

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: P936716

Luminaire Tested: SQ4-FB-050U-075D-835-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936716
REPORT IS A COMBINATION OF REPORTS P933486 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

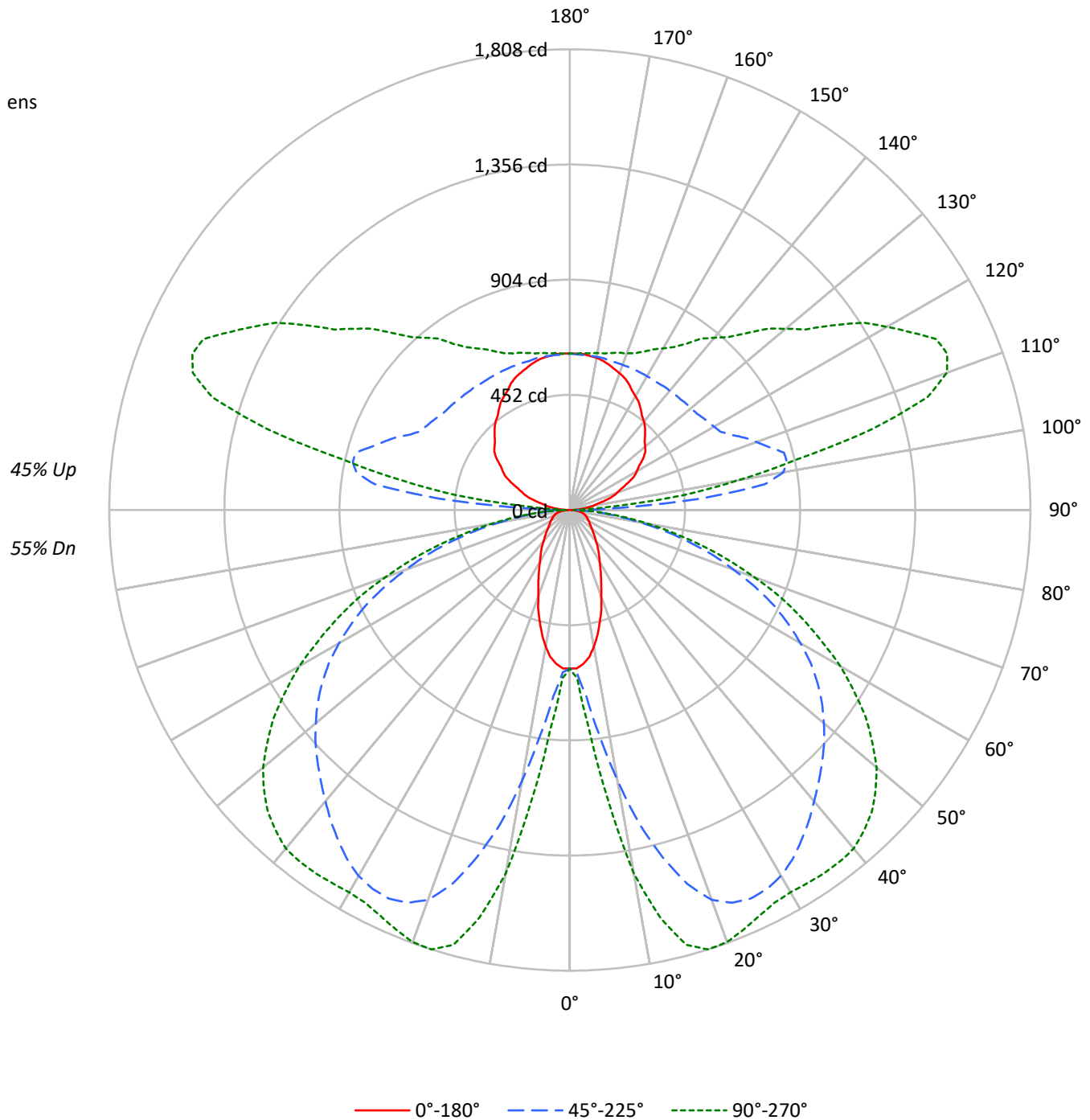
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8796.0 lumens
Efficiency: N/A
Efficacy: 120.8 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): 72.8
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			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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	50	50	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	41	41	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	34	34	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	29	29	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	25	25	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	21	21	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	19	19	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	16	16	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	15	15	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	13	13	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2886	2886	2886
5°	2819	3335	3879
10°	2557	4862	6431
15°	2173	6353	7766
20°	1769	7362	7914
25°	1476	7703	7753
30°	1245	7752	7739
35°	1100	7623	7939
40°	959	7456	8146
45°	868	7334	8178
50°	797	7223	8042
55°	763	7062	7686
60°	781	6751	7123
65°	813	6280	6349
70°	866	5477	5364
75°	959	4465	4186
80°	1048	3097	2820
85°	932	1643	1444

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8178 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.5	0.9
10°-20°	356.6	4.1
20°-30°	623.8	7.1
30°-40°	803.0	9.1
40°-50°	896.9	10.2
50°-60°	859.0	9.8
60°-70°	680.7	7.7
70°-80°	400.3	4.6
80°-90°	113.5	1.3
90°-100°	299.4	3.4
100°-110°	787.1	8.9
110°-120°	816.2	9.3
120°-130°	654.7	7.4
130°-140°	513.7	5.8
140°-150°	394.3	4.5
150°-160°	283.9	3.2
160°-170°	173.7	2.0
170°-180°	58.7	0.7
0°-30°	1060.8	12.1
0°-40°	1863.8	21.2
0°-60°	3619.7	41.2
0°-90°	4814.3	54.7
90°-120°	1902.7	21.6
90°-150°	3465.3	39.4
90°-180°	3982.0	45.3
