

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: P937537

Luminaire Tested: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-2700K

Issue Date: 12/17/2024

**Test Information**

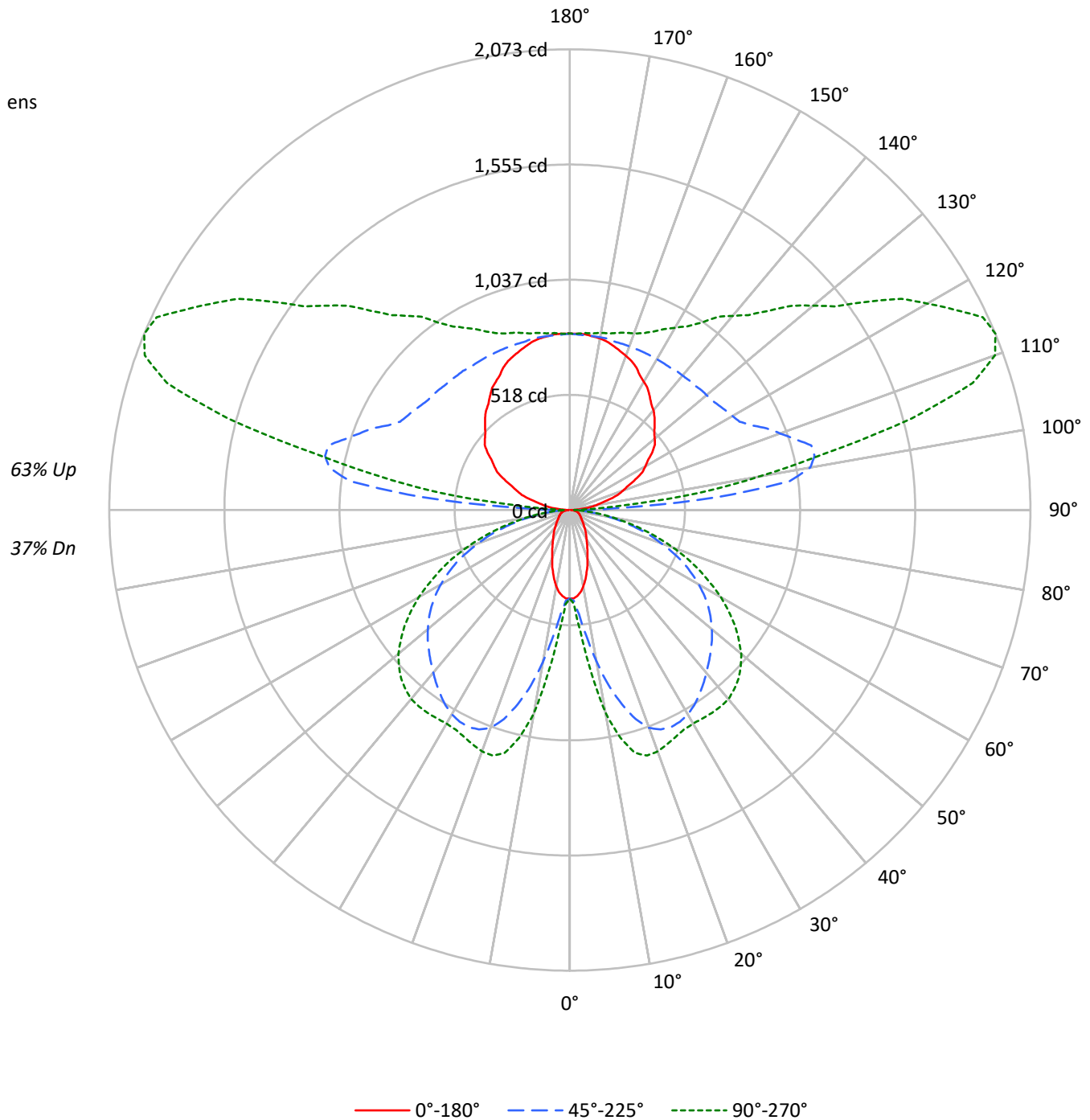
Test Method: LM-79-2019  
Report Number: P937537  
REPORT IS A COMBINATION OF REPORTS P933574 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8232.9 lumens  
Efficiency: N/A  
Efficacy: 111.6 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 (A<sub>in</sub>): 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-075D-92765-1D-UNV-STD-W-6-2700K

