

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: P936915

Luminaire Tested: SQ4-FB-050U-125D-835-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936915
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-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

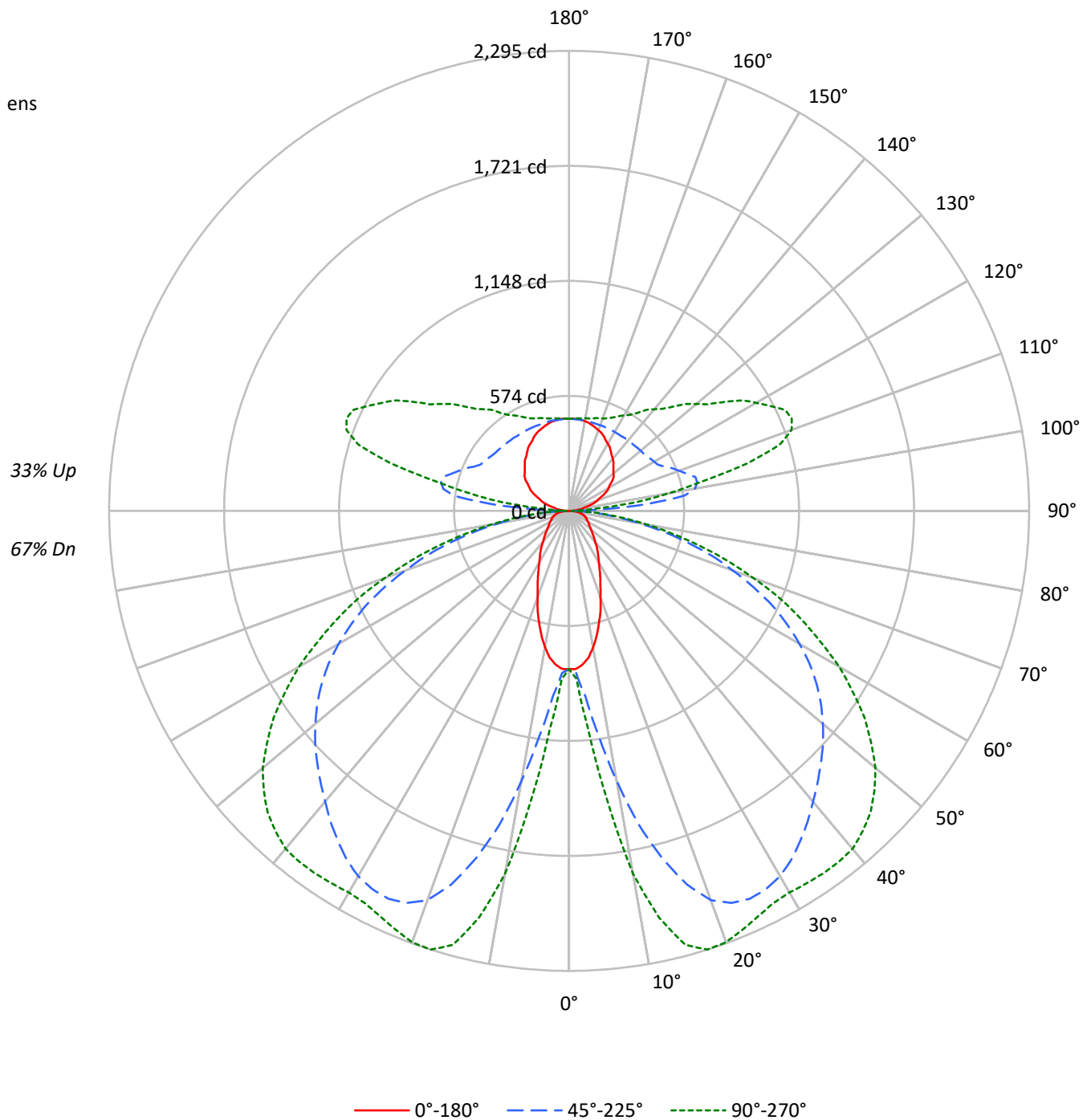
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9095.0 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-Direct

Input Watts (W): 84
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	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°	4883	4883	4883
5°	4769	5643	6564
10°	4324	8224	10883
15°	3674	10742	13141
20°	2990	12444	13392
25°	2493	13020	13120
30°	2101	13098	13095
35°	1857	12877	13434
40°	1618	12591	13783
45°	1464	12380	13837
50°	1341	12190	13608
55°	1283	11913	13005
60°	1312	11385	12053
65°	1364	10584	10744
70°	1449	9224	9077
75°	1600	7514	7083
80°	1735	5205	4773
85°	1514	2756	2443

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13837 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.1	1.1
10°-20°	452.6	5.0
20°-30°	791.6	8.7
30°-40°	1019.1	11.2
40°-50°	1138.3	12.5
50°-60°	1090.2	12.0
60°-70°	864.0	9.5
70°-80°	508.0	5.6
80°-90°	142.9	1.6
90°-100°	224.5	2.5
100°-110°	590.3	6.5
110°-120°	612.1	6.7
120°-130°	491.0	5.4
130°-140°	385.3	4.2
140°-150°	295.7	3.3
150°-160°	213.0	2.3
160°-170°	130.3	1.4
170°-180°	44.0	0.5
0°-30°	1346.3	14.8
0°-40°	2365.4	26.0
0°-60°	4593.8	50.5
0°-90°	6108.8	67.2
90°-120°	1427.0	15.7
90°-150°	2599.0	28.6
90°-180°	2986.0	32.8
0°-180°	9095.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	789	789	789	789	789	
5°	769	825	929	1051	1089	71
15°	576	1064	1792	2173	2241	160
25°	368	1206	2135	2229	2231	170
35°	249	1152	2010	2125	2208	155
45°	170	919	1777	2036	2127	132
55°	122	584	1508	1752	1800	111
65°	96	310	1119	1259	1277	96
75°	71	190	614	675	678	74
85°	25	58	152	168	170	27
90°	3	9	24	12	12	4
95°	30	116	387	199	136	33
105°	106	161	653	991	924	113
115°	189	229	523	1043	1190	187
125°	263	295	476	804	948	233
135°	313	345	461	649	736	242
145°	363	386	455	553	597	228
