

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: P936682

Luminaire Tested: SQ4-FB-050U-050D-B2750-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936682
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-B2750-1D-UNV-STD-W-4-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

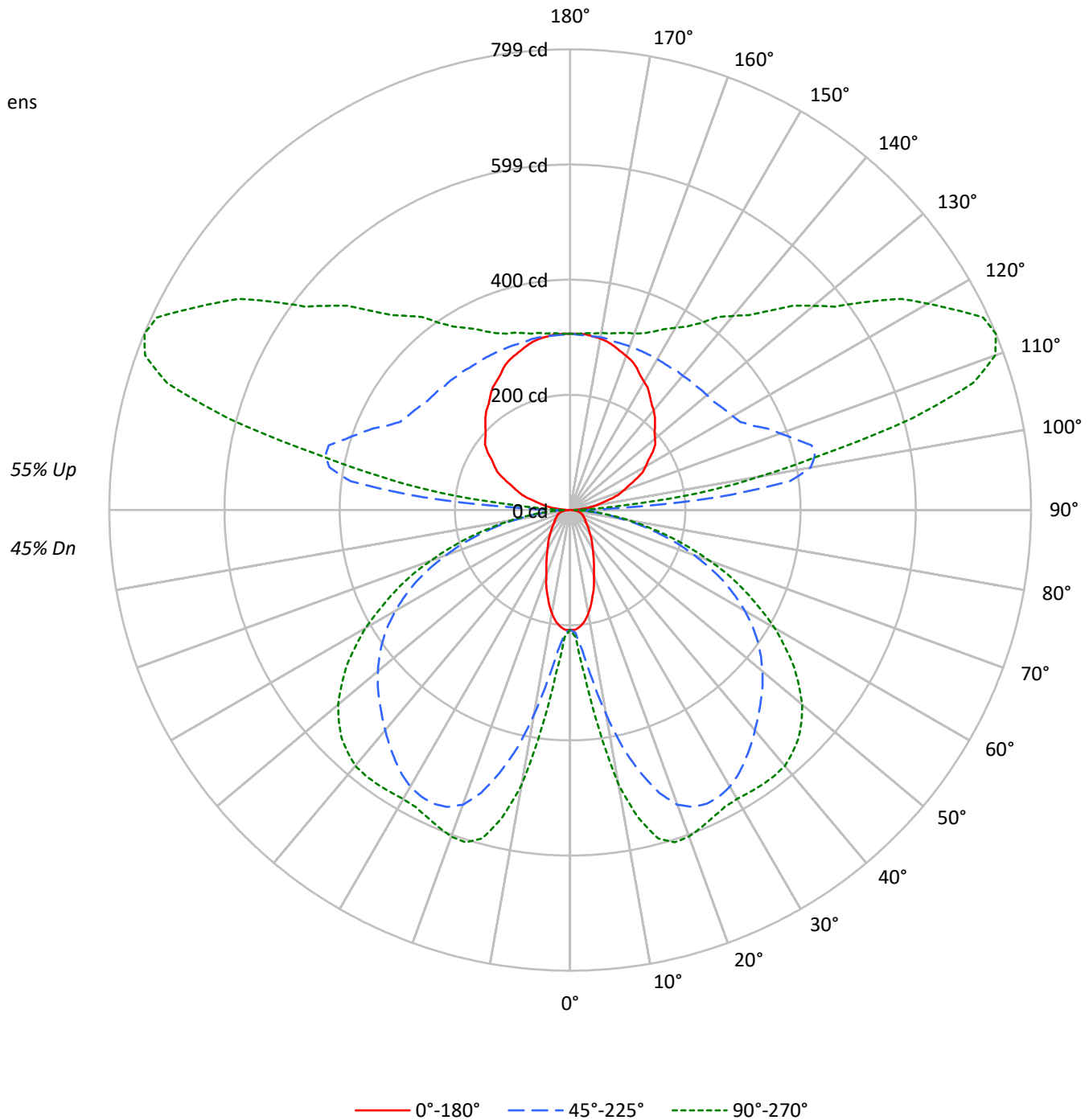
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3591.5 lumens
Efficiency: N/A
Efficacy: 126.5 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: P936682
CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-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	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°	1928	1928	1928
5°	1882	2226	2591
10°	1705	3244	4297
15°	1448	4235	5188
20°	1177	4904	5288
25°	981	5128	5180
30°	826	5156	5171
35°	728	5067	5304
40°	635	4952	5442
45°	572	4865	5464
50°	524	4788	5374
55°	501	4675	5135
60°	511	4464	4759
65°	529	4144	4242
70°	559	3607	3585
75°	613	2934	2797
80°	655	2027	1886
85°	555	1070	963

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5464 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.9	0.7
10°-20°	119.1	3.3
20°-30°	208.4	5.8
30°-40°	268.2	7.5
40°-50°	299.6	8.3
50°-60°	287.0	8.0
60°-70°	227.4	6.3
70°-80°	133.7	3.7
80°-90°	38.3	1.1
90°-100°	149.1	4.2
100°-110°	392.0	10.9
110°-120°	406.4	11.3
120°-130°	326.0	9.1
130°-140°	255.8	7.1
140°-150°	196.3	5.5
150°-160°	141.4	3.9
160°-170°	86.5	2.4
170°-180°	29.2	0.8
0°-30°	354.4	9.9
0°-40°	622.6	17.3
0°-60°	1209.2	33.7
0°-90°	1608.7	44.8
90°-120°	947.5	26.4
90°-150°	1725.7	48.0
90°-180°	1983.0	55.2
0°-180°	3591.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	208	208	208	208	208	
5°	202	217	244	277	287	19
15°	152	280	472	572	590	42
25°	97	317	562	587	587	45
35°	65	303	529	559	581	41
45°	45	242	468	536	560	35
55°	32	154	397	461	474	29
65°	25	82	295	331	336	25
75°	19	50	162	178	178	20
85°	7	15	40	44	45	7
90°	2	6	16	8	8	2
95°	20	77	257	132	90	22
105°	71	107	433	658	614	75
115°	125	152	347	692	790	124
125°	174	196	316	534	629	155
135°	208	229	306	431	488	161
145°	241	257	302	367	396	151
155°	273	280	302	332	341	125
165°	294	298	302	314	318	83
175°	306	306	304	308	308	29
180°	306	306	306	306	306	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8
2.5°	207.8	207.8	209.2	209.8	211.2	211.8	213.1	214.4	218.5	219.1	220.5
5°	202.5	205.2	213.8	217.1	226.5	239.2	244.5	253.3	271.3	276.6	280.0
7.5°	194.4	200.5	221.8	227.2	250.6	284.0	298.0	316.7	345.4	359.5	370.8
10°	181.8	194.4	232.6	245.2	283.3	334.1	360.2	386.2	429.7	449.0	456.4
