

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: P936618

Luminaire Tested: SQ4-FB-050U-050D-840-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936618
REPORT IS A COMBINATION OF REPORTS P933469 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

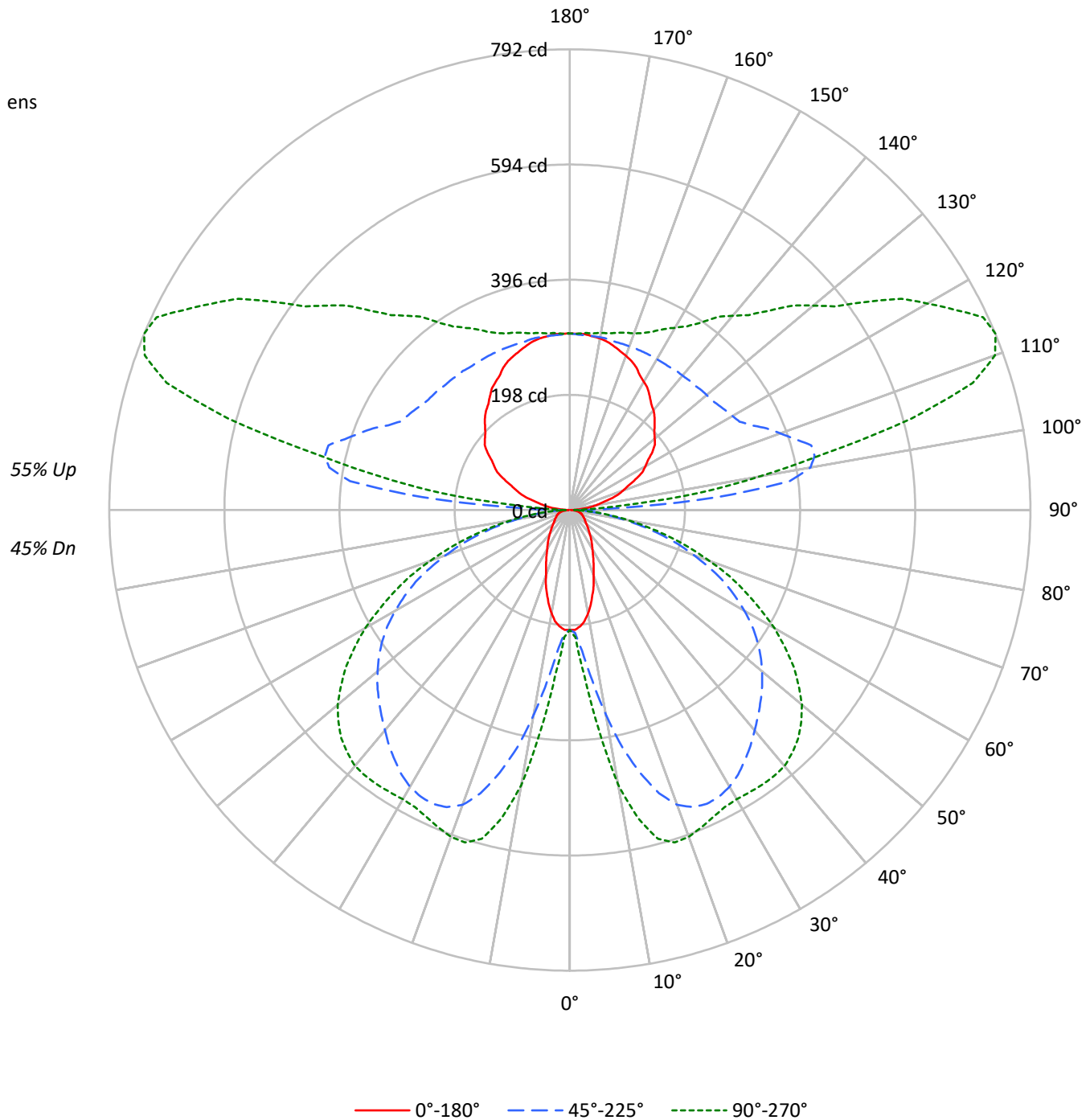
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3562.7 lumens
Efficiency: N/A
Efficacy: 125.4 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: General Diffuse

Input Watts (W): 28.4
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				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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1912	1912	1912
5°	1867	2209	2571
10°	1691	3218	4263
15°	1436	4201	5147
20°	1168	4864	5245
25°	973	5087	5139
30°	820	5114	5129
35°	723	5026	5261
40°	630	4912	5398
45°	568	4827	5421
50°	520	4749	5331
55°	497	4637	5094
60°	507	4428	4721
65°	525	4112	4208
70°	553	3577	3555
75°	610	2910	2775
80°	651	2012	1869
85°	547	1062	957

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5421 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.7	0.7
10°-20°	118.2	3.3
20°-30°	206.7	5.8
30°-40°	266.1	7.5
40°-50°	297.2	8.3
50°-60°	284.7	8.0
60°-70°	225.6	6.3
70°-80°	132.7	3.7
80°-90°	38.0	1.1
90°-100°	147.9	4.2
100°-110°	388.9	10.9
110°-120°	403.2	11.3
120°-130°	323.4	9.1
130°-140°	253.8	7.1
140°-150°	194.8	5.5
150°-160°	140.3	3.9
160°-170°	85.8	2.4
170°-180°	29.0	0.8
0°-30°	351.6	9.9
0°-40°	617.6	17.3
0°-60°	1199.5	33.7
0°-90°	1595.8	44.8
90°-120°	939.9	26.4
90°-150°	1711.8	48.0
90°-180°	1967.0	55.2
0°-180°	3562.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	206	206	206	206	206	
5°	201	215	243	274	284	19
15°	150	278	468	567	585	42
25°	96	315	557	582	583	44
35°	65	301	525	555	577	41
45°	44	240	464	532	556	34
55°	32	152	394	457	470	29
65°	25	81	292	329	333	25
75°	19	50	160	176	177	19
85°	7	15	40	44	44	7
90°	2	6	16	8	8	2
95°	20	77	255	131	89	22
105°	70	106	430	653	609	74
115°	124	151	344	687	784	123
125°	173	194	313	529	624	154
