

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: P936792

Luminaire Tested: SQ4-FB-050U-075D-B2750-1D-UNV-W2A-W-8-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936792
REPORT IS A COMBINATION OF REPORTS P933486 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-B2750-1D-UNV-W2A-W-8-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

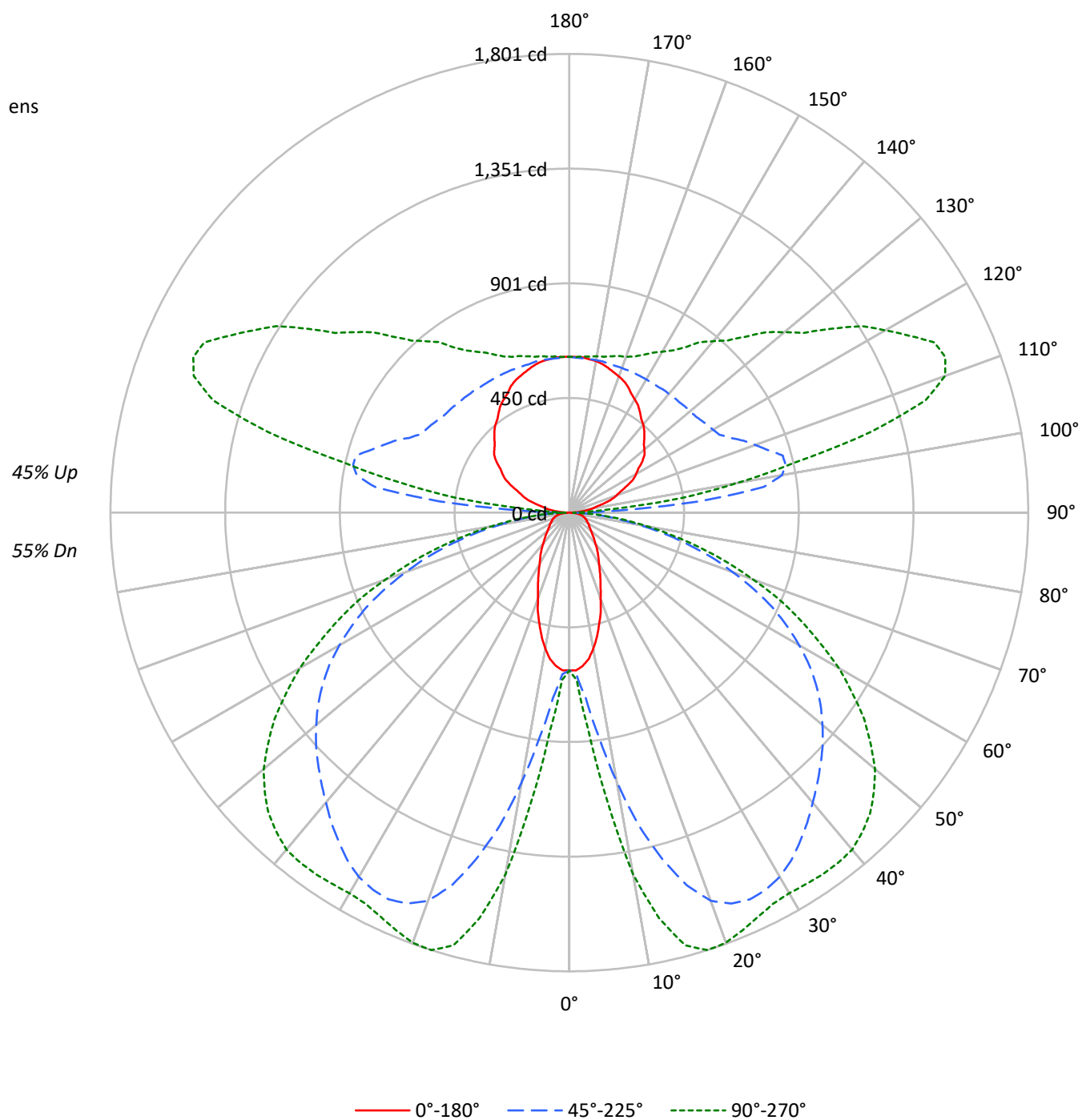
Lumens per Lamp: N/A
Luminaire Lumens: 8760.9 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 72.8
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

TEST NUMBER: P936792

CATALOG NUMBER: SQ4-FB-050U-075D-B2750-1D-UNV-W2A-W-8-2700K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2874	2874	2874
5°	2808	3322	3864
10°	2547	4843	6405
15°	2165	6327	7734
20°	1763	7332	7883
25°	1470	7673	7723
30°	1240	7721	7708
35°	1096	7593	7907
40°	955	7426	8113
45°	865	7304	8145
50°	794	7195	8010
55°	760	7034	7655
60°	778	6724	7095
65°	809	6255	6324
70°	862	5455	5342
75°	956	4448	4169
80°	1043	3085	2810
85°	927	1636	1438

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8145 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.1	0.9
10°-20°	355.2	4.1
20°-30°	621.3	7.1
30°-40°	799.8	9.1
40°-50°	893.3	10.2
50°-60°	855.6	9.8
60°-70°	678.0	7.7
70°-80°	398.7	4.6
80°-90°	113.1	1.3
90°-100°	298.2	3.4
100°-110°	784.0	8.9
110°-120°	812.9	9.3
120°-130°	652.0	7.4
130°-140°	511.6	5.8
140°-150°	392.7	4.5
150°-160°	282.8	3.2
160°-170°	173.0	2.0
170°-180°	58.5	0.7
0°-30°	1056.6	12.1
0°-40°	1856.4	21.2
0°-60°	3605.3	41.2
0°-90°	4795.1	54.7
90°-120°	1895.1	21.6
90°-150°	3451.4	39.4
90°-180°	3966.0	45.3
0°-180°	8760.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	604	647	729	825	855	56
15°	452	835	1406	1705	1759	126
25°	289	946	1675	1749	1751	133
35°	195	904	1578	1667	1733	122
45°	134	721	1394	1598	1669	103
55°	96	458	1183	1375	1412	87
65°	76	243	878	988	1002	75
75°	56	149	482	530	532	58
85°	20	46	120	132	134	21
90°	4	12	31	16	16	5
95°	39	154	514	265	180	44
105°	141	214	867	1316	1228	150
115°	251	305	694	1385	1581	248
125°	349	391	632	1067	1259	310
