

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: P937734

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937734
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-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

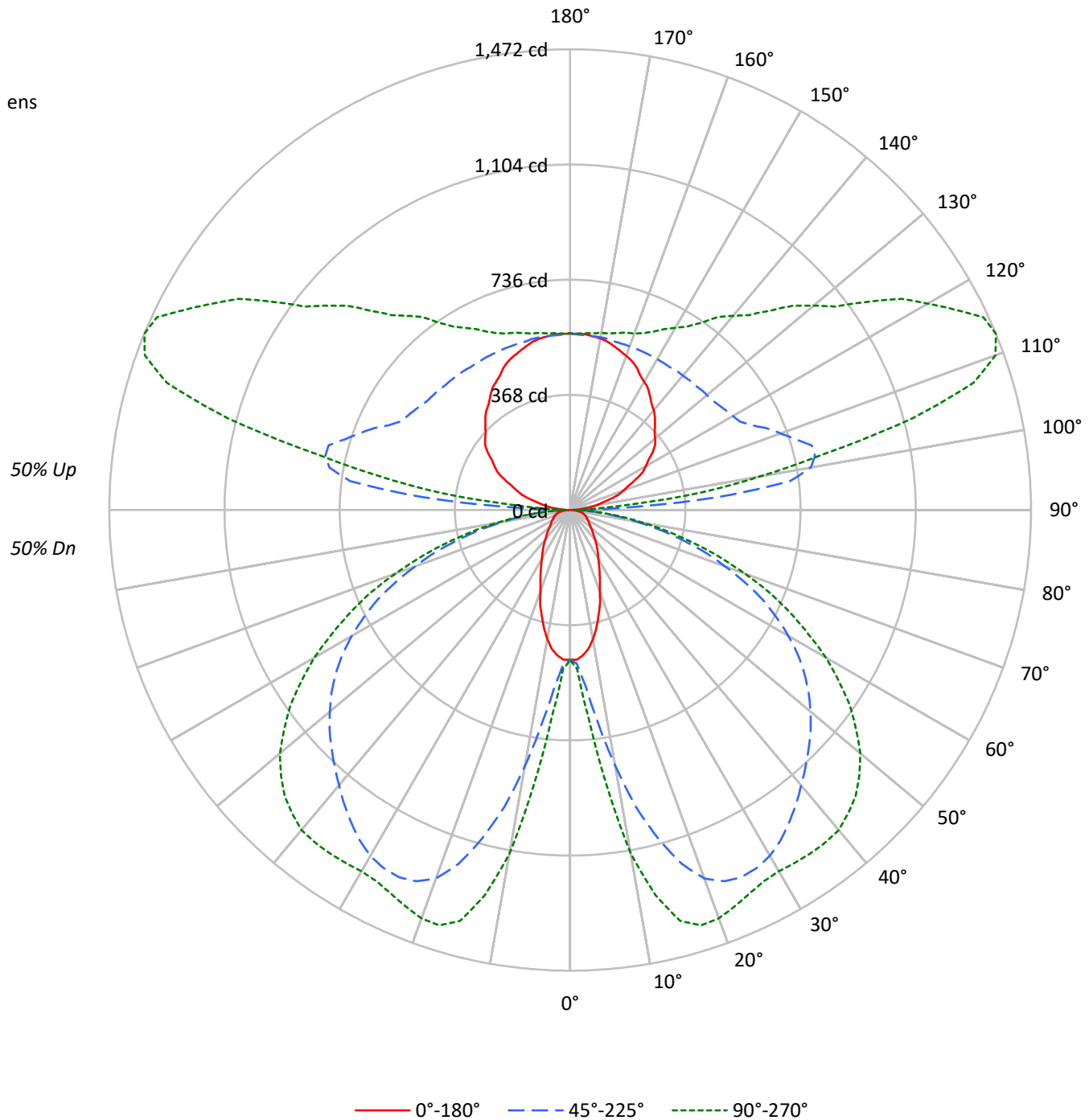
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7359.9 lumens
Efficiency: N/A
Efficacy: 107.0 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-4-4000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4442	4442	4442
5°	4335	5130	5970
10°	3927	7472	9898
15°	3334	9756	11952
20°	2712	11297	12181
25°	2259	11813	11934
30°	1902	11878	11911
35°	1679	11671	12219
40°	1462	11406	12536
45°	1321	11209	12587
50°	1208	11029	12378
55°	1154	10769	11829
60°	1178	10282	10964
65°	1219	9549	9772
70°	1290	8311	8256
75°	1413	6759	6443
80°	1512	4670	4341
85°	1275	2463	2224

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12587 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.9	0.8
10°-20°	274.4	3.7
20°-30°	480.0	6.5
30°-40°	617.9	8.4
40°-50°	690.2	9.4
50°-60°	661.1	9.0
60°-70°	523.9	7.1
70°-80°	308.1	4.2
80°-90°	87.8	1.2
90°-100°	274.8	3.7
100°-110°	722.5	9.8
110°-120°	749.1	10.2
120°-130°	600.9	8.2
130°-140°	471.5	6.4
140°-150°	361.9	4.9
150°-160°	260.6	3.5
160°-170°	159.5	2.2
170°-180°	53.9	0.7
0°-30°	816.4	11.1
0°-40°	1434.3	19.5
0°-60°	2785.6	37.8
0°-90°	3705.3	50.3
90°-120°	1746.4	23.7
90°-150°	3180.6	43.2
90°-180°	3655.0	49.7
0°-180°	7359.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	479	479	479	479	479	
5°	466	500	563	637	660	43
15°	349	645	1087	1318	1359	97
25°	223	731	1294	1351	1353	103
35°	151	699	1219	1288	1339	94
45°	103	557	1078	1234	1290	80
55°	74	354	914	1062	1091	67
65°	58	188	679	764	774	58
75°	43	115	372	409	411	45
85°	15	35	92	102	103	16
90°	4	11	29	14	14	4
95°	36	142	473	244	166	40
105°	130	197	799	1213	1131	138
115°	231	281	640	1276	1457	228
125°	322	361	582	983	1160	286
135°	383	422	564	794	900	297
145°	444	473	557	677	730	279
155°	502	516	557	611	629	231
165°	542	549	557	578	586	153
