

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: P937222

Luminaire Tested: SQ4-FB-075U-100D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

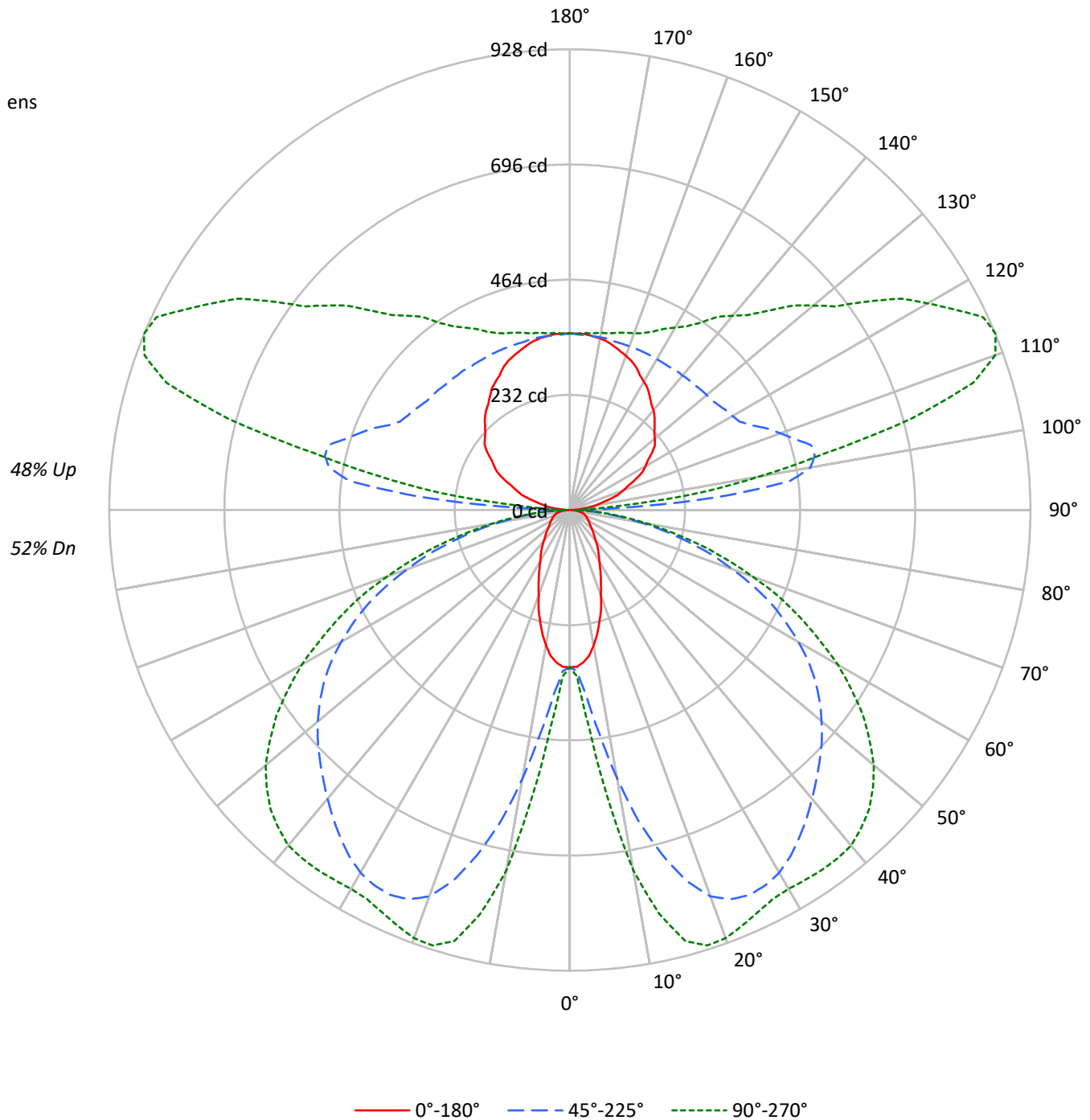
Test Method: LM-79-2019  
Report Number: P937222  
REPORT IS A COMBINATION OF REPORTS P933503 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-100D-927-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4754.8 lumens  
Efficiency: N/A  
Efficacy: 92.9 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	52	52	52	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	42	42	42	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	34	34	34	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	28	28	28	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	24	24	24	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	20	20	20	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	17	17	17	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	15	15	15	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	13	13	13	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	12	12	12	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	10	10	10	10

