

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: P936418

Luminaire Tested: SQ4-FB-025U-100D-840-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936418
REPORT IS A COMBINATION OF REPORTS P933439 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

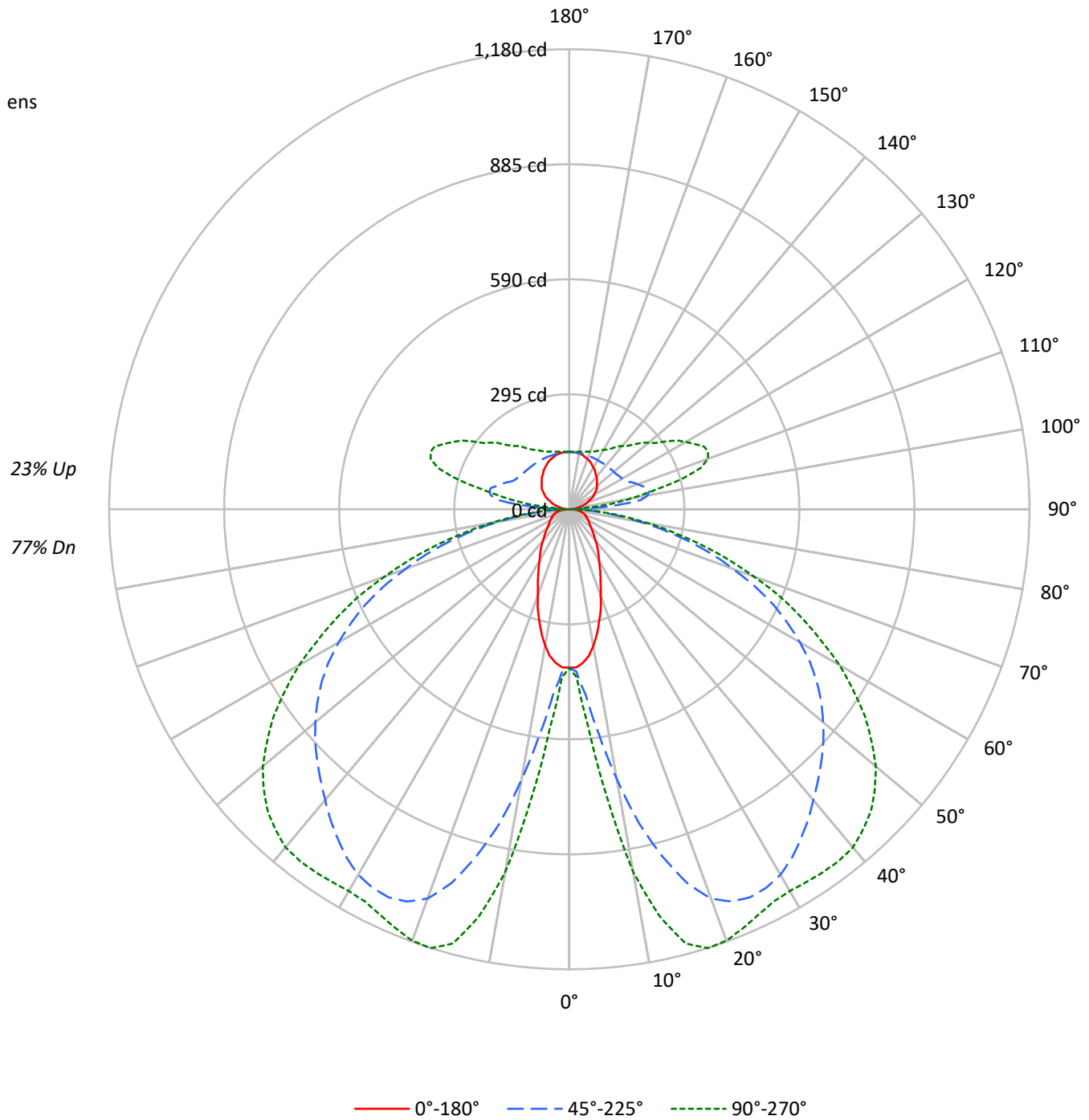
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4097.2 lumens
Efficiency: N/A
Efficacy: 105.6 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-Direct

