

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: P937636

Luminaire Tested: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-4-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937636
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-4-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

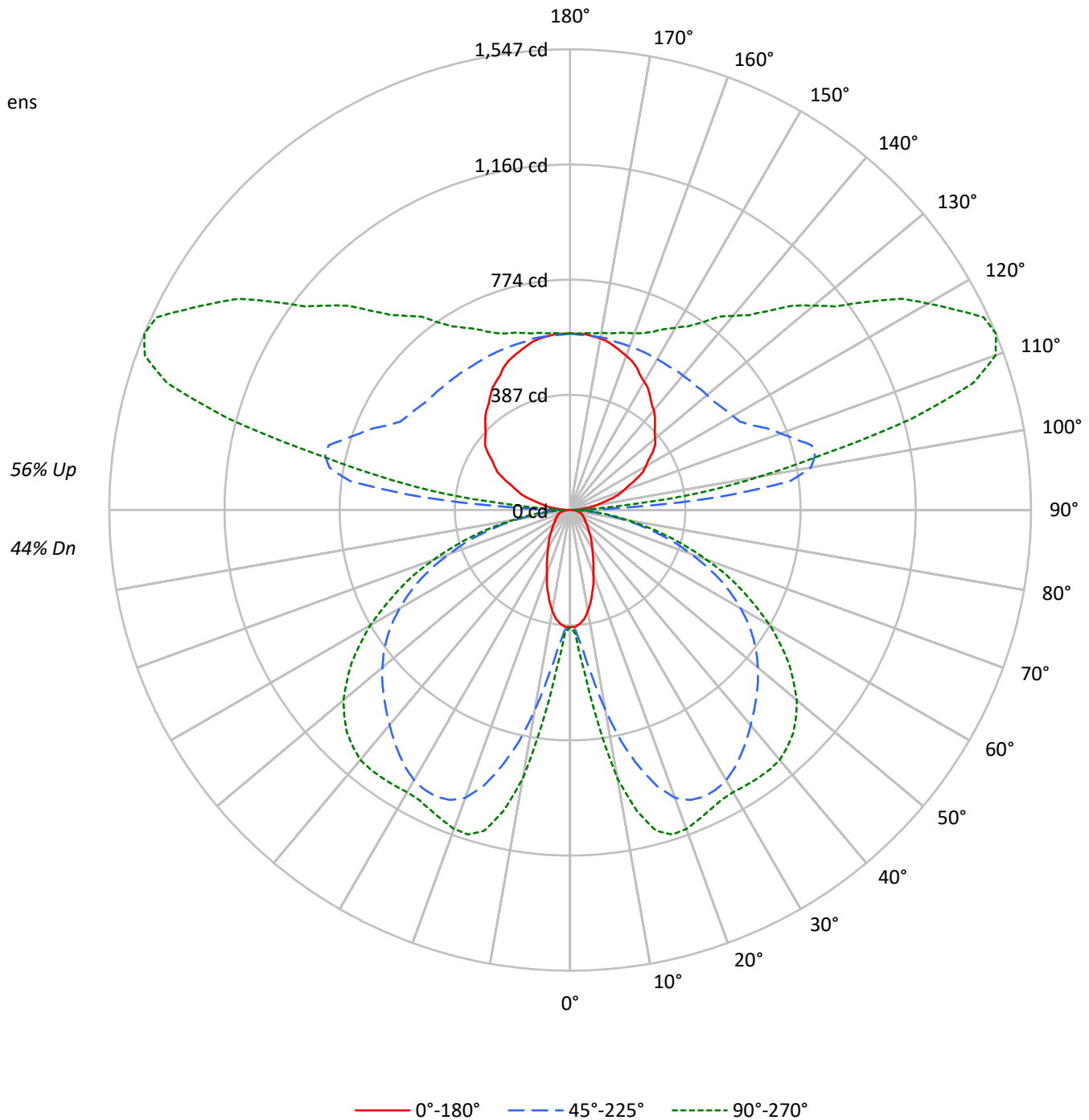
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6883.6 lumens
Efficiency: N/A
Efficacy: 118.7 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 (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

TEST NUMBER: P937636
CATALOG NUMBER: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-4-6500K

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°	3646	3646	3646
5°	3559	4211	4902
10°	3224	6134	8125
15°	2737	8008	9811
20°	2225	9274	9998
25°	1854	9696	9796
30°	1561	9750	9778
35°	1378	9581	10030
40°	1199	9362	10291
45°	1083	9200	10332
50°	992	9052	10161
55°	947	8840	9710
60°	966	8440	8999
65°	1000	7838	8022
70°	1059	6822	6776
75°	1161	5548	5288
80°	1240	3833	3564
85°	1043	2023	1823

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10332 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.8	0.7
10°-20°	225.3	3.3
20°-30°	394.0	5.7
30°-40°	507.2	7.4
40°-50°	566.6	8.2
50°-60°	542.6	7.9
60°-70°	430.1	6.2
70°-80°	252.9	3.7
80°-90°	72.5	1.1
90°-100°	288.9	4.2
100°-110°	759.5	11.0
110°-120°	787.5	11.4
120°-130°	631.6	9.2
130°-140°	495.6	7.2
140°-150°	380.4	5.5
150°-160°	274.0	4.0
160°-170°	167.6	2.4
170°-180°	56.6	0.8
0°-30°	670.1	9.7
0°-40°	1177.4	17.1
0°-60°	2286.6	33.2
0°-90°	3042.0	44.2
90°-120°	1835.8	26.7
90°-150°	3343.4	48.6
90°-180°	3842.0	55.8
0°-180°	6883.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	393	393	393	393	393	
5°	383	411	462	523	542	35
15°	287	529	892	1082	1116	80
25°	183	600	1062	1109	1111	84
35°	124	574	1001	1058	1099	77
45°	85	457	884	1013	1059	65
55°	61	291	750	872	896	55
65°	48	154	557	627	636	48
75°	35	95	306	336	337	37
85°	13	29	76	83	85	13
90°	4	11	30	15	15	4
95°	38	150	498	256	175	42
105°	137	207	840	1275	1189	145
