

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: P937632

Luminaire Tested: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937632  
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-4-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

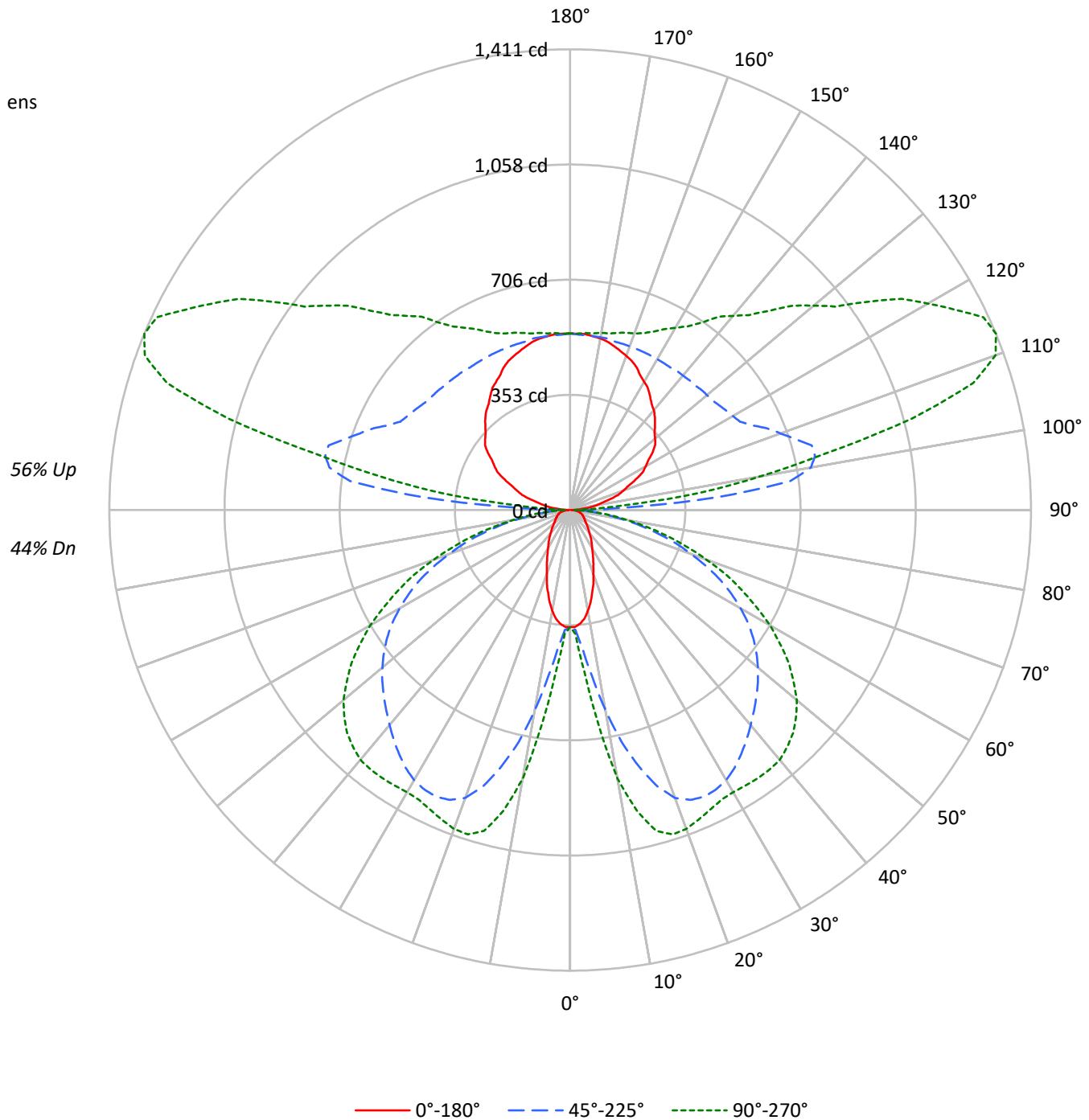
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6277.8 lumens  
Efficiency: N/A  
Efficacy: 108.2 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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CATALOG NUMBER: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-4-3000K

### 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°	3325	3325	3325
5°	3246	3840	4470
10°	2940	5594	7410
15°	2495	7303	8947
20°	2030	8458	9118
25°	1691	8843	8934
30°	1424	8892	8917
35°	1257	8738	9148
40°	1094	8539	9385
45°	988	8390	9422
50°	904	8256	9267
55°	864	8063	8855
60°	881	7698	8206
65°	913	7148	7316
70°	965	6222	6180
75°	1059	5060	4824
80°	1133	3497	3249
85°	952	1847	1663

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9422 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.4	0.7
10°-20°	205.4	3.3
20°-30°	359.3	5.7
30°-40°	462.6	7.4
40°-50°	516.7	8.2
50°-60°	494.9	7.9
60°-70°	392.2	6.2
70°-80°	230.6	3.7
80°-90°	66.1	1.1
90°-100°	263.4	4.2
100°-110°	692.6	11.0
110°-120°	718.2	11.4
120°-130°	576.0	9.2
130°-140°	452.0	7.2
140°-150°	346.9	5.5
150°-160°	249.8	4.0
160°-170°	152.9	2.4
170°-180°	51.6	0.8
0°-30°	611.1	9.7
0°-40°	1073.7	17.1
0°-60°	2085.3	33.2
0°-90°	2774.3	44.2
90°-120°	1674.2	26.7
90°-150°	3049.1	48.6
90°-180°	3504.0	55.8
0°-180°	6277.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	358	358	358	358	358	
5°	349	374	422	477	494	32
15°	262	483	814	986	1017	73
25°	167	547	969	1012	1013	77
35°	113	523	913	964	1002	71
45°	77	417	806	924	966	60
55°	55	265	684	795	817	50
65°	44	141	508	572	580	43
75°	32	86	279	306	308	34
85°	12	26	69	76	77	12
90°	4	10	28	14	14	4
95°	35	136	454	234	159	39
105°	125	189	766	1162	1084	132
115°	222	269	613	1224	1396	219
125°	308	346	558	943	1112	274
