

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: P937564

Luminaire Tested: SQ4-FB-100U-075D-93050-1D-UNV-STD-W-6-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937564
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-93050-1D-UNV-STD-W-6-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

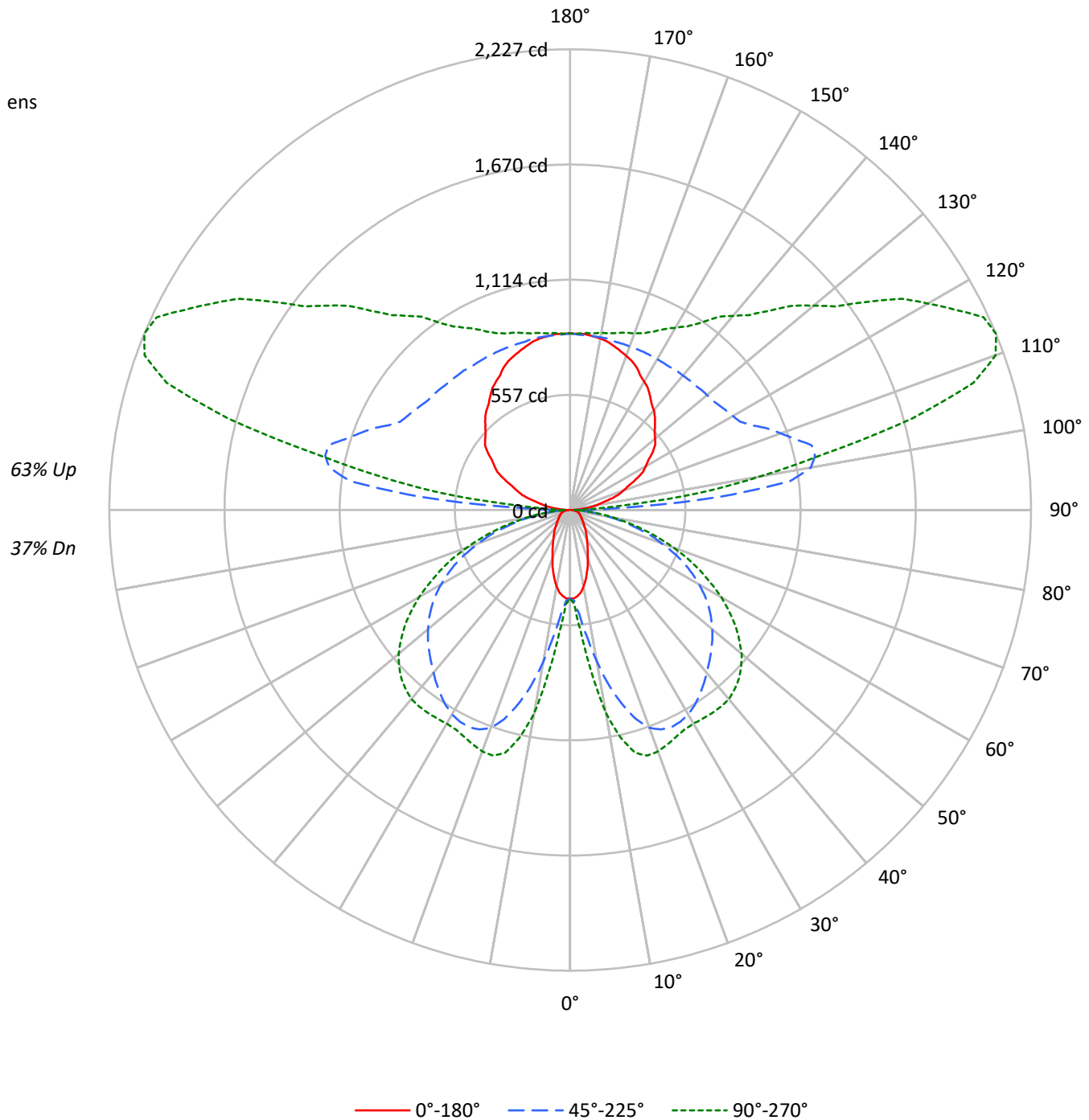
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8845.6 lumens
Efficiency: N/A
Efficacy: 119.9 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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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°	2648	2648	2648
5°	2586	3060	3559
10°	2345	4460	5901
15°	1992	5825	7127
20°	1621	6749	7263
25°	1352	7061	7116
30°	1140	7103	7102
35°	1007	6984	7286
40°	877	6828	7476
45°	793	6714	7505
50°	728	6610	7381
55°	696	6461	7053
60°	712	6174	6536
65°	739	5740	5827
70°	785	5002	4923
75°	866	4075	3841
80°	941	2823	2588
85°	823	1495	1324

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7505 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	0.6
10°-20°	245.4	2.8
20°-30°	429.3	4.9
30°-40°	552.7	6.2
40°-50°	617.3	7.0
50°-60°	591.2	6.7
60°-70°	468.5	5.3
70°-80°	275.5	3.1
80°-90°	79.8	0.9
90°-100°	415.8	4.7
100°-110°	1093.3	12.4
110°-120°	1133.6	12.8
120°-130°	909.3	10.3
130°-140°	713.5	8.1
140°-150°	547.6	6.2
150°-160°	394.4	4.5
160°-170°	241.3	2.7
170°-180°	81.5	0.9
0°-30°	730.1	8.3
0°-40°	1282.8	14.5
0°-60°	2491.3	28.2
0°-90°	3315.2	37.5
90°-120°	2642.8	29.9
90°-150°	4813.2	54.4
90°-180°	5530.0	62.5
0°-180°	8845.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	428	428	428	428	428	
5°	417	447	504	570	590	38
15°	312	577	972	1178	1216	87
25°	200	654	1158	1209	1210	92
35°	135	625	1090	1152	1198	84
45°	92	498	964	1104	1154	71
55°	66	317	818	950	976	60
65°	52	168	607	683	692	52
75°	38	103	333	366	368	40
85°	14	32	83	91	92	15
90°	6	16	44	22	22	6
95°	55	215	716	369	251	61
105°	197	298	1209	1835	1712	209
115°	350	425	968	1931	2204	346
125°	487	546	881	1488	1756	432
135°	580	638	853	1201	1362	449
145°	673	716	842	1025	1105	421
