

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: P936782

Luminaire Tested: SQ4-FB-050U-075D-B2750-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

**Test Information**

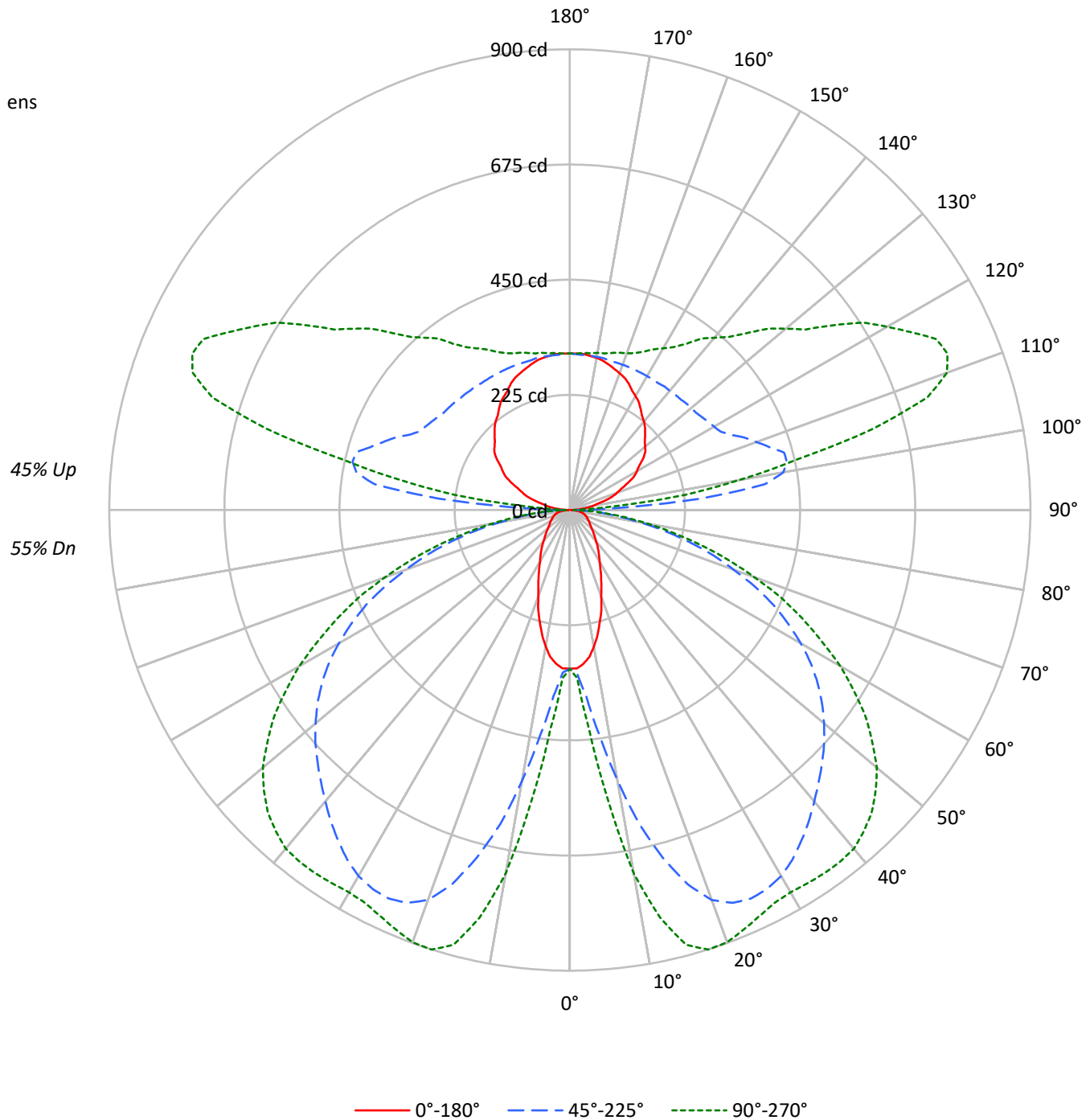
Test Method: LM-79-2019  
Report Number: P936782  
REPORT IS A COMBINATION OF REPORTS P933470 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-075D-B2750-1D-UNV-STD-W-4-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4380.3 lumens  
Efficiency: N/A  
Efficacy: 120.3 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): 36.4  
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

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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	100	100	100	100	86	86	86	73	73	73	60	60	60	55			
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45			
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37			
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30			
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25			
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21			
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18			
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16			
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14			
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12			
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11			

