

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: P937538

Luminaire Tested: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937538
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-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

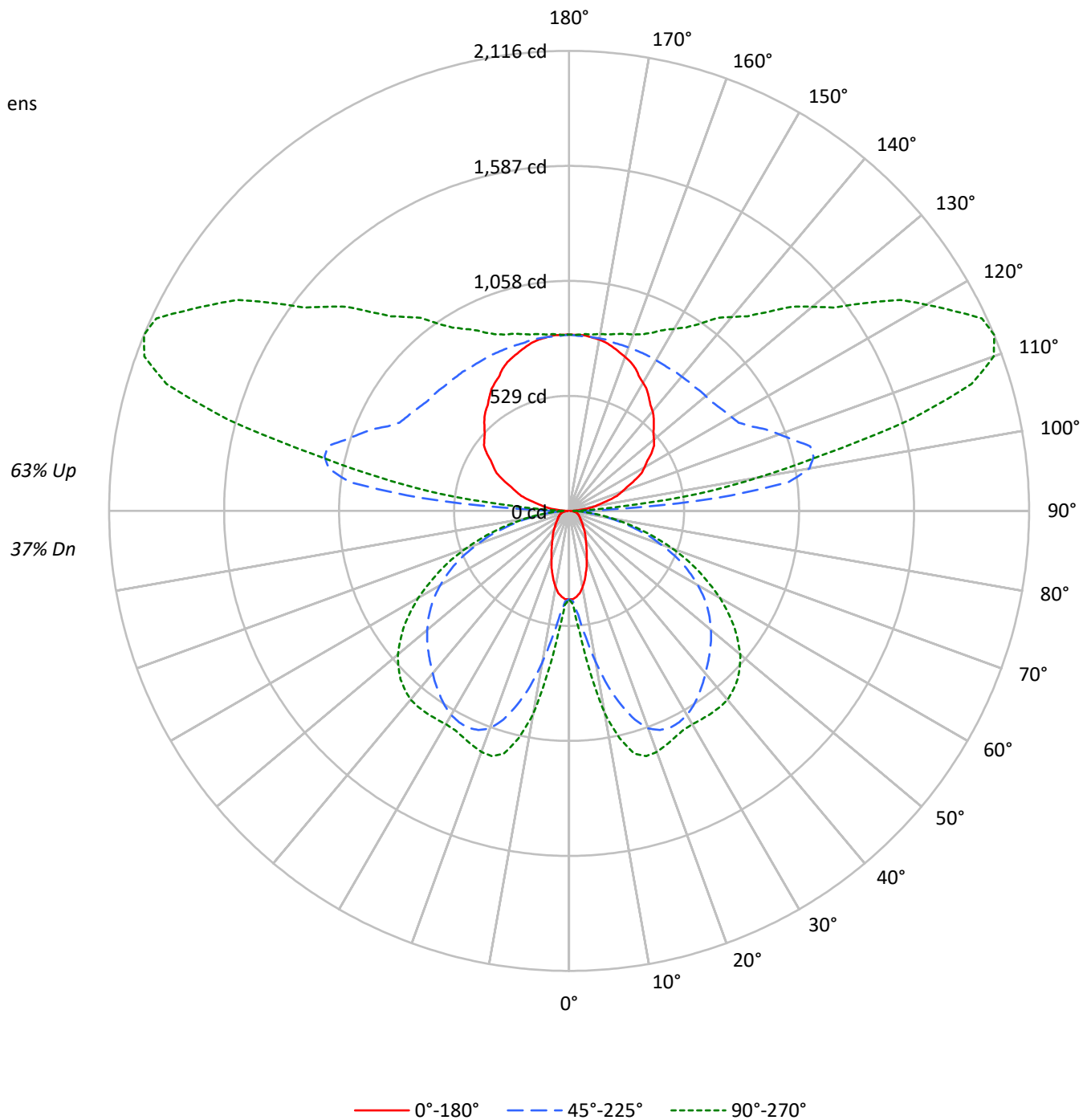
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8405.5 lumens
Efficiency: N/A
Efficacy: 113.9 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

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CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-6-3000K

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°	2517	2517	2517
5°	2457	2908	3383
10°	2228	4238	5608
15°	1893	5535	6772
20°	1540	6413	6901
25°	1285	6710	6762
30°	1082	6751	6749
35°	957	6637	6923
40°	833	6488	7104
45°	754	6379	7131
50°	692	6281	7013
55°	662	6139	6702
60°	676	5867	6211
65°	702	5455	5536
70°	747	4754	4677
75°	824	3872	3650
80°	895	2682	2460
85°	781	1421	1258

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7131 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.6	0.6
10°-20°	233.2	2.8
20°-30°	408.0	4.9
30°-40°	525.2	6.2
40°-50°	586.6	7.0
50°-60°	561.8	6.7
60°-70°	445.2	5.3
70°-80°	261.8	3.1
80°-90°	75.8	0.9
90°-100°	395.2	4.7
100°-110°	1038.9	12.4
110°-120°	1077.2	12.8
120°-130°	864.1	10.3
130°-140°	678.0	8.1
140°-150°	520.4	6.2
150°-160°	374.8	4.5
160°-170°	229.3	2.7
170°-180°	77.5	0.9
0°-30°	693.8	8.3
0°-40°	1219.0	14.5
0°-60°	2367.4	28.2
0°-90°	3150.2	37.5
90°-120°	2511.3	29.9
90°-150°	4573.8	54.4
90°-180°	5255.0	62.5
0°-180°	8405.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	407	407	407	407	407	
5°	396	425	479	542	561	37
15°	297	548	924	1120	1155	83
25°	190	621	1100	1149	1150	87
35°	128	594	1036	1095	1138	80
45°	88	474	916	1049	1096	68
55°	63	301	777	903	927	57
65°	50	160	577	649	658	49
75°	37	98	316	348	349	38
85°	13	30	78	86	88	14
90°	5	15	41	21	21	5
95°	52	205	681	351	239	58
105°	187	284	1149	1744	1627	198
115°	332	404	920	1835	2095	328
125°	462	518	837	1414	1668	411
135°	551	607	811	1142	1294	426
