

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: P936298

Luminaire Tested: SQ4-FB-025U-050D-B35-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

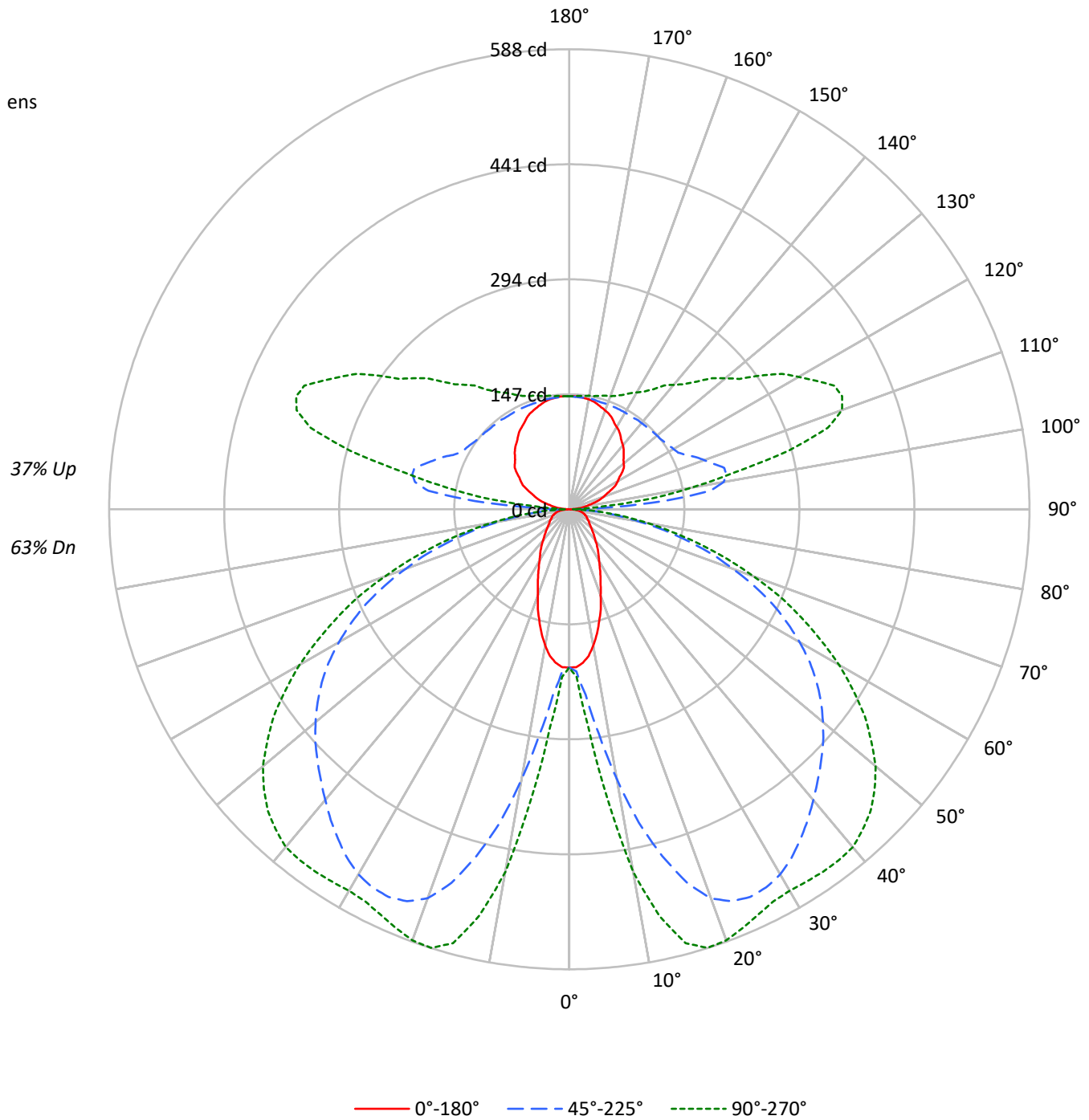
Test Method: LM-79-2019  
Report Number: P936298  
REPORT IS A COMBINATION OF REPORTS P933437 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-050D-B35-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2501.9 lumens  
Efficiency: N/A  
Efficacy: 113.7 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): 22  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P936298  
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### Luminous Intensity Polar Plot





