

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: P936690

Luminaire Tested: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936690
REPORT IS A COMBINATION OF REPORTS P933477 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-6-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

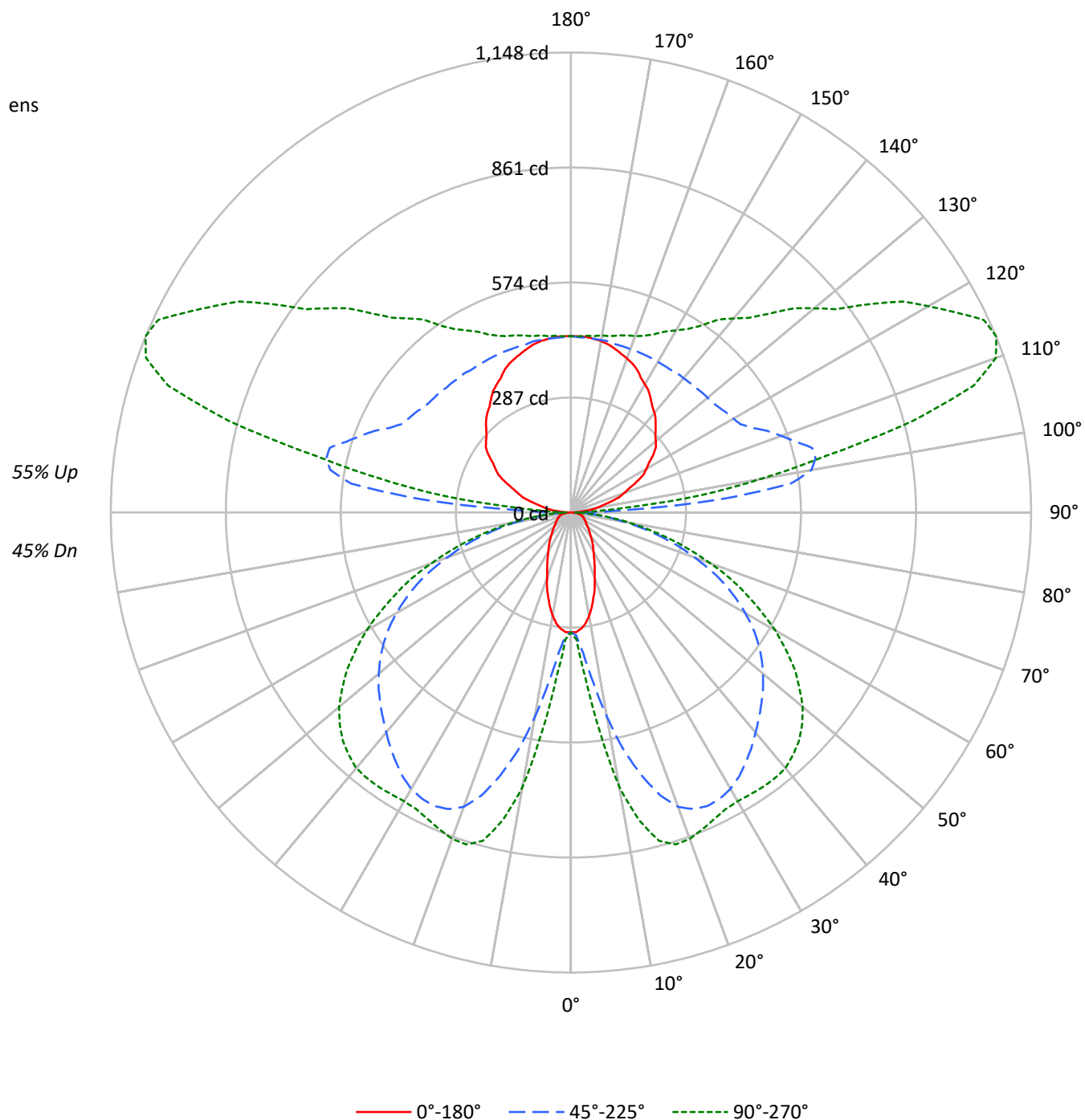
Lumens per Lamp: N/A
Luminaire Lumens: 5164.6 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 42.6
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: P936690