Input Watts (W): 38.8
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: P936418
CATALOG NUMBER: SQ4-FB-025U-100D-840-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P936418

CATALOG NUMBER: SQ4-FB-025U-100D-840-1D-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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77			77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66	63			63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51			51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42			42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35			35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30			30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26			26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22			22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20			20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	20	17			17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16			16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3767	3767	3767
5°	3677	4351	5064
10°	3331	6338	8395
15°	2827	8275	10137
20°	2299	9582	10331
25°	1916	10019	10122
30°	1613	10075	10103
35°	1424	9899	10364
40°	1239	9674	10634
45°	1119	9506	10675
50°	1025	9354	10498
55°	978	9134	10033
60°	998	8721	9299
65°	1034	8099	8288
70°	1094	7049	7002
75°	1200	5734	5465
80°	1282	3962	3681
85°	1076	2090	1883

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10675 cd/sqm



TEST NUMBER: P936418

CATALOG NUMBER: SQ4-FB-025U-100D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	1.3
10°-20°	232.8	5.7
20°-30°	407.1	9.9
30°-40°	524.1	12.8
40°-50°	585.4	14.3
50°-60°	560.7	13.7
60°-70°	444.4	10.8
70°-80°	261.3	6.4
80°-90°	73.1	1.8
90°-100°	71.9	1.8
100°-110°	189.0	4.6
110°-120°	195.9	4.8
120°-130°	157.1	3.8
130°-140°	123.3	3.0
140°-150°	94.6	2.3
150°-160°	68.2	1.7
160°-170°	41.7	1.0
170°-180°	14.1	0.3
0°-30°	692.4	16.9
0°-40°	1216.5	29.7
0°-60°	2362.6	57.7
0°-90°	3141.4	76.7
90°-120°	456.8	11.1
90°-150°	831.9	20.3
90°-180°	956.0	23.3
0°-180°	4097.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	396	424	478	540	560	37
15°	296	547	922	1118	1153	82
25°	189	620	1098	1146	1148	87
35°	128	593	1034	1093	1136	80
45°	87	473	914	1047	1094	68
55°	63	300	776	901	926	57
65°	50	159	576	648	657	49
75°	37	98	316	347	349	38
85°	13	30	78	86	87	14
90°	1	3	8	4	4	2
95°	10	37	124	64	44	11
105°	34	52	209	317	296	36
115°	60	73	167	334	381	60
125°	84	94	152	257	303	75
135°	100	110	147	208	235	78
145°	116	124	146	177	191	73
155°	131	135	146	160	164	60
165°	142	144	146	151	153	40
175°	147	147	146	148	148	14
180°	147	147	147	147	147	