135°	416	458	612	861	977	322
145°	482	513	604	735	792	302
155°	545	560	604	663	682	251
165°	588	596	604	628	636	166
175°	612	612	608	616	616	58
180°	612	612	612	612	612	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5	619.5
2.5°	619.5	619.5	623.5	625.5	629.5	631.5	635.4	639.4	651.4	653.4	657.4
5°	603.6	611.5	637.4	647.4	675.3	713.1	729.1	755.0	808.8	824.7	834.6
7.5°	579.7	597.6	661.3	677.3	747.0	846.6	888.4	944.2	1029.9	1071.7	1105.6
10°	541.8	579.7	693.2	731.1	844.6	996.0	1073.7	1151.5	1281.0	1338.7	1360.6
12.5°	500.0	561.7	727.1	778.9	942.2	1163.4	1257.1	1342.7	1490.1	1567.8	1579.8
15°	452.2	535.8	759.0	834.6	1045.8	1302.9	1406.5	1512.0	1649.5	1705.3	1719.2
17.5°	410.4	515.9	788.8	868.5	1125.5	1428.4	1533.9	1621.6	1733.1	1771.0	1780.9
20°	358.6	484.1	808.8	912.3	1209.2	1520.0	1621.6	1689.3	1765.0	1788.9	1792.9
22.5°	320.7	450.2	820.7	928.3	1265.0	1575.8	1661.4	1715.2	1767.0	1775.0	1777.0
25°	288.8	412.3	818.7	946.2	1312.8	1609.6	1675.4	1715.2	1745.1	1749.1	1749.1
27.5°	259.0	370.5	810.7	950.2	1348.7	1617.6	1669.4	1697.3	1711.2	1719.2	1719.2
30°	233.1	330.7	790.8	942.2	1364.6	1609.6	1651.5	1665.4	1679.4	1691.3	1697.3
32.5°	213.1	292.8	760.9	926.3	1366.6	1589.7	1619.6	1627.6	1647.5	1675.4	1685.3
35°	195.2	255.0	727.1	904.4	1354.7	1557.8	1577.8	1585.7	1625.6	1667.4	1681.3
37.5°	177.3	227.1	683.3	866.5	1336.7	1520.0	1533.9	1547.9	1609.6	1659.4	1675.4
40°	159.4	203.2	631.5	824.7	1308.8	1474.2	1486.1	1508.0	1589.7	1647.5	1663.4
42.5°	145.4	183.3	575.7	780.9	1273.0	1422.4	1440.3	1472.2	1565.8	1627.6	1645.5
45°	133.5	163.3	515.9	721.1	1227.2	1368.6	1394.5	1438.3	1537.9	1597.7	1613.6
47.5°	121.5	149.4	454.2	659.4	1177.4	1314.8	1348.7	1398.5	1500.1	1557.8	1571.8
50°	111.6	135.5	392.4	593.6	1123.5	1257.1	1296.9	1348.7	1452.3	1506.1	1524.0
52.5°	103.6	123.5	334.7	527.9	1061.7	1197.3	1243.1	1296.9	1394.5	1446.3	1458.2
55°	95.6	113.5	284.9	458.2	998.0	1133.5	1183.3	1235.1	1330.8	1374.6	1382.5
57.5°	91.6	105.6	243.0	392.4	930.3	1061.7	1117.5	1165.4	1255.1	1288.9	1296.9
60°	85.7	99.6	211.2	336.6	856.6	994.0	1041.8	1089.6	1165.4	1193.3	1199.3
