

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: P937423

Luminaire Tested: SQ4-FB-100U-050D-927-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937423
REPORT IS A COMBINATION OF REPORTS P933573 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

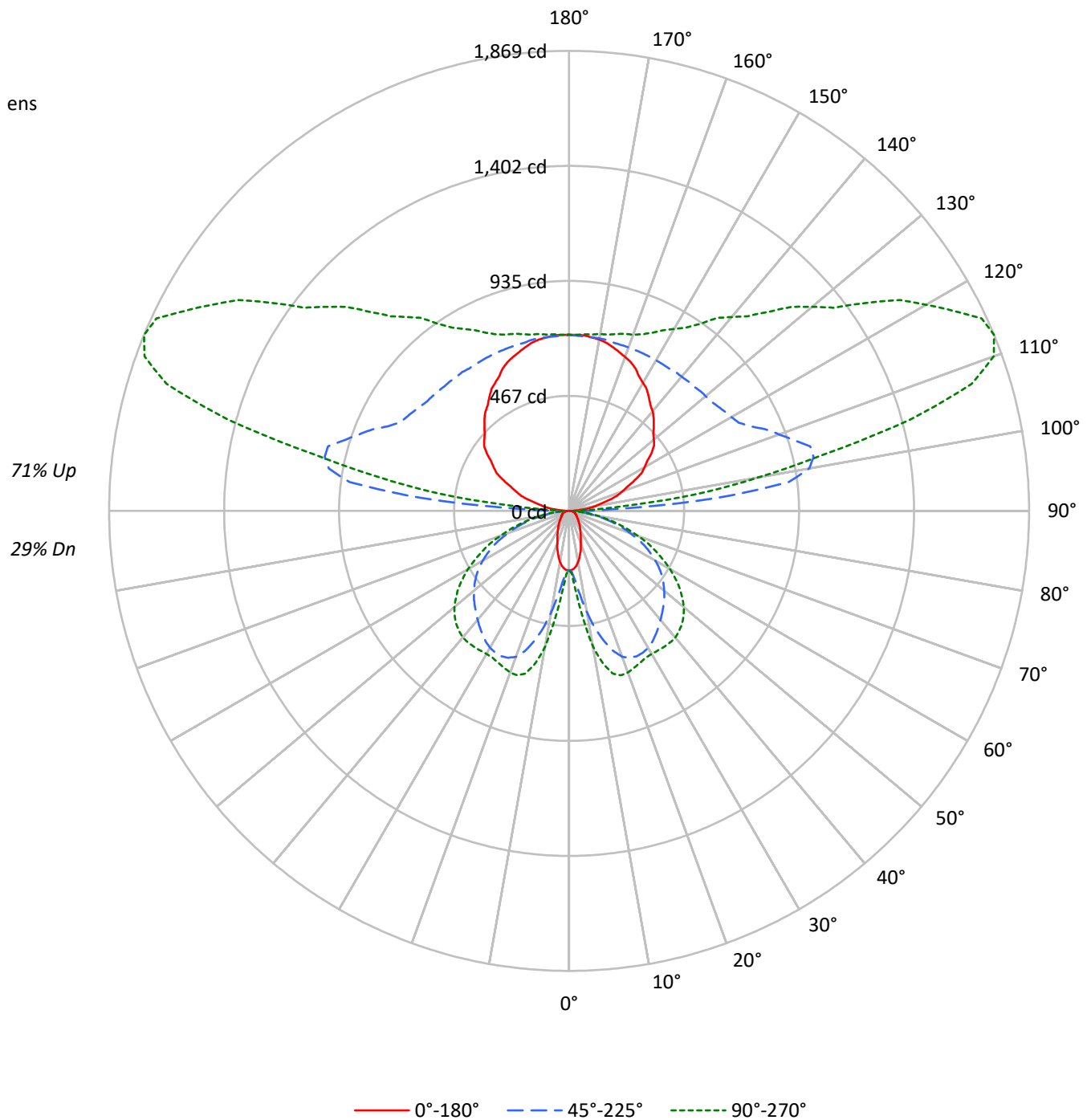
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6506.5 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 61.8
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

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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29			
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23			
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19			
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16			
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13			
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11			
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10			
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8			
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7			
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7			
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1490	1490	1490
5°	1455	1721	2003
10°	1320	2509	3320
15°	1121	3277	4009
20°	912	3797	4086
25°	761	3972	4003
30°	641	3997	3995
35°	567	3929	4099
40°	494	3842	4206
45°	447	3778	4222
50°	410	3719	4153
55°	392	3635	3969
60°	400	3474	3678
65°	415	3230	3278
70°	443	2815	2770
75°	488	2292	2161
80°	527	1588	1456
85°	465	842	745

