

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: P937514

Luminaire Tested: SQ4-FB-100U-075D-835-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937514
REPORT IS A COMBINATION OF REPORTS P933566 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

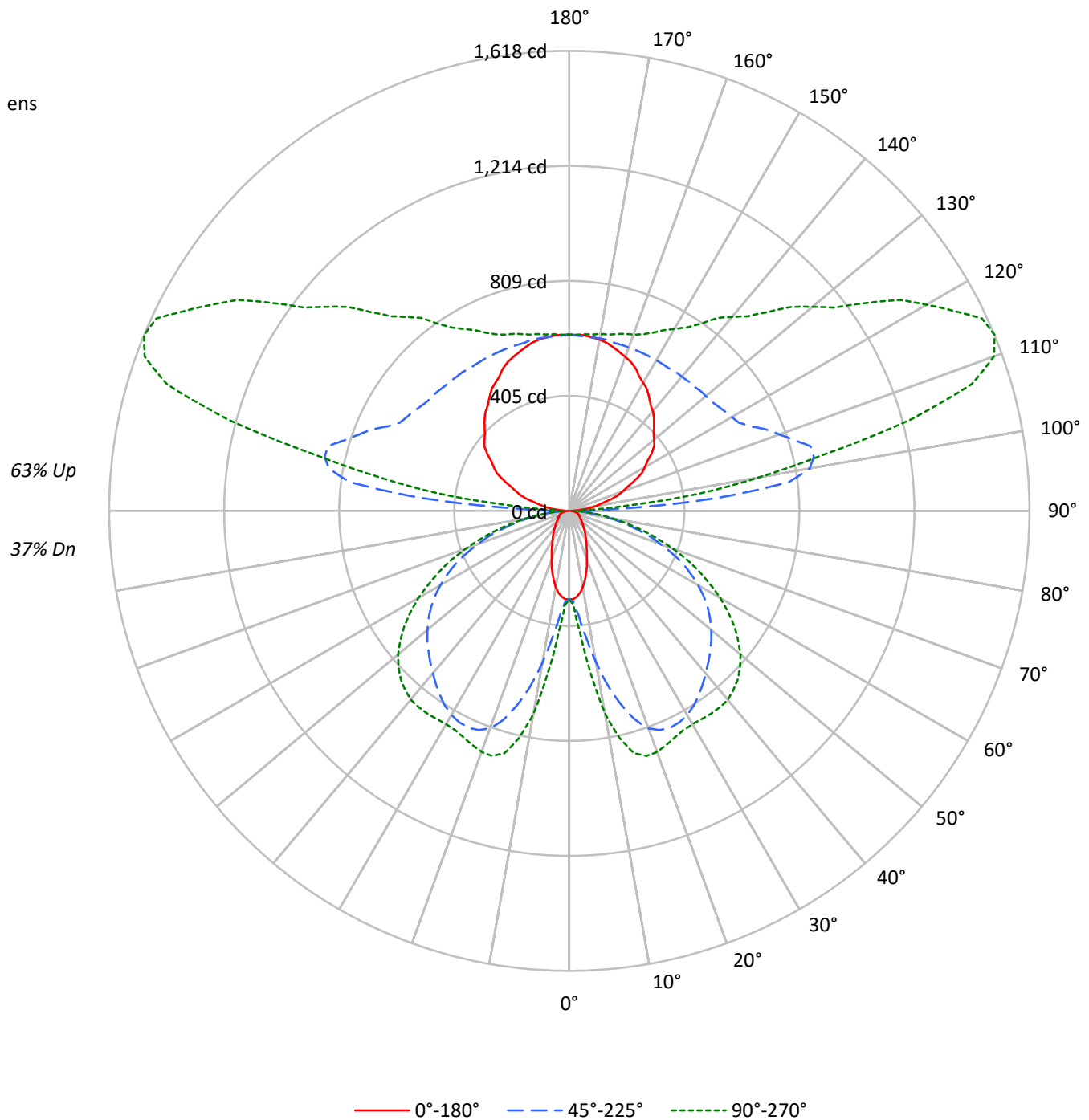
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6425.9 lumens
Efficiency: N/A
Efficacy: 130.6 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: Semi-Indirect

Input Watts (W): 49.2
Input Voltage (V): NR
Input Current (A_{in}): 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				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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37				37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31				31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25				25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21				21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17				17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15				15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13				13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11				11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10				10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9				9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8				8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2886	2886	2886
5°	2816	3333	3879
10°	2552	4855	6431
15°	2166	6338	7765
20°	1761	7339	7914
25°	1467	7675	7753
30°	1236	7717	7738
35°	1091	7583	7938
40°	949	7410	8145
45°	858	7282	8177
50°	785	7165	8042
55°	750	6997	7685
60°	765	6680	7122
65°	792	6204	6349
70°	838	5399	5364
75°	918	4391	4186
80°	983	3034	2820
85°	828	1601	1444

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8177 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.2	0.6
10°-20°	178.3	2.8
20°-30°	311.9	4.9
30°-40°	401.5	6.2
40°-50°	448.4	7.0
50°-60°	429.5	6.7
60°-70°	340.4	5.3
70°-80°	200.1	3.1
80°-90°	58.0	0.9
90°-100°	302.1	4.7
100°-110°	794.2	12.4
110°-120°	823.5	12.8
120°-130°	660.6	10.3
130°-140°	518.3	8.1
140°-150°	397.8	6.2
150°-160°	286.5	4.5
160°-170°	175.3	2.7
170°-180°	59.2	0.9
0°-30°	530.4	8.3