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

	0°	45°	90°
0°	2936	2936	2936
5°	2865	3391	3947
10°	2596	4939	6543
15°	2203	6449	7901
20°	1792	7468	8052
25°	1493	7808	7889
30°	1257	7852	7873
35°	1110	7715	8077
40°	966	7540	8287
45°	872	7409	8320
50°	799	7290	8182
55°	762	7119	7819
60°	777	6797	7247
65°	806	6312	6459
70°	853	5494	5457
75°	935	4467	4259
80°	997	3088	2869
85°	845	1631	1467

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8320 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.9	0.9
10°-20°	181.4	3.8
20°-30°	317.3	6.7
30°-40°	408.5	8.6
40°-50°	456.2	9.6
50°-60°	437.0	9.2
60°-70°	346.3	7.3
70°-80°	203.6	4.3
80°-90°	57.9	1.2
90°-100°	173.4	3.6
100°-110°	455.8	9.6
110°-120°	472.6	9.9
120°-130°	379.1	8.0
130°-140°	297.5	6.3
140°-150°	228.3	4.8
150°-160°	164.4	3.5
160°-170°	100.6	2.1
170°-180°	34.0	0.7
0°-30°	539.6	11.3
0°-40°	948.1	19.9
0°-60°	1841.3	38.7
0°-90°	2449.2	51.5
90°-120°	1101.7	23.2
90°-150°	2006.6	42.2
90°-180°	2306.0	48.5
0°-180°	4754.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	316	316	316	316	316	
5°	308	331	372	421	436	28
15°	231	426	718	871	898	64
25°	148	483	856	893	894	68
35°	100	462	806	852	885	62
45°	68	368	712	816	853	53
55°	49	234	604	702	721	44
65°	39	124	449	505	512	38
75°	28	76	246	271	272	30
85°	10	23	61	67	68	11
90°	2	7	18	9	9	3
95°	23	90	299	154	105	25
105°	82	124	504	765	714	87
115°	146	177	404	805	919	144
125°	203	228	367	620	732	180
135°	242	266	356	501	568	187
145°	280	298	351	427	461	176
155°	317	326	351	386	397	146
165°	342	347	351	365	370	97
175°	356	356	354	358	358	34
180°	356	356	356	356	356	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	316.4	316.4	316.4	316.4	316.4	316.4	316.4	316.4	316.4	316.4	316.4
2.5°	316.4	316.4	318.5	319.5	321.5	322.6	324.6	326.6	332.7	333.7	335.7
5°	308.3	312.4	325.6	330.6	344.9	364.2	372.4	385.6	413.1	421.2	426.3
7.5°	296.1	305.2	337.8	346.0	381.5	432.4	453.8	482.3	526.0	547.4	564.6
10°	276.7	296.1	354.0	373.4	431.4	508.7	548.4	588.0	654.2	683.7	694.9
12.5°	255.4	286.9	371.4	397.8	481.2	594.2	642.0	685.8	761.1	800.7	806.8
15°	230.9	273.7	387.6	426.3	534.1	665.4	718.3	772.2	842.5	870.9	878.0
17.5°	209.6	263.5	402.9	443.6	574.9	729.5	783.4	828.2	885.2	904.5	909.6
20°	183.1	247.2	413.1	466.0	617.6	776.3	828.2	862.8	901.4	913.7	915.7
22.5°	163.8	229.9	419.2	474.1	646.0	804.8	848.5	876.0	902.4	906.5	907.5
25°	147.5	210.6	418.2	483.3	670.5	822.1	855.6	876.0	891.3	893.3	893.3
27.5°	132.3	189.3	414.1	485.3	688.8	826.1	852.6	866.9	874.0	878.0	878.0
30°	119.0	168.9	403.9	481.2	696.9	822.1	843.5	850.5	857.7	863.8	866.9
32.5°	108.9	149.5	388.7	473.1	697.9	811.9	827.1	831.2	841.4	855.6	860.8
35°	99.7	130.2	371.4	461.9	691.8	795.6	805.8	809.9	830.2	851.6	858.7
37.5°	90.6	116.0	349.0	442.6	682.7	776.3	783.4	790.6	822.1	847.5	855.6
40°	81.4	103.8	322.6	421.2	668.4	752.9	759.0	770.2	811.9	841.4	849.5
42.5°	74.3	93.6	294.1	398.9	650.1	726.4	735.6	751.9	799.7	831.2	840.4
45°	68.1	83.4	263.5	368.3	626.7	699.0	712.2	734.6	785.5	816.0	824.1
47.5°	62.1	76.3	232.0	336.8	601.3	671.5	688.8	714.3	766.2	795.6	802.7
50°	57.0	69.2	200.4	303.2	573.8	642.0	662.4	688.8	741.7	769.2	778.3
52.5°	52.9	63.1	170.9	269.7	542.3	611.5	634.9	662.4	712.2	738.7	744.7
55°	48.8	58.0	145.5	234.0	509.7	578.9	604.4	630.8	679.7	702.0	706.1
57.5°	46.8	53.9	124.1	200.4	475.2	542.3	570.8	595.2	640.9	658.3	662.4
60°	43.7	50.9	107.9	171.9	437.5	507.7	532.1	556.6	595.2	609.5	612.5