175°	564	564	560	568	568	54
180°	564	564	564	564	564	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	478.7	478.7	478.7	478.7	478.7	478.7	478.7	478.7	478.7	478.7	478.7
2.5°	478.7	478.7	481.7	483.3	486.4	487.9	491.0	494.1	503.3	504.8	507.9
5°	466.4	472.6	492.6	500.2	521.8	551.1	563.3	583.4	624.9	637.2	644.9
7.5°	447.9	461.7	511.0	523.3	577.2	654.1	686.5	729.6	795.8	828.0	854.2
10°	418.6	447.9	535.6	564.9	652.6	769.6	829.6	889.6	989.7	1034.3	1051.3
12.5°	386.3	434.1	561.8	601.8	728.1	898.9	971.2	1037.4	1151.3	1211.4	1220.6
15°	349.4	414.1	586.4	644.9	808.0	1006.6	1086.7	1168.2	1274.5	1317.5	1328.3
17.5°	317.1	398.7	609.5	671.1	869.6	1103.6	1185.2	1252.9	1339.1	1368.4	1376.0
20°	277.1	374.0	624.9	705.0	934.3	1174.4	1252.9	1305.2	1363.7	1382.2	1385.3
22.5°	247.8	347.8	634.1	717.2	977.4	1217.5	1283.7	1325.3	1365.3	1371.5	1372.9
25°	223.2	318.6	632.7	731.1	1014.3	1243.7	1294.5	1325.3	1348.4	1351.4	1351.4
27.5°	200.1	286.3	626.5	734.2	1042.0	1249.8	1289.9	1311.4	1322.2	1328.3	1328.3
30°	180.1	255.5	611.1	728.1	1054.4	1243.7	1275.9	1286.8	1297.5	1306.8	1311.4
32.5°	164.7	226.2	588.0	715.7	1055.9	1228.3	1251.4	1257.5	1272.9	1294.5	1302.1
35°	150.8	197.0	561.8	698.8	1046.6	1203.6	1219.0	1225.2	1255.9	1288.3	1299.1
37.5°	137.0	175.5	528.0	669.6	1032.8	1174.4	1185.2	1196.0	1243.7	1282.1	1294.5
40°	123.2	157.0	487.9	637.2	1011.2	1139.0	1148.2	1165.2	1228.3	1272.9	1285.2
42.5°	112.3	141.6	444.8	603.4	983.5	1099.0	1112.8	1137.5	1209.8	1257.5	1271.4
45°	103.2	126.3	398.7	557.2	948.1	1057.5	1077.5	1111.3	1188.3	1234.5	1246.7
47.5°	93.9	115.4	350.9	509.5	909.6	1015.9	1042.0	1080.6	1159.0	1203.6	1214.5
50°	86.2	104.7	303.2	458.6	868.1	971.2	1002.1	1042.0	1122.0	1163.6	1177.5
52.5°	80.0	95.4	258.6	407.9	820.4	925.0	960.5	1002.1	1077.5	1117.5	1126.7
55°	73.9	87.7	220.1	354.0	771.1	875.8	914.3	954.3	1028.2	1062.0	1068.2
57.5°	70.8	81.6	187.7	303.2	718.8	820.4	863.5	900.4	969.7	995.9	1002.1
60°	66.2	77.0	163.2	260.2	661.9	768.1	805.0	842.0	900.4	922.0	926.6
62.5°	61.6	73.9	144.7	218.6	603.4	706.5	743.4	777.3	826.6	842.0	848.1
