

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: P936324

Luminaire Tested: SQ4-FB-025U-075D-927-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

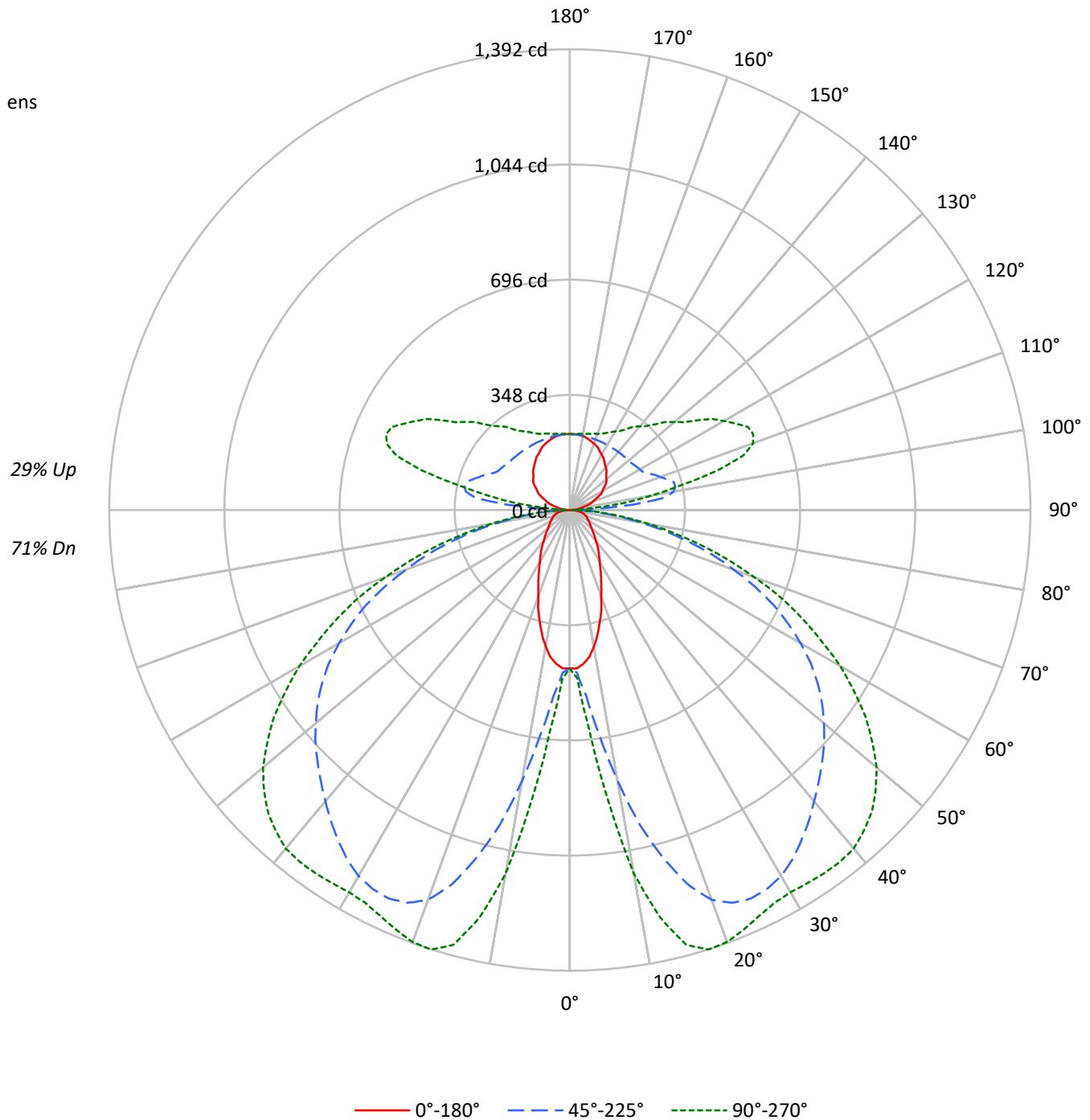
Test Method: LM-79-2019  
Report Number: P936324  
REPORT IS A COMBINATION OF REPORTS P933454 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-075D-927-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5196.0 lumens  
Efficiency: N/A  
Efficacy: 86.6 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: Semi-Direct  
  
