

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: P937670

Luminaire Tested: SQ4-FB-100U-100D-935-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937670
REPORT IS A COMBINATION OF REPORTS P933567 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-100D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

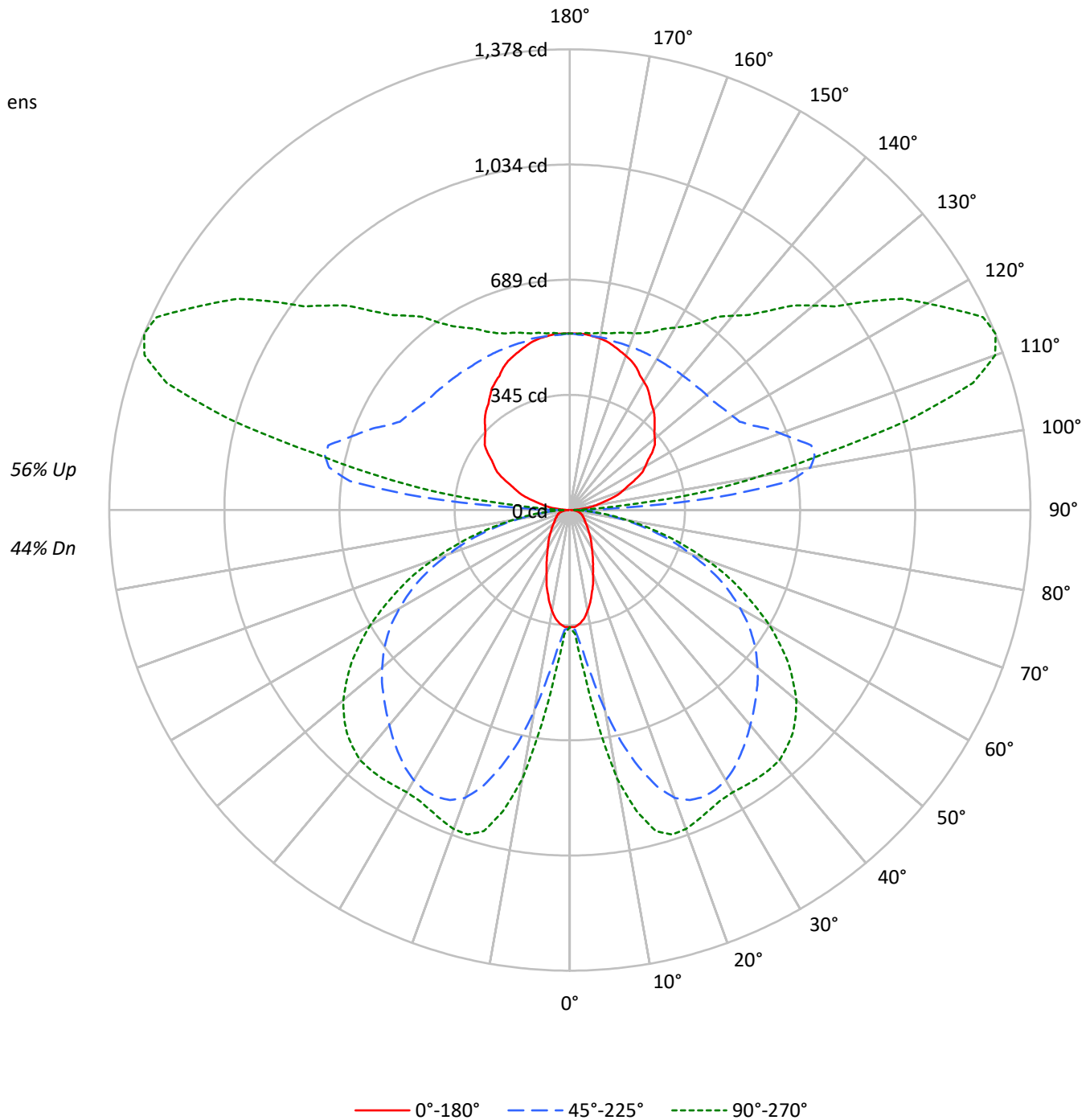
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6133.5 lumens
Efficiency: N/A
Efficacy: 105.8 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: General Diffuse

