

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: P936434

Luminaire Tested: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

**Test Information**

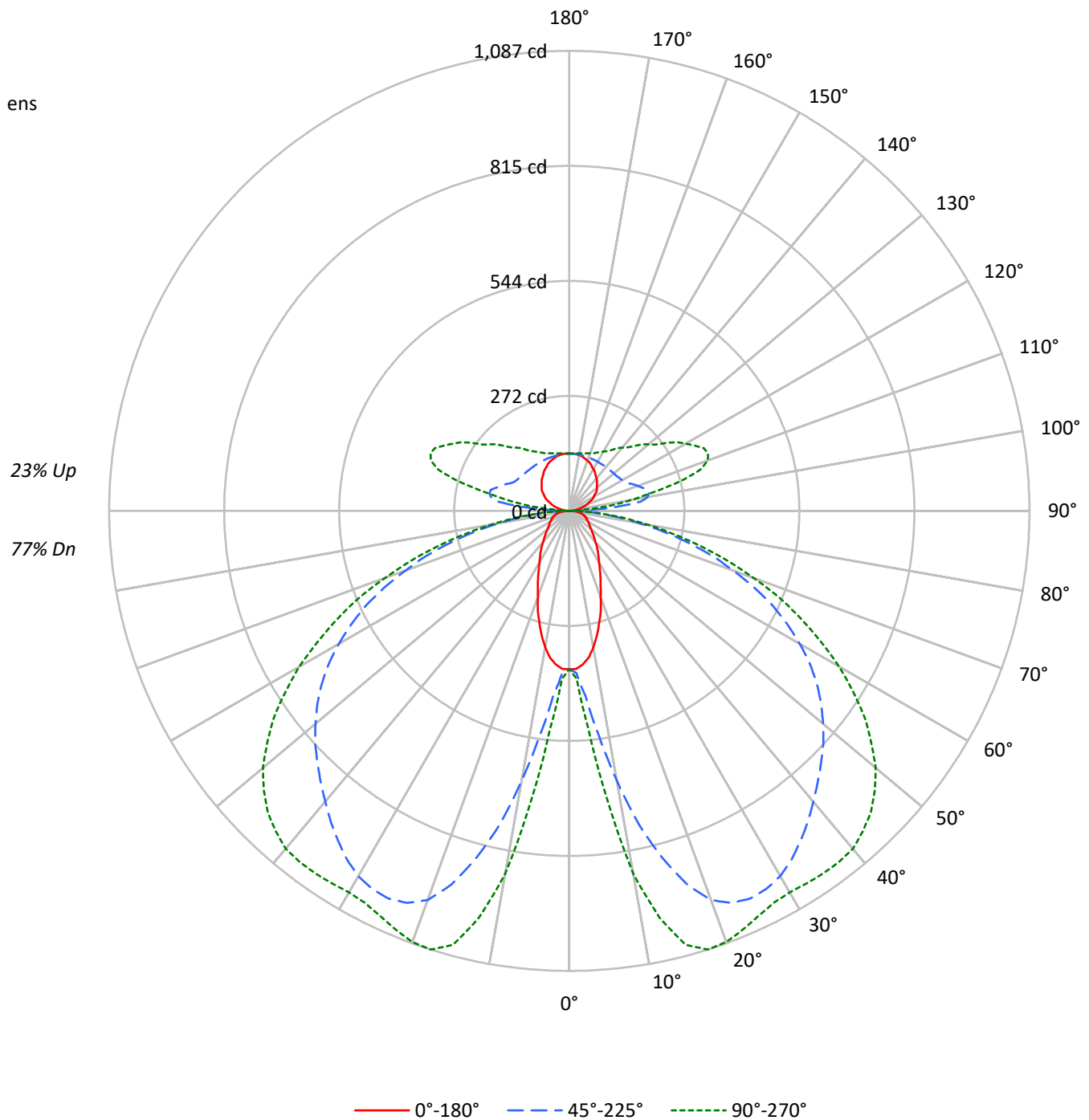
Test Method: LM-79-2019  
Report Number: P936434  
REPORT IS A COMBINATION OF REPORTS P933439 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-4-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3772.2 lumens  
Efficiency: N/A  
Efficacy: 97.2 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: Semi-Direct  
  
