

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: P936731

Luminaire Tested: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936731
REPORT IS A COMBINATION OF REPORTS P933470 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-4-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

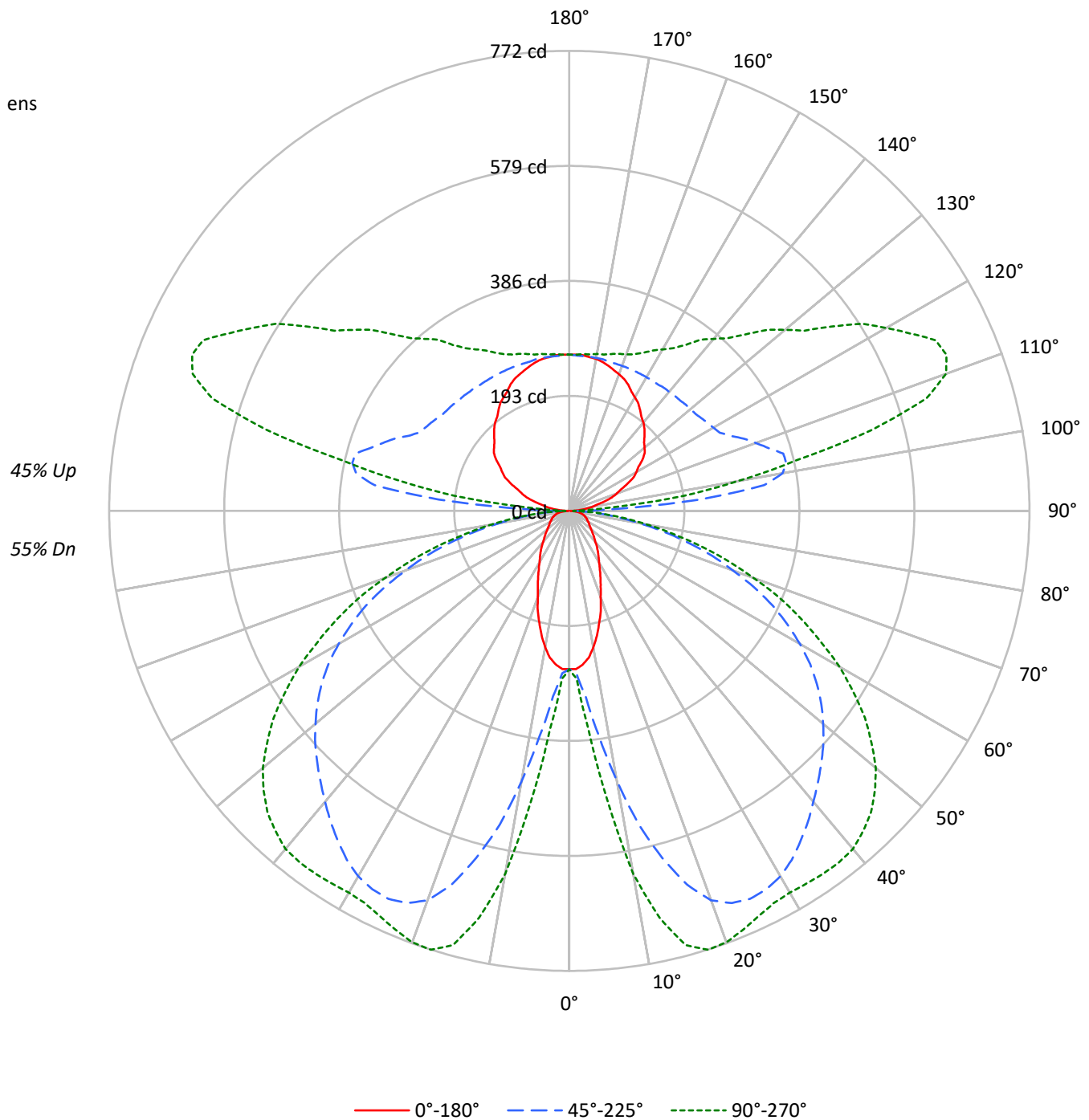
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3756.3 lumens
Efficiency: N/A
Efficacy: 103.2 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: General Diffuse

