

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: P937171

Luminaire Tested: SQ4-FB-075U-075D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

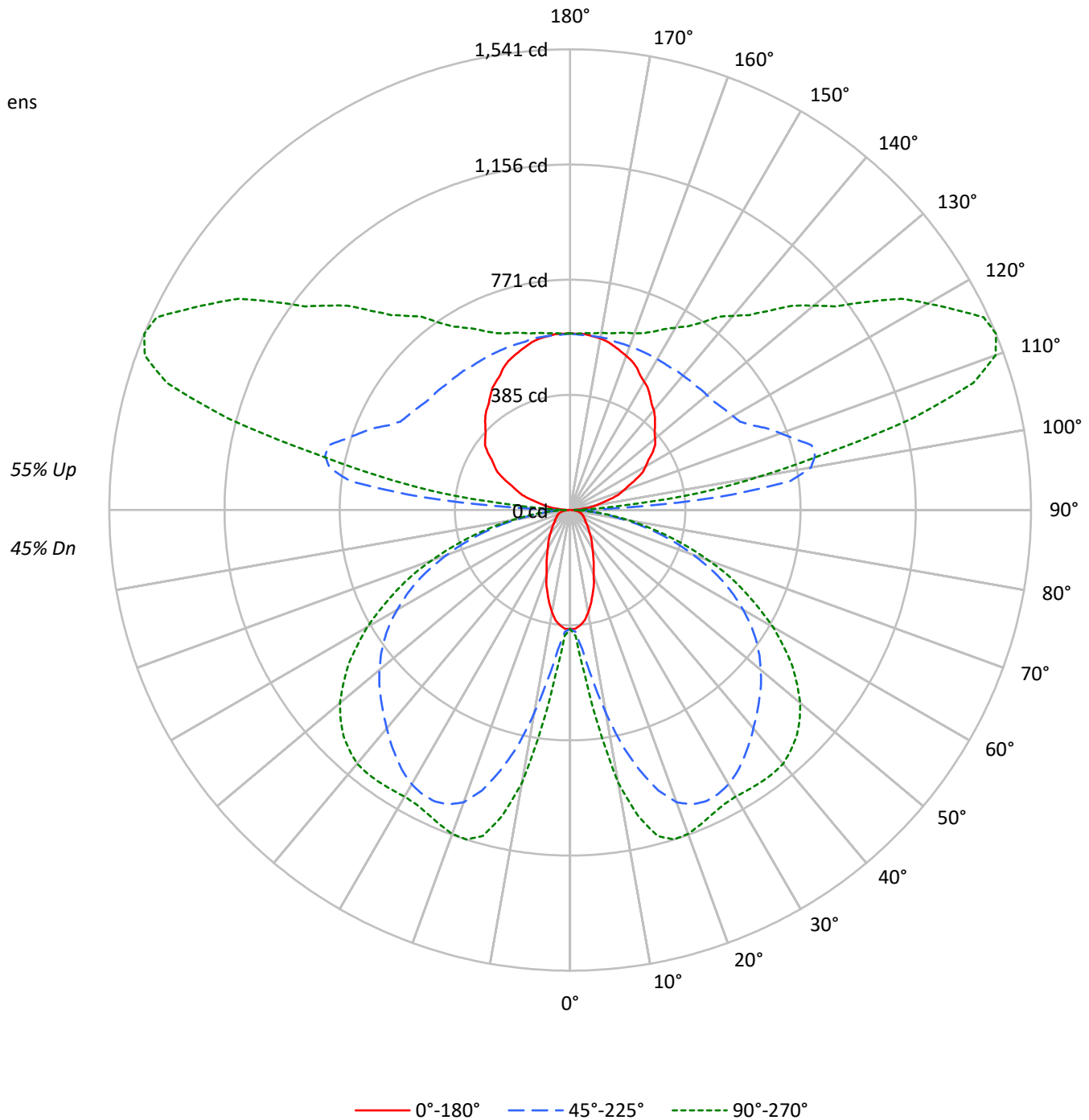
Test Method: LM-79-2019  
Report Number: P937171  
REPORT IS A COMBINATION OF REPORTS P933510 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-935-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6903.7 lumens  
Efficiency: N/A  
Efficacy: 108.5 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): 63.6  
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

