

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: P938158

Luminaire Tested: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938158
REPORT IS A COMBINATION OF REPORTS P933600 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

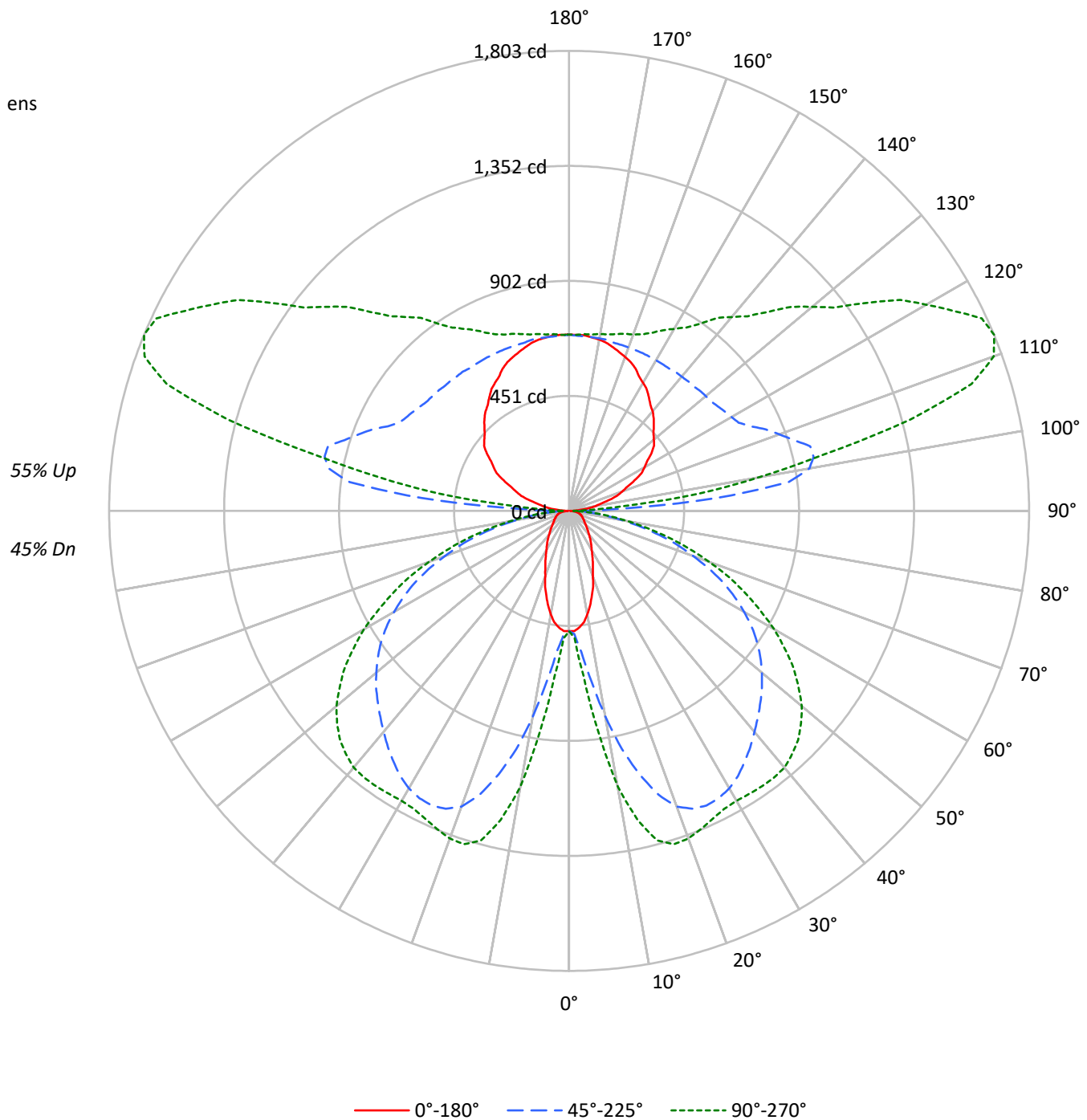
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8125.0 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.2
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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4371	4371	4371
5°	4266	5049	5876
10°	3865	7354	9742
15°	3282	9601	11764
20°	2669	11119	11989
25°	2223	11627	11746
30°	1873	11691	11724
35°	1652	11488	12026
40°	1438	11227	12339
45°	1299	11032	12389
50°	1190	10855	12184
55°	1136	10600	11643
60°	1160	10121	10791
65°	1200	9398	9618
70°	1269	8180	8126
75°	1390	6652	6341
80°	1488	4597	4274
85°	1250	2426	2187

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12389 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.9	0.8
10°-20°	270.1	3.3
20°-30°	472.5	5.8
30°-40°	608.2	7.5
40°-50°	679.3	8.4
50°-60°	650.7	8.0
60°-70°	515.7	6.3
70°-80°	303.2	3.7
80°-90°	86.9	1.1
90°-100°	336.7	4.1
100°-110°	885.2	10.9
110°-120°	917.8	11.3
120°-130°	736.2	9.1
130°-140°	577.7	7.1
140°-150°	443.4	5.5
150°-160°	319.3	3.9
160°-170°	195.4	2.4
170°-180°	66.0	0.8
0°-30°	803.5	9.9
0°-40°	1411.7	17.4
0°-60°	2741.7	33.7
0°-90°	3647.5	44.9
90°-120°	2139.6	26.3
90°-150°	3896.9	48.0
90°-180°	4478.0	55.1
0°-180°	8125.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	459	492	554	627	650	42
15°	344	635	1070	1297	1338	96
25°	220	720	1274	1330	1332	101
35°	148	688	1200	1268	1318	93
45°	102	548	1060	1215	1270	79
55°	73	348	900	1045	1074	66
65°	58	185	668	751	762	57
75°	42	114	367	403	404	44
85°	15	35	91	100	102	16
90°	5	13	35	18	18	5
95°	44	174	580	299	204	49
105°	160	242	979	1486	1386	169
115°	283	344	784	1564	1785	280
125°	394	442	713	1205	1421	350
135°	470	517	691	973	1103	363
145°	545	579	682	830	895	341
155°	616	633	682	749	770	283
165°	664	673	682	709	718	187
175°	691	691	686	695	695	66
