

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: P937324

Luminaire Tested: SQ4-FB-075U-125D-927-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937324
REPORT IS A COMBINATION OF REPORTS P933520 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-125D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

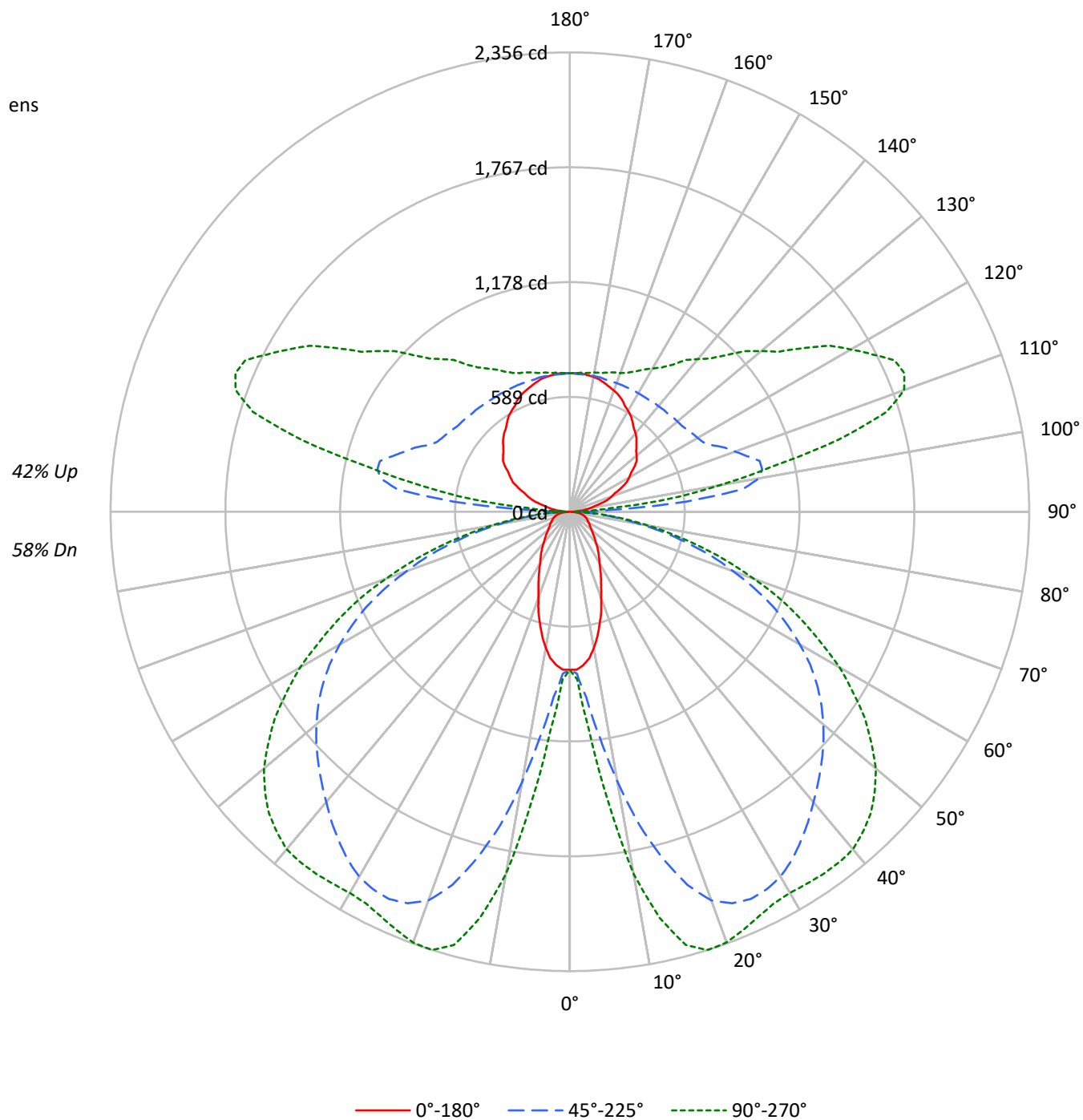
Lumens per Lamp: N/A
Luminaire Lumens: 10884.0 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 124
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
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17
9	49	36	28	23	46	34	27	22	30	24	20	26	21	18	22	18	15
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3760	3760	3760
5°	3673	4347	5054
10°	3332	6336	8380
15°	2832	8277	10118
20°	2306	9592	10312
25°	1923	10038	10103
30°	1622	10101	10084
35°	1434	9933	10344
40°	1250	9715	10614
45°	1131	9556	10656
50°	1038	9412	10479
55°	994	9202	10015
60°	1017	8798	9281
65°	1058	8183	8273
70°	1128	7137	6990
75°	1250	5819	5454
80°	1365	4035	3676
85°	1211	2141	1881

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10656 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.8	1.0
10°-20°	464.7	4.3
20°-30°	812.8	7.5
30°-40°	1046.3	9.6
40°-50°	1168.7	10.7
50°-60°	1119.3	10.3
60°-70°	887.1	8.2
70°-80°	521.6	4.8
80°-90°	147.6	1.4
90°-100°	346.7	3.2
100°-110°	911.6	8.4
110°-120°	945.2	8.7
120°-130°	758.2	7.0
130°-140°	594.9	5.5
140°-150°	456.6	4.2
150°-160°	328.8	3.0
160°-170°	201.2	1.8
170°-180°	68.0	0.6
0°-30°	1382.3	12.7
0°-40°	2428.6	22.3
0°-60°	4716.5	43.3
0°-90°	6272.8	57.6
90°-120°	2203.5	20.2
90°-150°	4013.1	36.9
90°-180°	4611.0	42.4
0°-180°	10884.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	790	847	954	1079	1118	73
15°	592	1092	1840	2231	2301	165
25°	378	1238	2192	2288	2291	174
35°	255	1183	2064	2181	2267	159
45°	175	943	1824	2090	2184	135
55°	125	599	1548	1798	1848	114
65°	99	318	1149	1293	1311	98
75°	73	195	631	693	696	76
85°	26	60	156	172	175	28
90°	5	13	36	18	18	6
95°	46	180	597	308	210	51
105°	164	249	1008	1530	1427	174
115°	292	354	807	1610	1838	288
125°	406	455	734	1241	1464	360