62.5°	79.7	95.6	187.2	282.9	780.9	914.3	962.1	1006.0	1069.7	1089.6	1097.6
65°	75.7	91.6	169.3	243.0	703.2	830.7	878.5	916.3	968.1	988.0	992.0
67.5°	71.7	87.6	155.4	209.2	625.5	747.0	782.9	818.7	858.6	878.5	880.5
70°	65.7	83.7	143.4	185.3	545.8	651.4	681.3	719.1	751.0	760.9	766.9
72.5°	61.8	77.7	135.5	167.3	464.1	559.8	587.6	609.6	637.4	647.4	647.4
75°	55.8	69.7	127.5	149.4	380.5	458.2	482.1	504.0	525.9	529.9	523.9
77.5°	49.8	61.8	109.6	125.5	296.8	362.5	382.5	394.4	412.3	416.3	418.3
80°	41.8	53.8	85.7	97.6	215.1	266.9	280.9	290.8	306.8	306.8	310.8
82.5°	31.9	41.8	61.8	69.7	145.4	183.3	195.2	201.2	211.2	211.2	211.2
85°	19.9	25.9	39.8	45.8	87.6	111.6	119.5	121.5	129.5	131.5	131.5
87.5°	10.0	13.9	25.9	27.9	45.8	57.8	57.8	61.8	61.8	59.8	57.8
90°	4.1	7.4	10.7	11.5	18.0	26.8	31.2	27.7	20.8	15.6	15.6
92.5°	16.4	44.3	72.3	79.3	111.5	154.3	175.7	154.0	110.6	78.0	74.9
95°	39.4	90.5	141.6	154.4	274.1	433.8	513.6	458.4	347.8	264.8	255.5
97.5°	68.1	113.1	158.3	169.5	369.2	635.4	768.6	733.7	663.7	611.3	593.4
100°	90.3	131.2	172.0	182.3	403.9	699.3	847.0	849.6	854.7	858.5	837.1
102.5°	109.3	147.4	185.5	195.0	419.7	719.4	869.2	913.7	1002.8	1069.5	1051.3
105°	141.2	173.5	205.9	213.9	431.6	721.7	866.7	966.5	1166.2	1315.9	1306.1
107.5°	174.1	204.2	234.3	241.8	433.7	689.5	817.4	956.7	1235.1	1444.0	1446.4
110°	196.2	223.4	250.7	257.5	430.5	661.0	776.4	932.1	1243.3	1476.8	1487.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	218.0	243.9	269.8	276.3	430.6	636.2	739.0	898.3	1216.9	1455.9	1471.6
115°	250.9	274.8	298.7	304.7	434.6	607.8	694.3	847.8	1154.7	1384.8	1406.6
117.5°	283.3	305.0	326.7	332.2	442.6	589.8	663.4	802.0	1079.0	1286.7	1310.8
120°	302.2	322.6	343.1	348.2	449.2	583.9	651.2	777.7	1030.8	1220.6	1244.0
122.5°	320.6	341.2	361.8	367.0	458.6	580.7	641.7	755.7	983.6	1154.6	1177.7
125°	349.0	367.7	386.5	391.2	471.3	578.1	631.5	728.3	921.9	1067.1	1088.4
127.5°	372.0	390.9	409.9	414.6	484.1	576.6	622.8	706.0	872.2	996.9	1014.8
130°	384.3	404.7	425.2	430.3	493.3	577.5	619.5	693.5	841.5	952.5	969.1
132.5°	397.0	417.4	437.9	443.0	500.9	578.1	616.7	683.0	815.4	914.7	929.6
