

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: P937433

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937433
REPORT IS A COMBINATION OF REPORTS P933565 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

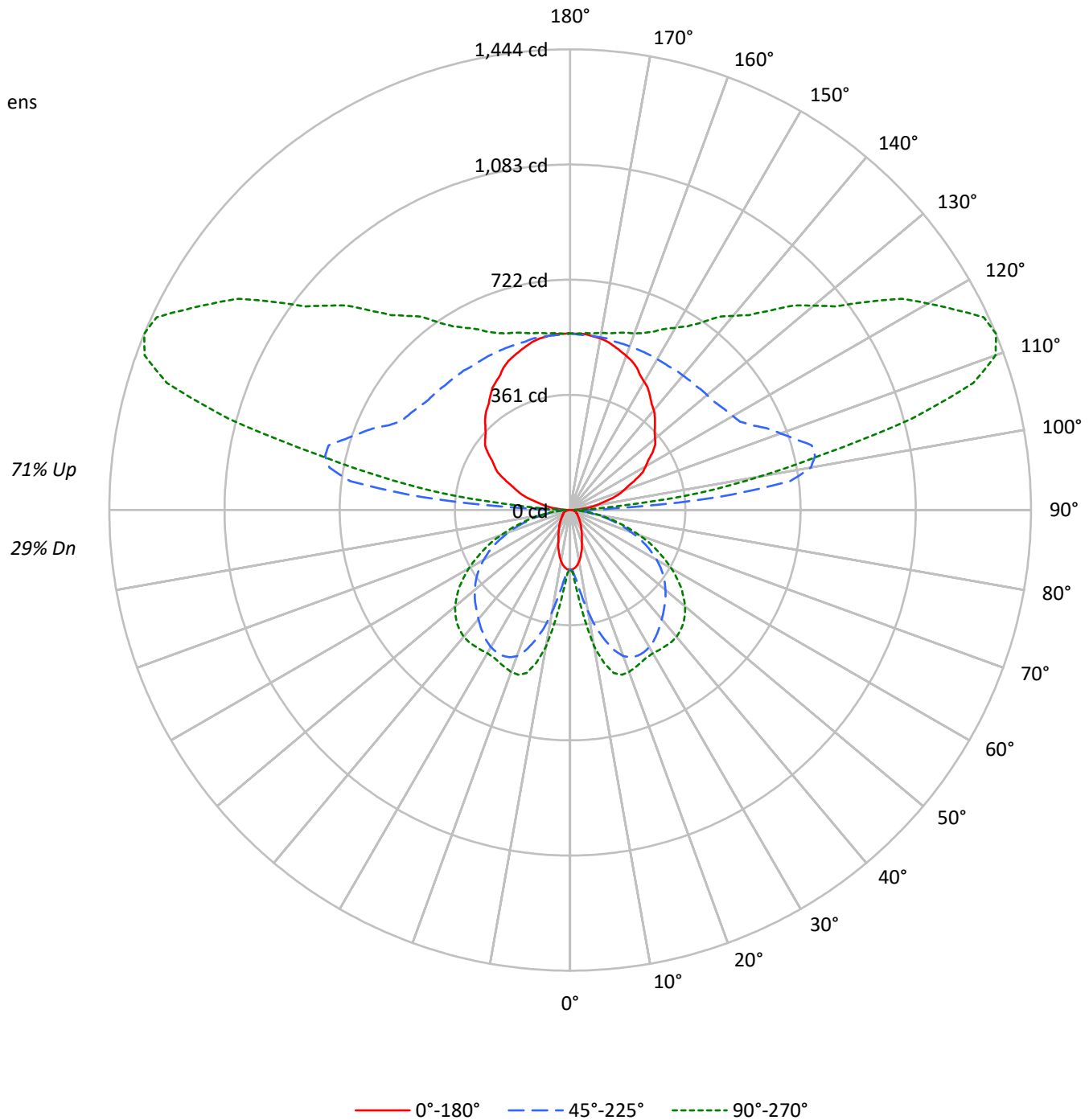
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5029.0 lumens
Efficiency: N/A
Efficacy: 122.1 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): 41.2
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-050D-92765-1D-UNV-STD-W-4-3500K

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29			29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23			23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19			19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16			16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13			13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11			11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10			10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8			8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7			7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7			7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6			6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1728	1728	1728
5°	1687	1995	2323
10°	1528	2907	3850
15°	1297	3795	4650
20°	1055	4396	4739
25°	879	4596	4643
30°	740	4621	4634
35°	652	4540	4753
40°	568	4438	4877
45°	513	4361	4897
50°	471	4290	4816
55°	448	4190	4601
60°	457	4001	4264
65°	475	3714	3802
70°	500	3233	3213
75°	551	2629	2507
80°	590	1816	1690
85°	497	961	864

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4897 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.1	0.5
10°-20°	106.8	2.1
20°-30°	186.8	3.7
30°-40°	240.4	4.8
40°-50°	268.5	5.3
50°-60°	257.2	5.1
60°-70°	203.8	4.1
70°-80°	119.9	2.4
80°-90°	35.4	0.7
90°-100°	269.7	5.4
100°-110°	709.0	14.1
110°-120°	735.1	14.6
120°-130°	589.6	11.7
130°-140°	462.7	9.2
140°-150°	355.1	7.1
150°-160°	255.7	5.1
160°-170°	156.5	3.1
170°-180°	52.9	1.1
0°-30°	317.6	6.3
0°-40°	558.0	11.1
0°-60°	1083.7	21.5
0°-90°	1442.8	28.7
90°-120°	1713.7	34.1
90°-150°	3121.1	62.1
90°-180°	3586.0	71.3
