

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: P937438

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937438
REPORT IS A COMBINATION OF REPORTS P933573 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

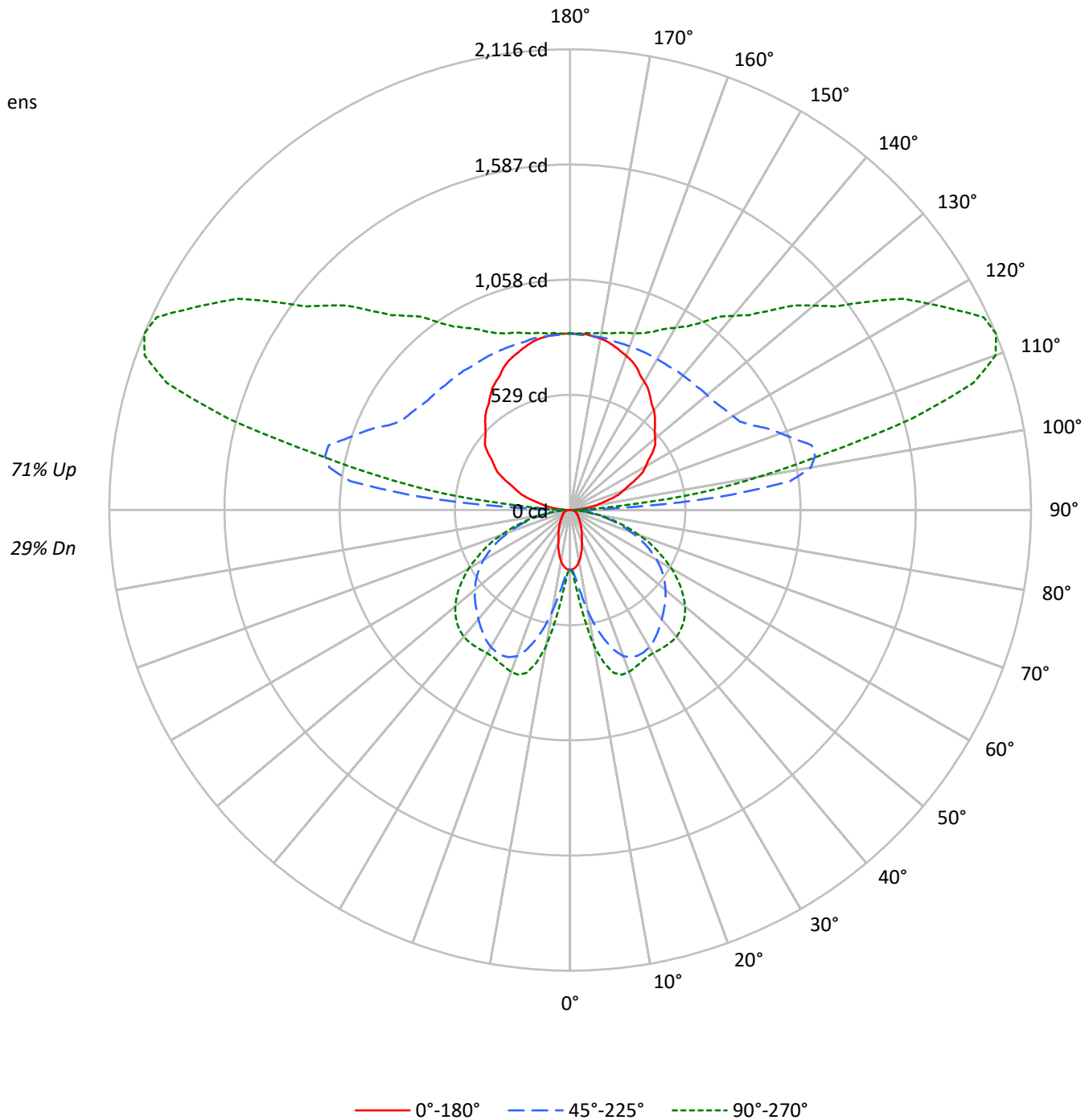
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7368.7 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 61.8
Input Voltage (V): NR
Input Current (A_{in}): 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-050D-92765-1D-UNV-STD-W-6-3000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1688	1688	1688
5°	1648	1950	2268
10°	1494	2842	3760
15°	1269	3711	4541
20°	1033	4300	4628
25°	862	4499	4534
30°	726	4526	4525
35°	642	4450	4642
40°	559	4351	4763
45°	506	4278	4781
50°	463	4212	4702
55°	444	4116	4494
60°	455	3934	4165
65°	471	3657	3713
70°	502	3188	3136
75°	554	2597	2448
80°	599	1799	1649
85°	525	954	845

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4781 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.3	0.5
10°-20°	156.4	2.1
20°-30°	273.6	3.7
30°-40°	352.2	4.8
40°-50°	393.3	5.3
50°-60°	376.7	5.1
60°-70°	298.6	4.1
70°-80°	175.6	2.4
80°-90°	51.9	0.7
90°-100°	395.2	5.4
100°-110°	1038.9	14.1
110°-120°	1077.2	14.6
120°-130°	864.1	11.7
130°-140°	678.0	9.2
140°-150°	520.4	7.1
150°-160°	374.8	5.1
160°-170°	229.3	3.1
170°-180°	77.5	1.1
0°-30°	465.2	6.3
0°-40°	817.4	11.1
0°-60°	1587.4	21.5
0°-90°	2113.4	28.7
90°-120°	2511.3	34.1
90°-150°	4573.8	62.1
90°-180°	5255.0	71.3
0°-180°	7368.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	273	273	273	273	273	
5°	266	285	321	363	376	25
15°	199	368	619	751	774	55
25°	127	417	738	770	771	59
35°	86	398	695	734	763	54
45°	59	318	614	704	735	45
55°	42	202	521	605	622	38
65°	33	107	387	435	441	33
75°	25	66	212	233	234	26
85°	9	20	53	58	59	9
90°	5	15	41	21	21	5
95°	52	205	681	351	239	58
105°	187	284	1149	1744	1627	198
115°	332	404	920	1835	2095	328
125°	462	518	837	1414	1668	411
135°	551	607	811	1142	1294	426
145°	639	680	800	974	1050	401
155°	723	743	800	879	904	332
