

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: P936742

Luminaire Tested: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-6-6500K

Issue Date: 12/17/2024

**Test Information**

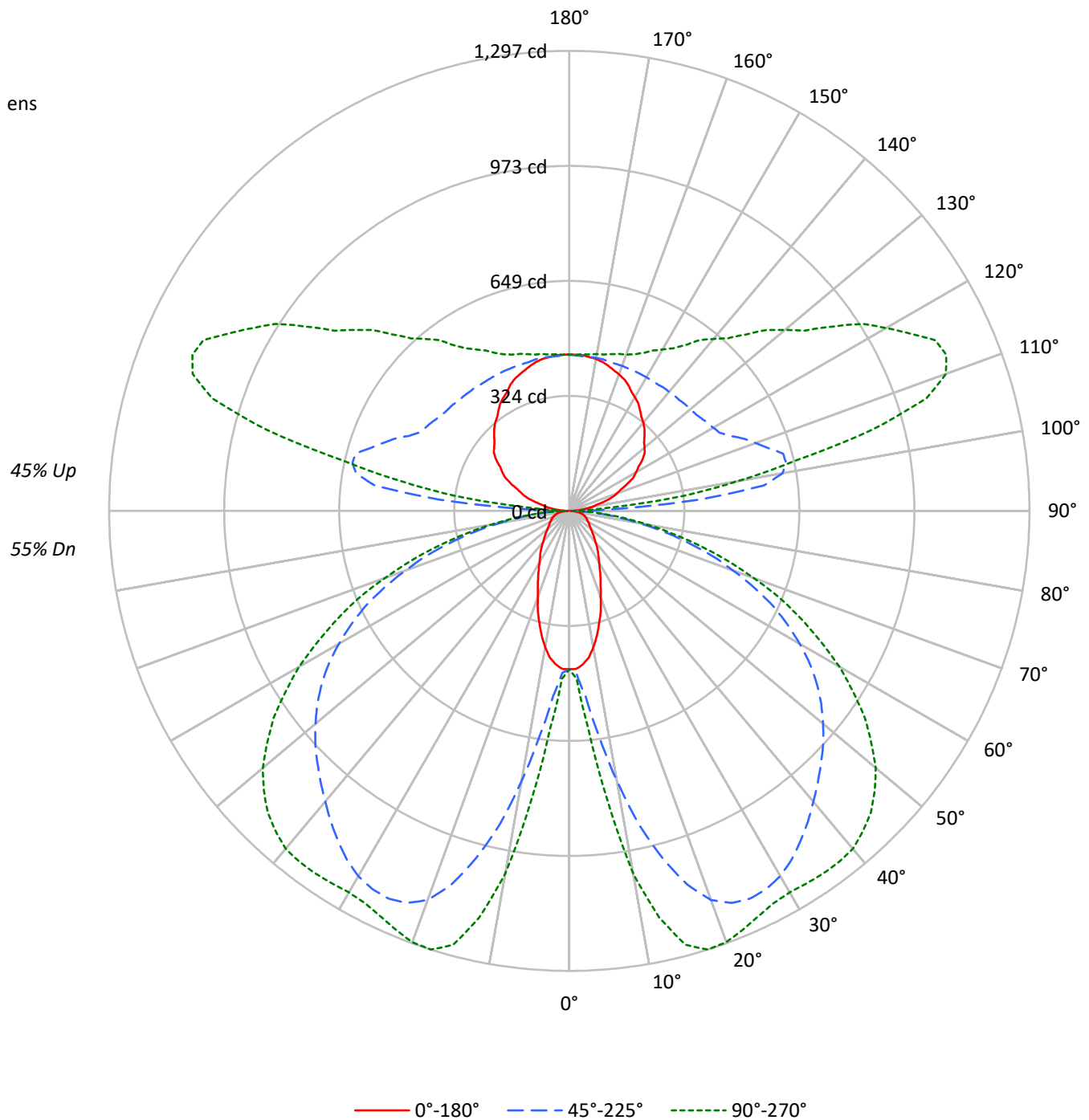
Test Method: LM-79-2019  
Report Number: P936742  
REPORT IS A COMBINATION OF REPORTS P933478 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-6-6500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6308.0 lumens  
Efficiency: N/A  
Efficacy: 115.5 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: 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	0
RCR																					
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	50	50	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	41	41	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	34	34	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	29	29	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	25	25	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	21	21	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	19	19	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	16	16	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	15	15	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	13	13	13	11