0°-40°	931.9	14.5
0°-60°	1809.8	28.2
0°-90°	2408.3	37.5
90°-120°	1919.9	29.9
90°-150°	3496.6	54.4
90°-180°	4018.0	62.5
0°-180°	6425.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	311	311	311	311	311	
5°	303	325	366	414	429	28
15°	227	419	706	856	883	63
25°	145	475	841	878	879	67
35°	98	454	792	837	870	61
45°	67	362	700	802	838	52
55°	48	230	594	690	709	44
65°	38	122	441	496	503	38
75°	28	75	242	266	267	29
85°	10	23	60	66	67	11
90°	4	12	32	16	16	4
95°	40	156	520	268	183	44
105°	143	217	878	1333	1244	152
115°	254	309	703	1403	1601	251
125°	354	396	640	1081	1275	314
135°	421	464	620	873	990	326
145°	489	520	612	744	803	306
155°	552	568	612	672	691	254
165°	596	604	612	636	644	168
175°	620	620	616	624	624	59
180°	620	620	620	620	620	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	311.0	311.0	311.0	311.0	311.0	311.0	311.0	311.0	311.0	311.0	311.0
2.5°	311.0	311.0	313.0	314.0	316.0	317.0	319.0	321.0	327.0	328.0	330.0
5°	303.0	307.0	320.0	325.0	339.0	358.0	366.0	379.0	406.0	414.0	419.0
7.5°	291.0	300.0	332.0	340.0	375.0	425.0	446.0	474.0	517.0	538.0	555.0
10°	272.0	291.0	348.0	367.0	424.0	500.0	539.0	578.0	643.0	672.0	683.0
12.5°	251.0	282.0	365.0	391.0	473.0	584.0	631.0	674.0	748.0	787.0	793.0
15°	227.0	269.0	381.0	419.0	525.0	654.0	706.0	759.0	828.0	856.0	863.0
17.5°	206.0	259.0	396.0	436.0	565.0	717.0	770.0	814.0	870.0	889.0	894.0
20°	180.0	243.0	406.0	458.0	607.0	763.0	814.0	848.0	886.0	898.0	900.0
22.5°	161.0	226.0	412.0	466.0	635.0	791.0	834.0	861.0	887.0	891.0	892.0
25°	145.0	207.0	411.0	475.0	659.0	808.0	841.0	861.0	876.0	878.0	878.0
27.5°	130.0	186.0	407.0	477.0	677.0	812.0	838.0	852.0	859.0	863.0	863.0
30°	117.0	166.0	397.0	473.0	685.0	808.0	829.0	836.0	843.0	849.0	852.0
32.5°	107.0	147.0	382.0	465.0	686.0	798.0	813.0	817.0	827.0	841.0	846.0
35°	98.0	128.0	365.0	454.0	680.0	782.0	792.0	796.0	816.0	837.0	844.0
37.5°	89.0	114.0	343.0	435.0	671.0	763.0	770.0	777.0	808.0	833.0	841.0
40°	80.0	102.0	317.0	414.0	657.0	740.0	746.0	757.0	798.0	827.0	835.0
42.5°	73.0	92.0	289.0	392.0	639.0	714.0	723.0	739.0	786.0	817.0	826.0
45°	67.0	82.0	259.0	362.0	616.0	687.0	700.0	722.0	772.0	802.0	810.0
47.5°	61.0	75.0	228.0	331.0	591.0	660.0	677.0	702.0	753.0	782.0	789.0
