

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: P936223

Luminaire Tested: SQ4-FB-025U-050D-927-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936223
REPORT IS A COMBINATION OF REPORTS P933445 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

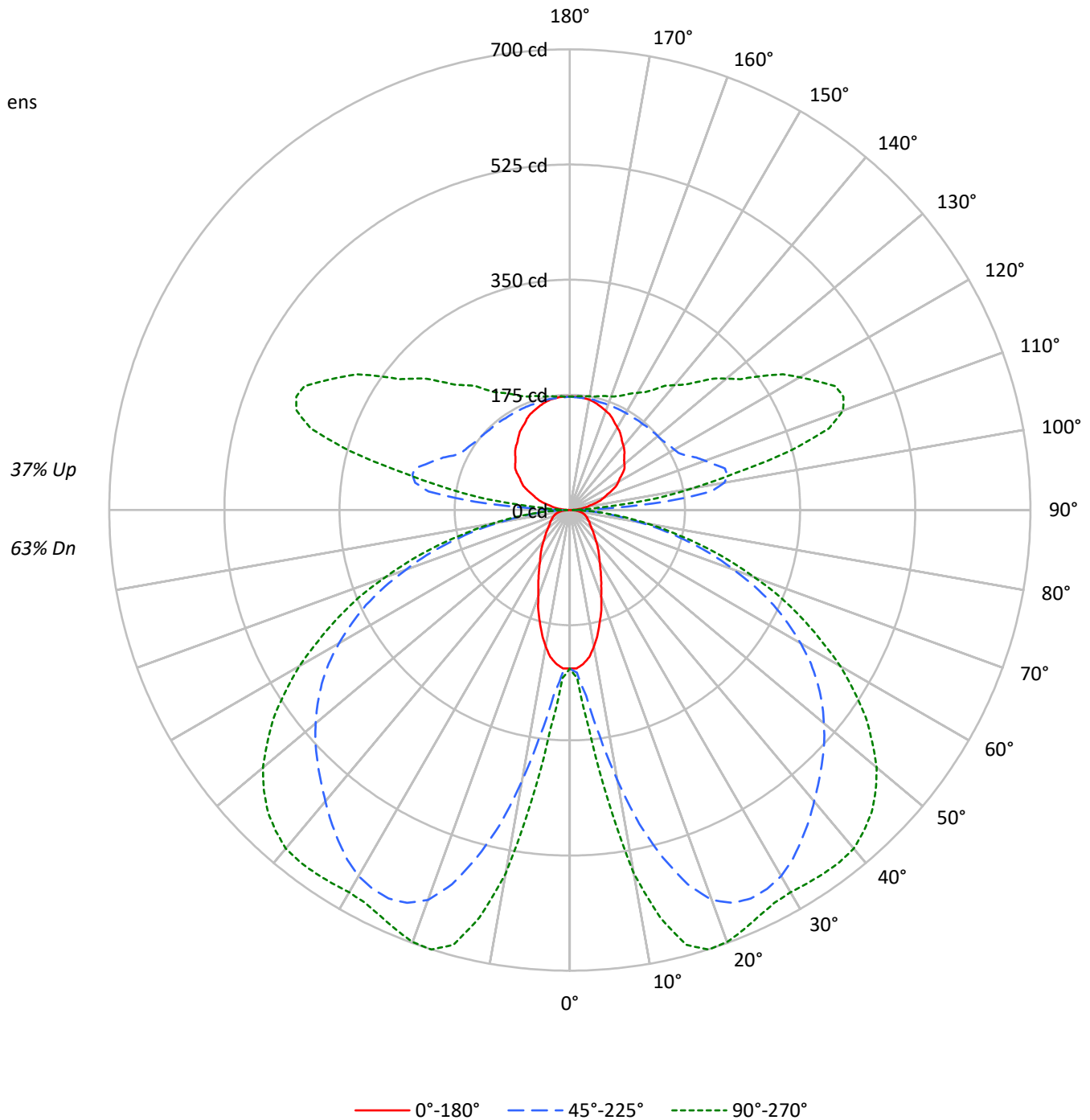
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2981.5 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 33
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

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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	63	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°	1490	1490	1490
5°	1455	1721	2003
10°	1320	2509	3320
15°	1121	3277	4009
20°	912	3797	4086
25°	761	3972	4003
30°	641	3997	3995
35°	567	3929	4099
40°	494	3842	4206
45°	447	3778	4222
50°	410	3719	4153
55°	392	3635	3969
60°	400	3474	3678
65°	415	3230	3278
70°	443	2815	2770
75°	488	2292	2161
80°	527	1588	1456
85°	465	842	745

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4222 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.2	1.0
10°-20°	138.1	4.6
20°-30°	241.5	8.1
30°-40°	310.9	10.4
40°-50°	347.3	11.6
50°-60°	332.6	11.2
60°-70°	263.6	8.8
70°-80°	155.0	5.2
80°-90°	43.7	1.5
90°-100°	84.0	2.8
100°-110°	220.9	7.4
110°-120°	229.0	7.7
120°-130°	183.7	6.2
130°-140°	144.2	4.8
140°-150°	110.6	3.7
150°-160°	79.7	2.7
160°-170°	48.8	1.6
170°-180°	16.5	0.6
0°-30°	410.8	13.8
0°-40°	721.7	24.2
0°-60°	1401.7	47.0
0°-90°	1864.1	62.5
90°-120°	534.0	17.9
90°-150°	972.5	32.6
90°-180°	1117.0	37.5
0°-180°	2981.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	241	241	241	241	241	
5°	235	252	283	321	332	22
15°	176	325	547	663	684	49
25°	112	368	651	680	681	52
35°	76	352	613	648	674	47
45°	52	280	542	621	649	40
55°	37	178	460	534	549	34
65°	29	94	342	384	390	29
75°	22	58	187	206	207	23
85°	8	18	46	51	52	8
90°	1	3	9	4	4	1
95°	11	44	145	75	51	12
105°	40	60	244	371	346	42
115°	71	86	196	390	445	70
125°	98	110	178	301	355	87
135°	117	129	172	243	275	91
145°	136	145	170	207	223	85
155°	154	158	170	187	192	71
165°	166	168	170	177	179	47
175°	172	172	171	174	174	16
180°	172	172	172	172	172	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9
2.5°	240.9	240.9	242.4	243.2	244.8	245.6	247.1	248.6	253.3	254.0	255.6
5°	234.7	237.8	247.9	251.7	262.6	277.3	283.4	293.5	314.5	320.6	324.6
7.5°	225.4	232.4	257.1	263.3	290.4	329.2	345.4	367.1	400.4	416.7	429.9
10°	210.7	225.4	269.5	284.3	328.4	387.2	417.5	447.7	498.0	520.4	529.0
