

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: P936933

Luminaire Tested: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936933
REPORT IS A COMBINATION OF REPORTS P933472 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

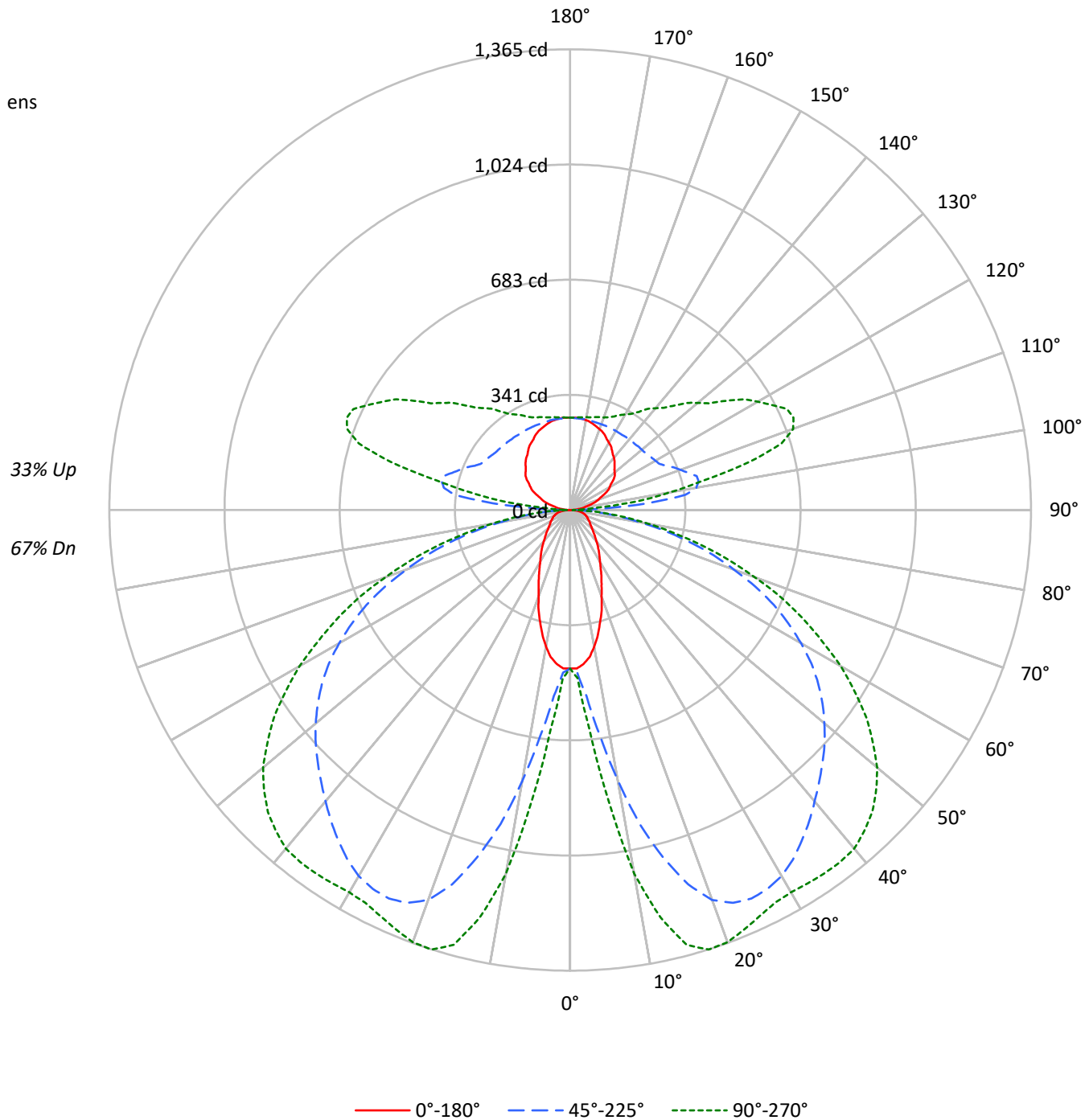
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5411.9 lumens
Efficiency: N/A
Efficacy: 96.6 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): 56
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67	67	67	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55	55	55	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45	45	45	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37	37	37	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31	31	31	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26	26	26	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23	23	23	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20	20	20	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17	17	17	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15	15	15	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14	14	14	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4358	4358	4358
5°	4253	5034	5859
10°	3854	7333	9713
15°	3272	9573	11729
20°	2661	11086	11953
25°	2216	11592	11711
30°	1866	11656	11688
35°	1648	11453	11990
40°	1434	11193	12303
45°	1296	10999	12351
50°	1186	10822	12147
55°	1132	10568	11608
60°	1156	10091	10758
65°	1196	9370	9589
70°	1264	8156	8101
75°	1387	6632	6323
80°	1484	4584	4261
85°	1250	2418	2180

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12351 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	1.1
10°-20°	269.3	5.0
20°-30°	471.0	8.7
30°-40°	606.4	11.2
40°-50°	677.3	12.5
50°-60°	648.7	12.0
60°-70°	514.1	9.5
70°-80°	302.3	5.6
80°-90°	85.0	1.6
90°-100°	133.6	2.5
100°-110°	351.3	6.5
110°-120°	364.3	6.7
120°-130°	292.2	5.4
130°-140°	229.3	4.2
140°-150°	176.0	3.3
150°-160°	126.7	2.3
160°-170°	77.5	1.4
170°-180°	26.2	0.5
0°-30°	801.1	14.8
0°-40°	1407.5	26.0
0°-60°	2733.5	50.5
0°-90°	3634.9	67.2
90°-120°	849.2	15.7
90°-150°	1546.6	28.6
90°-180°	1777.0	32.8