### 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	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°	2465	2465	2465
5°	2407	2848	3313
10°	2183	4151	5493
15°	1854	5421	6633
20°	1509	6282	6760
25°	1258	6572	6623
30°	1061	6612	6610
35°	938	6500	6781
40°	816	6355	6958
45°	738	6248	6985
50°	677	6153	6869
55°	648	6013	6565
60°	663	5746	6084
65°	688	5342	5423
70°	732	4656	4582
75°	808	3792	3575
80°	876	2626	2409
85°	763	1392	1232

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6985 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.5	0.6
10°-20°	228.4	2.8
20°-30°	399.6	4.9
30°-40°	514.4	6.2
40°-50°	574.5	7.0
50°-60°	550.3	6.7
60°-70°	436.1	5.3
70°-80°	256.4	3.1
80°-90°	74.3	0.9
90°-100°	387.0	4.7
100°-110°	1017.6	12.4
110°-120°	1055.1	12.8
120°-130°	846.3	10.3
130°-140°	664.1	8.1
140°-150°	509.7	6.2
150°-160°	367.1	4.5
160°-170°	224.6	2.7
170°-180°	75.9	0.9
0°-30°	679.6	8.3
0°-40°	1194.0	14.5
0°-60°	2318.8	28.2
0°-90°	3085.5	37.5
90°-120°	2459.7	29.9
90°-150°	4479.8	54.4
90°-180°	5147.0	62.5
0°-180°	8232.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	388	416	469	530	550	36
15°	291	537	904	1097	1131	81
25°	186	609	1078	1125	1126	86
35°	126	582	1015	1072	1115	78
45°	86	464	897	1028	1074	66
55°	62	295	761	884	908	56
65°	49	156	565	636	644	48
75°	36	96	310	341	342	38
85°	13	30	77	85	86	14
90°	5	15	40	20	20	5
95°	51	200	667	344	234	57
105°	183	278	1125	1708	1593	194
115°	326	395	901	1798	2052	322
125°	453	508	820	1385	1634	402
135°	540	594	794	1118	1268	418
145°	626	666	784	954	1028	392
155°	708	727	784	861	886	325
165°	764	774	784	815	825	216
175°	794	794	789	799	799	75
180°	794	794	794	794	794	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5	398.5
2.5°	398.5	398.5	401.0	402.3	404.9	406.1	408.7	411.3	418.9	420.2	422.8
5°	388.2	393.3	410.0	416.4	434.3	458.7	468.9	485.6	520.2	530.4	536.8
7.5°	372.8	384.4	425.4	435.6	480.4	544.5	571.4	607.3	662.4	689.3	711.1
10°	348.5	372.8	445.9	470.2	543.2	640.6	690.6	740.5	823.8	861.0	875.1
12.5°	321.6	361.3	467.6	500.9	606.0	748.2	808.4	863.5	958.3	1008.4	1016.1
15°	290.8	344.6	488.1	536.8	672.6	837.9	904.5	972.5	1060.9	1096.8	1105.8
17.5°	263.9	331.8	507.4	558.6	723.9	918.6	986.6	1043.0	1114.7	1139.1	1145.5
20°	230.6	311.3	520.2	586.8	777.7	977.6	1043.0	1086.5	1135.2	1150.6	1153.2
22.5°	206.3	289.5	527.9	597.0	813.6	1013.5	1068.6	1103.2	1136.5	1141.6	1142.9
25°	185.8	265.2	526.6	608.6	844.3	1035.3	1077.6	1103.2	1122.4	1125.0	1125.0
