

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: P936442

Luminaire Tested: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936442
REPORT IS A COMBINATION OF REPORTS P933447 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

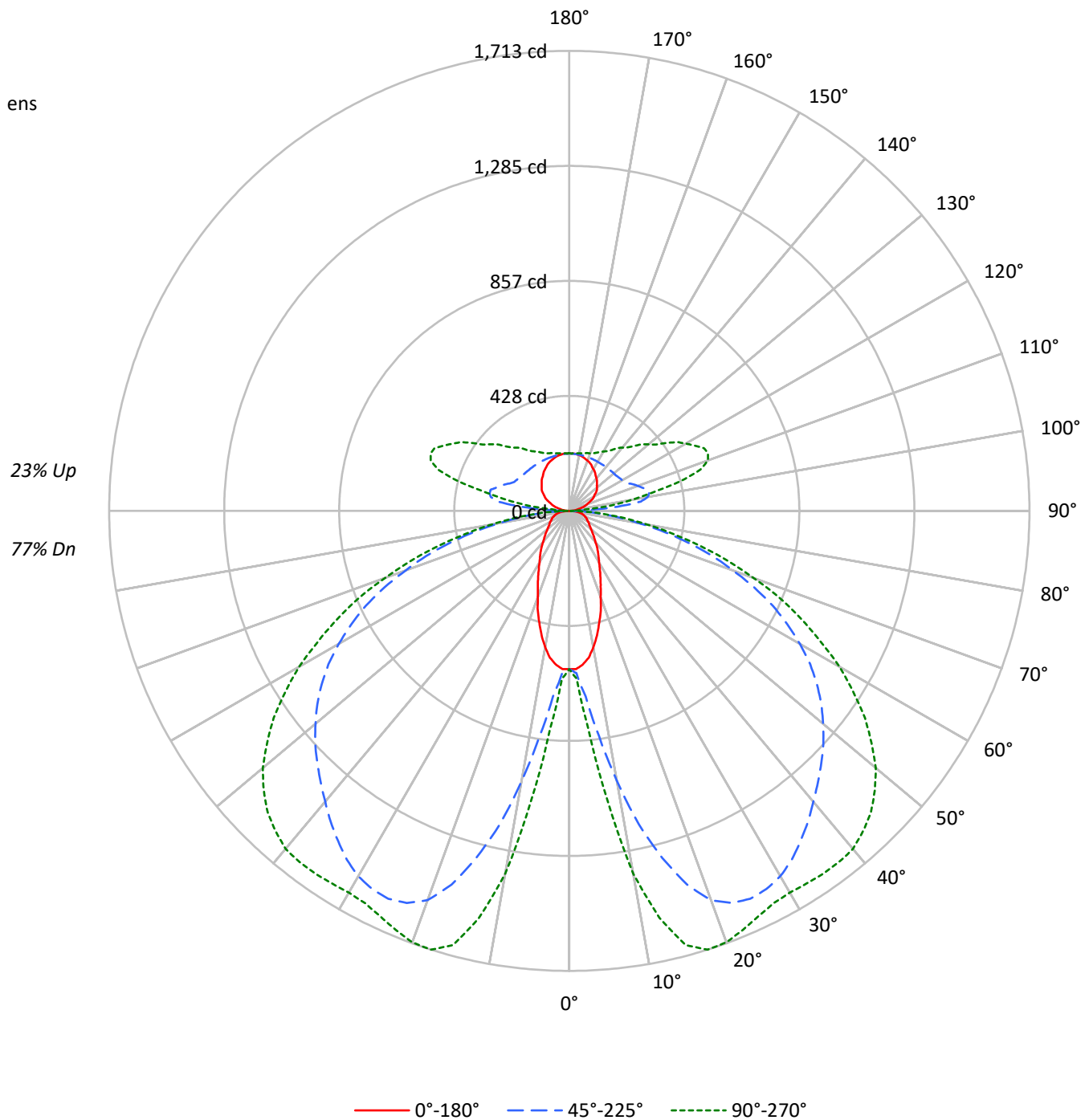
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5947.5 lumens
Efficiency: N/A
Efficacy: 102.2 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-Direct