Input Watts (W): 58
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: P937670
CATALOG NUMBER: SQ4-FB-100U-100D-935-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





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CATALOG NUMBER: SQ4-FB-100U-100D-935-1D-UNV-STD-W-4

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44	44	44	44
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42	36	36	36	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	34	30	30	30	30
3	79	69	62	56	72	63	57	52	53	48	44	43	39	36	33	31	29	24	24	24	24
4	72	61	53	46	65	56	49	43	46	41	37	38	34	30	29	27	24	20	20	20	20
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21	17	17	17	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	20	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	24	20	25	20	17	19	16	14	11	11	11	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10	10	10	10
10	44	32	25	20	41	30	23	19	25	20	16	21	16	14	16	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3249	3249	3249
5°	3170	3752	4367
10°	2872	5465	7239
15°	2438	7135	8741
20°	1983	8263	8909
25°	1652	8639	8729
30°	1391	8688	8711
35°	1228	8537	8938
40°	1069	8342	9170
45°	965	8197	9206
50°	883	8066	9054
55°	843	7876	8652
60°	861	7521	8018
65°	892	6984	7147
70°	942	6078	6038
75°	1033	4944	4713
80°	1105	3415	3175
85°	927	1804	1625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9206 cd/sqm



TEST NUMBER: P937670

CATALOG NUMBER: SQ4-FB-100U-100D-935-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.3	0.7
10°-20°	200.7	3.3
20°-30°	351.1	5.7
30°-40°	452.0	7.4
40°-50°	504.8	8.2
50°-60°	483.5	7.9
60°-70°	383.2	6.2
70°-80°	225.3	3.7
80°-90°	64.6	1.1
90°-100°	257.4	4.2
100°-110°	676.7	11.0
110°-120°	701.7	11.4
120°-130°	562.8	9.2
130°-140°	441.6	7.2
140°-150°	339.0	5.5
150°-160°	244.1	4.0
160°-170°	149.4	2.4
170°-180°	50.5	0.8
0°-30°	597.1	9.7
0°-40°	1049.1	17.1
0°-60°	2037.4	33.2
0°-90°	2710.5	44.2
90°-120°	1635.7	26.7
90°-150°	2979.1	48.6
90°-180°	3423.0	55.8
0°-180°	6133.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	350	350	350	350	350	
5°	341	366	412	466	483	31
15°	256	472	795	964	994	71
25°	163	535	947	988	990	75
35°	110	511	892	942	980	69
45°	75	408	788	903	943	58
55°	54	259	669	777	798	49
65°	43	137	496	558	566	42
75°	32	84	272	300	301	33
85°	11	26	68	74	75	12
90°	4	10	27	14	14	4
95°	34	133	443	229	156	38
105°	122	185	748	1136	1060	129
115°	216	263	599	1195	1364	214
125°	301	338	545	921	1087	267
135°	359	395	528	744	843	278
145°	416	443	521	634	684	261
155°	471	484	521	572	589	216
165°	508	514	521	542	549	143
175°	528	528	525	532	532	50
180°	528	528	528	528	528	



