

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: P936458

Luminaire Tested: SQ4-FB-025U-100D-93050-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936458
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-93050-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

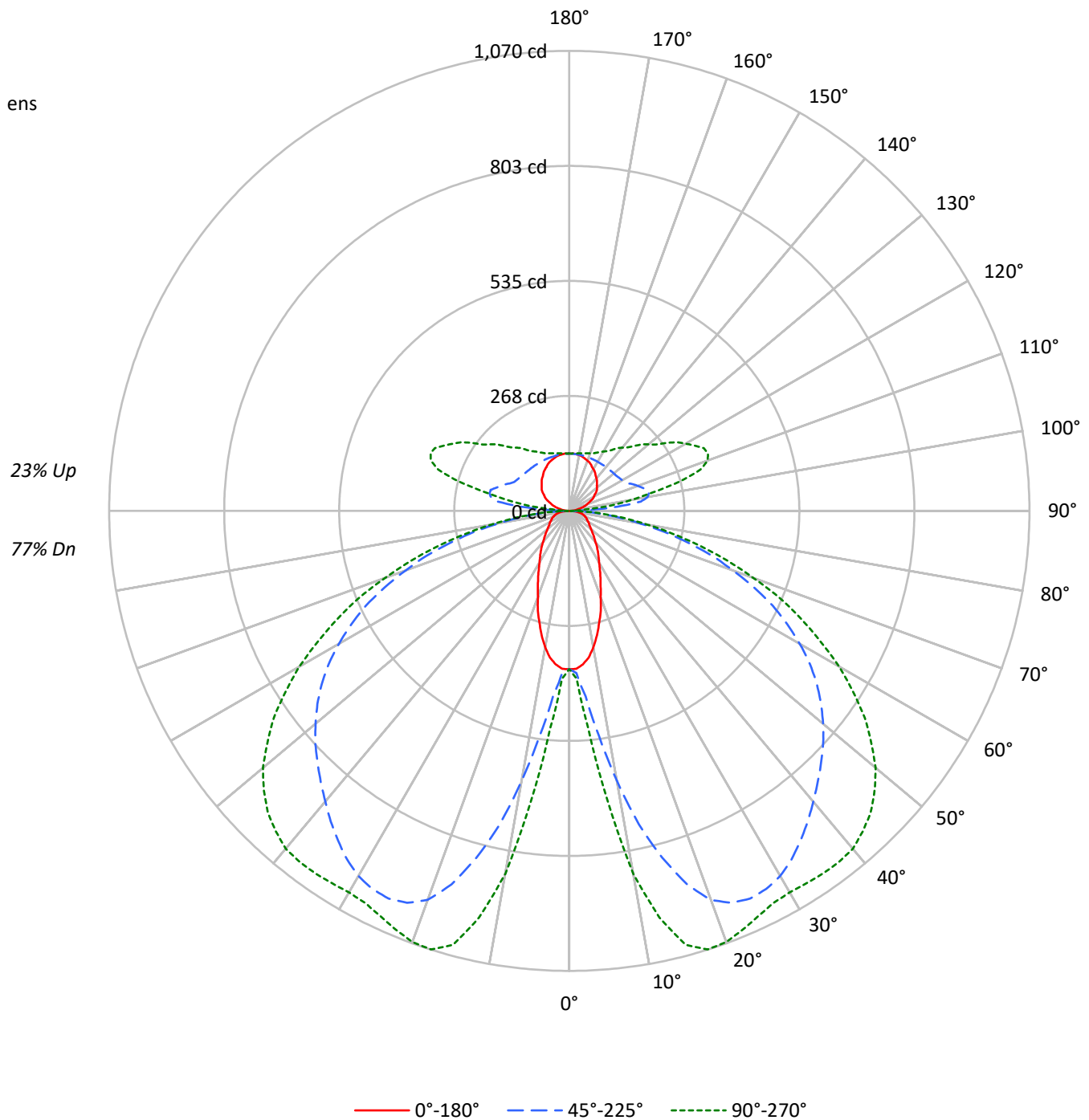
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3712.9 lumens
Efficiency: N/A
Efficacy: 95.7 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-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: P936458
CATALOG NUMBER: SQ4-FB-025U-100D-93050-1D-UNV-STD-W-4-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P936458

