

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: P936306

Luminaire Tested: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936306
REPORT IS A COMBINATION OF REPORTS P933437 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

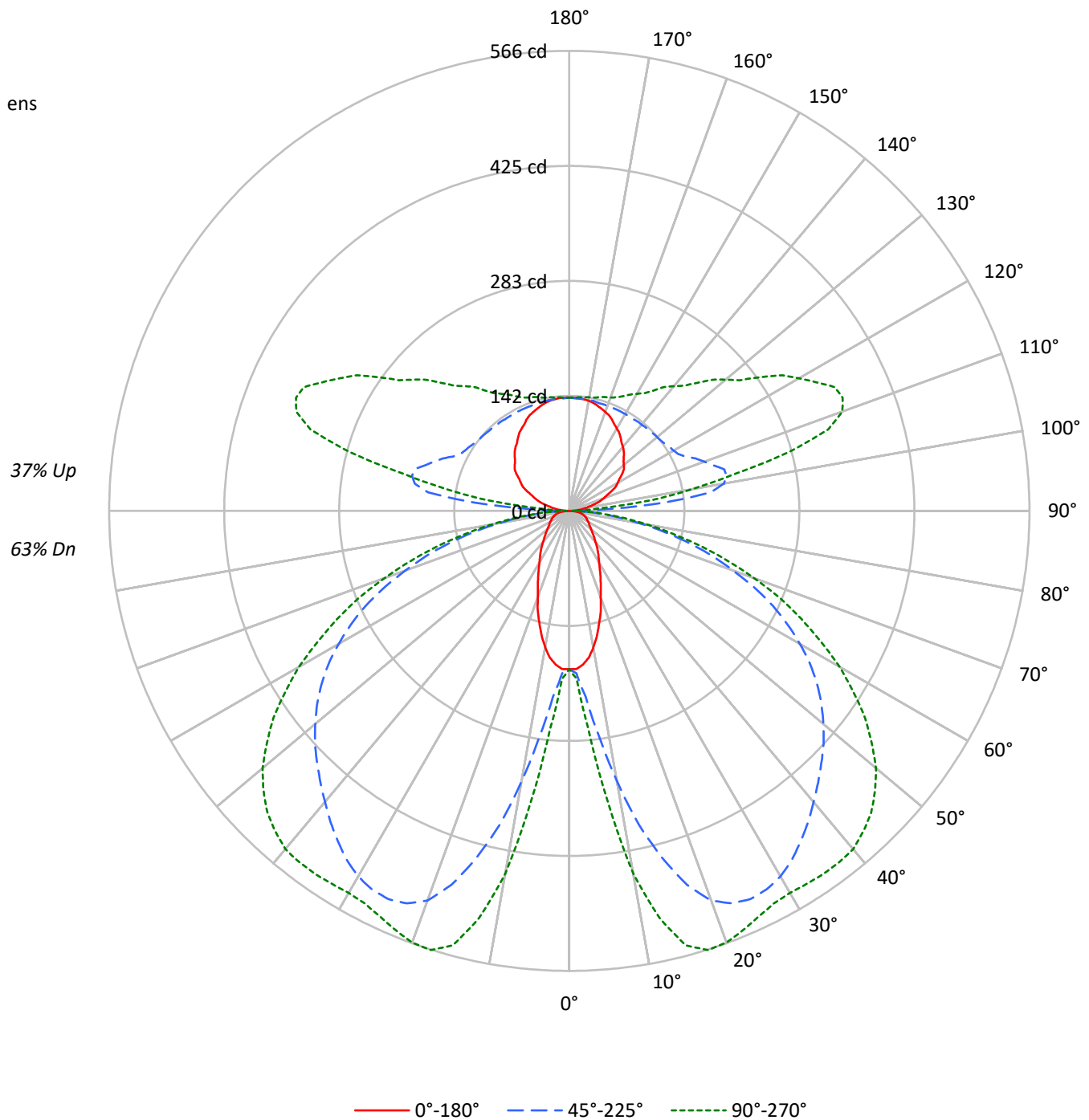
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2411.6 lumens
Efficiency: N/A
Efficacy: 109.6 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): 22
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: P936306
CATALOG NUMBER: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P936306

