

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: P937286

Luminaire Tested: SQ4-FB-075U-100D-B2750-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

**Test Information**

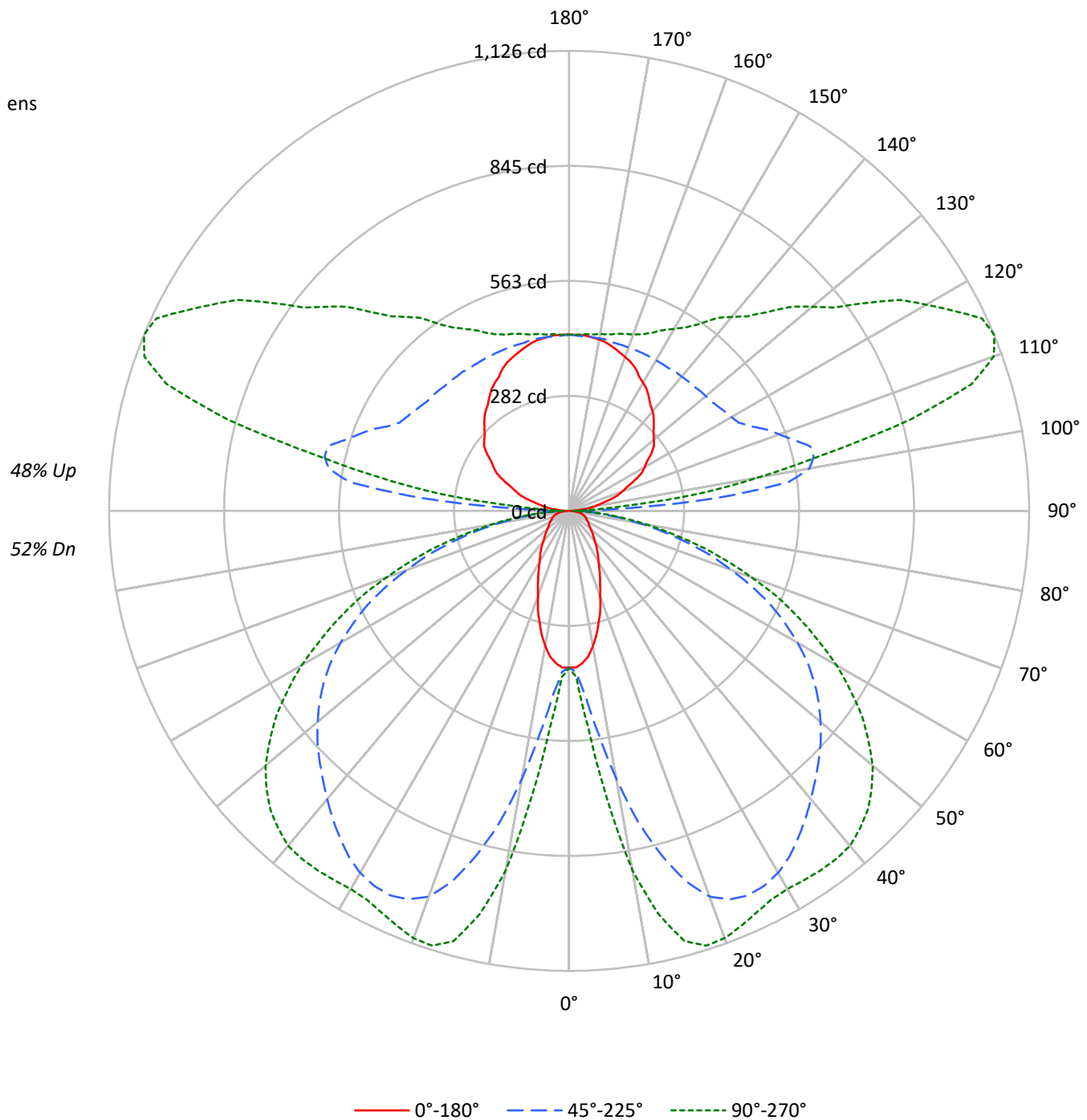
Test Method: LM-79-2019  
Report Number: P937286  
REPORT IS A COMBINATION OF REPORTS P933503 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-100D-B2750-1D-UNV-STD-W-4-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5767.5 lumens  
Efficiency: N/A  
Efficacy: 112.6 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: General Diffuse  
  
