

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: P938358

Luminaire Tested: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938358
REPORT IS A COMBINATION OF REPORTS P933630 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

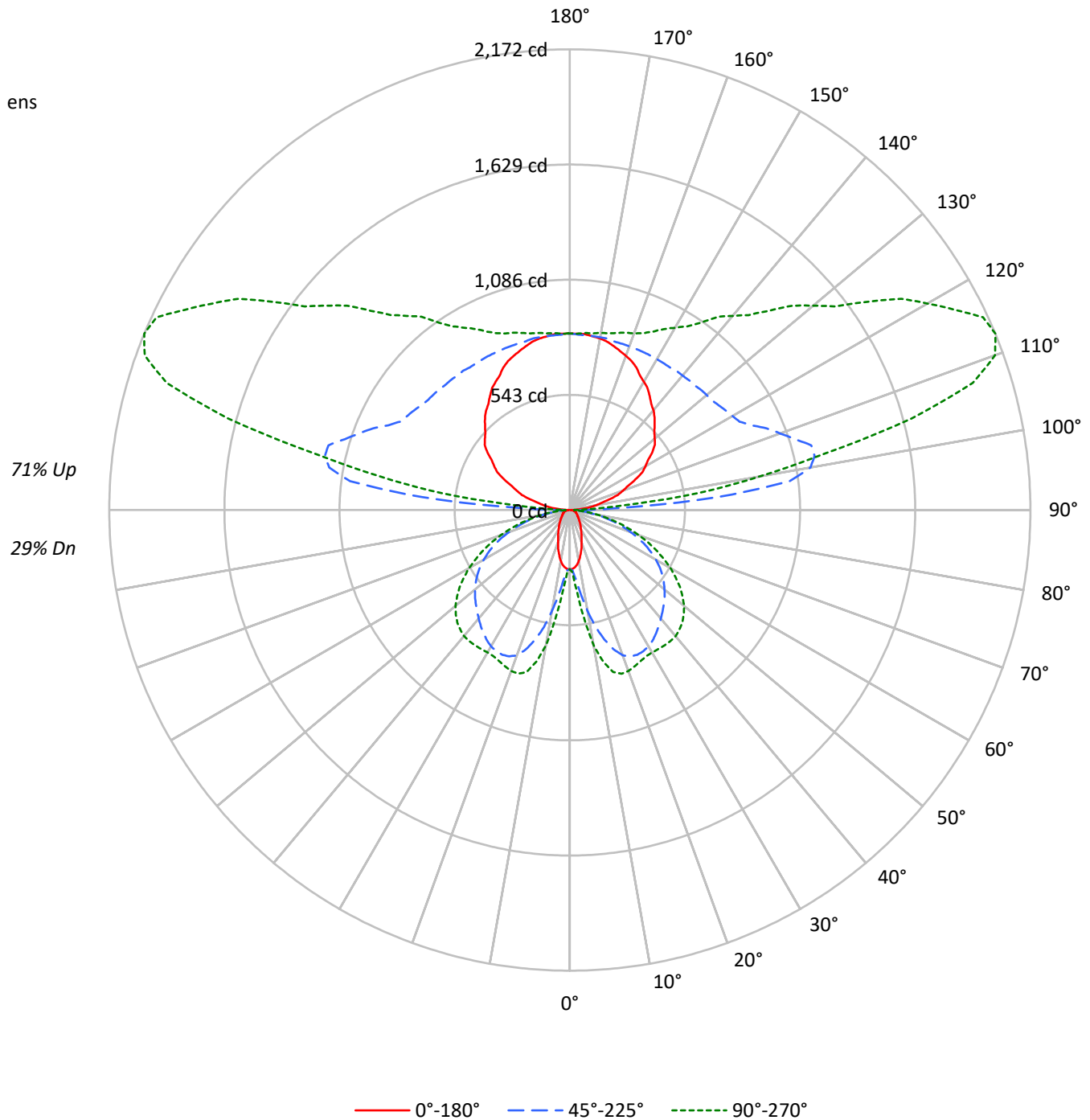
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7551.0 lumens
Efficiency: N/A
Efficacy: 118.7 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): 63.6
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: P938358
CATALOG NUMBER: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-4-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P938358

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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	36	36	36	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	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	17	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	10	9	6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2583	2583	2583
5°	2522	2984	3473
10°	2284	4347	5758
15°	1939	5675	6953
20°	1577	6571	7086
25°	1314	6872	6942
30°	1107	6909	6928
35°	976	6789	7107
40°	849	6635	7292
45°	768	6519	7321
50°	702	6414	7200
55°	672	6264	6881
60°	685	5980	6376
65°	709	5554	5684
70°	749	4834	4802
75°	823	3932	3747
80°	880	2716	2526
85°	745	1433	1293

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7321 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.0	0.5
10°-20°	159.6	2.1
20°-30°	279.2	3.7
30°-40°	359.4	4.8
40°-50°	401.5	5.3
50°-60°	384.5	5.1
60°-70°	304.7	4.0
70°-80°	179.2	2.4
80°-90°	53.0	0.7
90°-100°	405.6	5.4
100°-110°	1066.3	14.1
110°-120°	1105.6	14.6
120°-130°	886.8	11.7
130°-140°	695.8	9.2
140°-150°	534.1	7.1
150°-160°	384.6	5.1
160°-170°	235.3	3.1
170°-180°	79.5	1.1
0°-30°	474.9	6.3
0°-40°	834.3	11.0
0°-60°	1620.3	21.5
0°-90°	2157.2	28.6
90°-120°	2577.5	34.1
90°-150°	4694.3	62.2
90°-180°	5394.0	71.4
0°-180°	7551.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	278	278	278	278	278	
5°	271	291	328	371	384	25
15°	203	375	632	766	791	57
25°	130	425	753	786	787	60
35°	88	406	709	749	779	55
45°	60	324	627	718	750	46
