

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: P937439

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937439
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-6-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

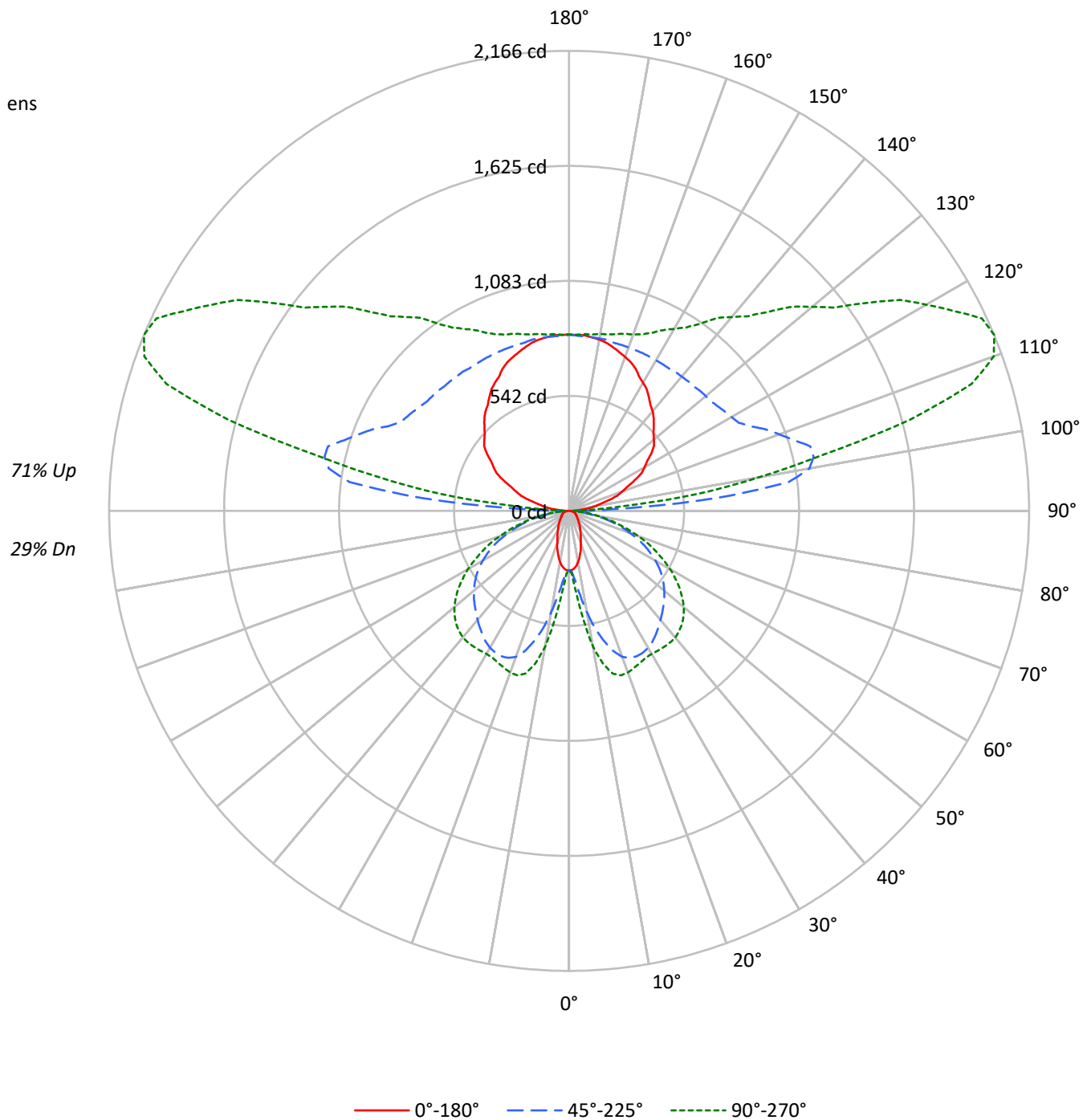
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7542.7 lumens
Efficiency: N/A
Efficacy: 122.0 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 (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-050D-92765-1D-UNV-STD-W-6-3500K

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	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°	1727	1727	1727
5°	1687	1996	2322
10°	1529	2909	3849
15°	1299	3799	4648
20°	1058	4402	4737
25°	882	4605	4641
30°	744	4634	4632
35°	657	4555	4752
40°	573	4454	4876
45°	518	4379	4895
50°	475	4312	4814
55°	454	4214	4600
60°	465	4027	4263
65°	482	3744	3800
70°	512	3263	3211
75°	567	2658	2506
80°	612	1841	1689
85°	537	976	865

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4895 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.1	0.5
10°-20°	160.1	2.1
20°-30°	280.0	3.7
30°-40°	360.5	4.8
40°-50°	402.6	5.3
50°-60°	385.6	5.1
60°-70°	305.6	4.1
70°-80°	179.7	2.4
80°-90°	53.1	0.7
90°-100°	404.5	5.4
100°-110°	1063.4	14.1
110°-120°	1102.7	14.6
120°-130°	884.5	11.7
130°-140°	694.0	9.2
140°-150°	532.7	7.1
150°-160°	383.6	5.1
160°-170°	234.7	3.1
170°-180°	79.3	1.1
0°-30°	476.2	6.3
0°-40°	836.7	11.1
0°-60°	1624.9	21.5
0°-90°	2163.3	28.7
90°-120°	2570.6	34.1
90°-150°	4681.7	62.1
90°-180°	5379.0	71.3
0°-180°	7542.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	279	279	279	279	279	
5°	272	292	329	372	385	25
15°	204	376	634	768	793	57
25°	130	426	755	788	789	60
35°	88	408	711	752	781	55
45°	60	325	628	720	752	47
55°	43	206	533	620	637	39
65°	34	110	396	445	452	34
75°	25	67	217	239	240	26
85°	9	21	54	59	60	10
90°	6	16	42	21	21	5
95°	54	209	697	359	244	59
105°	192	290	1176	1785	1665	203
115°	340	413	942	1878	2144	336
125°	473	531	857	1448	1708	420
135°	564	621	830	1168	1325	436
