

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: P938518

Luminaire Tested: SQ4-FB-150U-125D-840-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938518
REPORT IS A COMBINATION OF REPORTS P933632 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

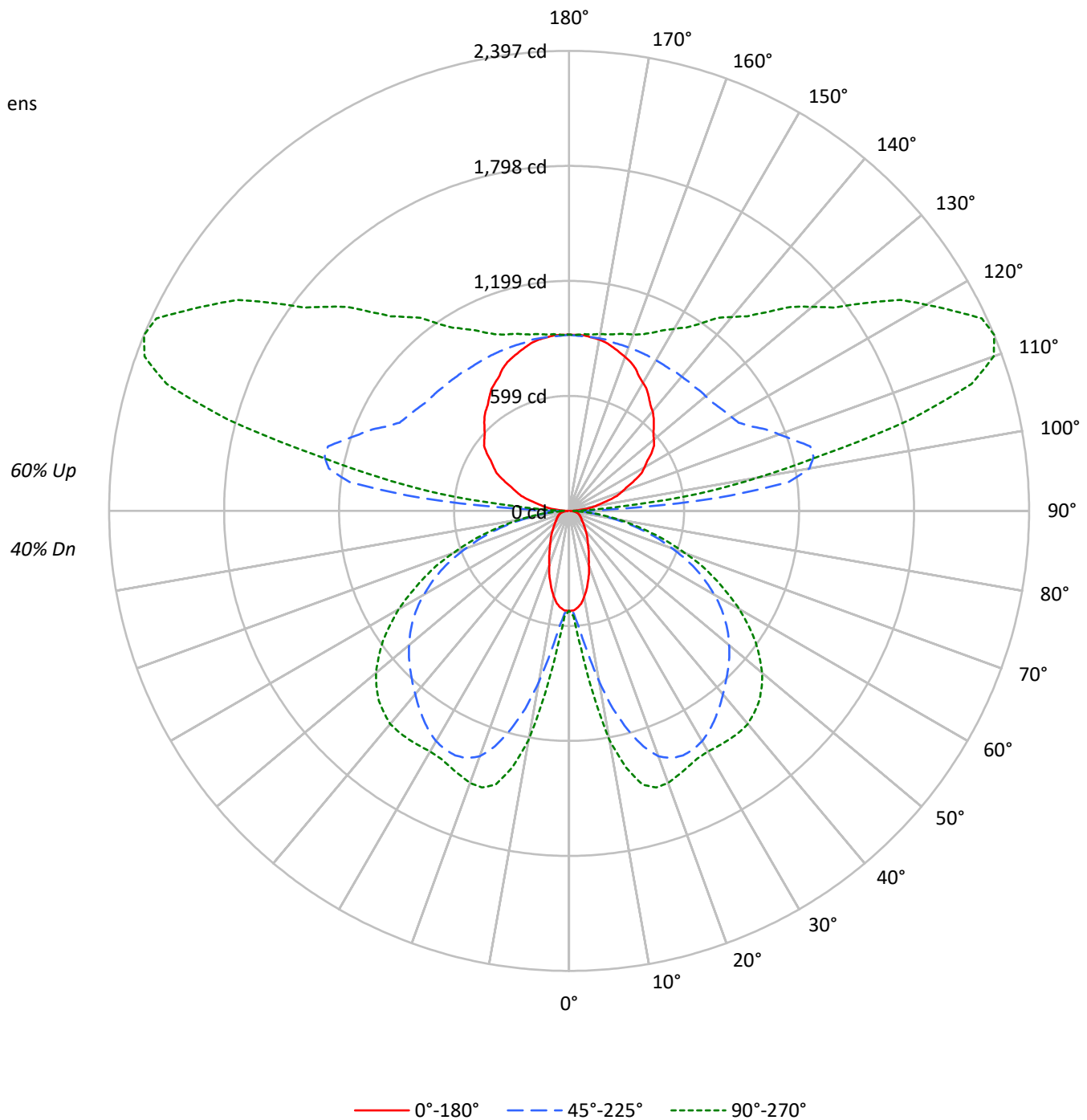
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9977.8 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 83.2
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				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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	39	39	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	32	32	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	27	27	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	23	23	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	19	19	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	17	17	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	15	15	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	13	13	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	11	11	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	10	10	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4824	4824	4824
5°	4708	5572	6485
10°	4266	8116	10751
15°	3621	10596	12982
20°	2945	12271	13231
25°	2454	12831	12962
30°	2066	12902	12937
35°	1824	12677	13271
40°	1587	12389	13617
45°	1434	12174	13671
50°	1314	11979	13444
55°	1253	11696	12848
60°	1279	11169	11908
65°	1323	10371	10614
70°	1399	9027	8968
75°	1535	7341	6998
80°	1643	5072	4715
85°	1383	2677	2413

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13671 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.3	0.7
10°-20°	298.1	3.0
20°-30°	521.4	5.2
30°-40°	671.2	6.7
40°-50°	749.7	7.5
50°-60°	718.0	7.2
60°-70°	569.0	5.7
70°-80°	334.6	3.4
80°-90°	96.5	1.0
90°-100°	447.6	4.5
100°-110°	1176.7	11.8
110°-120°	1220.1	12.2
120°-130°	978.7	9.8
130°-140°	767.9	7.7
140°-150°	589.4	5.9
150°-160°	424.5	4.3
160°-170°	259.7	2.6
170°-180°	87.7	0.9
0°-30°	886.7	8.9
0°-40°	1557.9	15.6
0°-60°	3025.6	30.3
0°-90°	4025.7	40.3
90°-120°	2844.3	28.5
90°-150°	5180.3	51.9
90°-180°	5952.0	59.7
0°-180°	9977.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	520	520	520	520	520	
