

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: P936268

Luminaire Tested: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-8-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936268
REPORT IS A COMBINATION OF REPORTS P933453 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-8-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

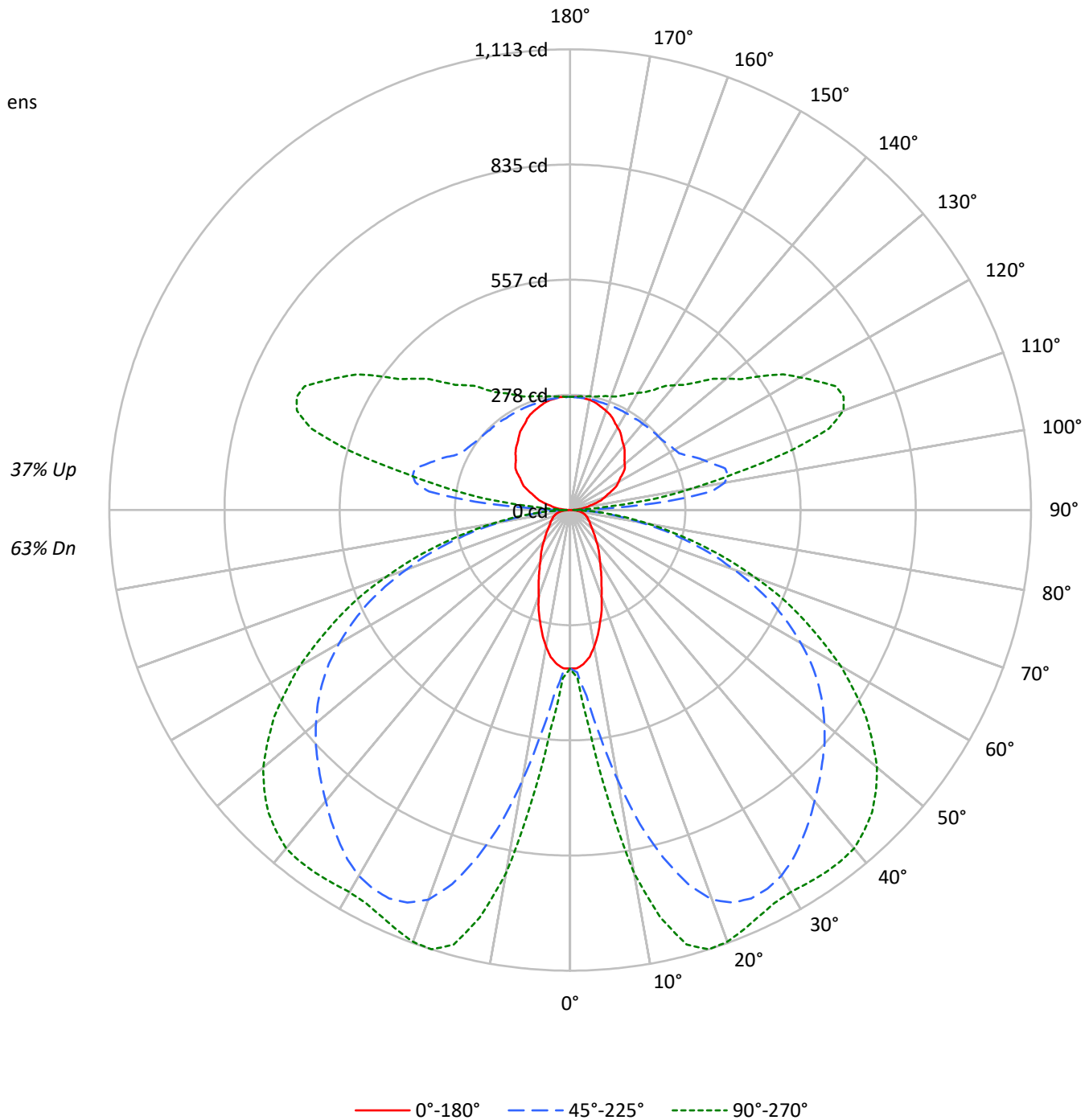
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4738.1 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 44
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: P936268
CATALOG NUMBER: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-8-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P936268

