

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: P936744

Luminaire Tested: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936744
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-8-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

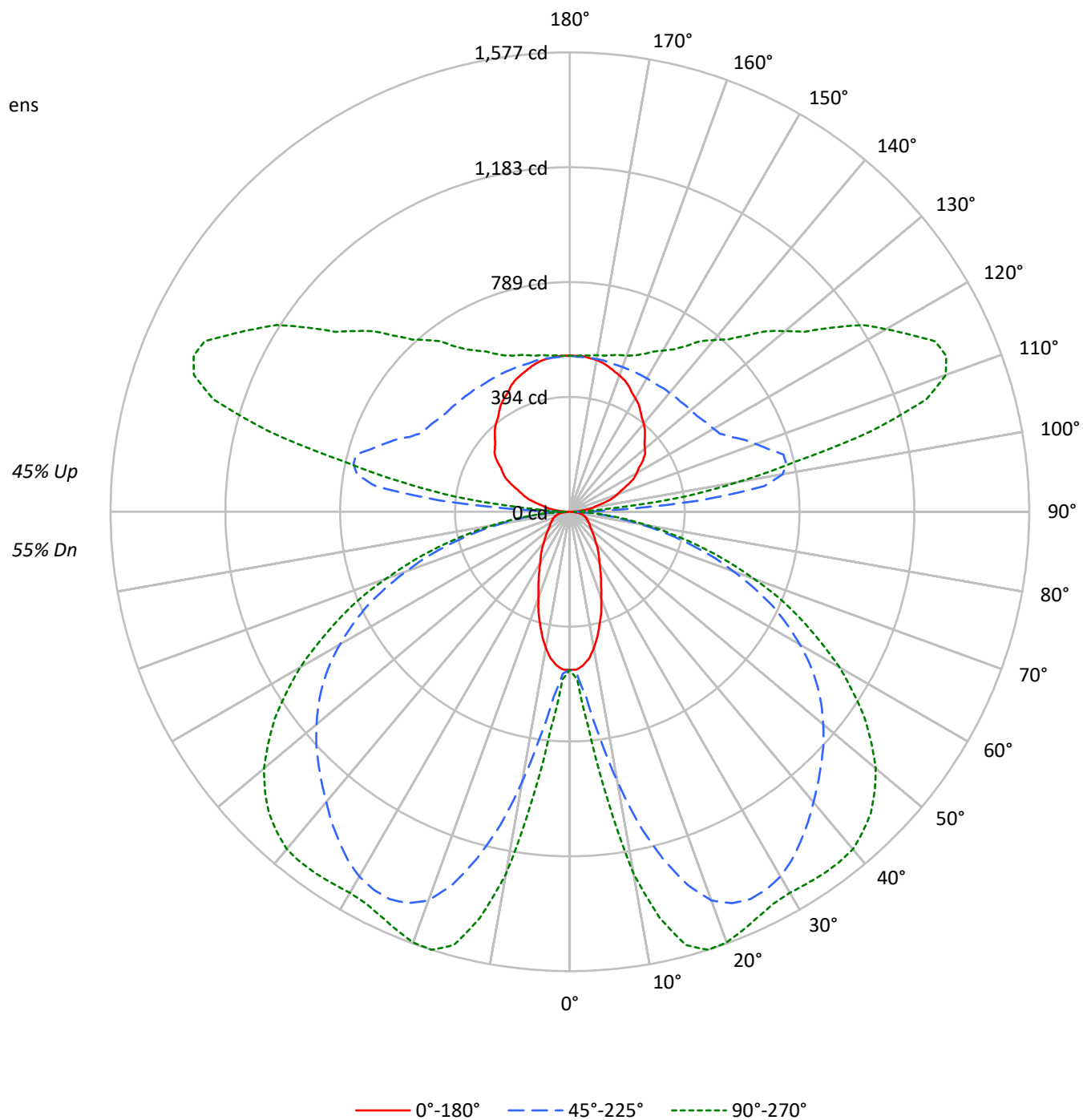
Lumens per Lamp: N/A
Luminaire Lumens: 7670.4 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 72.8
Input Voltage (V): NR
Input Current (Ain): 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

TEST NUMBER: P936744

CATALOG NUMBER: SQ4-FB-050U-075D-92765-1D-UNV-STD-W-8-3000K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2517	2517	2517
5°	2459	2908	3383
10°	2230	4240	5608
15°	1895	5540	6772
20°	1543	6420	6901
25°	1287	6717	6761
30°	1086	6760	6749
35°	960	6648	6923
40°	836	6502	7103
45°	758	6395	7131
50°	695	6299	7013
55°	665	6159	6702
60°	681	5887	6211
65°	709	5476	5537
70°	755	4776	4678
75°	836	3894	3650
80°	913	2700	2460
85°	810	1432	1259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7131 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.2	0.9
10°-20°	311.0	4.1
20°-30°	543.9	7.1
30°-40°	700.2	9.1
40°-50°	782.1	10.2
50°-60°	749.1	9.8
60°-70°	593.6	7.7
70°-80°	349.1	4.6
80°-90°	99.0	1.3
90°-100°	261.1	3.4
100°-110°	686.4	8.9
110°-120°	711.7	9.3
120°-130°	570.9	7.4
130°-140°	447.9	5.8
140°-150°	343.8	4.5
150°-160°	247.6	3.2
160°-170°	151.5	2.0
170°-180°	51.2	0.7
0°-30°	925.1	12.1
0°-40°	1625.3	21.2
0°-60°	3156.5	41.2
0°-90°	4198.3	54.7
90°-120°	1659.2	21.6
90°-150°	3021.9	39.4
90°-180°	3472.0	45.3
0°-180°	7670.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	542	542	542	542	542	
5°	528	567	638	722	748	49
15°	396	731	1231	1493	1540	110
25°	253	828	1467	1531	1533	116
35°	171	792	1381	1460	1517	107
45°	117	631	1221	1399	1462	90
55°	84	401	1036	1204	1237	76
65°	66	213	769	865	877	66
75°	49	131	422	464	466	51
85°	17	40	105	115	117	18
90°	4	10	27	14	14	4
95°	34	135	450	232	158	38
105°	124	187	759	1152	1075	131
115°	220	267	608	1212	1384	217
125°	306	342	553	934	1102	271
135°	364	401	536	754	855	282