Input Watts (W): 38.8  
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





TEST NUMBER: P936434

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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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77			77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66	63			63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51			51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42			42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35			35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30			30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26			26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22			22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20			20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	20	17			17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16			16

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

	0°	45°	90°
0°	3469	3469	3469
5°	3385	4006	4663
10°	3067	5835	7729
15°	2603	7618	9333
20°	2117	8822	9511
25°	1764	9224	9319
30°	1485	9276	9301
35°	1311	9114	9542
40°	1140	8906	9790
45°	1031	8752	9828
50°	943	8612	9666
55°	901	8410	9236
60°	920	8030	8561
65°	952	7456	7630
70°	1008	6490	6446
75°	1105	5278	5031
80°	1179	3648	3390
85°	994	1924	1734

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9828 cd/sqm



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CATALOG NUMBER: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-4-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.4	1.3
10°-20°	214.3	5.7
20°-30°	374.8	9.9
30°-40°	482.5	12.8
40°-50°	539.0	14.3
50°-60°	516.2	13.7
60°-70°	409.1	10.8
70°-80°	240.6	6.4
80°-90°	67.3	1.8
90°-100°	66.2	1.8
100°-110°	174.0	4.6
110°-120°	180.4	4.8
120°-130°	144.7	3.8
130°-140°	113.5	3.0
140°-150°	87.1	2.3
150°-160°	62.7	1.7
160°-170°	38.4	1.0
170°-180°	13.0	0.3
0°-30°	637.5	16.9
0°-40°	1120.0	29.7
0°-60°	2175.2	57.7
0°-90°	2892.3	76.7
90°-120°	420.5	11.1
90°-150°	765.9	20.3
90°-180°	880.0	23.3
0°-180°	3772.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	374	374	374	374	374	
5°	364	391	440	498	516	34
15°	273	504	849	1029	1061	76
25°	174	571	1011	1055	1056	80
35°	118	546	952	1006	1046	74
45°	80	435	841	964	1007	62
55°	58	276	714	829	852	53
65°	46	147	530	596	604	45
75°	34	90	291	320	321	35
85°	12	28	72	79	80	13
90°	1	2	7	4	4	2
95°	9	34	114	59	40	10
105°	31	48	192	292	272	33
115°	56	68	154	307	351	55
125°	77	87	140	237	279	69
135°	92	102	136	191	217	71
145°	107	114	134	163	176	67
155°	121	124	134	147	152	56
165°	130	132	134	139	141	37
175°	136	136	135	137	137	13
180°	136	136	136	136	136	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8
2.5°	373.8	373.8	376.2	377.4	379.8	381.0	383.4	385.8	393.1	394.2	396.6
5°	364.2	369.0	384.6	390.6	407.4	430.3	439.9	455.5	488.0	497.6	503.6
7.5°	349.8	360.6	399.1	408.7	450.7	510.9	536.0	569.7	621.4	646.7	667.0