145°	639	680	800	974	1050	401
155°	723	743	800	879	904	332
165°	780	790	800	832	842	220
175°	811	811	806	816	816	77
180°	811	811	811	811	811	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8
2.5°	406.8	406.8	409.4	410.7	413.3	414.7	417.3	419.9	427.7	429.0	431.7
5°	396.3	401.6	418.6	425.1	443.4	468.3	478.7	495.8	531.1	541.5	548.1
7.5°	380.6	392.4	434.3	444.7	490.5	555.9	583.4	620.0	676.3	703.7	726.0
10°	355.8	380.6	455.2	480.1	554.6	654.0	705.0	756.1	841.1	879.0	893.4
12.5°	328.3	368.9	477.4	511.4	618.7	763.9	825.4	881.6	978.4	1029.5	1037.4
15°	296.9	351.9	498.4	548.1	686.7	855.5	923.5	992.9	1083.2	1119.8	1128.9
17.5°	269.5	338.8	518.0	570.3	739.0	937.9	1007.3	1064.8	1138.1	1162.9	1169.5
20°	235.4	317.9	531.1	599.1	794.0	998.1	1064.8	1109.3	1159.0	1174.7	1177.3
22.5°	210.6	295.6	538.9	609.6	830.6	1034.8	1091.0	1126.3	1160.3	1165.6	1166.9
25°	189.7	270.8	537.6	621.3	862.0	1057.0	1100.2	1126.3	1145.9	1148.6	1148.6
27.5°	170.0	243.3	532.4	623.9	885.6	1062.2	1096.2	1114.5	1123.7	1128.9	1128.9
30°	153.0	217.1	519.3	618.7	896.0	1057.0	1084.5	1093.6	1102.8	1110.6	1114.5
32.5°	140.0	192.3	499.7	608.2	897.3	1043.9	1063.5	1068.8	1081.8	1100.2	1106.7
35°	128.2	167.4	477.4	593.9	889.5	1023.0	1036.1	1041.3	1067.5	1094.9	1104.1
37.5°	116.4	149.1	448.7	569.0	877.7	998.1	1007.3	1016.4	1057.0	1089.7	1100.2
40°	104.6	133.4	414.7	541.5	859.4	968.0	975.8	990.2	1043.9	1081.8	1092.3
42.5°	95.5	120.3	378.0	512.8	835.8	933.9	945.7	966.6	1028.2	1068.8	1080.5
45°	87.6	107.3	338.8	473.5	805.8	898.6	915.6	944.4	1009.9	1049.1	1059.6
47.5°	79.8	98.1	298.2	433.0	773.1	863.3	885.6	918.3	985.0	1023.0	1032.1
50°	73.3	88.9	257.7	389.8	737.7	825.4	851.5	885.6	953.6	988.9	1000.7
52.5°	68.0	81.1	219.8	346.6	697.2	786.1	816.2	851.5	915.6	949.6	957.5
55°	62.8	74.6	187.1	300.9	655.3	744.3	777.0	811.0	873.8	902.6	907.8
57.5°	60.2	69.3	159.6	257.7	610.9	697.2	733.8	765.2	824.1	846.3	851.5
60°	56.2	65.4	138.7	221.1	562.5	652.7	684.1	715.5	765.2	783.5	787.4
62.5°	52.3	62.8	123.0	185.7	512.8	600.4	631.8	660.6	702.4	715.5	720.7