165°	780	790	800	832	842	220
175°	811	811	806	816	816	77
180°	811	811	811	811	811	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	272.8	272.8	272.8	272.8	272.8	272.8	272.8	272.8	272.8	272.8	272.8
2.5°	272.8	272.8	274.5	275.4	277.2	278.1	279.8	281.6	286.8	287.7	289.4
5°	265.8	269.3	280.7	285.1	297.4	314.0	321.0	332.4	356.1	363.1	367.6
7.5°	255.2	263.2	291.2	298.2	328.9	372.8	391.2	415.8	453.5	471.9	486.9
10°	238.6	255.2	305.2	322.0	371.9	438.5	472.8	507.0	564.0	589.4	599.1
12.5°	220.2	247.4	320.1	343.0	414.9	512.2	553.5	591.2	656.1	690.3	695.5
15°	199.1	236.0	334.2	367.6	460.5	573.6	619.2	665.8	726.3	750.8	757.0
17.5°	180.7	227.2	347.3	382.5	495.6	628.9	675.4	714.0	763.1	779.8	784.1
20°	157.9	213.1	356.1	401.7	532.5	669.3	714.0	743.8	777.2	787.7	789.5
22.5°	141.2	198.2	361.4	408.7	557.0	693.8	731.5	755.2	778.0	781.5	782.4
25°	127.2	181.6	360.5	416.7	578.1	708.7	737.7	755.2	768.3	770.1	770.1
27.5°	114.1	163.2	357.0	418.4	593.9	712.3	735.0	747.3	753.4	757.0	757.0
30°	102.6	145.6	348.2	414.9	600.8	708.7	727.2	733.3	739.4	744.7	747.3
32.5°	93.8	129.0	335.0	407.9	601.7	700.0	713.1	716.6	725.4	737.7	742.1
35°	86.0	112.3	320.1	398.3	596.5	685.9	694.7	698.2	715.8	734.2	740.3
37.5°	78.0	100.0	300.9	381.6	588.5	669.3	675.4	681.6	708.7	730.7	737.7
40°	70.2	89.5	278.1	363.1	576.3	649.1	654.4	664.0	700.0	725.4	732.4
42.5°	64.0	80.7	253.5	343.8	560.5	626.3	634.1	648.2	689.4	716.6	724.5
45°	58.8	71.9	227.2	317.5	540.3	602.6	614.0	633.3	677.1	703.5	710.4
47.5°	53.5	65.8	200.0	290.3	518.4	578.9	593.9	615.7	660.5	685.9	692.0
50°	49.1	59.6	172.8	261.3	494.7	553.5	571.0	593.9	639.5	663.1	671.0
52.5°	45.6	54.4	147.4	232.5	467.5	527.1	547.4	571.0	614.0	636.8	642.1
55°	42.1	50.0	125.4	201.7	439.4	499.1	521.0	543.8	585.9	605.2	608.8
57.5°	40.4	46.5	107.0	172.8	409.6	467.5	492.1	513.1	552.6	567.5	571.0
60°	37.8	43.9	93.0	148.2	377.2	437.7	458.8	479.8	513.1	525.4	528.0
62.5°	35.1	42.1	82.5	124.5	343.8	402.6	423.6	443.0	471.0	479.8	483.3
65°	33.3	40.4	74.6	107.0	309.7	365.7	386.8	403.5	426.3	435.1	436.8
