

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: P937471

Luminaire Tested: SQ4-FB-100U-050D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937471
REPORT IS A COMBINATION OF REPORTS P933573 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

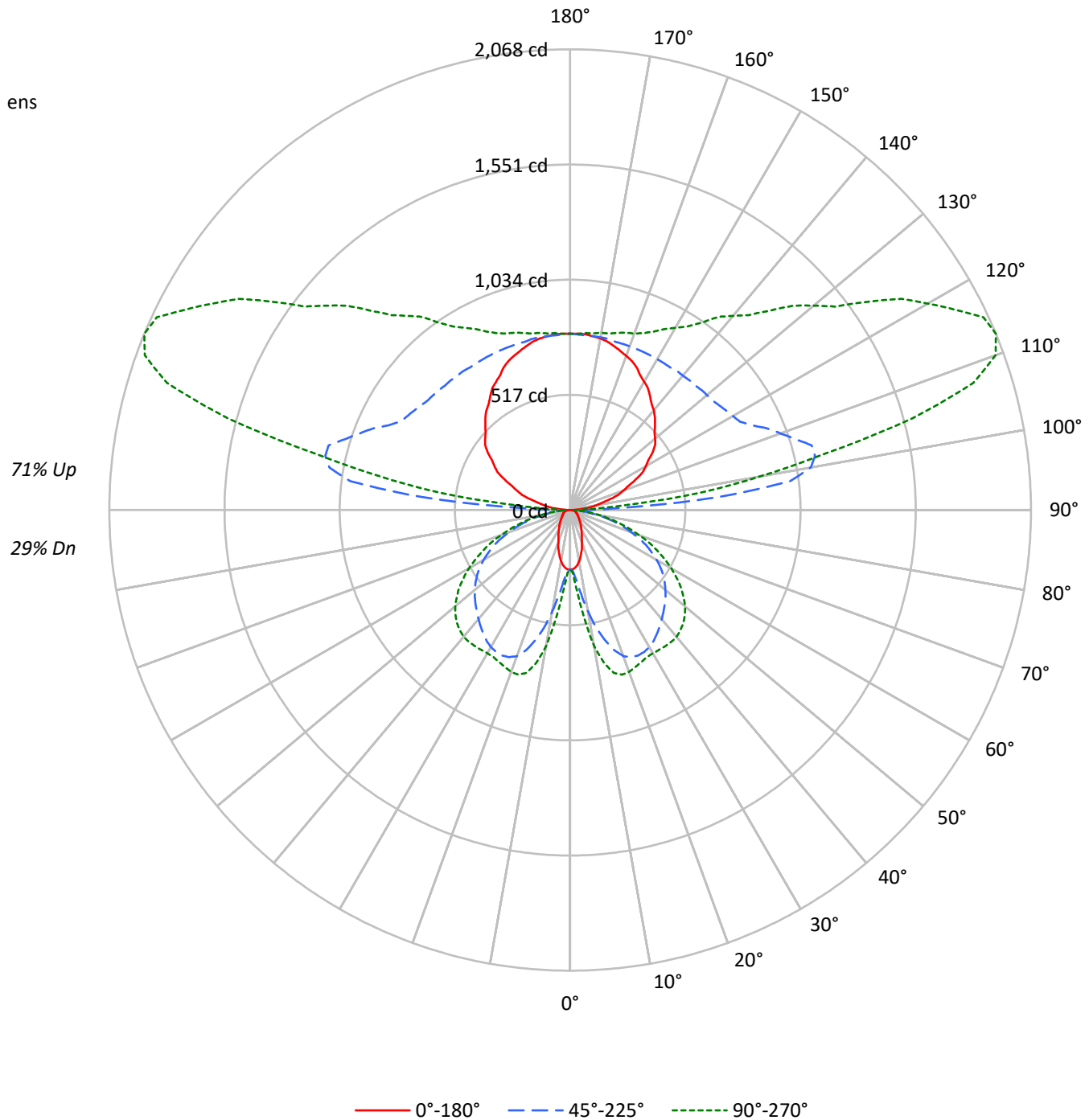
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7199.4 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 61.8
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: P937471
CATALOG NUMBER: SQ4-FB-100U-050D-935-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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			
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°	1649	1649	1649
5°	1610	1905	2216
10°	1460	2777	3674
15°	1240	3626	4436
20°	1010	4202	4521
25°	842	4395	4430
30°	710	4423	4421
35°	627	4347	4536
40°	546	4251	4654
45°	494	4180	4672
50°	453	4115	4595
55°	434	4022	4391
60°	444	3844	4069
65°	459	3573	3627
70°	489	3114	3065
75°	540	2537	2391
80°	586	1757	1612
85°	513	932	824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4672 cd/sqm