Input Watts (W): 51.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	10

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

	0°	45°	90°
0°	3561	3561	3561
5°	3476	4113	4788
10°	3149	5991	7936
15°	2673	7822	9583
20°	2173	9058	9766
25°	1812	9472	9568
30°	1525	9524	9551
35°	1347	9358	9797
40°	1171	9145	10052
45°	1059	8987	10092
50°	969	8842	9925
55°	925	8635	9485
60°	945	8245	8790
65°	977	7656	7835
70°	1033	6664	6619
75°	1135	5420	5166
80°	1212	3745	3480
85°	1019	1978	1782

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10092 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.6	0.9
10°-20°	220.0	3.8
20°-30°	384.9	6.7
30°-40°	495.5	8.6
40°-50°	553.4	9.6
50°-60°	530.0	9.2
60°-70°	420.1	7.3
70°-80°	247.0	4.3
80°-90°	70.3	1.2
90°-100°	210.3	3.6
100°-110°	552.9	9.6
110°-120°	573.3	9.9
120°-130°	459.8	8.0
130°-140°	360.8	6.3
140°-150°	276.9	4.8
150°-160°	199.4	3.5
160°-170°	122.0	2.1
170°-180°	41.2	0.7
0°-30°	654.6	11.3
0°-40°	1150.0	19.9
0°-60°	2233.5	38.7
0°-90°	2970.9	51.5
90°-120°	1336.4	23.2
90°-150°	2433.9	42.2
90°-180°	2797.0	48.5
0°-180°	5767.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	374	401	452	511	530	35
15°	280	517	871	1056	1090	78
25°	179	586	1038	1084	1085	82
35°	121	560	977	1033	1074	76
45°	83	447	864	990	1034	64
55°	59	284	733	852	875	54
65°	47	151	544	612	621	47
75°	35	93	299	328	330	36
85°	12	28	74	81	83	13
90°	3	8	22	11	11	3
95°	28	109	362	187	127	31
105°	100	151	611	928	866	106
115°	177	215	490	977	1115	175
125°	246	276	445	752	888	219
135°	293	323	431	608	689	227
145°	340	362	426	518	559	213
155°	384	395	426	468	481	177
165°	415	420	426	443	448	117
175°	431	431	429	434	434	41
180°	431	431	431	431	431	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8
2.5°	383.8	383.8	386.3	387.5	389.9	391.3	393.7	396.1	403.6	404.8	407.2
5°	374.0	378.9	394.9	401.1	418.3	441.8	451.7	467.7	501.1	510.9	517.1
7.5°	359.1	370.2	409.7	419.6	462.8	524.5	550.4	585.0	638.0	664.0	684.9
10°	335.7	359.1	429.5	452.9	523.2	617.1	665.2	713.3	793.5	829.3	842.9
12.5°	309.8	348.0	450.5	482.5	583.8	720.8	778.8	831.8	923.2	971.3	978.6
15°	280.1	331.9	470.2	517.1	647.9	807.2	871.3	936.7	1021.9	1056.4	1065.0
17.5°	254.2	319.6	488.7	538.1	697.3	884.9	950.3	1004.6	1073.7	1097.2	1103.3
20°	222.1	299.9	501.1	565.3	749.2	941.7	1004.6	1046.5	1093.4	1108.3	1110.7
22.5°	198.7	278.9	508.5	575.1	783.6	976.2	1029.3	1062.6	1094.6	1099.6	1100.8
25°	179.0	255.4	507.3	586.2	813.3	997.1	1037.9	1062.6	1081.1	1083.5	1083.5
27.5°	160.5	229.6	502.3	588.7	835.5	1002.1	1034.2	1051.5	1060.1	1065.0	1065.0
30°	144.4	204.8	490.0	583.8	845.4	997.1	1023.1	1031.7	1040.4	1047.8	1051.5
32.5°	132.1	181.4	471.5	573.8	846.6	984.8	1003.3	1008.3	1020.6	1037.9	1044.1
35°	121.0	157.9	450.5	560.3	839.2	965.1	977.4	982.4	1007.0	1033.0	1041.6