180°	691	691	691	691	691	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	471.1	471.1	471.1	471.1	471.1	471.1	471.1	471.1	471.1	471.1	471.1
2.5°	471.1	471.1	474.2	475.7	478.7	480.2	483.3	486.3	495.4	496.9	499.9
5°	459.0	465.1	484.8	492.3	513.6	542.4	554.5	574.2	615.1	627.2	634.8
7.5°	440.9	454.5	503.0	515.1	568.1	643.8	675.7	718.1	783.2	815.0	840.8
10°	412.0	440.9	527.2	556.0	642.3	757.4	816.5	875.6	974.1	1018.1	1034.7
12.5°	380.2	427.2	552.9	592.3	716.6	884.7	955.9	1021.1	1133.2	1192.3	1201.3
15°	343.9	407.5	577.2	634.8	795.3	990.8	1069.5	1149.8	1254.4	1296.8	1307.4
17.5°	312.1	392.4	599.9	660.6	855.9	1086.2	1166.5	1233.2	1318.0	1346.8	1354.3
20°	272.7	368.2	615.1	693.9	919.6	1155.9	1233.2	1284.7	1342.3	1360.4	1363.5
22.5°	243.9	342.4	624.1	706.0	962.0	1198.3	1263.5	1304.4	1343.8	1349.9	1351.3
25°	219.7	313.6	622.7	719.6	998.4	1224.1	1274.1	1304.4	1327.1	1330.2	1330.2
27.5°	197.0	281.8	616.6	722.6	1025.6	1230.2	1269.6	1290.8	1301.3	1307.4	1307.4
30°	177.3	251.5	601.5	716.6	1037.8	1224.1	1255.9	1266.5	1277.1	1286.2	1290.8
32.5°	162.1	222.7	578.7	704.4	1039.3	1208.9	1231.7	1237.7	1252.9	1274.1	1281.6
35°	148.4	193.9	552.9	687.8	1030.1	1184.7	1199.8	1205.9	1236.2	1268.0	1278.6
37.5°	134.8	172.7	519.6	659.0	1016.5	1155.9	1166.5	1177.2	1224.1	1261.9	1274.1
40°	121.2	154.5	480.2	627.2	995.3	1121.0	1130.2	1146.8	1208.9	1252.9	1265.0
42.5°	110.6	139.4	437.8	593.9	968.0	1081.7	1095.3	1119.6	1190.8	1237.7	1251.4
45°	101.5	124.3	392.4	548.4	933.2	1040.8	1060.5	1093.8	1169.5	1215.0	1227.1
47.5°	92.4	113.6	345.4	501.5	895.3	999.9	1025.6	1063.5	1140.7	1184.7	1195.3
50°	84.9	103.1	298.4	451.4	854.4	955.9	986.3	1025.6	1104.4	1145.3	1159.0
52.5°	78.8	93.9	254.5	401.5	807.5	910.4	945.4	986.3	1060.5	1099.9	1108.9
55°	72.7	86.3	216.7	348.5	759.0	862.0	899.9	939.3	1012.0	1045.3	1051.4
57.5°	69.7	80.3	184.8	298.4	707.5	807.5	849.9	886.3	954.4	980.2	986.3
60°	65.2	75.7	160.6	256.1	651.4	756.0	792.4	828.7	886.3	907.5	912.0
62.5°	60.6	72.7	142.4	215.1	593.9	695.4	731.7	765.0	813.6	828.7	834.7
