

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: P936939

Luminaire Tested: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

**Test Information**

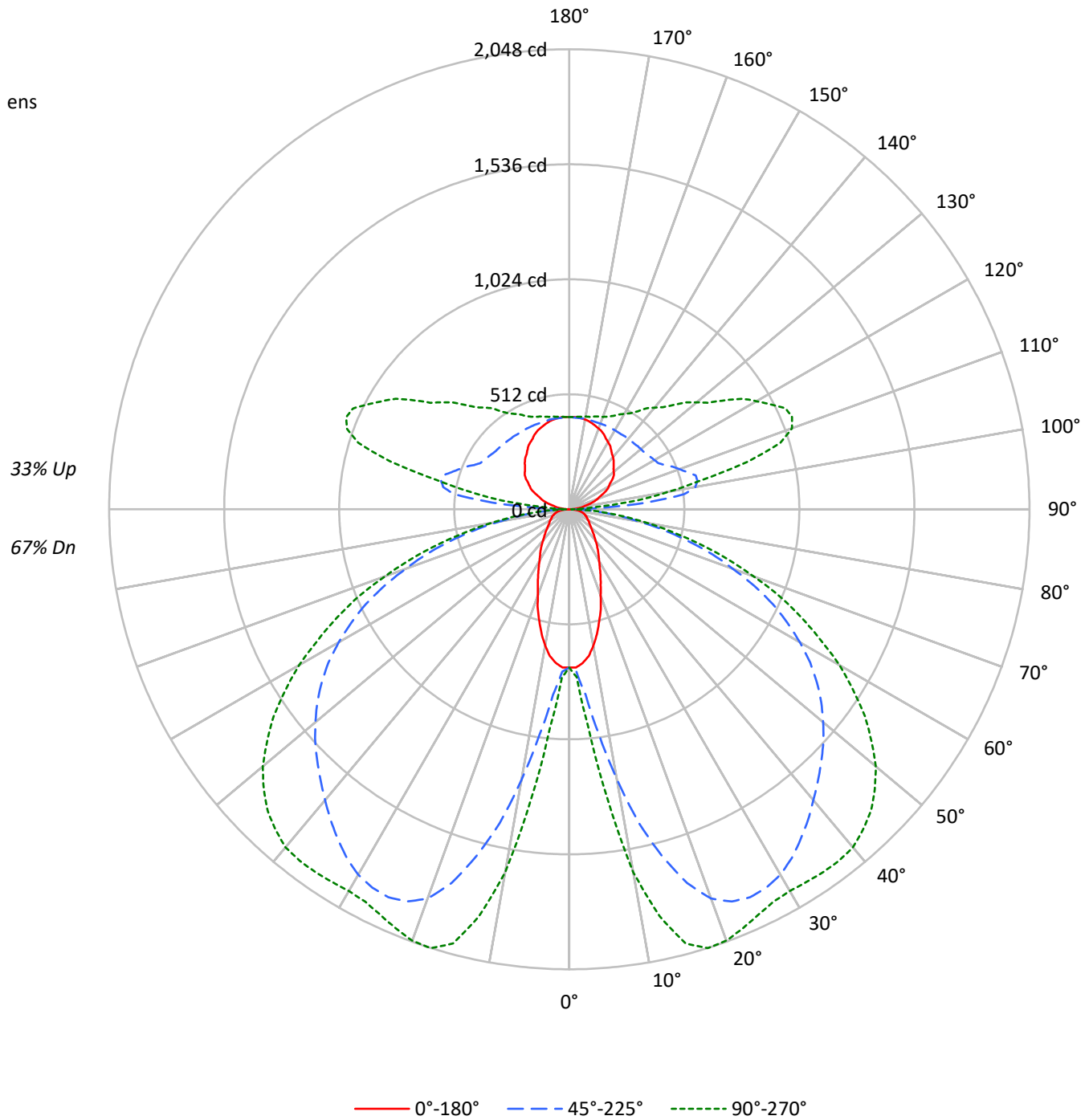
Test Method: LM-79-2019  
Report Number: P936939  
REPORT IS A COMBINATION OF REPORTS P933480 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8118.4 lumens  
Efficiency: N/A  
Efficacy: 96.6 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<sub>in</sub>): 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	50	30	10	0
RCR																					
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67	67	67	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55	55	55	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45	45	45	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37	37	37	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31	31	31	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26	26	26	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23	23	23	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20	20	20	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17	17	17	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15	15	15	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14	14	14	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4359	4359	4359
5°	4257	5037	5860
10°	3860	7341	9714
15°	3279	9588	11729
20°	2668	11108	11954
25°	2226	11622	11711
30°	1876	11692	11689
35°	1658	11495	11992
40°	1444	11239	12303
45°	1306	11051	12352
50°	1197	10881	12147
55°	1145	10634	11609
60°	1171	10162	10758
65°	1217	9447	9591
70°	1294	8233	8103
75°	1429	6707	6322
80°	1549	4646	4261
85°	1353	2460	2180

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12352 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.2	1.1
10°-20°	404.0	5.0
20°-30°	706.6	8.7
30°-40°	909.6	11.2
40°-50°	1016.0	12.5
50°-60°	973.1	12.0
60°-70°	771.2	9.5
70°-80°	453.5	5.6
80°-90°	127.5	1.6
90°-100°	200.4	2.5
100°-110°	527.0	6.5
110°-120°	546.4	6.7
120°-130°	438.3	5.4
130°-140°	343.9	4.2
140°-150°	264.0	3.3
150°-160°	190.1	2.3
160°-170°	116.3	1.4
170°-180°	39.3	0.5
0°-30°	1201.8	14.8
0°-40°	2111.4	26.0
0°-60°	4100.6	50.5
0°-90°	5452.8	67.2
90°-120°	1273.8	15.7
90°-150°	2319.9	28.6
