

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: P936686

Luminaire Tested: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936686
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-W2A-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

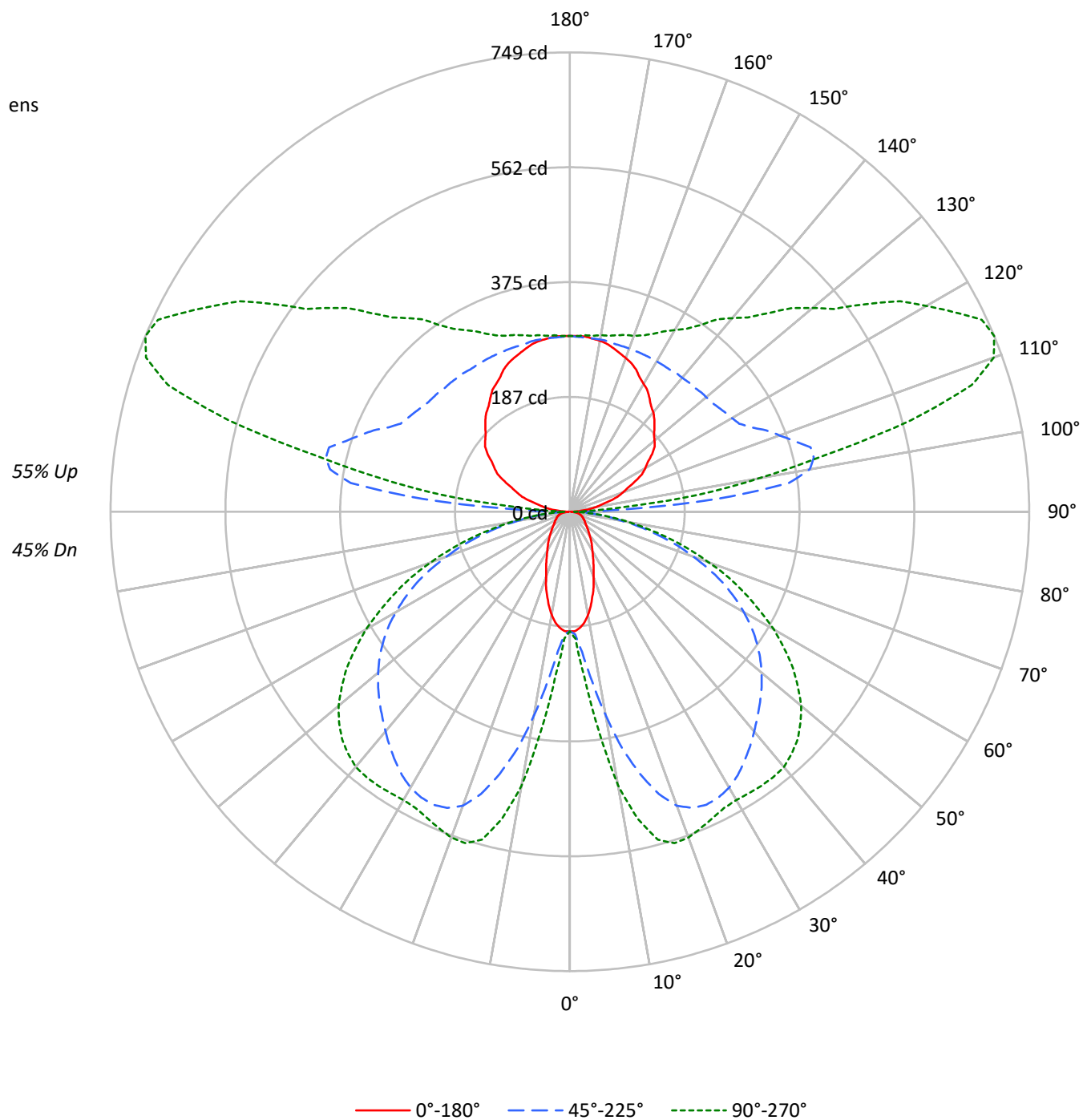
Lumens per Lamp: N/A
Luminaire Lumens: 3368.0 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 28.4
Input Voltage (V): NR
Input Current (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: P936686

