

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: P937571

Luminaire Tested: SQ4-FB-100U-075D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937571
REPORT IS A COMBINATION OF REPORTS P933574 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

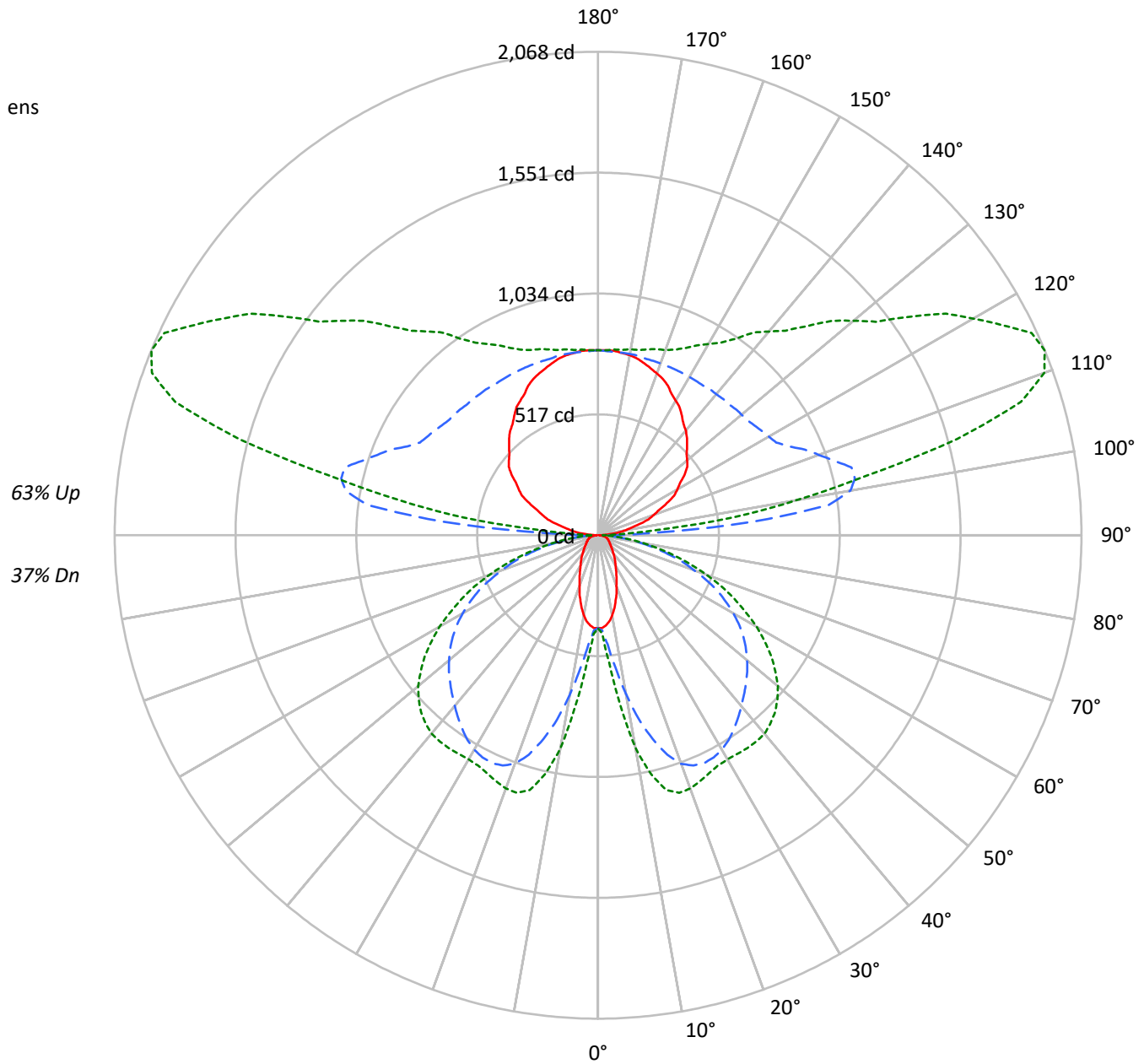
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8212.4 lumens
Efficiency: N/A
Efficacy: 111.3 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: Semi-Indirect

Input Watts (W): 73.8
Input Voltage (V): NR
Input Current (A_{in}): 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: P937571
CATALOG NUMBER: SQ4-FB-100U-075D-935-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270°



TEST NUMBER: P937571

CATALOG NUMBER: SQ4-FB-100U-075D-935-1D-UNV-STD-W-6

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37				37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31				31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25				25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21				21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17				17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15				15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13				13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11				11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10				10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9				9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8				8

