

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: P937733

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

**Test Information**

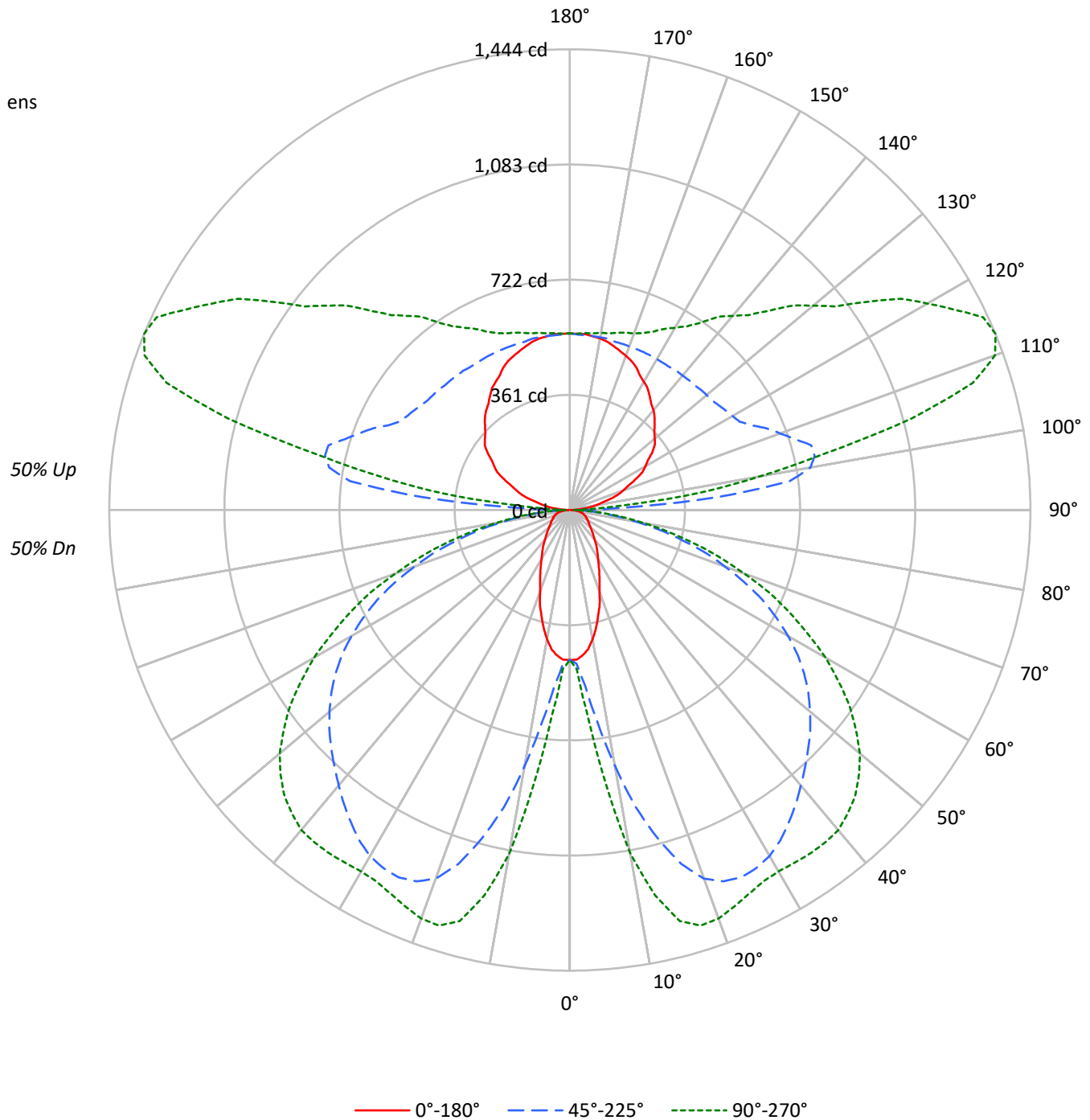
Test Method: LM-79-2019  
Report Number: P937733  
REPORT IS A COMBINATION OF REPORTS P933568 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7222.2 lumens  
Efficiency: N/A  
Efficacy: 105.0 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: General Diffuse  
  
Input Watts (W): 68.8  
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	10

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4358	4358	4358
5°	4253	5034	5859
10°	3854	7333	9713
15°	3272	9573	11729
20°	2661	11086	11953
25°	2216	11592	11711
30°	1866	11656	11688
35°	1648	11453	11990
40°	1434	11193	12303
45°	1296	10999	12351
50°	1186	10822	12147
55°	1132	10568	11608
60°	1156	10091	10758
65°	1196	9370	9589
70°	1264	8156	8101
75°	1387	6632	6323
80°	1484	4584	4261
85°	1250	2418	2180

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12351 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.8	0.8
10°-20°	269.3	3.7
20°-30°	471.0	6.5
30°-40°	606.4	8.4
40°-50°	677.3	9.4
50°-60°	648.7	9.0
60°-70°	514.1	7.1
70°-80°	302.3	4.2
80°-90°	86.1	1.2
90°-100°	269.7	3.7
100°-110°	709.0	9.8
110°-120°	735.1	10.2
120°-130°	589.6	8.2
130°-140°	462.7	6.4
140°-150°	355.1	4.9
150°-160°	255.7	3.5
160°-170°	156.5	2.2
170°-180°	52.9	0.7
0°-30°	801.1	11.1
0°-40°	1407.5	19.5
0°-60°	2733.5	37.8
0°-90°	3636.0	50.3
90°-120°	1713.7	23.7
90°-150°	3121.1	43.2
90°-180°	3586.0	49.7
0°-180°	7222.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	458	491	553	625	648	42
15°	343	633	1066	1293	1334	95
25°	219	717	1270	1326	1328	101
35°	148	686	1196	1264	1314	92
45°	101	547	1057	1211	1266	78
55°	72	347	897	1042	1071	66
65°	57	184	666	749	760	57
75°	42	113	366	402	403	44
85°	15	35	91	100	101	16
90°	4	10	28	14	14	4
95°	36	140	464	240	163	40
105°	128	193	784	1190	1110	135
115°	227	276	628	1252	1429	224
125°	316	354	571	965	1138	280
135°	376	414	553	779	883	291
145°	436	464	546	665	717	273