90°-180°	2666.0	32.8
0°-180°	8118.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	705	705	705	705	705	
5°	686	736	829	938	972	63
15°	514	949	1600	1940	2001	143
25°	329	1076	1906	1989	1992	151
35°	222	1029	1794	1896	1971	139
45°	152	820	1586	1817	1899	117
55°	109	521	1346	1563	1606	99
65°	86	276	999	1124	1140	85
75°	64	170	548	603	605	66
85°	23	52	136	150	152	24
90°	3	8	21	10	10	4
95°	26	104	345	178	121	29
105°	95	144	582	884	825	101
115°	169	205	467	931	1062	167
125°	235	263	424	717	846	208
135°	280	308	411	579	656	216
145°	324	345	406	494	533	203
155°	366	377	406	446	459	168
165°	395	401	406	422	427	112
175°	411	411	409	414	414	39
180°	411	411	411	411	411	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	704.6	704.6	704.6	704.6	704.6	704.6	704.6	704.6	704.6	704.6	704.6
2.5°	704.6	704.6	709.2	711.4	716.0	718.3	722.8	727.3	740.9	743.2	747.7
5°	686.5	695.6	725.1	736.4	768.1	811.1	829.2	858.7	919.9	938.1	949.4
7.5°	659.4	679.7	752.2	770.3	849.7	963.0	1010.5	1074.0	1171.4	1219.0	1257.5
10°	616.3	659.4	788.5	831.6	960.7	1132.9	1221.3	1309.7	1456.9	1522.6	1547.5
12.5°	568.7	638.9	827.0	885.9	1071.7	1323.2	1429.7	1527.1	1694.8	1783.2	1796.8
15°	514.3	609.5	863.3	949.4	1189.5	1481.8	1599.7	1719.7	1876.1	1939.5	1955.4
17.5°	466.8	586.8	897.3	987.9	1280.2	1624.6	1744.6	1844.3	1971.3	2014.3	2025.6
20°	407.8	550.6	919.9	1037.8	1375.3	1728.8	1844.3	1921.4	2007.5	2034.6	2039.2
22.5°	364.8	512.1	933.5	1055.9	1438.8	1792.2	1889.7	1950.8	2009.7	2018.8	2021.1
25°	328.6	469.0	931.3	1076.2	1493.2	1830.8	1905.6	1950.8	1984.8	1989.4	1989.4
27.5°	294.6	421.4	922.2	1080.8	1534.0	1839.8	1898.7	1930.5	1946.3	1955.4	1955.4
30°	265.1	376.2	899.5	1071.7	1552.1	1830.8	1878.3	1894.2	1910.0	1923.7	1930.5
32.5°	242.4	333.0	865.5	1053.6	1554.3	1808.1	1842.1	1851.1	1873.8	1905.6	1916.8
35°	222.1	290.0	827.0	1028.7	1540.8	1771.9	1794.5	1803.5	1848.9	1896.5	1912.3
37.5°	201.6	258.3	777.2	985.6	1520.3	1728.8	1744.6	1760.5	1830.8	1887.4	1905.6
40°	181.3	231.1	718.3	938.1	1488.6	1676.7	1690.3	1715.2	1808.1	1873.8	1891.9
42.5°	165.4	208.4	654.8	888.2	1447.8	1617.8	1638.1	1674.4	1780.9	1851.1	1871.6
45°	151.8	185.8	586.8	820.2	1395.7	1556.6	1586.0	1635.9	1749.2	1817.2	1835.3