155°	760	782	842	925	952	349
165°	820	831	842	876	886	232
175°	853	853	848	859	859	81
180°	853	853	853	853	853	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1
2.5°	428.1	428.1	430.9	432.2	435.0	436.4	439.1	441.9	450.1	451.5	454.3
5°	417.1	422.6	440.5	447.4	466.6	492.8	503.8	521.7	558.9	569.9	576.8
7.5°	400.6	413.0	457.0	468.0	516.2	585.0	613.9	652.5	711.7	740.6	764.0
10°	374.4	400.6	479.0	505.2	583.7	688.3	742.0	795.6	885.1	925.0	940.2
12.5°	345.5	388.2	502.4	538.2	651.1	803.9	868.6	927.8	1029.7	1083.4	1091.7
15°	312.5	370.3	524.5	576.8	722.7	900.3	971.8	1044.9	1139.9	1178.4	1188.0
17.5°	283.6	356.5	545.1	600.2	777.7	987.0	1060.0	1120.6	1197.7	1223.8	1230.7
20°	247.8	334.5	558.9	630.5	835.6	1050.4	1120.6	1167.4	1219.7	1236.2	1239.0
22.5°	221.6	311.1	567.1	641.5	874.1	1088.9	1148.1	1185.3	1221.1	1226.6	1228.0
25°	199.6	284.9	565.8	653.9	907.1	1112.3	1157.8	1185.3	1205.9	1208.7	1208.7
27.5°	179.0	256.0	560.3	656.6	931.9	1117.8	1153.6	1172.9	1182.5	1188.0	1188.0
30°	161.1	228.5	546.5	651.1	942.9	1112.3	1141.2	1150.9	1160.5	1168.8	1172.9
32.5°	147.3	202.4	525.8	640.1	944.3	1098.6	1119.2	1124.7	1138.5	1157.8	1164.6
35°	134.9	176.2	502.4	625.0	936.0	1076.5	1090.3	1095.8	1123.4	1152.3	1161.9
37.5°	122.5	156.9	472.2	598.8	923.7	1050.4	1060.0	1069.7	1112.3	1146.8	1157.8
40°	110.1	140.4	436.4	569.9	904.4	1018.6	1026.9	1042.0	1098.6	1138.5	1149.5
42.5°	100.5	126.6	397.8	539.6	879.6	982.9	995.2	1017.3	1082.1	1124.7	1137.1
45°	92.2	112.9	356.5	498.3	848.0	945.7	963.6	993.9	1062.8	1104.1	1115.1
47.5°	84.0	103.2	313.9	455.6	813.5	908.5	931.9	966.3	1036.5	1076.5	1086.2
50°	77.1	93.6	271.2	410.2	776.4	868.6	896.1	931.9	1003.5	1040.7	1053.1
52.5°	71.6	85.3	231.3	364.8	733.7	827.3	859.0	896.1	963.6	999.4	1007.6
55°	66.1	78.5	196.8	316.6	689.6	783.3	817.7	853.5	919.5	949.8	955.3
57.5°	63.3	73.0	167.9	271.2	642.8	733.7	772.2	805.3	867.2	890.6	896.1
60°	59.2	68.8	145.9	232.6	591.9	686.9	719.9	753.0	805.3	824.5	828.7
62.5°	55.1	66.1	129.4	195.5	539.6	631.8	664.9	695.2	739.2	753.0	758.5
