

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: P936740

Luminaire Tested: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936740
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-6-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

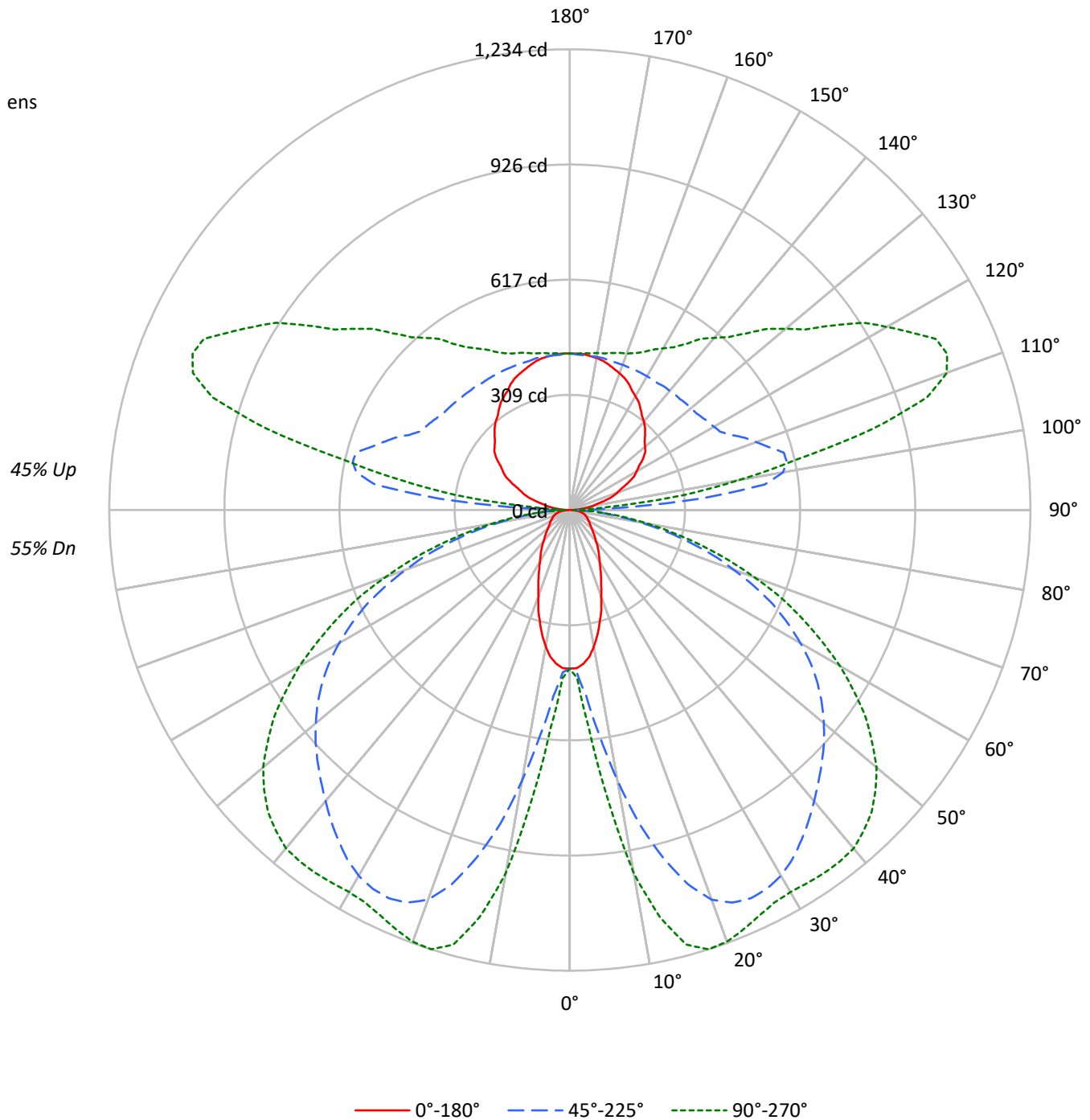
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6000.8 lumens
Efficiency: N/A
Efficacy: 109.9 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

