

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: P936834

Luminaire Tested: SQ4-FB-050U-100D-92765-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936834
REPORT IS A COMBINATION OF REPORTS P933471 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-100D-92765-1D-UNV-STD-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

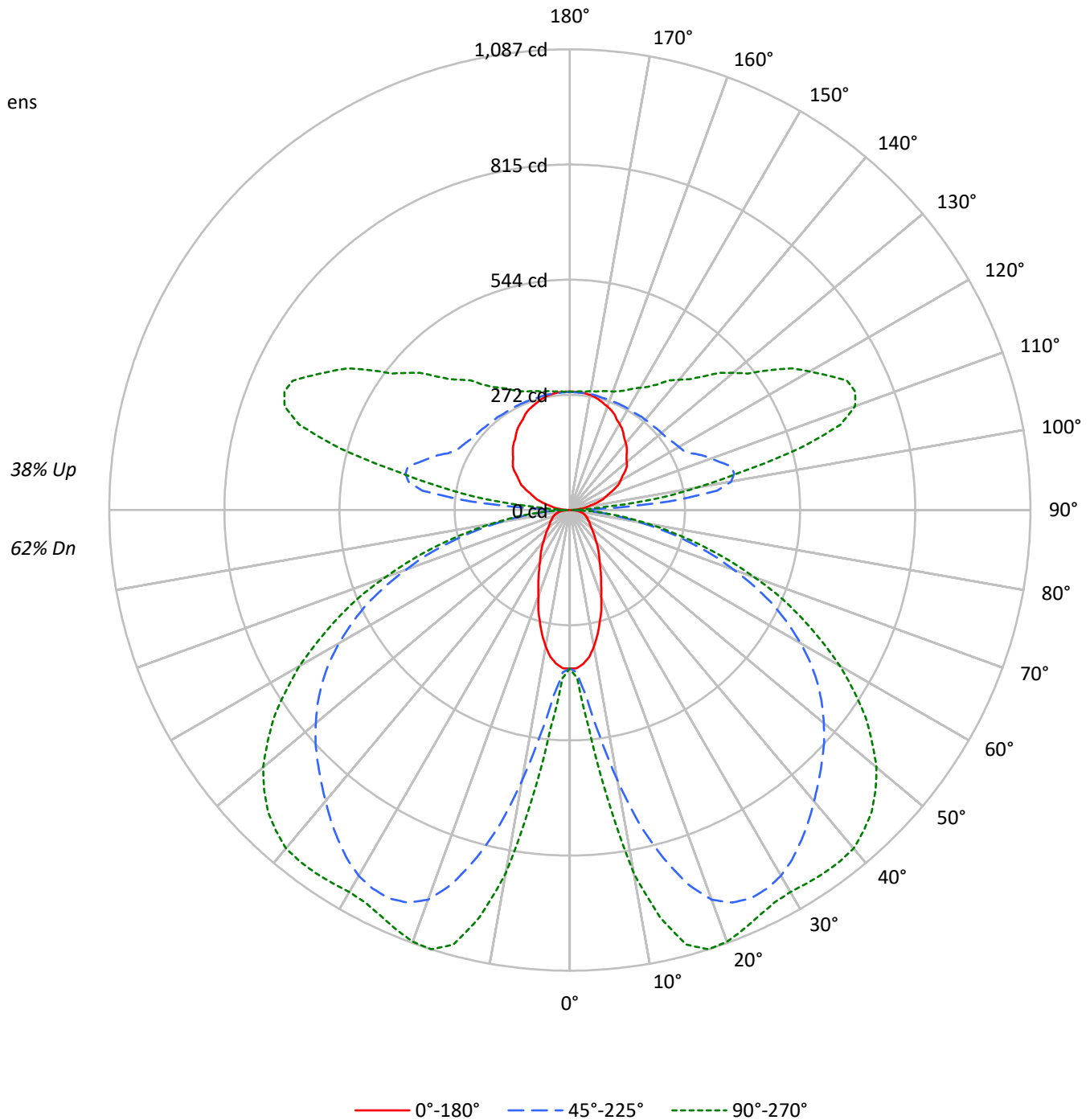
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4703.7 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 45.2
Input Voltage (V): NR
Input Current (A_{in}): 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: P936834
CATALOG NUMBER: SQ4-FB-050U-100D-92765-1D-UNV-STD-W-4-4000K

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	100	95	91	87	93	89	85	82	78	75	72	67	65	63	58	56	55	50
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	48	45	41
3	82	72	64	57	76	67	60	54	59	53	49	51	47	43	44	40	38	34
4	74	63	54	48	69	59	51	45	52	46	41	45	40	36	39	35	32	28
5	68	56	47	41	63	52	44	39	46	40	35	40	35	31	34	30	27	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	23	21
7	58	45	36	30	54	42	34	29	37	31	26	32	27	23	28	24	21	18
8	53	40	32	26	50	38	30	25	34	27	23	29	24	20	25	21	18	16
9	50	37	29	23	46	35	27	22	31	24	20	27	22	18	23	19	16	14
10	46	33	26	21	43	32	25	20	28	22	18	25	20	16	21	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3469	3469	3469
5°	3385	4006	4663
10°	3067	5835	7729
15°	2603	7618	9333
20°	2117	8822	9511
25°	1764	9224	9319
30°	1485	9276	9301
35°	1311	9114	9542
40°	1140	8906	9790
45°	1031	8752	9828
50°	943	8612	9666
55°	901	8410	9236
60°	920	8030	8561
65°	952	7456	7630
70°	1008	6490	6446
75°	1105	5278	5031
80°	1179	3648	3390
85°	994	1924	1734

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9828 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.4	1.0
10°-20°	214.3	4.6
20°-30°	374.8	8.0
30°-40°	482.5	10.3
40°-50°	539.0	11.5
50°-60°	516.2	11.0
60°-70°	409.1	8.7
70°-80°	240.6	5.1
80°-90°	67.9	1.4
90°-100°	136.2	2.9
100°-110°	358.0	7.6
110°-120°	371.2	7.9
120°-130°	297.8	6.3
130°-140°	233.6	5.0
140°-150°	179.3	3.8
150°-160°	129.1	2.7
160°-170°	79.0	1.7
170°-180°	26.7	0.6
0°-30°	637.5	13.6
0°-40°	1120.0	23.8