Input Watts (W): 60  
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	50	30	10
RCR																				
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	71	
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62	62	58	
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51	51	48	
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43	43	39	
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36	36	33	
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	31	28	
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27	27	24	
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23	23	21	
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	21	18	
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18	18	16	
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16	16	14	

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

	0°	45°	90°
0°	2222	2222	2222
5°	2171	2568	2987
10°	1969	3744	4952
15°	1674	4891	5980
20°	1362	5668	6094
25°	1137	5932	5970
30°	958	5969	5959
35°	847	5870	6113
40°	738	5741	6272
45°	669	5647	6297
50°	613	5562	6193
55°	587	5438	5918
60°	601	5198	5485
65°	625	4835	4889
70°	666	4217	4130
75°	738	3439	3223
80°	806	2384	2171
85°	717	1265	1112

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6297 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.0	1.2
10°-20°	274.6	5.3
20°-30°	480.3	9.2
30°-40°	618.3	11.9
40°-50°	690.6	13.3
50°-60°	661.5	12.7
60°-70°	524.2	10.1
70°-80°	308.2	5.9
80°-90°	86.5	1.7
90°-100°	112.0	2.2
100°-110°	294.5	5.7
110°-120°	305.4	5.9
120°-130°	245.0	4.7
130°-140°	192.2	3.7
140°-150°	147.5	2.8
150°-160°	106.2	2.0
160°-170°	65.0	1.3
170°-180°	22.0	0.4
0°-30°	816.8	15.7
0°-40°	1435.1	27.6
0°-60°	2787.2	53.6
0°-90°	3706.1	71.3
90°-120°	711.9	13.7
90°-150°	1296.7	25.0
90°-180°	1490.0	28.7
0°-180°	5196.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	467	500	564	638	661	43
15°	350	645	1087	1318	1360	97
25°	223	732	1295	1352	1354	103
35°	151	699	1220	1289	1340	94
45°	103	558	1078	1235	1291	80
55°	74	354	915	1063	1092	67
65°	58	188	679	764	775	58
75°	43	116	373	410	411	45
85°	15	35	92	102	103	16
90°	2	4	12	6	6	2
95°	15	58	193	100	68	16
105°	53	80	326	494	461	56
115°	94	114	261	520	594	93
125°	131	147	237	401	473	116
135°	156	172	230	324	367	121
145°	181	193	227	276	298	114
155°	205	210	227	249	256	94
165°	221	224	227	236	239	62
175°	230	230	228	231	231	22
180°	230	230	230	230	230	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9	478.9
2.5°	478.9	478.9	482.0	483.6	486.6	488.2	491.3	494.3	503.6	505.1	508.2
5°	466.6	472.8	492.8	500.5	522.1	551.3	563.6	583.7	625.2	637.6	645.3
7.5°	448.1	462.0	511.3	523.6	577.5	654.5	686.8	730.0	796.2	828.5	854.7
10°	418.9	448.1	535.9	565.2	653.0	770.0	830.1	890.2	990.3	1035.0	1051.9
12.5°	386.5	434.3	562.1	602.1	728.4	899.4	971.8	1038.0	1152.0	1212.1	1221.3
