

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: P936543

Luminaire Tested: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-8-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936543
REPORT IS A COMBINATION OF REPORTS P933456 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-8-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

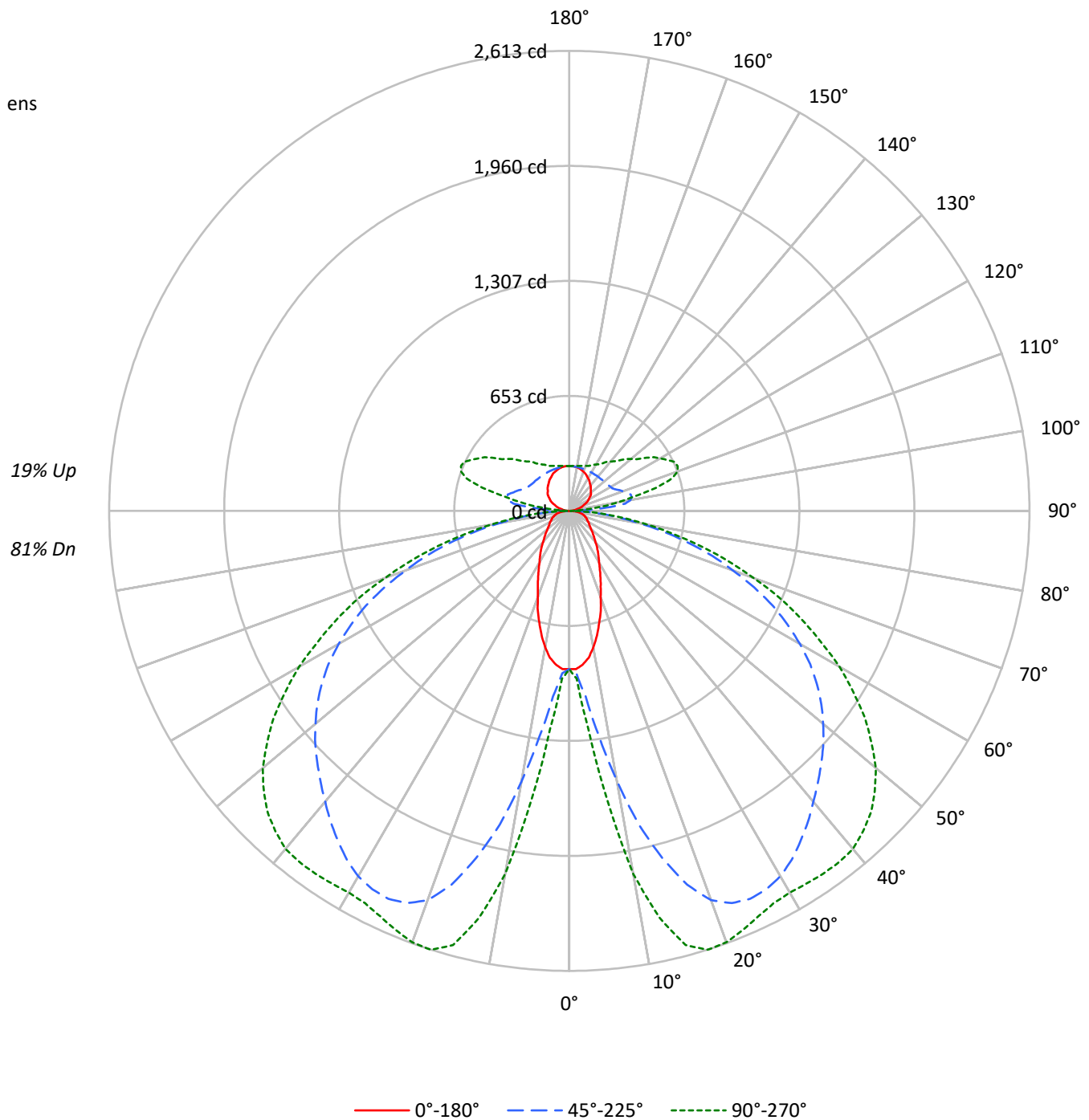
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8608.8 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 99.2
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

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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°	4171	4171	4171
5°	4075	4821	5607
10°	3696	7028	9295
15°	3141	9181	11224
20°	2557	10640	11439
25°	2134	11135	11207
30°	1799	11204	11185
35°	1591	11019	11475
40°	1386	10777	11774
45°	1255	10600	11820
50°	1151	10440	11624
55°	1103	10207	11109
60°	1129	9759	10295
65°	1174	9078	9178
70°	1251	7916	7753
75°	1387	6455	6051
80°	1514	4476	4077
85°	1346	2376	2087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11820 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	1.4
10°-20°	515.4	6.0
20°-30°	901.6	10.5
30°-40°	1160.6	13.5
40°-50°	1296.3	15.1
50°-60°	1241.6	14.4
60°-70°	984.0	11.4
70°-80°	578.6	6.7
80°-90°	161.7	1.9
90°-100°	124.3	1.4
100°-110°	326.7	3.8
110°-120°	338.8	3.9
120°-130°	271.7	3.2
130°-140°	213.2	2.5
140°-150°	163.7	1.9
150°-160°	117.8	1.4
160°-170°	72.1	0.8
170°-180°	24.4	0.3
0°-30°	1533.3	17.8
0°-40°	2693.9	31.3
0°-60°	5231.8	60.8
0°-90°	6956.2	80.8
90°-120°	789.7	9.2
90°-150°	1438.3	16.7
90°-180°	1653.0	19.2
0°-180°	8608.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	899	899	899	899	899	
5°	876	940	1058	1197	1240	81
15°	656	1211	2041	2475	2553	183
25°	419	1373	2431	2538	2541	193
35°	283	1312	2290	2420	2515	177
45°	194	1046	2024	2318	2423	150
55°	139	665	1717	1995	2050	126
65°	110	353	1275	1434	1454	109
75°	81	217	700	769	772	85
85°	29	66	174	191	194	31
90°	2	5	13	6	6	3
95°	16	64	214	110	75	18
105°	59	89	361	548	512	62
115°	104	127	289	577	659	103