55°	43	206	532	618	635	39
65°	34	109	395	444	450	34
75°	25	67	217	238	239	26
85°	9	21	54	59	60	10
90°	6	16	42	21	21	5
95°	54	210	699	360	245	60
105°	192	291	1179	1790	1670	204
115°	341	414	944	1884	2150	337
125°	475	532	859	1451	1712	421
135°	566	623	832	1172	1328	438
145°	656	698	821	1000	1078	411
155°	742	762	821	902	928	341
165°	800	811	821	854	864	226
175°	832	832	827	838	838	79
180°	832	832	832	832	832	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4
2.5°	278.4	278.4	280.2	281.1	282.9	283.8	285.6	287.4	292.8	293.7	295.5
5°	271.3	274.9	286.5	291.0	303.5	320.5	327.7	339.3	363.5	370.7	375.1
7.5°	260.5	268.6	297.2	304.4	335.7	380.5	399.3	424.4	462.9	481.7	496.9
10°	243.5	260.5	311.6	328.6	379.6	447.7	482.6	517.5	575.7	601.6	611.5
12.5°	224.7	252.5	326.8	350.1	423.5	522.9	564.9	603.4	669.7	704.6	710.0
15°	203.2	240.8	341.1	375.1	470.0	585.5	632.1	679.5	741.3	766.4	772.7
17.5°	184.4	231.9	354.5	390.4	505.9	641.9	689.4	728.8	778.9	795.9	800.4
20°	161.2	217.6	363.5	410.1	543.5	683.1	728.8	759.2	793.2	804.0	805.8
22.5°	144.1	202.3	368.9	417.2	568.5	708.2	746.7	770.9	794.1	797.7	798.6
25°	129.8	185.3	368.0	425.3	590.0	723.4	753.0	770.9	784.3	786.1	786.1
27.5°	116.4	166.5	364.4	427.1	606.1	727.0	750.3	762.8	769.1	772.7	772.7
30°	104.8	148.6	355.4	423.5	613.3	723.4	742.2	748.5	754.7	760.1	762.8
32.5°	95.8	131.6	342.0	416.3	614.2	714.5	727.9	731.5	740.4	753.0	757.4
35°	87.7	114.6	326.8	406.5	608.8	700.1	709.1	712.7	730.6	749.4	755.6
37.5°	79.7	102.1	307.1	389.5	600.8	683.1	689.4	695.7	723.4	745.8	753.0
40°	71.6	91.3	283.8	370.7	588.2	662.5	667.9	677.8	714.5	740.4	747.6
42.5°	65.4	82.4	258.7	351.0	572.1	639.3	647.3	661.6	703.7	731.5	739.5
45°	60.0	73.4	231.9	324.1	551.5	615.1	626.7	646.4	691.2	718.0	725.2
47.5°	54.6	67.1	204.1	296.3	529.1	590.9	606.1	628.5	674.2	700.1	706.4
50°	50.1	60.9	176.4	266.8	505.0	564.9	582.8	606.1	652.7	676.9	684.9
52.5°	46.6	55.5	150.4	237.3	477.2	538.1	558.7	582.8	626.7	650.0	655.4
55°	43.0	51.0	128.0	205.9	448.6	509.4	531.8	555.1	598.1	617.8	621.3
57.5°	41.2	47.5	109.2	176.4	418.1	477.2	502.3	523.8	564.0	579.3	582.8
