

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: P936768

Luminaire Tested: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-8-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936768
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-93050-1D-UNV-STD-W-8-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

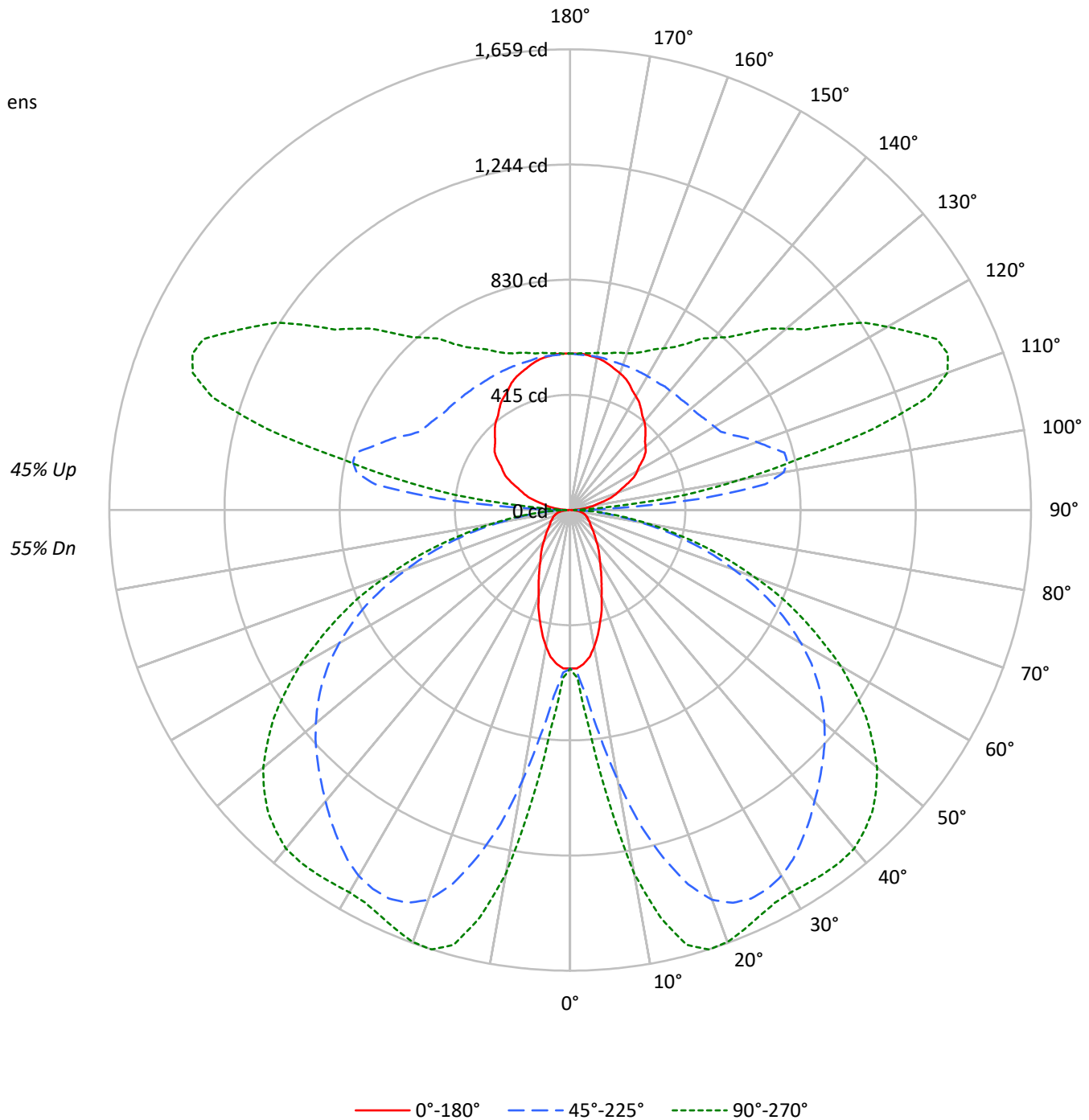
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8072.1 lumens
Efficiency: N/A
Efficacy: 110.9 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 (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

TEST NUMBER: P936768
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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	0
RCR																		
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2648	2648	2648
5°	2587	3061	3560
10°	2347	4462	5902
15°	1994	5830	7126
20°	1624	6756	7263
25°	1354	7070	7115
30°	1142	7114	7102
35°	1010	6996	7286
40°	880	6843	7475
45°	797	6730	7504
50°	731	6629	7380
55°	700	6481	7053
60°	717	6196	6537
65°	745	5763	5827
70°	795	5026	4922
75°	880	4098	3841
80°	961	2842	2588
85°	857	1507	1325

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7504 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	0.9
10°-20°	327.3	4.1
20°-30°	572.4	7.1
30°-40°	736.9	9.1
40°-50°	823.1	10.2
50°-60°	788.3	9.8
60°-70°	624.7	7.7
70°-80°	367.3	4.6
80°-90°	104.2	1.3
90°-100°	274.8	3.4
100°-110°	722.3	8.9
110°-120°	749.0	9.3
120°-130°	600.8	7.4
130°-140°	471.4	5.8
140°-150°	361.8	4.5
150°-160°	260.6	3.2
160°-170°	159.4	2.0
170°-180°	53.9	0.7
0°-30°	973.5	12.1
0°-40°	1710.4	21.2
0°-60°	3321.8	41.2
0°-90°	4418.1	54.7
90°-120°	1746.1	21.6
90°-150°	3180.1	39.4
90°-180°	3654.0	45.3
0°-180°	8072.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	571	571	571	571	571	
5°	556	596	672	760	787	51
15°	417	769	1296	1571	1621	116
25°	266	872	1544	1612	1613	123
35°	180	833	1454	1536	1597	112
45°	123	664	1285	1472	1538	95
55°	88	422	1090	1266	1301	80
65°	70	224	809	910	923	69
75°	51	138	444	488	490	54
85°	18	42	110	121	123	19
90°	4	11	29	14	14	4
95°	36	142	473	244	166	40