65°	58.5	70.8	130.8	187.7	543.3	641.8	678.8	708.1	748.1	763.5	766.6
67.5°	55.4	67.8	120.1	161.6	483.3	577.2	604.9	632.7	663.4	678.8	680.3
70°	50.8	64.7	110.8	143.2	421.7	503.3	526.4	555.6	580.3	588.0	592.6
72.5°	47.8	60.0	104.7	129.3	358.7	432.5	454.1	471.0	492.6	500.2	500.2
75°	43.1	53.9	98.5	115.4	294.0	354.0	372.5	389.4	406.3	409.4	404.8
77.5°	38.5	47.8	84.7	97.0	229.3	280.2	295.5	304.7	318.6	321.6	323.2
80°	32.3	41.6	66.2	75.4	166.2	206.2	217.0	224.7	237.1	237.1	240.1
82.5°	24.7	32.3	47.8	53.9	112.3	141.6	150.8	155.5	163.2	163.2	163.2
85°	15.4	20.0	30.7	35.4	67.8	86.2	92.3	93.9	100.1	101.6	101.6
87.5°	7.7	10.7	20.0	21.6	35.4	44.7	44.7	47.8	47.8	46.2	44.7
90°	3.8	6.8	9.8	10.6	16.6	24.7	28.7	25.6	19.2	14.4	14.4
92.5°	15.1	40.8	66.6	73.0	102.7	142.2	161.9	141.9	101.9	71.9	69.0
95°	36.3	83.4	130.5	142.3	252.6	399.7	473.3	422.3	320.5	244.1	235.4
97.5°	62.8	104.3	145.9	156.3	340.3	585.6	708.2	676.0	611.6	563.3	546.9
100°	83.2	120.9	158.5	168.0	372.2	644.5	780.6	782.9	787.6	791.1	771.5
102.5°	100.6	135.8	170.9	179.7	386.9	662.9	801.0	842.1	924.1	985.6	968.8
105°	130.2	159.9	189.7	197.1	397.7	665.0	798.8	890.7	1074.6	1212.6	1203.6
107.5°	160.5	188.2	215.9	222.9	399.7	635.4	753.3	881.6	1138.2	1330.7	1332.9
110°	180.8	205.9	231.0	237.2	396.6	609.2	715.4	858.9	1145.8	1360.9	1370.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	200.9	224.8	248.6	254.6	396.8	586.3	681.0	827.9	1121.4	1341.6	1356.1
115°	231.1	253.2	275.2	280.7	400.4	560.1	639.8	781.3	1064.1	1276.2	1296.2
117.5°	261.1	281.1	301.1	306.1	407.9	543.6	611.5	739.1	994.3	1185.8	1208.0
120°	278.4	297.3	316.1	320.8	413.9	538.1	600.1	716.7	949.9	1124.9	1146.5
122.5°	295.5	314.6	333.6	338.3	422.6	535.1	591.4	696.3	906.4	1063.9	1085.2
125°	321.6	338.9	356.2	360.6	434.4	532.7	581.9	671.1	849.5	983.3	1003.0
127.5°	342.8	360.2	377.8	382.1	446.1	531.3	574.0	650.6	803.8	918.6	935.2
130°	354.1	373.0	391.8	396.5	454.6	532.2	571.0	639.2	775.6	877.8	893.1
132.5°	365.9	384.7	403.5	408.2	461.5	532.7	568.3	629.3	751.4	843.0	856.7
