

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: P937386

Luminaire Tested: SQ4-FB-075U-125D-B2750-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

**Test Information**

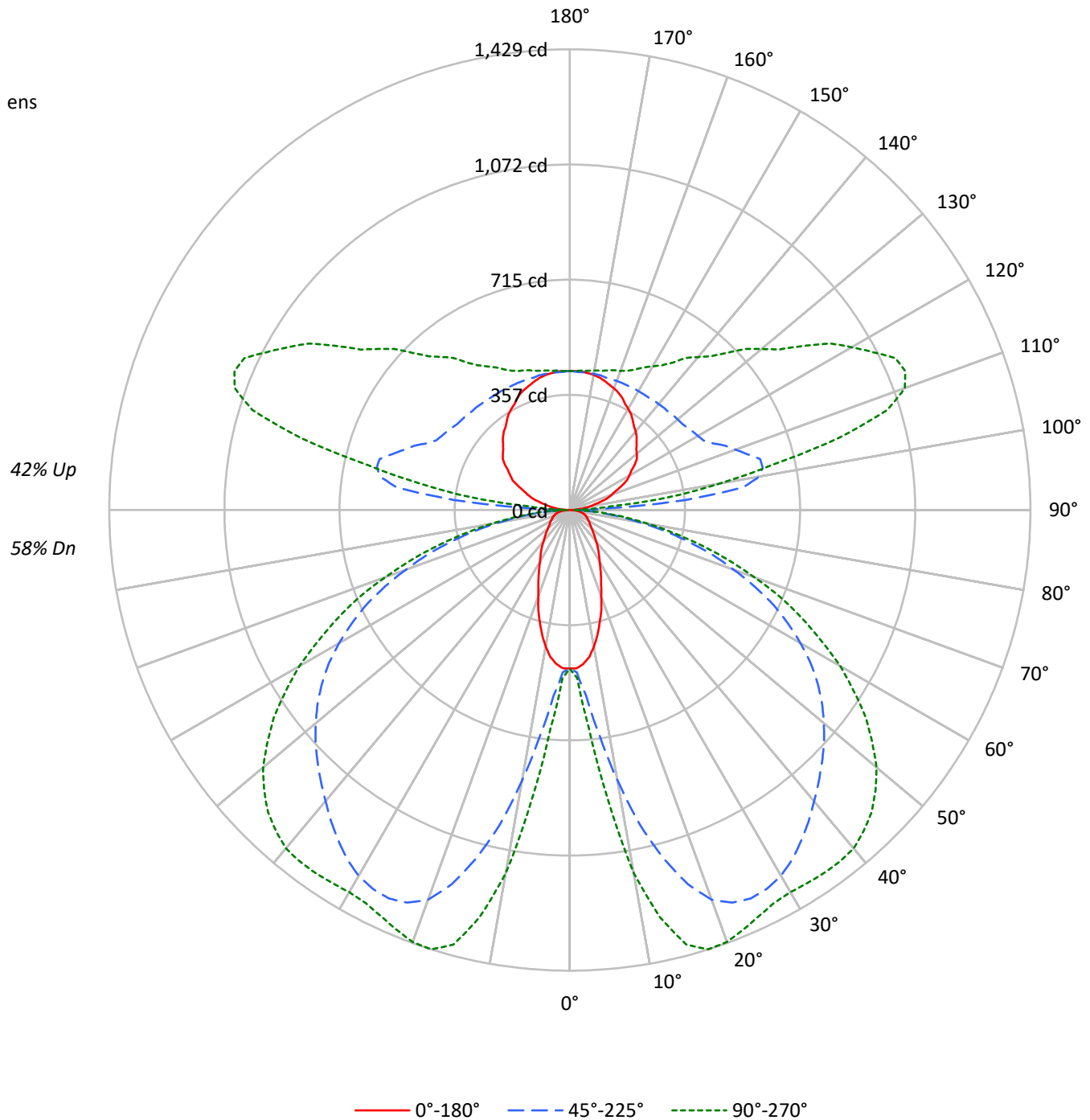
Test Method: LM-79-2019  
Report Number: P937386  
REPORT IS A COMBINATION OF REPORTS P933504 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-125D-B2750-1D-UNV-STD-W-4-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6600.6 lumens  
Efficiency: N/A  
Efficacy: 106.5 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): 62  
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	50	30	10	0
RCR																					
0	109	109	109	109	101	101	101	101	88	88	88	75	75	75	63	63	63	58			58
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47			47
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38			38
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32			32
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27			27
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23			23
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19			19
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17			17
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15			15
9	49	36	28	23	46	34	27	22	30	24	20	26	21	17	22	18	15	13			13
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12			12

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

	0°	45°	90°
0°	4561	4561	4561
5°	4451	5267	6130
10°	4032	7672	10163
15°	3423	10017	12272
20°	2784	11600	12508
25°	2320	12130	12253
30°	1953	12196	12230
35°	1724	11985	12546
40°	1501	11712	12873
45°	1356	11508	12923
50°	1241	11324	12709
55°	1184	11058	12146
60°	1210	10558	11256
65°	1252	9805	10034
70°	1323	8533	8477
75°	1453	6940	6616
80°	1554	4797	4458
85°	1308	2530	2282

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12923 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.6	1.0
10°-20°	281.8	4.3
20°-30°	492.9	7.5
30°-40°	634.5	9.6
40°-50°	708.7	10.7
50°-60°	678.8	10.3
60°-70°	537.9	8.1
70°-80°	316.3	4.8
80°-90°	89.5	1.4
90°-100°	210.3	3.2
100°-110°	552.9	8.4
110°-120°	573.3	8.7
120°-130°	459.8	7.0
130°-140°	360.8	5.5
140°-150°	276.9	4.2
150°-160°	199.4	3.0
160°-170°	122.0	1.8
