

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: P938014

Luminaire Tested: SQ4-FB-125U-100D-835-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938014
REPORT IS A COMBINATION OF REPORTS P933599 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

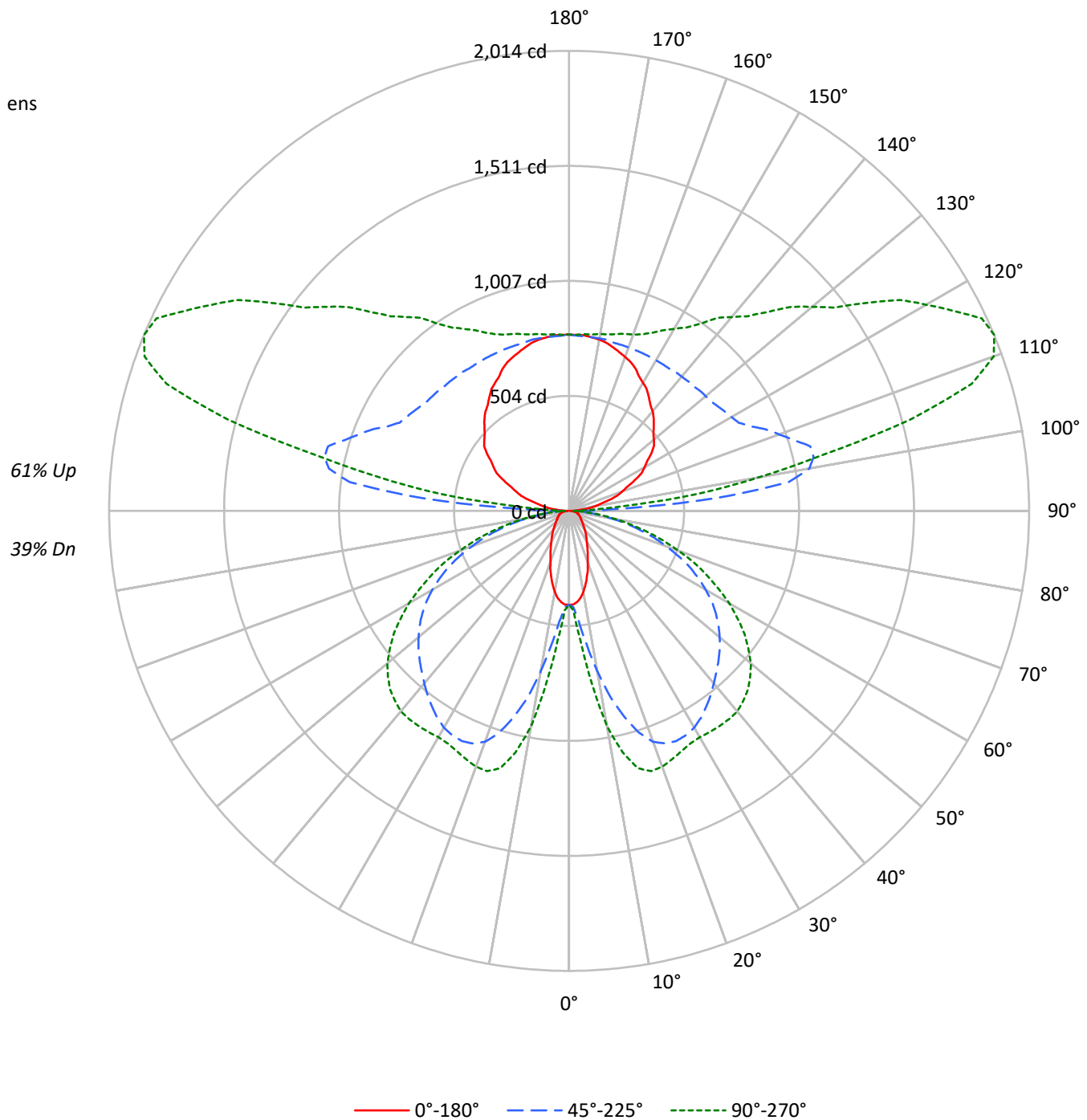
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8183.0 lumens
Efficiency: N/A
Efficacy: 127.1 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): 64.4
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

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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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39				39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32				32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26				26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21				21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18				18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15				15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13				13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11				11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10				10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9				9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8				8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3813	3813	3813
5°	3721	4404	5126
10°	3372	6415	8497
15°	2862	8375	10260
20°	2327	9698	10456
25°	1939	10140	10245
30°	1633	10197	10225
35°	1442	10020	10490
40°	1254	9791	10763
45°	1133	9621	10805
50°	1037	9467	10626
55°	990	9245	10155
60°	1010	8827	9411
65°	1046	8197	8389
70°	1107	7134	7087
75°	1213	5803	5531
80°	1296	4009	3726
85°	1093	2117	1907

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10805 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.2	0.6
10°-20°	235.6	2.9
20°-30°	412.1	5.0
30°-40°	530.5	6.5
40°-50°	592.5	7.2
50°-60°	567.5	6.9
60°-70°	449.7	5.5
70°-80°	264.5	3.2
80°-90°	76.4	0.9
90°-100°	376.0	4.6
100°-110°	988.7	12.1
110°-120°	1025.1	12.5
120°-130°	822.3	10.0
130°-140°	645.2	7.9
140°-150°	495.2	6.1
150°-160°	356.6	4.4
160°-170°	218.2	2.7
170°-180°	73.7	0.9
0°-30°	700.8	8.6
0°-40°	1231.3	15.0
0°-60°	2391.3	29.2