0°-60°	2175.2	46.2
0°-90°	2892.8	61.5
90°-120°	865.4	18.4
90°-150°	1576.0	33.5
90°-180°	1811.0	38.5
0°-180°	4703.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	374	374	374	374	374	
5°	364	391	440	498	516	34
15°	273	504	849	1029	1061	76
25°	174	571	1011	1055	1056	80
35°	118	546	952	1006	1046	74
45°	80	435	841	964	1007	62
55°	58	276	714	829	852	53
65°	46	147	530	596	604	45
75°	34	90	291	320	321	35
85°	12	28	72	79	80	13
90°	2	5	14	7	7	2
95°	18	70	234	121	82	20
105°	64	98	396	601	561	68
115°	114	139	317	632	722	113
125°	159	179	288	487	575	142
135°	190	209	279	393	446	147
145°	220	234	276	336	362	138
155°	249	256	276	303	312	114
165°	269	272	276	287	290	76
175°	279	279	278	281	281	27
180°	279	279	279	279	279	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8
2.5°	373.8	373.8	376.2	377.4	379.8	381.0	383.4	385.8	393.1	394.2	396.6
5°	364.2	369.0	384.6	390.6	407.4	430.3	439.9	455.5	488.0	497.6	503.6
7.5°	349.8	360.6	399.1	408.7	450.7	510.9	536.0	569.7	621.4	646.7	667.0
10°	326.9	349.8	418.3	441.1	509.6	601.0	647.8	694.7	772.8	807.7	820.9
12.5°	301.7	338.9	438.7	469.9	568.5	702.0	758.5	810.1	899.1	945.9	953.1
15°	272.8	323.3	457.9	503.6	631.0	786.1	848.6	912.3	995.2	1028.9	1037.3
17.5°	247.6	311.3	475.9	524.0	679.1	861.8	925.5	978.4	1045.7	1068.6	1074.6
20°	216.3	292.1	488.0	550.5	729.6	917.1	978.4	1019.2	1064.9	1079.4	1081.7
22.5°	193.5	271.6	495.2	560.1	763.2	950.8	1002.4	1034.9	1066.1	1070.9	1072.1
25°	174.3	248.8	494.0	570.9	792.1	971.1	1010.8	1034.9	1052.9	1055.3	1055.3
27.5°	156.3	223.6	489.2	573.3	813.7	975.9	1007.2	1024.1	1032.4	1037.3	1037.3
30°	140.6	199.5	477.2	568.5	823.3	971.1	996.4	1004.8	1013.2	1020.4	1024.1
32.5°	128.6	176.7	459.2	558.9	824.5	959.1	977.1	982.0	994.0	1010.8	1016.9
35°	117.8	153.8	438.7	545.7	817.3	939.9	951.9	956.8	980.8	1006.1	1014.4
37.5°	107.0	137.0	412.2	522.9	806.5	917.1	925.5	933.9	971.1	1001.2	1010.8
40°	96.1	122.6	381.0	497.6	789.7	889.4	896.6	909.9	959.1	994.0	1003.6
42.5°	87.8	110.6	347.4	471.2	768.0	858.2	869.0	888.3	944.7	982.0	992.8
45°	80.5	98.5	311.3	435.1	740.4	825.8	841.3	867.8	927.9	963.9	973.6
47.5°	73.3	90.1	274.1	397.9	710.3	793.3	813.7	843.8	905.1	939.9	948.3