0°-180°	5411.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	458	491	553	625	648	42
15°	343	633	1066	1293	1334	95
25°	219	717	1270	1326	1328	101
35°	148	686	1196	1264	1314	92
45°	101	547	1057	1211	1266	78
55°	72	347	897	1042	1071	66
65°	57	184	666	749	760	57
75°	42	113	366	402	403	44
85°	15	35	91	100	101	16
90°	2	5	14	7	7	3
95°	18	69	230	119	81	20
105°	63	96	388	590	550	67
115°	112	136	311	620	708	111
125°	156	175	283	478	564	139
135°	186	205	274	386	438	144
145°	216	230	271	329	355	135
155°	244	251	271	297	306	112
165°	264	267	271	281	285	74
175°	274	274	272	276	276	26
180°	274	274	274	274	274	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	469.7	469.7	469.7	469.7	469.7	469.7	469.7	469.7	469.7	469.7	469.7
2.5°	469.7	469.7	472.7	474.2	477.3	478.8	481.8	484.9	493.9	495.4	498.4
5°	457.6	463.7	483.4	490.9	512.0	540.7	552.8	572.4	613.2	625.3	632.9
7.5°	439.5	453.1	501.5	513.5	566.4	641.9	673.7	716.0	780.9	812.6	838.3
10°	410.8	439.5	525.6	554.3	640.4	755.2	814.1	873.0	971.2	1015.0	1031.6
12.5°	379.1	426.0	551.3	590.6	714.5	882.1	953.1	1018.0	1129.8	1188.7	1197.7
15°	342.9	406.3	575.5	632.9	792.9	987.8	1066.3	1146.4	1250.6	1292.9	1303.5
17.5°	311.2	391.2	598.1	658.6	853.3	1082.9	1163.0	1229.5	1314.0	1342.8	1350.3
20°	271.9	367.0	613.2	691.8	916.8	1152.5	1229.5	1280.8	1338.2	1356.3	1359.4
22.5°	243.1	341.3	622.2	703.8	959.1	1194.7	1259.7	1300.5	1339.7	1345.8	1347.2
25°	219.0	312.7	620.8	717.4	995.4	1220.4	1270.3	1300.5	1323.1	1326.2	1326.2
27.5°	196.4	280.9	614.7	720.4	1022.5	1226.5	1265.7	1286.9	1297.4	1303.5	1303.5
30°	176.7	250.7	599.7	714.5	1034.6	1220.4	1252.1	1262.7	1273.2	1282.3	1286.9
32.5°	161.7	222.0	577.0	702.3	1036.2	1205.3	1228.0	1234.0	1249.1	1270.3	1277.8
35°	148.0	193.3	551.3	685.7	1027.0	1181.1	1196.2	1202.3	1232.4	1264.2	1274.8
37.5°	134.4	172.2	518.1	657.1	1013.5	1152.5	1163.0	1173.6	1220.4	1258.1	1270.3
40°	120.9	154.1	478.8	625.3	992.3	1117.6	1126.8	1143.4	1205.3	1249.1	1261.2
42.5°	110.2	139.0	436.5	592.1	965.1	1078.5	1092.0	1116.2	1187.2	1234.0	1247.6
45°	101.2	123.9	391.2	546.7	930.4	1037.7	1057.3	1090.5	1166.0	1211.4	1223.4
47.5°	92.1	113.3	344.4	500.0	892.6	996.9	1022.5	1060.3	1137.3	1181.1	1191.7
