

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: P937634

Luminaire Tested: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

**Test Information**

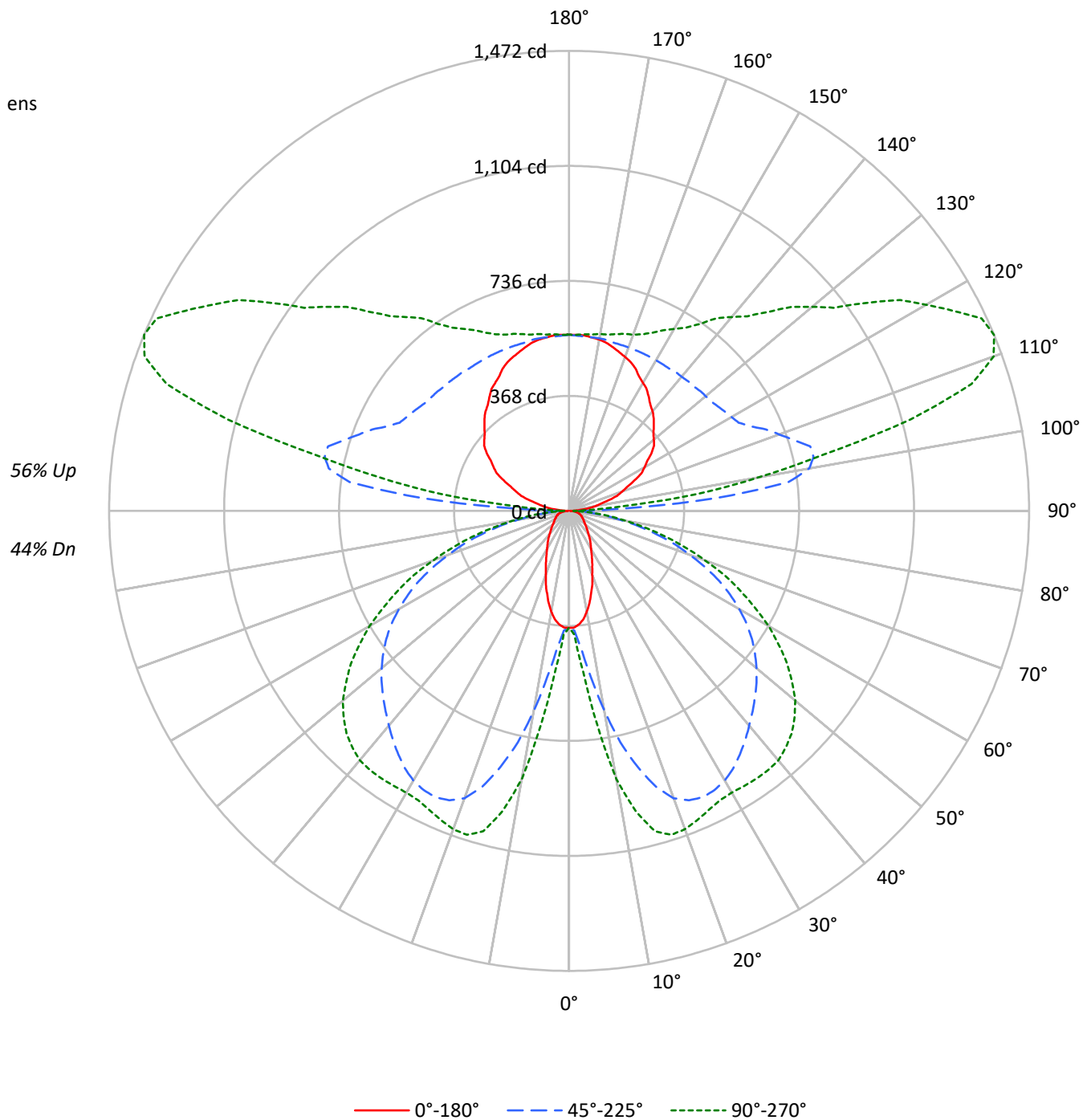
Test Method: LM-79-2019  
Report Number: P937634  
REPORT IS A COMBINATION OF REPORTS P933567 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-4-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6548.5 lumens  
Efficiency: N/A  
Efficacy: 112.9 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: General Diffuse  
  
Input Watts (W): 58  
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	
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	34	30
3	79	69	62	56	72	63	57	52	53	48	44	43	39	36	33	31	29	24
4	72	61	53	46	65	56	49	43	46	41	37	38	34	30	29	27	24	20
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	20	18	15
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16	13
8	51	39	31	26	47	36	29	24	30	24	20	25	20	17	19	16	14	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10
10	44	32	25	20	41	30	23	19	25	20	16	21	16	14	16	13	11	9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3469	3469	3469
5°	3385	4006	4663
10°	3067	5835	7729
15°	2603	7618	9333
20°	2117	8822	9511
25°	1764	9224	9319
30°	1485	9276	9301
35°	1311	9114	9542
40°	1140	8906	9790
45°	1031	8752	9828
50°	943	8612	9666
55°	901	8410	9236
60°	920	8030	8561
65°	952	7456	7630
70°	1008	6490	6446
75°	1105	5278	5031
80°	1179	3648	3390
85°	994	1924	1734

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9828 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.4	0.7
10°-20°	214.3	3.3
20°-30°	374.8	5.7
30°-40°	482.5	7.4
40°-50°	539.0	8.2
50°-60°	516.2	7.9
60°-70°	409.1	6.2
70°-80°	240.6	3.7
80°-90°	69.0	1.1
90°-100°	274.8	4.2
100°-110°	722.5	11.0
110°-120°	749.1	11.4
120°-130°	600.9	9.2
130°-140°	471.5	7.2
140°-150°	361.9	5.5
150°-160°	260.6	4.0
160°-170°	159.5	2.4
170°-180°	53.9	0.8
0°-30°	637.5	9.7
0°-40°	1120.0	17.1
0°-60°	2175.2	33.2
0°-90°	2893.9	44.2
90°-120°	1746.4	26.7
90°-150°	3180.6	48.6
90°-180°	3655.0	55.8
0°-180°	6548.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	374	374	374	374	374	
