

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: P938350

Luminaire Tested: SQ4-FB-150U-075D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

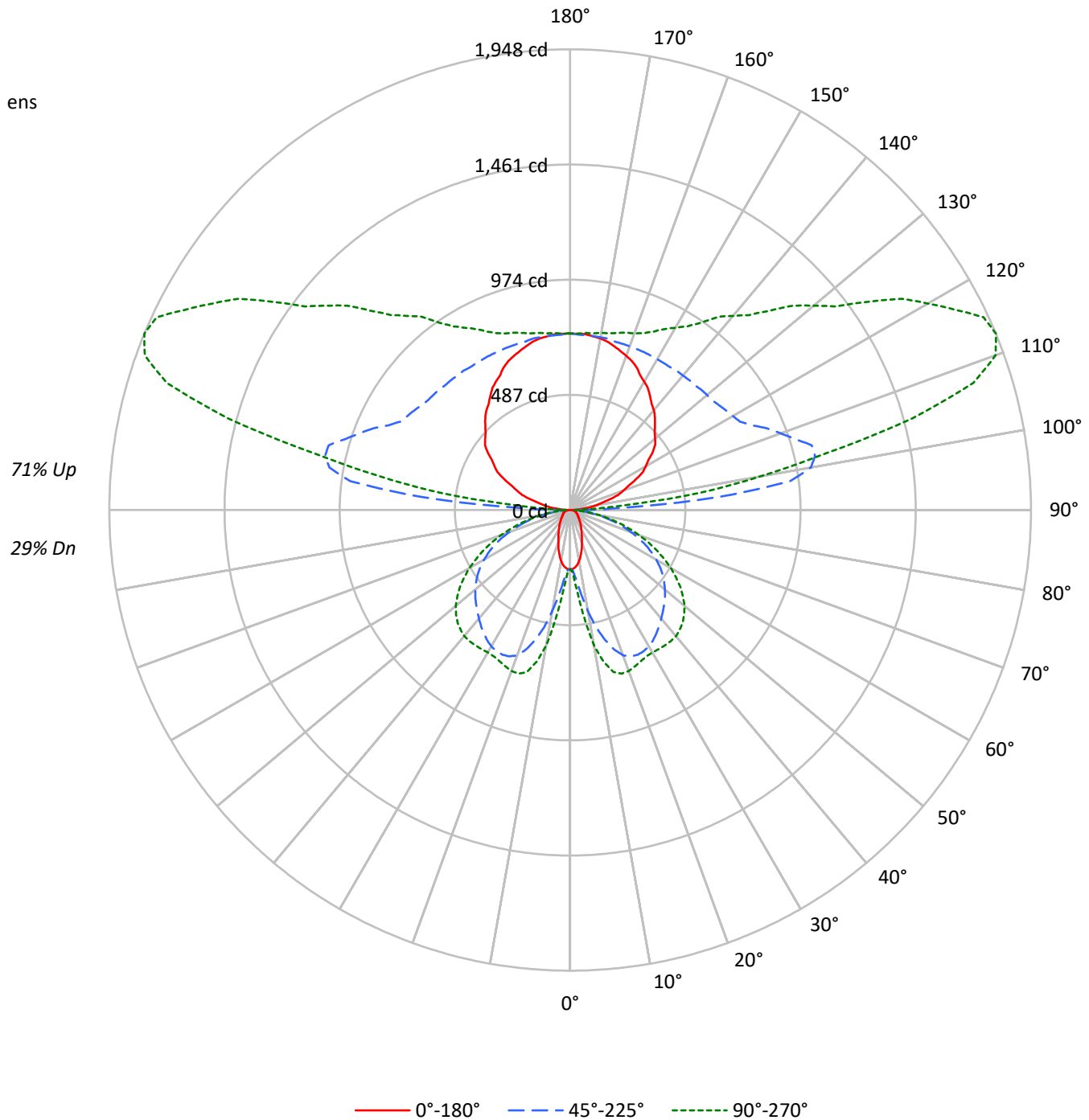
Test Method: LM-79-2019  
Report Number: P938350  
REPORT IS A COMBINATION OF REPORTS P933630 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-075D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6772.5 lumens  
Efficiency: N/A  
Efficacy: 106.5 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): 63.6  
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				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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29				29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23				23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19				19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16				16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13				13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11				11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10				10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8				8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7				7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6				6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6				6

