

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: P938023

Luminaire Tested: SQ4-FB-125U-100D-927-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938023
REPORT IS A COMBINATION OF REPORTS P933607 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

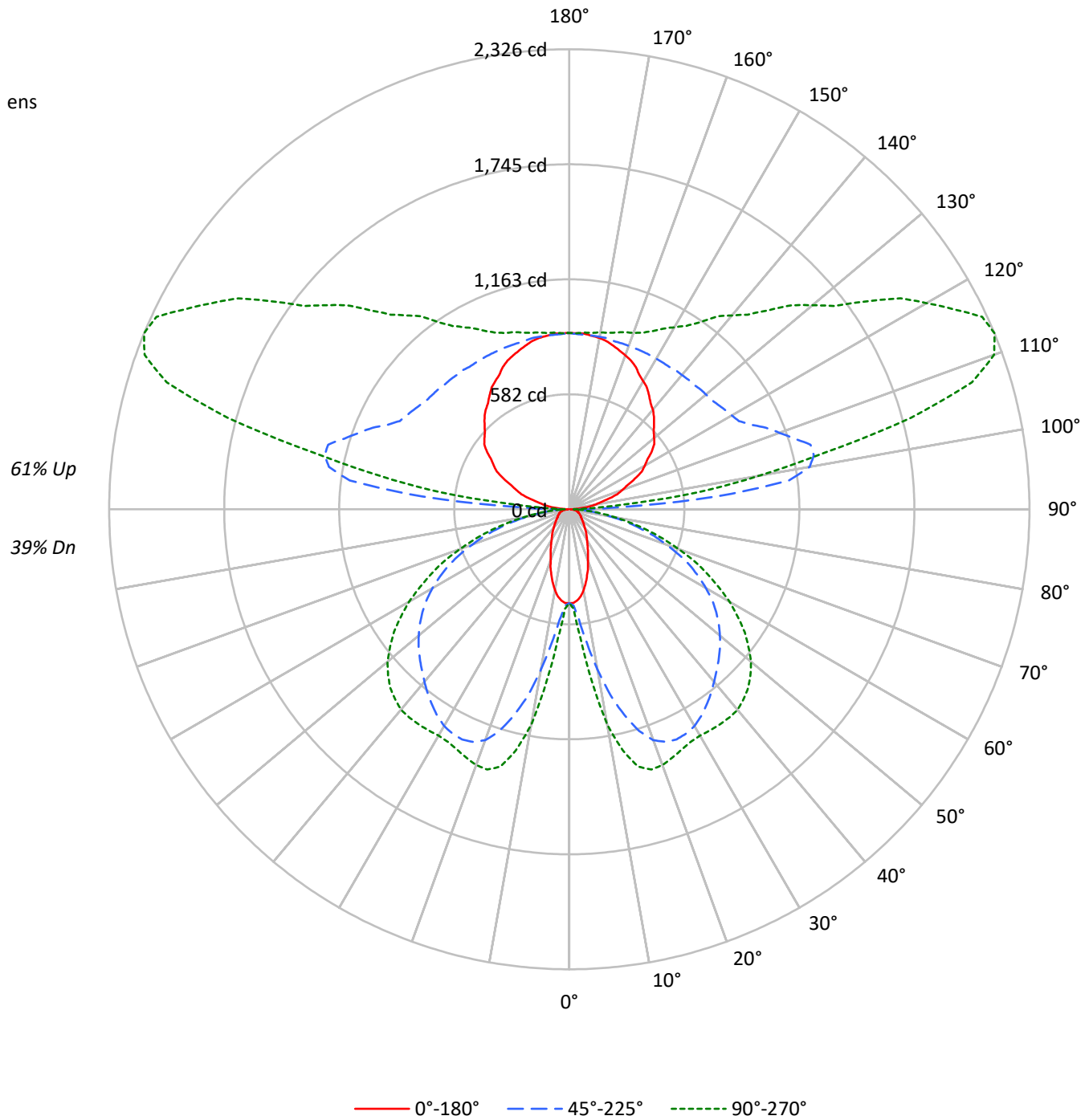
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9451.0 lumens
Efficiency: N/A
Efficacy: 97.8 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): 96.6
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				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	95	95	95	95	77	77	77	61	61	61	46	46	46	39				39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32				32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26				26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21				21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18				18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15				15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13				13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11				11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10				10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9				9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8				8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2936	2936	2936
5°	2867	3392	3946
10°	2599	4944	6542
15°	2209	6458	7899
20°	1797	7482	8051
25°	1499	7827	7887
30°	1264	7874	7872
35°	1116	7742	8076
40°	972	7570	8286
45°	880	7443	8318
50°	807	7329	8181
55°	771	7161	7818
60°	789	6844	7246
65°	820	6363	6458
70°	872	5545	5457
75°	961	4517	4258
80°	1042	3128	2870
85°	906	1658	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8318 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.4	0.6
10°-20°	272.1	2.9
20°-30°	475.9	5.0
30°-40°	612.6	6.5
40°-50°	684.3	7.2
50°-60°	655.4	6.9
60°-70°	519.4	5.5
70°-80°	305.4	3.2
80°-90°	88.3	0.9
90°-100°	434.3	4.6
100°-110°	1141.9	12.1
110°-120°	1184.0	12.5
120°-130°	949.7	10.0
130°-140°	745.2	7.9
140°-150°	572.0	6.1
150°-160°	411.9	4.4
160°-170°	252.0	2.7
170°-180°	85.1	0.9
0°-30°	809.4	8.6
0°-40°	1422.0	15.0
0°-60°	2761.7	29.2
0°-90°	3674.8	38.9
90°-120°	2760.2	29.2
90°-150°	5027.1	53.2