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CATALOG NUMBER: SQ4-FB-100U-100D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1
2.5°	350.1	350.1	352.4	353.5	355.7	356.9	359.1	361.3	368.1	369.3	371.5
5°	341.1	345.7	360.2	365.8	381.6	403.0	412.0	426.7	457.1	466.0	471.7
7.5°	327.6	337.7	373.8	382.8	422.2	478.5	502.1	533.6	582.0	605.7	624.8
10°	306.2	327.6	391.7	413.1	477.3	562.9	606.8	650.7	723.9	756.5	768.9
12.5°	282.6	317.5	410.9	440.1	532.5	657.5	710.4	758.8	842.1	886.0	892.7
15°	255.5	302.8	428.9	471.7	591.0	736.3	794.8	854.5	932.2	963.7	971.5
17.5°	231.9	291.6	445.8	490.8	636.1	807.2	866.8	916.4	979.5	1000.8	1006.5
20°	202.6	273.6	457.1	515.6	683.4	859.0	916.4	954.7	997.4	1011.0	1013.2
22.5°	181.2	254.4	463.8	524.6	714.8	890.5	938.9	969.3	998.5	1003.1	1004.2
25°	163.2	233.0	462.7	534.7	741.9	909.6	946.7	969.3	986.2	988.4	988.4
27.5°	146.4	209.4	458.2	537.0	762.1	914.1	943.4	959.2	967.0	971.5	971.5
30°	131.7	186.8	447.0	532.5	771.1	909.6	933.3	941.1	949.0	955.8	959.2
32.5°	120.5	165.5	430.1	523.5	772.3	898.3	915.2	919.7	931.0	946.7	952.5
35°	110.3	144.1	410.9	511.1	765.5	880.4	891.6	896.1	918.6	942.3	950.2
37.5°	100.2	128.3	386.1	489.7	755.4	859.0	866.8	874.7	909.6	937.8	946.7
40°	90.1	114.8	356.9	466.0	739.6	833.1	839.8	852.3	898.3	931.0	940.0
42.5°	82.2	103.6	325.4	441.3	719.3	803.8	813.9	832.0	884.9	919.7	929.9
45°	75.4	92.3	291.6	407.5	693.4	773.4	788.0	812.8	869.1	902.9	911.9
47.5°	68.7	84.4	256.7	372.7	665.3	743.0	762.1	790.3	847.7	880.4	888.2
50°	63.0	76.6	221.8	335.5	634.9	710.4	732.9	762.1	820.7	851.1	861.2
52.5°	58.5	69.8	189.1	298.4	600.1	676.6	702.5	732.9	788.0	817.3	824.1
55°	54.0	64.2	161.0	258.9	564.0	640.5	668.7	698.0	752.1	776.8	781.3
57.5°	51.8	59.6	137.3	221.8	525.8	600.1	631.6	658.6	709.2	728.4	732.9
60°	48.4	56.3	119.4	190.3	484.1	561.7	588.8	615.8	658.6	674.4	677.7
62.5°	45.1	54.0	105.8	159.8	441.3	516.7	543.7	568.5	604.6	615.8	620.3
65°	42.8	51.8	95.7	137.3	397.4	469.5	496.5	517.8	547.2	558.4	560.6
67.5°	40.6	49.5	87.8	118.2	353.5	422.2	442.4	462.7	485.2	496.5	497.6
70°	37.1	47.3	81.0	104.7	308.4	368.1	385.0	406.4	424.4	430.1	433.4
72.5°	34.9	43.9	76.6	94.6	262.3	316.3	332.1	344.5	360.2	365.8	365.8
75°	31.5	39.4	72.1	84.4	215.0	258.9	272.5	284.8	297.2	299.5	296.1
77.5°	28.1	34.9	61.9	70.9	167.8	204.9	216.2	222.9	233.0	235.3	236.4
80°	23.6	30.4	48.4	55.1	121.6	150.9	158.7	164.4	173.4	173.4	175.6
82.5°	18.0	23.6	34.9	39.4	82.2	103.6	110.3	113.7	119.4	119.4	119.4
85°	11.2	14.7	22.5	25.9	49.5	63.0	67.6	68.7	73.2	74.3	74.3
87.5°	5.6	7.8	14.7	15.8	25.9	32.6	32.6	34.9	34.9	33.7	32.6
90°	3.6	6.4	9.2	9.9	15.6	23.2	26.9	23.9	18.0	13.5	13.5
92.5°	14.1	38.3	62.4	68.4	96.2	133.2	151.7	132.9	95.4	67.3	64.7
95°	34.0	78.1	122.3	133.3	236.6	374.4	443.3	395.6	300.2	228.6	220.5
97.5°	58.8	97.7	136.7	146.4	318.7	548.5	663.4	633.2	572.9	527.6	512.2
100°	78.0	113.2	148.5	157.4	348.6	603.6	731.1	733.3	737.7	741.0	722.6
102.5°	94.2	127.2	160.1	168.4	362.4	620.9	750.3	788.7	865.5	923.1	907.4
105°	121.9	149.8	177.6	184.6	372.5	622.9	748.1	834.3	1006.6	1135.8	1127.4
107.5°	150.3	176.3	202.3	208.7	374.4	595.1	705.5	825.8	1066.1	1246.4	1248.4
110°	169.4	192.9	216.3	222.2	371.5	570.6	670.1	804.5	1073.2	1274.7	1283.5