145°	422	449	529	644	694	265
155°	477	491	529	580	597	219
165°	515	522	529	550	556	145
175°	536	536	532	539	539	51
180°	536	536	536	536	536	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	542.4	542.4	542.4	542.4	542.4	542.4	542.4	542.4	542.4	542.4	542.4
2.5°	542.4	542.4	545.9	547.6	551.1	552.9	556.4	559.8	570.3	572.1	575.5
5°	528.5	535.4	558.1	566.8	591.2	624.4	638.3	661.0	708.1	722.0	730.8
7.5°	507.5	523.2	579.0	593.0	654.0	741.2	777.9	826.7	901.7	938.3	968.0
10°	474.4	507.5	606.9	640.1	739.5	872.0	940.1	1008.2	1121.5	1172.1	1191.3
12.5°	437.8	491.8	636.6	681.9	824.9	1018.6	1100.6	1175.6	1304.7	1372.7	1383.1
15°	395.9	469.2	664.5	730.8	915.6	1140.7	1231.4	1323.8	1444.2	1493.0	1505.2
17.5°	359.3	451.7	690.7	760.4	985.4	1250.6	1343.0	1419.8	1517.4	1550.6	1559.3
20°	313.9	423.8	708.1	798.8	1058.7	1330.8	1419.8	1479.1	1545.3	1566.3	1569.7
22.5°	280.8	394.2	718.6	812.7	1107.6	1379.6	1454.6	1501.7	1547.1	1554.1	1555.8
25°	252.9	361.0	716.8	828.4	1149.4	1409.3	1466.8	1501.7	1527.9	1531.4	1531.4
27.5°	226.7	324.4	709.8	831.9	1180.8	1416.3	1461.6	1486.0	1498.2	1505.2	1505.2
30°	204.1	289.5	692.4	824.9	1194.8	1409.3	1445.9	1458.1	1470.3	1480.8	1486.0
32.5°	186.6	256.4	666.2	811.0	1196.5	1391.9	1418.0	1425.0	1442.4	1466.8	1475.6
35°	170.9	223.2	636.6	791.8	1186.1	1363.9	1381.4	1388.4	1423.2	1459.9	1472.1
37.5°	155.2	198.8	598.2	758.7	1170.4	1330.8	1343.0	1355.2	1409.3	1452.9	1466.8
40°	139.5	177.9	552.9	722.0	1145.9	1290.7	1301.2	1320.3	1391.9	1442.4	1456.4
42.5°	127.3	160.5	504.0	683.7	1114.5	1245.4	1261.0	1289.0	1370.9	1425.0	1440.7
45°	116.9	143.0	451.7	631.4	1074.4	1198.3	1220.9	1259.3	1346.5	1398.8	1412.8
47.5°	106.4	130.8	397.6	577.3	1030.8	1151.2	1180.8	1224.4	1313.4	1363.9	1376.2
50°	97.7	118.6	343.6	519.7	983.7	1100.6	1135.5	1180.8	1271.5	1318.6	1334.3
52.5°	90.7	108.1	293.0	462.2	929.6	1048.3	1088.4	1135.5	1220.9	1266.3	1276.7
55°	83.7	99.4	249.4	401.1	873.8	992.5	1036.1	1081.4	1165.1	1203.5	1210.5
57.5°	80.2	92.4	212.8	343.6	814.5	929.6	978.4	1020.4	1098.9	1128.5	1135.5