90°-180°	5776.0	61.1
0°-180°	9451.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	462	496	558	632	655	43
15°	346	639	1077	1306	1347	96
25°	221	725	1283	1340	1341	102
35°	150	693	1209	1277	1328	93
45°	102	552	1068	1224	1279	79
55°	73	351	906	1053	1082	67
65°	58	186	673	757	768	57
75°	43	114	369	406	407	45
85°	15	35	92	101	102	16
90°	6	17	45	23	23	6
95°	57	225	748	386	262	64
105°	206	312	1262	1917	1788	218
115°	365	444	1011	2017	2302	361
125°	508	570	920	1554	1834	451
135°	606	667	891	1255	1423	469
145°	703	748	880	1070	1154	440
155°	794	816	880	966	994	365
165°	857	868	880	914	926	242
175°	891	891	886	897	897	85
180°	891	891	891	891	891	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6
2.5°	474.6	474.6	477.6	479.2	482.2	483.7	486.8	489.9	499.0	500.5	503.6
5°	462.4	468.5	488.3	496.0	517.3	546.3	558.5	578.3	619.5	631.8	639.4
7.5°	444.1	457.8	506.7	518.8	572.3	648.6	680.6	723.3	788.9	821.0	846.9
10°	415.0	444.1	531.1	560.0	647.0	763.0	822.5	882.0	981.2	1025.5	1042.3
12.5°	383.0	430.4	557.0	596.7	721.8	891.2	962.9	1028.5	1141.4	1201.0	1210.1
15°	346.4	410.5	581.4	639.4	801.1	998.0	1077.4	1158.2	1263.5	1306.2	1316.9
17.5°	314.4	395.2	604.3	665.4	862.2	1094.2	1175.0	1242.2	1327.6	1356.6	1364.2
20°	274.7	370.8	619.5	698.9	926.3	1164.3	1242.2	1294.1	1352.0	1370.4	1373.4
22.5°	245.7	344.9	628.7	711.1	969.0	1207.1	1272.7	1313.9	1353.6	1359.7	1361.2
25°	221.3	315.9	627.2	724.9	1005.6	1233.0	1283.4	1313.9	1336.8	1339.8	1339.8
27.5°	198.4	283.8	621.1	727.9	1033.1	1239.1	1278.7	1300.1	1310.8	1316.9	1316.9
30°	178.6	253.3	605.8	721.8	1045.3	1233.0	1265.0	1275.7	1286.4	1295.5	1300.1
32.5°	163.3	224.3	582.9	709.6	1046.8	1217.8	1240.6	1246.7	1262.0	1283.4	1291.0
35°	149.5	195.3	557.0	692.8	1037.7	1193.3	1208.6	1214.7	1245.2	1277.3	1287.9
37.5°	135.8	173.9	523.4	663.8	1023.9	1164.3	1175.0	1185.7	1233.0	1271.1	1283.4
40°	122.0	155.6	483.7	631.8	1002.5	1129.2	1138.4	1155.2	1217.8	1262.0	1274.2
42.5°	111.4	140.4	441.0	598.2	975.1	1089.6	1103.3	1127.7	1199.4	1246.7	1260.5
45°	102.3	125.1	395.2	552.4	940.0	1048.4	1068.2	1101.8	1178.0	1223.8	1236.1
47.5°	93.1	114.4	348.0	505.1	901.8	1007.2	1033.1	1071.2	1149.1	1193.3	1204.0