12.5°	167.7	188.4	243.9	261.3	316.0	390.2	421.6	450.4	499.8	525.9	529.9
15°	151.7	179.8	254.6	280.0	350.8	436.9	471.7	507.2	553.3	571.9	576.6
17.5°	137.6	173.1	264.6	291.3	377.5	479.1	514.5	543.9	581.3	594.0	597.3
20°	120.3	162.3	271.3	306.1	405.6	509.9	543.9	566.6	592.0	600.0	601.4
22.5°	107.6	151.0	275.3	311.3	424.3	528.5	557.3	575.3	592.6	595.3	596.0
25°	96.9	138.3	274.6	317.4	440.3	539.8	561.9	575.3	585.3	586.6	586.6
27.5°	86.9	124.3	271.9	318.7	452.4	542.5	560.0	569.3	574.0	576.6	576.6
30°	78.2	111.0	265.2	316.0	457.7	539.8	553.9	558.6	563.2	567.3	569.3
32.5°	71.5	98.2	255.3	310.7	458.4	533.2	543.2	545.9	552.6	561.9	565.2
35°	65.4	85.6	243.9	303.4	454.4	522.5	529.2	531.9	545.2	559.3	563.9
37.5°	59.5	76.2	229.2	290.6	448.3	509.9	514.5	519.2	539.8	556.6	561.9
40°	53.5	68.1	211.8	276.6	439.0	494.4	498.5	505.8	533.2	552.6	558.0
42.5°	48.8	61.5	193.1	261.9	427.0	477.1	483.1	493.8	525.2	545.9	551.9
45°	44.7	54.8	173.1	241.8	411.5	459.1	467.7	482.5	515.8	535.8	541.2
47.5°	40.7	50.1	152.4	221.2	394.9	441.0	452.4	469.0	503.2	522.5	527.2
50°	37.4	45.4	131.7	199.1	376.9	421.6	435.0	452.4	487.1	505.2	511.1
52.5°	34.8	41.4	112.2	177.1	356.2	401.6	416.9	435.0	467.7	485.1	489.1
55°	32.1	38.0	95.5	153.7	334.8	380.2	396.9	414.2	446.3	461.0	463.7
57.5°	30.8	35.5	81.5	131.7	312.0	356.2	374.8	390.8	420.9	432.3	435.0
60°	28.7	33.4	70.8	112.9	287.3	333.5	349.5	365.5	390.8	400.2	402.3
62.5°	26.7	32.1	62.8	94.9	261.9	306.7	322.7	337.4	358.8	365.5	368.1
65°	25.4	30.8	56.8	81.5	235.9	278.6	294.6	307.4	324.7	331.4	332.8
67.5°	24.1	29.4	52.1	70.1	209.8	250.6	262.5	274.6	287.9	294.6	295.3
70°	22.0	28.1	48.1	62.2	183.1	218.5	228.5	241.2	251.9	255.3	257.3
72.5°	20.7	26.1	45.4	56.2	155.7	187.7	197.1	204.5	213.8	217.1	217.1
75°	18.7	23.4	42.7	50.1	127.6	153.7	161.7	169.0	176.4	177.7	175.7
77.5°	16.7	20.7	36.8	42.1	99.6	121.6	128.3	132.3	138.3	139.6	140.3
80°	14.0	18.0	28.7	32.8	72.2	89.5	94.2	97.5	102.9	102.9	104.3
82.5°	10.7	14.0	20.7	23.4	48.8	61.5	65.4	67.5	70.8	70.8	70.8
85°	6.7	8.7	13.3	15.3	29.4	37.4	40.1	40.7	43.4	44.1	44.1
87.5°	3.4	4.7	8.7	9.4	15.3	19.4	19.4	20.7	20.7	20.0	19.4
90°	2.1	3.7	5.4	5.8	9.1	13.4	15.6	13.8	10.4	7.8	7.8
92.5°	8.2	22.1	36.2	39.6	55.7	77.1	87.8	77.0	55.3	39.0	37.4
95°	19.7	45.2	70.8	77.2	137.0	216.8	256.8	229.1	173.8	132.4	127.7
97.5°	34.1	56.6	79.1	84.8	184.6	317.7	384.3	366.8	331.9	305.7	296.7
100°	45.1	65.5	86.1	91.1	201.9	349.6	423.5	424.8	427.4	429.3	418.6
102.5°	54.6	73.7	92.7	97.5	209.9	359.7	434.6	456.9	501.4	534.8	525.6
