

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: P936962

Luminaire Tested: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936962
REPORT IS A COMBINATION OF REPORTS P933480 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-6-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

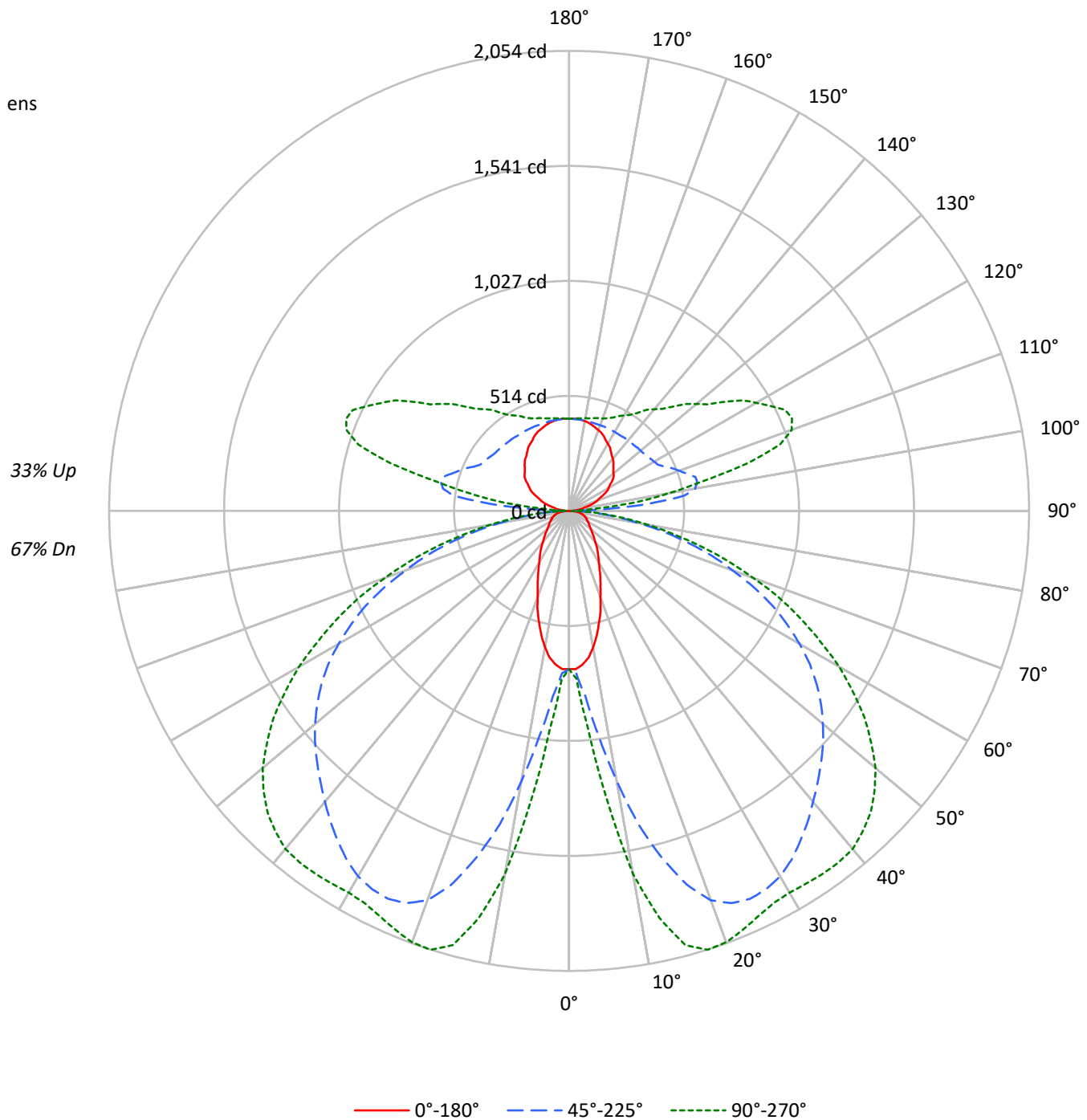
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8142.9 lumens
Efficiency: N/A
Efficacy: 96.9 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-Direct