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-4000K

Luminous Intensity Polar Plot



TEST NUMBER: P936690

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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	24
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°	1848	1848	1848
5°	1805	2135	2484
10°	1637	3112	4118
15°	1390	4064	4973
20°	1132	4710	5068
25°	943	4927	4965
30°	795	4957	4956
35°	703	4873	5084
40°	612	4765	5217
45°	554	4685	5237
50°	508	4613	5150
55°	486	4508	4922
60°	498	4308	4562
65°	516	4005	4065
70°	548	3490	3436
75°	605	2843	2681
80°	657	1969	1806
85°	572	1044	925

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5237 cd/sqm

TEST NUMBER: P936690

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.6	0.7
10°-20°	171.3	3.3
20°-30°	299.6	5.8
30°-40°	385.6	7.5
40°-50°	430.7	8.3
50°-60°	412.6	8.0
60°-70°	327.0	6.3
70°-80°	192.3	3.7
80°-90°	55.1	1.1
90°-100°	214.4	4.2
100°-110°	563.8	10.9
110°-120°	584.6	11.3
120°-130°	468.9	9.1
130°-140°	367.9	7.1
140°-150°	282.4	5.5
150°-160°	203.4	3.9
160°-170°	124.4	2.4
170°-180°	42.0	0.8
0°-30°	509.5	9.9
0°-40°	895.1	17.3
0°-60°	1738.5	33.7
0°-90°	2312.8	44.8
90°-120°	1362.8	26.4
90°-150°	2482.0	48.1
90°-180°	2852.0	55.2
0°-180°	5164.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	299	299	299	299	299	
5°	291	312	352	398	412	27
15°	218	402	678	822	848	61
25°	139	456	808	843	844	64
35°	94	436	761	804	836	59
45°	64	348	672	770	805	50
55°	46	221	571	663	681	42
65°	36	117	424	476	483	36
75°	27	72	232	256	256	28
85°	10	22	58	63	64	10
90°	3	8	22	11	11	3
95°	28	111	369	190	130	31
105°	102	154	623	946	883	108
115°	180	219	499	996	1137	178
125°	251	281	454	767	905	223
135°	299	329	440	619	702	231
145°	347	369	434	528	570	217
155°	392	403	434	477	491	180
165°	423	429	434	451	457	119
175°	440	440	437	443	443	42
180°	440	440	440	440	440	

