

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: P937219

Luminaire Tested: SQ4-FB-075U-100D-840-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937219
REPORT IS A COMBINATION OF REPORTS P933511 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

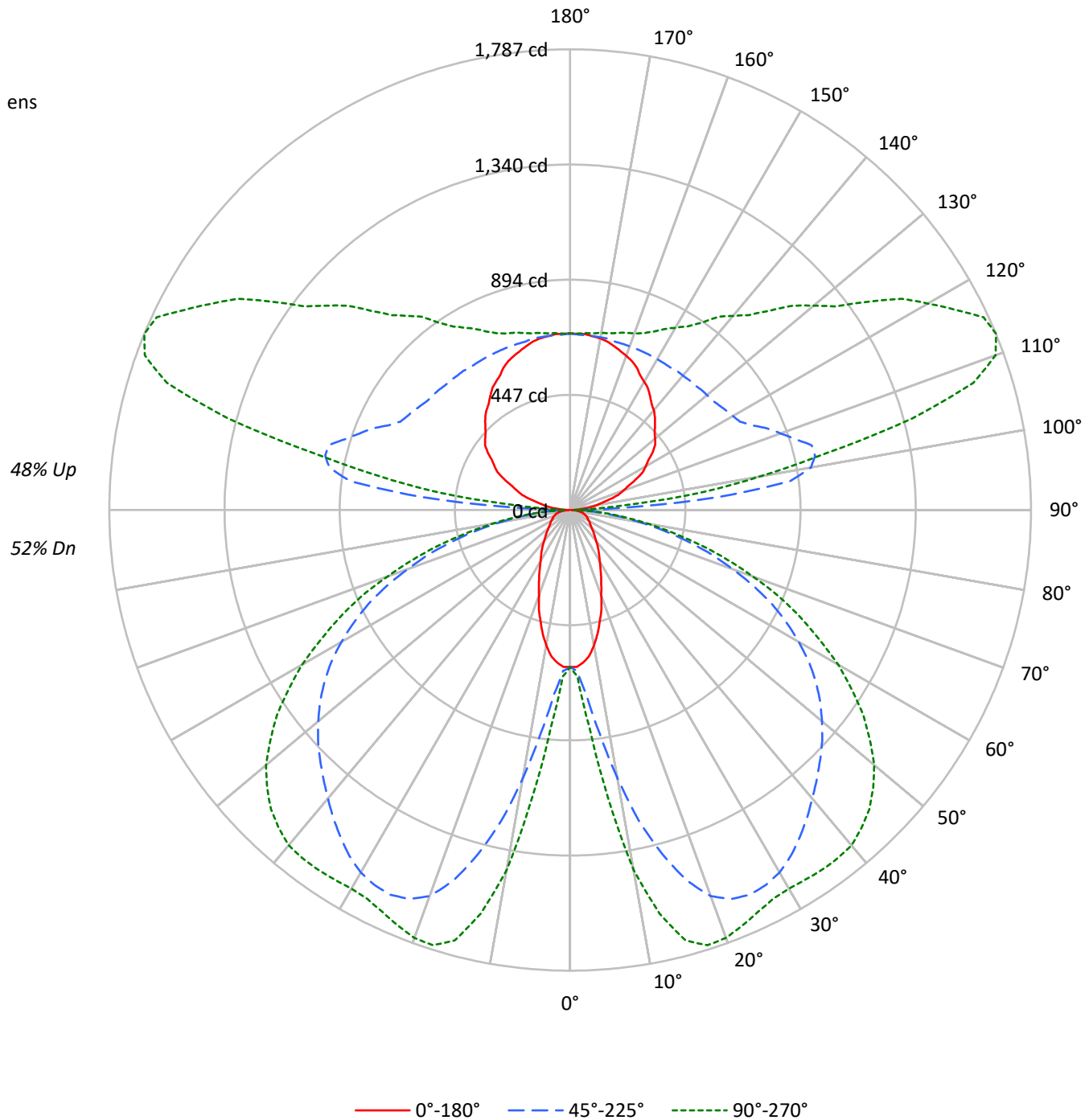
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9150.9 lumens
Efficiency: N/A
Efficacy: 119.2 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: General Diffuse

Input Watts (W): 76.8
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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	47	47	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	39	39	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	32	32	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	27	27	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	23	23	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	20	20	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	18	18	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	16	16	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	14	14	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	12	12	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3767	3767	3767
5°	3679	4353	5063
10°	3335	6344	8394
15°	2834	8286	10136
20°	2306	9599	10330
25°	1924	10043	10120
30°	1621	10104	10101
35°	1432	9934	10363
40°	1247	9713	10632
45°	1129	9550	10674
50°	1035	9403	10497
55°	990	9190	10032
60°	1013	8782	9297
65°	1051	8164	8287
70°	1117	7116	7001
75°	1233	5796	5464
80°	1338	4014	3682
85°	1169	2127	1885

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10674 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.8	0.9
10°-20°	349.1	3.8
20°-30°	610.6	6.7
30°-40°	786.1	8.6
40°-50°	878.0	9.6
50°-60°	840.9	9.2
60°-70°	666.5	7.3
70°-80°	391.9	4.3
80°-90°	111.5	1.2
90°-100°	333.7	3.6
100°-110°	877.2	9.6
110°-120°	909.6	9.9
120°-130°	729.6	8.0
130°-140°	572.5	6.3
140°-150°	439.4	4.8
150°-160°	316.4	3.5
160°-170°	193.6	2.1
170°-180°	65.4	0.7
0°-30°	1038.5	11.3
0°-40°	1824.6	19.9
0°-60°	3543.6	38.7
0°-90°	4713.4	51.5
90°-120°	2120.5	23.2
90°-150°	3862.0	42.2
90°-180°	4437.0	48.5
0°-180°	9150.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	609	609	609	609	609	