105°	130	197	799	1212	1131	138
115°	231	281	640	1276	1456	228
125°	322	360	582	983	1160	285
135°	383	422	564	794	900	296
145°	444	473	556	677	730	278
155°	502	516	556	611	629	231
165°	542	549	556	578	586	153
175°	564	564	560	567	567	54
180°	564	564	564	564	564	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	570.8	570.8	570.8	570.8	570.8	570.8	570.8	570.8	570.8	570.8	570.8
2.5°	570.8	570.8	574.5	576.3	580.0	581.8	585.5	589.2	600.2	602.0	605.7
5°	556.1	563.5	587.3	596.5	622.2	657.1	671.8	695.6	745.2	759.9	769.0
7.5°	534.1	550.6	609.3	624.0	688.3	780.0	818.6	870.0	948.9	987.4	1018.6
10°	499.2	534.1	638.7	673.6	778.2	917.7	989.3	1060.9	1180.2	1233.5	1253.7
12.5°	460.7	517.6	669.9	717.6	868.1	1072.0	1158.2	1237.1	1373.0	1444.5	1455.6
15°	416.6	493.7	699.3	769.0	963.6	1200.4	1295.9	1393.2	1519.8	1571.2	1584.0
17.5°	378.1	475.4	726.8	800.2	1037.0	1316.1	1413.3	1494.1	1596.9	1631.8	1640.9
20°	330.4	446.0	745.2	840.6	1114.2	1400.5	1494.1	1556.5	1626.2	1648.3	1651.9
22.5°	295.5	414.8	756.2	855.3	1165.6	1451.9	1530.8	1580.4	1628.1	1635.4	1637.3
25°	266.1	379.9	754.3	871.8	1209.6	1483.1	1543.7	1580.4	1607.9	1611.6	1611.6
27.5°	238.6	341.4	747.0	875.5	1242.7	1490.4	1538.1	1563.8	1576.7	1584.0	1584.0
30°	214.7	304.7	728.6	868.1	1257.3	1483.1	1521.6	1534.5	1547.3	1558.3	1563.8
32.5°	196.4	269.8	701.1	853.5	1259.2	1464.7	1492.3	1499.6	1518.0	1543.7	1552.8
35°	179.9	234.9	669.9	833.3	1248.2	1435.4	1453.7	1461.1	1497.8	1536.3	1549.2
37.5°	163.3	209.2	629.5	798.4	1231.6	1400.5	1413.3	1426.2	1483.1	1529.0	1543.7
40°	146.8	187.2	581.8	759.9	1205.9	1358.3	1369.3	1389.5	1464.7	1518.0	1532.6
42.5°	134.0	168.9	530.4	719.5	1172.9	1310.6	1327.1	1356.4	1442.7	1499.6	1516.1
45°	123.0	150.5	475.4	664.4	1130.7	1261.0	1284.9	1325.2	1417.0	1472.1	1486.8
47.5°	112.0	137.7	418.5	607.5	1084.8	1211.4	1242.7	1288.5	1382.1	1435.4	1448.2
50°	102.8	124.8	361.6	546.9	1035.2	1158.2	1194.9	1242.7	1338.1	1387.6	1404.2
52.5°	95.4	113.8	308.3	486.4	978.3	1103.2	1145.4	1194.9	1284.9	1332.6	1343.6
55°	88.1	104.6	262.5	422.1	919.5	1044.4	1090.3	1138.0	1226.1	1266.5	1273.9
57.5°	84.4	97.3	223.9	361.6	857.1	978.3	1029.7	1073.8	1156.4	1187.6	1194.9