47.5°	138.2	170.0	516.6	750.0	1339.1	1495.4	1534.0	1590.6	1706.2	1771.9	1787.7
50°	126.8	154.1	446.4	675.2	1277.9	1429.7	1475.1	1534.0	1651.8	1712.9	1733.3
52.5°	117.8	140.5	380.6	600.5	1207.6	1361.7	1413.8	1475.1	1586.0	1644.9	1658.6
55°	108.7	129.2	324.0	521.1	1135.1	1289.2	1345.9	1404.8	1513.5	1563.4	1572.4
57.5°	104.3	120.1	276.4	446.4	1058.1	1207.6	1271.1	1325.5	1427.5	1465.9	1475.1
60°	97.4	113.3	240.2	382.9	974.3	1130.6	1185.0	1239.4	1325.5	1357.2	1364.0
62.5°	90.6	108.7	213.0	321.7	888.2	1040.0	1094.4	1144.2	1216.7	1239.4	1248.4
65°	86.1	104.3	192.6	276.4	799.8	944.8	999.2	1042.2	1101.1	1123.8	1128.4
67.5°	81.6	99.7	176.7	237.9	711.4	849.7	890.5	931.3	976.5	999.2	1001.5
70°	74.8	95.2	163.2	210.7	620.8	740.9	774.9	817.9	854.2	865.5	872.4
72.5°	70.2	88.4	154.1	190.3	527.9	636.7	668.4	693.3	725.1	736.4	736.4
75°	63.5	79.3	145.1	170.0	432.7	521.1	548.3	573.2	598.1	602.7	595.9
77.5°	56.7	70.2	124.6	142.7	337.6	412.4	435.1	448.6	469.0	473.5	475.9
80°	47.6	61.1	97.4	111.0	244.7	303.6	319.5	330.8	348.9	348.9	353.5
82.5°	36.2	47.6	70.2	79.3	165.4	208.4	222.1	228.9	240.2	240.2	240.2
85°	22.7	29.5	45.3	52.1	99.7	126.8	135.9	138.2	147.3	149.5	149.5
87.5°	11.3	15.9	29.5	31.7	52.1	65.7	65.7	70.2	70.2	68.0	65.7
90°	2.8	5.0	7.2	7.8	12.1	18.0	21.0	18.7	13.9	10.4	10.4
92.5°	11.1	29.8	48.6	53.3	74.9	103.7	118.1	103.5	74.3	52.4	50.3
95°	26.5	60.8	95.2	103.7	184.2	291.6	345.3	308.1	233.8	178.0	171.7
97.5°	45.8	76.1	106.4	114.0	248.2	427.2	516.6	493.2	446.1	410.9	398.8
100°	60.7	88.2	115.7	122.6	271.4	470.1	569.3	571.0	574.5	577.1	562.8
102.5°	73.4	99.1	124.7	131.1	282.2	483.5	584.2	614.1	674.0	718.9	706.7
105°	95.0	116.7	138.4	143.8	290.0	485.0	582.5	649.6	783.8	884.5	877.9
107.5°	117.0	137.3	157.5	162.5	291.5	463.4	549.4	643.0	830.1	970.5	972.2
110°	131.9	150.1	168.4	173.0	289.3	444.3	521.8	626.4	835.8	992.7	999.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	146.6	164.0	181.4	185.8	289.4	427.7	496.7	603.9	818.0	978.6	989.1
115°	168.6	184.7	200.8	204.8	292.1	408.5	466.7	569.8	776.1	930.8	945.5
117.5°	190.4	205.0	219.6	223.2	297.5	396.5	446.0	539.1	725.3	864.9	881.1
120°	203.1	216.8	230.6	234.0	301.9	392.4	437.7	522.7	692.9	820.4	836.2
122.5°	215.6	229.4	243.2	246.7	308.2	390.3	431.3	507.9	661.2	776.0	791.6
