	239.8	253.0	260.9	272.7	275.3	276.7
80°	27.7	35.6	56.7	64.6	142.3	176.5	185.8	192.3	202.9	202.9	205.5
82.5°	21.1	27.7	40.8	46.1	96.2	121.2	129.1	133.1	139.6	139.6	139.6
85°	13.2	17.1	26.3	30.3	58.0	73.8	79.0	80.4	85.6	87.0	87.0
87.5°	6.6	9.2	17.1	18.4	30.3	38.2	38.2	40.8	40.8	39.5	38.2
90°	2.7	4.9	7.1	7.6	11.9	17.7	20.6	18.4	13.7	10.3	10.3
92.5°	10.9	29.3	47.8	52.4	73.7	102.1	116.2	101.8	73.1	51.6	49.5
95°	26.1	59.8	93.6	102.1	181.3	286.9	339.7	303.2	230.0	175.1	168.9
97.5°	45.1	74.9	104.7	112.2	244.3	420.4	508.4	485.3	439.0	404.3	392.4
100°	59.7	86.8	113.8	120.6	267.1	462.5	560.2	561.8	565.3	567.8	553.8
102.5°	72.2	97.5	122.7	129.0	277.6	475.8	574.8	604.3	663.2	707.4	695.4
105°	93.5	114.8	136.1	141.5	285.4	477.3	573.2	639.2	771.2	870.3	863.8
107.5°	115.1	135.1	154.9	159.9	286.9	456.0	540.6	632.6	816.8	955.0	956.6
110°	129.8	147.7	165.7	170.2	284.7	437.2	513.5	616.4	822.4	976.8	983.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	144.2	161.3	178.5	182.8	284.7	420.8	488.8	594.2	804.9	962.9	973.2
115°	165.9	181.7	197.5	201.5	287.4	401.9	459.2	560.7	763.7	915.9	930.3
117.5°	187.3	201.7	216.1	219.7	292.7	390.1	438.8	530.4	713.6	851.0	867.0
120°	199.8	213.3	226.9	230.3	297.0	386.1	430.6	514.3	681.7	807.2	822.8
122.5°	212.1	225.7	239.3	242.8	303.3	384.0	424.4	499.8	650.6	763.6	778.9
125°	230.8	243.2	255.7	258.7	311.7	382.3	417.6	481.7	609.7	705.7	719.8
127.5°	246.0	258.6	271.1	274.3	320.1	381.4	411.9	466.9	576.8	659.3	671.1
130°	254.2	267.7	281.2	284.6	326.3	381.9	409.7	458.6	556.6	630.0	641.0
132.5°	262.6	276.1	289.7	293.0	331.3	382.3	407.9	451.7	539.3	605.0	614.8
135°	275.1	287.4	299.7	302.8	336.7	382.0	404.6	441.3	514.7	569.7	578.2
137.5°	287.8	300.0	312.1	315.2	344.8	384.3	404.0	435.0	497.0	543.6	550.5
140°	298.4	309.7	320.8	323.7	349.8	384.7	402.2	429.0	482.5	522.7	529.2
142.5°	306.5	316.9	327.3	329.9	354.0	386.1	402.2	425.7	472.7	508.0	513.6
145°	319.1	328.1	337.2	339.5	359.5	386.1	399.5	418.7	457.2	486.1	490.3
147.5°	331.6	340.3	349.2	351.4	367.4	388.7	399.5	414.6	444.9	467.6	471.1
150°	339.7	347.7	355.6	357.6	371.6	390.1	399.5	412.3	437.8	457.0	459.8
152.5°	348.1	354.1	360.2	361.7	374.2	391.0	399.5	410.3	432.2	448.5	450.7
155°	360.6	365.1	369.5	370.6	380.2	393.0	399.5	408.1	425.5	438.5	439.9
157.5°	369.9	374.2	378.5	379.6	386.2	395.1	399.5	406.2	419.7	429.8	430.8
160°	376.1	379.4	382.8	383.6	388.9	395.9	399.5	405.2	416.8	425.5	426.1
162.5°	382.3	384.9	387.4	388.0	391.8	396.9	399.5	404.4	414.1	421.4	421.9
165°	389.1	391.4	393.7	394.3	396.0	398.3	399.5	403.0	409.9	415.2	415.8
167.5°	395.3	396.4	397.5	397.8	399.3	401.2	402.2	404.5	409.0	412.5	412.7
170°	399.5	400.5	401.6	401.9	402.0	402.1	402.2	404.5	409.0	412.5	412.5
172.5°	401.6	401.9	402.1	402.2	402.2	402.2	402.2	403.9	407.5	410.3	410.1
175°	404.6	404.6	404.6	404.6	403.8	402.7	402.2	403.3	405.6	407.3	407.3
