

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: P937250

Luminaire Tested: SQ4-FB-075U-100D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

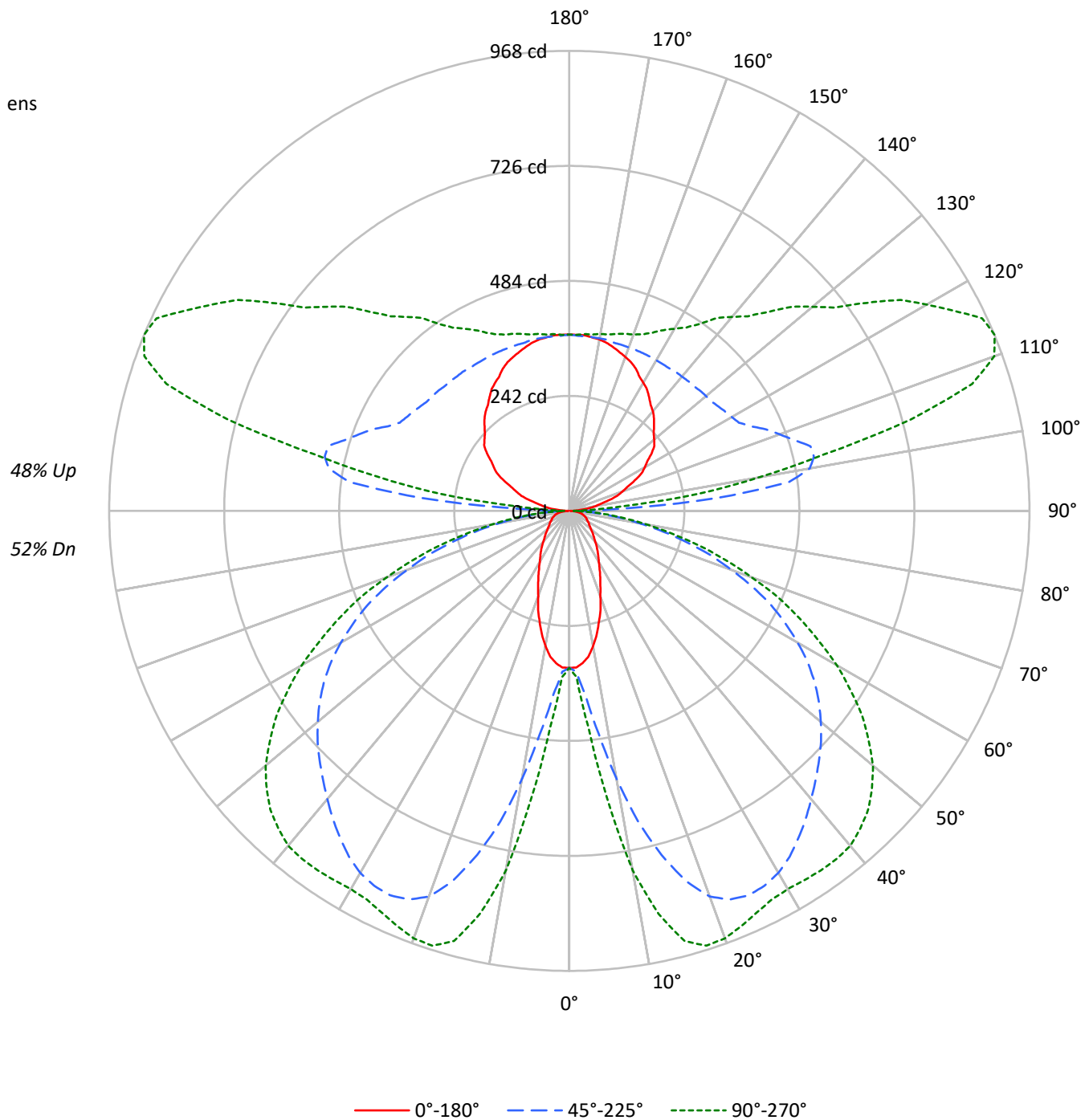
Test Method: LM-79-2019  
Report Number: P937250  
REPORT IS A COMBINATION OF REPORTS P933503 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-100D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4958.6 lumens  
Efficiency: N/A  
Efficacy: 96.8 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): 51.2  
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

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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	50	30	10	0
RCR																					
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	50	49	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	43	41	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	38	35	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	33	30	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	30	26	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	27	23	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	24	20	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	22	18	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	20	17	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	19	15	12	10

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3062	3062	3062
5°	2988	3536	4116
10°	2707	5151	6823
15°	2298	6725	8239
20°	1869	7788	8396
25°	1558	8143	8227
30°	1311	8188	8211
35°	1158	8046	8423
40°	1007	7862	8642
45°	910	7726	8677
50°	833	7602	8533
55°	795	7424	8155
60°	811	7089	7557
65°	840	6582	6737
70°	889	5729	5691
75°	974	4659	4441
80°	1039	3219	2992
85°	878	1700	1532

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8677 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.7	0.9
10°-20°	189.2	3.8
20°-30°	330.9	6.7
30°-40°	426.0	8.6
40°-50°	475.8	9.6
50°-60°	455.7	9.2
60°-70°	361.2	7.3
70°-80°	212.4	4.3
80°-90°	60.4	1.2
90°-100°	180.8	3.6
100°-110°	475.3	9.6
110°-120°	492.9	9.9
120°-130°	395.3	8.0
130°-140°	310.2	6.3
140°-150°	238.1	4.8
150°-160°	171.5	3.5
160°-170°	104.9	2.1
