

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: P937757

Luminaire Tested: SQ4-FB-100U-125D-93050-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

**Test Information**

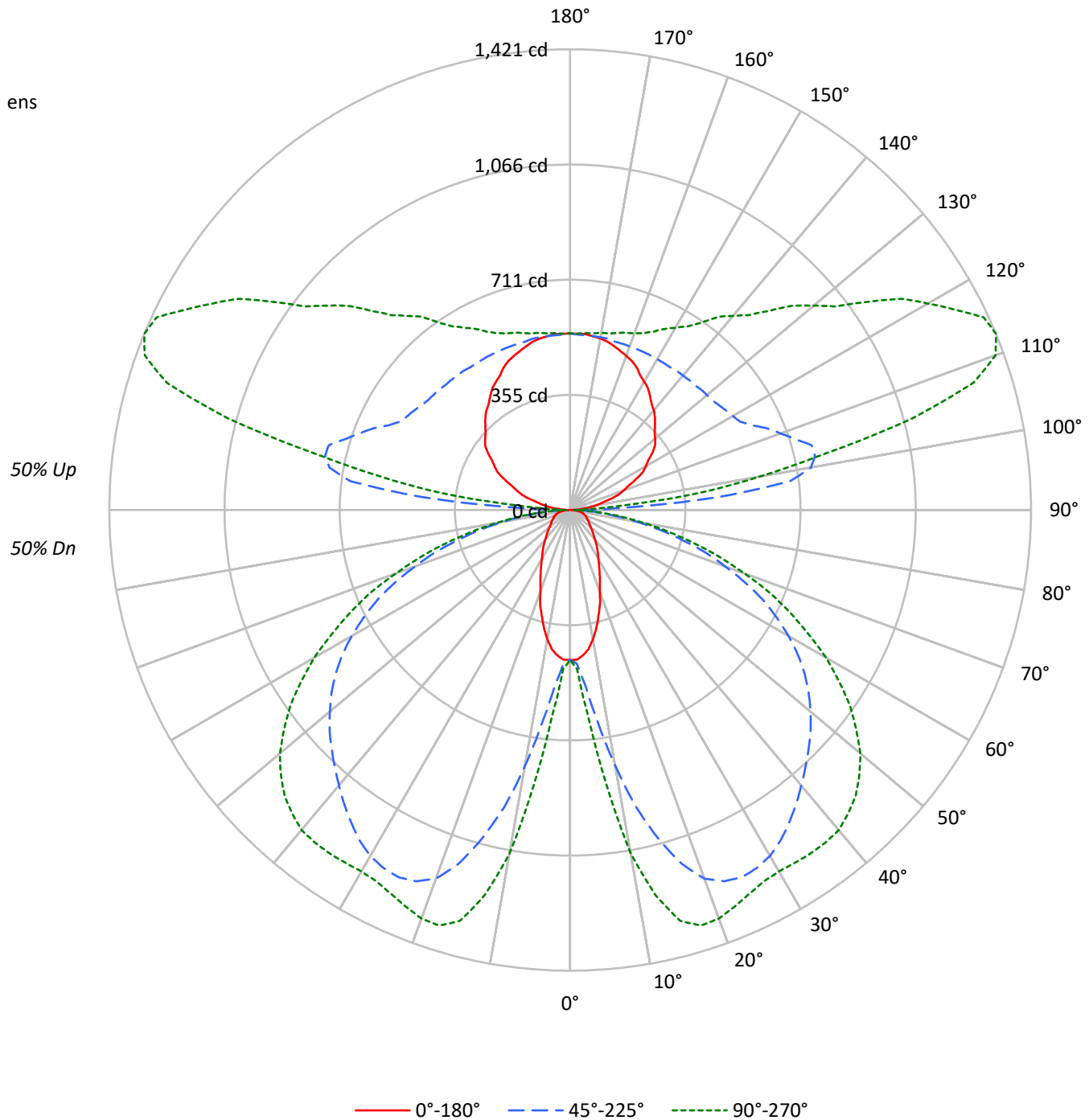
Test Method: LM-79-2019  
Report Number: P937757  
REPORT IS A COMBINATION OF REPORTS P933568 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-125D-93050-1D-UNV-STD-W-4-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7106.3 lumens  
Efficiency: N/A  
Efficacy: 103.3 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 (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	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°	4289	4289	4289
5°	4185	4953	5765
10°	3792	7215	9557
15°	3220	9419	11540
20°	2618	10908	11762
25°	2181	11406	11523
30°	1837	11469	11501
35°	1621	11269	11797
40°	1411	11013	12105
45°	1275	10822	12153
50°	1168	10648	11951
55°	1114	10398	11422
60°	1137	9928	10586
65°	1177	9220	9435
70°	1244	8025	7972
75°	1364	6526	6221
80°	1460	4511	4193
85°	1226	2378	2146

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12153 cd/sqm



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CATALOG NUMBER: SQ4-FB-100U-125D-93050-1D-UNV-STD-W-4-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.8	0.8
10°-20°	265.0	3.7
20°-30°	463.5	6.5
30°-40°	596.6	8.4
40°-50°	666.4	9.4
50°-60°	638.3	9.0
60°-70°	505.8	7.1
70°-80°	297.5	4.2
80°-90°	84.7	1.2
90°-100°	265.3	3.7
100°-110°	697.6	9.8
110°-120°	723.3	10.2
120°-130°	580.2	8.2
130°-140°	455.2	6.4
140°-150°	349.4	4.9
150°-160°	251.6	3.5
160°-170°	154.0	2.2
170°-180°	52.0	0.7
0°-30°	788.3	11.1
0°-40°	1384.9	19.5
0°-60°	2689.6	37.8
0°-90°	3577.7	50.3
90°-120°	1686.2	23.7
90°-150°	3071.0	43.2
90°-180°	3529.0	49.7
0°-180°	7106.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	462	462	462	462	462	
5°	450	483	544	615	638	42
15°	337	623	1049	1272	1312	94
25°	216	706	1250	1305	1306	99
35°	146	675	1177	1244	1293	91
45°	100	538	1040	1192	1245	77
55°	71	342	883	1025	1054	65
65°	56	181	655	737	748	56
75°	42	112	360	395	397	44
85°	15	34	89	98	100	16
90°	4	10	28	14	14	4
