

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: P937540

Luminaire Tested: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937540
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-6-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

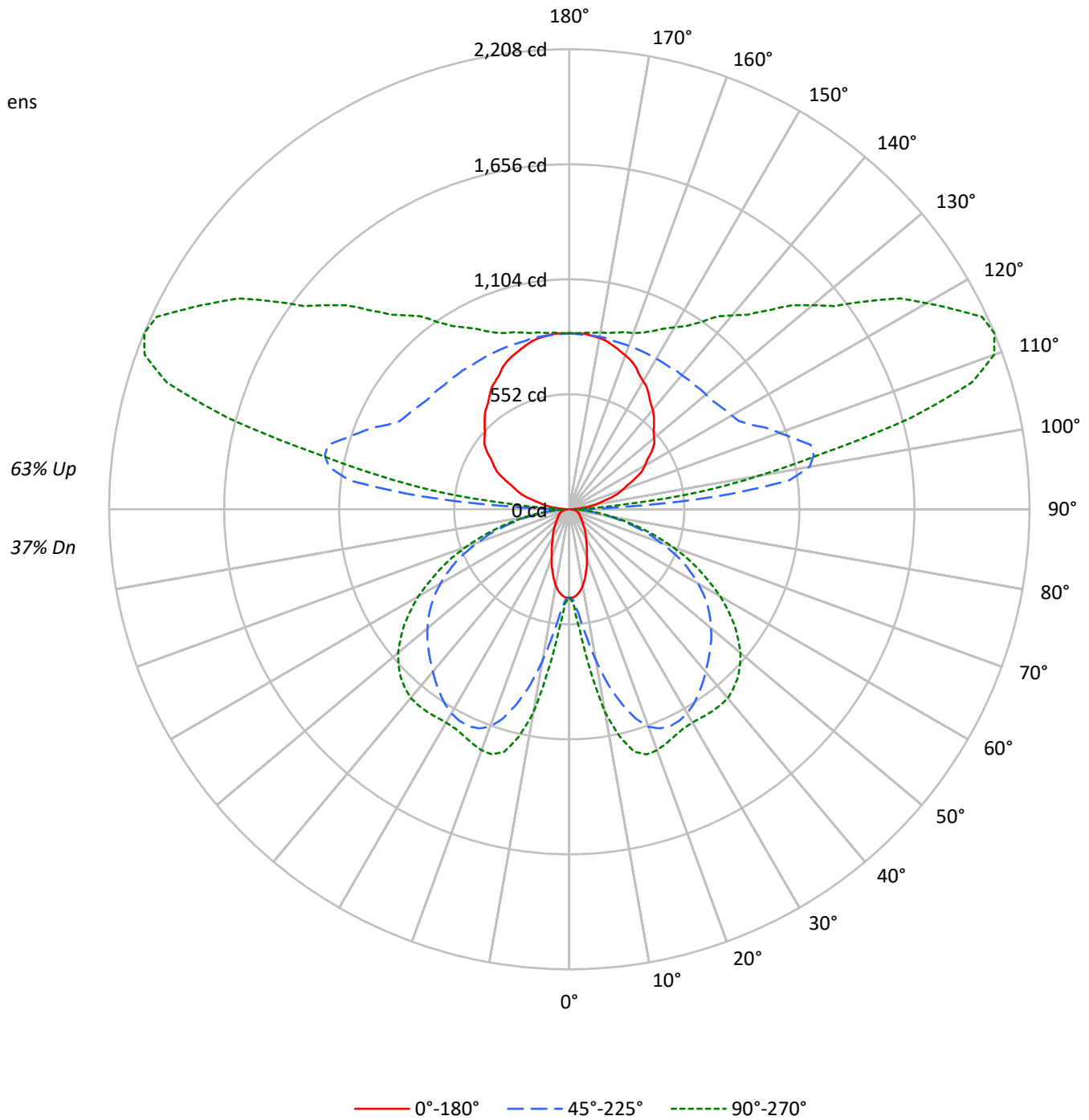
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8767.9 lumens
Efficiency: N/A
Efficacy: 118.8 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: P937540
CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-4000K

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	0
RCR																		
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2625	2625	2625
5°	2563	3033	3529
10°	2324	4420	5850
15°	1975	5774	7064
20°	1607	6690	7199
25°	1340	6999	7053
30°	1129	7041	7040
35°	998	6922	7222
40°	870	6768	7410
45°	787	6655	7439
50°	721	6553	7316
55°	690	6404	6991
60°	706	6120	6479
65°	732	5689	5775
70°	778	4958	4879
75°	860	4039	3807
80°	934	2798	2566
85°	811	1482	1313

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7439 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.9	0.6
10°-20°	243.3	2.8
20°-30°	425.6	4.9
30°-40°	547.8	6.2
40°-50°	611.9	7.0
50°-60°	586.0	6.7
60°-70°	464.4	5.3
70°-80°	273.1	3.1
80°-90°	79.1	0.9
90°-100°	412.2	4.7
100°-110°	1083.7	12.4
110°-120°	1123.7	12.8
120°-130°	901.3	10.3
130°-140°	707.2	8.1
140°-150°	542.8	6.2
150°-160°	390.9	4.5
160°-170°	239.2	2.7
170°-180°	80.8	0.9
0°-30°	723.7	8.3
0°-40°	1271.6	14.5
0°-60°	2469.5	28.2
0°-90°	3286.1	37.5
90°-120°	2619.6	29.9
90°-150°	4771.0	54.4
90°-180°	5482.0	62.5
0°-180°	8767.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	424	424	424	424	424	
5°	413	443	499	565	585	38
15°	310	572	963	1168	1205	86
25°	198	648	1148	1198	1199	91
35°	134	620	1081	1142	1187	83
45°	91	494	955	1094	1144	71
55°	66	314	810	942	967	60
65°	52	166	602	677	686	51
75°	38	102	330	363	364	40
85°	14	31	82	90	91	14
90°	6	16	43	22	22	6
95°	54	213	710	366	249	61
105°	195	296	1198	1819	1697	207
115°	347	421	960	1914	2185	343
125°	482	541	873	1475	1740	428
135°	575	633	846	1191	1350	445