170°-180°	41.2	0.6
0°-30°	838.2	12.7
0°-40°	1472.7	22.3
0°-60°	2860.2	43.3
0°-90°	3804.0	57.6
90°-120°	1336.4	20.2
90°-150°	2433.9	36.9
90°-180°	2797.0	42.4
0°-180°	6600.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	479	514	578	654	678	44
15°	359	662	1116	1353	1396	100
25°	229	751	1329	1388	1389	106
35°	155	718	1252	1323	1375	97
45°	106	572	1106	1268	1324	82
55°	76	364	939	1090	1120	69
65°	60	193	697	784	795	60
75°	44	118	382	420	422	46
85°	16	36	95	104	106	17
90°	3	8	22	11	11	3
95°	28	109	362	187	127	31
105°	100	151	611	928	866	106
115°	177	215	490	977	1115	175
125°	246	276	445	752	888	219
135°	293	323	431	608	689	227
145°	340	362	426	518	559	213
155°	384	395	426	468	481	177
165°	415	420	426	443	448	117
175°	431	431	429	434	434	41
180°	431	431	431	431	431	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5
2.5°	491.5	491.5	494.6	496.2	499.4	501.0	504.2	507.3	516.8	518.4	521.5
5°	478.9	485.2	505.8	513.6	535.7	565.8	578.4	599.0	641.7	654.3	662.2
7.5°	459.9	474.1	524.7	537.3	592.6	671.6	704.9	749.2	817.1	850.2	877.1
10°	429.8	459.9	549.9	580.0	670.1	790.2	851.8	913.5	1016.2	1062.1	1079.4
12.5°	396.7	445.7	576.8	617.9	747.6	923.0	997.2	1065.2	1182.2	1243.8	1253.2
15°	358.7	425.2	602.1	662.2	829.7	1033.6	1115.8	1199.5	1308.6	1352.8	1363.9
17.5°	325.6	409.4	625.9	689.1	892.9	1133.1	1216.9	1286.5	1374.9	1405.0	1412.9
20°	284.5	384.1	641.7	723.8	959.3	1205.9	1286.5	1340.2	1400.3	1419.2	1422.4
22.5°	254.4	357.2	651.1	736.5	1003.6	1250.1	1318.1	1360.7	1401.8	1408.2	1409.7
25°	229.2	327.2	649.6	750.7	1041.5	1277.0	1329.2	1360.7	1384.5	1387.6	1387.6
27.5°	205.5	293.9	643.2	753.8	1069.9	1283.3	1324.4	1346.5	1357.6	1363.9	1363.9
30°	184.9	262.4	627.5	747.6	1082.6	1277.0	1310.1	1321.2	1332.3	1341.8	1346.5
32.5°	169.1	232.3	603.7	734.9	1084.2	1261.2	1284.9	1291.2	1307.0	1329.2	1337.0
35°	154.9	202.3	576.8	717.5	1074.7	1235.9	1251.7	1258.0	1289.6	1322.8	1333.8
37.5°	140.7	180.2	542.1	687.5	1060.5	1205.9	1216.9	1228.0	1277.0	1316.5	1329.2
40°	126.5	161.2	501.0	654.3	1038.3	1169.5	1179.0	1196.4	1261.2	1307.0	1319.6
42.5°	115.3	145.4	456.7	619.5	1009.8	1128.5	1142.7	1168.0	1242.2	1291.2	1305.5
45°	105.9	129.6	409.4	572.1	973.5	1085.8	1106.3	1141.1	1220.1	1267.5	1280.1
