

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: P937523

Luminaire Tested: SQ4-FB-100U-075D-927-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937523
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-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

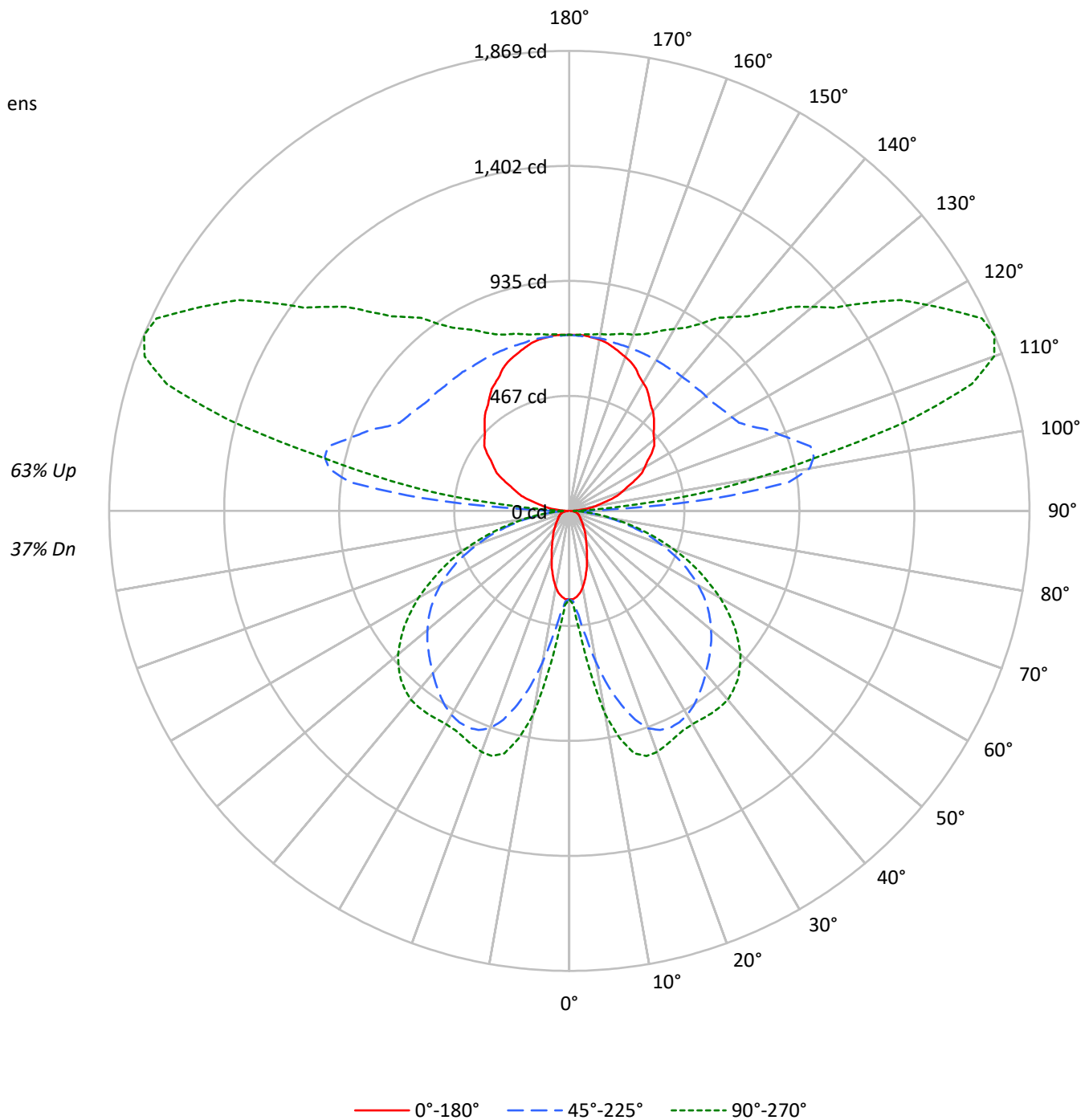
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7422.0 lumens
Efficiency: N/A
Efficacy: 100.6 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 (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: P937523
CATALOG NUMBER: SQ4-FB-100U-075D-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





