

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: P937740

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937740
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-92765-1D-UNV-STD-W-6-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

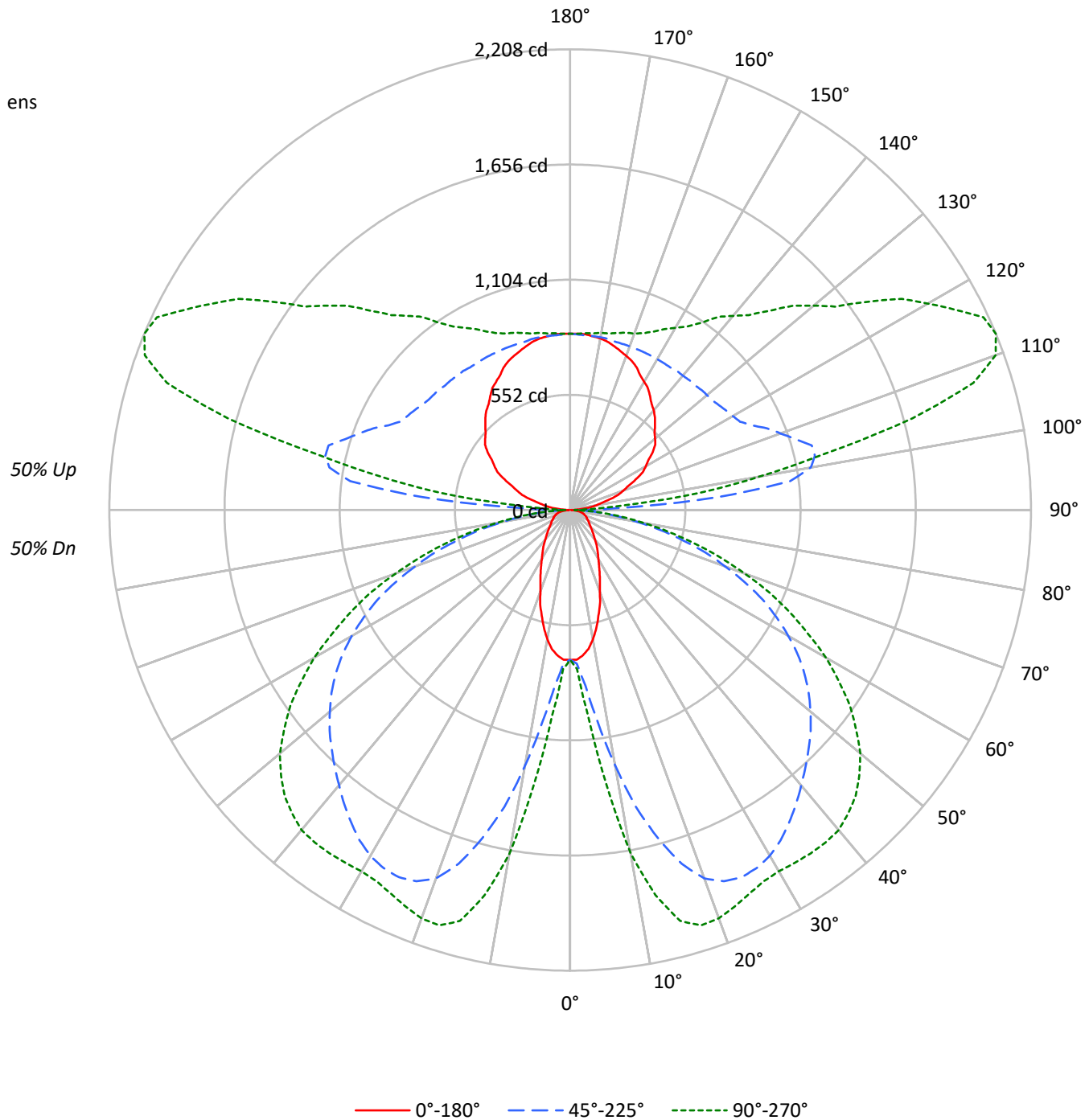
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11040.3 lumens
Efficiency: N/A
Efficacy: 107.0 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: General Diffuse

Input Watts (W): 103.2
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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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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4442	4442	4442
5°	4338	5133	5971
10°	3933	7481	9899
15°	3342	9771	11953
20°	2719	11320	12182
25°	2268	11843	11934
30°	1912	11914	11912
35°	1689	11714	12220
40°	1471	11453	12538
45°	1331	11261	12587
50°	1220	11089	12379
55°	1167	10837	11830
60°	1193	10356	10964
65°	1241	9627	9773
70°	1318	8391	8257
75°	1456	6835	6443
80°	1579	4735	4342
85°	1377	2507	2222

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12587 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.9	0.8
10°-20°	411.7	3.7
20°-30°	720.1	6.5
30°-40°	927.0	8.4
40°-50°	1035.4	9.4
50°-60°	991.7	9.0
60°-70°	785.9	7.1
70°-80°	462.1	4.2
80°-90°	131.6	1.2
90°-100°	412.2	3.7
100°-110°	1083.7	9.8
110°-120°	1123.7	10.2
120°-130°	901.3	8.2
130°-140°	707.2	6.4
140°-150°	542.8	4.9
150°-160°	390.9	3.5
160°-170°	239.2	2.2
170°-180°	80.8	0.7
0°-30°	1224.7	11.1
0°-40°	2151.7	19.5
0°-60°	4178.7	37.8
0°-90°	5558.4	50.3
90°-120°	2619.6	23.7
90°-150°	4771.0	43.2
90°-180°	5482.0	49.7
0°-180°	11040.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	700	750	845	956	991	65
15°	524	968	1630	1976	2039	146
25°	335	1097	1942	2027	2030	154
35°	226	1048	1829	1933	2009	141
45°	155	836	1616	1852	1935	120
55°	111	531	1372	1593	1637	101
65°	88	282	1018	1145	1161	87
75°	65	173	559	614	616	68
85°	23	53	138	152	155	24
90°	6	16	43	22	22	6
95°	54	213	710	366	249	61
105°	195	296	1198	1819	1697	207
115°	347	421	960	1914	2185	343
125°	482	541	873	1475	1740	428
