

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: P937148

Luminaire Tested: SQ4-FB-075U-075D-92765-1D-UNV-STD-W-8-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937148
REPORT IS A COMBINATION OF REPORTS P933518 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-075D-92765-1D-UNV-STD-W-8-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

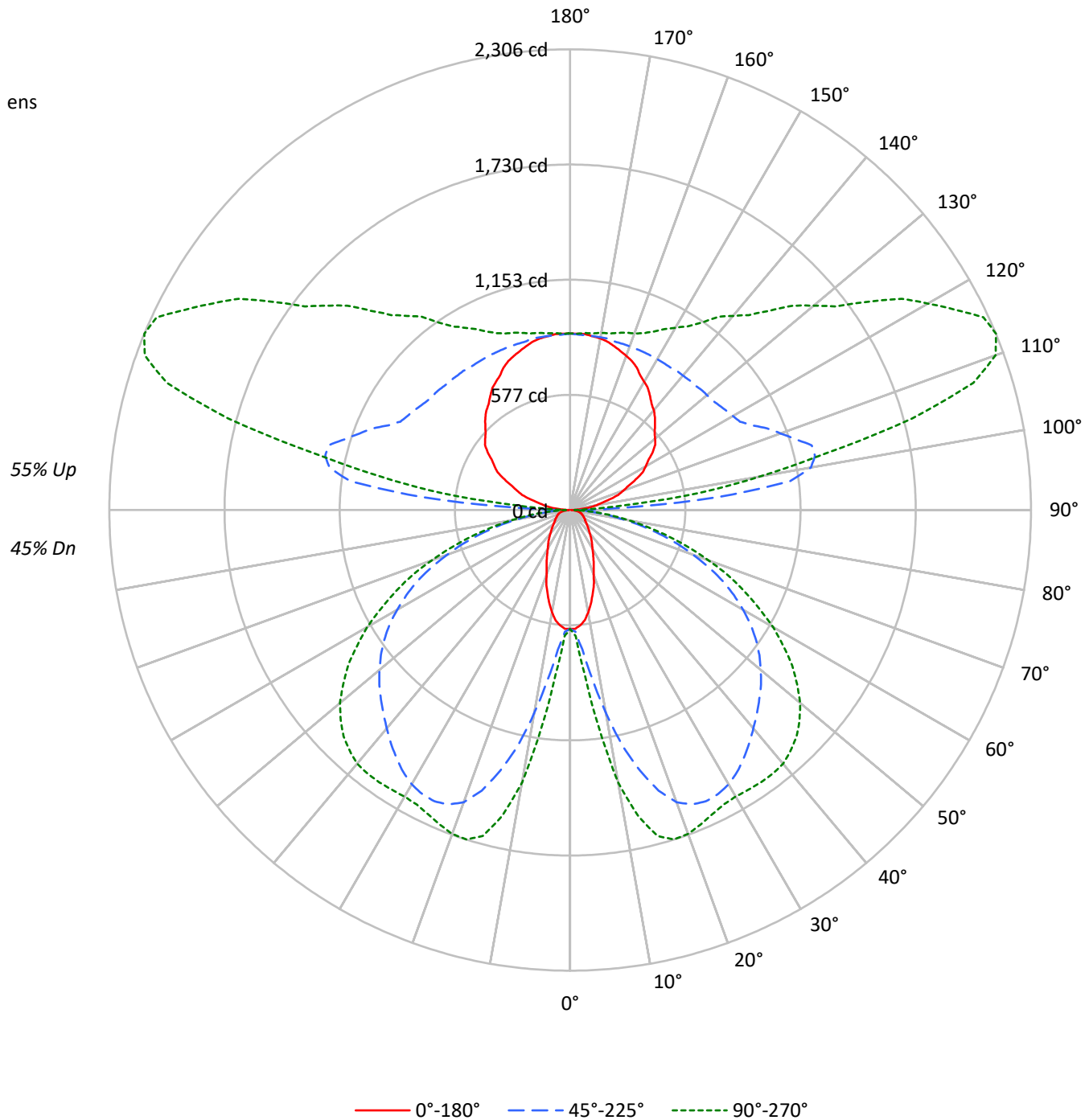
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10330.7 lumens
Efficiency: N/A
Efficacy: 121.8 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): 84.8
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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2760	2760	2760
5°	2696	3189	3709
10°	2445	4649	6150
15°	2078	6074	7425
20°	1692	7039	7568
25°	1411	7366	7414
30°	1190	7413	7400
35°	1052	7289	7591
40°	917	7129	7789
45°	830	7013	7820
50°	762	6907	7690
55°	730	6753	7349
60°	747	6456	6811
65°	777	6005	6071
70°	828	5237	5129
75°	916	4270	4002
80°	1003	2961	2697
85°	890	1570	1380

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7820 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.9	0.7
10°-20°	341.0	3.3
20°-30°	596.4	5.8
30°-40°	767.8	7.4
40°-50°	857.6	8.3
50°-60°	821.4	8.0
60°-70°	650.9	6.3
70°-80°	382.8	3.7
80°-90°	109.7	1.1
90°-100°	430.6	4.2
100°-110°	1132.0	11.0
110°-120°	1173.7	11.4
120°-130°	941.5	9.1
130°-140°	738.7	7.2
140°-150°	567.0	5.5
150°-160°	408.3	4.0
160°-170°	249.8	2.4
170°-180°	84.4	0.8
0°-30°	1014.4	9.8
0°-40°	1782.2	17.3
0°-60°	3461.2	33.5
0°-90°	4604.6	44.6
90°-120°	2736.3	26.5
90°-150°	4983.6	48.2
90°-180°	5726.0	55.4
0°-180°	10330.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	580	622	700	792	820	53
15°	434	801	1350	1637	1689	121
25°	277	908	1608	1679	1681	128
35°	187	868	1515	1601	1664	117
45°	128	692	1339	1534	1603	99
55°	92	440	1136	1320	1356	84
65°	73	233	843	948	962	72
75°	54	143	463	509	511	56
85°	19	44	115	126	128	20
90°	6	17	45	23	23	6
95°	57	223	742	382	260	63
105°	204	309	1252	1900	1772	216
115°	362	440	1002	2000	2282	358
125°	504	565	912	1541	1818	447
135°	600	661	883	1244	1410	465