95°	35	137	457	236	160	39
105°	126	190	771	1171	1092	133
115°	223	271	618	1232	1406	220
125°	311	348	562	949	1120	276
135°	370	407	544	766	869	286
145°	429	457	537	654	705	269
155°	485	499	537	590	607	223
165°	524	530	537	559	566	148
175°	544	544	541	548	548	52
180°	544	544	544	544	544	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	462.2	462.2	462.2	462.2	462.2	462.2	462.2	462.2	462.2	462.2	462.2
2.5°	462.2	462.2	465.1	466.6	469.6	471.1	474.1	477.1	486.0	487.5	490.4
5°	450.3	456.3	475.6	483.0	503.8	532.1	543.9	563.3	603.4	615.2	622.7
7.5°	432.5	445.8	493.4	505.3	557.3	631.6	662.9	704.5	768.3	799.5	824.8
10°	404.2	432.5	517.1	545.4	630.1	743.0	801.0	859.0	955.6	998.7	1015.1
12.5°	373.0	419.1	542.4	581.1	703.0	867.9	937.8	1001.7	1111.7	1169.6	1178.5
15°	337.4	399.8	566.2	622.7	780.2	971.9	1049.2	1128.0	1230.6	1272.1	1282.6
17.5°	306.2	385.0	588.5	648.0	839.7	1065.6	1144.3	1209.8	1292.9	1321.2	1328.6
20°	267.5	361.2	603.4	680.7	902.1	1134.0	1209.8	1260.3	1316.7	1334.6	1337.6
22.5°	239.2	335.9	612.3	692.5	943.7	1175.5	1239.5	1279.6	1318.2	1324.2	1325.6
25°	215.5	307.7	610.9	705.9	979.4	1200.8	1249.9	1279.6	1301.9	1304.9	1304.9
27.5°	193.2	276.4	604.9	708.9	1006.1	1206.8	1245.4	1266.2	1276.6	1282.6	1282.6
30°	173.9	246.7	590.0	703.0	1018.0	1200.8	1232.0	1242.4	1252.8	1261.8	1266.2
32.5°	159.1	218.4	567.7	691.0	1019.5	1186.0	1208.3	1214.2	1229.1	1249.9	1257.3
35°	145.6	190.2	542.4	674.7	1010.6	1162.2	1177.0	1183.0	1212.7	1243.9	1254.3
37.5°	132.3	169.4	509.8	646.5	997.2	1134.0	1144.3	1154.8	1200.8	1238.0	1249.9
40°	118.9	151.6	471.1	615.2	976.4	1099.7	1108.7	1125.0	1186.0	1229.1	1241.0
42.5°	108.5	136.8	429.5	582.6	949.6	1061.2	1074.5	1098.3	1168.1	1214.2	1227.6
45°	99.6	121.9	385.0	538.0	915.5	1021.0	1040.3	1073.0	1147.3	1191.9	1203.8
47.5°	90.6	111.5	338.8	491.9	878.3	980.9	1006.1	1043.3	1119.0	1162.2	1172.6
50°	83.3	101.1	292.7	442.8	838.2	937.8	967.5	1006.1	1083.4	1123.5	1137.0
52.5°	77.3	92.1	249.7	393.8	792.1	893.1	927.4	967.5	1040.3	1079.0	1087.9
55°	71.3	84.7	212.5	341.8	744.5	845.6	882.8	921.4	992.7	1025.4	1031.4
57.5°	68.3	78.8	181.3	292.7	694.0	792.1	833.8	869.4	936.3	961.6	967.5