65°	49.7	60.2	111.2	159.6	461.7	545.5	576.9	601.7	635.7	648.8	651.4
67.5°	47.1	57.6	102.0	137.3	410.7	490.5	514.1	537.6	563.8	576.9	578.2
70°	43.2	54.9	94.2	121.6	358.4	427.7	447.4	472.2	493.1	499.7	503.6
72.5°	40.5	51.0	88.9	109.9	304.8	367.6	385.9	400.3	418.6	425.1	425.1
75°	36.6	45.8	83.7	98.1	249.8	300.9	316.5	330.9	345.3	347.9	344.0
77.5°	32.7	40.5	71.9	82.4	194.9	238.1	251.1	259.0	270.8	273.4	274.7
80°	27.5	35.3	56.2	64.1	141.3	175.3	184.4	191.0	201.4	201.4	204.1
82.5°	20.9	27.5	40.5	45.8	95.5	120.3	128.2	132.1	138.7	138.7	138.7
85°	13.1	17.0	26.2	30.1	57.6	73.3	78.5	79.8	85.0	86.3	86.3
87.5°	6.5	9.2	17.0	18.3	30.1	37.9	37.9	40.5	40.5	39.2	37.9
90°	5.4	9.8	14.1	15.3	24.0	35.6	41.3	36.7	27.6	20.7	20.7
92.5°	21.8	58.8	95.7	105.0	147.6	204.4	232.8	204.1	146.5	103.3	99.2
95°	52.2	119.9	187.7	204.6	363.3	574.8	680.6	607.4	460.8	350.9	338.4
97.5°	90.3	150.1	209.8	224.7	489.3	842.1	1018.5	972.2	879.6	810.1	786.4
100°	119.7	173.9	228.0	241.6	535.2	926.6	1122.4	1125.8	1132.6	1137.7	1109.4
102.5°	144.8	195.3	245.8	258.5	556.3	953.3	1151.8	1210.8	1328.8	1417.3	1393.2
105°	187.1	230.0	272.8	283.5	571.9	956.4	1148.6	1280.8	1545.3	1743.7	1730.7
107.5°	230.7	270.6	310.5	320.5	574.8	913.7	1083.2	1267.8	1636.7	1913.5	1916.6
110°	260.0	296.1	332.2	341.1	570.4	876.0	1028.8	1235.1	1647.6	1957.0	1970.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	288.9	323.3	357.6	366.2	570.6	843.1	979.3	1190.4	1612.7	1929.3	1950.0
115°	332.4	364.1	395.7	403.7	575.8	805.2	920.0	1123.4	1530.2	1835.2	1864.1
117.5°	375.4	404.2	433.0	440.1	586.4	781.6	879.2	1062.7	1429.8	1705.1	1737.1
120°	400.4	427.6	454.6	461.4	595.3	773.7	862.9	1030.6	1366.0	1617.5	1648.6
122.5°	424.9	452.2	479.6	486.4	607.7	769.5	850.4	1001.4	1303.4	1529.9	1560.6
125°	462.4	487.4	512.3	518.5	624.6	766.1	836.8	965.1	1221.6	1414.1	1442.3
127.5°	493.0	518.1	543.3	549.6	641.5	764.1	825.4	935.5	1155.8	1321.0	1344.9
130°	509.3	536.4	563.4	570.2	653.9	765.3	821.0	919.0	1115.2	1262.3	1284.2
132.5°	526.1	553.2	580.3	587.1	663.8	766.1	817.2	905.0	1080.5	1212.2	1231.9