50°	56.0	68.0	197.0	298.0	564.0	631.0	651.0	677.0	729.0	756.0	765.0
52.5°	52.0	62.0	168.0	265.0	533.0	601.0	624.0	651.0	700.0	726.0	732.0
55°	48.0	57.0	143.0	230.0	501.0	569.0	594.0	620.0	668.0	690.0	694.0
57.5°	46.0	53.0	122.0	197.0	467.0	533.0	561.0	585.0	630.0	647.0	651.0
60°	43.0	50.0	106.0	169.0	430.0	499.0	523.0	547.0	585.0	599.0	602.0
62.5°	40.0	48.0	94.0	142.0	392.0	459.0	483.0	505.0	537.0	547.0	551.0
65°	38.0	46.0	85.0	122.0	353.0	417.0	441.0	460.0	486.0	496.0	498.0
67.5°	36.0	44.0	78.0	105.0	314.0	375.0	393.0	411.0	431.0	441.0	442.0
70°	33.0	42.0	72.0	93.0	274.0	327.0	342.0	361.0	377.0	382.0	385.0
72.5°	31.0	39.0	68.0	84.0	233.0	281.0	295.0	306.0	320.0	325.0	325.0
75°	28.0	35.0	64.0	75.0	191.0	230.0	242.0	253.0	264.0	266.0	263.0
77.5°	25.0	31.0	55.0	63.0	149.0	182.0	192.0	198.0	207.0	209.0	210.0
80°	21.0	27.0	43.0	49.0	108.0	134.0	141.0	146.0	154.0	154.0	156.0
82.5°	16.0	21.0	31.0	35.0	73.0	92.0	98.0	101.0	106.0	106.0	106.0
85°	10.0	13.0	20.0	23.0	44.0	56.0	60.0	61.0	65.0	66.0	66.0
87.5°	5.0	7.0	13.0	14.0	23.0	29.0	29.0	31.0	31.0	30.0	29.0
90°	4.2	7.5	10.8	11.6	18.3	27.2	31.6	28.1	21.1	15.8	15.8
92.5°	16.6	44.9	73.2	80.3	112.9	156.3	178.0	156.0	112.0	79.0	75.9
95°	39.9	91.7	143.5	156.4	277.7	439.4	520.3	464.3	352.3	268.3	258.8
97.5°	69.0	114.7	160.4	171.8	374.1	643.8	778.6	743.2	672.4	619.3	601.2
100°	91.5	132.9	174.3	184.7	409.2	708.5	858.1	860.7	865.8	869.7	848.1
102.5°	110.6	149.3	187.9	197.6	425.3	728.8	880.6	925.7	1015.9	1083.5	1065.0
105°	143.1	175.8	208.5	216.7	437.2	731.1	878.1	979.2	1181.4	1333.1	1323.2
107.5°	176.4	206.9	237.4	245.0	439.4	698.5	828.1	969.2	1251.3	1462.9	1465.3
110°	198.8	226.4	253.9	260.8	436.0	669.7	786.5	944.2	1259.6	1496.1	1506.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	220.9	247.1	273.3	279.9	436.2	644.5	748.7	910.1	1232.8	1474.9	1490.8
115°	254.1	278.3	302.5	308.6	440.2	615.7	703.4	858.9	1169.8	1403.0	1425.0
117.5°	287.0	309.0	331.0	336.5	448.4	597.6	672.2	812.5	1093.1	1303.6	1328.0
120°	306.1	326.8	347.5	352.7	455.0	591.5	659.7	787.9	1044.3	1236.6	1260.4
122.5°	324.9	345.8	366.7	371.9	464.6	588.3	650.1	765.5	996.4	1169.6	1193.0
