

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: P936502

Luminaire Tested: SQ4-FB-025U-100D-B40-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936502
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-B40-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

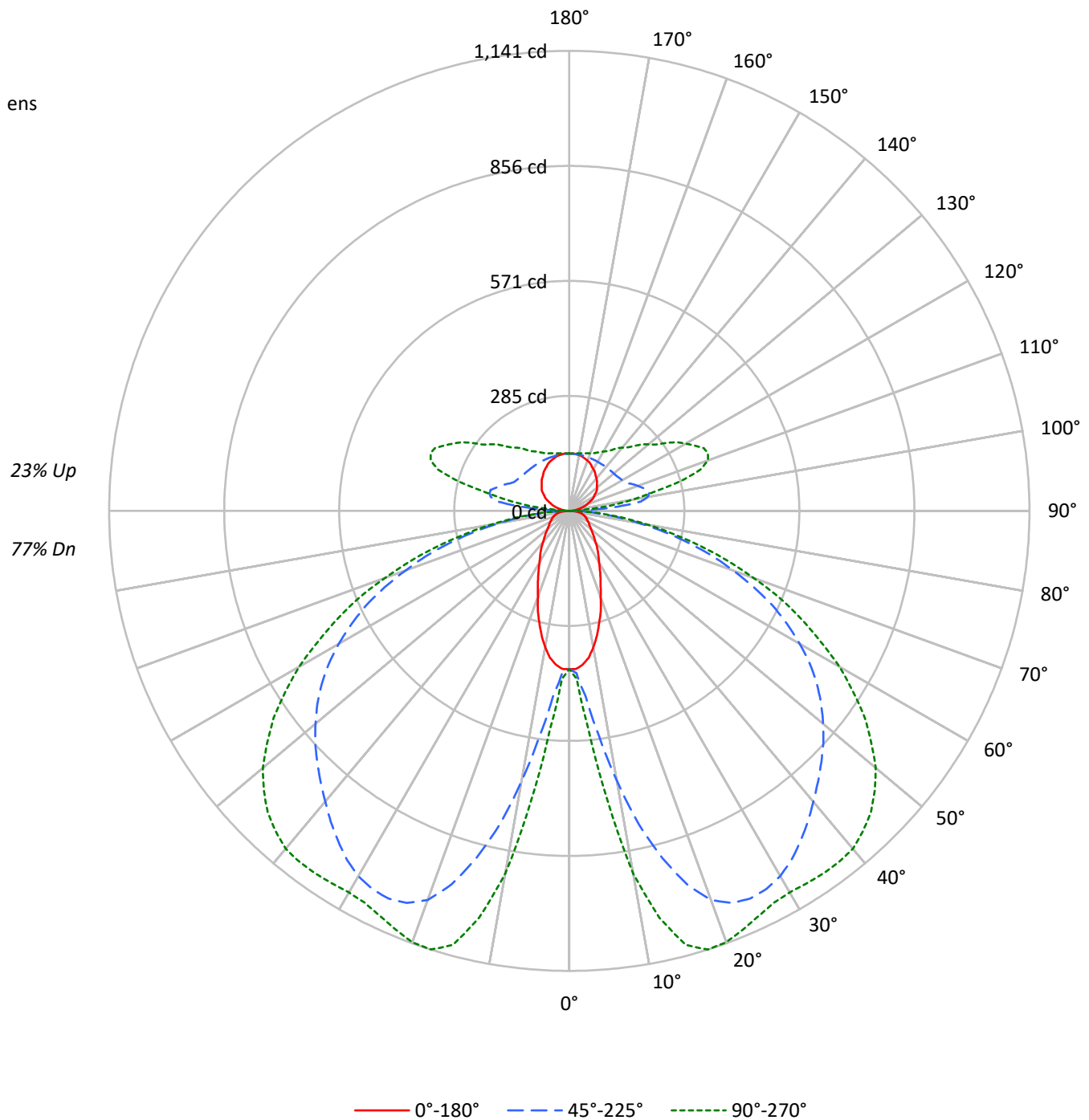
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3960.4 lumens
Efficiency: N/A
Efficacy: 102.1 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: P936502
CATALOG NUMBER: SQ4-FB-025U-100D-B40-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P936502