155°	493	507	546	600	617	227
165°	532	539	546	568	575	150
175°	553	553	550	557	557	53
180°	553	553	553	553	553	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	469.7	469.7	469.7	469.7	469.7	469.7	469.7	469.7	469.7	469.7	469.7
2.5°	469.7	469.7	472.7	474.2	477.3	478.8	481.8	484.9	493.9	495.4	498.4
5°	457.6	463.7	483.4	490.9	512.0	540.7	552.8	572.4	613.2	625.3	632.9
7.5°	439.5	453.1	501.5	513.5	566.4	641.9	673.7	716.0	780.9	812.6	838.3
10°	410.8	439.5	525.6	554.3	640.4	755.2	814.1	873.0	971.2	1015.0	1031.6
12.5°	379.1	426.0	551.3	590.6	714.5	882.1	953.1	1018.0	1129.8	1188.7	1197.7
15°	342.9	406.3	575.5	632.9	792.9	987.8	1066.3	1146.4	1250.6	1292.9	1303.5
17.5°	311.2	391.2	598.1	658.6	853.3	1082.9	1163.0	1229.5	1314.0	1342.8	1350.3
20°	271.9	367.0	613.2	691.8	916.8	1152.5	1229.5	1280.8	1338.2	1356.3	1359.4
22.5°	243.1	341.3	622.2	703.8	959.1	1194.7	1259.7	1300.5	1339.7	1345.8	1347.2
25°	219.0	312.7	620.8	717.4	995.4	1220.4	1270.3	1300.5	1323.1	1326.2	1326.2
27.5°	196.4	280.9	614.7	720.4	1022.5	1226.5	1265.7	1286.9	1297.4	1303.5	1303.5
30°	176.7	250.7	599.7	714.5	1034.6	1220.4	1252.1	1262.7	1273.2	1282.3	1286.9
32.5°	161.7	222.0	577.0	702.3	1036.2	1205.3	1228.0	1234.0	1249.1	1270.3	1277.8
35°	148.0	193.3	551.3	685.7	1027.0	1181.1	1196.2	1202.3	1232.4	1264.2	1274.8
37.5°	134.4	172.2	518.1	657.1	1013.5	1152.5	1163.0	1173.6	1220.4	1258.1	1270.3
40°	120.9	154.1	478.8	625.3	992.3	1117.6	1126.8	1143.4	1205.3	1249.1	1261.2
42.5°	110.2	139.0	436.5	592.1	965.1	1078.5	1092.0	1116.2	1187.2	1234.0	1247.6
45°	101.2	123.9	391.2	546.7	930.4	1037.7	1057.3	1090.5	1166.0	1211.4	1223.4
47.5°	92.1	113.3	344.4	500.0	892.6	996.9	1022.5	1060.3	1137.3	1181.1	1191.7
50°	84.6	102.7	297.5	450.1	851.8	953.1	983.3	1022.5	1101.0	1141.8	1155.5
52.5°	78.6	93.6	253.8	400.3	805.1	907.7	942.5	983.3	1057.3	1096.6	1105.6
55°	72.5	86.0	216.0	347.4	756.7	859.4	897.2	936.4	1008.9	1042.1	1048.2
57.5°	69.4	80.1	184.2	297.5	705.3	805.1	847.4	883.6	951.5	977.2	983.3
60°	65.0	75.5	160.1	255.3	649.5	753.7	790.0	826.2	883.6	904.8	909.2