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CATALOG NUMBER: SQ4-FB-100U-075D-927-1D-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°	2222	2222	2222
5°	2170	2567	2987
10°	1968	3742	4952
15°	1672	4887	5979
20°	1360	5663	6094
25°	1134	5924	5970
30°	956	5961	5959
35°	845	5860	6113
40°	736	5729	6273
45°	666	5633	6297
50°	611	5547	6193
55°	584	5421	5918
60°	598	5181	5484
65°	620	4816	4889
70°	659	4197	4130
75°	727	3419	3223
80°	791	2369	2172
85°	692	1254	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6297 cd/sqm



TEST NUMBER: P937523

CATALOG NUMBER: SQ4-FB-100U-075D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.5	0.6
10°-20°	205.9	2.8
20°-30°	360.2	4.9
30°-40°	463.7	6.2
40°-50°	517.9	7.0
50°-60°	496.1	6.7
60°-70°	393.1	5.3
70°-80°	231.2	3.1
80°-90°	67.0	0.9
90°-100°	348.9	4.7
100°-110°	917.3	12.4
110°-120°	951.2	12.8
120°-130°	763.0	10.3
130°-140°	598.7	8.1
140°-150°	459.5	6.2
150°-160°	330.9	4.5
160°-170°	202.5	2.7
170°-180°	68.4	0.9
0°-30°	612.6	8.3
0°-40°	1076.4	14.5
0°-60°	2090.4	28.2
0°-90°	2781.6	37.5
90°-120°	2217.4	29.9
90°-150°	4038.6	54.4
90°-180°	4640.0	62.5
0°-180°	7422.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	359	359	359	359	359	
5°	350	375	423	478	496	32
15°	262	484	815	989	1020	73
25°	168	549	971	1014	1015	77
35°	113	524	915	967	1005	71
45°	77	418	808	926	968	60
55°	55	266	686	797	819	51
65°	44	141	509	573	581	44
75°	32	87	280	307	308	34
85°	12	27	69	76	77	12
90°	5	14	36	18	18	5
95°	46	181	601	310	211	51
105°	165	250	1014	1540	1436	175
115°	294	356	812	1620	1850	290
125°	408	458	739	1249	1473	363
135°	487	536	716	1008	1143	377
145°	564	600	707	860	927	354
155°	638	656	707	776	798	293
165°	688	698	707	735	744	194
175°	716	716	712	721	721	68
180°	716	716	716	716	716	



