

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: P936312

Luminaire Tested: SQ4-FB-025U-075D-830-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936312
REPORT IS A COMBINATION OF REPORTS P933454 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-075D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

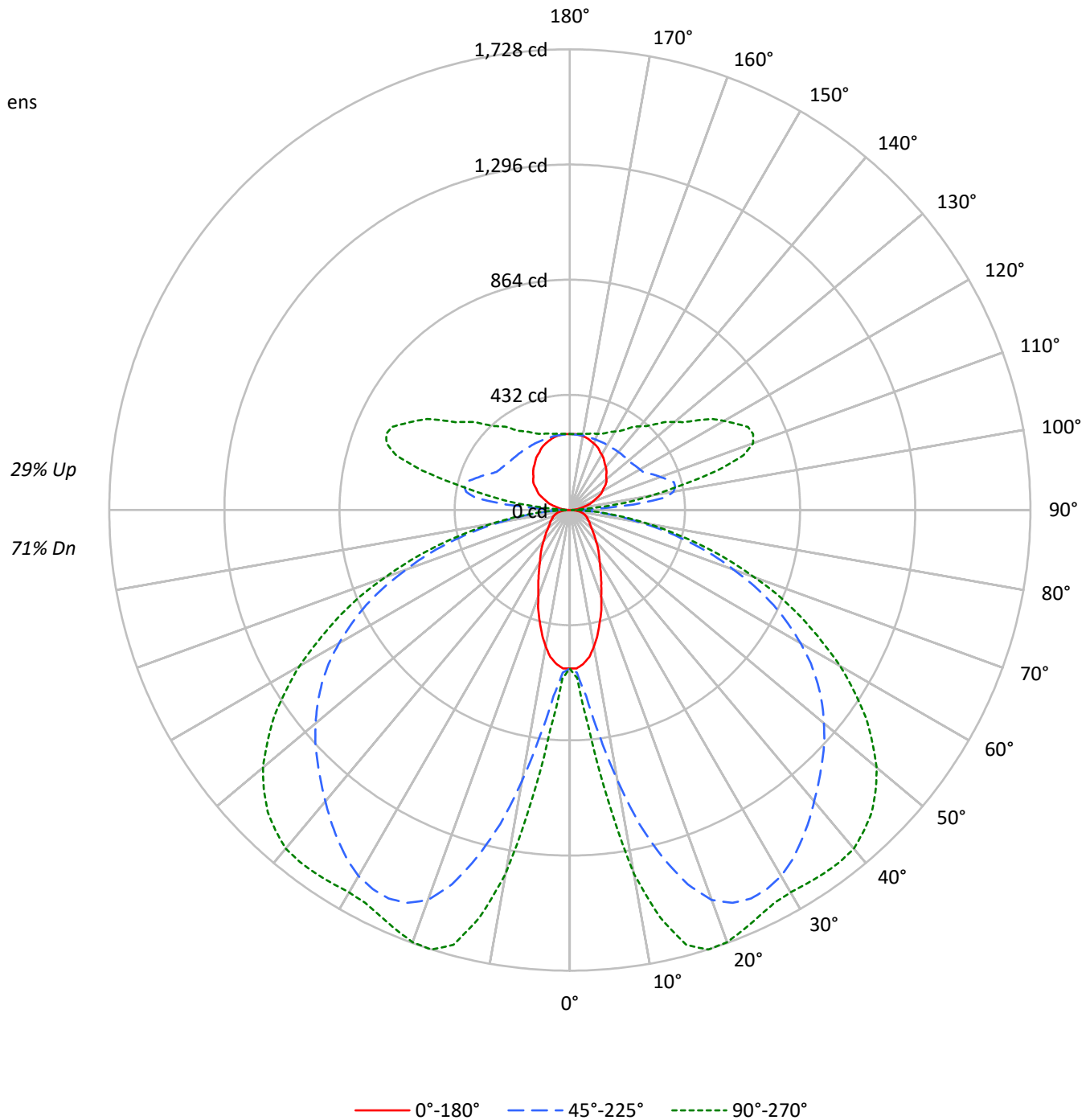
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6451.1 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 60
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