0°-180°	8796.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	622	622	622	622	622	
5°	606	650	732	828	858	56
15°	454	838	1412	1712	1766	126
25°	290	950	1682	1756	1758	134
35°	196	908	1584	1674	1740	122
45°	134	724	1400	1604	1676	104
55°	96	460	1188	1380	1418	87
65°	76	244	882	992	1006	75
75°	56	150	484	532	534	59
85°	20	46	120	132	134	21
90°	4	12	31	16	16	5
95°	40	155	516	266	181	44
105°	142	215	870	1321	1232	150
115°	252	306	697	1390	1587	249
125°	350	393	634	1071	1264	311
135°	418	460	614	865	981	323
145°	484	515	606	738	796	303
155°	547	563	606	666	685	252
165°	591	598	606	630	638	167
175°	614	614	610	618	618	58
180°	614	614	614	614	614	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0
2.5°	622.0	622.0	626.0	628.0	632.0	634.0	638.0	642.0	654.0	656.0	660.0
5°	606.0	614.0	640.0	650.0	678.0	716.0	732.0	758.0	812.0	828.0	838.0
7.5°	582.0	600.0	664.0	680.0	750.0	850.0	892.0	948.0	1034.0	1076.0	1110.0
10°	544.0	582.0	696.0	734.0	848.0	1000.0	1078.0	1156.1	1286.1	1344.1	1366.1
12.5°	502.0	564.0	730.0	782.0	946.0	1168.1	1262.1	1348.1	1496.1	1574.1	1586.1
15°	454.0	538.0	762.0	838.0	1050.0	1308.1	1412.1	1518.1	1656.1	1712.1	1726.1
17.5°	412.0	518.0	792.0	872.0	1130.0	1434.1	1540.1	1628.1	1740.1	1778.1	1788.1
20°	360.0	486.0	812.0	916.0	1214.1	1526.1	1628.1	1696.1	1772.1	1796.1	1800.1
22.5°	322.0	452.0	824.0	932.0	1270.1	1582.1	1668.1	1722.1	1774.1	1782.1	1784.1
25°	290.0	414.0	822.0	950.0	1318.1	1616.1	1682.1	1722.1	1752.1	1756.1	1756.1
27.5°	260.0	372.0	814.0	954.0	1354.1	1624.1	1676.1	1704.1	1718.1	1726.1	1726.1
30°	234.0	332.0	794.0	946.0	1370.1	1616.1	1658.1	1672.1	1686.1	1698.1	1704.1
32.5°	214.0	294.0	764.0	930.0	1372.1	1596.1	1626.1	1634.1	1654.1	1682.1	1692.1
35°	196.0	256.0	730.0	908.0	1360.1	1564.1	1584.1	1592.1	1632.1	1674.1	1688.1
37.5°	178.0	228.0	686.0	870.0	1342.1	1526.1	1540.1	1554.1	1616.1	1666.1	1682.1
40°	160.0	204.0	634.0	828.0	1314.1	1480.1	1492.1	1514.1	1596.1	1654.1	1670.1
42.5°	146.0	184.0	578.0	784.0	1278.1	1428.1	1446.1	1478.1	1572.1	1634.1	1652.1
45°	134.0	164.0	518.0	724.0	1232.1	1374.1	1400.1	1444.1	1544.1	1604.1	1620.1
47.5°	122.0	150.0	456.0	662.0	1182.1	1320.1	1354.1	1404.1	1506.1	1564.1	1578.1
50°	112.0	136.0	394.0	596.0	1128.0	1262.1	1302.1	1354.1	1458.1	1512.1	1530.1