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CATALOG NUMBER: SQ4-FB-100U-075D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2
2.5°	359.2	359.2	361.5	362.7	365.0	366.1	368.4	370.8	377.7	378.8	381.2
5°	350.0	354.6	369.6	375.4	391.5	413.5	422.7	437.7	468.9	478.2	483.9
7.5°	336.1	346.5	383.5	392.7	433.1	490.9	515.1	547.5	597.1	621.4	641.0
10°	314.2	336.1	401.9	423.9	489.7	577.5	622.5	667.6	742.7	776.2	788.9
12.5°	289.9	325.7	421.6	451.6	546.3	674.5	728.8	778.5	863.9	909.1	916.0
15°	262.2	310.7	440.1	483.9	606.4	755.4	815.4	876.7	956.4	988.8	996.8
17.5°	237.9	299.1	457.4	503.6	652.6	828.1	889.4	940.2	1004.9	1026.9	1032.6
20°	207.9	280.7	468.9	529.0	701.1	881.3	940.2	979.5	1023.4	1037.3	1039.6
22.5°	186.0	261.0	475.9	538.2	733.4	913.7	963.3	994.5	1024.6	1029.2	1030.3
25°	167.5	239.1	474.7	548.6	761.1	933.3	971.4	994.5	1011.9	1014.2	1014.2
27.5°	150.2	214.8	470.1	550.9	781.9	937.9	968.0	984.1	992.2	996.8	996.8
30°	135.1	191.7	458.5	546.3	791.2	933.3	957.6	965.7	973.7	980.7	984.1
32.5°	123.6	169.8	441.2	537.1	792.3	921.8	939.1	943.7	955.3	971.4	977.2
35°	113.2	147.8	421.6	524.4	785.4	903.3	914.8	919.5	942.6	966.8	974.9
37.5°	102.8	131.7	396.2	502.4	775.0	881.3	889.4	897.5	933.3	962.2	971.4
40°	92.4	117.8	366.1	478.2	758.8	854.7	861.6	874.3	921.8	955.3	964.5
42.5°	84.3	106.3	333.8	452.8	738.0	824.7	835.1	853.5	907.9	943.7	954.1
45°	77.4	94.7	299.1	418.1	711.5	793.5	808.5	833.9	891.7	926.4	935.6
47.5°	70.5	86.6	263.3	382.3	682.6	762.3	781.9	810.8	869.7	903.3	911.4
50°	64.7	78.5	227.5	344.2	651.4	728.8	751.9	781.9	842.0	873.2	883.7
52.5°	60.1	71.6	194.0	306.1	615.6	694.2	720.7	751.9	808.5	838.5	845.5
55°	55.4	65.8	165.2	265.7	578.7	657.2	686.1	716.1	771.5	797.0	801.6
57.5°	53.1	61.2	140.9	227.5	539.4	615.6	648.0	675.7	727.6	747.3	751.9
60°	49.7	57.8	122.4	195.2	496.6	576.3	604.1	631.8	675.7	691.8	695.3
62.5°	46.2	55.4	108.6	164.0	452.8	530.1	557.9	583.3	620.2	631.8	636.4
65°	43.9	53.1	98.2	140.9	407.7	481.6	509.4	531.3	561.3	572.9	575.2
67.5°	41.6	50.8	90.1	121.3	362.7	433.1	453.9	474.7	497.8	509.4	510.5
70°	38.1	48.5	83.2	107.4	316.5	377.7	395.0	417.0	435.4	441.2	444.7
72.5°	35.8	45.0	78.5	97.0	269.1	324.6	340.7	353.4	369.6	375.4	375.4
75°	32.3	40.4	73.9	86.6	220.6	265.7	279.5	292.2	304.9	307.2	303.8
77.5°	28.9	35.8	63.5	72.8	172.1	210.2	221.8	228.7	239.1	241.4	242.6
80°	24.3	31.2	49.7	56.6	124.7	154.8	162.9	168.6	177.9	177.9	180.2
82.5°	18.5	24.3	35.8	40.4	84.3	106.3	113.2	116.7	122.4	122.4	122.4
85°	11.6	15.0	23.1	26.6	50.8	64.7	69.3	70.5	75.1	76.2	76.2
87.5°	5.8	8.1	15.0	16.2	26.6	33.5	33.5	35.8	35.8	34.6	33.5
90°	4.8	8.6	12.5	13.5	21.2	31.4	36.5	32.4	24.3	18.2	18.2
92.5°	19.2	51.9	84.5	92.7	130.4	180.5	205.6	180.2	129.4	91.2	87.6
95°	46.1	105.9	165.7	180.6	320.8	507.6	601.0	536.3	406.9	309.8	298.8
97.5°	79.8	132.5	185.3	198.4	432.0	743.6	899.4	858.5	776.7	715.3	694.4
100°	105.7	153.5	201.4	213.3	472.5	818.2	991.1	994.1	1000.1	1004.5	979.6
102.5°	127.8	172.5	217.1	228.2	491.2	841.8	1017.0	1069.1	1173.3	1251.5	1230.2
105°	165.2	203.0	240.9	250.3	505.0	844.5	1014.2	1131.0	1364.5	1539.7	1528.2
107.5°	203.7	238.9	274.2	283.0	507.5	806.8	956.5	1119.4	1445.2	1689.6	1692.4
110°	229.6	261.4	293.3	301.2	503.7	773.5	908.4	1090.6	1454.8	1728.0	1740.0