**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	0.9
10°-20°	255.7	4.1
20°-30°	447.3	7.1
30°-40°	575.9	9.1
40°-50°	643.2	10.2
50°-60°	616.0	9.8
60°-70°	488.2	7.7
70°-80°	287.1	4.6
80°-90°	81.4	1.3
90°-100°	214.7	3.4
100°-110°	564.5	8.9
110°-120°	585.3	9.3
120°-130°	469.5	7.4
130°-140°	368.4	5.8
140°-150°	282.7	4.5
150°-160°	203.6	3.2
160°-170°	124.6	2.0
170°-180°	42.1	0.7
0°-30°	760.8	12.1
0°-40°	1336.6	21.2
0°-60°	2595.8	41.2
0°-90°	3452.5	54.7
90°-120°	1364.5	21.6
90°-150°	2485.1	39.4
90°-180°	2855.0	45.3
0°-180°	6308.0	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°	3	8	22	11	11	3
95°	28	111	370	191	130	32
105°	102	154	624	948	884	108
115°	181	219	500	997	1138	178
125°	251	282	455	768	906	223
135°	300	330	440	620	703	232
145°	347	370	435	529	571	218
155°	393	404	435	477	491	180
165°	424	429	435	452	458	120
175°	440	440	438	443	443	42
180°	440	440	440	440	440	



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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°	3.0	5.4	7.7	8.3	13.0	19.3	22.5	20.0	14.9	11.2	11.2
92.5°	11.9	31.9	52.0	57.1	80.2	111.1	126.5	110.8	79.6	56.1	53.9
95°	28.4	65.1	101.9	111.1	197.4	312.4	369.9	330.1	250.4	190.7	183.9
97.5°	49.1	81.6	114.0	122.1	265.9	457.6	553.4	528.3	477.9	440.1	427.2
100°	65.0	94.5	123.9	131.3	290.8	503.5	609.9	611.7	615.4	618.2	602.9
102.5°	78.6	106.1	133.6	140.5	302.3	518.0	625.8	657.9	722.0	770.1	757.0
105°	101.7	125.0	148.2	154.0	310.7	519.6	624.0	695.9	839.6	947.5	940.4
107.5°	125.4	147.1	168.7	174.1	312.3	496.5	588.5	688.7	889.3	1039.7	1041.4
110°	141.3	160.8	180.4	185.3	309.9	476.0	559.0	671.1	895.3	1063.4	1070.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	157.0	175.7	194.3	199.0	310.0	458.1	532.1	646.9	876.3	1048.3	1059.6
115°	180.6	197.8	215.0	219.4	312.9	437.6	499.9	610.4	831.4	997.1	1012.8
117.5°	204.0	219.6	235.2	239.1	318.7	424.7	477.7	577.4	776.9	926.5	943.9
120°	217.5	232.3	247.0	250.7	323.4	420.3	468.8	559.9	742.2	878.8	895.8
122.5°	230.9	245.7	260.6	264.3	330.2	418.0	462.0	544.1	708.3	831.3	848.0
125°	251.3	264.8	278.3	281.7	339.4	416.2	454.7	524.4	663.8	768.3	783.6
127.5°	267.8	281.5	295.2	298.6	348.5	415.2	448.5	508.3	627.9	717.7	730.6
130°	276.7	291.4	306.2	309.8	355.2	415.8	446.1	499.3	605.9	685.9	697.8
132.5°	285.9	300.6	315.4	319.0	360.7	416.2	444.1	491.8	587.1	658.6	669.3
135°	299.5	312.9	326.3	329.6	366.6	415.8	440.5	480.5	560.3	620.2	629.5
137.5°	313.3	326.6	339.8	343.2	375.4	418.3	439.8	473.6	541.1	591.8	599.3
140°	324.9	337.2	349.3	352.4	380.9	418.8	437.8	467.0	525.3	569.0	576.1
142.5°	333.7	345.0	356.3	359.1	385.3	420.3	437.8	463.5	514.6	553.1	559.2
145°	347.4	357.2	367.1	369.6	391.4	420.3	434.9	455.8	497.7	529.2	533.7
147.5°	361.0	370.5	380.2	382.6	400.0	423.2	434.9	451.3	484.3	509.1	512.9
150°	369.9	378.6	387.2	389.4	404.6	424.7	434.9	448.8	476.7	497.5	500.6
152.5°	378.9	385.5	392.1	393.8	407.4	425.7	434.9	446.7	470.5	488.3	490.6
155°	392.6	397.5	402.3	403.5	413.9	427.9	434.9	444.3	463.3	477.4	479.0
157.5°	402.7	407.3	412.1	413.3	420.4	430.1	434.9	442.2	457.0	468.0	469.0
160°	409.4	413.1	416.7	417.7	423.4	431.1	434.9	441.2	453.8	463.3	463.8
162.5°	416.2	419.0	421.8	422.4	426.6	432.1	434.9	440.2	450.8	458.8	459.4
165°	423.6	426.1	428.6	429.2	431.1	433.6	434.9	438.7	446.3	452.0	452.7
167.5°	430.4	431.5	432.8	433.1	434.7	436.8	437.8	440.3	445.3	449.0	449.3
170°	434.9	436.0	437.3	437.6	437.6	437.7	437.8	440.3	445.3	449.0	449.0
172.5°	437.3	437.6	437.7	437.8	437.8	437.8	437.8	439.8	443.7	446.6	446.4
175°	440.5	440.5	440.5	440.5	439.7	438.4	437.8	439.1	441.6	443.4	443.4
177.5°	440.5	440.5	440.5	440.5	439.8	438.9	438.4	439.4	441.4	442.8	442.5
180°	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5	440.5



