

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: P936519

Luminaire Tested: SQ4-FB-025U-125D-840-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

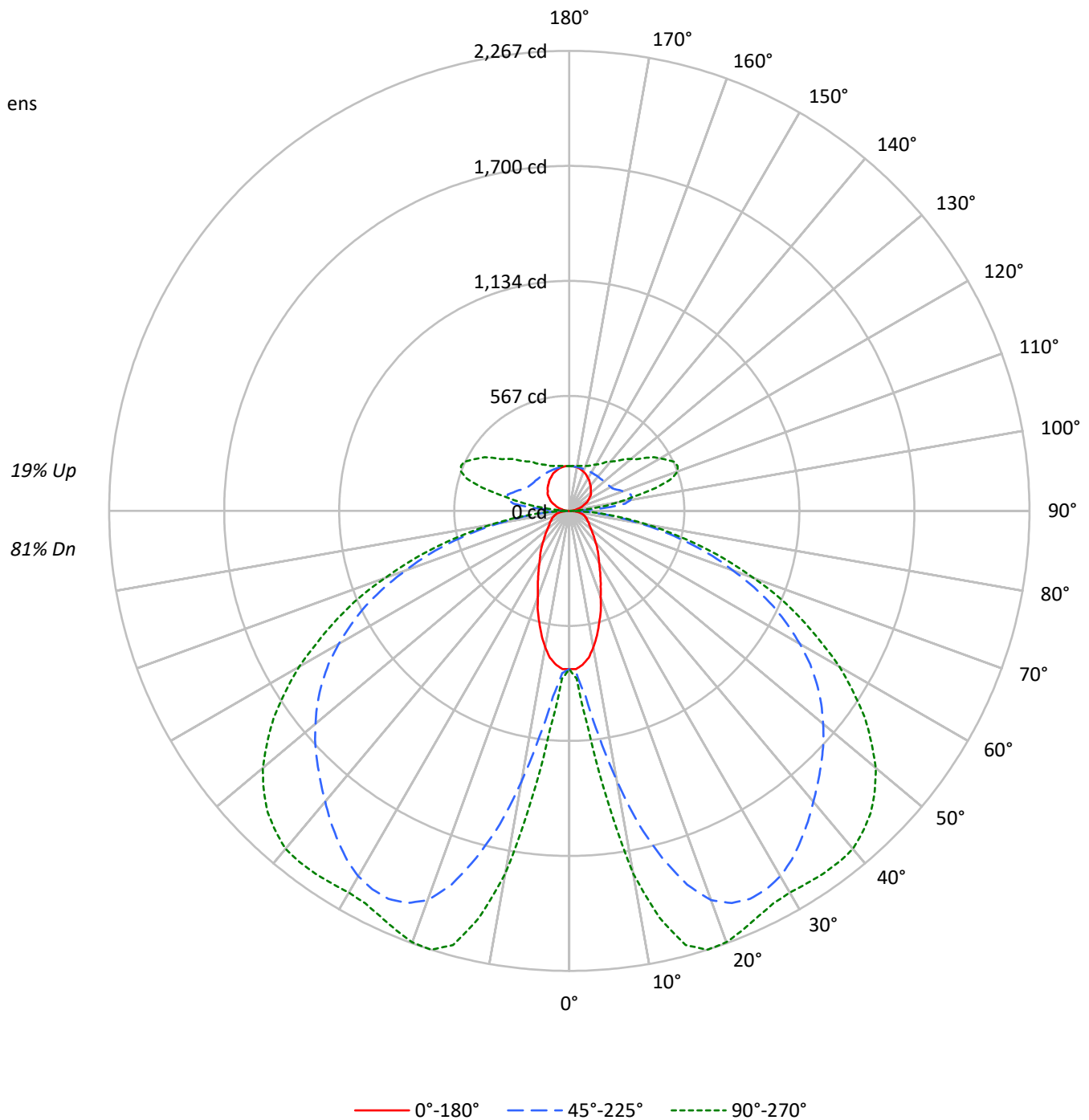
Test Method: LM-79-2019  
Report Number: P936519  
REPORT IS A COMBINATION OF REPORTS P933448 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-125D-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7468.3 lumens  
Efficiency: N/A  
Efficacy: 100.4 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): 74.4  
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	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	84	84	84	81
1	104	99	94	90	99	95	91	87	87	84	81	80	77	75	73	71	70	70	70	70	66
2	94	85	78	72	89	82	75	70	75	70	66	69	65	61	63	60	57	57	57	57	54
3	85	74	66	59	81	71	64	58	65	59	54	60	55	51	55	51	48	48	48	48	45
4	77	65	56	49	74	63	54	48	58	51	45	53	47	43	49	44	40	40	40	40	37
5	71	58	49	42	67	55	47	41	51	44	39	47	41	36	43	38	34	34	34	34	32
6	65	51	42	36	62	49	41	35	46	39	33	42	36	31	39	34	30	30	30	30	27
7	60	46	37	31	57	45	36	30	41	34	29	38	32	27	35	30	26	26	26	26	24
8	55	42	33	27	53	40	32	27	37	30	25	35	29	24	32	27	23	23	23	23	21
9	52	38	30	24	49	37	29	24	34	27	23	32	26	22	29	24	20	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	18	16

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

	0°	45°	90°
0°	4825	4825	4825
5°	4712	5575	6485
10°	4272	8125	10752
15°	3630	10613	12983
20°	2954	12295	13231
25°	2463	12863	12962
30°	2076	12941	12938
35°	1835	12723	13273
40°	1598	12440	13618
45°	1447	12232	13672
50°	1325	12044	13445
55°	1267	11770	12849
60°	1296	11249	11908
65°	1347	10457	10615
70°	1432	9113	8968
75°	1580	7424	6998
80°	1715	5142	4715
85°	1496	2724	2415

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13672 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.9	1.4
10°-20°	447.1	6.0
20°-30°	782.1	10.5
30°-40°	1006.8	13.5
40°-50°	1124.6	15.1
50°-60°	1077.1	14.4
60°-70°	853.6	11.4
70°-80°	501.9	6.7
80°-90°	140.3	1.9
90°-100°	107.8	1.4
100°-110°	283.4	3.8
110°-120°	293.9	3.9
120°-130°	235.7	3.2
130°-140°	185.0	2.5
140°-150°	142.0	1.9
150°-160°	102.2	1.4
160°-170°	62.6	0.8
170°-180°	21.1	0.3
0°-30°	1330.2	17.8
0°-40°	2337.0	31.3
