

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: P937723

Luminaire Tested: SQ4-FB-100U-125D-927-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937723
REPORT IS A COMBINATION OF REPORTS P933576 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

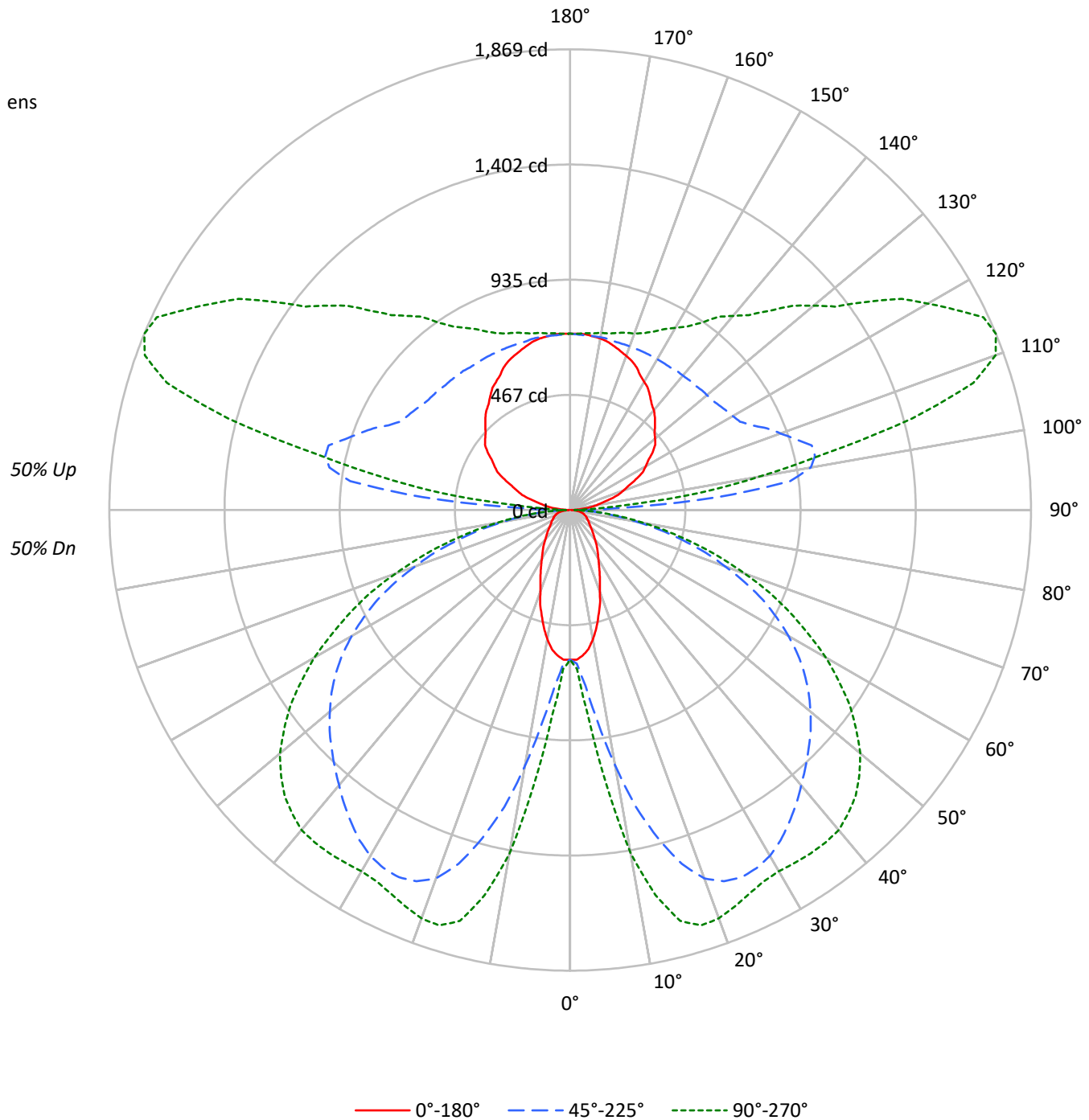
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9345.5 lumens
Efficiency: N/A
Efficacy: 90.6 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: General Diffuse

Input Watts (W): 103.2
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

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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	50	30	10	0
RCR																					
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3760	3760	3760
5°	3672	4345	5054
10°	3330	6332	8380
15°	2829	8271	10118
20°	2302	9582	10312
25°	1919	10025	10102
30°	1618	10086	10083
35°	1430	9916	10344
40°	1246	9695	10613
45°	1127	9532	10655
50°	1032	9386	10478
55°	988	9173	10014
60°	1010	8767	9280
65°	1050	8149	8273
70°	1116	7102	6989
75°	1231	5786	5454
80°	1334	4008	3675
85°	1169	2123	1882

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10655 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.6	0.8
10°-20°	348.5	3.7
20°-30°	609.6	6.5
30°-40°	784.7	8.4
40°-50°	876.5	9.4
50°-60°	839.4	9.0
60°-70°	665.3	7.1
70°-80°	391.2	4.2
80°-90°	111.4	1.2
90°-100°	348.9	3.7
100°-110°	917.3	9.8
110°-120°	951.2	10.2
120°-130°	763.0	8.2
130°-140°	598.7	6.4
140°-150°	459.5	4.9
150°-160°	330.9	3.5
160°-170°	202.5	2.2
170°-180°	68.4	0.7
0°-30°	1036.7	11.1
0°-40°	1821.4	19.5
0°-60°	3537.3	37.8
0°-90°	4705.1	50.3
90°-120°	2217.4	23.7
90°-150°	4038.6	43.2
90°-180°	4640.0	49.6
0°-180°	9345.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	608	608	608	608	608	
5°	592	635	715	809	838	55
15°	444	819	1380	1673	1726	123
25°	283	928	1644	1716	1718	131
35°	192	887	1548	1636	1700	120
45°	131	708	1368	1568	1638	101
55°	94	450	1161	1349	1386	85
65°	74	238	862	969	983	74
75°	55	147	473	520	522	57
85°	20	45	117	129	131	21
90°	5	14	36	18	18	5
95°	46	181	601	310	211	51
105°	165	250	1014	1540	1436	175