10°	326.9	349.8	418.3	441.1	509.6	601.0	647.8	694.7	772.8	807.7	820.9
12.5°	301.7	338.9	438.7	469.9	568.5	702.0	758.5	810.1	899.1	945.9	953.1
15°	272.8	323.3	457.9	503.6	631.0	786.1	848.6	912.3	995.2	1028.9	1037.3
17.5°	247.6	311.3	475.9	524.0	679.1	861.8	925.5	978.4	1045.7	1068.6	1074.6
20°	216.3	292.1	488.0	550.5	729.6	917.1	978.4	1019.2	1064.9	1079.4	1081.7
22.5°	193.5	271.6	495.2	560.1	763.2	950.8	1002.4	1034.9	1066.1	1070.9	1072.1
25°	174.3	248.8	494.0	570.9	792.1	971.1	1010.8	1034.9	1052.9	1055.3	1055.3
27.5°	156.3	223.6	489.2	573.3	813.7	975.9	1007.2	1024.1	1032.4	1037.3	1037.3
30°	140.6	199.5	477.2	568.5	823.3	971.1	996.4	1004.8	1013.2	1020.4	1024.1
32.5°	128.6	176.7	459.2	558.9	824.5	959.1	977.1	982.0	994.0	1010.8	1016.9
35°	117.8	153.8	438.7	545.7	817.3	939.9	951.9	956.8	980.8	1006.1	1014.4
37.5°	107.0	137.0	412.2	522.9	806.5	917.1	925.5	933.9	971.1	1001.2	1010.8
40°	96.1	122.6	381.0	497.6	789.7	889.4	896.6	909.9	959.1	994.0	1003.6
42.5°	87.8	110.6	347.4	471.2	768.0	858.2	869.0	888.3	944.7	982.0	992.8
45°	80.5	98.5	311.3	435.1	740.4	825.8	841.3	867.8	927.9	963.9	973.6
47.5°	73.3	90.1	274.1	397.9	710.3	793.3	813.7	843.8	905.1	939.9	948.3
50°	67.3	81.8	236.8	358.2	677.9	758.5	782.5	813.7	876.3	908.6	919.5
52.5°	62.5	74.5	201.9	318.6	640.7	722.3	750.0	782.5	841.3	872.6	879.8
55°	57.7	68.5	171.9	276.4	602.2	683.9	714.0	745.2	802.9	829.3	834.1
57.5°	55.3	63.7	146.6	236.8	561.3	640.7	674.3	703.1	757.2	777.6	782.5
60°	51.7	60.1	127.4	203.1	516.9	599.7	628.7	657.5	703.1	720.0	723.5
62.5°	48.1	57.7	113.0	170.6	471.2	551.7	580.5	607.0	645.5	657.5	662.3
65°	45.7	55.3	102.2	146.6	424.3	501.2	530.0	552.9	584.2	596.2	598.5
67.5°	43.3	52.8	93.8	126.2	377.4	450.7	472.4	494.0	518.0	530.0	531.2
70°	39.7	50.5	86.5	111.8	329.3	393.1	411.1	433.9	453.1	459.2	462.7
72.5°	37.3	46.8	81.8	101.0	280.1	337.7	354.6	367.8	384.6	390.6	390.6
75°	33.7	42.0	77.0	90.1	229.6	276.4	290.9	304.1	317.3	319.7	316.1
77.5°	30.0	37.3	66.1	75.7	179.1	218.8	230.8	238.0	248.8	251.2	252.4
80°	25.2	32.5	51.7	58.9	129.8	161.1	169.5	175.5	185.1	185.1	187.5
82.5°	19.2	25.2	37.3	42.0	87.8	110.6	117.8	121.4	127.4	127.4	127.4
85°	12.0	15.6	24.0	27.7	52.8	67.3	72.1	73.3	78.1	79.3	79.3
87.5°	6.0	8.4	15.6	16.8	27.7	34.8	34.8	37.3	37.3	36.0	34.8
90°	0.9	1.6	2.4	2.5	4.0	5.9	6.9	6.2	4.6	3.5	3.5
92.5°	3.6	9.8	16.0	17.6	24.7	34.3	39.0	34.2	24.6	17.3	16.6
95°	8.7	20.1	31.5	34.3	60.9	96.2	114.0	101.7	77.1	58.8	56.7
97.5°	15.1	25.1	35.1	37.7	82.0	141.0	170.6	162.8	147.3	135.6	131.6
100°	20.0	29.1	38.2	40.5	89.6	155.2	187.9	188.5	189.7	190.5	185.7
102.5°	24.2	32.7	41.2	43.3	93.1	159.6	192.8	202.8	222.5	237.3	233.2
105°	31.4	38.6	45.7	47.5	95.8	160.1	192.3	214.5	258.8	292.0	289.8
107.5°	38.7	45.3	52.0	53.7	96.2	153.0	181.4	212.3	274.1	320.5	321.0
110°	43.6	49.6	55.6	57.1	95.5	146.7	172.3	206.9	275.9	327.7	330.0



