

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: P937436

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937436
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-4-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

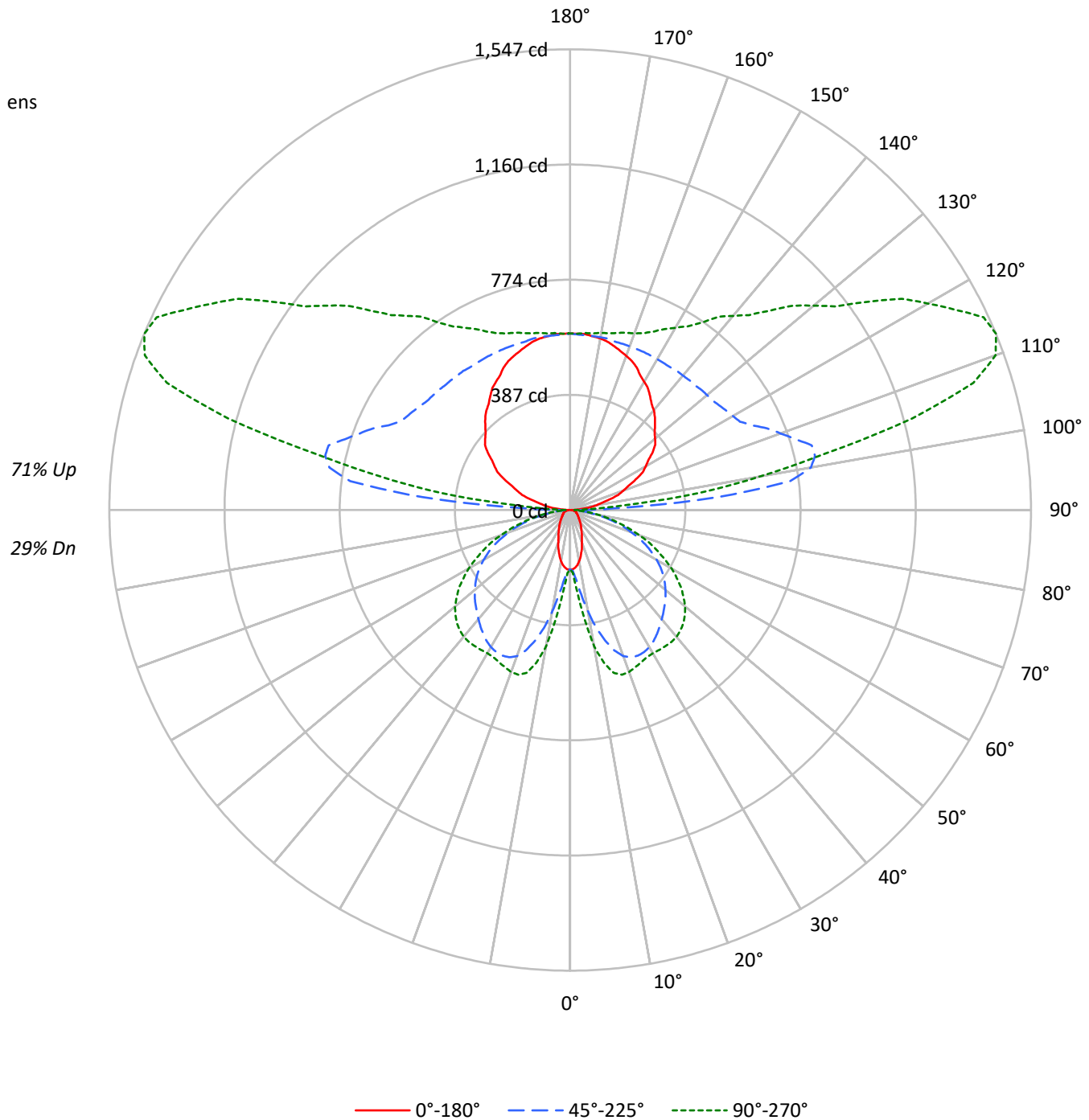
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5387.2 lumens
Efficiency: N/A
Efficacy: 130.8 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): 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-4-6500K

Luminous Intensity Polar Plot





TEST NUMBER: P937436

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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°	1851	1851	1851
5°	1807	2137	2488
10°	1637	3115	4125
15°	1389	4066	4981
20°	1130	4708	5076
25°	941	4923	4974
30°	793	4950	4964
35°	699	4864	5092
40°	609	4754	5224
45°	549	4671	5246
50°	505	4596	5159
55°	481	4488	4930
60°	489	4285	4569
65°	508	3978	4072
70°	536	3464	3441
75°	590	2816	2685
80°	632	1948	1810
85°	530	1028	924

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5246 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.8	0.5
10°-20°	114.4	2.1
20°-30°	200.1	3.7
30°-40°	257.5	4.8
40°-50°	287.7	5.3
50°-60°	275.5	5.1
60°-70°	218.3	4.1
70°-80°	128.4	2.4
80°-90°	37.9	0.7
90°-100°	288.9	5.4
100°-110°	759.5	14.1
110°-120°	787.5	14.6
120°-130°	631.6	11.7
130°-140°	495.6	9.2
140°-150°	380.4	7.1
150°-160°	274.0	5.1
160°-170°	167.6	3.1
170°-180°	56.6	1.1
0°-30°	340.2	6.3
0°-40°	597.8	11.1
0°-60°	1160.9	21.5
0°-90°	1545.6	28.7
90°-120°	1835.8	34.1
90°-150°	3343.4	62.1
90°-180°	3842.0	71.3
0°-180°	5387.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	200	200	200	200	200	
5°	194	208	235	266	275	18
15°	146	269	453	549	566	41
25°	93	305	540	563	564	43
35°	63	291	508	537	558	39
45°	43	232	449	514	538	33
55°	31	148	381	443	455	28
65°	24	78	283	318	323	24
75°	18	48	155	171	171	19
85°	6	15	38	42	43	7
90°	4	11	30	15	15	4
95°	38	150	498	256	175	42
105°	137	207	840	1275	1189	145
115°	243	295	673	1342	1531	240