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 CATALOG NUMBER: SQ4-FB-025U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0	406.0
2.5°	406.0	406.0	408.6	409.9	412.5	413.9	416.4	419.0	426.9	428.2	430.8
5°	395.6	400.8	417.7	424.2	442.5	467.3	477.8	494.8	530.1	540.4	547.0
7.5°	379.9	391.6	433.4	443.9	489.6	554.9	582.2	618.8	674.9	702.4	724.5
10°	355.1	379.9	454.3	479.1	553.5	652.8	703.7	754.5	839.4	877.2	891.7
12.5°	327.7	368.1	476.5	510.4	617.5	762.4	823.8	879.9	976.5	1027.4	1035.2
15°	296.3	351.1	497.4	547.0	685.4	853.8	921.7	990.9	1081.0	1117.5	1126.6
17.5°	268.9	338.1	516.9	569.2	737.6	936.0	1005.2	1062.7	1135.8	1160.6	1167.1
20°	234.9	317.2	530.1	597.9	792.5	996.1	1062.7	1107.1	1156.7	1172.4	1174.9
22.5°	210.1	295.0	537.9	608.3	828.9	1032.7	1088.8	1124.0	1157.9	1163.2	1164.5
25°	189.3	270.2	536.6	620.1	860.4	1054.8	1097.9	1124.0	1143.6	1146.2	1146.2
27.5°	169.7	242.9	531.3	622.7	883.8	1060.0	1094.0	1112.3	1121.4	1126.6	1126.6
30°	152.7	216.7	518.3	617.5	894.2	1054.8	1082.3	1091.3	1100.5	1108.3	1112.3
32.5°	139.7	191.9	498.7	607.0	895.5	1041.7	1061.3	1066.5	1079.6	1097.9	1104.5
35°	127.9	167.1	476.5	592.7	887.7	1020.9	1033.9	1039.2	1065.3	1092.7	1101.8
37.5°	116.2	148.8	447.8	567.9	876.0	996.1	1005.2	1014.4	1054.8	1087.5	1097.9
40°	104.4	133.2	413.9	540.4	857.7	966.1	973.9	988.3	1041.7	1079.6	1090.1
42.5°	95.3	120.1	377.3	511.8	834.2	932.1	943.8	964.8	1026.1	1066.5	1078.3
45°	87.4	107.0	338.1	472.6	804.1	896.9	913.8	942.6	1007.9	1047.0	1057.5
47.5°	79.6	97.9	297.7	432.2	771.5	861.6	883.8	916.5	983.1	1020.9	1030.0
50°	73.1	88.8	257.2	389.1	736.3	823.8	849.9	883.8	951.7	986.9	998.7
52.5°	67.9	80.9	219.3	346.0	695.8	784.6	814.6	849.9	913.8	947.8	955.6
55°	62.6	74.4	186.7	300.3	654.1	742.8	775.5	809.4	872.1	900.8	906.0
57.5°	60.1	69.2	159.3	257.2	609.7	695.8	732.4	763.7	822.4	844.6	849.9
60°	56.1	65.3	138.4	220.6	561.4	651.4	682.8	714.1	763.7	782.0	785.9
62.5°	52.3	62.6	122.7	185.3	511.8	599.2	630.5	659.3	701.1	714.1	719.4
65°	49.6	60.1	111.0	159.3	460.8	544.4	575.7	600.5	634.5	647.5	650.1
67.5°	47.0	57.4	101.9	137.0	409.9	489.6	513.1	536.6	562.7	575.7	577.0
70°	43.1	54.8	94.0	121.4	357.7	426.9	446.5	471.3	492.1	498.7	502.6
72.5°	40.5	50.9	88.8	109.7	304.2	366.8	385.1	399.4	417.7	424.2	424.2
75°	36.6	45.6	83.6	97.9	249.4	300.3	316.0	330.3	344.6	347.3	343.3
77.5°	32.6	40.5	71.8	82.2	194.5	237.6	250.7	258.5	270.2	272.9	274.2
80°	27.4	35.3	56.1	63.9	141.0	175.0	184.1	190.6	201.1	201.1	203.6
82.5°	20.8	27.4	40.5	45.6	95.3	120.1	127.9	131.9	138.4	138.4	138.4
85°	13.0	17.0	26.1	30.0	57.4	73.1	78.3	79.6	84.9	86.2	86.2
87.5°	6.5	9.1	17.0	18.3	30.0	37.8	37.8	40.5	40.5	39.1	37.8
90°	1.0	1.8	2.6	2.8	4.3	6.4	7.5	6.7	5.0	3.8	3.8
92.5°	4.0	10.7	17.4	19.1	26.9	37.2	42.4	37.1	26.7	18.8	18.0
95°	9.5	21.8	34.2	37.2	66.1	104.5	123.8	110.5	83.8	63.8	61.6
97.5°	16.4	27.3	38.1	40.9	89.0	153.1	185.2	176.9	160.0	147.3	143.0
100°	21.7	31.6	41.5	44.0	97.3	168.6	204.1	204.7	206.0	206.9	201.7
102.5°	26.3	35.5	44.8	47.0	101.2	173.4	209.5	220.2	241.7	257.8	253.3
105°	34.1	41.9	49.6	51.6	104.0	173.9	208.9	233.0	281.1	317.1	314.8
107.5°	42.0	49.2	56.5	58.3	104.5	166.2	197.0	230.6	297.7	348.1	348.7
110°	47.3	53.8	60.4	62.0	103.7	159.4	187.1	224.7	299.7	356.0	358.4



