

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: P937531

Luminaire Tested: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937531
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-4-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

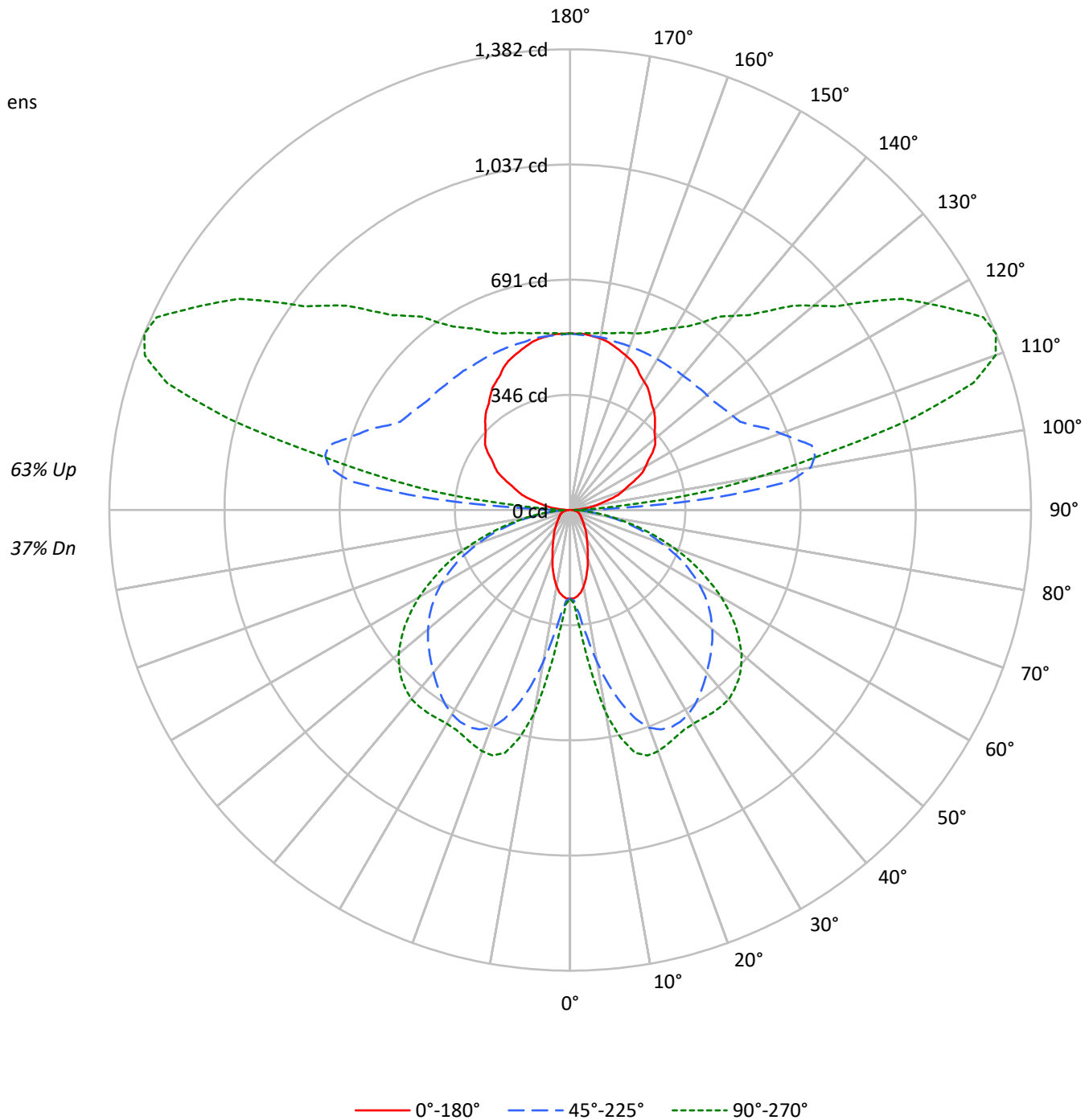
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5488.5 lumens
Efficiency: N/A
Efficacy: 111.6 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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CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P937531

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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°	2465	2465	2465
5°	2405	2847	3313
10°	2179	4147	5493
15°	1850	5413	6632
20°	1504	6269	6759
25°	1253	6555	6622
30°	1055	6592	6610
35°	932	6477	6781
40°	810	6330	6957
45°	732	6220	6985
50°	670	6119	6868
55°	640	5977	6565
60°	653	5706	6084
65°	677	5299	5423
70°	716	4612	4581
75°	784	3750	3576
80°	838	2591	2408
85°	704	1367	1232

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6985 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.4	0.6
10°-20°	152.3	2.8
20°-30°	266.4	4.9
30°-40°	342.9	6.2
40°-50°	383.0	7.0
50°-60°	366.8	6.7
60°-70°	290.7	5.3
70°-80°	170.9	3.1
80°-90°	49.5	0.9
90°-100°	258.0	4.7
100°-110°	678.4	12.4
110°-120°	703.4	12.8
120°-130°	564.2	10.3
130°-140°	442.7	8.1
140°-150°	339.8	6.2
150°-160°	244.7	4.5
160°-170°	149.7	2.7
170°-180°	50.6	0.9
0°-30°	453.0	8.3
0°-40°	795.9	14.5
0°-60°	1545.8	28.2
0°-90°	2057.0	37.5
90°-120°	1639.8	29.9
90°-150°	2986.5	54.4
90°-180°	3432.0	62.5
0°-180°	5488.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	266	266	266	266	266	
5°	259	278	313	354	366	24
15°	194	358	603	731	754	54
25°	124	406	718	750	751	57
35°	84	388	676	715	743	52
45°	57	309	598	685	716	44
55°	41	196	507	589	606	37
65°	32	104	377	424	430	32
75°	24	64	207	227	228	25
85°	8	20	51	56	57	9
90°	4	10	27	14	14	4
95°	34	134	444	229	156	38
105°	122	185	750	1139	1062	130
115°	217	264	601	1198	1368	214
125°	302	339	546	923	1089	268