135°	383.3	400.4	417.6	421.9	469.2	532.2	563.8	614.9	717.1	793.7	805.6
137.5°	401.1	418.1	435.0	439.3	480.5	535.5	563.0	606.2	692.6	757.5	767.1
140°	415.8	431.4	447.1	451.0	487.5	536.0	560.3	597.6	672.3	728.3	737.4
142.5°	427.2	441.6	456.1	459.7	493.3	538.0	560.3	593.1	658.7	707.9	715.7
145°	444.5	457.2	469.7	472.9	500.8	538.1	556.6	583.4	637.0	677.2	683.1
147.5°	462.0	474.3	486.5	489.6	511.9	541.7	556.6	577.7	619.9	651.6	656.5
150°	473.3	484.4	495.5	498.3	517.8	543.7	556.6	574.4	610.0	636.7	640.7
152.5°	485.0	493.4	501.8	503.9	521.5	544.9	556.6	571.8	602.2	625.0	628.0
155°	502.5	508.7	514.9	516.5	529.9	547.7	556.6	568.7	592.9	611.0	613.0
157.5°	515.3	521.4	527.4	529.0	538.1	550.4	556.6	566.0	584.8	598.9	600.3
160°	524.0	528.8	533.4	534.6	542.0	551.7	556.6	564.7	580.8	592.9	593.7
162.5°	532.7	536.2	539.8	540.7	546.0	553.1	556.6	563.4	577.0	587.2	587.9
165°	542.1	545.3	548.5	549.3	551.8	555.0	556.6	561.5	571.3	578.5	579.3
167.5°	550.9	552.4	554.0	554.3	556.3	559.0	560.3	563.5	569.9	574.7	575.1
170°	556.6	558.1	559.6	560.0	560.1	560.2	560.3	563.5	569.9	574.7	574.7
172.5°	559.6	560.0	560.2	560.3	560.3	560.3	560.3	562.9	567.9	571.7	571.4
175°	563.8	563.8	563.8	563.8	562.6	561.1	560.3	562.0	565.2	567.5	567.5
177.5°	563.8	563.8	563.8	563.8	562.9	561.7	561.1	562.3	564.9	566.8	566.4
180°	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8	563.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	478.7	478.7
2.5°	511.0	507.9
5°	657.2	660.3
7.5°	885.1	883.5
10°	1100.5	1114.4
12.5°	1257.5	1260.6
15°	1353.0	1359.1
17.5°	1389.9	1391.5
20°	1391.5	1388.4
22.5°	1374.5	1371.5
25°	1354.4	1353.0
27.5°	1336.0	1337.5
30°	1328.3	1333.0
32.5°	1328.3	1336.0
35°	1331.4	1339.1
37.5°	1329.9	1339.1
40°	1323.7	1334.4
42.5°	1306.8	1314.4
45°	1280.6	1289.9
47.5°	1246.7	1252.9
50°	1203.6	1209.8
52.5°	1149.8	1151.3
55°	1085.1	1091.3
57.5°	1015.9	1017.4
60°	938.9	943.6
62.5°	857.3	857.3
65°	771.1	774.2
67.5°	681.9	689.6
70°	591.1	592.6
72.5°	501.8	501.8
75°	409.4	411.0
77.5°	321.6	321.6
80°	238.6	240.1
82.5°	164.7	167.7
85°	103.2	103.2
87.5°	47.8	43.1