50°	67.3	81.8	236.8	358.2	677.9	758.5	782.5	813.7	876.3	908.6	919.5
52.5°	62.5	74.5	201.9	318.6	640.7	722.3	750.0	782.5	841.3	872.6	879.8
55°	57.7	68.5	171.9	276.4	602.2	683.9	714.0	745.2	802.9	829.3	834.1
57.5°	55.3	63.7	146.6	236.8	561.3	640.7	674.3	703.1	757.2	777.6	782.5
60°	51.7	60.1	127.4	203.1	516.9	599.7	628.7	657.5	703.1	720.0	723.5
62.5°	48.1	57.7	113.0	170.6	471.2	551.7	580.5	607.0	645.5	657.5	662.3
65°	45.7	55.3	102.2	146.6	424.3	501.2	530.0	552.9	584.2	596.2	598.5
67.5°	43.3	52.8	93.8	126.2	377.4	450.7	472.4	494.0	518.0	530.0	531.2
70°	39.7	50.5	86.5	111.8	329.3	393.1	411.1	433.9	453.1	459.2	462.7
72.5°	37.3	46.8	81.8	101.0	280.1	337.7	354.6	367.8	384.6	390.6	390.6
75°	33.7	42.0	77.0	90.1	229.6	276.4	290.9	304.1	317.3	319.7	316.1
77.5°	30.0	37.3	66.1	75.7	179.1	218.8	230.8	238.0	248.8	251.2	252.4
80°	25.2	32.5	51.7	58.9	129.8	161.1	169.5	175.5	185.1	185.1	187.5
82.5°	19.2	25.2	37.3	42.0	87.8	110.6	117.8	121.4	127.4	127.4	127.4
85°	12.0	15.6	24.0	27.7	52.8	67.3	72.1	73.3	78.1	79.3	79.3
87.5°	6.0	8.4	15.6	16.8	27.7	34.8	34.8	37.3	37.3	36.0	34.8
90°	1.9	3.4	4.9	5.3	8.3	12.3	14.3	12.6	9.5	7.1	7.1
92.5°	7.5	20.2	33.0	36.2	50.8	70.4	80.2	70.3	50.5	35.7	34.2
95°	18.0	41.3	64.7	70.5	125.2	198.0	234.5	209.2	158.7	120.9	116.6
97.5°	31.1	51.7	72.2	77.4	168.6	290.2	350.9	335.0	303.1	279.2	271.0
100°	41.2	59.9	78.6	83.2	184.4	319.3	386.8	388.0	390.3	392.1	382.3
102.5°	49.8	67.3	84.7	89.1	191.7	328.5	396.9	417.3	457.9	488.4	480.0
105°	64.5	79.2	94.0	97.7	197.0	329.6	395.8	441.4	532.5	600.9	596.4
107.5°	79.5	93.2	107.0	110.4	198.0	314.9	373.3	436.9	564.1	659.4	660.5
110°	89.6	102.0	114.4	117.5	196.6	301.9	354.6	425.6	567.8	674.4	679.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	99.5	111.3	123.2	126.2	196.6	290.5	337.5	410.2	555.7	664.9	672.0
115°	114.5	125.4	136.4	139.1	198.4	277.4	317.0	387.1	527.2	632.4	642.3
117.5°	129.4	139.3	149.2	151.6	202.1	269.3	303.0	366.2	492.7	587.5	598.5
120°	138.0	147.4	156.6	159.0	205.1	266.6	297.4	355.1	470.7	557.4	568.2
122.5°	146.5	155.9	165.3	167.6	209.4	265.2	293.0	345.0	449.2	527.2	537.8
125°	159.4	167.9	176.5	178.7	215.2	264.0	288.4	332.6	421.0	487.3	497.0