177.5°	404.6	404.6	404.6	404.6	404.0	403.1	402.7	403.6	405.4	406.7	406.5
180°	404.6	404.6	404.6	404.6	404.6	404.6	404.6	404.6	404.6	404.6	404.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	409.7	409.7
2.5°	437.4	434.8
5°	562.6	565.2
7.5°	757.5	756.2
10°	942.0	953.8
12.5°	1076.4	1079.1
15°	1158.1	1163.4
17.5°	1189.7	1191.1
20°	1191.1	1188.4
22.5°	1176.6	1173.9
25°	1159.4	1158.1
27.5°	1143.6	1145.0
30°	1137.0	1141.0
32.5°	1137.0	1143.6
35°	1139.7	1146.3
37.5°	1138.4	1146.3
40°	1133.1	1142.3
42.5°	1118.6	1125.2
45°	1096.2	1104.1
47.5°	1067.2	1072.5
50°	1030.3	1035.6
52.5°	984.1	985.5
55°	928.8	934.1
57.5°	869.5	870.8
60°	803.6	807.6
62.5°	733.8	733.8
65°	660.0	662.7
67.5°	583.6	590.2
70°	505.9	507.2
72.5°	429.5	429.5
75°	350.4	351.8
77.5°	275.3	275.3
80°	204.2	205.5
82.5°	141.0	143.6
85°	88.3	88.3
87.5°	40.8	36.9
90°	10.3	10.3
92.5°	41.3	33.1
95°	144.0	119.2
97.5°	345.2	297.9
100°	497.4	441.0
102.5°	647.0	598.7
105°	837.9	811.9
107.5°	962.8	969.1
110°	1010.5	1037.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1014.8	1056.2
115°	987.8	1045.4
117.5°	930.8	994.7
120°	884.8	946.9
122.5°	840.1	901.2
125°	776.2	832.5
127.5°	718.7	766.3
130°	684.9	728.8
132.5°	654.2	693.5
135°	612.1	646.0
137.5°	578.4	606.1
140°	555.1	581.1
142.5°	535.9	558.2
145°	507.2	524.1
147.5°	485.1	499.1
150°	471.2	482.5
152.5°	459.3	467.9
155°	445.6	451.3
157.5°	434.8	438.8
160°	428.3	430.6
162.5°	424.1	426.3
165°	418.1	420.4
167.5°	413.7	414.6
170°	412.5	412.5
172.5°	409.2	408.4
175°	407.3	407.3
177.5°	405.6	404.6
180°	404.6	404.6



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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	4.65	5.60	5.56	6.53	7.73	17.82	18.77	18.72	19.70	20.90
	3H	5.36	6.22	6.28	7.16	8.38	19.66	20.51	20.58	21.45	22.68
	4H	5.67	6.47	6.60	7.42	8.65	20.30	21.11	21.24	22.06	23.29
	6H	5.92	6.67	6.87	7.62	8.86	20.74	21.48	21.68	22.43	23.68
	8H	5.99	6.70	6.94	7.67	8.92	20.86	21.57	21.81	22.54	23.78
	12H	6.01	6.69	6.97	7.65	8.92	20.93	21.60	21.88	22.57	23.84
4H	2H	11.87	12.68	12.81	13.62	14.86	18.10	18.91	19.04	19.86	21.09
	3H	13.45	14.12	14.40	15.10	16.35	20.15	20.83	21.10	21.81	23.05
	4H	13.55	14.16	14.51	15.14	16.41	20.92	21.54	21.88	22.51	23.78
	6H	13.56	14.10	14.53	15.09	16.36	21.46	21.99	22.43	22.99	24.26
	8H	13.54	14.04	14.52	15.03	16.31	21.62	22.12	22.60	23.11	24.39
	12H	13.50	13.95	14.50	14.96	16.25	21.72	22.17	22.71	23.17	24.46
8H	4H	14.99	15.49	15.97	16.48	17.77	20.99	21.49	21.96	22.48	23.76
	6H	15.24	15.66	16.24	16.69	17.97	21.62	22.03	22.62	23.06	24.34
	8H	15.26	15.63	16.27	16.64	17.94	21.83	22.20	22.84	23.22	24.52
	12H	15.23	15.56	16.25	16.57	17.91	21.98	22.30	22.99	23.32	24.66
12H	4H	15.14	15.59	16.14	16.60	17.89	20.94	21.40	21.94	22.40	23.69
	6H	15.50	15.87	16.51	16.88	18.18	21.60	21.97	22.61	22.98	24.29
	8H	15.57	15.90	16.59	16.91	18.25	21.83	22.16	22.85	23.17	24.51