Input Watts (W): 58.2
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: P936442
CATALOG NUMBER: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-6500K

Luminous Intensity Polar Plot





TEST NUMBER: P936442

CATALOG NUMBER: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-6500K

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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77			77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66	63			63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51			51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42			42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35			35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30			30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26			26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22			22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20			20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19	17			17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16			16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3646	3646	3646
5°	3560	4212	4901
10°	3228	6139	8124
15°	2743	8019	9809
20°	2232	9290	9998
25°	1861	9720	9795
30°	1569	9778	9776
35°	1386	9613	10029
40°	1207	9399	10290
45°	1093	9242	10330
50°	1001	9101	10160
55°	958	8893	9709
60°	980	8499	8998
65°	1018	7901	8020
70°	1081	6886	6776
75°	1195	5610	5287
80°	1295	3886	3564
85°	1127	2058	1824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10330 cd/sqm



TEST NUMBER: P936442

CATALOG NUMBER: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.2	1.3
10°-20°	337.9	5.7
20°-30°	591.0	9.9
30°-40°	760.8	12.8
40°-50°	849.8	14.3
50°-60°	813.9	13.7
60°-70°	645.0	10.8
70°-80°	379.3	6.4
80°-90°	106.2	1.8
90°-100°	104.3	1.8
100°-110°	274.3	4.6
110°-120°	284.4	4.8
120°-130°	228.1	3.8
130°-140°	179.0	3.0
140°-150°	137.4	2.3
150°-160°	99.0	1.7
160°-170°	60.5	1.0
170°-180°	20.5	0.3
0°-30°	1005.1	16.9
0°-40°	1765.9	29.7
0°-60°	3429.5	57.7
0°-90°	4560.0	76.7
90°-120°	663.1	11.1
90°-150°	1207.6	20.3
90°-180°	1388.0	23.3
0°-180°	5947.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	574	616	694	785	813	53
15°	430	794	1338	1622	1673	120
25°	275	900	1594	1664	1666	127
35°	186	860	1501	1586	1649	116
45°	127	686	1326	1520	1588	98
55°	91	436	1126	1308	1344	83
65°	72	231	836	940	953	71
75°	53	142	459	504	506	56
85°	19	44	114	125	127	20
90°	1	4	11	6	6	2
95°	14	54	180	93	63	15
105°	49	75	303	460	430	52
115°	88	107	243	484	553	87
125°	122	137	221	373	440	108
135°	146	160	214	301	342	113
145°	169	180	211	257	277	106
155°	191	196	211	232	239	88
165°	206	208	211	220	222	58
175°	214	214	213	216	216	20
180°	214	214	214	214	214	