0°-180°	5029.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	186	186	186	186	186	
5°	182	195	219	248	257	17
15°	136	251	423	512	529	38
25°	87	284	504	526	526	40
35°	59	272	474	501	521	37
45°	40	217	419	480	502	31
55°	29	138	356	413	424	26
65°	23	73	264	297	301	23
75°	17	45	145	159	160	18
85°	6	14	36	40	40	6
90°	4	10	28	14	14	3
95°	36	140	464	240	163	40
105°	128	193	784	1190	1110	135
115°	227	276	628	1252	1429	224
125°	316	354	571	965	1138	280
135°	376	414	553	779	883	291
145°	436	464	546	665	717	273
155°	493	507	546	600	617	227
165°	532	539	546	568	575	150
175°	553	553	550	557	557	53
180°	553	553	553	553	553	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	186.2	186.2	186.2	186.2	186.2	186.2	186.2	186.2	186.2	186.2	186.2
2.5°	186.2	186.2	187.5	188.0	189.2	189.9	191.0	192.2	195.8	196.4	197.6
5°	181.5	183.9	191.6	194.6	203.0	214.4	219.1	227.0	243.1	247.9	250.9
7.5°	174.2	179.7	198.8	203.6	224.6	254.5	267.1	283.9	309.6	322.1	332.3
10°	162.9	174.2	208.4	219.8	253.9	299.4	322.8	346.2	385.1	402.4	409.0
12.5°	150.3	168.9	218.6	234.1	283.2	349.7	377.8	403.6	447.9	471.3	474.9
15°	135.9	161.1	228.2	250.9	314.4	391.6	422.7	454.5	495.9	512.5	516.7
17.5°	123.4	155.1	237.2	261.1	338.3	429.4	461.1	487.5	520.9	532.4	535.3
20°	107.8	145.5	243.1	274.3	363.5	456.9	487.5	507.8	530.6	537.7	539.0
22.5°	96.4	135.3	246.7	279.0	380.3	473.6	499.4	515.6	531.1	533.5	534.1
25°	86.9	124.0	246.1	284.5	394.6	483.8	503.6	515.6	524.6	525.8	525.8
27.5°	77.8	111.4	243.7	285.6	405.4	486.2	501.8	510.2	514.4	516.7	516.7
30°	70.1	99.4	237.7	283.2	410.2	483.8	496.4	500.6	504.8	508.4	510.2
32.5°	64.1	88.0	228.8	278.4	410.8	477.8	486.8	489.2	495.2	503.6	506.6
35°	58.6	76.7	218.6	271.9	407.2	468.3	474.2	476.7	488.6	501.2	505.4
37.5°	53.3	68.3	205.4	260.5	401.8	456.9	461.1	465.3	483.8	498.8	503.6
40°	47.9	61.1	189.9	247.9	393.5	443.1	446.8	453.3	477.8	495.2	500.0
42.5°	43.7	55.1	173.1	234.8	382.7	427.6	432.9	442.6	470.7	489.2	494.6
45°	40.1	49.1	155.1	216.7	368.8	411.4	419.2	432.4	462.3	480.2	485.0
47.5°	36.5	44.9	136.6	198.3	353.9	395.3	405.4	420.3	451.0	468.3	472.5
50°	33.6	40.7	118.0	178.4	337.8	377.8	389.8	405.4	436.6	452.7	458.1
