

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: P936743

Luminaire Tested: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-8-2700K

Issue Date: 12/17/2024

**Test Information**

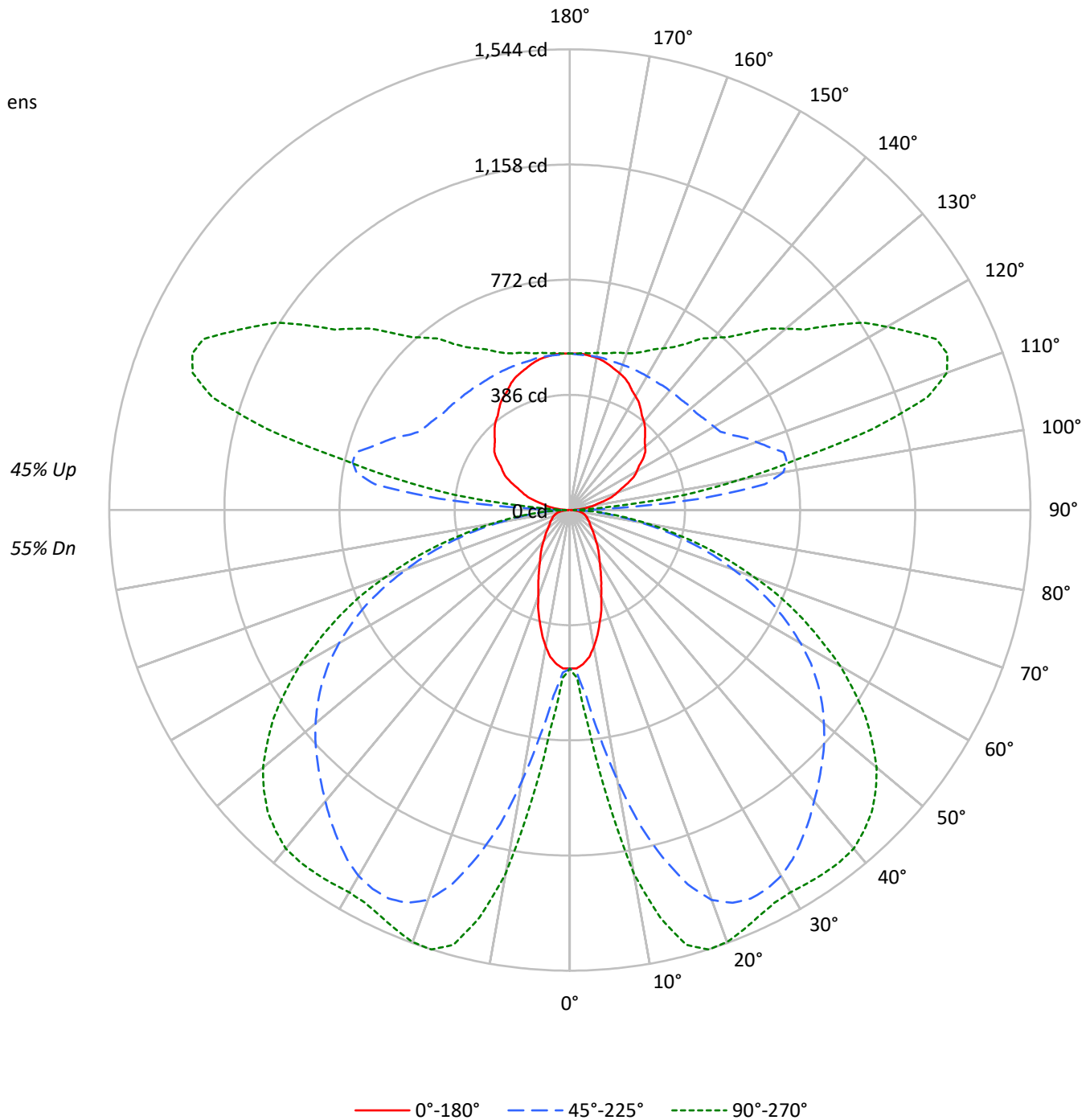
Test Method: LM-79-2019  
Report Number: P936743  
REPORT IS A COMBINATION OF REPORTS P933486 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-8-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7512.9 lumens  
Efficiency: N/A  
Efficacy: 103.2 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: General Diffuse  
  
Input Watts (W): 72.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2465	2465	2465
5°	2408	2849	3313
10°	2184	4153	5493
15°	1856	5426	6633
20°	1511	6288	6760
25°	1261	6580	6622
30°	1063	6621	6610
35°	940	6511	6781
40°	819	6368	6957
45°	742	6264	6985
50°	681	6170	6869
55°	652	6032	6565
60°	668	5766	6084
65°	694	5364	5423
70°	740	4678	4581
75°	819	3814	3575
80°	896	2646	2409
85°	796	1403	1234

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6985 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.7	0.9
10°-20°	304.6	4.1
20°-30°	532.8	7.1
30°-40°	685.8	9.1
40°-50°	766.1	10.2
50°-60°	733.7	9.8
60°-70°	581.4	7.7
70°-80°	341.9	4.6
80°-90°	97.0	1.3
90°-100°	255.7	3.4
100°-110°	672.3	8.9
110°-120°	697.1	9.3
120°-130°	559.2	7.4
130°-140°	438.7	5.8
140°-150°	336.8	4.5
150°-160°	242.5	3.2
160°-170°	148.4	2.0
170°-180°	50.1	0.7
0°-30°	906.1	12.1
0°-40°	1591.9	21.2
0°-60°	3091.7	41.2
0°-90°	4112.1	54.7
90°-120°	1625.1	21.6
90°-150°	2959.8	39.4
90°-180°	3401.0	45.3
0°-180°	7512.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	531	531	531	531	531	
5°	518	555	625	707	733	48
15°	388	716	1206	1462	1508	108
25°	248	811	1437	1500	1502	114
35°	167	776	1353	1430	1486	105
45°	114	618	1196	1370	1432	89
55°	82	393	1015	1179	1211	75
65°	65	208	753	847	859	64
75°	48	128	413	454	456	50
85°	17	39	102	113	114	18
90°	4	10	27	13	13	4
95°	34	132	440	227	155	38
105°	121	184	743	1128	1053	128
115°	215	261	595	1188	1356	212
125°	299	336	542	915	1080	266
135°	357	393	525	739	838	276