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-4-5000K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1808	1808	1808
5°	1765	2088	2430
10°	1599	3042	4029
15°	1357	3971	4866
20°	1104	4599	4959
25°	920	4809	4858
30°	774	4835	4849
35°	684	4751	4974
40°	596	4644	5103
45°	536	4563	5124
50°	492	4489	5039
55°	470	4384	4815
60°	479	4186	4463
65°	496	3887	3977
70°	523	3383	3362
75°	577	2751	2623
80°	618	1902	1768
85°	522	1004	903

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5124 cd/sqm

TEST NUMBER: P936686

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-4-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.2	0.7
10°-20°	111.7	3.3
20°-30°	195.4	5.8
30°-40°	251.5	7.5
40°-50°	281.0	8.3
50°-60°	269.1	8.0
60°-70°	213.3	6.3
70°-80°	125.4	3.7
80°-90°	35.9	1.1
90°-100°	139.8	4.2
100°-110°	367.6	10.9
110°-120°	381.1	11.3
120°-130°	305.7	9.1
130°-140°	239.9	7.1
140°-150°	184.1	5.5
150°-160°	132.6	3.9
160°-170°	81.1	2.4
170°-180°	27.4	0.8
0°-30°	332.3	9.9
0°-40°	583.9	17.3
0°-60°	1134.0	33.7
0°-90°	1508.6	44.8
90°-120°	888.5	26.4
90°-150°	1618.3	48.0
90°-180°	1859.0	55.2
0°-180°	3368.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	195	195	195	195	195	
5°	190	204	229	259	269	18
15°	142	262	442	536	553	40
25°	91	298	527	550	551	42
35°	61	284	496	524	545	38
45°	42	227	439	502	525	32
55°	30	144	372	432	444	27
65°	24	76	276	311	315	24
75°	18	47	152	167	167	18
85°	6	14	38	41	42	7
90°	2	5	15	7	7	2
95°	18	72	241	124	84	21
105°	66	100	406	617	576	70
115°	118	143	326	649	741	116
125°	164	183	296	500	590	145
135°	195	215	287	404	458	151
145°	226	241	283	345	372	142
155°	256	263	283	311	320	117
165°	276	280	283	294	298	78
175°	287	287	285	289	289	27
180°	287	287	287	287	287	