115°	243	295	673	1342	1531	240
125°	338	379	612	1034	1219	300
135°	403	444	593	834	946	312
145°	467	497	585	712	768	293
155°	528	543	585	642	661	243
165°	570	577	585	608	616	161
175°	593	593	589	597	597	56
180°	593	593	593	593	593	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	392.9	392.9	392.9	392.9	392.9	392.9	392.9	392.9	392.9	392.9	392.9
2.5°	392.9	392.9	395.5	396.7	399.2	400.5	403.0	405.5	413.2	414.4	416.9
5°	382.9	387.9	404.3	410.6	428.3	452.3	462.4	478.9	513.0	523.0	529.3
7.5°	367.7	379.0	419.5	429.6	473.8	537.0	563.5	598.9	653.2	679.8	701.2
10°	343.7	367.7	439.7	463.7	535.7	631.8	681.0	730.2	812.4	849.0	863.0
12.5°	317.2	356.3	461.2	494.0	597.6	737.9	797.3	851.6	945.1	994.3	1001.9
15°	286.8	339.8	481.3	529.3	663.3	826.3	892.0	959.0	1046.2	1081.5	1090.3
17.5°	260.3	327.2	500.3	550.9	713.9	905.9	972.8	1028.5	1099.2	1123.2	1129.6
20°	227.4	307.0	513.0	578.7	767.0	964.0	1028.5	1071.4	1119.4	1134.6	1137.1
22.5°	203.4	285.5	520.6	588.7	802.2	999.4	1053.7	1087.9	1120.7	1125.7	1127.0
25°	183.2	261.5	519.3	600.1	832.7	1020.8	1062.5	1087.9	1106.8	1109.3	1109.3
27.5°	164.3	235.0	514.2	602.7	855.3	1025.9	1058.8	1076.5	1085.3	1090.3	1090.3
30°	147.8	209.7	501.6	597.6	865.5	1020.8	1047.4	1056.2	1065.1	1072.7	1076.5
32.5°	135.2	185.7	482.7	587.5	866.7	1008.2	1027.1	1032.2	1044.8	1062.5	1068.9
35°	123.8	161.7	461.2	573.6	859.1	988.0	1000.7	1005.7	1031.0	1057.5	1066.3
37.5°	112.4	144.0	433.3	549.6	847.8	964.0	972.8	981.7	1020.8	1052.5	1062.5
40°	101.1	128.9	400.5	523.0	830.1	935.0	942.5	956.5	1008.2	1044.8	1055.0
42.5°	92.3	116.3	365.2	495.3	807.3	902.1	913.5	933.7	993.1	1032.2	1043.6
45°	84.6	103.6	327.2	457.3	778.2	868.0	884.4	912.2	975.4	1013.3	1023.4
47.5°	77.1	94.8	288.1	418.2	746.7	833.9	855.3	887.0	951.4	988.0	996.8
50°	70.8	86.0	248.9	376.5	712.6	797.3	822.5	855.3	921.1	955.1	966.5
52.5°	65.7	78.3	212.3	334.9	673.4	759.3	788.4	822.5	884.4	917.3	924.8
55°	60.6	72.0	180.7	290.6	633.0	718.9	750.5	783.3	844.0	871.8	876.8
57.5°	58.1	66.9	154.1	248.9	590.1	673.4	708.8	739.1	795.9	817.4	822.5
60°	54.3	63.2	134.0	213.5	543.3	630.4	660.8	691.1	739.1	756.8	760.6