60°	38.5	44.8	94.9	151.3	385.0	446.8	468.2	489.7	523.8	536.3	539.0
62.5°	35.8	43.0	84.2	127.1	351.0	410.9	432.4	452.1	480.8	489.7	493.3
65°	34.0	41.2	76.1	109.2	316.0	373.3	394.8	411.8	435.1	444.1	445.9
67.5°	32.2	39.4	69.8	94.0	281.1	335.7	351.9	368.0	385.9	394.8	395.7
70°	29.5	37.6	64.5	83.3	245.3	292.8	306.2	323.2	337.5	342.0	344.7
72.5°	27.8	34.9	60.9	75.2	208.6	251.6	264.1	274.0	286.5	291.0	291.0
75°	25.1	31.3	57.3	67.1	171.0	205.9	216.7	226.5	236.4	238.2	235.5
77.5°	22.4	27.8	49.2	56.4	133.4	162.9	171.9	177.3	185.3	187.1	188.0
80°	18.8	24.2	38.5	43.9	96.7	120.0	126.2	130.7	137.9	137.9	139.7
82.5°	14.3	18.8	27.8	31.3	65.4	82.4	87.7	90.4	94.9	94.9	94.9
85°	9.0	11.6	17.9	20.6	39.4	50.1	53.7	54.6	58.2	59.1	59.1
87.5°	4.5	6.3	11.6	12.5	20.6	26.0	26.0	27.8	27.8	26.9	26.0
90°	5.6	10.0	14.5	15.7	24.6	36.5	42.4	37.7	28.3	21.2	21.2
92.5°	22.3	60.3	98.3	107.8	151.5	209.8	239.0	209.4	150.4	106.1	101.9
95°	53.6	123.1	192.6	210.0	372.8	590.0	698.6	623.4	473.0	360.2	347.4
97.5°	92.7	154.0	215.3	230.6	502.2	864.3	1045.4	997.8	902.7	831.5	807.1
100°	122.8	178.4	234.0	247.9	549.3	951.1	1152.0	1155.5	1162.5	1167.7	1138.7
102.5°	148.5	200.5	252.3	265.3	570.9	978.4	1182.2	1242.7	1363.8	1454.7	1429.9
105°	192.1	236.1	280.0	291.0	586.9	981.4	1178.8	1314.5	1586.0	1789.7	1776.4
107.5°	236.8	277.7	318.7	328.9	589.9	937.8	1111.8	1301.2	1679.9	1964.0	1967.2
110°	266.9	303.9	340.9	350.2	585.4	899.1	1055.9	1267.7	1691.1	2008.6	2022.5



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CATALOG NUMBER: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	296.5	331.8	367.1	375.9	585.6	865.3	1005.2	1221.8	1655.2	1980.2	2001.5
115°	341.2	373.7	406.2	414.4	591.0	826.6	944.3	1153.0	1570.5	1883.6	1913.2
117.5°	385.3	414.9	444.4	451.8	602.0	802.3	902.4	1090.8	1467.5	1750.1	1782.9
120°	410.9	438.8	466.5	473.5	610.9	794.1	885.6	1057.7	1402.0	1660.2	1692.1
122.5°	436.1	464.1	492.2	499.2	623.8	789.8	872.8	1027.8	1337.8	1570.3	1601.7
125°	474.7	500.2	525.8	532.2	641.0	786.3	858.9	990.5	1253.8	1451.3	1480.3
127.5°	505.9	531.7	557.5	564.0	658.3	784.2	847.1	960.2	1186.3	1355.9	1380.3