Input Watts (W): 84
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

TEST NUMBER: P936962
CATALOG NUMBER: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-6-3500K

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4372	4372	4372
5°	4270	5052	5877
10°	3871	7363	9743
15°	3289	9617	11765
20°	2677	11142	11990
25°	2232	11657	11746
30°	1881	11727	11724
35°	1663	11529	12028
40°	1448	11273	12340
45°	1311	11084	12389
50°	1200	10914	12184
55°	1148	10666	11644
60°	1175	10193	10791
65°	1221	9476	9619
70°	1297	8258	8127
75°	1433	6728	6342
80°	1553	4659	4273
85°	1353	2469	2188

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12389 cd/sqm



TEST NUMBER: P936962

CATALOG NUMBER: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-6-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	1.1
10°-20°	405.2	5.0
20°-30°	708.8	8.7
30°-40°	912.4	11.2
40°-50°	1019.1	12.5
50°-60°	976.1	12.0
60°-70°	773.5	9.5
70°-80°	454.9	5.6
80°-90°	127.9	1.6
90°-100°	201.0	2.5
100°-110°	528.5	6.5
110°-120°	548.0	6.7
120°-130°	439.6	5.4
130°-140°	344.9	4.2
140°-150°	264.7	3.3
150°-160°	190.7	2.3
160°-170°	116.7	1.4
170°-180°	39.4	0.5
0°-30°	1205.4	14.8
0°-40°	2117.8	26.0
0°-60°	4112.9	50.5
0°-90°	5469.3	67.2
90°-120°	1277.6	15.7
90°-150°	2326.9	28.6
90°-180°	2674.0	32.8
0°-180°	8142.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	707	707	707	707	707	
5°	689	739	832	941	975	64
15°	516	952	1604	1945	2007	144
25°	330	1080	1911	1995	1998	152
35°	223	1032	1800	1902	1977	139
45°	152	823	1591	1823	1904	118
55°	109	523	1350	1568	1611	99
65°	86	277	1002	1127	1143	86
75°	64	170	550	604	607	67
85°	23	52	136	150	152	24
90°	3	8	21	10	10	4
95°	27	104	346	178	122	30
105°	95	144	584	887	828	101
115°	169	205	468	934	1066	167
125°	235	264	426	719	849	209
135°	280	309	412	581	658	217
145°	325	346	407	496	534	204
155°	368	378	407	447	460	169
165°	397	402	407	423	428	112
175°	412	412	410	415	415	39
180°	412	412	412	412	412	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	706.8	706.8	706.8	706.8	706.8	706.8	706.8	706.8	706.8	706.8	706.8
2.5°	706.8	706.8	711.3	713.6	718.1	720.5	724.9	729.5	743.1	745.4	750.0
5°	688.6	697.7	727.3	738.6	770.4	813.6	831.7	861.3	922.7	940.9	952.3
7.5°	661.4	681.8	754.5	772.7	852.2	965.9	1013.6	1077.2	1174.9	1222.6	1261.3
10°	618.1	661.4	790.8	834.1	963.6	1136.3	1225.0	1313.6	1461.3	1527.2	1552.2
12.5°	570.4	640.9	829.5	888.6	1074.9	1327.2	1434.0	1531.7	1699.9	1788.6	1802.2
15°	515.9	611.3	865.9	952.3	1193.1	1486.3	1604.5	1724.9	1881.8	1945.3	1961.3
17.5°	468.2	588.6	900.0	990.8	1284.1	1629.5	1749.9	1849.9	1977.2	2020.4	2031.7
20°	409.1	552.2	922.7	1040.9	1379.5	1734.0	1849.9	1927.2	2013.6	2040.8	2045.3