135°	415.9	434.6	453.1	457.8	509.1	577.5	611.7	667.2	778.2	861.3	874.2
137.5°	435.3	453.7	472.1	476.7	521.4	581.1	610.9	657.9	751.7	822.0	832.5
140°	451.2	468.2	485.2	489.4	529.0	581.7	608.1	648.6	729.6	790.3	800.1
142.5°	463.5	479.2	494.9	498.8	535.3	583.8	608.1	643.6	714.8	768.2	776.7
145°	482.5	496.1	509.9	513.2	543.5	583.9	604.0	633.1	691.3	734.9	741.3
147.5°	501.3	514.6	528.0	531.3	555.5	587.8	604.0	626.9	672.6	707.0	712.2
150°	513.6	525.7	537.7	540.7	561.8	589.9	604.0	623.3	662.0	691.0	695.3
152.5°	526.4	535.5	544.6	546.9	565.9	591.3	604.0	620.5	653.5	678.3	681.6
155°	545.2	552.0	558.8	560.4	575.0	594.3	604.0	617.1	643.3	663.0	665.2
157.5°	559.2	565.7	572.3	574.0	584.0	597.3	604.0	614.1	634.6	649.9	651.4
160°	568.6	573.8	578.9	580.2	588.1	598.7	604.0	612.7	630.2	643.3	644.2
162.5°	578.1	582.0	585.7	586.7	592.5	600.2	604.0	611.3	626.2	637.2	638.0
165°	588.3	591.8	595.2	596.1	598.7	602.2	604.0	609.3	619.8	627.8	628.7
167.5°	597.8	599.4	601.1	601.5	603.7	606.6	608.1	611.5	618.5	623.7	624.1
170°	604.0	605.6	607.3	607.7	607.8	608.0	608.1	611.5	618.5	623.7	623.7
172.5°	607.3	607.7	608.0	608.1	608.1	608.1	608.1	610.8	616.3	620.4	620.1
175°	611.7	611.7	611.7	611.7	610.5	608.9	608.1	609.8	613.2	615.8	615.8
177.5°	611.7	611.7	611.7	611.7	610.7	609.5	608.9	610.2	612.9	615.0	614.6
180°	611.7	611.7	611.7	611.7	611.7	611.7	611.7	611.7	611.7	611.7	611.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	619.5	619.5
2.5°	661.3	657.4
5°	850.6	854.6
7.5°	1145.5	1143.5
10°	1424.4	1442.3
12.5°	1627.6	1631.5
15°	1751.1	1759.0
17.5°	1798.9	1800.9
20°	1800.9	1796.9
22.5°	1779.0	1775.0
25°	1753.1	1751.1
27.5°	1729.2	1731.1
30°	1719.2	1725.2
32.5°	1719.2	1729.2
35°	1723.2	1733.1
37.5°	1721.2	1733.1
40°	1713.2	1727.2
42.5°	1691.3	1701.3
45°	1657.4	1669.4
47.5°	1613.6	1621.6
50°	1557.8	1565.8
52.5°	1488.1	1490.1
55°	1404.5	1412.4
57.5°	1314.8	1316.8
60°	1215.2	1221.2
62.5°	1109.5	1109.5
65°	998.0	1002.0
67.5°	882.5	892.4
70°	764.9	766.9
72.5°	649.4	649.4
75°	529.9	531.9
77.5°	416.3	416.3
80°	308.8	310.8
82.5°	213.1	217.1