CATALOG NUMBER: SQ4-FB-025U-100D-B40-1D-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°	3641	3641	3641
5°	3554	4205	4895
10°	3220	6127	8115
15°	2733	7998	9798
20°	2222	9262	9986
25°	1852	9684	9783
30°	1559	9738	9765
35°	1377	9569	10018
40°	1197	9350	10278
45°	1082	9189	10319
50°	991	9041	10148
55°	945	8829	9697
60°	964	8430	8988
65°	998	7829	8011
70°	1056	6814	6768
75°	1158	5541	5282
80°	1240	3828	3558
85°	1043	2020	1821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10319 cd/sqm



TEST NUMBER: P936502

CATALOG NUMBER: SQ4-FB-025U-100D-B40-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.8	1.3
10°-20°	225.0	5.7
20°-30°	393.5	9.9
30°-40°	506.6	12.8
40°-50°	565.9	14.3
50°-60°	542.0	13.7
60°-70°	429.5	10.8
70°-80°	252.6	6.4
80°-90°	70.7	1.8
90°-100°	69.5	1.8
100°-110°	182.7	4.6
110°-120°	189.4	4.8
120°-130°	151.9	3.8
130°-140°	119.2	3.0
140°-150°	91.5	2.3
150°-160°	65.9	1.7
160°-170°	40.3	1.0
170°-180°	13.6	0.3
0°-30°	669.3	16.9
0°-40°	1175.9	29.7
0°-60°	2283.7	57.7
0°-90°	3036.5	76.7
90°-120°	441.5	11.1
90°-150°	804.1	20.3
90°-180°	924.0	23.3
0°-180°	3960.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	392	392	392	392	392	
5°	382	410	462	522	541	35
15°	286	529	891	1080	1114	80
25°	183	599	1061	1108	1109	84
35°	124	573	999	1056	1098	77
45°	84	457	883	1012	1058	65
55°	60	290	750	871	895	55
65°	48	154	556	626	635	48
75°	35	95	305	336	337	37
85°	13	29	76	83	84	13
90°	1	3	7	4	4	2
95°	9	36	120	62	42	10
105°	33	50	202	307	286	35
115°	58	71	162	323	368	58
125°	81	91	147	249	293	72
135°	97	107	142	201	228	75
145°	112	120	141	171	185	70
155°	127	130	141	154	159	58
165°	137	139	141	146	148	39
175°	142	142	142	143	143	14
180°	142	142	142	142	142	