67.5°	31.6	38.6	68.5	92.1	275.4	328.9	344.7	360.5	378.0	386.8	387.7
70°	29.0	36.8	63.1	81.5	240.3	286.8	300.0	316.6	330.7	335.0	337.7
72.5°	27.2	34.2	59.6	73.7	204.4	246.4	258.7	268.4	280.7	285.1	285.1
75°	24.6	30.7	56.2	65.8	167.5	201.7	212.3	221.9	231.5	233.4	230.7
77.5°	21.9	27.2	48.2	55.3	130.7	159.7	168.4	173.7	181.6	183.3	184.2
80°	18.4	23.7	37.8	43.0	94.7	117.6	123.7	128.1	135.1	135.1	136.8
82.5°	14.0	18.4	27.2	30.7	64.0	80.7	86.0	88.6	93.0	93.0	93.0
85°	8.8	11.4	17.5	20.1	38.6	49.1	52.7	53.5	57.0	57.9	57.9
87.5°	4.4	6.1	11.4	12.3	20.1	25.5	25.5	27.2	27.2	26.3	25.5
90°	5.4	9.8	14.1	15.3	24.0	35.6	41.3	36.7	27.6	20.7	20.7
92.5°	21.8	58.8	95.7	105.0	147.6	204.4	232.8	204.1	146.5	103.3	99.2
95°	52.2	119.9	187.7	204.6	363.3	574.8	680.6	607.4	460.8	350.9	338.4
97.5°	90.3	150.1	209.8	224.7	489.3	842.1	1018.5	972.2	879.6	810.1	786.4
100°	119.7	173.9	228.0	241.6	535.2	926.6	1122.4	1125.8	1132.6	1137.7	1109.4
102.5°	144.8	195.3	245.8	258.5	556.3	953.3	1151.8	1210.8	1328.8	1417.3	1393.2
105°	187.1	230.0	272.8	283.5	571.9	956.4	1148.6	1280.8	1545.3	1743.7	1730.7
107.5°	230.7	270.6	310.5	320.5	574.8	913.7	1083.2	1267.8	1636.7	1913.5	1916.6
110°	260.0	296.1	332.2	341.1	570.4	876.0	1028.8	1235.1	1647.6	1957.0	1970.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	288.9	323.3	357.6	366.2	570.6	843.1	979.3	1190.4	1612.7	1929.3	1950.0
115°	332.4	364.1	395.7	403.7	575.8	805.2	920.0	1123.4	1530.2	1835.2	1864.1
117.5°	375.4	404.2	433.0	440.1	586.4	781.6	879.2	1062.7	1429.8	1705.1	1737.1
120°	400.4	427.6	454.6	461.4	595.3	773.7	862.9	1030.6	1366.0	1617.5	1648.6
122.5°	424.9	452.2	479.6	486.4	607.7	769.5	850.4	1001.4	1303.4	1529.9	1560.6
125°	462.4	487.4	512.3	518.5	624.6	766.1	836.8	965.1	1221.6	1414.1	1442.3
127.5°	493.0	518.1	543.3	549.6	641.5	764.1	825.4	935.5	1155.8	1321.0	1344.9
130°	509.3	536.4	563.4	570.2	653.9	765.3	821.0	919.0	1115.2	1262.3	1284.2
132.5°	526.1	553.2	580.3	587.1	663.8	766.1	817.2	905.0	1080.5	1212.2	1231.9