170°-180°	35.4	0.7
0°-30°	562.8	11.3
0°-40°	988.7	19.9
0°-60°	1920.2	38.7
0°-90°	2554.2	51.5
90°-120°	1149.0	23.2
90°-150°	2092.6	42.2
90°-180°	2404.0	48.5
0°-180°	4958.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	330	330	330	330	330	
5°	322	345	388	439	455	30
15°	241	444	749	908	937	67
25°	154	504	892	932	933	71
35°	104	482	840	888	923	65
45°	71	384	743	851	889	55
55°	51	244	630	732	752	46
65°	40	129	468	526	534	40
75°	30	80	257	282	283	31
85°	11	24	64	70	71	11
90°	2	7	19	10	10	3
95°	24	94	311	160	109	27
105°	86	130	526	798	744	91
115°	152	185	421	840	958	150
125°	212	237	383	647	763	188
135°	252	278	371	522	592	195
145°	292	311	366	446	480	183
155°	331	340	366	402	414	152
165°	357	361	366	381	385	101
175°	371	371	369	373	373	35
180°	371	371	371	371	371	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0
2.5°	330.0	330.0	332.1	333.2	335.3	336.4	338.5	340.6	347.0	348.0	350.1
5°	321.5	325.8	339.5	344.8	359.7	379.8	388.3	402.1	430.8	439.2	444.5
7.5°	308.8	318.3	352.3	360.8	397.9	451.0	473.2	502.9	548.5	570.9	588.8
10°	288.6	308.8	369.2	389.4	449.8	530.5	571.9	613.3	682.2	713.0	724.7
12.5°	266.4	299.2	387.3	414.8	501.9	619.7	669.5	715.2	793.7	835.0	841.4
15°	240.8	285.4	404.2	444.5	557.0	694.0	749.1	805.3	878.6	908.3	915.7
17.5°	218.6	274.8	420.1	462.6	599.5	760.8	817.0	863.7	923.1	943.3	948.6
20°	191.0	257.8	430.8	486.0	644.1	809.6	863.7	899.8	940.1	952.8	954.9
22.5°	170.8	239.8	437.2	494.4	673.7	839.3	884.9	913.6	941.1	945.4	946.4
25°	153.9	219.6	436.1	504.0	699.3	857.3	892.3	913.6	929.5	931.6	931.6
27.5°	138.0	197.4	431.9	506.1	718.3	861.5	889.2	904.0	911.4	915.7	915.7
30°	124.1	176.1	421.3	501.9	726.8	857.3	879.6	887.0	894.5	900.8	904.0
32.5°	113.5	155.9	405.4	493.4	727.8	846.7	862.6	866.8	877.4	892.3	897.7
35°	104.0	135.8	387.3	481.7	721.5	829.7	840.3	844.6	865.8	888.1	895.5
37.5°	94.4	120.9	363.9	461.6	711.9	809.6	817.0	824.4	857.3	883.9	892.3
40°	84.9	108.2	336.4	439.2	697.1	785.2	791.5	803.2	846.7	877.4	885.9
42.5°	77.5	97.6	306.7	416.0	678.0	757.6	767.1	784.1	834.0	866.8	876.4
45°	71.1	87.0	274.8	384.1	653.6	729.0	742.7	766.1	819.1	850.9	859.5