5°	364	391	440	498	516	34
15°	273	504	849	1029	1061	76
25°	174	571	1011	1055	1056	80
35°	118	546	952	1006	1046	74
45°	80	435	841	964	1007	62
55°	58	276	714	829	852	53
65°	46	147	530	596	604	45
75°	34	90	291	320	321	35
85°	12	28	72	79	80	13
90°	4	11	29	14	14	4
95°	36	142	473	244	166	40
105°	130	197	799	1213	1131	138
115°	231	281	640	1276	1457	228
125°	322	361	582	983	1160	286
135°	383	422	564	794	900	297
145°	444	473	557	677	730	279
155°	502	516	557	611	629	231
165°	542	549	557	578	586	153
175°	564	564	560	568	568	54
180°	564	564	564	564	564	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8
2.5°	373.8	373.8	376.2	377.4	379.8	381.0	383.4	385.8	393.1	394.2	396.6
5°	364.2	369.0	384.6	390.6	407.4	430.3	439.9	455.5	488.0	497.6	503.6
7.5°	349.8	360.6	399.1	408.7	450.7	510.9	536.0	569.7	621.4	646.7	667.0
10°	326.9	349.8	418.3	441.1	509.6	601.0	647.8	694.7	772.8	807.7	820.9
12.5°	301.7	338.9	438.7	469.9	568.5	702.0	758.5	810.1	899.1	945.9	953.1
15°	272.8	323.3	457.9	503.6	631.0	786.1	848.6	912.3	995.2	1028.9	1037.3
17.5°	247.6	311.3	475.9	524.0	679.1	861.8	925.5	978.4	1045.7	1068.6	1074.6
20°	216.3	292.1	488.0	550.5	729.6	917.1	978.4	1019.2	1064.9	1079.4	1081.7
22.5°	193.5	271.6	495.2	560.1	763.2	950.8	1002.4	1034.9	1066.1	1070.9	1072.1
25°	174.3	248.8	494.0	570.9	792.1	971.1	1010.8	1034.9	1052.9	1055.3	1055.3
27.5°	156.3	223.6	489.2	573.3	813.7	975.9	1007.2	1024.1	1032.4	1037.3	1037.3
30°	140.6	199.5	477.2	568.5	823.3	971.1	996.4	1004.8	1013.2	1020.4	1024.1
32.5°	128.6	176.7	459.2	558.9	824.5	959.1	977.1	982.0	994.0	1010.8	1016.9
35°	117.8	153.8	438.7	545.7	817.3	939.9	951.9	956.8	980.8	1006.1	1014.4
37.5°	107.0	137.0	412.2	522.9	806.5	917.1	925.5	933.9	971.1	1001.2	1010.8
40°	96.1	122.6	381.0	497.6	789.7	889.4	896.6	909.9	959.1	994.0	1003.6
42.5°	87.8	110.6	347.4	471.2	768.0	858.2	869.0	888.3	944.7	982.0	992.8
45°	80.5	98.5	311.3	435.1	740.4	825.8	841.3	867.8	927.9	963.9	973.6
47.5°	73.3	90.1	274.1	397.9	710.3	793.3	813.7	843.8	905.1	939.9	948.3
50°	67.3	81.8	236.8	358.2	677.9	758.5	782.5	813.7	876.3	908.6	919.5
52.5°	62.5	74.5	201.9	318.6	640.7	722.3	750.0	782.5	841.3	872.6	879.8