125°	146	163	263	445	525	129
135°	173	191	255	359	407	134
145°	201	214	252	306	330	126
155°	227	234	252	276	284	104
165°	245	248	252	262	265	69
175°	255	255	253	257	257	24
180°	255	255	255	255	255	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1	899.1
2.5°	899.1	899.1	904.9	907.8	913.5	916.4	922.2	928.0	945.3	948.3	954.0
5°	875.9	887.5	925.1	939.5	980.0	1034.9	1058.1	1095.7	1173.7	1196.8	1211.2
7.5°	841.2	867.3	959.8	982.9	1084.1	1228.7	1289.3	1370.3	1494.6	1555.3	1604.5
10°	786.3	841.2	1006.0	1060.9	1225.8	1445.4	1558.2	1670.9	1858.8	1942.7	1974.5
12.5°	725.6	815.3	1055.2	1130.4	1367.4	1688.3	1824.2	1948.4	2162.4	2275.1	2292.5
15°	656.2	777.7	1101.4	1211.2	1517.7	1890.6	2040.9	2194.2	2393.7	2474.6	2494.8
17.5°	595.5	748.7	1144.8	1260.4	1633.3	2072.8	2225.9	2353.2	2515.1	2570.0	2584.4
20°	520.3	702.5	1173.7	1324.0	1754.8	2205.8	2353.2	2451.4	2561.4	2596.0	2601.8
22.5°	465.4	653.3	1191.1	1347.1	1835.7	2286.7	2411.0	2489.0	2564.2	2575.8	2578.7
25°	419.2	598.4	1188.2	1373.2	1905.1	2335.9	2431.3	2489.0	2532.4	2538.2	2538.2
27.5°	375.8	537.7	1176.6	1379.0	1957.1	2347.4	2422.6	2463.0	2483.3	2494.8	2494.8
30°	338.2	479.8	1147.7	1367.4	1980.3	2335.9	2396.5	2416.8	2437.0	2454.3	2463.0
32.5°	309.4	424.9	1104.3	1344.2	1983.1	2306.9	2350.3	2361.8	2390.8	2431.3	2445.7
35°	283.3	370.0	1055.2	1312.5	1965.8	2260.7	2289.6	2301.1	2358.9	2419.7	2439.9
37.5°	257.3	329.5	991.6	1257.5	1939.8	2205.8	2225.9	2246.2	2335.9	2408.1	2431.3
40°	231.3	294.8	916.4	1196.8	1899.3	2139.2	2156.6	2188.4	2306.9	2390.8	2413.9
42.5°	211.1	266.0	835.5	1133.3	1847.3	2064.1	2090.1	2136.3	2272.2	2361.8	2387.9
45°	193.7	237.0	748.7	1046.5	1780.8	1986.0	2023.6	2087.2	2231.8	2318.5	2341.6
47.5°	176.4	216.8	659.1	956.9	1708.5	1908.0	1957.1	2029.4	2176.8	2260.7	2280.9
50°	161.9	196.6	569.5	861.5	1630.4	1824.2	1882.0	1957.1	2107.5	2185.5	2211.5
52.5°	150.3	179.2	485.7	766.1	1540.8	1737.4	1803.9	1882.0	2023.6	2098.8	2116.1
55°	138.8	164.8	413.4	664.9	1448.3	1644.9	1717.2	1792.4	1931.1	1994.7	2006.3
57.5°	133.0	153.2	352.7	569.5	1350.0	1540.8	1621.8	1691.2	1821.3	1870.4	1882.0