52.5°	104.0	124.0	336.0	530.0	1066.0	1202.1	1248.1	1302.1	1400.1	1452.1	1464.1
55°	96.0	114.0	286.0	460.0	1002.0	1138.1	1188.1	1240.1	1336.1	1380.1	1388.1
57.5°	92.0	106.0	244.0	394.0	934.0	1066.0	1122.0	1170.1	1260.1	1294.1	1302.1
60°	86.0	100.0	212.0	338.0	860.0	998.0	1046.0	1094.0	1170.1	1198.1	1204.1
62.5°	80.0	96.0	188.0	284.0	784.0	918.0	966.0	1010.0	1074.0	1094.0	1102.0
65°	76.0	92.0	170.0	244.0	706.0	834.0	882.0	920.0	972.0	992.0	996.0
67.5°	72.0	88.0	156.0	210.0	628.0	750.0	786.0	822.0	862.0	882.0	884.0
70°	66.0	84.0	144.0	186.0	548.0	654.0	684.0	722.0	754.0	764.0	770.0
72.5°	62.0	78.0	136.0	168.0	466.0	562.0	590.0	612.0	640.0	650.0	650.0
75°	56.0	70.0	128.0	150.0	382.0	460.0	484.0	506.0	528.0	532.0	526.0
77.5°	50.0	62.0	110.0	126.0	298.0	364.0	384.0	396.0	414.0	418.0	420.0
80°	42.0	54.0	86.0	98.0	216.0	268.0	282.0	292.0	308.0	308.0	312.0
82.5°	32.0	42.0	62.0	70.0	146.0	184.0	196.0	202.0	212.0	212.0	212.0
85°	20.0	26.0	40.0	46.0	88.0	112.0	120.0	122.0	130.0	132.0	132.0
87.5°	10.0	14.0	26.0	28.0	46.0	58.0	58.0	62.0	62.0	60.0	58.0
90°	4.1	7.4	10.7	11.5	18.1	26.9	31.3	27.8	20.9	15.7	15.7
92.5°	16.5	44.5	72.6	79.6	111.9	154.9	176.4	154.6	111.0	78.3	75.2
95°	39.6	90.9	142.2	155.0	275.2	435.5	515.7	460.2	349.2	265.9	256.5
97.5°	68.4	113.6	158.9	170.2	370.7	638.0	771.7	736.6	666.4	613.8	595.8
100°	90.7	131.7	172.7	183.0	405.5	702.1	850.4	853.0	858.1	861.9	840.5
102.5°	109.7	148.0	186.2	195.8	421.4	722.3	872.7	917.4	1006.8	1073.8	1055.5
105°	141.8	174.2	206.7	214.8	433.3	724.6	870.2	970.4	1170.9	1321.2	1311.3
107.5°	174.8	205.0	235.2	242.8	435.4	692.3	820.7	960.5	1240.1	1449.8	1452.2
110°	197.0	224.3	251.7	258.5	432.2	663.7	779.5	935.8	1248.3	1482.7	1493.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	218.9	244.9	270.9	277.4	432.3	638.8	742.0	901.9	1221.8	1461.7	1477.5
115°	251.9	275.9	299.9	305.9	436.3	610.2	697.1	851.2	1159.3	1390.4	1412.2
117.5°	284.4	306.2	328.0	333.5	444.4	592.2	666.1	805.2	1083.3	1291.9	1316.1
120°	303.4	323.9	344.5	349.6	451.0	586.2	653.8	780.8	1034.9	1225.5	1249.0
122.5°	321.9	342.6	363.3	368.5	460.4	583.0	644.3	758.7	987.6	1159.2	1182.4
125°	350.4	369.2	388.1	392.8	473.2	580.4	634.0	731.2	925.6	1071.4	1092.8