Input Watts (W): 36.4
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: P936731
CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-2700K

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	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°	2465	2465	2465
5°	2405	2847	3313
10°	2179	4147	5493
15°	1850	5413	6632
20°	1504	6269	6759
25°	1253	6555	6622
30°	1055	6592	6610
35°	932	6477	6781
40°	810	6330	6957
45°	732	6220	6985
50°	670	6119	6868
55°	640	5977	6565
60°	653	5706	6084
65°	677	5299	5423
70°	716	4612	4581
75°	784	3750	3576
80°	838	2591	2408
85°	704	1367	1232

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6985 cd/sqm



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CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.4	0.9
10°-20°	152.3	4.1
20°-30°	266.4	7.1
30°-40°	342.9	9.1
40°-50°	383.0	10.2
50°-60°	366.8	9.8
60°-70°	290.7	7.7
70°-80°	170.9	4.6
80°-90°	48.5	1.3
90°-100°	127.8	3.4
100°-110°	336.1	8.9
110°-120°	348.5	9.3
120°-130°	279.6	7.4
130°-140°	219.4	5.8
140°-150°	168.4	4.5
150°-160°	121.3	3.2
160°-170°	74.2	2.0
170°-180°	25.1	0.7
0°-30°	453.0	12.1
0°-40°	795.9	21.2
0°-60°	1545.8	41.2
0°-90°	2055.9	54.7
90°-120°	812.5	21.6
90°-150°	1479.9	39.4
90°-180°	1700.0	45.3
0°-180°	3756.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	266	266	266	266	266	
5°	259	278	313	354	366	24
15°	194	358	603	731	754	54
25°	124	406	718	750	751	57
35°	84	388	676	715	743	52
45°	57	309	598	685	716	44
55°	41	196	507	589	606	37
65°	32	104	377	424	430	32
75°	24	64	207	227	228	25
85°	8	20	51	56	57	9
90°	2	5	13	7	7	2
95°	17	66	220	114	77	19
105°	61	92	372	564	526	64
115°	108	131	298	594	678	106
125°	150	168	271	458	540	133
135°	178	196	262	369	419	138
145°	207	220	259	315	340	130
155°	234	240	259	284	293	107
165°	252	256	259	269	273	71
175°	262	262	261	264	264	25
180°	262	262	262	262	262	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	265.6	265.6	265.6	265.6	265.6	265.6	265.6	265.6	265.6	265.6	265.6
2.5°	265.6	265.6	267.3	268.2	269.9	270.8	272.5	274.2	279.3	280.2	281.9
5°	258.8	262.2	273.3	277.6	289.5	305.8	312.6	323.7	346.8	353.6	357.9
7.5°	248.6	256.2	283.6	290.4	320.3	363.0	380.9	404.9	441.6	459.5	474.0
10°	232.3	248.6	297.2	313.5	362.2	427.1	460.4	493.7	549.2	574.0	583.4
12.5°	214.4	240.9	311.8	334.0	404.0	498.8	539.0	575.7	638.9	672.2	677.3