60°	75.0	87.2	184.9	294.7	749.9	870.3	912.1	954.0	1020.4	1044.8	1050.0
62.5°	69.8	83.7	163.9	247.7	683.7	800.5	842.4	880.8	936.6	954.0	961.0
65°	66.3	80.2	148.2	212.8	615.7	727.3	769.1	802.3	847.6	865.1	868.5
67.5°	62.8	76.7	136.0	183.1	547.6	654.0	685.4	716.8	751.7	769.1	770.9
70°	57.6	73.3	125.6	162.2	477.9	570.3	596.5	629.6	657.5	666.2	671.5
72.5°	54.1	68.0	118.6	146.5	406.4	490.1	514.5	533.7	558.1	566.8	566.8
75°	48.8	61.0	111.6	130.8	333.1	401.1	422.1	441.2	460.4	463.9	458.7
77.5°	43.6	54.1	95.9	109.9	259.9	317.4	334.9	345.3	361.0	364.5	366.3
80°	36.6	47.1	75.0	85.5	188.4	233.7	245.9	254.6	268.6	268.6	272.1
82.5°	27.9	36.6	54.1	61.0	127.3	160.5	170.9	176.2	184.9	184.9	184.9
85°	17.4	22.7	34.9	40.1	76.7	97.7	104.6	106.4	113.4	115.1	115.1
87.5°	8.7	12.2	22.7	24.4	40.1	50.6	50.6	54.1	54.1	52.3	50.6
90°	3.6	6.5	9.3	10.0	15.8	23.5	27.3	24.2	18.2	13.7	13.7
92.5°	14.4	38.8	63.3	69.4	97.6	135.1	153.8	134.8	96.8	68.3	65.6
95°	34.5	79.3	124.0	135.2	240.0	379.8	449.7	401.3	304.5	231.9	223.7
97.5°	59.6	99.1	138.6	148.4	323.3	556.4	672.9	642.3	581.1	535.3	519.6
100°	79.1	114.8	150.6	159.6	353.6	612.3	741.6	743.8	748.3	751.6	732.9
102.5°	95.7	129.1	162.4	170.7	367.5	629.9	761.0	800.0	878.0	936.4	920.4
105°	123.7	151.9	180.2	187.3	377.9	631.9	758.8	846.2	1021.1	1152.1	1143.5
107.5°	152.4	178.8	205.1	211.7	379.7	603.7	715.7	837.6	1081.4	1264.3	1266.4
110°	171.8	195.6	219.5	225.4	376.9	578.8	679.8	816.0	1088.6	1293.0	1301.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	190.9	213.6	236.2	241.9	377.0	557.1	647.0	786.5	1065.5	1274.7	1288.4
115°	219.7	240.6	261.5	266.8	380.5	532.1	607.9	742.3	1010.9	1212.5	1231.5
117.5°	248.0	267.0	286.0	290.8	387.5	516.4	580.9	702.2	944.7	1126.6	1147.7
120°	264.6	282.5	300.4	304.9	393.3	511.2	570.1	680.9	902.5	1068.7	1089.2
122.5°	280.7	298.8	316.8	321.3	401.5	508.4	561.9	661.6	861.2	1010.9	1031.1
125°	305.6	322.0	338.4	342.5	412.6	506.1	552.9	637.6	807.2	934.3	953.0
127.5°	325.7	342.3	358.8	363.0	423.8	504.8	545.3	618.1	763.6	872.8	888.5
130°	336.4	354.3	372.3	376.7	431.9	505.6	542.4	607.2	736.8	833.9	848.5