105°	70.6	86.8	102.9	107.0	215.7	360.9	433.4	483.3	583.1	658.0	653.1
107.5°	87.1	102.1	117.1	120.9	216.8	344.8	408.8	478.4	617.6	722.0	723.2
110°	98.1	111.7	125.3	128.7	215.2	330.6	388.2	466.0	621.7	738.4	743.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	109.0	121.9	134.9	138.1	215.2	318.1	369.5	449.2	608.5	728.0	735.8
115°	125.4	137.3	149.3	152.3	217.2	303.8	347.1	423.8	577.3	692.4	703.3
117.5°	141.6	152.5	163.3	166.0	221.3	294.9	331.8	401.0	539.4	643.3	655.4
120°	151.1	161.4	171.5	174.1	224.6	291.9	325.6	388.8	515.4	610.3	622.1
122.5°	160.4	170.7	181.0	183.6	229.3	290.3	320.8	377.8	491.8	577.3	588.8
125°	174.5	183.9	193.2	195.6	235.7	289.0	315.7	364.1	460.9	533.6	544.2
127.5°	186.0	195.5	205.0	207.4	242.0	288.3	311.4	353.0	436.0	498.4	507.4
130°	192.1	202.4	212.5	215.1	246.7	288.7	309.8	346.8	420.8	476.3	484.6
132.5°	198.5	208.8	218.9	221.5	250.5	289.0	308.4	341.4	407.7	457.4	464.8
135°	208.0	217.2	226.6	228.9	254.6	288.7	305.9	333.6	389.0	430.7	437.0
137.5°	217.6	226.8	236.1	238.3	260.8	290.5	305.5	328.9	375.8	410.9	416.2
140°	225.6	234.1	242.6	244.7	264.4	290.8	304.0	324.3	364.8	395.2	400.1
142.5°	231.8	239.6	247.4	249.4	267.6	291.8	304.0	321.8	357.4	384.1	388.2
145°	241.2	248.0	254.9	256.6	271.7	291.9	302.0	316.5	345.6	367.4	370.6
147.5°	250.7	257.4	263.9	265.6	277.8	293.9	302.0	313.4	336.3	353.5	356.2
150°	256.8	262.7	268.8	270.3	280.9	294.9	302.0	311.6	331.0	345.5	347.7
152.5°	263.1	267.7	272.3	273.4	283.0	295.6	302.0	310.3	326.8	339.1	340.7
155°	272.6	276.0	279.4	280.2	287.4	297.1	302.0	308.6	321.7	331.6	332.7
157.5°	279.6	282.9	286.2	286.9	291.9	298.6	302.0	307.1	317.3	325.0	325.8
160°	284.4	286.8	289.4	290.0	294.0	299.3	302.0	306.4	315.1	321.7	322.1
162.5°	289.0	290.9	292.8	293.3	296.2	300.1	302.0	305.7	313.0	318.6	319.0
165°	294.2	295.9	297.7	298.1	299.4	301.1	302.0	304.6	309.9	313.8	314.2
167.5°	298.9	299.7	300.5	300.7	301.8	303.3	304.0	305.8	309.3	311.8	312.0
170°	302.0	302.8	303.6	303.8	303.9	304.0	304.0	305.8	309.3	311.8	311.8
172.5°	303.6	303.8	304.0	304.0	304.0	304.0	304.0	305.4	308.1	310.2	310.0
175°	305.9	305.9	305.9	305.9	305.3	304.4	304.0	304.9	306.7	308.0	308.0
177.5°	305.9	305.9	305.9	305.9	305.4	304.8	304.5	305.2	306.6	307.6	307.4
180°	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9



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CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-STD-W-4-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	207.8	207.8
2.5°	221.8	220.5
5°	285.4	286.6
7.5°	384.2	383.6
10°	477.8	483.8
12.5°	545.9	547.2
