

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: P937536

Luminaire Tested: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937536
REPORT IS A COMBINATION OF REPORTS P933566 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

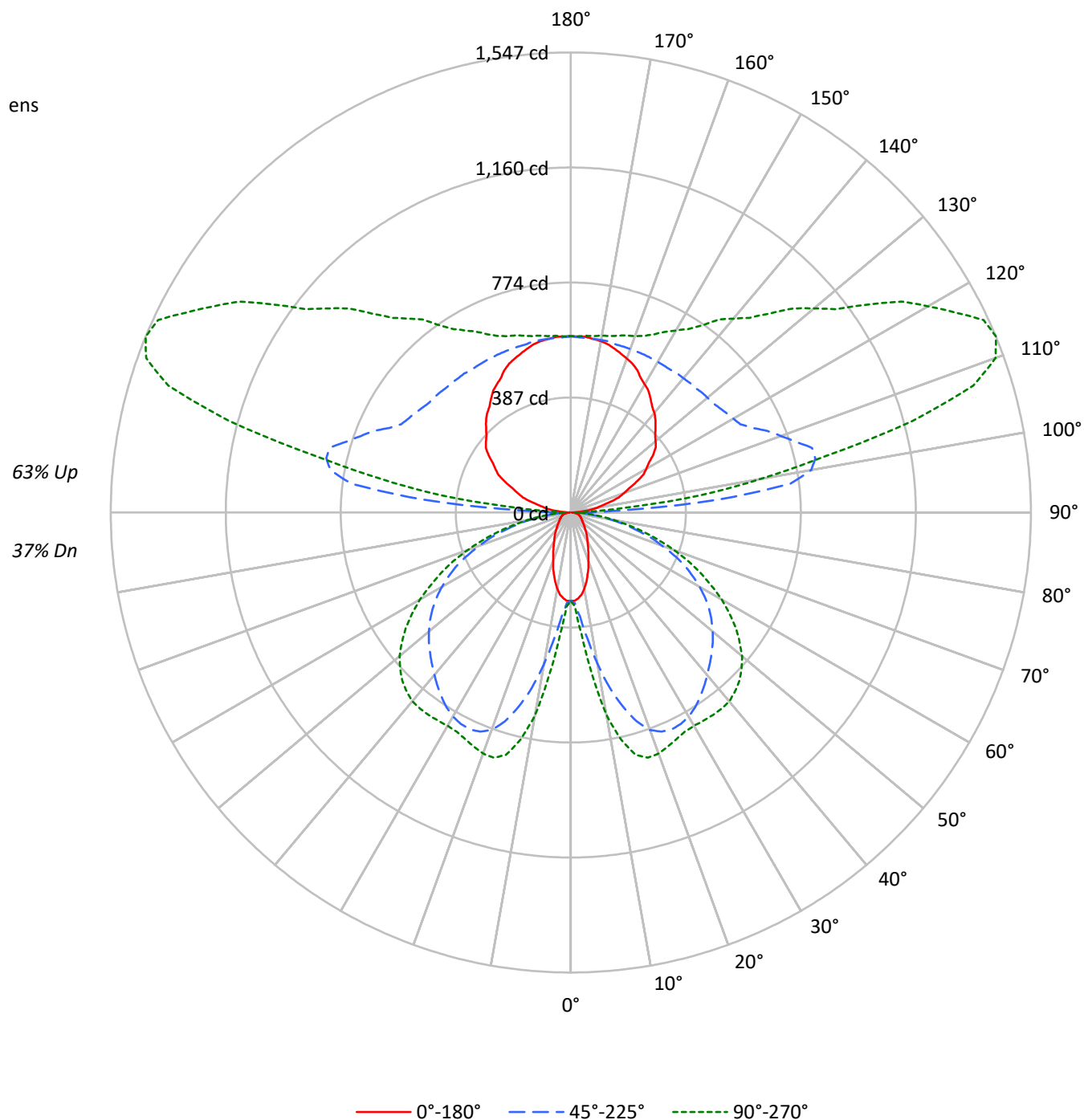
Lumens per Lamp: N/A
Luminaire Lumens: 6144.4 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 49.2
Input Voltage (V): NR
Input Current (Ain): 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: P937536

CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-6500K

Luminous Intensity Polar Plot



TEST NUMBER: P937536

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2760	2760	2760
5°	2693	3187	3709
10°	2440	4642	6149
15°	2072	6061	7425
20°	1684	7018	7567
25°	1403	7339	7413
30°	1182	7379	7400
35°	1043	7251	7591
40°	908	7086	7788
45°	821	6962	7819
50°	750	6851	7690
55°	717	6690	7348
60°	731	6388	6810
65°	756	5932	6071
70°	802	5163	5128
75°	879	4199	4002
80°	941	2901	2698
85°	795	1532	1381

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7819 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.5	0.6
10°-20°	170.5	2.8
20°-30°	298.2	4.9
30°-40°	383.9	6.2
40°-50°	428.8	7.0
50°-60°	410.7	6.7
60°-70°	325.5	5.3
70°-80°	191.4	3.1
80°-90°	55.4	0.9
90°-100°	288.9	4.7
100°-110°	759.5	12.4
110°-120°	787.5	12.8
120°-130°	631.6	10.3
130°-140°	495.6	8.1
140°-150°	380.4	6.2
150°-160°	274.0	4.5
160°-170°	167.6	2.7
170°-180°	56.6	0.9
0°-30°	507.2	8.3
0°-40°	891.0	14.5
0°-60°	1730.5	28.2
0°-90°	2302.8	37.5
90°-120°	1835.8	29.9
90°-150°	3343.4	54.4
90°-180°	3842.0	62.5
0°-180°	6144.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	297	297	297	297	297	
5°	290	311	350	396	410	27
15°	217	401	675	818	844	60
25°	139	454	804	840	840	64
35°	94	434	757	800	832	59
45°	64	346	669	767	801	50
55°	46	220	568	660	678	42
65°	36	117	422	474	481	36
75°	27	72	231	254	255	28
85°	10	22	57	63	64	10
90°	4	11	30	15	15	4
95°	38	150	498	256	175	42
105°	137	207	840	1275	1189	145
115°	243	295	673	1342	1531	240
125°	338	379	612	1034	1219	300
135°	403	444	593	834	946	312
145°	467	497	585	712	768	293
155°	528	543	585	642	661	243
165°	570	577	585	608	616	161
175°	593	593	589	597	597	56
180°	593	593	593	593	593	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4
2.5°	297.4	297.4	299.3	300.2	302.2	303.1	305.0	306.9	312.7	313.6	315.5
5°	289.7	293.6	306.0	310.8	324.1	342.3	350.0	362.4	388.2	395.9	400.6
7.5°	278.3	286.9	317.5	325.1	358.6	406.4	426.5	453.2	494.4	514.4	530.7
10°	260.1	278.3	332.8	350.9	405.4	478.1	515.4	552.7	614.8	642.6	653.1
12.5°	240.0	269.6	349.0	373.9	452.3	558.4	603.4	644.5	715.2	752.5	758.3
15°	217.1	257.2	364.3	400.6	502.0	625.4	675.1	725.8	791.7	818.5	825.2
17.5°	197.0	247.7	378.7	416.9	540.2	685.6	736.3	778.3	831.9	850.1	854.8
20°	172.1	232.4	388.2	437.9	580.4	729.6	778.3	810.9	847.2	858.7	860.6
22.5°	153.9	216.1	394.0	445.6	607.2	756.3	797.5	823.3	848.1	852.0	852.9