135°	206	227	303	427	484	160
145°	239	254	300	364	393	150
155°	270	278	300	329	338	124
165°	292	296	300	311	315	82
175°	303	303	302	306	306	29
180°	303	303	303	303	303	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	206.1	206.1	206.1	206.1	206.1	206.1	206.1	206.1	206.1	206.1	206.1
2.5°	206.1	206.1	207.5	208.1	209.5	210.1	211.4	212.7	216.8	217.4	218.7
5°	200.9	203.5	212.1	215.4	224.7	237.3	242.6	251.2	269.1	274.4	277.7
7.5°	192.9	198.9	220.0	225.4	248.6	281.7	295.6	314.2	342.6	356.6	367.8
10°	180.3	192.9	230.7	243.2	281.0	331.4	357.3	383.1	426.2	445.4	452.7
12.5°	166.4	186.9	242.0	259.2	313.5	387.1	418.2	446.8	495.8	521.7	525.6
15°	150.5	178.3	252.5	277.7	348.0	433.4	467.9	503.1	548.8	567.3	572.0
17.5°	136.5	171.7	262.5	289.0	374.5	475.2	510.4	539.5	576.6	589.2	592.5
20°	119.4	161.0	269.1	303.6	402.3	505.8	539.5	562.1	587.3	595.2	596.6
22.5°	106.7	149.8	273.1	308.8	420.9	524.2	552.8	570.7	587.9	590.5	591.2
25°	96.1	137.2	272.4	314.9	436.8	535.5	557.4	570.7	580.6	581.9	581.9
27.5°	86.2	123.3	269.7	316.2	448.7	538.2	555.5	564.7	569.4	572.0	572.0
30°	77.6	110.1	263.1	313.5	454.0	535.5	549.4	554.1	558.7	562.8	564.7
32.5°	70.9	97.4	253.2	308.2	454.7	528.9	538.9	541.5	548.1	557.4	560.7
35°	64.9	84.9	242.0	300.9	450.7	518.3	524.9	527.6	540.8	554.8	559.4
37.5°	59.0	75.6	227.3	288.3	444.7	505.8	510.4	515.0	535.5	552.1	557.4
40°	53.1	67.6	210.1	274.4	435.5	490.4	494.5	501.7	528.9	548.1	553.5
42.5°	48.4	61.0	191.6	259.8	423.6	473.3	479.2	489.9	521.0	541.5	547.5
45°	44.4	54.3	171.7	239.9	408.2	455.4	464.0	478.6	511.7	531.5	536.9
47.5°	40.4	49.7	151.2	219.4	391.7	437.5	448.7	465.2	499.1	518.3	522.9
50°	37.1	45.1	130.6	197.5	373.9	418.2	431.5	448.7	483.2	501.1	507.0
52.5°	34.5	41.1	111.3	175.7	353.3	398.4	413.6	431.5	464.0	481.2	485.2
55°	31.8	37.7	94.7	152.4	332.1	377.1	393.7	410.9	442.7	457.3	460.0
57.5°	30.5	35.2	80.8	130.6	309.5	353.3	371.8	387.7	417.5	428.8	431.5
60°	28.5	33.1	70.2	112.0	285.0	330.8	346.7	362.6	387.7	397.0	399.1