135°	360	396	529	745	845	278
145°	417	444	523	636	686	262
155°	472	485	523	574	590	217
165°	509	516	523	543	550	144
175°	529	529	526	533	533	50
180°	529	529	529	529	529	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	265.6	265.6	265.6	265.6	265.6	265.6	265.6	265.6	265.6	265.6	265.6
2.5°	265.6	265.6	267.3	268.2	269.9	270.8	272.5	274.2	279.3	280.2	281.9
5°	258.8	262.2	273.3	277.6	289.5	305.8	312.6	323.7	346.8	353.6	357.9
7.5°	248.6	256.2	283.6	290.4	320.3	363.0	380.9	404.9	441.6	459.5	474.0
10°	232.3	248.6	297.2	313.5	362.2	427.1	460.4	493.7	549.2	574.0	583.4
12.5°	214.4	240.9	311.8	334.0	404.0	498.8	539.0	575.7	638.9	672.2	677.3
15°	193.9	229.8	325.4	357.9	448.4	558.6	603.0	648.3	707.2	731.1	737.1
17.5°	176.0	221.2	338.2	372.4	482.6	612.4	657.7	695.3	743.1	759.3	763.6
20°	153.7	207.6	346.8	391.2	518.5	651.7	695.3	724.3	756.8	767.0	768.7
22.5°	137.5	193.0	351.9	398.0	542.4	675.6	712.3	735.4	757.6	761.0	761.9
25°	123.8	176.8	351.0	405.7	562.9	690.1	718.3	735.4	748.2	749.9	749.9
27.5°	111.0	158.9	347.6	407.4	578.2	693.6	715.8	727.7	733.7	737.1	737.1
30°	99.9	141.8	339.1	404.0	585.1	690.1	708.1	714.1	720.0	725.2	727.7
32.5°	91.4	125.6	326.3	397.2	585.9	681.6	694.4	697.8	706.4	718.3	722.6
35°	83.7	109.3	311.8	387.8	580.8	667.9	676.5	679.9	697.0	714.9	720.9
37.5°	76.0	97.4	293.0	371.5	573.1	651.7	657.7	663.7	690.1	711.5	718.3
40°	68.3	87.1	270.8	353.6	561.2	632.1	637.2	646.6	681.6	706.4	713.2
42.5°	62.4	78.6	246.8	334.8	545.8	609.8	617.5	631.2	671.3	697.8	705.5
45°	57.2	70.0	221.2	309.2	526.1	586.8	597.9	616.7	659.4	685.0	691.8
47.5°	52.1	64.1	194.7	282.7	504.8	563.7	578.2	599.6	643.2	667.9	673.9
50°	47.8	58.1	168.3	254.5	481.7	539.0	556.0	578.2	622.7	645.7	653.4
52.5°	44.4	53.0	143.5	226.3	455.3	513.3	533.0	556.0	597.9	620.1	625.2
55°	41.0	48.7	122.1	196.4	427.9	486.0	507.4	529.6	570.6	589.3	592.8
57.5°	39.3	45.3	104.2	168.3	398.9	455.3	479.2	499.7	538.1	552.6	556.0
60°	36.7	42.7	90.5	144.3	367.3	426.2	446.7	467.2	499.7	511.6	514.2
62.5°	34.2	41.0	80.3	121.3	334.8	392.0	412.5	431.3	458.7	467.2	470.6