15°	349.6	414.3	586.7	645.3	808.5	1007.2	1087.3	1168.9	1275.2	1318.3	1329.1
17.5°	317.2	398.9	609.8	671.4	870.1	1104.3	1185.9	1253.6	1339.9	1369.1	1376.8
20°	277.2	374.2	625.2	705.3	934.9	1175.1	1253.6	1306.0	1364.5	1383.0	1386.1
22.5°	247.9	348.0	634.5	717.6	978.0	1218.2	1284.4	1326.0	1366.1	1372.2	1373.8
25°	223.3	318.8	632.9	731.5	1014.9	1244.4	1295.2	1326.0	1349.1	1352.2	1352.2
27.5°	200.2	286.4	626.8	734.6	1042.7	1250.6	1290.6	1312.2	1322.9	1329.1	1329.1
30°	180.2	255.6	611.4	728.4	1055.0	1244.4	1276.7	1287.5	1298.3	1307.5	1312.2
32.5°	164.8	226.4	588.3	716.1	1056.5	1229.0	1252.1	1258.3	1273.7	1295.2	1302.9
35°	150.9	197.1	562.1	699.2	1047.3	1204.4	1219.8	1225.9	1256.7	1289.1	1299.8
37.5°	137.1	175.6	528.2	669.9	1033.4	1175.1	1185.9	1196.7	1244.4	1282.9	1295.2
40°	123.2	157.1	488.2	637.6	1011.9	1139.7	1148.9	1165.9	1229.0	1273.7	1286.0
42.5°	112.4	141.7	445.1	603.7	984.1	1099.6	1113.5	1138.1	1210.5	1258.3	1272.1
45°	103.2	126.3	398.9	557.5	948.7	1058.1	1078.1	1112.0	1189.0	1235.2	1247.5
47.5°	93.9	115.5	351.1	509.7	910.2	1016.5	1042.7	1081.2	1159.7	1204.4	1215.1
50°	86.2	104.7	303.4	458.9	868.6	971.8	1002.6	1042.7	1122.7	1164.3	1178.2
52.5°	80.1	95.5	258.7	408.1	820.8	925.6	961.0	1002.6	1078.1	1118.1	1127.4
55°	73.9	87.8	220.2	354.2	771.5	876.3	914.8	954.9	1028.8	1062.7	1068.8
57.5°	70.8	81.6	187.9	303.4	719.2	820.8	863.9	901.0	970.3	996.5	1002.6
60°	66.2	77.0	163.2	260.3	662.2	768.5	805.4	842.4	901.0	922.5	927.2
62.5°	61.6	73.9	144.8	218.7	603.7	706.9	743.8	777.7	827.0	842.4	848.5
65°	58.5	70.8	130.9	187.9	543.6	642.2	679.1	708.4	748.4	763.8	766.9
67.5°	55.4	67.8	120.1	161.7	483.6	577.5	605.2	632.9	663.7	679.1	680.7
70°	50.8	64.7	110.9	143.2	422.0	503.6	526.7	555.9	580.6	588.3	592.9
72.5°	47.7	60.1	104.7	129.4	358.8	432.7	454.3	471.2	492.8	500.5	500.5
75°	43.1	53.9	98.6	115.5	294.1	354.2	372.7	389.6	406.6	409.6	405.0
77.5°	38.5	47.7	84.7	97.0	229.5	280.3	295.7	304.9	318.8	321.9	323.4
80°	32.3	41.6	66.2	75.5	166.3	206.4	217.1	224.8	237.2	237.2	240.2
82.5°	24.6	32.3	47.7	53.9	112.4	141.7	150.9	155.5	163.2	163.2	163.2
85°	15.4	20.0	30.8	35.4	67.8	86.2	92.4	93.9	100.1	101.6	101.6
87.5°	7.7	10.8	20.0	21.6	35.4	44.7	44.7	47.7	47.7	46.2	44.7
90°	1.5	2.8	4.0	4.3	6.8	10.1	11.7	10.4	7.8	5.9	5.9
92.5°	6.2	16.6	27.2	29.8	41.9	58.0	66.0	57.8	41.6	29.3	28.2
95°	14.8	34.0	53.2	58.0	102.9	162.9	193.0	172.2	130.7	99.5	95.9
97.5°	25.6	42.6	59.4	63.7	138.7	238.7	288.8	275.7	249.4	229.7	223.0
100°	34.0	49.3	64.6	68.5	151.7	262.6	318.2	319.2	321.1	322.6	314.5
102.5°	41.0	55.4	69.7	73.2	157.7	270.3	326.6	343.3	376.7	401.8	394.9
105°	53.1	65.2	77.4	80.4	162.2	271.1	325.6	363.1	438.1	494.3	490.6
107.5°	65.4	76.7	88.0	90.9	162.9	259.0	307.1	359.4	464.0	542.5	543.4
110°	73.8	83.9	94.2	96.7	161.7	248.3	291.7	350.1	467.1	554.8	558.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	81.9	91.6	101.3	103.8	161.8	239.0	277.7	337.5	457.1	546.9	552.9