CATALOG NUMBER: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-8-5000K

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	63
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1776	1776	1776
5°	1735	2053	2387
10°	1574	2993	3958
15°	1338	3910	4779
20°	1089	4530	4870
25°	908	4741	4772
30°	766	4771	4763
35°	677	4692	4886
40°	590	4588	5013
45°	535	4513	5033
50°	490	4445	4949
55°	470	4346	4730
60°	481	4155	4383
65°	500	3865	3908
70°	534	3370	3301
75°	591	2748	2576
80°	646	1905	1736
85°	573	1012	889

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5033 cd/sqm



TEST NUMBER: P936268

CATALOG NUMBER: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-8-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	1.0
10°-20°	219.5	4.6
20°-30°	383.9	8.1
30°-40°	494.2	10.4
40°-50°	552.0	11.6
50°-60°	528.7	11.2
60°-70°	419.0	8.8
70°-80°	246.4	5.2
80°-90°	69.5	1.5
90°-100°	133.5	2.8
100°-110°	351.0	7.4
110°-120°	364.0	7.7
120°-130°	292.0	6.2
130°-140°	229.1	4.8
140°-150°	175.8	3.7
150°-160°	126.6	2.7
160°-170°	77.5	1.6
170°-180°	26.2	0.6
0°-30°	652.9	13.8
0°-40°	1147.0	24.2
0°-60°	2227.7	47.0
0°-90°	2962.5	62.5
90°-120°	848.5	17.9
90°-150°	1545.4	32.6
90°-180°	1776.0	37.5
0°-180°	4738.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	383	383	383	383	383	
5°	373	400	450	510	528	34
15°	279	516	869	1054	1087	78
25°	178	585	1035	1081	1082	82
35°	121	559	975	1030	1071	75
45°	82	446	862	987	1032	64
55°	59	283	731	849	873	54
65°	47	150	543	610	619	46
75°	34	92	298	327	329	36
85°	12	28	74	81	82	13
90°	2	5	14	7	7	2
95°	18	69	230	119	81	20
105°	63	96	388	589	550	67
115°	112	136	311	620	708	111
125°	156	175	283	478	564	139
135°	186	205	274	386	437	144
145°	216	230	270	329	355	135
155°	244	251	270	297	306	112
165°	264	267	270	281	285	74
175°	274	274	272	276	276	26
180°	274	274	274	274	274	