145°	667	709	835	1016	1095	418
155°	754	775	835	917	943	346
165°	813	824	835	868	878	230
175°	846	846	840	851	851	80
180°	846	846	846	846	846	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3
2.5°	424.3	424.3	427.1	428.4	431.2	432.5	435.3	438.0	446.2	447.5	450.3
5°	413.4	418.9	436.6	443.4	462.6	488.5	499.4	517.1	554.0	564.9	571.7
7.5°	397.1	409.3	453.0	463.9	511.7	579.9	608.5	646.8	705.4	734.1	757.3
10°	371.1	397.1	474.8	500.8	578.5	682.2	735.4	788.7	877.3	916.9	931.9
12.5°	342.5	384.8	498.0	533.5	645.4	796.8	861.0	919.6	1020.6	1073.9	1082.1
15°	309.7	367.0	519.9	571.7	716.3	892.4	963.3	1035.7	1129.9	1168.1	1177.6
17.5°	281.1	353.4	540.3	594.9	770.9	978.3	1050.7	1110.8	1187.2	1213.1	1219.9
20°	245.6	331.6	554.0	624.9	828.2	1041.2	1110.8	1157.1	1209.0	1225.4	1228.1
22.5°	219.7	308.4	562.2	635.8	866.4	1079.4	1138.0	1174.9	1210.4	1215.8	1217.2
25°	197.8	282.4	560.8	648.1	899.2	1102.6	1147.6	1174.9	1195.4	1198.1	1198.1
27.5°	177.4	253.8	555.3	650.8	923.7	1108.0	1143.5	1162.6	1172.2	1177.6	1177.6
30°	159.6	226.5	541.7	645.4	934.7	1102.6	1131.2	1140.8	1150.3	1158.5	1162.6
32.5°	146.0	200.6	521.2	634.5	936.0	1088.9	1109.4	1114.9	1128.5	1147.6	1154.4
35°	133.7	174.7	498.0	619.5	927.8	1067.1	1080.7	1086.2	1113.5	1142.1	1151.7
37.5°	121.4	155.5	468.0	593.5	915.5	1041.2	1050.7	1060.3	1102.6	1136.7	1147.6
40°	109.2	139.2	432.5	564.9	896.4	1009.7	1017.9	1032.9	1088.9	1128.5	1139.4
42.5°	99.6	125.5	394.3	534.9	871.9	974.2	986.5	1008.3	1072.6	1114.9	1127.1
45°	91.4	111.9	353.4	493.9	840.5	937.4	955.1	985.1	1053.5	1094.4	1105.3
47.5°	83.2	102.3	311.1	451.6	806.4	900.5	923.7	957.8	1027.4	1067.1	1076.6
50°	76.4	92.8	268.8	406.6	769.6	861.0	888.3	923.7	994.7	1031.5	1043.9
52.5°	71.0	84.6	229.2	361.6	727.3	820.0	851.4	888.3	955.1	990.6	998.8
55°	65.5	77.8	195.1	313.8	683.6	776.4	810.5	846.0	911.5	941.5	946.9
57.5°	62.8	72.3	166.5	268.8	637.2	727.3	765.5	798.2	859.6	882.8	888.3
60°	58.7	68.2	144.6	230.6	586.7	680.9	713.6	746.4	798.2	817.3	821.4
62.5°	54.6	65.5	128.3	193.8	534.9	626.3	659.0	689.1	732.7	746.4	751.8