60°	124.3	144.5	306.5	488.6	1243.1	1442.5	1511.9	1581.3	1691.2	1731.7	1740.3
62.5°	115.6	138.8	271.8	410.5	1133.3	1326.9	1396.3	1459.9	1552.4	1581.3	1592.9
65°	109.8	133.0	245.7	352.7	1020.5	1205.5	1274.9	1329.8	1405.0	1433.9	1439.6
67.5°	104.0	127.2	225.5	303.6	907.8	1084.1	1136.1	1188.2	1246.0	1274.9	1277.8
70°	95.4	121.5	208.2	268.9	792.1	945.3	988.7	1043.6	1089.9	1104.3	1113.0
72.5°	89.6	112.7	196.6	242.8	673.6	812.4	852.8	884.6	925.1	939.5	939.5
75°	81.0	101.2	185.0	216.8	552.2	664.9	699.6	731.4	763.2	769.0	760.3
77.5°	72.3	89.6	159.0	182.1	430.7	526.1	555.0	572.4	598.4	604.2	607.1
80°	60.7	78.1	124.3	141.6	312.2	387.3	407.6	422.1	445.2	445.2	451.0
82.5°	46.3	60.7	89.6	101.2	211.1	266.0	283.3	291.9	306.5	306.5	306.5
85°	28.9	37.6	57.8	66.5	127.2	161.9	173.5	176.4	187.9	190.8	190.8
87.5°	14.4	20.2	37.6	40.5	66.5	83.9	83.9	89.6	89.6	86.7	83.9
90°	1.7	3.1	4.4	4.8	7.5	11.2	13.0	11.5	8.6	6.5	6.5
92.5°	6.8	18.4	30.2	33.1	46.5	64.3	73.2	64.1	46.1	32.5	31.3
95°	16.4	37.7	59.0	64.3	114.2	180.7	214.0	191.0	144.9	110.4	106.4
97.5°	28.4	47.2	65.9	70.6	153.8	264.8	320.3	305.8	276.7	254.8	247.4
100°	37.7	54.7	71.7	75.9	168.3	291.3	352.9	354.0	356.2	357.8	348.9
102.5°	45.5	61.4	77.3	81.2	174.9	299.8	362.2	380.8	417.8	445.7	438.1
105°	58.8	72.3	85.8	89.2	179.9	300.7	361.2	402.8	486.0	548.4	544.3
107.5°	72.5	85.1	97.6	100.8	180.7	287.3	340.6	398.6	514.7	601.7	602.8
110°	81.8	93.1	104.5	107.3	179.4	275.5	323.5	388.4	518.1	615.4	619.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	90.9	101.6	112.4	115.1	179.5	265.1	308.0	374.4	507.1	606.7	613.3
115°	104.5	114.5	124.4	126.9	181.1	253.2	289.3	353.3	481.2	577.1	586.2
117.5°	118.0	127.1	136.1	138.5	184.5	245.8	276.5	334.2	449.6	536.2	546.3
120°	125.9	134.4	143.0	145.1	187.2	243.3	271.4	324.1	429.5	508.6	518.4
122.5°	133.6	142.2	150.8	153.0	191.2	242.0	267.4	314.9	409.9	481.1	490.8
125°	145.5	153.3	161.1	163.1	196.4	240.9	263.2	303.5	384.2	444.7	453.5
127.5°	155.0	162.9	170.8	172.8	201.7	240.3	259.6	294.2	363.5	415.4	423.0
130°	160.1	168.7	177.1	179.3	205.6	240.7	258.2	289.0	350.7	396.9	403.8