65°	52.3	63.3	117.0	167.9	485.9	574.0	607.1	633.2	669.0	682.8	685.5
67.5°	49.6	60.6	107.4	144.5	432.2	516.2	541.0	565.8	593.3	607.1	608.4
70°	45.4	57.8	99.1	128.0	377.2	450.1	470.8	496.9	519.0	525.8	530.0
72.5°	42.7	53.7	93.6	115.6	320.7	386.8	406.1	421.2	440.5	447.4	447.4
75°	38.5	48.2	88.1	103.2	262.9	316.6	333.1	348.3	363.4	366.2	362.0
77.5°	34.4	42.7	75.7	86.7	205.1	250.5	264.3	272.6	284.9	287.7	289.1
80°	28.9	37.2	59.2	67.5	148.7	184.5	194.1	201.0	212.0	212.0	214.7
82.5°	22.0	28.9	42.7	48.2	100.5	126.6	134.9	139.0	145.9	145.9	145.9
85°	13.8	17.9	27.5	31.7	60.6	77.1	82.6	84.0	89.5	90.9	90.9
87.5°	6.9	9.6	17.9	19.3	31.7	39.9	39.9	42.7	42.7	41.3	39.9
90°	5.7	10.3	14.9	16.1	25.2	37.4	43.5	38.6	29.0	21.7	21.7
92.5°	22.9	61.9	100.8	110.5	155.4	215.1	245.0	214.7	154.2	108.7	104.4
95°	55.0	126.2	197.5	215.3	382.3	604.9	716.3	639.2	484.9	369.3	356.2
97.5°	95.1	157.9	220.8	236.5	514.9	886.2	1071.9	1023.1	925.7	852.5	827.6
100°	126.0	183.0	240.0	254.2	563.2	975.1	1181.2	1184.7	1191.9	1197.2	1167.5
102.5°	152.3	205.6	258.7	272.0	585.4	1003.2	1212.1	1274.2	1398.4	1491.5	1466.1
105°	196.9	242.0	287.1	298.3	601.8	1006.4	1208.7	1347.9	1626.2	1835.0	1821.3
107.5°	242.7	284.8	326.8	337.3	604.9	961.6	1140.0	1334.1	1722.4	2013.7	2017.0
110°	273.7	311.6	349.6	359.0	600.3	921.9	1082.7	1299.7	1733.9	2059.5	2073.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	304.0	340.2	376.3	385.3	600.4	887.2	1030.6	1252.7	1697.1	2030.3	2052.1
115°	349.8	383.1	416.4	424.8	606.0	847.4	968.2	1182.2	1610.3	1931.3	1961.7
117.5°	395.1	425.4	455.6	463.2	617.1	822.5	925.2	1118.4	1504.7	1794.4	1828.0
120°	421.4	449.9	478.4	485.6	626.4	814.2	908.1	1084.5	1437.5	1702.2	1734.9
122.5°	447.2	475.9	504.7	511.9	639.5	809.8	894.9	1053.9	1371.7	1610.0	1642.3
125°	486.7	512.9	539.1	545.7	657.3	806.2	880.6	1015.6	1285.6	1488.1	1517.9
127.5°	518.8	545.2	571.7	578.3	675.1	804.1	868.6	984.5	1216.3	1390.2	1415.3
130°	535.9	564.5	592.9	600.1	688.1	805.4	864.0	967.2	1173.5	1328.4	1351.5
132.5°	553.6	582.2	610.6	617.8	698.5	806.2	860.0	952.4	1137.1	1275.7	1296.4
