

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: P936787

Luminaire Tested: SQ4-FB-050U-075D-B2750-1D-UNV-W2A-W-6-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936787
REPORT IS A COMBINATION OF REPORTS P933478 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-B2750-1D-UNV-W2A-W-6-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

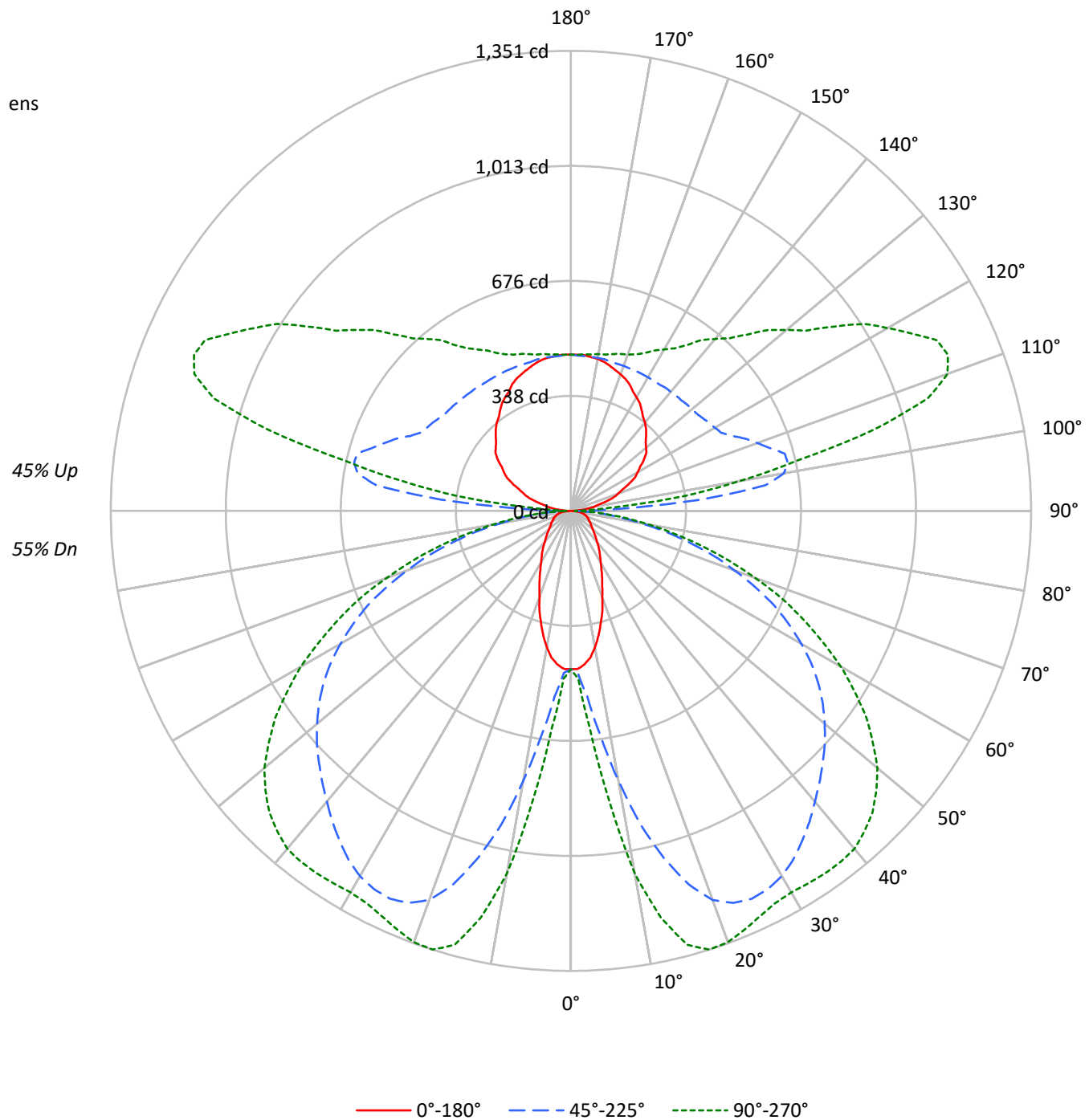
Lumens per Lamp: N/A
Luminaire Lumens: 6570.6 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 54.6
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: P936787