145°	414	440	518	630	680	259
155°	468	481	518	569	585	215
165°	504	511	518	538	545	142
175°	525	525	521	528	528	50
180°	525	525	525	525	525	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	531.3	531.3	531.3	531.3	531.3	531.3	531.3	531.3	531.3	531.3	531.3
2.5°	531.3	531.3	534.7	536.4	539.8	541.5	544.9	548.4	558.6	560.3	563.7
5°	517.6	524.4	546.6	555.2	579.1	611.6	625.2	647.4	693.6	707.2	715.8
7.5°	497.1	512.5	567.1	580.8	640.6	726.0	761.9	809.7	883.2	919.0	948.1
10°	464.6	497.1	594.5	626.9	724.3	854.1	920.7	987.5	1098.5	1148.0	1166.8
12.5°	428.8	481.7	623.5	667.9	808.0	997.7	1078.0	1151.4	1277.9	1344.5	1354.7
15°	387.8	459.5	650.8	715.8	896.8	1117.3	1206.1	1296.7	1414.5	1462.4	1474.3
17.5°	351.9	442.4	676.5	744.8	965.2	1224.9	1315.4	1390.6	1486.3	1518.7	1527.3
20°	307.5	415.1	693.6	782.4	1037.0	1303.5	1390.6	1448.7	1513.6	1534.1	1537.5
22.5°	275.0	386.1	703.8	796.0	1084.8	1351.3	1424.8	1470.9	1515.3	1522.1	1523.8
25°	247.7	353.6	702.1	811.4	1125.8	1380.4	1436.7	1470.9	1496.5	1499.9	1499.9
27.5°	222.1	317.7	695.3	814.8	1156.6	1387.2	1431.6	1455.5	1467.5	1474.3	1474.3
30°	199.9	283.6	678.2	808.0	1170.2	1380.4	1416.2	1428.2	1440.1	1450.4	1455.5
32.5°	182.8	251.1	652.6	794.3	1171.9	1363.3	1388.9	1395.7	1412.8	1436.7	1445.3
35°	167.4	218.7	623.5	775.5	1161.7	1335.9	1353.0	1359.9	1394.0	1429.9	1441.9
37.5°	152.0	194.7	585.9	743.1	1146.3	1303.5	1315.4	1327.4	1380.4	1423.1	1436.7
40°	136.7	174.2	541.5	707.2	1122.4	1264.2	1274.4	1293.2	1363.3	1412.8	1426.5
42.5°	124.7	157.2	493.7	669.6	1091.7	1219.8	1235.2	1262.5	1342.8	1395.7	1411.1
45°	114.5	140.1	442.4	618.4	1052.4	1173.7	1195.9	1233.4	1318.9	1370.1	1383.8
47.5°	104.2	128.1	389.5	565.4	1009.7	1127.5	1156.6	1199.3	1286.4	1335.9	1347.9
50°	95.7	116.2	336.5	509.1	963.5	1078.0	1112.2	1156.6	1245.4	1291.5	1306.9
52.5°	88.8	105.9	287.0	452.7	910.5	1026.7	1066.0	1112.2	1195.9	1240.3	1250.5
55°	82.0	97.4	244.3	392.9	855.8	972.1	1014.8	1059.2	1141.2	1178.8	1185.6
57.5°	78.6	90.5	208.4	336.5	797.8	910.5	958.3	999.4	1076.3	1105.3	1112.2
60°	73.5	85.4	181.1	288.7	734.6	852.4	893.4	934.4	999.4	1023.3	1028.5
