

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: P937732

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937732
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-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

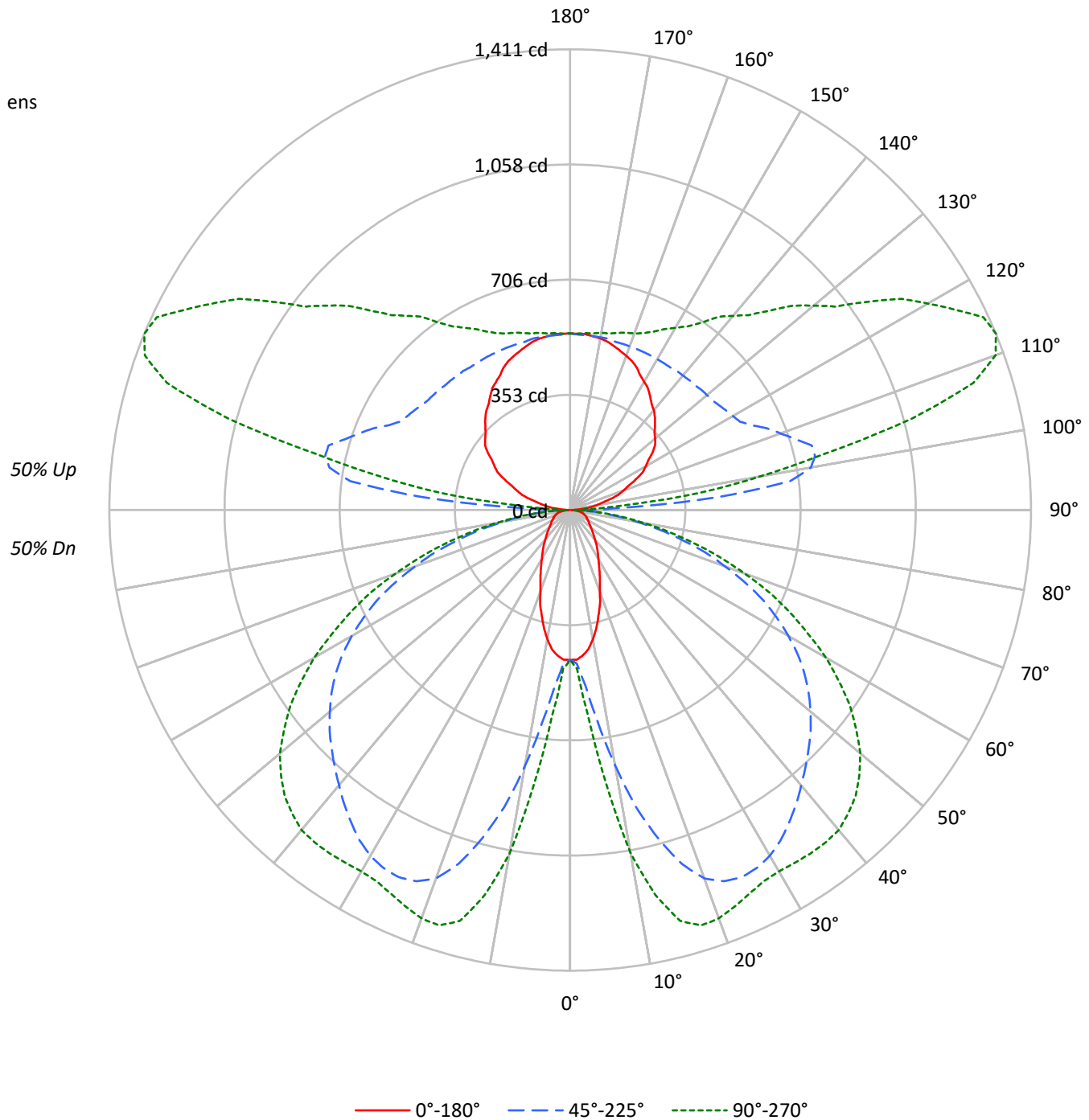
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7055.7 lumens
Efficiency: N/A
Efficacy: 102.6 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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CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-3000K

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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	47	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	38	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	32	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	27	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	23	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	20	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	17	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	15	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	14	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	12	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4258	4258	4258
5°	4156	4918	5724
10°	3765	7163	9489
15°	3196	9352	11458
20°	2599	10830	11678
25°	2166	11325	11441
30°	1824	11387	11419
35°	1610	11189	11713
40°	1401	10935	12019
45°	1266	10745	12066
50°	1159	10572	11866
55°	1106	10324	11340
60°	1130	9858	10511
65°	1169	9154	9368
70°	1236	7966	7915
75°	1354	6479	6177
80°	1451	4478	4162
85°	1217	2362	2131

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12066 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	0.8
10°-20°	263.1	3.7
20°-30°	460.2	6.5
30°-40°	592.4	8.4
40°-50°	661.7	9.4
50°-60°	633.7	9.0
60°-70°	502.2	7.1
70°-80°	295.3	4.2
80°-90°	84.1	1.2
90°-100°	263.4	3.7
100°-110°	692.6	9.8
110°-120°	718.2	10.2
120°-130°	576.0	8.2
130°-140°	452.0	6.4
140°-150°	346.9	4.9
150°-160°	249.8	3.5
160°-170°	152.9	2.2
170°-180°	51.6	0.7
0°-30°	782.6	11.1
0°-40°	1375.0	19.5
0°-60°	2670.4	37.8
0°-90°	3552.1	50.3
90°-120°	1674.2	23.7
90°-150°	3049.1	43.2
90°-180°	3504.0	49.7