TEST NUMBER: P936268

CATALOG NUMBER: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-8-5000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	382.8	382.8	382.8	382.8	382.8	382.8	382.8	382.8	382.8	382.8	382.8
2.5°	382.8	382.8	385.2	386.5	388.9	390.2	392.7	395.2	402.5	403.7	406.2
5°	373.0	377.9	393.9	400.0	417.3	440.7	450.5	466.5	499.8	509.6	515.7
7.5°	358.2	369.3	408.6	418.5	461.6	523.1	549.0	583.5	636.3	662.2	683.1
10°	334.8	358.2	428.4	451.8	521.9	615.4	663.5	711.5	791.4	827.1	840.7
12.5°	309.0	347.1	449.3	481.2	582.2	718.8	776.7	829.6	920.7	968.7	976.1
15°	279.4	331.1	468.9	515.7	646.2	805.0	869.1	934.2	1019.2	1053.6	1062.2
17.5°	253.6	318.8	487.5	536.7	695.4	882.5	947.8	1001.9	1070.9	1094.3	1100.4
20°	221.5	299.1	499.8	563.7	747.2	939.2	1001.9	1043.8	1090.6	1105.4	1107.8
22.5°	198.1	278.2	507.1	573.6	781.6	973.7	1026.5	1059.8	1091.8	1096.7	1097.9
25°	178.5	254.8	505.9	584.7	811.2	994.6	1035.2	1059.8	1078.3	1080.8	1080.8
27.5°	160.0	229.0	501.0	587.1	833.4	999.5	1031.5	1048.7	1057.4	1062.2	1062.2
30°	144.0	204.4	488.7	582.2	843.2	994.6	1020.4	1029.0	1037.6	1045.1	1048.7
32.5°	131.7	181.0	470.2	572.4	844.4	982.2	1000.7	1005.6	1017.9	1035.2	1041.3
35°	120.6	157.6	449.3	558.8	837.0	962.6	974.9	979.8	1004.4	1030.3	1038.8
37.5°	109.6	140.3	422.2	535.5	825.9	939.2	947.8	956.4	994.6	1025.3	1035.2
40°	98.5	125.5	390.2	509.6	808.7	910.9	918.2	931.8	982.2	1017.9	1027.8
42.5°	89.8	113.2	355.7	482.5	786.6	878.9	890.0	909.6	967.5	1005.6	1016.7
45°	82.5	100.9	318.8	445.5	758.2	845.7	861.6	888.7	950.3	987.2	997.0
47.5°	75.1	92.3	280.6	407.5	727.5	812.4	833.4	864.1	926.9	962.6	971.2
50°	68.9	83.7	242.5	366.8	694.2	776.7	801.3	833.4	897.3	930.5	941.6
52.5°	64.0	76.4	206.8	326.1	656.1	739.8	768.1	801.3	861.6	893.7	901.0
55°	59.1	70.2	176.0	283.1	616.7	700.4	731.1	763.2	822.3	849.3	854.3
57.5°	56.6	65.2	150.1	242.5	574.8	656.1	690.6	720.1	775.5	796.4	801.3
60°	53.0	61.6	130.5	208.0	529.3	614.2	643.8	673.3	720.1	737.3	741.0
62.5°	49.3	59.1	115.7	174.8	482.5	565.0	594.5	621.6	661.0	673.3	678.3
65°	46.8	56.6	104.6	150.1	434.5	513.3	542.8	566.2	598.2	610.5	613.0
67.5°	44.3	54.1	96.0	129.2	386.5	461.6	483.7	505.9	530.5	542.8	544.0
70°	40.7	51.7	88.6	114.4	337.3	402.5	420.9	444.3	464.1	470.2	473.9
72.5°	38.2	48.0	83.7	103.4	286.8	345.9	363.1	376.6	393.9	400.0	400.0
75°	34.5	43.0	78.7	92.3	235.1	283.1	297.9	311.4	325.0	327.4	323.8
77.5°	30.7	38.2	67.7	77.5	183.4	224.0	236.3	243.7	254.8	257.2	258.5
80°	25.9	33.2	53.0	60.3	133.0	164.9	173.5	179.7	189.6	189.6	192.0
82.5°	19.7	25.9	38.2	43.0	89.8	113.2	120.6	124.3	130.5	130.5	130.5
85°	12.3	16.0	24.6	28.3	54.1	68.9	73.9	75.1	80.0	81.2	81.2
87.5°	6.1	8.6	16.0	17.3	28.3	35.7	35.7	38.2	38.2	36.9	35.7
90°	1.8	3.3	4.8	5.1	8.1	12.0	13.9	12.4	9.3	7.0	7.0
92.5°	7.3	19.8	32.4	35.5	49.9	69.1	78.6	68.9	49.6	35.0	33.6
95°	17.6	40.5	63.4	69.1	122.7	194.2	230.0	205.2	155.7	118.6	114.3
97.5°	30.6	50.7	70.8	75.9	165.3	284.5	344.1	328.5	297.2	273.7	265.8
100°	40.5	58.7	77.0	81.6	180.8	313.0	379.2	380.4	382.7	384.4	374.9
102.5°	48.9	66.0	83.1	87.3	187.9	322.1	389.2	409.1	448.9	478.9	470.7
105°	63.2	77.7	92.2	95.8	193.3	323.1	388.1	432.8	522.2	589.2	584.8
107.5°	77.9	91.4	104.9	108.3	194.2	308.7	366.0	428.3	553.0	646.5	647.6
110°	87.9	100.0	112.2	115.3	192.7	296.0	347.6	417.3	556.7	661.2	665.8