47.5°	64.7	79.6	241.9	351.2	627.1	700.3	718.3	744.9	799.0	829.7	837.1
50°	59.4	72.2	209.0	316.2	598.4	669.5	690.7	718.3	773.5	802.1	811.7
52.5°	55.2	65.8	178.3	281.2	565.6	637.7	662.1	690.7	742.7	770.3	776.7
55°	50.9	60.5	151.8	244.0	531.6	603.7	630.3	657.8	708.8	732.1	736.4
57.5°	48.8	56.2	129.4	209.0	495.5	565.6	595.3	620.7	668.4	686.5	690.7
60°	45.6	53.1	112.5	179.3	456.3	529.4	555.0	580.4	620.7	635.6	638.7
62.5°	42.5	50.9	99.7	150.6	416.0	487.0	512.5	535.8	569.8	580.4	584.7
65°	40.3	48.8	90.2	129.4	374.5	442.5	467.9	488.1	515.7	526.3	528.4
67.5°	38.2	46.7	82.8	111.4	333.2	397.9	417.0	436.1	457.3	467.9	469.0
70°	35.0	44.6	76.4	98.7	290.7	347.0	362.9	383.0	400.0	405.4	408.5
72.5°	32.9	41.4	72.2	89.1	247.2	298.2	313.0	324.7	339.5	344.8	344.8
75°	29.7	37.1	67.9	79.6	202.7	244.0	256.8	268.4	280.1	282.3	279.0
77.5°	26.5	32.9	58.4	66.8	158.1	193.1	203.7	210.1	219.6	221.8	222.8
80°	22.2	28.7	45.6	52.0	114.6	142.2	149.6	154.9	163.4	163.4	165.5
82.5°	16.9	22.2	32.9	37.1	77.5	97.6	104.0	107.2	112.5	112.5	112.5
85°	10.6	13.8	21.2	24.4	46.7	59.4	63.7	64.7	69.0	70.0	70.0
87.5°	5.3	7.4	13.8	14.9	24.4	30.8	30.8	32.9	32.9	31.8	30.8
90°	2.5	4.5	6.5	7.0	11.0	16.3	19.0	16.9	12.6	9.5	9.5
92.5°	10.0	26.9	43.8	48.0	67.5	93.5	106.6	93.4	67.1	47.3	45.4
95°	23.9	54.9	85.9	93.6	166.2	263.0	311.4	277.8	210.8	160.5	154.8
97.5°	41.4	68.7	96.0	102.8	223.9	385.3	466.0	444.8	402.5	370.7	359.8
100°	54.8	79.5	104.3	110.5	244.8	424.0	513.5	515.0	518.2	520.5	507.6
102.5°	66.2	89.4	112.4	118.2	254.5	436.2	527.0	554.0	608.0	648.4	637.3
105°	85.6	105.2	124.8	129.7	261.6	437.6	525.5	586.0	707.0	797.8	791.8
107.5°	105.5	123.8	142.1	146.6	263.0	418.0	495.6	580.0	748.8	875.4	876.9
110°	119.0	135.5	152.0	156.1	261.0	400.8	470.7	565.1	753.8	895.3	901.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	132.2	147.9	163.6	167.5	261.1	385.8	448.1	544.7	737.8	882.7	892.2
115°	152.1	166.5	181.1	184.7	263.5	368.4	420.9	514.0	700.1	839.6	852.8
117.5°	171.8	184.9	198.1	201.4	268.4	357.6	402.2	486.2	654.1	780.1	794.7
120°	183.2	195.6	208.0	211.1	272.3	354.0	394.8	471.5	625.0	740.0	754.3
122.5°	194.4	206.9	219.4	222.5	278.0	352.0	389.1	458.1	596.3	700.0	714.0