127.5°	373.5	392.5	411.5	416.3	486.0	578.9	625.3	708.8	875.7	1000.9	1018.9
130°	385.8	406.3	426.9	432.0	495.3	579.8	622.0	696.3	844.9	956.3	973.0
132.5°	398.6	419.1	439.7	444.8	502.9	580.4	619.2	685.7	818.7	918.4	933.3
135°	417.6	436.3	454.9	459.6	511.1	579.8	614.2	669.9	781.3	864.8	877.7
137.5°	437.0	455.5	474.0	478.6	523.5	583.4	613.4	660.5	754.7	825.3	835.8
140°	453.0	470.1	487.1	491.4	531.1	584.0	610.5	651.2	732.5	793.5	803.3
142.5°	465.4	481.1	496.9	500.8	537.4	586.1	610.5	646.2	717.7	771.3	779.8
145°	484.4	498.1	511.9	515.3	545.7	586.2	606.4	635.6	694.1	737.9	744.3
147.5°	503.3	516.7	530.1	533.4	557.7	590.2	606.4	629.4	675.3	709.8	715.1
150°	515.7	527.8	539.9	542.9	564.1	592.3	606.4	625.8	664.7	693.8	698.1
152.5°	528.5	537.7	546.8	549.1	568.2	593.7	606.4	623.0	656.1	681.0	684.3
155°	547.4	554.2	561.0	562.7	577.3	596.7	606.4	619.6	645.9	665.7	667.9
157.5°	561.4	568.0	574.6	576.3	586.3	599.7	606.4	616.6	637.1	652.5	654.0
160°	570.9	576.1	581.2	582.5	590.5	601.1	606.4	615.2	632.7	645.9	646.8
162.5°	580.4	584.3	588.1	589.1	594.9	602.6	606.4	613.8	628.7	639.8	640.6
165°	590.7	594.2	597.6	598.5	601.1	604.6	606.4	611.7	622.3	630.3	631.2
167.5°	600.2	601.8	603.5	603.9	606.1	609.0	610.5	614.0	621.0	626.2	626.6
170°	606.4	608.0	609.7	610.1	610.2	610.4	610.5	614.0	621.0	626.2	626.2
172.5°	609.7	610.1	610.4	610.5	610.5	610.5	610.5	613.3	618.8	622.9	622.6
175°	614.2	614.2	614.2	614.2	613.0	611.3	610.5	612.2	615.7	618.3	618.3
177.5°	614.2	614.2	614.2	614.2	613.2	611.9	611.3	612.7	615.4	617.5	617.1
180°	614.2	614.2	614.2	614.2	614.2	614.2	614.2	614.2	614.2	614.2	614.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	622.0	622.0
2.5°	664.0	660.0
5°	854.0	858.0
7.5°	1150.1	1148.1
10°	1430.1	1448.1
12.5°	1634.1	1638.1
15°	1758.1	1766.1
17.5°	1806.1	1808.1
20°	1808.1	1804.1
22.5°	1786.1	1782.1
25°	1760.1	1758.1
27.5°	1736.1	1738.1
30°	1726.1	1732.1
32.5°	1726.1	1736.1
35°	1730.1	1740.1
37.5°	1728.1	1740.1
40°	1720.1	1734.1
42.5°	1698.1	1708.1
45°	1664.1	1676.1
47.5°	1620.1	1628.1
50°	1564.1	1572.1
52.5°	1494.1	1496.1
55°	1410.1	1418.1
57.5°	1320.1	1322.1
60°	1220.1	1226.1
62.5°	1114.0	1114.0
65°	1002.0	1006.0
