

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: P937076

Luminaire Tested: SQ4-FB-075U-050D-940-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937076
REPORT IS A COMBINATION OF REPORTS P933517 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

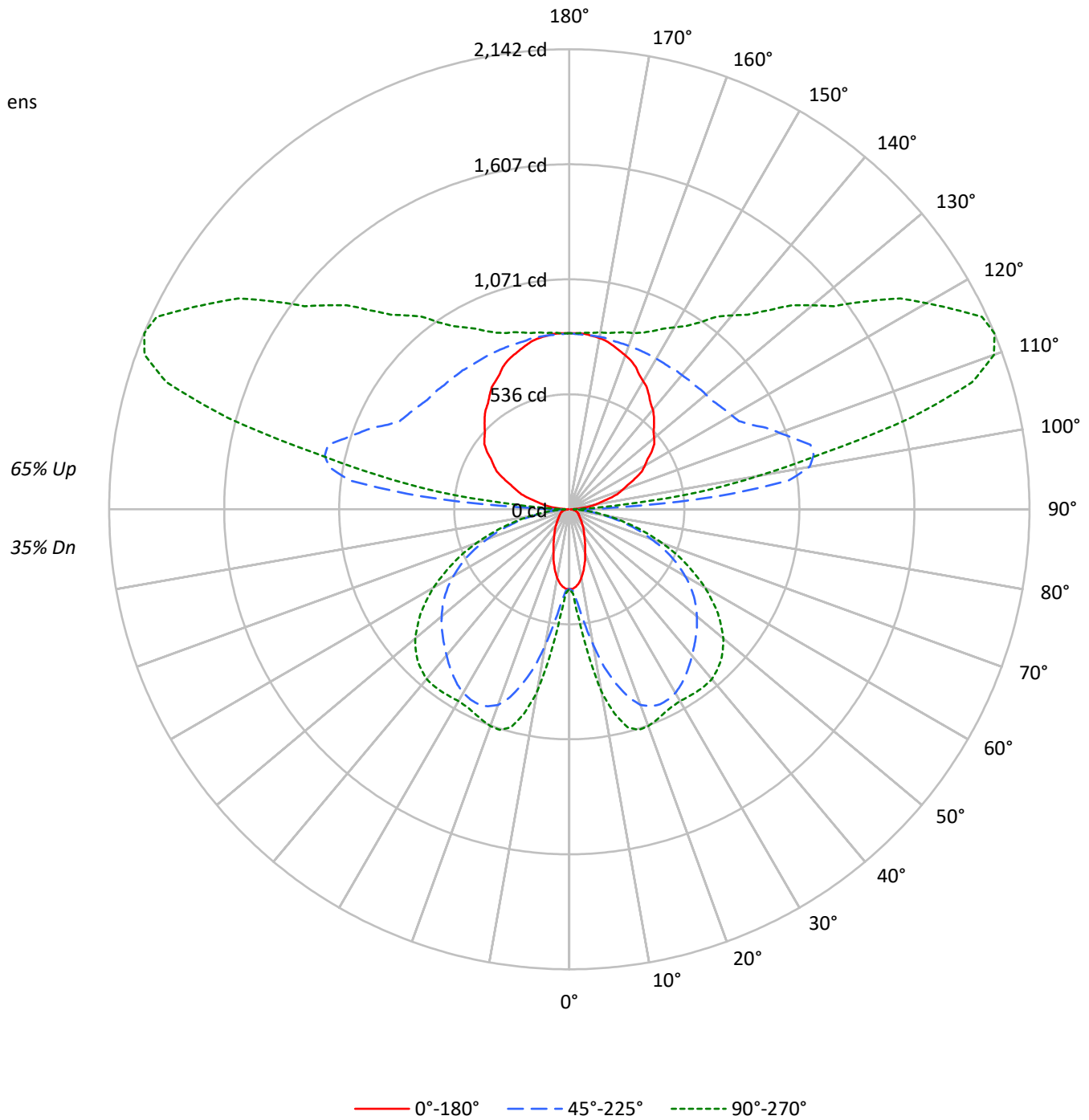
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8186.5 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 68.8
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				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	75	75	75	58	58	58	42	42	42	35				35
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29				29
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23				23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19				19
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16				16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14				14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12				12
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10				10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9				9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8				8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7				7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1719	1719	1719
5°	1679	1986	2310
10°	1523	2896	3830
15°	1294	3783	4624
20°	1054	4384	4713
25°	879	4587	4617
30°	741	4616	4609
35°	655	4540	4728
40°	571	4440	4851
45°	517	4367	4870
50°	474	4302	4789
55°	455	4205	4577
60°	465	4021	4241
65°	484	3740	3781
70°	515	3261	3195
75°	572	2659	2493
80°	624	1844	1680
85°	554	979	860

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4870 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.9	0.6
10°-20°	212.4	2.6
20°-30°	371.5	4.5
30°-40°	478.2	5.8
40°-50°	534.1	6.5
50°-60°	511.5	6.2
60°-70°	405.4	5.0
70°-80°	238.4	2.9
80°-90°	69.4	0.8
90°-100°	399.9	4.9
100°-110°	1051.3	12.8
110°-120°	1090.0	13.3
120°-130°	874.3	10.7
130°-140°	686.1	8.4
140°-150°	526.6	6.4
150°-160°	379.2	4.6
160°-170°	232.0	2.8
170°-180°	78.4	1.0
0°-30°	631.7	7.7
0°-40°	1109.9	13.6
0°-60°	2155.6	26.3
0°-90°	2868.7	35.0
90°-120°	2541.2	31.0
90°-150°	4628.1	56.5
90°-180°	5318.0	65.0