37.5°	109.8	140.7	423.3	536.9	828.1	941.7	950.3	958.9	997.1	1028.1	1037.9
40°	98.7	125.9	391.3	510.9	810.8	913.3	920.6	934.3	984.8	1020.6	1030.5
42.5°	90.1	113.6	356.7	483.8	788.6	881.1	892.3	912.1	970.1	1008.3	1019.4
45°	82.7	101.2	319.6	446.7	760.2	847.9	863.9	891.0	952.8	989.8	999.7
47.5°	75.3	92.6	281.4	408.5	729.4	814.5	835.5	866.4	929.3	965.1	973.7
50°	69.1	84.0	243.1	367.8	696.0	778.8	803.4	835.5	899.7	933.0	944.1
52.5°	64.2	76.5	207.3	327.1	657.8	741.7	770.1	803.4	863.9	896.0	903.4
55°	59.2	70.3	176.5	283.8	618.3	702.2	733.1	765.1	824.4	851.5	856.5
57.5°	56.8	65.4	150.6	243.1	576.4	657.8	692.4	722.0	777.5	798.5	803.4
60°	53.1	61.7	130.9	208.6	530.7	615.8	645.5	675.1	722.0	739.3	742.9
62.5°	49.4	59.2	116.0	175.2	483.8	566.5	596.1	623.3	662.8	675.1	680.0
65°	46.9	56.8	104.9	150.6	435.6	514.6	544.2	567.7	599.8	612.1	614.6
67.5°	44.5	54.3	96.3	129.5	387.5	462.8	485.0	507.3	531.9	544.2	545.5
70°	40.7	51.8	88.8	114.8	338.1	403.6	422.1	445.5	465.2	471.5	475.1
72.5°	38.3	48.1	84.0	103.7	287.6	346.8	364.1	377.6	394.9	401.1	401.1
75°	34.6	43.2	79.0	92.6	235.7	283.8	298.7	312.2	325.8	328.3	324.6
77.5°	30.8	38.3	67.9	77.7	183.9	224.6	237.0	244.3	255.4	258.0	259.2
80°	25.9	33.3	53.1	60.4	133.3	165.4	174.0	180.2	190.1	190.1	192.5
82.5°	19.7	25.9	38.3	43.2	90.1	113.6	121.0	124.7	130.9	130.9	130.9
85°	12.3	16.1	24.7	28.4	54.3	69.1	74.1	75.3	80.2	81.4	81.4
87.5°	6.2	8.6	16.1	17.3	28.4	35.8	35.8	38.3	38.3	37.0	35.8
90°	2.9	5.2	7.6	8.1	12.8	19.0	22.0	19.6	14.7	11.0	11.0
92.5°	11.6	31.3	50.9	55.9	78.5	108.8	123.9	108.6	78.0	55.0	52.9
95°	27.8	63.9	99.9	108.9	193.3	305.9	362.2	323.2	245.2	186.7	180.1
97.5°	48.1	79.9	111.6	119.6	260.4	448.1	542.0	517.3	468.1	431.1	418.5
100°	63.7	92.5	121.3	128.5	284.8	493.2	597.3	599.1	602.7	605.4	590.4
102.5°	77.1	104.0	130.8	137.5	296.0	507.3	613.0	644.4	707.1	754.2	741.3
105°	99.6	122.4	145.1	150.8	304.3	508.9	611.2	681.6	822.4	927.9	921.0
107.5°	122.7	144.0	165.2	170.5	305.9	486.2	576.5	674.6	871.0	1018.2	1019.9
110°	138.4	157.6	176.8	181.6	303.6	466.2	547.5	657.3	876.7	1041.4	1048.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	153.7	172.0	190.3	194.8	303.6	448.7	521.2	633.5	858.2	1026.7	1037.8
115°	176.9	193.7	210.6	214.8	306.4	428.5	489.6	597.9	814.3	976.6	991.9
117.5°	199.8	215.1	230.4	234.2	312.1	415.9	467.8	565.5	760.8	907.4	924.4
120°	213.1	227.5	241.9	245.5	316.7	411.7	459.2	548.4	726.9	860.8	877.3
122.5°	226.1	240.7	255.2	258.8	323.4	409.5	452.5	532.8	693.6	814.2	830.5
125°	246.1	259.4	272.6	275.9	332.4	407.7	445.3	513.6	650.2	752.5	767.6
127.5°	262.4	275.7	289.1	292.4	341.4	406.7	439.3	497.9	615.1	703.0	715.7
130°	271.0	285.4	299.8	303.5	347.9	407.2	436.9	489.1	593.5	671.7	683.4
132.5°	280.0	294.4	308.8	312.4	353.2	407.7	434.9	481.6	575.1	645.1	655.6