135°	368	404	540	761	863	284
145°	426	453	534	649	700	267
155°	482	495	534	586	603	221
165°	520	527	534	555	562	147
175°	540	540	537	544	544	51
180°	540	540	540	540	540	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	358.3	358.3	358.3	358.3	358.3	358.3	358.3	358.3	358.3	358.3	358.3
2.5°	358.3	358.3	360.7	361.8	364.1	365.3	367.6	369.8	376.8	377.9	380.2
5°	349.2	353.8	368.7	374.5	390.6	412.5	421.7	436.7	467.8	477.0	482.8
7.5°	335.3	345.7	382.6	391.8	432.1	489.7	513.9	546.2	595.7	619.9	639.5
10°	313.4	335.3	401.0	422.8	488.5	576.2	621.1	666.0	740.9	774.3	787.0
12.5°	289.3	324.9	420.6	450.5	545.0	672.9	727.1	776.6	861.9	906.8	913.7
15°	261.5	309.9	439.0	482.8	604.9	753.6	813.5	874.6	954.1	986.4	994.4
17.5°	237.4	298.4	456.2	502.4	651.1	826.2	887.2	938.0	1002.5	1024.4	1030.1
20°	207.4	280.0	467.8	527.8	699.5	879.2	938.0	977.1	1020.9	1034.8	1037.0
22.5°	185.5	260.4	474.7	536.9	731.6	911.4	961.0	992.1	1022.0	1026.6	1027.8
25°	167.1	238.5	473.6	547.3	759.4	931.0	969.0	992.1	1009.4	1011.6	1011.6
27.5°	149.8	214.3	469.0	549.6	780.0	935.6	965.6	981.7	989.8	994.4	994.4
30°	134.8	191.2	457.5	545.0	789.3	931.0	955.2	963.2	971.4	978.2	981.7
32.5°	123.3	169.3	440.2	535.8	790.4	919.5	936.7	941.4	952.9	969.0	974.8
35°	112.9	147.5	420.6	523.1	783.5	901.1	912.6	917.2	940.2	964.5	972.5
37.5°	102.6	131.3	395.2	501.2	773.1	879.2	887.2	895.3	931.0	959.8	969.0
40°	92.2	117.6	365.3	477.0	757.0	852.7	859.6	872.3	919.5	952.9	962.1
42.5°	84.2	106.0	333.0	451.7	736.3	822.7	833.1	851.5	905.7	941.4	951.7
45°	77.2	94.4	298.4	417.1	709.7	791.6	806.5	831.9	889.6	924.1	933.3
47.5°	70.3	86.4	262.7	381.4	681.0	760.5	780.0	808.9	867.7	901.1	909.1
50°	64.5	78.4	227.0	343.4	649.8	727.1	750.1	780.0	840.0	871.1	881.5
52.5°	59.9	71.4	193.6	305.4	614.2	692.5	719.0	750.1	806.5	836.5	843.4
55°	55.3	65.7	164.8	265.0	577.3	655.6	684.5	714.4	769.7	795.0	799.7
57.5°	53.0	61.0	140.6	227.0	538.1	614.2	646.4	674.1	725.9	745.5	750.1
60°	49.5	57.6	122.2	194.7	495.5	574.9	602.7	630.3	674.1	690.2	693.6