CATALOG NUMBER: SQ4-FB-025U-100D-93050-1D-UNV-STD-W-4-3500K

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	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°	3414	3414	3414
5°	3332	3943	4590
10°	3019	5743	7608
15°	2562	7498	9186
20°	2083	8683	9361
25°	1736	9079	9172
30°	1462	9130	9155
35°	1290	8970	9392
40°	1122	8766	9636
45°	1014	8614	9674
50°	929	8476	9514
55°	887	8277	9091
60°	905	7904	8426
65°	936	7339	7510
70°	990	6388	6344
75°	1085	5195	4952
80°	1161	3590	3336
85°	977	1895	1706

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9674 cd/sqm



TEST NUMBER: P936458

CATALOG NUMBER: SQ4-FB-025U-100D-93050-1D-UNV-STD-W-4-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.6	1.3
10°-20°	210.9	5.7
20°-30°	368.9	9.9
30°-40°	474.9	12.8
40°-50°	530.5	14.3
50°-60°	508.1	13.7
60°-70°	402.7	10.8
70°-80°	236.8	6.4
80°-90°	66.3	1.8
90°-100°	65.1	1.8
100°-110°	171.2	4.6
110°-120°	177.5	4.8
120°-130°	142.4	3.8
130°-140°	111.7	3.0
140°-150°	85.8	2.3
150°-160°	61.8	1.7
160°-170°	37.8	1.0
170°-180°	12.8	0.3
0°-30°	627.5	16.9
0°-40°	1102.4	29.7
0°-60°	2141.0	57.7
0°-90°	2846.7	76.7
90°-120°	413.9	11.1
90°-150°	753.8	20.3
90°-180°	866.0	23.3
0°-180°	3712.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	368	368	368	368	368	
5°	358	384	433	490	508	33
15°	268	496	835	1013	1045	75
25°	172	562	995	1039	1040	79
35°	116	537	937	990	1029	72
45°	79	428	828	949	991	61
55°	57	272	703	816	839	52
65°	45	144	522	587	595	45
75°	33	89	286	315	316	35
85°	12	27	71	78	79	13
90°	1	2	7	3	3	2
95°	9	34	112	58	39	10
105°	31	47	189	287	268	33
115°	55	66	152	302	345	54
125°	76	86	138	233	275	68
135°	91	100	134	188	213	70
145°	105	112	132	160	173	66
155°	119	122	132	145	149	55
165°	128	130	132	137	139	36
175°	134	134	133	134	134	13
180°	134	134	134	134	134	