TEST NUMBER: P936740
CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-6-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P936740

CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-6-4000K

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	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°	2625	2625	2625
5°	2563	3033	3529
10°	2324	4420	5850
15°	1975	5774	7064
20°	1607	6690	7199
25°	1340	6999	7053
30°	1129	7041	7040
35°	998	6922	7222
40°	870	6768	7410
45°	787	6655	7439
50°	721	6553	7316
55°	690	6404	6991
60°	706	6120	6479
65°	732	5689	5775
70°	778	4958	4879
75°	860	4039	3807
80°	934	2798	2566
85°	811	1482	1313

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7439 cd/sqm



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CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-6-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.9	0.9
10°-20°	243.3	4.1
20°-30°	425.6	7.1
30°-40°	547.8	9.1
40°-50°	611.9	10.2
50°-60°	586.0	9.8
60°-70°	464.4	7.7
70°-80°	273.1	4.6
80°-90°	77.5	1.3
90°-100°	204.3	3.4
100°-110°	537.0	8.9
110°-120°	556.8	9.3
120°-130°	446.6	7.4
130°-140°	350.4	5.8
140°-150°	269.0	4.5
150°-160°	193.7	3.2
160°-170°	118.5	2.0
170°-180°	40.0	0.7
0°-30°	723.7	12.1
0°-40°	1271.6	21.2
0°-60°	2469.5	41.2
0°-90°	3284.4	54.7
90°-120°	1298.1	21.6
90°-150°	2364.1	39.4
90°-180°	2716.0	45.3
0°-180°	6000.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	424	424	424	424	424	
5°	413	443	499	565	585	38
15°	310	572	963	1168	1205	86
25°	198	648	1148	1198	1199	91
35°	134	620	1081	1142	1187	83
45°	91	494	955	1094	1144	71
55°	66	314	810	942	967	60
65°	52	166	602	677	686	51
75°	38	102	330	363	364	40
85°	14	31	82	90	91	14
90°	3	8	21	11	11	3
95°	27	106	352	181	123	30
105°	97	146	594	901	841	103
115°	172	209	476	949	1083	170
125°	239	268	432	731	862	212
135°	285	314	419	590	669	220
145°	330	352	414	503	543	207
155°	374	384	414	454	467	172
165°	403	408	414	430	435	114
175°	419	419	416	422	422	40
180°	419	419	419	419	419	



