

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: P937534

Luminaire Tested: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937534
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-92765-1D-UNV-STD-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

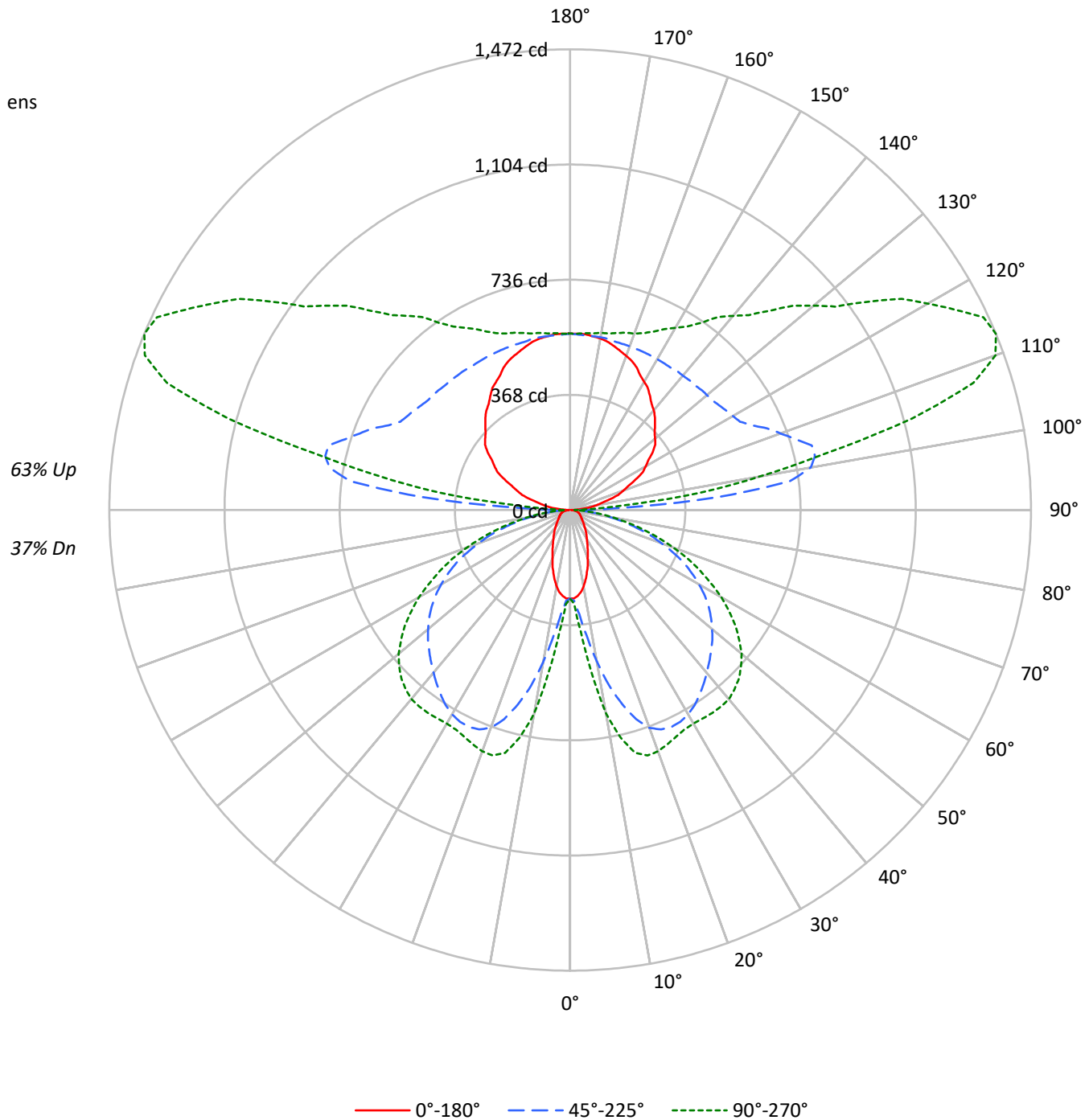
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5845.2 lumens
Efficiency: N/A
Efficacy: 118.8 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: 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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CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-4000K

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	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°	2625	2625	2625
5°	2562	3032	3528
10°	2321	4416	5850
15°	1971	5765	7063
20°	1602	6676	7199
25°	1335	6981	7053
30°	1124	7020	7039
35°	992	6898	7221
40°	864	6741	7410
45°	780	6623	7439
50°	714	6518	7315
55°	683	6364	6991
60°	696	6076	6479
65°	721	5642	5775
70°	762	4912	4879
75°	836	3994	3808
80°	894	2761	2566
85°	754	1457	1312

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7439 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.6	0.6
10°-20°	162.2	2.8
20°-30°	283.7	4.9
30°-40°	365.2	6.2
40°-50°	407.9	7.0
50°-60°	390.7	6.7
60°-70°	309.6	5.3
70°-80°	182.1	3.1
80°-90°	52.7	0.9
90°-100°	274.8	4.7
100°-110°	722.5	12.4
110°-120°	749.1	12.8
120°-130°	600.9	10.3
130°-140°	471.5	8.1
140°-150°	361.9	6.2
150°-160°	260.6	4.5
160°-170°	159.5	2.7
170°-180°	53.9	0.9
0°-30°	482.5	8.3
0°-40°	847.7	14.5
0°-60°	1646.2	28.2
0°-90°	2190.6	37.5
90°-120°	1746.4	29.9
90°-150°	3180.6	54.4
90°-180°	3655.0	62.5
0°-180°	5845.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	283	283	283	283	283	
5°	276	296	333	377	390	25
15°	206	381	642	779	803	57
25°	132	432	765	799	800	61
35°	89	413	720	761	791	56
45°	61	329	637	730	762	47
55°	44	209	540	628	645	40
65°	35	111	401	451	458	34
75°	26	68	220	242	243	27
85°	9	21	55	60	61	10
90°	4	11	29	14	14	4
95°	36	142	473	244	166	40