5°	593	636	717	811	840	55
15°	444	820	1382	1676	1729	124
25°	284	930	1647	1719	1721	131
35°	192	889	1551	1639	1704	120
45°	131	709	1371	1570	1641	101
55°	94	450	1163	1351	1388	86
65°	74	239	864	971	985	74
75°	55	147	474	521	523	57
85°	20	45	118	129	131	21
90°	4	13	35	18	18	5
95°	44	173	575	296	202	49
105°	158	239	970	1472	1374	168
115°	281	341	777	1550	1769	277
125°	390	438	707	1194	1409	347
135°	465	512	684	964	1093	360
145°	540	574	676	822	887	338
155°	610	627	676	742	764	280
165°	658	667	676	702	711	186
175°	684	684	680	689	689	65
180°	684	684	684	684	684	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	608.9	608.9	608.9	608.9	608.9	608.9	608.9	608.9	608.9	608.9	608.9
2.5°	608.9	608.9	612.9	614.8	618.7	620.7	624.6	628.6	640.2	642.2	646.2
5°	593.3	601.1	626.6	636.4	663.7	701.0	716.6	742.1	794.9	810.7	820.4
7.5°	569.8	587.4	650.1	665.7	734.3	832.2	873.3	928.1	1012.3	1053.4	1086.7
10°	532.5	569.8	681.4	718.6	830.2	979.0	1055.4	1131.8	1259.0	1315.8	1337.4
12.5°	491.4	552.2	714.7	765.6	926.2	1143.5	1235.5	1319.7	1464.6	1541.0	1552.7
15°	444.5	526.7	746.0	820.4	1027.9	1280.5	1382.4	1486.1	1621.2	1676.0	1689.8
17.5°	403.4	507.1	775.4	853.7	1106.3	1403.9	1507.7	1593.8	1703.5	1740.7	1750.4
20°	352.4	475.8	794.9	896.8	1188.6	1494.0	1593.8	1660.4	1734.8	1758.3	1762.2
22.5°	315.3	442.5	806.7	912.4	1243.3	1548.8	1633.0	1685.8	1736.8	1744.6	1746.6
25°	284.0	405.3	804.7	930.1	1290.3	1582.1	1646.7	1685.8	1715.3	1719.1	1719.1
27.5°	254.5	364.2	796.9	934.0	1325.6	1589.9	1640.8	1668.2	1682.0	1689.8	1689.8
30°	229.1	325.1	777.4	926.2	1341.2	1582.1	1623.2	1636.9	1650.7	1662.3	1668.2
32.5°	209.6	287.8	747.9	910.4	1343.2	1562.5	1591.9	1599.7	1619.2	1646.7	1656.5
35°	191.9	250.7	714.7	888.9	1331.4	1531.2	1550.8	1558.6	1597.7	1638.9	1652.5
37.5°	174.3	223.2	671.6	851.8	1313.8	1494.0	1507.7	1521.4	1582.1	1631.0	1646.7
40°	156.6	199.7	620.7	810.7	1286.4	1448.9	1460.7	1482.2	1562.5	1619.2	1634.9
42.5°	143.0	180.1	565.8	767.6	1251.2	1398.0	1415.6	1446.9	1539.0	1599.7	1617.4
45°	131.2	160.6	507.1	708.8	1206.2	1345.2	1370.7	1413.7	1511.5	1570.3	1586.0
47.5°	119.4	146.8	446.5	648.1	1157.1	1292.3	1325.6	1374.5	1474.4	1531.2	1544.8