115°	294	356	812	1620	1850	290
125°	408	458	739	1249	1473	363
135°	487	536	716	1008	1143	377
145°	564	600	707	860	927	354
155°	638	656	707	776	798	293
165°	688	698	707	735	744	194
175°	716	716	712	721	721	68
180°	716	716	716	716	716	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8	607.8
2.5°	607.8	607.8	611.8	613.7	617.6	619.6	623.5	627.4	639.1	641.1	645.0
5°	592.2	600.1	625.5	635.2	662.6	699.7	715.3	740.7	793.6	809.2	819.0
7.5°	568.8	586.4	648.9	664.5	733.0	830.7	871.7	926.5	1010.5	1051.5	1084.8
10°	531.6	568.8	680.1	717.3	828.8	977.3	1053.5	1129.7	1256.8	1313.5	1334.9
12.5°	490.6	551.2	713.4	764.2	924.5	1141.4	1233.3	1317.3	1462.0	1538.2	1549.9
15°	443.7	525.8	744.7	819.0	1026.1	1278.3	1379.9	1483.5	1618.4	1673.1	1686.8
17.5°	402.6	506.2	774.0	852.2	1104.3	1401.4	1505.0	1591.0	1700.5	1737.6	1747.4
20°	351.8	474.9	793.6	895.2	1186.4	1491.3	1591.0	1657.4	1731.7	1755.1	1759.1
22.5°	314.7	441.7	805.3	910.8	1241.2	1546.0	1630.1	1682.8	1733.7	1741.5	1743.4
25°	283.4	404.6	803.3	928.4	1288.1	1579.3	1643.8	1682.8	1712.2	1716.1	1716.1
27.5°	254.1	363.5	795.5	932.3	1323.2	1587.0	1637.9	1665.3	1678.9	1686.8	1686.8
30°	228.7	324.5	775.9	924.5	1338.9	1579.3	1620.3	1634.0	1647.6	1659.4	1665.3
32.5°	209.1	287.3	746.6	908.8	1340.8	1559.7	1589.0	1596.8	1616.4	1643.8	1653.5
35°	191.6	250.2	713.4	887.3	1329.1	1528.4	1548.0	1555.8	1594.9	1635.9	1649.6
37.5°	173.9	222.8	670.4	850.2	1311.5	1491.3	1505.0	1518.7	1579.3	1628.1	1643.8
40°	156.4	199.4	619.6	809.2	1284.1	1446.4	1458.1	1479.6	1559.7	1616.4	1632.0
42.5°	142.7	179.8	564.9	766.2	1248.9	1395.5	1413.1	1444.4	1536.2	1596.8	1614.5
45°	131.0	160.2	506.2	707.6	1204.0	1342.7	1368.1	1411.2	1508.9	1567.6	1583.2
47.5°	119.2	146.6	445.6	647.0	1155.2	1290.0	1323.2	1372.1	1471.8	1528.4	1542.2
50°	109.4	132.9	385.1	582.4	1102.3	1233.3	1272.4	1323.2	1424.9	1477.6	1495.2
52.5°	101.6	121.2	328.3	518.0	1041.7	1174.6	1219.6	1272.4	1368.1	1419.0	1430.7
55°	93.8	111.4	279.5	449.5	979.2	1112.1	1161.0	1211.8	1305.6	1348.7	1356.4
57.5°	89.9	103.6	238.5	385.1	912.8	1041.7	1096.5	1143.4	1231.4	1264.6	1272.4