55°	57.7	68.5	171.9	276.4	602.2	683.9	714.0	745.2	802.9	829.3	834.1
57.5°	55.3	63.7	146.6	236.8	561.3	640.7	674.3	703.1	757.2	777.6	782.5
60°	51.7	60.1	127.4	203.1	516.9	599.7	628.7	657.5	703.1	720.0	723.5
62.5°	48.1	57.7	113.0	170.6	471.2	551.7	580.5	607.0	645.5	657.5	662.3
65°	45.7	55.3	102.2	146.6	424.3	501.2	530.0	552.9	584.2	596.2	598.5
67.5°	43.3	52.8	93.8	126.2	377.4	450.7	472.4	494.0	518.0	530.0	531.2
70°	39.7	50.5	86.5	111.8	329.3	393.1	411.1	433.9	453.1	459.2	462.7
72.5°	37.3	46.8	81.8	101.0	280.1	337.7	354.6	367.8	384.6	390.6	390.6
75°	33.7	42.0	77.0	90.1	229.6	276.4	290.9	304.1	317.3	319.7	316.1
77.5°	30.0	37.3	66.1	75.7	179.1	218.8	230.8	238.0	248.8	251.2	252.4
80°	25.2	32.5	51.7	58.9	129.8	161.1	169.5	175.5	185.1	185.1	187.5
82.5°	19.2	25.2	37.3	42.0	87.8	110.6	117.8	121.4	127.4	127.4	127.4
85°	12.0	15.6	24.0	27.7	52.8	67.3	72.1	73.3	78.1	79.3	79.3
87.5°	6.0	8.4	15.6	16.8	27.7	34.8	34.8	37.3	37.3	36.0	34.8
90°	3.8	6.8	9.8	10.6	16.6	24.7	28.7	25.6	19.2	14.4	14.4
92.5°	15.1	40.8	66.6	73.0	102.7	142.2	161.9	141.9	101.9	71.9	69.0
95°	36.3	83.4	130.5	142.3	252.6	399.7	473.3	422.3	320.5	244.1	235.4
97.5°	62.8	104.3	145.9	156.3	340.3	585.6	708.2	676.0	611.6	563.3	546.9
100°	83.2	120.9	158.5	168.0	372.2	644.5	780.6	782.9	787.6	791.1	771.5
102.5°	100.6	135.8	170.9	179.7	386.9	662.9	801.0	842.1	924.1	985.6	968.8
105°	130.2	159.9	189.7	197.1	397.7	665.0	798.8	890.7	1074.6	1212.6	1203.6
107.5°	160.5	188.2	215.9	222.9	399.7	635.4	753.3	881.6	1138.2	1330.7	1332.9
110°	180.8	205.9	231.0	237.2	396.6	609.2	715.4	858.9	1145.8	1360.9	1370.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	200.9	224.8	248.6	254.6	396.8	586.3	681.0	827.9	1121.4	1341.6	1356.1
115°	231.1	253.2	275.2	280.7	400.4	560.1	639.8	781.3	1064.1	1276.2	1296.2
117.5°	261.1	281.1	301.1	306.1	407.9	543.6	611.5	739.1	994.3	1185.8	1208.0
120°	278.4	297.3	316.1	320.8	413.9	538.1	600.1	716.7	949.9	1124.9	1146.5
122.5°	295.5	314.6	333.6	338.3	422.6	535.1	591.4	696.3	906.4	1063.9	1085.2
125°	321.6	338.9	356.2	360.6	434.4	532.7	581.9	671.1	849.5	983.3	1003.0
