

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: P938071

Luminaire Tested: SQ4-FB-125U-100D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938071
REPORT IS A COMBINATION OF REPORTS P933607 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

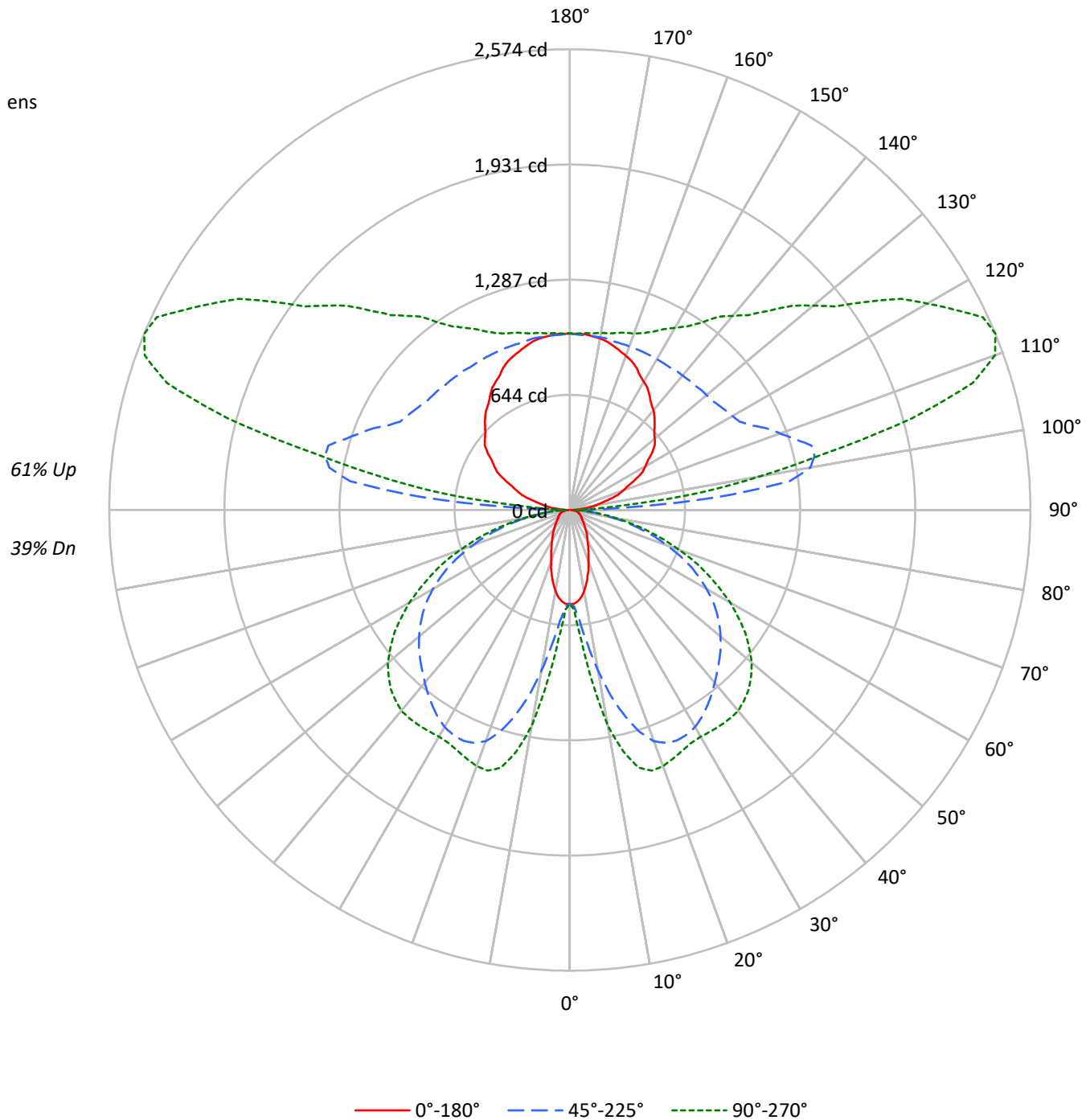
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10457.4 lumens
Efficiency: N/A
Efficacy: 108.3 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: Semi-Indirect

Input Watts (W): 96.6
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39			
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32			
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26			
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21			
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18			
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15			
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11			
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10			
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9			
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3248	3248	3248
5°	3172	3754	4367
10°	2876	5470	7238
15°	2444	7145	8741
20°	1989	8278	8908
25°	1659	8660	8727
30°	1398	8713	8711
35°	1235	8566	8936
40°	1075	8375	9169
45°	973	8236	9204
50°	893	8109	9053
55°	853	7925	8651
60°	873	7573	8017
65°	907	7040	7147
70°	963	6136	6038
75°	1064	4998	4711
80°	1152	3461	3175
85°	1008	1833	1625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9204 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	0.6
10°-20°	301.1	2.9
20°-30°	526.6	5.0
30°-40°	677.9	6.5
40°-50°	757.2	7.2
50°-60°	725.2	6.9
60°-70°	574.7	5.5
70°-80°	338.0	3.2
80°-90°	97.6	0.9
90°-100°	480.6	4.6
100°-110°	1263.5	12.1
110°-120°	1310.1	12.5
120°-130°	1050.9	10.0
130°-140°	824.5	7.9
140°-150°	632.9	6.1
150°-160°	455.8	4.4
160°-170°	278.9	2.7
170°-180°	94.2	0.9
0°-30°	895.6	8.6
0°-40°	1573.4	15.0
0°-60°	3055.8	29.2
0°-90°	4066.1	38.9
90°-120°	3054.2	29.2
90°-150°	5562.5	53.2
90°-180°	6391.0	61.1
0°-180°	10457.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	525	525	525	525	525	
5°	512	549	618	699	724	47
15°	383	708	1192	1445	1491	107
25°	245	802	1420	1482	1484	113