0°-180°	8186.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	370	370	370	370	370	
5°	361	387	436	493	511	33
15°	270	499	841	1020	1052	75
25°	173	566	1002	1046	1047	80
35°	117	541	943	997	1036	73
45°	80	431	834	955	998	62
55°	57	274	708	822	844	52
65°	45	145	525	591	599	45
75°	33	89	288	317	318	35
85°	12	27	72	79	80	13
90°	6	16	42	21	21	5
95°	53	207	689	355	242	59
105°	189	287	1162	1764	1646	201
115°	336	408	931	1857	2120	332
125°	468	525	847	1431	1688	415
135°	558	614	820	1155	1310	432
145°	647	688	810	986	1063	405
155°	731	752	810	889	915	336
165°	789	799	810	842	852	223
175°	820	820	815	826	826	78
180°	820	820	820	820	820	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	370.4	370.4	370.4	370.4	370.4	370.4	370.4	370.4	370.4	370.4	370.4
2.5°	370.4	370.4	372.8	374.0	376.3	377.6	380.0	382.4	389.5	390.6	393.0
5°	360.9	365.7	381.1	387.1	403.8	426.4	435.9	451.4	483.6	493.1	499.1
7.5°	346.6	357.3	395.4	404.9	446.7	506.2	531.2	564.6	615.7	640.8	661.0
10°	323.9	346.6	414.5	437.2	505.0	595.5	642.0	688.5	765.8	800.4	813.5
12.5°	299.0	335.8	434.8	465.7	563.3	695.6	751.6	802.8	890.9	937.4	944.5
15°	270.4	320.4	453.8	499.1	625.3	779.0	840.9	904.0	986.2	1019.5	1027.9
17.5°	245.4	308.5	471.7	519.3	672.9	854.0	917.1	969.5	1036.2	1058.9	1064.8
20°	214.4	289.4	483.6	545.5	723.0	908.8	969.5	1010.0	1055.3	1069.6	1072.0
22.5°	191.7	269.2	490.7	555.0	756.3	942.2	993.3	1025.6	1056.5	1061.2	1062.4
25°	172.7	246.5	489.6	565.7	784.9	962.4	1001.7	1025.6	1043.4	1045.8	1045.8
27.5°	154.9	221.6	484.8	568.1	806.4	967.1	998.1	1014.8	1023.2	1027.9	1027.9
30°	139.3	197.8	472.9	563.3	815.9	962.4	987.4	995.7	1004.1	1011.3	1014.8
32.5°	127.4	175.1	455.0	553.8	817.0	950.4	968.4	973.1	985.0	1001.7	1007.6
35°	116.7	152.5	434.8	540.7	809.9	931.4	943.3	948.1	971.9	997.0	1005.2
37.5°	106.0	135.8	408.6	518.1	799.2	908.8	917.1	925.5	962.4	992.2	1001.7
40°	95.3	121.5	377.6	493.1	782.5	881.4	888.5	901.7	950.4	985.0	994.6
42.5°	86.9	109.6	344.2	466.9	761.1	850.4	861.2	880.2	936.2	973.1	983.8
45°	79.8	97.7	308.5	431.1	733.7	818.3	833.7	859.9	919.5	955.2	964.7
47.5°	72.6	89.3	271.6	394.3	703.9	786.1	806.4	836.1	896.9	931.4	939.8