50°	85.5	103.8	300.6	454.8	860.6	962.9	993.5	1033.1	1112.4	1153.6	1167.4
52.5°	79.4	94.6	256.3	404.4	813.4	917.1	952.2	993.5	1068.2	1107.9	1117.0
55°	73.2	87.0	218.2	351.0	764.5	868.3	906.4	946.1	1019.3	1052.9	1059.1
57.5°	70.2	80.9	186.2	300.6	712.6	813.4	856.1	892.7	961.3	987.3	993.5
60°	65.6	76.3	161.8	257.9	656.2	761.5	798.1	834.7	892.7	914.1	918.6
62.5°	61.1	73.2	143.5	216.7	598.2	700.4	737.0	770.6	819.4	834.7	840.8
65°	58.0	70.2	129.7	186.2	538.7	636.3	673.0	701.9	741.7	756.9	759.9
67.5°	54.9	67.1	119.0	160.2	479.2	572.3	599.7	627.2	657.7	673.0	674.5
70°	50.4	64.1	109.9	141.9	418.1	499.0	521.9	550.9	575.3	582.9	587.5
72.5°	47.3	59.5	103.8	128.2	355.6	428.8	450.1	466.9	488.3	496.0	496.0
75°	42.7	53.4	97.6	114.4	291.4	351.0	369.3	386.1	402.9	405.9	401.3
77.5°	38.1	47.3	83.9	96.2	227.4	277.7	293.0	302.1	315.9	318.9	320.5
80°	32.0	41.2	65.6	74.8	164.8	204.5	215.1	222.8	235.0	235.0	238.1
82.5°	24.4	32.0	47.3	53.4	111.4	140.4	149.5	154.2	161.8	161.8	161.8
85°	15.2	19.9	30.5	35.1	67.1	85.5	91.6	93.1	99.2	100.7	100.7
87.5°	7.6	10.7	19.9	21.3	35.1	44.3	44.3	47.3	47.3	45.8	44.3
90°	6.0	10.8	15.6	16.7	26.3	39.0	45.4	40.3	30.3	22.7	22.7
92.5°	23.9	64.6	105.3	115.4	162.2	224.7	255.9	224.3	161.1	113.7	109.1
95°	57.4	131.8	206.2	224.8	399.2	631.9	748.1	667.6	506.5	385.7	372.0
97.5°	99.3	164.9	230.5	246.9	537.8	925.6	1119.5	1068.6	966.8	890.4	864.4
100°	131.6	191.1	250.6	265.5	588.2	1018.6	1233.7	1237.4	1244.9	1250.4	1219.4
102.5°	159.1	214.6	270.2	284.1	611.4	1047.7	1266.0	1330.8	1460.5	1557.8	1531.2
105°	205.7	252.8	299.8	311.5	628.5	1051.1	1262.4	1407.8	1698.5	1916.6	1902.3
107.5°	253.6	297.4	341.3	352.2	631.7	1004.3	1190.7	1393.5	1799.0	2103.2	2106.6
110°	285.8	325.4	365.0	374.9	626.9	962.8	1130.8	1357.5	1811.0	2151.1	2165.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	317.5	355.3	393.0	402.5	627.1	926.6	1076.4	1308.4	1772.5	2120.5	2143.4
115°	365.4	400.2	435.0	443.8	632.9	885.1	1011.2	1234.8	1681.8	2017.1	2048.8
117.5°	412.6	444.3	475.9	483.8	644.6	859.1	966.4	1168.1	1571.6	1874.2	1909.3
120°	440.1	469.9	499.7	507.1	654.2	850.3	948.4	1132.7	1501.3	1777.9	1812.0
122.5°	467.1	497.1	527.1	534.6	668.0	845.8	934.7	1100.7	1432.7	1681.6	1715.3