25°	138.6	197.9	393.0	454.2	630.1	772.6	804.2	823.3	837.6	839.5	839.5
27.5°	124.3	177.9	389.2	456.1	647.3	776.4	801.3	814.7	821.4	825.2	825.2
30°	111.9	158.7	379.6	452.3	655.0	772.6	792.7	799.4	806.1	811.8	814.7
32.5°	102.3	140.6	365.3	444.6	655.9	763.0	777.4	781.2	790.8	804.2	808.9
35°	93.7	122.4	349.0	434.1	650.2	747.7	757.3	761.1	780.3	800.3	807.0
37.5°	85.1	109.0	328.0	415.9	641.6	729.6	736.3	743.0	772.6	796.5	804.2
40°	76.5	97.5	303.1	395.9	628.2	707.6	713.3	723.8	763.0	790.8	798.4
42.5°	69.8	88.0	276.3	374.8	611.0	682.7	691.3	706.6	751.6	781.2	789.8
45°	64.1	78.4	247.7	346.1	589.0	656.9	669.3	690.4	738.2	766.9	774.5
47.5°	58.3	71.7	218.0	316.5	565.1	631.1	647.3	671.2	720.0	747.7	754.4
50°	53.5	65.0	188.4	284.9	539.3	603.4	622.5	647.3	697.1	722.9	731.5
52.5°	49.7	59.3	160.6	253.4	509.7	574.7	596.7	622.5	669.3	694.2	699.9
55°	45.9	54.5	136.7	219.9	479.1	544.1	568.0	592.8	638.7	659.8	663.6
57.5°	44.0	50.7	116.7	188.4	446.5	509.7	536.4	559.4	602.4	618.7	622.5
60°	41.1	47.8	101.4	161.6	411.2	477.1	500.1	523.0	559.4	572.8	575.6
62.5°	38.2	45.9	89.9	135.8	374.8	438.9	461.8	482.9	513.5	523.0	526.9
65°	36.3	44.0	81.3	116.7	337.5	398.7	421.7	439.8	464.7	474.3	476.2
67.5°	34.4	42.1	74.6	100.4	300.2	358.6	375.8	393.0	412.1	421.7	422.6
70°	31.6	40.2	68.8	88.9	262.0	312.7	327.0	345.2	360.5	365.3	368.1
72.5°	29.6	37.3	65.0	80.3	222.8	268.7	282.1	292.6	306.0	310.8	310.8
75°	26.8	33.5	61.2	71.7	182.6	219.9	231.4	241.9	252.4	254.3	251.5
77.5°	23.9	29.6	52.6	60.2	142.5	174.0	183.6	189.3	197.9	199.8	200.8
80°	20.1	25.8	41.1	46.9	103.3	128.1	134.8	139.6	147.3	147.3	149.2
82.5°	15.3	20.1	29.6	33.5	69.8	88.0	93.7	96.6	101.4	101.4	101.4
85°	9.6	12.4	19.1	22.0	42.1	53.5	57.4	58.3	62.2	63.1	63.1
87.5°	4.8	6.7	12.4	13.4	22.0	27.7	27.7	29.6	29.6	28.7	27.7
90°	4.0	7.2	10.3	11.1	17.5	26.0	30.2	26.9	20.2	15.1	15.1
92.5°	15.9	42.9	70.0	76.8	108.0	149.5	170.2	149.2	107.1	75.5	72.6
95°	38.2	87.7	137.2	149.5	265.5	420.2	497.5	444.0	336.9	256.5	247.5
97.5°	66.0	109.7	153.4	164.3	357.7	615.6	744.5	710.6	642.9	592.2	574.9
100°	87.5	127.1	166.7	176.6	391.3	677.5	820.5	823.0	827.9	831.6	810.9
102.5°	105.8	142.8	179.7	188.9	406.7	696.9	842.0	885.1	971.4	1036.0	1018.3
105°	136.8	168.1	199.4	207.2	418.0	699.1	839.6	936.3	1129.6	1274.7	1265.2
107.5°	168.7	197.8	227.0	234.3	420.2	667.9	791.8	926.7	1196.5	1398.8	1401.1
110°	190.1	216.5	242.8	249.4	416.9	640.4	752.0	902.8	1204.4	1430.6	1440.5