105°	130	197	799	1213	1131	138
115°	231	281	640	1276	1457	228
125°	322	361	582	983	1160	286
135°	383	422	564	794	900	297
145°	444	473	557	677	730	279
155°	502	516	557	611	629	231
165°	542	549	557	578	586	153
175°	564	564	560	568	568	54
180°	564	564	564	564	564	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9
2.5°	282.9	282.9	284.7	285.6	287.4	288.4	290.2	292.0	297.5	298.4	300.2
5°	275.6	279.3	291.1	295.6	308.4	325.7	332.9	344.8	369.3	376.6	381.1
7.5°	264.7	272.9	302.0	309.3	341.1	386.6	405.7	431.2	470.3	489.4	504.8
10°	247.4	264.7	316.6	333.8	385.7	454.8	490.3	525.8	584.9	611.3	621.3
12.5°	228.3	256.5	332.0	355.7	430.3	531.2	574.0	613.1	680.4	715.9	721.3
15°	206.5	244.7	346.6	381.1	477.6	594.9	642.2	690.4	753.2	778.6	785.0
17.5°	187.4	235.6	360.2	396.6	513.9	652.2	700.4	740.4	791.4	808.7	813.2
20°	163.7	221.0	369.3	416.6	552.1	694.1	740.4	771.4	805.9	816.9	818.7
22.5°	146.5	205.6	374.8	423.9	577.6	719.5	758.6	783.2	806.8	810.5	811.4
25°	131.9	188.3	373.9	432.1	599.5	735.0	765.0	783.2	796.8	798.7	798.7
27.5°	118.3	169.2	370.2	433.9	615.8	738.6	762.3	775.0	781.4	785.0	785.0
30°	106.4	151.0	361.1	430.3	623.1	735.0	754.1	760.5	766.8	772.3	775.0
32.5°	97.3	133.7	347.5	423.0	624.0	725.9	739.5	743.2	752.3	765.0	769.6
35°	89.1	116.4	332.0	413.0	618.6	711.3	720.4	724.1	742.3	761.4	767.7
37.5°	81.0	103.7	312.0	395.7	610.4	694.1	700.4	706.8	735.0	757.7	765.0
40°	72.8	92.8	288.4	376.6	597.6	673.1	678.6	688.6	725.9	752.3	759.5
42.5°	66.4	83.7	262.9	356.6	581.3	649.5	657.7	672.2	715.0	743.2	751.4
45°	60.9	74.6	235.6	329.3	560.3	624.9	636.7	656.8	702.2	729.5	736.8
47.5°	55.5	68.2	207.4	301.1	537.6	600.4	615.8	638.6	685.0	711.3	717.7
50°	50.9	61.9	179.2	271.1	513.0	574.0	592.2	615.8	663.1	687.7	695.9
52.5°	47.3	56.4	152.8	241.1	484.8	546.7	567.6	592.2	636.7	660.4	665.9
55°	43.7	51.8	130.1	209.2	455.7	517.6	540.3	564.0	607.6	627.6	631.3
57.5°	41.8	48.2	111.0	179.2	424.8	484.8	510.3	532.1	573.1	588.5	592.2
60°	39.1	45.5	96.4	153.7	391.1	453.9	475.7	497.6	532.1	544.9	547.6