60°	78.9	91.8	194.6	310.2	789.2	915.9	959.9	1004.0	1073.8	1099.5	1105.0
62.5°	73.4	88.1	172.5	260.6	719.5	842.4	886.5	926.9	985.6	1004.0	1011.3
65°	69.7	84.4	156.0	223.9	647.9	765.4	809.4	844.3	892.0	910.4	914.0
67.5°	66.1	80.8	143.2	192.7	576.3	688.3	721.3	754.3	791.1	809.4	811.2
70°	60.6	77.1	132.1	170.7	502.9	600.2	627.7	662.6	691.9	701.1	706.6
72.5°	56.9	71.6	124.8	154.2	427.6	515.7	541.4	561.6	587.3	596.5	596.5
75°	51.4	64.2	117.5	137.7	350.6	422.1	444.2	464.4	484.5	488.2	482.7
77.5°	45.9	56.9	100.9	115.6	273.5	334.0	352.4	363.4	379.9	383.6	385.4
80°	38.5	49.6	78.9	89.9	198.2	245.9	258.8	268.0	282.7	282.7	286.3
82.5°	29.4	38.5	56.9	64.2	134.0	168.9	179.9	185.4	194.6	194.6	194.6
85°	18.4	23.9	36.7	42.2	80.8	102.8	110.1	112.0	119.3	121.1	121.1
87.5°	9.2	12.8	23.9	25.7	42.2	53.2	53.2	56.9	56.9	55.1	53.2
90°	3.8	6.8	9.8	10.6	16.6	24.7	28.7	25.5	19.2	14.4	14.4
92.5°	15.1	40.8	66.6	73.0	102.7	142.2	161.9	141.9	101.9	71.9	69.0
95°	36.3	83.4	130.5	142.2	252.5	399.7	473.3	422.3	320.5	244.0	235.4
97.5°	62.8	104.3	145.8	156.2	340.2	585.5	708.2	676.0	611.6	563.3	546.8
100°	83.2	120.9	158.5	167.9	372.1	644.3	780.4	782.8	787.5	791.0	771.3
102.5°	100.7	135.8	170.9	179.7	386.7	662.9	800.9	841.9	923.9	985.4	968.6
105°	130.1	159.9	189.7	197.1	397.6	665.0	798.6	890.5	1074.5	1212.5	1203.4
107.5°	160.4	188.1	215.8	222.8	399.6	635.3	753.2	881.4	1138.0	1330.5	1332.7
110°	180.8	205.8	231.0	237.2	396.6	609.1	715.3	858.8	1145.6	1360.7	1370.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	200.9	224.7	248.6	254.6	396.7	586.2	680.9	827.7	1121.2	1341.4	1355.9
115°	231.2	253.2	275.2	280.7	400.4	560.0	639.7	781.1	1063.9	1276.0	1296.0
117.5°	261.0	281.0	301.0	306.1	407.8	543.5	611.3	738.9	994.1	1185.6	1207.8
120°	278.4	297.2	316.1	320.8	413.9	538.0	600.0	716.5	949.7	1124.6	1146.2
122.5°	295.4	314.4	333.4	338.2	422.5	535.0	591.3	696.3	906.3	1063.8	1085.1
125°	321.6	338.8	356.2	360.5	434.3	532.6	581.8	671.0	849.4	983.2	1002.9
127.5°	342.8	360.2	377.6	382.0	446.0	531.3	573.8	650.5	803.6	918.5	935.0
130°	354.0	372.9	391.8	396.4	454.5	532.1	570.8	639.0	775.4	877.6	892.9