TEST NUMBER: P936418

CATALOG NUMBER: SQ4-FB-025U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	52.6	58.8	65.0	66.6	103.7	153.3	178.1	216.6	293.3	350.9	354.7
115°	60.5	66.2	71.9	73.4	104.7	146.5	167.4	204.3	278.3	333.7	339.0
117.5°	68.3	73.5	78.7	80.0	106.7	142.2	160.0	193.4	260.0	310.1	316.0
120°	72.8	77.8	82.7	83.9	108.2	140.7	156.9	187.4	248.5	294.2	299.9
122.5°	77.3	82.2	87.1	88.4	110.5	139.9	154.6	182.1	237.0	278.2	283.8
125°	84.1	88.6	93.2	94.4	113.6	139.3	152.2	175.5	222.2	257.2	262.3
127.5°	89.6	94.3	98.8	100.0	116.7	138.9	150.1	170.1	210.2	240.3	244.6
130°	92.6	97.5	102.5	103.7	119.0	139.2	149.3	167.2	202.8	229.6	233.6
132.5°	95.7	100.7	105.6	106.8	120.7	139.3	148.6	164.6	196.5	220.5	224.1
135°	100.3	104.7	109.3	110.4	122.7	139.2	147.4	160.7	187.5	207.6	210.6
137.5°	104.9	109.4	113.8	114.9	125.7	140.0	147.2	158.5	181.1	198.1	200.7
140°	108.8	112.8	117.0	118.0	127.5	140.2	146.5	156.3	175.9	190.5	192.9
142.5°	111.7	115.5	119.3	120.2	129.0	140.7	146.5	155.1	172.3	185.2	187.2
145°	116.3	119.5	122.9	123.7	131.0	140.7	145.5	152.5	166.6	177.1	178.7
147.5°	120.8	124.0	127.3	128.0	133.9	141.7	145.5	151.1	162.1	170.4	171.7
150°	123.8	126.7	129.6	130.3	135.4	142.2	145.5	150.2	159.6	166.6	167.6
152.5°	126.9	129.0	131.2	131.8	136.3	142.5	145.5	149.5	157.5	163.5	164.3
155°	131.4	133.0	134.7	135.1	138.5	143.2	145.5	148.7	155.1	159.9	160.4
157.5°	134.8	136.3	137.9	138.3	140.7	144.0	145.5	148.0	152.9	156.6	157.0
160°	137.0	138.2	139.5	139.8	141.7	144.2	145.5	147.6	151.9	155.0	155.2
162.5°	139.3	140.2	141.2	141.4	142.8	144.6	145.5	147.3	150.9	153.5	153.7
165°	141.8	142.6	143.5	143.7	144.2	145.1	145.5	146.8	149.4	151.3	151.5
167.5°	144.1	144.4	144.8	144.9	145.4	146.1	146.5	147.3	149.0	150.3	150.4
170°	145.5	145.9	146.3	146.4	146.4	146.5	146.5	147.3	149.0	150.3	150.3
172.5°	146.3	146.4	146.5	146.5	146.5	146.5	146.5	147.2	148.5	149.5	149.4
175°	147.4	147.4	147.4	147.4	147.1	146.7	146.5	146.9	147.8	148.4	148.4
177.5°	147.4	147.4	147.4	147.4	147.2	146.9	146.7	147.0	147.7	148.2	148.1
180°	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4