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

	0°	45°	90°
0°	2875	2875	2875
5°	2805	3319	3864
10°	2541	4835	6405
15°	2158	6313	7734
20°	1755	7310	7882
25°	1461	7644	7722
30°	1231	7687	7707
35°	1087	7552	7907
40°	946	7381	8112
45°	854	7253	8144
50°	782	7136	8010
55°	747	6968	7655
60°	761	6653	7093
65°	788	6178	6324
70°	835	5377	5343
75°	915	4373	4169
80°	978	3021	2810
85°	828	1596	1437

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8144 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.1	0.9
10°-20°	177.6	4.1
20°-30°	310.6	7.1
30°-40°	399.9	9.1
40°-50°	446.6	10.2
50°-60°	427.8	9.8
60°-70°	339.0	7.7
70°-80°	199.3	4.6
80°-90°	56.6	1.3
90°-100°	149.1	3.4
100°-110°	392.0	8.9
110°-120°	406.4	9.3
120°-130°	326.0	7.4
130°-140°	255.8	5.8
140°-150°	196.3	4.5
150°-160°	141.4	3.2
160°-170°	86.5	2.0
170°-180°	29.2	0.7
0°-30°	528.3	12.1
0°-40°	928.1	21.2
0°-60°	1802.5	41.2
0°-90°	2397.4	54.7
90°-120°	947.5	21.6
90°-150°	1725.7	39.4
90°-180°	1983.0	45.3
0°-180°	4380.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	310	310	310	310	310	
5°	302	324	364	412	427	28
15°	226	417	703	853	880	63
25°	144	473	838	874	876	67
35°	98	452	789	834	866	61
45°	67	361	697	799	835	52
55°	48	229	592	687	706	44
65°	38	122	439	494	501	38
75°	28	75	241	265	266	29
85°	10	23	60	66	67	11
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°	309.8	309.8	309.8	309.8	309.8	309.8	309.8	309.8	309.8	309.8	309.8
2.5°	309.8	309.8	311.7	312.7	314.7	315.7	317.7	319.7	325.7	326.7	328.7
5°	301.8	305.8	318.7	323.7	337.6	356.6	364.5	377.5	404.4	412.3	417.3
7.5°	289.8	298.8	330.7	338.6	373.5	423.3	444.2	472.1	514.9	535.8	552.8
10°	270.9	289.8	346.6	365.5	422.3	498.0	536.8	575.7	640.4	669.3	680.3
12.5°	250.0	280.9	363.5	389.4	471.1	581.7	628.5	671.3	745.0	783.9	789.8
15°	226.1	267.9	379.5	417.3	522.9	651.4	703.2	756.0	824.7	852.6	859.5
17.5°	205.2	258.0	394.4	434.3	562.7	714.1	766.9	810.7	866.5	885.4	890.4
20°	179.3	242.0	404.4	456.2	604.6	759.9	810.7	844.6	882.5	894.4	896.4
22.5°	160.4	225.1	410.4	464.1	632.5	787.8	830.7	857.6	883.5	887.4	888.4
25°	144.4	206.2	409.4	473.1	656.4	804.8	837.6	857.6	872.5	874.5	874.5
27.5°	129.5	185.3	405.4	475.1	674.3	808.8	834.6	848.6	855.6	859.5	859.5
30°	116.5	165.3	395.4	471.1	682.3	804.8	825.7	832.7	839.6	845.6	848.6
32.5°	106.6	146.4	380.5	463.1	683.3	794.8	809.7	813.7	823.7	837.6	842.6
35°	97.6	127.5	363.5	452.2	677.3	778.9	788.8	792.8	812.7	833.7	840.6
37.5°	88.6	113.5	341.6	433.3	668.3	759.9	766.9	773.9	804.8	829.7	837.6
40°	79.7	101.6	315.7	412.3	654.4	737.0	743.0	754.0	794.8	823.7	831.7
42.5°	72.7	91.6	287.8	390.4	636.4	711.1	720.1	736.0	782.9	813.7	822.7
45°	66.7	81.7	258.0	360.6	613.5	684.3	697.2	719.1	768.9	798.8	806.8
47.5°	60.8	74.7	227.1	329.7	588.6	657.4	674.3	699.2	750.0	778.9	785.8
50°	55.8	67.7	196.2	296.8	561.7	628.5	648.4	674.3	726.1	753.0	761.9
52.5°	51.8	61.8	167.3	263.9	530.9	598.6	621.5	648.4	697.2	723.1	729.1