125°	508.3	535.7	563.0	569.9	686.5	842.0	919.8	1060.8	1342.7	1554.2	1585.3
127.5°	541.8	569.4	597.1	604.0	705.1	839.8	907.2	1028.3	1270.4	1452.0	1478.2
130°	559.7	589.5	619.2	626.7	718.6	841.1	902.4	1010.2	1225.7	1387.4	1411.6
132.5°	578.3	608.1	637.8	645.3	729.6	842.0	898.2	994.7	1187.6	1332.3	1354.0
135°	605.8	632.9	660.0	666.7	741.5	841.2	891.0	971.8	1133.4	1254.6	1273.3
137.5°	633.9	660.7	687.6	694.3	759.5	846.4	889.8	958.1	1094.7	1197.2	1212.4
140°	657.2	681.9	706.6	712.8	770.4	847.2	885.7	944.6	1062.7	1151.2	1165.5
142.5°	675.1	698.0	720.9	726.6	779.6	850.3	885.7	937.5	1041.1	1118.9	1131.2
145°	702.6	722.6	742.5	747.5	791.6	850.3	879.6	922.1	1006.9	1070.5	1079.8
147.5°	730.2	749.6	769.0	773.8	809.1	856.2	879.6	913.0	979.7	1029.8	1037.5
150°	748.1	765.7	783.2	787.6	818.3	859.2	879.6	907.8	964.2	1006.5	1012.7
152.5°	766.6	779.9	793.3	796.6	824.3	861.2	879.6	903.7	951.8	987.9	992.6
155°	794.2	804.0	813.8	816.3	837.4	865.6	879.6	898.8	937.1	965.8	969.0
157.5°	814.5	824.1	833.6	836.0	850.5	869.9	879.6	894.5	924.3	946.6	948.8
160°	828.2	835.7	843.2	845.0	856.5	871.9	879.6	892.4	917.9	937.1	938.3
162.5°	842.0	847.5	853.2	854.5	862.9	874.1	879.6	890.4	911.9	928.1	929.3
165°	856.9	862.0	867.1	868.3	872.1	877.1	879.6	887.3	902.8	914.4	915.6
167.5°	870.7	873.1	875.5	876.1	879.3	883.5	885.7	890.7	900.8	908.4	908.9
170°	879.6	882.0	884.4	885.0	885.3	885.5	885.7	890.7	900.8	908.4	908.4
172.5°	884.4	885.0	885.5	885.7	885.7	885.7	885.7	889.7	897.6	903.6	903.1
175°	891.0	891.0	891.0	891.0	889.3	886.9	885.7	888.2	893.3	897.0	897.0
177.5°	891.0	891.0	891.0	891.0	889.7	887.7	886.8	888.8	892.8	895.8	895.3
180°	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	474.6	474.6
2.5°	506.7	503.6
5°	651.6	654.7
7.5°	877.4	876.0
10°	1091.1	1104.8
12.5°	1246.7	1249.8
15°	1341.3	1347.4
17.5°	1378.0	1379.5
20°	1379.5	1376.5
22.5°	1362.7	1359.7
25°	1342.9	1341.3
27.5°	1324.6	1326.1
30°	1316.9	1321.5
32.5°	1316.9	1324.6
35°	1320.0	1327.6
37.5°	1318.5	1327.6
40°	1312.3	1323.0
42.5°	1295.5	1303.2
45°	1269.7	1278.7
47.5°	1236.1	1242.2
50°	1193.3	1199.4
52.5°	1139.9	1141.4
55°	1075.8	1081.9
57.5°	1007.2	1008.7
60°	930.9	935.4
62.5°	850.0	850.0
65°	764.5	767.5
67.5°	676.0	683.6
70°	586.0	587.5
