

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: P936775

Luminaire Tested: SQ4-FB-050U-075D-940-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

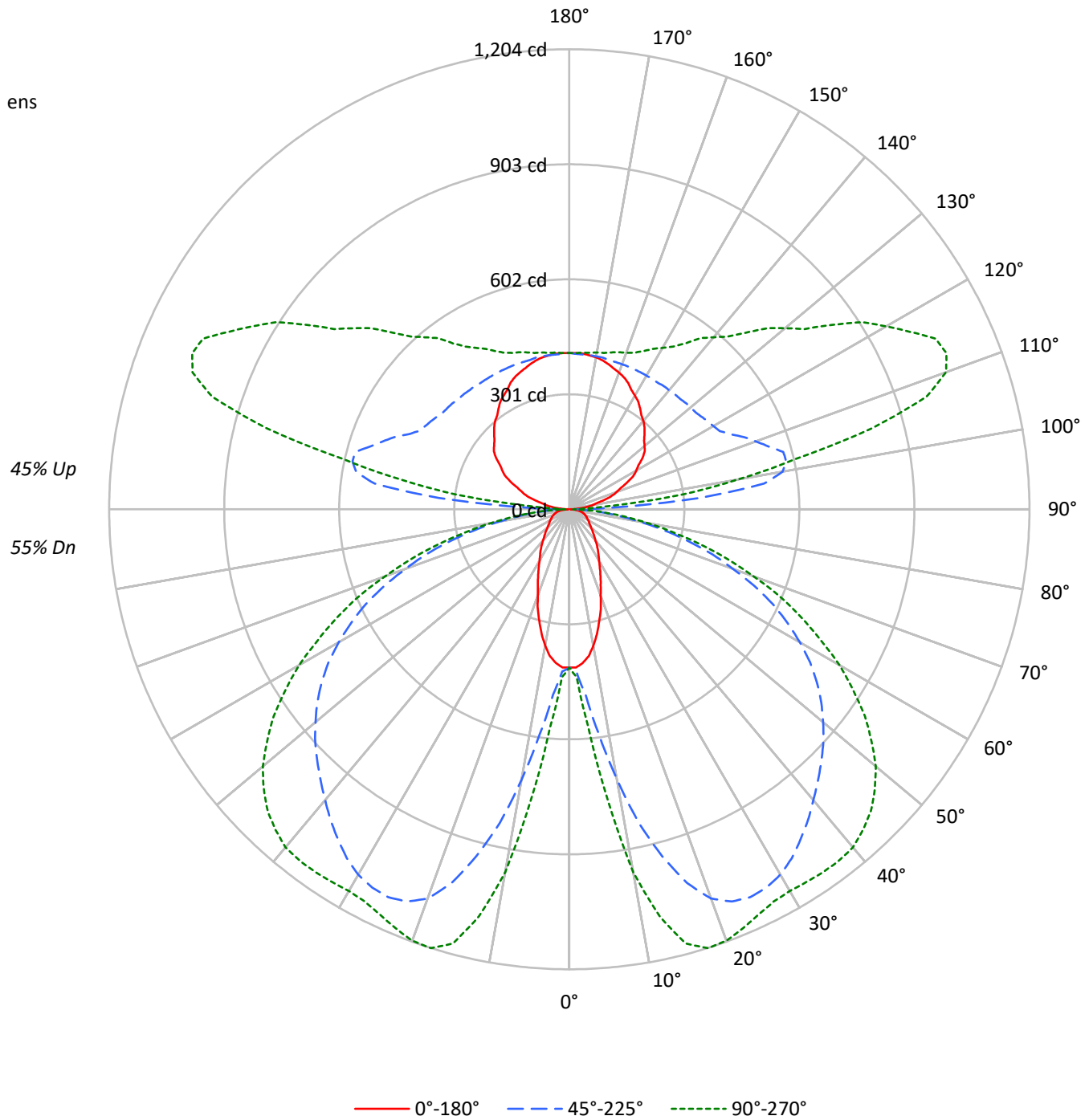
Test Method: LM-79-2019  
Report Number: P936775  
REPORT IS A COMBINATION OF REPORTS P933478 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-075D-940-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5858.1 lumens  
Efficiency: N/A  
Efficacy: 107.3 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°	2563	2563	2563
5°	2503	2961	3444
10°	2269	4315	5711
15°	1928	5637	6896
20°	1569	6531	7028
25°	1308	6832	6885
30°	1102	6874	6872
35°	974	6758	7050
40°	849	6607	7233
45°	768	6497	7262
50°	704	6396	7141
55°	673	6251	6825
60°	689	5974	6325
65°	715	5554	5638
70°	761	4840	4763
75°	839	3942	3717
80°	911	2731	2505
85°	793	1446	1281

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7262 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.6	0.9
10°-20°	237.5	4.1
20°-30°	415.4	7.1
30°-40°	534.8	9.1
40°-50°	597.3	10.2
50°-60°	572.1	9.8
60°-70°	453.4	7.7
70°-80°	266.6	4.6
80°-90°	75.6	1.3
90°-100°	199.4	3.4
100°-110°	524.2	8.9
110°-120°	543.6	9.3
120°-130°	436.0	7.4
130°-140°	342.1	5.8
140°-150°	262.6	4.5
150°-160°	189.1	3.2
160°-170°	115.7	2.0
170°-180°	39.1	0.7
0°-30°	706.5	12.1
0°-40°	1241.3	21.2
0°-60°	2410.7	41.2
0°-90°	3206.3	54.7
90°-120°	1267.2	21.6
90°-150°	2307.9	39.4
90°-180°	2652.0	45.3
0°-180°	5858.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	414	414	414	414	414	
5°	404	433	488	551	571	37
15°	302	558	940	1140	1176	84
25°	193	633	1120	1170	1171	89
35°	130	605	1055	1115	1159	81
45°	89	482	932	1068	1116	69
55°	64	306	791	919	944	58
65°	51	162	587	661	670	50
75°	37	100	322	354	356	39
85°	13	31	80	88	89	14
90°	3	8	21	10	10	3
95°	26	103	344	177	120	29
105°	94	143	580	880	821	100
115°	168	204	464	926	1057	166
125°	233	262	422	714	842	207
135°	278	306	409	576	653	215
145°	323	343	404	491	530	202
155°	365	375	404	443	456	168
165°	393	399	404	420	425	111