15°	587.3	590.0
17.5°	603.4	604.1
20°	604.1	602.7
22.5°	596.7	595.3
25°	588.0	587.3
27.5°	580.0	580.7
30°	576.6	578.7
32.5°	576.6	580.0
35°	578.0	581.3
37.5°	577.3	581.3
40°	574.6	579.3
42.5°	567.3	570.6
45°	555.9	560.0
47.5°	541.2	543.9
50°	522.5	525.2
52.5°	499.1	499.8
55°	471.1	473.7
57.5°	441.0	441.6
60°	407.6	409.6
62.5°	372.2	372.2
65°	334.8	336.1
67.5°	296.0	299.3
70°	256.6	257.3
72.5°	217.8	217.8
75°	177.7	178.4
77.5°	139.6	139.6
80°	103.6	104.3
82.5°	71.5	72.8
85°	44.7	44.7
87.5°	20.7	18.7
90°	7.8	7.8
92.5°	31.3	25.0
95°	108.9	90.1
97.5°	261.0	225.2
100°	376.0	333.4
102.5°	489.1	452.7
105°	633.5	613.8
107.5°	727.9	732.7
110°	763.9	784.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	767.2	798.6
115°	746.8	790.3
117.5°	703.7	752.0
120°	668.9	715.8
122.5°	635.1	681.4
125°	586.7	629.4
127.5°	543.3	579.3
130°	517.8	551.0
132.5°	494.5	524.3
135°	462.7	488.3
137.5°	437.1	458.2
140°	419.7	439.3
142.5°	405.2	422.1
145°	383.5	396.2
147.5°	366.7	377.3
150°	356.3	364.8
152.5°	347.2	353.7
155°	336.9	341.2
157.5°	328.8	331.8
160°	323.9	325.6
162.5°	320.7	322.3
165°	316.0	317.8
167.5°	312.7	313.4
170°	311.8	311.8
172.5°	309.4	308.8
175°	308.0	308.0
177.5°	306.7	305.9
180°	305.9	305.9



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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	2.78	3.63	3.77	4.64	5.98	15.92	16.77	16.91	17.78	19.12
	3H	3.48	4.25	4.49	5.27	6.63	17.74	18.50	18.74	19.52	20.88
	4H	3.78	4.51	4.80	5.53	6.90	18.37	19.10	19.39	20.12	21.49
	6H	4.03	4.70	5.06	5.72	7.11	18.79	19.46	19.82	20.49	21.87
	8H	4.10	4.73	5.13	5.78	7.16	18.91	19.54	19.94	20.58	21.96
	12H	4.12	4.72	5.15	5.76	7.16	18.97	19.57	20.00	20.61	22.01
4H	2H	9.97	10.69	10.99	11.71	13.08	16.19	16.91	17.21	17.94	19.31
	3H	11.53	12.14	12.57	13.19	14.57	18.22	18.83	19.25	19.88	21.26
	4H	11.63	12.19	12.67	13.23	14.63	18.98	19.53	20.02	20.57	21.98
	6H	11.64	12.12	12.69	13.18	14.58	19.50	19.98	20.55	21.05	22.45
	8H	11.62	12.06	12.67	13.12	14.54	19.66	20.10	20.71	21.16	22.58
	12H	11.57	11.98	12.64	13.05	14.47	19.74	20.15	20.81	21.22	22.64
8H	4H	13.06	13.51	14.11	14.57	15.99	19.04	19.48	20.09	20.54	21.96
	6H	13.31	13.68	14.38	14.78	16.19	19.65	20.02	20.73	21.12	22.54
	8H	13.32	13.65	14.41	14.73	16.17	19.86	20.19	20.95	21.27	22.71
	12H	13.29	13.58	14.38	14.66	16.13	20.00	20.29	21.09	21.37	22.84
12H	4H	13.20	13.61	14.27	14.68	16.10	18.99	19.39	20.06	20.47	21.89
	6H	13.56	13.89	14.64	14.97	16.40	19.64	19.96	20.72	21.05	22.48
	8H	13.63	13.92	14.72	14.99	16.47	19.86	20.14	20.94	21.22	22.70