TEST NUMBER: P936740

CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-6-400K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3
2.5°	424.3	424.3	427.1	428.4	431.2	432.5	435.3	438.0	446.2	447.5	450.3
5°	413.4	418.9	436.6	443.4	462.6	488.5	499.4	517.1	554.0	564.9	571.7
7.5°	397.1	409.3	453.0	463.9	511.7	579.9	608.5	646.8	705.4	734.1	757.3
10°	371.1	397.1	474.8	500.8	578.5	682.2	735.4	788.7	877.3	916.9	931.9
12.5°	342.5	384.8	498.0	533.5	645.4	796.8	861.0	919.6	1020.6	1073.9	1082.1
15°	309.7	367.0	519.9	571.7	716.3	892.4	963.3	1035.7	1129.9	1168.1	1177.6
17.5°	281.1	353.4	540.3	594.9	770.9	978.3	1050.7	1110.8	1187.2	1213.1	1219.9
20°	245.6	331.6	554.0	624.9	828.2	1041.2	1110.8	1157.1	1209.0	1225.4	1228.1
22.5°	219.7	308.4	562.2	635.8	866.4	1079.4	1138.0	1174.9	1210.4	1215.8	1217.2
25°	197.8	282.4	560.8	648.1	899.2	1102.6	1147.6	1174.9	1195.4	1198.1	1198.1
27.5°	177.4	253.8	555.3	650.8	923.7	1108.0	1143.5	1162.6	1172.2	1177.6	1177.6
30°	159.6	226.5	541.7	645.4	934.7	1102.6	1131.2	1140.8	1150.3	1158.5	1162.6
32.5°	146.0	200.6	521.2	634.5	936.0	1088.9	1109.4	1114.9	1128.5	1147.6	1154.4
35°	133.7	174.7	498.0	619.5	927.8	1067.1	1080.7	1086.2	1113.5	1142.1	1151.7
37.5°	121.4	155.5	468.0	593.5	915.5	1041.2	1050.7	1060.3	1102.6	1136.7	1147.6
40°	109.2	139.2	432.5	564.9	896.4	1009.7	1017.9	1032.9	1088.9	1128.5	1139.4
42.5°	99.6	125.5	394.3	534.9	871.9	974.2	986.5	1008.3	1072.6	1114.9	1127.1
45°	91.4	111.9	353.4	493.9	840.5	937.4	955.1	985.1	1053.5	1094.4	1105.3
47.5°	83.2	102.3	311.1	451.6	806.4	900.5	923.7	957.8	1027.4	1067.1	1076.6
50°	76.4	92.8	268.8	406.6	769.6	861.0	888.3	923.7	994.7	1031.5	1043.9
52.5°	71.0	84.6	229.2	361.6	727.3	820.0	851.4	888.3	955.1	990.6	998.8
55°	65.5	77.8	195.1	313.8	683.6	776.4	810.5	846.0	911.5	941.5	946.9
57.5°	62.8	72.3	166.5	268.8	637.2	727.3	765.5	798.2	859.6	882.8	888.3
60°	58.7	68.2	144.6	230.6	586.7	680.9	713.6	746.4	798.2	817.3	821.4
62.5°	54.6	65.5	128.3	193.8	534.9	626.3	659.0	689.1	732.7	746.4	751.8
65°	51.8	62.8	116.0	166.5	481.7	569.0	601.7	627.6	663.1	676.8	679.5
67.5°	49.1	60.0	106.4	143.3	428.4	511.7	536.2	560.8	588.1	601.7	603.1
70°	45.0	57.3	98.2	126.9	373.9	446.2	466.6	492.6	514.4	521.2	525.3
72.5°	42.3	53.2	92.8	114.6	317.9	383.4	402.5	417.5	436.6	443.4	443.4
75°	38.2	47.8	87.3	102.3	260.6	313.8	330.2	345.2	360.2	362.9	358.9
77.5°	34.1	42.3	75.0	86.0	203.3	248.3	262.0	270.2	282.4	285.2	286.5
80°	28.7	36.8	58.7	66.9	147.4	182.8	192.4	199.2	210.1	210.1	212.9
82.5°	21.8	28.7	42.3	47.8	99.6	125.5	133.7	137.8	144.6	144.6	144.6
85°	13.6	17.7	27.3	31.4	60.0	76.4	81.9	83.2	88.7	90.1	90.1
87.5°	6.8	9.6	17.7	19.1	31.4	39.6	39.6	42.3	42.3	40.9	39.6