TEST NUMBER: P936442

CATALOG NUMBER: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-6500K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3
2.5°	589.3	589.3	593.1	595.0	598.8	600.7	604.5	608.3	619.6	621.5	625.4
5°	574.2	581.7	606.4	615.9	642.4	678.4	693.5	718.2	769.4	784.6	794.0
7.5°	551.4	568.5	629.2	644.3	710.6	805.4	845.2	898.2	979.7	1019.5	1051.7
10°	515.4	551.4	659.5	695.4	803.5	947.5	1021.4	1095.3	1218.5	1273.5	1294.3
12.5°	475.6	534.4	691.7	741.0	896.3	1106.7	1195.7	1277.2	1417.5	1491.4	1502.8
15°	430.2	509.7	722.0	794.0	994.8	1239.3	1337.9	1438.3	1569.0	1622.1	1635.4
17.5°	390.4	490.8	750.4	826.2	1070.6	1358.8	1459.2	1542.5	1648.7	1684.6	1694.1
20°	341.1	460.5	769.4	867.9	1150.3	1445.9	1542.5	1607.0	1679.0	1701.7	1705.5
22.5°	305.1	428.3	780.7	883.0	1203.3	1498.9	1580.4	1631.6	1680.9	1688.4	1690.4
25°	274.8	392.2	778.8	900.2	1248.8	1531.2	1593.7	1631.6	1660.0	1663.8	1663.8
27.5°	246.3	352.5	771.3	903.9	1282.9	1538.7	1587.9	1614.5	1627.8	1635.4	1635.4
30°	221.7	314.6	752.3	896.3	1298.0	1531.2	1570.9	1584.2	1597.5	1608.8	1614.5
32.5°	202.8	278.5	723.8	881.1	1299.9	1512.2	1540.6	1548.2	1567.1	1593.7	1603.2
35°	185.7	242.6	691.7	860.3	1288.6	1481.9	1500.8	1508.4	1546.3	1586.1	1599.3
37.5°	168.7	216.0	650.0	824.3	1271.5	1445.9	1459.2	1472.4	1531.2	1578.5	1593.7
40°	151.6	193.2	600.7	784.6	1245.0	1402.3	1413.6	1434.5	1512.2	1567.1	1582.3
42.5°	138.4	174.3	547.6	742.9	1210.9	1353.0	1370.0	1400.3	1489.5	1548.2	1565.3
45°	127.0	155.4	490.8	686.0	1167.3	1301.9	1326.5	1368.2	1462.9	1519.8	1535.0
47.5°	115.6	142.1	432.1	627.3	1119.9	1250.7	1282.9	1330.3	1426.9	1481.9	1495.1
50°	106.1	128.9	373.3	564.7	1068.7	1195.7	1233.7	1282.9	1381.4	1432.6	1449.7
52.5°	98.6	117.5	318.3	502.2	1010.0	1138.9	1182.4	1233.7	1326.5	1375.8	1387.1
55°	90.9	108.0	271.0	435.8	949.4	1078.2	1125.6	1174.9	1265.8	1307.5	1315.1
57.5°	87.2	100.4	231.2	373.3	885.0	1010.0	1063.1	1108.6	1193.8	1226.0	1233.7
60°	81.5	94.8	200.9	320.2	814.9	945.6	991.1	1036.5	1108.6	1135.1	1140.7
62.5°	75.8	90.9	178.1	269.1	742.9	869.8	915.3	957.0	1017.6	1036.5	1044.2
65°	72.0	87.2	161.1	231.2	669.0	790.2	835.7	871.7	921.0	939.9	943.7
67.5°	68.2	83.4	147.8	199.0	595.0	710.6	744.7	778.8	816.8	835.7	837.6
70°	62.5	79.6	136.4	176.2	519.2	619.6	648.1	684.1	714.4	723.8	729.6
72.5°	58.7	73.9	128.9	159.2	441.6	532.5	559.0	579.8	606.4	615.9	615.9
75°	53.1	66.4	121.2	142.1	361.9	435.8	458.6	479.4	500.3	504.1	498.4
77.5°	47.3	58.7	104.2	119.4	282.4	344.9	363.8	375.2	392.2	396.1	398.0
80°	39.8	51.2	81.5	92.8	204.6	254.0	267.2	276.6	291.8	291.8	295.7
82.5°	30.3	39.8	58.7	66.4	138.4	174.3	185.7	191.4	200.9	200.9	200.9
85°	18.9	24.7	37.9	43.6	83.4	106.1	113.7	115.6	123.2	125.1	125.1
87.5°	9.5	13.3	24.7	26.5	43.6	55.0	55.0	58.7	58.7	56.9	55.0
90°	1.4	2.6	3.7	4.0	6.3	9.4	10.9	9.7	7.3	5.5	5.5
92.5°	5.7	15.5	25.2	27.7	39.0	54.0	61.5	53.8	38.6	27.3	26.2
95°	13.8	31.6	49.5	54.0	95.9	151.7	179.7	160.4	121.6	92.7	89.4
97.5°	23.8	39.6	55.4	59.3	129.2	222.3	268.9	256.6	232.3	213.9	207.7
100°	31.6	45.9	60.2	63.8	141.3	244.7	296.3	297.2	299.0	300.3	292.9
102.5°	38.2	51.6	64.9	68.3	146.9	251.7	304.1	319.7	350.8	374.3	367.8
105°	49.4	60.7	72.0	74.9	151.0	252.4	303.2	338.1	408.0	460.4	457.0
107.5°	60.9	71.4	81.9	84.6	151.7	241.2	286.0	334.8	432.2	505.3	506.1
110°	68.7	78.2	87.7	90.1	150.6	231.3	271.7	326.2	435.1	516.7	520.3