0°-90°	3181.9	38.9
90°-120°	2389.8	29.2
90°-150°	4352.5	53.2
90°-180°	5001.0	61.1
0°-180°	8183.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	411	411	411	411	411	
5°	400	429	484	547	567	37
15°	300	554	933	1131	1167	83
25°	192	628	1111	1160	1162	88
35°	130	600	1046	1106	1150	81
45°	88	478	925	1060	1107	68
55°	63	304	785	912	937	58
65°	50	161	583	655	665	50
75°	37	99	320	352	353	39
85°	13	30	79	87	88	14
90°	5	14	39	20	20	5
95°	50	195	648	334	227	55
105°	178	270	1093	1659	1548	189
115°	316	384	876	1746	1993	312
125°	440	493	796	1346	1587	391
135°	524	577	772	1086	1232	406
145°	608	647	762	927	999	381
155°	688	707	762	836	860	316
165°	742	752	762	792	802	209
175°	772	772	767	777	777	73
180°	772	772	772	772	772	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	410.9	410.9	410.9	410.9	410.9	410.9	410.9	410.9	410.9	410.9	410.9
2.5°	410.9	410.9	413.6	414.9	417.5	418.9	421.5	424.1	432.1	433.4	436.0
5°	400.4	405.7	422.8	429.4	447.9	473.0	483.6	500.8	536.5	547.0	553.6
7.5°	384.5	396.4	438.7	449.3	495.5	561.6	589.3	626.3	683.1	710.9	733.3
10°	359.4	384.5	459.8	484.9	560.2	660.7	712.2	763.7	849.6	887.9	902.5
12.5°	331.7	372.6	482.3	516.6	625.0	771.7	833.8	890.6	988.4	1039.9	1047.8
15°	299.9	355.4	503.4	553.6	693.7	864.2	932.9	1002.9	1094.1	1131.1	1140.3
17.5°	272.2	342.2	523.2	576.1	746.6	947.4	1017.4	1075.6	1149.6	1174.7	1181.3
20°	237.8	321.1	536.5	605.2	802.1	1008.2	1075.6	1120.5	1170.7	1186.6	1189.2
22.5°	212.7	298.6	544.4	615.7	839.0	1045.2	1102.0	1137.7	1172.0	1177.3	1178.6
25°	191.6	273.5	543.1	627.6	870.8	1067.6	1111.2	1137.7	1157.5	1160.1	1160.1
27.5°	171.8	245.8	537.8	630.3	894.5	1072.9	1107.3	1125.8	1135.0	1140.3	1140.3
30°	154.6	219.3	524.6	625.0	905.1	1067.6	1095.4	1104.6	1113.9	1121.8	1125.8
32.5°	141.4	194.2	504.8	614.4	906.4	1054.4	1074.2	1079.5	1092.7	1111.2	1117.9
35°	129.5	169.1	482.3	599.9	898.5	1033.3	1046.5	1051.8	1078.2	1106.0	1115.2
37.5°	117.6	150.6	453.2	574.8	886.6	1008.2	1017.4	1026.7	1067.6	1100.7	1111.2
40°	105.7	134.8	418.9	547.0	868.1	977.8	985.7	1000.3	1054.4	1092.7	1103.3
42.5°	96.5	121.6	381.9	518.0	844.3	943.4	955.3	976.5	1038.6	1079.5	1091.4
45°	88.5	108.3	342.2	478.3	813.9	907.8	924.9	954.0	1020.1	1059.7	1070.3