130°	522.7	550.4	578.2	585.2	671.0	785.5	842.7	943.3	1144.6	1295.5	1318.1
132.5°	540.0	567.8	595.6	602.5	681.2	786.3	838.7	928.8	1109.0	1244.1	1264.4
135°	565.7	591.0	616.2	622.6	692.4	785.5	832.0	907.5	1058.3	1171.5	1189.0
137.5°	591.9	617.0	642.0	648.3	709.2	790.4	830.9	894.7	1022.3	1118.0	1132.2
140°	613.7	636.8	659.9	665.7	719.5	791.2	827.0	882.1	992.3	1074.9	1088.3
142.5°	630.5	651.8	673.1	678.5	728.0	794.0	827.0	875.4	972.2	1044.8	1056.3
145°	656.2	674.8	693.3	698.0	739.2	794.1	821.4	861.0	940.2	999.5	1008.2
147.5°	681.8	700.0	718.0	722.6	755.6	799.5	821.4	852.6	914.8	961.6	968.7
150°	698.6	715.0	731.3	735.4	764.1	802.3	821.4	847.8	900.3	939.8	945.6
152.5°	715.9	728.3	740.7	743.8	769.7	804.2	821.4	843.9	888.9	922.5	926.9
155°	741.6	750.8	759.9	762.3	782.0	808.3	821.4	839.4	875.1	901.8	904.8
157.5°	760.6	769.5	778.4	780.6	794.2	812.4	821.4	835.3	863.1	883.9	886.0
160°	773.4	780.4	787.3	789.0	799.9	814.3	821.4	833.4	857.2	875.0	876.2
162.5°	786.3	791.5	796.6	798.0	805.8	816.3	821.4	831.5	851.6	866.7	867.7
165°	800.2	804.9	809.6	810.8	814.4	819.1	821.4	828.6	843.0	853.8	854.9
167.5°	813.0	815.3	817.5	818.0	821.0	825.0	827.0	831.7	841.1	848.2	848.8
170°	821.4	823.7	825.9	826.5	826.6	826.9	827.0	831.7	841.1	848.2	848.2
172.5°	825.9	826.4	826.9	827.0	827.0	827.0	827.0	830.8	838.2	843.7	843.3
175°	832.0	832.0	832.0	832.0	830.3	828.1	827.0	829.3	834.1	837.7	837.7
177.5°	832.0	832.0	832.0	832.0	830.8	829.1	828.2	830.0	833.7	836.5	836.0
180°	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0	832.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	278.4	278.4
2.5°	297.2	295.5
5°	382.3	384.1
7.5°	514.8	513.9
10°	640.1	648.2
12.5°	731.5	733.3
15°	787.0	790.6
17.5°	808.5	809.4
20°	809.4	807.6
22.5°	799.5	797.7
25°	787.9	787.0
27.5°	777.1	778.0
30°	772.7	775.3
32.5°	772.7	777.1
35°	774.4	778.9
37.5°	773.5	778.9
40°	770.0	776.2
42.5°	760.1	764.6
45°	744.9	750.3
47.5°	725.2	728.8
50°	700.1	703.7
52.5°	668.8	669.7
55°	631.2	634.8
57.5°	590.9	591.8
60°	546.1	548.8
62.5°	498.7	498.7
65°	448.6	450.3
67.5°	396.6	401.1
70°	343.8	344.7
72.5°	291.9	291.9
75°	238.2	239.0
77.5°	187.1	187.1