62.5°	36.4	43.7	85.5	129.2	356.6	417.5	439.4	459.4	488.5	497.6	501.2
65°	34.6	41.8	77.3	111.0	321.1	379.3	401.1	418.4	442.1	451.2	453.0
67.5°	32.7	40.0	71.0	95.5	285.6	341.1	357.5	373.9	392.1	401.1	402.1
70°	30.0	38.2	65.5	84.6	249.2	297.5	311.1	328.4	342.9	347.5	350.2
72.5°	28.2	35.5	61.9	76.4	211.9	255.6	268.3	278.3	291.1	295.6	295.6
75°	25.5	31.8	58.2	68.2	173.7	209.2	220.1	230.1	240.1	242.0	239.2
77.5°	22.7	28.2	50.0	57.3	135.5	165.6	174.7	180.1	188.3	190.1	191.0
80°	19.1	24.6	39.1	44.6	98.2	121.9	128.3	132.8	140.1	140.1	141.9
82.5°	14.6	19.1	28.2	31.8	66.4	83.7	89.1	91.9	96.4	96.4	96.4
85°	9.1	11.8	18.2	20.9	40.0	50.9	54.6	55.5	59.1	60.0	60.0
87.5°	4.5	6.4	11.8	12.7	20.9	26.4	26.4	28.2	28.2	27.3	26.4
90°	3.8	6.8	9.8	10.6	16.6	24.7	28.7	25.6	19.2	14.4	14.4
92.5°	15.1	40.8	66.6	73.0	102.7	142.2	161.9	141.9	101.9	71.9	69.0
95°	36.3	83.4	130.5	142.3	252.6	399.7	473.3	422.3	320.5	244.1	235.4
97.5°	62.8	104.3	145.9	156.3	340.3	585.6	708.2	676.0	611.6	563.3	546.9
100°	83.2	120.9	158.5	168.0	372.2	644.5	780.6	782.9	787.6	791.1	771.5
102.5°	100.6	135.8	170.9	179.7	386.9	662.9	801.0	842.1	924.1	985.6	968.8
105°	130.2	159.9	189.7	197.1	397.7	665.0	798.8	890.7	1074.6	1212.6	1203.6
107.5°	160.5	188.2	215.9	222.9	399.7	635.4	753.3	881.6	1138.2	1330.7	1332.9
110°	180.8	205.9	231.0	237.2	396.6	609.2	715.4	858.9	1145.8	1360.9	1370.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	200.9	224.8	248.6	254.6	396.8	586.3	681.0	827.9	1121.4	1341.6	1356.1
115°	231.1	253.2	275.2	280.7	400.4	560.1	639.8	781.3	1064.1	1276.2	1296.2
117.5°	261.1	281.1	301.1	306.1	407.9	543.6	611.5	739.1	994.3	1185.8	1208.0
120°	278.4	297.3	316.1	320.8	413.9	538.1	600.1	716.7	949.9	1124.9	1146.5
122.5°	295.5	314.6	333.6	338.3	422.6	535.1	591.4	696.3	906.4	1063.9	1085.2
125°	321.6	338.9	356.2	360.6	434.4	532.7	581.9	671.1	849.5	983.3	1003.0
127.5°	342.8	360.2	377.8	382.1	446.1	531.3	574.0	650.6	803.8	918.6	935.2
130°	354.1	373.0	391.8	396.5	454.6	532.2	571.0	639.2	775.6	877.8	893.1
132.5°	365.9	384.7	403.5	408.2	461.5	532.7	568.3	629.3	751.4	843.0	856.7