TEST NUMBER: P937171  
CATALOG NUMBER: SQ4-FB-075U-075D-935-1D-UNV-STD-W-6

### Luminous Intensity Polar Plot





TEST NUMBER: P937171

CATALOG NUMBER: SQ4-FB-075U-075D-935-1D-UNV-STD-W-6

**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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9

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

	0°	45°	90°
0°	2459	2459	2459
5°	2401	2841	3305
10°	2177	4140	5479
15°	1850	5408	6617
20°	1505	6266	6743
25°	1255	6556	6606
30°	1058	6595	6593
35°	935	6484	6764
40°	814	6339	6940
45°	737	6233	6967
50°	676	6137	6852
55°	646	5998	6548
60°	661	5732	6068
65°	687	5329	5409
70°	730	4644	4570
75°	806	3783	3566
80°	872	2621	2403
85°	763	1388	1230

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6967 cd/sqm



TEST NUMBER: P937171

CATALOG NUMBER: SQ4-FB-075U-075D-935-1D-UNV-STD-W-6

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.4	0.7
10°-20°	227.9	3.3
20°-30°	398.6	5.8
30°-40°	513.1	7.4
40°-50°	573.1	8.3
50°-60°	548.9	8.0
60°-70°	435.0	6.3
70°-80°	255.8	3.7
80°-90°	73.3	1.1
90°-100°	287.7	4.2
100°-110°	756.5	11.0
110°-120°	784.4	11.4
120°-130°	629.2	9.1
130°-140°	493.7	7.2
140°-150°	378.9	5.5
150°-160°	272.9	4.0
160°-170°	167.0	2.4
170°-180°	56.4	0.8
0°-30°	677.9	9.8
0°-40°	1191.0	17.3
0°-60°	2313.0	33.5
0°-90°	3077.1	44.6
90°-120°	1828.6	26.5
90°-150°	3330.4	48.2
90°-180°	3827.0	55.4
0°-180°	6903.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	387	415	468	529	548	36
15°	290	536	902	1094	1129	81
25°	185	607	1075	1122	1123	85
35°	125	580	1012	1070	1112	78
45°	86	463	895	1025	1071	66
55°	61	294	759	882	906	56
65°	49	156	564	634	643	48
75°	36	96	309	340	341	37
85°	13	29	77	84	86	14
90°	4	11	30	15	15	4
95°	38	149	496	256	174	42
105°	136	206	836	1270	1184	145
115°	242	294	670	1336	1525	239
125°	337	378	609	1030	1215	299
135°	401	442	590	831	942	311
145°	466	495	583	709	765	292
155°	526	541	583	640	658	242
165°	568	575	583	606	613	160
175°	590	590	587	594	594	56
180°	590	590	590	590	590	