175°	409	409	407	412	412	39
180°	409	409	409	409	409	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3
2.5°	414.3	414.3	416.9	418.2	420.9	422.2	424.9	427.6	435.6	436.9	439.6
5°	403.6	408.9	426.2	432.9	451.5	476.9	487.5	504.8	540.8	551.4	558.1
7.5°	387.6	399.6	442.2	452.9	499.5	566.1	594.1	631.4	688.6	716.6	739.3
10°	362.3	387.6	463.5	488.8	564.8	666.0	717.9	769.9	856.5	895.1	909.8
12.5°	334.3	375.6	486.2	520.8	630.0	777.9	840.5	897.8	996.3	1048.4	1056.4
15°	302.4	358.3	507.5	558.1	699.3	871.1	940.4	1011.1	1103.0	1140.3	1149.6
17.5°	274.4	345.0	527.5	580.8	752.6	955.0	1025.7	1084.3	1158.9	1184.2	1190.9
20°	239.8	323.7	540.8	610.1	808.5	1016.4	1084.3	1129.6	1180.2	1196.2	1198.9
22.5°	214.5	301.0	548.8	620.7	845.8	1053.7	1111.0	1146.9	1181.6	1186.9	1188.2
25°	193.1	275.7	547.5	632.7	877.8	1076.3	1120.3	1146.9	1166.9	1169.6	1169.6
27.5°	173.2	247.8	542.1	635.4	901.8	1081.7	1116.3	1135.0	1144.3	1149.6	1149.6
30°	155.8	221.1	528.8	630.0	912.4	1076.3	1104.3	1113.6	1123.0	1131.0	1135.0
32.5°	142.5	195.8	508.8	619.4	913.8	1063.0	1083.0	1088.3	1101.7	1120.3	1127.0
35°	130.5	170.5	486.2	604.7	905.8	1041.7	1055.0	1060.4	1087.0	1115.0	1124.3
37.5°	118.5	151.8	456.9	579.4	893.8	1016.4	1025.7	1035.1	1076.3	1109.6	1120.3
40°	106.6	135.9	422.2	551.4	875.1	985.7	993.7	1008.3	1063.0	1101.7	1112.3
42.5°	97.2	122.5	384.9	522.1	851.1	951.0	963.0	984.3	1047.0	1088.3	1100.3
45°	89.2	109.2	345.0	482.2	820.5	915.1	932.4	961.7	1028.4	1068.4	1079.0
47.5°	81.3	99.9	303.7	440.9	787.2	879.1	901.8	935.1	1003.0	1041.7	1051.0
50°	74.6	90.6	262.4	396.9	751.2	840.5	867.1	901.8	971.0	1007.0	1019.1
52.5°	69.3	82.6	223.8	353.0	710.0	800.5	831.2	867.1	932.4	967.0	975.0
55°	63.9	75.9	190.5	306.4	667.3	757.9	791.2	825.8	889.8	919.1	924.4
57.5°	61.3	70.6	162.5	262.4	622.0	710.0	747.3	779.2	839.2	861.8	867.1
60°	57.3	66.6	141.2	225.1	572.8	664.7	696.6	728.6	779.2	797.9	801.9
62.5°	53.3	63.9	125.2	189.1	522.1	611.4	643.4	672.7	715.3	728.6	733.9
65°	50.6	61.3	113.2	162.5	470.2	555.4	587.4	612.7	647.4	660.7	663.3