0°-180°	7055.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	459	459	459	459	459	
5°	447	480	540	611	633	41
15°	335	618	1042	1263	1303	93
25°	214	701	1241	1296	1297	99
35°	145	670	1169	1235	1284	90
45°	99	534	1033	1183	1236	76
55°	71	339	876	1018	1046	65
65°	56	180	651	732	742	56
75°	41	111	357	392	394	43
85°	15	34	88	97	99	16
90°	4	10	28	14	14	4
95°	35	136	454	234	159	39
105°	125	189	766	1162	1084	132
115°	222	269	613	1224	1396	219
125°	308	346	558	943	1112	274
135°	368	404	540	761	863	284
145°	426	453	534	649	700	267
155°	482	495	534	586	603	221
165°	520	527	534	555	562	147
175°	540	540	537	544	544	51
180°	540	540	540	540	540	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	458.9	458.9	458.9	458.9	458.9	458.9	458.9	458.9	458.9	458.9	458.9
2.5°	458.9	458.9	461.8	463.3	466.3	467.8	470.7	473.7	482.5	484.0	486.9
5°	447.1	453.0	472.2	479.5	500.2	528.3	540.1	559.2	599.1	610.9	618.3
7.5°	429.4	442.6	489.9	501.7	553.3	627.1	658.1	699.5	762.9	793.8	818.9
10°	401.3	429.4	513.5	541.5	625.6	737.7	795.3	852.8	948.8	991.6	1007.8
12.5°	370.4	416.1	538.6	576.9	698.0	861.7	931.1	994.6	1103.7	1161.3	1170.1
15°	334.9	396.9	562.2	618.3	774.6	965.0	1041.7	1120.0	1221.8	1263.1	1273.4
17.5°	304.0	382.2	584.3	643.4	833.7	1058.0	1136.2	1201.1	1283.7	1311.8	1319.1
20°	265.6	358.6	599.1	675.8	895.7	1125.9	1201.1	1251.3	1307.4	1325.1	1328.0
22.5°	237.5	333.5	607.9	687.6	937.0	1167.1	1230.6	1270.5	1308.8	1314.8	1316.2
25°	214.0	305.5	606.5	700.9	972.4	1192.2	1241.0	1270.5	1292.6	1295.6	1295.6
27.5°	191.8	274.4	600.6	703.8	998.9	1198.2	1236.5	1257.2	1267.5	1273.4	1273.4
30°	172.7	245.0	585.8	698.0	1010.8	1192.2	1223.2	1233.6	1243.9	1252.8	1257.2
32.5°	157.9	216.9	563.7	686.1	1012.3	1177.5	1199.7	1205.5	1220.3	1241.0	1248.3
35°	144.6	188.9	538.6	669.9	1003.4	1153.9	1168.6	1174.5	1204.0	1235.1	1245.4
37.5°	131.3	168.2	506.1	641.9	990.1	1125.9	1136.2	1146.6	1192.2	1229.1	1241.0
40°	118.1	150.5	467.8	610.9	969.4	1091.9	1100.8	1117.0	1177.5	1220.3	1232.1
42.5°	107.7	135.8	426.4	578.4	942.8	1053.6	1066.8	1090.5	1159.8	1205.5	1218.8
45°	98.9	121.0	382.2	534.1	908.9	1013.7	1032.9	1065.4	1139.1	1183.4	1195.2
47.5°	90.0	110.7	336.4	488.4	872.0	973.9	998.9	1035.9	1111.1	1153.9	1164.3