47.5°	96.4	118.5	360.3	523.1	934.0	1043.1	1069.9	1109.5	1190.0	1235.9	1247.0
50°	88.5	107.5	311.3	470.9	891.3	997.2	1028.9	1069.9	1152.1	1194.8	1209.1
52.5°	82.2	98.0	265.5	418.8	842.4	949.8	986.2	1028.9	1106.3	1147.4	1156.9
55°	75.8	90.0	226.0	363.5	791.8	899.3	938.8	979.9	1055.7	1090.4	1096.8
57.5°	72.7	83.8	192.8	311.3	738.0	842.4	886.6	924.6	995.6	1022.5	1028.9
60°	68.0	79.0	167.6	267.1	679.6	788.7	826.6	864.5	924.6	946.7	951.4
62.5°	63.2	75.8	148.6	224.4	619.5	725.4	763.4	798.1	848.7	864.5	870.8
65°	60.1	72.7	134.3	192.8	557.9	659.0	697.0	727.0	768.1	783.9	787.1
67.5°	56.9	69.6	123.3	166.0	496.2	592.6	621.1	649.6	681.2	697.0	698.5
70°	52.1	66.4	113.8	147.0	433.0	516.8	540.5	570.5	595.8	603.7	608.5
72.5°	49.0	61.6	107.5	132.7	368.3	444.1	466.3	483.6	505.8	513.6	513.6
75°	44.3	55.3	101.2	118.5	301.9	363.5	382.5	399.8	417.2	420.4	415.6
77.5°	39.5	49.0	87.0	99.6	235.5	287.7	303.5	312.9	327.2	330.3	331.9
80°	33.2	42.7	68.0	77.4	170.6	211.7	222.9	230.7	243.4	243.4	246.6
82.5°	25.3	33.2	49.0	55.3	115.3	145.4	154.9	159.6	167.6	167.6	167.6
85°	15.8	20.5	31.6	36.3	69.6	88.5	94.8	96.4	102.7	104.3	104.3
87.5°	7.9	11.0	20.5	22.1	36.3	45.9	45.9	49.0	49.0	47.4	45.9
90°	2.9	5.2	7.6	8.1	12.8	19.0	22.0	19.6	14.7	11.0	11.0
92.5°	11.6	31.3	50.9	55.9	78.5	108.8	123.9	108.6	78.0	55.0	52.9
95°	27.8	63.9	99.9	108.9	193.3	305.9	362.2	323.2	245.2	186.7	180.1
97.5°	48.1	79.9	111.6	119.6	260.4	448.1	542.0	517.3	468.1	431.1	418.5
100°	63.7	92.5	121.3	128.5	284.8	493.2	597.3	599.1	602.7	605.4	590.4
102.5°	77.1	104.0	130.8	137.5	296.0	507.3	613.0	644.4	707.1	754.2	741.3
105°	99.6	122.4	145.1	150.8	304.3	508.9	611.2	681.6	822.4	927.9	921.0
107.5°	122.7	144.0	165.2	170.5	305.9	486.2	576.5	674.6	871.0	1018.2	1019.9
110°	138.4	157.6	176.8	181.6	303.6	466.2	547.5	657.3	876.7	1041.4	1048.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	153.7	172.0	190.3	194.8	303.6	448.7	521.2	633.5	858.2	1026.7	1037.8
115°	176.9	193.7	210.6	214.8	306.4	428.5	489.6	597.9	814.3	976.6	991.9
117.5°	199.8	215.1	230.4	234.2	312.1	415.9	467.8	565.5	760.8	907.4	924.4
120°	213.1	227.5	241.9	245.5	316.7	411.7	459.2	548.4	726.9	860.8	877.3