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	48.4	54.1	59.9	61.3	95.5	141.2	164.0	199.4	270.1	323.1	326.6
115°	55.7	60.9	66.2	67.6	96.4	134.9	154.1	188.1	256.2	307.3	312.1
117.5°	62.9	67.7	72.5	73.7	98.2	130.9	147.3	178.0	239.4	285.5	290.9
120°	67.0	71.6	76.1	77.2	99.6	129.5	144.5	172.6	228.8	270.9	276.1
122.5°	71.1	75.7	80.2	81.4	101.7	128.8	142.4	167.6	218.2	256.2	261.2
125°	77.4	81.6	85.8	86.9	104.6	128.3	140.1	161.6	204.6	236.8	241.5
127.5°	82.5	86.8	91.0	92.1	107.4	127.9	138.2	156.6	193.6	221.2	225.2
130°	85.2	89.8	94.3	95.5	109.5	128.2	137.4	153.9	186.7	211.4	215.0
132.5°	88.1	92.7	97.2	98.3	111.2	128.3	136.8	151.5	180.9	203.0	206.3
135°	92.3	96.4	100.6	101.6	113.0	128.2	135.7	148.0	172.6	191.1	193.9
137.5°	96.6	100.7	104.8	105.8	115.7	128.9	135.5	145.9	166.7	182.4	184.7
140°	100.2	103.9	107.7	108.6	117.3	129.1	134.9	143.9	161.9	175.4	177.6
142.5°	102.9	106.3	109.8	110.7	118.8	129.5	134.9	142.8	158.6	170.5	172.4
145°	107.1	110.1	113.2	113.9	120.6	129.5	134.0	140.4	153.4	163.1	164.6
147.5°	111.2	114.2	117.2	117.9	123.3	130.4	134.0	139.1	149.3	156.9	158.1
150°	114.0	116.6	119.3	120.0	124.6	130.9	134.0	138.3	146.9	153.4	154.3
152.5°	116.8	118.8	120.8	121.3	125.5	131.2	134.0	137.6	145.0	150.5	151.3
155°	121.0	122.4	124.0	124.3	127.5	131.8	134.0	136.9	142.8	147.2	147.6
157.5°	124.1	125.5	127.0	127.3	129.5	132.5	134.0	136.3	140.8	144.2	144.5
160°	126.2	127.3	128.4	128.7	130.4	132.8	134.0	135.9	139.8	142.7	142.9
162.5°	128.3	129.1	130.0	130.2	131.4	133.2	134.0	135.6	138.9	141.4	141.5
165°	130.5	131.3	132.1	132.3	132.8	133.6	134.0	135.2	137.5	139.3	139.4
167.5°	132.6	133.0	133.4	133.4	133.9	134.5	134.9	135.6	137.2	138.4	138.4
170°	134.0	134.4	134.7	134.8	134.8	134.9	134.9	135.6	137.2	138.4	138.4
172.5°	134.7	134.8	134.9	134.9	134.9	134.9	134.9	135.5	136.7	137.6	137.5
175°	135.7	135.7	135.7	135.7	135.4	135.1	134.9	135.3	136.1	136.6	136.6
177.5°	135.7	135.7	135.7	135.7	135.5	135.3	135.1	135.4	136.0	136.4	136.4
180°	135.7	135.7	135.7	135.7	135.7	135.7	135.7	135.7	135.7	135.7	135.7