60°	84.0	97.7	207.2	330.3	840.5	975.3	1022.3	1069.1	1143.4	1170.8	1176.6
62.5°	78.2	93.8	183.7	277.5	766.2	897.1	944.0	987.1	1049.6	1069.1	1076.9
65°	74.3	89.9	166.2	238.5	689.9	815.0	861.9	899.1	949.9	969.4	973.4
67.5°	70.4	86.0	152.5	205.2	613.7	733.0	768.2	803.3	842.4	861.9	863.9
70°	64.5	82.1	140.8	181.8	535.5	639.1	668.4	705.6	736.9	746.6	752.5
72.5°	60.6	76.2	132.9	164.2	455.4	549.2	576.6	598.1	625.5	635.2	635.2
75°	54.7	68.4	125.1	146.6	373.3	449.5	473.0	494.5	516.0	519.9	514.1
77.5°	48.9	60.6	107.5	123.1	291.2	355.7	375.3	387.0	404.6	408.5	410.5
80°	41.0	52.7	84.0	95.8	211.1	261.9	275.6	285.4	301.0	301.0	304.9
82.5°	31.3	41.0	60.6	68.4	142.7	179.8	191.6	197.4	207.2	207.2	207.2
85°	19.6	25.4	39.1	45.0	86.0	109.4	117.3	119.2	127.0	129.0	129.0
87.5°	9.8	13.7	25.4	27.3	45.0	56.7	56.7	60.6	60.6	58.7	56.7
90°	4.8	8.6	12.5	13.5	21.2	31.4	36.5	32.4	24.3	18.2	18.2
92.5°	19.2	51.9	84.5	92.7	130.4	180.5	205.6	180.2	129.4	91.2	87.6
95°	46.1	105.9	165.7	180.6	320.8	507.6	601.0	536.3	406.9	309.8	298.8
97.5°	79.8	132.5	185.3	198.4	432.0	743.6	899.4	858.5	776.7	715.3	694.4
100°	105.7	153.5	201.4	213.3	472.5	818.2	991.1	994.1	1000.1	1004.5	979.6
102.5°	127.8	172.5	217.1	228.2	491.2	841.8	1017.0	1069.1	1173.3	1251.5	1230.2
105°	165.2	203.0	240.9	250.3	505.0	844.5	1014.2	1131.0	1364.5	1539.7	1528.2
107.5°	203.7	238.9	274.2	283.0	507.5	806.8	956.5	1119.4	1445.2	1689.6	1692.4
110°	229.6	261.4	293.3	301.2	503.7	773.5	908.4	1090.6	1454.8	1728.0	1740.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	255.1	285.4	315.8	323.3	503.8	744.4	864.7	1051.1	1424.0	1703.5	1721.9
115°	293.5	321.5	349.4	356.4	508.4	711.0	812.4	991.9	1351.1	1620.5	1646.0
117.5°	331.5	356.9	382.3	388.6	517.8	690.2	776.3	938.4	1262.5	1505.6	1533.8
120°	353.6	377.5	401.4	407.4	525.6	683.1	761.9	910.0	1206.1	1428.3	1455.7
122.5°	375.2	399.3	423.5	429.5	536.6	679.4	750.9	884.3	1150.9	1350.9	1378.0
125°	408.3	430.4	452.4	457.8	551.6	676.4	738.9	852.2	1078.7	1248.6	1273.6
127.5°	435.3	457.5	479.7	485.3	566.4	674.7	728.8	826.1	1020.6	1166.5	1187.5
130°	449.7	473.6	497.5	503.5	577.3	675.8	725.0	811.5	984.7	1114.6	1134.0