132.5°	347.6	365.5	383.4	387.9	438.5	506.1	540.0	598.0	713.9	800.9	813.9
135°	364.2	380.5	396.7	400.8	445.7	505.6	535.6	584.2	681.3	754.1	765.4
137.5°	381.1	397.2	413.3	417.4	456.5	508.7	534.9	576.0	658.1	719.7	728.8
140°	395.0	409.9	424.8	428.5	463.1	509.3	532.4	567.9	638.8	692.0	700.5
142.5°	405.8	419.5	433.3	436.7	468.6	511.1	532.4	563.5	625.9	672.6	680.0
145°	422.4	434.4	446.4	449.4	475.9	511.2	528.8	554.3	605.3	643.5	649.1
147.5°	438.9	450.6	462.3	465.1	486.3	514.7	528.8	548.9	588.9	619.0	623.6
150°	449.7	460.3	470.8	473.4	491.9	516.5	528.8	545.7	579.6	605.0	608.8
152.5°	460.9	468.9	476.8	478.8	495.5	517.7	528.8	543.3	572.1	593.9	596.7
155°	477.4	483.3	489.2	490.7	503.4	520.3	528.8	540.3	563.2	580.5	582.4
157.5°	489.6	495.3	501.1	502.6	511.3	523.0	528.8	537.7	555.6	569.0	570.3
160°	497.8	502.4	506.8	508.0	514.9	524.2	528.8	536.5	551.7	563.2	564.0
162.5°	506.1	509.5	512.8	513.7	518.8	525.5	528.8	535.3	548.2	557.9	558.6
165°	515.1	518.2	521.1	521.9	524.2	527.2	528.8	533.4	542.7	549.6	550.4
167.5°	523.4	524.8	526.3	526.6	528.5	531.1	532.4	535.4	541.5	546.1	546.4
170°	528.8	530.2	531.7	532.0	532.1	532.3	532.4	535.4	541.5	546.1	546.1
172.5°	531.7	532.0	532.3	532.4	532.4	532.4	532.4	534.8	539.6	543.2	542.9
175°	535.6	535.6	535.6	535.6	534.6	533.1	532.4	533.9	536.9	539.2	539.2
177.5°	535.6	535.6	535.6	535.6	534.7	533.6	533.1	534.3	536.6	538.5	538.1
180°	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	542.4	542.4
2.5°	579.0	575.5
5°	744.7	748.2
7.5°	1002.9	1001.2
10°	1247.1	1262.8
12.5°	1425.0	1428.5
15°	1533.1	1540.1
17.5°	1575.0	1576.7
20°	1576.7	1573.2
22.5°	1557.5	1554.1
25°	1534.9	1533.1
27.5°	1513.9	1515.7
30°	1505.2	1510.5
32.5°	1505.2	1513.9
35°	1508.7	1517.4
37.5°	1507.0	1517.4
40°	1500.0	1512.2
42.5°	1480.8	1489.5
45°	1451.2	1461.6
47.5°	1412.8	1419.8
50°	1363.9	1370.9
52.5°	1302.9	1304.7
55°	1229.7	1236.6
57.5°	1151.2	1152.9
60°	1064.0	1069.2
62.5°	971.4	971.4
65°	873.8	877.3
67.5°	772.6	781.3
70°	669.7	671.5
72.5°	568.6	568.6
75°	463.9	465.7
77.5°	364.5	364.5
80°	270.3	272.1
82.5°	186.6	190.1
