

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: P936715

Luminaire Tested: SQ4-FB-050U-075D-835-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P936715  
REPORT IS A COMBINATION OF REPORTS P933478 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-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

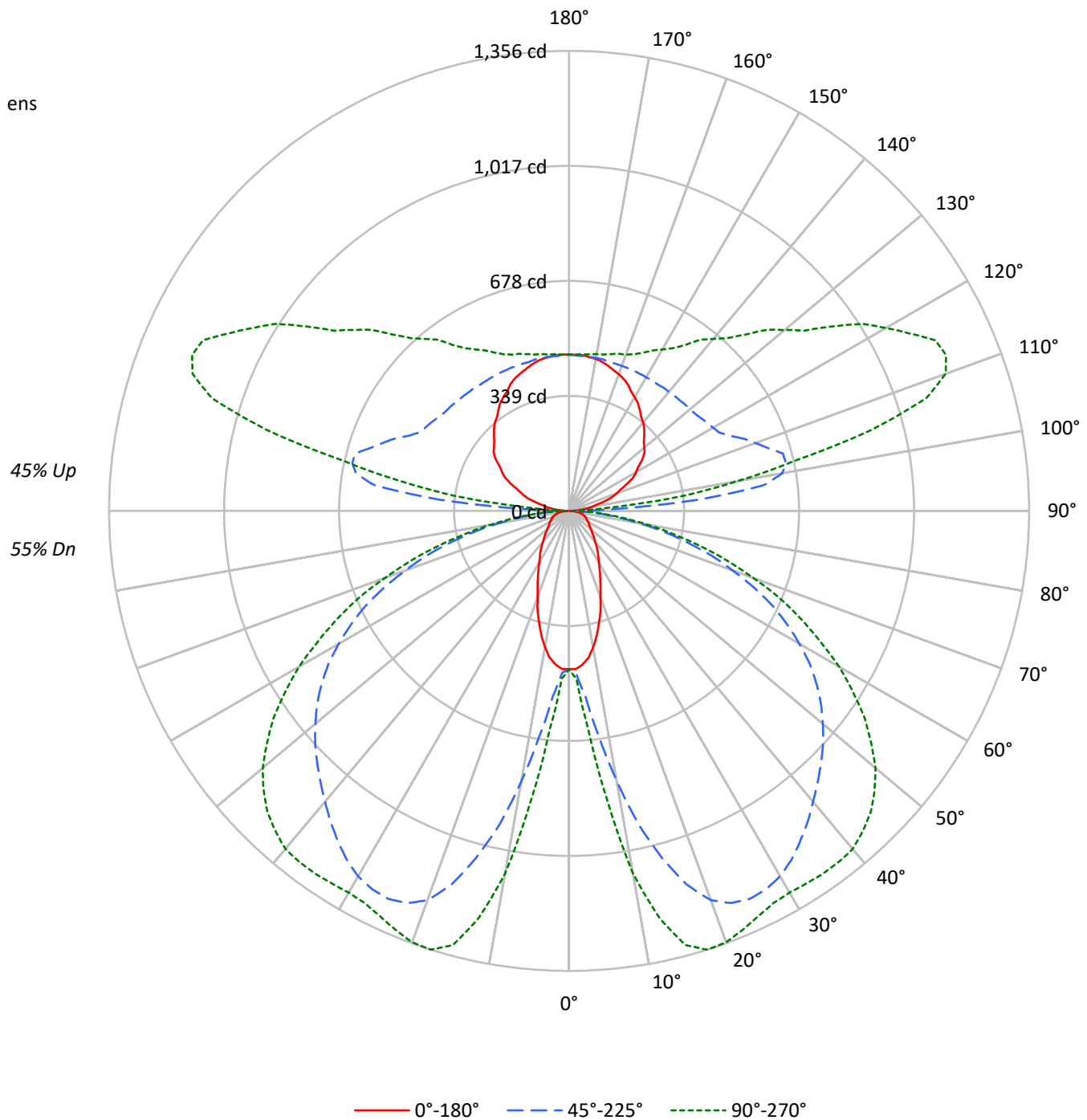
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6597.0 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: 6' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 54.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	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°	2886	2886	2886
5°	2818	3335	3879
10°	2555	4860	6431
15°	2171	6347	7766
20°	1767	7354	7914
25°	1473	7694	7754
30°	1242	7741	7739
35°	1097	7610	7939
40°	956	7441	8146
45°	865	7316	8178
50°	793	7203	8043
55°	758	7040	7685
60°	776	6728	7122
65°	806	6254	6349
70°	856	5451	5364
75°	945	4440	4186
80°	1025	3076	2820
85°	894	1629	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°	60.3	0.9
10°-20°	267.5	4.1
20°-30°	467.8	7.1
30°-40°	602.2	9.1
40°-50°	672.7	10.2
50°-60°	644.2	9.8
60°-70°	510.6	7.7
70°-80°	300.2	4.6
80°-90°	85.2	1.3
90°-100°	224.5	3.4
100°-110°	590.3	8.9
110°-120°	612.1	9.3
120°-130°	491.0	7.4
130°-140°	385.3	5.8
140°-150°	295.7	4.5
150°-160°	213.0	3.2
160°-170°	130.3	2.0
170°-180°	44.0	0.7
0°-30°	795.6	12.1
0°-40°	1397.9	21.2
0°-60°	2714.8	41.2
0°-90°	3610.7	54.7
90°-120°	1427.0	21.6
90°-150°	2599.0	39.4
90°-180°	2986.0	45.3
0°-180°	6597.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	466	466	466	466	466	
5°	454	488	549	621	644	42
15°	340	628	1059	1284	1325	95
25°	218	712	1262	1317	1319	100
35°	147	681	1188	1256	1305	92
45°	100	543	1050	1203	1257	78
55°	72	345	891	1035	1064	66
65°	57	183	662	744	754	56
75°	42	112	363	399	400	44
85°	15	34	90	99	100	16
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°	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5
2.5°	466.5	466.5	469.5	471.0	474.0	475.5	478.5	481.5	490.5	492.0	495.0
5°	454.5	460.5	480.0	487.5	508.5	537.0	549.0	568.5	609.0	621.0	628.5
7.5°	436.5	450.0	498.0	510.0	562.5	637.5	669.0	711.0	775.5	807.0	832.5