35°	166	766	1337	1413	1469	103
45°	113	611	1182	1354	1415	88
55°	81	388	1003	1165	1197	74
65°	64	206	745	838	849	64
75°	47	127	409	449	451	49
85°	17	39	101	111	113	18
90°	7	18	50	25	25	7
95°	64	249	828	427	290	71
105°	228	345	1397	2121	1978	241
115°	404	491	1119	2232	2548	399
125°	562	631	1018	1720	2029	499
135°	670	738	986	1388	1574	519
145°	777	827	973	1184	1277	487
155°	879	903	973	1069	1100	404
165°	948	961	973	1012	1024	268
175°	986	986	980	993	993	94
180°	986	986	986	986	986	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1
2.5°	525.1	525.1	528.5	530.2	533.5	535.2	538.6	542.0	552.1	553.8	557.2
5°	511.6	518.4	540.3	548.8	572.4	604.5	618.0	639.9	685.5	699.1	707.5
7.5°	491.3	506.5	560.6	574.1	633.2	717.6	753.1	800.4	873.0	908.4	937.1
10°	459.2	491.3	587.6	619.7	715.9	844.2	910.1	976.0	1085.7	1134.7	1153.3
12.5°	423.8	476.2	616.3	660.2	798.7	986.1	1065.4	1138.0	1263.0	1328.9	1339.0
15°	383.3	454.2	643.3	707.5	886.4	1104.3	1192.1	1281.6	1398.0	1445.3	1457.2
17.5°	347.9	437.3	668.6	736.2	954.0	1210.7	1300.2	1374.4	1469.0	1501.1	1509.5
20°	303.9	410.3	685.5	773.4	1025.0	1288.3	1374.4	1431.9	1496.0	1516.3	1519.6
22.5°	271.9	381.6	695.7	786.8	1072.2	1335.6	1408.2	1453.8	1497.7	1504.5	1506.2
25°	244.9	349.5	694.0	802.1	1112.7	1364.3	1420.0	1453.8	1479.2	1482.5	1482.5
27.5°	219.5	314.0	687.2	805.4	1143.1	1371.0	1414.9	1438.6	1450.4	1457.2	1457.2
30°	197.6	280.3	670.4	798.7	1156.6	1364.3	1399.8	1411.6	1423.4	1433.5	1438.6
32.5°	180.7	248.2	645.0	785.1	1158.3	1347.4	1372.7	1379.5	1396.3	1420.0	1428.5
35°	165.5	216.2	616.3	766.5	1148.2	1320.4	1337.3	1344.0	1377.8	1413.3	1425.1
37.5°	150.3	192.5	579.2	734.5	1133.0	1288.3	1300.2	1312.0	1364.3	1406.5	1420.0
40°	135.0	172.2	535.2	699.1	1109.3	1249.5	1259.6	1278.2	1347.4	1396.3	1409.9
42.5°	123.3	155.3	487.9	661.9	1079.0	1205.6	1220.7	1247.8	1327.2	1379.5	1394.7
45°	113.1	138.4	437.3	611.2	1040.1	1160.0	1182.0	1219.1	1303.5	1354.2	1367.7
47.5°	103.0	126.6	385.0	558.9	997.9	1114.4	1143.1	1185.3	1271.4	1320.4	1332.2
50°	94.6	114.8	332.6	503.2	952.3	1065.4	1099.3	1143.1	1230.9	1276.5	1291.7
52.5°	87.8	104.7	283.6	447.5	900.0	1014.8	1053.6	1099.3	1182.0	1225.9	1236.0