65°	57.6	69.7	128.7	184.8	534.8	631.7	668.1	696.9	736.3	751.4	754.5
67.5°	54.5	66.7	118.2	159.1	475.7	568.1	595.4	622.7	653.0	668.1	669.6
70°	50.0	63.7	109.0	140.9	415.1	495.4	518.1	546.9	571.1	578.7	583.3
72.5°	47.0	59.1	103.1	127.2	353.0	425.7	446.9	463.6	484.8	492.3	492.3
75°	42.4	53.0	97.0	113.6	289.4	348.5	366.6	383.3	399.9	403.0	398.4
77.5°	37.9	47.0	83.4	95.4	225.7	275.8	290.9	299.9	313.6	316.6	318.1
80°	31.8	40.9	65.2	74.2	163.6	203.0	213.6	221.1	233.3	233.3	236.4
82.5°	24.3	31.8	47.0	53.0	110.6	139.4	148.4	153.0	160.6	160.6	160.6
85°	15.1	19.7	30.3	34.8	66.7	84.9	90.9	92.4	98.5	100.0	100.0
87.5°	7.6	10.6	19.7	21.2	34.8	44.0	44.0	47.0	47.0	45.5	44.0
90°	4.7	8.3	12.1	13.0	20.4	30.3	35.2	31.2	23.5	17.6	17.6
92.5°	18.5	50.0	81.6	89.4	125.8	174.2	198.4	173.9	124.9	88.1	84.6
95°	44.5	102.2	159.9	174.3	309.5	489.7	579.9	517.5	392.7	299.0	288.4
97.5°	76.9	127.8	178.7	191.4	416.9	717.4	867.7	828.3	749.4	690.2	670.1
100°	102.0	148.2	194.3	205.8	456.0	789.5	956.3	959.1	965.0	969.3	945.2
102.5°	123.3	166.3	209.4	220.2	473.9	812.2	981.4	1031.7	1132.2	1207.6	1187.0
105°	159.5	196.0	232.4	241.6	487.2	814.8	978.6	1091.3	1316.6	1485.7	1474.6
107.5°	196.5	230.5	264.6	273.1	489.7	778.6	923.0	1080.2	1394.5	1630.3	1633.0
110°	221.6	252.3	282.9	290.6	486.0	746.4	876.6	1052.3	1403.8	1667.4	1679.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	246.1	275.4	304.6	311.9	486.1	718.3	834.4	1014.3	1374.0	1643.8	1661.5
115°	283.2	310.2	337.3	344.0	490.6	686.1	783.8	957.1	1303.7	1563.6	1588.1
117.5°	319.9	344.4	369.0	375.0	499.8	666.0	749.1	905.4	1218.2	1452.7	1480.0
120°	341.2	364.3	387.4	393.1	507.2	659.2	735.2	878.1	1163.8	1378.2	1404.7
122.5°	362.1	385.3	408.6	414.4	517.8	655.6	724.6	853.2	1110.5	1303.5	1329.6
125°	394.0	415.2	436.5	441.7	532.2	652.7	712.9	822.3	1040.8	1204.7	1228.8
127.5°	420.0	441.4	462.8	468.2	546.5	651.0	703.2	797.0	984.8	1125.5	1145.8
130°	433.9	457.0	480.1	485.8	557.1	652.1	699.5	783.0	950.1	1075.4	1094.2
132.5°	448.3	471.4	494.5	500.2	565.6	652.7	696.3	771.0	920.6	1032.8	1049.6
