

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: P937435

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937435
REPORT IS A COMBINATION OF REPORTS P933565 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

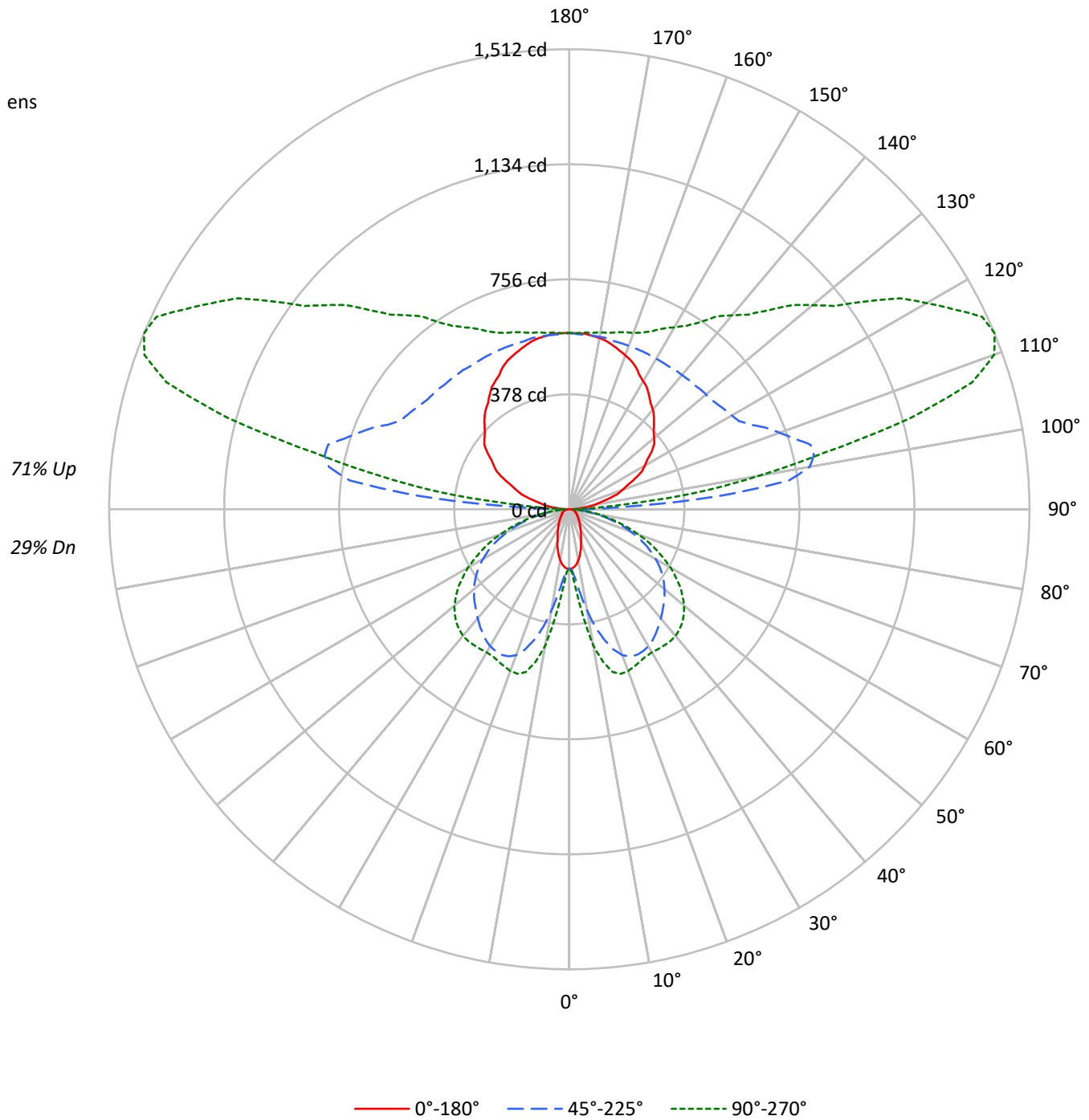
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5266.1 lumens
Efficiency: N/A
Efficacy: 127.8 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): 41.2
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: P937435
CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P937435

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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	0
RCR																		
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1809	1809	1809
5°	1766	2090	2432
10°	1600	3044	4033
15°	1359	3974	4869
20°	1105	4602	4962
25°	920	4813	4862
30°	775	4839	4853
35°	684	4755	4978
40°	596	4647	5107
45°	538	4566	5128
50°	492	4493	5043
55°	470	4388	4818
60°	479	4190	4466
65°	496	3890	3981
70°	526	3385	3363
75°	577	2752	2624
80°	618	1902	1770
85°	522	1006	905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5128 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.2	0.5
10°-20°	111.8	2.1
20°-30°	195.6	3.7
30°-40°	251.7	4.8
40°-50°	281.2	5.3
50°-60°	269.3	5.1
60°-70°	213.4	4.1
70°-80°	125.5	2.4
80°-90°	37.1	0.7
90°-100°	282.4	5.4
100°-110°	742.4	14.1
110°-120°	769.8	14.6
120°-130°	617.4	11.7
130°-140°	484.5	9.2
140°-150°	371.9	7.1
150°-160°	267.8	5.1
160°-170°	163.9	3.1
170°-180°	55.4	1.1
0°-30°	332.6	6.3
0°-40°	584.3	11.1
0°-60°	1134.8	21.5
0°-90°	1510.8	28.7
90°-120°	1794.5	34.1
90°-150°	3268.3	62.1
90°-180°	3755.0	71.3
0°-180°	5266.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	195	195	195	195	195	
5°	190	204	230	260	269	18
15°	142	263	443	537	554	40
25°	91	298	527	550	551	42
35°	61	285	497	525	546	38
45°	42	227	439	503	526	32
55°	30	144	372	433	444	27
65°	24	76	276	311	315	24
75°	18	47	152	167	167	18
85°	6	14	38	41	42	7
90°	4	11	30	15	15	4
95°	37	146	486	251	171	41
105°	134	203	821	1246	1162	142