55°	81.0	96.3	241.5	388.3	846.0	960.7	1003.0	1046.9	1127.9	1165.0	1171.8
57.5°	77.7	89.5	206.0	332.6	788.5	900.0	947.3	987.8	1063.7	1092.4	1099.3
60°	72.6	84.4	179.0	285.3	726.1	842.5	883.1	923.6	987.8	1011.4	1016.4
62.5°	67.6	81.0	158.7	239.8	661.9	775.0	815.5	852.7	906.7	923.6	930.4
65°	64.2	77.7	143.6	206.0	596.1	704.1	744.6	776.7	820.6	837.5	840.8
67.5°	60.7	74.3	131.7	177.3	530.2	633.2	663.5	694.0	727.8	744.6	746.4
70°	55.7	70.9	121.6	157.0	462.6	552.1	577.5	609.5	636.5	645.0	650.1
72.5°	52.3	65.9	114.8	141.9	393.5	474.5	498.1	516.7	540.3	548.8	548.8
75°	47.3	59.1	108.0	126.6	322.5	388.3	408.6	427.2	445.8	449.2	444.1
77.5°	42.2	52.3	92.9	106.4	251.6	307.3	324.2	334.3	349.5	352.9	354.6
80°	35.4	45.6	72.6	82.7	182.3	226.3	238.0	246.5	260.0	260.0	263.4
82.5°	27.0	35.4	52.3	59.1	123.3	155.3	165.5	170.6	179.0	179.0	179.0
85°	16.9	22.0	33.7	38.9	74.3	94.6	101.3	103.0	109.7	111.4	111.4
87.5°	8.4	11.8	22.0	23.6	38.9	49.0	49.0	52.3	52.3	50.7	49.0
90°	6.6	11.9	17.2	18.5	29.1	43.2	50.3	44.6	33.5	25.1	25.1
92.5°	26.5	71.5	116.5	127.7	179.5	248.6	283.2	248.2	178.2	125.8	120.7
95°	63.6	145.9	228.2	248.8	441.8	699.2	827.8	738.7	560.4	426.8	411.6
97.5°	109.8	182.4	255.1	273.2	595.0	1024.2	1238.7	1182.4	1069.8	985.3	956.5
100°	145.6	211.5	277.3	293.8	650.8	1127.0	1365.1	1369.2	1377.4	1383.6	1349.2
102.5°	176.0	237.5	299.0	314.3	676.5	1159.3	1400.8	1472.5	1616.1	1723.7	1694.3
105°	227.7	279.7	331.7	344.7	695.4	1163.1	1396.9	1557.7	1879.4	2120.7	2104.9
107.5°	280.6	329.0	377.6	389.7	699.0	1111.3	1317.4	1541.9	1990.6	2327.2	2331.0
110°	316.3	360.1	403.8	414.8	693.6	1065.3	1251.2	1502.1	2003.8	2380.1	2396.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	351.4	393.1	434.9	445.3	693.9	1025.3	1191.0	1447.7	1961.2	2346.3	2371.6
115°	404.3	442.8	481.4	491.0	700.3	979.4	1118.9	1366.3	1860.9	2231.9	2267.0
117.5°	456.6	491.6	526.5	535.3	713.3	950.6	1069.3	1292.5	1738.9	2073.8	2112.6
120°	487.0	520.0	552.9	561.1	723.9	940.9	1049.4	1253.4	1661.2	1967.2	2005.0
122.5°	516.8	550.1	583.3	591.5	739.1	935.8	1034.2	1217.9	1585.2	1860.7	1897.9
125°	562.4	592.7	623.0	630.6	759.6	931.7	1017.7	1173.7	1485.7	1719.8	1754.1
127.5°	599.5	630.1	660.6	668.3	780.2	929.3	1003.8	1137.8	1405.7	1606.6	1635.6