TEST NUMBER: P936690

CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-4000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	298.7	298.7	298.7	298.7	298.7	298.7	298.7	298.7	298.7	298.7	298.7
2.5°	298.7	298.7	300.6	301.6	303.6	304.5	306.5	308.4	314.1	315.1	317.0
5°	291.1	294.9	307.4	312.2	325.7	343.9	351.5	364.0	390.0	397.7	402.5
7.5°	279.5	288.2	318.9	326.6	360.2	408.3	428.4	455.3	496.6	516.8	533.2
10°	261.3	279.5	334.2	352.6	407.3	480.3	517.8	555.2	617.7	645.5	656.1
12.5°	241.1	270.9	350.6	375.6	454.4	561.0	606.1	647.5	718.5	756.0	761.7
15°	218.0	258.4	366.0	402.5	504.3	628.2	678.1	729.1	795.4	822.3	829.0
17.5°	197.9	248.8	380.4	418.9	542.7	688.7	739.6	782.0	835.7	854.0	858.7
20°	173.0	233.4	390.0	440.0	583.1	733.0	782.0	814.6	851.1	862.7	864.6
22.5°	154.6	217.1	395.8	447.6	610.0	759.8	801.1	827.0	852.1	855.9	856.8
25°	139.3	198.8	394.8	456.3	633.1	776.1	807.8	827.0	841.5	843.4	843.4
27.5°	124.9	178.7	391.0	458.2	650.4	780.0	805.0	818.4	825.1	829.0	829.0
30°	112.4	159.5	381.3	454.4	658.0	776.1	796.4	803.1	809.7	815.6	818.4
32.5°	102.8	141.2	366.9	446.7	658.9	766.6	781.0	784.8	794.4	807.8	812.7
35°	94.2	123.0	350.6	436.1	653.2	751.2	760.8	764.7	783.9	804.0	810.7
37.5°	85.5	109.5	329.5	417.9	644.5	733.0	739.6	746.4	776.1	800.2	807.8
40°	76.9	98.0	304.5	397.7	631.2	710.8	716.6	727.1	766.6	794.4	802.1
42.5°	70.1	88.3	277.6	376.6	613.8	685.9	694.5	709.9	755.0	784.8	793.4
45°	64.4	78.8	248.8	347.7	591.7	659.9	672.4	693.5	741.6	770.4	778.0
47.5°	58.6	72.0	219.0	317.9	567.7	634.0	650.4	674.3	723.3	751.2	757.9
50°	53.8	65.3	189.3	286.2	541.8	606.1	625.3	650.4	700.3	726.2	734.9
52.5°	49.9	59.6	161.4	254.6	512.0	577.3	599.5	625.3	672.4	697.4	703.2
55°	46.1	54.7	137.3	220.9	481.2	546.5	570.6	595.5	641.7	662.8	666.7
57.5°	44.2	50.9	117.2	189.3	448.6	512.0	538.9	561.9	605.2	621.5	625.3
60°	41.4	48.0	101.8	162.4	413.0	479.3	502.4	525.4	561.9	575.4	578.3
62.5°	38.4	46.1	90.3	136.4	376.6	440.9	463.9	485.1	515.8	525.4	529.3
65°	36.5	44.2	81.7	117.2	339.1	400.5	423.6	441.9	466.8	476.4	478.4
67.5°	34.6	42.3	75.0	100.8	301.6	360.2	377.5	394.8	414.0	423.6	424.6
70°	31.7	40.3	69.1	89.3	263.2	314.1	328.5	346.8	362.1	366.9	369.9
72.5°	29.8	37.4	65.3	80.7	223.9	269.9	283.3	293.9	307.4	312.2	312.2
75°	26.9	33.6	61.5	72.0	183.5	220.9	232.4	243.0	253.6	255.6	252.6
77.5°	24.0	29.8	52.8	60.5	143.2	174.9	184.4	190.2	198.8	200.7	201.7
80°	20.2	26.0	41.4	47.1	103.7	128.7	135.4	140.3	147.9	147.9	149.8
82.5°	15.4	20.2	29.8	33.6	70.1	88.3	94.2	97.0	101.8	101.8	101.8
85°	9.6	12.5	19.2	22.1	42.3	53.8	57.7	58.6	62.5	63.4	63.4
87.5°	4.8	6.7	12.5	13.5	22.1	27.9	27.9	29.8	29.8	28.8	27.9
90°	3.0	5.3	7.7	8.3	13.0	19.3	22.4	20.0	14.9	11.2	11.2
92.5°	11.8	31.9	52.0	57.0	80.1	111.0	126.3	110.7	79.5	56.1	53.9
95°	28.4	65.0	101.8	111.0	197.1	312.0	369.4	329.7	250.1	190.4	183.6
97.5°	49.0	81.5	113.8	122.0	265.6	457.1	552.8	527.6	477.3	439.6	426.7
100°	64.9	94.4	123.8	131.1	290.4	502.9	609.1	610.9	614.6	617.4	602.1
102.5°	78.5	106.0	133.4	140.3	301.9	517.3	625.0	657.0	721.1	769.2	756.1
105°	101.6	124.8	148.0	153.9	310.3	518.9	623.2	695.0	838.6	946.3	939.2
107.5°	125.2	146.9	168.5	173.9	311.9	495.8	587.8	687.9	888.2	1038.4	1040.1
110°	141.1	160.6	180.2	185.1	309.5	475.4	558.3	670.2	894.2	1062.1	1069.4