65°	51.8	62.8	116.0	166.5	481.7	569.0	601.7	627.6	663.1	676.8	679.5
67.5°	49.1	60.0	106.4	143.3	428.4	511.7	536.2	560.8	588.1	601.7	603.1
70°	45.0	57.3	98.2	126.9	373.9	446.2	466.6	492.6	514.4	521.2	525.3
72.5°	42.3	53.2	92.8	114.6	317.9	383.4	402.5	417.5	436.6	443.4	443.4
75°	38.2	47.8	87.3	102.3	260.6	313.8	330.2	345.2	360.2	362.9	358.9
77.5°	34.1	42.3	75.0	86.0	203.3	248.3	262.0	270.2	282.4	285.2	286.5
80°	28.7	36.8	58.7	66.9	147.4	182.8	192.4	199.2	210.1	210.1	212.9
82.5°	21.8	28.7	42.3	47.8	99.6	125.5	133.7	137.8	144.6	144.6	144.6
85°	13.6	17.7	27.3	31.4	60.0	76.4	81.9	83.2	88.7	90.1	90.1
87.5°	6.8	9.6	17.7	19.1	31.4	39.6	39.6	42.3	42.3	40.9	39.6
90°	5.6	10.2	14.7	15.9	25.0	37.1	43.1	38.3	28.7	21.6	21.6
92.5°	22.7	61.3	99.9	109.5	154.0	213.2	242.9	212.9	152.8	107.8	103.5
95°	54.5	125.1	195.8	213.4	379.0	599.6	710.0	633.6	480.7	366.0	353.0
97.5°	94.2	156.5	218.9	234.4	510.4	878.4	1062.5	1014.2	917.6	845.1	820.3
100°	124.9	181.4	237.9	252.0	558.2	966.6	1170.8	1174.3	1181.4	1186.7	1157.2
102.5°	151.0	203.8	256.4	269.6	580.3	994.4	1201.4	1263.0	1386.1	1478.4	1453.2
105°	195.2	239.9	284.5	295.7	596.5	997.6	1198.1	1336.1	1612.0	1818.9	1805.4
107.5°	240.6	282.3	323.9	334.3	599.5	953.1	1130.0	1322.4	1707.3	1996.0	1999.3
110°	271.3	308.8	346.5	355.8	595.0	913.8	1073.2	1288.3	1718.7	2041.4	2055.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	301.4	337.2	373.0	382.0	595.2	879.4	1021.5	1241.7	1682.2	2012.5	2034.1
115°	346.8	379.8	412.8	421.1	600.6	840.0	959.7	1171.8	1596.1	1914.3	1944.4
117.5°	391.6	421.6	451.6	459.1	611.7	815.3	917.1	1108.6	1491.4	1778.6	1812.0
120°	417.7	446.0	474.2	481.3	620.9	807.0	900.1	1075.0	1424.9	1687.3	1719.7
122.5°	443.3	471.7	500.3	507.4	633.9	802.7	887.1	1044.6	1359.6	1595.9	1627.9
125°	482.4	508.4	534.4	540.9	651.6	799.1	872.9	1006.7	1274.3	1475.1	1504.5
127.5°	514.2	540.4	566.7	573.3	669.1	797.0	861.0	975.9	1205.6	1378.0	1402.8
130°	531.2	559.5	587.7	594.8	682.0	798.3	856.4	958.7	1163.2	1316.7	1339.6
132.5°	548.8	577.1	605.3	612.4	692.4	799.1	852.4	944.0	1127.1	1264.5	1285.0