CATALOG NUMBER: SQ4-FB-050U-075D-B2750-1D-UNV-W2A-W-6-2700K

Luminous Intensity Polar Plot



TEST NUMBER: P936787

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2874	2874	2874
5°	2807	3321	3863
10°	2545	4840	6405
15°	2162	6322	7735
20°	1760	7325	7883
25°	1467	7664	7722
30°	1237	7710	7708
35°	1093	7580	7907
40°	952	7411	8113
45°	861	7287	8145
50°	790	7175	8010
55°	755	7011	7654
60°	772	6701	7094
65°	803	6230	6324
70°	853	5428	5342
75°	941	4422	4169
80°	1022	3064	2810
85°	888	1622	1438

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 8145 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.1	0.9
10°-20°	266.4	4.1
20°-30°	466.0	7.1
30°-40°	599.8	9.1
40°-50°	670.0	10.2
50°-60°	641.7	9.8
60°-70°	508.5	7.7
70°-80°	299.0	4.6
80°-90°	84.8	1.3
90°-100°	223.7	3.4
100°-110°	588.0	8.9
110°-120°	609.7	9.3
120°-130°	489.0	7.4
130°-140°	383.7	5.8
140°-150°	294.5	4.5
150°-160°	212.1	3.2
160°-170°	129.8	2.0
170°-180°	43.8	0.7
0°-30°	792.4	12.1
0°-40°	1392.3	21.2
0°-60°	2703.9	41.2
0°-90°	3596.2	54.7
90°-120°	1421.3	21.6
90°-150°	2588.6	39.4
90°-180°	2974.0	45.3
0°-180°	6570.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	465	465	465	465	465	
5°	453	486	547	618	641	42
15°	339	626	1055	1279	1319	94
25°	217	710	1257	1312	1313	100
35°	146	678	1183	1251	1300	91
45°	100	541	1046	1198	1252	77
55°	72	344	887	1031	1059	65
65°	57	182	659	741	752	56
75°	42	112	362	397	399	44
85°	15	34	90	99	100	16
90°	3	9	23	12	12	4
95°	30	116	385	199	135	33
105°	106	160	650	987	921	112
115°	188	228	521	1039	1186	186
125°	262	293	474	800	944	232
135°	312	343	459	646	733	241
145°	362	385	453	551	594	227
155°	409	420	453	497	512	188
165°	441	447	453	471	477	125
175°	459	459	456	462	462	44
180°	459	459	459	459	459	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	464.6	464.6	464.6	464.6	464.6	464.6	464.6	464.6	464.6	464.6	464.6
2.5°	464.6	464.6	467.6	469.1	472.1	473.6	476.6	479.6	488.5	490.0	493.0
5°	452.7	458.7	478.1	485.6	506.5	534.9	546.8	566.2	606.6	618.5	626.0
7.5°	434.8	448.2	496.0	508.0	560.2	635.0	666.3	708.2	772.4	803.8	829.2
10°	406.4	434.8	519.9	548.3	633.5	747.0	805.3	863.5	960.6	1004.0	1020.4
12.5°	375.0	421.3	545.3	584.2	706.7	872.5	942.7	1007.0	1117.5	1175.9	1184.8
15°	339.1	401.9	569.2	626.0	784.4	977.1	1054.8	1134.0	1237.1	1279.0	1289.4
17.5°	307.8	386.9	591.6	651.4	844.1	1071.2	1150.5	1216.2	1299.9	1328.3	1335.7
20°	268.9	363.0	606.6	684.3	906.9	1140.0	1216.2	1267.0	1323.8	1341.7	1344.7
22.5°	240.5	337.6	615.5	696.2	948.7	1181.9	1246.1	1286.4	1325.3	1331.3	1332.7