62.5°	50.6	60.6	118.8	179.4	495.3	579.9	610.2	638.1	678.5	691.1	696.2
65°	48.0	58.1	107.4	154.1	446.0	526.9	557.2	581.2	614.1	626.7	629.2
67.5°	45.5	55.6	98.6	132.6	396.7	473.8	496.6	519.3	544.6	557.2	558.4
70°	41.7	53.1	90.9	117.5	346.1	413.2	432.1	456.1	476.3	482.7	486.4
72.5°	39.2	49.2	86.0	106.1	294.4	355.0	372.7	386.6	404.3	410.6	410.6
75°	35.4	44.2	80.9	94.8	241.3	290.6	305.8	319.7	333.5	336.1	332.3
77.5°	31.6	39.2	69.5	79.6	188.3	230.0	242.6	250.1	261.5	264.1	265.3
80°	26.5	34.1	54.3	61.9	136.4	169.3	178.1	184.4	194.6	194.6	197.1
82.5°	20.2	26.5	39.2	44.2	92.3	116.3	123.8	127.7	134.0	134.0	134.0
85°	12.6	16.4	25.2	29.1	55.6	70.8	75.8	77.1	82.1	83.4	83.4
87.5°	6.3	8.8	16.4	17.7	29.1	36.6	36.6	39.2	39.2	37.9	36.6
90°	4.0	7.2	10.3	11.1	17.5	26.0	30.2	26.9	20.2	15.1	15.1
92.5°	15.9	42.9	70.0	76.8	108.0	149.5	170.2	149.2	107.1	75.5	72.6
95°	38.2	87.7	137.2	149.5	265.5	420.2	497.5	444.0	336.9	256.5	247.5
97.5°	66.0	109.7	153.4	164.3	357.7	615.6	744.5	710.6	642.9	592.2	574.9
100°	87.5	127.1	166.7	176.6	391.3	677.5	820.5	823.0	827.9	831.6	810.9
102.5°	105.8	142.8	179.7	188.9	406.7	696.9	842.0	885.1	971.4	1036.0	1018.3
105°	136.8	168.1	199.4	207.2	418.0	699.1	839.6	936.3	1129.6	1274.7	1265.2
107.5°	168.7	197.8	227.0	234.3	420.2	667.9	791.8	926.7	1196.5	1398.8	1401.1
110°	190.1	216.5	242.8	249.4	416.9	640.4	752.0	902.8	1204.4	1430.6	1440.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	211.2	236.3	261.3	267.6	417.1	616.3	715.9	870.2	1178.8	1410.3	1425.5
115°	243.0	266.1	289.2	295.1	420.9	588.7	672.6	821.3	1118.6	1341.5	1362.6
117.5°	274.4	295.5	316.5	321.8	428.8	571.4	642.8	776.9	1045.2	1246.5	1269.8
120°	292.7	312.5	332.3	337.2	435.1	565.6	630.8	753.4	998.6	1182.4	1205.2
122.5°	310.7	330.7	350.6	355.6	444.2	562.5	621.6	732.0	952.8	1118.4	1140.7
125°	338.1	356.3	374.4	379.0	456.6	559.9	611.7	705.5	893.0	1033.6	1054.3
127.5°	360.3	378.7	397.1	401.7	468.9	558.5	603.4	683.9	844.9	965.7	983.1
130°	372.2	392.0	411.8	416.8	477.9	559.5	600.2	671.9	815.3	922.7	938.8