TEST NUMBER: P937171  
 CATALOG NUMBER: SQ4-FB-075U-075D-935-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	397.5	397.5	397.5	397.5	397.5	397.5	397.5	397.5	397.5	397.5	397.5
2.5°	397.5	397.5	400.0	401.3	403.8	405.1	407.7	410.2	417.9	419.2	421.7
5°	387.2	392.3	409.0	415.4	433.2	457.5	467.7	484.4	518.9	529.1	535.5
7.5°	371.9	383.4	424.3	434.5	479.2	543.2	570.0	605.8	660.7	687.6	709.3
10°	347.6	371.9	444.7	469.0	541.9	639.0	688.8	738.7	821.8	858.8	872.9
12.5°	320.8	360.4	466.5	499.7	604.5	746.4	806.4	861.4	955.9	1005.9	1013.5
15°	290.1	343.8	486.9	535.5	670.9	835.8	902.3	970.1	1058.3	1094.1	1103.0
17.5°	263.3	331.0	506.1	557.2	722.1	916.3	984.1	1040.4	1111.9	1136.2	1142.6
20°	230.0	310.6	518.9	585.3	775.7	975.2	1040.4	1083.8	1132.4	1147.7	1150.3
22.5°	205.8	288.8	526.5	595.5	811.5	1011.0	1065.9	1100.4	1133.7	1138.8	1140.1
25°	185.3	264.5	525.3	607.0	842.2	1032.7	1074.9	1100.4	1119.6	1122.2	1122.2
27.5°	166.1	237.7	520.1	609.6	865.2	1037.8	1071.0	1088.9	1097.9	1103.0	1103.0
30°	149.5	212.1	507.4	604.5	875.4	1032.7	1059.5	1068.5	1077.4	1085.1	1088.9
32.5°	136.7	187.9	488.2	594.3	876.7	1019.9	1039.1	1044.2	1057.0	1074.9	1081.3
35°	125.2	163.6	466.5	580.2	869.0	999.5	1012.3	1017.4	1042.9	1069.8	1078.7
37.5°	113.7	145.7	438.4	555.9	857.5	975.2	984.1	993.1	1032.7	1064.7	1074.9
40°	102.2	130.4	405.1	529.1	839.6	945.7	953.4	967.4	1019.9	1057.0	1067.2
42.5°	93.3	117.6	369.3	501.0	816.6	912.5	924.0	944.4	1004.6	1044.2	1055.7
45°	85.6	104.8	331.0	462.6	787.2	878.0	894.6	922.7	986.7	1025.0	1035.3
47.5°	78.0	95.8	291.4	423.0	755.3	843.5	865.2	897.2	962.3	999.5	1008.4
50°	71.6	86.9	251.8	380.8	720.8	806.4	832.0	865.2	931.7	966.2	977.8
52.5°	66.5	79.2	214.7	338.7	681.2	768.1	797.5	832.0	894.6	927.8	935.5
55°	61.3	72.8	182.8	293.9	640.3	727.2	759.1	792.4	853.7	881.8	886.9
57.5°	58.8	67.7	155.9	251.8	596.8	681.2	717.0	747.6	805.1	826.9	832.0
60°	55.0	63.9	135.5	216.0	549.5	637.7	668.4	699.1	747.6	765.5	769.4
62.5°	51.1	61.3	120.1	181.5	501.0	586.6	617.3	645.4	686.3	699.1	704.2
65°	48.6	58.8	108.6	155.9	451.1	532.9	563.6	587.9	621.1	633.9	636.4
67.5°	46.0	56.2	99.7	134.2	401.3	479.2	502.3	525.3	550.8	563.6	564.9
70°	42.2	53.7	92.0	118.9	350.2	417.9	437.1	461.4	481.8	488.2	492.0
72.5°	39.6	49.8	86.9	107.4	297.8	359.1	377.0	391.1	409.0	415.4	415.4
75°	35.8	44.7	81.8	95.8	244.1	293.9	309.3	323.3	337.4	339.9	336.1
77.5°	32.0	39.6	70.3	80.5	190.4	232.6	245.4	253.0	264.5	267.1	268.4
80°	26.8	34.5	55.0	62.6	138.0	171.3	180.2	186.6	196.8	196.8	199.4
82.5°	20.4	26.8	39.6	44.7	93.3	117.6	125.2	129.1	135.5	135.5	135.5
85°	12.8	16.6	25.6	29.4	56.2	71.6	76.7	78.0	83.1	84.3	84.3
87.5°	6.4	8.9	16.6	17.9	29.4	37.1	37.1	39.6	39.6	38.3	37.1
90°	3.9	7.1	10.3	11.1	17.4	25.8	30.1	26.8	20.1	15.1	15.1
92.5°	15.8	42.8	69.7	76.4	107.4	148.8	169.5	148.6	106.7	75.2	72.2
95°	38.0	87.3	136.6	148.9	264.5	418.6	495.6	442.3	335.5	255.5	246.5
97.5°	65.8	109.2	152.7	163.6	356.3	613.2	741.7	707.9	640.5	589.9	572.6
100°	87.2	126.6	166.1	175.9	389.7	674.8	817.3	819.8	824.7	828.4	807.9
102.5°	105.4	142.2	179.0	188.2	405.0	694.1	838.7	881.6	967.6	1032.0	1014.4
105°	136.3	167.5	198.7	206.4	416.4	696.3	836.3	932.6	1125.2	1269.7	1260.3
107.5°	168.0	197.1	226.1	233.4	418.5	665.3	788.8	923.1	1191.9	1393.4	1395.7
110°	189.4	215.6	241.8	248.4	415.3	637.9	749.2	899.4	1199.8	1425.1	1434.9