132.5°	464.5	488.5	512.4	518.4	586.1	676.4	721.6	799.1	954.1	1070.4	1087.8
135°	486.6	508.4	530.2	535.7	595.7	675.8	715.8	780.7	910.5	1007.9	1022.9
137.5°	509.2	530.8	552.4	557.8	610.1	680.0	714.9	769.8	879.5	961.8	974.0
140°	528.0	547.9	567.7	572.6	618.9	680.6	711.5	758.9	853.7	924.8	936.2
142.5°	542.4	560.8	579.1	583.7	626.3	683.1	711.5	753.1	836.4	898.8	908.7
145°	564.5	580.5	596.5	600.5	635.9	683.1	706.7	740.7	808.9	859.9	867.4
147.5°	586.6	602.1	617.7	621.6	650.0	687.8	706.7	733.5	787.1	827.3	833.4
150°	601.0	615.1	629.2	632.7	657.3	690.2	706.7	729.3	774.5	808.5	813.5
152.5°	615.9	626.6	637.3	639.9	662.2	691.8	706.7	726.0	764.7	793.6	797.4
155°	638.0	645.9	653.7	655.7	672.7	695.4	706.7	722.1	752.8	775.9	778.4
157.5°	654.3	662.0	669.7	671.6	683.3	698.9	706.7	718.6	742.6	760.5	762.3
160°	665.4	671.4	677.4	678.8	688.1	700.5	706.7	716.9	737.4	752.8	753.8
162.5°	676.4	680.9	685.4	686.5	693.2	702.2	706.7	715.3	732.7	745.6	746.5
165°	688.5	692.5	696.5	697.5	700.6	704.7	706.7	712.9	725.3	734.6	735.6
167.5°	699.5	701.4	703.3	703.8	706.3	709.8	711.5	715.6	723.6	729.7	730.2
170°	706.7	708.6	710.6	711.0	711.2	711.4	711.5	715.6	723.6	729.7	729.7
172.5°	710.6	710.9	711.4	711.5	711.5	711.5	711.5	714.7	721.1	725.9	725.5
175°	715.8	715.8	715.8	715.8	714.3	712.4	711.5	713.5	717.6	720.6	720.6
177.5°	715.8	715.8	715.8	715.8	714.7	713.3	712.5	714.1	717.3	719.6	719.2
180°	715.8	715.8	715.8	715.8	715.8	715.8	715.8	715.8	715.8	715.8	715.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	607.8	607.8
2.5°	648.9	645.0
5°	834.6	838.5
7.5°	1123.9	1121.9
10°	1397.5	1415.1
12.5°	1596.8	1600.8
15°	1718.0	1725.9
17.5°	1764.9	1766.9
20°	1766.9	1763.0
22.5°	1745.4	1741.5
25°	1719.9	1718.0
27.5°	1696.5	1698.5
30°	1686.8	1692.6
32.5°	1686.8	1696.5
35°	1690.7	1700.5
37.5°	1688.7	1700.5
40°	1680.9	1694.5
42.5°	1659.4	1669.2
45°	1626.2	1637.9
47.5°	1583.2	1591.0
50°	1528.4	1536.2
52.5°	1460.0	1462.0
55°	1377.9	1385.8
57.5°	1290.0	1291.9
60°	1192.3	1198.1
62.5°	1088.7	1088.7
65°	979.2	983.1
67.5°	865.9	875.6
70°	750.5	752.5
72.5°	637.2	637.2
75°	519.9	521.8
77.5°	408.5	408.5
80°	302.9	304.9