15°	193.9	229.8	325.4	357.9	448.4	558.6	603.0	648.3	707.2	731.1	737.1
17.5°	176.0	221.2	338.2	372.4	482.6	612.4	657.7	695.3	743.1	759.3	763.6
20°	153.7	207.6	346.8	391.2	518.5	651.7	695.3	724.3	756.8	767.0	768.7
22.5°	137.5	193.0	351.9	398.0	542.4	675.6	712.3	735.4	757.6	761.0	761.9
25°	123.8	176.8	351.0	405.7	562.9	690.1	718.3	735.4	748.2	749.9	749.9
27.5°	111.0	158.9	347.6	407.4	578.2	693.6	715.8	727.7	733.7	737.1	737.1
30°	99.9	141.8	339.1	404.0	585.1	690.1	708.1	714.1	720.0	725.2	727.7
32.5°	91.4	125.6	326.3	397.2	585.9	681.6	694.4	697.8	706.4	718.3	722.6
35°	83.7	109.3	311.8	387.8	580.8	667.9	676.5	679.9	697.0	714.9	720.9
37.5°	76.0	97.4	293.0	371.5	573.1	651.7	657.7	663.7	690.1	711.5	718.3
40°	68.3	87.1	270.8	353.6	561.2	632.1	637.2	646.6	681.6	706.4	713.2
42.5°	62.4	78.6	246.8	334.8	545.8	609.8	617.5	631.2	671.3	697.8	705.5
45°	57.2	70.0	221.2	309.2	526.1	586.8	597.9	616.7	659.4	685.0	691.8
47.5°	52.1	64.1	194.7	282.7	504.8	563.7	578.2	599.6	643.2	667.9	673.9
50°	47.8	58.1	168.3	254.5	481.7	539.0	556.0	578.2	622.7	645.7	653.4
52.5°	44.4	53.0	143.5	226.3	455.3	513.3	533.0	556.0	597.9	620.1	625.2
55°	41.0	48.7	122.1	196.4	427.9	486.0	507.4	529.6	570.6	589.3	592.8
57.5°	39.3	45.3	104.2	168.3	398.9	455.3	479.2	499.7	538.1	552.6	556.0
60°	36.7	42.7	90.5	144.3	367.3	426.2	446.7	467.2	499.7	511.6	514.2
62.5°	34.2	41.0	80.3	121.3	334.8	392.0	412.5	431.3	458.7	467.2	470.6
65°	32.5	39.3	72.6	104.2	301.5	356.2	376.7	392.9	415.1	423.6	425.4
67.5°	30.7	37.6	66.6	89.7	268.2	320.3	335.7	351.0	368.1	376.7	377.5
70°	28.2	35.9	61.5	79.4	234.0	279.3	292.1	308.3	322.0	326.3	328.8
72.5°	26.5	33.3	58.1	71.7	199.0	240.0	252.0	261.4	273.3	277.6	277.6
75°	23.9	29.9	54.7	64.1	163.1	196.4	206.7	216.1	225.5	227.2	224.6
77.5°	21.4	26.5	47.0	53.8	127.3	155.5	164.0	169.1	176.8	178.5	179.4
80°	17.9	23.1	36.7	41.9	92.2	114.5	120.4	124.7	131.5	131.5	133.2
82.5°	13.7	17.9	26.5	29.9	62.4	78.6	83.7	86.3	90.5	90.5	90.5
85°	8.5	11.1	17.1	19.6	37.6	47.8	51.2	52.1	55.5	56.4	56.4
87.5°	4.3	6.0	11.1	12.0	19.6	24.8	24.8	26.5	26.5	25.6	24.8
90°	1.8	3.2	4.6	5.0	7.8	11.5	13.4	11.9	8.9	6.7	6.7
92.5°	7.0	19.0	31.0	34.0	47.7	66.1	75.3	66.0	47.4	33.5	32.1
95°	16.9	38.8	60.7	66.2	117.5	185.9	220.2	196.4	149.0	113.5	109.5
97.5°	29.2	48.5	67.8	72.7	158.3	272.5	329.5	314.6	284.6	262.1	254.4
100°	38.7	56.2	73.8	78.2	173.1	299.8	363.2	364.3	366.5	368.1	359.0