TEST NUMBER: P936312
CATALOG NUMBER: SQ4-FB-025U-075D-830-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P936312

CATALOG NUMBER: SQ4-FB-025U-075D-830-1D-UNV-STD-W-8

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	50	30	10	0
RCR																					
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	71
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62	66	64	62	58
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51	57	54	51	48
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43	50	46	43	39
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36	44	40	36	33
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	39	34	31	28
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27	35	30	27	24
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23	32	27	23	21
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	29	24	21	18
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18	26	22	18	16
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16	24	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2759	2759	2759
5°	2695	3189	3708
10°	2445	4648	6148
15°	2078	6073	7424
20°	1692	7038	7566
25°	1411	7365	7412
30°	1190	7411	7398
35°	1052	7288	7589
40°	917	7128	7787
45°	830	7011	7818
50°	762	6906	7688
55°	730	6751	7348
60°	747	6455	6810
65°	777	6004	6069
70°	828	5236	5128
75°	916	4269	4002
80°	1003	2961	2697
85°	890	1570	1380

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7818 cd/sqm



TEST NUMBER: P936312

CATALOG NUMBER: SQ4-FB-025U-075D-830-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.9	1.2
10°-20°	340.9	5.3
20°-30°	596.3	9.2
30°-40°	767.6	11.9
40°-50°	857.4	13.3
50°-60°	821.2	12.7
60°-70°	650.8	10.1
70°-80°	382.7	5.9
80°-90°	107.4	1.7
90°-100°	139.1	2.2
100°-110°	365.7	5.7
110°-120°	379.2	5.9
120°-130°	304.1	4.7
130°-140°	238.6	3.7
140°-150°	183.2	2.8
150°-160°	131.9	2.0
160°-170°	80.7	1.3
170°-180°	27.3	0.4
0°-30°	1014.2	15.7
0°-40°	1781.8	27.6
0°-60°	3460.5	53.6
0°-90°	4601.4	71.3
90°-120°	883.9	13.7
90°-150°	1609.9	25.0
90°-180°	1850.0	28.7
0°-180°	6451.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	579	621	700	792	820	53
15°	434	801	1350	1637	1688	121
25°	277	908	1608	1679	1681	128
35°	187	868	1514	1600	1664	117
45°	128	692	1338	1534	1602	99
55°	92	440	1136	1319	1356	84
65°	73	233	843	948	962	72
75°	54	143	463	509	510	56
85°	19	44	115	126	128	20
90°	2	5	14	7	7	3
95°	18	72	240	124	84	20
105°	66	100	404	614	572	70
115°	117	142	324	646	737	116
125°	163	182	294	498	587	144
135°	194	214	285	402	456	150
145°	225	239	282	343	370	141
155°	254	261	282	309	318	117
165°	274	278	282	293	296	77
175°	285	285	284	287	287	27
180°	285	285	285	285	285	