5°	506	543	612	692	717	47
15°	380	700	1180	1431	1476	106
25°	242	794	1406	1468	1470	112
35°	164	759	1324	1399	1454	102
45°	112	605	1170	1341	1401	87
55°	80	384	993	1154	1185	73
65°	64	204	737	829	841	63
75°	47	125	405	445	446	49
85°	17	38	100	110	112	18
90°	6	17	47	23	23	6
95°	59	232	771	398	270	66
105°	212	321	1301	1975	1842	225
115°	376	457	1042	2079	2372	372
125°	524	587	948	1602	1889	465
135°	624	687	918	1293	1466	483
145°	724	770	906	1103	1189	454
155°	818	841	906	995	1024	376
165°	883	895	906	942	954	249
175°	918	918	913	924	924	87
180°	918	918	918	918	918	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9
2.5°	519.9	519.9	523.2	524.9	528.3	530.0	533.3	536.7	546.7	548.3	551.7
5°	506.5	513.3	535.0	543.3	566.7	598.5	611.9	633.6	678.8	692.1	700.5
7.5°	486.5	501.5	555.1	568.4	626.9	710.5	745.6	792.5	864.3	899.4	927.8
10°	454.7	486.5	581.7	613.5	708.8	835.8	901.1	966.3	1074.9	1123.5	1141.8
12.5°	419.6	471.5	610.2	653.7	790.8	976.3	1054.9	1126.8	1250.5	1315.7	1325.7
15°	379.5	449.7	637.0	700.5	877.6	1093.3	1180.3	1268.9	1384.3	1431.0	1442.8
17.5°	344.4	433.0	662.1	728.9	944.5	1198.6	1287.3	1360.9	1454.4	1486.2	1494.5
20°	300.9	406.3	678.8	765.7	1014.8	1275.6	1360.9	1417.7	1481.2	1501.3	1504.6
22.5°	269.1	377.8	688.7	779.0	1061.6	1322.3	1394.3	1439.4	1482.9	1489.6	1491.2
25°	242.5	346.1	687.2	794.1	1101.7	1350.8	1406.0	1439.4	1464.5	1467.9	1467.9
27.5°	217.4	310.9	680.4	797.4	1131.8	1357.5	1401.0	1424.4	1436.1	1442.8	1442.8
30°	195.6	277.5	663.7	790.8	1145.2	1350.8	1385.9	1397.6	1409.3	1419.4	1424.4
32.5°	178.9	245.7	638.6	777.4	1146.9	1334.1	1359.2	1365.8	1382.6	1406.0	1414.3
35°	163.8	214.0	610.2	759.0	1136.8	1307.3	1324.0	1330.7	1364.1	1399.3	1411.0
37.5°	148.8	190.6	573.4	727.3	1121.8	1275.6	1287.3	1299.0	1350.8	1392.6	1406.0
40°	133.8	170.5	530.0	692.1	1098.4	1237.1	1247.2	1265.5	1334.1	1382.6	1395.9
42.5°	122.0	153.8	483.1	655.3	1068.2	1193.7	1208.7	1235.5	1314.0	1365.8	1380.9
45°	112.0	137.1	433.0	605.2	1029.8	1148.6	1170.3	1207.0	1290.6	1340.8	1354.2
47.5°	102.0	125.4	381.2	553.4	988.0	1103.4	1131.8	1173.6	1258.8	1307.3	1319.1
50°	93.7	113.7	329.3	498.1	942.8	1054.9	1088.4	1131.8	1218.7	1263.8	1279.0
