

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: P936634

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936634
REPORT IS A COMBINATION OF REPORTS P933469 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

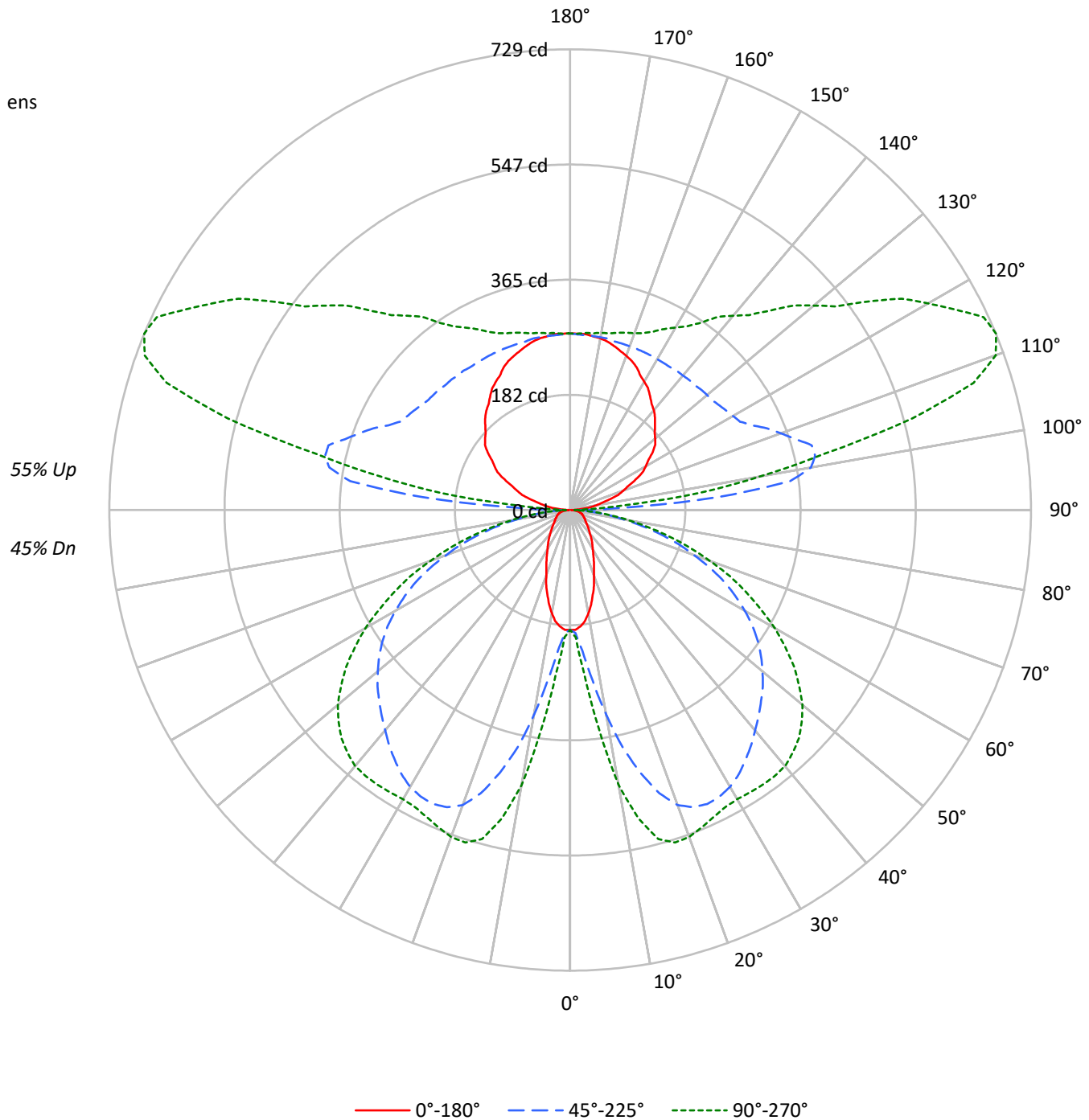
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3280.1 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: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 28.4
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: P936634
CATALOG NUMBER: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-4-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P936634

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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1761	1761	1761
5°	1719	2033	2367
10°	1557	2962	3924
15°	1322	3868	4739
20°	1075	4479	4829
25°	896	4683	4731
30°	754	4709	4723
35°	666	4627	4844
40°	579	4523	4970
45°	522	4444	4990
50°	479	4372	4908
55°	458	4270	4689
60°	466	4077	4345
65°	483	3786	3874
70°	510	3295	3274
75°	561	2678	2554
80°	599	1853	1721
85°	505	980	879