TEST NUMBER: P936458

CATALOG NUMBER: SQ4-FB-025U-100D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9	367.9
2.5°	367.9	367.9	370.3	371.5	373.8	375.0	377.4	379.7	386.9	388.0	390.4
5°	358.5	363.2	378.5	384.4	401.0	423.5	433.0	448.4	480.3	489.7	495.6
7.5°	344.2	354.9	392.8	402.3	443.6	502.8	527.6	560.7	611.6	636.5	656.5
10°	321.8	344.2	411.7	434.1	501.6	591.5	637.6	683.7	760.7	794.9	808.0
12.5°	297.0	333.6	431.8	462.5	559.6	690.9	746.5	797.4	884.9	931.0	938.1
15°	268.5	318.2	450.7	495.6	621.1	773.7	835.2	897.9	979.6	1012.7	1020.9
17.5°	243.7	306.4	468.4	515.8	668.4	848.2	910.9	963.0	1029.3	1051.7	1057.6
20°	212.9	287.5	480.3	541.8	718.1	902.7	963.0	1003.2	1048.1	1062.4	1064.7
22.5°	190.4	267.3	487.4	551.2	751.2	935.8	986.6	1018.6	1049.3	1054.1	1055.2
25°	171.5	244.9	486.2	561.9	779.6	955.8	994.9	1018.6	1036.3	1038.7	1038.7
27.5°	153.8	220.1	481.5	564.3	800.9	960.6	991.4	1007.9	1016.2	1020.9	1020.9
30°	138.4	196.3	469.7	559.6	810.3	955.8	980.7	989.0	997.3	1004.4	1007.9
32.5°	126.6	173.9	452.0	550.1	811.5	944.0	961.7	966.5	978.3	994.9	1000.9
35°	115.9	151.4	431.8	537.1	804.4	925.1	936.9	941.7	965.3	990.2	998.5
37.5°	105.3	134.8	405.8	514.6	793.8	902.7	910.9	919.2	955.8	985.5	994.9
40°	94.6	120.7	375.0	489.7	777.2	875.4	882.5	895.6	944.0	978.3	987.8
42.5°	86.4	108.9	341.9	463.8	755.9	844.6	855.3	874.3	929.9	966.5	977.1
45°	79.2	97.0	306.4	428.2	728.7	812.8	828.1	854.1	913.3	948.8	958.3
47.5°	72.2	88.7	269.8	391.6	699.1	780.8	800.9	830.5	890.8	925.1	933.4
50°	66.3	80.5	233.0	352.6	667.2	746.5	770.1	800.9	862.5	894.3	905.0
52.5°	61.5	73.3	198.8	313.5	630.6	711.0	738.2	770.1	828.1	858.9	865.9
55°	56.8	67.4	169.2	272.1	592.7	673.1	702.7	733.4	790.3	816.3	821.0
57.5°	54.4	62.7	144.3	233.0	552.5	630.6	663.7	692.1	745.3	765.4	770.1
60°	50.9	59.2	125.4	199.9	508.7	590.3	618.8	647.1	692.1	708.6	712.1
62.5°	47.4	56.8	111.2	168.0	463.8	543.0	571.4	597.4	635.3	647.1	651.9
65°	44.9	54.4	100.5	144.3	417.6	493.3	521.7	544.2	575.0	586.8	589.1
67.5°	42.6	52.0	92.3	124.2	371.5	443.6	464.9	486.2	509.9	521.7	522.9
70°	39.0	49.7	85.1	110.0	324.1	386.9	404.6	427.1	446.0	452.0	455.4
72.5°	36.7	46.1	80.5	99.4	275.7	332.4	349.0	362.0	378.5	384.4	384.4
75°	33.1	41.4	75.7	88.7	226.0	272.1	286.3	299.3	312.3	314.7	311.1
77.5°	29.5	36.7	65.1	74.5	176.3	215.3	227.1	234.2	244.9	247.3	248.4
80°	24.8	32.0	50.9	57.9	127.8	158.6	166.8	172.7	182.2	182.2	184.5
82.5°	18.9	24.8	36.7	41.4	86.4	108.9	115.9	119.5	125.4	125.4	125.4
85°	11.8	15.4	23.6	27.2	52.0	66.3	71.0	72.2	76.9	78.1	78.1
87.5°	5.9	8.2	15.4	16.6	27.2	34.3	34.3	36.7	36.7	35.5	34.3
90°	0.9	1.6	2.3	2.5	3.9	5.8	6.8	6.1	4.6	3.4	3.4
92.5°	3.6	9.7	15.8	17.3	24.4	33.8	38.4	33.7	24.2	17.0	16.3
95°	8.6	19.8	31.0	33.8	59.9	94.7	112.2	100.1	75.9	57.8	55.8
97.5°	14.9	24.7	34.6	37.1	80.7	138.8	167.9	160.3	145.0	133.5	129.6
100°	19.7	28.6	37.6	39.8	88.2	152.7	185.0	185.5	186.7	187.5	182.8
102.5°	23.8	32.1	40.6	42.6	91.7	157.1	189.8	199.6	219.0	233.6	229.6
105°	30.9	38.0	44.9	46.7	94.3	157.6	189.3	211.1	254.7	287.4	285.2
107.5°	38.1	44.6	51.2	52.8	94.7	150.6	178.5	209.0	269.8	315.4	316.0
110°	42.9	48.8	54.7	56.2	94.0	144.4	169.6	203.6	271.5	322.6	324.8