TEST NUMBER: P937471

CATALOG NUMBER: SQ4-FB-100U-050D-935-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.5	0.5
10°-20°	152.8	2.1
20°-30°	267.3	3.7
30°-40°	344.1	4.8
40°-50°	384.3	5.3
50°-60°	368.1	5.1
60°-70°	291.7	4.1
70°-80°	171.5	2.4
80°-90°	50.7	0.7
90°-100°	386.1	5.4
100°-110°	1015.0	14.1
110°-120°	1052.5	14.6
120°-130°	844.2	11.7
130°-140°	662.4	9.2
140°-150°	508.4	7.1
150°-160°	366.2	5.1
160°-170°	224.0	3.1
170°-180°	75.7	1.1
0°-30°	454.5	6.3
0°-40°	798.6	11.1
0°-60°	1551.0	21.5
0°-90°	2064.9	28.7
90°-120°	2453.6	34.1
90°-150°	4468.7	62.1
90°-180°	5135.0	71.3
0°-180°	7199.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	266	266	266	266	266	
5°	260	278	314	355	368	24
15°	194	359	605	734	757	54
25°	124	407	721	752	753	57
35°	84	389	679	717	746	52
45°	57	310	600	687	718	44
55°	41	197	509	591	608	38
65°	32	104	378	425	431	32
75°	24	64	207	228	229	25
85°	9	20	52	57	57	9
90°	5	15	40	20	20	5
95°	51	200	665	343	233	57
105°	183	277	1122	1704	1589	194
115°	325	394	899	1793	2047	321
125°	452	507	818	1382	1630	401
135°	538	593	792	1115	1265	417
145°	625	664	782	952	1026	391
155°	706	726	782	858	883	324
165°	762	772	782	813	823	215
175°	792	792	787	797	797	75
180°	792	792	792	792	792	