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

	0°	45°	90°
0°	2317	2317	2317
5°	2261	2676	3115
10°	2049	3898	5164
15°	1740	5089	6235
20°	1414	5893	6355
25°	1178	6163	6225
30°	993	6197	6214
35°	876	6089	6375
40°	762	5950	6541
45°	689	5847	6566
50°	631	5754	6458
55°	601	5618	6171
60°	614	5365	5719
65°	636	4981	5098
70°	673	4335	4308
75°	738	3525	3361
80°	791	2436	2265
85°	662	1286	1159

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6566 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.3	0.5
10°-20°	143.2	2.1
20°-30°	250.4	3.7
30°-40°	322.4	4.8
40°-50°	360.1	5.3
50°-60°	344.9	5.1
60°-70°	273.3	4.0
70°-80°	160.7	2.4
80°-90°	47.5	0.7
90°-100°	363.8	5.4
100°-110°	956.4	14.1
110°-120°	991.6	14.6
120°-130°	795.4	11.7
130°-140°	624.1	9.2
140°-150°	479.0	7.1
150°-160°	345.0	5.1
160°-170°	211.1	3.1
170°-180°	71.3	1.1
0°-30°	425.9	6.3
0°-40°	748.3	11.0
0°-60°	1453.3	21.5
0°-90°	1934.8	28.6
90°-120°	2311.7	34.1
90°-150°	4210.3	62.2
90°-180°	4838.0	71.4
0°-180°	6772.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	250	250	250	250	250	
5°	243	261	294	332	344	22
15°	182	336	567	687	709	51
25°	116	381	675	705	706	54
35°	79	365	636	672	699	49
45°	54	291	562	644	673	42
55°	38	185	477	554	569	35
65°	30	98	354	398	404	30
75°	22	60	194	214	214	24
85°	8	18	48	53	54	8
90°	5	14	38	19	19	5
95°	48	188	627	323	220	53
105°	172	261	1057	1605	1498	183
115°	306	372	847	1689	1928	302
125°	426	477	770	1302	1536	378
135°	507	558	746	1051	1192	393
145°	588	626	737	896	967	369
155°	665	684	737	809	832	306
165°	718	727	737	766	775	203
175°	746	746	742	751	751	71
180°	746	746	746	746	746	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	249.7	249.7	249.7	249.7	249.7	249.7	249.7	249.7	249.7	249.7	249.7
2.5°	249.7	249.7	251.3	252.1	253.7	254.6	256.2	257.8	262.6	263.4	265.0
5°	243.3	246.5	257.0	261.0	272.2	287.5	293.9	304.3	326.0	332.4	336.5
7.5°	233.7	240.9	266.6	273.0	301.1	341.3	358.1	380.6	415.2	432.0	445.7
10°	218.4	233.7	279.4	294.7	340.5	401.5	432.8	464.1	516.3	539.6	548.4
12.5°	201.6	226.4	293.1	314.0	379.8	469.0	506.7	541.2	600.6	632.0	636.8
15°	182.3	216.0	305.9	336.5	421.6	525.2	566.9	609.5	664.9	687.4	693.0
17.5°	165.4	208.0	318.0	350.1	453.7	575.8	618.3	653.6	698.6	713.9	717.9
20°	144.5	195.1	326.0	367.8	487.4	612.7	653.6	680.9	711.5	721.1	722.7
22.5°	129.3	181.5	330.8	374.2	509.9	635.2	669.7	691.4	712.3	715.5	716.3