TEST NUMBER: P937171

CATALOG NUMBER: SQ4-FB-075U-075D-935-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	210.4	235.3	260.4	266.6	415.4	613.9	713.1	866.8	1174.2	1404.8	1419.9
115°	242.1	265.1	288.1	293.9	419.3	586.3	669.9	818.0	1114.2	1336.3	1357.2
117.5°	273.3	294.3	315.2	320.5	427.1	569.1	640.2	773.9	1041.1	1241.6	1264.9
120°	291.6	311.3	331.0	335.9	433.4	563.3	628.4	750.4	994.6	1177.8	1200.5
122.5°	309.4	329.3	349.2	354.2	442.5	560.4	619.2	729.1	949.0	1114.0	1136.3
125°	336.7	354.9	373.0	377.5	454.8	557.8	609.4	702.7	889.6	1029.6	1050.2
127.5°	358.9	377.3	395.5	400.1	467.1	556.4	601.0	681.2	841.6	961.9	979.3
130°	370.8	390.6	410.2	415.2	476.1	557.3	597.8	669.2	812.0	919.1	935.2
132.5°	383.1	402.8	422.5	427.4	483.3	557.8	595.0	658.9	786.8	882.7	897.0
135°	401.3	419.3	437.2	441.8	491.3	557.3	590.3	643.8	750.9	831.1	843.5
137.5°	420.0	437.7	455.5	459.9	503.1	560.7	589.5	634.7	725.2	793.1	803.3
140°	435.4	451.7	468.2	472.3	510.4	561.3	586.7	625.8	704.0	762.6	772.1
142.5°	447.3	462.5	477.6	481.4	516.5	563.3	586.7	621.0	689.7	741.2	749.4
145°	465.5	478.7	491.9	495.2	524.4	563.3	582.8	610.9	667.0	709.1	715.3
147.5°	483.7	496.5	509.4	512.6	536.0	567.2	582.8	604.8	649.1	682.2	687.3
150°	495.6	507.2	518.9	521.8	542.1	569.2	582.8	601.4	638.7	666.8	670.9
152.5°	507.9	516.7	525.5	527.7	546.0	570.5	582.8	598.7	630.6	654.5	657.7
155°	526.1	532.6	539.1	540.8	554.7	573.4	582.8	595.5	620.9	639.9	641.9
157.5°	539.6	546.0	552.3	553.9	563.5	576.4	582.8	592.7	612.3	627.2	628.6
160°	548.7	553.6	558.6	559.8	567.4	577.7	582.8	591.2	608.1	620.8	621.6
162.5°	557.8	561.6	565.2	566.2	571.7	579.1	582.8	589.9	604.2	614.9	615.7
165°	567.7	571.1	574.4	575.3	577.7	581.1	582.8	587.9	598.1	605.8	606.6
167.5°	576.8	578.4	580.0	580.4	582.5	585.3	586.7	590.0	596.7	601.8	602.1
170°	582.8	584.4	585.9	586.3	586.4	586.6	586.7	590.0	596.7	601.8	601.8
172.5°	585.9	586.3	586.6	586.7	586.7	586.7	586.7	589.3	594.6	598.6	598.3
175°	590.3	590.3	590.3	590.3	589.1	587.5	586.7	588.4	591.7	594.3	594.3
177.5°	590.3	590.3	590.3	590.3	589.3	588.1	587.5	588.9	591.5	593.5	593.2
180°	590.3	590.3	590.3	590.3	590.3	590.3	590.3	590.3	590.3	590.3	590.3