62.5°	26.5	31.8	62.3	94.2	259.8	304.2	320.1	334.7	355.9	362.6	365.2
65°	25.2	30.5	56.3	80.8	234.0	276.3	292.3	304.9	322.1	328.7	330.1
67.5°	23.9	29.1	51.7	69.6	208.1	248.6	260.4	272.4	285.6	292.3	292.9
70°	21.8	27.9	47.7	61.7	181.6	216.8	226.6	239.3	249.9	253.2	255.2
72.5°	20.6	25.9	45.1	55.7	154.4	186.2	195.5	202.8	212.1	215.4	215.4
75°	18.6	23.2	42.4	49.7	126.6	152.4	160.4	167.7	175.0	176.3	174.3
77.5°	16.6	20.6	36.5	41.8	98.8	120.6	127.3	131.2	137.2	138.5	139.2
80°	13.9	17.9	28.5	32.5	71.6	88.8	93.5	96.7	102.1	102.1	103.4
82.5°	10.6	13.9	20.6	23.2	48.4	61.0	64.9	67.0	70.2	70.2	70.2
85°	6.6	8.6	13.2	15.2	29.1	37.1	39.8	40.4	43.1	43.8	43.8
87.5°	3.4	4.6	8.6	9.3	15.2	19.3	19.3	20.6	20.6	19.9	19.3
90°	2.1	3.7	5.3	5.7	9.0	13.3	15.5	13.7	10.3	7.7	7.7
92.5°	8.1	21.9	35.9	39.3	55.2	76.5	87.1	76.4	54.8	38.7	37.1
95°	19.6	44.9	70.2	76.6	135.9	215.1	254.7	227.2	172.4	131.3	126.7
97.5°	33.8	56.1	78.4	84.1	183.1	315.2	381.2	363.9	329.2	303.2	294.3
100°	44.8	65.0	85.4	90.4	200.3	346.8	420.1	421.4	424.0	425.8	415.3
102.5°	54.1	73.1	92.0	96.7	208.2	356.8	431.1	453.2	497.4	530.5	521.4
105°	70.0	86.1	102.1	106.1	214.0	358.0	429.9	479.4	578.4	652.7	647.8
107.5°	86.4	101.3	116.2	119.9	215.1	342.0	405.5	474.5	612.7	716.2	717.4
110°	97.3	110.8	124.3	127.6	213.5	327.9	385.1	462.3	616.7	732.5	737.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	108.1	120.9	133.8	137.0	213.5	315.6	366.5	445.6	603.6	722.1	729.9
115°	124.4	136.2	148.1	151.1	215.5	301.3	344.3	420.4	572.6	686.9	697.6
117.5°	140.5	151.3	162.0	164.7	219.5	292.5	329.1	397.8	535.1	638.1	650.1
120°	149.9	160.1	170.1	172.7	222.8	289.6	323.0	385.7	511.3	605.4	617.1
122.5°	159.1	169.3	179.5	182.1	227.4	288.0	318.2	374.7	487.9	572.6	584.1
125°	173.1	182.4	191.7	194.0	233.8	286.7	313.2	361.2	457.2	529.3	539.8
127.5°	184.5	193.9	203.3	205.7	240.1	286.0	308.9	350.1	432.5	494.4	503.3
130°	190.6	200.8	210.8	213.4	244.7	286.4	307.3	344.0	417.4	472.5	480.7
132.5°	196.9	207.1	217.2	219.7	248.5	286.7	305.9	338.7	404.4	453.7	461.1