65°	32.5	39.3	72.6	104.2	301.5	356.2	376.7	392.9	415.1	423.6	425.4
67.5°	30.7	37.6	66.6	89.7	268.2	320.3	335.7	351.0	368.1	376.7	377.5
70°	28.2	35.9	61.5	79.4	234.0	279.3	292.1	308.3	322.0	326.3	328.8
72.5°	26.5	33.3	58.1	71.7	199.0	240.0	252.0	261.4	273.3	277.6	277.6
75°	23.9	29.9	54.7	64.1	163.1	196.4	206.7	216.1	225.5	227.2	224.6
77.5°	21.4	26.5	47.0	53.8	127.3	155.5	164.0	169.1	176.8	178.5	179.4
80°	17.9	23.1	36.7	41.9	92.2	114.5	120.4	124.7	131.5	131.5	133.2
82.5°	13.7	17.9	26.5	29.9	62.4	78.6	83.7	86.3	90.5	90.5	90.5
85°	8.5	11.1	17.1	19.6	37.6	47.8	51.2	52.1	55.5	56.4	56.4
87.5°	4.3	6.0	11.1	12.0	19.6	24.8	24.8	26.5	26.5	25.6	24.8
90°	3.6	6.4	9.2	9.9	15.6	23.2	27.0	24.0	18.0	13.5	13.5
92.5°	14.2	38.4	62.5	68.6	96.4	133.5	152.0	133.2	95.7	67.5	64.8
95°	34.1	78.3	122.6	133.6	237.2	375.3	444.4	396.6	300.9	229.2	221.0
97.5°	58.9	98.0	137.0	146.7	319.5	549.9	665.0	634.8	574.3	529.0	513.5
100°	78.2	113.5	148.9	157.8	349.5	605.1	732.9	735.1	739.5	742.8	724.4
102.5°	94.5	127.5	160.5	168.8	363.3	622.5	752.1	790.7	867.7	925.4	909.6
105°	122.2	150.2	178.1	185.1	373.4	624.5	750.0	836.4	1009.1	1138.6	1130.2
107.5°	150.7	176.7	202.8	209.3	375.3	596.6	707.3	827.8	1068.8	1249.5	1251.6
110°	169.8	193.4	216.9	222.8	372.4	572.0	671.8	806.5	1075.9	1277.9	1286.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	188.7	211.1	233.4	239.1	372.6	550.5	639.5	777.3	1053.0	1259.8	1273.3
115°	217.0	237.7	258.4	263.6	376.0	525.9	600.8	733.6	999.2	1198.3	1217.1
117.5°	245.1	263.9	282.7	287.4	383.0	510.4	574.1	694.0	933.6	1113.4	1134.3
120°	261.4	279.1	296.8	301.3	388.6	505.2	563.5	673.0	892.0	1056.2	1076.5
122.5°	277.5	295.4	313.2	317.7	396.8	502.5	555.3	653.8	851.1	999.0	1019.0
125°	302.0	318.2	334.5	338.6	407.8	500.2	546.4	630.2	797.7	923.3	941.8
127.5°	321.8	338.2	354.7	358.8	418.9	498.9	539.0	610.9	754.7	862.6	878.1
130°	332.5	350.2	367.9	372.3	426.9	499.8	536.1	600.2	728.2	824.2	838.6
132.5°	343.5	361.2	378.9	383.3	433.4	500.2	533.6	590.9	705.5	791.5	804.4