62.5°	68.3	82.0	160.6	242.6	669.6	784.1	825.1	862.7	917.3	934.4	941.2
65°	64.9	78.6	145.2	208.4	603.0	712.3	753.3	785.8	830.2	847.3	850.7
67.5°	61.5	75.2	133.2	179.4	536.4	640.6	671.3	702.1	736.3	753.3	755.0
70°	56.4	71.7	123.0	158.9	468.1	558.6	584.2	616.7	644.0	652.6	657.7
72.5°	53.0	66.6	116.2	143.5	398.0	480.0	503.9	522.7	546.6	555.2	555.2
75°	47.8	59.8	109.3	128.1	326.3	392.9	413.4	432.2	451.0	454.4	449.3
77.5°	42.7	53.0	94.0	107.6	254.5	310.9	328.0	338.2	353.6	357.0	358.7
80°	35.9	46.1	73.5	83.7	184.5	228.9	240.9	249.4	263.1	263.1	266.5
82.5°	27.3	35.9	53.0	59.8	124.7	157.2	167.4	172.5	181.1	181.1	181.1
85°	17.1	22.2	34.2	39.3	75.2	95.7	102.5	104.2	111.0	112.7	112.7
87.5°	8.5	12.0	22.2	23.9	39.3	49.5	49.5	53.0	53.0	51.2	49.5
90°	3.5	6.3	9.1	9.8	15.5	23.0	26.7	23.7	17.9	13.4	13.4
92.5°	14.1	38.0	62.0	68.0	95.6	132.3	150.7	132.0	94.8	66.9	64.2
95°	33.8	77.6	121.5	132.4	235.1	372.0	440.5	393.1	298.3	227.1	219.1
97.5°	58.4	97.0	135.7	145.4	316.6	544.9	659.1	629.2	569.2	524.3	508.9
100°	77.5	112.5	147.5	156.3	346.3	599.7	726.4	728.6	732.9	736.2	717.9
102.5°	93.7	126.4	159.0	167.2	359.9	616.9	745.4	783.6	859.9	917.2	901.5
105°	121.1	148.8	176.5	183.5	370.1	618.9	743.3	828.8	1000.1	1128.5	1120.0
107.5°	149.3	175.1	200.9	207.4	371.9	591.3	701.0	820.4	1059.2	1238.3	1240.4
110°	168.3	191.6	215.0	220.8	369.2	566.9	665.8	799.3	1066.2	1266.4	1275.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	187.0	209.2	231.4	236.9	369.2	545.6	633.8	770.3	1043.6	1248.5	1262.0
115°	215.2	235.7	256.2	261.3	372.7	521.2	595.4	727.0	990.2	1187.6	1206.2
117.5°	242.9	261.5	280.2	284.9	379.6	505.8	568.9	687.7	925.3	1103.4	1124.1
120°	259.1	276.7	294.2	298.6	385.2	500.7	558.4	666.9	883.9	1046.7	1066.8
122.5°	274.9	292.6	310.3	314.7	393.2	498.0	550.3	648.0	843.5	990.1	1009.9
125°	299.3	315.3	331.5	335.5	404.2	495.7	541.5	624.5	790.6	915.1	933.4
127.5°	319.0	335.2	351.5	355.6	415.1	494.5	534.1	605.4	748.0	854.9	870.3
130°	329.5	347.0	364.6	369.0	423.0	495.2	531.3	594.7	721.7	816.8	831.1
132.5°	340.5	358.0	375.6	379.9	429.5	495.7	528.9	585.7	699.3	784.4	797.2