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**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°	1875	1875	1875
5°	1831	2166	2522
10°	1659	3156	4180
15°	1408	4120	5048
20°	1146	4772	5144
25°	954	4989	5040
30°	804	5017	5031
35°	709	4929	5160
40°	617	4818	5295
45°	557	4733	5316
50°	510	4658	5228
55°	487	4548	4996
60°	496	4343	4630
65°	515	4032	4126
70°	543	3510	3487
75°	597	2854	2720
80°	641	1973	1835
85°	538	1044	937

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5316 cd/sqm



TEST NUMBER: P936298

CATALOG NUMBER: SQ4-FB-025U-050D-B35-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.2	1.0
10°-20°	115.9	4.6
20°-30°	202.7	8.1
30°-40°	261.0	10.4
40°-50°	291.5	11.7
50°-60°	279.2	11.2
60°-70°	221.2	8.8
70°-80°	130.1	5.2
80°-90°	36.7	1.5
90°-100°	70.5	2.8
100°-110°	185.3	7.4
110°-120°	192.2	7.7
120°-130°	154.1	6.2
130°-140°	120.9	4.8
140°-150°	92.8	3.7
150°-160°	66.8	2.7
160°-170°	40.9	1.6
170°-180°	13.8	0.6
0°-30°	344.8	13.8
0°-40°	605.8	24.2
0°-60°	1176.5	47.0
0°-90°	1564.5	62.5
90°-120°	448.0	17.9
90°-150°	815.9	32.6
90°-180°	937.0	37.5
0°-180°	2501.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	202	202	202	202	202	
5°	197	211	238	269	279	18
15°	148	272	459	556	574	41
25°	94	309	547	571	571	43
35°	64	295	515	544	566	40
45°	44	235	455	521	545	34
55°	31	150	386	449	461	28
65°	25	79	287	322	327	24
75°	18	49	157	173	174	19
85°	6	15	39	43	44	7
90°	1	3	7	4	4	1
95°	9	36	121	63	43	10
105°	33	51	205	311	290	35
115°	59	72	164	327	374	59
125°	82	92	149	252	298	73
135°	98	108	145	204	231	76
145°	114	121	143	174	187	71
155°	129	132	143	157	161	59
165°	139	141	143	148	150	39
175°	145	145	144	146	146	14
180°	145	145	145	145	145	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	202.1	202.1	202.1	202.1	202.1	202.1	202.1	202.1	202.1	202.1	202.1
2.5°	202.1	202.1	203.5	204.1	205.4	206.1	207.4	208.6	212.6	213.2	214.5
5°	197.0	199.6	208.0	211.2	220.4	232.8	237.9	246.4	264.0	269.1	272.4
7.5°	189.1	195.1	215.8	221.0	243.8	276.3	289.9	308.1	336.0	349.7	360.8
10°	176.8	189.1	226.3	238.6	275.6	325.0	350.4	375.8	418.0	436.8	444.0
12.5°	163.2	183.3	237.3	254.2	307.5	379.7	410.2	438.2	486.2	511.6	515.5
15°	147.6	174.9	247.7	272.4	341.3	425.1	458.9	493.4	538.3	556.4	561.0
17.5°	133.9	168.4	257.5	283.4	367.3	466.1	500.6	529.2	565.5	577.9	581.1
20°	117.1	157.9	264.0	297.8	394.6	496.0	529.2	551.3	576.0	583.7	585.1