25°	116.4	166.2	330.0	381.4	529.2	648.8	675.3	691.4	703.4	705.0	705.0
27.5°	104.4	149.4	326.8	383.0	543.6	652.0	672.9	684.2	689.8	693.0	693.0
30°	94.0	133.3	318.8	379.8	550.1	648.8	665.7	671.3	676.9	681.7	684.2
32.5°	85.9	118.0	306.7	373.4	550.9	640.8	652.8	656.1	664.1	675.3	679.3
35°	78.7	102.8	293.1	364.6	546.0	627.9	636.0	639.2	655.2	672.1	677.7
37.5°	71.5	91.5	275.4	349.3	538.8	612.7	618.3	623.9	648.8	668.9	675.3
40°	64.2	81.9	254.6	332.4	527.6	594.2	599.0	607.9	640.8	664.1	670.5
42.5°	58.6	73.9	232.1	314.8	513.1	573.3	580.6	593.4	631.2	656.1	663.3
45°	53.8	65.8	208.0	290.7	494.6	551.7	562.1	579.8	619.9	644.0	650.4
47.5°	49.0	60.2	183.1	265.8	474.6	530.0	543.6	563.7	604.7	627.9	633.6
50°	45.0	54.6	158.2	239.3	452.9	506.7	522.8	543.6	585.4	607.1	614.3
52.5°	41.8	49.8	134.9	212.8	428.0	482.6	501.1	522.8	562.1	583.0	587.8
55°	38.5	45.8	114.8	184.7	402.3	456.9	477.0	497.9	536.4	554.1	557.3
57.5°	36.9	42.6	98.0	158.2	375.0	428.0	450.5	469.8	505.9	519.5	522.8
60°	34.5	40.2	85.1	135.7	345.3	400.7	420.0	439.2	469.8	481.0	483.4
62.5°	32.1	38.5	75.5	114.0	314.8	368.6	387.8	405.5	431.2	439.2	442.5
65°	30.5	36.9	68.3	98.0	283.5	334.9	354.1	369.4	390.3	398.3	399.9
67.5°	28.9	35.3	62.6	84.3	252.1	301.1	315.6	330.0	346.1	354.1	354.9
70°	26.5	33.7	57.8	74.7	220.0	262.6	274.6	289.9	302.7	306.7	309.2
72.5°	24.9	31.3	54.6	67.5	187.1	225.6	236.9	245.7	257.0	261.0	261.0
75°	22.5	28.1	51.4	60.2	153.4	184.7	194.3	203.2	212.0	213.6	211.2
77.5°	20.1	24.9	44.2	50.6	119.6	146.1	154.2	159.0	166.2	167.8	168.6
80°	16.9	21.7	34.5	39.3	86.7	107.6	113.2	117.2	123.7	123.7	125.3
82.5°	12.8	16.9	24.9	28.1	58.6	73.9	78.7	81.1	85.1	85.1	85.1
85°	8.0	10.4	16.1	18.5	35.3	45.0	48.2	49.0	52.2	53.0	53.0
87.5°	4.0	5.6	10.4	11.2	18.5	23.3	23.3	24.9	24.9	24.1	23.3
90°	5.0	9.0	13.0	14.1	22.1	32.8	38.1	33.8	25.4	19.0	19.0
92.5°	20.0	54.0	88.2	96.7	135.9	188.1	214.3	187.8	134.9	95.2	91.4
95°	48.1	110.4	172.7	188.3	334.4	529.2	626.6	559.1	424.2	323.0	311.6
97.5°	83.1	138.1	193.1	206.9	450.4	775.2	937.6	894.9	809.7	745.7	723.9
100°	110.2	160.0	209.9	222.4	492.6	853.0	1033.2	1036.4	1042.6	1047.3	1021.3
102.5°	133.2	179.8	226.3	237.9	512.1	877.5	1060.3	1114.6	1223.2	1304.7	1282.5
105°	172.3	211.8	251.1	261.0	526.4	880.2	1057.2	1179.0	1422.5	1605.2	1593.2
107.5°	212.4	249.1	285.9	295.0	529.1	841.1	997.2	1167.0	1506.7	1761.5	1764.4
110°	239.4	272.5	305.8	314.1	525.1	806.4	947.1	1137.0	1516.7	1801.5	1814.0



