

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: P937434

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937434
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-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

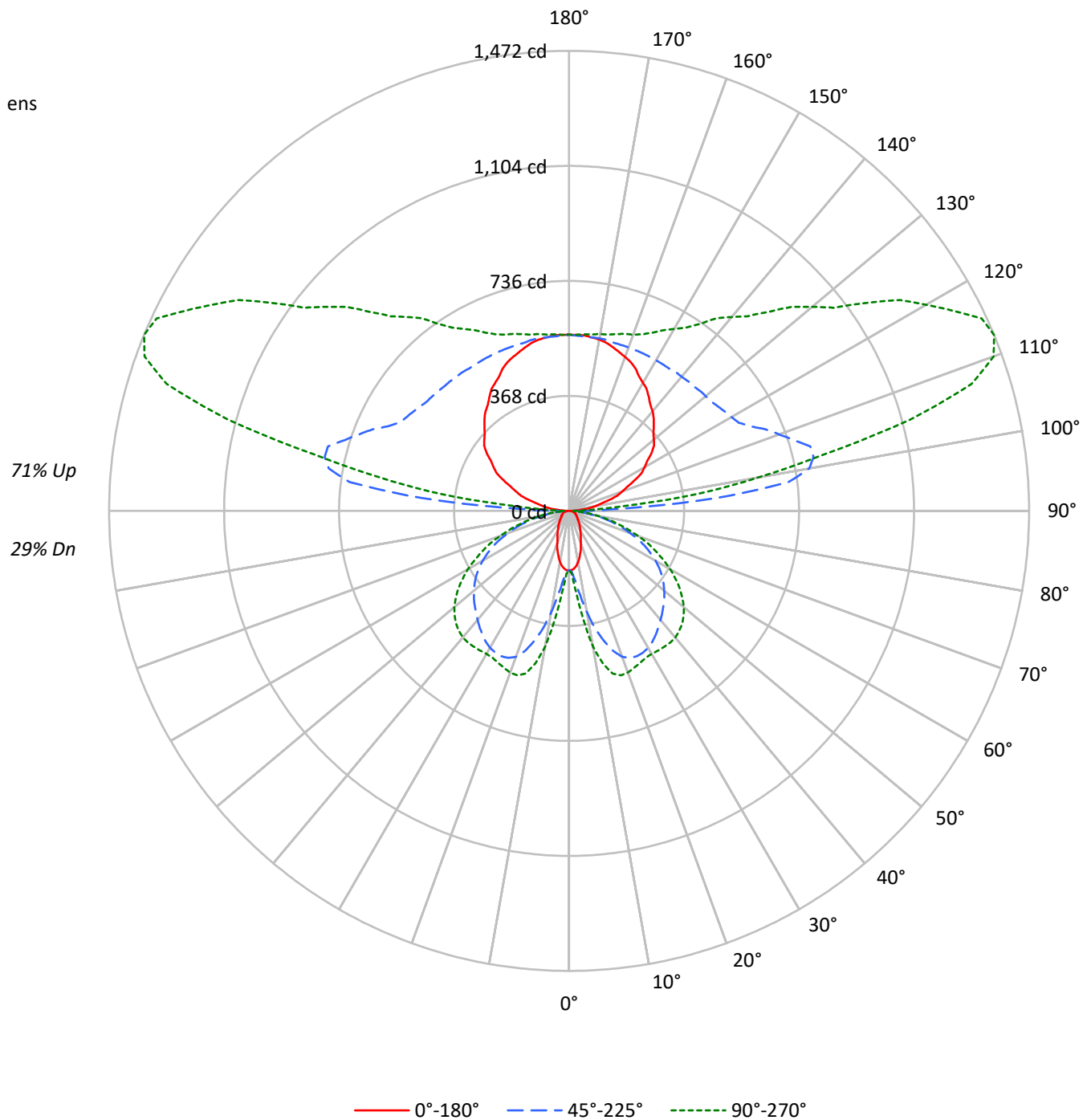
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5124.9 lumens
Efficiency: N/A
Efficacy: 124.4 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

TEST NUMBER: P937434
CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P937434

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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	0
RCR																		
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1761	1761	1761
5°	1719	2033	2367
10°	1557	2962	3924
15°	1322	3868	4739
20°	1075	4479	4829
25°	896	4683	4731
30°	754	4709	4723
35°	666	4627	4844
40°	579	4523	4970
45°	522	4444	4990
50°	479	4372	4908
55°	458	4270	4689
60°	466	4077	4345
65°	483	3786	3874
70°	510	3295	3274
75°	561	2678	2554
80°	599	1853	1721
85°	505	980	879