TEST NUMBER: P936458

CATALOG NUMBER: SQ4-FB-025U-100D-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°	47.6	53.3	58.9	60.3	94.0	139.0	161.4	196.3	265.8	318.0	321.4
115°	54.8	60.0	65.2	66.5	94.9	132.8	151.7	185.2	252.2	302.4	307.2
117.5°	61.9	66.6	71.4	72.5	96.7	128.8	145.0	175.2	235.6	281.0	286.3
120°	66.0	70.5	74.9	76.0	98.0	127.5	142.2	169.8	225.2	266.6	271.7
122.5°	70.0	74.5	79.0	80.1	100.1	126.8	140.1	165.0	214.8	252.1	257.1
125°	76.2	80.3	84.4	85.5	103.0	126.2	137.9	159.0	201.4	233.0	237.7
127.5°	81.2	85.4	89.5	90.6	105.7	125.9	136.0	154.2	190.5	217.7	221.7
130°	83.9	88.4	92.8	94.0	107.8	126.1	135.3	151.5	183.8	208.1	211.7
132.5°	86.8	91.2	95.7	96.8	109.4	126.2	134.7	149.2	178.1	199.8	203.1
135°	90.9	94.9	99.0	100.0	111.2	126.1	133.6	145.7	169.9	188.1	190.9
137.5°	95.1	99.1	103.1	104.1	113.9	126.9	133.4	143.6	164.1	179.5	181.8
140°	98.6	102.2	106.0	106.9	115.5	127.0	132.8	141.6	159.4	172.6	174.8
142.5°	101.3	104.7	108.1	109.0	116.9	127.5	132.8	140.6	156.1	167.8	169.7
145°	105.4	108.3	111.4	112.1	118.7	127.5	131.9	138.2	150.9	160.5	162.0
147.5°	109.5	112.4	115.3	116.0	121.3	128.4	131.9	136.9	146.9	154.4	155.6
150°	112.2	114.8	117.5	118.1	122.7	128.8	131.9	136.1	144.6	150.9	151.8
152.5°	115.0	116.9	118.9	119.4	123.6	129.1	131.9	135.5	142.7	148.2	148.9
155°	119.1	120.5	122.0	122.4	125.5	129.7	131.9	134.7	140.6	144.9	145.3
157.5°	122.1	123.6	125.0	125.3	127.5	130.4	131.9	134.1	138.6	141.9	142.3
160°	124.2	125.3	126.4	126.7	128.4	130.7	131.9	133.8	137.6	140.5	140.7
162.5°	126.2	127.0	127.9	128.1	129.4	131.1	131.9	133.5	136.7	139.1	139.3
165°	128.5	129.2	130.0	130.2	130.7	131.5	131.9	133.0	135.4	137.1	137.3
167.5°	130.5	130.9	131.3	131.3	131.8	132.4	132.8	133.5	135.0	136.2	136.3
170°	131.9	132.2	132.6	132.7	132.7	132.8	132.8	133.5	135.0	136.2	136.2
172.5°	132.6	132.7	132.8	132.8	132.8	132.8	132.8	133.4	134.6	135.5	135.4
175°	133.6	133.6	133.6	133.6	133.3	133.0	132.8	133.1	133.9	134.5	134.5
177.5°	133.6	133.6	133.6	133.6	133.4	133.1	133.0	133.2	133.8	134.3	134.2
180°	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6