47.5°	80.6	99.1	301.3	437.4	780.9	872.1	894.5	927.6	995.0	1033.3	1042.5
50°	74.0	89.9	260.3	393.8	745.2	833.8	860.2	894.5	963.3	998.9	1010.8
52.5°	68.7	81.9	222.0	350.2	704.3	794.1	824.5	860.2	924.9	959.3	967.2
55°	63.4	75.3	189.0	303.9	662.0	751.8	784.9	819.2	882.7	911.7	917.0
57.5°	60.8	70.0	161.2	260.3	617.1	704.3	741.3	773.0	832.4	854.9	860.2
60°	56.8	66.1	140.1	223.3	568.2	659.3	691.1	722.8	773.0	791.5	795.4
62.5°	52.9	63.4	124.2	187.6	518.0	606.5	638.2	667.3	709.6	722.8	728.1
65°	50.2	60.8	112.3	161.2	466.4	551.0	582.7	607.8	642.2	655.4	658.0
67.5°	47.6	58.1	103.1	138.7	414.9	495.5	519.3	543.1	569.5	582.7	584.0
70°	43.6	55.5	95.1	122.9	362.0	432.1	451.9	477.0	498.1	504.8	508.7
72.5°	41.0	51.5	89.9	111.0	307.9	371.3	389.8	404.3	422.8	429.4	429.4
75°	37.0	46.2	84.6	99.1	252.4	303.9	319.8	334.3	348.8	351.5	347.5
77.5°	33.0	41.0	72.7	83.2	196.9	240.5	253.7	261.6	273.5	276.2	277.5
80°	27.7	35.7	56.8	64.7	142.7	177.1	186.3	192.9	203.5	203.5	206.1
82.5°	21.1	27.7	41.0	46.2	96.5	121.6	129.5	133.5	140.1	140.1	140.1
85°	13.2	17.2	26.4	30.4	58.1	74.0	79.3	80.6	85.9	87.2	87.2
87.5°	6.6	9.2	17.2	18.5	30.4	38.3	38.3	41.0	41.0	39.6	38.3
90°	5.2	9.3	13.5	14.5	22.8	33.8	39.3	34.9	26.2	19.7	19.7
92.5°	20.7	55.9	91.1	99.9	140.5	194.6	221.6	194.2	139.5	98.4	94.5
95°	49.7	114.1	178.6	194.7	345.7	547.0	647.7	578.0	438.6	334.0	322.1
97.5°	85.9	142.7	199.6	213.8	465.6	801.3	969.2	925.1	837.0	770.9	748.4
100°	113.9	165.5	217.0	229.9	509.3	881.8	1068.1	1071.3	1077.8	1082.6	1055.7
102.5°	137.7	185.8	233.9	245.9	529.3	907.2	1096.1	1152.3	1264.6	1348.8	1325.8
105°	178.1	218.9	259.6	269.8	544.2	910.1	1093.0	1218.9	1470.6	1659.4	1647.0
107.5°	219.5	257.5	295.5	305.0	547.0	869.6	1030.9	1206.5	1557.6	1820.9	1823.9
110°	247.5	281.8	316.0	324.6	542.8	833.7	979.1	1175.4	1568.0	1862.4	1875.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	274.9	307.6	340.2	348.4	542.9	802.3	932.0	1132.9	1534.7	1836.0	1855.8
115°	316.3	346.5	376.7	384.2	548.0	766.3	875.5	1069.0	1456.1	1746.4	1773.8
117.5°	357.3	384.7	412.1	418.9	558.2	743.9	836.7	1011.3	1360.6	1622.6	1653.0
120°	381.1	406.9	432.7	439.1	566.5	736.3	821.2	980.8	1299.9	1539.3	1568.9
