

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: P938550

Luminaire Tested: SQ4-FB-150U-125D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938550
REPORT IS A COMBINATION OF REPORTS P933632 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

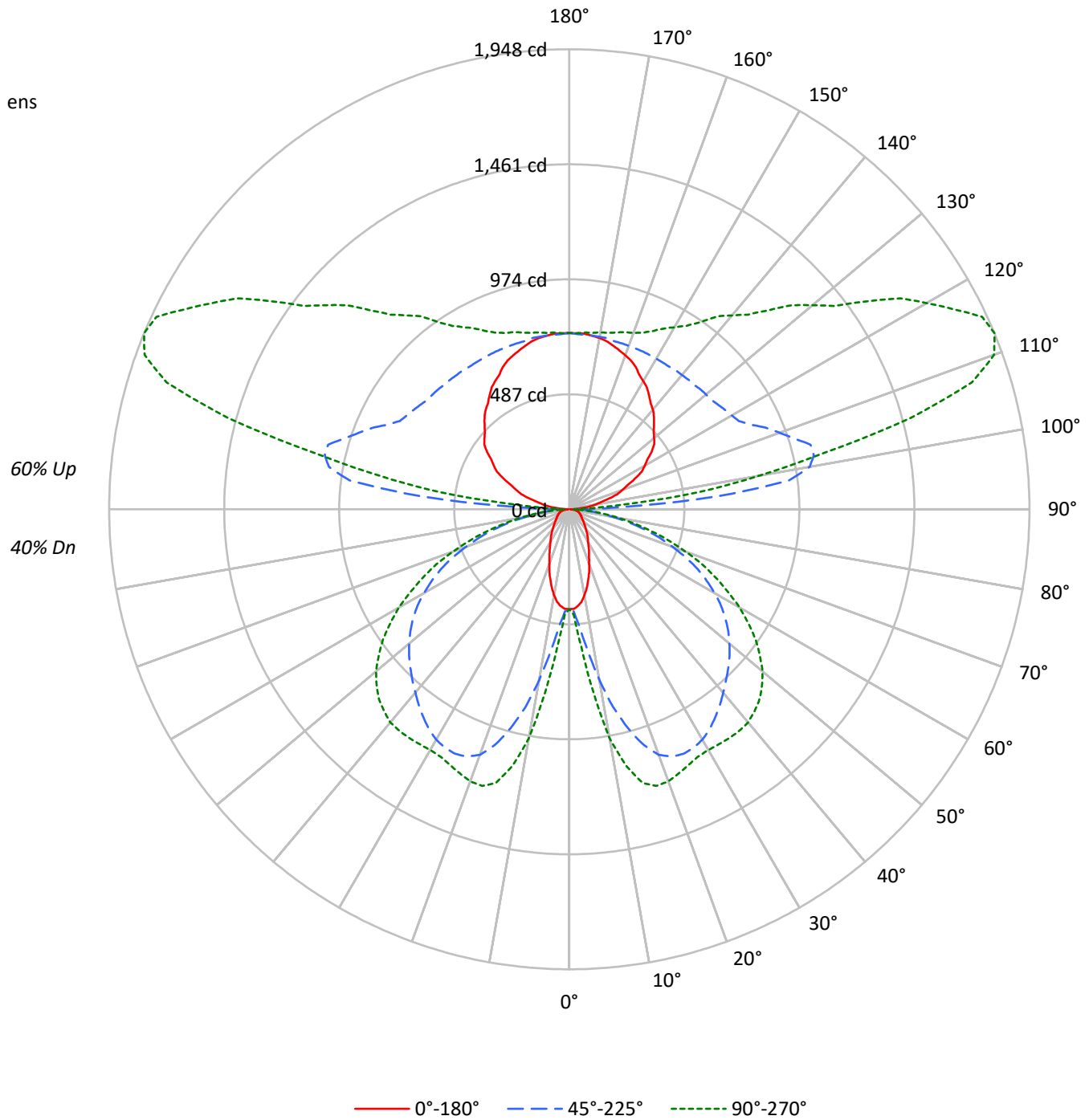
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8109.6 lumens
Efficiency: N/A
Efficacy: 97.5 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): 83.2
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				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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	39	39	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	32	32	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	27	27	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	23	23	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	19	19	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	17	17	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	15	15	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	13	13	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	11	11	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	10	10	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3920	3920	3920
5°	3826	4529	5271
10°	3466	6596	8738
15°	2943	8612	10551
20°	2394	9973	10753
25°	1995	10428	10535
30°	1679	10486	10515
35°	1482	10303	10786
40°	1290	10069	11067
45°	1166	9895	11111
50°	1067	9736	10927
55°	1018	9507	10443
60°	1041	9078	9679
65°	1075	8429	8626
70°	1137	7336	7289
75°	1249	5966	5688
80°	1334	4123	3833
85°	1126	2175	1963

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11111 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.7	0.7
10°-20°	242.3	3.0
20°-30°	423.8	5.2
30°-40°	545.5	6.7
40°-50°	609.3	7.5
50°-60°	583.6	7.2
60°-70°	462.5	5.7
70°-80°	271.9	3.4
80°-90°	78.4	1.0
90°-100°	363.8	4.5
100°-110°	956.4	11.8
110°-120°	991.6	12.2
120°-130°	795.4	9.8
130°-140°	624.1	7.7
140°-150°	479.0	5.9
150°-160°	345.0	4.3
160°-170°	211.1	2.6
170°-180°	71.3	0.9
0°-30°	720.7	8.9
0°-40°	1266.2	15.6
0°-60°	2459.1	30.3
0°-90°	3271.9	40.3
90°-120°	2311.7	28.5
90°-150°	4210.3	51.9
90°-180°	4838.0	59.7