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4990 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.6	0.5
10°-20°	108.8	2.1
20°-30°	190.3	3.7
30°-40°	245.0	4.8
40°-50°	273.7	5.3
50°-60°	262.1	5.1
60°-70°	207.7	4.1
70°-80°	122.1	2.4
80°-90°	36.1	0.7
90°-100°	274.8	5.4
100°-110°	722.5	14.1
110°-120°	749.1	14.6
120°-130°	600.9	11.7
130°-140°	471.5	9.2
140°-150°	361.9	7.1
150°-160°	260.6	5.1
160°-170°	159.5	3.1
170°-180°	53.9	1.1
0°-30°	323.7	6.3
0°-40°	568.7	11.1
0°-60°	1104.4	21.5
0°-90°	1470.3	28.7
90°-120°	1746.4	34.1
90°-150°	3180.6	62.1
90°-180°	3655.0	71.3
0°-180°	5124.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	190	190	190	190	190	
5°	185	198	223	253	262	17
15°	138	256	431	522	539	39
25°	88	290	513	536	536	41
35°	60	277	483	511	531	37
45°	41	221	427	489	511	32
55°	29	140	362	421	433	27
65°	23	74	269	303	307	23
75°	17	46	148	162	163	18
85°	6	14	37	40	41	6
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°	189.8	189.8	189.8	189.8	189.8	189.8	189.8	189.8	189.8	189.8	189.8
2.5°	189.8	189.8	191.0	191.6	192.8	193.5	194.7	195.8	199.6	200.1	201.4
5°	184.9	187.4	195.3	198.3	206.9	218.5	223.3	231.3	247.8	252.6	255.7
7.5°	177.6	183.1	202.6	207.5	228.9	259.3	272.2	289.3	315.5	328.3	338.7
10°	166.0	177.6	212.4	224.0	258.7	305.1	328.9	352.8	392.4	410.1	416.8
12.5°	153.2	172.1	222.8	238.6	288.6	356.4	385.0	411.3	456.5	480.3	483.9
15°	138.5	164.2	232.5	255.7	320.4	399.1	430.8	463.2	505.3	522.3	526.6
17.5°	125.7	158.1	241.7	266.1	344.8	437.5	469.9	496.8	530.9	542.5	545.5
20°	109.9	148.3	247.8	279.5	370.4	465.6	496.8	517.5	540.7	548.0	549.2
22.5°	98.2	137.9	251.4	284.4	387.5	482.7	508.9	525.4	541.2	543.7	544.3
25°	88.5	126.3	250.8	289.9	402.2	493.0	513.2	525.4	534.6	535.8	535.8
27.5°	79.3	113.5	248.3	291.1	413.2	495.5	511.4	519.9	524.2	526.6	526.6
30°	71.4	101.3	242.2	288.6	418.0	493.0	505.8	510.1	514.4	518.1	519.9
32.5°	65.3	89.7	233.1	283.7	418.6	486.9	496.1	498.6	504.7	513.2	516.2
35°	59.8	78.1	222.8	277.1	415.0	477.2	483.3	485.7	497.9	510.8	515.0
37.5°	54.3	69.6	209.3	265.4	409.4	465.6	469.9	474.2	493.0	508.3	513.2
40°	48.8	62.2	193.5	252.6	401.0	451.5	455.3	461.9	486.9	504.7	509.6
42.5°	44.6	56.1	176.4	239.2	390.0	435.7	441.2	451.0	479.7	498.6	504.0
45°	40.8	50.0	158.1	220.9	375.9	419.3	427.2	440.6	471.1	489.4	494.3
47.5°	37.2	45.8	139.2	202.0	360.7	402.8	413.2	428.3	459.5	477.2	481.5
50°	34.2	41.5	120.3	181.8	344.2	385.0	397.2	413.2	444.9	461.4	466.8
52.5°	31.7	37.8	102.5	161.7	325.3	366.8	380.8	397.2	427.2	443.0	446.7
55°	29.3	34.7	87.2	140.4	305.7	347.2	362.5	378.3	407.6	421.1	423.5
57.5°	28.1	32.4	74.4	120.3	285.0	325.3	342.3	356.9	384.4	394.8	397.2