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	156.8	175.4	194.1	198.7	309.6	457.5	531.5	646.1	875.2	1047.0	1058.2
115°	180.4	197.6	214.8	219.1	312.5	437.0	499.3	609.7	830.4	995.9	1011.5
117.5°	203.7	219.4	234.9	238.8	318.3	424.2	477.1	576.7	775.9	925.3	942.7
120°	217.3	232.0	246.7	250.4	323.0	419.8	468.2	559.2	741.3	877.7	894.6
122.5°	230.6	245.4	260.2	264.0	329.8	417.5	461.5	543.4	707.4	830.3	846.9
125°	251.0	264.4	278.0	281.3	338.9	415.7	454.1	523.7	663.0	767.3	782.6
127.5°	267.5	281.2	294.8	298.2	348.1	414.7	447.9	507.7	627.1	716.8	729.7
130°	276.4	291.1	305.8	309.4	354.8	415.2	445.5	498.7	605.2	685.0	697.0
132.5°	285.5	300.3	315.0	318.6	360.2	415.7	443.5	491.2	586.4	657.8	668.5
135°	299.1	312.5	325.8	329.2	366.1	415.3	440.0	479.9	559.6	619.4	628.7
137.5°	313.0	326.2	339.4	342.7	374.9	417.8	439.3	473.0	540.4	591.0	598.6
140°	324.5	336.7	348.9	351.9	380.4	418.3	437.3	466.4	524.7	568.3	575.4
142.5°	333.3	344.6	355.8	358.7	384.9	419.8	437.3	462.9	514.0	552.4	558.5
145°	347.0	356.8	366.6	369.1	390.9	419.8	434.3	455.2	497.1	528.5	533.1
147.5°	360.5	370.1	379.7	382.1	399.5	422.7	434.3	450.8	483.7	508.4	512.3
150°	369.4	378.1	386.7	388.9	404.1	424.2	434.3	448.3	476.1	496.9	499.9
152.5°	378.5	385.1	391.6	393.3	406.9	425.2	434.3	446.2	470.0	487.7	490.0
155°	392.1	397.0	401.8	403.0	413.4	427.4	434.3	443.8	462.7	476.8	478.4
157.5°	402.2	406.8	411.6	412.8	419.9	429.6	434.3	441.7	456.4	467.4	468.4
160°	408.9	412.6	416.2	417.1	422.9	430.5	434.3	440.6	453.2	462.7	463.3
162.5°	415.7	418.5	421.3	421.9	426.0	431.6	434.3	439.7	450.3	458.2	458.8
165°	423.1	425.5	428.0	428.7	430.6	433.1	434.3	438.2	445.7	451.4	452.1
167.5°	429.8	431.0	432.2	432.5	434.1	436.2	437.3	439.8	444.7	448.5	448.8
170°	434.3	435.5	436.7	437.0	437.1	437.2	437.3	439.8	444.7	448.5	448.5
172.5°	436.7	437.0	437.2	437.3	437.3	437.3	437.3	439.2	443.1	446.1	445.9
175°	440.0	440.0	440.0	440.0	439.1	437.9	437.3	438.5	441.0	442.8	442.8
177.5°	440.0	440.0	440.0	440.0	439.3	438.3	437.9	438.8	440.8	442.3	442.0
180°	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0