62.5°	60.4	72.5	142.0	214.5	592.1	693.3	729.5	762.7	811.1	826.2	832.2
65°	57.4	69.4	128.4	184.2	533.2	629.8	666.1	694.8	734.1	749.2	752.2
67.5°	54.4	66.5	117.8	158.6	474.2	566.4	593.6	620.8	651.0	666.1	667.6
70°	49.8	63.5	108.7	140.5	413.8	493.9	516.6	545.2	569.4	577.0	581.5
72.5°	46.9	58.9	102.7	126.8	352.0	424.4	445.6	462.2	483.4	490.9	490.9
75°	42.3	52.8	96.7	113.3	288.5	347.4	365.5	382.1	398.7	401.8	397.2
77.5°	37.8	46.9	83.1	95.2	225.0	274.9	290.0	299.0	312.7	315.6	317.1
80°	31.7	40.8	65.0	74.0	163.1	202.4	213.0	220.5	232.6	232.6	235.7
82.5°	24.2	31.7	46.9	52.8	110.2	139.0	148.0	152.5	160.1	160.1	160.1
85°	15.1	19.6	30.2	34.7	66.5	84.6	90.6	92.1	98.2	99.7	99.7
87.5°	7.6	10.5	19.6	21.2	34.7	43.8	43.8	46.9	46.9	45.3	43.8
90°	3.7	6.7	9.6	10.4	16.3	24.3	28.2	25.1	18.8	14.1	14.1
92.5°	14.8	40.1	65.3	71.7	100.8	139.5	158.9	139.2	100.0	70.5	67.7
95°	35.6	81.9	128.1	139.6	247.9	392.2	464.4	414.4	314.5	239.5	231.0
97.5°	61.6	102.4	143.2	153.4	333.9	574.7	695.0	663.4	600.2	552.8	536.6
100°	81.7	118.6	155.6	164.9	365.3	632.4	766.0	768.3	772.8	776.3	757.0
102.5°	98.7	133.3	167.7	176.4	379.6	650.5	786.0	826.3	906.8	967.2	950.6
105°	127.7	156.9	186.1	193.4	390.3	652.6	783.8	874.1	1054.5	1190.0	1181.1
107.5°	157.5	184.7	211.9	218.7	392.2	623.5	739.2	865.1	1116.9	1305.8	1308.0
110°	177.5	202.1	226.6	232.8	389.2	597.8	702.0	842.8	1124.3	1335.4	1344.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	197.2	220.6	244.0	249.8	389.4	575.3	668.3	812.4	1100.4	1316.5	1330.7
115°	226.8	248.4	270.0	275.5	392.9	549.6	627.9	766.7	1044.2	1252.3	1272.0
117.5°	256.2	275.8	295.5	300.4	400.3	533.4	600.0	725.3	975.7	1163.6	1185.4
120°	273.2	291.7	310.2	314.8	406.1	528.0	588.9	703.3	932.2	1103.8	1125.1
122.5°	290.0	308.7	327.3	332.0	414.7	525.1	580.3	683.3	889.4	1044.0	1064.9
125°	315.6	332.6	349.5	353.8	426.2	522.7	571.0	658.6	833.6	964.9	984.2
127.5°	336.3	353.5	370.7	375.0	437.7	521.4	563.2	638.4	788.7	901.5	917.7
130°	347.5	366.0	384.5	389.1	446.1	522.3	560.3	627.2	761.0	861.4	876.4
132.5°	359.0	377.5	396.0	400.6	452.9	522.7	557.6	617.5	737.3	827.2	840.7