25°	216.6	309.3	614.0	709.6	984.5	1207.3	1256.6	1286.4	1308.8	1311.8	1311.8
27.5°	194.2	277.9	608.1	712.6	1011.4	1213.2	1252.1	1273.0	1283.4	1289.4	1289.4
30°	174.8	248.0	593.1	706.7	1023.4	1207.3	1238.6	1249.1	1259.5	1268.5	1273.0
32.5°	159.9	219.6	570.7	694.7	1024.9	1192.3	1214.7	1220.7	1235.6	1256.6	1264.0
35°	146.4	191.2	545.3	678.3	1015.9	1168.4	1183.3	1189.3	1219.2	1250.6	1261.0
37.5°	133.0	170.3	512.4	649.9	1002.5	1140.0	1150.5	1160.9	1207.3	1244.6	1256.6
40°	119.5	152.4	473.6	618.5	981.6	1105.6	1114.5	1131.0	1192.3	1235.6	1247.6
42.5°	109.1	137.4	431.8	585.6	954.7	1066.7	1080.2	1104.1	1174.4	1220.7	1234.1
45°	100.1	122.5	386.9	540.8	920.3	1026.4	1045.8	1078.7	1153.5	1198.3	1210.2
47.5°	91.1	112.0	340.6	494.5	883.0	986.0	1011.4	1048.8	1125.0	1168.4	1178.9
50°	83.7	101.6	294.3	445.2	842.6	942.7	972.6	1011.4	1089.1	1129.5	1143.0
52.5°	77.7	92.6	251.0	395.9	796.3	897.9	932.3	972.6	1045.8	1084.6	1093.6
55°	71.7	85.2	213.6	343.6	748.5	850.1	887.4	926.3	998.0	1030.9	1036.8
57.5°	68.7	79.2	182.3	294.3	697.7	796.3	838.1	874.0	941.2	966.6	972.6
60°	64.2	74.7	158.4	252.5	642.4	745.5	781.4	817.2	874.0	894.9	899.4
62.5°	59.8	71.7	140.4	212.1	585.6	685.7	721.6	754.5	802.3	817.2	823.2
65°	56.8	68.7	127.0	182.3	527.4	623.0	658.9	687.2	726.1	741.0	744.0
67.5°	53.8	65.7	116.5	156.9	469.1	560.2	587.1	614.0	643.9	658.9	660.3
70°	49.3	62.7	107.6	138.9	409.4	488.5	510.9	539.3	563.2	570.7	575.2
72.5°	46.3	58.3	101.6	125.5	348.1	419.8	440.7	457.2	478.1	485.6	485.6
75°	41.8	52.3	95.6	112.0	285.4	343.6	361.5	378.0	394.4	397.4	392.9
77.5°	37.4	46.3	82.2	94.1	222.6	271.9	286.8	295.8	309.3	312.2	313.7
80°	31.4	40.3	64.2	73.2	161.4	200.2	210.7	218.1	230.1	230.1	233.1
82.5°	23.9	31.4	46.3	52.3	109.1	137.4	146.4	150.9	158.4	158.4	158.4
85°	14.9	19.4	29.9	34.4	65.7	83.7	89.6	91.1	97.1	98.6	98.6
87.5°	7.5	10.5	19.4	20.9	34.4	43.3	43.3	46.3	46.3	44.8	43.3
90°	3.1	5.6	8.1	8.7	13.5	20.1	23.4	20.8	15.5	11.7	11.7
92.5°	12.4	33.3	54.2	59.5	83.6	115.7	131.8	115.4	82.9	58.5	56.2
95°	29.6	67.8	106.2	115.7	205.6	325.4	385.3	343.8	260.9	198.6	191.5
97.5°	51.1	85.0	118.7	127.2	277.0	476.7	576.5	550.3	497.8	458.5	445.0
100°	67.7	98.4	129.1	136.8	302.9	524.5	635.2	637.1	641.0	643.9	628.0
102.5°	81.9	110.6	139.1	146.3	314.8	539.5	651.9	685.2	752.1	802.2	788.5
105°	106.0	130.2	154.4	160.5	323.6	541.2	650.0	724.9	874.6	986.9	979.6
107.5°	130.6	153.2	175.7	181.4	325.3	517.1	613.0	717.4	926.3	1083.0	1084.7
110°	147.2	167.5	187.9	193.0	322.8	495.8	582.3	699.0	932.6	1107.7	1115.3