22.5°	365.9	513.6	936.3	1059.1	1443.2	1797.6	1895.4	1956.7	2015.8	2024.9	2027.2
25°	329.6	470.4	934.1	1079.5	1497.7	1836.3	1911.3	1956.7	1990.8	1995.4	1995.4
27.5°	295.5	422.7	924.9	1084.0	1538.6	1845.3	1904.4	1936.3	1952.1	1961.3	1961.3
30°	265.9	377.3	902.2	1074.9	1556.8	1836.3	1884.0	1899.9	1915.8	1929.5	1936.3
32.5°	243.2	334.0	868.1	1056.7	1559.0	1813.5	1847.7	1856.7	1879.4	1911.3	1922.6
35°	222.8	290.9	829.5	1031.8	1545.4	1777.2	1799.9	1809.0	1854.5	1902.2	1918.1
37.5°	202.3	259.1	779.5	988.6	1524.9	1734.0	1749.9	1765.8	1836.3	1893.0	1911.3
40°	181.8	231.8	720.5	940.9	1493.1	1681.8	1695.4	1720.3	1813.5	1879.4	1897.6
42.5°	165.9	209.1	656.8	890.8	1452.2	1622.7	1643.1	1679.4	1786.2	1856.7	1877.2
45°	152.3	186.3	588.6	822.7	1399.9	1561.2	1590.8	1640.8	1754.5	1822.7	1840.9
47.5°	138.6	170.5	518.1	752.2	1343.1	1499.9	1538.6	1595.4	1711.3	1777.2	1793.1
50°	127.2	154.5	447.7	677.2	1281.7	1434.0	1479.5	1538.6	1656.8	1718.1	1738.5
52.5°	118.2	140.9	381.8	602.3	1211.3	1365.8	1418.1	1479.5	1590.8	1649.9	1663.6
55°	109.0	129.6	325.0	522.7	1138.6	1293.1	1350.0	1409.0	1518.1	1568.1	1577.2
57.5°	104.6	120.4	277.3	447.7	1061.3	1211.3	1274.9	1329.4	1431.8	1470.4	1479.5
60°	97.7	113.6	240.9	384.1	977.2	1134.0	1188.6	1243.1	1329.4	1361.3	1368.1
62.5°	90.9	109.0	213.6	322.7	890.8	1043.1	1097.7	1147.7	1220.4	1243.1	1252.2
65°	86.4	104.6	193.2	277.3	802.2	947.7	1002.2	1045.4	1104.5	1127.2	1131.8
67.5°	81.8	100.0	177.3	238.6	713.6	852.2	893.2	934.1	979.5	1002.2	1004.5
70°	75.0	95.4	163.7	211.4	622.7	743.1	777.2	820.4	856.8	868.1	875.0
72.5°	70.5	88.6	154.5	190.9	529.5	638.6	670.4	695.4	727.3	738.6	738.6
75°	63.7	79.5	145.5	170.5	434.0	522.7	550.0	575.0	599.9	604.5	597.7
77.5°	56.9	70.5	125.0	143.2	338.6	413.6	436.4	450.0	470.4	475.0	477.3
80°	47.7	61.3	97.7	111.4	245.4	304.5	320.4	331.8	350.0	350.0	354.5
82.5°	36.3	47.7	70.5	79.5	165.9	209.1	222.8	229.6	240.9	240.9	240.9
85°	22.7	29.5	45.5	52.3	100.0	127.2	136.4	138.6	147.7	150.0	150.0
87.5°	11.4	15.9	29.5	31.8	52.3	65.9	65.9	70.5	70.5	68.2	65.9
90°	2.8	5.0	7.3	7.8	12.2	18.1	21.0	18.7	14.0	10.5	10.5
92.5°	11.1	29.9	48.7	53.5	75.1	104.0	118.4	103.8	74.5	52.6	50.5
95°	26.6	61.0	95.4	104.0	184.8	292.5	346.3	309.1	234.5	178.5	172.2
97.5°	45.9	76.4	106.7	114.3	249.0	428.5	518.2	494.7	447.5	412.1	400.0
100°	60.9	88.5	116.0	122.9	272.3	471.5	571.0	572.7	576.2	578.8	564.5
102.5°	73.6	99.4	125.1	131.5	283.0	485.0	586.0	616.0	676.1	721.1	708.8
105°	95.3	117.0	138.8	144.2	290.9	486.5	584.3	651.6	786.2	887.2	880.5
107.5°	117.4	137.7	157.9	163.0	292.4	464.8	551.1	644.9	832.6	973.5	975.1
110°	132.3	150.6	168.9	173.5	290.2	445.7	523.4	628.3	838.3	995.7	1002.6