22.5°	104.7	146.9	267.8	302.9	412.8	514.2	542.2	559.7	576.6	579.2	579.8
25°	94.3	134.6	267.2	308.8	428.4	525.2	546.7	559.7	569.5	570.7	570.7
27.5°	84.5	120.9	264.5	310.1	440.1	527.8	544.8	553.9	558.4	561.0	561.0
30°	76.1	107.9	258.0	307.5	445.3	525.2	538.9	543.4	548.0	551.9	553.9
32.5°	69.6	95.5	248.4	302.2	445.9	518.7	528.5	531.1	537.6	546.7	549.9
35°	63.7	83.2	237.3	295.2	442.1	508.3	514.8	517.4	530.4	544.1	548.6
37.5°	57.8	74.1	223.0	282.8	436.1	496.0	500.6	505.1	525.2	541.5	546.7
40°	52.0	66.3	206.1	269.1	427.1	481.0	485.0	492.1	518.7	537.6	542.8
42.5°	47.5	59.8	187.9	254.8	415.4	464.2	470.0	480.4	511.0	531.1	536.9
45°	43.5	53.3	168.4	235.3	400.4	446.6	455.0	469.4	501.8	521.3	526.6
47.5°	39.6	48.7	148.3	215.2	384.2	429.1	440.1	456.3	489.5	508.3	512.9
50°	36.4	44.2	128.1	193.7	366.7	410.2	423.2	440.1	473.9	491.5	497.3
52.5°	33.8	40.3	109.2	172.3	346.5	390.7	405.6	423.2	455.0	471.9	475.9
55°	31.2	37.0	92.9	149.5	325.7	369.9	386.1	403.0	434.2	448.6	451.2
57.5°	29.9	34.5	79.3	128.1	303.6	346.5	364.6	380.2	409.5	420.5	423.2
60°	27.9	32.5	68.9	109.9	279.6	324.4	340.0	355.6	380.2	389.3	391.4
62.5°	26.0	31.2	61.1	92.3	254.8	298.4	314.0	328.3	349.0	355.6	358.1
65°	24.7	29.9	55.2	79.3	229.5	271.0	286.6	299.0	315.9	322.4	323.7
67.5°	23.4	28.6	50.7	68.2	204.1	243.8	255.4	267.2	280.1	286.6	287.3
70°	21.4	27.3	46.8	60.5	178.1	212.6	222.3	234.7	245.1	248.4	250.3
72.5°	20.2	25.4	44.2	54.7	151.5	182.7	191.8	198.9	208.0	211.2	211.2
75°	18.2	22.8	41.6	48.7	124.1	149.5	157.3	164.4	171.6	172.9	170.9
77.5°	16.3	20.2	35.8	41.0	96.9	118.3	124.8	128.7	134.6	135.9	136.5
80°	13.7	17.5	27.9	31.9	70.3	87.1	91.7	94.9	100.1	100.1	101.5
82.5°	10.4	13.7	20.2	22.8	47.5	59.8	63.7	65.7	68.9	68.9	68.9
85°	6.5	8.4	13.0	14.9	28.6	36.4	39.1	39.6	42.2	42.9	42.9
87.5°	3.3	4.6	8.4	9.1	14.9	18.9	18.9	20.2	20.2	19.5	18.9
90°	1.0	1.7	2.5	2.7	4.3	6.3	7.4	6.6	4.9	3.7	3.7
92.5°	3.9	10.5	17.1	18.7	26.4	36.5	41.6	36.4	26.2	18.4	17.6
95°	9.3	21.4	33.5	36.5	64.8	102.5	121.4	108.3	82.2	62.6	60.4
97.5°	16.1	26.7	37.4	40.1	87.3	150.2	181.7	173.5	156.9	144.5	140.2
100°	21.3	31.0	40.7	43.1	95.4	165.3	200.2	200.8	202.0	202.9	197.9
102.5°	25.8	34.8	43.9	46.1	99.2	170.1	205.4	216.0	237.0	252.8	248.5
105°	33.4	41.1	48.6	50.6	102.0	170.5	204.8	228.5	275.7	311.0	308.7
107.5°	41.2	48.3	55.4	57.2	102.5	163.0	193.2	226.2	292.0	341.4	342.0
110°	46.4	52.8	59.2	60.9	101.7	156.3	183.5	220.4	293.9	349.1	351.6