60°	26.2	30.5	64.7	103.2	262.4	304.5	319.2	333.8	356.9	365.5	367.4
62.5°	24.4	29.3	57.4	86.7	239.2	280.1	294.7	308.2	327.7	333.8	336.2
65°	23.2	28.1	51.8	74.4	215.4	254.4	269.1	280.7	296.5	302.6	303.9
67.5°	22.0	26.8	47.6	64.0	191.6	228.9	239.8	250.8	263.0	269.1	269.7
70°	20.1	25.7	43.9	56.8	167.2	199.6	208.7	220.3	230.0	233.1	235.0
72.5°	18.9	23.8	41.5	51.3	142.2	171.5	180.0	186.7	195.3	198.3	198.3
75°	17.1	21.4	39.0	45.8	116.5	140.4	147.6	154.4	161.1	162.3	160.5
77.5°	15.3	18.9	33.6	38.5	91.0	111.1	117.2	120.8	126.3	127.5	128.2
80°	12.8	16.5	26.2	29.9	65.9	81.8	86.1	89.1	94.0	94.0	95.2
82.5°	9.7	12.8	18.9	21.4	44.6	56.1	59.8	61.7	64.7	64.7	64.7
85°	6.1	7.9	12.2	14.0	26.8	34.2	36.7	37.2	39.7	40.3	40.3
87.5°	3.1	4.3	7.9	8.6	14.0	17.7	17.7	18.9	18.9	18.3	17.7
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°	189.8	189.8
2.5°	202.6	201.4
5°	260.6	261.8
7.5°	350.8	350.3
10°	436.4	441.8
12.5°	498.6	499.8
15°	536.4	538.9
17.5°	551.1	551.7
20°	551.7	550.4
22.5°	545.0	543.7
25°	537.0	536.4
27.5°	529.7	530.3
30°	526.6	528.5
32.5°	526.6	529.7
35°	527.9	530.9
37.5°	527.2	530.9
40°	524.8	529.0
42.5°	518.1	521.1
45°	507.7	511.4
47.5°	494.3	496.8
50°	477.2	479.7
52.5°	455.8	456.5
55°	430.3	432.6
57.5°	402.8	403.3
60°	372.2	374.0
62.5°	339.9	339.9
65°	305.7	306.9
67.5°	270.3	273.3
70°	234.3	235.0
72.5°	198.9	198.9
75°	162.3	162.9
77.5°	127.5	127.5
80°	94.6	95.2
82.5°	65.3	66.5
85°	40.8	40.8
87.5°	18.9	17.1
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	0.58	1.30	1.70	2.41	3.96	13.72	14.44	14.84	15.55	17.10
	3H	1.28	1.92	2.40	3.04	4.60	15.54	16.18	16.66	17.30	18.86
	4H	1.57	2.18	2.70	3.30	4.87	16.16	16.77	17.30	17.90	19.46
	6H	1.81	2.38	2.96	3.50	5.08	16.57	17.14	17.72	18.26	19.84
	8H	1.88	2.41	3.02	3.55	5.12	16.68	17.22	17.83	18.36	19.93
	12H	1.89	2.40	3.04	3.53	5.13	16.74	17.25	17.89	18.38	19.98
4H	2H	7.76	8.37	8.90	9.49	11.06	13.98	14.59	15.12	15.71	17.28
	3H	9.31	9.82	10.46	10.97	12.55	16.00	16.51	17.14	17.66	19.23
	4H	9.40	9.87	10.55	11.01	12.61	16.75	17.22	17.90	18.36	19.95
	6H	9.41	9.81	10.56	10.97	12.56	17.27	17.67	18.42	18.83	20.42
	8H	9.38	9.75	10.53	10.91	12.51	17.42	17.79	18.57	18.95	20.55
	12H	9.33	9.67	10.50	10.83	12.44	17.49	17.84	18.67	19.00	20.61
8H	4H	10.82	11.20	11.98	12.35	13.96	16.80	17.17	17.95	18.32	19.93
	6H	11.06	11.37	12.24	12.57	14.17	17.41	17.72	18.58	18.91	20.51
	8H	11.08	11.35	12.26	12.52	14.14	17.62	17.89	18.80	19.06	20.68
	12H	11.04	11.28	12.22	12.45	14.10	17.75	17.98	18.93	19.15	20.81
12H	4H	10.96	11.30	12.13	12.46	14.07	16.74	17.08	17.91	18.25	19.86
	6H	11.31	11.59	12.49	12.76	14.38	17.39	17.66	18.57	18.83	20.45
	8H	11.38	11.61	12.56	12.78	14.44	17.60	17.84	18.79	19.01	20.67