TEST NUMBER: P936962

CATALOG NUMBER: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-6-3500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	147.0	164.5	181.9	186.3	290.3	428.9	498.2	605.7	820.5	981.5	992.1
115°	169.1	185.2	201.4	205.4	292.9	409.7	468.1	571.6	778.5	933.6	948.3
117.5°	191.0	205.7	220.2	223.9	298.4	397.7	447.3	540.7	727.4	867.5	883.8
120°	203.7	217.5	231.3	234.8	302.8	393.6	439.0	524.3	694.9	822.9	838.7
122.5°	216.2	230.1	244.0	247.5	309.2	391.4	432.6	509.4	663.2	778.4	794.0
125°	235.3	247.9	260.6	263.8	317.7	389.7	425.7	491.0	621.5	719.4	733.7
127.5°	250.8	263.6	276.4	279.6	326.3	388.7	419.9	475.9	588.0	672.0	684.1
130°	259.1	272.9	286.7	290.1	332.6	389.3	417.7	467.5	567.4	642.2	653.4
132.5°	267.7	281.5	295.3	298.7	337.7	389.7	415.8	460.5	549.7	616.7	626.7
135°	280.4	292.9	305.5	308.6	343.3	389.4	412.5	449.9	524.7	580.7	589.4
137.5°	293.4	305.8	318.2	321.3	351.5	391.7	411.8	443.4	506.7	554.1	561.2
140°	304.2	315.7	327.1	329.9	356.6	392.1	410.0	437.3	491.9	532.8	539.4
142.5°	312.5	323.0	333.6	336.3	360.8	393.6	410.0	434.0	481.9	517.8	523.6
145°	325.3	334.5	343.7	346.0	366.5	393.6	407.2	426.8	466.0	495.5	499.8
147.5°	338.0	346.9	356.0	358.2	374.5	396.3	407.2	422.6	453.5	476.7	480.2
150°	346.3	354.5	362.5	364.6	378.8	397.7	407.2	420.3	446.3	465.8	468.7
152.5°	354.8	361.0	367.2	368.7	381.5	398.6	407.2	418.3	440.6	457.2	459.4
155°	367.6	372.2	376.7	377.8	387.6	400.7	407.2	416.1	433.8	447.0	448.5
157.5°	377.0	381.4	385.9	387.0	393.7	402.7	407.2	414.1	427.9	438.2	439.2
160°	383.4	386.8	390.2	391.1	396.4	403.6	407.2	413.1	424.9	433.8	434.3
162.5°	389.7	392.3	394.9	395.5	399.4	404.6	407.2	412.2	422.1	429.6	430.1
165°	396.6	399.0	401.3	401.9	403.7	406.0	407.2	410.8	417.8	423.2	423.8
167.5°	403.0	404.1	405.2	405.5	407.0	409.0	410.0	412.3	416.9	420.4	420.7
170°	407.2	408.3	409.4	409.7	409.8	409.9	410.0	412.3	416.9	420.4	420.4
172.5°	409.4	409.7	409.9	410.0	410.0	410.0	410.0	411.8	415.4	418.2	418.0
175°	412.5	412.5	412.5	412.5	411.7	410.5	410.0	411.1	413.5	415.2	415.2
177.5°	412.5	412.5	412.5	412.5	411.8	410.9	410.5	411.4	413.3	414.6	414.4
180°	412.5	412.5	412.5	412.5	412.5	412.5	412.5	412.5	412.5	412.5	412.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	706.8	706.8
2.5°	754.5	750.0
5°	970.4	975.0
7.5°	1306.8	1304.5
10°	1624.9	1645.4
12.5°	1856.7	1861.3
15°	1997.6	2006.8
17.5°	2052.1	2054.5
20°	2054.5	2049.9
22.5°	2029.4	2024.9
25°	1999.9	1997.6
27.5°	1972.6	1974.9
30°	1961.3	1968.1
32.5°	1961.3	1972.6
35°	1965.8	1977.2
37.5°	1963.5	1977.2
40°	1954.5	1970.3
42.5°	1929.5	1940.9
45°	1890.8	1904.4
47.5°	1840.9	1849.9
50°	1777.2	1786.2
52.5°	1697.6	1699.9
55°	1602.2	1611.3
57.5°	1499.9	1502.2
60°	1386.3	1393.1
62.5°	1265.9	1265.9
65°	1138.6	1143.1
67.5°	1006.8	1018.1
70°	872.7	875.0
72.5°	740.9	740.9
75°	604.5	606.8
77.5°	475.0	475.0
80°	352.2	354.5
82.5°	243.2	247.7
85°	152.3	152.3
87.5°	70.5	63.7
90°	10.5	10.5
92.5°	42.1	33.8
95°	146.8	121.5
97.5°	351.9	303.7
100°	507.0	449.5
102.5°	659.6	610.3
105°	854.1	827.6
107.5°	981.4	987.9
110°	1030.1	1057.6