0°-180°	8109.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	422	422	422	422	422	
5°	412	442	497	562	583	38
15°	308	569	959	1163	1200	86
25°	197	645	1143	1193	1194	91
35°	133	617	1076	1137	1182	83
45°	91	492	951	1090	1139	70
55°	65	312	807	938	963	59
65°	52	166	599	674	683	51
75°	38	102	329	361	363	40
85°	14	31	82	90	91	14
90°	5	14	38	19	19	5
95°	48	188	627	323	220	53
105°	172	261	1057	1605	1498	183
115°	306	372	847	1689	1928	302
125°	426	477	770	1302	1536	378
135°	507	558	746	1051	1192	393
145°	588	626	737	896	967	369
155°	665	684	737	809	832	306
165°	718	727	737	766	775	203
175°	746	746	742	751	751	71
180°	746	746	746	746	746	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	422.5	422.5	422.5	422.5	422.5	422.5	422.5	422.5	422.5	422.5	422.5
2.5°	422.5	422.5	425.3	426.6	429.4	430.7	433.5	436.2	444.3	445.7	448.4
5°	411.7	417.2	434.8	441.6	460.6	486.5	497.3	515.0	551.7	562.5	569.3
7.5°	395.4	407.6	451.1	462.0	509.5	577.4	606.0	644.1	702.5	731.0	754.1
10°	369.5	395.4	472.8	498.7	576.1	679.3	732.3	785.3	873.7	913.1	928.0
12.5°	341.0	383.2	495.9	531.3	642.7	793.5	857.4	915.8	1016.4	1069.4	1077.5
15°	308.4	365.5	517.7	569.3	713.3	888.6	959.3	1031.3	1125.1	1163.1	1172.6
17.5°	279.9	352.0	538.1	592.5	767.7	974.2	1046.2	1106.1	1182.1	1208.0	1214.7
20°	244.6	330.2	551.7	622.3	824.8	1036.8	1106.1	1152.2	1203.9	1220.2	1222.9
22.5°	218.7	307.1	559.8	633.2	862.8	1074.7	1133.2	1169.9	1205.2	1210.7	1212.0
25°	197.1	281.3	558.5	645.4	895.4	1097.9	1142.7	1169.9	1190.3	1193.0	1193.0
27.5°	176.7	252.7	553.0	648.1	919.8	1103.3	1138.7	1157.7	1167.2	1172.6	1172.6
30°	159.0	225.6	539.5	642.7	930.8	1097.9	1126.4	1135.9	1145.4	1153.6	1157.7
32.5°	145.4	199.7	519.1	631.8	932.1	1084.3	1104.7	1110.1	1123.7	1142.7	1149.5
35°	133.1	173.9	495.9	616.9	923.9	1062.5	1076.1	1081.6	1108.7	1137.3	1146.8
37.5°	120.9	154.9	466.1	591.1	911.7	1036.8	1046.2	1055.8	1097.9	1131.8	1142.7
40°	108.7	138.6	430.7	562.5	892.7	1005.4	1013.6	1028.6	1084.3	1123.7	1134.6
42.5°	99.2	125.0	392.7	532.6	868.2	970.2	982.4	1004.2	1068.0	1110.1	1122.4
45°	91.1	111.5	352.0	491.8	837.0	933.5	951.2	981.0	1049.0	1089.8	1100.6
47.5°	82.9	101.9	309.8	449.8	803.0	896.8	919.8	953.9	1023.1	1062.5	1072.1