50°	66.7	81.0	234.6	354.9	671.8	751.6	775.4	806.4	868.3	900.4	911.2
52.5°	61.9	73.9	200.1	315.6	634.8	715.8	743.3	775.4	833.7	864.7	871.8
55°	57.2	67.9	170.3	273.9	596.7	677.7	707.5	738.5	795.6	821.8	826.6
57.5°	54.8	63.1	145.3	234.6	556.2	634.8	668.2	696.8	750.4	770.6	775.4
60°	51.2	59.6	126.3	201.3	512.2	594.3	622.9	651.5	696.8	713.4	717.1
62.5°	47.7	57.2	112.0	169.2	466.9	546.7	575.2	601.5	639.6	651.5	656.3
65°	45.3	54.8	101.2	145.3	420.5	496.7	525.3	547.9	578.9	590.8	593.2
67.5°	42.9	52.4	92.9	125.0	374.0	446.7	468.1	489.6	513.4	525.3	526.4
70°	39.3	50.0	85.8	110.7	326.3	389.5	407.3	430.0	449.1	455.0	458.6
72.5°	36.9	46.4	81.0	100.1	277.5	334.7	351.4	364.4	381.1	387.1	387.1
75°	33.4	41.6	76.2	89.3	227.5	273.9	288.2	301.3	314.4	316.8	313.3
77.5°	29.7	36.9	65.5	75.0	177.5	216.8	228.7	235.9	246.5	248.9	250.1
80°	25.0	32.1	51.2	58.3	128.7	159.6	167.9	173.9	183.5	183.5	185.8
82.5°	19.1	25.0	36.9	41.6	86.9	109.6	116.7	120.3	126.3	126.3	126.3
85°	11.9	15.5	23.8	27.4	52.4	66.7	71.5	72.6	77.4	78.6	78.6
87.5°	5.9	8.3	15.5	16.7	27.4	34.5	34.5	36.9	36.9	35.7	34.5
90°	5.5	9.9	14.4	15.5	24.2	36.0	41.8	37.2	27.9	21.0	21.0
92.5°	22.0	59.5	97.0	106.3	149.5	206.9	235.7	206.5	148.3	104.6	100.4
95°	52.8	121.4	189.9	207.0	367.5	581.6	688.7	614.6	466.3	355.1	342.5
97.5°	91.4	151.8	212.3	227.4	495.1	852.1	1030.6	983.7	890.0	819.8	795.8
100°	121.1	175.9	230.8	244.5	541.6	937.7	1135.8	1139.2	1146.1	1151.2	1122.6
102.5°	146.4	197.6	248.7	261.5	562.8	964.6	1165.5	1225.2	1344.6	1434.2	1409.7
105°	189.4	232.7	276.0	286.8	578.6	967.7	1162.2	1296.0	1563.7	1764.5	1751.3
107.5°	233.5	273.9	314.2	324.3	581.6	924.6	1096.1	1282.8	1656.2	1936.3	1939.5
110°	263.2	299.6	336.0	345.2	577.1	886.4	1041.1	1249.8	1667.2	1980.3	1994.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	292.3	327.1	361.8	370.5	577.3	853.1	991.0	1204.7	1631.9	1952.3	1973.3
115°	336.4	368.4	400.5	408.5	582.6	814.8	931.0	1136.7	1548.3	1857.0	1886.2
117.5°	379.9	409.0	438.1	445.4	593.5	790.9	889.7	1075.4	1446.8	1725.4	1757.7
120°	405.2	432.5	460.0	466.8	602.2	782.9	873.2	1042.9	1382.3	1636.8	1668.2
122.5°	430.0	457.7	485.3	492.2	614.9	778.6	860.5	1013.3	1318.9	1548.1	1579.1
