

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: P936290

Luminaire Tested: SQ4-FB-025U-050D-B2750-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P936290  
REPORT IS A COMBINATION OF REPORTS P933445 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-050D-B2750-1D-UNV-STD-W-6-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

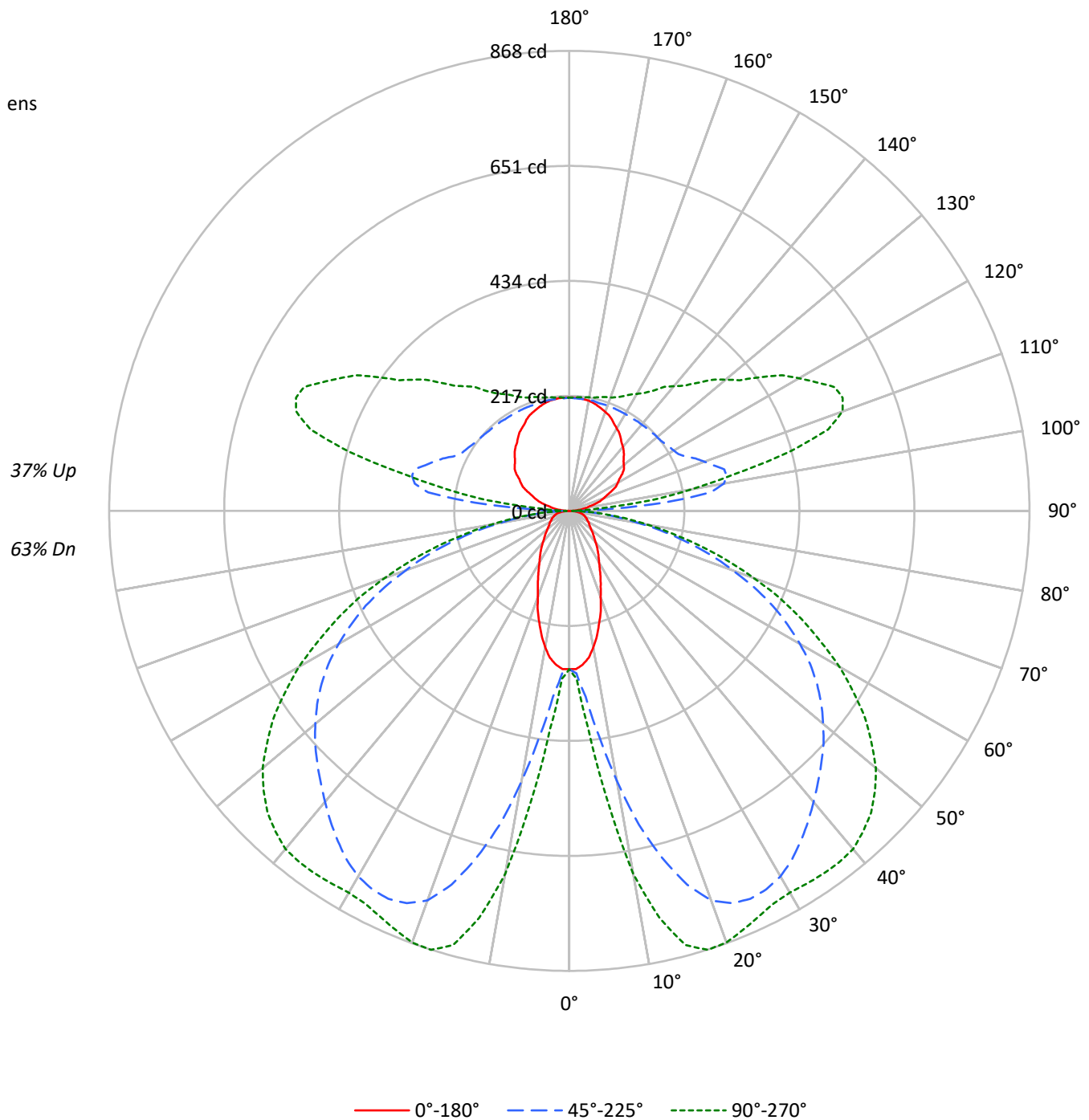
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3697.7 lumens  
Efficiency: N/A  
Efficacy: 112.1 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: Semi-Direct

Input Watts (W): 33  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

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### 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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	63
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	13