125°	338	379	612	1034	1219	300
135°	403	444	593	834	946	312
145°	467	497	585	712	768	293
155°	528	543	585	642	661	243
165°	570	577	585	608	616	161
175°	593	593	589	597	597	56
180°	593	593	593	593	593	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	199.5	199.5	199.5	199.5	199.5	199.5	199.5	199.5	199.5	199.5	199.5
2.5°	199.5	199.5	200.8	201.4	202.7	203.4	204.6	205.9	209.8	210.4	211.7
5°	194.4	197.0	205.3	208.5	217.4	229.7	234.7	243.2	260.5	265.5	268.8
7.5°	186.6	192.5	212.9	218.1	240.6	272.6	286.1	304.1	331.6	345.1	356.0
10°	174.5	186.6	223.3	235.4	271.9	320.7	345.8	370.8	412.5	431.1	438.1
12.5°	161.0	180.9	234.2	250.8	303.4	374.6	404.8	432.4	479.8	504.9	508.7
15°	145.6	172.6	244.4	268.8	336.8	419.5	452.9	486.9	531.2	549.0	553.5
17.5°	132.1	166.2	254.1	279.7	362.4	459.9	494.0	522.2	558.0	570.3	573.4
20°	115.5	155.9	260.5	293.8	389.4	489.5	522.2	544.0	568.4	576.0	577.3
22.5°	103.3	145.0	264.3	298.9	407.3	507.4	535.0	552.3	568.9	571.5	572.2
25°	93.0	132.8	263.6	304.7	422.7	518.3	539.5	552.3	562.0	563.2	563.2
27.5°	83.4	119.3	261.0	306.0	434.3	520.8	537.6	546.6	551.1	553.5	553.5
30°	75.1	106.5	254.6	303.4	439.4	518.3	531.7	536.2	540.7	544.6	546.6
32.5°	68.7	94.3	245.1	298.2	440.0	511.9	521.5	524.1	530.5	539.5	542.6
35°	62.8	82.1	234.2	291.3	436.2	501.6	508.0	510.6	523.4	536.9	541.4
37.5°	57.1	73.1	220.0	279.0	430.4	489.5	494.0	498.5	518.3	534.3	539.5
40°	51.3	65.4	203.4	265.5	421.5	474.7	478.6	485.6	511.9	530.5	535.7
42.5°	46.9	59.0	185.4	251.5	409.9	458.0	463.8	474.1	504.2	524.1	529.8
45°	42.9	52.6	166.2	232.2	395.1	440.7	449.0	463.2	495.2	514.4	519.6
47.5°	39.1	48.1	146.3	212.4	379.1	423.4	434.3	450.3	483.1	501.6	506.1
50°	36.0	43.6	126.4	191.1	361.8	404.8	417.6	434.3	467.7	485.0	490.7
52.5°	33.4	39.8	107.8	170.0	341.9	385.5	400.3	417.6	449.0	465.7	469.6
55°	30.8	36.5	91.7	147.5	321.4	365.0	381.0	397.7	428.5	442.6	445.2
57.5°	29.5	34.0	78.2	126.4	299.6	341.9	359.8	375.2	404.1	415.0	417.6
60°	27.5	32.0	68.0	108.4	275.9	320.1	335.5	350.9	375.2	384.2	386.2