115°	238	288	658	1311	1497	235
125°	330	370	598	1010	1192	293
135°	394	434	579	816	925	305
145°	457	486	572	696	750	286
155°	516	531	572	628	646	237
165°	557	564	572	594	602	157
175°	579	579	576	583	583	55
180°	579	579	579	579	579	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	195.0	195.0	195.0	195.0	195.0	195.0	195.0	195.0	195.0	195.0	195.0
2.5°	195.0	195.0	196.3	196.8	198.2	198.8	200.0	201.2	205.1	205.6	206.9
5°	190.0	192.5	200.7	203.8	212.6	224.5	229.5	237.7	254.6	259.6	262.7
7.5°	182.5	188.2	208.2	213.2	235.2	266.5	279.7	297.2	324.2	337.3	348.0
10°	170.6	182.5	218.3	230.1	265.8	313.5	338.0	362.5	403.2	421.4	428.3
12.5°	157.4	176.8	228.9	245.2	296.6	366.2	395.7	422.7	469.0	493.5	497.3
15°	142.4	168.7	238.9	262.7	329.2	410.1	442.7	476.0	519.2	536.7	541.1
17.5°	129.2	162.5	248.4	273.4	354.3	449.6	482.9	510.4	545.5	557.5	560.5
20°	112.9	152.4	254.6	287.2	380.6	478.5	510.4	531.8	555.6	563.1	564.4
22.5°	100.9	141.7	258.4	292.2	398.2	496.0	523.0	539.9	556.2	558.7	559.3
25°	90.9	129.8	257.7	297.9	413.2	506.6	527.4	539.9	549.3	550.5	550.5
27.5°	81.5	116.7	255.2	299.1	424.5	509.1	525.5	534.3	538.7	541.1	541.1
30°	73.4	104.1	248.9	296.6	429.5	506.6	519.8	524.2	528.6	532.4	534.3
32.5°	67.1	92.2	239.6	291.5	430.2	500.3	509.8	512.3	518.6	527.4	530.4
35°	61.4	80.3	228.9	284.7	426.4	490.3	496.6	499.1	511.7	524.8	529.2
37.5°	55.8	71.5	215.1	272.7	420.7	478.5	482.9	487.3	506.6	522.3	527.4
40°	50.2	63.9	198.8	259.6	412.0	464.0	467.8	474.6	500.3	518.6	523.6
42.5°	45.8	57.7	181.2	245.8	400.7	447.7	453.3	463.4	492.9	512.3	517.9
45°	42.0	51.4	162.5	226.9	386.2	430.8	438.9	452.8	484.1	502.9	507.9
47.5°	38.2	47.0	143.0	207.6	370.6	413.9	424.5	440.2	472.2	490.3	494.7
50°	35.1	42.6	123.6	186.8	353.7	395.7	408.2	424.5	457.2	474.1	479.7
52.5°	32.6	38.9	105.3	166.2	334.3	376.9	391.3	408.2	438.9	455.2	459.0
55°	30.1	35.7	89.6	144.2	314.2	356.8	372.5	388.7	418.8	432.7	435.2
57.5°	28.9	33.3	76.5	123.6	292.8	334.3	351.7	366.8	395.0	405.7	408.2
60°	26.9	31.3	66.5	106.0	269.7	312.9	328.0	343.0	366.8	375.6	377.5