135°	383.3	400.4	417.6	421.9	469.2	532.2	563.8	614.9	717.1	793.7	805.6
137.5°	401.1	418.1	435.0	439.3	480.5	535.5	563.0	606.2	692.6	757.5	767.1
140°	415.8	431.4	447.1	451.0	487.5	536.0	560.3	597.6	672.3	728.3	737.4
142.5°	427.2	441.6	456.1	459.7	493.3	538.0	560.3	593.1	658.7	707.9	715.7
145°	444.5	457.2	469.7	472.9	500.8	538.1	556.6	583.4	637.0	677.2	683.1
147.5°	462.0	474.3	486.5	489.6	511.9	541.7	556.6	577.7	619.9	651.6	656.5
150°	473.3	484.4	495.5	498.3	517.8	543.7	556.6	574.4	610.0	636.7	640.7
152.5°	485.0	493.4	501.8	503.9	521.5	544.9	556.6	571.8	602.2	625.0	628.0
155°	502.5	508.7	514.9	516.5	529.9	547.7	556.6	568.7	592.9	611.0	613.0
157.5°	515.3	521.4	527.4	529.0	538.1	550.4	556.6	566.0	584.8	598.9	600.3
160°	524.0	528.8	533.4	534.6	542.0	551.7	556.6	564.7	580.8	592.9	593.7
162.5°	532.7	536.2	539.8	540.7	546.0	553.1	556.6	563.4	577.0	587.2	587.9
165°	542.1	545.3	548.5	549.3	551.8	555.0	556.6	561.5	571.3	578.5	579.3
167.5°	550.9	552.4	554.0	554.3	556.3	559.0	560.3	563.5	569.9	574.7	575.1
170°	556.6	558.1	559.6	560.0	560.1	560.2	560.3	563.5	569.9	574.7	574.7
172.5°	559.6	560.0	560.2	560.3	560.3	560.3	560.3	562.9	567.9	571.7	571.4
175°	563.8	563.8	563.8	563.8	562.6	561.1	560.3	562.0	565.2	567.5	567.5
177.5°	563.8	563.8	563.8	563.8	562.9	561.7	561.1	562.3	564.9	566.8	566.4
180°	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	282.9	282.9
2.5°	302.0	300.2
5°	388.4	390.2
7.5°	523.0	522.1
10°	650.4	658.6
12.5°	743.2	745.0
15°	799.6	803.2
17.5°	821.4	822.3
20°	822.3	820.5
22.5°	812.3	810.5
25°	800.5	799.6
27.5°	789.6	790.5
30°	785.0	787.7
32.5°	785.0	789.6
35°	786.8	791.4
37.5°	785.9	791.4
40°	782.3	788.7
42.5°	772.3	776.8
45°	756.8	762.3
47.5°	736.8	740.4
50°	711.3	715.0
52.5°	679.5	680.4
55°	641.3	644.9
57.5°	600.4	601.3
60°	554.9	557.6
62.5°	506.7	506.7
65°	455.7	457.5
67.5°	403.0	407.5
70°	349.3	350.2
72.5°	296.5	296.5
75°	242.0	242.9
77.5°	190.1	190.1
80°	141.0	141.9
82.5°	97.3	99.2
85°	60.9	60.9
87.5°	28.2	25.5
90°	14.4	14.4