135°	575	633	846	1191	1350	445
145°	667	709	835	1016	1095	418
155°	754	775	835	917	943	346
165°	813	824	835	868	878	230
175°	846	846	840	851	851	80
180°	846	846	846	846	846	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	718.1	718.1	718.1	718.1	718.1	718.1	718.1	718.1	718.1	718.1	718.1
2.5°	718.1	718.1	722.7	725.0	729.6	732.0	736.5	741.2	755.0	757.4	762.0
5°	699.6	708.9	738.9	750.5	782.7	826.6	845.1	875.1	937.5	955.9	967.5
7.5°	671.9	692.7	766.6	785.0	865.9	981.3	1029.8	1094.5	1193.7	1242.2	1281.5
10°	628.0	671.9	803.5	847.4	979.0	1154.5	1244.6	1334.6	1484.7	1551.7	1577.0
12.5°	579.5	651.1	842.8	902.8	1092.1	1348.4	1457.0	1556.2	1727.1	1817.2	1831.0
15°	524.1	621.1	879.7	967.5	1212.2	1510.1	1630.2	1752.5	1911.9	1976.5	1992.7
17.5°	475.6	598.0	914.4	1006.7	1304.6	1655.5	1777.9	1879.5	2008.8	2052.7	2064.2
20°	415.6	561.1	937.5	1057.5	1401.6	1761.8	1879.5	1958.0	2045.8	2073.4	2078.1
22.5°	371.8	521.9	951.3	1076.0	1466.2	1826.4	1925.7	1988.0	2048.0	2057.3	2059.6
25°	334.8	477.9	949.0	1096.7	1521.6	1865.7	1941.9	1988.0	2022.7	2027.3	2027.3
27.5°	300.2	429.4	939.7	1101.4	1563.2	1874.9	1934.9	1967.3	1983.4	1992.7	1992.7
30°	270.2	383.3	916.6	1092.1	1581.7	1865.7	1914.1	1930.3	1946.4	1960.4	1967.3
32.5°	247.1	339.4	882.0	1073.6	1584.0	1842.6	1877.2	1886.4	1909.5	1941.9	1953.4
35°	226.3	295.5	842.8	1048.3	1570.1	1805.6	1828.7	1837.9	1884.1	1932.6	1948.8
37.5°	205.5	263.2	792.0	1004.4	1549.3	1761.8	1777.9	1794.1	1865.7	1923.3	1941.9
40°	184.7	235.5	732.0	955.9	1517.0	1708.7	1722.5	1747.9	1842.6	1909.5	1928.0
42.5°	168.6	212.4	667.3	905.1	1475.4	1648.6	1669.4	1706.3	1814.8	1886.4	1907.2
45°	154.7	189.3	598.0	835.9	1422.3	1586.2	1616.2	1667.1	1782.5	1851.8	1870.3
47.5°	140.8	173.2	526.4	764.3	1364.6	1523.9	1563.2	1620.9	1738.7	1805.6	1821.8
50°	129.3	157.0	454.9	688.0	1302.2	1457.0	1503.2	1563.2	1683.3	1745.6	1766.3
52.5°	120.1	143.2	387.9	611.9	1230.6	1387.7	1440.8	1503.2	1616.2	1676.3	1690.2
55°	110.8	131.6	330.2	531.0	1156.8	1313.8	1371.6	1431.6	1542.4	1593.2	1602.4
57.5°	106.2	122.3	281.7	454.9	1078.3	1230.6	1295.3	1350.7	1454.7	1493.9	1503.2