102.5°	46.8	63.2	79.5	83.6	180.0	308.4	372.7	391.8	430.0	458.6	450.7
105°	60.6	74.4	88.2	91.7	185.0	309.5	371.6	414.4	500.0	564.2	560.1
107.5°	74.7	87.5	100.4	103.7	185.9	295.7	350.5	410.2	529.6	619.2	620.2
110°	84.1	95.7	107.4	110.4	184.6	283.5	332.9	399.6	533.1	633.3	637.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	93.4	104.5	115.6	118.5	184.6	272.8	316.9	385.2	521.8	624.3	631.0
115°	107.5	117.8	128.0	130.6	186.3	260.5	297.7	363.4	495.1	593.8	603.1
117.5°	121.5	130.8	140.1	142.4	189.8	252.9	284.5	343.9	462.6	551.7	562.0
120°	129.6	138.4	147.1	149.3	192.6	250.3	279.2	333.5	442.0	523.4	533.5
122.5°	137.5	146.4	155.2	157.4	196.6	249.0	275.1	324.0	421.8	495.1	505.0
125°	149.6	157.7	165.7	167.8	202.1	247.9	270.8	312.3	395.3	457.6	466.7
127.5°	159.5	167.7	175.8	177.8	207.6	247.3	267.1	302.7	373.9	427.4	435.1
130°	164.8	173.6	182.3	184.5	211.6	247.6	265.6	297.4	360.9	408.4	415.5
132.5°	170.2	179.0	187.7	190.0	214.8	247.9	264.4	292.8	349.6	392.2	398.6
135°	178.3	186.3	194.3	196.3	218.3	247.6	262.3	286.0	333.6	369.3	374.8
137.5°	186.6	194.5	202.4	204.4	223.6	249.1	262.0	282.0	322.3	352.4	356.9
140°	193.5	200.7	208.1	209.9	226.8	249.4	260.7	278.1	312.9	338.9	343.1
142.5°	198.8	205.5	212.2	213.9	229.5	250.3	260.7	276.0	306.5	329.4	332.9
145°	206.9	212.7	218.6	220.0	233.0	250.3	259.0	271.4	296.4	315.1	317.8
147.5°	215.0	220.7	226.3	227.8	238.2	252.1	259.0	268.8	288.4	303.1	305.4
150°	220.2	225.3	230.5	231.8	240.9	252.9	259.0	267.3	283.8	296.3	298.2
152.5°	225.7	229.6	233.5	234.5	242.7	253.5	259.0	266.1	280.2	290.8	292.2
155°	233.8	236.7	239.6	240.3	246.5	254.8	259.0	264.6	275.9	284.3	285.3
157.5°	239.8	242.6	245.4	246.1	250.3	256.1	259.0	263.3	272.1	278.7	279.4
160°	243.9	246.0	248.2	248.7	252.1	256.7	259.0	262.7	270.2	275.9	276.2
162.5°	247.9	249.5	251.1	251.5	254.0	257.3	259.0	262.1	268.5	273.2	273.6
165°	252.3	253.8	255.3	255.6	256.8	258.2	259.0	261.2	265.7	269.1	269.5
167.5°	256.3	257.0	257.7	257.9	258.8	260.1	260.7	262.2	265.2	267.4	267.6
170°	259.0	259.7	260.3	260.5	260.6	260.7	260.7	262.2	265.2	267.4	267.4
172.5°	260.3	260.5	260.7	260.7	260.7	260.7	260.7	261.9	264.2	266.0	265.8
175°	262.3	262.3	262.3	262.3	261.8	261.0	260.7	261.4	263.0	264.1	264.1
177.5°	262.3	262.3	262.3	262.3	261.9	261.4	261.1	261.7	262.9	263.8	263.6
180°	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3	262.3