135°	484	532	711	1002	1136	374
145°	561	597	702	854	921	351
155°	634	652	702	771	793	291
165°	684	693	702	730	739	193
175°	711	711	707	716	716	68
180°	711	711	711	711	711	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	810.5	810.5	810.5	810.5	810.5	810.5	810.5	810.5	810.5	810.5	810.5
2.5°	810.5	810.5	815.7	818.4	823.5	826.1	831.4	836.6	852.2	854.9	860.0
5°	789.6	800.1	834.0	847.0	883.5	933.0	953.9	987.8	1058.1	1078.9	1091.9
7.5°	758.4	781.9	865.2	886.1	977.3	1107.6	1162.3	1235.3	1347.3	1402.1	1446.4
10°	708.9	758.4	906.9	956.4	1105.0	1303.1	1404.7	1506.4	1675.8	1751.4	1780.0
12.5°	654.1	735.0	951.3	1019.0	1232.7	1522.0	1644.5	1756.5	1949.4	2051.0	2066.7
15°	591.6	701.1	992.9	1091.9	1368.2	1704.4	1839.9	1978.1	2157.9	2230.8	2249.1
17.5°	536.8	675.0	1032.0	1136.3	1472.5	1868.6	2006.7	2121.4	2267.3	2316.9	2329.9
20°	469.1	633.3	1058.1	1193.6	1582.0	1988.5	2121.4	2210.0	2309.1	2340.3	2345.5
22.5°	419.6	589.0	1073.8	1214.4	1654.9	2061.4	2173.6	2243.9	2311.6	2322.1	2324.7
25°	377.9	539.5	1071.1	1237.9	1717.5	2105.8	2191.8	2243.9	2283.0	2288.2	2288.2
27.5°	338.8	484.7	1060.7	1243.2	1764.4	2116.2	2184.0	2220.4	2238.7	2249.1	2249.1
30°	304.9	432.6	1034.6	1232.7	1785.2	2105.8	2160.5	2178.7	2197.0	2212.6	2220.4
32.5°	278.9	383.1	995.5	1211.8	1787.8	2079.7	2118.8	2129.2	2155.3	2191.8	2204.8
35°	255.4	333.6	951.3	1183.2	1772.2	2038.0	2064.1	2074.5	2126.6	2181.3	2199.6
37.5°	231.9	297.1	893.9	1133.7	1748.7	1988.5	2006.7	2024.9	2105.8	2170.9	2191.8
40°	208.5	265.8	826.1	1078.9	1712.2	1928.5	1944.2	1972.8	2079.7	2155.3	2176.1
42.5°	190.3	239.8	753.2	1021.6	1665.4	1860.8	1884.3	1925.9	2048.4	2129.2	2152.7
45°	174.6	213.7	675.0	943.4	1605.4	1790.4	1824.3	1881.6	2011.9	2090.2	2111.0
47.5°	159.0	195.4	594.2	862.6	1540.2	1720.0	1764.4	1829.5	1962.4	2038.0	2056.3
50°	145.9	177.3	513.4	776.6	1469.9	1644.5	1696.6	1764.4	1899.9	1970.3	1993.7
52.5°	135.5	161.5	437.8	690.6	1389.1	1566.3	1626.2	1696.6	1824.3	1892.0	1907.7
55°	125.1	148.5	372.7	599.4	1305.7	1482.9	1548.1	1615.8	1740.9	1798.3	1808.7
57.5°	119.9	138.1	317.9	513.4	1217.1	1389.1	1462.1	1524.6	1641.9	1686.1	1696.6