125°	468.0	493.2	518.3	524.6	632.0	775.1	846.7	976.5	1236.1	1430.8	1459.4
127.5°	498.8	524.3	549.7	556.1	649.1	773.2	835.2	946.6	1169.5	1336.7	1360.8
130°	515.3	542.7	570.1	576.9	661.6	774.4	830.8	930.0	1128.5	1277.3	1299.6
132.5°	532.4	559.8	587.2	594.1	671.7	775.1	826.9	915.7	1093.4	1226.6	1246.6
135°	557.7	582.6	607.7	613.9	682.7	774.4	820.3	894.7	1043.5	1155.0	1172.2
137.5°	583.6	608.3	633.0	639.2	699.2	779.2	819.2	882.1	1007.9	1102.2	1116.2
140°	605.1	627.8	650.5	656.2	709.2	780.0	815.4	869.7	978.3	1059.8	1073.0
142.5°	621.6	642.6	663.7	668.9	717.8	782.9	815.4	863.0	958.5	1030.1	1041.4
145°	646.9	665.3	683.6	688.2	728.8	782.9	809.9	848.9	927.0	985.5	994.0
147.5°	672.2	690.1	708.0	712.4	744.9	788.2	809.9	840.6	901.9	948.0	955.1
150°	688.7	704.9	721.1	725.1	753.3	791.0	809.9	835.8	887.6	926.5	932.3
152.5°	705.8	718.0	730.3	733.3	758.8	792.8	809.9	832.0	876.3	909.5	913.8
155°	731.1	740.1	749.2	751.5	771.0	796.9	809.9	827.4	862.7	889.2	892.0
157.5°	749.8	758.6	767.4	769.6	783.0	800.9	809.9	823.5	851.0	871.5	873.5
160°	762.5	769.4	776.2	777.9	788.5	802.8	809.9	821.6	845.1	862.7	863.8
162.5°	775.1	780.3	785.4	786.8	794.5	804.7	809.9	819.8	839.6	854.4	855.5
165°	788.9	793.5	798.2	799.4	802.8	807.5	809.9	817.0	831.2	841.8	843.0
167.5°	801.6	803.8	806.0	806.6	809.5	813.4	815.4	820.0	829.3	836.3	836.8
170°	809.9	812.1	814.3	814.8	815.0	815.3	815.4	820.0	829.3	836.3	836.3
172.5°	814.3	814.7	815.3	815.4	815.4	815.4	815.4	819.0	826.4	831.9	831.4
175°	820.3	820.3	820.3	820.3	818.6	816.4	815.4	817.7	822.4	825.8	825.8
177.5°	820.3	820.3	820.3	820.3	819.0	817.3	816.4	818.3	821.9	824.7	824.2
180°	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	370.4	370.4
2.5°	395.4	393.0
5°	508.6	511.0
7.5°	684.8	683.7
10°	851.6	862.3
12.5°	973.1	975.5
15°	1047.0	1051.7
17.5°	1075.5	1076.7
20°	1076.7	1074.3
22.5°	1063.6	1061.2
25°	1048.1	1047.0
27.5°	1033.8	1035.1
30°	1027.9	1031.5
32.5°	1027.9	1033.8
35°	1030.3	1036.2
37.5°	1029.1	1036.2
40°	1024.3	1032.7
42.5°	1011.3	1017.2
45°	991.0	998.1
47.5°	964.7	969.5
50°	931.4	936.2
52.5°	889.7	890.9
55°	839.7	844.5
57.5°	786.1	787.3
60°	726.6	730.1
62.5°	663.4	663.4
65°	596.7	599.1
67.5°	527.6	533.6
70°	457.4	458.6