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.6	1.0
10°-20°	171.3	4.6
20°-30°	299.6	8.1
30°-40°	385.6	10.4
40°-50°	430.7	11.6
50°-60°	412.6	11.2
60°-70°	327.0	8.8
70°-80°	192.3	5.2
80°-90°	54.2	1.5
90°-100°	104.2	2.8
100°-110°	274.0	7.4
110°-120°	284.1	7.7
120°-130°	227.9	6.2
130°-140°	178.8	4.8
140°-150°	137.2	3.7
150°-160°	98.8	2.7
160°-170°	60.5	1.6
170°-180°	20.4	0.6
0°-30°	509.5	13.8
0°-40°	895.1	24.2
0°-60°	1738.5	47.0
0°-90°	2311.9	62.5
90°-120°	662.2	17.9
90°-150°	1206.1	32.6
90°-180°	1386.0	37.5
0°-180°	3697.7	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°	1	4	11	5	5	2
95°	14	54	179	92	63	15
105°	49	75	303	460	429	52
115°	88	106	243	484	552	87
125°	122	137	221	373	440	108
135°	145	160	214	301	341	112
145°	169	179	211	257	277	106
155°	190	196	211	232	238	88
165°	206	208	211	219	222	58
175°	214	214	212	215	215	20
180°	214	214	214	214	214	



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**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°	1.4	2.6	3.7	4.0	6.3	9.4	10.9	9.6	7.3	5.4	5.4
92.5°	5.7	15.5	25.2	27.7	39.0	54.0	61.4	53.8	38.6	27.2	26.2
95°	13.8	31.6	49.5	54.0	95.8	151.6	179.4	160.2	121.5	92.5	89.3
97.5°	23.8	39.5	55.3	59.2	129.0	222.0	268.5	256.3	232.0	213.6	207.4
100°	31.6	45.8	60.2	63.7	141.1	244.4	296.0	296.8	298.6	300.0	292.5
102.5°	38.2	51.6	64.8	68.2	146.7	251.4	303.7	319.3	350.4	373.8	367.4
105°	49.4	60.6	71.9	74.8	150.8	252.1	302.8	337.7	407.5	459.8	456.4
107.5°	60.8	71.3	81.8	84.5	151.6	240.9	285.6	334.3	431.7	504.6	505.5
110°	68.6	78.1	87.6	90.0	150.4	231.0	271.3	325.8	434.5	516.1	519.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	76.2	85.3	94.3	96.6	150.4	222.3	258.2	313.9	425.3	508.7	514.2
115°	87.7	96.1	104.4	106.5	151.8	212.3	242.6	296.2	403.5	483.9	491.5
117.5°	99.0	106.6	114.1	116.0	154.6	206.1	231.9	280.3	377.0	449.6	458.0
120°	105.6	112.8	119.9	121.7	157.0	204.1	227.6	271.8	360.2	426.6	434.8
122.5°	112.0	119.3	126.4	128.3	160.2	202.9	224.2	264.1	343.7	403.5	411.6
125°	122.0	128.5	135.1	136.8	164.7	202.1	220.7	254.5	322.2	372.9	380.4
127.5°	130.0	136.6	143.2	144.9	169.1	201.5	217.6	246.7	304.8	348.4	354.7
130°	134.3	141.4	148.5	150.3	172.4	201.8	216.5	242.4	294.0	332.8	338.6
132.5°	138.8	145.9	153.0	154.8	175.1	202.1	215.5	238.7	285.0	319.6	324.8
135°	145.4	151.8	158.3	160.0	177.9	201.9	213.8	233.2	272.0	301.0	305.5
137.5°	152.1	158.5	164.9	166.6	182.2	203.1	213.5	230.0	262.7	287.3	290.9
140°	157.7	163.6	169.5	171.0	184.9	203.3	212.5	226.6	255.0	276.2	279.6
142.5°	162.0	167.4	173.0	174.3	187.0	204.0	212.5	224.9	249.8	268.5	271.4
145°	168.6	173.3	178.1	179.3	189.9	204.0	211.1	221.2	241.5	256.8	259.0
147.5°	175.1	179.8	184.5	185.7	194.2	205.4	211.1	219.1	235.0	247.1	248.9
150°	179.4	183.6	187.9	189.0	196.3	206.2	211.1	217.8	231.3	241.4	243.0
152.5°	183.9	187.1	190.3	191.1	197.8	206.7	211.1	216.8	228.3	237.0	238.2
155°	190.5	192.9	195.3	195.9	200.9	207.7	211.1	215.6	224.8	231.7	232.4
157.5°	195.4	197.7	200.0	200.5	204.1	208.8	211.1	214.6	221.8	227.1	227.7
160°	198.7	200.5	202.3	202.7	205.5	209.2	211.1	214.1	220.2	224.8	225.1
162.5°	202.0	203.3	204.7	205.0	207.0	209.7	211.1	213.6	218.8	222.7	223.0
165°	205.6	206.8	208.0	208.3	209.2	210.5	211.1	212.9	216.6	219.4	219.6
167.5°	208.9	209.4	210.0	210.2	211.0	212.0	212.5	213.7	216.1	217.9	218.0
170°	211.1	211.6	212.2	212.3	212.4	212.5	212.5	213.7	216.1	217.9	217.9
172.5°	212.2	212.3	212.5	212.5	212.5	212.5	212.5	213.4	215.4	216.8	216.7
175°	213.8	213.8	213.8	213.8	213.3	212.8	212.5	213.1	214.3	215.3	215.3
177.5°	213.8	213.8	213.8	213.8	213.4	213.0	212.8	213.3	214.2	215.0	214.9
180°	213.8	213.8	213.8	213.8	213.8	213.8	213.8	213.8	213.8	213.8	213.8