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CATALOG NUMBER: SQ4-FB-100U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5	266.5
2.5°	266.5	266.5	268.2	269.1	270.9	271.7	273.4	275.1	280.2	281.1	282.8
5°	259.7	263.1	274.3	278.5	290.5	306.8	313.6	324.8	348.0	354.8	359.1
7.5°	249.4	257.1	284.5	291.4	321.4	364.2	382.2	406.2	443.0	461.1	475.7
10°	233.1	249.4	298.2	314.6	363.4	428.5	462.0	495.4	551.1	575.9	585.3
12.5°	215.1	241.7	312.8	335.1	405.4	500.5	540.8	577.7	641.0	674.4	679.6
15°	194.5	230.6	326.5	359.1	449.9	560.4	605.0	650.5	709.6	733.6	739.6
17.5°	176.5	221.9	339.4	373.7	484.2	614.5	659.9	697.6	745.6	761.9	766.1
20°	154.3	208.2	348.0	392.5	520.2	653.9	697.6	726.8	759.3	769.6	771.3
22.5°	137.9	193.7	353.1	399.3	544.2	677.9	714.7	737.8	760.2	763.6	764.4
25°	124.3	177.4	352.2	407.1	564.8	692.4	720.7	737.8	750.7	752.4	752.4
27.5°	111.4	159.4	348.8	408.8	580.2	695.9	718.2	730.2	736.1	739.6	739.6
30°	100.3	142.3	340.2	405.4	587.0	692.4	710.5	716.4	722.4	727.6	730.2
32.5°	91.7	126.0	327.3	398.5	587.9	683.9	696.8	700.2	708.7	720.7	725.1
35°	84.0	109.7	312.8	389.1	582.8	670.2	678.7	682.2	699.3	717.3	723.3
37.5°	76.3	97.7	293.9	372.8	575.0	653.9	659.9	665.9	692.4	713.9	720.7
40°	68.6	87.4	271.7	354.8	563.1	634.1	639.3	648.7	683.9	708.7	715.6
42.5°	62.5	78.8	247.7	335.9	547.6	611.9	619.6	633.3	673.6	700.2	707.8
45°	57.4	70.3	221.9	310.2	527.9	588.7	599.9	618.7	661.6	687.3	694.1
47.5°	52.3	64.2	195.4	283.6	506.5	565.6	580.2	601.6	645.3	670.2	676.1
50°	48.0	58.3	168.9	255.3	483.3	540.8	557.9	580.2	624.8	647.9	655.6
52.5°	44.6	53.2	144.0	227.1	456.8	515.0	534.8	557.9	599.9	622.2	627.3
55°	41.2	48.8	122.5	197.1	429.3	487.6	509.1	531.3	572.5	591.3	594.8
57.5°	39.4	45.4	104.5	168.9	400.2	456.8	480.8	501.3	539.9	554.5	557.9
60°	36.9	42.9	90.8	144.8	368.5	427.6	448.2	468.8	501.3	513.3	515.9
62.5°	34.3	41.2	80.6	121.7	335.9	393.4	413.9	432.8	460.2	468.8	472.2
65°	32.5	39.4	72.8	104.5	302.5	357.3	377.9	394.2	416.5	425.1	426.8
67.5°	30.8	37.7	66.9	90.0	269.1	321.4	336.8	352.2	369.3	377.9	378.8
70°	28.3	36.0	61.7	79.7	234.8	280.2	293.1	309.4	323.1	327.3	330.0
72.5°	26.6	33.4	58.3	72.0	199.7	240.8	252.8	262.2	274.3	278.5	278.5
75°	24.0	30.0	54.9	64.2	163.7	197.1	207.4	216.8	226.2	228.0	225.4
77.5°	21.4	26.6	47.1	54.0	127.7	156.0	164.5	169.7	177.4	179.1	179.9
80°	18.0	23.2	36.9	42.0	92.5	114.8	120.8	125.2	132.0	132.0	133.7
82.5°	13.7	18.0	26.6	30.0	62.5	78.8	84.0	86.6	90.8	90.8	90.8
85°	8.6	11.2	17.1	19.7	37.7	48.0	51.5	52.3	55.7	56.6	56.6
87.5°	4.3	6.0	11.2	12.0	19.7	24.9	24.9	26.6	26.6	25.7	24.9
90°	5.3	9.5	13.8	14.9	23.4	34.8	40.4	35.9	26.9	20.2	20.2
92.5°	21.3	57.4	93.5	102.6	144.2	199.7	227.5	199.4	143.1	101.0	97.0
95°	51.0	117.2	183.4	199.9	354.9	561.6	665.0	593.4	450.2	342.8	330.7
97.5°	88.3	146.6	205.0	219.6	478.1	822.8	995.1	949.9	859.4	791.5	768.3
100°	117.0	169.9	222.8	236.0	522.9	905.3	1096.6	1099.9	1106.6	1111.5	1083.9
102.5°	141.4	190.8	240.2	252.5	543.5	931.4	1125.3	1183.0	1298.3	1384.8	1361.2
105°	182.8	224.7	266.5	277.0	558.7	934.4	1122.2	1251.4	1509.8	1703.7	1691.0
107.5°	225.4	264.4	303.4	313.1	561.6	892.7	1058.4	1238.6	1599.1	1869.5	1872.6
110°	254.1	289.3	324.5	333.3	557.3	855.9	1005.2	1206.7	1609.8	1912.1	1925.3