60°	99.2	115.4	244.8	390.2	992.9	1152.1	1207.6	1263.0	1350.7	1383.1	1390.0
62.5°	92.3	110.8	217.0	327.8	905.1	1059.8	1115.2	1166.1	1239.9	1263.0	1272.2
65°	87.8	106.2	196.3	281.7	815.0	962.9	1018.2	1062.1	1122.1	1145.2	1149.9
67.5°	83.1	101.6	180.1	242.4	725.0	865.9	907.5	949.0	995.1	1018.2	1020.6
70°	76.2	97.0	166.3	214.8	632.7	755.0	789.7	833.5	870.5	882.0	889.0
72.5°	71.6	90.1	157.0	193.9	538.0	648.8	681.1	706.5	738.9	750.5	750.5
75°	64.7	80.8	147.8	173.2	441.0	531.0	558.8	584.2	609.5	614.2	607.3
77.5°	57.8	71.6	127.0	145.5	344.0	420.3	443.4	457.2	477.9	482.6	484.9
80°	48.5	62.3	99.2	113.2	249.3	309.4	325.6	337.1	355.6	355.6	360.2
82.5°	36.9	48.5	71.6	80.8	168.6	212.4	226.3	233.2	244.8	244.8	244.8
85°	23.1	30.0	46.2	53.1	101.6	129.3	138.5	140.8	150.1	152.4	152.4
87.5°	11.6	16.2	30.0	32.3	53.1	66.9	66.9	71.6	71.6	69.3	66.9
90°	5.6	10.2	14.7	15.9	25.0	37.1	43.1	38.3	28.7	21.6	21.6
92.5°	22.7	61.3	99.9	109.5	154.0	213.2	242.9	212.9	152.8	107.8	103.5
95°	54.5	125.1	195.8	213.4	379.0	599.6	710.0	633.6	480.7	366.0	353.0
97.5°	94.2	156.5	218.9	234.4	510.4	878.4	1062.5	1014.2	917.6	845.1	820.3
100°	124.9	181.4	237.9	252.0	558.2	966.6	1170.8	1174.3	1181.4	1186.7	1157.2
102.5°	151.0	203.8	256.4	269.6	580.3	994.4	1201.4	1263.0	1386.1	1478.4	1453.2
105°	195.2	239.9	284.5	295.7	596.5	997.6	1198.1	1336.1	1612.0	1818.9	1805.4
107.5°	240.6	282.3	323.9	334.3	599.5	953.1	1130.0	1322.4	1707.3	1996.0	1999.3
110°	271.3	308.8	346.5	355.8	595.0	913.8	1073.2	1288.3	1718.7	2041.4	2055.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	301.4	337.2	373.0	382.0	595.2	879.4	1021.5	1241.7	1682.2	2012.5	2034.1
115°	346.8	379.8	412.8	421.1	600.6	840.0	959.7	1171.8	1596.1	1914.3	1944.4
117.5°	391.6	421.6	451.6	459.1	611.7	815.3	917.1	1108.6	1491.4	1778.6	1812.0
120°	417.7	446.0	474.2	481.3	620.9	807.0	900.1	1075.0	1424.9	1687.3	1719.7
122.5°	443.3	471.7	500.3	507.4	633.9	802.7	887.1	1044.6	1359.6	1595.9	1627.9
125°	482.4	508.4	534.4	540.9	651.6	799.1	872.9	1006.7	1274.3	1475.1	1504.5
127.5°	514.2	540.4	566.7	573.3	669.1	797.0	861.0	975.9	1205.6	1378.0	1402.8
130°	531.2	559.5	587.7	594.8	682.0	798.3	856.4	958.7	1163.2	1316.7	1339.6