CATALOG NUMBER: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-4

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1808	1808	1808
5°	1765	2088	2430
10°	1599	3042	4029
15°	1357	3971	4866
20°	1104	4599	4959
25°	920	4809	4858
30°	774	4835	4849
35°	684	4751	4974
40°	596	4644	5103
45°	536	4563	5124
50°	492	4489	5039
55°	470	4384	4815
60°	479	4186	4463
65°	496	3887	3977
70°	523	3383	3362
75°	577	2751	2623
80°	618	1902	1768
85°	522	1004	903

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5124 cd/sqm



TEST NUMBER: P936306

CATALOG NUMBER: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.2	1.0
10°-20°	111.7	4.6
20°-30°	195.4	8.1
30°-40°	251.5	10.4
40°-50°	281.0	11.7
50°-60°	269.1	11.2
60°-70°	213.3	8.8
70°-80°	125.4	5.2
80°-90°	35.4	1.5
90°-100°	67.9	2.8
100°-110°	178.6	7.4
110°-120°	185.2	7.7
120°-130°	148.6	6.2
130°-140°	116.6	4.8
140°-150°	89.5	3.7
150°-160°	64.4	2.7
160°-170°	39.4	1.6
170°-180°	13.3	0.6
0°-30°	332.3	13.8
0°-40°	583.9	24.2
0°-60°	1134.0	47.0
0°-90°	1508.0	62.5
90°-120°	431.8	17.9
90°-150°	786.4	32.6
90°-180°	904.0	37.5
0°-180°	2411.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	195	195	195	195	195	
5°	190	204	229	259	269	18
15°	142	262	442	536	553	40
25°	91	298	527	550	551	42
35°	61	284	496	524	545	38
45°	42	227	439	502	525	32
55°	30	144	372	432	444	27
65°	24	76	276	311	315	24
75°	18	47	152	167	167	18
85°	6	14	38	41	42	7
90°	1	3	7	4	4	1
95°	9	35	117	60	41	10
105°	32	49	197	300	280	34
115°	57	69	158	316	360	56
125°	80	89	144	243	287	71
135°	95	104	139	196	223	73
145°	110	117	138	168	180	69
155°	124	128	138	151	156	57
165°	134	136	138	143	145	38
175°	139	139	138	140	140	13
180°	139	139	139	139	139	



