

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: P936871

Luminaire Tested: SQ4-FB-050U-100D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936871
REPORT IS A COMBINATION OF REPORTS P933479 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-100D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

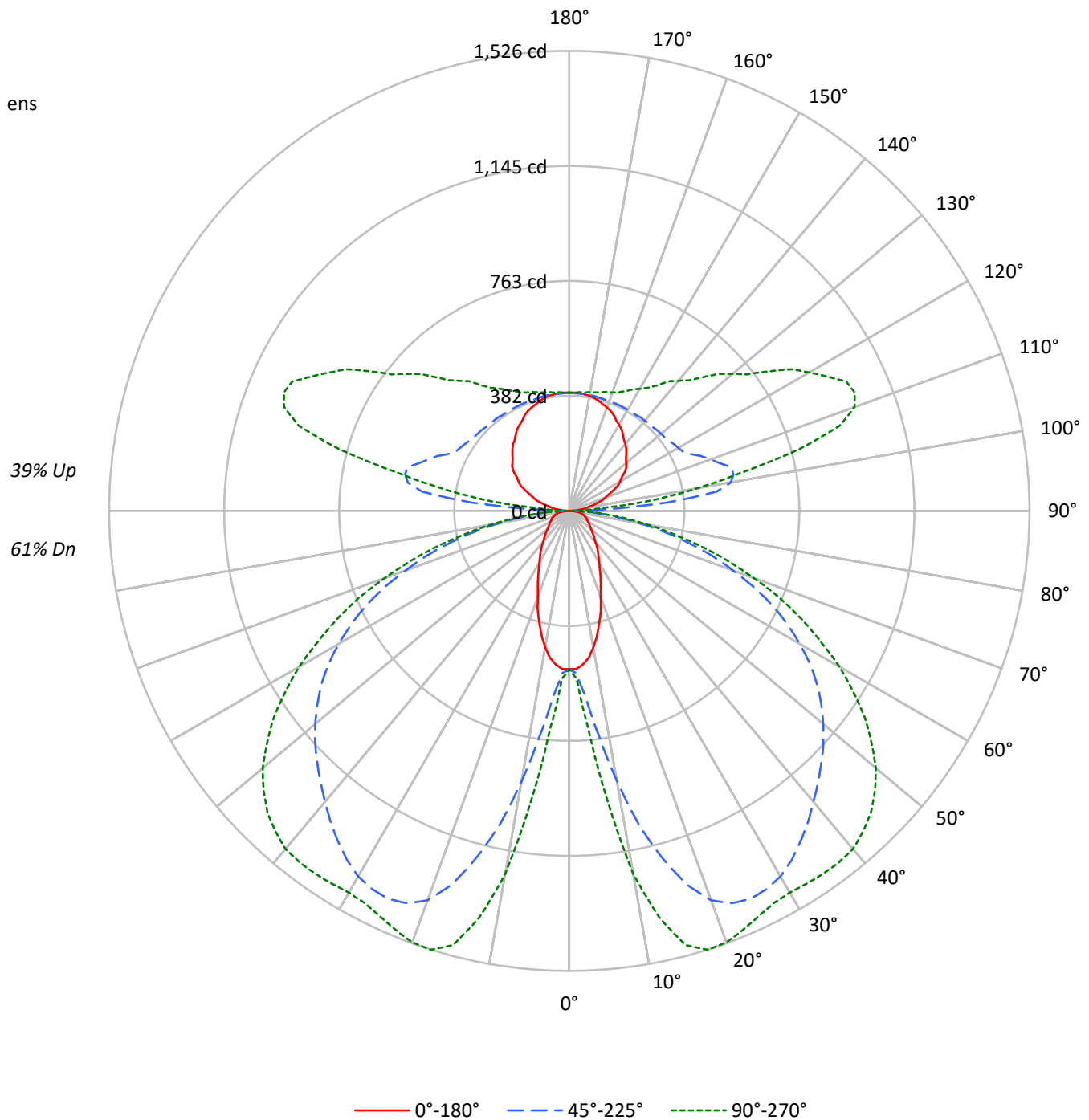
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6608.1 lumens
Efficiency: N/A
Efficacy: 97.5 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: Semi-Direct

Input Watts (W): 67.8
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

TEST NUMBER: P936871
CATALOG NUMBER: SQ4-FB-050U-100D-935-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P936871