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: P937571

CATALOG NUMBER: SQ4-FB-100U-075D-935-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.4	0.6
10°-20°	227.9	2.8
20°-30°	398.6	4.9
30°-40°	513.1	6.2
40°-50°	573.1	7.0
50°-60°	548.9	6.7
60°-70°	435.0	5.3
70°-80°	255.8	3.1
80°-90°	74.1	0.9
90°-100°	386.1	4.7
100°-110°	1015.0	12.4
110°-120°	1052.5	12.8
120°-130°	844.2	10.3
130°-140°	662.4	8.1
140°-150°	508.4	6.2
150°-160°	366.2	4.5
160°-170°	224.0	2.7
170°-180°	75.7	0.9
0°-30°	677.9	8.3
0°-40°	1191.0	14.5
0°-60°	2313.0	28.2
0°-90°	3077.8	37.5
90°-120°	2453.6	29.9
90°-150°	4468.7	54.4
90°-180°	5135.0	62.5
0°-180°	8212.4	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°	5	15	40	20	20	5
95°	51	200	665	343	233	57
105°	183	277	1122	1704	1589	194
115°	325	394	899	1793	2047	321
125°	452	507	818	1382	1630	401
135°	538	593	792	1115	1265	417
145°	625	664	782	952	1026	391
155°	706	726	782	858	883	324
165°	762	772	782	813	823	215
175°	792	792	787	797	797	75
180°	792	792	792	792	792	



TEST NUMBER: P937571

CATALOG NUMBER: SQ4-FB-100U-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°	5.3	9.5	13.8	14.9	23.4	34.8	40.4	35.9	26.9	20.2	20.2
92.5°	21.3	57.4	93.5	102.6	144.2	199.7	227.5	199.4	143.1	101.0	97.0
95°	51.0	117.2	183.4	199.9	354.9	561.6	665.0	593.4	450.2	342.8	330.7
97.5°	88.3	146.6	205.0	219.6	478.1	822.8	995.1	949.9	859.4	791.5	768.3
100°	117.0	169.9	222.8	236.0	522.9	905.3	1096.6	1099.9	1106.6	1111.5	1083.9
102.5°	141.4	190.8	240.2	252.5	543.5	931.4	1125.3	1183.0	1298.3	1384.8	1361.2
105°	182.8	224.7	266.5	277.0	558.7	934.4	1122.2	1251.4	1509.8	1703.7	1691.0
107.5°	225.4	264.4	303.4	313.1	561.6	892.7	1058.4	1238.6	1599.1	1869.5	1872.6
110°	254.1	289.3	324.5	333.3	557.3	855.9	1005.2	1206.7	1609.8	1912.1	1925.3



TEST NUMBER: P937571

CATALOG NUMBER: SQ4-FB-100U-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°	282.3	315.8	349.4	357.8	557.5	823.7	956.8	1163.1	1575.6	1885.0	1905.2
115°	324.8	355.7	386.6	394.4	562.6	786.7	898.9	1097.5	1495.0	1793.0	1821.2
117.5°	366.8	394.9	423.0	430.0	573.0	763.6	859.0	1038.3	1396.9	1665.9	1697.2
120°	391.2	417.7	444.1	450.8	581.6	755.9	843.1	1006.9	1334.6	1580.4	1610.7
122.5°	415.2	441.8	468.6	475.2	593.8	751.8	830.9	978.4	1273.5	1494.7	1524.7
125°	451.8	476.2	500.6	506.6	610.3	748.5	817.6	942.9	1193.6	1381.6	1409.2
127.5°	481.6	506.2	530.8	536.9	626.7	746.5	806.4	914.0	1129.2	1290.7	1314.0
130°	497.6	524.1	550.5	557.1	638.8	747.7	802.2	897.9	1089.5	1233.3	1254.7
132.5°	514.0	540.5	566.9	573.6	648.5	748.5	798.4	884.2	1055.7	1184.4	1203.6
135°	538.5	562.6	586.7	592.7	659.2	747.7	792.0	863.8	1007.5	1115.3	1131.9
137.5°	563.4	587.3	611.2	617.2	675.1	752.4	791.0	851.7	973.2	1064.2	1077.8
140°	584.2	606.2	628.2	633.6	684.8	753.1	787.2	839.7	944.6	1023.3	1035.9
142.5°	600.1	620.5	640.8	645.9	693.0	755.8	787.2	833.3	925.4	994.5	1005.4
145°	624.6	642.3	660.0	664.5	703.7	755.9	782.0	819.6	895.0	951.5	959.8
147.5°	649.1	666.3	683.5	687.8	719.2	761.0	782.0	811.6	870.9	915.4	922.2
150°	665.0	680.6	696.2	700.1	727.4	763.7	782.0	807.0	857.0	894.6	900.1
152.5°	681.5	693.4	705.1	708.1	732.7	765.5	782.0	803.4	846.1	878.2	882.3
155°	706.0	714.7	723.3	725.6	744.4	769.4	782.0	799.0	833.0	858.5	861.3
157.5°	724.0	732.5	741.0	743.1	756.1	773.4	782.0	795.2	821.7	841.5	843.5
160°	736.2	742.9	749.5	751.1	761.4	775.1	782.0	793.3	816.0	833.0	834.1
162.5°	748.5	753.4	758.4	759.6	767.1	777.0	782.0	791.5	810.7	825.0	826.0
165°	761.8	766.2	770.7	771.8	775.2	779.8	782.0	788.8	802.5	812.8	813.9
167.5°	774.0	776.1	778.2	778.7	781.5	785.4	787.2	791.8	800.7	807.4	808.0
170°	782.0	784.1	786.2	786.7	786.9	787.2	787.2	791.8	800.7	807.4	807.4
172.5°	786.2	786.7	787.2	787.2	787.2	787.2	787.2	790.8	797.9	803.2	802.8
175°	792.0	792.0	792.0	792.0	790.4	788.3	787.2	789.5	794.0	797.4	797.4
177.5°	792.0	792.0	792.0	792.0	790.8	789.2	788.4	790.1	793.6	796.3	795.8
180°	792.0	792.0	792.0	792.0	792.0	792.0	792.0	792.0	792.0	792.0	792.0