145°	697	741	872	1061	1144	436
155°	787	809	872	957	985	362
165°	850	861	872	906	918	240
175°	883	883	878	889	889	84
180°	883	883	883	883	883	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	594.8	594.8	594.8	594.8	594.8	594.8	594.8	594.8	594.8	594.8	594.8
2.5°	594.8	594.8	598.6	600.5	604.3	606.2	610.1	613.9	625.4	627.3	631.1
5°	579.5	587.1	612.0	621.5	648.3	684.6	699.9	724.8	776.4	791.7	801.3
7.5°	556.5	573.7	634.9	650.2	717.1	812.8	852.9	906.5	988.7	1028.9	1061.4
10°	520.2	556.5	665.5	701.8	810.9	956.2	1030.8	1105.5	1229.8	1285.2	1306.3
12.5°	480.0	539.3	698.0	747.7	904.6	1116.9	1206.8	1289.0	1430.6	1505.1	1516.6
15°	434.1	514.4	728.6	801.3	1004.0	1250.8	1350.2	1451.6	1583.6	1637.1	1650.5
17.5°	394.0	495.3	757.3	833.8	1080.5	1371.3	1472.6	1556.8	1663.9	1700.2	1709.8
20°	344.2	464.7	776.4	875.9	1160.9	1459.2	1556.8	1621.8	1694.5	1717.4	1721.2
22.5°	307.9	432.2	787.9	891.2	1214.5	1512.8	1595.0	1646.7	1696.4	1704.0	1705.9
25°	277.3	395.9	786.0	908.4	1260.4	1545.3	1608.4	1646.7	1675.3	1679.2	1679.2
27.5°	248.6	355.7	778.3	912.2	1294.8	1553.0	1602.7	1629.4	1642.8	1650.5	1650.5
30°	223.7	317.5	759.2	904.6	1310.1	1545.3	1585.5	1598.9	1612.2	1623.7	1629.4
32.5°	204.6	281.1	730.5	889.3	1312.0	1526.2	1554.9	1562.5	1581.6	1608.4	1618.0
35°	187.4	244.8	698.0	868.2	1300.5	1495.6	1514.7	1522.4	1560.6	1600.8	1614.1
37.5°	170.2	218.0	655.9	831.9	1283.3	1459.2	1472.6	1486.0	1545.3	1593.1	1608.4
40°	153.0	195.1	606.2	791.7	1256.5	1415.3	1426.7	1447.8	1526.2	1581.6	1596.9
42.5°	139.6	175.9	552.7	749.7	1222.1	1365.5	1382.8	1413.3	1503.2	1562.5	1579.7
45°	128.1	156.8	495.3	692.3	1178.1	1313.9	1338.8	1380.8	1476.5	1533.8	1549.1
47.5°	116.7	143.4	436.0	633.0	1130.3	1262.3	1294.8	1342.6	1440.1	1495.6	1509.0
50°	107.1	130.0	376.7	569.9	1078.6	1206.8	1245.1	1294.8	1394.2	1445.9	1463.1
52.5°	99.4	118.6	321.3	506.8	1019.3	1149.4	1193.4	1245.1	1338.8	1388.5	1400.0
55°	91.8	109.0	273.5	439.8	958.1	1088.2	1136.1	1185.8	1277.6	1319.6	1327.3
57.5°	88.0	101.4	233.3	376.7	893.1	1019.3	1072.8	1118.8	1204.9	1237.4	1245.1
60°	82.2	95.6	202.7	323.2	822.3	954.3	1000.2	1046.1	1118.8	1145.6	1151.4