TEST NUMBER: P936442

CATALOG NUMBER: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-6500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	76.3	85.4	94.4	96.7	150.6	222.6	258.6	314.3	425.8	509.4	514.8
115°	87.8	96.2	104.5	106.6	152.0	212.6	242.9	296.6	404.0	484.5	492.2
117.5°	99.2	106.7	114.3	116.2	154.8	206.3	232.2	280.6	377.5	450.2	458.6
120°	105.8	112.9	120.0	121.8	157.2	204.3	227.9	272.1	360.7	427.1	435.4
122.5°	112.2	119.4	126.6	128.4	160.4	203.2	224.5	264.4	344.1	404.0	412.1
125°	122.1	128.7	135.3	136.9	164.9	202.3	221.0	254.8	322.6	373.4	380.9
127.5°	130.1	136.7	143.4	145.1	169.3	201.8	217.9	247.0	305.2	348.8	355.1
130°	134.4	141.6	148.7	150.5	172.6	202.0	216.8	242.7	294.4	333.2	339.1
132.5°	138.9	146.1	153.2	155.0	175.3	202.3	215.8	239.0	285.3	320.0	325.2
135°	145.5	152.0	158.5	160.2	178.1	202.1	214.1	233.5	272.3	301.4	305.9
137.5°	152.3	158.7	165.1	166.8	182.4	203.4	213.8	230.3	263.0	287.6	291.3
140°	157.9	163.8	169.7	171.3	185.1	203.6	212.8	226.9	255.3	276.5	280.0
142.5°	162.2	167.6	173.2	174.5	187.2	204.2	212.8	225.2	250.1	268.8	271.8
145°	168.8	173.5	178.3	179.6	190.2	204.2	211.3	221.5	241.8	257.1	259.3
147.5°	175.4	180.1	184.7	185.9	194.4	205.7	211.3	219.4	235.3	247.4	249.2
150°	179.7	183.9	188.2	189.2	196.6	206.4	211.3	218.1	231.6	241.7	243.3
152.5°	184.2	187.3	190.6	191.3	198.0	206.9	211.3	217.1	228.6	237.3	238.5
155°	190.8	193.2	195.5	196.1	201.2	208.0	211.3	215.9	225.1	232.0	232.7
157.5°	195.6	197.9	200.2	200.8	204.3	209.0	211.3	214.9	222.0	227.4	228.0
160°	199.0	200.8	202.5	203.0	205.8	209.5	211.3	214.4	220.5	225.1	225.4
162.5°	202.2	203.6	204.9	205.3	207.3	210.0	211.3	213.9	219.1	223.0	223.3
165°	205.9	207.0	208.3	208.5	209.5	210.7	211.3	213.1	216.9	219.6	219.9
167.5°	209.1	209.7	210.3	210.5	211.2	212.3	212.8	214.0	216.4	218.2	218.3
170°	211.3	211.9	212.5	212.6	212.7	212.8	212.8	214.0	216.4	218.2	218.2
172.5°	212.5	212.6	212.8	212.8	212.8	212.8	212.8	213.7	215.6	217.1	217.0
175°	214.1	214.1	214.1	214.1	213.6	213.0	212.8	213.3	214.6	215.5	215.5
177.5°	214.1	214.1	214.1	214.1	213.7	213.2	213.0	213.5	214.5	215.2	215.1
180°	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1