12.5°	194.4	218.4	282.7	302.8	366.4	452.3	488.7	522.1	579.3	609.5	614.2
15°	175.8	208.4	295.1	324.6	406.6	506.5	546.8	587.9	641.3	663.0	668.4
17.5°	159.5	200.6	306.7	337.7	437.6	555.3	596.4	630.5	673.8	688.5	692.4
20°	139.4	188.2	314.5	354.7	470.2	591.0	630.5	656.8	686.2	695.5	697.1
22.5°	124.7	175.0	319.1	360.9	491.8	612.6	646.0	666.8	687.0	690.1	690.8
25°	112.3	160.3	318.3	367.9	510.4	625.8	651.3	666.8	678.4	680.0	680.0
27.5°	100.7	144.1	315.2	369.4	524.4	628.9	649.0	659.9	665.3	668.4	668.4
30°	90.6	128.6	307.5	366.4	530.5	625.8	642.1	647.5	652.9	657.6	659.9
32.5°	82.9	113.9	295.8	360.1	531.3	618.1	629.7	632.8	640.5	651.3	655.3
35°	75.9	99.2	282.7	351.7	526.7	605.7	613.4	616.5	632.0	648.3	653.7
37.5°	68.9	88.3	265.7	337.0	519.7	591.0	596.4	601.8	625.8	645.2	651.3
40°	62.0	79.0	245.6	320.6	508.9	573.1	577.8	586.3	618.1	640.5	646.7
42.5°	56.5	71.2	223.8	303.6	494.9	553.0	559.9	572.3	608.8	632.8	639.7
45°	51.9	63.5	200.6	280.4	477.1	532.1	542.2	559.2	597.9	621.2	627.3
47.5°	47.3	58.1	176.6	256.3	457.8	511.2	524.4	543.7	583.2	605.7	611.1
50°	43.4	52.7	152.6	230.8	436.8	488.7	504.2	524.4	564.6	585.5	592.5
52.5°	40.3	48.0	130.1	205.3	412.8	465.5	483.3	504.2	542.2	562.3	567.0
55°	37.2	44.1	110.7	178.1	388.0	440.7	460.1	480.2	517.4	534.4	537.5
57.5°	35.7	41.0	94.5	152.6	361.7	412.8	434.5	453.1	487.9	501.1	504.2
60°	33.3	38.7	82.1	130.9	333.0	386.5	405.1	423.7	453.1	463.9	466.2
62.5°	31.0	37.2	72.8	110.0	303.6	355.5	374.1	391.2	415.9	423.7	426.7
65°	29.4	35.7	65.8	94.5	273.4	322.9	341.6	356.3	376.4	384.2	385.7
67.5°	27.9	34.1	60.4	81.3	243.2	290.4	304.4	318.3	333.8	341.6	342.3
70°	25.6	32.5	55.7	72.0	212.2	253.3	264.9	279.6	292.0	295.8	298.2
72.5°	24.0	30.2	52.7	65.1	180.5	217.6	228.5	237.0	247.9	251.7	251.7
75°	21.7	27.1	49.6	58.1	147.9	178.1	187.4	196.0	204.4	206.1	203.7
77.5°	19.3	24.0	42.6	48.8	115.4	141.0	148.7	153.4	160.3	161.9	162.6
80°	16.2	20.9	33.3	38.0	83.6	103.8	109.2	113.1	119.3	119.3	120.8
82.5°	12.4	16.2	24.0	27.1	56.5	71.2	75.9	78.2	82.1	82.1	82.1
85°	7.8	10.1	15.5	17.8	34.1	43.4	46.5	47.3	50.4	51.1	51.1
87.5°	3.8	5.4	10.1	10.9	17.8	22.5	22.5	24.0	24.0	23.3	22.5
90°	1.2	2.1	3.0	3.2	5.1	7.5	8.8	7.8	5.9	4.4	4.4
92.5°	4.6	12.5	20.3	22.3	31.4	43.5	49.5	43.4	31.1	21.9	21.1
95°	11.1	25.5	39.9	43.5	77.2	122.2	144.7	129.1	97.9	74.6	72.0
97.5°	19.2	31.9	44.6	47.7	104.0	179.0	216.5	206.7	187.0	172.2	167.2
100°	25.5	37.0	48.5	51.4	113.8	197.0	238.6	239.3	240.8	241.9	235.9
102.5°	30.8	41.6	52.3	55.0	118.3	202.7	244.9	257.4	282.5	301.4	296.2