135°	206.3	215.5	224.8	227.0	252.5	286.4	303.4	330.9	385.9	427.2	433.5
137.5°	215.9	225.0	234.2	236.4	258.7	288.2	303.0	326.2	372.8	407.6	412.9
140°	223.8	232.2	240.7	242.8	262.3	288.5	301.5	321.7	361.9	392.0	396.9
142.5°	229.9	237.7	245.4	247.4	265.5	289.5	301.5	319.2	354.5	381.0	385.1
145°	239.3	246.0	252.8	254.5	269.5	289.6	299.6	314.0	342.8	364.5	367.6
147.5°	248.7	255.3	261.8	263.5	275.6	291.6	299.6	310.9	333.6	350.6	353.3
150°	254.7	260.6	266.7	268.1	278.6	292.5	299.6	309.1	328.3	342.7	344.9
152.5°	261.0	265.6	270.1	271.2	280.7	293.2	299.6	307.8	324.2	336.4	338.0
155°	270.4	273.8	277.1	277.9	285.1	294.7	299.6	306.1	319.1	328.9	330.0
157.5°	277.3	280.6	283.9	284.6	289.6	296.2	299.6	304.6	314.8	322.4	323.2
160°	282.1	284.5	287.1	287.7	291.7	296.9	299.6	303.9	312.6	319.1	319.5
162.5°	286.7	288.6	290.5	291.0	293.8	297.7	299.6	303.2	310.5	316.1	316.5
165°	291.9	293.5	295.3	295.7	297.0	298.7	299.6	302.1	307.4	311.3	311.7
167.5°	296.5	297.3	298.1	298.3	299.4	300.8	301.5	303.3	306.8	309.3	309.5
170°	299.6	300.4	301.1	301.3	301.4	301.5	301.5	303.3	306.8	309.3	309.3
172.5°	301.1	301.3	301.5	301.5	301.5	301.5	301.5	302.9	305.6	307.7	307.5
175°	303.4	303.4	303.4	303.4	302.8	301.9	301.5	302.4	304.2	305.5	305.5
177.5°	303.4	303.4	303.4	303.4	302.9	302.3	302.0	302.7	304.1	305.1	304.9
180°	303.4	303.4	303.4	303.4	303.4	303.4	303.4	303.4	303.4	303.4	303.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	206.1	206.1
2.5°	220.0	218.7
5°	283.1	284.3
7.5°	381.1	380.5
10°	473.9	479.9
12.5°	541.5	542.8
15°	582.6	585.3
17.5°	598.5	599.2
20°	599.2	597.8
22.5°	591.9	590.5
25°	583.3	582.6
27.5°	575.3	576.0
30°	572.0	574.0
32.5°	572.0	575.3
35°	573.3	576.6
37.5°	572.6	576.6
40°	570.0	574.6
42.5°	562.8	566.0
45°	551.4	555.5
47.5°	536.9	539.5
50°	518.3	521.0
52.5°	495.1	495.8
55°	467.3	469.9
57.5°	437.5	438.1
60°	404.3	406.3
62.5°	369.2	369.2
65°	332.1	333.4
67.5°	293.6	296.9
70°	254.5	255.2
72.5°	216.1	216.1
75°	176.3	177.0
77.5°	138.5	138.5
80°	102.8	103.4
82.5°	70.9	72.2
85°	44.4	44.4
87.5°	20.6	18.6