0°-60°	4538.7	60.8
0°-90°	6034.6	80.8
90°-120°	685.1	9.2
90°-150°	1247.8	16.7
90°-180°	1434.0	19.2
0°-180°	7468.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	780	780	780	780	780	
5°	760	815	918	1038	1076	70
15°	569	1051	1771	2147	2214	158
25°	364	1191	2109	2202	2204	168
35°	246	1139	1986	2099	2182	153
45°	168	908	1756	2011	2102	130
55°	120	577	1490	1730	1778	110
65°	95	306	1106	1244	1262	94
75°	70	188	607	667	670	74
85°	25	58	150	166	168	27
90°	2	4	11	6	6	3
95°	14	56	186	96	65	16
105°	51	77	313	476	444	54
115°	91	110	251	501	572	90
125°	126	142	228	386	455	112
135°	150	166	221	311	353	116
145°	174	186	218	266	286	109
155°	197	203	218	240	247	91
165°	213	216	218	227	230	60
175°	221	221	220	223	223	21
180°	221	221	221	221	221	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9
2.5°	779.9	779.9	785.0	787.4	792.5	795.0	800.0	805.0	820.0	822.6	827.6
5°	759.9	769.9	802.6	815.1	850.2	897.8	917.9	950.5	1018.2	1038.3	1050.8
7.5°	729.8	752.4	832.6	852.6	940.5	1065.9	1118.5	1188.8	1296.6	1349.2	1391.9
10°	682.1	729.8	872.7	920.4	1063.4	1254.0	1351.8	1449.6	1612.6	1685.3	1712.9
12.5°	629.5	707.2	915.4	980.6	1186.2	1464.6	1582.5	1690.3	1875.9	1973.7	1988.7
15°	569.3	674.6	955.5	1050.8	1316.6	1640.2	1770.6	1903.5	2076.6	2146.7	2164.3
17.5°	516.6	649.5	993.1	1093.4	1417.0	1798.2	1931.0	2041.4	2181.9	2229.5	2242.1
20°	451.4	609.4	1018.2	1148.6	1522.3	1913.6	2041.4	2126.7	2222.0	2252.0	2257.1
22.5°	403.8	566.8	1033.3	1168.7	1592.6	1983.7	2091.6	2159.3	2224.5	2234.6	2237.0
25°	363.7	519.1	1030.8	1191.2	1652.7	2026.4	2109.2	2159.3	2196.9	2202.0	2202.0
27.5°	326.0	466.4	1020.7	1196.3	1697.9	2036.4	2101.6	2136.7	2154.2	2164.3	2164.3
30°	293.4	416.3	995.6	1186.2	1717.9	2026.4	2079.0	2096.6	2114.1	2129.2	2136.7
32.5°	268.3	368.6	958.0	1166.1	1720.4	2001.3	2038.9	2048.9	2074.0	2109.2	2121.6
35°	245.8	321.0	915.4	1138.6	1705.4	1961.2	1986.3	1996.3	2046.4	2099.1	2116.7
37.5°	223.2	285.9	860.3	1090.9	1682.8	1913.6	1931.0	1948.6	2026.4	2089.0	2109.2
40°	200.7	255.8	795.0	1038.3	1647.7	1855.9	1870.9	1898.4	2001.3	2074.0	2094.1
42.5°	183.1	230.7	724.8	983.1	1602.5	1790.7	1813.2	1853.3	1971.2	2048.9	2071.5
45°	168.1	205.6	649.5	907.9	1544.8	1722.9	1755.5	1810.7	1936.1	2011.4	2031.4