CATALOG NUMBER: SQ4-FB-050U-100D-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	50	30	10	0
RCR																					
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	67	67	67	61
1	100	95	91	87	93	89	85	82	78	75	72	67	65	63	58	56	55	55	55	55	50
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	48	45	45	45	45	41
3	82	72	64	57	76	67	60	54	59	53	49	51	47	43	44	40	38	38	38	38	34
4	74	63	54	48	69	59	51	45	52	46	41	45	40	36	39	35	32	32	32	32	28
5	68	56	47	41	63	52	44	39	46	40	35	40	35	31	34	30	27	27	27	27	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	23	23	23	23	21
7	58	45	36	30	54	42	34	29	37	31	26	32	27	23	28	24	21	21	21	21	18
8	53	40	32	26	50	38	30	25	34	27	23	29	24	20	25	21	18	18	18	18	16
9	50	37	29	23	46	35	27	22	31	24	20	27	22	18	23	19	16	16	16	16	14
10	46	33	26	21	43	32	25	20	28	22	18	25	20	16	21	17	14	14	14	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3248	3248	3248
5°	3172	3754	4367
10°	2876	5470	7238
15°	2444	7145	8741
20°	1989	8278	8908
25°	1659	8660	8727
30°	1398	8713	8711
35°	1235	8566	8936
40°	1075	8375	9169
45°	973	8236	9204
50°	893	8109	9053
55°	853	7925	8651
60°	873	7573	8017
65°	907	7040	7147
70°	963	6136	6038
75°	1064	4998	4711
80°	1152	3461	3175
85°	1008	1833	1625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9204 cd/sqm



TEST NUMBER: P936871

CATALOG NUMBER: SQ4-FB-050U-100D-935-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	1.0
10°-20°	301.1	4.6
20°-30°	526.6	8.0
30°-40°	677.9	10.3
40°-50°	757.2	11.5
50°-60°	725.2	11.0
60°-70°	574.7	8.7
70°-80°	338.0	5.1
80°-90°	95.4	1.4
90°-100°	191.3	2.9
100°-110°	503.0	7.6
110°-120°	521.5	7.9
120°-130°	418.3	6.3
130°-140°	328.2	5.0
140°-150°	251.9	3.8
150°-160°	181.4	2.7
160°-170°	111.0	1.7
170°-180°	37.5	0.6
0°-30°	895.6	13.6
0°-40°	1573.4	23.8
0°-60°	3055.8	46.2
0°-90°	4063.8	61.5
90°-120°	1215.8	18.4
90°-150°	2214.3	33.5
90°-180°	2544.0	38.5
0°-180°	6608.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	525	525	525	525	525	
5°	512	549	618	699	724	47
15°	383	708	1192	1445	1491	107
25°	245	802	1420	1482	1484	113
35°	166	766	1337	1413	1469	103
45°	113	611	1182	1354	1415	88
55°	81	388	1003	1165	1197	74
65°	64	206	745	838	849	64
75°	47	127	409	449	451	49
85°	17	39	101	111	113	18
90°	3	7	20	10	10	3
95°	25	99	330	170	116	28
105°	91	137	556	844	788	96
115°	161	195	445	888	1014	159
125°	224	251	405	685	808	199
135°	267	294	392	553	627	206
145°	310	329	388	472	508	194
155°	350	360	388	425	438	161
165°	377	382	388	403	408	107
175°	392	392	390	395	395	37
180°	392	392	392	392	392	