135°	293.3	306.4	319.5	322.8	359.0	407.3	431.4	470.5	548.8	607.5	616.5
137.5°	306.9	319.9	332.9	336.1	367.7	409.8	430.9	463.9	530.0	579.6	587.0
140°	318.2	330.2	342.1	345.1	373.0	410.2	428.8	457.4	514.4	557.3	564.2
142.5°	326.9	337.9	348.9	351.7	377.4	411.7	428.8	453.9	504.1	541.7	547.7
145°	340.2	349.9	359.5	361.9	383.2	411.7	425.9	446.5	487.5	518.3	522.8
147.5°	353.5	362.9	372.3	374.6	391.7	414.5	425.9	442.1	474.4	498.6	502.3
150°	362.2	370.7	379.2	381.4	396.2	416.0	425.9	439.5	466.8	487.3	490.3
152.5°	371.2	377.6	384.1	385.6	399.1	416.9	425.9	437.6	460.8	478.3	480.5
155°	384.5	389.3	394.0	395.2	405.4	419.1	425.9	435.2	453.6	467.6	469.1
157.5°	394.3	399.0	403.7	404.8	411.8	421.2	425.9	433.1	447.5	458.3	459.3
160°	401.0	404.6	408.2	409.1	414.7	422.2	425.9	432.1	444.5	453.7	454.3
162.5°	407.7	410.4	413.1	413.8	417.8	423.2	425.9	431.1	441.5	449.3	449.9
165°	414.9	417.3	419.7	420.4	422.3	424.7	425.9	429.6	437.1	442.7	443.4
167.5°	421.5	422.6	423.8	424.1	425.7	427.8	428.8	431.2	436.2	439.8	440.1
170°	425.9	427.0	428.2	428.5	428.6	428.7	428.8	431.2	436.2	439.8	439.8
172.5°	428.2	428.5	428.7	428.8	428.8	428.8	428.8	430.8	434.6	437.5	437.3
175°	431.4	431.4	431.4	431.4	430.6	429.4	428.8	430.0	432.4	434.3	434.3
177.5°	431.4	431.4	431.4	431.4	430.8	429.8	429.4	430.3	432.3	433.7	433.5
180°	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	383.8	383.8
2.5°	409.7	407.2
5°	527.0	529.5
7.5°	709.7	708.3
10°	882.4	893.5
12.5°	1008.3	1010.8
15°	1084.8	1089.7
17.5°	1114.4	1115.7
20°	1115.7	1113.1
22.5°	1102.1	1099.6
25°	1086.1	1084.8
27.5°	1071.2	1072.4
30°	1065.0	1068.8
32.5°	1065.0	1071.2
35°	1067.6	1073.7
37.5°	1066.3	1073.7
40°	1061.4	1070.0
42.5°	1047.8	1053.9
45°	1026.8	1034.2
47.5°	999.7	1004.6
50°	965.1	970.1
52.5°	921.9	923.2
55°	870.0	875.0
57.5°	814.5	815.8
60°	752.8	756.5
62.5°	687.4	687.4
65°	618.3	620.7
67.5°	546.8	552.9
70°	473.9	475.1
72.5°	402.4	402.4
75°	328.3	329.5
77.5°	258.0	258.0
80°	191.3	192.5
82.5°	132.1	134.5
85°	82.7	82.7
87.5°	38.3	34.6
90°	11.0	11.0
92.5°	44.1	35.3
95°	153.6	127.1
97.5°	368.1	317.7
100°	530.3	470.2
102.5°	689.9	638.4
105°	893.4	865.7
107.5°	1026.7	1033.4
110°	1077.5	1106.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1082.0	1126.3
115°	1053.4	1114.7
117.5°	992.5	1060.6
120°	943.4	1009.6
122.5°	895.7	961.0
125°	827.6	887.7
127.5°	766.3	817.1
130°	730.3	777.1
132.5°	697.5	739.4
135°	652.7	688.8
137.5°	616.6	646.2
140°	592.0	619.6
142.5°	571.4	595.2
145°	540.8	558.8
147.5°	517.2	532.2
150°	502.4	514.5
152.5°	489.7	498.8
155°	475.1	481.2
157.5°	463.6	467.8
160°	456.7	459.2
162.5°	452.2	454.6
165°	445.8	448.2
167.5°	441.1	442.2
170°	439.8	439.8
172.5°	436.4	435.4
175°	434.3	434.3
177.5°	432.4	431.4
180°	431.4	431.4