62.5°	76.5	91.8	179.8	271.6	749.7	877.8	923.7	965.8	1027.0	1046.1	1053.7
65°	72.7	88.0	162.6	233.3	675.1	797.5	843.4	879.7	929.4	948.5	952.4
67.5°	68.8	84.1	149.2	200.8	600.5	717.1	751.6	786.0	824.2	843.4	845.3
70°	63.1	80.3	137.7	177.9	524.0	625.4	654.0	690.4	721.0	730.5	736.3
72.5°	59.3	74.6	130.0	160.6	445.6	537.4	564.2	585.2	612.0	621.5	621.5
75°	53.5	66.9	122.4	143.4	365.3	439.8	462.8	483.8	504.9	508.7	503.0
77.5°	47.8	59.3	105.2	120.5	284.9	348.1	367.2	378.7	395.9	399.7	401.6
80°	40.2	51.6	82.2	93.7	206.5	256.3	269.6	279.2	294.5	294.5	298.3
82.5°	30.6	40.2	59.3	66.9	139.6	175.9	187.4	193.2	202.7	202.7	202.7
85°	19.1	24.9	38.2	44.0	84.1	107.1	114.7	116.7	124.3	126.2	126.2
87.5°	9.6	13.4	24.9	26.8	44.0	55.5	55.5	59.3	59.3	57.4	55.5
90°	5.9	10.7	15.5	16.6	26.1	38.7	45.0	40.1	30.0	22.6	22.6
92.5°	23.7	64.1	104.4	114.5	160.9	222.8	253.8	222.4	159.7	112.6	108.1
95°	56.9	130.7	204.4	222.9	395.8	626.3	741.6	661.8	502.1	382.4	368.8
97.5°	98.4	163.5	228.6	244.9	533.2	917.6	1109.8	1059.3	958.4	882.8	856.9
100°	130.4	189.4	248.5	263.2	583.2	1009.7	1223.0	1226.7	1234.1	1239.6	1208.8
102.5°	157.7	212.8	267.8	281.6	606.0	1038.7	1255.0	1319.3	1447.9	1544.3	1518.0
105°	204.0	250.6	297.2	308.9	623.1	1042.0	1251.5	1395.6	1683.8	1900.0	1885.8
107.5°	251.4	294.9	338.3	349.2	626.2	995.6	1180.3	1381.3	1783.4	2085.0	2088.4
110°	283.4	322.6	361.8	371.7	621.4	954.5	1121.0	1345.7	1795.3	2132.4	2147.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	314.8	352.2	389.6	398.9	621.6	918.6	1067.1	1297.2	1757.2	2102.2	2124.9
115°	362.2	396.7	431.2	439.8	627.4	877.4	1002.5	1224.0	1667.2	1999.6	2031.0
117.5°	409.1	440.4	471.8	479.6	639.1	851.7	958.0	1157.9	1557.9	1857.9	1892.7
120°	436.3	465.8	495.3	502.7	648.5	843.0	940.2	1123.0	1488.4	1762.5	1796.3
122.5°	463.0	492.8	522.6	530.0	662.2	838.4	926.6	1091.1	1420.2	1667.0	1700.4
125°	503.9	531.1	558.1	564.9	680.5	834.7	911.7	1051.5	1331.0	1540.7	1571.5
127.5°	537.1	564.5	591.9	598.8	699.0	832.6	899.3	1019.3	1259.3	1439.4	1465.3
130°	554.9	584.3	613.9	621.2	712.4	833.9	894.6	1001.4	1215.1	1375.4	1399.4