122.5°	404.4	430.4	456.4	462.9	578.4	732.3	809.3	953.0	1240.4	1455.9	1485.1
125°	440.1	463.8	487.5	493.4	594.4	729.0	796.3	918.4	1162.5	1345.6	1372.5
127.5°	469.1	493.0	516.9	522.9	610.4	727.1	785.4	890.2	1099.9	1257.1	1279.8
130°	484.6	510.4	536.2	542.6	622.2	728.3	781.3	874.6	1061.2	1201.2	1222.1
132.5°	500.7	526.5	552.3	558.7	631.7	729.0	777.7	861.2	1028.3	1153.6	1172.3
135°	524.5	548.0	571.4	577.3	642.0	728.3	771.5	841.5	981.4	1086.3	1102.5
137.5°	548.8	572.0	595.3	601.1	657.5	732.8	770.4	829.5	947.8	1036.5	1049.7
140°	569.0	590.4	611.8	617.2	667.1	733.6	766.8	817.9	920.1	996.7	1009.1
142.5°	584.5	604.3	624.1	629.1	675.0	736.2	766.8	811.7	901.4	968.7	979.3
145°	608.4	625.6	642.9	647.2	685.3	736.2	761.6	798.3	871.7	926.8	934.9
147.5°	632.2	649.0	665.8	670.0	700.5	741.2	761.6	790.5	848.3	891.6	898.3
150°	647.7	662.9	678.1	681.9	708.5	743.9	761.6	786.0	834.8	871.4	876.8
152.5°	663.8	675.3	686.8	689.7	713.7	745.6	761.6	782.4	824.1	855.3	859.4
155°	687.6	696.1	704.6	706.7	725.0	749.4	761.6	778.2	811.3	836.2	838.9
157.5°	705.2	713.5	721.7	723.8	736.4	753.2	761.6	774.5	800.3	819.6	821.5
160°	717.1	723.5	730.0	731.6	741.6	754.9	761.6	772.6	794.7	811.3	812.4
162.5°	729.0	733.8	738.7	739.9	747.1	756.8	761.6	770.9	789.6	803.6	804.6
165°	741.9	746.3	750.7	751.8	755.1	759.4	761.6	768.3	781.6	791.6	792.7
167.5°	753.9	755.9	758.0	758.5	761.3	765.0	766.8	771.2	779.9	786.5	787.0
170°	761.6	763.7	765.8	766.3	766.5	766.7	766.8	771.2	779.9	786.5	786.5
172.5°	765.8	766.2	766.7	766.8	766.8	766.8	766.8	770.2	777.1	782.3	781.9
175°	771.5	771.5	771.5	771.5	769.9	767.8	766.8	769.0	773.3	776.6	776.6
177.5°	771.5	771.5	771.5	771.5	770.3	768.6	767.8	769.5	773.0	775.6	775.1
180°	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	410.9	410.9
2.5°	438.7	436.0
5°	564.2	566.9
7.5°	759.8	758.4
10°	944.8	956.6
12.5°	1079.5	1082.2
15°	1161.5	1166.7
17.5°	1193.2	1194.5
20°	1194.5	1191.8
22.5°	1180.0	1177.3
25°	1162.8	1161.5
27.5°	1146.9	1148.2
30°	1140.3	1144.3
32.5°	1140.3	1146.9
35°	1143.0	1149.6
37.5°	1141.6	1149.6
40°	1136.4	1145.6
42.5°	1121.8	1128.4
45°	1099.4	1107.3
47.5°	1070.3	1075.6
50°	1033.3	1038.6
52.5°	987.0	988.4
55°	931.5	936.8
57.5°	872.1	873.4
60°	806.0	810.0
62.5°	736.0	736.0
65°	662.0	664.6