62.5°	46.1	55.3	108.3	163.6	451.7	528.9	556.5	581.9	618.8	630.3	634.9
65°	43.8	53.0	97.9	140.6	406.7	480.5	508.1	530.0	560.0	571.5	573.8
67.5°	41.5	50.7	89.9	121.0	361.8	432.1	452.8	473.6	496.6	508.1	509.3
70°	38.0	48.4	82.9	107.2	315.7	376.8	394.1	416.0	434.4	440.2	443.6
72.5°	35.8	44.9	78.4	96.8	268.5	323.8	339.9	352.6	368.7	374.5	374.5
75°	32.3	40.3	73.8	86.4	220.1	265.0	278.9	291.5	304.2	306.5	303.0
77.5°	28.8	35.8	63.4	72.6	171.7	209.7	221.2	228.1	238.5	240.9	242.0
80°	24.2	31.1	49.5	56.4	124.4	154.4	162.5	168.2	177.5	177.5	179.7
82.5°	18.4	24.2	35.8	40.3	84.2	106.0	112.9	116.4	122.2	122.2	122.2
85°	11.5	15.0	23.0	26.5	50.7	64.5	69.2	70.3	74.9	76.0	76.0
87.5°	5.8	8.0	15.0	16.1	26.5	33.4	33.4	35.8	35.8	34.5	33.4
90°	3.7	6.5	9.4	10.1	16.0	23.7	27.6	24.5	18.4	13.8	13.8
92.5°	14.5	39.2	63.8	70.0	98.5	136.3	155.2	136.0	97.7	68.9	66.2
95°	34.8	80.0	125.1	136.4	242.2	383.2	453.7	404.9	307.2	234.0	225.7
97.5°	60.2	100.0	139.9	149.8	326.2	561.4	679.0	648.1	586.4	540.1	524.3
100°	79.8	115.9	152.0	161.1	356.8	617.8	748.3	750.6	755.0	758.4	739.6
102.5°	96.4	130.2	163.9	172.3	370.9	635.5	767.9	807.2	885.9	944.8	928.7
105°	124.8	153.3	181.8	189.0	381.3	637.5	765.7	853.9	1030.2	1162.5	1153.9
107.5°	153.8	180.4	207.0	213.6	383.2	609.1	722.1	845.2	1091.2	1275.7	1277.8
110°	173.4	197.4	221.4	227.4	380.2	584.0	685.9	823.4	1098.4	1304.7	1313.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	192.6	215.5	238.3	244.1	380.4	562.0	652.9	793.6	1075.0	1286.2	1300.0
115°	221.6	242.7	263.8	269.1	383.9	536.9	613.4	749.0	1020.1	1223.5	1242.6
117.5°	250.3	269.5	288.6	293.4	391.0	521.1	586.2	708.5	953.2	1136.8	1158.1
120°	266.9	285.0	303.0	307.6	396.8	515.8	575.3	687.1	910.7	1078.4	1099.1
122.5°	283.3	301.5	319.8	324.3	405.1	513.0	566.9	667.5	868.9	1019.9	1040.3
125°	308.4	324.9	341.5	345.7	416.4	510.7	557.8	643.4	814.4	942.7	961.5
127.5°	328.6	345.3	362.2	366.3	427.6	509.4	550.3	623.7	770.5	880.7	896.5
130°	339.5	357.5	375.6	380.1	435.8	510.2	547.4	612.8	743.5	841.5	856.2
132.5°	350.7	368.8	386.8	391.4	442.5	510.7	544.8	603.3	720.3	808.1	821.3