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CATALOG NUMBER: SQ4-FB-050U-100D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1
2.5°	525.1	525.1	528.5	530.2	533.5	535.2	538.6	542.0	552.1	553.8	557.2
5°	511.6	518.4	540.3	548.8	572.4	604.5	618.0	639.9	685.5	699.1	707.5
7.5°	491.3	506.5	560.6	574.1	633.2	717.6	753.1	800.4	873.0	908.4	937.1
10°	459.2	491.3	587.6	619.7	715.9	844.2	910.1	976.0	1085.7	1134.7	1153.3
12.5°	423.8	476.2	616.3	660.2	798.7	986.1	1065.4	1138.0	1263.0	1328.9	1339.0
15°	383.3	454.2	643.3	707.5	886.4	1104.3	1192.1	1281.6	1398.0	1445.3	1457.2
17.5°	347.9	437.3	668.6	736.2	954.0	1210.7	1300.2	1374.4	1469.0	1501.1	1509.5
20°	303.9	410.3	685.5	773.4	1025.0	1288.3	1374.4	1431.9	1496.0	1516.3	1519.6
22.5°	271.9	381.6	695.7	786.8	1072.2	1335.6	1408.2	1453.8	1497.7	1504.5	1506.2
25°	244.9	349.5	694.0	802.1	1112.7	1364.3	1420.0	1453.8	1479.2	1482.5	1482.5
27.5°	219.5	314.0	687.2	805.4	1143.1	1371.0	1414.9	1438.6	1450.4	1457.2	1457.2
30°	197.6	280.3	670.4	798.7	1156.6	1364.3	1399.8	1411.6	1423.4	1433.5	1438.6
32.5°	180.7	248.2	645.0	785.1	1158.3	1347.4	1372.7	1379.5	1396.3	1420.0	1428.5
35°	165.5	216.2	616.3	766.5	1148.2	1320.4	1337.3	1344.0	1377.8	1413.3	1425.1
37.5°	150.3	192.5	579.2	734.5	1133.0	1288.3	1300.2	1312.0	1364.3	1406.5	1420.0
40°	135.0	172.2	535.2	699.1	1109.3	1249.5	1259.6	1278.2	1347.4	1396.3	1409.9
42.5°	123.3	155.3	487.9	661.9	1079.0	1205.6	1220.7	1247.8	1327.2	1379.5	1394.7
45°	113.1	138.4	437.3	611.2	1040.1	1160.0	1182.0	1219.1	1303.5	1354.2	1367.7
47.5°	103.0	126.6	385.0	558.9	997.9	1114.4	1143.1	1185.3	1271.4	1320.4	1332.2
50°	94.6	114.8	332.6	503.2	952.3	1065.4	1099.3	1143.1	1230.9	1276.5	1291.7
52.5°	87.8	104.7	283.6	447.5	900.0	1014.8	1053.6	1099.3	1182.0	1225.9	1236.0
55°	81.0	96.3	241.5	388.3	846.0	960.7	1003.0	1046.9	1127.9	1165.0	1171.8
57.5°	77.7	89.5	206.0	332.6	788.5	900.0	947.3	987.8	1063.7	1092.4	1099.3
60°	72.6	84.4	179.0	285.3	726.1	842.5	883.1	923.6	987.8	1011.4	1016.4
62.5°	67.6	81.0	158.7	239.8	661.9	775.0	815.5	852.7	906.7	923.6	930.4
65°	64.2	77.7	143.6	206.0	596.1	704.1	744.6	776.7	820.6	837.5	840.8
67.5°	60.7	74.3	131.7	177.3	530.2	633.2	663.5	694.0	727.8	744.6	746.4
70°	55.7	70.9	121.6	157.0	462.6	552.1	577.5	609.5	636.5	645.0	650.1
72.5°	52.3	65.9	114.8	141.9	393.5	474.5	498.1	516.7	540.3	548.8	548.8
75°	47.3	59.1	108.0	126.6	322.5	388.3	408.6	427.2	445.8	449.2	444.1
77.5°	42.2	52.3	92.9	106.4	251.6	307.3	324.2	334.3	349.5	352.9	354.6
80°	35.4	45.6	72.6	82.7	182.3	226.3	238.0	246.5	260.0	260.0	263.4
82.5°	27.0	35.4	52.3	59.1	123.3	155.3	165.5	170.6	179.0	179.0	179.0
85°	16.9	22.0	33.7	38.9	74.3	94.6	101.3	103.0	109.7	111.4	111.4
87.5°	8.4	11.8	22.0	23.6	38.9	49.0	49.0	52.3	52.3	50.7	49.0
90°	2.6	4.8	6.9	7.4	11.6	17.2	20.0	17.8	13.3	10.0	10.0
92.5°	10.6	28.5	46.3	50.9	71.5	99.0	112.7	98.7	70.9	50.0	48.1
95°	25.3	58.0	90.8	99.0	175.9	278.3	329.6	294.1	223.1	169.9	163.8
97.5°	43.7	72.7	101.6	108.8	236.9	407.8	493.1	470.7	425.8	392.2	380.7
100°	57.9	84.2	110.4	117.0	259.1	448.7	543.4	545.0	548.3	550.8	537.2
102.5°	70.0	94.6	119.0	125.2	269.3	461.5	557.6	586.2	643.3	686.2	674.5
105°	90.7	111.4	132.1	137.3	276.8	463.0	556.0	620.1	748.1	844.2	837.9
107.5°	111.7	131.0	150.3	155.1	278.3	442.4	524.4	613.7	792.4	926.4	927.9
110°	125.9	143.3	160.8	165.1	276.1	424.1	498.1	597.9	797.7	947.5	954.1