62.5°	25.1	30.1	59.0	89.1	245.8	287.8	302.8	316.7	336.7	343.0	345.5
65°	23.8	28.9	53.3	76.5	221.3	261.4	276.5	288.5	304.7	311.0	312.3
67.5°	22.6	27.6	48.9	65.8	196.8	235.2	246.4	257.7	270.2	276.5	277.1
70°	20.7	26.4	45.1	58.3	171.8	205.1	214.4	226.4	236.4	239.6	241.4
72.5°	19.4	24.5	42.6	52.7	146.1	176.2	185.0	191.9	200.7	203.8	203.8
75°	17.6	22.0	40.1	47.0	119.7	144.2	151.7	158.6	165.5	166.8	164.9
77.5°	15.7	19.4	34.5	39.5	93.5	114.1	120.4	124.1	129.8	131.0	131.7
80°	13.2	16.9	26.9	30.8	67.8	84.0	88.4	91.5	96.6	96.6	97.9
82.5°	10.0	13.2	19.4	22.0	45.8	57.7	61.4	63.4	66.5	66.5	66.5
85°	6.3	8.1	12.5	14.4	27.6	35.1	37.7	38.2	40.8	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°	3.9	7.0	10.1	10.8	17.1	25.4	29.5	26.3	19.7	14.8	14.8
92.5°	15.5	42.0	68.4	75.1	105.5	146.1	166.4	145.8	104.7	73.8	70.9
95°	37.3	85.7	134.1	146.2	259.6	410.7	486.3	434.0	329.3	250.8	241.9
97.5°	64.5	107.2	149.9	160.6	349.7	601.8	727.8	694.7	628.5	578.9	561.9
100°	85.5	124.2	162.9	172.6	382.5	662.2	802.1	804.5	809.3	812.9	792.7
102.5°	103.4	139.6	175.6	184.7	397.5	681.2	823.1	865.3	949.6	1012.8	995.5
105°	133.8	164.3	194.9	202.6	408.7	683.4	820.8	915.3	1104.3	1246.1	1236.8
107.5°	164.9	193.4	221.9	229.0	410.7	652.9	774.0	905.9	1169.6	1367.4	1369.6
110°	185.8	211.6	237.3	243.8	407.5	626.0	735.1	882.5	1177.4	1398.4	1408.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	206.5	231.0	255.5	261.6	407.7	602.4	699.8	850.7	1152.3	1378.6	1393.5
115°	237.5	260.1	282.7	288.5	411.5	575.5	657.5	802.8	1093.4	1311.4	1332.0
117.5°	268.3	288.8	309.4	314.5	419.1	558.6	628.3	759.4	1021.7	1218.5	1241.3
120°	286.1	305.5	324.8	329.7	425.3	552.9	616.6	736.5	976.1	1155.9	1178.1
122.5°	303.7	323.2	342.8	347.6	434.3	549.9	607.7	715.5	931.3	1093.2	1115.1
125°	330.5	348.3	366.0	370.5	446.3	547.4	597.9	689.6	872.9	1010.4	1030.6
127.5°	352.2	370.1	388.2	392.7	458.4	546.0	589.8	668.5	825.9	944.0	961.0
130°	363.9	383.2	402.6	407.4	467.2	546.9	586.7	656.8	796.9	902.0	917.7
132.5°	375.9	395.3	414.6	419.5	474.3	547.4	583.9	646.6	772.1	866.2	880.3