62.5°	25.6	30.8	60.3	91.1	251.5	294.4	309.8	324.0	344.4	350.9	353.4
65°	24.4	29.5	54.5	78.2	226.4	267.4	282.8	295.1	311.7	318.1	319.5
67.5°	23.1	28.2	50.0	67.3	201.4	240.6	252.1	263.6	276.4	282.8	283.5
70°	21.1	27.0	46.2	59.7	175.7	209.8	219.4	231.6	241.8	245.1	247.0
72.5°	19.9	25.1	43.6	53.9	149.5	180.2	189.2	196.3	205.3	208.5	208.5
75°	18.0	22.5	41.0	48.1	122.5	147.5	155.2	162.3	169.3	170.6	168.7
77.5°	16.1	19.9	35.3	40.4	95.6	116.8	123.2	127.0	132.8	134.1	134.7
80°	13.5	17.3	27.5	31.5	69.3	86.0	90.5	93.6	98.8	98.8	100.1
82.5°	10.2	13.5	19.9	22.5	46.9	59.0	62.8	64.8	68.0	68.0	68.0
85°	6.4	8.3	12.8	14.7	28.2	36.0	38.5	39.1	41.7	42.4	42.4
87.5°	3.3	4.5	8.3	9.0	14.7	18.6	18.6	19.9	19.9	19.2	18.6
90°	4.0	7.2	10.3	11.1	17.5	26.0	30.2	26.9	20.2	15.1	15.1
92.5°	15.9	42.9	70.0	76.8	108.0	149.5	170.2	149.2	107.1	75.5	72.6
95°	38.2	87.7	137.2	149.5	265.5	420.2	497.5	444.0	336.9	256.5	247.5
97.5°	66.0	109.7	153.4	164.3	357.7	615.6	744.5	710.6	642.9	592.2	574.9
100°	87.5	127.1	166.7	176.6	391.3	677.5	820.5	823.0	827.9	831.6	810.9
102.5°	105.8	142.8	179.7	188.9	406.7	696.9	842.0	885.1	971.4	1036.0	1018.3
105°	136.8	168.1	199.4	207.2	418.0	699.1	839.6	936.3	1129.6	1274.7	1265.2
107.5°	168.7	197.8	227.0	234.3	420.2	667.9	791.8	926.7	1196.5	1398.8	1401.1
110°	190.1	216.5	242.8	249.4	416.9	640.4	752.0	902.8	1204.4	1430.6	1440.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	211.2	236.3	261.3	267.6	417.1	616.3	715.9	870.2	1178.8	1410.3	1425.5
115°	243.0	266.1	289.2	295.1	420.9	588.7	672.6	821.3	1118.6	1341.5	1362.6
117.5°	274.4	295.5	316.5	321.8	428.8	571.4	642.8	776.9	1045.2	1246.5	1269.8
120°	292.7	312.5	332.3	337.2	435.1	565.6	630.8	753.4	998.6	1182.4	1205.2
122.5°	310.7	330.7	350.6	355.6	444.2	562.5	621.6	732.0	952.8	1118.4	1140.7
125°	338.1	356.3	374.4	379.0	456.6	559.9	611.7	705.5	893.0	1033.6	1054.3
127.5°	360.3	378.7	397.1	401.7	468.9	558.5	603.4	683.9	844.9	965.7	983.1
130°	372.2	392.0	411.8	416.8	477.9	559.5	600.2	671.9	815.3	922.7	938.8
132.5°	384.6	404.4	424.2	429.1	485.2	559.9	597.3	661.5	789.8	886.1	900.5
