

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: P936249

Luminaire Tested: SQ4-FB-025U-050D-930-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936249
REPORT IS A COMBINATION OF REPORTS P933429 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

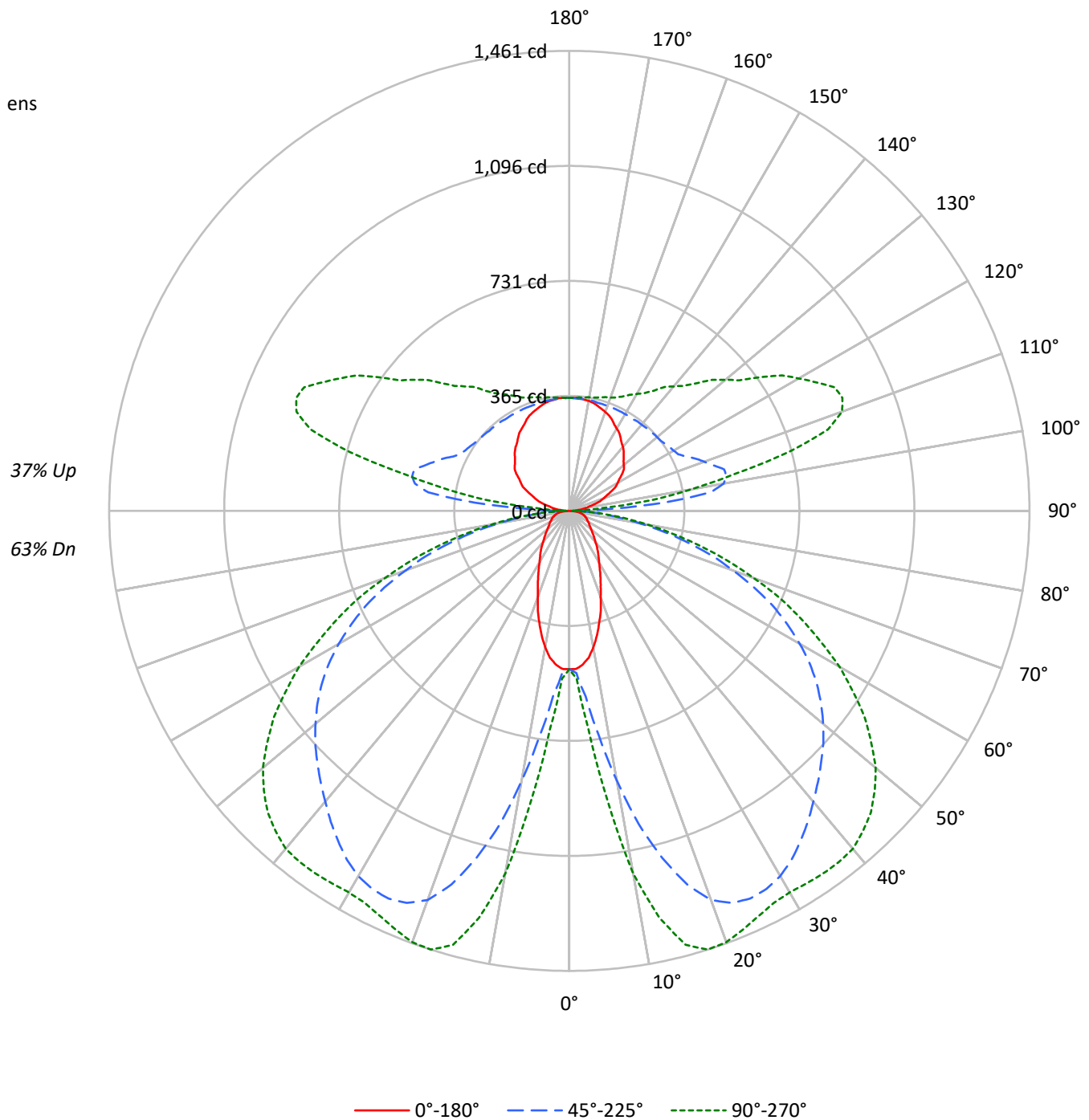
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6219.2 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 66
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

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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	50	30	10	0
RCR																					
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	68	68	68	63
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	59	57	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	51	48	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	44	41	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	39	35	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	35	31	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	31	27	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	28	24	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	26	22	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	24	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1554	1554	1554
5°	1519	1797	2089
10°	1378	2620	3464
15°	1172	3424	4182
20°	954	3968	4262
25°	797	4154	4176
30°	672	4181	4168
35°	595	4113	4276
40°	518	4024	4387
45°	469	3959	4404
50°	431	3900	4331
55°	414	3815	4139
60°	424	3649	3836
65°	441	3396	3419
70°	471	2964	2889
75°	524	2419	2254
80°	578	1679	1519
85°	522	892	777

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4404 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	1.0
10°-20°	288.1	4.6
20°-30°	503.9	8.1
30°-40°	648.7	10.4
40°-50°	724.5	11.6
50°-60°	693.9	11.2
60°-70°	550.0	8.8
70°-80°	323.4	5.2
80°-90°	91.2	1.5
90°-100°	175.3	2.8
100°-110°	460.7	7.4
110°-120°	477.7	7.7
120°-130°	383.2	6.2
130°-140°	300.7	4.8
140°-150°	230.8	3.7
150°-160°	166.2	2.7
160°-170°	101.7	1.6
170°-180°	34.4	0.6
0°-30°	857.0	13.8
0°-40°	1505.7	24.2
0°-60°	2924.1	47.0
0°-90°	3888.7	62.5
90°-120°	1113.7	17.9
90°-150°	2028.3	32.6