135°	469.6	490.6	511.6	516.9	574.8	652.1	690.7	753.4	878.7	972.6	987.1
137.5°	491.3	512.1	533.0	538.2	588.7	656.1	689.7	742.7	848.6	928.0	939.8
140°	509.4	528.6	547.8	552.6	597.3	656.8	686.5	732.3	823.8	892.4	903.5
142.5°	523.3	541.0	558.8	563.2	604.3	659.1	686.5	726.7	807.0	867.3	876.8
145°	544.7	560.1	575.6	579.4	613.6	659.1	681.9	714.7	780.4	829.8	837.0
147.5°	566.0	581.1	596.1	599.9	627.2	663.6	681.9	707.7	759.5	798.3	804.3
150°	579.9	593.5	607.1	610.5	634.3	666.0	681.9	703.7	747.4	780.2	785.0
152.5°	594.3	604.6	614.9	617.5	639.0	667.5	681.9	700.5	737.8	765.8	769.4
155°	615.6	623.2	630.8	632.7	649.1	670.9	681.9	696.7	726.4	748.7	751.1
157.5°	631.4	638.8	646.1	648.0	659.3	674.3	681.9	693.4	716.5	733.8	735.5
160°	642.0	647.8	653.6	655.0	664.0	675.9	681.9	691.7	711.5	726.4	727.4
162.5°	652.7	657.0	661.4	662.4	668.9	677.6	681.9	690.2	706.9	719.5	720.4
165°	664.2	668.2	672.1	673.1	676.1	679.9	681.9	687.9	699.8	708.7	709.7
167.5°	675.0	676.8	678.6	679.1	681.6	684.9	686.5	690.5	698.3	704.2	704.6
170°	681.9	683.7	685.6	686.1	686.3	686.4	686.5	690.5	698.3	704.2	704.2
172.5°	685.6	686.0	686.4	686.5	686.5	686.5	686.5	689.6	695.7	700.4	700.0
175°	690.7	690.7	690.7	690.7	689.3	687.4	686.5	688.5	692.3	695.3	695.3
177.5°	690.7	690.7	690.7	690.7	689.7	688.1	687.4	688.9	692.1	694.4	694.0
180°	690.7	690.7	690.7	690.7	690.7	690.7	690.7	690.7	690.7	690.7	690.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	471.1	471.1
2.5°	503.0	499.9
5°	646.9	649.9
7.5°	871.1	869.6
10°	1083.1	1096.8
12.5°	1237.7	1240.7
15°	1331.7	1337.7
17.5°	1368.0	1369.6
20°	1369.6	1366.5
22.5°	1352.8	1349.9
25°	1333.1	1331.7
27.5°	1314.9	1316.5
30°	1307.4	1312.0
32.5°	1307.4	1314.9
35°	1310.5	1318.0
37.5°	1308.9	1318.0
40°	1302.9	1313.4
42.5°	1286.2	1293.7
45°	1260.4	1269.6
47.5°	1227.1	1233.2
50°	1184.7	1190.8
52.5°	1131.7	1133.2
55°	1068.0	1074.1
57.5°	999.9	1001.4
60°	924.1	928.7
62.5°	843.8	843.8
65°	759.0	762.0
67.5°	671.1	678.7
70°	581.8	583.3
72.5°	493.9	493.9
75°	403.0	404.5
77.5°	316.6	316.6
80°	234.8	236.4
82.5°	162.1	165.1
85°	101.5	101.5
87.5°	47.0	42.4