52.5°	86.9	103.6	280.9	443.0	891.1	1004.7	1043.2	1088.4	1170.3	1213.8	1223.7
55°	80.2	95.2	239.1	384.5	837.5	951.2	993.0	1036.5	1116.7	1153.5	1160.2
57.5°	76.9	88.6	203.9	329.3	780.7	891.1	937.9	978.0	1053.2	1081.7	1088.4
60°	71.9	83.6	177.2	282.6	718.9	834.3	874.4	914.5	978.0	1001.4	1006.4
62.5°	66.9	80.2	157.2	237.4	655.3	767.4	807.5	844.2	897.8	914.5	921.1
65°	63.5	76.9	142.1	203.9	590.1	697.1	737.2	769.1	812.5	829.2	832.6
67.5°	60.2	73.6	130.4	175.6	524.9	626.9	657.0	687.2	720.5	737.2	738.9
70°	55.1	70.2	120.3	155.5	458.0	546.7	571.8	603.5	630.2	638.6	643.7
72.5°	51.9	65.2	113.7	140.4	389.6	469.8	493.2	511.6	535.0	543.3	543.3
75°	46.8	58.5	107.0	125.4	319.3	384.5	404.6	423.0	441.3	444.7	439.7
77.5°	41.8	51.9	92.0	105.3	249.1	304.3	321.0	331.0	346.1	349.4	351.0
80°	35.1	45.2	71.9	81.9	180.5	224.0	235.7	244.0	257.5	257.5	260.8
82.5°	26.8	35.1	51.9	58.5	122.0	153.8	163.8	168.8	177.2	177.2	177.2
85°	16.7	21.7	33.4	38.4	73.6	93.7	100.3	102.0	108.7	110.4	110.4
87.5°	8.4	11.7	21.7	23.4	38.4	48.5	48.5	51.9	51.9	50.2	48.5
90°	6.1	11.1	16.0	17.3	27.2	40.3	46.8	41.6	31.2	23.4	23.4
92.5°	24.6	66.5	108.5	119.0	167.2	231.5	263.7	231.1	166.0	117.1	112.4
95°	59.2	135.8	212.5	231.7	411.4	651.1	770.9	687.9	522.0	397.5	383.3
97.5°	102.3	169.9	237.6	254.5	554.2	953.8	1153.6	1101.1	996.2	917.6	890.7
100°	135.6	196.9	258.3	273.6	606.1	1049.6	1271.3	1275.1	1282.8	1288.5	1256.5
102.5°	163.9	221.2	278.4	292.7	630.0	1079.7	1304.6	1371.3	1505.0	1605.3	1577.9
105°	212.0	260.5	308.9	321.1	647.6	1083.0	1300.8	1450.6	1750.2	1975.0	1960.3
107.5°	261.3	306.5	351.7	363.0	651.0	1034.9	1226.9	1435.9	1853.8	2167.3	2170.8
110°	294.5	335.3	376.2	386.4	646.1	992.1	1165.2	1398.9	1866.1	2216.6	2231.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	327.2	366.2	405.1	414.8	646.3	954.9	1109.2	1348.3	1826.5	2185.2	2208.7
115°	376.5	412.4	448.3	457.2	652.2	912.1	1042.0	1272.3	1733.1	2078.6	2111.3
117.5°	425.2	457.8	490.4	498.5	664.3	885.3	995.8	1203.7	1619.4	1931.2	1967.5
120°	453.5	484.2	514.8	522.6	674.1	876.3	977.3	1167.2	1547.1	1832.0	1867.2
122.5°	481.3	512.2	543.2	550.9	688.3	871.6	963.2	1134.2	1476.3	1732.9	1767.5
125°	523.8	552.0	580.3	587.3	707.4	867.7	947.8	1093.0	1383.6	1601.5	1633.6