55°	47.8	56.8	142.4	229.1	499.0	566.7	591.6	617.5	665.3	687.2	691.2
57.5°	45.8	52.8	121.5	196.2	465.1	530.9	558.8	582.7	627.5	644.4	648.4
60°	42.8	49.8	105.6	168.3	428.3	497.0	520.9	544.8	582.7	596.6	599.6
62.5°	39.8	47.8	93.6	141.4	390.4	457.2	481.1	503.0	534.9	544.8	548.8
65°	37.8	45.8	84.7	121.5	351.6	415.3	439.2	458.2	484.1	494.0	496.0
67.5°	35.9	43.8	77.7	104.6	312.7	373.5	391.4	409.4	429.3	439.2	440.2
70°	32.9	41.8	71.7	92.6	272.9	325.7	340.6	359.6	375.5	380.5	383.5
72.5°	30.9	38.8	67.7	83.7	232.1	279.9	293.8	304.8	318.7	323.7	323.7
75°	27.9	34.9	63.7	74.7	190.2	229.1	241.0	252.0	262.9	264.9	261.9
77.5°	24.9	30.9	54.8	62.7	148.4	181.3	191.2	197.2	206.2	208.2	209.2
80°	20.9	26.9	42.8	48.8	107.6	133.5	140.4	145.4	153.4	153.4	155.4
82.5°	15.9	20.9	30.9	34.9	72.7	91.6	97.6	100.6	105.6	105.6	105.6
85°	10.0	12.9	19.9	22.9	43.8	55.8	59.8	60.8	64.7	65.7	65.7
87.5°	5.0	7.0	12.9	13.9	22.9	28.9	28.9	30.9	30.9	29.9	28.9
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-075D-B2750-1D-UNV-STD-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	309.8	309.8
2.5°	330.7	328.7
5°	425.3	427.3
7.5°	572.7	571.7
10°	712.1	721.1
12.5°	813.7	815.7
15°	875.5	879.5
17.5°	899.4	900.4
20°	900.4	898.4
22.5°	889.4	887.4
25°	876.5	875.5
27.5°	864.5	865.5
30°	859.5	862.5
32.5°	859.5	864.5
35°	861.5	866.5
37.5°	860.5	866.5
40°	856.6	863.5
42.5°	845.6	850.6
45°	828.7	834.6
47.5°	806.8	810.7
50°	778.9	782.9
52.5°	744.0	745.0
55°	702.2	706.2
57.5°	657.4	658.4
60°	607.6	610.5
62.5°	554.8	554.8
65°	499.0	501.0
67.5°	441.2	446.2
70°	382.5	383.5
72.5°	324.7	324.7
75°	264.9	265.9
77.5°	208.2	208.2
80°	154.4	155.4
82.5°	106.6	108.6
85°	66.7	66.7
87.5°	30.9	27.9
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	5.08	6.03	5.99	6.96	8.16	18.22	19.17	19.13	20.10	21.30
	3H	5.79	6.64	6.71	7.59	8.81	20.05	20.90	20.97	21.84	23.07
	4H	6.09	6.90	7.03	7.85	9.08	20.69	21.50	21.62	22.44	23.67
	6H	6.35	7.10	7.30	8.05	9.29	21.11	21.86	22.06	22.81	24.05
	8H	6.42	7.13	7.37	8.10	9.35	21.23	21.94	22.18	22.91	24.15
	12H	6.44	7.12	7.40	8.08	9.35	21.29	21.97	22.25	22.93	24.20
4H	2H	12.28	13.09	13.22	14.04	15.27	18.51	19.31	19.44	20.26	21.49
	3H	13.86	14.54	14.81	15.51	16.76	20.54	21.22	21.49	22.20	23.44
	4H	13.96	14.58	14.92	15.55	16.82	21.30	21.92	22.26	22.89	24.16
	6H	13.97	14.51	14.95	15.50	16.77	21.84	22.37	22.81	23.37	24.64
	8H	13.95	14.45	14.93	15.44	16.73	21.99	22.49	22.97	23.48	24.77
	12H	13.92	14.37	14.91	15.37	16.66	22.08	22.54	23.08	23.54	24.83
8H	4H	15.40	15.90	16.37	16.89	18.17	21.37	21.87	22.35	22.86	24.15
	6H	15.65	16.06	16.65	17.09	18.37	21.99	22.41	22.99	23.44	24.72
	8H	15.67	16.03	16.68	17.05	18.35	22.21	22.57	23.22	23.59	24.89
	12H	15.64	15.96	16.65	16.97	18.32	22.35	22.67	23.36	23.68	25.03
12H	4H	15.54	16.00	16.54	17.00	18.29	21.33	21.78	22.33	22.79	24.08
	6H	15.90	16.27	16.91	17.29	18.59	21.98	22.35	22.99	23.36	24.66
	8H	15.98	16.30	16.99	17.31	18.66	22.21	22.53	23.22	23.54	24.89