50°	76.1	92.4	267.6	404.9	766.3	857.4	884.6	919.8	990.5	1027.2	1039.5
52.5°	70.7	84.2	228.3	360.1	724.2	816.6	847.9	884.6	951.2	986.5	994.6
55°	65.2	77.4	194.3	312.5	680.7	773.1	807.1	842.4	907.6	937.5	943.0
57.5°	62.5	72.0	165.7	267.6	634.5	724.2	762.3	794.9	856.0	879.1	884.6
60°	58.5	67.9	144.1	229.7	584.3	678.1	710.7	743.3	794.9	813.9	817.9
62.5°	54.4	65.2	127.8	193.0	532.6	623.7	656.3	686.2	729.7	743.3	748.6
65°	51.6	62.5	115.5	165.7	479.6	566.6	599.2	625.1	660.4	674.0	676.7
67.5°	48.9	59.8	106.0	142.7	426.6	509.5	534.0	558.5	585.6	599.2	600.6
70°	44.8	57.1	97.8	126.4	372.3	444.3	464.7	490.5	512.2	519.1	523.2
72.5°	42.2	53.0	92.4	114.1	316.6	381.8	400.9	415.8	434.8	441.6	441.6
75°	38.1	47.5	87.0	101.9	259.5	312.5	328.8	343.8	358.7	361.4	357.3
77.5°	34.0	42.2	74.8	85.6	202.4	247.3	260.9	269.0	281.3	283.9	285.3
80°	28.5	36.7	58.5	66.6	146.7	182.0	191.6	198.3	209.3	209.3	212.0
82.5°	21.8	28.5	42.2	47.5	99.2	125.0	133.1	137.2	144.1	144.1	144.1
85°	13.6	17.7	27.1	31.2	59.8	76.1	81.5	82.9	88.3	89.7	89.7
87.5°	6.8	9.5	17.7	19.0	31.2	39.4	39.4	42.2	42.2	40.8	39.4
90°	5.0	9.0	13.0	14.1	22.1	32.8	38.1	33.8	25.4	19.0	19.0
92.5°	20.0	54.0	88.2	96.7	135.9	188.1	214.3	187.8	134.9	95.2	91.4
95°	48.1	110.4	172.7	188.3	334.4	529.2	626.6	559.1	424.2	323.0	311.6
97.5°	83.1	138.1	193.1	206.9	450.4	775.2	937.6	894.9	809.7	745.7	723.9
100°	110.2	160.0	209.9	222.4	492.6	853.0	1033.2	1036.4	1042.6	1047.3	1021.3
102.5°	133.2	179.8	226.3	237.9	512.1	877.5	1060.3	1114.6	1223.2	1304.7	1282.5
105°	172.3	211.8	251.1	261.0	526.4	880.2	1057.2	1179.0	1422.5	1605.2	1593.2
107.5°	212.4	249.1	285.9	295.0	529.1	841.1	997.2	1167.0	1506.7	1761.5	1764.4
110°	239.4	272.5	305.8	314.1	525.1	806.4	947.1	1137.0	1516.7	1801.5	1814.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	266.0	297.6	329.2	337.1	525.2	776.1	901.5	1095.9	1484.5	1776.0	1795.1
115°	306.0	335.2	364.3	371.6	530.1	741.3	846.9	1034.1	1408.5	1689.4	1715.9
117.5°	345.6	372.1	398.6	405.2	539.9	719.6	809.3	978.3	1316.2	1569.6	1599.1
120°	368.6	393.6	418.4	424.7	547.9	712.2	794.3	948.7	1257.4	1489.0	1517.6
122.5°	391.1	416.3	441.5	447.8	559.5	708.4	782.8	921.8	1199.8	1408.4	1436.6