TEST NUMBER: P936306

CATALOG NUMBER: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8
2.5°	194.8	194.8	196.1	196.7	198.0	198.7	199.9	201.1	204.9	205.5	206.8
5°	189.9	192.4	200.5	203.6	212.4	224.3	229.3	237.5	254.4	259.4	262.5
7.5°	182.3	188.0	208.0	213.0	235.0	266.3	279.5	297.0	323.9	337.1	347.7
10°	170.5	182.3	218.1	230.0	265.6	313.3	337.7	362.2	402.9	421.0	428.0
12.5°	157.3	176.7	228.7	245.0	296.4	365.9	395.4	422.4	468.7	493.2	496.9
15°	142.2	168.6	238.7	262.5	329.0	409.7	442.3	475.6	518.8	536.3	540.7
17.5°	129.1	162.3	248.2	273.2	354.0	449.3	482.5	510.1	545.1	557.0	560.1
20°	112.8	152.2	254.4	287.0	380.3	478.1	510.1	531.4	555.2	562.6	563.9
22.5°	100.9	141.6	258.2	292.0	397.9	495.6	522.6	539.5	555.7	558.3	558.9
25°	90.9	129.7	257.5	297.7	412.9	506.2	527.0	539.5	548.9	550.1	550.1
27.5°	81.4	116.6	255.0	298.9	424.2	508.7	525.1	533.9	538.3	540.7	540.7
30°	73.3	104.0	248.7	296.4	429.2	506.2	519.4	523.8	528.2	532.0	533.9
32.5°	67.1	92.1	239.4	291.3	429.8	500.0	509.4	511.9	518.2	527.0	530.0
35°	61.4	80.2	228.7	284.5	426.1	490.0	496.2	498.8	511.3	524.4	528.8
37.5°	55.8	71.5	214.9	272.5	420.4	478.1	482.5	486.9	506.2	521.9	527.0
40°	50.2	63.9	198.7	259.4	411.7	463.6	467.5	474.3	500.0	518.2	523.2
42.5°	45.8	57.6	181.1	245.6	400.4	447.4	453.0	463.1	492.5	511.9	517.5
45°	41.9	51.4	162.3	226.8	385.9	430.5	438.6	452.4	483.7	502.5	507.5
47.5°	38.2	47.0	142.9	207.4	370.3	413.6	424.2	439.8	471.9	490.0	494.4
50°	35.1	42.6	123.5	186.7	353.4	395.4	407.9	424.2	456.8	473.7	479.3
52.5°	32.6	38.9	105.3	166.1	334.0	376.6	391.0	407.9	438.6	454.9	458.7
55°	30.1	35.7	89.6	144.1	313.9	356.5	372.2	388.5	418.5	432.3	434.9
57.5°	28.9	33.3	76.4	123.5	292.6	334.0	351.5	366.5	394.7	405.4	407.9
60°	26.9	31.3	66.4	105.9	269.5	312.7	327.7	342.8	366.5	375.3	377.2
62.5°	25.0	30.1	58.9	89.0	245.6	287.6	302.6	316.4	336.4	342.8	345.2
65°	23.8	28.9	53.2	76.4	221.2	261.2	276.3	288.2	304.5	310.7	312.0
67.5°	22.6	27.6	48.8	65.8	196.7	235.0	246.2	257.5	270.0	276.3	276.9
70°	20.6	26.3	45.1	58.3	171.7	204.9	214.3	226.2	236.2	239.4	241.3
72.5°	19.4	24.5	42.6	52.7	146.0	176.1	184.8	191.8	200.5	203.6	203.6
75°	17.6	21.9	40.1	47.0	119.6	144.1	151.6	158.5	165.4	166.6	164.8
77.5°	15.7	19.4	34.5	39.5	93.4	114.0	120.3	124.0	129.7	130.9	131.6
80°	13.2	16.9	26.9	30.7	67.7	84.0	88.4	91.4	96.5	96.5	97.8
82.5°	10.0	13.2	19.4	21.9	45.8	57.6	61.4	63.3	66.4	66.4	66.4
85°	6.3	8.1	12.5	14.4	27.6	35.1	37.6	38.2	40.7	41.4	41.4
87.5°	3.2	4.4	8.1	8.8	14.4	18.2	18.2	19.4	19.4	18.8	18.2
90°	0.9	1.7	2.4	2.6	4.1	6.1	7.1	6.4	4.8	3.5	3.5
92.5°	3.7	10.1	16.4	18.0	25.4	35.2	40.1	35.1	25.2	17.7	17.0
95°	9.0	20.6	32.3	35.2	62.5	98.8	117.0	104.4	79.2	60.3	58.2
97.5°	15.5	25.8	36.1	38.7	84.2	144.8	175.1	167.2	151.2	139.3	135.1
100°	20.5	29.9	39.2	41.6	92.0	159.3	193.0	193.5	194.7	195.6	190.7
102.5°	24.8	33.5	42.3	44.5	95.6	163.9	198.0	208.2	228.5	243.7	239.5
105°	32.2	39.6	46.9	48.8	98.4	164.4	197.4	220.2	265.7	299.8	297.6
107.5°	39.7	46.5	53.4	55.1	98.8	157.1	186.2	218.0	281.4	329.0	329.6
110°	44.7	50.9	57.1	58.7	98.1	150.7	176.9	212.4	283.3	336.5	338.9