60°	112.0	130.3	276.3	440.4	1120.7	1300.5	1363.0	1425.6	1524.6	1561.1	1568.9
62.5°	104.3	125.1	245.0	370.1	1021.6	1196.2	1258.8	1316.1	1399.5	1425.6	1436.0
65°	99.0	119.9	221.5	317.9	920.0	1086.8	1149.3	1198.8	1266.6	1292.7	1297.8
67.5°	93.8	114.7	203.3	273.7	818.4	977.3	1024.2	1071.1	1123.3	1149.3	1151.9
70°	86.0	109.5	187.6	242.4	714.1	852.2	891.3	940.8	982.5	995.5	1003.4
72.5°	80.8	101.6	177.3	218.9	607.2	732.3	768.8	797.5	834.0	847.0	847.0
75°	73.0	91.2	166.8	195.4	497.8	599.4	630.7	659.4	688.0	693.2	685.5
77.5°	65.1	80.8	143.4	164.2	388.3	474.3	500.3	516.1	539.5	544.7	547.3
80°	54.7	70.4	112.0	127.7	281.4	349.2	367.4	380.5	401.3	401.3	406.6
82.5°	41.7	54.7	80.8	91.2	190.3	239.8	255.4	263.2	276.3	276.3	276.3
85°	26.0	33.9	52.1	59.9	114.7	145.9	156.4	159.0	169.4	172.0	172.0
87.5°	13.0	18.2	33.9	36.5	59.9	75.6	75.6	80.8	80.8	78.2	75.6
90°	4.8	8.6	12.5	13.4	21.0	31.2	36.3	32.3	24.2	18.2	18.2
92.5°	19.1	51.6	84.1	92.2	129.6	179.4	204.4	179.1	128.6	90.7	87.1
95°	45.8	105.3	164.6	179.5	318.7	504.4	597.2	532.9	404.3	307.9	297.0
97.5°	79.2	131.7	184.1	197.2	429.4	738.9	893.7	853.0	771.8	710.9	690.1
100°	105.0	152.5	200.1	212.0	469.6	813.1	984.8	987.8	993.8	998.2	973.4
102.5°	127.0	171.3	215.7	226.8	488.0	836.5	1010.6	1062.4	1165.9	1243.6	1222.4
105°	164.2	201.8	239.3	248.7	501.7	839.1	1007.8	1123.8	1355.9	1530.0	1518.6
107.5°	202.4	237.5	272.4	281.2	504.3	801.7	950.5	1112.3	1436.1	1679.0	1681.8
110°	228.2	259.8	291.4	299.3	500.4	768.6	902.7	1083.7	1445.7	1717.2	1729.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	253.5	283.6	313.7	321.2	500.6	739.7	859.3	1044.6	1415.0	1692.8	1711.1
115°	291.7	319.5	347.3	354.2	505.2	706.6	807.3	985.7	1342.6	1610.2	1635.6
117.5°	329.4	354.7	379.9	386.2	514.7	685.8	771.5	932.5	1254.6	1496.1	1524.1
120°	351.4	375.1	398.9	404.8	522.2	678.8	757.1	904.3	1198.6	1419.3	1446.5
122.5°	372.8	396.9	420.8	426.8	533.2	675.1	746.1	878.6	1143.7	1342.4	1369.3
125°	405.8	427.7	449.4	454.9	548.0	672.1	734.2	846.8	1071.8	1240.7	1265.5
127.5°	432.5	454.6	476.6	482.2	562.9	670.4	724.2	820.8	1014.1	1159.1	1179.9
130°	446.8	470.5	494.3	500.3	573.6	671.5	720.4	806.4	978.5	1107.6	1126.9