105°	39.8	48.9	58.0	60.3	121.6	203.3	244.2	272.3	328.6	370.8	368.0
107.5°	49.0	57.5	66.0	68.1	122.2	194.3	230.3	269.6	348.0	406.9	407.6
110°	55.3	63.0	70.6	72.5	121.3	186.3	218.8	262.6	350.4	416.1	419.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	61.4	68.8	76.0	77.8	121.3	179.3	208.2	253.1	342.9	410.2	414.6
115°	70.7	77.5	84.2	85.9	122.4	171.2	195.6	238.9	325.3	390.2	396.3
117.5°	79.8	85.9	92.0	93.6	124.7	166.2	187.0	226.0	304.0	362.5	369.3
120°	85.2	90.9	96.6	98.1	126.6	164.5	183.5	219.1	290.4	344.0	350.6
122.5°	90.3	96.2	101.9	103.4	129.2	163.6	180.8	212.9	277.1	325.3	331.9
125°	98.3	103.6	109.0	110.3	132.8	162.9	177.9	205.2	259.8	300.7	306.7
127.5°	104.8	110.1	115.5	116.8	136.4	162.5	175.5	198.9	245.8	280.9	286.0
130°	108.3	114.0	119.7	121.2	139.0	162.7	174.6	195.4	237.1	268.3	273.0
132.5°	111.9	117.7	123.4	124.8	141.1	162.9	173.8	192.4	229.8	257.7	261.9
135°	117.2	122.4	127.7	129.0	143.5	162.8	172.4	188.0	219.3	242.7	246.3
137.5°	122.7	127.8	133.0	134.3	146.9	163.8	172.2	185.4	211.8	231.6	234.5
140°	127.1	131.9	136.7	137.9	149.1	163.9	171.3	182.7	205.6	222.7	225.5
142.5°	130.6	135.0	139.4	140.5	150.8	164.5	171.3	181.3	201.4	216.4	218.8
145°	135.9	139.8	143.6	144.6	153.2	164.5	170.2	178.3	194.7	207.1	208.8
147.5°	141.2	145.0	148.8	149.7	156.5	165.6	170.2	176.6	189.5	199.2	200.7
150°	144.7	148.1	151.5	152.4	158.3	166.2	170.2	175.6	186.5	194.7	195.9
152.5°	148.3	150.8	153.5	154.1	159.5	166.6	170.2	174.8	184.1	191.1	192.0
155°	153.6	155.5	157.5	157.9	162.0	167.5	170.2	173.9	181.3	186.8	187.4
157.5°	157.5	159.4	161.2	161.7	164.5	168.3	170.2	173.0	178.8	183.1	183.6
160°	160.2	161.7	163.1	163.5	165.7	168.7	170.2	172.6	177.6	181.3	181.5
162.5°	162.9	163.9	165.0	165.3	166.9	169.1	170.2	172.2	176.4	179.6	179.8
165°	165.8	166.7	167.7	167.9	168.7	169.7	170.2	171.6	174.6	176.9	177.1
167.5°	168.4	168.9	169.3	169.5	170.1	170.9	171.3	172.3	174.3	175.7	175.8
170°	170.2	170.6	171.1	171.2	171.2	171.3	171.3	172.3	174.3	175.7	175.7
172.5°	171.1	171.2	171.3	171.3	171.3	171.3	171.3	172.1	173.6	174.8	174.7
175°	172.4	172.4	172.4	172.4	172.0	171.6	171.3	171.8	172.8	173.6	173.6
177.5°	172.4	172.4	172.4	172.4	172.1	171.7	171.6	171.9	172.7	173.3	173.2
180°	172.4	172.4	172.4	172.4	172.4	172.4	172.4	172.4	172.4	172.4	172.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	240.9	240.9
2.5°	257.1	255.6
5°	330.7	332.3
7.5°	445.4	444.6
10°	553.8	560.7
12.5°	632.8	634.3
15°	680.8	683.9
17.5°	699.4	700.2