130°	619.3	652.3	685.2	693.4	795.1	930.6	998.5	1117.7	1356.2	1535.1	1561.9
132.5°	639.9	672.8	705.7	714.0	807.3	931.7	993.9	1100.6	1314.1	1474.2	1498.2
135°	670.3	700.3	730.2	737.7	820.5	930.8	985.9	1075.3	1254.1	1388.2	1408.9
137.5°	701.4	731.1	760.8	768.2	840.3	936.5	984.6	1060.1	1211.3	1324.7	1341.6
140°	727.2	754.5	781.9	788.7	852.4	937.5	980.0	1045.2	1175.8	1273.7	1289.6
142.5°	747.0	772.3	797.6	803.9	862.6	940.9	980.0	1037.3	1152.0	1238.0	1251.7
145°	777.4	799.5	821.6	827.1	875.9	940.9	973.3	1020.3	1114.1	1184.5	1194.8
147.5°	808.0	829.4	850.9	856.3	895.3	947.3	973.3	1010.2	1084.1	1139.5	1148.0
150°	827.8	847.2	866.6	871.4	905.4	950.7	973.3	1004.5	1066.9	1113.6	1120.6
152.5°	848.3	863.0	877.7	881.4	912.1	952.9	973.3	999.9	1053.2	1093.1	1098.3
155°	878.8	889.7	900.5	903.2	926.6	957.7	973.3	994.5	1036.9	1068.7	1072.2
157.5°	901.2	911.8	922.4	925.0	941.1	962.6	973.3	989.8	1022.7	1047.4	1049.8
160°	916.4	924.7	932.9	935.0	947.8	964.8	973.3	987.5	1015.7	1036.9	1038.2
162.5°	931.7	937.8	944.0	945.5	954.8	967.2	973.3	985.3	1009.0	1026.9	1028.3
165°	948.2	953.8	959.4	960.8	965.0	970.5	973.3	981.8	999.0	1011.8	1013.1
167.5°	963.4	966.1	968.7	969.4	972.9	977.6	980.0	985.6	996.8	1005.1	1005.7
170°	973.3	976.0	978.6	979.3	979.5	979.8	980.0	985.6	996.8	1005.1	1005.1
172.5°	978.6	979.2	979.8	980.0	980.0	980.0	980.0	984.4	993.2	999.8	999.3
175°	985.9	985.9	985.9	985.9	984.0	981.3	980.0	982.8	988.4	992.6	992.6
177.5°	985.9	985.9	985.9	985.9	984.4	982.3	981.2	983.5	987.9	991.2	990.6
180°	985.9	985.9	985.9	985.9	985.9	985.9	985.9	985.9	985.9	985.9	985.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	525.1	525.1
2.5°	560.6	557.2
5°	721.0	724.4
7.5°	970.9	969.2
10°	1207.3	1222.4
12.5°	1379.5	1382.9
15°	1484.2	1490.9
17.5°	1524.7	1526.4
20°	1526.4	1523.0
22.5°	1507.8	1504.5
25°	1485.9	1484.2
27.5°	1465.6	1467.3
30°	1457.2	1462.2
32.5°	1457.2	1465.6
35°	1460.6	1469.0
37.5°	1458.9	1469.0
40°	1452.1	1463.9
42.5°	1433.5	1442.0
45°	1404.9	1414.9
47.5°	1367.7	1374.4
50°	1320.4	1327.2
52.5°	1261.3	1263.0
55°	1190.4	1197.1
57.5°	1114.4	1116.1
60°	1030.0	1035.0
62.5°	940.5	940.5
65°	846.0	849.3
67.5°	748.0	756.4
70°	648.4	650.1
72.5°	550.5	550.5