TEST NUMBER: P937171  
 CATALOG NUMBER: SQ4-FB-075U-075D-935-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	397.5	397.5
2.5°	424.3	421.7
5°	545.7	548.3
7.5°	734.8	733.6
10°	913.8	925.3
12.5°	1044.2	1046.8
15°	1123.4	1128.6
17.5°	1154.1	1155.4
20°	1155.4	1152.8
22.5°	1141.3	1138.8
25°	1124.7	1123.4
27.5°	1109.4	1110.7
30°	1103.0	1106.8
32.5°	1103.0	1109.4
35°	1105.6	1111.9
37.5°	1104.3	1111.9
40°	1099.2	1108.1
42.5°	1085.1	1091.5
45°	1063.4	1071.0
47.5°	1035.3	1040.4
50°	999.5	1004.6
52.5°	954.7	955.9
55°	901.0	906.1
57.5°	843.5	844.8
60°	779.6	783.4
62.5°	711.8	711.8
65°	640.3	642.8
67.5°	566.2	572.5
70°	490.8	492.0
72.5°	416.6	416.6
75°	339.9	341.2
77.5°	267.1	267.1
80°	198.1	199.4
82.5°	136.7	139.3
85°	85.6	85.6
87.5°	39.6	35.8
90°	15.1	15.1
92.5°	60.2	48.3
95°	210.2	173.9
97.5°	503.6	434.6
100°	725.6	643.3
102.5°	944.0	873.6
105°	1222.4	1184.5
107.5°	1404.8	1413.9
110°	1474.3	1513.7





TEST NUMBER: P937171

CATALOG NUMBER: SQ4-FB-075U-075D-935-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1480.5	1541.1
115°	1441.2	1525.3
117.5°	1358.0	1451.1
120°	1291.0	1381.4
122.5°	1225.6	1314.9
125°	1132.5	1214.7
127.5°	1048.6	1118.0
130°	999.2	1063.3
132.5°	954.4	1011.8
135°	893.0	942.5
137.5°	843.7	884.3
140°	810.0	847.8
142.5°	782.0	814.5
145°	740.0	764.6
147.5°	707.7	728.1
150°	687.5	704.0
152.5°	670.1	682.6
155°	650.2	658.4
157.5°	634.4	640.2
160°	624.9	628.4
162.5°	618.8	622.0
165°	609.9	613.3
167.5°	603.6	604.9
170°	601.8	601.8
172.5°	597.1	595.8
175°	594.3	594.3
177.5°	591.7	590.3
180°	590.3	590.3



TEST NUMBER: P937171  
 CATALOG NUMBER: SQ4-FB-075U-075D-935-1D-UNV-STD-W-6

**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	3.61	4.46	4.60	5.47	6.81	16.77	17.62	17.77	18.63	19.98
	3H	4.31	5.07	5.32	6.09	7.46	18.61	19.37	19.61	20.39	21.75
	4H	4.61	5.33	5.63	6.36	7.73	19.25	19.97	20.27	20.99	22.37
	6H	4.86	5.53	5.89	6.55	7.94	19.67	20.34	20.70	21.37	22.75
	8H	4.93	5.56	5.96	6.61	7.99	19.79	20.43	20.83	21.47	22.85
	12H	4.94	5.55	5.98	6.59	7.99	19.86	20.46	20.90	21.50	22.91
4H	2H	10.81	11.54	11.84	12.56	13.93	17.05	17.77	18.07	18.79	20.16
	3H	12.38	12.99	13.42	14.04	15.42	19.09	19.69	20.12	20.74	22.13
	4H	12.48	13.03	13.52	14.07	15.48	19.85	20.40	20.89	21.45	22.86
	6H	12.49	12.96	13.54	14.03	15.43	20.38	20.86	21.43	21.93	23.33
	8H	12.46	12.91	13.51	13.97	15.39	20.54	20.99	21.60	22.05	23.47
	12H	12.42	12.82	13.49	13.90	15.32	20.63	21.04	21.70	22.11	23.54
8H	4H	13.92	14.36	14.97	15.42	16.84	19.91	20.36	20.96	21.42	22.83
	6H	14.16	14.53	15.23	15.63	17.04	20.53	20.90	21.61	22.00	23.42
	8H	14.18	14.50	15.26	15.59	17.02	20.75	21.08	21.83	22.16	23.60
	12H	14.14	14.43	15.23	15.51	16.99	20.89	21.18	21.98	22.26	23.73
12H	4H	14.06	14.46	15.13	15.54	16.96	19.86	20.27	20.93	21.34	22.76
	6H	14.42	14.74	15.50	15.83	17.26	20.52	20.84	21.60	21.93	23.36
	8H	14.48	14.77	15.57	15.85	17.33	20.74	21.03	21.83	22.11	23.59