27.5°	166.6	238.3	521.4	611.1	867.4	1040.4	1073.7	1091.7	1100.6	1105.8	1105.8
30°	149.9	212.7	508.6	606.0	877.6	1035.3	1062.2	1071.2	1080.1	1087.8	1091.7
32.5°	137.1	188.3	489.4	595.8	878.9	1022.5	1041.7	1046.8	1059.6	1077.6	1084.0
35°	125.6	164.0	467.6	581.7	871.2	1002.0	1014.8	1019.9	1045.5	1072.4	1081.4
37.5°	114.0	146.1	439.4	557.3	859.7	977.6	986.6	995.6	1035.3	1067.3	1077.6
40°	102.5	130.7	406.1	530.4	841.7	948.1	955.8	969.9	1022.5	1059.6	1069.9
42.5°	93.5	117.9	370.3	502.2	818.7	914.8	926.3	946.8	1007.1	1046.8	1058.4
45°	85.8	105.1	331.8	463.8	789.2	880.2	896.8	925.0	989.2	1027.6	1037.9
47.5°	78.2	96.1	292.1	424.1	757.2	845.6	867.4	899.4	964.7	1002.0	1010.9
50°	71.7	87.1	252.4	381.8	722.6	808.4	834.1	867.4	934.0	968.6	980.2
52.5°	66.6	79.4	215.2	339.5	682.9	770.0	799.5	834.1	896.8	930.1	937.8
55°	61.5	73.0	183.2	294.7	641.9	729.0	761.0	794.3	855.8	884.0	889.1
57.5°	58.9	67.9	156.3	252.4	598.3	682.9	718.7	749.5	807.2	828.9	834.1
60°	55.1	64.1	135.8	216.5	550.9	639.3	670.1	700.8	749.5	767.4	771.3
62.5°	51.2	61.5	120.4	181.9	502.2	588.1	618.8	647.0	688.0	700.8	705.9
65°	48.7	58.9	108.9	156.3	452.3	534.3	565.0	589.3	622.7	635.5	638.0
67.5°	46.1	56.4	99.9	134.5	402.3	480.4	503.5	526.6	552.2	565.0	566.3
70°	42.3	53.8	92.2	119.2	351.0	418.9	438.2	462.5	483.0	489.4	493.3
72.5°	39.7	50.0	87.1	107.6	298.5	360.0	378.0	392.0	410.0	416.4	416.4
75°	35.9	44.8	82.0	96.1	244.7	294.7	310.0	324.1	338.2	340.8	337.0
77.5°	32.0	39.7	70.5	80.7	190.9	233.2	246.0	253.7	265.2	267.8	269.1
80°	26.9	34.6	55.1	62.8	138.4	171.7	180.6	187.1	197.3	197.3	199.9
82.5°	20.5	26.9	39.7	44.8	93.5	117.9	125.6	129.4	135.8	135.8	135.8
85°	12.8	16.7	25.6	29.5	56.4	71.7	76.9	78.2	83.3	84.6	84.6
87.5°	6.4	9.0	16.7	17.9	29.5	37.2	37.2	39.7	39.7	38.4	37.2
90°	5.3	9.6	13.8	14.9	23.5	34.8	40.5	36.0	27.0	20.2	20.2
92.5°	21.4	57.6	93.8	102.8	144.6	200.2	228.1	199.9	143.5	101.2	97.2
95°	51.2	117.4	183.8	200.4	355.8	563.0	666.6	594.9	451.3	343.7	331.5
97.5°	88.5	147.0	205.5	220.1	479.3	824.8	997.6	952.3	861.6	793.5	770.3
100°	117.3	170.3	223.4	236.6	524.2	907.6	1099.3	1102.7	1109.3	1114.3	1086.6
102.5°	141.8	191.3	240.8	253.2	544.8	933.7	1128.1	1186.0	1301.5	1388.2	1364.6
105°	183.3	225.2	267.2	277.7	560.1	936.7	1125.0	1254.5	1513.6	1707.9	1695.2
107.5°	225.9	265.0	304.2	313.9	563.0	895.0	1061.0	1241.7	1603.1	1874.2	1877.3
110°	254.7	290.0	325.3	334.1	558.7	858.1	1007.7	1209.7	1613.8	1916.8	1930.1