127.5°	169.8	178.6	187.2	189.4	221.0	263.3	284.4	322.4	398.2	455.2	463.4
130°	175.5	184.8	194.1	196.5	225.3	263.7	282.9	316.7	384.3	435.0	442.5
132.5°	181.3	190.7	199.9	202.3	228.8	264.0	281.6	311.8	372.3	417.7	424.5
135°	189.9	198.4	206.9	209.0	232.5	263.7	279.3	304.6	355.3	393.3	399.1
137.5°	198.8	207.1	215.6	217.7	238.1	265.3	279.0	300.4	343.2	375.3	380.1
140°	206.0	213.8	221.6	223.5	241.5	265.6	277.6	296.2	333.2	360.9	365.4
142.5°	211.7	218.9	226.0	227.8	244.4	266.5	277.6	293.9	326.4	350.8	354.6
145°	220.3	226.5	232.8	234.3	248.1	266.6	275.8	289.1	315.6	335.6	338.5
147.5°	229.0	235.1	241.1	242.6	253.7	268.4	275.8	286.3	307.2	322.8	325.3
150°	234.5	240.0	245.5	246.9	256.5	269.3	275.8	284.6	302.3	315.6	317.6
152.5°	240.3	244.5	248.7	249.7	258.4	270.0	275.8	283.4	298.5	309.7	311.2
155°	249.0	252.1	255.2	255.9	262.5	271.3	275.8	281.8	293.8	302.8	303.8
157.5°	255.3	258.3	261.3	262.1	266.6	272.7	275.8	280.4	289.8	296.8	297.5
160°	259.7	262.0	264.3	264.9	268.5	273.3	275.8	279.8	287.8	293.8	294.2
162.5°	264.0	265.7	267.4	267.9	270.5	274.1	275.8	279.2	285.9	291.0	291.4
165°	268.7	270.3	271.9	272.3	273.4	275.0	275.8	278.2	283.0	286.6	287.0
167.5°	273.0	273.7	274.4	274.6	275.6	277.0	277.6	279.3	282.4	284.8	285.0
170°	275.8	276.5	277.3	277.4	277.5	277.6	277.6	279.3	282.4	284.8	284.8
172.5°	277.3	277.4	277.6	277.6	277.6	277.6	277.6	278.9	281.4	283.3	283.1
175°	279.3	279.3	279.3	279.3	278.8	278.0	277.6	278.4	280.1	281.3	281.3
177.5°	279.3	279.3	279.3	279.3	278.9	278.3	278.1	278.7	280.0	280.9	280.7
180°	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3	279.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	373.8	373.8
2.5°	399.1	396.6
5°	513.2	515.7
7.5°	691.1	689.9
10°	859.4	870.2
12.5°	982.0	984.4
15°	1056.5	1061.3
17.5°	1085.4	1086.6
20°	1086.6	1084.1
22.5°	1073.4	1070.9
25°	1057.7	1056.5
27.5°	1043.3	1044.4
30°	1037.3	1040.9
32.5°	1037.3	1043.3
35°	1039.7	1045.7
37.5°	1038.4	1045.7
40°	1033.7	1042.1
42.5°	1020.4	1026.4
45°	1000.1	1007.2
47.5°	973.6	978.4
50°	939.9	944.7
52.5°	897.8	899.1
55°	847.3	852.1
57.5°	793.3	794.5
60°	733.2	736.8
62.5°	669.5	669.5
65°	602.2	604.5
67.5°	532.5	538.5