20°	700.2	698.6
22.5°	691.6	690.1
25°	681.6	680.8
27.5°	672.3	673.1
30°	668.4	670.7
32.5°	668.4	672.3
35°	670.0	673.8
37.5°	669.2	673.8
40°	666.1	671.5
42.5°	657.6	661.4
45°	644.4	649.0
47.5°	627.3	630.5
50°	605.7	608.8
52.5°	578.6	579.3
55°	546.0	549.2
57.5°	511.2	512.0
60°	472.5	474.8
62.5°	431.4	431.4
65°	388.0	389.5
67.5°	343.1	347.0
70°	297.5	298.2
72.5°	252.5	252.5
75°	206.1	206.8
77.5°	161.9	161.9
80°	120.0	120.8
82.5°	82.9	84.4
85°	51.9	51.9
87.5°	24.0	21.7
90°	4.4	4.4
92.5°	17.6	14.1
95°	61.4	50.8
97.5°	147.1	126.9
100°	211.9	187.9
102.5°	275.7	255.1
105°	357.0	345.9
107.5°	410.2	412.9
110°	430.5	442.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	432.3	450.0
115°	420.8	445.4
117.5°	396.6	423.7
120°	377.0	403.4
122.5°	357.9	383.9
125°	330.6	354.7
127.5°	306.2	326.5
130°	291.8	310.5
132.5°	278.7	295.4
135°	260.7	275.2
137.5°	246.4	258.2
140°	236.5	247.6
142.5°	228.3	237.9
145°	216.1	223.3
147.5°	206.7	212.6
150°	200.7	205.6
152.5°	195.7	199.4
155°	189.8	192.3
157.5°	185.3	187.0
160°	182.5	183.5
162.5°	180.7	181.6
165°	178.1	179.1
167.5°	176.3	176.6
170°	175.7	175.7
172.5°	174.3	174.0
175°	173.6	173.6
177.5°	172.8	172.4
180°	172.4	172.4



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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	3.45	4.49	4.28	5.35	6.43	16.62	17.65	17.45	18.52	19.59
	3H	4.17	5.10	5.01	5.98	7.08	18.46	19.40	19.31	20.27	21.37
	4H	4.48	5.36	5.34	6.24	7.35	19.11	20.00	19.98	20.88	21.99
	6H	4.73	5.55	5.61	6.44	7.57	19.55	20.37	20.42	21.25	22.38
	8H	4.81	5.59	5.69	6.49	7.62	19.67	20.45	20.56	21.36	22.48
	12H	4.83	5.58	5.72	6.47	7.63	19.75	20.49	20.63	21.39	22.54
4H	2H	10.68	11.56	11.55	12.44	13.56	16.91	17.80	17.78	18.67	19.79
	3H	12.26	13.01	13.14	13.92	15.05	18.97	19.71	19.85	20.62	21.75
	4H	12.37	13.04	13.26	13.95	15.11	19.74	20.42	20.63	21.32	22.48
	6H	12.39	12.98	13.29	13.91	15.06	20.29	20.87	21.19	21.80	22.96
	8H	12.37	12.92	13.28	13.84	15.02	20.45	21.00	21.36	21.92	23.10
	12H	12.34	12.83	13.26	13.77	14.95	20.55	21.05	21.48	21.99	23.17
8H	4H	13.82	14.37	14.73	15.30	16.47	19.82	20.37	20.73	21.29	22.46
	6H	14.07	14.53	15.01	15.50	16.67	20.45	20.91	21.39	21.87	23.04
	8H	14.09	14.50	15.04	15.46	16.64	20.67	21.07	21.62	22.03	23.22
	12H	14.07	14.43	15.02	15.38	16.62	20.82	21.18	21.77	22.13	23.36
12H	4H	13.97	14.47	14.90	15.41	16.59	19.78	20.27	20.71	21.22	22.39
	6H	14.33	14.74	15.28	15.70	16.88	20.44	20.84	21.38	21.80	22.99
	8H	14.41	14.77	15.36	15.72	16.96	20.67	21.03	21.62	21.98	23.22