TEST NUMBER: P936458

CATALOG NUMBER: SQ4-FB-025U-100D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	367.9	367.9
2.5°	392.8	390.4
5°	505.1	507.6
7.5°	680.3	679.0
10°	845.9	856.5
12.5°	966.5	968.9
15°	1039.9	1044.6
17.5°	1068.3	1069.5
20°	1069.5	1067.0
22.5°	1056.5	1054.1
25°	1041.1	1039.9
27.5°	1026.8	1028.0
30°	1020.9	1024.5
32.5°	1020.9	1026.8
35°	1023.3	1029.3
37.5°	1022.1	1029.3
40°	1017.4	1025.7
42.5°	1004.4	1010.3
45°	984.3	991.4
47.5°	958.3	963.0
50°	925.1	929.9
52.5°	883.7	884.9
55°	834.0	838.7
57.5°	780.8	782.0
60°	721.6	725.2
62.5°	658.9	658.9
65°	592.7	595.0
67.5°	524.1	530.0
70°	454.3	455.4
72.5°	385.7	385.7
75°	314.7	315.9
77.5°	247.3	247.3
80°	183.4	184.5
82.5°	126.6	128.9
85°	79.2	79.2
87.5°	36.7	33.1
90°	3.4	3.4
92.5°	13.6	10.9
95°	47.6	39.4
97.5°	114.0	98.4
100°	164.3	145.7
102.5°	213.6	197.7
105°	276.7	268.1
107.5°	318.0	320.1
110°	333.7	342.6



TEST NUMBER: P936458
CATALOG NUMBER: SQ4-FB-025U-100D-93050-1D-UNV-STD-W-4-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	335.1	348.8
115°	326.3	345.2
117.5°	307.4	328.5
120°	292.2	312.6
122.5°	277.4	297.6
125°	256.3	275.0
127.5°	237.3	253.0
130°	226.2	240.7
132.5°	216.0	229.0
135°	202.2	213.4
137.5°	191.0	200.2
140°	183.3	191.9
142.5°	177.0	184.3
145°	167.5	173.1
147.5°	160.2	164.8
150°	155.6	159.4
152.5°	151.7	154.5
155°	147.2	149.1
157.5°	143.6	145.0
160°	141.5	142.2
162.5°	140.0	140.7
165°	138.1	138.8
167.5°	136.5	136.9
170°	136.2	136.2
172.5°	135.1	134.8
175°	134.5	134.5
177.5°	133.9	133.6
180°	133.6	133.6



TEST NUMBER: P936458
 CATALOG NUMBER: SQ4-FB-025U-100D-93050-1D-UNV-STD-W-4-3500K

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	7.39	8.62	8.07	9.33	10.15	20.53	21.76	21.21	22.47	23.29
	3H	8.12	9.23	8.81	9.95	10.81	22.38	23.49	23.07	24.21	25.07
	4H	8.43	9.49	9.15	10.21	11.09	23.03	24.08	23.74	24.81	25.68
	6H	8.70	9.68	9.43	10.42	11.30	23.47	24.44	24.19	25.18	26.07
	8H	8.78	9.71	9.52	10.47	11.36	23.59	24.52	24.33	25.28	26.17
	12H	8.81	9.70	9.56	10.45	11.37	23.67	24.56	24.41	25.30	26.22
4H	2H	14.62	15.68	15.34	16.40	17.27	20.85	21.90	21.56	22.62	23.50
	3H	16.22	17.11	16.95	17.87	18.76	22.91	23.80	23.64	24.56	25.45
	4H	16.34	17.14	17.08	17.91	18.83	23.68	24.49	24.43	25.25	26.17
	6H	16.37	17.07	17.13	17.86	18.79	24.23	24.93	24.99	25.72	26.65
	8H	16.36	17.01	17.12	17.80	18.74	24.40	25.05	25.16	25.84	26.78
	12H	16.33	16.92	17.12	17.73	18.68	24.50	25.09	25.29	25.90	26.85
8H	4H	17.80	18.46	18.57	19.24	20.18	23.78	24.43	24.54	25.22	26.16
	6H	18.06	18.61	18.86	19.44	20.38	24.41	24.96	25.21	25.78	26.72
	8H	18.09	18.57	18.90	19.40	20.36	24.63	25.11	25.44	25.94	26.90
	12H	18.07	18.50	18.89	19.32	20.33	24.78	25.21	25.59	26.03	27.04
12H	4H	17.96	18.55	18.75	19.36	20.31	23.75	24.34	24.54	25.15	26.09
	6H	18.32	18.81	19.13	19.64	20.59	24.40	24.89	25.21	25.71	26.67
	8H	18.41	18.84	19.22	19.66	20.67	24.64	25.07	25.45	25.89	26.90