50°	84.6	102.7	297.5	450.1	851.8	953.1	983.3	1022.5	1101.0	1141.8	1155.5
52.5°	78.6	93.6	253.8	400.3	805.1	907.7	942.5	983.3	1057.3	1096.6	1105.6
55°	72.5	86.0	216.0	347.4	756.7	859.4	897.2	936.4	1008.9	1042.1	1048.2
57.5°	69.4	80.1	184.2	297.5	705.3	805.1	847.4	883.6	951.5	977.2	983.3
60°	65.0	75.5	160.1	255.3	649.5	753.7	790.0	826.2	883.6	904.8	909.2
62.5°	60.4	72.5	142.0	214.5	592.1	693.3	729.5	762.7	811.1	826.2	832.2
65°	57.4	69.4	128.4	184.2	533.2	629.8	666.1	694.8	734.1	749.2	752.2
67.5°	54.4	66.5	117.8	158.6	474.2	566.4	593.6	620.8	651.0	666.1	667.6
70°	49.8	63.5	108.7	140.5	413.8	493.9	516.6	545.2	569.4	577.0	581.5
72.5°	46.9	58.9	102.7	126.8	352.0	424.4	445.6	462.2	483.4	490.9	490.9
75°	42.3	52.8	96.7	113.3	288.5	347.4	365.5	382.1	398.7	401.8	397.2
77.5°	37.8	46.9	83.1	95.2	225.0	274.9	290.0	299.0	312.7	315.6	317.1
80°	31.7	40.8	65.0	74.0	163.1	202.4	213.0	220.5	232.6	232.6	235.7
82.5°	24.2	31.7	46.9	52.8	110.2	139.0	148.0	152.5	160.1	160.1	160.1
85°	15.1	19.6	30.2	34.7	66.5	84.6	90.6	92.1	98.2	99.7	99.7
87.5°	7.6	10.5	19.6	21.2	34.7	43.8	43.8	46.9	46.9	45.3	43.8
90°	1.9	3.3	4.8	5.2	8.1	12.1	14.0	12.4	9.3	7.0	7.0
92.5°	7.3	19.8	32.4	35.5	49.9	69.1	78.7	69.0	49.5	35.0	33.6
95°	17.7	40.5	63.5	69.2	122.8	194.3	230.1	205.3	155.8	118.6	114.4
97.5°	30.5	50.7	70.9	76.0	165.4	284.7	344.4	328.8	297.4	273.9	265.9
100°	40.4	58.7	77.1	81.7	180.9	313.3	379.5	380.7	383.0	384.7	375.2
102.5°	48.9	66.1	83.1	87.4	188.1	322.3	389.5	409.4	449.3	479.2	471.0
105°	63.3	77.7	92.2	95.9	193.3	323.4	388.4	433.1	522.5	589.7	585.3
107.5°	78.0	91.5	105.0	108.4	194.3	309.0	366.3	428.7	553.5	647.1	648.1
110°	87.9	100.1	112.3	115.3	192.9	296.3	347.9	417.7	557.2	661.8	666.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	97.7	109.3	120.9	123.8	192.9	285.1	331.2	402.6	545.3	652.4	659.5
115°	112.4	123.1	133.8	136.5	194.7	272.2	311.1	379.8	517.4	620.5	630.3
117.5°	126.9	136.7	146.4	148.8	198.3	264.3	297.3	359.4	483.4	576.5	587.3
120°	135.4	144.6	153.7	156.0	201.3	261.6	291.8	348.5	461.9	547.0	557.5
122.5°	143.7	153.0	162.2	164.5	205.5	260.2	287.5	338.6	440.8	517.4	527.7
125°	156.4	164.8	173.2	175.3	211.2	259.0	283.0	326.3	413.1	478.2	487.7