115°	94.2	103.2	112.2	114.4	163.2	228.3	260.8	318.5	433.8	520.3	528.5
117.5°	106.4	114.6	122.7	124.8	166.3	221.6	249.2	301.3	405.3	483.4	492.5
120°	113.5	121.2	128.9	130.8	168.8	219.4	244.6	292.1	387.2	458.5	467.3
122.5°	120.4	128.2	136.0	137.9	172.3	218.1	241.1	283.9	369.5	433.7	442.4
125°	131.1	138.2	145.2	147.0	177.1	217.2	237.2	273.6	346.3	400.9	408.9
127.5°	139.8	146.8	154.0	155.8	181.9	216.6	234.0	265.3	327.7	374.5	381.3
130°	144.4	152.1	159.7	161.6	185.3	217.0	232.8	260.6	316.2	357.8	364.1
132.5°	149.1	156.8	164.5	166.4	188.2	217.2	231.7	256.6	306.3	343.7	349.3
135°	156.2	163.2	170.2	172.0	191.3	217.0	229.8	250.7	292.4	323.6	328.4
137.5°	163.5	170.4	177.3	179.1	195.9	218.3	229.5	247.2	282.4	308.8	312.7
140°	169.5	175.9	182.3	183.9	198.7	218.5	228.5	243.7	274.1	296.9	300.6
142.5°	174.2	180.0	186.0	187.4	201.1	219.4	228.5	241.9	268.6	288.6	291.8
145°	181.3	186.4	191.5	192.8	204.2	219.4	226.9	237.9	259.7	276.1	278.5
147.5°	188.3	193.3	198.4	199.6	208.7	220.8	226.9	235.5	252.7	265.6	267.6
150°	193.0	197.5	202.0	203.1	211.1	221.6	226.9	234.2	248.7	259.6	261.2
152.5°	197.7	201.1	204.6	205.4	212.6	222.1	226.9	233.1	245.5	254.8	256.0
155°	204.8	207.4	209.9	210.5	216.0	223.3	226.9	231.8	241.7	249.1	249.9
157.5°	210.1	212.5	215.0	215.6	219.4	224.4	226.9	230.8	238.4	244.2	244.7
160°	213.6	215.5	217.4	217.9	220.9	224.9	226.9	230.2	236.8	241.7	242.0
162.5°	217.1	218.6	220.0	220.4	222.5	225.5	226.9	229.7	235.2	239.4	239.7
165°	221.1	222.4	223.7	224.0	225.0	226.3	226.9	228.9	232.8	235.9	236.2
167.5°	224.6	225.2	225.8	226.0	226.8	227.9	228.5	229.8	232.4	234.3	234.5
170°	226.9	227.5	228.2	228.3	228.4	228.5	228.5	229.8	232.4	234.3	234.3
172.5°	228.2	228.3	228.5	228.5	228.5	228.5	228.5	229.5	231.5	233.1	232.9
175°	229.8	229.8	229.8	229.8	229.4	228.8	228.5	229.1	230.4	231.4	231.4
177.5°	229.8	229.8	229.8	229.8	229.5	229.0	228.8	229.3	230.3	231.1	230.9
180°	229.8	229.8	229.8	229.8	229.8	229.8	229.8	229.8	229.8	229.8	229.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	478.9	478.9
2.5°	511.3	508.2
5°	657.6	660.7
7.5°	885.6	884.0
10°	1101.2	1115.0
12.5°	1258.3	1261.3
15°	1353.7	1359.9
17.5°	1390.7	1392.2
20°	1392.2	1389.2
22.5°	1375.3	1372.2
25°	1355.3	1353.7
27.5°	1336.8	1338.3
30°	1329.1	1333.7
32.5°	1329.1	1336.8
35°	1332.2	1339.9
37.5°	1330.6	1339.9
40°	1324.5	1335.3
42.5°	1307.5	1315.2
45°	1281.4	1290.6
47.5°	1247.5	1253.6
50°	1204.4	1210.5
52.5°	1150.5	1152.0
55°	1085.8	1091.9
57.5°	1016.5	1018.0
60°	939.5	944.1
62.5°	857.8	857.8
65°	771.5	774.6
67.5°	682.2	689.9
70°	591.4	592.9
72.5°	502.0	502.0
75°	409.6	411.2
77.5°	321.9	321.9
80°	238.7	240.2
82.5°	164.8	167.9
85°	103.2	103.2
87.5°	47.7	43.1
90°	5.9	5.9
92.5°	23.5	18.8
95°	81.9	67.7
97.5°	196.0	169.2
100°	282.5	250.5
102.5°	367.5	340.1
105°	475.9	461.2
107.5°	546.9	550.5
110°	574.0	589.4