TEST NUMBER: P936871

CATALOG NUMBER: SQ4-FB-050U-100D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	139.9	156.5	173.1	177.3	276.2	408.2	474.1	576.4	780.8	934.0	944.1
115°	160.9	176.3	191.6	195.4	278.8	389.9	445.4	543.9	740.8	888.5	902.4
117.5°	181.7	195.7	209.6	213.1	284.0	378.5	425.7	514.5	692.2	825.5	841.0
120°	193.8	207.0	220.1	223.4	288.1	374.5	417.7	498.9	661.3	783.1	798.2
122.5°	205.8	219.0	232.2	235.5	294.2	372.5	411.7	484.8	631.1	740.7	755.6
125°	223.9	235.9	248.0	251.0	302.4	370.9	405.1	467.2	591.5	684.6	698.2
127.5°	238.6	250.8	263.0	266.1	310.6	369.9	399.6	452.9	559.5	639.5	651.0
130°	246.6	259.7	272.8	276.0	316.5	370.4	397.5	444.9	539.9	611.1	621.8
132.5°	254.7	267.9	281.0	284.2	321.4	370.9	395.7	438.2	523.1	586.9	596.4
135°	266.8	278.8	290.7	293.7	326.7	370.5	392.5	428.1	499.3	552.6	560.9
137.5°	279.2	291.0	302.8	305.8	334.5	372.8	391.9	422.0	482.1	527.3	534.0
140°	289.5	300.4	311.2	314.0	339.4	373.2	390.1	416.1	468.1	507.0	513.3
142.5°	297.3	307.4	317.5	320.0	343.4	374.5	390.1	413.0	458.5	492.8	498.2
145°	309.5	318.3	327.1	329.3	348.7	374.5	387.5	406.1	443.5	471.5	475.6
147.5°	321.6	330.2	338.8	340.9	356.4	377.1	387.5	402.1	431.5	453.6	457.0
150°	329.6	337.3	345.0	346.9	360.5	378.5	387.5	399.9	424.7	443.3	446.0
152.5°	337.6	343.5	349.4	350.9	363.0	379.3	387.5	398.1	419.3	435.1	437.2
155°	349.8	354.2	358.4	359.5	368.8	381.3	387.5	395.9	412.8	425.4	426.8
157.5°	358.8	363.0	367.2	368.2	374.6	383.2	387.5	394.0	407.2	417.0	417.9
160°	364.8	368.1	371.3	372.2	377.3	384.1	387.5	393.1	404.4	412.8	413.3
162.5°	370.9	373.3	375.8	376.4	380.1	385.0	387.5	392.3	401.7	408.8	409.3
165°	377.4	379.7	381.9	382.5	384.2	386.4	387.5	390.9	397.6	402.7	403.3
167.5°	383.5	384.5	385.6	385.9	387.3	389.2	390.1	392.3	396.8	400.1	400.4
170°	387.5	388.5	389.6	389.9	390.0	390.0	390.1	392.3	396.8	400.1	400.1
172.5°	389.6	389.9	390.0	390.1	390.1	390.1	390.1	391.8	395.3	398.0	397.8
175°	392.5	392.5	392.5	392.5	391.7	390.6	390.1	391.2	393.5	395.1	395.1
177.5°	392.5	392.5	392.5	392.5	391.9	391.1	390.6	391.5	393.3	394.6	394.3
180°	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5