60°	63.9	74.3	157.6	251.2	639.1	741.6	777.3	813.0	869.4	890.2	894.6
62.5°	59.5	71.3	139.7	211.1	582.6	682.2	717.8	750.5	798.1	813.0	818.8
65°	56.5	68.3	126.3	181.3	524.6	619.7	655.4	683.7	722.3	737.2	740.1
67.5°	53.5	65.4	115.9	156.1	466.6	557.3	584.1	610.9	640.5	655.4	656.9
70°	49.0	62.4	107.0	138.2	407.2	486.0	508.3	536.5	560.3	567.7	572.2
72.5°	46.1	58.0	101.1	124.8	346.3	417.6	438.4	454.8	475.6	483.0	483.0
75°	41.6	52.0	95.1	111.5	283.9	341.8	359.7	376.0	392.3	395.3	390.8
77.5°	37.2	46.1	81.8	93.6	221.4	270.5	285.4	294.2	307.7	310.6	312.1
80°	31.2	40.1	63.9	72.8	160.5	199.1	209.6	216.9	228.9	228.9	231.9
82.5°	23.8	31.2	46.1	52.0	108.5	136.8	145.6	150.1	157.6	157.6	157.6
85°	14.8	19.3	29.7	34.2	65.4	83.3	89.1	90.6	96.6	98.1	98.1
87.5°	7.5	10.4	19.3	20.8	34.2	43.1	43.1	46.1	46.1	44.6	43.1
90°	3.7	6.6	9.5	10.2	16.1	23.9	27.8	24.7	18.5	13.9	13.9
92.5°	14.6	39.4	64.3	70.5	99.2	137.3	156.3	137.0	98.4	69.4	66.7
95°	35.0	80.5	126.0	137.4	243.9	385.9	457.0	407.8	309.4	235.6	227.3
97.5°	60.6	100.7	140.9	150.9	328.6	565.5	683.8	652.8	590.6	543.9	528.0
100°	80.4	116.7	153.1	162.2	359.4	622.3	753.7	756.0	760.4	763.9	744.9
102.5°	97.1	131.1	165.0	173.6	373.5	640.1	773.4	813.0	892.3	951.6	935.4
105°	125.7	154.4	183.1	190.3	384.0	642.1	771.2	860.0	1037.6	1170.9	1162.2
107.5°	154.9	181.7	208.5	215.2	385.9	613.5	727.3	851.2	1099.0	1284.9	1287.0
110°	174.6	198.8	223.0	229.1	382.9	588.2	690.8	829.3	1106.3	1314.0	1323.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	194.0	217.0	240.0	245.8	383.1	566.1	657.6	799.3	1082.8	1295.4	1309.4
115°	223.2	244.4	265.7	271.0	386.6	540.8	617.8	754.4	1027.4	1232.3	1251.6
117.5°	252.1	271.4	290.7	295.5	393.8	524.9	590.4	713.6	960.1	1145.0	1166.4
120°	268.8	287.0	305.2	309.8	399.6	519.5	579.4	692.0	917.2	1086.1	1107.0
122.5°	285.4	303.7	322.1	326.6	408.1	516.7	571.0	672.3	875.1	1027.3	1047.8
125°	310.6	327.3	343.9	348.2	419.4	514.3	561.8	648.0	820.2	949.4	968.4
127.5°	330.9	347.8	364.8	369.0	430.7	513.0	554.2	628.2	776.1	887.0	903.0
130°	341.9	360.1	378.3	382.9	439.0	513.9	551.3	617.2	748.8	847.6	862.3