145°	654	696	819	997	1075	410
155°	740	760	819	899	926	340
165°	798	809	819	852	862	225
175°	830	830	825	835	835	79
180°	830	830	830	830	830	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	279.2	279.2	279.2	279.2	279.2	279.2	279.2	279.2	279.2	279.2	279.2
2.5°	279.2	279.2	281.0	281.9	283.8	284.7	286.4	288.2	293.6	294.5	296.3
5°	272.1	275.6	287.3	291.8	304.4	321.4	328.6	340.3	364.5	371.7	376.2
7.5°	261.3	269.4	298.0	305.3	336.7	381.6	400.4	425.6	464.2	483.1	498.3
10°	244.2	261.3	312.4	329.6	380.7	448.9	484.0	519.0	577.3	603.3	613.2
12.5°	225.4	253.2	327.7	351.1	424.7	524.3	566.5	605.2	671.6	706.6	712.0
15°	203.8	241.5	342.1	376.2	471.4	587.2	633.8	681.5	743.5	768.5	774.9
17.5°	185.0	232.5	355.5	391.5	507.3	643.8	691.3	730.9	781.1	798.2	802.6
20°	161.7	218.2	364.5	411.2	545.0	685.1	730.9	761.4	795.5	806.3	808.1
22.5°	144.5	202.9	369.9	418.4	570.1	710.2	748.8	773.0	796.4	800.0	800.9
25°	130.2	185.8	369.0	426.5	591.7	725.4	755.1	773.0	786.5	788.3	788.3
27.5°	116.8	167.0	365.4	428.3	607.9	729.1	752.4	765.0	771.2	774.9	774.9
30°	105.1	149.1	356.4	424.7	615.0	725.4	744.4	750.6	756.9	762.3	765.0
32.5°	96.0	132.0	342.9	417.5	615.9	716.5	730.0	733.6	742.5	755.1	759.6
35°	88.0	115.0	327.7	407.7	610.6	702.1	711.1	714.7	732.7	751.5	757.7
37.5°	79.9	102.4	308.0	390.6	602.4	685.1	691.3	697.7	725.4	747.9	755.1
40°	71.9	91.6	284.7	371.7	589.9	664.4	669.8	679.6	716.5	742.5	749.7
42.5°	65.5	82.6	259.5	352.0	573.7	641.1	649.1	663.5	705.7	733.6	741.6
45°	60.2	73.6	232.5	325.0	553.1	616.8	628.5	648.2	693.1	720.1	727.2
47.5°	54.8	67.3	204.7	297.2	530.7	592.6	607.9	630.3	676.1	702.1	708.4
50°	50.3	61.1	176.9	267.5	506.4	566.5	584.5	607.9	654.6	678.7	686.9
52.5°	46.7	55.7	150.9	238.0	478.5	539.6	560.3	584.5	628.5	651.9	657.2
55°	43.1	51.1	128.4	206.5	449.8	510.8	533.3	556.6	599.8	619.5	623.1
57.5°	41.3	47.6	109.5	176.9	419.3	478.5	503.7	525.2	565.7	580.9	584.5
60°	38.7	44.9	95.2	151.7	386.1	448.0	469.6	491.1	525.2	537.8	540.5
62.5°	35.9	43.1	84.4	127.5	352.0	412.1	433.6	453.5	482.1	491.1	494.7