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CATALOG NUMBER: SQ4-FB-025U-050D-B35-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	51.6	57.7	63.8	65.3	101.7	150.4	174.7	212.4	287.7	344.2	347.9
115°	59.3	64.9	70.5	72.0	102.7	143.7	164.1	200.4	273.0	327.3	332.5
117.5°	67.0	72.1	77.2	78.5	104.7	139.4	156.9	189.6	255.0	304.2	309.9
120°	71.4	76.3	81.1	82.3	106.1	138.0	153.9	183.8	243.7	288.6	294.1
122.5°	75.8	80.6	85.5	86.7	108.3	137.2	151.6	178.6	232.5	272.9	278.3
125°	82.5	86.9	91.4	92.5	111.4	136.6	149.2	172.1	217.9	252.2	257.3
127.5°	87.9	92.4	96.9	98.1	114.4	136.2	147.2	166.9	206.2	235.7	239.9
130°	90.8	95.6	100.5	101.7	116.7	136.5	146.4	164.0	198.9	225.2	229.1
132.5°	93.9	98.7	103.6	104.7	118.4	136.6	145.7	161.4	192.7	216.3	219.8
135°	98.4	102.7	107.2	108.2	120.3	136.5	144.6	157.7	183.9	203.6	206.6
137.5°	102.9	107.3	111.6	112.7	123.3	137.3	144.4	155.4	177.6	194.3	196.8
140°	106.7	110.7	114.7	115.7	125.0	137.5	143.7	153.3	172.5	186.8	189.1
142.5°	109.6	113.3	117.0	117.9	126.6	138.0	143.7	152.1	169.0	181.6	183.6
145°	114.1	117.2	120.5	121.3	128.5	138.0	142.7	149.6	163.4	173.7	175.3
147.5°	118.5	121.6	124.8	125.6	131.3	139.0	142.7	148.2	159.0	167.2	168.4
150°	121.4	124.2	127.1	127.8	132.8	139.4	142.7	147.3	156.5	163.4	164.3
152.5°	124.4	126.6	128.7	129.3	133.7	139.7	142.7	146.6	154.5	160.4	161.1
155°	128.9	130.4	132.1	132.5	135.9	140.4	142.7	145.8	152.1	156.8	157.3
157.5°	132.2	133.7	135.3	135.7	138.0	141.2	142.7	145.2	150.0	153.6	154.0
160°	134.4	135.6	136.8	137.1	139.0	141.5	142.7	144.8	148.9	152.0	152.2
162.5°	136.6	137.5	138.5	138.7	140.0	141.9	142.7	144.5	148.0	150.6	150.8
165°	139.1	139.8	140.7	140.9	141.5	142.3	142.7	144.0	146.5	148.4	148.5
167.5°	141.3	141.7	142.1	142.2	142.6	143.3	143.7	144.5	146.1	147.4	147.5
170°	142.7	143.1	143.5	143.6	143.6	143.7	143.7	144.5	146.1	147.4	147.4
172.5°	143.5	143.6	143.7	143.7	143.7	143.7	143.7	144.4	145.6	146.6	146.5
175°	144.6	144.6	144.6	144.6	144.3	143.9	143.7	144.1	145.0	145.5	145.5
177.5°	144.6	144.6	144.6	144.6	144.4	144.1	143.9	144.2	144.9	145.4	145.3
180°	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6