47.5°	152.9	188.1	571.8	830.1	1482.2	1655.2	1697.9	1760.5	1888.5	1961.2	1978.8
50°	140.4	170.5	494.1	747.3	1414.4	1582.5	1632.7	1697.9	1828.3	1896.0	1918.5
52.5°	130.4	155.5	421.3	664.6	1336.7	1507.2	1564.9	1632.7	1755.5	1820.7	1835.8
55°	120.3	143.0	358.6	576.8	1256.4	1427.0	1489.7	1554.9	1675.3	1730.5	1740.5
57.5°	115.4	132.9	306.0	494.1	1171.2	1336.7	1406.9	1467.1	1580.0	1622.6	1632.7
60°	107.8	125.4	265.9	423.9	1078.4	1251.4	1311.7	1371.8	1467.1	1502.3	1509.8
62.5°	100.3	120.3	235.7	356.1	983.1	1151.1	1211.3	1266.5	1346.7	1371.8	1381.8
65°	95.3	115.4	213.2	306.0	885.2	1045.8	1106.0	1153.6	1218.8	1243.9	1248.9
67.5°	90.3	110.4	195.6	263.3	787.4	940.5	985.6	1030.8	1080.9	1106.0	1108.5
70°	82.8	105.3	180.6	233.3	687.2	820.0	857.7	905.3	945.5	958.0	965.6
72.5°	77.8	97.8	170.5	210.6	584.3	704.7	739.8	767.4	802.6	815.1	815.1
75°	70.2	87.7	160.6	188.1	479.0	576.8	606.9	634.5	662.1	667.1	659.6
77.5°	62.7	77.8	137.9	158.0	373.7	456.5	481.6	496.6	519.1	524.1	526.7
80°	52.7	67.7	107.8	122.9	270.8	336.0	353.6	366.2	386.2	386.2	391.2
82.5°	40.1	52.7	77.8	87.7	183.1	230.7	245.8	253.3	265.9	265.9	265.9
85°	25.1	32.6	50.2	57.7	110.4	140.4	150.5	152.9	163.0	165.5	165.5
87.5°	12.5	17.6	32.6	35.1	57.7	72.7	72.7	77.8	77.8	75.3	72.7
90°	1.5	2.7	3.9	4.1	6.5	9.7	11.3	10.0	7.5	5.6	5.6
92.5°	5.9	16.0	26.1	28.7	40.3	55.8	63.5	55.6	39.9	28.2	27.1
95°	14.2	32.7	51.2	55.8	99.1	156.8	185.6	165.7	125.7	95.7	92.4
97.5°	24.6	40.9	57.2	61.3	133.5	229.7	277.8	265.2	240.0	221.0	214.6
100°	32.7	47.4	62.2	65.9	146.0	252.8	306.2	307.1	308.9	310.3	302.6
102.5°	39.5	53.4	67.1	70.5	151.8	260.0	314.2	330.3	362.5	386.7	380.1
105°	51.1	62.7	74.4	77.4	156.0	260.8	313.3	349.4	421.6	475.7	472.2
107.5°	62.9	73.8	84.7	87.4	156.8	249.3	295.5	345.9	446.6	522.1	522.9
110°	70.9	80.8	90.6	93.1	155.6	239.0	280.7	337.0	449.5	533.9	537.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	78.8	88.2	97.5	99.9	155.6	230.0	267.2	324.8	440.0	526.3	531.9
115°	90.7	99.4	108.0	110.2	157.1	219.6	251.0	306.5	417.4	500.6	508.5
117.5°	102.5	110.3	118.1	120.0	160.0	213.2	239.9	290.0	390.1	465.2	473.8
120°	109.3	116.7	124.0	125.9	162.4	211.1	235.4	281.2	372.7	441.3	449.8
122.5°	115.9	123.4	130.8	132.7	165.8	210.0	232.0	273.2	355.6	417.4	425.8