125°	425.8	448.6	471.6	477.3	574.9	705.2	770.3	888.4	1124.5	1301.7	1327.7
127.5°	453.8	476.9	500.0	505.8	590.4	703.3	759.8	861.2	1064.0	1216.1	1238.0
130°	468.8	493.7	518.6	524.8	601.8	704.5	755.8	846.0	1026.6	1161.9	1182.2
132.5°	484.3	509.3	534.2	540.4	611.0	705.2	752.3	833.0	994.7	1115.8	1134.0
135°	507.3	530.1	552.7	558.4	621.0	704.5	746.2	813.9	949.2	1050.7	1066.4
137.5°	530.9	553.3	575.8	581.5	636.1	708.9	745.3	802.4	916.9	1002.7	1015.5
140°	550.5	571.2	591.9	597.0	645.3	709.6	741.7	791.1	890.0	964.1	976.0
142.5°	565.5	584.6	603.7	608.5	652.9	712.1	741.7	785.2	872.0	937.1	947.4
145°	588.5	605.2	621.8	626.0	663.0	712.2	736.8	772.2	843.2	896.5	904.3
147.5°	611.5	627.8	644.0	648.1	677.7	717.1	736.8	764.7	820.5	862.4	868.8
150°	626.6	641.3	655.9	659.6	685.3	719.6	736.8	760.4	807.5	842.9	848.1
152.5°	642.1	653.2	664.3	667.1	690.3	721.3	736.8	756.9	797.2	827.4	831.3
155°	665.1	673.4	681.6	683.7	701.3	724.9	736.8	752.8	784.9	808.9	811.5
157.5°	682.1	690.2	698.1	700.1	712.3	728.6	736.8	749.2	774.1	792.8	794.6
160°	693.6	699.9	706.2	707.7	717.4	730.3	736.8	747.4	768.8	784.8	785.8
162.5°	705.2	709.9	714.5	715.7	722.7	732.1	736.8	745.7	763.8	777.3	778.3
165°	717.7	721.9	726.2	727.2	730.4	734.7	736.8	743.2	756.1	765.7	766.8
167.5°	729.2	731.2	733.2	733.7	736.4	740.0	741.7	746.0	754.4	760.8	761.2
170°	736.8	738.8	740.8	741.2	741.4	741.7	741.7	746.0	754.4	760.8	760.8
172.5°	740.8	741.2	741.7	741.7	741.7	741.7	741.7	745.1	751.8	756.7	756.3
175°	746.2	746.2	746.2	746.2	744.7	742.7	741.7	743.8	748.1	751.3	751.3
177.5°	746.2	746.2	746.2	746.2	745.1	743.6	742.8	744.5	747.8	750.2	749.8
180°	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	422.5	422.5
2.5°	451.1	448.4
5°	580.2	582.9
7.5°	781.3	780.0
10°	971.5	983.8
12.5°	1110.1	1112.8
15°	1194.4	1199.8
17.5°	1227.0	1228.3
20°	1228.3	1225.6
22.5°	1213.3	1210.7
25°	1195.7	1194.4
27.5°	1179.4	1180.7
30°	1172.6	1176.7
32.5°	1172.6	1179.4
35°	1175.4	1182.1
37.5°	1174.0	1182.1
40°	1168.5	1178.0
42.5°	1153.6	1160.3
45°	1130.5	1138.7
47.5°	1100.6	1106.1
50°	1062.5	1068.0
52.5°	1015.0	1016.4
55°	957.9	963.4
57.5°	896.8	898.2
60°	828.9	833.0
62.5°	756.8	756.8
65°	680.7	683.4
67.5°	601.9	608.8