85°	116.9	116.9
87.5°	54.1	48.8
90°	13.7	13.7
92.5°	54.7	43.9
95°	190.7	157.8
97.5°	456.9	394.3
100°	658.4	583.7
102.5°	856.5	792.6
105°	1109.1	1074.8
107.5°	1274.7	1282.9
110°	1337.7	1373.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1343.4	1398.3
115°	1307.7	1383.9
117.5°	1232.3	1316.8
120°	1171.3	1253.5
122.5°	1112.1	1193.1
125°	1027.5	1102.2
127.5°	951.5	1014.4
130°	906.7	964.8
132.5°	866.0	918.1
135°	810.3	855.2
137.5°	765.6	802.4
140°	734.9	769.2
142.5°	709.5	739.0
145°	671.5	693.8
147.5°	642.2	660.7
150°	623.8	638.8
152.5°	608.1	619.4
155°	589.9	597.4
157.5°	575.6	580.9
160°	567.1	570.1
162.5°	561.5	564.4
165°	553.4	556.4
167.5°	547.6	548.9
170°	546.1	546.1
172.5°	541.8	540.7
175°	539.2	539.2
177.5°	536.9	535.6
180°	535.6	535.6

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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	4.63	5.58	5.54	6.51	7.71	17.81	18.76	18.72	19.69	20.89
	3H	5.34	6.20	6.26	7.14	8.36	19.66	20.51	20.58	21.45	22.67
	4H	5.65	6.45	6.58	7.40	8.63	20.31	21.11	21.24	22.06	23.29
	6H	5.90	6.65	6.85	7.60	8.85	20.74	21.49	21.69	22.44	23.69
	8H	5.97	6.68	6.92	7.65	8.90	20.87	21.58	21.82	22.55	23.79
	12H	5.99	6.67	6.95	7.63	8.90	20.94	21.61	21.89	22.58	23.85
4H	2H	11.86	12.67	12.80	13.61	14.84	18.10	18.90	19.03	19.85	21.08
	3H	13.43	14.11	14.38	15.09	16.33	20.15	20.83	21.10	21.80	23.05
	4H	13.53	14.15	14.49	15.12	16.39	20.92	21.54	21.88	22.51	23.78
	6H	13.55	14.08	14.52	15.08	16.35	21.46	22.00	22.44	22.99	24.26
	8H	13.53	14.03	14.50	15.02	16.30	21.63	22.13	22.60	23.12	24.40
	12H	13.49	13.94	14.48	14.95	16.24	21.73	22.18	22.72	23.18	24.47
8H	4H	14.99	15.49	15.96	16.47	17.76	20.99	21.49	21.96	22.48	23.76
	6H	15.23	15.65	16.23	16.68	17.96	21.62	22.04	22.62	23.07	24.35
	8H	15.25	15.62	16.26	16.63	17.94	21.84	22.21	22.85	23.23	24.53
	12H	15.22	15.55	16.24	16.56	17.90	21.99	22.32	23.01	23.33	24.67
12H	4H	15.13	15.59	16.13	16.59	17.88	20.95	21.40	21.94	22.40	23.69
	6H	15.49	15.86	16.50	16.88	18.18	21.61	21.97	22.62	22.99	24.29
	8H	15.56	15.89	16.58	16.90	18.25	21.84	22.16	22.85	23.18	24.52