70°	461.5	462.7
72.5°	391.9	391.9
75°	319.7	320.9
77.5°	251.2	251.2
80°	186.3	187.5
82.5°	128.6	131.0
85°	80.5	80.5
87.5°	37.3	33.7
90°	7.1	7.1
92.5°	28.6	22.8
95°	99.4	82.3
97.5°	238.3	205.7
100°	343.4	304.5
102.5°	446.7	413.4
105°	578.5	560.6
107.5°	664.8	669.1
110°	697.7	716.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	700.7	729.3
115°	682.0	721.8
117.5°	642.7	686.8
120°	610.9	653.8
122.5°	580.1	622.3
125°	535.9	574.8
127.5°	496.2	529.0
130°	472.9	503.2
132.5°	451.6	478.8
135°	422.6	446.0
137.5°	399.2	418.4
140°	383.3	401.2
142.5°	370.0	385.5
145°	350.2	361.9
147.5°	334.9	344.6
150°	325.4	333.2
152.5°	317.1	323.0
155°	307.7	311.6
157.5°	300.3	303.0
160°	295.8	297.4
162.5°	292.9	294.4
165°	288.6	290.3
167.5°	285.6	286.3
170°	284.8	284.8
172.5°	282.5	282.0
175°	281.3	281.3
177.5°	280.1	279.3
180°	279.3	279.3



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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	6.29	7.32	7.14	8.19	9.28	19.43	20.46	20.28	21.33	22.42
	3H	7.01	7.94	7.87	8.82	9.94	21.27	22.19	22.13	23.07	24.19
	4H	7.32	8.19	8.19	9.08	10.21	21.91	22.79	22.78	23.67	24.80
	6H	7.58	8.38	8.46	9.28	10.42	22.34	23.15	23.22	24.04	25.19
	8H	7.65	8.42	8.54	9.33	10.48	22.46	23.23	23.35	24.14	25.29
	12H	7.67	8.41	8.57	9.31	10.48	22.53	23.26	23.42	24.17	25.34
4H	2H	13.51	14.38	14.38	15.27	16.40	19.73	20.60	20.61	21.49	22.62
	3H	15.09	15.82	15.98	16.74	17.89	21.78	22.51	22.66	23.43	24.57
	4H	15.19	15.86	16.09	16.78	17.95	22.54	23.21	23.44	24.12	25.29
	6H	15.21	15.79	16.13	16.73	17.90	23.08	23.66	23.99	24.60	25.77
	8H	15.20	15.74	16.11	16.67	17.86	23.24	23.78	24.15	24.71	25.90
	12H	15.16	15.65	16.10	16.60	17.79	23.33	23.82	24.27	24.77	25.96
8H	4H	16.64	17.18	17.56	18.12	19.30	22.61	23.16	23.53	24.09	25.28
	6H	16.89	17.34	17.84	18.32	19.50	23.24	23.69	24.18	24.66	25.85
	8H	16.91	17.31	17.87	18.28	19.48	23.45	23.85	24.41	24.82	26.02
	12H	16.89	17.24	17.85	18.20	19.45	23.60	23.95	24.56	24.91	26.16
12H	4H	16.79	17.28	17.73	18.23	19.42	22.58	23.07	23.51	24.02	25.21
	6H	17.15	17.55	18.10	18.51	19.72	23.22	23.62	24.18	24.59	25.79
	8H	17.23	17.58	18.19	18.54	19.79	23.46	23.81	24.41	24.77	26.02