TEST NUMBER: P936418

CATALOG NUMBER: SQ4-FB-025U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	406.0	406.0
2.5°	433.4	430.8
5°	557.4	560.1
7.5°	750.7	749.3
10°	933.5	945.1
12.5°	1066.5	1069.2
15°	1147.6	1152.7
17.5°	1178.9	1180.2
20°	1180.2	1177.5
22.5°	1165.8	1163.2
25°	1148.8	1147.6
27.5°	1133.1	1134.4
30°	1126.6	1130.6
32.5°	1126.6	1133.1
35°	1129.3	1135.8
37.5°	1127.9	1135.8
40°	1122.8	1131.9
42.5°	1108.3	1114.9
45°	1086.2	1094.0
47.5°	1057.5	1062.7
50°	1020.9	1026.1
52.5°	975.2	976.5
55°	920.3	925.6
57.5°	861.6	862.9
60°	796.3	800.3
62.5°	727.2	727.2
65°	654.1	656.6
67.5°	578.4	584.9
70°	501.3	502.6
72.5°	425.6	425.6
75°	347.3	348.6
77.5°	272.9	272.9
80°	202.3	203.6
82.5°	139.7	142.3
85°	87.4	87.4
87.5°	40.5	36.6
90°	3.8	3.8
92.5°	15.0	12.1
95°	52.6	43.5
97.5°	125.8	108.6
100°	181.3	160.7
102.5°	235.7	218.2
105°	305.4	295.9
107.5°	350.9	353.2
110°	368.2	378.1



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CATALOG NUMBER: SQ4-FB-025U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	369.8	384.9
115°	360.0	381.0
117.5°	339.2	362.5
120°	322.5	345.0
122.5°	306.1	328.4
125°	282.9	303.4
127.5°	261.9	279.2
130°	249.6	265.6
132.5°	238.4	252.7
135°	223.1	235.4
137.5°	210.7	220.9
140°	202.2	211.7
142.5°	195.3	203.4
145°	184.9	191.0
147.5°	176.8	181.9
150°	171.7	175.9
152.5°	167.4	170.5
155°	162.4	164.5
157.5°	158.5	160.0
160°	156.1	156.9
162.5°	154.5	155.3
165°	152.3	153.1
167.5°	150.7	151.1
170°	150.3	150.3
172.5°	149.1	148.8
175°	148.4	148.4
177.5°	147.8	147.4
180°	147.4	147.4



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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	7.73	8.97	8.41	9.67	10.50	20.87	22.10	21.55	22.81	23.64
	3H	8.46	9.58	9.16	10.29	11.15	22.72	23.83	23.41	24.55	25.41
	4H	8.78	9.83	9.49	10.56	11.43	23.37	24.43	24.08	25.15	26.02
	6H	9.05	10.02	9.77	10.76	11.65	23.81	24.78	24.54	25.52	26.41
	8H	9.13	10.06	9.86	10.81	11.70	23.93	24.87	24.67	25.62	26.51
	12H	9.16	10.05	9.90	10.80	11.72	24.01	24.90	24.75	25.65	26.57
4H	2H	14.96	16.02	15.68	16.74	17.62	21.19	22.24	21.90	22.97	23.84
	3H	16.57	17.45	17.30	18.21	19.11	23.25	24.14	23.98	24.90	25.79
	4H	16.68	17.48	17.42	18.25	19.17	24.02	24.83	24.77	25.59	26.51
	6H	16.71	17.41	17.48	18.20	19.13	24.57	25.28	25.34	26.06	26.99
	8H	16.70	17.36	17.47	18.14	19.08	24.74	25.40	25.51	26.18	27.12
	12H	16.67	17.27	17.46	18.07	19.02	24.84	25.44	25.63	26.24	27.19
8H	4H	18.15	18.80	18.91	19.59	20.53	24.12	24.78	24.89	25.56	26.50
	6H	18.40	18.95	19.20	19.78	20.72	24.75	25.30	25.55	26.13	27.07
	8H	18.43	18.92	19.24	19.74	20.70	24.97	25.46	25.78	26.28	27.24
	12H	18.42	18.85	19.23	19.66	20.68	25.12	25.55	25.94	26.37	27.38
12H	4H	18.30	18.90	19.09	19.70	20.65	24.09	24.68	24.88	25.49	26.44
	6H	18.66	19.15	19.47	19.98	20.94	24.74	25.23	25.55	26.05	27.01
	8H	18.75	19.18	19.57	20.00	21.01	24.98	25.41	25.79	26.23	27.24