90°	14.4	14.4
92.5°	57.6	46.1
95°	200.8	166.1
97.5°	480.9	415.1
100°	693.0	614.5
102.5°	901.5	834.3
105°	1167.4	1131.3
107.5°	1341.6	1350.4
110°	1408.0	1445.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1413.9	1471.8
115°	1376.5	1456.7
117.5°	1297.0	1385.9
120°	1232.9	1319.3
122.5°	1170.5	1255.8
125°	1081.5	1160.1
127.5°	1001.5	1067.7
130°	954.3	1015.5
132.5°	911.5	966.3
135°	852.8	900.1
137.5°	805.8	844.5
140°	773.6	809.7
142.5°	746.8	777.9
145°	706.7	730.3
147.5°	676.0	695.4
150°	656.5	672.3
152.5°	639.9	651.9
155°	620.9	628.8
157.5°	605.9	611.5
160°	596.9	600.1
162.5°	591.0	594.0
165°	582.5	585.7
167.5°	576.3	577.7
170°	574.7	574.7
172.5°	570.3	569.1
175°	567.5	567.5
177.5°	565.2	563.8
180°	563.8	563.8



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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	6.20	7.10	7.15	8.07	9.34	19.34	20.25	20.29	21.21	22.48
	3H	6.91	7.72	7.87	8.70	9.99	21.17	21.98	22.13	22.96	24.24
	4H	7.21	7.98	8.18	8.96	10.26	21.81	22.58	22.78	23.56	24.85
	6H	7.47	8.18	8.45	9.16	10.47	22.23	22.94	23.21	23.92	25.23
	8H	7.54	8.21	8.53	9.22	10.52	22.34	23.02	23.33	24.02	25.33
	12H	7.56	8.20	8.55	9.20	10.53	22.41	23.05	23.40	24.05	25.38
4H	2H	13.40	14.17	14.38	15.15	16.44	19.62	20.39	20.60	21.37	22.67
	3H	14.97	15.62	15.96	16.63	17.94	21.66	22.30	22.65	23.31	24.62
	4H	15.07	15.66	16.07	16.66	17.99	22.42	23.01	23.41	24.01	25.34
	6H	15.08	15.59	16.09	16.62	17.95	22.95	23.46	23.95	24.48	25.81
	8H	15.06	15.54	16.07	16.56	17.90	23.10	23.58	24.11	24.60	25.94
	12H	15.02	15.45	16.05	16.49	17.84	23.19	23.62	24.22	24.66	26.01
8H	4H	16.51	16.98	17.52	18.00	19.35	22.48	22.96	23.49	23.98	25.32
	6H	16.75	17.15	17.79	18.21	19.55	23.10	23.49	24.13	24.56	25.90
	8H	16.77	17.12	17.81	18.17	19.53	23.31	23.66	24.36	24.71	26.07
	12H	16.74	17.05	17.79	18.09	19.49	23.45	23.76	24.50	24.80	26.20
12H	4H	16.65	17.08	17.68	18.12	19.47	22.44	22.87	23.47	23.90	25.25
	6H	17.01	17.36	18.05	18.40	19.76	23.08	23.43	24.13	24.48	25.84
	8H	17.08	17.39	18.13	18.43	19.83	23.31	23.61	24.36	24.66	26.06