52.5°	31.2	37.1	100.6	158.7	319.2	359.9	373.7	389.8	419.2	434.7	438.4
55°	28.7	34.1	85.6	137.7	300.0	340.7	355.7	371.2	400.0	413.2	415.6
57.5°	27.6	31.8	73.0	118.0	279.7	319.2	335.9	350.3	377.2	387.4	389.8
60°	25.7	29.9	63.5	101.2	257.5	298.8	313.2	327.6	350.3	358.7	360.5
62.5°	23.9	28.7	56.3	85.1	234.8	274.8	289.2	302.4	321.5	327.6	329.9
65°	22.8	27.6	50.9	73.0	211.4	249.7	264.0	275.5	291.0	297.0	298.2
67.5°	21.6	26.3	46.7	62.8	188.0	224.6	235.3	246.1	258.1	264.0	264.7
70°	19.7	25.2	43.1	55.7	164.1	195.8	204.8	216.2	225.7	228.8	230.6
72.5°	18.6	23.4	40.7	50.3	139.5	168.3	176.6	183.3	191.6	194.6	194.6
75°	16.8	21.0	38.3	44.9	114.3	137.7	144.9	151.5	158.1	159.2	157.5
77.5°	15.0	18.6	32.9	37.8	89.3	109.0	115.0	118.5	124.0	125.1	125.8
80°	12.6	16.2	25.7	29.4	64.7	80.2	84.4	87.4	92.2	92.2	93.5
82.5°	9.6	12.6	18.6	21.0	43.7	55.1	58.6	60.5	63.5	63.5	63.5
85°	6.0	7.8	12.0	13.7	26.3	33.6	36.0	36.5	38.9	39.5	39.5
87.5°	3.0	4.2	7.8	8.4	13.7	17.4	17.4	18.6	18.6	17.9	17.4
90°	3.7	6.7	9.6	10.4	16.3	24.3	28.2	25.1	18.8	14.1	14.1
92.5°	14.8	40.1	65.3	71.7	100.8	139.5	158.9	139.2	100.0	70.5	67.7
95°	35.6	81.9	128.1	139.6	247.9	392.2	464.4	414.4	314.5	239.5	231.0
97.5°	61.6	102.4	143.2	153.4	333.9	574.7	695.0	663.4	600.2	552.8	536.6
100°	81.7	118.6	155.6	164.9	365.3	632.4	766.0	768.3	772.8	776.3	757.0
102.5°	98.7	133.3	167.7	176.4	379.6	650.5	786.0	826.3	906.8	967.2	950.6
105°	127.7	156.9	186.1	193.4	390.3	652.6	783.8	874.1	1054.5	1190.0	1181.1
107.5°	157.5	184.7	211.9	218.7	392.2	623.5	739.2	865.1	1116.9	1305.8	1308.0
110°	177.5	202.1	226.6	232.8	389.2	597.8	702.0	842.8	1124.3	1335.4	1344.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	197.2	220.6	244.0	249.8	389.4	575.3	668.3	812.4	1100.4	1316.5	1330.7
115°	226.8	248.4	270.0	275.5	392.9	549.6	627.9	766.7	1044.2	1252.3	1272.0
117.5°	256.2	275.8	295.5	300.4	400.3	533.4	600.0	725.3	975.7	1163.6	1185.4
120°	273.2	291.7	310.2	314.8	406.1	528.0	588.9	703.3	932.2	1103.8	1125.1
122.5°	290.0	308.7	327.3	332.0	414.7	525.1	580.3	683.3	889.4	1044.0	1064.9
125°	315.6	332.6	349.5	353.8	426.2	522.7	571.0	658.6	833.6	964.9	984.2