135°	376.2	392.9	409.8	414.0	460.4	522.3	553.2	603.4	703.7	778.9	790.5
137.5°	393.6	410.2	426.9	431.0	471.5	525.5	552.4	594.8	679.6	743.3	752.7
140°	408.0	423.4	438.7	442.6	478.4	526.0	549.9	586.5	659.7	714.7	723.6
142.5°	419.2	433.4	447.6	451.1	484.1	527.9	549.9	582.0	646.3	694.6	702.3
145°	436.2	448.6	460.9	464.1	491.5	528.0	546.2	572.5	625.1	664.6	670.4
147.5°	453.4	465.4	477.4	480.4	502.4	531.6	546.2	566.9	608.3	639.4	644.2
150°	464.4	475.3	486.2	489.0	508.1	533.5	546.2	563.7	598.6	624.8	628.7
152.5°	475.9	484.2	492.5	494.5	511.7	534.7	546.2	561.1	590.9	613.3	616.3
155°	493.1	499.2	505.3	506.8	520.0	537.4	546.2	558.1	581.8	599.6	601.5
157.5°	505.7	511.6	517.5	519.1	528.1	540.1	546.2	555.4	573.9	587.7	589.0
160°	514.2	518.9	523.4	524.6	531.8	541.4	546.2	554.1	569.9	581.8	582.6
162.5°	522.7	526.2	529.7	530.6	535.8	542.7	546.2	552.9	566.2	576.2	576.9
165°	532.0	535.1	538.2	539.1	541.5	544.6	546.2	551.0	560.6	567.7	568.5
167.5°	540.6	542.1	543.6	544.0	545.9	548.5	549.9	553.0	559.2	564.0	564.3
170°	546.2	547.6	549.1	549.5	549.6	549.8	549.9	553.0	559.2	564.0	564.0
172.5°	549.1	549.5	549.8	549.9	549.9	549.9	549.9	552.4	557.3	561.0	560.7
175°	553.2	553.2	553.2	553.2	552.1	550.6	549.9	551.5	554.6	556.9	556.9
177.5°	553.2	553.2	553.2	553.2	552.4	551.2	550.6	551.8	554.3	556.2	555.8
180°	553.2	553.2	553.2	553.2	553.2	553.2	553.2	553.2	553.2	553.2	553.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	469.7	469.7
2.5°	501.5	498.4
5°	644.9	648.0
7.5°	868.5	867.0
10°	1079.9	1093.5
12.5°	1234.0	1237.0
15°	1327.7	1333.7
17.5°	1363.9	1365.4
20°	1365.4	1362.4
22.5°	1348.7	1345.8
25°	1329.1	1327.7
27.5°	1311.0	1312.5
30°	1303.5	1308.0
32.5°	1303.5	1311.0
35°	1306.5	1314.0
37.5°	1305.0	1314.0
40°	1298.9	1309.5
42.5°	1282.3	1289.8
45°	1256.6	1265.7
47.5°	1223.4	1229.5
50°	1181.1	1187.2
52.5°	1128.3	1129.8
55°	1064.8	1070.9
57.5°	996.9	998.4
60°	921.4	925.9
62.5°	841.3	841.3
65°	756.7	759.7
67.5°	669.1	676.7
70°	580.0	581.5
72.5°	492.4	492.4
75°	401.8	403.3
77.5°	315.6	315.6
80°	234.1	235.7
82.5°	161.7	164.6
85°	101.2	101.2