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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	5.54	6.46	6.48	7.42	8.66	18.68	19.59	19.62	20.55	21.80
	3H	6.25	7.08	7.20	8.04	9.31	20.51	21.33	21.46	22.30	23.57
	4H	6.55	7.33	7.51	8.31	9.58	21.15	21.93	22.11	22.90	24.17
	6H	6.81	7.53	7.78	8.50	9.79	21.57	22.29	22.54	23.26	24.56
	8H	6.88	7.56	7.86	8.56	9.85	21.68	22.37	22.66	23.36	24.65
	12H	6.90	7.55	7.88	8.54	9.85	21.75	22.40	22.73	23.39	24.70
4H	2H	12.74	13.52	13.71	14.49	15.77	18.96	19.74	19.93	20.71	21.99
	3H	14.31	14.97	15.29	15.97	17.26	21.00	21.65	21.98	22.65	23.94
	4H	14.41	15.01	15.40	16.00	17.32	21.76	22.35	22.74	23.35	24.67
	6H	14.43	14.94	15.42	15.96	17.27	22.29	22.80	23.29	23.82	25.13
	8H	14.40	14.89	15.40	15.90	17.23	22.44	22.93	23.44	23.94	25.27
	12H	14.36	14.80	15.38	15.83	17.16	22.53	22.97	23.55	24.00	25.33
8H	4H	15.85	16.33	16.85	17.34	18.67	21.82	22.31	22.82	23.32	24.65
	6H	16.09	16.50	17.12	17.55	18.87	22.44	22.84	23.47	23.90	25.22
	8H	16.11	16.47	17.15	17.51	18.85	22.66	23.01	23.69	24.05	25.39
	12H	16.09	16.40	17.12	17.43	18.82	22.79	23.11	23.83	24.14	25.53
12H	4H	15.99	16.43	17.01	17.46	18.79	21.78	22.22	22.80	23.24	24.58
	6H	16.35	16.70	17.38	17.74	19.09	22.43	22.78	23.46	23.82	25.16
	8H	16.42	16.73	17.46	17.77	19.16	22.65	22.96	23.69	24.00	25.39