TEST NUMBER: P936268

CATALOG NUMBER: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-8-5000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	97.6	109.2	120.8	123.7	192.8	284.9	330.9	402.2	544.8	651.8	658.9
115°	112.3	123.0	133.7	136.4	194.6	272.1	310.8	379.6	517.0	620.1	629.8
117.5°	126.8	136.6	146.3	148.8	198.2	264.1	297.1	359.1	483.1	576.1	587.0
120°	135.3	144.4	153.6	155.9	201.2	261.5	291.6	348.2	461.5	546.5	556.9
122.5°	143.5	152.8	162.1	164.4	205.4	260.0	287.3	338.4	440.4	516.9	527.3
125°	156.3	164.7	173.1	175.2	211.1	258.9	282.7	326.1	412.8	477.8	487.3
127.5°	166.6	175.0	183.5	185.6	216.8	258.1	278.9	316.1	390.6	446.4	454.4
130°	172.1	181.2	190.3	192.6	220.9	258.6	277.4	310.5	376.8	426.5	433.9
132.5°	177.8	186.9	196.0	198.3	224.3	258.9	276.1	305.8	365.1	409.6	416.3
135°	186.2	194.6	202.9	205.0	228.0	258.6	273.9	298.8	348.4	385.7	391.4
137.5°	194.8	203.1	211.3	213.5	233.5	260.2	273.6	294.6	336.5	368.0	372.7
140°	202.0	209.6	217.2	219.1	236.9	260.4	272.3	290.5	326.7	353.9	358.3
142.5°	207.6	214.6	221.6	223.4	239.7	261.5	272.3	288.2	320.1	344.0	347.7
145°	216.0	222.2	228.2	229.8	243.4	261.5	270.4	283.5	309.5	329.1	331.9
147.5°	224.5	230.4	236.4	237.9	248.7	263.2	270.4	280.7	301.2	316.5	318.9
150°	230.0	235.4	240.7	242.1	251.5	264.1	270.4	279.1	296.4	309.4	311.3
152.5°	235.7	239.7	243.8	244.8	253.4	264.8	270.4	277.8	292.6	303.7	305.1
155°	244.1	247.1	250.2	250.9	257.4	266.1	270.4	276.3	288.1	296.9	297.8
157.5°	250.3	253.3	256.2	257.0	261.5	267.4	270.4	275.0	284.1	291.0	291.6
160°	254.6	256.9	259.2	259.7	263.3	268.1	270.4	274.4	282.2	288.1	288.4
162.5°	258.8	260.5	262.2	262.6	265.2	268.7	270.4	273.7	280.4	285.3	285.7
165°	263.5	265.0	266.6	267.0	268.2	269.7	270.4	272.8	277.5	281.1	281.5
167.5°	267.7	268.4	269.2	269.3	270.4	271.6	272.3	273.8	277.0	279.3	279.4
170°	270.4	271.2	271.9	272.1	272.2	272.3	272.3	273.8	277.0	279.3	279.3
172.5°	271.9	272.1	272.3	272.3	272.3	272.3	272.3	273.5	276.0	277.8	277.6
175°	273.9	273.9	273.9	273.9	273.4	272.6	272.3	273.0	274.6	275.8	275.8
177.5°	273.9	273.9	273.9	273.9	273.5	272.9	272.6	273.3	274.5	275.4	275.2
180°	273.9	273.9	273.9	273.9	273.9	273.9	273.9	273.9	273.9	273.9	273.9