155°	411	422	455	499	514	189
165°	443	449	455	473	479	125
175°	461	461	458	464	464	44
180°	461	461	461	461	461	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	789.4	789.4	789.4	789.4	789.4	789.4	789.4	789.4	789.4	789.4	789.4
2.5°	789.4	789.4	794.5	797.0	802.1	804.7	809.7	814.8	830.0	832.6	837.7
5°	769.1	779.3	812.3	825.0	860.5	908.7	929.0	962.0	1030.6	1050.9	1063.6
7.5°	738.7	761.5	842.7	863.0	951.9	1078.8	1132.1	1203.2	1312.3	1365.6	1408.8
10°	690.4	738.7	883.3	931.6	1076.3	1269.2	1368.2	1467.2	1632.2	1705.8	1733.7
12.5°	637.1	715.8	926.5	992.5	1200.6	1482.4	1601.7	1710.8	1898.7	1997.7	2012.9
15°	576.2	682.8	967.1	1063.6	1332.6	1660.1	1792.1	1926.6	2101.8	2172.8	2190.6
17.5°	522.9	657.4	1005.2	1106.7	1434.2	1820.0	1954.5	2066.2	2208.4	2256.6	2269.3
20°	456.9	616.8	1030.6	1162.6	1540.8	1936.8	2066.2	2152.5	2249.0	2279.4	2284.5
22.5°	408.7	573.7	1045.8	1182.9	1611.9	2007.8	2117.0	2185.5	2251.5	2261.7	2264.2
25°	368.1	525.4	1043.3	1205.7	1672.8	2051.0	2134.8	2185.5	2223.6	2228.7	2228.7
27.5°	330.0	472.1	1033.1	1210.8	1718.5	2061.1	2127.1	2162.7	2180.4	2190.6	2190.6
30°	297.0	421.4	1007.7	1200.6	1738.8	2051.0	2104.3	2122.1	2139.8	2155.1	2162.7
32.5°	271.6	373.1	969.6	1180.3	1741.3	2025.6	2063.7	2073.8	2099.2	2134.8	2147.4
35°	248.8	324.9	926.5	1152.4	1726.1	1985.0	2010.4	2020.5	2071.3	2124.6	2142.4
37.5°	225.9	289.4	870.7	1104.2	1703.2	1936.8	1954.5	1972.3	2051.0	2114.4	2134.8
40°	203.1	258.9	804.7	1050.9	1667.7	1878.4	1893.6	1921.5	2025.6	2099.2	2119.5
42.5°	185.3	233.5	733.6	995.0	1622.0	1812.4	1835.2	1875.8	1995.1	2073.8	2096.7
45°	170.1	208.1	657.4	918.9	1563.6	1743.8	1776.8	1832.7	1959.6	2035.8	2056.1
47.5°	154.8	190.4	578.7	840.2	1500.2	1675.3	1718.5	1781.9	1911.4	1985.0	2002.8
50°	142.1	172.6	500.1	756.4	1431.6	1601.7	1652.5	1718.5	1850.5	1919.0	1941.8
52.5°	132.0	157.4	426.4	672.7	1352.9	1525.5	1583.9	1652.5	1776.8	1842.8	1858.1
55°	121.8	144.7	363.0	583.8	1271.7	1444.3	1507.8	1573.8	1695.6	1751.5	1761.6
57.5°	116.8	134.5	309.7	500.1	1185.4	1352.9	1424.0	1484.9	1599.2	1642.3	1652.5
60°	109.1	126.9	269.1	429.0	1091.5	1266.6	1327.6	1388.5	1484.9	1520.5	1528.1