90°	7.7	7.7
92.5°	31.0	24.8
95°	108.0	89.4
97.5°	258.9	223.4
100°	373.0	330.7
102.5°	485.2	449.0
105°	628.4	608.9
107.5°	722.0	726.8
110°	757.8	778.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	761.1	792.2
115°	740.8	784.0
117.5°	698.0	745.9
120°	663.5	710.1
122.5°	630.0	675.9
125°	582.0	624.3
127.5°	539.0	574.6
130°	513.7	546.6
132.5°	490.5	520.1
135°	459.0	484.4
137.5°	433.6	454.5
140°	416.3	435.8
142.5°	401.9	418.7
145°	380.4	393.0
147.5°	363.8	374.3
150°	353.4	361.9
152.5°	344.4	350.8
155°	334.2	338.5
157.5°	326.1	329.1
160°	321.3	323.0
162.5°	318.1	319.7
165°	313.5	315.3
167.5°	310.2	310.9
170°	309.3	309.3
172.5°	306.9	306.3
175°	305.5	305.5
177.5°	304.2	303.4
180°	303.4	303.4



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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	2.75	3.59	3.74	4.60	5.95	15.89	16.74	16.88	17.75	19.09
	3H	3.45	4.21	4.45	5.23	6.59	17.71	18.47	18.71	19.49	20.85
	4H	3.75	4.47	4.77	5.50	6.86	18.35	19.07	19.36	20.09	21.46
	6H	4.00	4.67	5.03	5.70	7.08	18.76	19.43	19.79	20.46	21.84
	8H	4.07	4.71	5.10	5.75	7.13	18.88	19.51	19.91	20.56	21.93
	12H	4.09	4.69	5.12	5.73	7.13	18.94	19.54	19.98	20.58	21.98
4H	2H	9.94	10.66	10.96	11.68	13.05	16.16	16.89	17.19	17.91	19.28
	3H	11.51	12.11	12.54	13.16	14.55	18.19	18.80	19.22	19.85	21.23
	4H	11.60	12.16	12.64	13.20	14.60	18.95	19.50	19.99	20.55	21.95
	6H	11.61	12.09	12.66	13.16	14.56	19.47	19.95	20.52	21.02	22.42
	8H	11.59	12.04	12.64	13.09	14.51	19.63	20.08	20.68	21.13	22.55
	12H	11.55	11.95	12.61	13.02	14.44	19.71	20.12	20.78	21.19	22.61
8H	4H	13.04	13.48	14.09	14.54	15.96	19.01	19.46	20.06	20.51	21.93
	6H	13.28	13.65	14.35	14.75	16.16	19.62	20.00	20.70	21.10	22.51
	8H	13.30	13.62	14.38	14.70	16.14	19.84	20.16	20.92	21.25	22.68
	12H	13.26	13.55	14.35	14.63	16.10	19.97	20.26	21.06	21.34	22.81
12H	4H	13.17	13.58	14.24	14.65	16.07	18.96	19.37	20.03	20.44	21.86
	6H	13.53	13.86	14.61	14.94	16.37	19.61	19.93	20.69	21.02	22.45
	8H	13.60	13.89	14.69	14.97	16.44	19.83	20.12	20.92	21.20	22.67