90°-180°	2331.0	37.5
0°-180°	6219.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	502	502	502	502	502	
5°	490	525	591	669	693	45
15°	367	677	1141	1383	1427	102
25°	234	768	1359	1419	1420	108
35°	158	734	1280	1352	1406	99
45°	108	585	1131	1296	1354	84
55°	78	372	960	1115	1146	71
65°	61	197	713	801	813	61
75°	45	121	391	430	431	47
85°	16	37	97	107	108	17
90°	2	7	18	9	9	3
95°	23	91	302	156	106	26
105°	83	126	509	773	721	88
115°	147	179	408	814	929	146
125°	205	230	371	627	740	182
135°	244	269	360	506	574	189
145°	284	302	355	432	466	178
155°	320	329	355	390	401	147
165°	346	350	355	369	374	98
175°	360	360	357	362	362	34
180°	360	360	360	360	360	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5
2.5°	502.5	502.5	505.7	507.3	510.5	512.2	515.4	518.7	528.4	530.0	533.2
5°	489.6	496.0	517.1	525.1	547.7	578.4	591.3	612.4	656.0	668.9	677.0
7.5°	470.2	484.7	536.4	549.3	605.9	686.7	720.6	765.9	835.4	869.2	896.7
10°	439.5	470.2	562.3	593.0	685.0	807.9	870.9	933.9	1038.9	1085.8	1103.6
12.5°	405.5	455.6	589.7	631.7	764.2	943.6	1019.6	1089.0	1208.6	1271.6	1281.3
15°	366.8	434.7	615.6	677.0	848.3	1056.7	1140.7	1226.3	1337.9	1383.1	1394.4
17.5°	332.8	418.4	639.8	704.5	912.9	1158.5	1244.1	1315.2	1405.7	1436.4	1444.5
20°	290.8	392.7	656.0	740.0	980.8	1232.8	1315.2	1370.2	1431.6	1450.9	1454.2
22.5°	260.2	365.1	665.7	753.0	1026.0	1278.1	1347.5	1391.2	1433.2	1439.6	1441.2
25°	234.3	334.4	664.1	767.5	1064.8	1305.5	1358.8	1391.2	1415.4	1418.7	1418.7
27.5°	210.1	300.6	657.6	770.7	1093.8	1312.0	1354.0	1376.6	1387.9	1394.4	1394.4
30°	189.0	268.2	641.4	764.2	1106.8	1305.5	1339.5	1350.8	1362.0	1371.8	1376.6
32.5°	172.9	237.5	617.2	751.3	1108.4	1289.4	1313.6	1320.1	1336.2	1358.8	1366.9
35°	158.4	206.9	589.7	733.5	1098.7	1263.5	1279.7	1286.2	1318.4	1352.4	1363.7
37.5°	143.8	184.2	554.2	702.9	1084.1	1232.8	1244.1	1255.4	1305.5	1345.9	1358.8
40°	129.3	164.8	512.2	668.9	1061.6	1195.7	1205.4	1223.1	1289.4	1336.2	1349.1
42.5°	118.0	148.6	466.9	633.4	1032.5	1153.7	1168.2	1194.1	1269.9	1320.1	1334.6
45°	108.2	132.5	418.4	584.9	995.3	1110.0	1131.0	1166.6	1247.4	1295.8	1308.7
47.5°	98.5	121.2	368.4	534.8	954.9	1066.4	1093.8	1134.2	1216.6	1263.5	1274.8