10°	408.0	436.5	522.0	550.5	636.0	750.0	808.5	867.0	964.5	1008.0	1024.5
12.5°	376.5	423.0	547.5	586.5	709.5	876.0	946.5	1011.0	1122.0	1180.6	1189.6
15°	340.5	403.5	571.5	628.5	787.5	981.0	1059.0	1138.6	1242.1	1284.1	1294.6
17.5°	309.0	388.5	594.0	654.0	847.5	1075.5	1155.1	1221.1	1305.1	1333.6	1341.1
20°	270.0	364.5	609.0	687.0	910.5	1144.6	1221.1	1272.1	1329.1	1347.1	1350.1
22.5°	241.5	339.0	618.0	699.0	952.5	1186.6	1251.1	1291.6	1330.6	1336.6	1338.1
25°	217.5	310.5	616.5	712.5	988.5	1212.1	1261.6	1291.6	1314.1	1317.1	1317.1
27.5°	195.0	279.0	610.5	715.5	1015.5	1218.1	1257.1	1278.1	1288.6	1294.6	1294.6
30°	175.5	249.0	595.5	709.5	1027.5	1212.1	1243.6	1254.1	1264.6	1273.6	1278.1
32.5°	160.5	220.5	573.0	697.5	1029.0	1197.1	1219.6	1225.6	1240.6	1261.6	1269.1
35°	147.0	192.0	547.5	681.0	1020.0	1173.1	1188.1	1194.1	1224.1	1255.6	1266.1
37.5°	133.5	171.0	514.5	652.5	1006.5	1144.6	1155.1	1165.6	1212.1	1249.6	1261.6
40°	120.0	153.0	475.5	621.0	985.5	1110.0	1119.0	1135.5	1197.1	1240.6	1252.6
42.5°	109.5	138.0	433.5	588.0	958.5	1071.0	1084.5	1108.5	1179.1	1225.6	1239.1
45°	100.5	123.0	388.5	543.0	924.0	1030.5	1050.0	1083.0	1158.1	1203.1	1215.1
47.5°	91.5	112.5	342.0	496.5	886.5	990.0	1015.5	1053.0	1129.5	1173.1	1183.6
50°	84.0	102.0	295.5	447.0	846.0	946.5	976.5	1015.5	1093.5	1134.0	1147.6
52.5°	78.0	93.0	252.0	397.5	799.5	901.5	936.0	976.5	1050.0	1089.0	1098.0
55°	72.0	85.5	214.5	345.0	751.5	853.5	891.0	930.0	1002.0	1035.0	1041.0
57.5°	69.0	79.5	183.0	295.5	700.5	799.5	841.5	877.5	945.0	970.5	976.5
60°	64.5	75.0	159.0	253.5	645.0	748.5	784.5	820.5	877.5	898.5	903.0
62.5°	60.0	72.0	141.0	213.0	588.0	688.5	724.5	757.5	805.5	820.5	826.5
65°	57.0	69.0	127.5	183.0	529.5	625.5	661.5	690.0	729.0	744.0	747.0
67.5°	54.0	66.0	117.0	157.5	471.0	562.5	589.5	616.5	646.5	661.5	663.0
70°	49.5	63.0	108.0	139.5	411.0	490.5	513.0	541.5	565.5	573.0	577.5
72.5°	46.5	58.5	102.0	126.0	349.5	421.5	442.5	459.0	480.0	487.5	487.5
75°	42.0	52.5	96.0	112.5	286.5	345.0	363.0	379.5	396.0	399.0	394.5
77.5°	37.5	46.5	82.5	94.5	223.5	273.0	288.0	297.0	310.5	313.5	315.0
80°	31.5	40.5	64.5	73.5	162.0	201.0	211.5	219.0	231.0	231.0	234.0