132.5°	461.6	485.4	509.2	515.1	582.4	672.1	717.0	794.0	948.1	1063.6	1080.9
135°	483.6	505.2	526.9	532.3	592.0	671.5	711.3	775.9	904.8	1001.5	1016.5
137.5°	506.0	527.4	548.9	554.2	606.3	675.7	710.3	764.8	874.0	955.7	967.9
140°	524.7	544.4	564.1	569.0	615.0	676.4	707.0	754.1	848.3	919.0	930.4
142.5°	539.0	557.2	575.5	580.0	622.4	678.8	707.0	748.4	831.1	893.2	903.0
145°	560.9	576.9	592.7	596.8	631.9	678.8	702.2	736.1	803.8	854.5	861.9
147.5°	582.9	598.4	613.9	617.8	646.0	683.5	702.2	728.9	782.1	822.1	828.2
150°	597.2	611.2	625.2	628.7	653.2	685.9	702.2	724.7	769.7	803.4	808.4
152.5°	612.0	622.6	633.2	635.9	658.0	687.5	702.2	721.4	759.8	788.6	792.4
155°	633.9	641.8	649.6	651.7	668.5	691.0	702.2	717.5	748.1	771.0	773.5
157.5°	650.2	657.8	665.4	667.4	679.0	694.5	702.2	714.1	737.9	755.7	757.4
160°	661.2	667.1	673.1	674.5	683.8	696.1	702.2	712.4	732.8	748.1	749.1
162.5°	672.1	676.6	681.1	682.2	688.9	697.8	702.2	710.9	728.0	740.9	741.8
165°	684.1	688.1	692.2	693.2	696.2	700.2	702.2	708.4	720.7	730.0	731.0
167.5°	695.1	697.0	698.9	699.4	701.9	705.3	707.0	711.0	719.1	725.2	725.6
170°	702.2	704.2	706.1	706.6	706.7	706.9	707.0	711.0	719.1	725.2	725.2
172.5°	706.1	706.5	706.9	707.0	707.0	707.0	707.0	710.2	716.6	721.3	721.0
175°	711.3	711.3	711.3	711.3	709.9	707.9	707.0	709.0	713.1	716.1	716.1
177.5°	711.3	711.3	711.3	711.3	710.2	708.7	707.9	709.6	712.7	715.1	714.7
180°	711.3	711.3	711.3	711.3	711.3	711.3	711.3	711.3	711.3	711.3	711.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	810.5	810.5
2.5°	865.2	860.0
5°	1112.8	1118.0
7.5°	1498.5	1496.0
10°	1863.4	1886.9
12.5°	2129.2	2134.4
15°	2290.8	2301.2
17.5°	2353.4	2356.0
20°	2356.0	2350.7
22.5°	2327.3	2322.1
25°	2293.4	2290.8
27.5°	2262.1	2264.7
30°	2249.1	2256.9
32.5°	2249.1	2262.1
35°	2254.3	2267.3
37.5°	2251.7	2267.3
40°	2241.3	2259.6
42.5°	2212.6	2225.7
45°	2168.3	2184.0
47.5°	2111.0	2121.4
50°	2038.0	2048.4
52.5°	1946.8	1949.4
55°	1837.3	1847.8
57.5°	1720.0	1722.6
60°	1589.7	1597.6
62.5°	1451.6	1451.6
65°	1305.7	1310.9
67.5°	1154.5	1167.6
70°	1000.8	1003.4
72.5°	849.6	849.6
75°	693.2	695.8
77.5°	544.7	544.7