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CATALOG NUMBER: SQ4-FB-025U-050D-B35-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	202.1	202.1
2.5°	215.8	214.5
5°	277.6	278.9
7.5°	373.7	373.2
10°	464.8	470.6
12.5°	531.1	532.4
15°	571.4	574.0
17.5°	587.0	587.7
20°	587.7	586.3
22.5°	580.5	579.2
25°	572.1	571.4
27.5°	564.2	564.9
30°	561.0	563.0
32.5°	561.0	564.2
35°	562.3	565.5
37.5°	561.6	565.5
40°	559.0	563.6
42.5°	551.9	555.1
45°	540.8	544.8
47.5°	526.6	529.2
50°	508.3	511.0
52.5°	485.6	486.2
55°	458.3	460.9
57.5°	429.1	429.7
60°	396.5	398.5
62.5°	362.1	362.1
65°	325.7	326.9
67.5°	288.0	291.2
70°	249.6	250.3
72.5°	211.9	211.9
75°	172.9	173.5
77.5°	135.9	135.9
80°	100.8	101.5
82.5°	69.6	70.8
85°	43.5	43.5
87.5°	20.2	18.2
90°	3.7	3.7
92.5°	14.7	11.8
95°	51.6	42.6
97.5°	123.4	106.5
100°	177.8	157.7
102.5°	231.2	214.0
105°	299.5	290.2
107.5°	344.2	346.4
110°	361.1	370.8





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CATALOG NUMBER: SQ4-FB-025U-050D-B35-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	362.7	377.5
115°	353.1	373.6
117.5°	332.7	355.5
120°	316.3	338.4
122.5°	300.2	322.1
125°	277.4	297.6
127.5°	256.9	273.8
130°	244.8	260.5
132.5°	233.8	247.9
135°	218.8	230.9
137.5°	206.7	216.7
140°	198.4	207.7
142.5°	191.6	199.5
145°	181.3	187.3
147.5°	173.4	178.4
150°	168.4	172.5
152.5°	164.1	167.2
155°	159.3	161.3
157.5°	155.4	156.9
160°	153.1	153.9
162.5°	151.6	152.3
165°	149.4	150.2
167.5°	147.8	148.2
170°	147.4	147.4
172.5°	146.2	145.9
175°	145.5	145.5
177.5°	145.0	144.6
180°	144.6	144.6



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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	4.24	5.28	5.08	6.14	7.22	17.38	18.42	18.21	19.28	20.36
	3H	4.96	5.90	5.81	6.77	7.87	19.22	20.15	20.06	21.02	22.13
	4H	5.27	6.15	6.13	7.03	8.15	19.86	20.75	20.72	21.62	22.74
	6H	5.53	6.35	6.41	7.23	8.36	20.29	21.11	21.16	21.99	23.12
	8H	5.60	6.38	6.49	7.29	8.42	20.41	21.19	21.29	22.09	23.22
	12H	5.63	6.37	6.52	7.27	8.42	20.48	21.22	21.37	22.12	23.27
4H	2H	11.45	12.34	12.32	13.22	14.33	17.68	18.56	18.54	19.44	20.55
	3H	13.04	13.78	13.92	14.69	15.82	19.73	20.47	20.60	21.38	22.51
	4H	13.14	13.82	14.03	14.73	15.88	20.49	21.17	21.38	22.07	23.23
	6H	13.16	13.75	14.07	14.68	15.84	21.03	21.61	21.93	22.54	23.70
	8H	13.15	13.70	14.05	14.62	15.79	21.19	21.74	22.10	22.66	23.83
	12H	13.11	13.61	14.04	14.55	15.73	21.28	21.78	22.21	22.72	23.90
8H	4H	14.59	15.14	15.50	16.07	17.24	20.57	21.12	21.47	22.04	23.21
	6H	14.84	15.30	15.78	16.27	17.44	21.19	21.65	22.13	22.61	23.78
	8H	14.87	15.27	15.81	16.23	17.41	21.41	21.81	22.35	22.77	23.96
	12H	14.84	15.20	15.79	16.15	17.39	21.55	21.91	22.50	22.86	24.09
12H	4H	14.74	15.24	15.67	16.18	17.36	20.53	21.02	21.46	21.97	23.14
	6H	15.10	15.51	16.05	16.46	17.65	21.18	21.58	22.12	22.54	23.73
	8H	15.18	15.54	16.13	16.49	17.72	21.41	21.76	22.36	22.72	23.95