80°	138.8	139.7
82.5°	95.8	97.6
85°	60.0	60.0
87.5°	27.8	25.1
90°	21.2	21.2
92.5°	85.0	68.1
95°	296.3	245.1
97.5°	709.9	612.6
100°	1022.8	906.9
102.5°	1330.6	1231.3
105°	1723.0	1669.7
107.5°	1980.1	1993.0
110°	2078.1	2133.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2086.9	2172.2
115°	2031.6	2149.9
117.5°	1914.2	2045.4
120°	1819.6	1947.2
122.5°	1727.6	1853.4
125°	1596.2	1712.1
127.5°	1478.1	1575.8
130°	1408.4	1498.8
132.5°	1345.2	1426.1
135°	1258.7	1328.5
137.5°	1189.3	1246.4
140°	1141.6	1195.0
142.5°	1102.2	1148.1
145°	1043.0	1077.8
147.5°	997.6	1026.4
150°	969.0	992.3
152.5°	944.6	962.1
155°	916.4	928.1
157.5°	894.1	902.4
160°	880.9	885.6
162.5°	872.2	876.7
165°	859.7	864.4
167.5°	850.7	852.7
170°	848.2	848.2
172.5°	841.6	839.9
175°	837.7	837.7
177.5°	834.0	832.0
180°	832.0	832.0



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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	1.90	2.61	3.02	3.73	5.27	15.04	15.75	16.15	16.87	18.41
	3H	2.59	3.24	3.72	4.36	5.92	16.85	17.49	17.98	18.62	20.18
	4H	2.89	3.50	4.02	4.62	6.19	17.48	18.09	18.61	19.21	20.78
	6H	3.13	3.69	4.27	4.82	6.40	17.89	18.45	19.03	19.58	21.16
	8H	3.19	3.73	4.34	4.87	6.44	18.00	18.53	19.15	19.68	21.25
	12H	3.21	3.71	4.36	4.85	6.44	18.06	18.56	19.21	19.70	21.29
4H	2H	9.07	9.68	10.21	10.80	12.37	15.30	15.91	16.44	17.03	18.60
	3H	10.63	11.14	11.78	12.29	13.87	17.31	17.82	18.46	18.97	20.55
	4H	10.72	11.19	11.87	12.32	13.92	18.06	18.53	19.21	19.67	21.27
	6H	10.72	11.12	11.88	12.28	13.87	18.58	18.98	19.74	20.14	21.73
	8H	10.69	11.07	11.85	12.22	13.83	18.73	19.11	19.89	20.26	21.87
	12H	10.64	10.98	11.81	12.15	13.76	18.81	19.15	19.98	20.32	21.93
8H	4H	12.14	12.51	13.29	13.67	15.27	18.11	18.49	19.27	19.64	21.25
	6H	12.37	12.69	13.55	13.88	15.48	18.72	19.03	19.90	20.23	21.83
	8H	12.39	12.66	13.57	13.83	15.46	18.93	19.20	20.11	20.38	22.00
	12H	12.35	12.59	13.54	13.76	15.42	19.06	19.30	20.25	20.47	22.13
12H	4H	12.27	12.61	13.44	13.78	15.39	18.06	18.40	19.23	19.56	21.17
	6H	12.63	12.90	13.81	14.07	15.69	18.70	18.97	19.88	20.15	21.77
	8H	12.69	12.93	13.88	14.10	15.75	18.92	19.16	20.10	20.33	21.98