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	283.0	316.6	350.3	358.6	558.9	825.8	959.2	1166.0	1579.5	1889.7	1910.0
115°	325.6	356.6	387.6	395.4	564.0	788.7	901.1	1100.3	1498.7	1797.5	1825.8
117.5°	367.7	395.9	424.1	431.1	574.4	765.6	861.1	1040.9	1400.4	1670.1	1701.4
120°	392.2	418.8	445.3	451.9	583.0	757.8	845.2	1009.4	1337.9	1584.3	1614.7
122.5°	416.2	443.0	469.8	476.4	595.2	753.7	832.9	980.9	1276.7	1498.5	1528.5
125°	452.9	477.4	501.8	507.9	611.8	750.4	819.6	945.3	1196.5	1385.1	1412.7
127.5°	482.8	507.4	532.1	538.3	628.3	748.4	808.4	916.3	1132.1	1293.9	1317.2
130°	498.8	525.4	551.9	558.5	640.4	749.6	804.2	900.2	1092.3	1236.4	1257.9
132.5°	515.3	541.9	568.3	575.0	650.2	750.4	800.4	886.4	1058.4	1187.3	1206.6
135°	539.8	564.0	588.2	594.2	660.8	749.6	794.0	866.0	1010.0	1118.1	1134.7
137.5°	564.8	588.8	612.8	618.7	676.8	754.3	793.0	853.9	975.6	1066.9	1080.5
140°	585.7	607.7	629.7	635.2	686.5	755.0	789.2	841.8	947.0	1025.8	1038.5
142.5°	601.6	622.1	642.4	647.5	694.7	757.7	789.2	835.4	927.8	997.0	1008.0
145°	626.2	643.9	661.7	666.1	705.4	757.8	783.9	821.7	897.3	953.9	962.2
147.5°	650.7	667.9	685.2	689.5	721.0	762.9	783.9	813.6	873.1	917.7	924.5
150°	666.6	682.3	697.9	701.8	729.2	765.6	783.9	809.0	859.2	896.8	902.4
152.5°	683.2	695.1	706.9	709.9	734.6	767.4	783.9	805.4	848.2	880.3	884.5
155°	707.7	716.4	725.2	727.4	746.3	771.4	783.9	801.0	835.1	860.6	863.4
157.5°	725.8	734.4	742.8	745.0	758.0	775.3	783.9	797.2	823.7	843.6	845.6
160°	738.1	744.7	751.4	753.0	763.3	777.1	783.9	795.3	818.0	835.1	836.2
162.5°	750.4	755.3	760.3	761.5	769.0	779.0	783.9	793.5	812.7	827.1	828.1
165°	763.7	768.1	772.6	773.8	777.2	781.7	783.9	790.8	804.5	814.8	815.9
167.5°	775.9	778.0	780.2	780.7	783.5	787.3	789.2	793.7	802.7	809.5	810.0
170°	783.9	786.1	788.2	788.7	788.9	789.1	789.2	793.7	802.7	809.5	809.5
172.5°	788.2	788.6	789.1	789.2	789.2	789.2	789.2	792.8	799.9	805.2	804.8
175°	794.0	794.0	794.0	794.0	792.4	790.2	789.2	791.4	796.0	799.4	799.4
177.5°	794.0	794.0	794.0	794.0	792.8	791.2	790.3	792.1	795.6	798.3	797.8
180°	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	398.5	398.5
2.5°	425.4	422.8
5°	547.1	549.6
7.5°	736.7	735.4
10°	916.1	927.6
12.5°	1046.8	1049.4
15°	1126.3	1131.4
17.5°	1157.0	1158.3
20°	1158.3	1155.7
22.5°	1144.2	1141.6
25°	1127.5	1126.3
27.5°	1112.2	1113.4
30°	1105.8	1109.6
32.5°	1105.8	1112.2
35°	1108.3	1114.7
37.5°	1107.0	1114.7
40°	1101.9	1110.9
42.5°	1087.8	1094.2
45°	1066.0	1073.7
47.5°	1037.9	1043.0
50°	1002.0	1007.1
52.5°	957.1	958.3
55°	903.2	908.4
57.5°	845.6	846.9
60°	781.5	785.4
62.5°	713.6	713.6
65°	641.9	644.4
67.5°	567.6	574.0
70°	492.0	493.3
72.5°	417.7	417.7
75°	340.8	342.1
77.5°	267.8	267.8
80°	198.6	199.9
82.5°	137.1	139.6
85°	85.8	85.8
87.5°	39.7	35.9
90°	20.2	20.2
92.5°	81.1	65.0
95°	282.7	233.9
97.5°	677.4	584.6
100°	976.0	865.4
102.5°	1269.7	1175.0
105°	1644.3	1593.4
107.5°	1889.7	1902.0
110°	1983.2	2036.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1991.5	2073.0
115°	1938.7	2051.7
117.5°	1826.7	1952.0
120°	1736.5	1858.2
122.5°	1648.6	1768.7
125°	1523.3	1633.9
127.5°	1410.6	1503.9
130°	1344.1	1430.3
132.5°	1283.8	1361.1
135°	1201.2	1267.8
137.5°	1135.0	1189.5
140°	1089.5	1140.4
142.5°	1051.9	1095.7
145°	995.4	1028.5
147.5°	952.0	979.5
150°	924.7	947.0
152.5°	901.4	918.2
155°	874.5	885.6
157.5°	853.4	861.1
160°	840.7	845.2
162.5°	832.3	836.6
165°	820.5	824.9
167.5°	811.8	813.7
170°	809.5	809.5
172.5°	803.1	801.5
175°	799.4	799.4
177.5°	795.9	794.0
180°	794.0	794.0