50°	109.7	133.2	385.7	583.5	1104.3	1235.5	1274.7	1325.6	1427.4	1480.2	1497.9
52.5°	101.9	121.4	328.9	518.9	1043.6	1176.8	1221.8	1274.7	1370.7	1421.5	1433.3
55°	94.0	111.6	280.0	450.3	981.0	1114.1	1163.1	1214.0	1307.9	1351.0	1358.9
57.5°	90.1	103.7	238.9	385.7	914.4	1043.6	1098.5	1145.5	1233.5	1266.8	1274.7
60°	84.2	97.9	207.6	330.9	842.0	977.0	1024.1	1071.0	1145.5	1172.9	1178.7
62.5°	78.3	94.0	184.1	278.0	767.6	898.7	945.7	988.8	1051.4	1071.0	1078.9
65°	74.4	90.1	166.5	238.9	691.2	816.5	863.5	900.7	951.6	971.2	975.1
67.5°	70.4	86.2	152.7	205.6	614.8	734.3	769.5	804.7	843.9	863.5	865.5
70°	64.6	82.2	141.0	182.1	536.5	640.2	669.7	706.8	738.1	747.9	753.8
72.5°	60.7	76.4	133.2	164.5	456.3	550.2	577.6	599.1	626.6	636.4	636.4
75°	54.8	68.6	125.3	146.8	374.0	450.3	473.8	495.4	516.9	520.9	514.9
77.5°	48.9	60.7	107.7	123.4	291.8	356.4	375.9	387.7	405.3	409.2	411.2
80°	41.1	52.9	84.2	95.9	211.4	262.4	276.0	285.8	301.5	301.5	305.5
82.5°	31.3	41.1	60.7	68.6	143.0	180.1	191.9	197.8	207.6	207.6	207.6
85°	19.6	25.5	39.1	45.1	86.2	109.7	117.5	119.4	127.3	129.2	129.2
87.5°	9.8	13.7	25.5	27.4	45.1	56.8	56.8	60.7	60.7	58.8	56.8
90°	4.5	8.2	12.0	12.8	20.2	29.9	34.9	31.0	23.3	17.5	17.5
92.5°	18.4	49.6	80.8	88.6	124.6	172.6	196.6	172.3	123.7	87.2	83.8
95°	44.1	101.3	158.4	172.7	306.7	485.4	574.7	512.9	389.1	296.3	285.8
97.5°	76.3	126.7	177.0	189.7	413.2	711.1	860.1	820.9	742.8	684.1	664.0
100°	101.1	146.8	192.6	204.0	451.9	782.5	947.8	950.7	956.4	960.6	936.8
102.5°	122.2	164.9	207.6	218.2	469.7	804.9	972.6	1022.4	1122.1	1196.8	1176.3
105°	158.1	194.2	230.4	239.4	482.8	807.5	969.8	1081.5	1304.9	1472.4	1461.4
107.5°	194.8	228.5	262.2	270.6	485.3	771.5	914.7	1070.5	1382.1	1615.8	1618.4
110°	219.6	250.1	280.4	288.0	481.6	739.7	868.7	1042.9	1391.3	1652.5	1664.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	243.9	272.9	301.9	309.1	481.7	711.9	827.0	1005.2	1361.7	1629.0	1646.6
115°	280.7	307.5	334.1	340.9	486.2	679.9	776.9	948.6	1292.0	1549.6	1573.9
117.5°	317.0	341.3	365.6	371.7	495.3	660.0	742.4	897.4	1207.3	1439.8	1466.8
120°	338.1	361.0	383.8	389.6	502.6	653.3	728.6	870.2	1153.4	1365.8	1392.1
122.5°	358.8	381.9	405.0	410.7	513.2	649.8	718.1	845.5	1100.5	1291.8	1317.7