125°	126.2	133.0	139.8	141.5	170.4	209.1	228.3	263.3	333.4	385.8	393.5
127.5°	134.5	141.3	148.2	149.9	175.0	208.5	225.2	255.2	315.4	360.4	366.9
130°	138.9	146.3	153.6	155.5	178.3	208.8	224.0	250.8	304.2	344.3	350.3
132.5°	143.6	151.0	158.3	160.2	181.1	209.1	223.0	246.9	294.8	330.7	336.0
135°	150.4	157.1	163.8	165.5	184.1	208.9	221.2	241.3	281.4	311.4	316.1
137.5°	157.4	164.0	170.6	172.3	188.5	210.1	220.9	237.9	271.8	297.2	300.9
140°	163.1	169.2	175.4	177.0	191.3	210.3	219.8	234.5	263.8	285.7	289.3
142.5°	167.6	173.2	178.9	180.3	193.5	211.0	219.8	232.7	258.5	277.7	280.8
145°	174.4	179.3	184.3	185.5	196.5	211.0	218.3	228.8	249.9	265.7	267.9
147.5°	181.2	186.0	190.9	192.1	200.9	212.5	218.3	226.6	243.1	255.6	257.5
150°	185.6	190.0	194.4	195.5	203.1	213.3	218.3	225.4	239.3	249.8	251.3
152.5°	190.3	193.5	196.9	197.7	204.6	213.8	218.3	224.3	236.2	245.2	246.4
155°	197.1	199.6	202.0	202.6	207.9	214.9	218.3	223.1	232.6	239.7	240.5
157.5°	202.1	204.5	206.9	207.5	211.1	216.0	218.3	222.0	229.4	234.9	235.5
160°	205.6	207.5	209.3	209.8	212.6	216.5	218.3	221.5	227.8	232.6	232.9
162.5°	209.0	210.3	211.7	212.1	214.2	217.0	218.3	221.0	226.4	230.4	230.7
165°	212.7	213.9	215.2	215.5	216.5	217.8	218.3	220.2	224.1	226.9	227.2
167.5°	216.1	216.7	217.3	217.5	218.2	219.3	219.8	221.1	223.6	225.5	225.6
170°	218.3	218.9	219.5	219.6	219.7	219.8	219.8	221.1	223.6	225.5	225.5
172.5°	219.5	219.6	219.8	219.8	219.8	219.8	219.8	220.8	222.8	224.3	224.2
175°	221.2	221.2	221.2	221.2	220.7	220.1	219.8	220.4	221.7	222.7	222.7
177.5°	221.2	221.2	221.2	221.2	220.8	220.3	220.1	220.6	221.6	222.4	222.3
180°	221.2	221.2	221.2	221.2	221.2	221.2	221.2	221.2	221.2	221.2	221.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	779.9	779.9
2.5°	832.6	827.6
5°	1070.9	1075.9
7.5°	1442.1	1439.5
10°	1793.1	1815.7
12.5°	2048.9	2054.0
15°	2204.4	2214.5
17.5°	2264.6	2267.2
20°	2267.2	2262.1
22.5°	2239.5	2234.6
25°	2206.9	2204.4
27.5°	2176.9	2179.3
30°	2164.3	2171.8
32.5°	2164.3	2176.9
35°	2169.4	2181.9
37.5°	2166.8	2181.9
40°	2156.8	2174.3
42.5°	2129.2	2141.8
45°	2086.6	2101.6
47.5°	2031.4	2041.4
50°	1961.2	1971.2
52.5°	1873.3	1875.9
55°	1768.0	1778.1
57.5°	1655.2	1657.7
60°	1529.8	1537.3
62.5°	1396.9	1396.9