135°	367.5	383.9	400.4	404.4	449.8	510.2	540.5	589.5	687.4	760.9	772.3
137.5°	384.5	400.8	417.0	421.1	460.6	513.4	539.7	581.1	664.0	726.1	735.4
140°	398.6	413.6	428.6	432.4	467.3	513.9	537.2	572.9	644.5	698.2	706.9
142.5°	409.5	423.4	437.2	440.7	472.9	515.7	537.2	568.6	631.4	678.6	686.1
145°	426.2	438.3	450.3	453.4	480.1	515.8	533.6	559.3	610.7	649.2	654.9
147.5°	442.9	454.7	466.4	469.3	490.8	519.3	533.6	553.8	594.3	624.6	629.3
150°	453.7	464.4	475.0	477.7	496.4	521.2	533.6	550.7	584.8	610.4	614.2
152.5°	465.0	473.0	481.1	483.1	499.9	522.3	533.6	548.2	577.3	599.2	602.1
155°	481.7	487.6	493.7	495.1	508.0	525.1	533.6	545.2	568.4	585.7	587.7
157.5°	494.0	499.8	505.6	507.1	515.9	527.7	533.6	542.6	560.6	574.1	575.5
160°	502.4	506.9	511.4	512.5	519.6	528.9	533.6	541.4	556.8	568.4	569.2
162.5°	510.7	514.1	517.5	518.3	523.4	530.2	533.6	540.1	553.1	562.9	563.6
165°	519.7	522.8	525.8	526.6	529.0	532.0	533.6	538.3	547.6	554.6	555.4
167.5°	528.1	529.6	531.1	531.4	533.3	535.9	537.2	540.2	546.3	551.0	551.3
170°	533.6	535.0	536.5	536.8	536.9	537.1	537.2	540.2	546.3	551.0	551.0
172.5°	536.5	536.8	537.1	537.2	537.2	537.2	537.2	539.6	544.4	548.1	547.8
175°	540.5	540.5	540.5	540.5	539.4	537.9	537.2	538.7	541.8	544.1	544.1
177.5°	540.5	540.5	540.5	540.5	539.6	538.5	537.9	539.1	541.5	543.4	543.0
180°	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	358.3	358.3
2.5°	382.6	380.2
5°	492.0	494.4
7.5°	662.6	661.4
10°	823.9	834.2
12.5°	941.4	943.7
15°	1012.9	1017.4
17.5°	1040.5	1041.6
20°	1041.6	1039.3
22.5°	1029.0	1026.6
25°	1014.0	1012.9
27.5°	1000.1	1001.3
30°	994.4	997.9
32.5°	994.4	1000.1
35°	996.7	1002.5
37.5°	995.5	1002.5
40°	991.0	999.0
42.5°	978.2	984.0
45°	958.7	965.6
47.5°	933.3	938.0
50°	901.1	905.7
52.5°	860.7	861.9
55°	812.3	816.9
57.5°	760.5	761.6
60°	702.9	706.3
62.5°	641.8	641.8
65°	577.3	579.6
67.5°	510.5	516.2
70°	442.5	443.6
72.5°	375.7	375.7
75°	306.5	307.7
77.5°	240.9	240.9
80°	178.6	179.7
82.5°	123.3	125.6
85°	77.2	77.2
87.5°	35.8	32.3
90°	13.8	13.8