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CATALOG NUMBER: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-6-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1034.4	1076.7
115°	1007.0	1065.7
117.5°	948.9	1013.9
120°	901.9	965.2
122.5°	856.4	918.7
125°	791.2	848.7
127.5°	732.6	781.2
130°	698.2	742.9
132.5°	666.8	706.9
135°	623.9	658.5
137.5°	589.6	617.9
140°	565.8	592.3
142.5°	546.3	569.1
145°	517.0	534.2
147.5°	494.5	508.7
150°	480.3	491.9
152.5°	468.2	476.9
155°	454.3	460.0
157.5°	443.3	447.3
160°	436.6	439.0
162.5°	432.3	434.6
165°	426.2	428.5
167.5°	421.7	422.7
170°	420.4	420.4
172.5°	417.1	416.3
175°	415.2	415.2
177.5°	413.5	412.5
180°	412.5	412.5



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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	7.55	8.65	8.34	9.47	10.47	20.72	21.81	21.50	22.63	23.63
	3H	8.28	9.27	9.07	10.09	11.12	22.57	23.56	23.37	24.38	25.41
	4H	8.59	9.52	9.40	10.35	11.39	23.22	24.16	24.04	24.99	26.03
	6H	8.85	9.71	9.68	10.55	11.61	23.66	24.53	24.49	25.37	26.42
	8H	8.92	9.75	9.76	10.61	11.66	23.79	24.61	24.62	25.47	26.52
	12H	8.95	9.74	9.79	10.59	11.67	23.86	24.65	24.70	25.50	26.58
4H	2H	14.79	15.72	15.61	16.56	17.59	21.02	21.96	21.84	22.79	23.83
	3H	16.38	17.16	17.21	18.03	19.08	23.08	23.87	23.92	24.73	25.79
	4H	16.48	17.20	17.33	18.06	19.14	23.86	24.57	24.70	25.44	26.52
	6H	16.51	17.13	17.37	18.02	19.10	24.41	25.03	25.27	25.91	27.00
	8H	16.49	17.07	17.36	17.96	19.06	24.57	25.15	25.44	26.04	27.14
	12H	16.46	16.98	17.35	17.89	18.99	24.67	25.20	25.56	26.10	27.21
8H	4H	17.94	18.53	18.81	19.41	20.51	23.94	24.52	24.80	25.40	26.50
	6H	18.20	18.68	19.09	19.61	20.70	24.57	25.06	25.47	25.98	27.08
	8H	18.22	18.65	19.12	19.57	20.68	24.79	25.22	25.70	26.14	27.26
	12H	18.20	18.58	19.11	19.49	20.66	24.95	25.33	25.86	26.24	27.40
12H	4H	18.10	18.62	18.99	19.53	20.63	23.90	24.43	24.79	25.33	26.44
	6H	18.46	18.89	19.36	19.81	20.92	24.56	24.99	25.46	25.91	27.02
	8H	18.54	18.92	19.45	19.83	21.00	24.80	25.18	25.71	26.09	27.26