TEST NUMBER: P936312

CATALOG NUMBER: SQ4-FB-025U-075D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	594.6	594.6	594.6	594.6	594.6	594.6	594.6	594.6	594.6	594.6	594.6
2.5°	594.6	594.6	598.5	600.4	604.2	606.1	609.9	613.8	625.2	627.1	631.0
5°	579.3	587.0	611.8	621.4	648.2	684.5	699.8	724.6	776.3	791.6	801.1
7.5°	556.4	573.6	634.8	650.1	717.0	812.6	852.8	906.3	988.5	1028.7	1061.2
10°	520.1	556.4	665.4	701.7	810.7	956.0	1030.6	1105.2	1229.5	1285.0	1306.0
12.5°	479.9	539.2	697.9	747.6	904.4	1116.7	1206.6	1288.8	1430.3	1504.8	1516.3
15°	434.0	514.3	728.5	801.1	1003.8	1250.5	1350.0	1451.3	1583.2	1636.8	1650.2
17.5°	393.9	495.2	757.2	833.6	1080.3	1371.0	1472.3	1556.5	1663.5	1699.9	1709.4
20°	344.2	464.6	776.3	875.7	1160.7	1459.0	1556.5	1621.5	1694.1	1717.1	1720.9
22.5°	307.8	432.1	787.7	891.0	1214.2	1512.5	1594.7	1646.3	1696.0	1703.7	1705.6
25°	277.2	395.8	785.8	908.2	1260.1	1545.0	1608.1	1646.3	1675.0	1678.8	1678.8
27.5°	248.6	355.6	778.2	912.0	1294.5	1552.6	1602.4	1629.1	1642.5	1650.2	1650.2
30°	223.7	317.4	759.1	904.4	1309.8	1545.0	1585.1	1598.5	1611.9	1623.4	1629.1
32.5°	204.6	281.1	730.4	889.1	1311.7	1525.9	1554.6	1562.2	1581.3	1608.1	1617.6
35°	187.4	244.7	697.9	868.0	1300.3	1495.3	1514.4	1522.0	1560.3	1600.4	1613.8
37.5°	170.2	218.0	655.8	831.7	1283.0	1459.0	1472.3	1485.7	1545.0	1592.8	1608.1
40°	153.0	195.0	606.1	791.6	1256.3	1415.0	1426.4	1447.5	1525.9	1581.3	1596.6
42.5°	139.6	175.9	552.6	749.5	1221.9	1365.3	1382.5	1413.1	1502.9	1562.2	1579.4
45°	128.1	156.8	495.2	692.1	1177.9	1313.6	1338.5	1380.6	1476.2	1533.5	1548.8
47.5°	116.6	143.4	435.9	632.9	1130.1	1262.0	1294.5	1342.3	1439.8	1495.3	1508.7
50°	107.1	130.0	376.7	569.8	1078.4	1206.6	1244.8	1294.5	1393.9	1445.6	1462.8
52.5°	99.4	118.5	321.2	506.7	1019.1	1149.2	1193.2	1244.8	1338.5	1388.2	1399.7
55°	91.8	109.0	273.4	439.8	957.9	1088.0	1135.8	1185.5	1277.3	1319.4	1327.0
57.5°	88.0	101.3	233.3	376.7	892.9	1019.1	1072.6	1118.6	1204.7	1237.2	1244.8
60°	82.2	95.6	202.7	323.1	822.2	954.1	1000.0	1045.9	1118.6	1145.4	1151.1
62.5°	76.5	91.8	179.7	271.5	749.5	877.6	923.5	965.6	1026.7	1045.9	1053.5
65°	72.7	88.0	162.5	233.3	674.9	797.3	843.2	879.5	929.2	948.4	952.2
67.5°	68.8	84.1	149.1	200.8	600.4	717.0	751.4	785.8	824.1	843.2	845.1
70°	63.1	80.3	137.7	177.8	523.9	625.2	653.9	690.2	720.8	730.4	736.1
72.5°	59.3	74.6	130.0	160.6	445.5	537.3	564.0	585.1	611.8	621.4	621.4
75°	53.5	66.9	122.4	143.4	365.2	439.8	462.7	483.7	504.8	508.6	502.9
77.5°	47.8	59.3	105.2	120.5	284.9	348.0	367.1	378.6	395.8	399.6	401.5
80°	40.2	51.6	82.2	93.7	206.5	256.2	269.6	279.2	294.4	294.4	298.3
82.5°	30.6	40.2	59.3	66.9	139.6	175.9	187.4	193.1	202.7	202.7	202.7
85°	19.1	24.9	38.2	44.0	84.1	107.1	114.7	116.6	124.3	126.2	126.2
87.5°	9.6	13.4	24.9	26.8	44.0	55.4	55.4	59.3	59.3	57.4	55.4
90°	1.9	3.4	5.0	5.4	8.4	12.5	14.5	12.9	9.7	7.3	7.3
92.5°	7.6	20.6	33.7	37.0	52.0	72.0	81.9	71.8	51.6	36.4	35.0
95°	18.4	42.2	66.1	72.0	127.8	202.3	239.6	213.8	162.2	123.5	119.1
97.5°	31.8	52.9	73.8	79.1	172.2	296.4	358.5	342.2	309.6	285.2	276.9
100°	42.2	61.2	80.2	85.0	188.3	326.1	395.0	396.3	398.7	400.5	390.5
102.5°	51.0	68.7	86.5	90.9	195.8	335.6	405.4	426.2	467.7	498.8	490.3
105°	65.9	81.0	96.1	99.8	201.3	336.6	404.3	450.8	544.0	613.8	609.2
107.5°	81.2	95.2	109.3	112.8	202.3	321.6	381.3	446.2	576.1	673.5	674.6
110°	91.6	104.2	116.9	120.1	200.8	308.3	362.1	434.7	579.9	688.8	693.6