127.5°	558.3	586.8	615.2	622.3	726.5	865.4	934.8	1059.6	1309.1	1496.2	1523.2
130°	576.8	607.4	638.1	645.8	740.5	866.8	929.9	1041.0	1263.1	1429.6	1454.5
132.5°	595.9	626.6	657.2	664.9	751.8	867.7	925.6	1025.0	1223.8	1372.9	1395.3
135°	624.2	652.2	680.0	687.1	764.1	866.8	918.1	1001.4	1167.9	1292.8	1312.1
137.5°	653.2	680.8	708.5	715.4	782.6	872.2	917.0	987.3	1128.1	1233.7	1249.4
140°	677.3	702.8	728.3	734.6	794.0	873.1	912.6	973.4	1095.0	1186.2	1200.9
142.5°	695.7	719.3	742.8	748.7	803.3	876.2	912.6	966.1	1072.9	1153.0	1165.6
145°	724.1	744.7	765.1	770.2	815.7	876.3	906.5	950.2	1037.5	1103.0	1112.6
147.5°	752.4	772.4	792.4	797.4	833.8	882.3	906.5	940.9	1009.5	1061.1	1069.0
150°	770.9	789.0	807.0	811.5	843.2	885.3	906.5	935.5	993.5	1037.1	1043.5
152.5°	790.0	803.7	817.4	820.8	849.4	887.4	906.5	931.3	980.9	1018.0	1022.9
155°	818.4	828.5	838.6	841.2	862.9	892.0	906.5	926.2	965.7	995.2	998.5
157.5°	839.3	849.2	859.0	861.4	876.5	896.5	906.5	921.8	952.4	975.5	977.7
160°	853.4	861.1	868.8	870.7	882.7	898.6	906.5	919.6	945.9	965.6	966.9
162.5°	867.7	873.4	879.1	880.6	889.2	900.8	906.5	917.6	939.8	956.4	957.6
165°	883.1	888.2	893.4	894.7	898.7	903.9	906.5	914.4	930.3	942.2	943.4
167.5°	897.2	899.7	902.1	902.7	906.0	910.4	912.6	917.9	928.2	936.0	936.6
170°	906.5	909.0	911.4	912.0	912.2	912.5	912.6	917.9	928.2	936.0	936.0
172.5°	911.4	911.9	912.5	912.6	912.6	912.6	912.6	916.8	925.0	931.1	930.6
175°	918.1	918.1	918.1	918.1	916.3	913.8	912.6	915.2	920.4	924.4	924.4
177.5°	918.1	918.1	918.1	918.1	916.8	914.9	913.9	916.0	920.0	923.1	922.5
180°	918.1	918.1	918.1	918.1	918.1	918.1	918.1	918.1	918.1	918.1	918.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	519.9	519.9
2.5°	555.1	551.7
5°	713.8	717.2
7.5°	961.3	959.6
10°	1195.3	1210.4
12.5°	1365.8	1369.2
15°	1469.6	1476.2
17.5°	1509.7	1511.3
20°	1511.3	1508.0
22.5°	1492.9	1489.6
25°	1471.1	1469.6
27.5°	1451.1	1452.8
30°	1442.8	1447.8
32.5°	1442.8	1451.1
35°	1446.1	1454.4
37.5°	1444.5	1454.4
40°	1437.7	1449.4
42.5°	1419.4	1427.7
45°	1390.9	1401.0
47.5°	1354.2	1360.9
50°	1307.3	1314.0
52.5°	1248.8	1250.5
55°	1178.6	1185.3
57.5°	1103.4	1105.1
60°	1019.8	1024.9
62.5°	931.2	931.2
65°	837.5	840.9
67.5°	740.6	749.0