125°	390.5	411.5	432.5	437.8	527.4	646.8	706.6	814.9	1031.6	1194.0	1217.8
127.5°	416.2	437.5	458.6	464.0	541.6	645.2	696.9	789.9	975.9	1115.5	1135.6
130°	430.0	452.9	475.7	481.5	552.1	646.3	693.3	776.1	941.7	1065.9	1084.4
132.5°	444.2	467.1	489.9	495.7	560.5	646.8	690.0	764.1	912.4	1023.6	1040.2
135°	465.3	486.2	507.0	512.3	569.7	646.3	684.5	746.5	870.7	963.8	978.1
137.5°	487.0	507.5	528.2	533.3	583.4	650.2	683.6	736.1	841.0	919.7	931.5
140°	504.9	523.8	542.9	547.6	591.9	650.9	680.3	725.7	816.4	884.4	895.3
142.5°	518.7	536.3	553.9	558.2	598.9	653.2	680.3	720.2	799.8	859.6	869.0
145°	539.8	555.2	570.4	574.2	608.1	653.3	675.8	708.4	773.5	822.3	829.4
147.5°	560.9	575.8	590.7	594.5	621.6	657.7	675.8	701.4	752.7	791.1	797.0
150°	574.7	588.2	601.7	605.1	628.7	660.1	675.8	697.4	740.7	773.2	778.0
152.5°	588.9	599.2	609.4	612.0	633.2	661.6	675.8	694.3	731.2	759.0	762.6
155°	610.1	617.6	625.2	627.1	643.3	664.9	675.8	690.5	720.0	742.0	744.4
157.5°	625.7	633.1	640.4	642.3	653.5	668.4	675.8	687.3	710.1	727.3	728.9
160°	636.3	642.0	647.7	649.1	658.0	669.9	675.8	685.6	705.1	719.9	720.8
162.5°	646.8	651.2	655.4	656.5	662.9	671.5	675.8	684.1	700.6	713.0	713.9
165°	658.3	662.3	666.1	667.1	670.0	673.8	675.8	681.7	693.6	702.5	703.5
167.5°	668.9	670.8	672.5	673.0	675.5	678.8	680.3	684.2	692.0	697.8	698.2
170°	675.8	677.7	679.4	679.9	680.0	680.2	680.3	684.2	692.0	697.8	697.8
172.5°	679.4	679.8	680.2	680.3	680.3	680.3	680.3	683.4	689.5	694.2	693.8
175°	684.5	684.5	684.5	684.5	683.1	681.2	680.3	682.3	686.2	689.1	689.1
177.5°	684.5	684.5	684.5	684.5	683.4	682.0	681.3	682.9	686.0	688.2	687.8
180°	684.5	684.5	684.5	684.5	684.5	684.5	684.5	684.5	684.5	684.5	684.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	608.9	608.9
2.5°	650.1	646.2
5°	836.0	840.0
7.5°	1125.8	1123.9
10°	1400.0	1417.6
12.5°	1599.7	1603.6
15°	1721.1	1728.9
17.5°	1768.1	1770.0
20°	1770.0	1766.1
22.5°	1748.5	1744.6
25°	1723.1	1721.1
27.5°	1699.6	1701.5
30°	1689.8	1695.6
32.5°	1689.8	1699.6
35°	1693.7	1703.5
37.5°	1691.8	1703.5
40°	1683.8	1697.6
42.5°	1662.3	1672.2
45°	1629.1	1640.8
47.5°	1586.0	1593.8
50°	1531.2	1539.0
52.5°	1462.6	1464.6
55°	1380.4	1388.2
57.5°	1292.3	1294.3
60°	1194.4	1200.2
62.5°	1090.7	1090.7
65°	981.0	984.8