135°	574.9	600.6	626.4	632.8	703.8	798.3	845.6	922.3	1075.6	1190.7	1208.5
137.5°	601.5	627.0	652.6	658.9	720.8	803.3	844.5	909.4	1039.0	1136.2	1150.7
140°	623.7	647.2	670.7	676.5	731.2	804.0	840.5	896.5	1008.5	1092.5	1106.0
142.5°	640.7	662.5	684.1	689.6	739.9	806.9	840.5	889.7	988.0	1061.8	1073.5
145°	666.9	685.8	704.7	709.4	751.3	807.0	834.9	875.1	955.6	1015.9	1024.7
147.5°	693.0	711.3	729.7	734.3	767.8	812.5	834.9	866.5	929.8	977.3	984.6
150°	710.0	726.6	743.3	747.4	776.6	815.4	834.9	861.6	915.0	955.1	961.0
152.5°	727.6	740.3	752.8	756.0	782.3	817.3	834.9	857.7	903.4	937.6	942.0
155°	753.7	763.0	772.3	774.6	794.7	821.5	834.9	853.1	889.4	916.6	919.6
157.5°	773.0	782.1	791.1	793.4	807.2	825.7	834.9	849.0	877.3	898.4	900.5
160°	786.0	793.1	800.2	801.9	812.9	827.6	834.9	847.0	871.2	889.4	890.5
162.5°	799.1	804.4	809.7	811.0	818.9	829.6	834.9	845.1	865.5	880.8	881.9
165°	813.3	818.0	822.9	824.0	827.7	832.5	834.9	842.1	856.8	867.8	869.0
167.5°	826.3	828.6	830.9	831.4	834.4	838.5	840.5	845.3	854.9	862.1	862.6
170°	834.9	837.1	839.4	840.0	840.1	840.4	840.5	845.3	854.9	862.1	862.1
172.5°	839.4	839.9	840.4	840.5	840.5	840.5	840.5	844.3	851.9	857.5	857.1
175°	845.6	845.6	845.6	845.6	843.9	841.6	840.5	842.9	847.7	851.3	851.3
177.5°	845.6	845.6	845.6	845.6	844.3	842.6	841.7	843.6	847.3	850.1	849.6
180°	845.6	845.6	845.6	845.6	845.6	845.6	845.6	845.6	845.6	845.6	845.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	424.3	424.3
2.5°	453.0	450.3
5°	582.6	585.4
7.5°	784.6	783.2
10°	975.6	987.9
12.5°	1114.9	1117.6
15°	1199.4	1204.9
17.5°	1232.2	1233.6
20°	1233.6	1230.8
22.5°	1218.5	1215.8
25°	1200.8	1199.4
27.5°	1184.4	1185.8
30°	1177.6	1181.7
32.5°	1177.6	1184.4
35°	1180.3	1187.2
37.5°	1179.0	1187.2
40°	1173.5	1183.1
42.5°	1158.5	1165.3
45°	1135.3	1143.5
47.5°	1105.3	1110.8
50°	1067.1	1072.6
52.5°	1019.2	1020.6
55°	961.9	967.4
57.5°	900.5	901.9
60°	832.3	836.4
62.5°	760.0	760.0
65°	683.6	686.3
67.5°	604.5	611.3
70°	524.0	525.3
72.5°	444.8	444.8
75°	362.9	364.3
77.5°	285.2	285.2
80°	211.5	212.9
82.5°	146.0	148.7
85°	91.4	91.4
87.5°	42.3	38.2