65°	34.1	41.3	76.3	109.5	317.0	374.4	396.0	413.0	436.3	445.3	447.1
67.5°	32.3	39.5	70.1	94.3	281.9	336.7	352.9	369.0	387.0	396.0	396.9
70°	29.6	37.7	64.6	83.5	246.0	293.6	307.1	324.1	338.5	342.9	345.7
72.5°	27.8	35.0	61.1	75.4	209.2	252.3	264.8	274.7	287.3	291.8	291.8
75°	25.2	31.4	57.5	67.3	171.5	206.5	217.3	227.2	237.0	238.9	236.1
77.5°	22.4	27.8	49.4	56.6	133.8	163.4	172.4	177.8	185.8	187.6	188.5
80°	18.8	24.3	38.7	44.0	96.9	120.3	126.6	131.1	138.3	138.3	140.1
82.5°	14.4	18.8	27.8	31.4	65.5	82.6	88.0	90.7	95.2	95.2	95.2
85°	9.0	11.7	17.9	20.6	39.5	50.3	53.9	54.8	58.4	59.3	59.3
87.5°	4.5	6.2	11.7	12.6	20.6	26.1	26.1	27.8	27.8	27.0	26.1
90°	5.5	10.0	14.5	15.6	24.5	36.4	42.3	37.6	28.2	21.2	21.2
92.5°	22.3	60.2	98.0	107.5	151.1	209.2	238.3	208.9	150.0	105.8	101.6
95°	53.5	122.7	192.1	209.4	371.9	588.4	696.7	621.7	471.7	359.2	346.4
97.5°	92.5	153.6	214.8	230.0	500.8	862.0	1042.6	995.2	900.4	829.2	805.0
100°	122.6	178.0	233.4	247.3	547.8	948.5	1148.9	1152.4	1159.3	1164.5	1135.6
102.5°	148.2	199.9	251.6	264.6	569.4	975.8	1179.0	1239.4	1360.2	1450.8	1426.0
105°	191.6	235.4	279.2	290.2	585.4	978.9	1175.7	1311.1	1581.8	1784.9	1771.6
107.5°	236.1	277.0	317.9	328.0	588.3	935.3	1108.8	1297.7	1675.4	1958.7	1961.9
110°	266.2	303.0	340.0	349.2	583.9	896.7	1053.1	1264.2	1686.5	2003.2	2017.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	295.7	330.9	366.1	374.8	584.0	863.0	1002.4	1218.5	1650.7	1974.8	1996.1
115°	340.3	372.7	405.1	413.2	589.4	824.2	941.7	1149.9	1566.3	1878.5	1908.1
117.5°	384.3	413.7	443.2	450.5	600.3	800.1	899.9	1087.8	1463.5	1745.3	1778.1
120°	409.9	437.7	465.3	472.3	609.3	791.9	883.2	1054.9	1398.2	1655.7	1687.5
122.5°	435.0	462.9	490.9	497.9	622.1	787.6	870.5	1025.1	1334.2	1566.0	1597.4
125°	473.4	498.9	524.4	530.8	639.4	784.2	856.6	987.9	1250.5	1447.5	1476.4
127.5°	504.6	530.3	556.1	562.5	656.6	782.1	844.9	957.6	1183.1	1352.2	1376.6
130°	521.3	549.1	576.7	583.7	669.3	783.4	840.4	940.7	1141.5	1292.1	1314.6
132.5°	538.5	566.3	593.9	600.9	679.5	784.2	836.5	926.4	1106.0	1240.8	1261.0