TEST NUMBER: P936686

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8
2.5°	194.8	194.8	196.1	196.7	198.0	198.7	199.9	201.1	204.9	205.5	206.8
5°	189.9	192.4	200.5	203.6	212.4	224.3	229.3	237.5	254.4	259.4	262.5
7.5°	182.3	188.0	208.0	213.0	235.0	266.3	279.5	297.0	323.9	337.1	347.7
10°	170.5	182.3	218.1	230.0	265.6	313.3	337.7	362.2	402.9	421.0	428.0
12.5°	157.3	176.7	228.7	245.0	296.4	365.9	395.4	422.4	468.7	493.2	496.9
15°	142.2	168.6	238.7	262.5	329.0	409.7	442.3	475.6	518.8	536.3	540.7
17.5°	129.1	162.3	248.2	273.2	354.0	449.3	482.5	510.1	545.1	557.0	560.1
20°	112.8	152.2	254.4	287.0	380.3	478.1	510.1	531.4	555.2	562.6	563.9
22.5°	100.9	141.6	258.2	292.0	397.9	495.6	522.6	539.5	555.7	558.3	558.9
25°	90.9	129.7	257.5	297.7	412.9	506.2	527.0	539.5	548.9	550.1	550.1
27.5°	81.4	116.6	255.0	298.9	424.2	508.7	525.1	533.9	538.3	540.7	540.7
30°	73.3	104.0	248.7	296.4	429.2	506.2	519.4	523.8	528.2	532.0	533.9
32.5°	67.1	92.1	239.4	291.3	429.8	500.0	509.4	511.9	518.2	527.0	530.0
35°	61.4	80.2	228.7	284.5	426.1	490.0	496.2	498.8	511.3	524.4	528.8
37.5°	55.8	71.5	214.9	272.5	420.4	478.1	482.5	486.9	506.2	521.9	527.0
40°	50.2	63.9	198.7	259.4	411.7	463.6	467.5	474.3	500.0	518.2	523.2
42.5°	45.8	57.6	181.1	245.6	400.4	447.4	453.0	463.1	492.5	511.9	517.5
45°	41.9	51.4	162.3	226.8	385.9	430.5	438.6	452.4	483.7	502.5	507.5
47.5°	38.2	47.0	142.9	207.4	370.3	413.6	424.2	439.8	471.9	490.0	494.4
50°	35.1	42.6	123.5	186.7	353.4	395.4	407.9	424.2	456.8	473.7	479.3
52.5°	32.6	38.9	105.3	166.1	334.0	376.6	391.0	407.9	438.6	454.9	458.7
55°	30.1	35.7	89.6	144.1	313.9	356.5	372.2	388.5	418.5	432.3	434.9
57.5°	28.9	33.3	76.4	123.5	292.6	334.0	351.5	366.5	394.7	405.4	407.9
60°	26.9	31.3	66.4	105.9	269.5	312.7	327.7	342.8	366.5	375.3	377.2
62.5°	25.0	30.1	58.9	89.0	245.6	287.6	302.6	316.4	336.4	342.8	345.2
65°	23.8	28.9	53.2	76.4	221.2	261.2	276.3	288.2	304.5	310.7	312.0
67.5°	22.6	27.6	48.8	65.8	196.7	235.0	246.2	257.5	270.0	276.3	276.9
70°	20.6	26.3	45.1	58.3	171.7	204.9	214.3	226.2	236.2	239.4	241.3
72.5°	19.4	24.5	42.6	52.7	146.0	176.1	184.8	191.8	200.5	203.6	203.6
75°	17.6	21.9	40.1	47.0	119.6	144.1	151.6	158.5	165.4	166.6	164.8
77.5°	15.7	19.4	34.5	39.5	93.4	114.0	120.3	124.0	129.7	130.9	131.6
80°	13.2	16.9	26.9	30.7	67.7	84.0	88.4	91.4	96.5	96.5	97.8
82.5°	10.0	13.2	19.4	21.9	45.8	57.6	61.4	63.3	66.4	66.4	66.4
85°	6.3	8.1	12.5	14.4	27.6	35.1	37.6	38.2	40.7	41.4	41.4
87.5°	3.2	4.4	8.1	8.8	14.4	18.2	18.2	19.4	19.4	18.8	18.2
90°	2.0	3.5	5.0	5.4	8.5	12.6	14.7	13.0	9.7	7.3	7.3
92.5°	7.7	20.7	33.9	37.2	52.2	72.3	82.4	72.2	51.8	36.6	35.1
95°	18.5	42.4	66.4	72.4	128.5	203.3	240.8	214.8	163.0	124.1	119.7
97.5°	31.9	53.1	74.2	79.5	173.1	297.9	360.3	344.0	311.2	286.6	278.2
100°	42.3	61.5	80.7	85.5	189.3	327.8	397.1	398.4	400.8	402.6	392.6
102.5°	51.2	69.1	87.0	91.4	196.8	337.3	407.5	428.4	470.2	501.5	492.9
105°	66.2	81.4	96.5	100.3	202.3	338.4	406.4	453.2	546.8	617.0	612.4
107.5°	81.6	95.7	109.8	113.4	203.3	323.4	383.3	448.6	579.2	677.1	678.2
110°	92.0	104.7	117.5	120.7	201.8	310.0	364.1	437.0	583.0	692.5	697.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	102.2	114.3	126.5	129.5	201.8	298.3	346.5	421.2	570.6	682.7	690.0
115°	117.6	128.8	140.0	142.8	203.7	284.9	325.5	397.4	541.3	649.3	659.5
117.5°	132.8	143.0	153.2	155.7	207.5	276.6	311.1	376.0	505.9	603.3	614.6
120°	141.7	151.3	160.8	163.3	210.6	273.8	305.3	364.6	483.3	572.4	583.4
122.5°	150.4	160.1	169.7	172.1	215.0	272.3	300.8	354.3	461.2	541.3	552.2
125°	163.6	172.4	181.2	183.4	221.0	271.0	296.1	341.5	432.3	500.3	510.3
127.5°	174.4	183.3	192.2	194.5	227.0	270.4	292.1	331.0	408.9	467.4	475.8
130°	180.2	189.8	199.3	201.7	231.4	270.8	290.5	325.2	394.6	446.6	454.4
132.5°	186.1	195.8	205.3	207.7	234.9	271.0	289.2	320.2	382.3	428.9	435.9
135°	195.0	203.7	212.5	214.6	238.7	270.8	286.8	312.8	364.8	403.9	409.8
137.5°	204.1	212.7	221.4	223.5	244.5	272.4	286.5	308.4	352.4	385.4	390.3
140°	211.6	219.5	227.5	229.5	248.0	272.7	285.1	304.1	342.1	370.6	375.2
142.5°	217.3	224.7	232.0	233.9	251.0	273.7	285.1	301.8	335.1	360.2	364.1
145°	226.2	232.6	239.0	240.6	254.8	273.8	283.2	296.8	324.1	344.6	347.5
147.5°	235.1	241.3	247.5	249.1	260.5	275.6	283.2	293.9	315.4	331.5	334.0
150°	240.8	246.4	252.1	253.5	263.4	276.6	283.2	292.2	310.4	324.0	326.1
152.5°	246.8	251.1	255.4	256.4	265.3	277.2	283.2	290.9	306.4	318.0	319.5
155°	255.6	258.8	262.0	262.7	269.6	278.6	283.2	289.4	301.7	310.9	312.0
157.5°	262.2	265.3	268.3	269.1	273.8	280.0	283.2	288.0	297.6	304.8	305.5
160°	266.7	269.0	271.4	272.0	275.7	280.7	283.2	287.3	295.5	301.7	302.1
162.5°	271.0	272.8	274.6	275.1	277.8	281.4	283.2	286.6	293.6	298.8	299.2
165°	275.9	277.5	279.2	279.5	280.8	282.3	283.2	285.6	290.6	294.3	294.7
167.5°	280.3	281.0	281.8	282.0	283.0	284.4	285.1	286.7	290.0	292.4	292.6
170°	283.2	283.9	284.7	284.9	285.0	285.1	285.1	286.7	290.0	292.4	292.4
172.5°	284.7	284.9	285.1	285.1	285.1	285.1	285.1	286.4	288.9	290.8	290.7
175°	286.8	286.8	286.8	286.8	286.3	285.4	285.1	285.9	287.6	288.8	288.8
177.5°	286.8	286.8	286.8	286.8	286.4	285.8	285.5	286.2	287.5	288.4	288.2
180°	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8