125°	353.6	372.6	391.6	396.4	477.5	585.6	639.7	737.8	933.9	1081.0	1102.6
127.5°	376.8	396.0	415.3	420.1	490.4	584.1	631.0	715.2	883.6	1009.9	1028.1
130°	389.3	410.0	430.7	435.9	499.8	585.1	627.7	702.7	852.6	965.0	981.8
132.5°	402.2	422.9	443.6	448.8	507.4	585.6	624.7	691.8	826.0	926.7	941.8
135°	421.4	440.2	459.1	463.8	515.8	585.1	619.8	676.0	788.3	872.6	885.6
137.5°	440.9	459.6	478.2	482.9	528.2	588.7	618.9	666.4	761.4	832.7	843.3
140°	457.1	474.3	491.5	495.8	535.9	589.3	616.0	657.0	739.1	800.7	810.6
142.5°	469.6	485.5	501.4	505.4	542.3	591.4	616.0	652.0	724.1	778.2	786.8
145°	488.7	502.6	516.4	519.9	550.6	591.5	611.9	641.4	700.3	744.5	751.0
147.5°	507.9	521.4	534.8	538.2	562.8	595.5	611.9	635.1	681.5	716.3	721.7
150°	520.3	532.5	544.7	547.8	569.2	597.7	611.9	631.5	670.6	700.0	704.3
152.5°	533.2	542.4	551.7	554.0	573.3	599.0	611.9	628.6	662.0	687.1	690.4
155°	552.4	559.2	566.1	567.8	582.5	602.1	611.9	625.2	651.8	671.7	673.9
157.5°	566.5	573.2	579.8	581.5	591.6	605.1	611.9	622.2	642.9	658.4	659.9
160°	576.1	581.3	586.4	587.7	595.8	606.5	611.9	620.8	638.5	651.8	652.7
162.5°	585.6	589.5	593.4	594.4	600.2	608.0	611.9	619.4	634.3	645.5	646.3
165°	596.0	599.5	603.0	603.9	606.6	610.1	611.9	617.3	628.0	636.0	636.9
167.5°	605.6	607.3	609.0	609.4	611.6	614.5	616.0	619.5	626.5	631.8	632.2
170°	611.9	613.5	615.2	615.6	615.7	615.9	616.0	619.5	626.5	631.8	631.8
172.5°	615.2	615.6	615.9	616.0	616.0	616.0	616.0	618.8	624.3	628.5	628.2
175°	619.8	619.8	619.8	619.8	618.5	616.8	616.0	617.8	621.3	623.9	623.9
177.5°	619.8	619.8	619.8	619.8	618.8	617.5	616.8	618.2	621.0	623.1	622.7
180°	619.8	619.8	619.8	619.8	619.8	619.8	619.8	619.8	619.8	619.8	619.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	311.0	311.0
2.5°	332.0	330.0
5°	427.0	429.0
7.5°	575.0	574.0
10°	715.0	724.0
12.5°	817.0	819.0
15°	879.0	883.0
17.5°	903.0	904.0
20°	904.0	902.0
22.5°	893.0	891.0
25°	880.0	879.0
27.5°	868.0	869.0
30°	863.0	866.0
32.5°	863.0	868.0
35°	865.0	870.0
37.5°	864.0	870.0
40°	860.0	867.0
42.5°	849.0	854.0
45°	832.0	838.0
47.5°	810.0	814.0
50°	782.0	786.0
52.5°	747.0	748.0
55°	705.0	709.0
57.5°	660.0	661.0
60°	610.0	613.0
62.5°	557.0	557.0
65°	501.0	503.0
67.5°	443.0	448.0