TEST NUMBER: P936502
 CATALOG NUMBER: SQ4-FB-025U-100D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	392.4	392.4	392.4	392.4	392.4	392.4	392.4	392.4	392.4	392.4	392.4
2.5°	392.4	392.4	395.0	396.2	398.7	400.0	402.5	405.0	412.7	413.9	416.4
5°	382.4	387.4	403.8	410.1	427.7	451.7	461.8	478.3	512.4	522.4	528.7
7.5°	367.2	378.6	419.0	429.1	473.2	536.3	562.8	598.1	652.4	678.9	700.3
10°	343.2	367.2	439.1	463.1	535.0	631.0	680.2	729.3	811.4	847.9	861.9
12.5°	316.8	355.8	460.6	493.4	596.9	737.0	796.3	850.5	943.9	993.1	1000.6
15°	286.4	339.4	480.7	528.7	662.5	825.3	890.9	957.8	1044.9	1080.2	1089.0
17.5°	260.0	326.8	499.7	550.2	713.0	904.8	971.6	1027.2	1097.9	1121.8	1128.1
20°	227.1	306.7	512.4	578.0	766.0	962.8	1027.2	1070.1	1118.0	1133.2	1135.7
22.5°	203.1	285.2	519.9	588.0	801.2	998.2	1052.4	1086.5	1119.3	1124.3	1125.6
25°	183.0	261.2	518.7	599.4	831.6	1019.6	1061.2	1086.5	1105.4	1107.9	1107.9
27.5°	164.1	234.7	513.6	601.9	854.2	1024.6	1057.5	1075.1	1083.9	1089.0	1089.0
30°	147.6	209.4	501.0	596.9	864.4	1019.6	1046.1	1054.9	1063.8	1071.3	1075.1
32.5°	135.0	185.5	482.1	586.8	865.6	1007.0	1025.9	1030.9	1043.5	1061.2	1067.6
35°	123.7	161.5	460.6	572.9	858.1	986.8	999.4	1004.5	1029.7	1056.2	1065.0
37.5°	112.3	143.8	432.8	548.9	846.7	962.8	971.6	980.5	1019.6	1051.2	1061.2
40°	100.9	128.7	400.0	522.4	829.0	933.8	941.3	955.3	1007.0	1043.5	1053.7
42.5°	92.2	116.1	364.7	494.7	806.3	900.9	912.3	932.6	991.9	1030.9	1042.3
45°	84.5	103.4	326.8	456.8	777.3	866.9	883.3	911.1	974.2	1012.0	1022.1
47.5°	77.0	94.6	287.7	417.7	745.8	832.9	854.2	885.9	950.2	986.8	995.6
50°	70.7	85.9	248.6	376.1	711.7	796.3	821.5	854.2	920.0	953.9	965.3
52.5°	65.6	78.2	212.0	334.4	672.6	758.4	787.4	821.5	883.3	916.1	923.7
55°	60.5	71.9	180.5	290.2	632.2	718.0	749.6	782.3	843.0	870.7	875.7
57.5°	58.1	66.8	153.9	248.6	589.3	672.6	707.9	738.2	794.9	816.4	821.5
60°	54.2	63.1	133.8	213.3	542.6	629.6	660.0	690.3	738.2	755.9	759.6
62.5°	50.5	60.5	118.6	179.2	494.7	579.2	609.5	637.3	677.7	690.3	695.3
65°	47.9	58.1	107.2	153.9	445.4	526.2	556.5	580.4	613.3	625.9	628.4
67.5°	45.5	55.5	98.5	132.5	396.2	473.2	495.9	518.7	543.9	556.5	557.7
70°	41.6	53.0	90.8	117.4	345.7	412.7	431.6	455.5	475.7	482.1	485.8
72.5°	39.2	49.2	85.9	106.0	294.0	354.6	372.3	386.1	403.8	410.1	410.1
75°	35.3	44.1	80.8	94.6	241.0	290.2	305.4	319.3	333.1	335.7	331.9
77.5°	31.5	39.2	69.4	79.5	188.0	229.7	242.3	249.8	261.2	263.8	265.0
80°	26.5	34.1	54.2	61.8	136.3	169.1	177.9	184.2	194.3	194.3	196.8
82.5°	20.2	26.5	39.2	44.1	92.2	116.1	123.7	127.5	133.8	133.8	133.8
85°	12.6	16.4	25.2	29.0	55.5	70.7	75.7	77.0	82.0	83.3	83.3
87.5°	6.3	8.8	16.4	17.7	29.0	36.6	36.6	39.2	39.2	37.8	36.6
90°	1.0	1.7	2.5	2.7	4.2	6.2	7.3	6.5	4.9	3.6	3.6
92.5°	3.8	10.3	16.8	18.4	26.0	36.0	41.0	35.9	25.8	18.1	17.4
95°	9.2	21.1	33.0	36.0	63.9	101.0	119.7	106.8	81.0	61.7	59.5
97.5°	15.9	26.4	36.9	39.5	86.0	148.0	179.1	170.9	154.6	142.4	138.2
100°	21.0	30.6	40.1	42.5	94.1	162.9	197.3	197.9	199.1	200.0	195.0
102.5°	25.4	34.3	43.3	45.5	97.8	167.6	202.5	212.9	233.6	249.2	244.9
105°	32.9	40.5	47.9	49.9	100.6	168.1	201.9	225.2	271.7	306.6	304.3
107.5°	40.6	47.6	54.6	56.3	101.0	160.6	190.4	222.9	287.7	336.4	337.0
110°	45.7	52.0	58.4	60.0	100.3	154.0	180.9	217.2	289.7	344.1	346.5