132.5°	573.2	602.8	632.3	639.7	723.3	834.7	890.4	986.0	1177.4	1320.8	1342.3
135°	600.5	627.4	654.3	661.0	735.1	833.9	883.3	963.5	1123.6	1243.7	1262.3
137.5°	628.4	655.0	681.6	688.3	752.9	839.1	882.1	949.8	1085.3	1186.8	1201.9
140°	651.5	676.0	700.5	706.6	763.7	839.9	878.0	936.5	1053.4	1141.2	1155.4
142.5°	669.3	692.0	714.7	720.3	772.9	843.0	878.0	929.3	1032.1	1109.2	1121.3
145°	696.6	716.4	736.1	741.0	784.7	843.0	872.0	914.1	998.2	1061.2	1070.4
147.5°	723.8	743.1	762.4	767.2	802.2	848.7	872.0	905.1	971.2	1020.8	1028.5
150°	741.6	759.0	776.4	780.7	811.1	851.8	872.0	900.0	955.8	997.7	1003.9
152.5°	760.0	773.2	786.4	789.6	817.1	853.7	872.0	895.9	943.6	979.3	984.0
155°	787.2	797.0	806.7	809.2	830.2	858.1	872.0	891.0	928.9	957.4	960.5
157.5°	807.4	816.9	826.3	828.7	843.2	862.4	872.0	886.8	916.3	938.4	940.6
160°	821.1	828.4	835.8	837.6	849.1	864.4	872.0	884.7	910.0	928.9	930.2
162.5°	834.7	840.2	845.8	847.2	855.5	866.5	872.0	882.8	904.1	920.0	921.2
165°	849.5	854.5	859.5	860.8	864.5	869.6	872.0	879.7	895.0	906.5	907.7
167.5°	863.2	865.5	867.9	868.5	871.7	875.9	878.0	882.9	893.0	900.5	901.0
170°	872.0	874.4	876.8	877.4	877.6	877.9	878.0	882.9	893.0	900.5	900.5
172.5°	876.8	877.3	877.9	878.0	878.0	878.0	878.0	881.9	889.8	895.8	895.3
175°	883.3	883.3	883.3	883.3	881.5	879.1	878.0	880.5	885.5	889.3	889.3
177.5°	883.3	883.3	883.3	883.3	881.9	880.1	879.1	881.1	885.1	888.0	887.5
180°	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	594.8	594.8
2.5°	634.9	631.1
5°	816.6	820.4
7.5°	1099.7	1097.8
10°	1367.5	1384.7
12.5°	1562.5	1566.3
15°	1681.1	1688.7
17.5°	1727.0	1728.9
20°	1728.9	1725.1
22.5°	1707.9	1704.0
25°	1683.0	1681.1
27.5°	1660.0	1662.0
30°	1650.5	1656.2
32.5°	1650.5	1660.0
35°	1654.3	1663.9
37.5°	1652.4	1663.9
40°	1644.7	1658.1
42.5°	1623.7	1633.3
45°	1591.2	1602.7
47.5°	1549.1	1556.8
50°	1495.6	1503.2
52.5°	1428.6	1430.6
55°	1348.3	1356.0
57.5°	1262.3	1264.2
60°	1166.7	1172.4
62.5°	1065.2	1065.2
65°	958.1	961.9
67.5°	847.2	856.7
70°	734.4	736.3
72.5°	623.4	623.4
75°	508.7	510.6
77.5°	399.7	399.7
80°	296.4	298.3
82.5°	204.6	208.5