TEST NUMBER: P937670

CATALOG NUMBER: SQ4-FB-100U-100D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	188.2	210.5	232.9	238.5	371.6	549.1	637.9	775.4	1050.3	1256.6	1270.2
115°	216.5	237.1	257.7	262.9	375.1	524.6	599.3	731.8	996.7	1195.4	1214.1
117.5°	244.5	263.3	282.0	286.7	382.0	509.2	572.7	692.2	931.3	1110.7	1131.5
120°	260.8	278.4	296.1	300.5	387.7	504.0	562.1	671.3	889.7	1053.6	1073.9
122.5°	276.8	294.6	312.4	316.9	395.8	501.2	553.9	652.2	848.9	996.5	1016.4
125°	301.3	317.5	333.6	337.7	406.8	498.9	545.0	628.6	795.7	921.0	939.4
127.5°	321.0	337.4	353.8	357.9	417.8	497.7	537.6	609.4	752.8	860.4	875.9
130°	331.7	349.3	367.0	371.4	425.8	498.5	534.8	598.7	726.4	822.2	836.5
132.5°	342.7	360.3	377.9	382.4	432.3	498.9	532.2	589.4	703.8	789.5	802.4
135°	359.0	375.1	391.2	395.2	439.5	498.5	528.1	576.0	671.6	743.5	754.5
137.5°	375.6	391.6	407.4	411.4	450.0	501.6	527.3	567.8	648.7	709.5	718.5
140°	389.4	404.1	418.8	422.4	456.6	502.1	524.8	559.8	629.7	682.2	690.6
142.5°	400.1	413.6	427.2	430.6	462.0	503.9	524.8	555.5	616.9	663.0	670.4
145°	416.4	428.2	440.0	443.0	469.1	504.0	521.3	546.5	596.7	634.3	639.9
147.5°	432.7	444.2	455.6	458.5	479.5	507.4	521.3	541.1	580.6	610.3	614.9
150°	443.3	453.7	464.1	466.7	485.0	509.2	521.3	538.0	571.4	596.4	600.1
152.5°	454.3	462.1	470.0	472.0	488.5	510.3	521.3	535.6	564.0	585.4	588.2
155°	470.6	476.4	482.3	483.8	496.3	513.0	521.3	532.7	555.3	572.3	574.2
157.5°	482.7	488.4	494.0	495.4	504.0	515.5	521.3	530.1	547.8	561.0	562.2
160°	490.8	495.3	499.6	500.7	507.6	516.7	521.3	528.9	544.0	555.3	556.1
162.5°	498.9	502.3	505.6	506.4	511.4	518.0	521.3	527.7	540.4	550.0	550.6
165°	507.8	510.8	513.8	514.5	516.8	519.8	521.3	525.9	535.1	541.9	542.6
167.5°	516.0	517.4	518.9	519.2	521.1	523.6	524.8	527.8	533.8	538.3	538.6
170°	521.3	522.7	524.2	524.5	524.6	524.7	524.8	527.8	533.8	538.3	538.3
172.5°	524.2	524.5	524.7	524.8	524.8	524.8	524.8	527.2	531.9	535.5	535.2
175°	528.1	528.1	528.1	528.1	527.0	525.5	524.8	526.4	529.3	531.6	531.6
177.5°	528.1	528.1	528.1	528.1	527.2	526.1	525.5	526.7	529.1	530.9	530.5
180°	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	350.1	350.1
2.5°	373.8	371.5
5°	480.7	483.0
7.5°	647.3	646.2
10°	805.0	815.0
12.5°	919.7	922.0
15°	989.6	994.0
17.5°	1016.6	1017.7
20°	1017.7	1015.4
22.5°	1005.4	1003.1
25°	990.7	989.6
27.5°	977.2	978.3
30°	971.5	974.9
32.5°	971.5	977.2
35°	973.8	979.5
37.5°	972.6	979.5
40°	968.2	976.1
42.5°	955.8	961.4
45°	936.7	943.4
47.5°	911.9	916.4
50°	880.4	884.9
52.5°	840.9	842.1
55°	793.6	798.2
57.5°	743.0	744.1
60°	686.7	690.1
62.5°	627.1	627.1
65°	564.0	566.2
67.5°	498.8	504.4
70°	432.3	433.4
72.5°	367.0	367.0
75°	299.5	300.6
77.5°	235.3	235.3
80°	174.5	175.6
82.5°	120.5	122.7
85°	75.4	75.4
87.5°	34.9	31.5
90°	13.5	13.5
92.5°	53.9	43.2
95°	188.0	155.6
97.5°	450.5	388.8
100°	649.1	575.5
102.5°	844.4	781.5
105°	1093.5	1059.6
107.5°	1256.6	1264.8
110°	1318.8	1354.1