87.5°	46.9	42.3
90°	14.1	14.1
92.5°	56.5	45.3
95°	197.0	163.0
97.5°	471.9	407.3
100°	680.0	603.0
102.5°	884.7	818.7
105°	1145.6	1110.2
107.5°	1316.5	1325.1
110°	1381.7	1418.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1387.5	1444.3
115°	1350.7	1429.4
117.5°	1272.7	1360.0
120°	1209.9	1294.7
122.5°	1148.6	1232.3
125°	1061.2	1138.4
127.5°	982.8	1047.8
130°	936.4	996.5
132.5°	894.4	948.2
135°	836.8	883.2
137.5°	790.8	828.7
140°	759.1	794.5
142.5°	732.8	763.4
145°	693.5	716.6
147.5°	663.3	682.4
150°	644.2	659.7
152.5°	628.0	639.7
155°	609.3	617.1
157.5°	594.6	600.0
160°	585.7	588.9
162.5°	579.9	582.9
165°	571.6	574.8
167.5°	565.6	566.9
170°	564.0	564.0
172.5°	559.6	558.4
175°	556.9	556.9
177.5°	554.6	553.2
180°	553.2	553.2



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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	6.14	7.04	7.08	8.01	9.27	19.28	20.18	20.22	21.15	22.41
	3H	6.85	7.66	7.80	8.64	9.92	21.10	21.92	22.06	22.89	24.18
	4H	7.15	7.92	8.12	8.90	10.19	21.74	22.51	22.71	23.49	24.79
	6H	7.40	8.11	8.38	9.10	10.40	22.16	22.87	23.14	23.86	25.16
	8H	7.47	8.15	8.46	9.15	10.45	22.28	22.95	23.27	23.96	25.26
	12H	7.49	8.13	8.48	9.13	10.46	22.34	22.98	23.33	23.98	25.31
4H	2H	13.33	14.10	14.31	15.08	16.38	19.56	20.33	20.53	21.31	22.60
	3H	14.91	15.55	15.89	16.56	17.87	21.59	22.24	22.58	23.25	24.56
	4H	15.00	15.59	16.00	16.60	17.93	22.35	22.94	23.35	23.94	25.28
	6H	15.02	15.53	16.03	16.55	17.88	22.88	23.39	23.89	24.42	25.74
	8H	15.00	15.47	16.01	16.49	17.84	23.04	23.51	24.05	24.53	25.88
	12H	14.96	15.39	15.98	16.42	17.77	23.12	23.55	24.15	24.59	25.94
8H	4H	16.44	16.92	17.45	17.94	19.28	22.42	22.89	23.43	23.91	25.26
	6H	16.69	17.08	17.72	18.14	19.49	23.03	23.43	24.07	24.49	25.83
	8H	16.71	17.05	17.75	18.10	19.46	23.25	23.60	24.29	24.64	26.00
	12H	16.68	16.98	17.72	18.03	19.43	23.39	23.69	24.43	24.73	26.14
12H	4H	16.58	17.02	17.61	18.05	19.40	22.37	22.80	23.40	23.84	25.19
	6H	16.94	17.29	17.98	18.34	19.70	23.02	23.37	24.06	24.41	25.77
	8H	17.01	17.32	18.06	18.36	19.77	23.24	23.55	24.29	24.59	26.00