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4990 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.6	0.7
10°-20°	108.8	3.3
20°-30°	190.3	5.8
30°-40°	245.0	7.5
40°-50°	273.7	8.3
50°-60°	262.1	8.0
60°-70°	207.7	6.3
70°-80°	122.1	3.7
80°-90°	35.0	1.1
90°-100°	136.2	4.2
100°-110°	358.0	10.9
110°-120°	371.2	11.3
120°-130°	297.8	9.1
130°-140°	233.6	7.1
140°-150°	179.3	5.5
150°-160°	129.1	3.9
160°-170°	79.0	2.4
170°-180°	26.7	0.8
0°-30°	323.7	9.9
0°-40°	568.7	17.3
0°-60°	1104.4	33.7
0°-90°	1469.2	44.8
90°-120°	865.4	26.4
90°-150°	1576.0	48.0
90°-180°	1811.0	55.2
0°-180°	3280.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	190	190	190	190	190	
5°	185	198	223	253	262	17
15°	138	256	431	522	539	39
25°	88	290	513	536	536	41
35°	60	277	483	511	531	37
45°	41	221	427	489	511	32
55°	29	140	362	421	433	27
65°	23	74	269	303	307	23
75°	17	46	148	162	163	18
85°	6	14	37	40	41	6
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°	189.8	189.8	189.8	189.8	189.8	189.8	189.8	189.8	189.8	189.8	189.8
2.5°	189.8	189.8	191.0	191.6	192.8	193.5	194.7	195.8	199.6	200.1	201.4
5°	184.9	187.4	195.3	198.3	206.9	218.5	223.3	231.3	247.8	252.6	255.7
7.5°	177.6	183.1	202.6	207.5	228.9	259.3	272.2	289.3	315.5	328.3	338.7
10°	166.0	177.6	212.4	224.0	258.7	305.1	328.9	352.8	392.4	410.1	416.8
12.5°	153.2	172.1	222.8	238.6	288.6	356.4	385.0	411.3	456.5	480.3	483.9
15°	138.5	164.2	232.5	255.7	320.4	399.1	430.8	463.2	505.3	522.3	526.6
17.5°	125.7	158.1	241.7	266.1	344.8	437.5	469.9	496.8	530.9	542.5	545.5
20°	109.9	148.3	247.8	279.5	370.4	465.6	496.8	517.5	540.7	548.0	549.2
22.5°	98.2	137.9	251.4	284.4	387.5	482.7	508.9	525.4	541.2	543.7	544.3
25°	88.5	126.3	250.8	289.9	402.2	493.0	513.2	525.4	534.6	535.8	535.8
27.5°	79.3	113.5	248.3	291.1	413.2	495.5	511.4	519.9	524.2	526.6	526.6
30°	71.4	101.3	242.2	288.6	418.0	493.0	505.8	510.1	514.4	518.1	519.9
32.5°	65.3	89.7	233.1	283.7	418.6	486.9	496.1	498.6	504.7	513.2	516.2
35°	59.8	78.1	222.8	277.1	415.0	477.2	483.3	485.7	497.9	510.8	515.0
37.5°	54.3	69.6	209.3	265.4	409.4	465.6	469.9	474.2	493.0	508.3	513.2
40°	48.8	62.2	193.5	252.6	401.0	451.5	455.3	461.9	486.9	504.7	509.6
42.5°	44.6	56.1	176.4	239.2	390.0	435.7	441.2	451.0	479.7	498.6	504.0
45°	40.8	50.0	158.1	220.9	375.9	419.3	427.2	440.6	471.1	489.4	494.3
47.5°	37.2	45.8	139.2	202.0	360.7	402.8	413.2	428.3	459.5	477.2	481.5
50°	34.2	41.5	120.3	181.8	344.2	385.0	397.2	413.2	444.9	461.4	466.8
52.5°	31.7	37.8	102.5	161.7	325.3	366.8	380.8	397.2	427.2	443.0	446.7
55°	29.3	34.7	87.2	140.4	305.7	347.2	362.5	378.3	407.6	421.1	423.5
57.5°	28.1	32.4	74.4	120.3	285.0	325.3	342.3	356.9	384.4	394.8	397.2