132.5°	165.4	174.0	182.4	184.6	208.7	240.9	257.0	284.6	339.8	381.2	387.4
135°	173.3	181.1	188.8	190.8	212.2	240.7	255.0	278.1	324.3	359.0	364.3
137.5°	181.3	189.0	196.7	198.7	217.3	242.1	254.6	274.2	313.2	342.5	346.9
140°	188.0	195.1	202.2	204.0	220.5	242.4	253.4	270.3	304.1	329.4	333.5
142.5°	193.2	199.7	206.3	207.9	223.1	243.3	253.4	268.3	297.9	320.1	323.6
145°	201.1	206.8	212.4	213.9	226.5	243.3	251.7	263.8	288.1	306.3	308.9
147.5°	208.9	214.5	220.0	221.4	231.5	245.0	251.7	261.3	280.3	294.6	296.8
150°	214.0	219.1	224.0	225.3	234.1	245.8	251.7	259.7	275.9	287.9	289.7
152.5°	219.3	223.1	226.9	227.9	235.8	246.4	251.7	258.5	272.3	282.6	284.0
155°	227.2	230.0	232.8	233.5	239.6	247.7	251.7	257.2	268.1	276.3	277.2
157.5°	233.0	235.7	238.5	239.2	243.3	248.9	251.7	256.0	264.4	270.8	271.4
160°	236.9	239.1	241.2	241.7	245.0	249.5	251.7	255.4	262.6	268.1	268.5
162.5°	240.9	242.5	244.0	244.5	246.8	250.1	251.7	254.8	260.9	265.5	265.9
165°	245.2	246.7	248.1	248.5	249.6	251.0	251.7	253.9	258.3	261.6	262.0
167.5°	249.1	249.8	250.5	250.7	251.6	252.8	253.4	254.9	257.8	259.9	260.1
170°	251.7	252.4	253.1	253.2	253.3	253.4	253.4	254.9	257.8	259.9	259.9
172.5°	253.1	253.2	253.4	253.4	253.4	253.4	253.4	254.5	256.8	258.5	258.4
175°	255.0	255.0	255.0	255.0	254.4	253.8	253.4	254.1	255.6	256.7	256.7
177.5°	255.0	255.0	255.0	255.0	254.5	254.0	253.8	254.4	255.5	256.3	256.2
180°	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	899.1	899.1
2.5°	959.8	954.0
5°	1234.4	1240.2
7.5°	1662.2	1659.4
10°	2067.0	2093.0
12.5°	2361.8	2367.6
15°	2541.1	2552.6
17.5°	2610.5	2613.4
20°	2613.4	2607.6
22.5°	2581.6	2575.8
25°	2544.0	2541.1
27.5°	2509.3	2512.2
30°	2494.8	2503.5
32.5°	2494.8	2509.3
35°	2500.6	2515.1
37.5°	2497.7	2515.1
40°	2486.2	2506.4
42.5°	2454.3	2468.9
45°	2405.2	2422.6
47.5°	2341.6	2353.2
50°	2260.7	2272.2
52.5°	2159.5	2162.4
55°	2038.0	2049.7
57.5°	1908.0	1910.9
60°	1763.4	1772.1
62.5°	1610.2	1610.2
65°	1448.3	1454.2
67.5°	1280.7	1295.1
70°	1110.1	1113.0
72.5°	942.4	942.4
75°	769.0	771.9
77.5°	604.2	604.2
80°	448.1	451.0