67.5°	48.0	58.6	103.9	139.9	418.2	499.5	523.5	547.5	574.1	587.4	588.7
70°	44.0	55.9	95.9	123.9	365.0	435.6	455.5	480.9	502.2	508.8	512.8
72.5°	41.3	51.9	90.6	111.9	310.4	374.3	392.9	407.6	426.2	432.9	432.9
75°	37.3	46.6	85.2	99.9	254.4	306.4	322.3	337.0	351.6	354.3	350.3
77.5°	33.3	41.3	73.3	83.9	198.5	242.4	255.7	263.7	275.7	278.4	279.7
80°	28.0	36.0	57.3	65.3	143.9	178.5	187.8	194.5	205.1	205.1	207.8
82.5°	21.3	28.0	41.3	46.6	97.2	122.5	130.5	134.5	141.2	141.2	141.2
85°	13.3	17.3	26.6	30.6	58.6	74.6	79.9	81.3	86.6	87.9	87.9
87.5°	6.7	9.3	17.3	18.6	30.6	38.6	38.6	41.3	41.3	40.0	38.6
90°	2.8	5.0	7.2	7.7	12.1	17.9	20.9	18.6	13.9	10.4	10.4
92.5°	11.0	29.7	48.3	53.0	74.5	103.2	117.5	102.9	73.9	52.1	50.1
95°	26.4	60.5	94.7	103.2	183.3	290.1	343.5	306.5	232.6	177.1	170.8
97.5°	45.6	75.7	105.8	113.4	247.0	425.0	514.0	490.6	443.8	408.7	396.8
100°	60.4	87.7	115.1	121.9	270.0	467.6	566.4	568.1	571.5	574.1	559.9
102.5°	73.0	98.6	124.1	130.4	280.7	481.0	581.2	610.9	670.5	715.2	703.0
105°	94.5	116.1	137.6	143.1	288.5	482.5	579.5	646.3	779.8	879.9	873.3
107.5°	116.4	136.6	156.6	161.7	290.0	461.0	546.6	639.6	825.8	965.5	967.1
110°	131.2	149.4	167.6	172.1	287.8	442.0	519.1	623.2	831.4	987.5	994.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	145.8	163.1	180.4	184.8	287.9	425.4	494.2	600.7	813.8	973.5	984.0
115°	167.7	183.7	199.7	203.7	290.6	406.3	464.2	566.9	772.1	926.0	940.6
117.5°	189.4	204.0	218.4	222.1	296.0	394.4	443.6	536.3	721.5	860.4	876.5
120°	202.0	215.7	229.4	232.8	300.3	390.4	435.4	520.0	689.3	816.2	831.9
122.5°	214.5	228.2	242.0	245.4	306.6	388.2	429.1	505.3	657.7	772.0	787.5
125°	233.4	245.9	258.5	261.6	315.2	386.5	422.2	487.0	616.4	713.5	727.7
127.5°	248.7	261.4	274.1	277.3	323.7	385.6	416.5	472.1	583.1	666.5	678.5
130°	257.0	270.7	284.3	287.7	329.9	386.1	414.3	463.7	562.7	637.0	648.1
132.5°	265.5	279.2	292.9	296.2	335.0	386.5	412.4	456.7	545.2	611.7	621.6
135°	278.1	290.6	303.0	306.1	340.5	386.2	409.1	446.2	520.4	576.0	584.6