135°	359.9	376.0	392.1	396.1	440.6	499.8	529.4	577.4	673.3	745.3	756.4
137.5°	376.6	392.6	408.4	412.5	451.2	502.8	528.6	569.2	650.3	711.2	720.3
140°	390.4	405.1	419.8	423.5	457.7	503.3	526.1	561.2	631.3	683.9	692.4
142.5°	401.1	414.7	428.3	431.7	463.2	505.1	526.1	556.9	618.5	664.7	672.0
145°	417.4	429.3	441.1	444.1	470.3	505.2	522.6	547.8	598.1	635.9	641.5
147.5°	433.8	445.3	456.8	459.7	480.7	508.6	522.6	542.5	582.1	611.8	616.4
150°	444.4	454.8	465.2	467.9	486.2	510.5	522.6	539.4	572.8	597.9	601.6
152.5°	455.4	463.3	471.2	473.2	489.7	511.6	522.6	536.9	565.4	586.9	589.7
155°	471.8	477.6	483.5	485.0	497.5	514.3	522.6	534.0	556.7	573.7	575.6
157.5°	483.9	489.6	495.2	496.7	505.3	516.8	522.6	531.4	549.1	562.4	563.6
160°	492.1	496.5	500.9	502.0	508.9	518.0	522.6	530.2	545.4	556.7	557.5
162.5°	500.2	503.5	506.8	507.7	512.6	519.3	522.6	529.0	541.8	551.3	552.0
165°	509.1	512.0	515.0	515.8	518.1	521.1	522.6	527.3	536.4	543.2	544.0
167.5°	517.3	518.7	520.2	520.5	522.4	524.9	526.1	529.1	535.1	539.6	540.0
170°	522.6	524.0	525.5	525.8	525.9	526.1	526.1	529.1	535.1	539.6	539.6
172.5°	525.5	525.8	526.1	526.1	526.1	526.1	526.1	528.5	533.2	536.8	536.6
175°	529.4	529.4	529.4	529.4	528.3	526.8	526.1	527.7	530.7	532.9	532.9
177.5°	529.4	529.4	529.4	529.4	528.5	527.4	526.8	528.0	530.4	532.2	531.9
180°	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4



TEST NUMBER: P937531

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	265.6	265.6
2.5°	283.6	281.9
5°	364.7	366.4
7.5°	491.1	490.3
10°	610.7	618.4
12.5°	697.8	699.5
15°	750.8	754.2
17.5°	771.3	772.1
20°	772.1	770.4
22.5°	762.7	761.0
25°	751.6	750.8
27.5°	741.4	742.2
30°	737.1	739.7
32.5°	737.1	741.4
35°	738.8	743.1
37.5°	738.0	743.1
40°	734.6	740.5
42.5°	725.2	729.4
45°	710.6	715.8
47.5°	691.8	695.3
50°	667.9	671.3
52.5°	638.0	638.9
55°	602.2	605.6
57.5°	563.7	564.6
60°	521.0	523.6
62.5°	475.7	475.7
65°	427.9	429.6
67.5°	378.4	382.6
70°	328.0	328.8
72.5°	278.4	278.4
75°	227.2	228.1
77.5°	178.5	178.5
80°	132.4	133.2
82.5°	91.4	93.1
85°	57.2	57.2
87.5°	26.5	23.9