135°	551.1	575.8	600.5	606.7	674.7	765.3	810.6	884.2	1031.2	1141.5	1158.5
137.5°	576.7	601.1	625.6	631.7	691.0	770.1	809.6	871.8	996.0	1089.3	1103.1
140°	598.0	620.5	643.0	648.5	700.9	770.8	805.8	859.5	966.8	1047.3	1060.3
142.5°	614.3	635.1	655.9	661.1	709.3	773.6	805.8	852.9	947.2	1017.9	1029.1
145°	639.3	657.4	675.6	680.1	720.2	773.7	800.4	838.9	916.1	973.9	982.3
147.5°	664.3	681.9	699.5	704.0	736.1	778.9	800.4	830.7	891.4	936.9	943.9
150°	680.6	696.6	712.5	716.6	744.5	781.7	800.4	826.0	877.2	915.6	921.3
152.5°	697.5	709.7	721.7	724.7	749.9	783.5	800.4	822.2	866.0	898.8	903.1
155°	722.6	731.5	740.4	742.6	761.9	787.5	800.4	817.8	852.6	878.7	881.5
157.5°	741.1	749.8	758.4	760.6	773.8	791.5	800.4	813.9	841.0	861.3	863.3
160°	753.5	760.3	767.1	768.8	779.3	793.4	800.4	812.0	835.1	852.6	853.7
162.5°	766.1	771.1	776.2	777.5	785.1	795.3	800.4	810.1	829.7	844.4	845.4
165°	779.7	784.2	788.8	790.0	793.5	798.1	800.4	807.3	821.4	831.9	833.1
167.5°	792.2	794.3	796.5	797.0	799.9	803.8	805.8	810.4	819.5	826.4	826.9
170°	800.4	802.5	804.7	805.2	805.4	805.7	805.8	810.4	819.5	826.4	826.4
172.5°	804.7	805.1	805.7	805.8	805.8	805.8	805.8	809.4	816.7	822.1	821.6
175°	810.6	810.6	810.6	810.6	809.0	806.8	805.8	808.0	812.6	816.1	816.1
177.5°	810.6	810.6	810.6	810.6	809.4	807.8	806.9	808.7	812.3	815.0	814.5
180°	810.6	810.6	810.6	810.6	810.6	810.6	810.6	810.6	810.6	810.6	810.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	406.8	406.8
2.5°	434.3	431.7
5°	558.5	561.2
7.5°	752.1	750.8
10°	935.3	947.0
12.5°	1068.8	1071.4
15°	1149.9	1155.1
17.5°	1181.3	1182.6
20°	1182.6	1179.9
22.5°	1168.2	1165.6
25°	1151.2	1149.9
27.5°	1135.5	1136.8
30°	1128.9	1132.9
32.5°	1128.9	1135.5
35°	1131.6	1138.1
37.5°	1130.2	1138.1
40°	1125.0	1134.2
42.5°	1110.6	1117.2
45°	1088.4	1096.2
47.5°	1059.6	1064.8
50°	1023.0	1028.2
52.5°	977.1	978.4
55°	922.2	927.4
57.5°	863.3	864.6
60°	797.9	801.8
62.5°	728.6	728.6
65°	655.3	657.9
67.5°	579.5	586.0
70°	502.3	503.6
72.5°	426.4	426.4
75°	347.9	349.2
77.5°	273.4	273.4
80°	202.7	204.1
82.5°	140.0	142.6
85°	87.6	87.6
87.5°	40.5	36.6