50°	82.7	100.4	290.6	439.7	832.2	931.1	960.6	998.9	1075.7	1115.5	1128.8
52.5°	76.7	91.5	247.9	391.0	786.5	886.8	920.8	960.6	1032.9	1071.3	1080.1
55°	70.8	84.1	211.0	339.4	739.2	839.6	876.5	914.9	985.7	1018.1	1024.0
57.5°	67.8	78.2	180.0	290.6	689.1	786.5	827.8	863.2	929.6	954.7	960.6
60°	63.5	73.8	156.4	249.4	634.5	736.3	771.8	807.2	863.2	883.9	888.3
62.5°	59.0	70.8	138.7	209.5	578.4	677.3	712.7	745.2	792.4	807.2	813.0
65°	56.1	67.8	125.4	180.0	520.9	615.3	650.7	678.8	717.2	731.9	734.9
67.5°	53.1	65.0	115.1	155.0	463.3	553.3	579.9	606.5	636.0	650.7	652.2
70°	48.7	62.0	106.2	137.3	404.3	482.5	504.6	532.6	556.3	563.7	568.1
72.5°	45.8	57.6	100.4	123.9	343.8	414.7	435.3	451.5	472.2	479.5	479.5
75°	41.3	51.6	94.4	110.7	281.8	339.4	357.1	373.3	389.5	392.5	388.1
77.5°	36.9	45.8	81.2	93.0	219.8	268.6	283.3	292.1	305.5	308.4	309.8
80°	31.0	39.9	63.5	72.3	159.3	197.7	208.1	215.4	227.3	227.3	230.2
82.5°	23.6	31.0	45.8	51.6	107.7	135.8	144.6	149.0	156.4	156.4	156.4
85°	14.7	19.2	29.5	33.9	65.0	82.7	88.5	90.0	95.9	97.4	97.4
87.5°	7.4	10.3	19.2	20.7	33.9	42.8	42.8	45.8	45.8	44.3	42.8
90°	3.7	6.5	9.4	10.1	16.0	23.7	27.6	24.5	18.4	13.8	13.8
92.5°	14.5	39.2	63.8	70.0	98.5	136.3	155.2	136.0	97.7	68.9	66.2
95°	34.8	80.0	125.1	136.4	242.2	383.2	453.7	404.9	307.2	234.0	225.7
97.5°	60.2	100.0	139.9	149.8	326.2	561.4	679.0	648.1	586.4	540.1	524.3
100°	79.8	115.9	152.0	161.1	356.8	617.8	748.3	750.6	755.0	758.4	739.6
102.5°	96.4	130.2	163.9	172.3	370.9	635.5	767.9	807.2	885.9	944.8	928.7
105°	124.8	153.3	181.8	189.0	381.3	637.5	765.7	853.9	1030.2	1162.5	1153.9
107.5°	153.8	180.4	207.0	213.6	383.2	609.1	722.1	845.2	1091.2	1275.7	1277.8
110°	173.4	197.4	221.4	227.4	380.2	584.0	685.9	823.4	1098.4	1304.7	1313.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	192.6	215.5	238.3	244.1	380.4	562.0	652.9	793.6	1075.0	1286.2	1300.0
115°	221.6	242.7	263.8	269.1	383.9	536.9	613.4	749.0	1020.1	1223.5	1242.6
117.5°	250.3	269.5	288.6	293.4	391.0	521.1	586.2	708.5	953.2	1136.8	1158.1
120°	266.9	285.0	303.0	307.6	396.8	515.8	575.3	687.1	910.7	1078.4	1099.1
122.5°	283.3	301.5	319.8	324.3	405.1	513.0	566.9	667.5	868.9	1019.9	1040.3