62.5°	40.7	48.8	95.6	144.5	398.9	467.0	491.4	513.8	546.4	556.6	560.6
65°	38.7	46.8	86.5	124.1	359.1	424.3	448.7	468.0	494.5	504.7	506.7
67.5°	36.7	44.7	79.4	106.8	319.5	381.5	399.9	418.2	438.5	448.7	449.7
70°	33.6	42.7	73.2	94.6	278.7	332.7	348.0	367.3	383.5	388.7	391.7
72.5°	31.6	39.7	69.2	85.5	237.1	285.9	300.1	311.3	325.6	330.6	330.6
75°	28.5	35.6	65.1	76.3	194.3	234.0	246.2	257.4	268.6	270.7	267.6
77.5°	25.4	31.6	56.0	64.1	151.6	185.2	195.3	201.4	210.6	212.7	213.7
80°	21.3	27.5	43.7	49.8	109.9	136.4	143.5	148.5	156.7	156.7	158.7
82.5°	16.2	21.3	31.6	35.6	74.3	93.6	99.7	102.8	107.9	107.9	107.9
85°	10.2	13.2	20.3	23.4	44.7	57.0	61.1	62.1	66.1	67.1	67.1
87.5°	5.1	7.1	13.2	14.2	23.4	29.5	29.5	31.6	31.6	30.5	29.5
90°	2.4	4.3	6.2	6.7	10.5	15.6	18.2	16.2	12.1	9.1	9.1
92.5°	9.5	25.8	42.0	46.0	64.8	89.7	102.2	89.6	64.3	45.4	43.6
95°	22.9	52.7	82.4	89.8	159.4	252.2	298.6	266.4	202.1	153.9	148.5
97.5°	39.7	65.8	92.0	98.6	214.7	369.4	446.8	426.5	385.9	355.4	345.0
100°	52.5	76.2	100.0	106.0	234.8	406.6	492.4	493.9	496.9	499.1	486.7
102.5°	63.5	85.7	107.8	113.3	244.0	418.3	505.4	531.2	583.0	621.8	611.1
105°	82.1	100.9	119.7	124.4	250.9	419.6	503.9	561.9	678.0	765.0	759.3
107.5°	101.2	118.7	136.2	140.6	252.2	400.9	475.2	556.2	718.0	839.5	840.8
110°	114.1	129.9	145.8	149.7	250.2	384.3	451.4	541.8	722.8	858.6	864.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	126.7	141.8	156.8	160.6	250.3	369.9	429.7	522.3	707.5	846.4	855.5
115°	145.8	159.7	173.6	177.1	252.6	353.3	403.6	492.9	671.3	805.1	817.7
117.5°	164.7	177.3	190.0	193.1	257.3	342.9	385.7	466.2	627.2	748.1	762.1
120°	175.7	187.6	199.4	202.4	261.1	339.4	378.5	452.1	599.3	709.6	723.3
122.5°	186.4	198.4	210.4	213.4	266.6	337.6	373.1	439.3	571.8	671.2	684.7
125°	202.9	213.8	224.8	227.5	274.0	336.1	367.1	423.4	536.0	620.4	632.8
127.5°	216.3	227.3	238.3	241.1	281.4	335.3	362.1	410.5	507.1	579.6	590.1
130°	223.5	235.3	247.2	250.2	286.8	335.7	360.2	403.2	489.3	553.8	563.4
132.5°	230.8	242.7	254.6	257.6	291.2	336.1	358.5	397.0	474.1	531.8	540.5
135°	241.8	252.6	263.4	266.1	296.0	335.8	355.7	387.9	452.5	500.8	508.3
137.5°	253.0	263.7	274.4	277.1	303.1	337.9	355.2	382.5	437.0	477.9	483.9
140°	262.3	272.2	282.1	284.5	307.5	338.2	353.5	377.1	424.1	459.5	465.2
142.5°	269.5	278.6	287.7	290.0	311.2	339.4	353.5	374.2	415.6	446.6	451.5
145°	280.4	288.4	296.4	298.4	315.9	339.4	351.1	368.1	401.9	427.3	431.0
147.5°	291.4	299.1	306.9	308.8	322.9	341.7	351.1	364.4	391.1	411.0	414.1
150°	298.6	305.6	312.6	314.4	326.6	343.0	351.1	362.4	384.8	401.7	404.2
152.5°	306.0	311.3	316.6	317.9	329.0	343.7	351.1	360.7	379.9	394.3	396.2
155°	317.0	320.9	324.8	325.8	334.3	345.5	351.1	358.7	374.0	385.5	386.7
157.5°	325.1	328.9	332.8	333.7	339.5	347.3	351.1	357.0	368.9	377.8	378.7
160°	330.6	333.6	336.5	337.3	341.9	348.0	351.1	356.2	366.4	374.1	374.5
162.5°	336.1	338.3	340.6	341.1	344.4	348.9	351.1	355.4	364.0	370.4	370.9
165°	342.0	344.0	346.0	346.6	348.1	350.1	351.1	354.2	360.4	365.0	365.5
167.5°	347.5	348.4	349.4	349.7	351.0	352.7	353.5	355.5	359.6	362.6	362.8
170°	351.1	352.0	353.0	353.3	353.4	353.4	353.5	355.5	359.6	362.6	362.6
172.5°	353.0	353.3	353.4	353.5	353.5	353.5	353.5	355.1	358.3	360.7	360.5
175°	355.7	355.7	355.7	355.7	355.0	354.0	353.5	354.5	356.5	358.0	358.0
177.5°	355.7	355.7	355.7	355.7	355.1	354.4	354.0	354.7	356.4	357.6	357.4
180°	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7	355.7