90°	20.7	20.7
92.5°	82.8	66.4
95°	288.6	238.9
97.5°	691.6	596.8
100°	996.5	883.5
102.5°	1296.4	1199.7
105°	1678.8	1626.8
107.5°	1929.3	1941.8
110°	2024.8	2078.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2033.2	2116.4
115°	1979.3	2094.7
117.5°	1865.0	1992.9
120°	1772.9	1897.2
122.5°	1683.2	1805.8
125°	1555.2	1668.1
127.5°	1440.2	1535.4
130°	1372.3	1460.3
132.5°	1310.8	1389.6
135°	1226.4	1294.4
137.5°	1158.8	1214.4
140°	1112.4	1164.3
142.5°	1073.9	1118.6
145°	1016.3	1050.1
147.5°	972.0	1000.0
150°	944.1	966.8
152.5°	920.3	937.4
155°	892.9	904.2
157.5°	871.2	879.2
160°	858.3	862.9
162.5°	849.8	854.2
165°	837.7	842.2
167.5°	828.9	830.8
170°	826.4	826.4
172.5°	820.0	818.3
175°	816.1	816.1
177.5°	812.6	810.6
180°	810.6	810.6



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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	2.94	3.73	3.99	4.79	6.22	16.10	16.89	17.15	17.95	19.39
	3H	3.64	4.35	4.70	5.41	6.87	17.93	18.64	18.99	19.71	21.16
	4H	3.93	4.60	5.01	5.67	7.14	18.57	19.24	19.64	20.31	21.77
	6H	4.18	4.80	5.26	5.87	7.35	18.99	19.61	20.08	20.68	22.16
	8H	4.25	4.83	5.33	5.92	7.39	19.11	19.70	20.20	20.79	22.26
	12H	4.26	4.82	5.35	5.90	7.40	19.17	19.73	20.26	20.82	22.31
4H	2H	10.14	10.81	11.22	11.88	13.34	16.37	17.04	17.45	18.11	19.57
	3H	11.70	12.26	12.79	13.36	14.83	18.40	18.96	19.49	20.06	21.54
	4H	11.79	12.30	12.88	13.39	14.89	19.16	19.68	20.26	20.77	22.26
	6H	11.80	12.24	12.90	13.35	14.84	19.69	20.14	20.79	21.25	22.74
	8H	11.77	12.18	12.87	13.29	14.79	19.85	20.26	20.95	21.37	22.87
	12H	11.72	12.10	12.84	13.21	14.73	19.94	20.31	21.06	21.43	22.94
8H	4H	13.22	13.64	14.33	14.74	16.25	19.22	19.63	20.32	20.73	22.24
	6H	13.46	13.81	14.59	14.95	16.45	19.84	20.18	20.96	21.33	22.83
	8H	13.48	13.78	14.61	14.91	16.43	20.06	20.36	21.18	21.48	23.00
	12H	13.44	13.71	14.58	14.83	16.39	20.19	20.46	21.33	21.58	23.14
12H	4H	13.36	13.74	14.48	14.85	16.36	19.17	19.54	20.28	20.66	22.17
	6H	13.72	14.02	14.85	15.15	16.67	19.82	20.12	20.95	21.25	22.77
	8H	13.79	14.05	14.92	15.17	16.73	20.04	20.31	21.18	21.43	22.99