TEST NUMBER: P937471

CATALOG NUMBER: SQ4-FB-100U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	282.3	315.8	349.4	357.8	557.5	823.7	956.8	1163.1	1575.6	1885.0	1905.2
115°	324.8	355.7	386.6	394.4	562.6	786.7	898.9	1097.5	1495.0	1793.0	1821.2
117.5°	366.8	394.9	423.0	430.0	573.0	763.6	859.0	1038.3	1396.9	1665.9	1697.2
120°	391.2	417.7	444.1	450.8	581.6	755.9	843.1	1006.9	1334.6	1580.4	1610.7
122.5°	415.2	441.8	468.6	475.2	593.8	751.8	830.9	978.4	1273.5	1494.7	1524.7
125°	451.8	476.2	500.6	506.6	610.3	748.5	817.6	942.9	1193.6	1381.6	1409.2
127.5°	481.6	506.2	530.8	536.9	626.7	746.5	806.4	914.0	1129.2	1290.7	1314.0
130°	497.6	524.1	550.5	557.1	638.8	747.7	802.2	897.9	1089.5	1233.3	1254.7
132.5°	514.0	540.5	566.9	573.6	648.5	748.5	798.4	884.2	1055.7	1184.4	1203.6
135°	538.5	562.6	586.7	592.7	659.2	747.7	792.0	863.8	1007.5	1115.3	1131.9
137.5°	563.4	587.3	611.2	617.2	675.1	752.4	791.0	851.7	973.2	1064.2	1077.8
140°	584.2	606.2	628.2	633.6	684.8	753.1	787.2	839.7	944.6	1023.3	1035.9
142.5°	600.1	620.5	640.8	645.9	693.0	755.8	787.2	833.3	925.4	994.5	1005.4
145°	624.6	642.3	660.0	664.5	703.7	755.9	782.0	819.6	895.0	951.5	959.8
147.5°	649.1	666.3	683.5	687.8	719.2	761.0	782.0	811.6	870.9	915.4	922.2
150°	665.0	680.6	696.2	700.1	727.4	763.7	782.0	807.0	857.0	894.6	900.1
152.5°	681.5	693.4	705.1	708.1	732.7	765.5	782.0	803.4	846.1	878.2	882.3
155°	706.0	714.7	723.3	725.6	744.4	769.4	782.0	799.0	833.0	858.5	861.3
157.5°	724.0	732.5	741.0	743.1	756.1	773.4	782.0	795.2	821.7	841.5	843.5
160°	736.2	742.9	749.5	751.1	761.4	775.1	782.0	793.3	816.0	833.0	834.1
162.5°	748.5	753.4	758.4	759.6	767.1	777.0	782.0	791.5	810.7	825.0	826.0
165°	761.8	766.2	770.7	771.8	775.2	779.8	782.0	788.8	802.5	812.8	813.9
167.5°	774.0	776.1	778.2	778.7	781.5	785.4	787.2	791.8	800.7	807.4	808.0
170°	782.0	784.1	786.2	786.7	786.9	787.2	787.2	791.8	800.7	807.4	807.4
172.5°	786.2	786.7	787.2	787.2	787.2	787.2	787.2	790.8	797.9	803.2	802.8
175°	792.0	792.0	792.0	792.0	790.4	788.3	787.2	789.5	794.0	797.4	797.4
177.5°	792.0	792.0	792.0	792.0	790.8	789.2	788.4	790.1	793.6	796.3	795.8
180°	792.0	792.0	792.0	792.0	792.0	792.0	792.0	792.0	792.0	792.0	792.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	266.5	266.5
2.5°	284.5	282.8
5°	365.9	367.6
7.5°	492.8	491.9
10°	612.8	620.4
12.5°	700.2	701.9
15°	753.3	756.7
17.5°	773.9	774.7
20°	774.7	773.0
22.5°	765.3	763.6
25°	754.2	753.3
27.5°	743.9	744.7
30°	739.6	742.2
32.5°	739.6	743.9
35°	741.3	745.6
37.5°	740.5	745.6
40°	737.0	743.0
42.5°	727.6	731.9
45°	713.0	718.2
47.5°	694.1	697.6
50°	670.2	673.6
52.5°	640.2	641.0
55°	604.2	607.6
57.5°	565.6	566.5
60°	522.8	525.3
62.5°	477.4	477.4
65°	429.3	431.0
67.5°	379.7	383.9
70°	329.1	330.0
72.5°	279.4	279.4
75°	228.0	228.8
77.5°	179.1	179.1
80°	132.8	133.7
82.5°	91.7	93.4
85°	57.4	57.4
87.5°	26.6	24.0
90°	20.2	20.2
92.5°	80.9	64.8
95°	282.0	233.4
97.5°	675.7	583.1
100°	973.6	863.2
102.5°	1266.6	1172.1
105°	1640.2	1589.4
107.5°	1885.0	1897.2
110°	1978.3	2031.2