132.5°	548.8	577.1	605.3	612.4	692.4	799.1	852.4	944.0	1127.1	1264.5	1285.0
135°	574.9	600.6	626.4	632.8	703.8	798.3	845.6	922.3	1075.6	1190.7	1208.5
137.5°	601.5	627.0	652.6	658.9	720.8	803.3	844.5	909.4	1039.0	1136.2	1150.7
140°	623.7	647.2	670.7	676.5	731.2	804.0	840.5	896.5	1008.5	1092.5	1106.0
142.5°	640.7	662.5	684.1	689.6	739.9	806.9	840.5	889.7	988.0	1061.8	1073.5
145°	666.9	685.8	704.7	709.4	751.3	807.0	834.9	875.1	955.6	1015.9	1024.7
147.5°	693.0	711.3	729.7	734.3	767.8	812.5	834.9	866.5	929.8	977.3	984.6
150°	710.0	726.6	743.3	747.4	776.6	815.4	834.9	861.6	915.0	955.1	961.0
152.5°	727.6	740.3	752.8	756.0	782.3	817.3	834.9	857.7	903.4	937.6	942.0
155°	753.7	763.0	772.3	774.6	794.7	821.5	834.9	853.1	889.4	916.6	919.6
157.5°	773.0	782.1	791.1	793.4	807.2	825.7	834.9	849.0	877.3	898.4	900.5
160°	786.0	793.1	800.2	801.9	812.9	827.6	834.9	847.0	871.2	889.4	890.5
162.5°	799.1	804.4	809.7	811.0	818.9	829.6	834.9	845.1	865.5	880.8	881.9
165°	813.3	818.0	822.9	824.0	827.7	832.5	834.9	842.1	856.8	867.8	869.0
167.5°	826.3	828.6	830.9	831.4	834.4	838.5	840.5	845.3	854.9	862.1	862.6
170°	834.9	837.1	839.4	840.0	840.1	840.4	840.5	845.3	854.9	862.1	862.1
172.5°	839.4	839.9	840.4	840.5	840.5	840.5	840.5	844.3	851.9	857.5	857.1
175°	845.6	845.6	845.6	845.6	843.9	841.6	840.5	842.9	847.7	851.3	851.3
177.5°	845.6	845.6	845.6	845.6	844.3	842.6	841.7	843.6	847.3	850.1	849.6
180°	845.6	845.6	845.6	845.6	845.6	845.6	845.6	845.6	845.6	845.6	845.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	718.1	718.1
2.5°	766.6	762.0
5°	986.0	990.6
7.5°	1327.7	1325.3
10°	1650.9	1671.7
12.5°	1886.4	1891.0
15°	2029.6	2038.9
17.5°	2085.0	2087.3
20°	2087.3	2082.7
22.5°	2061.9	2057.3
25°	2031.9	2029.6
27.5°	2004.2	2006.5
30°	1992.7	1999.6
32.5°	1992.7	2004.2
35°	1997.3	2008.8
37.5°	1994.9	2008.8
40°	1985.7	2001.8
42.5°	1960.4	1971.9
45°	1921.1	1934.9
47.5°	1870.3	1879.5
50°	1805.6	1814.8
52.5°	1724.8	1727.1
55°	1627.8	1637.1
57.5°	1523.9	1526.2
60°	1408.5	1415.4
62.5°	1286.1	1286.1
65°	1156.8	1161.4
67.5°	1022.9	1034.4
70°	886.6	889.0
72.5°	752.7	752.7
75°	614.2	616.5
77.5°	482.6	482.6