127.5°	166.7	175.2	183.7	185.8	216.9	258.4	279.1	316.3	390.8	446.7	454.7
130°	172.2	181.4	190.5	192.8	221.1	258.8	277.6	310.8	377.1	426.9	434.3
132.5°	177.9	187.1	196.2	198.5	224.5	259.0	276.4	306.0	365.3	409.9	416.6
135°	186.4	194.7	203.1	205.1	228.2	258.8	274.1	298.9	348.7	386.0	391.7
137.5°	195.0	203.2	211.6	213.6	233.7	260.4	273.8	294.7	336.8	368.3	373.0
140°	202.2	209.8	217.4	219.3	237.0	260.6	272.4	290.6	327.0	354.2	358.6
142.5°	207.7	214.8	221.7	223.5	239.8	261.5	272.4	288.4	320.3	344.2	347.9
145°	216.2	222.3	228.4	229.9	243.5	261.6	270.6	283.7	309.7	329.3	332.1
147.5°	224.7	230.7	236.5	238.1	249.0	263.4	270.6	280.9	301.4	316.8	319.2
150°	230.1	235.5	240.9	242.3	251.7	264.3	270.6	279.3	296.6	309.6	311.6
152.5°	235.8	239.9	244.0	245.0	253.6	264.9	270.6	278.1	292.9	303.9	305.4
155°	244.3	247.3	250.4	251.1	257.6	266.3	270.6	276.5	288.3	297.2	298.1
157.5°	250.6	253.5	256.4	257.2	261.6	267.6	270.6	275.2	284.4	291.3	292.0
160°	254.8	257.1	259.4	259.9	263.5	268.2	270.6	274.6	282.4	288.3	288.7
162.5°	259.0	260.7	262.4	262.9	265.5	268.9	270.6	273.9	280.6	285.5	285.9
165°	263.7	265.2	266.8	267.2	268.3	269.8	270.6	273.0	277.7	281.3	281.6
167.5°	267.9	268.6	269.3	269.5	270.5	271.8	272.4	274.0	277.2	279.5	279.7
170°	270.6	271.4	272.1	272.2	272.3	272.4	272.4	274.0	277.2	279.5	279.5
172.5°	272.1	272.2	272.4	272.4	272.4	272.4	272.4	273.7	276.1	278.0	277.8
175°	274.1	274.1	274.1	274.1	273.6	272.8	272.4	273.2	274.8	276.0	276.0
177.5°	274.1	274.1	274.1	274.1	273.7	273.1	272.9	273.5	274.7	275.6	275.5
180°	274.1	274.1	274.1	274.1	274.1	274.1	274.1	274.1	274.1	274.1	274.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	469.7	469.7
2.5°	501.5	498.4
5°	644.9	648.0
7.5°	868.5	867.0
10°	1079.9	1093.5
12.5°	1234.0	1237.0
15°	1327.7	1333.7
17.5°	1363.9	1365.4
20°	1365.4	1362.4
22.5°	1348.7	1345.8
25°	1329.1	1327.7
27.5°	1311.0	1312.5
30°	1303.5	1308.0
32.5°	1303.5	1311.0
35°	1306.5	1314.0
37.5°	1305.0	1314.0
40°	1298.9	1309.5
42.5°	1282.3	1289.8
45°	1256.6	1265.7
47.5°	1223.4	1229.5
50°	1181.1	1187.2
52.5°	1128.3	1129.8
55°	1064.8	1070.9
57.5°	996.9	998.4
60°	921.4	925.9
62.5°	841.3	841.3
65°	756.7	759.7
67.5°	669.1	676.7