60°	26.2	30.5	64.7	103.2	262.4	304.5	319.2	333.8	356.9	365.5	367.4
62.5°	24.4	29.3	57.4	86.7	239.2	280.1	294.7	308.2	327.7	333.8	336.2
65°	23.2	28.1	51.8	74.4	215.4	254.4	269.1	280.7	296.5	302.6	303.9
67.5°	22.0	26.8	47.6	64.0	191.6	228.9	239.8	250.8	263.0	269.1	269.7
70°	20.1	25.7	43.9	56.8	167.2	199.6	208.7	220.3	230.0	233.1	235.0
72.5°	18.9	23.8	41.5	51.3	142.2	171.5	180.0	186.7	195.3	198.3	198.3
75°	17.1	21.4	39.0	45.8	116.5	140.4	147.6	154.4	161.1	162.3	160.5
77.5°	15.3	18.9	33.6	38.5	91.0	111.1	117.2	120.8	126.3	127.5	128.2
80°	12.8	16.5	26.2	29.9	65.9	81.8	86.1	89.1	94.0	94.0	95.2
82.5°	9.7	12.8	18.9	21.4	44.6	56.1	59.8	61.7	64.7	64.7	64.7
85°	6.1	7.9	12.2	14.0	26.8	34.2	36.7	37.2	39.7	40.3	40.3
87.5°	3.1	4.3	7.9	8.6	14.0	17.7	17.7	18.9	18.9	18.3	17.7
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°	189.8	189.8
2.5°	202.6	201.4
5°	260.6	261.8
7.5°	350.8	350.3
10°	436.4	441.8
12.5°	498.6	499.8
15°	536.4	538.9
17.5°	551.1	551.7
20°	551.7	550.4
22.5°	545.0	543.7
25°	537.0	536.4
27.5°	529.7	530.3
30°	526.6	528.5
32.5°	526.6	529.7
35°	527.9	530.9
37.5°	527.2	530.9
40°	524.8	529.0
42.5°	518.1	521.1
45°	507.7	511.4
47.5°	494.3	496.8
50°	477.2	479.7
52.5°	455.8	456.5
55°	430.3	432.6
57.5°	402.8	403.3
60°	372.2	374.0
62.5°	339.9	339.9
65°	305.7	306.9
67.5°	270.3	273.3
70°	234.3	235.0
72.5°	198.9	198.9
75°	162.3	162.9
77.5°	127.5	127.5
80°	94.6	95.2
82.5°	65.3	66.5
85°	40.8	40.8
87.5°	18.9	17.1
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	2.46	3.31	3.45	4.32	5.66	15.60	16.45	16.59	17.46	18.80
	3H	3.17	3.93	4.17	4.95	6.31	17.42	18.19	18.43	19.21	20.57
	4H	3.46	4.19	4.48	5.21	6.58	18.06	18.78	19.07	19.80	21.17
	6H	3.72	4.38	4.74	5.41	6.79	18.48	19.14	19.50	20.17	21.55
	8H	3.78	4.42	4.81	5.46	6.84	18.59	19.23	19.62	20.27	21.65
	12H	3.80	4.40	4.84	5.44	6.84	18.65	19.25	19.69	20.29	21.69
4H	2H	9.65	10.37	10.67	11.40	12.77	15.87	16.60	16.90	17.62	18.99
	3H	11.22	11.83	12.25	12.88	14.26	17.90	18.51	18.94	19.56	20.94
	4H	11.31	11.87	12.35	12.91	14.32	18.66	19.22	19.70	20.26	21.66
	6H	11.33	11.80	12.37	12.87	14.27	19.19	19.67	20.24	20.73	22.13
	8H	11.30	11.75	12.35	12.81	14.22	19.34	19.79	20.39	20.85	22.26
	12H	11.26	11.66	12.33	12.74	14.16	19.43	19.83	20.50	20.90	22.33
8H	4H	12.75	13.20	13.80	14.25	15.67	18.72	19.17	19.77	20.23	21.64
	6H	12.99	13.36	14.06	14.46	15.87	19.34	19.71	20.41	20.81	22.22
	8H	13.01	13.33	14.09	14.42	15.85	19.55	19.88	20.63	20.96	22.39
	12H	12.98	13.26	14.06	14.34	15.82	19.68	19.97	20.77	21.05	22.52
12H	4H	12.89	13.29	13.96	14.37	15.79	18.67	19.08	19.74	20.15	21.57
	6H	13.25	13.57	14.33	14.65	16.09	19.32	19.65	20.40	20.73	22.16
	8H	13.31	13.60	14.40	14.68	16.15	19.54	19.83	20.63	20.91	22.38