135°	564.1	589.4	614.7	621.0	690.6	783.4	829.8	905.0	1055.5	1168.4	1185.8
137.5°	590.3	615.3	640.4	646.6	707.3	788.3	828.7	892.4	1019.6	1115.0	1129.2
140°	612.1	635.1	658.1	663.8	717.5	789.0	824.8	879.8	989.6	1072.0	1085.3
142.5°	628.8	650.1	671.3	676.7	726.1	791.8	824.8	873.1	969.6	1042.0	1053.4
145°	654.4	672.9	691.5	696.2	737.2	791.9	819.2	858.7	937.7	996.9	1005.5
147.5°	680.0	698.0	716.1	720.6	753.5	797.3	819.2	850.3	912.4	959.0	966.2
150°	696.7	713.0	729.4	733.5	762.0	800.1	819.2	845.5	897.9	937.3	943.1
152.5°	714.0	726.4	738.7	741.9	767.7	802.0	819.2	841.7	886.5	920.0	924.4
155°	739.6	748.7	757.8	760.2	779.9	806.1	819.2	837.1	872.7	899.4	902.3
157.5°	758.5	767.5	776.3	778.5	792.1	810.2	819.2	833.1	860.8	881.6	883.7
160°	771.3	778.3	785.2	786.9	797.7	812.1	819.2	831.1	854.9	872.7	873.9
162.5°	784.2	789.3	794.5	795.9	803.6	814.1	819.2	829.2	849.3	864.3	865.4
165°	798.1	802.7	807.5	808.6	812.2	816.9	819.2	826.4	840.8	851.6	852.7
167.5°	810.9	813.1	815.3	815.9	818.8	822.8	824.8	829.5	838.9	845.9	846.5
170°	819.2	821.5	823.7	824.2	824.4	824.7	824.8	829.5	838.9	845.9	845.9
172.5°	823.7	824.2	824.7	824.8	824.8	824.8	824.8	828.5	835.9	841.5	841.0
175°	829.8	829.8	829.8	829.8	828.1	825.9	824.8	827.1	831.8	835.4	835.4
177.5°	829.8	829.8	829.8	829.8	828.5	826.8	825.9	827.8	831.5	834.2	833.7
180°	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	279.2	279.2
2.5°	298.0	296.3
5°	383.4	385.2
7.5°	516.3	515.4
10°	642.0	650.0
12.5°	733.6	735.3
15°	789.3	792.8
17.5°	810.8	811.7
20°	811.7	809.9
22.5°	801.8	800.0
25°	790.1	789.3
27.5°	779.3	780.2
30°	774.9	777.6
32.5°	774.9	779.3
35°	776.7	781.1
37.5°	775.8	781.1
40°	772.1	778.5
42.5°	762.3	766.8
45°	747.0	752.4
47.5°	727.2	730.9
50°	702.1	705.7
52.5°	670.7	671.6
55°	633.0	636.6
57.5°	592.6	593.5
60°	547.7	550.4
62.5°	500.1	500.1
65°	449.8	451.6
67.5°	397.8	402.2
70°	344.8	345.7
72.5°	292.7	292.7
75°	238.9	239.8
77.5°	187.6	187.6
80°	139.2	140.1
82.5°	96.0	97.8
85°	60.2	60.2
87.5°	27.8	25.2
90°	21.2	21.2