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CATALOG NUMBER: SQ4-FB-050U-050D-B2750-1D-UNV-W2A-W-6-4000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	298.7	298.7
2.5°	318.9	317.0
5°	410.2	412.1
7.5°	552.4	551.4
10°	686.8	695.4
12.5°	784.8	786.7
15°	844.4	848.2
17.5°	867.4	868.4
20°	868.4	866.5
22.5°	857.8	855.9
25°	845.4	844.4
27.5°	833.8	834.8
30°	829.0	831.9
32.5°	829.0	833.8
35°	830.9	835.7
37.5°	830.0	835.7
40°	826.1	832.9
42.5°	815.6	820.3
45°	799.2	805.0
47.5°	778.0	782.0
50°	751.2	755.0
52.5°	717.6	718.5
55°	677.2	681.1
57.5°	634.0	635.0
60°	586.0	588.9
62.5°	535.1	535.1
65°	481.2	483.1
67.5°	425.5	430.3
70°	368.9	369.9
72.5°	313.1	313.1
75°	255.6	256.5
77.5°	200.7	200.7
80°	148.9	149.8
82.5°	102.8	104.7
85°	64.4	64.4
87.5°	29.8	26.9
90°	11.2	11.2
92.5°	44.9	36.0
95°	156.6	129.6
97.5°	375.3	323.9
100°	540.8	479.5
102.5°	703.5	651.0
105°	911.1	882.8
107.5°	1046.9	1053.7
110°	1098.7	1128.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1103.4	1148.5
115°	1074.1	1136.7
117.5°	1012.1	1081.5
120°	962.1	1029.6
122.5°	913.5	979.9
125°	843.9	905.2
127.5°	781.5	833.2
130°	744.7	792.5
132.5°	711.3	754.1
135°	665.5	702.4
137.5°	628.9	659.0
140°	603.6	631.8
142.5°	582.7	607.0
145°	551.5	569.8
147.5°	527.4	542.6
150°	512.4	524.7
152.5°	499.4	508.7
155°	484.6	490.7
157.5°	472.8	477.1
160°	465.8	468.2
162.5°	461.2	463.6
165°	454.6	457.1
167.5°	449.8	450.9
170°	448.5	448.5
172.5°	444.9	444.1
175°	442.8	442.8
177.5°	441.0	440.0
180°	440.0	440.0

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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	2.64	3.49	3.63	4.50	5.84	15.80	16.65	16.80	17.66	19.00
	3H	3.34	4.11	4.35	5.13	6.49	17.64	18.40	18.64	19.42	20.78
	4H	3.64	4.36	4.66	5.39	6.76	18.28	19.00	19.29	20.02	21.39
	6H	3.89	4.56	4.92	5.58	6.97	18.70	19.37	19.73	20.40	21.78
	8H	3.96	4.60	4.99	5.64	7.02	18.82	19.46	19.85	20.50	21.88
	12H	3.98	4.58	5.01	5.62	7.02	18.89	19.49	19.93	20.53	21.93
4H	2H	9.84	10.57	10.87	11.59	12.96	16.08	16.80	17.10	17.82	19.19
	3H	11.41	12.02	12.44	13.07	14.45	18.12	18.72	19.15	19.77	21.15
	4H	11.51	12.06	12.54	13.10	14.51	18.88	19.43	19.92	20.48	21.88
	6H	11.52	11.99	12.57	13.06	14.46	19.41	19.89	20.46	20.96	22.36
	8H	11.49	11.94	12.54	13.00	14.41	19.57	20.02	20.62	21.08	22.49
	12H	11.45	11.85	12.52	12.93	14.35	19.66	20.07	20.73	21.14	22.56
8H	4H	12.95	13.39	14.00	14.45	15.87	18.94	19.39	19.99	20.44	21.86
	6H	13.19	13.56	14.26	14.66	16.07	19.56	19.93	20.64	21.03	22.45
	8H	13.21	13.53	14.29	14.61	16.05	19.78	20.11	20.86	21.19	22.62
	12H	13.17	13.46	14.26	14.54	16.01	19.92	20.21	21.01	21.29	22.76
12H	4H	13.09	13.49	14.16	14.56	15.99	18.89	19.30	19.96	20.37	21.79
	6H	13.44	13.77	14.53	14.85	16.29	19.55	19.87	20.63	20.96	22.39
	8H	13.51	13.80	14.60	14.88	16.35	19.77	20.06	20.86	21.14	22.61