82.5°	209.1	213.1
85°	131.0	131.0
87.5°	60.6	54.7
90°	18.2	18.2
92.5°	73.1	58.6
95°	254.9	210.9
97.5°	610.7	527.0
100°	879.9	780.2
102.5°	1144.7	1059.3
105°	1482.3	1436.4
107.5°	1703.5	1714.6
110°	1787.9	1835.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1795.3	1868.8
115°	1747.7	1849.6
117.5°	1646.8	1759.8
120°	1565.5	1675.2
122.5°	1486.3	1594.5
125°	1373.2	1472.9
127.5°	1271.7	1355.7
130°	1211.7	1289.4
132.5°	1157.4	1227.0
135°	1082.9	1142.9
137.5°	1023.2	1072.3
140°	982.2	1028.1
142.5°	948.3	987.8
145°	897.4	927.2
147.5°	858.2	883.0
150°	833.6	853.7
152.5°	812.6	827.8
155°	788.4	798.4
157.5°	769.3	776.3
160°	757.9	761.9
162.5°	750.4	754.2
165°	739.7	743.7
167.5°	731.9	733.6
170°	729.7	729.7
172.5°	724.0	722.6
175°	720.6	720.6
177.5°	717.5	715.8
180°	715.8	715.8



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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	5.64	6.54	6.58	7.51	8.77	18.80	19.70	19.75	20.67	21.93
	3H	6.34	7.16	7.30	8.13	9.42	20.64	21.45	21.59	22.43	23.71
	4H	6.64	7.41	7.62	8.40	9.69	21.28	22.05	22.25	23.03	24.32
	6H	6.90	7.61	7.88	8.59	9.90	21.71	22.42	22.69	23.41	24.71
	8H	6.97	7.64	7.96	8.65	9.95	21.83	22.51	22.82	23.51	24.81
	12H	6.99	7.63	7.98	8.63	9.96	21.90	22.54	22.89	23.54	24.87
4H	2H	12.85	13.62	13.82	14.60	15.89	19.08	19.85	20.06	20.83	22.12
	3H	14.42	15.06	15.41	16.07	17.38	21.12	21.77	22.11	22.78	24.09
	4H	14.52	15.11	15.51	16.11	17.44	21.89	22.48	22.89	23.48	24.81
	6H	14.53	15.04	15.54	16.07	17.39	22.43	22.94	23.43	23.96	25.29
	8H	14.51	14.98	15.52	16.00	17.35	22.59	23.06	23.60	24.08	25.43
	12H	14.47	14.90	15.49	15.93	17.28	22.68	23.11	23.71	24.15	25.50
8H	4H	15.96	16.44	16.97	17.46	18.80	21.95	22.43	22.96	23.45	24.79
	6H	16.20	16.60	17.24	17.66	19.00	22.58	22.98	23.61	24.04	25.38
	8H	16.22	16.57	17.27	17.62	18.98	22.80	23.15	23.84	24.19	25.55
	12H	16.19	16.50	17.24	17.54	18.95	22.94	23.25	23.99	24.29	25.69
12H	4H	16.10	16.54	17.13	17.57	18.92	21.91	22.34	22.94	23.37	24.72
	6H	16.46	16.81	17.50	17.86	19.22	22.56	22.91	23.61	23.96	25.32
	8H	16.53	16.84	17.58	17.88	19.29	22.79	23.10	23.84	24.14	25.55