72.5°	388.3	388.3
75°	316.8	318.0
77.5°	248.9	248.9
80°	184.6	185.8
82.5°	127.4	129.8
85°	79.8	79.8
87.5°	36.9	33.4
90°	21.0	21.0
92.5°	83.8	67.1
95°	292.2	241.7
97.5°	699.8	603.9
100°	1008.4	894.1
102.5°	1311.8	1214.0
105°	1698.7	1646.1
107.5°	1952.2	1964.9
110°	2048.9	2103.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2057.4	2141.6
115°	2002.9	2119.6
117.5°	1887.2	2016.6
120°	1794.0	1919.8
122.5°	1703.2	1827.2
125°	1573.7	1688.0
127.5°	1457.2	1553.6
130°	1388.6	1477.6
132.5°	1326.3	1406.1
135°	1241.0	1309.7
137.5°	1172.5	1228.8
140°	1125.6	1178.2
142.5°	1086.6	1131.9
145°	1028.3	1062.6
147.5°	983.5	1011.9
150°	955.3	978.3
152.5°	931.2	948.6
155°	903.5	915.0
157.5°	881.6	889.7
160°	868.6	873.2
162.5°	859.9	864.4
165°	847.6	852.2
167.5°	838.7	840.7
170°	836.3	836.3
172.5°	829.7	828.1
175°	825.8	825.8
177.5°	822.3	820.3
180°	820.3	820.3



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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	1.34	2.10	2.40	3.18	4.64	14.51	15.28	15.58	16.36	17.82
	3H	2.03	2.72	3.11	3.80	5.29	16.35	17.03	17.43	18.12	19.60
	4H	2.33	2.98	3.42	4.06	5.56	16.99	17.64	18.08	18.73	20.22
	6H	2.57	3.17	3.67	4.26	5.76	17.41	18.01	18.51	19.10	20.61
	8H	2.64	3.21	3.74	4.31	5.81	17.53	18.10	18.63	19.21	20.71
	12H	2.65	3.19	3.76	4.29	5.81	17.60	18.14	18.70	19.24	20.76
4H	2H	8.54	9.19	9.64	10.28	11.77	14.78	15.43	15.87	16.52	18.01
	3H	10.10	10.64	11.20	11.76	13.26	16.81	17.36	17.92	18.47	19.98
	4H	10.19	10.69	11.30	11.79	13.32	17.58	18.08	18.68	19.18	20.70
	6H	10.19	10.62	11.31	11.75	13.27	18.11	18.54	19.23	19.67	21.18
	8H	10.17	10.57	11.28	11.69	13.22	18.27	18.67	19.39	19.79	21.32
	12H	10.12	10.48	11.25	11.61	13.15	18.36	18.72	19.49	19.85	21.39
8H	4H	11.62	12.03	12.74	13.14	14.68	17.63	18.03	18.74	19.15	20.68
	6H	11.86	12.20	13.00	13.35	14.89	18.25	18.59	19.39	19.75	21.28
	8H	11.88	12.17	13.02	13.31	14.86	18.47	18.76	19.62	19.90	21.45
	12H	11.84	12.10	12.99	13.24	14.82	18.61	18.87	19.76	20.00	21.59
12H	4H	11.76	12.13	12.90	13.26	14.80	17.58	17.94	18.71	19.07	20.61
	6H	12.12	12.41	13.26	13.55	15.10	18.23	18.53	19.38	19.67	21.22
	8H	12.18	12.44	13.33	13.58	15.16	18.46	18.72	19.61	19.85	21.44