90°	2.8	5.1	7.4	7.9	12.4	18.4	21.4	19.0	14.2	10.6	10.6
92.5°	11.3	30.4	49.5	54.3	76.3	105.7	120.3	105.4	75.7	53.4	51.3
95°	27.0	61.9	97.0	105.7	187.7	297.2	351.8	314.0	238.2	181.4	174.9
97.5°	46.7	77.6	108.4	116.2	253.0	435.4	526.5	502.6	454.6	418.7	406.4
100°	61.9	89.9	117.9	124.9	276.6	479.0	580.2	581.9	585.4	588.1	573.5
102.5°	74.8	101.0	127.1	133.6	287.5	492.8	595.4	625.8	686.9	732.6	720.2
105°	96.8	118.9	141.0	146.5	295.5	494.3	593.6	662.0	798.8	901.4	894.6
107.5°	119.3	139.9	160.5	165.6	297.1	472.3	559.9	655.2	846.0	989.0	990.7
110°	134.4	153.0	171.6	176.3	294.8	452.8	531.8	638.4	851.7	1011.6	1018.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	149.4	167.1	184.8	189.3	294.9	435.8	506.2	615.4	833.6	997.2	1008.0
115°	171.8	188.2	204.6	208.7	297.6	416.2	475.6	580.7	790.9	948.6	963.5
117.5°	194.0	208.9	223.8	227.5	303.2	404.1	454.5	549.3	739.1	881.3	897.9
120°	206.9	221.0	235.0	238.5	307.6	399.9	446.0	532.7	706.1	836.0	852.1
122.5°	219.7	233.8	247.9	251.4	314.1	397.7	439.5	517.6	673.8	790.8	806.7
125°	239.1	251.9	264.8	268.0	322.8	396.0	432.5	498.8	631.5	730.9	745.4
127.5°	254.8	267.8	280.8	284.1	331.6	395.0	426.6	483.6	597.4	682.8	695.1
130°	263.2	277.3	291.3	294.7	337.9	395.5	424.3	475.0	576.4	652.5	663.9
132.5°	272.0	286.0	300.0	303.5	343.1	396.0	422.4	467.8	558.5	626.6	636.7
135°	284.9	297.6	310.4	313.6	348.8	395.6	419.1	457.1	533.0	590.0	598.8
137.5°	298.1	310.7	323.3	326.5	357.1	398.0	418.4	450.5	514.8	563.0	570.2
140°	309.1	320.7	332.3	335.2	362.3	398.4	416.5	444.3	499.8	541.3	548.1
142.5°	317.5	328.2	338.9	341.7	366.6	399.9	416.5	440.9	489.6	526.1	532.0
145°	330.5	339.8	349.2	351.6	372.3	399.9	413.7	433.6	473.5	503.4	507.8
147.5°	343.4	352.5	361.7	363.9	380.5	402.6	413.7	429.3	460.7	484.3	487.9
150°	351.8	360.1	368.3	370.4	384.9	404.1	413.7	427.0	453.5	473.3	476.2
152.5°	360.5	366.8	373.0	374.6	387.6	405.0	413.7	425.0	447.6	464.6	466.7
155°	373.5	378.1	382.7	383.9	393.8	407.1	413.7	422.7	440.7	454.2	455.6
157.5°	383.0	387.5	392.1	393.1	400.0	409.2	413.7	420.7	434.7	445.2	446.2
160°	389.5	393.0	396.4	397.3	402.8	410.1	413.7	419.7	431.7	440.7	441.3
162.5°	396.0	398.6	401.2	401.9	405.8	411.1	413.7	418.8	428.9	436.4	437.0
165°	403.0	405.3	407.7	408.3	410.2	412.5	413.7	417.3	424.5	430.0	430.6
167.5°	409.4	410.5	411.7	412.0	413.5	415.5	416.5	418.9	423.6	427.2	427.4
170°	413.7	414.8	416.0	416.2	416.3	416.4	416.5	418.9	423.6	427.2	427.2
172.5°	416.0	416.2	416.4	416.5	416.5	416.5	416.5	418.3	422.1	424.9	424.7
175°	419.1	419.1	419.1	419.1	418.3	417.1	416.5	417.7	420.1	421.8	421.8
177.5°	419.1	419.1	419.1	419.1	418.4	417.5	417.1	418.0	419.9	421.3	421.0
180°	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.1