90°	13.5	13.5
92.5°	54.1	43.3
95°	188.5	156.0
97.5°	451.6	389.7
100°	650.7	577.0
102.5°	846.5	783.4
105°	1096.2	1062.3
107.5°	1259.8	1268.0
110°	1322.1	1357.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1327.7	1382.0
115°	1292.5	1367.8
117.5°	1217.8	1301.3
120°	1157.7	1238.8
122.5°	1099.1	1179.1
125°	1015.5	1089.3
127.5°	940.4	1002.6
130°	896.1	953.5
132.5°	855.8	907.3
135°	800.7	845.2
137.5°	756.7	793.0
140°	726.4	760.3
142.5°	701.2	730.5
145°	663.6	685.7
147.5°	634.7	653.0
150°	616.4	631.3
152.5°	600.9	612.2
155°	583.0	590.5
157.5°	568.9	574.1
160°	560.5	563.5
162.5°	554.9	557.7
165°	547.0	550.0
167.5°	541.2	542.5
170°	539.6	539.6
172.5°	535.5	534.3
175°	532.9	532.9
177.5°	530.7	529.4
180°	529.4	529.4



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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	2.86	3.64	3.91	4.70	6.14	16.00	16.78	17.05	17.84	19.28
	3H	3.56	4.26	4.62	5.33	6.79	17.81	18.52	18.87	19.59	21.04
	4H	3.85	4.52	4.93	5.59	7.06	18.45	19.12	19.52	20.19	21.65
	6H	4.10	4.72	5.18	5.79	7.27	18.86	19.48	19.94	20.55	22.03
	8H	4.17	4.75	5.25	5.84	7.31	18.97	19.56	20.06	20.65	22.12
	12H	4.18	4.74	5.27	5.82	7.32	19.03	19.59	20.12	20.67	22.17
4H	2H	10.04	10.71	11.12	11.78	13.24	16.26	16.93	17.34	18.00	19.46
	3H	11.60	12.16	12.69	13.26	14.73	18.29	18.85	19.37	19.94	21.42
	4H	11.69	12.21	12.79	13.30	14.79	19.04	19.55	20.13	20.64	22.14
	6H	11.70	12.14	12.80	13.25	14.74	19.56	20.00	20.66	21.12	22.60
	8H	11.68	12.09	12.78	13.19	14.70	19.71	20.13	20.82	21.23	22.74
	12H	11.63	12.00	12.75	13.12	14.63	19.80	20.17	20.91	21.29	22.80
8H	4H	13.12	13.53	14.22	14.64	16.14	19.09	19.51	20.19	20.61	22.12
	6H	13.36	13.70	14.48	14.85	16.35	19.71	20.05	20.83	21.19	22.70
	8H	13.38	13.68	14.51	14.80	16.33	19.92	20.22	21.05	21.34	22.87
	12H	13.34	13.61	14.48	14.73	16.29	20.05	20.31	21.18	21.44	23.00
12H	4H	13.26	13.63	14.38	14.75	16.26	19.04	19.42	20.16	20.53	22.04
	6H	13.61	13.91	14.74	15.04	16.56	19.69	19.99	20.82	21.12	22.64
	8H	13.68	13.94	14.81	15.07	16.63	19.91	20.17	21.04	21.29	22.85