132.5°	365.8	384.6	403.5	408.2	461.5	532.6	568.2	629.3	751.3	842.8	856.5
135°	383.2	400.4	417.5	421.8	469.0	532.1	563.6	614.8	717.0	793.6	805.5
137.5°	401.0	418.0	435.0	439.2	480.4	535.4	562.9	606.1	692.6	757.4	767.0
140°	415.7	431.4	447.0	451.0	487.4	535.9	560.3	597.6	672.2	728.2	737.2
142.5°	427.1	441.5	456.0	459.6	493.2	537.9	560.3	593.0	658.6	707.8	715.6
145°	444.5	457.1	469.8	472.9	500.8	538.0	556.5	583.3	637.0	677.2	683.0
147.5°	461.9	474.2	486.5	489.5	511.8	541.6	556.5	577.6	619.7	651.4	656.2
150°	473.3	484.4	495.5	498.2	517.7	543.6	556.5	574.3	610.0	636.7	640.6
152.5°	485.0	493.4	501.8	503.9	521.4	544.8	556.5	571.7	602.1	625.0	628.0
155°	502.3	508.6	514.8	516.4	529.8	547.6	556.5	568.6	592.7	610.9	612.9
157.5°	515.2	521.3	527.3	528.9	538.0	550.3	556.5	565.9	584.7	598.8	600.2
160°	523.9	528.7	533.4	534.6	541.9	551.6	556.5	564.6	580.6	592.7	593.6
162.5°	532.6	536.2	539.7	540.6	545.9	553.0	556.5	563.3	577.0	587.1	587.9
165°	542.1	545.3	548.4	549.2	551.6	554.8	556.5	561.4	571.1	578.4	579.2
167.5°	550.8	552.3	553.8	554.2	556.2	558.9	560.3	563.5	569.9	574.7	575.0
170°	556.5	558.0	559.5	559.9	560.0	560.2	560.3	563.5	569.9	574.7	574.7
172.5°	559.5	559.9	560.2	560.3	560.3	560.3	560.3	562.8	567.9	571.6	571.4
175°	563.6	563.6	563.6	563.6	562.5	561.0	560.3	561.8	565.0	567.4	567.4
177.5°	563.6	563.6	563.6	563.6	562.7	561.5	561.0	562.3	564.7	566.7	566.3
180°	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6	563.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	570.8	570.8
2.5°	609.3	605.7
5°	783.7	787.4
7.5°	1055.4	1053.6
10°	1312.4	1328.9
12.5°	1499.6	1503.3
15°	1613.4	1620.7
17.5°	1657.4	1659.3
20°	1659.3	1655.6
22.5°	1639.1	1635.4
25°	1615.2	1613.4
27.5°	1593.2	1595.0
30°	1584.0	1589.5
32.5°	1584.0	1593.2
35°	1587.7	1596.9
37.5°	1585.9	1596.9
40°	1578.5	1591.4
42.5°	1558.3	1567.5
45°	1527.1	1538.1
47.5°	1486.8	1494.1
50°	1435.4	1442.7
52.5°	1371.1	1373.0
55°	1294.0	1301.4
57.5°	1211.4	1213.3
60°	1119.7	1125.2
62.5°	1022.3	1022.3
65°	919.5	923.2
67.5°	813.1	822.3
70°	704.8	706.6
72.5°	598.3	598.3
75°	488.2	490.0
77.5°	383.6	383.6