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CATALOG NUMBER: SQ4-FB-100U-100D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1324.3	1378.5
115°	1289.2	1364.4
117.5°	1214.8	1298.1
120°	1154.8	1235.7
122.5°	1096.4	1176.2
125°	1012.9	1086.6
127.5°	938.1	1000.1
130°	893.8	951.2
132.5°	853.7	905.1
135°	798.8	843.1
137.5°	754.8	791.0
140°	724.5	758.4
142.5°	699.5	728.6
145°	661.9	684.0
147.5°	633.1	651.4
150°	614.9	629.7
152.5°	599.4	610.6
155°	581.6	589.0
157.5°	567.5	572.7
160°	559.1	562.1
162.5°	553.5	556.4
165°	545.6	548.6
167.5°	539.8	541.1
170°	538.3	538.3
172.5°	534.1	533.0
175°	531.6	531.6
177.5°	529.3	528.1
180°	528.1	528.1



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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	4.53	5.37	5.53	6.39	7.74	17.67	18.51	18.67	19.53	20.88
	3H	5.23	5.99	6.24	7.01	8.38	19.49	20.25	20.50	21.27	22.64
	4H	5.53	6.25	6.55	7.28	8.65	20.13	20.85	21.15	21.87	23.25
	6H	5.78	6.44	6.81	7.47	8.86	20.54	21.21	21.58	22.24	23.63
	8H	5.85	6.48	6.89	7.53	8.91	20.66	21.29	21.69	22.34	23.72
	12H	5.87	6.47	6.91	7.51	8.92	20.72	21.32	21.76	22.36	23.77
4H	2H	11.72	12.44	12.75	13.46	14.84	17.94	18.66	18.97	19.69	21.06
	3H	13.29	13.89	14.32	14.94	16.33	19.97	20.57	21.01	21.63	23.02
	4H	13.38	13.93	14.42	14.98	16.39	20.73	21.28	21.77	22.33	23.74
	6H	13.39	13.87	14.44	14.94	16.34	21.25	21.73	22.31	22.80	24.21
	8H	13.37	13.81	14.42	14.87	16.30	21.41	21.85	22.46	22.91	24.34
	12H	13.32	13.73	14.40	14.80	16.23	21.49	21.90	22.57	22.97	24.40
8H	4H	14.81	15.26	15.87	16.32	17.74	20.79	21.23	21.84	22.29	23.72
	6H	15.06	15.42	16.13	16.53	17.95	21.40	21.77	22.48	22.88	24.30
	8H	15.07	15.40	16.16	16.48	17.93	21.62	21.94	22.70	23.03	24.47
	12H	15.04	15.33	16.13	16.41	17.89	21.75	22.04	22.84	23.12	24.60
12H	4H	14.95	15.36	16.03	16.43	17.86	20.74	21.14	21.81	22.22	23.65
	6H	15.31	15.64	16.40	16.72	18.16	21.39	21.71	22.47	22.80	24.24
	8H	15.38	15.66	16.47	16.75	18.23	21.61	21.89	22.70	22.98	24.46