135°	356.7	372.7	388.5	392.6	436.5	495.2	524.6	572.2	667.3	738.6	749.7
137.5°	373.3	389.1	404.9	408.8	447.1	498.3	523.9	564.2	644.6	704.9	713.9
140°	386.9	401.5	416.0	419.7	453.6	498.8	521.4	556.2	625.6	677.8	686.1
142.5°	397.5	410.9	424.4	427.7	459.0	500.6	521.4	551.9	613.0	658.8	666.0
145°	413.7	425.4	437.2	440.1	466.1	500.7	517.9	542.9	592.9	630.3	635.7
147.5°	429.9	441.3	452.8	455.6	476.3	504.1	517.9	537.6	576.8	606.3	610.8
150°	440.5	450.8	461.1	463.7	481.8	505.9	517.9	534.5	567.7	592.6	596.3
152.5°	451.4	459.3	467.0	469.0	485.3	507.1	517.9	532.1	560.4	581.7	584.5
155°	467.5	473.4	479.2	480.6	493.1	509.7	517.9	529.2	551.7	568.6	570.5
157.5°	479.5	485.1	490.8	492.2	500.8	512.2	517.9	526.7	544.2	557.3	558.6
160°	487.6	492.1	496.4	497.5	504.4	513.4	517.9	525.5	540.4	551.7	552.4
162.5°	495.7	499.1	502.3	503.2	508.1	514.7	517.9	524.3	537.0	546.5	547.2
165°	504.5	507.5	510.4	511.2	513.4	516.4	517.9	522.5	531.5	538.4	539.1
167.5°	512.6	514.0	515.5	515.8	517.7	520.2	521.4	524.4	530.4	534.9	535.2
170°	517.9	519.3	520.8	521.1	521.2	521.4	521.4	524.4	530.4	534.9	534.9
172.5°	520.8	521.1	521.4	521.4	521.4	521.4	521.4	523.8	528.5	532.0	531.8
175°	524.6	524.6	524.6	524.6	523.6	522.1	521.4	522.9	525.9	528.1	528.1
177.5°	524.6	524.6	524.6	524.6	523.8	522.6	522.1	523.3	525.6	527.4	527.1
180°	524.6	524.6	524.6	524.6	524.6	524.6	524.6	524.6	524.6	524.6	524.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	531.3	531.3
2.5°	567.1	563.7
5°	729.4	732.8
7.5°	982.3	980.6
10°	1221.5	1236.9
12.5°	1395.7	1399.1
15°	1501.6	1508.5
17.5°	1542.6	1544.3
20°	1544.3	1540.9
22.5°	1525.6	1522.1
25°	1503.4	1501.6
27.5°	1482.9	1484.6
30°	1474.3	1479.4
32.5°	1474.3	1482.9
35°	1477.7	1486.3
37.5°	1476.0	1486.3
40°	1469.2	1481.1
42.5°	1450.4	1458.9
45°	1421.4	1431.6
47.5°	1383.8	1390.6
50°	1335.9	1342.8
52.5°	1276.2	1277.9
55°	1204.4	1211.2
57.5°	1127.5	1129.2
60°	1042.1	1047.2
62.5°	951.5	951.5
65°	855.8	859.3
67.5°	756.8	765.3
70°	656.0	657.7
72.5°	556.9	556.9
75°	454.4	456.1
77.5°	357.0	357.0
80°	264.8	266.5
82.5°	182.8	186.2