TEST NUMBER: P936306

CATALOG NUMBER: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	49.7	55.6	61.5	63.0	98.1	145.0	168.4	204.7	277.3	331.8	335.3
115°	57.2	62.6	68.0	69.4	99.0	138.5	158.2	193.2	263.1	315.5	320.5
117.5°	64.5	69.5	74.4	75.7	100.9	134.4	151.2	182.8	245.8	293.2	298.7
120°	68.8	73.5	78.2	79.3	102.3	133.0	148.3	177.2	234.9	278.1	283.5
122.5°	73.0	77.7	82.4	83.6	104.4	132.3	146.2	172.1	224.1	263.0	268.2
125°	79.5	83.8	88.1	89.2	107.4	131.7	143.8	165.9	210.1	243.1	248.0
127.5°	84.7	89.1	93.4	94.5	110.3	131.3	141.9	160.8	198.8	227.1	231.3
130°	87.5	92.2	96.9	98.1	112.5	131.6	141.1	158.0	191.8	217.1	220.8
132.5°	90.5	95.2	99.8	101.0	114.1	131.7	140.5	155.6	185.8	208.5	211.8
135°	94.8	99.0	103.3	104.3	116.0	131.6	139.4	152.0	177.3	196.2	199.1
137.5°	99.2	103.4	107.6	108.6	118.8	132.3	139.2	149.8	171.2	187.3	189.7
140°	102.8	106.7	110.6	111.5	120.5	132.5	138.5	147.8	166.3	180.1	182.3
142.5°	105.6	109.2	112.7	113.7	122.0	133.0	138.5	146.6	162.9	175.0	177.0
145°	109.9	113.0	116.2	116.9	123.8	133.0	137.6	144.2	157.5	167.5	169.0
147.5°	114.2	117.2	120.3	121.0	126.6	133.9	137.6	142.8	153.3	161.1	162.3
150°	117.0	119.7	122.5	123.2	128.0	134.4	137.6	142.0	150.8	157.5	158.4
152.5°	119.9	122.0	124.0	124.6	128.9	134.7	137.6	141.3	148.9	154.6	155.3
155°	124.2	125.7	127.3	127.7	130.9	135.3	137.6	140.6	146.6	151.1	151.6
157.5°	127.4	128.9	130.4	130.8	133.0	136.1	137.6	139.9	144.6	148.0	148.4
160°	129.5	130.7	131.9	132.2	133.9	136.4	137.6	139.5	143.6	146.5	146.7
162.5°	131.7	132.5	133.5	133.7	135.0	136.7	137.6	139.3	142.6	145.1	145.3
165°	134.0	134.8	135.6	135.8	136.4	137.2	137.6	138.8	141.2	143.0	143.2
167.5°	136.2	136.6	136.9	137.0	137.5	138.1	138.5	139.3	140.8	142.1	142.2
170°	137.6	138.0	138.3	138.4	138.4	138.5	138.5	139.3	140.8	142.1	142.1
172.5°	138.3	138.4	138.5	138.5	138.5	138.5	138.5	139.2	140.4	141.3	141.2
175°	139.4	139.4	139.4	139.4	139.1	138.7	138.5	138.9	139.7	140.3	140.3
177.5°	139.4	139.4	139.4	139.4	139.2	138.9	138.7	139.0	139.6	140.1	140.0
180°	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4