125°	234.6	247.2	259.8	263.0	316.8	388.6	424.4	489.5	619.7	717.2	731.5
127.5°	250.0	262.8	275.6	278.8	325.4	387.6	418.6	474.5	586.2	670.0	682.1
130°	258.3	272.1	285.8	289.2	331.6	388.1	416.4	466.1	565.7	640.3	651.4
132.5°	266.9	280.6	294.4	297.8	336.7	388.6	414.5	459.1	548.1	614.8	624.8
135°	279.6	292.1	304.6	307.7	342.2	388.2	411.2	448.5	523.1	579.0	587.6
137.5°	292.5	304.9	317.2	320.4	350.4	390.5	410.6	442.1	505.1	552.4	559.5
140°	303.3	314.7	326.1	328.9	355.5	391.0	408.7	436.0	490.4	531.2	537.8
142.5°	311.5	322.1	332.6	335.3	359.7	392.4	408.7	432.7	480.4	516.3	522.0
145°	324.3	333.5	342.7	345.0	365.3	392.4	406.0	425.5	464.6	494.0	498.3
147.5°	337.0	345.9	354.9	357.1	373.4	395.1	406.0	421.3	452.1	475.2	478.8
150°	345.3	353.4	361.4	363.5	377.7	396.5	406.0	419.0	445.0	464.4	467.3
152.5°	353.7	359.9	366.1	367.6	380.3	397.4	406.0	417.0	439.3	455.9	458.0
155°	366.5	371.1	375.5	376.7	386.4	399.4	406.0	414.8	432.5	445.7	447.1
157.5°	375.9	380.3	384.7	385.8	392.5	401.5	406.0	412.8	426.6	436.8	437.8
160°	382.2	385.6	389.0	389.9	395.3	402.4	406.0	411.9	423.6	432.5	433.0
162.5°	388.6	391.1	393.7	394.4	398.2	403.4	406.0	411.0	420.9	428.3	428.8
165°	395.4	397.8	400.1	400.7	402.5	404.8	406.0	409.5	416.6	421.9	422.6
167.5°	401.8	402.8	404.0	404.3	405.8	407.7	408.7	411.1	415.7	419.2	419.4
170°	406.0	407.0	408.2	408.5	408.6	408.6	408.7	411.1	415.7	419.2	419.2
172.5°	408.2	408.5	408.6	408.7	408.7	408.7	408.7	410.5	414.2	416.9	416.8
175°	411.2	411.2	411.2	411.2	410.4	409.3	408.7	409.9	412.2	413.9	413.9
177.5°	411.2	411.2	411.2	411.2	410.6	409.7	409.3	410.2	412.0	413.4	413.1
180°	411.2	411.2	411.2	411.2	411.2	411.2	411.2	411.2	411.2	411.2	411.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	704.6	704.6
2.5°	752.2	747.7
5°	967.5	972.1
7.5°	1302.9	1300.5
10°	1620.0	1640.5
12.5°	1851.1	1855.7
15°	1991.6	2000.7
17.5°	2046.0	2048.3
20°	2048.3	2043.7
22.5°	2023.3	2018.8
25°	1993.8	1991.6
27.5°	1966.7	1968.9
30°	1955.4	1962.2
32.5°	1955.4	1966.7
35°	1959.9	1971.3
37.5°	1957.6	1971.3
40°	1948.6	1964.4
42.5°	1923.7	1935.0
45°	1885.1	1898.7
47.5°	1835.3	1844.3
50°	1771.9	1780.9
52.5°	1692.5	1694.8
55°	1597.3	1606.4
57.5°	1495.4	1497.6
60°	1382.1	1388.9