TEST NUMBER: P936871

CATALOG NUMBER: SQ4-FB-050U-100D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	525.1	525.1
2.5°	560.6	557.2
5°	721.0	724.4
7.5°	970.9	969.2
10°	1207.3	1222.4
12.5°	1379.5	1382.9
15°	1484.2	1490.9
17.5°	1524.7	1526.4
20°	1526.4	1523.0
22.5°	1507.8	1504.5
25°	1485.9	1484.2
27.5°	1465.6	1467.3
30°	1457.2	1462.2
32.5°	1457.2	1465.6
35°	1460.6	1469.0
37.5°	1458.9	1469.0
40°	1452.1	1463.9
42.5°	1433.5	1442.0
45°	1404.9	1414.9
47.5°	1367.7	1374.4
50°	1320.4	1327.2
52.5°	1261.3	1263.0
55°	1190.4	1197.1
57.5°	1114.4	1116.1
60°	1030.0	1035.0
62.5°	940.5	940.5
65°	846.0	849.3
67.5°	748.0	756.4
70°	648.4	650.1
72.5°	550.5	550.5
75°	449.2	450.8
77.5°	352.9	352.9
80°	261.7	263.4
82.5°	180.7	184.0
85°	113.1	113.1
87.5°	52.3	47.3
90°	10.0	10.0
92.5°	40.0	32.1
95°	139.7	115.6
97.5°	334.8	289.0
100°	482.5	427.8
102.5°	627.7	580.8
105°	812.8	787.6
107.5°	934.0	940.1
110°	980.2	1006.5



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CATALOG NUMBER: SQ4-FB-050U-100D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	984.4	1024.6
115°	958.2	1014.1
117.5°	902.9	964.9
120°	858.3	918.5
122.5°	814.9	874.2
125°	752.9	807.6
127.5°	697.2	743.4
130°	664.4	707.0
132.5°	634.6	672.7
135°	593.8	626.6
137.5°	561.0	588.0
140°	538.5	563.7
142.5°	519.9	541.5
145°	492.0	508.4
147.5°	470.6	484.1
150°	457.1	468.1
152.5°	445.5	453.9
155°	432.3	437.8
157.5°	421.8	425.7
160°	415.5	417.7
162.5°	411.4	413.6
165°	405.6	407.8
167.5°	401.3	402.2
170°	400.1	400.1
172.5°	396.9	396.2
175°	395.1	395.1
177.5°	393.5	392.5
180°	392.5	392.5



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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	6.08	7.10	6.92	7.97	9.07	19.24	20.27	20.09	21.14	22.23
	3H	6.80	7.72	7.65	8.60	9.72	21.09	22.01	21.94	22.89	24.01
	4H	7.10	7.98	7.97	8.86	9.99	21.74	22.61	22.61	23.50	24.63
	6H	7.36	8.17	8.24	9.06	10.21	22.17	22.98	23.06	23.87	25.02
	8H	7.43	8.20	8.32	9.12	10.26	22.30	23.07	23.19	23.98	25.12
	12H	7.46	8.19	8.35	9.10	10.27	22.37	23.10	23.27	24.01	25.18
4H	2H	13.30	14.18	14.18	15.07	16.19	19.54	20.41	20.41	21.30	22.43
	3H	14.89	15.62	15.78	16.54	17.68	21.59	22.33	22.48	23.24	24.39
	4H	14.99	15.66	15.89	16.57	17.74	22.36	23.03	23.26	23.95	25.12
	6H	15.01	15.59	15.92	16.53	17.70	22.91	23.49	23.82	24.43	25.60
	8H	14.99	15.53	15.91	16.47	17.65	23.07	23.61	23.99	24.55	25.73
	12H	14.96	15.45	15.89	16.40	17.59	23.17	23.66	24.11	24.61	25.81
8H	4H	16.44	16.99	17.36	17.92	19.11	22.44	22.98	23.36	23.91	25.10
	6H	16.69	17.15	17.64	18.12	19.31	23.07	23.52	24.02	24.50	25.68
	8H	16.72	17.11	17.67	18.08	19.28	23.29	23.69	24.24	24.65	25.86
	12H	16.69	17.04	17.65	18.00	19.25	23.44	23.79	24.40	24.75	26.00
12H	4H	16.60	17.09	17.53	18.04	19.23	22.40	22.89	23.34	23.84	25.03
	6H	16.95	17.35	17.91	18.32	19.52	23.06	23.46	24.01	24.42	25.62
	8H	17.03	17.38	17.99	18.34	19.59	23.29	23.64	24.25	24.60	25.85