TEST NUMBER: P936502

CATALOG NUMBER: SQ4-FB-025U-100D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	50.8	56.8	62.8	64.4	100.3	148.2	172.2	209.3	283.5	339.2	342.8
115°	58.4	64.0	69.5	71.0	101.2	141.6	161.8	197.5	269.0	322.6	327.7
117.5°	66.0	71.1	76.1	77.4	103.1	137.4	154.6	186.9	251.4	299.8	305.4
120°	70.4	75.2	79.9	81.1	104.6	136.0	151.7	181.2	240.2	284.4	289.8
122.5°	74.7	79.5	84.2	85.5	106.8	135.2	149.5	176.0	229.1	268.9	274.3
125°	81.3	85.7	90.1	91.2	109.8	134.7	147.1	169.6	214.8	248.6	253.6
127.5°	86.6	91.1	95.5	96.6	112.8	134.3	145.1	164.5	203.2	232.3	236.5
130°	89.5	94.3	99.0	100.3	115.0	134.6	144.3	161.6	196.1	221.9	225.8
132.5°	92.5	97.3	102.1	103.2	116.7	134.7	143.6	159.1	189.9	213.2	216.6
135°	96.9	101.2	105.6	106.7	118.6	134.6	142.5	155.4	181.3	200.6	203.6
137.5°	101.4	105.7	110.0	111.1	121.5	135.3	142.3	153.2	175.1	191.5	194.0
140°	105.1	109.1	113.1	114.0	123.2	135.5	141.6	151.1	170.0	184.1	186.4
142.5°	108.0	111.6	115.3	116.2	124.7	136.0	141.6	149.9	166.6	179.0	181.0
145°	112.4	115.6	118.8	119.6	126.6	136.0	140.7	147.5	161.0	171.2	172.8
147.5°	116.8	119.9	123.0	123.8	129.4	136.9	140.7	146.0	156.7	164.7	166.0
150°	119.7	122.4	125.3	126.0	130.8	137.4	140.7	145.2	154.2	161.0	162.0
152.5°	122.6	124.7	126.8	127.4	131.8	137.7	140.7	144.5	152.2	158.1	158.8
155°	127.0	128.5	130.2	130.5	133.9	138.4	140.7	143.7	149.9	154.5	155.0
157.5°	130.3	131.8	133.3	133.7	136.0	139.1	140.7	143.1	147.8	151.4	151.7
160°	132.5	133.6	134.8	135.1	136.9	139.4	140.7	142.7	146.8	149.8	150.0
162.5°	134.7	135.5	136.5	136.7	138.0	139.8	140.7	142.4	145.8	148.4	148.6
165°	137.0	137.8	138.7	138.9	139.4	140.3	140.7	141.9	144.4	146.2	146.4
167.5°	139.2	139.6	140.0	140.1	140.6	141.2	141.6	142.4	144.0	145.3	145.4
170°	140.7	141.1	141.4	141.5	141.5	141.6	141.6	142.4	144.0	145.3	145.3
172.5°	141.4	141.5	141.6	141.6	141.6	141.6	141.6	142.3	143.5	144.5	144.4
175°	142.5	142.5	142.5	142.5	142.2	141.8	141.6	142.0	142.9	143.4	143.4
177.5°	142.5	142.5	142.5	142.5	142.3	142.0	141.8	142.1	142.8	143.2	143.2
180°	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5	142.5