125°	211.6	223.0	234.4	237.2	285.8	350.5	382.9	441.6	559.0	647.0	659.9
127.5°	225.6	237.0	248.5	251.4	293.5	349.6	377.7	428.1	528.9	604.4	615.3
130°	233.0	245.4	257.8	260.9	299.1	350.1	375.6	420.5	510.2	577.5	587.6
132.5°	240.7	253.1	265.5	268.6	303.7	350.5	373.9	414.0	494.4	554.6	563.6
135°	252.1	263.4	274.7	277.5	308.7	350.2	370.9	404.6	471.8	522.3	530.1
137.5°	263.9	275.0	286.2	289.0	316.1	352.4	370.4	398.9	455.7	498.3	504.7
140°	273.6	283.9	294.1	296.7	320.7	352.7	368.7	393.2	442.3	479.2	485.1
142.5°	281.0	290.5	300.0	302.4	324.5	354.0	368.7	390.3	433.4	465.7	470.9
145°	292.5	300.8	309.1	311.2	329.5	354.0	366.2	383.8	419.1	445.6	449.4
147.5°	303.9	312.0	320.1	322.1	336.8	356.4	366.2	380.1	407.8	428.6	431.9
150°	311.4	318.7	326.0	327.9	340.6	357.7	366.2	377.9	401.3	418.9	421.5
152.5°	319.1	324.7	330.2	331.6	343.1	358.5	366.2	376.2	396.2	411.2	413.1
155°	330.6	334.7	338.7	339.7	348.6	360.3	366.2	374.1	390.0	402.0	403.3
157.5°	339.0	343.0	347.1	348.0	354.0	362.2	366.2	372.4	384.7	394.0	394.9
160°	344.7	347.9	350.9	351.7	356.5	363.0	366.2	371.5	382.1	390.1	390.6
162.5°	350.5	352.8	355.2	355.7	359.2	363.8	366.2	370.7	379.6	386.3	386.8
165°	356.7	358.8	360.9	361.4	363.0	365.1	366.2	369.4	375.8	380.6	381.2
167.5°	362.4	363.4	364.4	364.6	366.0	367.8	368.7	370.7	375.0	378.1	378.4
170°	366.2	367.1	368.2	368.4	368.5	368.6	368.7	370.7	375.0	378.1	378.1
172.5°	368.2	368.4	368.6	368.7	368.7	368.7	368.7	370.3	373.6	376.1	376.0
175°	370.9	370.9	370.9	370.9	370.2	369.1	368.7	369.7	371.8	373.4	373.4
177.5°	370.9	370.9	370.9	370.9	370.3	369.5	369.1	369.9	371.6	372.9	372.7
180°	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	330.0	330.0
2.5°	352.3	350.1
5°	453.1	455.2
7.5°	610.1	609.0
10°	758.7	768.1
12.5°	866.8	869.0
15°	932.7	936.9
17.5°	958.1	959.2
20°	959.2	957.0
22.5°	947.5	945.4
25°	933.7	932.7
27.5°	921.0	922.0
30°	915.7	918.9
32.5°	915.7	921.0
35°	917.8	923.1
37.5°	916.7	923.1
40°	912.5	919.9
42.5°	900.8	906.1
45°	882.8	889.2
47.5°	859.5	863.7
50°	829.7	834.0
52.5°	792.6	793.7
55°	748.0	752.3
57.5°	700.3	701.3
60°	647.2	650.4
62.5°	591.0	591.0
65°	531.6	533.7
67.5°	470.1	475.4
70°	407.4	408.5