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**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°	5.4	5.4
92.5°	21.8	17.5
95°	76.1	63.0
97.5°	182.4	157.4
100°	262.8	233.0
102.5°	341.9	316.4
105°	442.7	429.0
107.5°	508.7	512.1
110°	533.9	548.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	536.1	558.1
115°	521.9	552.4
117.5°	491.8	525.5
120°	467.6	500.3
122.5°	443.9	476.2
125°	410.1	439.9
127.5°	379.8	404.9
130°	361.8	385.1
132.5°	345.6	366.4
135°	323.4	341.3
137.5°	305.6	320.2
140°	293.3	307.0
142.5°	283.2	295.0
145°	268.0	277.0
147.5°	256.3	263.7
150°	249.0	255.0
152.5°	242.7	247.2
155°	235.4	238.5
157.5°	229.8	231.9
160°	226.3	227.6
162.5°	224.1	225.3
165°	220.9	222.1
167.5°	218.6	219.1
170°	217.9	217.9
172.5°	216.2	215.8
175°	215.3	215.3
177.5°	214.3	213.8
180°	213.8	213.8



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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	4.20	5.24	5.03	6.10	7.18	17.36	18.40	18.20	19.26	20.34
	3H	4.92	5.85	5.76	6.72	7.83	19.21	20.15	20.06	21.02	22.12
	4H	5.22	6.11	6.09	6.99	8.10	19.86	20.75	20.72	21.62	22.74
	6H	5.48	6.30	6.36	7.19	8.31	20.30	21.11	21.17	22.00	23.13
	8H	5.56	6.34	6.44	7.24	8.37	20.42	21.20	21.30	22.10	23.23
	12H	5.58	6.33	6.47	7.22	8.38	20.49	21.24	21.38	22.13	23.29
4H	2H	11.43	12.31	12.29	13.19	14.30	17.66	18.54	18.53	19.42	20.54
	3H	13.01	13.75	13.89	14.66	15.79	19.72	20.46	20.60	21.37	22.50
	4H	13.11	13.79	14.01	14.70	15.85	20.49	21.17	21.38	22.07	23.23
	6H	13.14	13.72	14.04	14.65	15.81	21.03	21.62	21.94	22.55	23.71
	8H	13.12	13.67	14.03	14.59	15.76	21.20	21.75	22.11	22.67	23.84
	12H	13.08	13.58	14.01	14.52	15.70	21.30	21.79	22.23	22.74	23.91
8H	4H	14.57	15.12	15.48	16.04	17.22	20.56	21.11	21.47	22.04	23.21
	6H	14.82	15.28	15.76	16.24	17.41	21.20	21.65	22.13	22.62	23.79
	8H	14.84	15.25	15.79	16.20	17.39	21.42	21.82	22.36	22.78	23.97
	12H	14.82	15.18	15.77	16.13	17.36	21.57	21.92	22.52	22.87	24.11
12H	4H	14.72	15.22	15.65	16.16	17.34	20.53	21.02	21.45	21.96	23.14
	6H	15.08	15.49	16.03	16.44	17.63	21.18	21.59	22.13	22.54	23.73
	8H	15.16	15.52	16.11	16.47	17.70	21.42	21.78	22.37	22.73	23.96