TEST NUMBER: P936442

CATALOG NUMBER: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-6500K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	589.3	589.3
2.5°	629.2	625.4
5°	809.1	813.0
7.5°	1089.6	1087.8
10°	1354.9	1371.9
12.5°	1548.2	1552.0
15°	1665.7	1673.2
17.5°	1711.2	1713.0
20°	1713.0	1709.3
22.5°	1692.2	1688.4
25°	1667.6	1665.7
27.5°	1644.8	1646.8
30°	1635.4	1641.0
32.5°	1635.4	1644.8
35°	1639.2	1648.7
37.5°	1637.3	1648.7
40°	1629.6	1642.9
42.5°	1608.8	1618.4
45°	1576.7	1587.9
47.5°	1535.0	1542.5
50°	1481.9	1489.5
52.5°	1415.5	1417.5
55°	1336.0	1343.5
57.5°	1250.7	1252.6
60°	1155.9	1161.6
62.5°	1055.5	1055.5
65°	949.4	953.1
67.5°	839.4	848.9
70°	727.7	729.6
72.5°	617.8	617.8
75°	504.1	505.9
77.5°	396.1	396.1
80°	293.7	295.7
82.5°	202.8	206.5
85°	127.0	127.0
87.5°	58.7	53.1
90°	5.5	5.5
92.5°	21.8	17.5
95°	76.2	63.1
97.5°	182.6	157.6
100°	263.1	233.3
102.5°	342.3	316.8
105°	443.3	429.5
107.5°	509.4	512.7
110°	534.6	549.0



TEST NUMBER: P936442

CATALOG NUMBER: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-6500K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	536.8	558.8
115°	522.6	553.1
117.5°	492.4	526.2
120°	468.2	500.9
122.5°	444.4	476.8
125°	410.6	440.4
127.5°	380.3	405.4
130°	362.3	385.5
132.5°	346.0	366.9
135°	323.8	341.7
137.5°	306.0	320.6
140°	293.6	307.4
142.5°	283.5	295.4
145°	268.3	277.3
147.5°	256.6	264.0
150°	249.3	255.3
152.5°	243.0	247.6
155°	235.7	238.8
157.5°	230.1	232.2
160°	226.6	227.9
162.5°	224.4	225.6
165°	221.2	222.4
167.5°	218.9	219.4
170°	218.2	218.2
172.5°	216.5	216.1
175°	215.5	215.5
177.5°	214.6	214.1
180°	214.1	214.1



TEST NUMBER: P936442

CATALOG NUMBER: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-6-6500K

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	7.63	8.86	8.31	9.57	10.39	20.79	22.02	21.47	22.73	23.56
	3H	8.36	9.47	9.05	10.19	11.05	22.65	23.77	23.35	24.48	25.34
	4H	8.67	9.73	9.39	10.45	11.33	23.31	24.36	24.02	25.09	25.96
	6H	8.94	9.92	9.67	10.65	11.54	23.76	24.73	24.48	25.47	26.35
	8H	9.02	9.95	9.76	10.71	11.60	23.88	24.82	24.62	25.57	26.46
	12H	9.05	9.94	9.80	10.69	11.61	23.96	24.85	24.71	25.60	26.52
4H	2H	14.88	15.93	15.59	16.66	17.53	21.11	22.16	21.82	22.89	23.76
	3H	16.48	17.36	17.21	18.12	19.02	23.18	24.07	23.91	24.83	25.72
	4H	16.59	17.39	17.33	18.16	19.08	23.96	24.77	24.71	25.53	26.45
	6H	16.62	17.32	17.39	18.11	19.04	24.52	25.22	25.28	26.01	26.94
	8H	16.61	17.27	17.38	18.05	18.99	24.69	25.35	25.46	26.13	27.07
	12H	16.58	17.18	17.37	17.98	18.93	24.80	25.39	25.59	26.20	27.14
8H	4H	18.06	18.72	18.83	19.50	20.44	24.05	24.71	24.82	25.50	26.44
	6H	18.32	18.87	19.12	19.69	20.64	24.70	25.24	25.50	26.07	27.01
	8H	18.35	18.83	19.15	19.66	20.61	24.92	25.41	25.73	26.23	27.19
	12H	18.33	18.76	19.14	19.58	20.59	25.08	25.51	25.89	26.33	27.34
12H	4H	18.22	18.82	19.01	19.62	20.57	24.03	24.62	24.82	25.43	26.37
	6H	18.58	19.07	19.39	19.90	20.85	24.69	25.17	25.49	26.00	26.96
	8H	18.67	19.10	19.49	19.92	20.93	24.93	25.36	25.74	26.18	27.19