135°	393.9	411.5	429.1	433.5	482.1	546.9	579.3	631.9	736.8	815.6	827.8
137.5°	412.1	429.6	447.0	451.4	493.7	550.3	578.5	622.9	711.7	778.3	788.2
140°	427.3	443.3	459.4	463.4	500.9	550.8	575.8	614.1	690.8	748.4	757.7
142.5°	438.9	453.8	468.7	472.4	506.9	552.8	575.8	609.4	676.8	727.4	735.4
145°	456.8	469.8	482.7	486.0	514.6	552.9	571.9	599.5	654.6	695.9	702.0
147.5°	474.7	487.4	499.9	503.1	526.1	556.6	571.9	593.6	637.0	669.5	674.6
150°	486.3	497.7	509.1	512.0	532.0	558.7	571.9	590.3	626.8	654.3	658.3
152.5°	498.4	507.0	515.7	517.8	535.9	559.9	571.9	587.6	618.8	642.2	645.3
155°	516.3	522.7	529.1	530.7	544.5	562.8	571.9	584.4	609.2	627.8	629.9
157.5°	529.5	535.8	541.9	543.5	553.0	565.6	571.9	581.6	600.9	615.4	616.8
160°	538.5	543.3	548.1	549.3	556.9	566.9	571.9	580.3	596.8	609.2	610.1
162.5°	547.4	551.0	554.7	555.6	561.0	568.3	571.9	579.0	592.9	603.4	604.1
165°	557.1	560.4	563.6	564.5	567.0	570.3	571.9	577.0	587.0	594.5	595.3
167.5°	566.1	567.6	569.2	569.6	571.7	574.4	575.8	579.1	585.6	590.5	590.9
170°	571.9	573.4	575.0	575.4	575.5	575.7	575.8	579.1	585.6	590.5	590.5
172.5°	575.0	575.4	575.7	575.8	575.8	575.8	575.8	578.4	583.5	587.5	587.2
175°	579.3	579.3	579.3	579.3	578.1	576.5	575.8	577.5	580.7	583.2	583.2
177.5°	579.3	579.3	579.3	579.3	578.4	577.2	576.5	577.8	580.5	582.4	582.0
180°	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3	579.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	195.0	195.0
2.5°	208.2	206.9
5°	267.8	269.0
7.5°	360.5	360.0
10°	448.4	454.0
12.5°	512.3	513.5
15°	551.2	553.7
17.5°	566.2	566.9
20°	566.9	565.6
22.5°	560.0	558.7
25°	551.9	551.2
27.5°	544.3	544.9
30°	541.1	543.1
32.5°	541.1	544.3
35°	542.4	545.5
37.5°	541.8	545.5
40°	539.2	543.6
42.5°	532.4	535.5
45°	521.7	525.5
47.5°	507.9	510.4
50°	490.3	492.9
52.5°	468.4	469.0
55°	442.1	444.5
57.5°	413.9	414.4
60°	382.5	384.4
62.5°	349.3	349.3
65°	314.2	315.4
67.5°	277.8	280.9
70°	240.8	241.4
72.5°	204.4	204.4
75°	166.8	167.4
77.5°	131.0	131.0
80°	97.2	97.9
82.5°	67.1	68.3
85°	42.0	42.0