67.5°	585.4	592.0
70°	507.4	508.7
72.5°	430.8	430.8
75°	351.5	352.8
77.5°	276.2	276.2
80°	204.8	206.1
82.5°	141.4	144.0
85°	88.5	88.5
87.5°	41.0	37.0
90°	19.7	19.7
92.5°	78.8	63.2
95°	274.7	227.3
97.5°	658.2	568.0
100°	948.3	840.8
102.5°	1233.7	1141.7
105°	1597.6	1548.1
107.5°	1835.9	1847.9
110°	1926.8	1978.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1934.9	2014.1
115°	1883.6	1993.4
117.5°	1774.8	1896.5
120°	1687.1	1805.4
122.5°	1601.7	1718.4
125°	1479.9	1587.4
127.5°	1370.4	1461.1
130°	1305.9	1389.7
132.5°	1247.3	1322.3
135°	1167.1	1231.7
137.5°	1102.7	1155.6
140°	1058.5	1108.0
142.5°	1021.9	1064.5
145°	967.1	999.3
147.5°	924.9	951.6
150°	898.5	920.1
152.5°	875.7	892.1
155°	849.7	860.5
157.5°	829.1	836.7
160°	816.8	821.2
162.5°	808.8	812.9
165°	797.1	801.5
167.5°	788.8	790.6
170°	786.5	786.5
172.5°	780.3	778.7
175°	776.6	776.6
177.5°	773.3	771.5
180°	771.5	771.5



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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	4.53	5.33	5.57	6.38	7.80	17.67	18.47	18.71	19.52	20.94
	3H	5.23	5.95	6.28	7.01	8.44	19.49	20.20	20.54	21.26	22.70
	4H	5.53	6.21	6.59	7.27	8.71	20.12	20.80	21.18	21.86	23.31
	6H	5.77	6.40	6.85	7.47	8.92	20.54	21.16	21.61	22.23	23.68
	8H	5.84	6.44	6.92	7.52	8.97	20.65	21.24	21.72	22.33	23.78
	12H	5.86	6.42	6.94	7.50	8.97	20.71	21.27	21.79	22.35	23.83
4H	2H	11.71	12.39	12.78	13.45	14.90	17.94	18.62	19.01	19.68	21.12
	3H	13.28	13.85	14.35	14.93	16.39	19.96	20.53	21.04	21.62	23.08
	4H	13.37	13.89	14.45	14.97	16.45	20.72	21.24	21.80	22.32	23.80
	6H	13.38	13.83	14.47	14.93	16.40	21.24	21.69	22.33	22.79	24.26
	8H	13.35	13.77	14.44	14.87	16.36	21.39	21.81	22.48	22.91	24.40
	12H	13.31	13.69	14.42	14.79	16.29	21.47	21.85	22.58	22.96	24.46
8H	4H	14.80	15.22	15.89	16.31	17.80	20.77	21.19	21.86	22.29	23.78
	6H	15.04	15.39	16.15	16.52	18.01	21.39	21.73	22.50	22.87	24.35
	8H	15.06	15.36	16.18	16.48	17.98	21.60	21.90	22.72	23.02	24.53
	12H	15.02	15.29	16.15	16.40	17.95	21.73	22.00	22.85	23.11	24.65
12H	4H	14.94	15.32	16.04	16.42	17.92	20.72	21.10	21.83	22.21	23.70
	6H	15.29	15.60	16.41	16.72	18.22	21.37	21.67	22.49	22.79	24.30
	8H	15.36	15.63	16.48	16.74	18.28	21.59	21.86	22.71	22.97	24.51