70°	580.0	581.5
72.5°	492.4	492.4
75°	401.8	403.3
77.5°	315.6	315.6
80°	234.1	235.7
82.5°	161.7	164.6
85°	101.2	101.2
87.5°	46.9	42.3
90°	7.0	7.0
92.5°	28.0	22.4
95°	97.6	80.8
97.5°	233.9	201.8
100°	337.0	298.8
102.5°	438.4	405.7
105°	567.7	550.1
107.5°	652.3	656.6
110°	684.6	702.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	687.6	715.7
115°	669.3	708.3
117.5°	630.6	673.9
120°	599.5	641.5
122.5°	569.2	610.6
125°	525.8	564.0
127.5°	486.9	519.1
130°	464.1	493.8
132.5°	443.2	469.9
135°	414.7	437.7
137.5°	391.8	410.6
140°	376.2	393.7
142.5°	363.1	378.3
145°	343.7	355.1
147.5°	328.7	338.1
150°	319.3	327.0
152.5°	311.2	317.0
155°	302.0	305.8
157.5°	294.7	297.3
160°	290.3	291.8
162.5°	287.4	288.9
165°	283.2	284.8
167.5°	280.3	280.9
170°	279.5	279.5
172.5°	277.2	276.7
175°	276.0	276.0
177.5°	274.8	274.1
180°	274.1	274.1



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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	7.53	8.63	8.32	9.44	10.44	20.67	21.77	21.46	22.58	23.58
	3H	8.26	9.24	9.05	10.07	11.10	22.51	23.50	23.31	24.33	25.35
	4H	8.56	9.50	9.38	10.33	11.37	23.16	24.09	23.97	24.93	25.97
	6H	8.83	9.69	9.66	10.53	11.59	23.59	24.45	24.42	25.29	26.35
	8H	8.90	9.73	9.74	10.59	11.64	23.71	24.54	24.55	25.39	26.45
	12H	8.93	9.72	9.77	10.57	11.65	23.78	24.57	24.62	25.42	26.50
4H	2H	14.75	15.69	15.57	16.52	17.56	20.98	21.91	21.80	22.74	23.78
	3H	16.34	17.13	17.18	17.99	19.05	23.03	23.81	23.86	24.68	25.73
	4H	16.45	17.16	17.29	18.03	19.11	23.79	24.51	24.64	25.37	26.46
	6H	16.47	17.10	17.34	17.98	19.07	24.34	24.96	25.20	25.84	26.93
	8H	16.46	17.04	17.32	17.92	19.02	24.50	25.08	25.36	25.96	27.06
	12H	16.43	16.95	17.31	17.85	18.96	24.59	25.12	25.48	26.02	27.13
8H	4H	17.90	18.48	18.77	19.37	20.47	23.88	24.46	24.74	25.34	26.44
	6H	18.16	18.64	19.05	19.56	20.66	24.50	24.99	25.40	25.91	27.01
	8H	18.18	18.61	19.08	19.52	20.64	24.72	25.15	25.62	26.07	27.18
	12H	18.16	18.54	19.07	19.45	20.61	24.87	25.25	25.78	26.16	27.32
12H	4H	18.06	18.58	18.94	19.48	20.59	23.84	24.37	24.73	25.27	26.37
	6H	18.41	18.84	19.32	19.76	20.88	24.49	24.92	25.39	25.84	26.95
	8H	18.50	18.87	19.40	19.78	20.95	24.72	25.10	25.63	26.01	27.18