70°	521.8	523.2
72.5°	442.9	442.9
75°	361.4	362.8
77.5°	283.9	283.9
80°	210.6	212.0
82.5°	145.4	148.1
85°	91.1	91.1
87.5°	42.2	38.1
90°	19.0	19.0
92.5°	76.2	61.1
95°	265.7	219.9
97.5°	636.7	549.4
100°	917.3	813.4
102.5°	1193.4	1104.4
105°	1545.4	1497.5
107.5°	1775.9	1787.5
110°	1863.8	1913.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1871.7	1948.2
115°	1822.1	1928.2
117.5°	1716.8	1834.5
120°	1632.0	1746.4
122.5°	1549.5	1662.3
125°	1431.6	1535.6
127.5°	1325.7	1413.4
130°	1263.2	1344.2
132.5°	1206.5	1279.1
135°	1128.9	1191.5
137.5°	1066.7	1117.9
140°	1023.9	1071.8
142.5°	988.6	1029.7
145°	935.5	966.7
147.5°	894.7	920.6
150°	869.1	890.0
152.5°	847.2	862.9
155°	822.0	832.4
157.5°	802.0	809.3
160°	790.1	794.3
162.5°	782.3	786.3
165°	771.0	775.3
167.5°	763.0	764.8
170°	760.8	760.8
172.5°	754.8	753.3
175°	751.3	751.3
177.5°	748.0	746.2
180°	746.2	746.2



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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	4.78	5.59	5.81	6.63	8.03	17.93	18.73	18.95	19.78	21.18
	3H	5.49	6.21	6.53	7.26	8.68	19.75	20.47	20.78	21.52	22.94
	4H	5.78	6.47	6.83	7.53	8.95	20.38	21.07	21.43	22.12	23.55
	6H	6.03	6.67	7.09	7.72	9.16	20.79	21.43	21.85	22.49	23.92
	8H	6.10	6.70	7.16	7.78	9.21	20.91	21.51	21.97	22.58	24.02
	12H	6.12	6.69	7.19	7.76	9.22	20.97	21.54	22.04	22.61	24.07
4H	2H	11.97	12.66	13.03	13.71	15.14	18.19	18.88	19.25	19.94	21.36
	3H	13.54	14.11	14.60	15.19	16.63	20.22	20.80	21.29	21.88	23.32
	4H	13.63	14.16	14.70	15.23	16.69	20.97	21.50	22.05	22.57	24.04
	6H	13.64	14.09	14.72	15.19	16.64	21.50	21.95	22.58	23.05	24.50
	8H	13.61	14.04	14.69	15.12	16.60	21.65	22.08	22.73	23.16	24.64
	12H	13.57	13.95	14.67	15.05	16.53	21.73	22.12	22.83	23.22	24.70
8H	4H	15.06	15.48	16.14	16.57	18.04	21.03	21.46	22.11	22.54	24.02
	6H	15.30	15.65	16.40	16.78	18.25	21.65	22.00	22.75	23.13	24.59
	8H	15.32	15.63	16.43	16.74	18.22	21.86	22.17	22.97	23.28	24.76
	12H	15.28	15.55	16.40	16.66	18.19	21.99	22.26	23.11	23.37	24.90
12H	4H	15.20	15.58	16.30	16.68	18.16	20.98	21.37	22.08	22.47	23.94
	6H	15.55	15.86	16.66	16.97	18.46	21.63	21.94	22.74	23.05	24.54
	8H	15.62	15.89	16.74	17.00	18.52	21.85	22.12	22.96	23.23	24.75