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CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-4-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	194.8	194.8
2.5°	208.0	206.8
5°	267.6	268.8
7.5°	360.2	359.7
10°	448.0	453.6
12.5°	511.9	513.1
15°	550.8	553.3
17.5°	565.8	566.5
20°	566.5	565.2
22.5°	559.6	558.3
25°	551.4	550.8
27.5°	543.9	544.5
30°	540.7	542.7
32.5°	540.7	543.9
35°	542.0	545.1
37.5°	541.3	545.1
40°	538.8	543.2
42.5°	532.0	535.1
45°	521.3	525.1
47.5°	507.5	510.1
50°	490.0	492.5
52.5°	468.0	468.7
55°	441.8	444.2
57.5°	413.6	414.1
60°	382.2	384.1
62.5°	349.0	349.0
65°	313.9	315.1
67.5°	277.6	280.7
70°	240.6	241.3
72.5°	204.3	204.3
75°	166.6	167.3
77.5°	130.9	130.9
80°	97.1	97.8
82.5°	67.1	68.3
85°	41.9	41.9
87.5°	19.4	17.6
90°	7.3	7.3
92.5°	29.3	23.4
95°	102.1	84.5
97.5°	244.7	211.2
100°	352.6	312.6
102.5°	458.7	424.5
105°	594.0	575.6
107.5°	682.6	687.1
110°	716.4	735.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	719.5	748.9
115°	700.3	741.1
117.5°	659.9	705.2
120°	627.3	671.3
122.5°	595.6	638.9
125°	550.2	590.2
127.5°	509.5	543.2
130°	485.6	516.7
132.5°	463.7	491.7
135°	433.9	457.9
137.5°	409.9	429.6
140°	393.6	412.0
142.5°	380.0	395.8
145°	359.6	371.5
147.5°	343.9	353.8
150°	334.1	342.1
152.5°	325.6	331.7
155°	316.0	320.0
157.5°	308.3	311.1
160°	303.7	305.3
162.5°	300.7	302.2
165°	296.4	298.0
167.5°	293.3	293.9
170°	292.4	292.4
172.5°	290.1	289.5
175°	288.8	288.8
177.5°	287.6	286.8
180°	286.8	286.8