62.5°	1262.1	1262.1
65°	1135.1	1139.7
67.5°	1003.8	1015.1
70°	870.0	872.4
72.5°	738.6	738.6
75°	602.7	604.9
77.5°	473.5	473.5
80°	351.2	353.5
82.5°	242.4	247.0
85°	151.8	151.8
87.5°	70.2	63.5
90°	10.4	10.4
92.5°	42.0	33.7
95°	146.4	121.1
97.5°	350.8	302.8
100°	505.5	448.2
102.5°	657.6	608.5
105°	851.6	825.1
107.5°	978.5	984.9
110°	1027.0	1054.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1031.3	1073.5
115°	1003.9	1062.5
117.5°	946.0	1010.9
120°	899.2	962.3
122.5°	853.8	915.9
125°	788.8	846.1
127.5°	730.4	778.8
130°	696.1	740.7
132.5°	664.8	704.8
135°	622.1	656.5
137.5°	587.8	616.0
140°	564.1	590.6
142.5°	544.7	567.3
145°	515.5	532.6
147.5°	493.0	507.2
150°	478.9	490.4
152.5°	466.8	475.5
155°	452.9	458.6
157.5°	441.9	446.0
160°	435.3	437.7
162.5°	431.0	433.3
165°	424.9	427.2
167.5°	420.4	421.4
170°	419.2	419.2
172.5°	415.9	415.1
175°	413.9	413.9
177.5°	412.2	411.2
180°	411.2	411.2



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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	7.54	8.64	8.33	9.45	10.45	20.71	21.80	21.49	22.62	23.62
	3H	8.27	9.25	9.06	10.08	11.11	22.56	23.55	23.36	24.37	25.40
	4H	8.57	9.51	9.39	10.34	11.38	23.21	24.15	24.03	24.98	26.02
	6H	8.84	9.70	9.67	10.54	11.60	23.65	24.52	24.48	25.36	26.41
	8H	8.91	9.74	9.75	10.60	11.65	23.78	24.60	24.61	25.46	26.51
	12H	8.94	9.73	9.78	10.58	11.66	23.85	24.64	24.69	25.49	26.57
4H	2H	14.78	15.71	15.60	16.55	17.58	21.01	21.95	21.83	22.78	23.82
	3H	16.37	17.15	17.20	18.02	19.07	23.07	23.86	23.91	24.72	25.78
	4H	16.47	17.19	17.32	18.05	19.13	23.85	24.56	24.69	25.43	26.51
	6H	16.50	17.12	17.36	18.01	19.09	24.40	25.02	25.26	25.90	26.99
	8H	16.48	17.06	17.35	17.94	19.04	24.56	25.14	25.43	26.03	27.13
	12H	16.45	16.97	17.34	17.88	18.98	24.66	25.19	25.55	26.09	27.20
8H	4H	17.93	18.52	18.80	19.40	20.50	23.93	24.51	24.79	25.39	26.49
	6H	18.19	18.67	19.08	19.59	20.69	24.56	25.05	25.46	25.97	27.07
	8H	18.21	18.64	19.11	19.56	20.67	24.78	25.21	25.69	26.13	27.25
	12H	18.19	18.57	19.10	19.48	20.65	24.94	25.32	25.85	26.23	27.39
12H	4H	18.09	18.61	18.97	19.52	20.62	23.89	24.42	24.78	25.32	26.42
	6H	18.45	18.88	19.35	19.79	20.91	24.55	24.98	25.45	25.90	27.01
	8H	18.53	18.91	19.44	19.82	20.99	24.79	25.17	25.70	26.08	27.25