TEST NUMBER: P936502

CATALOG NUMBER: SQ4-FB-025U-100D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	392.4	392.4
2.5°	419.0	416.4
5°	538.8	541.4
7.5°	725.6	724.3
10°	902.3	913.6
12.5°	1030.9	1033.5
15°	1109.2	1114.2
17.5°	1139.5	1140.7
20°	1140.7	1138.2
22.5°	1126.9	1124.3
25°	1110.5	1109.2
27.5°	1095.3	1096.5
30°	1089.0	1092.8
32.5°	1089.0	1095.3
35°	1091.6	1097.9
37.5°	1090.2	1097.9
40°	1085.3	1094.0
42.5°	1071.3	1077.6
45°	1049.9	1057.5
47.5°	1022.1	1027.2
50°	986.8	991.9
52.5°	942.6	943.9
55°	889.6	894.6
57.5°	832.9	834.1
60°	769.7	773.6
62.5°	702.9	702.9
65°	632.2	634.7
67.5°	559.1	565.4
70°	484.6	485.8
72.5°	411.4	411.4
75°	335.7	336.9
77.5°	263.8	263.8
80°	195.6	196.8
82.5°	135.0	137.5
85°	84.5	84.5
87.5°	39.2	35.3
90°	3.6	3.6
92.5°	14.5	11.7
95°	50.8	42.0
97.5°	121.6	105.0
100°	175.2	155.4
102.5°	227.9	210.9
105°	295.2	286.0
107.5°	339.2	341.4
110°	355.9	365.5



TEST NUMBER: P936502

CATALOG NUMBER: SQ4-FB-025U-100D-B40-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	357.5	372.1
115°	348.0	368.2
117.5°	327.9	350.4
120°	311.7	333.5
122.5°	295.9	317.4
125°	273.4	293.3
127.5°	253.2	269.9
130°	241.2	256.7
132.5°	230.4	244.3
135°	215.6	227.6
137.5°	203.7	213.5
140°	195.5	204.7
142.5°	188.8	196.6
145°	178.7	184.6
147.5°	170.8	175.8
150°	166.0	170.0
152.5°	161.8	164.8
155°	157.0	159.0
157.5°	153.2	154.6
160°	150.9	151.7
162.5°	149.4	150.1
165°	147.3	148.0
167.5°	145.6	146.0
170°	145.3	145.3
172.5°	144.1	143.8
175°	143.4	143.4
177.5°	142.9	142.5
180°	142.5	142.5



TEST NUMBER: P936502
 CATALOG NUMBER: SQ4-FB-025U-100D-B40-1D-UNV-STD-W-4

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	7.61	8.84	8.29	9.55	10.38	20.75	21.98	21.43	22.69	23.52
	3H	8.34	9.46	9.04	10.17	11.03	22.60	23.72	23.30	24.43	25.29
	4H	8.66	9.71	9.37	10.44	11.31	23.25	24.31	23.97	25.03	25.91
	6H	8.93	9.90	9.65	10.64	11.53	23.69	24.67	24.42	25.40	26.29
	8H	9.01	9.94	9.74	10.70	11.59	23.82	24.75	24.55	25.50	26.39
	12H	9.04	9.93	9.78	10.68	11.60	23.89	24.78	24.63	25.53	26.45
4H	2H	14.85	15.90	15.56	16.63	17.50	21.07	22.12	21.79	22.85	23.72
	3H	16.45	17.33	17.18	18.10	18.99	23.13	24.02	23.86	24.78	25.67
	4H	16.56	17.37	17.31	18.13	19.05	23.91	24.71	24.65	25.48	26.40
	6H	16.59	17.30	17.36	18.08	19.01	24.46	25.16	25.22	25.95	26.87
	8H	16.58	17.24	17.35	18.02	18.96	24.62	25.28	25.39	26.06	27.00
	12H	16.56	17.15	17.35	17.96	18.90	24.72	25.32	25.51	26.12	27.07
8H	4H	18.03	18.68	18.79	19.47	20.41	24.00	24.66	24.77	25.44	26.38
	6H	18.29	18.83	19.08	19.66	20.60	24.63	25.18	25.43	26.01	26.95
	8H	18.31	18.80	19.12	19.62	20.58	24.85	25.34	25.66	26.16	27.12
	12H	18.30	18.73	19.11	19.54	20.56	25.01	25.44	25.82	26.25	27.27
12H	4H	18.19	18.78	18.98	19.59	20.53	23.97	24.56	24.76	25.37	26.32
	6H	18.55	19.03	19.36	19.86	20.82	24.62	25.11	25.43	25.94	26.89
	8H	18.63	19.06	19.45	19.88	20.90	24.86	25.29	25.68	26.11	27.12