TEST NUMBER: P937571
 CATALOG NUMBER: SQ4-FB-100U-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°	20.2	20.2
92.5°	80.9	64.8
95°	282.0	233.4
97.5°	675.7	583.1
100°	973.6	863.2
102.5°	1266.6	1172.1
105°	1640.2	1589.4
107.5°	1885.0	1897.2
110°	1978.3	2031.2



TEST NUMBER: P937571

CATALOG NUMBER: SQ4-FB-100U-075D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1986.5	2067.8
115°	1933.9	2046.6
117.5°	1822.2	1947.2
120°	1732.2	1853.6
122.5°	1644.5	1764.3
125°	1519.5	1629.8
127.5°	1407.1	1500.1
130°	1340.8	1426.8
132.5°	1280.6	1357.7
135°	1198.3	1264.6
137.5°	1132.1	1186.5
140°	1086.8	1137.6
142.5°	1049.2	1092.9
145°	992.9	1026.0
147.5°	949.6	977.1
150°	922.4	944.6
152.5°	899.1	915.9
155°	872.4	883.4
157.5°	851.2	859.0
160°	838.6	843.1
162.5°	830.3	834.5
165°	818.4	822.9
167.5°	809.8	811.7
170°	807.4	807.4
172.5°	801.1	799.5
175°	797.4	797.4
177.5°	793.9	792.0
180°	792.0	792.0



TEST NUMBER: P937571
 CATALOG NUMBER: SQ4-FB-100U-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	2.86	3.64	3.91	4.70	6.14	16.02	16.81	17.07	17.87	19.31
	3H	3.56	4.26	4.62	5.33	6.79	17.85	18.56	18.91	19.63	21.08
	4H	3.85	4.52	4.92	5.59	7.05	18.49	19.16	19.56	20.23	21.69
	6H	4.10	4.72	5.18	5.79	7.26	18.91	19.53	19.99	20.60	22.08
	8H	4.16	4.75	5.25	5.84	7.31	19.03	19.62	20.12	20.71	22.18
	12H	4.18	4.74	5.27	5.82	7.31	19.09	19.65	20.18	20.73	22.23
4H	2H	10.06	10.73	11.13	11.80	13.26	16.29	16.96	17.37	18.03	19.49
	3H	11.62	12.18	12.70	13.28	14.75	18.32	18.88	19.41	19.98	21.46
	4H	11.71	12.22	12.80	13.31	14.81	19.08	19.60	20.17	20.68	22.18
	6H	11.72	12.16	12.82	13.27	14.76	19.61	20.06	20.71	21.17	22.66
	8H	11.69	12.10	12.79	13.21	14.71	19.77	20.18	20.87	21.29	22.79
	12H	11.64	12.02	12.76	13.13	14.64	19.86	20.23	20.98	21.35	22.86
8H	4H	13.14	13.56	14.24	14.66	16.17	19.14	19.55	20.24	20.65	22.16
	6H	13.38	13.72	14.51	14.87	16.37	19.76	20.10	20.88	21.25	22.75
	8H	13.40	13.70	14.53	14.83	16.35	19.97	20.27	21.10	21.40	22.92
	12H	13.36	13.63	14.50	14.75	16.31	20.11	20.38	21.25	21.50	23.06
12H	4H	13.28	13.66	14.40	14.77	16.28	19.09	19.46	20.20	20.58	22.09
	6H	13.64	13.94	14.77	15.07	16.59	19.74	20.04	20.87	21.17	22.69
	8H	13.70	13.97	14.84	15.09	16.65	19.96	20.23	21.10	21.35	22.91