135°	580.0	606.0	631.9	638.4	710.0	805.4	853.1	930.5	1085.2	1201.3	1219.2
137.5°	606.9	632.6	658.4	664.8	727.2	810.4	852.0	917.4	1048.2	1146.3	1160.9
140°	629.3	652.9	676.6	682.5	737.6	811.2	848.0	904.5	1017.4	1102.2	1115.8
142.5°	646.4	668.4	690.2	695.7	746.5	814.1	848.0	897.6	996.8	1071.2	1083.0
145°	672.8	691.9	710.9	715.7	757.9	814.2	842.3	882.8	964.0	1024.9	1033.8
147.5°	699.1	717.6	736.2	740.9	774.6	819.7	842.3	874.2	938.1	986.0	993.3
150°	716.3	733.1	749.8	754.1	783.4	822.6	842.3	869.2	923.1	963.6	969.5
152.5°	734.1	746.8	759.5	762.7	789.2	824.5	842.3	865.3	911.4	945.9	950.4
155°	760.4	769.8	779.1	781.5	801.8	828.8	842.3	860.6	897.2	924.7	927.7
157.5°	779.9	789.0	798.1	800.4	814.4	833.0	842.3	856.5	885.0	906.4	908.5
160°	793.0	800.1	807.3	809.0	820.1	834.9	842.3	854.5	878.9	897.2	898.4
162.5°	806.2	811.5	816.8	818.2	826.2	836.9	842.3	852.5	873.2	888.6	889.7
165°	820.5	825.3	830.1	831.3	835.0	839.9	842.3	849.6	864.4	875.5	876.7
167.5°	833.6	835.9	838.2	838.8	841.8	845.9	848.0	852.8	862.4	869.7	870.3
170°	842.3	844.6	846.8	847.4	847.6	847.9	848.0	852.8	862.4	869.7	869.7
172.5°	846.8	847.3	847.9	848.0	848.0	848.0	848.0	851.8	859.4	865.1	864.7
175°	853.1	853.1	853.1	853.1	851.3	849.1	848.0	850.3	855.2	858.9	858.9
177.5°	853.1	853.1	853.1	853.1	851.8	850.1	849.1	851.1	854.8	857.7	857.1
180°	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1	853.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	428.1	428.1
2.5°	457.0	454.3
5°	587.8	590.5
7.5°	791.5	790.1
10°	984.2	996.6
12.5°	1124.7	1127.5
15°	1210.1	1215.6
17.5°	1243.1	1244.5
20°	1244.5	1241.7
22.5°	1229.3	1226.6
25°	1211.4	1210.1
27.5°	1194.9	1196.3
30°	1188.0	1192.2
32.5°	1188.0	1194.9
35°	1190.8	1197.7
37.5°	1189.4	1197.7
40°	1183.9	1193.6
42.5°	1168.8	1175.7
45°	1145.4	1153.6
47.5°	1115.1	1120.6
50°	1076.5	1082.1
52.5°	1028.3	1029.7
55°	970.5	976.0
57.5°	908.5	909.9
60°	839.7	843.8
62.5°	766.7	766.7
65°	689.6	692.4
67.5°	609.8	616.7
70°	528.6	530.0
72.5°	448.8	448.8
75°	366.2	367.5
77.5°	287.7	287.7
80°	213.4	214.7
82.5°	147.3	150.0
85°	92.2	92.2
87.5°	42.7	38.5