90°	17.6	17.6
92.5°	70.6	56.6
95°	245.9	203.5
97.5°	589.3	508.5
100°	849.0	752.8
102.5°	1104.5	1022.2
105°	1430.4	1386.0
107.5°	1643.7	1654.4
110°	1725.1	1771.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1732.3	1803.2
115°	1686.4	1784.7
117.5°	1589.0	1698.0
120°	1510.5	1616.4
122.5°	1434.0	1538.5
125°	1325.0	1421.2
127.5°	1226.9	1308.1
130°	1169.2	1244.2
132.5°	1116.7	1183.9
135°	1044.9	1102.8
137.5°	987.3	1034.6
140°	947.7	992.0
142.5°	914.9	953.1
145°	865.9	894.7
147.5°	828.1	852.0
150°	804.4	823.8
152.5°	784.0	798.7
155°	760.7	770.4
157.5°	742.3	749.1
160°	731.3	735.2
162.5°	724.1	727.8
165°	713.7	717.6
167.5°	706.2	707.8
170°	704.2	704.2
172.5°	698.6	697.2
175°	695.3	695.3
177.5°	692.3	690.7
180°	690.7	690.7



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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	5.63	6.48	6.62	7.49	8.83	18.77	19.62	19.76	20.63	21.97
	3H	6.34	7.10	7.34	8.12	9.48	20.59	21.36	21.60	22.38	23.74
	4H	6.64	7.36	7.65	8.38	9.75	21.23	21.95	22.24	22.97	24.34
	6H	6.89	7.55	7.91	8.58	9.96	21.65	22.31	22.67	23.34	24.72
	8H	6.95	7.59	7.99	8.63	10.01	21.76	22.40	22.79	23.44	24.82
	12H	6.97	7.58	8.01	8.61	10.01	21.82	22.43	22.86	23.46	24.86
4H	2H	12.82	13.55	13.84	14.57	15.93	19.04	19.77	20.07	20.79	22.16
	3H	14.39	15.00	15.42	16.05	17.43	21.07	21.68	22.11	22.73	24.11
	4H	14.48	15.04	15.52	16.08	17.49	21.83	22.39	22.87	23.43	24.83
	6H	14.50	14.97	15.54	16.04	17.44	22.36	22.84	23.41	23.90	25.30
	8H	14.47	14.92	15.52	15.98	17.39	22.51	22.96	23.56	24.02	25.43
	12H	14.43	14.83	15.50	15.91	17.33	22.60	23.00	23.66	24.07	25.49
8H	4H	15.92	16.37	16.97	17.42	18.84	21.89	22.34	22.94	23.40	24.81
	6H	16.16	16.53	17.23	17.63	19.04	22.51	22.88	23.58	23.98	25.39
	8H	16.18	16.50	17.26	17.59	19.02	22.72	23.05	23.80	24.13	25.56
	12H	16.15	16.43	17.23	17.51	18.98	22.85	23.14	23.94	24.22	25.69
12H	4H	16.06	16.46	17.13	17.53	18.96	21.84	22.25	22.91	23.32	24.74
	6H	16.41	16.74	17.50	17.82	19.26	22.49	22.82	23.57	23.90	25.33
	8H	16.48	16.77	17.57	17.85	19.32	22.71	23.00	23.80	24.08	25.55