137.5°	291.0	303.3	315.6	318.7	348.6	388.5	408.5	439.8	502.5	549.6	556.6
140°	301.7	313.1	324.4	327.2	353.7	388.9	406.6	433.7	487.9	528.4	535.0
142.5°	309.9	320.4	330.9	333.5	357.9	390.4	406.6	430.4	477.9	513.6	519.3
145°	322.6	331.8	340.9	343.2	363.5	390.4	403.9	423.3	462.2	491.4	495.7
147.5°	335.2	344.1	353.1	355.3	371.5	393.0	403.9	419.1	449.8	472.8	476.3
150°	343.5	351.6	359.6	361.6	375.7	394.4	403.9	416.8	442.7	462.0	464.9
152.5°	351.9	358.0	364.2	365.7	378.4	395.3	403.9	414.9	437.0	453.5	455.6
155°	364.6	369.1	373.6	374.7	384.4	397.4	403.9	412.7	430.2	443.4	444.8
157.5°	373.9	378.3	382.7	383.8	390.5	399.4	403.9	410.7	424.4	434.6	435.6
160°	380.2	383.6	387.0	387.9	393.2	400.3	403.9	409.7	421.4	430.2	430.8
162.5°	386.5	389.1	391.7	392.3	396.1	401.3	403.9	408.8	418.7	426.1	426.6
165°	393.4	395.7	398.0	398.6	400.4	402.7	403.9	407.4	414.4	419.8	420.4
167.5°	399.7	400.8	401.9	402.2	403.7	405.6	406.6	408.9	413.5	417.0	417.3
170°	403.9	404.9	406.1	406.3	406.4	406.5	406.6	408.9	413.5	417.0	417.0
172.5°	406.1	406.3	406.5	406.6	406.6	406.6	406.6	408.4	412.0	414.8	414.6
175°	409.1	409.1	409.1	409.1	408.3	407.1	406.6	407.8	410.1	411.8	411.8
177.5°	409.1	409.1	409.1	409.1	408.5	407.6	407.1	408.0	409.9	411.2	411.0
180°	409.1	409.1	409.1	409.1	409.1	409.1	409.1	409.1	409.1	409.1	409.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	414.3	414.3
2.5°	442.2	439.6
5°	568.8	571.4
7.5°	765.9	764.6
10°	952.4	964.4
12.5°	1088.3	1091.0
15°	1170.9	1176.2
17.5°	1202.9	1204.2
20°	1204.2	1201.6
22.5°	1189.6	1186.9
25°	1172.2	1170.9
27.5°	1156.3	1157.6
30°	1149.6	1153.6
32.5°	1149.6	1156.3
35°	1152.3	1158.9
37.5°	1150.9	1158.9
40°	1145.6	1154.9
42.5°	1131.0	1137.6
45°	1108.3	1116.3
47.5°	1079.0	1084.3
50°	1041.7	1047.0
52.5°	995.0	996.3
55°	939.1	944.4
57.5°	879.1	880.5
60°	812.5	816.5
62.5°	741.9	741.9
65°	667.3	670.0
67.5°	590.1	596.7
70°	511.5	512.8
72.5°	434.2	434.2
75°	354.3	355.6
77.5°	278.4	278.4
80°	206.5	207.8
82.5°	142.5	145.2
85°	89.2	89.2
87.5°	41.3	37.3
90°	10.4	10.4