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	266.0	297.6	329.2	337.1	525.2	776.1	901.5	1095.9	1484.5	1776.0	1795.1
115°	306.0	335.2	364.3	371.6	530.1	741.3	846.9	1034.1	1408.5	1689.4	1715.9
117.5°	345.6	372.1	398.6	405.2	539.9	719.6	809.3	978.3	1316.2	1569.6	1599.1
120°	368.6	393.6	418.4	424.7	547.9	712.2	794.3	948.7	1257.4	1489.0	1517.6
122.5°	391.1	416.3	441.5	447.8	559.5	708.4	782.8	921.8	1199.8	1408.4	1436.6
125°	425.8	448.6	471.6	477.3	574.9	705.2	770.3	888.4	1124.5	1301.7	1327.7
127.5°	453.8	476.9	500.0	505.8	590.4	703.3	759.8	861.2	1064.0	1216.1	1238.0
130°	468.8	493.7	518.6	524.8	601.8	704.5	755.8	846.0	1026.6	1161.9	1182.2
132.5°	484.3	509.3	534.2	540.4	611.0	705.2	752.3	833.0	994.7	1115.8	1134.0
135°	507.3	530.1	552.7	558.4	621.0	704.5	746.2	813.9	949.2	1050.7	1066.4
137.5°	530.9	553.3	575.8	581.5	636.1	708.9	745.3	802.4	916.9	1002.7	1015.5
140°	550.5	571.2	591.9	597.0	645.3	709.6	741.7	791.1	890.0	964.1	976.0
142.5°	565.5	584.6	603.7	608.5	652.9	712.1	741.7	785.2	872.0	937.1	947.4
145°	588.5	605.2	621.8	626.0	663.0	712.2	736.8	772.2	843.2	896.5	904.3
147.5°	611.5	627.8	644.0	648.1	677.7	717.1	736.8	764.7	820.5	862.4	868.8
150°	626.6	641.3	655.9	659.6	685.3	719.6	736.8	760.4	807.5	842.9	848.1
152.5°	642.1	653.2	664.3	667.1	690.3	721.3	736.8	756.9	797.2	827.4	831.3
155°	665.1	673.4	681.6	683.7	701.3	724.9	736.8	752.8	784.9	808.9	811.5
157.5°	682.1	690.2	698.1	700.1	712.3	728.6	736.8	749.2	774.1	792.8	794.6
160°	693.6	699.9	706.2	707.7	717.4	730.3	736.8	747.4	768.8	784.8	785.8
162.5°	705.2	709.9	714.5	715.7	722.7	732.1	736.8	745.7	763.8	777.3	778.3
165°	717.7	721.9	726.2	727.2	730.4	734.7	736.8	743.2	756.1	765.7	766.8
167.5°	729.2	731.2	733.2	733.7	736.4	740.0	741.7	746.0	754.4	760.8	761.2
170°	736.8	738.8	740.8	741.2	741.4	741.7	741.7	746.0	754.4	760.8	760.8
172.5°	740.8	741.2	741.7	741.7	741.7	741.7	741.7	745.1	751.8	756.7	756.3
175°	746.2	746.2	746.2	746.2	744.7	742.7	741.7	743.8	748.1	751.3	751.3
177.5°	746.2	746.2	746.2	746.2	745.1	743.6	742.8	744.5	747.8	750.2	749.8
180°	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	249.7	249.7
2.5°	266.6	265.0
5°	342.9	344.5
7.5°	461.7	460.9
10°	574.1	581.4
12.5°	656.1	657.7
15°	705.8	709.0
17.5°	725.1	725.9
20°	725.9	724.3
22.5°	717.1	715.5
25°	706.6	705.8
27.5°	697.0	697.8
30°	693.0	695.4
32.5°	693.0	697.0
35°	694.6	698.6
37.5°	693.8	698.6
40°	690.6	696.2
42.5°	681.7	685.8
45°	668.1	672.9
47.5°	650.4	653.6
50°	627.9	631.2
52.5°	599.8	600.6
55°	566.1	569.3
57.5°	530.0	530.8
60°	489.8	492.2
62.5°	447.3	447.3
65°	402.3	403.9
67.5°	355.7	359.7
70°	308.4	309.2
72.5°	261.8	261.8
75°	213.6	214.4
77.5°	167.8	167.8
80°	124.5	125.3
82.5°	85.9	87.5
85°	53.8	53.8
87.5°	24.9	22.5
90°	19.0	19.0
92.5°	76.2	61.1
95°	265.7	219.9
97.5°	636.7	549.4
100°	917.3	813.4
102.5°	1193.4	1104.4
105°	1545.4	1497.5
107.5°	1775.9	1787.5
110°	1863.8	1913.7