67.5°	886.0	896.0
70°	768.0	770.0
72.5°	652.0	652.0
75°	532.0	534.0
77.5°	418.0	418.0
80°	310.0	312.0
82.5°	214.0	218.0
85°	134.0	134.0
87.5°	62.0	56.0
90°	15.7	15.7
92.5°	62.7	50.3
95°	218.7	181.0
97.5°	524.0	452.2
100°	755.0	669.4
102.5°	982.2	908.9
105°	1271.9	1232.5
107.5°	1461.7	1471.2
110°	1534.0	1575.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1540.5	1603.5
115°	1499.6	1587.0
117.5°	1413.1	1510.0
120°	1343.2	1437.4
122.5°	1275.3	1368.2
125°	1178.3	1263.9
127.5°	1091.1	1163.3
130°	1039.7	1106.4
132.5°	993.1	1052.8
135°	929.2	980.7
137.5°	878.0	920.1
140°	842.7	882.1
142.5°	813.6	847.5
145°	770.0	795.6
147.5°	736.4	757.7
150°	715.3	732.5
152.5°	697.3	710.3
155°	676.5	685.1
157.5°	660.1	666.1
160°	650.3	653.8
162.5°	643.9	647.2
165°	634.6	638.1
167.5°	628.0	629.5
170°	626.2	626.2
172.5°	621.3	620.0
175°	618.3	618.3
177.5°	615.7	614.2
180°	614.2	614.2



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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	5.11	6.06	6.01	6.99	8.19	18.29	19.24	19.19	20.17	21.37
	3H	5.82	6.67	6.74	7.61	8.84	20.13	20.99	21.05	21.93	23.15
	4H	6.12	6.93	7.06	7.88	9.11	20.78	21.59	21.72	22.54	23.77
	6H	6.38	7.12	7.32	8.08	9.32	21.22	21.96	22.16	22.92	24.16
	8H	6.45	7.16	7.40	8.13	9.37	21.34	22.05	22.29	23.02	24.27
	12H	6.47	7.15	7.43	8.11	9.38	21.41	22.09	22.37	23.05	24.32
4H	2H	12.33	13.14	13.27	14.09	15.32	18.57	19.38	19.51	20.33	21.56
	3H	13.91	14.59	14.86	15.56	16.81	20.63	21.30	21.58	22.28	23.53
	4H	14.01	14.63	14.97	15.60	16.87	21.40	22.02	22.36	22.99	24.26
	6H	14.02	14.56	15.00	15.55	16.82	21.94	22.48	22.91	23.47	24.74
	8H	14.00	14.50	14.98	15.49	16.78	22.11	22.61	23.08	23.59	24.88
	12H	13.96	14.42	14.96	15.42	16.71	22.20	22.66	23.20	23.66	24.95
8H	4H	15.46	15.96	16.44	16.95	18.23	21.46	21.96	22.44	22.95	24.24
	6H	15.71	16.12	16.71	17.15	18.43	22.10	22.51	23.10	23.54	24.82
	8H	15.73	16.09	16.74	17.11	18.41	22.32	22.69	23.33	23.70	25.00
	12H	15.70	16.02	16.71	17.03	18.38	22.47	22.79	23.48	23.80	25.15
12H	4H	15.61	16.06	16.60	17.07	18.36	21.42	21.87	22.42	22.88	24.17
	6H	15.97	16.33	16.98	17.35	18.65	22.08	22.45	23.09	23.47	24.77
	8H	16.04	16.36	17.05	17.38	18.72	22.32	22.64	23.33	23.65	25.00