135°	551.1	575.8	600.5	606.7	674.7	765.3	810.6	884.2	1031.2	1141.5	1158.5
137.5°	576.7	601.1	625.6	631.7	691.0	770.1	809.6	871.8	996.0	1089.3	1103.1
140°	598.0	620.5	643.0	648.5	700.9	770.8	805.8	859.5	966.8	1047.3	1060.3
142.5°	614.3	635.1	655.9	661.1	709.3	773.6	805.8	852.9	947.2	1017.9	1029.1
145°	639.3	657.4	675.6	680.1	720.2	773.7	800.4	838.9	916.1	973.9	982.3
147.5°	664.3	681.9	699.5	704.0	736.1	778.9	800.4	830.7	891.4	936.9	943.9
150°	680.6	696.6	712.5	716.6	744.5	781.7	800.4	826.0	877.2	915.6	921.3
152.5°	697.5	709.7	721.7	724.7	749.9	783.5	800.4	822.2	866.0	898.8	903.1
155°	722.6	731.5	740.4	742.6	761.9	787.5	800.4	817.8	852.6	878.7	881.5
157.5°	741.1	749.8	758.4	760.6	773.8	791.5	800.4	813.9	841.0	861.3	863.3
160°	753.5	760.3	767.1	768.8	779.3	793.4	800.4	812.0	835.1	852.6	853.7
162.5°	766.1	771.1	776.2	777.5	785.1	795.3	800.4	810.1	829.7	844.4	845.4
165°	779.7	784.2	788.8	790.0	793.5	798.1	800.4	807.3	821.4	831.9	833.1
167.5°	792.2	794.3	796.5	797.0	799.9	803.8	805.8	810.4	819.5	826.4	826.9
170°	800.4	802.5	804.7	805.2	805.4	805.7	805.8	810.4	819.5	826.4	826.4
172.5°	804.7	805.1	805.7	805.8	805.8	805.8	805.8	809.4	816.7	822.1	821.6
175°	810.6	810.6	810.6	810.6	809.0	806.8	805.8	808.0	812.6	816.1	816.1
177.5°	810.6	810.6	810.6	810.6	809.4	807.8	806.9	808.7	812.3	815.0	814.5
180°	810.6	810.6	810.6	810.6	810.6	810.6	810.6	810.6	810.6	810.6	810.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	272.8	272.8
2.5°	291.2	289.4
5°	374.5	376.3
7.5°	504.4	503.5
10°	627.2	635.0
12.5°	716.6	718.4
15°	771.1	774.5
17.5°	792.1	792.9
20°	792.9	791.2
22.5°	783.3	781.5
25°	771.9	771.1
27.5°	761.4	762.2
30°	757.0	759.6
32.5°	757.0	761.4
35°	758.8	763.1
37.5°	757.9	763.1
40°	754.3	760.5
42.5°	744.7	749.1
45°	729.8	735.0
47.5°	710.4	714.0
50°	685.9	689.4
52.5°	655.2	656.1
55°	618.4	621.9
57.5°	578.9	579.8
60°	535.1	537.7
62.5°	488.6	488.6
65°	439.4	441.2
67.5°	388.6	392.9
70°	336.9	337.7
72.5°	285.9	285.9
75°	233.4	234.2
77.5°	183.3	183.3
80°	136.0	136.8
82.5°	93.8	95.6
85°	58.8	58.8
87.5°	27.2	24.6
90°	20.7	20.7