TEST NUMBER: P937523

CATALOG NUMBER: SQ4-FB-100U-075D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	255.1	285.4	315.8	323.3	503.8	744.4	864.7	1051.1	1424.0	1703.5	1721.9
115°	293.5	321.5	349.4	356.4	508.4	711.0	812.4	991.9	1351.1	1620.5	1646.0
117.5°	331.5	356.9	382.3	388.6	517.8	690.2	776.3	938.4	1262.5	1505.6	1533.8
120°	353.6	377.5	401.4	407.4	525.6	683.1	761.9	910.0	1206.1	1428.3	1455.7
122.5°	375.2	399.3	423.5	429.5	536.6	679.4	750.9	884.3	1150.9	1350.9	1378.0
125°	408.3	430.4	452.4	457.8	551.6	676.4	738.9	852.2	1078.7	1248.6	1273.6
127.5°	435.3	457.5	479.7	485.3	566.4	674.7	728.8	826.1	1020.6	1166.5	1187.5
130°	449.7	473.6	497.5	503.5	577.3	675.8	725.0	811.5	984.7	1114.6	1134.0
132.5°	464.5	488.5	512.4	518.4	586.1	676.4	721.6	799.1	954.1	1070.4	1087.8
135°	486.6	508.4	530.2	535.7	595.7	675.8	715.8	780.7	910.5	1007.9	1022.9
137.5°	509.2	530.8	552.4	557.8	610.1	680.0	714.9	769.8	879.5	961.8	974.0
140°	528.0	547.9	567.7	572.6	618.9	680.6	711.5	758.9	853.7	924.8	936.2
142.5°	542.4	560.8	579.1	583.7	626.3	683.1	711.5	753.1	836.4	898.8	908.7
145°	564.5	580.5	596.5	600.5	635.9	683.1	706.7	740.7	808.9	859.9	867.4
147.5°	586.6	602.1	617.7	621.6	650.0	687.8	706.7	733.5	787.1	827.3	833.4
150°	601.0	615.1	629.2	632.7	657.3	690.2	706.7	729.3	774.5	808.5	813.5
152.5°	615.9	626.6	637.3	639.9	662.2	691.8	706.7	726.0	764.7	793.6	797.4
155°	638.0	645.9	653.7	655.7	672.7	695.4	706.7	722.1	752.8	775.9	778.4
157.5°	654.3	662.0	669.7	671.6	683.3	698.9	706.7	718.6	742.6	760.5	762.3
160°	665.4	671.4	677.4	678.8	688.1	700.5	706.7	716.9	737.4	752.8	753.8
162.5°	676.4	680.9	685.4	686.5	693.2	702.2	706.7	715.3	732.7	745.6	746.5
165°	688.5	692.5	696.5	697.5	700.6	704.7	706.7	712.9	725.3	734.6	735.6
167.5°	699.5	701.4	703.3	703.8	706.3	709.8	711.5	715.6	723.6	729.7	730.2
170°	706.7	708.6	710.6	711.0	711.2	711.4	711.5	715.6	723.6	729.7	729.7
172.5°	710.6	710.9	711.4	711.5	711.5	711.5	711.5	714.7	721.1	725.9	725.5
175°	715.8	715.8	715.8	715.8	714.3	712.4	711.5	713.5	717.6	720.6	720.6
177.5°	715.8	715.8	715.8	715.8	714.7	713.3	712.5	714.1	717.3	719.6	719.2
180°	715.8	715.8	715.8	715.8	715.8	715.8	715.8	715.8	715.8	715.8	715.8