85°	133.5	133.5
87.5°	61.8	55.8
90°	15.6	15.6
92.5°	62.4	50.1
95°	217.8	180.3
97.5°	521.9	450.4
100°	752.0	666.7
102.5°	978.3	905.3
105°	1266.8	1227.6
107.5°	1455.9	1465.3
110°	1527.9	1568.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1534.3	1597.1
115°	1493.6	1580.7
117.5°	1407.4	1504.0
120°	1337.8	1431.7
122.5°	1270.2	1362.7
125°	1173.6	1258.8
127.5°	1086.7	1158.6
130°	1035.5	1102.0
132.5°	989.1	1048.6
135°	925.5	976.8
137.5°	874.5	916.4
140°	839.3	878.6
142.5°	810.3	844.1
145°	766.9	792.4
147.5°	733.5	754.7
150°	712.4	729.6
152.5°	694.5	707.5
155°	673.8	682.4
157.5°	657.5	663.4
160°	647.7	651.2
162.5°	641.3	644.6
165°	632.1	635.5
167.5°	625.5	627.0
170°	623.7	623.7
172.5°	618.8	617.5
175°	615.8	615.8
177.5°	613.2	611.7
180°	611.7	611.7

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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	5.09	6.04	6.00	6.97	8.17	18.27	19.22	19.18	20.15	21.35
	3H	5.81	6.66	6.72	7.60	8.82	20.12	20.97	21.04	21.91	23.14
	4H	6.11	6.92	7.04	7.86	9.09	20.77	21.58	21.70	22.52	23.75
	6H	6.36	7.11	7.31	8.06	9.31	21.20	21.95	22.15	22.90	24.15
	8H	6.43	7.15	7.39	8.12	9.36	21.33	22.04	22.28	23.01	24.25
	12H	6.45	7.13	7.41	8.10	9.37	21.40	22.08	22.36	23.04	24.31
4H	2H	12.32	13.13	13.26	14.07	15.31	18.56	19.37	19.50	20.31	21.54
	3H	13.90	14.57	14.85	15.55	16.80	20.61	21.29	21.56	22.27	23.51
	4H	13.99	14.61	14.95	15.58	16.85	21.38	22.00	22.34	22.97	24.24
	6H	14.01	14.55	14.98	15.54	16.81	21.93	22.46	22.90	23.46	24.73
	8H	13.99	14.49	14.96	15.48	16.76	22.09	22.59	23.07	23.58	24.86
	12H	13.95	14.40	14.95	15.41	16.70	22.19	22.64	23.18	23.65	24.94
8H	4H	15.45	15.95	16.42	16.94	18.22	21.45	21.95	22.43	22.94	24.22
	6H	15.69	16.11	16.69	17.14	18.42	22.08	22.50	23.08	23.53	24.81
	8H	15.71	16.08	16.72	17.10	18.40	22.30	22.67	23.31	23.69	24.99
	12H	15.68	16.01	16.70	17.02	18.37	22.45	22.78	23.47	23.79	25.13
12H	4H	15.59	16.05	16.59	17.05	18.34	21.41	21.86	22.40	22.86	24.15
	6H	15.95	16.32	16.96	17.34	18.64	22.07	22.44	23.08	23.45	24.75
	8H	16.03	16.35	17.04	17.36	18.71	22.30	22.63	23.32	23.64	24.98