92.5°	57.6	46.1
95°	200.8	166.1
97.5°	480.9	415.1
100°	693.0	614.5
102.5°	901.5	834.3
105°	1167.4	1131.3
107.5°	1341.6	1350.4
110°	1408.0	1445.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1413.9	1471.8
115°	1376.5	1456.7
117.5°	1297.0	1385.9
120°	1232.9	1319.3
122.5°	1170.5	1255.8
125°	1081.5	1160.1
127.5°	1001.5	1067.7
130°	954.3	1015.5
132.5°	911.5	966.3
135°	852.8	900.1
137.5°	805.8	844.5
140°	773.6	809.7
142.5°	746.8	777.9
145°	706.7	730.3
147.5°	676.0	695.4
150°	656.5	672.3
152.5°	639.9	651.9
155°	620.9	628.8
157.5°	605.9	611.5
160°	596.9	600.1
162.5°	591.0	594.0
165°	582.5	585.7
167.5°	576.3	577.7
170°	574.7	574.7
172.5°	570.3	569.1
175°	567.5	567.5
177.5°	565.2	563.8
180°	563.8	563.8



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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	3.08	3.86	4.13	4.92	6.36	16.22	17.00	17.27	18.06	19.50
	3H	3.78	4.48	4.84	5.55	7.01	18.03	18.74	19.09	19.81	21.26
	4H	4.07	4.74	5.14	5.81	7.27	18.67	19.33	19.74	20.41	21.87
	6H	4.32	4.94	5.40	6.01	7.48	19.08	19.70	20.16	20.77	22.24
	8H	4.39	4.97	5.47	6.06	7.53	19.19	19.78	20.28	20.87	22.34
	12H	4.40	4.96	5.49	6.04	7.54	19.25	19.81	20.34	20.89	22.39
4H	2H	10.26	10.93	11.34	12.00	13.46	16.48	17.15	17.56	18.22	19.68
	3H	11.82	12.38	12.91	13.48	14.95	18.51	19.07	19.59	20.16	21.64
	4H	11.91	12.43	13.00	13.51	15.01	19.26	19.77	20.35	20.86	22.36
	6H	11.92	12.36	13.02	13.47	14.96	19.78	20.22	20.88	21.33	22.82
	8H	11.89	12.31	12.99	13.41	14.92	19.93	20.35	21.03	21.45	22.96
	12H	11.85	12.22	12.96	13.34	14.85	20.02	20.39	21.13	21.51	23.02
8H	4H	13.34	13.75	14.44	14.86	16.36	19.31	19.73	20.41	20.83	22.34
	6H	13.58	13.92	14.70	15.07	16.57	19.93	20.27	21.05	21.41	22.92
	8H	13.60	13.90	14.73	15.02	16.54	20.14	20.44	21.27	21.56	23.09
	12H	13.56	13.82	14.69	14.95	16.51	20.27	20.53	21.40	21.66	23.21
12H	4H	13.48	13.85	14.59	14.97	16.48	19.26	19.64	20.38	20.75	22.26
	6H	13.83	14.13	14.96	15.26	16.78	19.91	20.21	21.04	21.33	22.86
	8H	13.90	14.16	15.03	15.28	16.84	20.13	20.39	21.26	21.51	23.07