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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	2.55	3.40	3.54	4.41	5.75	15.69	16.54	16.69	17.55	18.89
	3H	3.26	4.02	4.26	5.04	6.40	17.52	18.28	18.52	19.30	20.66
	4H	3.56	4.28	4.57	5.30	6.67	18.15	18.87	19.17	19.90	21.26
	6H	3.81	4.47	4.83	5.50	6.88	18.57	19.24	19.59	20.26	21.64
	8H	3.87	4.51	4.91	5.55	6.93	18.68	19.32	19.71	20.36	21.74
	12H	3.89	4.50	4.93	5.53	6.94	18.74	19.35	19.78	20.38	21.79
4H	2H	9.74	10.47	10.77	11.49	12.86	15.97	16.69	16.99	17.71	19.08
	3H	11.31	11.92	12.34	12.97	14.35	18.00	18.60	19.03	19.65	21.04
	4H	11.41	11.96	12.45	13.00	14.41	18.75	19.31	19.79	20.35	21.75
	6H	11.42	11.90	12.47	12.96	14.36	19.28	19.76	20.33	20.82	22.22
	8H	11.39	11.84	12.44	12.90	14.32	19.43	19.88	20.48	20.94	22.36
	12H	11.35	11.76	12.42	12.83	14.25	19.52	19.92	20.59	21.00	22.42
8H	4H	12.84	13.29	13.89	14.35	15.76	18.81	19.26	19.86	20.32	21.73
	6H	13.08	13.45	14.16	14.55	15.97	19.43	19.80	20.50	20.90	22.31
	8H	13.10	13.43	14.18	14.51	15.94	19.64	19.97	20.72	21.05	22.48
	12H	13.07	13.36	14.15	14.43	15.91	19.78	20.06	20.86	21.14	22.61
12H	4H	12.98	13.38	14.05	14.46	15.88	18.77	19.17	19.83	20.24	21.66
	6H	13.34	13.66	14.42	14.75	16.18	19.41	19.74	20.49	20.82	22.25
	8H	13.41	13.69	14.49	14.77	16.24	19.63	19.92	20.72	21.00	22.47