92.5°	82.8	66.4
95°	288.6	238.9
97.5°	691.6	596.8
100°	996.5	883.5
102.5°	1296.4	1199.7
105°	1678.8	1626.8
107.5°	1929.3	1941.8
110°	2024.8	2078.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2033.2	2116.4
115°	1979.3	2094.7
117.5°	1865.0	1992.9
120°	1772.9	1897.2
122.5°	1683.2	1805.8
125°	1555.2	1668.1
127.5°	1440.2	1535.4
130°	1372.3	1460.3
132.5°	1310.8	1389.6
135°	1226.4	1294.4
137.5°	1158.8	1214.4
140°	1112.4	1164.3
142.5°	1073.9	1118.6
145°	1016.3	1050.1
147.5°	972.0	1000.0
150°	944.1	966.8
152.5°	920.3	937.4
155°	892.9	904.2
157.5°	871.2	879.2
160°	858.3	862.9
162.5°	849.8	854.2
165°	837.7	842.2
167.5°	828.9	830.8
170°	826.4	826.4
172.5°	820.0	818.3
175°	816.1	816.1
177.5°	812.6	810.6
180°	810.6	810.6



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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	0.44	1.16	1.56	2.27	3.82	13.61	14.33	14.73	15.44	16.98
	3H	1.14	1.78	2.26	2.90	4.46	15.43	16.08	16.56	17.20	18.76
	4H	1.43	2.04	2.56	3.16	4.73	16.07	16.68	17.20	17.80	19.37
	6H	1.67	2.24	2.82	3.36	4.94	16.49	17.05	17.63	18.17	19.75
	8H	1.74	2.27	2.88	3.41	4.98	16.60	17.14	17.75	18.28	19.85
	12H	1.75	2.26	2.90	3.39	4.99	16.66	17.17	17.81	18.30	19.90
4H	2H	7.63	8.24	8.77	9.37	10.93	13.87	14.48	15.01	15.60	17.17
	3H	9.19	9.70	10.34	10.85	12.43	15.89	16.41	17.04	17.55	19.13
	4H	9.28	9.75	10.43	10.88	12.48	16.65	17.12	17.80	18.26	19.86
	6H	9.28	9.68	10.44	10.84	12.43	17.18	17.58	18.33	18.74	20.33
	8H	9.25	9.63	10.41	10.78	12.39	17.33	17.71	18.49	18.86	20.47
	12H	9.20	9.54	10.37	10.71	12.32	17.42	17.76	18.59	18.92	20.53
8H	4H	10.71	11.08	11.86	12.23	13.84	16.70	17.08	17.85	18.23	19.83
	6H	10.94	11.25	12.12	12.45	14.05	17.32	17.63	18.49	18.82	20.42
	8H	10.96	11.23	12.14	12.40	14.02	17.53	17.80	18.71	18.98	20.60
	12H	10.92	11.16	12.10	12.33	13.98	17.67	17.91	18.85	19.08	20.73
12H	4H	10.84	11.18	12.01	12.35	13.96	16.64	16.99	17.82	18.15	19.76
	6H	11.20	11.47	12.38	12.64	14.26	17.30	17.57	18.48	18.74	20.36
	8H	11.26	11.50	12.44	12.67	14.32	17.52	17.76	18.70	18.93	20.58