65°	1256.4	1261.5
67.5°	1111.0	1123.6
70°	963.0	965.6
72.5°	817.6	817.6
75°	667.1	669.6
77.5°	524.1	524.1
80°	388.7	391.2
82.5°	268.3	273.4
85°	168.1	168.1
87.5°	77.8	70.2
90°	5.6	5.6
92.5°	22.5	18.1
95°	78.7	65.2
97.5°	188.7	162.8
100°	271.9	241.1
102.5°	353.7	327.3
105°	458.0	443.8
107.5°	526.3	529.8
110°	552.4	567.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	554.7	577.4
115°	539.9	571.5
117.5°	508.8	543.7
120°	483.7	517.6
122.5°	459.2	492.6
125°	424.2	455.1
127.5°	392.9	418.9
130°	374.4	398.4
132.5°	357.6	379.1
135°	334.5	353.1
137.5°	316.2	331.3
140°	303.4	317.6
142.5°	292.9	305.2
145°	277.2	286.5
147.5°	265.2	272.8
150°	257.6	263.8
152.5°	251.1	255.8
155°	243.5	246.7
157.5°	237.7	239.9
160°	234.2	235.4
162.5°	231.9	233.1
165°	228.5	229.8
167.5°	226.2	226.6
170°	225.5	225.5
172.5°	223.7	223.3
175°	222.7	222.7
177.5°	221.7	221.2
180°	221.2	221.2



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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	8.89	10.20	9.52	10.85	11.59	22.06	23.36	22.69	24.01	24.76
	3H	9.63	10.81	10.27	11.47	12.25	23.92	25.10	24.57	25.76	26.54
	4H	9.95	11.06	10.61	11.73	12.53	24.58	25.70	25.25	26.37	27.16
	6H	10.22	11.25	10.90	11.93	12.75	25.03	26.06	25.71	26.75	27.56
	8H	10.30	11.29	10.99	11.99	12.80	25.16	26.15	25.85	26.85	27.67
	12H	10.33	11.28	11.03	11.97	12.82	25.25	26.19	25.94	26.88	27.73
4H	2H	16.15	17.26	16.82	17.94	18.73	22.38	23.50	23.05	24.17	24.96
	3H	17.76	18.69	18.44	19.40	20.22	24.46	25.40	25.14	26.11	26.92
	4H	17.87	18.72	18.57	19.44	20.28	25.25	26.10	25.94	26.81	27.65
	6H	17.91	18.65	18.63	19.39	20.24	25.81	26.55	26.52	27.29	28.14
	8H	17.90	18.59	18.62	19.33	20.19	25.98	26.67	26.70	27.41	28.27
	12H	17.88	18.50	18.62	19.26	20.13	26.09	26.72	26.83	27.48	28.35
8H	4H	19.35	20.05	20.07	20.78	21.65	25.34	26.04	26.07	26.77	27.64
	6H	19.61	20.19	20.37	20.97	21.84	25.99	26.57	26.74	27.35	28.21
	8H	19.64	20.15	20.40	20.93	21.82	26.21	26.73	26.98	27.51	28.39
	12H	19.63	20.08	20.40	20.85	21.80	26.38	26.83	27.14	27.60	28.54
12H	4H	19.52	20.14	20.26	20.90	21.77	25.32	25.95	26.06	26.71	27.58
	6H	19.88	20.39	20.64	21.17	22.06	25.98	26.50	26.74	27.27	28.16
	8H	19.97	20.42	20.74	21.19	22.14	26.23	26.68	27.00	27.45	28.40