80°	357.9	360.2
82.5°	247.1	251.7
85°	154.7	154.7
87.5°	71.6	64.7
90°	21.6	21.6
92.5°	86.3	69.2
95°	301.1	249.1
97.5°	721.4	622.6
100°	1039.4	921.6
102.5°	1352.3	1251.4
105°	1751.1	1696.9
107.5°	2012.5	2025.6
110°	2112.1	2168.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2120.9	2207.7
115°	2064.7	2185.0
117.5°	1945.4	2078.9
120°	1849.4	1979.0
122.5°	1755.8	1883.7
125°	1622.2	1740.0
127.5°	1502.3	1601.6
130°	1431.5	1523.3
132.5°	1367.3	1449.5
135°	1279.3	1350.2
137.5°	1208.7	1266.8
140°	1160.3	1214.5
142.5°	1120.2	1166.9
145°	1060.1	1095.4
147.5°	1013.9	1043.2
150°	984.8	1008.5
152.5°	959.9	977.9
155°	931.4	943.2
157.5°	908.8	917.1
160°	895.4	900.1
162.5°	886.4	891.0
165°	873.8	878.5
167.5°	864.6	866.6
170°	862.1	862.1
172.5°	855.3	853.6
175°	851.3	851.3
177.5°	847.6	845.6
180°	845.6	845.6



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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	6.21	7.12	7.16	8.08	9.35	19.38	20.28	20.32	21.25	22.51
	3H	6.92	7.73	7.88	8.71	10.00	21.22	22.03	22.17	23.00	24.29
	4H	7.22	7.99	8.19	8.97	10.27	21.86	22.63	22.83	23.61	24.90
	6H	7.48	8.19	8.46	9.17	10.48	22.29	23.00	23.27	23.98	25.29
	8H	7.55	8.22	8.53	9.23	10.53	22.41	23.08	23.40	24.09	25.39
	12H	7.56	8.21	8.56	9.21	10.54	22.48	23.12	23.47	24.12	25.45
4H	2H	13.43	14.19	14.40	15.18	16.47	19.66	20.43	20.64	21.41	22.70
	3H	15.00	15.64	15.98	16.65	17.96	21.70	22.35	22.69	23.36	24.67
	4H	15.09	15.68	16.09	16.69	18.02	22.47	23.06	23.46	24.06	25.39
	6H	15.11	15.62	16.12	16.64	17.97	23.01	23.52	24.01	24.54	25.87
	8H	15.09	15.56	16.10	16.58	17.93	23.17	23.64	24.18	24.66	26.01
	12H	15.04	15.48	16.07	16.51	17.86	23.26	23.69	24.29	24.73	26.08
8H	4H	16.54	17.02	17.55	18.04	19.38	22.53	23.01	23.54	24.03	25.37
	6H	16.78	17.18	17.82	18.24	19.58	23.16	23.55	24.19	24.62	25.96
	8H	16.80	17.15	17.84	18.20	19.56	23.38	23.73	24.42	24.77	26.13
	12H	16.77	17.08	17.82	18.12	19.53	23.52	23.83	24.57	24.87	26.27
12H	4H	16.68	17.11	17.71	18.15	19.50	22.49	22.92	23.52	23.95	25.30
	6H	17.04	17.39	18.08	18.44	19.80	23.14	23.49	24.19	24.54	25.90
	8H	17.11	17.42	18.16	18.46	19.87	23.37	23.68	24.42	24.72	26.13