TEST NUMBER: P936306

CATALOG NUMBER: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	194.8	194.8
2.5°	208.0	206.8
5°	267.6	268.8
7.5°	360.2	359.7
10°	448.0	453.6
12.5°	511.9	513.1
15°	550.8	553.3
17.5°	565.8	566.5
20°	566.5	565.2
22.5°	559.6	558.3
25°	551.4	550.8
27.5°	543.9	544.5
30°	540.7	542.7
32.5°	540.7	543.9
35°	542.0	545.1
37.5°	541.3	545.1
40°	538.8	543.2
42.5°	532.0	535.1
45°	521.3	525.1
47.5°	507.5	510.1
50°	490.0	492.5
52.5°	468.0	468.7
55°	441.8	444.2
57.5°	413.6	414.1
60°	382.2	384.1
62.5°	349.0	349.0
65°	313.9	315.1
67.5°	277.6	280.7
70°	240.6	241.3
72.5°	204.3	204.3
75°	166.6	167.3
77.5°	130.9	130.9
80°	97.1	97.8
82.5°	67.1	68.3
85°	41.9	41.9
87.5°	19.4	17.6
90°	3.5	3.5
92.5°	14.2	11.4
95°	49.7	41.1
97.5°	118.9	102.6
100°	171.4	152.0
102.5°	222.9	206.2
105°	288.7	279.7
107.5°	331.8	333.9
110°	348.1	357.4



TEST NUMBER: P936306

CATALOG NUMBER: SQ4-FB-025U-050D-B50-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	349.6	363.9
115°	340.3	360.2
117.5°	320.6	342.7
120°	304.9	326.2
122.5°	289.4	310.5
125°	267.4	286.8
127.5°	247.6	263.9
130°	235.9	251.1
132.5°	225.4	238.9
135°	210.9	222.6
137.5°	199.2	208.8
140°	191.2	200.2
142.5°	184.7	192.3
145°	174.8	180.5
147.5°	167.1	171.9
150°	162.3	166.3
152.5°	158.2	161.2
155°	153.5	155.5
157.5°	149.8	151.2
160°	147.6	148.3
162.5°	146.1	146.8
165°	144.0	144.8
167.5°	142.4	142.8
170°	142.1	142.1
172.5°	140.9	140.7
175°	140.3	140.3
177.5°	139.7	139.4
180°	139.4	139.4



TEST NUMBER: P936306
 CATALOG NUMBER: SQ4-FB-025U-050D-B50-1D-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	4.11	5.15	4.95	6.01	7.09	17.25	18.29	18.09	19.15	20.23
	3H	4.83	5.77	5.68	6.64	7.74	19.09	20.03	19.94	20.90	22.00
	4H	5.14	6.02	6.00	6.90	8.02	19.73	20.62	20.60	21.50	22.61
	6H	5.40	6.22	6.27	7.10	8.23	20.16	20.98	21.04	21.86	22.99
	8H	5.47	6.25	6.36	7.16	8.28	20.28	21.06	21.16	21.96	23.09
	12H	5.50	6.24	6.39	7.14	8.29	20.35	21.09	21.24	21.99	23.14
4H	2H	11.33	12.21	12.19	13.09	14.20	17.55	18.44	18.42	19.31	20.43
	3H	12.91	13.65	13.79	14.56	15.69	19.60	20.34	20.48	21.25	22.38
	4H	13.02	13.69	13.91	14.60	15.75	20.36	21.04	21.25	21.94	23.10
	6H	13.04	13.62	13.94	14.55	15.71	20.90	21.49	21.80	22.42	23.57
	8H	13.02	13.57	13.93	14.49	15.66	21.06	21.61	21.97	22.53	23.70
	12H	12.98	13.48	13.91	14.42	15.60	21.15	21.65	22.08	22.59	23.77
8H	4H	14.46	15.01	15.37	15.94	17.11	20.44	20.99	21.35	21.91	23.08
	6H	14.72	15.17	15.65	16.14	17.31	21.06	21.52	22.00	22.48	23.66
	8H	14.74	15.14	15.68	16.10	17.29	21.28	21.68	22.22	22.64	23.83
	12H	14.71	15.07	15.66	16.02	17.26	21.42	21.78	22.37	22.73	23.97
12H	4H	14.61	15.11	15.54	16.05	17.23	20.40	20.90	21.33	21.84	23.02
	6H	14.97	15.38	15.92	16.33	17.52	21.05	21.45	21.99	22.41	23.60
	8H	15.05	15.41	16.00	16.36	17.59	21.28	21.64	22.23	22.59	23.82