132.5°	353.3	371.4	389.6	394.2	445.6	514.3	548.7	607.6	725.5	813.9	827.2
135°	370.1	386.6	403.2	407.4	453.0	513.9	544.4	593.7	692.4	766.4	777.8
137.5°	387.2	403.7	420.0	424.1	463.9	517.1	543.6	585.3	668.7	731.4	740.7
140°	401.5	416.6	431.7	435.5	470.7	517.6	541.0	577.0	649.2	703.3	712.0
142.5°	412.5	426.4	440.4	443.9	476.3	519.4	541.0	572.7	636.0	683.5	691.0
145°	429.2	441.4	453.6	456.6	483.6	519.5	537.4	563.3	615.1	653.9	659.6
147.5°	446.1	457.9	469.7	472.7	494.3	523.0	537.4	557.8	598.6	629.1	633.9
150°	457.0	467.7	478.4	481.1	499.9	525.0	537.4	554.6	589.0	614.8	618.6
152.5°	468.3	476.4	484.6	486.6	503.5	526.1	537.4	552.1	581.4	603.5	606.4
155°	485.2	491.1	497.2	498.7	511.6	528.8	537.4	549.1	572.5	590.0	591.9
157.5°	497.6	503.4	509.2	510.7	519.6	531.5	537.4	546.5	564.7	578.3	579.6
160°	506.0	510.6	515.0	516.2	523.3	532.7	537.4	545.2	560.8	572.5	573.3
162.5°	514.3	517.8	521.2	522.1	527.2	534.0	537.4	544.0	557.1	566.9	567.6
165°	523.5	526.5	529.6	530.4	532.8	535.9	537.4	542.2	551.6	558.6	559.4
167.5°	531.9	533.4	534.9	535.2	537.2	539.7	541.0	544.1	550.3	554.9	555.3
170°	537.4	538.8	540.3	540.7	540.8	540.9	541.0	544.1	550.3	554.9	554.9
172.5°	540.3	540.7	540.9	541.0	541.0	541.0	541.0	543.5	548.3	552.0	551.7
175°	544.4	544.4	544.4	544.4	543.2	541.7	541.0	542.6	545.7	548.0	548.0
177.5°	544.4	544.4	544.4	544.4	543.5	542.4	541.7	543.0	545.4	547.3	546.9
180°	544.4	544.4	544.4	544.4	544.4	544.4	544.4	544.4	544.4	544.4	544.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	462.2	462.2
2.5°	493.4	490.4
5°	634.6	637.6
7.5°	854.6	853.1
10°	1062.6	1076.0
12.5°	1214.2	1217.1
15°	1306.4	1312.3
17.5°	1342.0	1343.5
20°	1343.5	1340.6
22.5°	1327.1	1324.2
25°	1307.8	1306.4
27.5°	1290.0	1291.5
30°	1282.6	1287.1
32.5°	1282.6	1290.0
35°	1285.6	1292.9
37.5°	1284.1	1292.9
40°	1278.1	1288.5
42.5°	1261.8	1269.1
45°	1236.5	1245.4
47.5°	1203.8	1209.8
50°	1162.2	1168.1
52.5°	1110.2	1111.7
55°	1047.7	1053.7
57.5°	980.9	982.4
60°	906.6	911.1
62.5°	827.8	827.8
65°	744.5	747.5
67.5°	658.4	665.8
70°	570.7	572.2
72.5°	484.5	484.5
75°	395.3	396.8
77.5°	310.6	310.6
80°	230.4	231.9