132.5°	384.6	404.4	424.2	429.1	485.2	559.9	597.3	661.5	789.8	886.1	900.5
135°	402.9	420.9	439.0	443.5	493.2	559.5	592.6	646.4	753.8	834.4	846.8
137.5°	421.6	439.5	457.3	461.7	505.1	562.9	591.8	637.2	728.0	796.2	806.4
140°	437.1	453.5	470.0	474.1	512.4	563.5	589.0	628.2	706.7	765.6	775.1
142.5°	449.0	464.2	479.4	483.3	518.5	565.5	589.0	623.4	692.4	744.1	752.3
145°	467.3	480.6	493.8	497.1	526.5	565.6	585.1	613.3	669.6	711.9	718.1
147.5°	485.7	498.6	511.4	514.6	538.1	569.4	585.1	607.3	651.6	684.9	690.1
150°	497.5	509.2	520.8	523.8	544.3	571.5	585.1	603.8	641.2	669.3	673.4
152.5°	509.8	518.6	527.5	529.7	548.2	572.8	585.1	601.1	633.0	657.0	660.2
155°	528.2	534.7	541.3	542.9	557.0	575.7	585.1	597.8	623.2	642.3	644.4
157.5°	541.7	548.1	554.4	556.0	565.7	578.6	585.1	594.9	614.7	629.6	631.0
160°	550.9	555.8	560.7	562.0	569.7	579.9	585.1	593.6	610.5	623.2	624.1
162.5°	559.9	563.7	567.4	568.4	573.9	581.4	585.1	592.3	606.5	617.2	618.0
165°	569.9	573.2	576.6	577.4	580.0	583.4	585.1	590.3	600.5	608.1	609.0
167.5°	579.1	580.7	582.3	582.7	584.8	587.6	589.0	592.4	599.1	604.1	604.5
170°	585.1	586.6	588.2	588.6	588.7	588.9	589.0	592.4	599.1	604.1	604.1
172.5°	588.2	588.6	588.9	589.0	589.0	589.0	589.0	591.7	597.0	601.0	600.7
175°	592.6	592.6	592.6	592.6	591.4	589.8	589.0	590.7	594.1	596.6	596.6
177.5°	592.6	592.6	592.6	592.6	591.7	590.4	589.8	591.1	593.8	595.8	595.4
180°	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6	592.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	392.9	392.9
2.5°	419.5	416.9
5°	539.5	542.1
7.5°	726.5	725.2
10°	903.4	914.7
12.5°	1032.2	1034.8
15°	1110.6	1115.6
17.5°	1140.9	1142.2
20°	1142.2	1139.6
22.5°	1128.3	1125.7
25°	1111.9	1110.6
27.5°	1096.7	1097.9
30°	1090.3	1094.2
32.5°	1090.3	1096.7
35°	1092.9	1099.2
37.5°	1091.6	1099.2
40°	1086.6	1095.4
42.5°	1072.7	1079.0
45°	1051.2	1058.8
47.5°	1023.4	1028.5
50°	988.0	993.1
52.5°	943.8	945.1
55°	890.7	895.8
57.5°	833.9	835.1
60°	770.7	774.5
62.5°	703.8	703.8
65°	633.0	635.5
67.5°	559.8	566.1
70°	485.2	486.4
72.5°	411.9	411.9
75°	336.1	337.3
77.5°	264.1	264.1
80°	195.8	197.1
82.5°	135.2	137.7