122.5°	226.1	240.7	255.2	258.8	323.4	409.5	452.5	532.8	693.6	814.2	830.5
125°	246.1	259.4	272.6	275.9	332.4	407.7	445.3	513.6	650.2	752.5	767.6
127.5°	262.4	275.7	289.1	292.4	341.4	406.7	439.3	497.9	615.1	703.0	715.7
130°	271.0	285.4	299.8	303.5	347.9	407.2	436.9	489.1	593.5	671.7	683.4
132.5°	280.0	294.4	308.8	312.4	353.2	407.7	434.9	481.6	575.1	645.1	655.6
135°	293.3	306.4	319.5	322.8	359.0	407.3	431.4	470.5	548.8	607.5	616.5
137.5°	306.9	319.9	332.9	336.1	367.7	409.8	430.9	463.9	530.0	579.6	587.0
140°	318.2	330.2	342.1	345.1	373.0	410.2	428.8	457.4	514.4	557.3	564.2
142.5°	326.9	337.9	348.9	351.7	377.4	411.7	428.8	453.9	504.1	541.7	547.7
145°	340.2	349.9	359.5	361.9	383.2	411.7	425.9	446.5	487.5	518.3	522.8
147.5°	353.5	362.9	372.3	374.6	391.7	414.5	425.9	442.1	474.4	498.6	502.3
150°	362.2	370.7	379.2	381.4	396.2	416.0	425.9	439.5	466.8	487.3	490.3
152.5°	371.2	377.6	384.1	385.6	399.1	416.9	425.9	437.6	460.8	478.3	480.5
155°	384.5	389.3	394.0	395.2	405.4	419.1	425.9	435.2	453.6	467.6	469.1
157.5°	394.3	399.0	403.7	404.8	411.8	421.2	425.9	433.1	447.5	458.3	459.3
160°	401.0	404.6	408.2	409.1	414.7	422.2	425.9	432.1	444.5	453.7	454.3
162.5°	407.7	410.4	413.1	413.8	417.8	423.2	425.9	431.1	441.5	449.3	449.9
165°	414.9	417.3	419.7	420.4	422.3	424.7	425.9	429.6	437.1	442.7	443.4
167.5°	421.5	422.6	423.8	424.1	425.7	427.8	428.8	431.2	436.2	439.8	440.1
170°	425.9	427.0	428.2	428.5	428.6	428.7	428.8	431.2	436.2	439.8	439.8
172.5°	428.2	428.5	428.7	428.8	428.8	428.8	428.8	430.8	434.6	437.5	437.3
175°	431.4	431.4	431.4	431.4	430.6	429.4	428.8	430.0	432.4	434.3	434.3
177.5°	431.4	431.4	431.4	431.4	430.8	429.8	429.4	430.3	432.3	433.7	433.5
180°	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	491.5	491.5
2.5°	524.7	521.5
5°	674.8	678.0
7.5°	908.8	907.2
10°	1130.0	1144.2
12.5°	1291.2	1294.3
15°	1389.2	1395.5
17.5°	1427.2	1428.7
20°	1428.7	1425.6
22.5°	1411.3	1408.2
25°	1390.7	1389.2
27.5°	1371.8	1373.4
30°	1363.9	1368.7
32.5°	1363.9	1371.8
35°	1367.1	1374.9
37.5°	1365.5	1374.9
40°	1359.2	1370.2
42.5°	1341.8	1349.6
45°	1314.9	1324.4
47.5°	1280.1	1286.5
50°	1235.9	1242.2
52.5°	1180.6	1182.2
55°	1114.2	1120.5
57.5°	1043.1	1044.7
60°	964.1	968.8
62.5°	880.3	880.3