TEST NUMBER: P936312

CATALOG NUMBER: SQ4-FB-025U-075D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	101.7	113.8	125.8	128.9	200.9	296.7	344.7	419.0	567.6	679.0	686.4
115°	117.0	128.1	139.3	142.1	202.7	283.5	323.8	395.4	538.6	646.0	656.1
117.5°	132.1	142.3	152.4	155.0	206.5	275.1	309.5	374.1	503.2	600.2	611.5
120°	140.9	150.5	160.0	162.4	209.6	272.4	303.7	362.7	480.8	569.3	580.2
122.5°	149.5	159.2	168.8	171.2	214.0	270.8	299.3	352.5	458.8	538.5	549.3
125°	162.8	171.6	180.3	182.5	219.9	269.7	294.5	339.7	430.0	497.7	507.6
127.5°	173.5	182.3	191.2	193.4	225.8	268.9	290.5	329.3	406.9	465.0	473.4
130°	179.2	188.8	198.3	200.7	230.1	269.4	289.0	323.5	392.5	444.3	452.0
132.5°	185.2	194.7	204.2	206.6	233.6	269.7	287.7	318.5	380.3	426.7	433.6
135°	194.0	202.7	211.4	213.6	237.5	269.4	285.4	311.3	363.0	401.8	407.7
137.5°	203.0	211.6	220.2	222.4	243.2	271.0	285.0	306.9	350.6	383.4	388.2
140°	210.4	218.4	226.3	228.3	246.7	271.3	283.6	302.6	340.3	368.6	373.2
142.5°	216.2	223.5	230.9	232.7	249.7	272.4	283.6	300.3	333.5	358.3	362.2
145°	225.0	231.4	237.8	239.4	253.5	272.4	281.7	295.3	322.5	342.8	345.8
147.5°	233.8	240.1	246.3	247.8	259.1	274.2	281.7	292.4	313.8	329.7	332.2
150°	239.6	245.2	250.8	252.2	262.0	275.1	281.7	290.7	308.8	322.3	324.3
152.5°	245.5	249.7	254.0	255.1	264.0	275.8	281.7	289.4	304.8	316.3	317.9
155°	254.3	257.5	260.6	261.4	268.2	277.2	281.7	287.9	300.1	309.3	310.2
157.5°	260.8	263.9	266.9	267.7	272.4	278.6	281.7	286.5	296.0	303.1	303.8
160°	265.2	267.6	270.0	270.5	274.3	279.2	281.7	285.8	294.0	300.1	300.5
162.5°	269.6	271.4	273.1	273.6	276.3	279.9	281.7	285.2	292.1	297.2	297.6
165°	274.5	276.1	277.7	278.1	279.3	281.0	281.7	284.2	289.1	292.8	293.2
167.5°	278.9	279.6	280.4	280.6	281.6	283.0	283.6	285.3	288.5	290.9	291.1
170°	281.7	282.5	283.3	283.5	283.5	283.6	283.6	285.3	288.5	290.9	290.9
172.5°	283.3	283.5	283.6	283.6	283.6	283.6	283.6	284.9	287.5	289.4	289.2
175°	285.4	285.4	285.4	285.4	284.8	284.0	283.6	284.4	286.0	287.3	287.3
177.5°	285.4	285.4	285.4	285.4	284.9	284.3	284.0	284.7	285.9	286.9	286.7
180°	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4	285.4