85°	114.5	114.5
87.5°	53.0	47.8
90°	13.4	13.4
92.5°	53.6	43.0
95°	186.8	154.6
97.5°	447.6	386.2
100°	644.9	571.8
102.5°	838.9	776.3
105°	1086.4	1052.7
107.5°	1248.5	1256.6
110°	1310.2	1345.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1315.8	1369.6
115°	1280.9	1355.5
117.5°	1207.0	1289.7
120°	1147.3	1227.7
122.5°	1089.3	1168.6
125°	1006.4	1079.5
127.5°	931.9	993.6
130°	888.0	945.0
132.5°	848.2	899.2
135°	793.7	837.6
137.5°	749.9	785.9
140°	719.8	753.4
142.5°	694.9	723.9
145°	657.7	679.5
147.5°	629.0	647.2
150°	611.0	625.6
152.5°	595.6	606.7
155°	577.8	585.2
157.5°	563.8	568.9
160°	555.4	558.4
162.5°	550.0	552.8
165°	542.0	545.0
167.5°	536.4	537.7
170°	534.9	534.9
172.5°	530.7	529.6
175°	528.1	528.1
177.5°	525.9	524.6
180°	524.6	524.6



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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	4.56	5.51	5.47	6.44	7.64	17.74	18.69	18.65	19.62	20.82
	3H	5.27	6.13	6.19	7.07	8.29	19.59	20.44	20.50	21.38	22.60
	4H	5.57	6.38	6.51	7.33	8.56	20.23	21.04	21.17	21.99	23.22
	6H	5.83	6.58	6.77	7.53	8.77	20.67	21.42	21.61	22.37	23.61
	8H	5.90	6.61	6.85	7.58	8.82	20.79	21.50	21.75	22.47	23.72
	12H	5.92	6.60	6.88	7.56	8.83	20.86	21.54	21.82	22.51	23.77
4H	2H	11.79	12.59	12.72	13.54	14.77	18.02	18.83	18.96	19.78	21.01
	3H	13.36	14.04	14.31	15.02	16.26	20.08	20.76	21.03	21.73	22.98
	4H	13.46	14.08	14.42	15.05	16.32	20.85	21.47	21.81	22.44	23.71
	6H	13.48	14.01	14.45	15.01	16.28	21.39	21.93	22.37	22.92	24.19
	8H	13.46	13.96	14.43	14.94	16.23	21.56	22.06	22.53	23.05	24.33
	12H	13.42	13.87	14.41	14.87	16.16	21.66	22.11	22.65	23.11	24.40
8H	4H	14.91	15.41	15.89	16.40	17.69	20.92	21.42	21.89	22.41	23.69
	6H	15.16	15.57	16.16	16.60	17.89	21.55	21.97	22.55	22.99	24.28
	8H	15.18	15.55	16.19	16.56	17.86	21.77	22.14	22.78	23.15	24.46
	12H	15.15	15.47	16.16	16.49	17.83	21.92	22.24	22.93	23.25	24.60
12H	4H	15.06	15.51	16.06	16.52	17.81	20.87	21.33	21.87	22.33	23.62
	6H	15.42	15.79	16.43	16.80	18.10	21.53	21.90	22.54	22.92	24.22
	8H	15.49	15.82	16.51	16.83	18.17	21.77	22.09	22.78	23.10	24.45