127.5°	336.3	353.5	370.7	375.0	437.7	521.4	563.2	638.4	788.7	901.5	917.7
130°	347.5	366.0	384.5	389.1	446.1	522.3	560.3	627.2	761.0	861.4	876.4
132.5°	359.0	377.5	396.0	400.6	452.9	522.7	557.6	617.5	737.3	827.2	840.7
135°	376.2	392.9	409.8	414.0	460.4	522.3	553.2	603.4	703.7	778.9	790.5
137.5°	393.6	410.2	426.9	431.0	471.5	525.5	552.4	594.8	679.6	743.3	752.7
140°	408.0	423.4	438.7	442.6	478.4	526.0	549.9	586.5	659.7	714.7	723.6
142.5°	419.2	433.4	447.6	451.1	484.1	527.9	549.9	582.0	646.3	694.6	702.3
145°	436.2	448.6	460.9	464.1	491.5	528.0	546.2	572.5	625.1	664.6	670.4
147.5°	453.4	465.4	477.4	480.4	502.4	531.6	546.2	566.9	608.3	639.4	644.2
150°	464.4	475.3	486.2	489.0	508.1	533.5	546.2	563.7	598.6	624.8	628.7
152.5°	475.9	484.2	492.5	494.5	511.7	534.7	546.2	561.1	590.9	613.3	616.3
155°	493.1	499.2	505.3	506.8	520.0	537.4	546.2	558.1	581.8	599.6	601.5
157.5°	505.7	511.6	517.5	519.1	528.1	540.1	546.2	555.4	573.9	587.7	589.0
160°	514.2	518.9	523.4	524.6	531.8	541.4	546.2	554.1	569.9	581.8	582.6
162.5°	522.7	526.2	529.7	530.6	535.8	542.7	546.2	552.9	566.2	576.2	576.9
165°	532.0	535.1	538.2	539.1	541.5	544.6	546.2	551.0	560.6	567.7	568.5
167.5°	540.6	542.1	543.6	544.0	545.9	548.5	549.9	553.0	559.2	564.0	564.3
170°	546.2	547.6	549.1	549.5	549.6	549.8	549.9	553.0	559.2	564.0	564.0
172.5°	549.1	549.5	549.8	549.9	549.9	549.9	549.9	552.4	557.3	561.0	560.7
175°	553.2	553.2	553.2	553.2	552.1	550.6	549.9	551.5	554.6	556.9	556.9
177.5°	553.2	553.2	553.2	553.2	552.4	551.2	550.6	551.8	554.3	556.2	555.8
180°	553.2	553.2	553.2	553.2	553.2	553.2	553.2	553.2	553.2	553.2	553.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	186.2	186.2
2.5°	198.8	197.6
5°	255.7	256.9
7.5°	344.3	343.7
10°	428.2	433.5
12.5°	489.2	490.4
15°	526.4	528.8
17.5°	540.7	541.4
20°	541.4	540.1
22.5°	534.8	533.5
25°	527.0	526.4
27.5°	519.8	520.4
30°	516.7	518.6
32.5°	516.7	519.8
35°	518.0	520.9
37.5°	517.4	520.9
40°	515.0	519.1
42.5°	508.4	511.4
45°	498.2	501.8
47.5°	485.0	487.5
50°	468.3	470.7
52.5°	447.3	447.9
55°	422.2	424.5
57.5°	395.3	395.8
60°	365.3	367.0
62.5°	333.6	333.6
65°	300.0	301.2
67.5°	265.3	268.2
70°	229.9	230.6