85°	84.6	84.6
87.5°	39.2	35.4
90°	15.1	15.1
92.5°	60.5	48.5
95°	211.0	174.6
97.5°	505.5	436.3
100°	728.4	645.9
102.5°	947.7	877.0
105°	1227.2	1189.2
107.5°	1410.3	1419.5
110°	1480.1	1519.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1486.3	1547.1
115°	1446.9	1531.2
117.5°	1363.3	1456.9
120°	1296.0	1386.9
122.5°	1230.4	1320.0
125°	1136.8	1219.4
127.5°	1052.8	1122.4
130°	1003.1	1067.5
132.5°	958.1	1015.8
135°	896.4	946.2
137.5°	847.1	887.7
140°	813.1	851.1
142.5°	785.0	817.7
145°	742.9	767.6
147.5°	710.5	731.0
150°	690.1	706.7
152.5°	672.7	685.3
155°	652.7	661.0
157.5°	636.9	642.8
160°	627.5	630.8
162.5°	621.2	624.4
165°	612.3	615.7
167.5°	605.8	607.3
170°	604.1	604.1
172.5°	599.4	598.2
175°	596.6	596.6
177.5°	594.1	592.6
180°	592.6	592.6



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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	4.93	5.77	5.93	6.79	8.14	18.07	18.91	19.07	19.93	21.28
	3H	5.64	6.39	6.64	7.42	8.79	19.89	20.65	20.90	21.67	23.04
	4H	5.93	6.65	6.95	7.68	9.05	20.53	21.25	21.55	22.27	23.65
	6H	6.18	6.85	7.21	7.88	9.27	20.94	21.61	21.98	22.64	24.03
	8H	6.25	6.88	7.29	7.93	9.31	21.06	21.69	22.10	22.74	24.12
	12H	6.27	6.87	7.31	7.91	9.32	21.12	21.72	22.16	22.76	24.17
4H	2H	12.12	12.84	13.15	13.86	15.24	18.34	19.06	19.37	20.09	21.47
	3H	13.69	14.29	14.72	15.34	16.73	20.37	20.97	21.41	22.03	23.42
	4H	13.78	14.33	14.83	15.38	16.79	21.13	21.68	22.17	22.73	24.14
	6H	13.79	14.27	14.85	15.34	16.74	21.65	22.13	22.71	23.20	24.61
	8H	13.77	14.21	14.82	15.28	16.70	21.81	22.25	22.86	23.32	24.74
	12H	13.72	14.13	14.80	15.20	16.63	21.89	22.30	22.97	23.37	24.80
8H	4H	15.22	15.66	16.27	16.72	18.15	21.19	21.63	22.24	22.69	24.12
	6H	15.46	15.83	16.54	16.93	18.35	21.80	22.17	22.88	23.28	24.70
	8H	15.47	15.80	16.56	16.89	18.33	22.02	22.34	23.10	23.43	24.87
	12H	15.44	15.73	16.53	16.81	18.29	22.15	22.44	23.24	23.52	25.00
12H	4H	15.35	15.76	16.43	16.83	18.26	21.14	21.54	22.21	22.62	24.05
	6H	15.71	16.04	16.80	17.12	18.56	21.79	22.11	22.87	23.20	24.64
	8H	15.78	16.07	16.87	17.15	18.63	22.01	22.29	23.10	23.38	24.86