70°	384.0	385.0
72.5°	326.0	326.0
75°	266.0	267.0
77.5°	209.0	209.0
80°	155.0	156.0
82.5°	107.0	109.0
85°	67.0	67.0
87.5°	31.0	28.0
90°	15.8	15.8
92.5°	63.3	50.7
95°	220.7	182.6
97.5°	528.7	456.3
100°	761.8	675.5
102.5°	991.1	917.2
105°	1283.4	1243.7
107.5°	1474.9	1484.5
110°	1547.9	1589.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1554.4	1618.0
115°	1513.2	1601.4
117.5°	1425.8	1523.6
120°	1355.4	1450.4
122.5°	1286.8	1380.5
125°	1188.9	1275.3
127.5°	1101.0	1173.8
130°	1049.1	1116.4
132.5°	1002.0	1062.3
135°	937.5	989.5
137.5°	885.9	928.4
140°	850.4	890.1
142.5°	821.0	855.2
145°	776.9	802.8
147.5°	743.1	764.5
150°	721.7	739.1
152.5°	703.5	716.7
155°	682.6	691.3
157.5°	666.1	672.2
160°	656.2	659.7
162.5°	649.7	653.0
165°	640.4	643.9
167.5°	633.6	635.1
170°	631.8	631.8
172.5°	626.9	625.6
175°	623.9	623.9
177.5°	621.3	619.8
180°	619.8	619.8



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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	3.41	4.19	4.46	5.25	6.69	16.54	17.33	17.59	18.39	19.83
	3H	4.11	4.81	5.17	5.88	7.33	18.36	19.07	19.42	20.14	21.59
	4H	4.40	5.07	5.47	6.14	7.60	18.99	19.66	20.07	20.73	22.20
	6H	4.65	5.26	5.73	6.34	7.81	19.41	20.03	20.49	21.10	22.57
	8H	4.71	5.30	5.80	6.39	7.86	19.52	20.11	20.61	21.20	22.67
	12H	4.73	5.29	5.82	6.37	7.86	19.58	20.14	20.67	21.22	22.71
4H	2H	10.59	11.26	11.67	12.33	13.79	16.81	17.48	17.89	18.55	20.01
	3H	12.15	12.71	13.24	13.81	15.28	18.83	19.39	19.92	20.49	21.97
	4H	12.24	12.76	13.33	13.84	15.34	19.59	20.10	20.68	21.19	22.69
	6H	12.25	12.69	13.35	13.80	15.29	20.11	20.55	21.21	21.66	23.15
	8H	12.22	12.64	13.32	13.74	15.25	20.26	20.68	21.36	21.78	23.28
	12H	12.18	12.55	13.29	13.67	15.18	20.34	20.72	21.46	21.84	23.35
8H	4H	13.67	14.08	14.77	15.19	16.69	19.64	20.06	20.74	21.16	22.66
	6H	13.91	14.25	15.03	15.40	16.90	20.26	20.60	21.38	21.74	23.24
	8H	13.93	14.23	15.05	15.35	16.87	20.47	20.77	21.60	21.89	23.41
	12H	13.89	14.15	15.02	15.28	16.84	20.60	20.86	21.73	21.99	23.54
12H	4H	13.81	14.18	14.92	15.30	16.81	19.59	19.97	20.71	21.08	22.59
	6H	14.16	14.46	15.29	15.59	17.11	20.24	20.54	21.37	21.66	23.19
	8H	14.23	14.49	15.36	15.61	17.17	20.46	20.72	21.59	21.84	23.40