82.5°	24.0	31.5	46.5	52.5	109.5	138.0	147.0	151.5	159.0	159.0	159.0
85°	15.0	19.5	30.0	34.5	66.0	84.0	90.0	91.5	97.5	99.0	99.0
87.5°	7.5	10.5	19.5	21.0	34.5	43.5	43.5	46.5	46.5	45.0	43.5
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°	466.5	466.5
2.5°	498.0	495.0
5°	640.5	643.5
7.5°	862.5	861.0
10°	1072.5	1086.0
12.5°	1225.6	1228.6
15°	1318.6	1324.6
17.5°	1354.6	1356.1
20°	1356.1	1353.1
22.5°	1339.6	1336.6
25°	1320.1	1318.6
27.5°	1302.1	1303.6
30°	1294.6	1299.1
32.5°	1294.6	1302.1
35°	1297.6	1305.1
37.5°	1296.1	1305.1
40°	1290.1	1300.6
42.5°	1273.6	1281.1
45°	1248.1	1257.1
47.5°	1215.1	1221.1
50°	1173.1	1179.1
52.5°	1120.5	1122.0
55°	1057.5	1063.5
57.5°	990.0	991.5
60°	915.0	919.5
62.5°	835.5	835.5
65°	751.5	754.5
67.5°	664.5	672.0
70°	576.0	577.5
72.5°	489.0	489.0
75°	399.0	400.5
77.5°	313.5	313.5
80°	232.5	234.0
82.5°	160.5	163.5
85°	100.5	100.5
87.5°	46.5	42.0
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	5.10	6.05	6.01	6.98	8.18	18.27	19.22	19.18	20.15	21.35
	3H	5.82	6.67	6.73	7.61	8.83	20.11	20.96	21.03	21.90	23.13
	4H	6.12	6.93	7.05	7.87	9.10	20.76	21.56	21.69	22.51	23.74
	6H	6.37	7.12	7.32	8.07	9.32	21.19	21.93	22.13	22.88	24.13
	8H	6.44	7.16	7.40	8.13	9.37	21.31	22.02	22.26	22.99	24.23
	12H	6.46	7.14	7.42	8.11	9.38	21.38	22.05	22.33	23.02	24.29
4H	2H	12.32	13.13	13.26	14.08	15.31	18.55	19.36	19.49	20.31	21.54
	3H	13.90	14.57	14.85	15.55	16.80	20.60	21.28	21.55	22.26	23.50
	4H	14.00	14.62	14.96	15.59	16.86	21.37	21.99	22.33	22.96	24.23
	6H	14.01	14.55	14.98	15.54	16.81	21.91	22.45	22.88	23.44	24.71
	8H	13.99	14.49	14.97	15.48	16.76	22.07	22.57	23.05	23.56	24.85
	12H	13.95	14.41	14.95	15.41	16.70	22.17	22.62	23.16	23.62	24.91
8H	4H	15.45	15.95	16.42	16.93	18.22	21.44	21.94	22.41	22.93	24.21
	6H	15.69	16.11	16.69	17.14	18.42	22.07	22.48	23.07	23.51	24.79
	8H	15.71	16.08	16.72	17.09	18.40	22.29	22.65	23.30	23.67	24.97
	12H	15.68	16.01	16.70	17.02	18.36	22.43	22.75	23.45	23.77	25.11
12H	4H	15.59	16.04	16.59	17.05	18.34	21.40	21.85	22.39	22.85	24.14
	6H	15.95	16.32	16.96	17.33	18.64	22.05	22.42	23.06	23.44	24.74
	8H	16.02	16.35	17.04	17.36	18.70	22.28	22.61	23.30	23.62	24.96