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	576.4	600.0
115°	561.2	593.8
117.5°	528.8	565.0
120°	502.6	537.8
122.5°	477.2	511.9
125°	440.9	472.9
127.5°	408.3	435.3
130°	389.0	414.0
132.5°	371.6	393.9
135°	347.7	366.9
137.5°	328.5	344.3
140°	315.3	330.1
142.5°	304.5	317.1
145°	288.1	297.7
147.5°	275.5	283.5
150°	267.7	274.1
152.5°	260.9	265.7
155°	253.1	256.3
157.5°	247.0	249.2
160°	243.3	244.6
162.5°	240.9	242.2
165°	237.5	238.8
167.5°	235.0	235.5
170°	234.3	234.3
172.5°	232.5	232.0
175°	231.4	231.4
177.5°	230.4	229.8
180°	229.8	229.8



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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	5.52	6.67	6.26	7.44	8.37	18.70	19.85	19.44	20.62	21.55
	3H	6.25	7.29	7.00	8.07	9.02	20.56	21.60	21.31	22.38	23.34
	4H	6.56	7.54	7.33	8.33	9.30	21.22	22.20	21.99	22.99	23.96
	6H	6.82	7.73	7.61	8.53	9.51	21.66	22.57	22.45	23.37	24.35
	8H	6.90	7.77	7.70	8.59	9.57	21.79	22.66	22.59	23.48	24.46
	12H	6.93	7.76	7.73	8.57	9.58	21.87	22.70	22.67	23.51	24.52
4H	2H	12.77	13.75	13.54	14.54	15.51	19.01	19.99	19.78	20.78	21.75
	3H	14.36	15.19	15.15	16.01	17.00	21.08	21.91	21.87	22.73	23.71
	4H	14.47	15.22	15.27	16.05	17.06	21.86	22.61	22.66	23.43	24.45
	6H	14.50	15.15	15.32	16.00	17.02	22.42	23.07	23.24	23.92	24.93
	8H	14.48	15.10	15.31	15.94	16.97	22.59	23.20	23.41	24.04	25.07
	12H	14.45	15.01	15.30	15.87	16.91	22.69	23.25	23.54	24.11	25.15
8H	4H	15.94	16.55	16.77	17.40	18.43	21.94	22.56	22.77	23.40	24.43
	6H	16.20	16.71	17.05	17.59	18.62	22.59	23.10	23.44	23.98	25.01
	8H	16.22	16.67	17.08	17.55	18.60	22.81	23.26	23.68	24.14	25.19
	12H	16.20	16.60	17.07	17.47	18.58	22.97	23.37	23.84	24.24	25.34
12H	4H	16.10	16.65	16.94	17.51	18.55	21.91	22.46	22.76	23.33	24.37
	6H	16.46	16.91	17.32	17.79	18.84	22.57	23.03	23.44	23.91	24.96
	8H	16.54	16.94	17.41	17.81	18.92	22.82	23.22	23.69	24.09	25.19