82.5°	159.1	162.0
85°	99.6	99.6
87.5°	46.1	41.6
90°	13.9	13.9
92.5°	55.6	44.5
95°	193.8	160.4
97.5°	464.4	400.8
100°	669.1	593.3
102.5°	870.5	805.6
105°	1127.2	1092.3
107.5°	1295.4	1303.8
110°	1359.5	1395.9





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1365.2	1421.1
115°	1329.0	1406.5
117.5°	1252.3	1338.2
120°	1190.4	1273.9
122.5°	1130.2	1212.5
125°	1044.2	1120.1
127.5°	967.0	1030.9
130°	921.4	980.5
132.5°	880.1	933.0
135°	823.4	869.1
137.5°	778.1	815.4
140°	746.9	781.8
142.5°	721.1	751.1
145°	682.4	705.1
147.5°	652.7	671.5
150°	633.9	649.2
152.5°	617.9	629.5
155°	599.5	607.2
157.5°	585.0	590.4
160°	576.3	579.4
162.5°	570.6	573.5
165°	562.5	565.5
167.5°	556.5	557.8
170°	554.9	554.9
172.5°	550.6	549.5
175°	548.0	548.0
177.5°	545.7	544.4
180°	544.4	544.4



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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	6.08	6.98	7.03	7.95	9.22	19.22	20.12	20.17	21.09	22.35
	3H	6.79	7.60	7.75	8.58	9.86	21.05	21.86	22.00	22.84	24.12
	4H	7.09	7.86	8.06	8.84	10.14	21.68	22.45	22.66	23.44	24.73
	6H	7.34	8.05	8.33	9.04	10.35	22.11	22.82	23.09	23.80	25.11
	8H	7.41	8.09	8.40	9.09	10.40	22.22	22.90	23.21	23.90	25.21
	12H	7.43	8.08	8.43	9.08	10.40	22.28	22.93	23.28	23.93	25.25
4H	2H	13.28	14.05	14.25	15.03	16.32	19.50	20.27	20.48	21.25	22.55
	3H	14.85	15.50	15.84	16.51	17.81	21.54	22.18	22.52	23.19	24.50
	4H	14.95	15.54	15.94	16.54	17.87	22.29	22.88	23.29	23.89	25.22
	6H	14.96	15.47	15.97	16.50	17.83	22.82	23.33	23.83	24.36	25.69
	8H	14.94	15.42	15.95	16.44	17.78	22.98	23.46	23.99	24.48	25.82
	12H	14.90	15.33	15.93	16.37	17.72	23.07	23.50	24.10	24.53	25.88
8H	4H	16.39	16.86	17.40	17.88	19.23	22.36	22.84	23.37	23.86	25.20
	6H	16.63	17.03	17.67	18.09	19.43	22.98	23.37	24.01	24.43	25.78
	8H	16.65	17.00	17.69	18.05	19.41	23.19	23.54	24.23	24.59	25.95
	12H	16.62	16.93	17.67	17.97	19.37	23.33	23.64	24.38	24.68	26.08
12H	4H	16.53	16.96	17.56	18.00	19.35	22.31	22.75	23.34	23.78	25.13
	6H	16.89	17.24	17.93	18.28	19.64	22.96	23.31	24.00	24.36	25.72
	8H	16.96	17.26	18.00	18.31	19.71	23.19	23.49	24.23	24.54	25.94