90°	21.7	21.7
92.5°	87.1	69.8
95°	303.8	251.4
97.5°	727.8	628.1
100°	1048.7	929.8
102.5°	1364.2	1262.5
105°	1766.7	1712.0
107.5°	2030.3	2043.5
110°	2130.8	2187.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2139.7	2227.2
115°	2083.0	2204.4
117.5°	1962.7	2097.3
120°	1865.8	1996.5
122.5°	1771.3	1900.4
125°	1636.6	1755.5
127.5°	1515.6	1615.8
130°	1444.2	1536.8
132.5°	1379.4	1462.3
135°	1290.6	1362.1
137.5°	1219.4	1278.0
140°	1170.6	1225.3
142.5°	1130.1	1177.2
145°	1069.5	1105.1
147.5°	1022.9	1052.4
150°	993.5	1017.4
152.5°	968.4	986.5
155°	939.6	951.6
157.5°	916.9	925.2
160°	903.3	908.1
162.5°	894.3	898.9
165°	881.5	886.3
167.5°	872.3	874.3
170°	869.7	869.7
172.5°	862.9	861.2
175°	858.9	858.9
177.5°	855.1	853.1
180°	853.1	853.1



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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	3.12	3.90	4.17	4.96	6.40	16.28	17.07	17.33	18.13	19.56
	3H	3.82	4.52	4.88	5.59	7.04	18.11	18.82	19.17	19.88	21.34
	4H	4.11	4.78	5.18	5.85	7.31	18.75	19.42	19.82	20.49	21.95
	6H	4.36	4.97	5.44	6.05	7.52	19.17	19.79	20.25	20.86	22.34
	8H	4.42	5.01	5.51	6.10	7.57	19.29	19.87	20.37	20.96	22.43
	12H	4.44	5.00	5.53	6.08	7.57	19.35	19.91	20.44	20.99	22.49
4H	2H	10.31	10.98	11.39	12.05	13.52	16.55	17.22	17.63	18.29	19.75
	3H	11.88	12.44	12.96	13.53	15.01	18.58	19.14	19.67	20.24	21.71
	4H	11.97	12.48	13.06	13.57	15.07	19.34	19.86	20.43	20.94	22.44
	6H	11.97	12.42	13.07	13.53	15.02	19.87	20.31	20.97	21.42	22.91
	8H	11.95	12.36	13.05	13.47	14.97	20.03	20.44	21.13	21.55	23.05
	12H	11.90	12.28	13.02	13.39	14.90	20.12	20.49	21.23	21.61	23.12
8H	4H	13.40	13.82	14.50	14.92	16.42	19.39	19.81	20.50	20.91	22.42
	6H	13.64	13.98	14.76	15.13	16.63	20.02	20.36	21.14	21.50	23.01
	8H	13.66	13.96	14.79	15.08	16.61	20.23	20.53	21.36	21.66	23.18
	12H	13.62	13.89	14.76	15.01	16.57	20.37	20.63	21.50	21.76	23.32
12H	4H	13.54	13.92	14.66	15.03	16.54	19.34	19.72	20.46	20.83	22.35
	6H	13.90	14.20	15.03	15.32	16.85	20.00	20.30	21.13	21.42	22.95
	8H	13.96	14.23	15.10	15.35	16.91	20.22	20.49	21.36	21.61	23.17