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	211.2	236.3	261.3	267.6	417.1	616.3	715.9	870.2	1178.8	1410.3	1425.5
115°	243.0	266.1	289.2	295.1	420.9	588.7	672.6	821.3	1118.6	1341.5	1362.6
117.5°	274.4	295.5	316.5	321.8	428.8	571.4	642.8	776.9	1045.2	1246.5	1269.8
120°	292.7	312.5	332.3	337.2	435.1	565.6	630.8	753.4	998.6	1182.4	1205.2
122.5°	310.7	330.7	350.6	355.6	444.2	562.5	621.6	732.0	952.8	1118.4	1140.7
125°	338.1	356.3	374.4	379.0	456.6	559.9	611.7	705.5	893.0	1033.6	1054.3
127.5°	360.3	378.7	397.1	401.7	468.9	558.5	603.4	683.9	844.9	965.7	983.1
130°	372.2	392.0	411.8	416.8	477.9	559.5	600.2	671.9	815.3	922.7	938.8
132.5°	384.6	404.4	424.2	429.1	485.2	559.9	597.3	661.5	789.8	886.1	900.5
135°	402.9	420.9	439.0	443.5	493.2	559.5	592.6	646.4	753.8	834.4	846.8
137.5°	421.6	439.5	457.3	461.7	505.1	562.9	591.8	637.2	728.0	796.2	806.4
140°	437.1	453.5	470.0	474.1	512.4	563.5	589.0	628.2	706.7	765.6	775.1
142.5°	449.0	464.2	479.4	483.3	518.5	565.5	589.0	623.4	692.4	744.1	752.3
145°	467.3	480.6	493.8	497.1	526.5	565.6	585.1	613.3	669.6	711.9	718.1
147.5°	485.7	498.6	511.4	514.6	538.1	569.4	585.1	607.3	651.6	684.9	690.1
150°	497.5	509.2	520.8	523.8	544.3	571.5	585.1	603.8	641.2	669.3	673.4
152.5°	509.8	518.6	527.5	529.7	548.2	572.8	585.1	601.1	633.0	657.0	660.2
155°	528.2	534.7	541.3	542.9	557.0	575.7	585.1	597.8	623.2	642.3	644.4
157.5°	541.7	548.1	554.4	556.0	565.7	578.6	585.1	594.9	614.7	629.6	631.0
160°	550.9	555.8	560.7	562.0	569.7	579.9	585.1	593.6	610.5	623.2	624.1
162.5°	559.9	563.7	567.4	568.4	573.9	581.4	585.1	592.3	606.5	617.2	618.0
165°	569.9	573.2	576.6	577.4	580.0	583.4	585.1	590.3	600.5	608.1	609.0
167.5°	579.1	580.7	582.3	582.7	584.8	587.6	589.0	592.4	599.1	604.1	604.5
170°	585.1	586.6	588.2	588.6	588.7	588.9	589.0	592.4	599.1	604.1	604.1
172.5°	588.2	588.6	588.9	589.0	589.0	589.0	589.0	591.7	597.0	601.0	600.7
175°	592.6	592.6	592.6	592.6	591.4	589.8	589.0	590.7	594.1	596.6	596.6
177.5°	592.6	592.6	592.6	592.6	591.7	590.4	589.8	591.1	593.8	595.8	595.4
180°	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	297.4	297.4
2.5°	317.5	315.5
5°	408.3	410.2
7.5°	549.8	548.9
10°	683.7	692.3
12.5°	781.2	783.1
15°	840.5	844.3
17.5°	863.4	864.4
20°	864.4	862.5
22.5°	853.9	852.0
25°	841.4	840.5
27.5°	830.0	830.9
30°	825.2	828.1
32.5°	825.2	830.0
35°	827.1	831.9
37.5°	826.2	831.9
40°	822.3	829.0
42.5°	811.8	816.6
45°	795.6	801.3
47.5°	774.5	778.3
50°	747.7	751.6
52.5°	714.3	715.2
55°	674.1	677.9
57.5°	631.1	632.0
60°	583.3	586.1
62.5°	532.6	532.6
65°	479.1	481.0
67.5°	423.6	428.4
70°	367.2	368.1
72.5°	311.7	311.7
75°	254.3	255.3
77.5°	199.8	199.8
80°	148.2	149.2
82.5°	102.3	104.2
85°	64.1	64.1
87.5°	29.6	26.8
90°	15.1	15.1
92.5°	60.5	48.5
95°	211.0	174.6
97.5°	505.5	436.3
100°	728.4	645.9
102.5°	947.7	877.0
105°	1227.2	1189.2
107.5°	1410.3	1419.5
110°	1480.1	1519.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1486.3	1547.1
115°	1446.9	1531.2
117.5°	1363.3	1456.9
120°	1296.0	1386.9
122.5°	1230.4	1320.0
125°	1136.8	1219.4
127.5°	1052.8	1122.4
130°	1003.1	1067.5
132.5°	958.1	1015.8
135°	896.4	946.2
137.5°	847.1	887.7
140°	813.1	851.1
142.5°	785.0	817.7
145°	742.9	767.6
147.5°	710.5	731.0
150°	690.1	706.7
152.5°	672.7	685.3
155°	652.7	661.0
157.5°	636.9	642.8
160°	627.5	630.8
162.5°	621.2	624.4
165°	612.3	615.7
167.5°	605.8	607.3
170°	604.1	604.1
172.5°	599.4	598.2
175°	596.6	596.6
177.5°	594.1	592.6
180°	592.6	592.6