50°	90.5	109.9	318.3	481.5	911.2	1019.6	1051.8	1093.8	1177.9	1221.5	1236.1
52.5°	84.0	100.2	271.4	428.2	861.2	971.1	1008.2	1051.8	1131.0	1173.0	1182.7
55°	77.6	92.1	231.0	371.6	809.5	919.4	959.7	1001.7	1079.3	1114.9	1121.3
57.5°	74.4	85.6	197.1	318.3	754.6	861.2	906.4	945.2	1017.9	1045.4	1051.8
60°	69.5	80.8	171.3	273.1	694.8	806.3	845.1	883.8	945.2	967.9	972.7
62.5°	64.6	77.6	151.8	229.4	633.4	741.7	780.4	815.9	867.6	883.8	890.3
65°	61.4	74.4	137.3	197.1	570.4	673.8	712.6	743.3	785.3	801.4	804.6
67.5°	58.1	71.1	126.0	169.7	507.3	605.9	635.0	664.1	696.4	712.6	714.2
70°	53.3	67.9	116.4	150.2	442.7	528.4	552.6	583.3	609.2	617.2	622.1
72.5°	50.1	63.0	109.9	135.7	376.4	454.0	476.7	494.4	517.1	525.1	525.1
75°	45.2	56.5	103.4	121.2	308.6	371.6	391.0	408.8	426.6	429.8	424.9
77.5°	40.4	50.1	88.9	101.8	240.7	294.1	310.2	319.9	334.4	337.7	339.3
80°	34.0	43.6	69.5	79.2	174.5	216.5	227.8	235.9	248.8	248.8	252.1
82.5°	25.9	34.0	50.1	56.5	118.0	148.6	158.4	163.2	171.3	171.3	171.3
85°	16.1	21.0	32.3	37.2	71.1	90.5	96.9	98.5	105.0	106.6	106.6
87.5°	8.1	11.3	21.0	22.6	37.2	46.9	46.9	50.1	50.1	48.5	46.9
90°	2.4	4.3	6.3	6.7	10.6	15.7	18.3	16.3	12.2	9.2	9.2
92.5°	9.6	26.0	42.5	46.6	65.4	90.7	103.3	90.5	65.0	45.9	44.0
95°	23.1	53.2	83.2	90.7	161.1	255.0	301.8	269.3	204.4	155.6	150.1
97.5°	40.1	66.6	93.1	99.7	217.0	373.5	451.7	431.1	390.1	359.3	348.7
100°	53.1	77.1	101.1	107.1	237.4	411.0	497.8	499.3	502.3	504.5	492.0
102.5°	64.2	86.6	109.0	114.6	246.7	422.8	510.8	537.0	589.2	628.5	617.7
105°	83.0	102.0	120.9	125.7	253.6	424.1	509.3	568.0	685.3	773.3	767.5
107.5°	102.3	120.0	137.7	142.1	254.9	405.2	480.4	562.2	725.8	848.6	850.0
110°	115.3	131.3	147.3	151.3	252.9	388.5	456.3	547.7	730.6	867.9	873.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	128.2	143.3	158.6	162.4	253.0	373.9	434.3	528.0	715.2	855.6	864.8
115°	147.4	161.5	175.5	179.1	255.4	357.1	408.0	498.2	678.5	813.8	826.6
117.5°	166.5	179.2	192.0	195.2	260.1	346.7	389.9	471.4	634.1	756.2	770.4
120°	177.5	189.6	201.6	204.6	263.9	343.0	382.6	457.0	605.8	717.3	731.1
122.5°	188.5	200.6	212.6	215.7	269.5	341.2	377.1	444.1	578.0	678.5	692.0
125°	205.1	216.2	227.2	230.0	277.0	339.7	371.1	427.9	541.7	627.1	639.6