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	163.5	183.0	202.4	207.3	322.9	477.2	554.3	673.8	912.7	1091.9	1103.7
115°	188.1	206.1	224.0	228.5	325.9	455.8	520.7	635.8	866.0	1038.6	1055.0
117.5°	212.4	228.8	245.0	249.1	332.0	442.4	497.6	601.5	809.2	965.0	983.2
120°	226.6	241.9	257.3	261.2	336.8	437.8	488.3	583.3	773.1	915.4	933.1
122.5°	240.5	256.0	271.4	275.3	343.9	435.5	481.3	566.7	737.7	865.9	883.3
125°	261.7	275.8	289.9	293.4	353.5	433.6	473.6	546.2	691.4	800.3	816.2
127.5°	279.0	293.2	307.5	311.1	363.0	432.5	467.1	529.5	654.1	747.6	761.0
130°	288.2	303.6	318.9	322.7	370.0	433.1	464.6	520.1	631.2	714.4	726.9
132.5°	297.8	313.1	328.5	332.3	375.7	433.6	462.5	512.2	611.5	686.0	697.2
135°	311.9	325.9	339.8	343.3	381.9	433.2	458.9	500.5	583.7	646.0	655.7
137.5°	326.4	340.2	354.0	357.5	391.0	435.8	458.2	493.3	563.6	616.4	624.3
140°	338.4	351.2	363.8	367.0	396.7	436.2	456.1	486.4	547.2	592.7	600.1
142.5°	347.6	359.4	371.1	374.1	401.4	437.8	456.1	482.8	536.0	576.1	582.5
145°	361.8	372.1	382.4	385.0	407.7	437.8	453.0	474.8	518.4	551.2	556.0
147.5°	376.0	386.0	396.0	398.5	416.6	440.8	453.0	470.1	504.5	530.3	534.3
150°	385.3	394.3	403.3	405.6	421.4	442.4	453.0	467.5	496.5	518.2	521.4
152.5°	394.7	401.6	408.5	410.2	424.4	443.4	453.0	465.3	490.1	508.7	511.0
155°	409.0	414.0	419.0	420.3	431.2	445.7	453.0	462.8	482.6	497.3	498.9
157.5°	419.4	424.3	429.3	430.5	437.9	448.0	453.0	460.6	476.0	487.4	488.5
160°	426.5	430.3	434.1	435.1	441.0	449.0	453.0	459.6	472.7	482.6	483.2
162.5°	433.6	436.4	439.3	440.0	444.3	450.1	453.0	458.6	469.6	477.9	478.5
165°	441.2	443.8	446.4	447.1	449.1	451.7	453.0	457.0	464.8	470.8	471.5
167.5°	448.3	449.5	450.8	451.1	452.8	455.0	456.1	458.7	463.8	467.7	468.0
170°	453.0	454.2	455.5	455.8	455.9	456.0	456.1	458.7	463.8	467.7	467.7
172.5°	455.5	455.8	456.0	456.1	456.1	456.1	456.1	458.1	462.1	465.2	465.0
175°	458.9	458.9	458.9	458.9	458.0	456.7	456.1	457.4	460.0	461.8	461.8
177.5°	458.9	458.9	458.9	458.9	458.2	457.2	456.7	457.7	459.8	461.2	460.9
180°	458.9	458.9	458.9	458.9	458.9	458.9	458.9	458.9	458.9	458.9	458.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	464.6	464.6
2.5°	496.0	493.0
5°	637.9	640.9
7.5°	859.0	857.6
10°	1068.2	1081.7
12.5°	1220.7	1223.7
15°	1313.3	1319.3
17.5°	1349.2	1350.7
20°	1350.7	1347.7
22.5°	1334.2	1331.3
25°	1314.8	1313.3
27.5°	1296.9	1298.4
30°	1289.4	1293.9
32.5°	1289.4	1296.9
35°	1292.4	1299.9
37.5°	1290.9	1299.9
40°	1284.9	1295.4
42.5°	1268.5	1276.0
45°	1243.1	1252.1
47.5°	1210.2	1216.2
50°	1168.4	1174.4
52.5°	1116.0	1117.5
55°	1053.3	1059.2
57.5°	986.0	987.5
60°	911.3	915.8
62.5°	832.2	832.2
65°	748.5	751.5
67.5°	661.8	669.3
70°	573.7	575.2
72.5°	487.0	487.0
75°	397.4	398.9
77.5°	312.2	312.2
80°	231.6	233.1
82.5°	159.9	162.8
85°	100.1	100.1
87.5°	46.3	41.8
90°	11.7	11.7
92.5°	46.8	37.5
95°	163.3	135.2
97.5°	391.4	337.8
100°	564.0	500.1
102.5°	733.8	679.0
105°	950.2	920.7
107.5°	1091.8	1099.0
110°	1145.9	1176.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1150.8	1197.8
115°	1120.2	1185.5
117.5°	1055.6	1128.0
120°	1003.4	1073.8
122.5°	952.7	1022.0
125°	880.2	944.1
127.5°	815.0	869.0
130°	776.7	826.5
132.5°	741.8	786.4
135°	694.1	732.6
137.5°	655.9	687.3
140°	629.5	659.0
142.5°	607.8	633.1
145°	575.2	594.3
147.5°	550.1	565.9
150°	534.4	547.2
152.5°	520.8	530.6
155°	505.4	511.7
157.5°	493.1	497.6
160°	485.7	488.3
162.5°	481.0	483.5
165°	474.1	476.7
167.5°	469.1	470.2
170°	467.7	467.7
172.5°	464.0	463.1
175°	461.8	461.8
177.5°	460.0	458.9
180°	458.9	458.9