87.5°	19.4	17.6
90°	14.8	14.8
92.5°	59.2	47.4
95°	206.3	170.7
97.5°	494.2	426.5
100°	712.1	631.4
102.5°	926.4	857.3
105°	1199.6	1162.5
107.5°	1378.6	1387.6
110°	1446.8	1485.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1452.9	1512.4
115°	1414.4	1496.8
117.5°	1332.7	1424.1
120°	1266.9	1355.7
122.5°	1202.8	1290.4
125°	1111.3	1192.0
127.5°	1029.1	1097.2
130°	980.6	1043.5
132.5°	936.6	992.9
135°	876.3	924.9
137.5°	828.1	867.8
140°	794.9	832.0
142.5°	767.4	799.4
145°	726.2	750.4
147.5°	694.6	714.6
150°	674.6	690.8
152.5°	657.6	669.9
155°	638.0	646.2
157.5°	622.6	628.3
160°	613.4	616.6
162.5°	607.3	610.4
165°	598.6	601.9
167.5°	592.2	593.6
170°	590.5	590.5
172.5°	586.0	584.8
175°	583.2	583.2
177.5°	580.7	579.3
180°	579.3	579.3



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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	0.68	1.40	1.80	2.51	4.05	13.82	14.53	14.93	15.65	17.19
	3H	1.38	2.02	2.50	3.14	4.70	15.63	16.27	16.75	17.40	18.96
	4H	1.67	2.28	2.80	3.40	4.97	16.26	16.87	17.39	17.99	19.56
	6H	1.91	2.47	3.05	3.60	5.18	16.67	17.23	17.81	18.36	19.93
	8H	1.98	2.51	3.12	3.65	5.22	16.78	17.32	17.92	18.46	20.03
	12H	1.99	2.50	3.14	3.63	5.22	16.84	17.34	17.98	18.48	20.07
4H	2H	7.85	8.46	8.99	9.58	11.15	14.08	14.69	15.22	15.81	17.37
	3H	9.41	9.92	10.55	11.07	12.65	16.09	16.60	17.24	17.75	19.33
	4H	9.50	9.97	10.65	11.10	12.70	16.84	17.31	17.99	18.45	20.05
	6H	9.50	9.90	10.66	11.06	12.65	17.36	17.76	18.52	18.92	20.51
	8H	9.47	9.85	10.63	11.00	12.61	17.51	17.89	18.67	19.04	20.65
	12H	9.42	9.76	10.59	10.93	12.54	17.59	17.93	18.76	19.10	20.71
8H	4H	10.92	11.30	12.07	12.45	14.05	16.89	17.27	18.05	18.42	20.03
	6H	11.15	11.47	12.33	12.66	14.26	17.50	17.81	18.68	19.01	20.61
	8H	11.17	11.44	12.35	12.61	14.24	17.71	17.98	18.89	19.16	20.78
	12H	11.13	11.37	12.32	12.54	14.20	17.84	18.08	19.03	19.25	20.90
12H	4H	11.05	11.39	12.22	12.56	14.17	16.84	17.18	18.01	18.34	19.95
	6H	11.41	11.68	12.59	12.85	14.47	17.48	17.76	18.66	18.93	20.55
	8H	11.47	11.71	12.66	12.88	14.53	17.70	17.94	18.88	19.11	20.76