62.5°	101.5	121.8	238.6	360.4	995.0	1165.1	1226.0	1281.9	1363.1	1388.5	1398.6
65°	96.5	116.8	215.8	309.7	896.0	1058.5	1119.4	1167.6	1233.6	1259.0	1264.1
67.5°	91.4	111.7	198.0	266.5	797.0	951.9	997.6	1043.3	1094.0	1119.4	1122.0
70°	83.8	106.6	182.8	236.1	695.5	830.0	868.1	916.3	957.0	969.6	977.3
72.5°	78.7	99.0	172.6	213.2	591.4	713.3	748.8	776.7	812.3	825.0	825.0
75°	71.1	88.8	162.5	190.4	484.8	583.8	614.3	642.2	670.1	675.2	667.6
77.5°	63.5	78.7	139.6	159.9	378.2	462.0	487.4	502.6	525.4	530.5	533.1
80°	53.3	68.5	109.1	124.4	274.1	340.1	357.9	370.6	390.9	390.9	396.0
82.5°	40.6	53.3	78.7	88.8	185.3	233.5	248.8	256.4	269.1	269.1	269.1
85°	25.4	33.0	50.8	58.4	111.7	142.1	152.3	154.8	165.0	167.5	167.5
87.5°	12.7	17.8	33.0	35.5	58.4	73.6	73.6	78.7	78.7	76.2	73.6
90°	3.1	5.6	8.1	8.7	13.6	20.2	23.5	20.9	15.6	11.7	11.7
92.5°	12.4	33.4	54.4	59.7	83.9	116.2	132.3	115.9	83.2	58.7	56.4
95°	29.7	68.1	106.6	116.2	206.4	326.7	386.8	345.2	261.9	199.4	192.3
97.5°	51.3	85.3	119.2	127.7	278.1	478.6	578.8	552.5	499.8	460.3	446.8
100°	68.0	98.8	129.6	137.3	304.1	526.6	637.8	639.7	643.6	646.5	630.5
102.5°	82.2	111.0	139.7	146.9	316.1	541.7	654.5	688.0	755.1	805.4	791.7
105°	106.4	130.7	155.0	161.1	324.9	543.4	652.6	727.8	878.1	990.9	983.5
107.5°	131.1	153.8	176.4	182.1	326.6	519.2	615.5	720.3	930.0	1087.3	1089.1
110°	147.8	168.2	188.7	193.8	324.1	497.8	584.6	701.8	936.3	1112.1	1119.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	164.2	183.7	203.2	208.1	324.2	479.1	556.5	676.5	916.4	1096.3	1108.1
115°	188.9	206.9	224.9	229.4	327.2	457.6	522.8	638.4	869.5	1042.8	1059.2
117.5°	213.3	229.7	246.0	250.1	333.3	444.2	499.6	603.9	812.5	968.9	987.1
120°	227.5	242.9	258.3	262.2	338.2	439.6	490.3	585.6	776.2	919.1	936.8
122.5°	241.5	257.0	272.5	276.4	345.3	437.2	483.2	569.0	740.7	869.4	886.8
125°	262.8	276.9	291.1	294.6	354.9	435.3	475.5	548.4	694.2	803.5	819.5
127.5°	280.1	294.4	308.7	312.3	364.5	434.2	469.0	531.6	656.7	750.6	764.1
130°	289.4	304.8	320.2	324.0	371.5	434.8	466.5	522.2	633.7	717.3	729.8
132.5°	299.0	314.4	329.8	333.6	377.2	435.3	464.4	514.3	614.0	688.8	700.0