92.5°	41.7	33.5
95°	145.6	120.5
97.5°	349.0	301.2
100°	502.9	445.9
102.5°	654.2	605.3
105°	847.2	820.9
107.5°	973.4	979.8
110°	1021.6	1049.0





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1026.0	1067.9
115°	998.7	1057.0
117.5°	941.1	1005.7
120°	894.6	957.4
122.5°	849.4	911.2
125°	784.7	841.7
127.5°	726.7	774.8
130°	692.5	736.9
132.5°	661.4	701.2
135°	618.8	653.1
137.5°	584.7	612.8
140°	561.2	587.5
142.5°	541.9	564.4
145°	512.8	529.9
147.5°	490.4	504.6
150°	476.4	487.9
152.5°	464.3	473.0
155°	450.6	456.3
157.5°	439.6	443.6
160°	433.1	435.4
162.5°	428.8	431.0
165°	422.7	425.0
167.5°	418.2	419.2
170°	417.0	417.0
172.5°	413.7	412.9
175°	411.8	411.8
177.5°	410.1	409.1
180°	409.1	409.1



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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	4.69	5.64	5.60	6.57	7.77	17.86	18.80	18.76	19.74	20.93
	3H	5.40	6.26	6.32	7.20	8.42	19.70	20.55	20.62	21.49	22.71
	4H	5.70	6.51	6.64	7.46	8.69	20.34	21.15	21.28	22.10	23.33
	6H	5.96	6.71	6.91	7.66	8.90	20.77	21.52	21.72	22.47	23.72
	8H	6.03	6.74	6.98	7.71	8.96	20.89	21.61	21.85	22.58	23.82
	12H	6.05	6.73	7.01	7.69	8.96	20.96	21.64	21.92	22.60	23.87
4H	2H	11.91	12.72	12.85	13.66	14.89	18.14	18.95	19.08	19.90	21.13
	3H	13.48	14.16	14.43	15.14	16.39	20.19	20.87	21.14	21.84	23.09
	4H	13.58	14.20	14.54	15.17	16.44	20.96	21.58	21.92	22.55	23.82
	6H	13.60	14.14	14.57	15.13	16.40	21.50	22.03	22.47	23.03	24.30
	8H	13.58	14.08	14.55	15.07	16.35	21.66	22.16	22.63	23.15	24.43
	12H	13.54	13.99	14.53	15.00	16.29	21.75	22.21	22.75	23.21	24.50
8H	4H	15.03	15.53	16.01	16.52	17.81	21.03	21.53	22.00	22.51	23.80
	6H	15.28	15.69	16.28	16.72	18.01	21.65	22.07	22.66	23.10	24.38
	8H	15.30	15.67	16.31	16.68	17.98	21.87	22.24	22.88	23.26	24.56
	12H	15.27	15.59	16.28	16.61	17.95	22.02	22.34	23.03	23.35	24.70
12H	4H	15.18	15.63	16.17	16.64	17.93	20.98	21.44	21.98	22.44	23.73
	6H	15.54	15.91	16.55	16.92	18.22	21.64	22.01	22.65	23.02	24.32
	8H	15.61	15.93	16.62	16.95	18.29	21.87	22.19	22.88	23.21	24.55