135°	402.9	420.9	439.0	443.5	493.2	559.5	592.6	646.4	753.8	834.4	846.8
137.5°	421.6	439.5	457.3	461.7	505.1	562.9	591.8	637.2	728.0	796.2	806.4
140°	437.1	453.5	470.0	474.1	512.4	563.5	589.0	628.2	706.7	765.6	775.1
142.5°	449.0	464.2	479.4	483.3	518.5	565.5	589.0	623.4	692.4	744.1	752.3
145°	467.3	480.6	493.8	497.1	526.5	565.6	585.1	613.3	669.6	711.9	718.1
147.5°	485.7	498.6	511.4	514.6	538.1	569.4	585.1	607.3	651.6	684.9	690.1
150°	497.5	509.2	520.8	523.8	544.3	571.5	585.1	603.8	641.2	669.3	673.4
152.5°	509.8	518.6	527.5	529.7	548.2	572.8	585.1	601.1	633.0	657.0	660.2
155°	528.2	534.7	541.3	542.9	557.0	575.7	585.1	597.8	623.2	642.3	644.4
157.5°	541.7	548.1	554.4	556.0	565.7	578.6	585.1	594.9	614.7	629.6	631.0
160°	550.9	555.8	560.7	562.0	569.7	579.9	585.1	593.6	610.5	623.2	624.1
162.5°	559.9	563.7	567.4	568.4	573.9	581.4	585.1	592.3	606.5	617.2	618.0
165°	569.9	573.2	576.6	577.4	580.0	583.4	585.1	590.3	600.5	608.1	609.0
167.5°	579.1	580.7	582.3	582.7	584.8	587.6	589.0	592.4	599.1	604.1	604.5
170°	585.1	586.6	588.2	588.6	588.7	588.9	589.0	592.4	599.1	604.1	604.1
172.5°	588.2	588.6	588.9	589.0	589.0	589.0	589.0	591.7	597.0	601.0	600.7
175°	592.6	592.6	592.6	592.6	591.4	589.8	589.0	590.7	594.1	596.6	596.6
177.5°	592.6	592.6	592.6	592.6	591.7	590.4	589.8	591.1	593.8	595.8	595.4
180°	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	199.5	199.5
2.5°	212.9	211.7
5°	273.9	275.2
7.5°	368.8	368.2
10°	458.7	464.4
12.5°	524.1	525.3
15°	563.9	566.4
17.5°	579.3	579.9
20°	579.9	578.6
22.5°	572.9	571.5
25°	564.5	563.9
27.5°	556.8	557.5
30°	553.5	555.5
32.5°	553.5	556.8
35°	554.9	558.0
37.5°	554.2	558.0
40°	551.6	556.1
42.5°	544.6	547.8
45°	533.7	537.6
47.5°	519.6	522.2
50°	501.6	504.2
52.5°	479.1	479.8
55°	452.3	454.8
57.5°	423.4	424.0
60°	391.3	393.2
62.5°	357.3	357.3
65°	321.4	322.6
67.5°	284.2	287.3
70°	246.3	247.0
72.5°	209.1	209.1
75°	170.6	171.3
77.5°	134.1	134.1
80°	99.4	100.1
82.5°	68.7	69.9
85°	42.9	42.9
87.5°	19.9	18.0
90°	15.1	15.1