TEST NUMBER: P937523

CATALOG NUMBER: SQ4-FB-100U-075D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	359.2	359.2
2.5°	383.5	381.2
5°	493.2	495.5
7.5°	664.1	663.0
10°	825.8	836.2
12.5°	943.7	946.0
15°	1015.3	1019.9
17.5°	1043.0	1044.2
20°	1044.2	1041.9
22.5°	1031.5	1029.2
25°	1016.5	1015.3
27.5°	1002.6	1003.8
30°	996.8	1000.3
32.5°	996.8	1002.6
35°	999.2	1004.9
37.5°	998.0	1004.9
40°	993.4	1001.5
42.5°	980.7	986.4
45°	961.0	968.0
47.5°	935.6	940.2
50°	903.3	907.9
52.5°	862.8	863.9
55°	814.3	818.9
57.5°	762.3	763.5
60°	704.6	708.0
62.5°	643.3	643.3
65°	578.7	581.0
67.5°	511.7	517.4
70°	443.5	444.7
72.5°	376.5	376.5
75°	307.2	308.4
77.5°	241.4	241.4
80°	179.0	180.2
82.5°	123.6	125.9
85°	77.4	77.4
87.5°	35.8	32.3
90°	18.2	18.2
92.5°	73.1	58.6
95°	254.9	210.9
97.5°	610.7	527.0
100°	879.9	780.2
102.5°	1144.7	1059.3
105°	1482.3	1436.4
107.5°	1703.5	1714.6
110°	1787.9	1835.7



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CATALOG NUMBER: SQ4-FB-100U-075D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1795.3	1868.8
115°	1747.7	1849.6
117.5°	1646.8	1759.8
120°	1565.5	1675.2
122.5°	1486.3	1594.5
125°	1373.2	1472.9
127.5°	1271.7	1355.7
130°	1211.7	1289.4
132.5°	1157.4	1227.0
135°	1082.9	1142.9
137.5°	1023.2	1072.3
140°	982.2	1028.1
142.5°	948.3	987.8
145°	897.4	927.2
147.5°	858.2	883.0
150°	833.6	853.7
152.5°	812.6	827.8
155°	788.4	798.4
157.5°	769.3	776.3
160°	757.9	761.9
162.5°	750.4	754.2
165°	739.7	743.7
167.5°	731.9	733.6
170°	729.7	729.7
172.5°	724.0	722.6
175°	720.6	720.6
177.5°	717.5	715.8
180°	715.8	715.8



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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	2.51	3.29	3.56	4.35	5.79	15.67	16.46	16.72	17.52	18.95
	3H	3.21	3.91	4.27	4.98	6.43	17.50	18.21	18.56	19.27	20.73
	4H	3.50	4.17	4.57	5.24	6.70	18.14	18.81	19.21	19.88	21.34
	6H	3.75	4.36	4.83	5.44	6.91	18.56	19.18	19.64	20.25	21.73
	8H	3.81	4.40	4.90	5.49	6.96	18.68	19.26	19.76	20.36	21.82
	12H	3.83	4.39	4.92	5.47	6.96	18.74	19.30	19.83	20.38	21.88
4H	2H	9.71	10.37	10.78	11.45	12.91	15.94	16.61	17.02	17.68	19.14
	3H	11.27	11.83	12.35	12.92	14.40	17.97	18.53	19.06	19.63	21.10
	4H	11.36	11.87	12.45	12.96	14.46	18.73	19.25	19.82	20.33	21.83
	6H	11.36	11.81	12.46	12.92	14.41	19.26	19.70	20.36	20.82	22.30
	8H	11.34	11.75	12.44	12.86	14.36	19.42	19.83	20.52	20.94	22.44
	12H	11.29	11.67	12.41	12.78	14.29	19.51	19.88	20.62	21.00	22.51
8H	4H	12.79	13.21	13.89	14.31	15.81	18.79	19.20	19.89	20.30	21.81
	6H	13.03	13.37	14.15	14.52	16.02	19.41	19.75	20.53	20.89	22.40
	8H	13.05	13.35	14.18	14.47	16.00	19.62	19.92	20.75	21.05	22.57
	12H	13.01	13.28	14.15	14.40	15.96	19.76	20.02	20.89	21.15	22.71
12H	4H	12.93	13.31	14.05	14.42	15.93	18.73	19.11	19.85	20.22	21.74
	6H	13.29	13.59	14.42	14.71	16.24	19.39	19.69	20.52	20.81	22.34
	8H	13.35	13.62	14.49	14.74	16.30	19.61	19.88	20.75	21.00	22.56