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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°	11.2	11.2
92.5°	44.9	36.0
95°	156.8	129.8
97.5°	375.8	324.3
100°	541.5	480.1
102.5°	704.4	651.8
105°	912.2	883.9
107.5°	1048.2	1055.1
110°	1100.1	1129.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1104.8	1149.9
115°	1075.4	1138.2
117.5°	1013.4	1082.9
120°	963.3	1030.9
122.5°	914.6	981.1
125°	845.0	906.4
127.5°	782.5	834.3
130°	745.6	793.4
132.5°	712.2	755.0
135°	666.4	703.3
137.5°	629.7	659.9
140°	604.3	632.6
142.5°	583.5	607.8
145°	552.2	570.6
147.5°	528.1	543.3
150°	513.0	525.3
152.5°	500.0	509.4
155°	485.2	491.3
157.5°	473.4	477.7
160°	466.3	468.8
162.5°	461.7	464.1
165°	455.1	457.6
167.5°	450.4	451.4
170°	449.0	449.0
172.5°	445.5	444.6
175°	443.4	443.4
177.5°	441.6	440.5
180°	440.5	440.5



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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	4.95	5.90	5.85	6.83	8.03	18.11	19.06	19.02	19.99	21.19
	3H	5.66	6.51	6.58	7.45	8.68	19.95	20.81	20.87	21.75	22.97
	4H	5.96	6.77	6.90	7.72	8.95	20.60	21.41	21.53	22.35	23.59
	6H	6.22	6.96	7.16	7.92	9.16	21.03	21.78	21.98	22.73	23.97
	8H	6.29	7.00	7.24	7.97	9.21	21.15	21.86	22.10	22.83	24.08
	12H	6.31	6.99	7.27	7.95	9.22	21.22	21.90	22.18	22.86	24.13
4H	2H	12.17	12.97	13.10	13.92	15.15	18.40	19.21	19.34	20.15	21.38
	3H	13.74	14.42	14.69	15.40	16.64	20.45	21.12	21.40	22.10	23.35
	4H	13.84	14.46	14.80	15.43	16.70	21.21	21.83	22.17	22.80	24.07
	6H	13.86	14.39	14.83	15.39	16.66	21.75	22.29	22.73	23.28	24.55
	8H	13.84	14.34	14.81	15.32	16.61	21.92	22.42	22.89	23.41	24.69
	12H	13.80	14.25	14.79	15.25	16.54	22.01	22.46	23.01	23.47	24.76
8H	4H	15.29	15.79	16.26	16.78	18.06	21.28	21.78	22.26	22.77	24.06
	6H	15.54	15.95	16.54	16.98	18.26	21.91	22.33	22.91	23.36	24.64
	8H	15.56	15.92	16.56	16.94	18.24	22.13	22.50	23.14	23.51	24.81
	12H	15.53	15.85	16.54	16.86	18.21	22.28	22.60	23.29	23.61	24.96
12H	4H	15.44	15.89	16.43	16.89	18.18	21.24	21.69	22.23	22.70	23.99
	6H	15.79	16.16	16.80	17.18	18.48	21.90	22.26	22.90	23.28	24.58
	8H	15.87	16.19	16.88	17.20	18.55	22.13	22.45	23.14	23.46	24.81