TEST NUMBER: P936312

CATALOG NUMBER: SQ4-FB-025U-075D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	594.6	594.6
2.5°	634.8	631.0
5°	816.4	820.2
7.5°	1099.5	1097.6
10°	1367.2	1384.4
12.5°	1562.2	1566.0
15°	1680.7	1688.4
17.5°	1726.6	1728.5
20°	1728.5	1724.7
22.5°	1707.5	1703.7
25°	1682.7	1680.7
27.5°	1659.7	1661.6
30°	1650.2	1655.9
32.5°	1650.2	1659.7
35°	1654.0	1663.5
37.5°	1652.1	1663.5
40°	1644.4	1657.8
42.5°	1623.4	1632.9
45°	1590.9	1602.4
47.5°	1548.8	1556.5
50°	1495.3	1502.9
52.5°	1428.4	1430.3
55°	1348.1	1355.7
57.5°	1262.0	1263.9
60°	1166.4	1172.2
62.5°	1065.0	1065.0
65°	957.9	961.7
67.5°	847.0	856.6
70°	734.2	736.1
72.5°	623.3	623.3
75°	508.6	510.5
77.5°	399.6	399.6
80°	296.4	298.3
82.5°	204.6	208.4
85°	128.1	128.1
87.5°	59.3	53.5
90°	7.3	7.3
92.5°	29.2	23.3
95°	101.6	84.0
97.5°	243.4	210.0
100°	350.8	311.0
102.5°	456.3	422.3
105°	590.9	572.5
107.5°	679.0	683.4
110°	712.6	731.7



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CATALOG NUMBER: SQ4-FB-025U-075D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	715.7	744.9
115°	696.7	737.3
117.5°	656.5	701.5
120°	624.0	667.8
122.5°	592.4	635.5
125°	547.4	587.2
127.5°	506.9	540.4
130°	483.0	513.9
132.5°	461.4	489.1
135°	431.6	455.5
137.5°	407.8	427.4
140°	391.5	409.8
142.5°	378.0	393.7
145°	357.7	369.6
147.5°	342.1	352.0
150°	332.3	340.3
152.5°	323.9	329.9
155°	314.2	318.3
157.5°	306.7	309.5
160°	302.1	303.7
162.5°	299.1	300.7
165°	294.8	296.5
167.5°	291.8	292.4
170°	290.9	290.9
172.5°	288.6	288.0
175°	287.3	287.3
177.5°	286.0	285.4
180°	285.4	285.4



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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	6.27	7.43	7.01	8.20	9.12	19.45	20.60	20.19	21.37	22.30
	3H	7.00	8.04	7.75	8.82	9.78	21.31	22.35	22.06	23.13	24.09
	4H	7.31	8.29	8.08	9.08	10.05	21.97	22.95	22.74	23.74	24.71
	6H	7.58	8.49	8.36	9.28	10.27	22.42	23.33	23.20	24.12	25.11
	8H	7.65	8.52	8.45	9.34	10.32	22.54	23.41	23.34	24.23	25.21
	12H	7.68	8.51	8.48	9.32	10.33	22.62	23.45	23.42	24.26	25.28
4H	2H	13.52	14.51	14.30	15.29	16.26	19.76	20.74	20.53	21.53	22.50
	3H	15.12	15.94	15.90	16.76	17.75	21.83	22.66	22.62	23.48	24.47
	4H	15.22	15.98	16.03	16.80	17.81	22.61	23.36	23.41	24.19	25.20
	6H	15.25	15.91	16.07	16.75	17.77	23.17	23.82	23.99	24.67	25.69
	8H	15.24	15.85	16.06	16.69	17.72	23.34	23.95	24.16	24.79	25.82
	12H	15.21	15.76	16.05	16.62	17.66	23.45	24.00	24.29	24.86	25.90
8H	4H	16.69	17.31	17.52	18.15	19.18	22.70	23.31	23.52	24.15	25.18
	6H	16.95	17.46	17.80	18.34	19.37	23.34	23.85	24.19	24.73	25.76
	8H	16.97	17.42	17.84	18.30	19.35	23.56	24.02	24.43	24.90	25.94
	12H	16.95	17.35	17.82	18.22	19.33	23.72	24.12	24.59	24.99	26.10
12H	4H	16.85	17.40	17.70	18.27	19.30	22.66	23.22	23.51	24.08	25.12
	6H	17.21	17.67	18.08	18.54	19.59	23.33	23.78	24.19	24.66	25.71
	8H	17.30	17.69	18.16	18.57	19.67	23.57	23.97	24.44	24.84	25.94