90°	21.6	21.6
92.5°	86.3	69.2
95°	301.1	249.1
97.5°	721.4	622.6
100°	1039.4	921.6
102.5°	1352.3	1251.4
105°	1751.1	1696.9
107.5°	2012.5	2025.6
110°	2112.1	2168.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2120.9	2207.7
115°	2064.7	2185.0
117.5°	1945.4	2078.9
120°	1849.4	1979.0
122.5°	1755.8	1883.7
125°	1622.2	1740.0
127.5°	1502.3	1601.6
130°	1431.5	1523.3
132.5°	1367.3	1449.5
135°	1279.3	1350.2
137.5°	1208.7	1266.8
140°	1160.3	1214.5
142.5°	1120.2	1166.9
145°	1060.1	1095.4
147.5°	1013.9	1043.2
150°	984.8	1008.5
152.5°	959.9	977.9
155°	931.4	943.2
157.5°	908.8	917.1
160°	895.4	900.1
162.5°	886.4	891.0
165°	873.8	878.5
167.5°	864.6	866.6
170°	862.1	862.1
172.5°	855.3	853.6
175°	851.3	851.3
177.5°	847.6	845.6
180°	845.6	845.6



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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	3.09	3.87	4.14	4.93	6.37	16.25	17.04	17.30	18.10	19.53
	3H	3.79	4.49	4.85	5.56	7.01	18.08	18.79	19.14	19.85	21.31
	4H	4.08	4.75	5.15	5.82	7.28	18.72	19.39	19.79	20.46	21.92
	6H	4.33	4.94	5.41	6.02	7.49	19.14	19.76	20.22	20.83	22.31
	8H	4.39	4.98	5.48	6.07	7.54	19.26	19.84	20.34	20.93	22.40
	12H	4.41	4.97	5.50	6.05	7.54	19.32	19.88	20.41	20.96	22.46
4H	2H	10.28	10.95	11.36	12.02	13.49	16.52	17.19	17.60	18.26	19.72
	3H	11.84	12.41	12.93	13.50	14.98	18.55	19.11	19.64	20.21	21.68
	4H	11.94	12.45	13.03	13.54	15.03	19.31	19.82	20.40	20.91	22.41
	6H	11.94	12.39	13.04	13.50	14.98	19.84	20.28	20.94	21.39	22.88
	8H	11.92	12.33	13.02	13.43	14.94	20.00	20.41	21.10	21.51	23.02
	12H	11.87	12.25	12.99	13.36	14.87	20.08	20.46	21.20	21.58	23.09
8H	4H	13.37	13.78	14.47	14.89	16.39	19.36	19.78	20.46	20.88	22.39
	6H	13.61	13.95	14.73	15.10	16.60	19.99	20.33	21.11	21.47	22.97
	8H	13.63	13.93	14.76	15.05	16.57	20.20	20.50	21.33	21.63	23.15
	12H	13.59	13.86	14.73	14.98	16.54	20.34	20.60	21.47	21.73	23.28
12H	4H	13.51	13.88	14.63	15.00	16.51	19.31	19.69	20.43	20.80	22.31
	6H	13.87	14.17	15.00	15.29	16.81	19.97	20.27	21.10	21.39	22.92
	8H	13.93	14.20	15.07	15.32	16.88	20.19	20.46	21.33	21.58	23.14