135°	313.2	327.2	341.2	344.7	383.4	434.9	460.7	502.5	586.0	648.6	658.3
137.5°	327.7	341.6	355.4	358.9	392.6	437.5	460.0	495.3	565.9	618.9	626.8
140°	339.8	352.6	365.3	368.5	398.3	438.0	457.9	488.4	549.4	595.1	602.5
142.5°	349.0	360.8	372.6	375.6	403.0	439.6	457.9	484.7	538.2	578.4	584.8
145°	363.3	373.6	383.9	386.5	409.3	439.6	454.8	476.7	520.5	553.4	558.2
147.5°	377.5	387.5	397.6	400.1	418.3	442.6	454.8	472.0	506.5	532.4	536.4
150°	386.8	395.9	404.9	407.2	423.1	444.2	454.8	469.4	498.5	520.3	523.5
152.5°	396.3	403.2	410.1	411.8	426.1	445.2	454.8	467.2	492.1	510.7	513.1
155°	410.6	415.7	420.7	422.0	432.9	447.5	454.8	464.7	484.5	499.3	500.9
157.5°	421.1	426.0	431.0	432.2	439.7	449.8	454.8	462.5	477.9	489.4	490.5
160°	428.2	432.0	435.8	436.8	442.8	450.8	454.8	461.4	474.6	484.5	485.1
162.5°	435.3	438.2	441.1	441.8	446.1	451.9	454.8	460.4	471.5	479.8	480.4
165°	443.0	445.6	448.2	448.9	450.9	453.5	454.8	458.8	466.7	472.7	473.4
167.5°	450.1	451.3	452.6	452.9	454.6	456.8	457.9	460.5	465.7	469.6	469.9
170°	454.8	456.0	457.3	457.6	457.7	457.8	457.9	460.5	465.7	469.6	469.6
172.5°	457.3	457.6	457.8	457.9	457.9	457.9	457.9	459.9	464.0	467.1	466.9
175°	460.7	460.7	460.7	460.7	459.8	458.5	457.9	459.2	461.8	463.7	463.7
177.5°	460.7	460.7	460.7	460.7	460.0	459.0	458.5	459.5	461.6	463.1	462.8
180°	460.7	460.7	460.7	460.7	460.7	460.7	460.7	460.7	460.7	460.7	460.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	789.4	789.4
2.5°	842.7	837.7
5°	1083.9	1089.0
7.5°	1459.6	1457.0
10°	1814.9	1837.8
12.5°	2073.8	2078.9
15°	2231.2	2241.4
17.5°	2292.1	2294.7
20°	2294.7	2289.6
22.5°	2266.7	2261.7
25°	2233.7	2231.2
27.5°	2203.3	2205.8
30°	2190.6	2198.2
32.5°	2190.6	2203.3
35°	2195.7	2208.4
37.5°	2193.1	2208.4
40°	2183.0	2200.7
42.5°	2155.1	2167.8
45°	2111.9	2127.1
47.5°	2056.1	2066.2
50°	1985.0	1995.1
52.5°	1896.1	1898.7
55°	1789.5	1799.7
57.5°	1675.3	1677.8
60°	1548.4	1556.0
62.5°	1413.9	1413.9
65°	1271.7	1276.8
67.5°	1124.5	1137.2
70°	974.7	977.3
72.5°	827.5	827.5
75°	675.2	677.7
77.5°	530.5	530.5
80°	393.4	396.0
82.5°	271.6	276.7