70°	642.0	643.7
72.5°	545.0	545.0
75°	444.7	446.4
77.5°	349.4	349.4
80°	259.2	260.8
82.5°	178.9	182.2
85°	112.0	112.0
87.5°	51.9	46.8
90°	23.4	23.4
92.5°	93.8	75.2
95°	326.9	270.5
97.5°	783.4	676.0
100°	1128.7	1000.7
102.5°	1468.4	1358.8
105°	1901.4	1842.5
107.5°	2185.1	2199.3
110°	2293.2	2354.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2302.9	2397.1
115°	2241.9	2372.5
117.5°	2112.3	2257.2
120°	2008.0	2148.8
122.5°	1906.4	2045.3
125°	1761.4	1889.4
127.5°	1631.1	1739.0
130°	1554.2	1653.9
132.5°	1484.5	1573.8
135°	1389.0	1466.0
137.5°	1312.5	1375.4
140°	1259.8	1318.7
142.5°	1216.3	1266.9
145°	1151.0	1189.4
147.5°	1100.8	1132.6
150°	1069.3	1095.0
152.5°	1042.3	1061.7
155°	1011.3	1024.2
157.5°	986.7	995.8
160°	972.1	977.3
162.5°	962.5	967.4
165°	948.7	953.9
167.5°	938.8	941.0
170°	936.0	936.0
172.5°	928.7	926.8
175°	924.4	924.4
177.5°	920.3	918.1
180°	918.1	918.1



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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	5.51	6.31	6.53	7.36	8.76	18.65	19.46	19.67	20.50	21.90
	3H	6.21	6.93	7.25	7.98	9.40	20.47	21.19	21.50	22.24	23.66
	4H	6.50	7.19	7.55	8.25	9.67	21.10	21.79	22.15	22.84	24.27
	6H	6.75	7.39	7.81	8.44	9.88	21.51	22.15	22.57	23.21	24.64
	8H	6.82	7.43	7.89	8.50	9.93	21.63	22.23	22.69	23.30	24.74
	12H	6.84	7.41	7.91	8.48	9.94	21.69	22.26	22.76	23.33	24.79
4H	2H	12.69	13.38	13.75	14.43	15.86	18.92	19.61	19.97	20.66	22.08
	3H	14.26	14.83	15.32	15.91	17.35	20.94	21.52	22.01	22.60	24.04
	4H	14.35	14.88	15.42	15.95	17.41	21.70	22.23	22.77	23.30	24.76
	6H	14.36	14.81	15.44	15.91	17.36	22.22	22.68	23.30	23.77	25.22
	8H	14.33	14.76	15.41	15.85	17.32	22.37	22.80	23.45	23.88	25.36
	12H	14.29	14.67	15.39	15.77	17.25	22.46	22.84	23.56	23.94	25.42
8H	4H	15.78	16.20	16.86	17.29	18.76	21.75	22.18	22.83	23.26	24.74
	6H	16.02	16.37	17.12	17.50	18.97	22.37	22.72	23.47	23.85	25.32
	8H	16.04	16.35	17.15	17.46	18.94	22.58	22.89	23.69	24.00	25.49
	12H	16.00	16.27	17.12	17.38	18.91	22.71	22.98	23.83	24.09	25.62
12H	4H	15.92	16.30	17.02	17.40	18.88	21.70	22.09	22.80	23.19	24.66
	6H	16.27	16.58	17.38	17.69	19.18	22.35	22.66	23.46	23.77	25.26
	8H	16.34	16.61	17.46	17.72	19.24	22.57	22.84	23.68	23.95	25.47