82.5°	309.4	315.1
85°	193.7	193.7
87.5°	89.6	81.0
90°	6.5	6.5
92.5°	26.1	20.8
95°	90.8	75.1
97.5°	217.5	187.7
100°	313.4	277.8
102.5°	407.7	377.3
105°	527.9	511.5
107.5°	606.7	610.6
110°	636.7	653.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	639.4	665.5
115°	622.5	658.7
117.5°	586.5	626.8
120°	557.5	596.6
122.5°	529.3	567.8
125°	489.1	524.6
127.5°	452.9	482.8
130°	431.5	459.2
132.5°	412.2	437.0
135°	385.6	407.0
137.5°	364.4	381.9
140°	349.8	366.2
142.5°	337.7	351.7
145°	319.6	330.2
147.5°	305.6	314.5
150°	296.9	304.1
152.5°	289.4	294.8
155°	280.8	284.3
157.5°	274.0	276.5
160°	269.9	271.4
162.5°	267.3	268.6
165°	263.4	264.9
167.5°	260.7	261.3
170°	259.9	259.9
172.5°	257.9	257.3
175°	256.7	256.7
177.5°	255.6	255.0
180°	255.0	255.0



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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	8.39	9.69	9.02	10.35	11.09	21.57	22.87	22.20	23.52	24.27
	3H	9.13	10.31	9.77	10.97	11.75	23.44	24.62	24.09	25.28	26.06
	4H	9.45	10.56	10.11	11.23	12.03	24.11	25.22	24.77	25.89	26.69
	6H	9.72	10.75	10.40	11.43	12.24	24.56	25.59	25.24	26.27	27.08
	8H	9.80	10.79	10.49	11.49	12.30	24.69	25.68	25.38	26.38	27.19
	12H	9.83	10.77	10.53	11.47	12.31	24.78	25.72	25.47	26.41	27.26
4H	2H	15.66	16.77	16.32	17.44	18.24	21.90	23.01	22.56	23.68	24.48
	3H	17.26	18.20	17.95	18.91	19.72	23.98	24.92	24.66	25.63	26.44
	4H	17.38	18.23	18.08	18.94	19.79	24.77	25.62	25.46	26.33	27.18
	6H	17.42	18.16	18.13	18.90	19.75	25.33	26.07	26.05	26.81	27.66
	8H	17.40	18.10	18.13	18.83	19.70	25.51	26.20	26.23	26.94	27.80
	12H	17.38	18.01	18.13	18.77	19.64	25.62	26.25	26.36	27.01	27.88
8H	4H	18.86	19.56	19.58	20.29	21.16	24.86	25.56	25.59	26.29	27.16
	6H	19.12	19.70	19.88	20.48	21.35	25.51	26.09	26.27	26.87	27.74
	8H	19.15	19.66	19.91	20.44	21.33	25.74	26.26	26.50	27.04	27.92
	12H	19.14	19.59	19.91	20.36	21.31	25.91	26.36	26.67	27.13	28.07
12H	4H	19.03	19.65	19.77	20.41	21.28	24.84	25.47	25.58	26.23	27.10
	6H	19.39	19.91	20.15	20.68	21.57	25.50	26.02	26.27	26.80	27.68
	8H	19.48	19.94	20.25	20.70	21.65	25.76	26.21	26.52	26.98	27.92