127.5°	342.8	360.2	377.8	382.1	446.1	531.3	574.0	650.6	803.8	918.6	935.2
130°	354.1	373.0	391.8	396.5	454.6	532.2	571.0	639.2	775.6	877.8	893.1
132.5°	365.9	384.7	403.5	408.2	461.5	532.7	568.3	629.3	751.4	843.0	856.7
135°	383.3	400.4	417.6	421.9	469.2	532.2	563.8	614.9	717.1	793.7	805.6
137.5°	401.1	418.1	435.0	439.3	480.5	535.5	563.0	606.2	692.6	757.5	767.1
140°	415.8	431.4	447.1	451.0	487.5	536.0	560.3	597.6	672.3	728.3	737.4
142.5°	427.2	441.6	456.1	459.7	493.3	538.0	560.3	593.1	658.7	707.9	715.7
145°	444.5	457.2	469.7	472.9	500.8	538.1	556.6	583.4	637.0	677.2	683.1
147.5°	462.0	474.3	486.5	489.6	511.9	541.7	556.6	577.7	619.9	651.6	656.5
150°	473.3	484.4	495.5	498.3	517.8	543.7	556.6	574.4	610.0	636.7	640.7
152.5°	485.0	493.4	501.8	503.9	521.5	544.9	556.6	571.8	602.2	625.0	628.0
155°	502.5	508.7	514.9	516.5	529.9	547.7	556.6	568.7	592.9	611.0	613.0
157.5°	515.3	521.4	527.4	529.0	538.1	550.4	556.6	566.0	584.8	598.9	600.3
160°	524.0	528.8	533.4	534.6	542.0	551.7	556.6	564.7	580.8	592.9	593.7
162.5°	532.7	536.2	539.8	540.7	546.0	553.1	556.6	563.4	577.0	587.2	587.9
165°	542.1	545.3	548.5	549.3	551.8	555.0	556.6	561.5	571.3	578.5	579.3
167.5°	550.9	552.4	554.0	554.3	556.3	559.0	560.3	563.5	569.9	574.7	575.1
170°	556.6	558.1	559.6	560.0	560.1	560.2	560.3	563.5	569.9	574.7	574.7
172.5°	559.6	560.0	560.2	560.3	560.3	560.3	560.3	562.9	567.9	571.7	571.4
175°	563.8	563.8	563.8	563.8	562.6	561.1	560.3	562.0	565.2	567.5	567.5
177.5°	563.8	563.8	563.8	563.8	562.9	561.7	561.1	562.3	564.9	566.8	566.4
180°	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	373.8	373.8
2.5°	399.1	396.6
5°	513.2	515.7
7.5°	691.1	689.9
10°	859.4	870.2
12.5°	982.0	984.4
15°	1056.5	1061.3
17.5°	1085.4	1086.6
20°	1086.6	1084.1
22.5°	1073.4	1070.9
25°	1057.7	1056.5
27.5°	1043.3	1044.4
30°	1037.3	1040.9
32.5°	1037.3	1043.3
35°	1039.7	1045.7
37.5°	1038.4	1045.7
40°	1033.7	1042.1
42.5°	1020.4	1026.4
45°	1000.1	1007.2
47.5°	973.6	978.4
50°	939.9	944.7
52.5°	897.8	899.1
55°	847.3	852.1
57.5°	793.3	794.5
60°	733.2	736.8
62.5°	669.5	669.5
65°	602.2	604.5
67.5°	532.5	538.5
70°	461.5	462.7
72.5°	391.9	391.9
75°	319.7	320.9
77.5°	251.2	251.2