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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	5.09	6.04	6.00	6.97	8.17	18.25	19.20	19.16	20.14	21.33
	3H	5.80	6.66	6.72	7.60	8.82	20.10	20.95	21.01	21.89	23.11
	4H	6.10	6.91	7.04	7.86	9.09	20.74	21.55	21.67	22.50	23.73
	6H	6.36	7.11	7.30	8.06	9.30	21.17	21.92	22.12	22.87	24.12
	8H	6.43	7.14	7.38	8.11	9.35	21.29	22.00	22.25	22.97	24.22
	12H	6.45	7.13	7.41	8.09	9.36	21.36	22.04	22.32	23.00	24.27
4H	2H	12.31	13.12	13.25	14.06	15.29	18.54	19.35	19.48	20.29	21.53
	3H	13.88	14.56	14.83	15.54	16.78	20.59	21.27	21.54	22.24	23.49
	4H	13.98	14.60	14.94	15.57	16.84	21.36	21.98	22.32	22.95	24.22
	6H	14.00	14.53	14.97	15.53	16.80	21.90	22.43	22.87	23.43	24.69
	8H	13.98	14.48	14.95	15.47	16.75	22.06	22.56	23.03	23.55	24.83
	12H	13.94	14.39	14.93	15.40	16.69	22.15	22.61	23.15	23.61	24.90
8H	4H	15.43	15.93	16.41	16.92	18.20	21.42	21.92	22.40	22.91	24.20
	6H	15.68	16.09	16.68	17.12	18.40	22.05	22.47	23.05	23.50	24.78
	8H	15.70	16.06	16.71	17.08	18.38	22.27	22.64	23.28	23.66	24.96
	12H	15.67	15.99	16.68	17.00	18.35	22.42	22.74	23.43	23.75	25.10
12H	4H	15.58	16.03	16.57	17.04	18.33	21.38	21.83	22.38	22.84	24.13
	6H	15.94	16.30	16.95	17.32	18.62	22.04	22.41	23.05	23.42	24.72
	8H	16.01	16.33	17.02	17.34	18.69	22.27	22.59	23.28	23.60	24.95