72.5°	345.9	345.9
75°	282.3	283.3
77.5°	221.8	221.8
80°	164.5	165.5
82.5°	113.5	115.6
85°	71.1	71.1
87.5°	32.9	29.7
90°	9.5	9.5
92.5°	37.9	30.4
95°	132.1	109.3
97.5°	316.5	273.1
100°	455.9	404.2
102.5°	593.1	548.9
105°	768.1	744.3
107.5°	882.7	888.4
110°	926.3	951.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	930.3	968.3
115°	905.6	958.4
117.5°	853.3	911.8
120°	811.1	868.0
122.5°	770.1	826.2
125°	711.5	763.2
127.5°	658.9	702.5
130°	627.9	668.1
132.5°	599.7	635.7
135°	561.1	592.2
137.5°	530.1	555.6
140°	508.9	532.7
142.5°	491.3	511.8
145°	464.9	480.4
147.5°	444.7	457.5
150°	431.9	442.4
152.5°	421.0	428.9
155°	408.5	413.7
157.5°	398.6	402.2
160°	392.7	394.8
162.5°	388.8	390.8
165°	383.3	385.4
167.5°	379.3	380.1
170°	378.1	378.1
172.5°	375.2	374.4
175°	373.4	373.4
177.5°	371.8	370.9
180°	370.9	370.9



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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	5.01	5.93	5.95	6.89	8.13	18.15	19.07	19.09	20.03	21.27
	3H	5.73	6.55	6.67	7.52	8.78	19.98	20.81	20.93	21.77	23.04
	4H	6.03	6.81	6.99	7.78	9.06	20.62	21.40	21.58	22.37	23.65
	6H	6.28	7.00	7.25	7.98	9.27	21.04	21.76	22.01	22.74	24.03
	8H	6.35	7.03	7.33	8.03	9.32	21.16	21.84	22.14	22.84	24.13
	12H	6.37	7.02	7.35	8.01	9.32	21.22	21.87	22.21	22.86	24.18
4H	2H	12.21	12.99	13.18	13.96	15.24	18.44	19.22	19.40	20.19	21.47
	3H	13.79	14.44	14.77	15.44	16.73	20.47	21.13	21.45	22.13	23.42
	4H	13.89	14.48	14.87	15.48	16.79	21.23	21.83	22.22	22.82	24.14
	6H	13.90	14.42	14.90	15.44	16.75	21.76	22.28	22.76	23.30	24.61
	8H	13.88	14.36	14.88	15.37	16.70	21.92	22.40	22.92	23.41	24.74
	12H	13.84	14.27	14.86	15.30	16.64	22.01	22.44	23.03	23.47	24.81
8H	4H	15.33	15.81	16.33	16.82	18.15	21.30	21.78	22.30	22.79	24.12
	6H	15.57	15.97	16.60	17.02	18.35	21.92	22.32	22.94	23.37	24.70
	8H	15.59	15.94	16.62	16.98	18.33	22.13	22.48	23.16	23.52	24.87
	12H	15.56	15.87	16.60	16.91	18.29	22.27	22.58	23.31	23.61	25.00
12H	4H	15.47	15.90	16.49	16.93	18.27	21.25	21.69	22.27	22.72	24.05
	6H	15.83	16.18	16.86	17.22	18.56	21.90	22.26	22.93	23.29	24.64
	8H	15.90	16.21	16.94	17.24	18.63	22.13	22.44	23.16	23.47	24.86