TEST NUMBER: P936268

CATALOG NUMBER: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-8-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	382.8	382.8
2.5°	408.6	406.2
5°	525.6	528.0
7.5°	707.7	706.5
10°	880.1	891.2
12.5°	1005.6	1008.1
15°	1082.0	1086.9
17.5°	1111.5	1112.7
20°	1112.7	1110.2
22.5°	1099.2	1096.7
25°	1083.2	1082.0
27.5°	1068.4	1069.7
30°	1062.2	1066.0
32.5°	1062.2	1068.4
35°	1064.7	1070.9
37.5°	1063.5	1070.9
40°	1058.6	1067.2
42.5°	1045.1	1051.2
45°	1024.1	1031.5
47.5°	997.0	1001.9
50°	962.6	967.5
52.5°	919.4	920.7
55°	867.8	872.7
57.5°	812.4	813.6
60°	750.9	754.5
62.5°	685.6	685.6
65°	616.7	619.2
67.5°	545.3	551.4
70°	472.7	473.9
72.5°	401.3	401.3
75°	327.4	328.6
77.5°	257.2	257.2
80°	190.8	192.0
82.5°	131.7	134.2
85°	82.5	82.5
87.5°	38.2	34.5
90°	7.0	7.0
92.5°	28.0	22.4
95°	97.6	80.7
97.5°	233.6	201.6
100°	336.7	298.5
102.5°	438.0	405.3
105°	567.2	549.6
107.5°	651.8	656.1
110°	684.0	702.4



TEST NUMBER: P936268

CATALOG NUMBER: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-8-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	687.0	715.1
115°	668.8	707.7
117.5°	630.2	673.4
120°	599.0	641.0
122.5°	568.7	610.1
125°	525.5	563.6
127.5°	486.6	518.8
130°	463.6	493.4
132.5°	442.9	469.5
135°	414.3	437.3
137.5°	391.5	410.3
140°	375.8	393.4
142.5°	362.9	377.9
145°	343.4	354.8
147.5°	328.4	337.9
150°	319.0	326.7
152.5°	310.9	316.7
155°	301.6	305.5
157.5°	294.4	297.1
160°	290.0	291.6
162.5°	287.1	288.6
165°	283.0	284.6
167.5°	280.1	280.7
170°	279.3	279.3
172.5°	277.1	276.5
175°	275.8	275.8
177.5°	274.6	273.9
180°	273.9	273.9



TEST NUMBER: P936268

CATALOG NUMBER: SQ4-FB-025U-050D-93050-1D-UNV-STD-W-8-5000K

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	4.06	5.10	4.90	5.96	7.04	17.24	18.28	18.08	19.14	20.22
	3H	4.78	5.72	5.63	6.59	7.69	19.10	20.03	19.94	20.90	22.01
	4H	5.09	5.97	5.95	6.85	7.96	19.75	20.64	20.61	21.51	22.63
	6H	5.35	6.17	6.22	7.05	8.18	20.19	21.01	21.06	21.89	23.02
	8H	5.42	6.20	6.30	7.10	8.23	20.32	21.10	21.20	22.00	23.13
	12H	5.45	6.19	6.33	7.09	8.24	20.39	21.13	21.28	22.03	23.19
4H	2H	11.30	12.19	12.17	13.06	14.18	17.54	18.42	18.41	19.30	20.42
	3H	12.89	13.63	13.76	14.54	15.67	19.60	20.34	20.48	21.25	22.38
	4H	12.99	13.67	13.88	14.57	15.73	20.38	21.05	21.27	21.96	23.12
	6H	13.01	13.60	13.91	14.53	15.68	20.93	21.51	21.83	22.44	23.60
	8H	12.99	13.54	13.90	14.47	15.64	21.09	21.64	22.00	22.57	23.74
	12H	12.96	13.45	13.89	14.40	15.57	21.20	21.69	22.12	22.63	23.81
8H	4H	14.45	15.00	15.36	15.92	17.09	20.45	21.00	21.36	21.93	23.10
	6H	14.70	15.16	15.63	16.12	17.29	21.09	21.55	22.03	22.51	23.68
	8H	14.72	15.12	15.67	16.08	17.27	21.31	21.72	22.26	22.67	23.86
	12H	14.70	15.05	15.65	16.00	17.24	21.47	21.82	22.42	22.77	24.01
12H	4H	14.60	15.10	15.53	16.04	17.22	20.41	20.91	21.34	21.85	23.03
	6H	14.96	15.37	15.91	16.32	17.51	21.08	21.48	22.02	22.44	23.62
	8H	15.04	15.39	15.99	16.34	17.58	21.31	21.67	22.26	22.62	23.86