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1871.7	1948.2
115°	1822.1	1928.2
117.5°	1716.8	1834.5
120°	1632.0	1746.4
122.5°	1549.5	1662.3
125°	1431.6	1535.6
127.5°	1325.7	1413.4
130°	1263.2	1344.2
132.5°	1206.5	1279.1
135°	1128.9	1191.5
137.5°	1066.7	1117.9
140°	1023.9	1071.8
142.5°	988.6	1029.7
145°	935.5	966.7
147.5°	894.7	920.6
150°	869.1	890.0
152.5°	847.2	862.9
155°	822.0	832.4
157.5°	802.0	809.3
160°	790.1	794.3
162.5°	782.3	786.3
165°	771.0	775.3
167.5°	763.0	764.8
170°	760.8	760.8
172.5°	754.8	753.3
175°	751.3	751.3
177.5°	748.0	746.2
180°	746.2	746.2



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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	1.52	2.24	2.64	3.35	4.90	14.66	15.38	15.78	16.49	18.04
	3H	2.22	2.86	3.34	3.98	5.54	16.47	17.12	17.60	18.24	19.80
	4H	2.51	3.12	3.64	4.24	5.81	17.10	17.71	18.24	18.83	20.40
	6H	2.75	3.31	3.90	4.44	6.02	17.51	18.07	18.65	19.20	20.78
	8H	2.82	3.35	3.96	4.49	6.06	17.62	18.16	18.77	19.30	20.87
	12H	2.83	3.34	3.98	4.47	6.07	17.68	18.19	18.83	19.32	20.92
4H	2H	8.69	9.30	9.84	10.43	11.99	14.92	15.53	16.06	16.65	18.22
	3H	10.25	10.76	11.40	11.91	13.49	16.94	17.45	18.08	18.59	20.17
	4H	10.34	10.81	11.49	11.95	13.54	17.69	18.16	18.84	19.29	20.89
	6H	10.34	10.74	11.50	11.90	13.49	18.20	18.61	19.36	19.77	21.36
	8H	10.31	10.69	11.47	11.84	13.45	18.35	18.73	19.51	19.88	21.49
	12H	10.26	10.61	11.44	11.77	13.38	18.43	18.77	19.61	19.94	21.55
8H	4H	11.76	12.14	12.92	13.29	14.90	17.73	18.11	18.89	19.26	20.87
	6H	12.00	12.31	13.17	13.50	15.10	18.34	18.65	19.52	19.85	21.45
	8H	12.01	12.28	13.19	13.46	15.08	18.55	18.83	19.74	20.00	21.62
	12H	11.97	12.21	13.16	13.38	15.04	18.68	18.92	19.87	20.09	21.75
12H	4H	11.89	12.23	13.07	13.40	15.01	17.68	18.02	18.85	19.18	20.80
	6H	12.25	12.52	13.43	13.69	15.32	18.32	18.60	19.51	19.77	21.39
	8H	12.31	12.55	13.50	13.72	15.38	18.54	18.78	19.73	19.95	21.60