127.5°	218.6	229.7	240.9	243.7	284.5	338.9	366.0	414.8	512.6	585.8	596.4
130°	225.8	237.8	249.9	252.9	290.0	339.3	364.1	407.6	494.6	559.8	569.6
132.5°	233.4	245.3	257.4	260.3	294.4	339.7	362.4	401.3	479.2	537.6	546.4
135°	244.4	255.4	266.3	269.0	299.2	339.4	359.5	392.1	457.3	506.2	513.8
137.5°	255.8	266.6	277.4	280.1	306.4	341.5	359.0	386.6	441.6	483.0	489.2
140°	265.2	275.1	285.1	287.6	310.8	341.8	357.3	381.1	428.7	464.5	470.2
142.5°	272.4	281.6	290.8	293.2	314.5	343.0	357.3	378.2	420.0	451.4	456.4
145°	283.5	291.6	299.6	301.6	319.4	343.0	354.9	372.0	406.2	431.9	435.6
147.5°	294.6	302.4	310.3	312.2	326.4	345.5	354.9	368.4	395.3	415.5	418.6
150°	301.8	308.9	316.0	317.7	330.1	346.7	354.9	366.3	389.1	406.1	408.6
152.5°	309.3	314.7	320.0	321.4	332.5	347.5	354.9	364.6	384.1	398.6	400.5
155°	320.4	324.3	328.3	329.3	337.8	349.2	354.9	362.6	378.1	389.7	391.0
157.5°	328.6	332.4	336.4	337.3	343.2	351.0	354.9	360.9	372.9	381.9	382.8
160°	334.2	337.2	340.2	341.0	345.6	351.8	354.9	360.1	370.3	378.1	378.5
162.5°	339.7	342.0	344.2	344.8	348.2	352.7	354.9	359.3	367.9	374.4	374.9
165°	345.8	347.8	349.9	350.3	351.9	353.9	354.9	358.1	364.2	368.9	369.4
167.5°	351.3	352.3	353.2	353.5	354.8	356.5	357.3	359.3	363.4	366.5	366.7
170°	354.9	355.9	356.9	357.1	357.2	357.3	357.3	359.3	363.4	366.5	366.5
172.5°	356.9	357.1	357.3	357.3	357.3	357.3	357.3	358.9	362.2	364.6	364.4
175°	359.5	359.5	359.5	359.5	358.8	357.8	357.3	358.4	360.4	361.9	361.9
177.5°	359.5	359.5	359.5	359.5	358.9	358.2	357.8	358.6	360.2	361.4	361.2
180°	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5	359.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	502.5	502.5
2.5°	536.4	533.2
5°	689.9	693.1
7.5°	929.1	927.5
10°	1155.3	1169.8
12.5°	1320.1	1323.3
15°	1420.3	1426.7
17.5°	1459.1	1460.7
20°	1460.7	1457.4
22.5°	1442.8	1439.6
25°	1421.9	1420.3
27.5°	1402.4	1404.1
30°	1394.4	1399.2
32.5°	1394.4	1402.4
35°	1397.6	1405.7
37.5°	1396.0	1405.7
40°	1389.5	1400.8
42.5°	1371.8	1379.9
45°	1344.3	1354.0
47.5°	1308.7	1315.2
50°	1263.5	1269.9
52.5°	1207.0	1208.6
55°	1139.1	1145.6
57.5°	1066.4	1068.0
60°	985.6	990.4
62.5°	900.0	900.0
65°	809.5	812.7