72.5°	195.2	195.2
75°	159.2	159.9
77.5°	125.1	125.1
80°	92.8	93.5
82.5°	64.1	65.3
85°	40.1	40.1
87.5°	18.6	16.8
90°	14.1	14.1
92.5°	56.5	45.3
95°	197.0	163.0
97.5°	471.9	407.3
100°	680.0	603.0
102.5°	884.7	818.7
105°	1145.6	1110.2
107.5°	1316.5	1325.1
110°	1381.7	1418.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1387.5	1444.3
115°	1350.7	1429.4
117.5°	1272.7	1360.0
120°	1209.9	1294.7
122.5°	1148.6	1232.3
125°	1061.2	1138.4
127.5°	982.8	1047.8
130°	936.4	996.5
132.5°	894.4	948.2
135°	836.8	883.2
137.5°	790.8	828.7
140°	759.1	794.5
142.5°	732.8	763.4
145°	693.5	716.6
147.5°	663.3	682.4
150°	644.2	659.7
152.5°	628.0	639.7
155°	609.3	617.1
157.5°	594.6	600.0
160°	585.7	588.9
162.5°	579.9	582.9
165°	571.6	574.8
167.5°	565.6	566.9
170°	564.0	564.0
172.5°	559.6	558.4
175°	556.9	556.9
177.5°	554.6	553.2
180°	553.2	553.2



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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	0.52	1.23	1.63	2.35	3.89	13.66	14.37	14.77	15.49	17.03
	3H	1.21	1.85	2.33	2.98	4.54	15.47	16.11	16.59	17.24	18.80
	4H	1.50	2.12	2.64	3.24	4.80	16.10	16.71	17.23	17.83	19.40
	6H	1.75	2.31	2.89	3.44	5.01	16.51	17.07	17.65	18.20	19.77
	8H	1.81	2.35	2.96	3.49	5.06	16.62	17.15	17.76	18.30	19.87
	12H	1.83	2.34	2.98	3.47	5.06	16.67	17.18	17.82	18.32	19.91
4H	2H	7.69	8.30	8.83	9.42	10.99	13.92	14.53	15.06	15.65	17.21
	3H	9.25	9.76	10.39	10.91	12.48	15.93	16.44	17.08	17.59	19.17
	4H	9.34	9.81	10.49	10.94	12.54	16.68	17.15	17.83	18.29	19.89
	6H	9.34	9.74	10.49	10.90	12.49	17.20	17.60	18.36	18.76	20.35
	8H	9.31	9.69	10.47	10.84	12.45	17.35	17.73	18.51	18.88	20.49
	12H	9.26	9.60	10.43	10.77	12.38	17.43	17.77	18.60	18.93	20.54
8H	4H	10.76	11.13	11.91	12.29	13.89	16.73	17.11	17.89	18.26	19.86
	6H	10.99	11.31	12.17	12.50	14.10	17.34	17.65	18.52	18.85	20.45
	8H	11.01	11.28	12.19	12.45	14.08	17.55	17.82	18.73	18.99	20.62
	12H	10.97	11.21	12.16	12.38	14.03	17.68	17.92	18.87	19.09	20.74
12H	4H	10.89	11.23	12.06	12.40	14.01	16.68	17.02	17.85	18.18	19.79
	6H	11.25	11.52	12.43	12.69	14.31	17.32	17.59	18.50	18.77	20.39
	8H	11.31	11.55	12.49	12.72	14.37	17.54	17.78	18.72	18.95	20.60