92.5°	55.2	44.2
95°	192.5	159.2
97.5°	461.0	397.9
100°	664.3	589.1
102.5°	864.3	799.8
105°	1119.2	1084.5
107.5°	1286.2	1294.5
110°	1349.8	1385.9





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1355.5	1411.0
115°	1319.6	1396.5
117.5°	1243.3	1328.6
120°	1182.0	1264.8
122.5°	1122.1	1203.8
125°	1036.8	1112.1
127.5°	960.1	1023.6
130°	914.9	973.5
132.5°	873.8	926.4
135°	817.5	862.9
137.5°	772.5	809.6
140°	741.6	776.2
142.5°	715.9	745.8
145°	677.5	700.1
147.5°	648.0	666.7
150°	629.3	644.5
152.5°	613.5	625.0
155°	595.3	602.8
157.5°	580.9	586.2
160°	572.2	575.3
162.5°	566.6	569.4
165°	558.5	561.5
167.5°	552.5	553.8
170°	551.0	551.0
172.5°	546.7	545.5
175°	544.1	544.1
177.5°	541.8	540.5
180°	540.5	540.5



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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	4.61	5.46	5.61	6.47	7.82	17.75	18.59	18.75	19.61	20.96
	3H	5.32	6.07	6.32	7.10	8.47	19.57	20.33	20.58	21.35	22.72
	4H	5.61	6.33	6.63	7.36	8.74	20.21	20.93	21.23	21.95	23.33
	6H	5.86	6.53	6.90	7.56	8.95	20.62	21.29	21.66	22.32	23.71
	8H	5.93	6.56	6.97	7.61	9.00	20.74	21.37	21.78	22.42	23.80
	12H	5.95	6.55	6.99	7.59	9.00	20.80	21.40	21.84	22.44	23.85
4H	2H	11.80	12.52	12.83	13.54	14.92	18.02	18.74	19.05	19.77	21.15
	3H	13.37	13.97	14.40	15.02	16.41	20.05	20.65	21.09	21.71	23.10
	4H	13.46	14.01	14.51	15.06	16.47	20.81	21.36	21.85	22.41	23.82
	6H	13.47	13.95	14.53	15.02	16.42	21.33	21.81	22.39	22.88	24.29
	8H	13.45	13.89	14.50	14.96	16.38	21.49	21.93	22.54	23.00	24.42
	12H	13.40	13.81	14.48	14.88	16.31	21.57	21.98	22.65	23.05	24.48
8H	4H	14.90	15.34	15.95	16.40	17.83	20.87	21.31	21.92	22.37	23.80
	6H	15.14	15.51	16.22	16.61	18.03	21.48	21.85	22.56	22.96	24.38
	8H	15.15	15.48	16.24	16.57	18.01	21.70	22.02	22.78	23.11	24.55
	12H	15.12	15.41	16.21	16.49	17.97	21.83	22.12	22.92	23.20	24.68
12H	4H	15.03	15.44	16.11	16.51	17.94	20.82	21.22	21.89	22.30	23.73
	6H	15.39	15.72	16.48	16.80	18.24	21.47	21.79	22.55	22.88	24.32
	8H	15.46	15.75	16.55	16.83	18.31	21.69	21.97	22.78	23.06	24.54