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	316.4	316.4
2.5°	337.8	335.7
5°	434.4	436.5
7.5°	585.0	584.0
10°	727.5	736.6
12.5°	831.2	833.3
15°	894.4	898.4
17.5°	918.8	919.8
20°	919.8	917.7
22.5°	908.6	906.5
25°	895.4	894.4
27.5°	883.1	884.1
30°	878.0	881.1
32.5°	878.0	883.1
35°	880.1	885.2
37.5°	879.0	885.2
40°	875.0	882.1
42.5°	863.8	868.9
45°	846.5	852.6
47.5°	824.1	828.2
50°	795.6	799.7
52.5°	760.0	761.1
55°	717.3	721.3
57.5°	671.5	672.5
60°	620.6	623.7
62.5°	566.7	566.7
65°	509.7	511.7
67.5°	450.8	455.8
70°	390.7	391.7
72.5°	331.7	331.7
75°	270.7	271.7
77.5°	212.7	212.7
80°	157.7	158.7
82.5°	108.9	110.9
85°	68.1	68.1
87.5°	31.6	28.5
90°	9.1	9.1
92.5°	36.3	29.1
95°	126.7	104.8
97.5°	303.5	261.9
100°	437.2	387.6
102.5°	568.7	526.3
105°	736.5	713.7
107.5°	846.4	851.9
110°	888.3	912.1