67.5°	715.8	723.8
70°	620.5	622.1
72.5°	526.8	526.8
75°	429.8	431.4
77.5°	337.7	337.7
80°	250.5	252.1
82.5°	172.9	176.1
85°	108.2	108.2
87.5°	50.1	45.2
90°	9.2	9.2
92.5°	36.8	29.5
95°	128.0	105.9
97.5°	306.7	264.7
100°	442.0	391.9
102.5°	574.9	532.0
105°	744.5	721.4
107.5°	855.6	861.1
110°	897.9	921.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	901.7	938.5
115°	877.8	928.9
117.5°	827.1	883.8
120°	786.2	841.3
122.5°	746.5	800.8
125°	689.6	739.7
127.5°	638.6	680.9
130°	608.6	647.6
132.5°	581.3	616.2
135°	543.9	574.0
137.5°	513.8	538.6
140°	493.3	516.3
142.5°	476.3	496.1
145°	450.6	465.7
147.5°	431.1	443.5
150°	418.7	428.7
152.5°	408.1	415.7
155°	396.0	401.0
157.5°	386.4	389.9
160°	380.6	382.6
162.5°	376.8	378.8
165°	371.5	373.5
167.5°	367.5	368.4
170°	366.5	366.5
172.5°	363.6	362.9
175°	361.9	361.9
177.5°	360.4	359.5
180°	359.5	359.5



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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	3.61	4.64	4.44	5.51	6.58	16.80	17.84	17.63	18.70	19.78
	3H	4.33	5.26	5.17	6.13	7.24	18.66	19.59	19.50	20.46	21.57
	4H	4.63	5.52	5.49	6.39	7.51	19.31	20.20	20.18	21.08	22.19
	6H	4.89	5.71	5.77	6.59	7.72	19.76	20.58	20.63	21.46	22.59
	8H	4.96	5.74	5.85	6.65	7.78	19.89	20.67	20.77	21.57	22.70
	12H	4.99	5.73	5.88	6.63	7.78	19.96	20.71	20.85	21.60	22.76
4H	2H	10.85	11.74	11.72	12.62	13.73	17.09	17.98	17.96	18.86	19.97
	3H	12.44	13.18	13.31	14.09	15.22	19.16	19.90	20.04	20.81	21.94
	4H	12.54	13.22	13.43	14.12	15.28	19.94	20.62	20.83	21.52	22.68
	6H	12.56	13.15	13.46	14.08	15.23	20.49	21.08	21.40	22.01	23.17
	8H	12.54	13.09	13.45	14.01	15.19	20.66	21.21	21.57	22.14	23.31
	12H	12.51	13.00	13.43	13.94	15.12	20.77	21.26	21.70	22.21	23.39
8H	4H	14.00	14.55	14.91	15.48	16.65	20.02	20.56	20.92	21.49	22.66
	6H	14.25	14.71	15.19	15.67	16.84	20.66	21.11	21.59	22.08	23.25
	8H	14.27	14.68	15.22	15.63	16.82	20.88	21.29	21.83	22.24	23.43
	12H	14.25	14.61	15.20	15.56	16.79	21.04	21.40	21.99	22.35	23.58
12H	4H	14.15	14.65	15.08	15.59	16.77	19.98	20.47	20.91	21.42	22.59
	6H	14.51	14.92	15.46	15.88	17.06	20.64	21.05	21.59	22.00	23.19
	8H	14.59	14.95	15.54	15.90	17.14	20.88	21.24	21.83	22.19	23.43