72.5°	497.5	497.5
75°	405.9	407.4
77.5°	318.9	318.9
80°	236.5	238.1
82.5°	163.3	166.3
85°	102.3	102.3
87.5°	47.3	42.7
90°	22.7	22.7
92.5°	91.0	72.9
95°	317.2	262.5
97.5°	760.2	656.0
100°	1095.3	971.2
102.5°	1424.9	1318.6
105°	1845.2	1788.0
107.5°	2120.4	2134.3
110°	2225.5	2285.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2234.8	2326.2
115°	2175.6	2302.3
117.5°	2049.9	2190.5
120°	1948.6	2085.2
122.5°	1850.0	1984.8
125°	1709.4	1833.5
127.5°	1582.9	1687.6
130°	1508.4	1605.1
132.5°	1440.7	1527.3
135°	1348.0	1422.7
137.5°	1273.6	1334.7
140°	1222.6	1279.7
142.5°	1180.3	1229.5
145°	1117.0	1154.2
147.5°	1068.4	1099.2
150°	1037.7	1062.7
152.5°	1011.5	1030.3
155°	981.4	993.9
157.5°	957.6	966.4
160°	943.4	948.4
162.5°	934.1	938.9
165°	920.7	925.7
167.5°	911.0	913.1
170°	908.4	908.4
172.5°	901.3	899.4
175°	897.0	897.0
177.5°	893.2	891.0
180°	891.0	891.0



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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	3.63	4.43	4.67	5.48	6.90	16.80	17.59	17.84	18.65	20.06
	3H	4.33	5.05	5.38	6.11	7.55	18.63	19.34	19.68	20.40	21.84
	4H	4.63	5.31	5.69	6.37	7.81	19.27	19.94	20.33	21.01	22.45
	6H	4.87	5.50	5.95	6.57	8.02	19.69	20.31	20.76	21.38	22.84
	8H	4.94	5.54	6.02	6.62	8.07	19.80	20.40	20.88	21.48	22.93
	12H	4.96	5.52	6.04	6.60	8.07	19.87	20.43	20.95	21.51	22.99
4H	2H	10.83	11.51	11.90	12.57	14.02	17.06	17.74	18.13	18.81	20.25
	3H	12.39	12.96	13.47	14.05	15.51	19.10	19.67	20.17	20.76	22.21
	4H	12.49	13.01	13.57	14.09	15.57	19.86	20.38	20.94	21.46	22.94
	6H	12.49	12.94	13.58	14.04	15.52	20.39	20.84	21.48	21.94	23.41
	8H	12.47	12.89	13.56	13.98	15.47	20.55	20.97	21.64	22.06	23.55
	12H	12.42	12.80	13.53	13.91	15.40	20.64	21.02	21.74	22.12	23.62
8H	4H	13.92	14.34	15.01	15.44	16.92	19.91	20.33	21.01	21.43	22.92
	6H	14.16	14.51	15.27	15.64	17.13	20.54	20.88	21.65	22.02	23.51
	8H	14.18	14.48	15.30	15.60	17.11	20.75	21.06	21.87	22.18	23.68
	12H	14.14	14.41	15.27	15.53	17.07	20.89	21.16	22.02	22.27	23.82
12H	4H	14.06	14.44	15.17	15.55	17.04	19.86	20.24	20.97	21.35	22.85
	6H	14.42	14.72	15.54	15.84	17.35	20.52	20.82	21.64	21.94	23.45
	8H	14.48	14.75	15.61	15.87	17.41	20.74	21.01	21.87	22.13	23.67