92.5°	84.7	67.9
95°	295.5	244.5
97.5°	707.9	610.9
100°	1020.0	904.4
102.5°	1327.0	1228.0
105°	1718.4	1665.2
107.5°	1974.8	1987.7
110°	2072.6	2128.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2081.2	2166.4
115°	2026.1	2144.2
117.5°	1909.0	2040.0
120°	1814.8	1942.0
122.5°	1722.9	1848.4
125°	1591.9	1707.5
127.5°	1474.2	1571.6
130°	1404.7	1494.8
132.5°	1341.7	1422.4
135°	1255.4	1324.9
137.5°	1186.1	1243.1
140°	1138.6	1191.8
142.5°	1099.3	1145.1
145°	1040.3	1074.9
147.5°	994.9	1023.7
150°	966.4	989.6
152.5°	942.0	959.6
155°	914.0	925.6
157.5°	891.8	899.9
160°	878.6	883.2
162.5°	869.9	874.3
165°	857.5	862.1
167.5°	848.4	850.4
170°	845.9	845.9
172.5°	839.3	837.6
175°	835.4	835.4
177.5°	831.7	829.8
180°	829.8	829.8



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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	0.52	1.24	1.64	2.35	3.90	13.69	14.41	14.81	15.52	17.07
	3H	1.22	1.86	2.34	2.98	4.54	15.51	16.16	16.64	17.28	18.84
	4H	1.51	2.12	2.64	3.24	4.81	16.15	16.76	17.28	17.88	19.45
	6H	1.75	2.32	2.89	3.44	5.02	16.57	17.13	17.71	18.26	19.83
	8H	1.82	2.35	2.96	3.49	5.06	16.68	17.22	17.83	18.36	19.93
	12H	1.83	2.34	2.98	3.47	5.07	16.74	17.25	17.89	18.39	19.98
4H	2H	7.72	8.33	8.86	9.45	11.01	13.95	14.56	15.09	15.68	17.25
	3H	9.27	9.78	10.42	10.93	12.51	15.98	16.49	17.12	17.63	19.21
	4H	9.36	9.83	10.51	10.97	12.56	16.73	17.20	17.88	18.34	19.94
	6H	9.36	9.76	10.52	10.92	12.51	17.26	17.66	18.41	18.82	20.41
	8H	9.33	9.71	10.49	10.86	12.47	17.41	17.79	18.57	18.94	20.55
	12H	9.28	9.62	10.46	10.79	12.40	17.50	17.84	18.67	19.00	20.61
8H	4H	10.79	11.16	11.94	12.32	13.92	16.78	17.16	17.94	18.31	19.91
	6H	11.02	11.33	12.20	12.53	14.13	17.40	17.71	18.57	18.90	20.51
	8H	11.04	11.31	12.22	12.48	14.10	17.61	17.89	18.80	19.06	20.68
	12H	11.00	11.24	12.19	12.41	14.06	17.75	17.99	18.93	19.16	20.81
12H	4H	10.92	11.26	12.09	12.43	14.04	16.73	17.07	17.90	18.23	19.84
	6H	11.28	11.55	12.46	12.72	14.34	17.38	17.65	18.56	18.82	20.45
	8H	11.34	11.58	12.53	12.75	14.40	17.60	17.84	18.79	19.01	20.66