67.5°	867.4	877.1
70°	751.9	753.8
72.5°	638.3	638.3
75°	520.9	522.8
77.5°	409.2	409.2
80°	303.5	305.5
82.5°	209.6	213.4
85°	131.2	131.2
87.5°	60.7	54.8
90°	17.5	17.5
92.5°	69.9	56.0
95°	243.7	201.7
97.5°	584.0	504.0
100°	841.4	746.0
102.5°	1094.7	1013.0
105°	1417.5	1373.6
107.5°	1629.0	1639.6
110°	1709.6	1755.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1716.8	1787.1
115°	1671.3	1768.7
117.5°	1574.8	1682.8
120°	1497.0	1601.9
122.5°	1421.2	1524.8
125°	1313.2	1408.6
127.5°	1216.0	1296.5
130°	1158.7	1233.0
132.5°	1106.8	1173.3
135°	1035.5	1092.9
137.5°	978.4	1025.4
140°	939.3	983.2
142.5°	906.8	944.5
145°	858.1	886.6
147.5°	820.6	844.3
150°	797.2	816.4
152.5°	777.1	791.6
155°	753.9	763.5
157.5°	735.7	742.4
160°	724.7	728.6
162.5°	717.6	721.2
165°	707.3	711.2
167.5°	699.9	701.5
170°	697.8	697.8
172.5°	692.4	690.9
175°	689.1	689.1
177.5°	686.2	684.5
180°	684.5	684.5



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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	5.75	6.66	6.68	7.62	8.87	18.91	19.83	19.85	20.78	22.03
	3H	6.46	7.28	7.40	8.25	9.52	20.75	21.57	21.70	22.54	23.81
	4H	6.76	7.54	7.72	8.51	9.79	21.39	22.17	22.35	23.15	24.42
	6H	7.01	7.73	7.98	8.71	10.00	21.82	22.54	22.80	23.52	24.81
	8H	7.08	7.77	8.06	8.76	10.05	21.94	22.63	22.92	23.62	24.91
	12H	7.10	7.75	8.08	8.74	10.06	22.01	22.66	23.00	23.65	24.97
4H	2H	12.96	13.74	13.93	14.71	15.99	19.19	19.97	20.16	20.94	22.22
	3H	14.53	15.19	15.51	16.19	17.48	21.24	21.89	22.22	22.89	24.18
	4H	14.63	15.23	15.62	16.22	17.54	22.00	22.60	22.99	23.60	24.91
	6H	14.64	15.16	15.64	16.18	17.49	22.54	23.06	23.54	24.08	25.39
	8H	14.62	15.10	15.62	16.12	17.45	22.70	23.19	23.70	24.20	25.53
	12H	14.58	15.02	15.60	16.05	17.38	22.80	23.23	23.82	24.26	25.59
8H	4H	16.08	16.56	17.08	17.57	18.90	22.07	22.55	23.07	23.56	24.89
	6H	16.32	16.72	17.35	17.77	19.10	22.70	23.10	23.72	24.15	25.48
	8H	16.34	16.69	17.37	17.73	19.08	22.91	23.27	23.95	24.31	25.65
	12H	16.31	16.62	17.35	17.66	19.04	23.06	23.37	24.10	24.40	25.79
12H	4H	16.22	16.66	17.24	17.68	19.02	22.02	22.46	23.04	23.49	24.82
	6H	16.58	16.93	17.61	17.97	19.32	22.68	23.03	23.71	24.07	25.42
	8H	16.65	16.96	17.69	18.00	19.38	22.91	23.22	23.95	24.26	25.64