92.5°	60.5	48.5
95°	211.0	174.6
97.5°	505.5	436.3
100°	728.4	645.9
102.5°	947.7	877.0
105°	1227.2	1189.2
107.5°	1410.3	1419.5
110°	1480.1	1519.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1486.3	1547.1
115°	1446.9	1531.2
117.5°	1363.3	1456.9
120°	1296.0	1386.9
122.5°	1230.4	1320.0
125°	1136.8	1219.4
127.5°	1052.8	1122.4
130°	1003.1	1067.5
132.5°	958.1	1015.8
135°	896.4	946.2
137.5°	847.1	887.7
140°	813.1	851.1
142.5°	785.0	817.7
145°	742.9	767.6
147.5°	710.5	731.0
150°	690.1	706.7
152.5°	672.7	685.3
155°	652.7	661.0
157.5°	636.9	642.8
160°	627.5	630.8
162.5°	621.2	624.4
165°	612.3	615.7
167.5°	605.8	607.3
170°	604.1	604.1
172.5°	599.4	598.2
175°	596.6	596.6
177.5°	594.1	592.6
180°	592.6	592.6



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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	0.75	1.47	1.87	2.58	4.13	13.90	14.61	15.01	15.73	17.27
	3H	1.45	2.09	2.57	3.21	4.77	15.71	16.35	16.83	17.47	19.03
	4H	1.74	2.36	2.88	3.48	5.04	16.34	16.95	17.47	18.07	19.64
	6H	1.99	2.55	3.13	3.68	5.25	16.75	17.31	17.89	18.44	20.01
	8H	2.05	2.59	3.20	3.73	5.30	16.86	17.39	18.00	18.53	20.10
	12H	2.06	2.57	3.21	3.71	5.30	16.91	17.42	18.06	18.56	20.15
4H	2H	7.93	8.54	9.07	9.66	11.23	14.15	14.77	15.30	15.89	17.45
	3H	9.49	10.00	10.63	11.14	12.72	16.17	16.68	17.32	17.83	19.41
	4H	9.57	10.04	10.72	11.18	12.78	16.92	17.39	18.07	18.53	20.13
	6H	9.58	9.98	10.73	11.14	12.73	17.44	17.84	18.60	19.00	20.59
	8H	9.55	9.93	10.71	11.08	12.68	17.59	17.97	18.75	19.12	20.72
	12H	9.50	9.84	10.67	11.00	12.61	17.67	18.01	18.84	19.17	20.78
8H	4H	11.00	11.37	12.15	12.53	14.13	16.97	17.35	18.13	18.50	20.10
	6H	11.23	11.54	12.41	12.74	14.34	17.58	17.89	18.76	19.09	20.69
	8H	11.25	11.52	12.43	12.69	14.31	17.79	18.06	18.97	19.23	20.86
	12H	11.21	11.45	12.40	12.62	14.27	17.92	18.16	19.11	19.33	20.98
12H	4H	11.13	11.47	12.30	12.63	14.24	16.92	17.26	18.09	18.42	20.03
	6H	11.49	11.76	12.67	12.93	14.55	17.56	17.83	18.74	19.01	20.63
	8H	11.55	11.79	12.73	12.96	14.61	17.78	18.02	18.96	19.19	20.84