TEST NUMBER: P936740

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	424.3	424.3
2.5°	453.0	450.3
5°	582.6	585.4
7.5°	784.6	783.2
10°	975.6	987.9
12.5°	1114.9	1117.6
15°	1199.4	1204.9
17.5°	1232.2	1233.6
20°	1233.6	1230.8
22.5°	1218.5	1215.8
25°	1200.8	1199.4
27.5°	1184.4	1185.8
30°	1177.6	1181.7
32.5°	1177.6	1184.4
35°	1180.3	1187.2
37.5°	1179.0	1187.2
40°	1173.5	1183.1
42.5°	1158.5	1165.3
45°	1135.3	1143.5
47.5°	1105.3	1110.8
50°	1067.1	1072.6
52.5°	1019.2	1020.6
55°	961.9	967.4
57.5°	900.5	901.9
60°	832.3	836.4
62.5°	760.0	760.0
65°	683.6	686.3
67.5°	604.5	611.3
70°	524.0	525.3
72.5°	444.8	444.8
75°	362.9	364.3
77.5°	285.2	285.2
80°	211.5	212.9
82.5°	146.0	148.7
85°	91.4	91.4
87.5°	42.3	38.2
90°	10.6	10.6
92.5°	42.8	34.3
95°	149.2	123.4
97.5°	357.5	308.5
100°	515.1	456.7
102.5°	670.1	620.1
105°	867.8	840.9
107.5°	997.1	1003.7
110°	1046.5	1074.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1051.0	1093.9
115°	1023.1	1082.7
117.5°	964.0	1030.2
120°	916.4	980.7
122.5°	870.1	933.4
125°	803.8	862.2
127.5°	744.4	793.7
130°	709.3	754.8
132.5°	677.5	718.2
135°	633.9	669.0
137.5°	599.0	627.7
140°	574.9	601.8
142.5°	555.1	578.2
145°	525.3	542.8
147.5°	502.4	516.9
150°	488.0	499.8
152.5°	475.6	484.6
155°	461.5	467.4
157.5°	450.4	454.5
160°	443.6	446.0
162.5°	439.3	441.5
165°	433.0	435.4
167.5°	428.4	429.4
170°	427.2	427.2
172.5°	423.8	423.0
175°	421.8	421.8
177.5°	420.1	419.1
180°	419.1	419.1



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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	4.78	5.72	5.68	6.66	7.85	17.94	18.89	18.85	19.82	21.02
	3H	5.49	6.34	6.41	7.28	8.50	19.78	20.63	20.70	21.58	22.80
	4H	5.79	6.60	6.72	7.54	8.78	20.43	21.23	21.36	22.18	23.41
	6H	6.04	6.79	6.99	7.74	8.99	20.86	21.60	21.80	22.56	23.80
	8H	6.12	6.83	7.07	7.80	9.04	20.98	21.69	21.93	22.66	23.90
	12H	6.14	6.81	7.09	7.78	9.05	21.05	21.72	22.01	22.69	23.96
4H	2H	11.99	12.80	12.93	13.75	14.98	18.23	19.03	19.16	19.98	21.21
	3H	13.57	14.25	14.52	15.22	16.47	20.27	20.95	21.22	21.93	23.17
	4H	13.67	14.29	14.63	15.26	16.53	21.04	21.66	22.00	22.63	23.90
	6H	13.68	14.22	14.66	15.21	16.48	21.58	22.12	22.55	23.11	24.38
	8H	13.66	14.16	14.64	15.15	16.44	21.74	22.24	22.72	23.23	24.52
	12H	13.62	14.08	14.62	15.08	16.37	21.84	22.29	22.83	23.30	24.59
8H	4H	15.12	15.62	16.09	16.60	17.89	21.11	21.61	22.08	22.60	23.88
	6H	15.36	15.78	16.36	16.81	18.09	21.74	22.15	22.74	23.18	24.47
	8H	15.38	15.75	16.39	16.77	18.07	21.96	22.32	22.97	23.34	24.64
	12H	15.35	15.68	16.37	16.69	18.03	22.10	22.43	23.12	23.44	24.78
12H	4H	15.26	15.72	16.26	16.72	18.01	21.07	21.52	22.06	22.52	23.81
	6H	15.62	15.99	16.63	17.01	18.31	21.72	22.09	22.73	23.11	24.41
	8H	15.69	16.02	16.71	17.03	18.38	21.95	22.28	22.97	23.29	24.63