75°	449.2	450.8
77.5°	352.9	352.9
80°	261.7	263.4
82.5°	180.7	184.0
85°	113.1	113.1
87.5°	52.3	47.3
90°	25.1	25.1
92.5°	100.7	80.7
95°	351.0	290.4
97.5°	841.2	725.9
100°	1212.0	1074.6
102.5°	1576.6	1459.0
105°	2041.6	1978.4
107.5°	2346.2	2361.6
110°	2462.5	2528.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2472.8	2574.0
115°	2407.2	2547.5
117.5°	2268.2	2423.8
120°	2156.2	2307.3
122.5°	2047.0	2196.1
125°	1891.4	2028.8
127.5°	1751.5	1867.3
130°	1669.0	1776.0
132.5°	1594.1	1689.9
135°	1491.5	1574.2
137.5°	1409.2	1476.9
140°	1352.8	1416.0
142.5°	1306.0	1360.5
145°	1235.9	1277.1
147.5°	1182.1	1216.2
150°	1148.2	1175.8
152.5°	1119.2	1140.1
155°	1086.0	1099.8
157.5°	1059.5	1069.3
160°	1043.9	1049.4
162.5°	1033.6	1038.8
165°	1018.7	1024.3
167.5°	1008.0	1010.4
170°	1005.1	1005.1
172.5°	997.3	995.2
175°	992.6	992.6
177.5°	988.3	985.9
180°	985.9	985.9



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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	3.98	4.78	5.02	5.83	7.25	17.15	17.95	18.19	19.00	20.42
	3H	4.68	5.40	5.73	6.46	7.90	18.98	19.69	20.03	20.75	22.19
	4H	4.98	5.66	6.04	6.72	8.16	19.62	20.30	20.68	21.36	22.80
	6H	5.23	5.85	6.30	6.92	8.37	20.04	20.67	21.11	21.73	23.19
	8H	5.29	5.89	6.37	6.97	8.42	20.16	20.75	21.23	21.83	23.29
	12H	5.31	5.87	6.39	6.95	8.43	20.22	20.79	21.30	21.86	23.34
4H	2H	11.18	11.86	12.25	12.92	14.37	17.42	18.10	18.48	19.16	20.60
	3H	12.74	13.31	13.82	14.40	15.86	19.45	20.02	20.53	21.11	22.56
	4H	12.84	13.36	13.92	14.44	15.92	20.21	20.73	21.29	21.81	23.29
	6H	12.84	13.29	13.93	14.40	15.87	20.74	21.19	21.83	22.29	23.77
	8H	12.82	13.24	13.91	14.33	15.82	20.90	21.32	21.99	22.41	23.90
	12H	12.77	13.15	13.88	14.26	15.75	20.99	21.37	22.10	22.48	23.97
8H	4H	14.27	14.69	15.36	15.79	17.28	20.27	20.69	21.36	21.78	23.27
	6H	14.51	14.86	15.63	16.00	17.48	20.89	21.24	22.00	22.37	23.86
	8H	14.53	14.83	15.65	15.95	17.46	21.10	21.41	22.22	22.53	24.03
	12H	14.49	14.76	15.62	15.88	17.42	21.24	21.51	22.37	22.62	24.17
12H	4H	14.41	14.79	15.52	15.90	17.39	20.22	20.60	21.32	21.70	23.20
	6H	14.77	15.07	15.89	16.19	17.70	20.87	21.18	21.99	22.29	23.80
	8H	14.83	15.10	15.96	16.22	17.76	21.09	21.36	22.22	22.48	24.02