85°	128.1	128.1
87.5°	59.3	53.5
90°	22.6	22.6
92.5°	90.3	72.3
95°	314.6	260.3
97.5°	753.6	650.3
100°	1085.9	962.8
102.5°	1412.6	1307.2
105°	1829.1	1772.5
107.5°	2102.1	2115.8
110°	2206.2	2265.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2215.4	2306.1
115°	2156.7	2282.3
117.5°	2032.1	2171.5
120°	1931.8	2067.2
122.5°	1834.0	1967.6
125°	1694.6	1817.6
127.5°	1569.1	1673.0
130°	1495.2	1591.1
132.5°	1428.2	1514.0
135°	1336.3	1410.3
137.5°	1262.6	1323.2
140°	1212.1	1268.7
142.5°	1170.1	1218.9
145°	1107.3	1144.2
147.5°	1059.0	1089.6
150°	1028.7	1053.4
152.5°	1002.7	1021.4
155°	972.9	985.3
157.5°	949.3	958.0
160°	935.3	940.2
162.5°	926.0	930.8
165°	912.7	917.7
167.5°	903.1	905.2
170°	900.5	900.5
172.5°	893.5	891.6
175°	889.3	889.3
177.5°	885.4	883.3
180°	883.3	883.3



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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	4.02	4.86	5.01	5.87	7.22	17.19	18.04	18.19	19.05	20.40
	3H	4.72	5.48	5.72	6.50	7.86	19.03	19.79	20.04	20.81	22.18
	4H	5.02	5.74	6.03	6.76	8.13	19.68	20.40	20.69	21.42	22.79
	6H	5.27	5.93	6.29	6.96	8.34	20.11	20.77	21.14	21.80	23.19
	8H	5.33	5.97	6.37	7.01	8.39	20.23	20.86	21.26	21.91	23.29
	12H	5.35	5.95	6.39	6.99	8.40	20.29	20.90	21.33	21.94	23.34
4H	2H	11.23	11.95	12.25	12.97	14.35	17.47	18.19	18.49	19.21	20.58
	3H	12.80	13.40	13.83	14.45	15.84	19.51	20.12	20.54	21.17	22.55
	4H	12.89	13.44	13.93	14.49	15.89	20.28	20.83	21.32	21.87	23.28
	6H	12.90	13.38	13.95	14.44	15.85	20.82	21.29	21.87	22.36	23.76
	8H	12.88	13.32	13.93	14.38	15.80	20.98	21.42	22.03	22.48	23.90
	12H	12.83	13.24	13.90	14.31	15.73	21.07	21.47	22.14	22.55	23.97
8H	4H	14.33	14.78	15.38	15.84	17.26	20.34	20.78	21.39	21.84	23.26
	6H	14.57	14.94	15.65	16.05	17.46	20.96	21.33	22.04	22.44	23.85
	8H	14.59	14.92	15.68	16.00	17.44	21.18	21.51	22.27	22.59	24.03
	12H	14.56	14.85	15.65	15.93	17.40	21.33	21.61	22.42	22.69	24.17
12H	4H	14.48	14.88	15.55	15.95	17.38	20.29	20.69	21.36	21.77	23.19
	6H	14.83	15.16	15.92	16.24	17.68	20.95	21.27	22.03	22.36	23.79
	8H	14.90	15.19	15.99	16.27	17.74	21.18	21.46	22.26	22.54	24.02