80°	284.5	286.3
82.5°	196.4	200.1
85°	123.0	123.0
87.5°	56.9	51.4
90°	14.4	14.4
92.5°	57.5	46.2
95°	200.7	166.1
97.5°	480.9	415.0
100°	692.9	614.3
102.5°	901.4	834.1
105°	1167.2	1131.1
107.5°	1341.4	1350.1
110°	1407.7	1445.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1413.7	1471.5
115°	1376.2	1456.4
117.5°	1296.8	1385.7
120°	1232.6	1319.1
122.5°	1170.3	1255.6
125°	1081.3	1159.9
127.5°	1001.3	1067.6
130°	954.1	1015.3
132.5°	911.4	966.1
135°	852.7	900.0
137.5°	805.7	844.4
140°	773.3	809.5
142.5°	746.6	777.7
145°	706.6	730.1
147.5°	675.8	695.3
150°	656.4	672.2
152.5°	639.9	651.8
155°	620.8	628.7
157.5°	605.8	611.3
160°	596.8	600.0
162.5°	590.9	593.9
165°	582.4	585.6
167.5°	576.3	577.7
170°	574.7	574.7
172.5°	570.2	569.0
175°	567.4	567.4
177.5°	565.0	563.6
180°	563.6	563.6



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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	4.81	5.76	5.72	6.69	7.89	17.99	18.94	18.90	19.87	21.07
	3H	5.52	6.38	6.44	7.32	8.54	19.83	20.69	20.75	21.63	22.85
	4H	5.82	6.63	6.76	7.58	8.81	20.48	21.29	21.42	22.24	23.47
	6H	6.08	6.83	7.02	7.78	9.02	20.92	21.67	21.86	22.62	23.86
	8H	6.15	6.86	7.10	7.83	9.07	21.04	21.75	21.99	22.72	23.97
	12H	6.17	6.85	7.13	7.81	9.08	21.11	21.79	22.07	22.75	24.02
4H	2H	12.04	12.84	12.97	13.79	15.02	18.27	19.08	19.21	20.03	21.26
	3H	13.61	14.29	14.56	15.26	16.51	20.33	21.00	21.28	21.98	23.23
	4H	13.71	14.33	14.67	15.30	16.57	21.10	21.72	22.06	22.69	23.96
	6H	13.73	14.26	14.70	15.26	16.52	21.64	22.18	22.61	23.17	24.44
	8H	13.71	14.21	14.68	15.19	16.48	21.81	22.31	22.78	23.30	24.58
	12H	13.67	14.12	14.66	15.12	16.41	21.90	22.36	22.90	23.36	24.65
8H	4H	15.16	15.66	16.14	16.65	17.94	21.17	21.67	22.14	22.65	23.94
	6H	15.41	15.82	16.41	16.85	18.14	21.80	22.21	22.80	23.24	24.53
	8H	15.43	15.79	16.44	16.81	18.11	22.02	22.39	23.03	23.40	24.71
	12H	15.40	15.72	16.41	16.73	18.08	22.17	22.49	23.18	23.50	24.85
12H	4H	15.31	15.76	16.30	16.77	18.06	21.12	21.58	22.12	22.58	23.87
	6H	15.67	16.04	16.68	17.05	18.35	21.78	22.15	22.79	23.17	24.47
	8H	15.74	16.07	16.76	17.08	18.42	22.02	22.34	23.03	23.35	24.70