125°	308.4	324.9	341.5	345.7	416.4	510.7	557.8	643.4	814.4	942.7	961.5
127.5°	328.6	345.3	362.2	366.3	427.6	509.4	550.3	623.7	770.5	880.7	896.5
130°	339.5	357.5	375.6	380.1	435.8	510.2	547.4	612.8	743.5	841.5	856.2
132.5°	350.7	368.8	386.8	391.4	442.5	510.7	544.8	603.3	720.3	808.1	821.3
135°	367.5	383.9	400.4	404.4	449.8	510.2	540.5	589.5	687.4	760.9	772.3
137.5°	384.5	400.8	417.0	421.1	460.6	513.4	539.7	581.1	664.0	726.1	735.4
140°	398.6	413.6	428.6	432.4	467.3	513.9	537.2	572.9	644.5	698.2	706.9
142.5°	409.5	423.4	437.2	440.7	472.9	515.7	537.2	568.6	631.4	678.6	686.1
145°	426.2	438.3	450.3	453.4	480.1	515.8	533.6	559.3	610.7	649.2	654.9
147.5°	442.9	454.7	466.4	469.3	490.8	519.3	533.6	553.8	594.3	624.6	629.3
150°	453.7	464.4	475.0	477.7	496.4	521.2	533.6	550.7	584.8	610.4	614.2
152.5°	465.0	473.0	481.1	483.1	499.9	522.3	533.6	548.2	577.3	599.2	602.1
155°	481.7	487.6	493.7	495.1	508.0	525.1	533.6	545.2	568.4	585.7	587.7
157.5°	494.0	499.8	505.6	507.1	515.9	527.7	533.6	542.6	560.6	574.1	575.5
160°	502.4	506.9	511.4	512.5	519.6	528.9	533.6	541.4	556.8	568.4	569.2
162.5°	510.7	514.1	517.5	518.3	523.4	530.2	533.6	540.1	553.1	562.9	563.6
165°	519.7	522.8	525.8	526.6	529.0	532.0	533.6	538.3	547.6	554.6	555.4
167.5°	528.1	529.6	531.1	531.4	533.3	535.9	537.2	540.2	546.3	551.0	551.3
170°	533.6	535.0	536.5	536.8	536.9	537.1	537.2	540.2	546.3	551.0	551.0
172.5°	536.5	536.8	537.1	537.2	537.2	537.2	537.2	539.6	544.4	548.1	547.8
175°	540.5	540.5	540.5	540.5	539.4	537.9	537.2	538.7	541.8	544.1	544.1
177.5°	540.5	540.5	540.5	540.5	539.6	538.5	537.9	539.1	541.5	543.4	543.0
180°	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	458.9	458.9
2.5°	489.9	486.9
5°	630.0	633.0
7.5°	848.5	847.0
10°	1055.0	1068.3
12.5°	1205.5	1208.5
15°	1297.1	1302.9
17.5°	1332.5	1334.0
20°	1334.0	1331.0
22.5°	1317.6	1314.8
25°	1298.5	1297.1
27.5°	1280.8	1282.2
30°	1273.4	1277.9
32.5°	1273.4	1280.8
35°	1276.4	1283.7
37.5°	1274.9	1283.7
40°	1269.0	1279.3
42.5°	1252.8	1260.1
45°	1227.6	1236.5
47.5°	1195.2	1201.1
50°	1153.9	1159.8
52.5°	1102.3	1103.7
55°	1040.2	1046.2
57.5°	973.9	975.4
60°	900.1	904.6
62.5°	821.9	821.9
65°	739.2	742.2
67.5°	653.7	661.1