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	892.0	928.5
115°	868.4	919.0
117.5°	818.2	874.3
120°	777.8	832.3
122.5°	738.4	792.3
125°	682.3	731.8
127.5°	631.8	673.6
130°	602.1	640.6
132.5°	575.0	609.6
135°	538.1	567.9
137.5°	508.4	532.8
140°	488.0	510.8
142.5°	471.1	490.7
145°	445.8	460.7
147.5°	426.4	438.7
150°	414.2	424.2
152.5°	403.7	411.3
155°	391.7	396.7
157.5°	382.2	385.7
160°	376.5	378.5
162.5°	372.8	374.8
165°	367.5	369.5
167.5°	363.7	364.5
170°	362.6	362.6
172.5°	359.7	359.0
175°	358.0	358.0
177.5°	356.5	355.7
180°	355.7	355.7



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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	4.87	5.78	5.81	6.74	7.99	18.01	18.92	18.95	19.88	21.13
	3H	5.58	6.40	6.53	7.37	8.64	19.84	20.66	20.78	21.63	22.90
	4H	5.88	6.66	6.84	7.63	8.91	20.48	21.25	21.44	22.23	23.50
	6H	6.13	6.85	7.11	7.83	9.12	20.90	21.62	21.87	22.59	23.88
	8H	6.20	6.89	7.18	7.88	9.17	21.01	21.70	21.99	22.69	23.98
	12H	6.22	6.88	7.21	7.86	9.18	21.08	21.73	22.06	22.72	24.03
4H	2H	12.07	12.85	13.03	13.82	15.10	18.29	19.07	19.26	20.04	21.32
	3H	13.64	14.30	14.62	15.30	16.59	20.33	20.98	21.31	21.98	23.27
	4H	13.74	14.34	14.73	15.33	16.65	21.09	21.68	22.07	22.68	23.99
	6H	13.75	14.27	14.75	15.29	16.60	21.62	22.13	22.62	23.15	24.46
	8H	13.73	14.22	14.73	15.23	16.56	21.77	22.26	22.77	23.27	24.60
	12H	13.69	14.13	14.71	15.16	16.49	21.86	22.30	22.88	23.33	24.66
8H	4H	15.18	15.66	16.18	16.67	18.00	21.15	21.64	22.15	22.65	23.98
	6H	15.42	15.82	16.45	16.88	18.20	21.77	22.17	22.80	23.23	24.55
	8H	15.44	15.80	16.48	16.84	18.18	21.99	22.34	23.02	23.38	24.72
	12H	15.41	15.73	16.45	16.76	18.15	22.12	22.43	23.16	23.47	24.86
12H	4H	15.32	15.76	16.34	16.79	18.12	21.11	21.54	22.13	22.57	23.91
	6H	15.68	16.03	16.71	17.07	18.42	21.76	22.11	22.79	23.15	24.49
	8H	15.75	16.06	16.79	17.10	18.49	21.98	22.29	23.02	23.33	24.71