TEST NUMBER: P936731

CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	265.6	265.6
2.5°	283.6	281.9
5°	364.7	366.4
7.5°	491.1	490.3
10°	610.7	618.4
12.5°	697.8	699.5
15°	750.8	754.2
17.5°	771.3	772.1
20°	772.1	770.4
22.5°	762.7	761.0
25°	751.6	750.8
27.5°	741.4	742.2
30°	737.1	739.7
32.5°	737.1	741.4
35°	738.8	743.1
37.5°	738.0	743.1
40°	734.6	740.5
42.5°	725.2	729.4
45°	710.6	715.8
47.5°	691.8	695.3
50°	667.9	671.3
52.5°	638.0	638.9
55°	602.2	605.6
57.5°	563.7	564.6
60°	521.0	523.6
62.5°	475.7	475.7
65°	427.9	429.6
67.5°	378.4	382.6
70°	328.0	328.8
72.5°	278.4	278.4
75°	227.2	228.1
77.5°	178.5	178.5
80°	132.4	133.2
82.5°	91.4	93.1
85°	57.2	57.2
87.5°	26.5	23.9
90°	6.7	6.7
92.5°	26.8	21.4
95°	93.4	77.3
97.5°	223.8	193.1
100°	322.4	285.9
102.5°	419.5	388.2
105°	543.2	526.4
107.5°	624.2	628.3
110°	655.1	672.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	657.9	684.8
115°	640.4	677.8
117.5°	603.4	644.9
120°	573.6	613.9
122.5°	544.7	584.3
125°	503.2	539.7
127.5°	465.9	496.8
130°	444.1	472.5
132.5°	424.1	449.6
135°	396.8	418.8
137.5°	374.9	392.9
140°	359.9	376.8
142.5°	347.5	362.0
145°	328.8	339.8
147.5°	314.5	323.5
150°	305.5	312.9
152.5°	297.7	303.3
155°	289.0	292.6
157.5°	281.9	284.5
160°	277.8	279.2
162.5°	275.0	276.4
165°	271.0	272.6
167.5°	268.2	268.8
170°	267.4	267.4
172.5°	265.3	264.8
175°	264.1	264.1
177.5°	263.0	262.3
180°	262.3	262.3



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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	4.55	5.49	5.45	6.43	7.63	17.68	18.63	18.59	19.57	20.76
	3H	5.26	6.11	6.18	7.05	8.28	19.52	20.37	20.43	21.31	22.53
	4H	5.56	6.37	6.50	7.32	8.55	20.15	20.96	21.09	21.91	23.14
	6H	5.82	6.56	6.76	7.52	8.76	20.58	21.32	21.52	22.28	23.52
	8H	5.89	6.60	6.84	7.57	8.81	20.69	21.41	21.65	22.38	23.62
	12H	5.91	6.59	6.87	7.55	8.82	20.76	21.44	21.72	22.40	23.67
4H	2H	11.75	12.56	12.69	13.50	14.73	17.97	18.78	18.91	19.73	20.96
	3H	13.33	14.00	14.28	14.98	16.23	20.01	20.69	20.96	21.66	22.91
	4H	13.42	14.04	14.38	15.01	16.29	20.77	21.39	21.73	22.36	23.63
	6H	13.44	13.98	14.41	14.97	16.24	21.30	21.84	22.27	22.83	24.10
	8H	13.42	13.92	14.40	14.91	16.19	21.46	21.96	22.43	22.95	24.23
	12H	13.38	13.83	14.38	14.84	16.13	21.55	22.00	22.54	23.01	24.30
8H	4H	14.87	15.37	15.84	16.36	17.64	20.84	21.34	21.81	22.33	23.61
	6H	15.11	15.53	16.11	16.56	17.84	21.46	21.88	22.46	22.90	24.19
	8H	15.13	15.50	16.14	16.52	17.82	21.67	22.04	22.68	23.06	24.36
	12H	15.11	15.43	16.12	16.44	17.79	21.81	22.14	22.83	23.15	24.49
12H	4H	15.01	15.46	16.01	16.47	17.76	20.80	21.25	21.79	22.25	23.54
	6H	15.37	15.74	16.38	16.75	18.05	21.44	21.81	22.45	22.83	24.13
	8H	15.44	15.77	16.46	16.78	18.12	21.67	21.99	22.69	23.01	24.35