80°	403.9	406.6
82.5°	278.9	284.1
85°	174.6	174.6
87.5°	80.8	73.0
90°	18.2	18.2
92.5°	72.7	58.2
95°	253.3	209.6
97.5°	606.8	523.7
100°	874.4	775.3
102.5°	1137.5	1052.7
105°	1472.9	1427.3
107.5°	1692.8	1703.8
110°	1776.6	1824.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1784.0	1857.0
115°	1736.7	1837.9
117.5°	1636.4	1748.7
120°	1555.6	1664.7
122.5°	1476.9	1584.4
125°	1364.6	1463.7
127.5°	1263.6	1347.2
130°	1204.0	1281.3
132.5°	1150.1	1219.2
135°	1076.1	1135.7
137.5°	1016.7	1065.5
140°	976.1	1021.6
142.5°	942.2	981.5
145°	891.7	921.4
147.5°	852.8	877.4
150°	828.4	848.3
152.5°	807.4	822.5
155°	783.5	793.4
157.5°	764.5	771.5
160°	753.1	757.1
162.5°	745.7	749.5
165°	735.0	739.0
167.5°	727.3	729.0
170°	725.2	725.2
172.5°	719.5	718.0
175°	716.1	716.1
177.5°	713.0	711.3
180°	711.3	711.3

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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	6.27	7.25	7.15	8.16	9.32	19.45	20.43	20.33	21.34	22.49
	3H	6.99	7.87	7.88	8.79	9.97	21.30	22.18	22.19	23.10	24.28
	4H	7.29	8.13	8.20	9.05	10.24	21.95	22.79	22.86	23.71	24.90
	6H	7.55	8.32	8.47	9.25	10.45	22.39	23.16	23.31	24.09	25.29
	8H	7.62	8.36	8.55	9.30	10.50	22.51	23.25	23.44	24.20	25.40
	12H	7.64	8.34	8.58	9.28	10.51	22.59	23.29	23.52	24.23	25.45
4H	2H	13.50	14.34	14.42	15.26	16.45	19.74	20.58	20.65	21.50	22.69
	3H	15.08	15.78	16.01	16.74	17.94	21.80	22.50	22.72	23.45	24.65
	4H	15.18	15.82	16.12	16.77	18.00	22.57	23.21	23.50	24.16	25.39
	6H	15.20	15.75	16.15	16.73	17.95	23.12	23.67	24.06	24.64	25.87
	8H	15.18	15.70	16.13	16.66	17.91	23.28	23.80	24.23	24.77	26.01
	12H	15.14	15.61	16.11	16.59	17.84	23.38	23.85	24.35	24.83	26.08
8H	4H	16.64	17.16	17.59	18.12	19.36	22.64	23.16	23.59	24.12	25.37
	6H	16.88	17.32	17.86	18.32	19.56	23.28	23.71	24.25	24.71	25.95
	8H	16.90	17.29	17.89	18.28	19.54	23.50	23.88	24.48	24.87	26.13
	12H	16.88	17.21	17.87	18.20	19.51	23.65	23.98	24.64	24.97	26.28
12H	4H	16.79	17.26	17.76	18.24	19.49	22.60	23.07	23.57	24.05	25.30
	6H	17.15	17.53	18.13	18.52	19.78	23.26	23.64	24.25	24.64	25.90
	8H	17.22	17.56	18.21	18.55	19.85	23.50	23.83	24.49	24.82	26.13