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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	3.25	4.04	4.30	5.10	6.53	16.39	17.17	17.44	18.23	19.67
	3H	3.95	4.66	5.01	5.73	7.18	18.21	18.91	19.27	19.98	21.44
	4H	4.25	4.92	5.32	5.99	7.45	18.84	19.51	19.91	20.58	22.04
	6H	4.49	5.11	5.58	6.19	7.66	19.25	19.87	20.33	20.94	22.42
	8H	4.56	5.15	5.65	6.24	7.71	19.36	19.95	20.45	21.04	22.51
	12H	4.58	5.13	5.67	6.22	7.71	19.42	19.98	20.51	21.07	22.56
4H	2H	10.43	11.10	11.51	12.17	13.63	16.66	17.32	17.73	18.40	19.86
	3H	11.99	12.55	13.08	13.65	15.13	18.68	19.24	19.77	20.34	21.81
	4H	12.09	12.60	13.18	13.69	15.18	19.43	19.95	20.52	21.03	22.53
	6H	12.09	12.54	13.19	13.65	15.13	19.95	20.40	21.05	21.51	23.00
	8H	12.07	12.48	13.17	13.58	15.09	20.11	20.52	21.21	21.62	23.13
	12H	12.02	12.40	13.14	13.51	15.02	20.19	20.56	21.31	21.68	23.19
8H	4H	13.51	13.93	14.61	15.03	16.54	19.49	19.90	20.59	21.00	22.51
	6H	13.75	14.09	14.88	15.24	16.74	20.10	20.44	21.22	21.59	23.09
	8H	13.77	14.07	14.90	15.20	16.72	20.31	20.61	21.44	21.74	23.26
	12H	13.73	14.00	14.87	15.12	16.68	20.44	20.71	21.58	21.83	23.39
12H	4H	13.65	14.02	14.77	15.14	16.65	19.44	19.81	20.55	20.93	22.44
	6H	14.01	14.31	15.14	15.43	16.96	20.08	20.38	21.21	21.51	23.03
	8H	14.07	14.34	15.21	15.46	17.02	20.30	20.56	21.43	21.69	23.25