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CATALOG NUMBER: SQ4-FB-100U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1986.5	2067.8
115°	1933.9	2046.6
117.5°	1822.2	1947.2
120°	1732.2	1853.6
122.5°	1644.5	1764.3
125°	1519.5	1629.8
127.5°	1407.1	1500.1
130°	1340.8	1426.8
132.5°	1280.6	1357.7
135°	1198.3	1264.6
137.5°	1132.1	1186.5
140°	1086.8	1137.6
142.5°	1049.2	1092.9
145°	992.9	1026.0
147.5°	949.6	977.1
150°	922.4	944.6
152.5°	899.1	915.9
155°	872.4	883.4
157.5°	851.2	859.0
160°	838.6	843.1
162.5°	830.3	834.5
165°	818.4	822.9
167.5°	809.8	811.7
170°	807.4	807.4
172.5°	801.1	799.5
175°	797.4	797.4
177.5°	793.9	792.0
180°	792.0	792.0



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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	0.36	1.08	1.48	2.19	3.74	13.53	14.25	14.64	15.36	16.90
	3H	1.06	1.70	2.18	2.82	4.38	15.35	16.00	16.48	17.12	18.68
	4H	1.35	1.96	2.48	3.08	4.65	15.99	16.60	17.12	17.72	19.29
	6H	1.59	2.15	2.73	3.28	4.86	16.41	16.97	17.55	18.09	19.67
	8H	1.66	2.19	2.80	3.33	4.90	16.52	17.06	17.67	18.20	19.77
	12H	1.67	2.18	2.82	3.31	4.90	16.58	17.09	17.73	18.22	19.82
4H	2H	7.55	8.16	8.69	9.29	10.85	13.79	14.40	14.93	15.52	17.08
	3H	9.11	9.62	10.25	10.77	12.34	15.81	16.32	16.96	17.47	19.05
	4H	9.20	9.67	10.35	10.80	12.40	16.57	17.04	17.72	18.18	19.78
	6H	9.20	9.60	10.35	10.76	12.35	17.10	17.50	18.25	18.66	20.25
	8H	9.17	9.55	10.33	10.70	12.30	17.25	17.63	18.41	18.78	20.39
	12H	9.12	9.46	10.29	10.63	12.24	17.34	17.68	18.51	18.84	20.45
8H	4H	10.62	11.00	11.78	12.15	13.76	16.62	17.00	17.77	18.15	19.75
	6H	10.86	11.17	12.04	12.37	13.97	17.24	17.55	18.41	18.74	20.34
	8H	10.88	11.15	12.06	12.32	13.94	17.45	17.72	18.63	18.90	20.52
	12H	10.84	11.08	12.02	12.25	13.90	17.59	17.82	18.77	18.99	20.65
12H	4H	10.76	11.10	11.93	12.26	13.87	16.56	16.91	17.74	18.07	19.68
	6H	11.12	11.39	12.30	12.56	14.18	17.22	17.49	18.40	18.66	20.28
	8H	11.18	11.42	12.36	12.59	14.24	17.44	17.68	18.62	18.85	20.50