65°	791.8	794.9
67.5°	700.1	708.1
70°	606.9	608.5
72.5°	515.2	515.2
75°	420.4	422.0
77.5°	330.3	330.3
80°	245.0	246.6
82.5°	169.1	172.2
85°	105.9	105.9
87.5°	49.0	44.3
90°	11.0	11.0
92.5°	44.1	35.3
95°	153.6	127.1
97.5°	368.1	317.7
100°	530.3	470.2
102.5°	689.9	638.4
105°	893.4	865.7
107.5°	1026.7	1033.4
110°	1077.5	1106.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1082.0	1126.3
115°	1053.4	1114.7
117.5°	992.5	1060.6
120°	943.4	1009.6
122.5°	895.7	961.0
125°	827.6	887.7
127.5°	766.3	817.1
130°	730.3	777.1
132.5°	697.5	739.4
135°	652.7	688.8
137.5°	616.6	646.2
140°	592.0	619.6
142.5°	571.4	595.2
145°	540.8	558.8
147.5°	517.2	532.2
150°	502.4	514.5
152.5°	489.7	498.8
155°	475.1	481.2
157.5°	463.6	467.8
160°	456.7	459.2
162.5°	452.2	454.6
165°	445.8	448.2
167.5°	441.1	442.2
170°	439.8	439.8
172.5°	436.4	435.4
175°	434.3	434.3
177.5°	432.4	431.4
180°	431.4	431.4



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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	6.93	7.91	7.81	8.82	9.97	20.07	21.05	20.95	21.96	23.11
	3H	7.65	8.53	8.54	9.44	10.62	21.90	22.78	22.79	23.70	24.88
	4H	7.95	8.79	8.86	9.71	10.90	22.54	23.38	23.45	24.30	25.49
	6H	8.21	8.98	9.13	9.91	11.11	22.97	23.74	23.89	24.67	25.87
	8H	8.28	9.01	9.21	9.96	11.16	23.08	23.82	24.01	24.77	25.97
	12H	8.30	9.00	9.23	9.94	11.17	23.15	23.85	24.08	24.79	26.02
4H	2H	14.14	14.97	15.05	15.89	17.08	20.36	21.19	21.27	22.12	23.31
	3H	15.72	16.42	16.64	17.37	18.57	22.40	23.10	23.32	24.05	25.26
	4H	15.82	16.46	16.75	17.40	18.63	23.16	23.80	24.10	24.75	25.98
	6H	15.84	16.39	16.78	17.36	18.59	23.70	24.25	24.64	25.22	26.45
	8H	15.82	16.33	16.77	17.30	18.54	23.85	24.37	24.81	25.34	26.58
	12H	15.78	16.25	16.75	17.23	18.48	23.95	24.41	24.92	25.40	26.65
8H	4H	17.26	17.78	18.21	18.74	19.99	23.23	23.75	24.19	24.72	25.96
	6H	17.51	17.94	18.49	18.95	20.19	23.86	24.29	24.83	25.29	26.54
	8H	17.53	17.91	18.52	18.91	20.17	24.07	24.45	25.06	25.45	26.71
	12H	17.50	17.84	18.49	18.83	20.13	24.21	24.55	25.20	25.54	26.84
12H	4H	17.41	17.88	18.38	18.86	20.11	23.19	23.66	24.16	24.64	25.89
	6H	17.77	18.15	18.75	19.14	20.40	23.84	24.22	24.83	25.22	26.48
	8H	17.84	18.18	18.83	19.17	20.47	24.07	24.40	25.06	25.39	26.70