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	373.8	373.8
2.5°	399.1	396.6
5°	513.2	515.7
7.5°	691.1	689.9
10°	859.4	870.2
12.5°	982.0	984.4
15°	1056.5	1061.3
17.5°	1085.4	1086.6
20°	1086.6	1084.1
22.5°	1073.4	1070.9
25°	1057.7	1056.5
27.5°	1043.3	1044.4
30°	1037.3	1040.9
32.5°	1037.3	1043.3
35°	1039.7	1045.7
37.5°	1038.4	1045.7
40°	1033.7	1042.1
42.5°	1020.4	1026.4
45°	1000.1	1007.2
47.5°	973.6	978.4
50°	939.9	944.7
52.5°	897.8	899.1
55°	847.3	852.1
57.5°	793.3	794.5
60°	733.2	736.8
62.5°	669.5	669.5
65°	602.2	604.5
67.5°	532.5	538.5
70°	461.5	462.7
72.5°	391.9	391.9
75°	319.7	320.9
77.5°	251.2	251.2
80°	186.3	187.5
82.5°	128.6	131.0
85°	80.5	80.5
87.5°	37.3	33.7
90°	3.5	3.5
92.5°	13.8	11.1
95°	48.4	40.0
97.5°	115.8	100.0
100°	166.9	148.0
102.5°	217.0	200.8
105°	281.2	272.4
107.5°	323.1	325.2
110°	339.0	348.1





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	340.5	354.4
115°	331.5	350.8
117.5°	312.3	333.7
120°	296.9	317.6
122.5°	281.8	302.4
125°	260.4	279.3
127.5°	241.1	257.1
130°	229.8	244.5
132.5°	219.5	232.7
135°	205.4	216.8
137.5°	194.0	203.4
140°	186.2	194.9
142.5°	179.8	187.3
145°	170.2	175.8
147.5°	162.7	167.5
150°	158.1	161.9
152.5°	154.1	157.0
155°	149.5	151.5
157.5°	145.9	147.3
160°	143.7	144.5
162.5°	142.3	143.0
165°	140.3	141.0
167.5°	138.7	139.1
170°	138.4	138.4
172.5°	137.3	137.0
175°	136.6	136.6
177.5°	136.1	135.7
180°	135.7	135.7



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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	7.44	8.68	8.12	9.38	10.21	20.58	21.82	21.26	22.52	23.35
	3H	8.17	9.29	8.87	10.00	10.86	22.43	23.55	23.13	24.26	25.12
	4H	8.49	9.54	9.20	10.27	11.14	23.08	24.14	23.80	24.86	25.74
	6H	8.76	9.73	9.49	10.47	11.36	23.52	24.50	24.25	25.23	26.12
	8H	8.84	9.77	9.57	10.53	11.42	23.65	24.58	24.38	25.33	26.22
	12H	8.87	9.76	9.61	10.51	11.43	23.72	24.61	24.46	25.36	26.28
4H	2H	14.68	15.73	15.39	16.46	17.33	20.90	21.95	21.62	22.68	23.55
	3H	16.28	17.17	17.01	17.93	18.82	22.96	23.85	23.69	24.61	25.50
	4H	16.39	17.20	17.14	17.96	18.88	23.74	24.54	24.48	25.31	26.23
	6H	16.42	17.13	17.19	17.91	18.84	24.29	24.99	25.05	25.78	26.70
	8H	16.41	17.07	17.18	17.85	18.79	24.45	25.11	25.22	25.89	26.83
	12H	16.39	16.98	17.18	17.79	18.73	24.56	25.15	25.35	25.96	26.90
8H	4H	17.86	18.51	18.63	19.30	20.24	23.83	24.49	24.60	25.27	26.21
	6H	18.12	18.66	18.92	19.49	20.43	24.46	25.01	25.26	25.84	26.78
	8H	18.14	18.63	18.95	19.45	20.41	24.68	25.17	25.49	25.99	26.95
	12H	18.13	18.56	18.94	19.37	20.39	24.84	25.27	25.65	26.08	27.10
12H	4H	18.02	18.61	18.81	19.42	20.36	23.80	24.40	24.59	25.20	26.15
	6H	18.38	18.87	19.19	19.69	20.65	24.45	24.94	25.26	25.77	26.72
	8H	18.47	18.90	19.28	19.71	20.73	24.69	25.12	25.51	25.94	26.96