70°	566.6	568.1
72.5°	481.0	481.0
75°	392.5	394.0
77.5°	308.4	308.4
80°	228.7	230.2
82.5°	157.9	160.8
85°	98.9	98.9
87.5°	45.8	41.3
90°	13.8	13.8
92.5°	55.2	44.2
95°	192.5	159.2
97.5°	461.0	397.9
100°	664.3	589.1
102.5°	864.3	799.8
105°	1119.2	1084.5
107.5°	1286.2	1294.5
110°	1349.8	1385.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1355.5	1411.0
115°	1319.6	1396.5
117.5°	1243.3	1328.6
120°	1182.0	1264.8
122.5°	1122.1	1203.8
125°	1036.8	1112.1
127.5°	960.1	1023.6
130°	914.9	973.5
132.5°	873.8	926.4
135°	817.5	862.9
137.5°	772.5	809.6
140°	741.6	776.2
142.5°	715.9	745.8
145°	677.5	700.1
147.5°	648.0	666.7
150°	629.3	644.5
152.5°	613.5	625.0
155°	595.3	602.8
157.5°	580.9	586.2
160°	572.2	575.3
162.5°	566.6	569.4
165°	558.5	561.5
167.5°	552.5	553.8
170°	551.0	551.0
172.5°	546.7	545.5
175°	544.1	544.1
177.5°	541.8	540.5
180°	540.5	540.5



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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	6.06	6.96	7.00	7.93	9.19	19.20	20.10	20.14	21.07	22.33
	3H	6.77	7.58	7.72	8.56	9.84	21.02	21.83	21.98	22.81	24.10
	4H	7.07	7.84	8.04	8.82	10.11	21.66	22.43	22.63	23.41	24.70
	6H	7.32	8.03	8.30	9.02	10.32	22.08	22.79	23.06	23.78	25.08
	8H	7.39	8.07	8.38	9.07	10.37	22.20	22.87	23.18	23.88	25.18
	12H	7.41	8.05	8.40	9.05	10.38	22.26	22.90	23.25	23.90	25.23
4H	2H	13.25	14.02	14.23	15.00	16.30	19.48	20.25	20.45	21.23	22.52
	3H	14.83	15.47	15.81	16.48	17.79	21.51	22.16	22.50	23.17	24.47
	4H	14.92	15.51	15.92	16.52	17.85	22.27	22.86	23.27	23.86	25.19
	6H	14.94	15.45	15.94	16.47	17.80	22.80	23.31	23.81	24.34	25.66
	8H	14.92	15.39	15.92	16.41	17.76	22.96	23.43	23.96	24.45	25.80
	12H	14.87	15.31	15.90	16.34	17.69	23.04	23.47	24.07	24.51	25.86
8H	4H	16.36	16.84	17.37	17.86	19.20	22.33	22.81	23.34	23.83	25.18
	6H	16.61	17.00	17.64	18.06	19.40	22.95	23.35	23.99	24.41	25.75
	8H	16.62	16.97	17.67	18.02	19.38	23.17	23.51	24.21	24.56	25.92
	12H	16.60	16.90	17.64	17.94	19.35	23.30	23.61	24.35	24.65	26.06
12H	4H	16.50	16.93	17.53	17.97	19.32	22.29	22.72	23.32	23.76	25.11
	6H	16.86	17.21	17.90	18.26	19.62	22.94	23.29	23.98	24.33	25.69
	8H	16.93	17.24	17.98	18.28	19.69	23.16	23.47	24.21	24.51	25.91