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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	2.87	3.65	3.92	4.71	6.15	16.03	16.82	17.08	17.88	19.31
	3H	3.57	4.27	4.63	5.34	6.80	17.86	18.57	18.92	19.63	21.09
	4H	3.86	4.53	4.93	5.60	7.06	18.50	19.17	19.57	20.24	21.70
	6H	4.11	4.72	5.19	5.80	7.27	18.92	19.54	20.00	20.61	22.09
	8H	4.17	4.76	5.26	5.85	7.32	19.04	19.63	20.12	20.72	22.18
	12H	4.19	4.75	5.28	5.83	7.32	19.10	19.66	20.19	20.74	22.24
4H	2H	10.06	10.73	11.14	11.80	13.27	16.30	16.97	17.38	18.04	19.50
	3H	11.63	12.19	12.71	13.28	14.76	18.33	18.89	19.42	19.99	21.46
	4H	11.72	12.23	12.81	13.32	14.82	19.09	19.61	20.18	20.69	22.19
	6H	11.72	12.17	12.82	13.28	14.77	19.62	20.06	20.72	21.18	22.66
	8H	11.70	12.11	12.80	13.22	14.72	19.78	20.19	20.88	21.30	22.80
	12H	11.65	12.03	12.77	13.14	14.65	19.87	20.24	20.98	21.36	22.87
8H	4H	13.15	13.57	14.25	14.67	16.17	19.15	19.56	20.25	20.66	22.17
	6H	13.39	13.73	14.51	14.88	16.38	19.77	20.11	20.89	21.25	22.76
	8H	13.41	13.71	14.54	14.83	16.36	19.98	20.28	21.11	21.41	22.93
	12H	13.37	13.64	14.51	14.76	16.32	20.12	20.38	21.25	21.51	23.07
12H	4H	13.29	13.67	14.41	14.78	16.29	19.09	19.47	20.21	20.59	22.10
	6H	13.65	13.95	14.78	15.07	16.60	19.75	20.05	20.88	21.18	22.70
	8H	13.71	13.98	14.85	15.10	16.66	19.97	20.24	21.11	21.36	22.92