80°	186.3	187.5
82.5°	128.6	131.0
85°	80.5	80.5
87.5°	37.3	33.7
90°	14.4	14.4
92.5°	57.6	46.1
95°	200.8	166.1
97.5°	480.9	415.1
100°	693.0	614.5
102.5°	901.5	834.3
105°	1167.4	1131.3
107.5°	1341.6	1350.4
110°	1408.0	1445.7





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1413.9	1471.8
115°	1376.5	1456.7
117.5°	1297.0	1385.9
120°	1232.9	1319.3
122.5°	1170.5	1255.8
125°	1081.5	1160.1
127.5°	1001.5	1067.7
130°	954.3	1015.5
132.5°	911.5	966.3
135°	852.8	900.1
137.5°	805.8	844.5
140°	773.6	809.7
142.5°	746.8	777.9
145°	706.7	730.3
147.5°	676.0	695.4
150°	656.5	672.3
152.5°	639.9	651.9
155°	620.9	628.8
157.5°	605.9	611.5
160°	596.9	600.1
162.5°	591.0	594.0
165°	582.5	585.7
167.5°	576.3	577.7
170°	574.7	574.7
172.5°	570.3	569.1
175°	567.5	567.5
177.5°	565.2	563.8
180°	563.8	563.8



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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	4.76	5.60	5.75	6.61	7.96	17.90	18.74	18.89	19.75	21.10
	3H	5.46	6.22	6.47	7.24	8.61	19.72	20.48	20.73	21.50	22.87
	4H	5.76	6.48	6.78	7.50	8.88	20.35	21.07	21.37	22.10	23.48
	6H	6.01	6.67	7.04	7.70	9.09	20.77	21.43	21.80	22.46	23.85
	8H	6.08	6.71	7.11	7.75	9.14	20.88	21.52	21.92	22.56	23.95
	12H	6.09	6.69	7.14	7.73	9.15	20.95	21.55	21.99	22.59	24.00
4H	2H	11.95	12.66	12.97	13.69	15.07	18.17	18.89	19.20	19.92	21.29
	3H	13.51	14.12	14.55	15.17	16.56	20.20	20.80	21.24	21.86	23.25
	4H	13.61	14.16	14.65	15.21	16.62	20.96	21.51	22.00	22.55	23.97
	6H	13.62	14.09	14.67	15.16	16.57	21.48	21.96	22.53	23.03	24.43
	8H	13.60	14.04	14.65	15.10	16.53	21.64	22.08	22.69	23.14	24.57
	12H	13.55	13.95	14.62	15.03	16.46	21.72	22.12	22.79	23.20	24.63
8H	4H	15.04	15.49	16.10	16.55	17.97	21.01	21.46	22.07	22.52	23.95
	6H	15.28	15.65	16.36	16.76	18.18	21.63	22.00	22.71	23.10	24.52
	8H	15.30	15.63	16.39	16.71	18.15	21.84	22.17	22.93	23.25	24.69
	12H	15.27	15.55	16.36	16.64	18.12	21.98	22.26	23.07	23.35	24.83
12H	4H	15.18	15.58	16.25	16.66	18.09	20.97	21.37	22.04	22.45	23.87
	6H	15.54	15.86	16.62	16.95	18.39	21.61	21.94	22.70	23.02	24.47
	8H	15.61	15.89	16.70	16.97	18.45	21.84	22.12	22.93	23.20	24.68