85°	170.1	170.1
87.5°	78.7	71.1
90°	11.7	11.7
92.5°	47.0	37.7
95°	164.0	135.7
97.5°	393.0	339.2
100°	566.3	502.1
102.5°	736.7	681.7
105°	954.0	924.4
107.5°	1096.2	1103.4
110°	1150.5	1181.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1155.4	1202.6
115°	1124.7	1190.3
117.5°	1059.8	1132.5
120°	1007.4	1078.1
122.5°	956.5	1026.1
125°	883.7	947.9
127.5°	818.3	872.5
130°	779.8	829.8
132.5°	744.8	789.6
135°	696.9	735.5
137.5°	658.5	690.1
140°	632.0	661.6
142.5°	610.2	635.6
145°	577.5	596.7
147.5°	552.3	568.2
150°	536.5	549.4
152.5°	522.9	532.7
155°	507.4	513.8
157.5°	495.1	499.6
160°	487.7	490.3
162.5°	482.9	485.4
165°	476.0	478.6
167.5°	471.0	472.1
170°	469.6	469.6
172.5°	465.9	465.0
175°	463.7	463.7
177.5°	461.8	460.7
180°	460.7	460.7



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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	7.94	9.03	8.72	9.85	10.85	21.10	22.20	21.89	23.01	24.01
	3H	8.66	9.65	9.46	10.47	11.50	22.95	23.94	23.75	24.77	25.80
	4H	8.97	9.90	9.79	10.74	11.78	23.61	24.54	24.42	25.37	26.41
	6H	9.23	10.10	10.06	10.94	11.99	24.05	24.91	24.87	25.75	26.80
	8H	9.31	10.13	10.15	10.99	12.05	24.17	25.00	25.01	25.86	26.91
	12H	9.33	10.12	10.18	10.97	12.05	24.24	25.03	25.09	25.88	26.97
4H	2H	15.17	16.11	15.99	16.94	17.98	21.41	22.34	22.22	23.17	24.21
	3H	16.76	17.55	17.59	18.41	19.47	23.47	24.25	24.30	25.12	26.17
	4H	16.87	17.58	17.71	18.45	19.53	24.24	24.96	25.09	25.82	26.90
	6H	16.89	17.51	17.75	18.40	19.49	24.79	25.41	25.65	26.30	27.38
	8H	16.88	17.46	17.74	18.34	19.44	24.96	25.54	25.82	26.42	27.52
	12H	16.84	17.37	17.73	18.27	19.38	25.06	25.58	25.95	26.49	27.59
8H	4H	18.33	18.91	19.19	19.79	20.89	24.32	24.90	25.19	25.79	26.89
	6H	18.58	19.07	19.48	19.99	21.09	24.96	25.44	25.85	26.37	27.46
	8H	18.60	19.03	19.51	19.95	21.07	25.18	25.61	26.08	26.53	27.64
	12H	18.58	18.96	19.49	19.87	21.04	25.33	25.71	26.24	26.62	27.79
12H	4H	18.48	19.01	19.37	19.91	21.02	24.29	24.81	25.17	25.71	26.82
	6H	18.84	19.27	19.75	20.19	21.31	24.94	25.37	25.85	26.29	27.41
	8H	18.92	19.30	19.83	20.21	21.38	25.18	25.56	26.09	26.47	27.64