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4222 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.2	0.5
10°-20°	138.1	2.1
20°-30°	241.5	3.7
30°-40°	310.9	4.8
40°-50°	347.3	5.3
50°-60°	332.6	5.1
60°-70°	263.6	4.1
70°-80°	155.0	2.4
80°-90°	45.8	0.7
90°-100°	348.9	5.4
100°-110°	917.3	14.1
110°-120°	951.2	14.6
120°-130°	763.0	11.7
130°-140°	598.7	9.2
140°-150°	459.5	7.1
150°-160°	330.9	5.1
160°-170°	202.5	3.1
170°-180°	68.4	1.1
0°-30°	410.8	6.3
0°-40°	721.7	11.1
0°-60°	1401.7	21.5
0°-90°	1866.1	28.7
90°-120°	2217.4	34.1
90°-150°	4038.6	62.1
90°-180°	4640.0	71.3
0°-180°	6506.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	241	241	241	241	241	
5°	235	252	283	321	332	22
15°	176	325	547	663	684	49
25°	112	368	651	680	681	52
35°	76	352	613	648	674	47
45°	52	280	542	621	649	40
55°	37	178	460	534	549	34
65°	29	94	342	384	390	29
75°	22	58	187	206	207	23
85°	8	18	46	51	52	8
90°	5	14	36	18	18	4
95°	46	181	601	310	211	51
105°	165	250	1014	1540	1436	175
115°	294	356	812	1620	1850	290
125°	408	458	739	1249	1473	363
135°	487	536	716	1008	1143	377
145°	564	600	707	860	927	354
155°	638	656	707	776	798	293
165°	688	698	707	735	744	194
175°	716	716	712	721	721	68
180°	716	716	716	716	716	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9
2.5°	240.9	240.9	242.4	243.2	244.8	245.6	247.1	248.6	253.3	254.0	255.6
5°	234.7	237.8	247.9	251.7	262.6	277.3	283.4	293.5	314.5	320.6	324.6
7.5°	225.4	232.4	257.1	263.3	290.4	329.2	345.4	367.1	400.4	416.7	429.9
10°	210.7	225.4	269.5	284.3	328.4	387.2	417.5	447.7	498.0	520.4	529.0
12.5°	194.4	218.4	282.7	302.8	366.4	452.3	488.7	522.1	579.3	609.5	614.2
15°	175.8	208.4	295.1	324.6	406.6	506.5	546.8	587.9	641.3	663.0	668.4
17.5°	159.5	200.6	306.7	337.7	437.6	555.3	596.4	630.5	673.8	688.5	692.4
20°	139.4	188.2	314.5	354.7	470.2	591.0	630.5	656.8	686.2	695.5	697.1
22.5°	124.7	175.0	319.1	360.9	491.8	612.6	646.0	666.8	687.0	690.1	690.8
25°	112.3	160.3	318.3	367.9	510.4	625.8	651.3	666.8	678.4	680.0	680.0
27.5°	100.7	144.1	315.2	369.4	524.4	628.9	649.0	659.9	665.3	668.4	668.4
30°	90.6	128.6	307.5	366.4	530.5	625.8	642.1	647.5	652.9	657.6	659.9
32.5°	82.9	113.9	295.8	360.1	531.3	618.1	629.7	632.8	640.5	651.3	655.3
35°	75.9	99.2	282.7	351.7	526.7	605.7	613.4	616.5	632.0	648.3	653.7
37.5°	68.9	88.3	265.7	337.0	519.7	591.0	596.4	601.8	625.8	645.2	651.3
40°	62.0	79.0	245.6	320.6	508.9	573.1	577.8	586.3	618.1	640.5	646.7
42.5°	56.5	71.2	223.8	303.6	494.9	553.0	559.9	572.3	608.8	632.8	639.7
45°	51.9	63.5	200.6	280.4	477.1	532.1	542.2	559.2	597.9	621.2	627.3
47.5°	47.3	58.1	176.6	256.3	457.8	511.2	524.4	543.7	583.2	605.7	611.1
50°	43.4	52.7	152.6	230.8	436.8	488.7	504.2	524.4	564.6	585.5	592.5
52.5°	40.3	48.0	130.1	205.3	412.8	465.5	483.3	504.2	542.2	562.3	567.0
55°	37.2	44.1	110.7	178.1	388.0	440.7	460.1	480.2	517.4	534.4	537.5
57.5°	35.7	41.0	94.5	152.6	361.7	412.8	434.5	453.1	487.9	501.1	504.2
60°	33.3	38.7	82.1	130.9	333.0	386.5	405.1	423.7	453.1	463.9	466.2
62.5°	31.0	37.2	72.8	110.0	303.6	355.5	374.1	391.2	415.9	423.7	426.7
65°	29.4	35.7	65.8	94.5	273.4	322.9	341.6	356.3	376.4	384.2	385.7
67.5°	27.9	34.1	60.4	81.3	243.2	290.4	304.4	318.3	333.8	341.6	342.3
70°	25.6	32.5	55.7	72.0	212.2	253.3	264.9	279.6	292.0	295.8	298.2
72.5°	24.0	30.2	52.7	65.1	180.5	217.6	228.5	237.0	247.9	251.7	251.7
75°	21.7	27.1	49.6	58.1	147.9	178.1	187.4	196.0	204.4	206.1	203.7
77.5°	19.3	24.0	42.6	48.8	115.4	141.0	148.7	153.4	160.3	161.9	162.6
80°	16.2	20.9	33.3	38.0	83.6	103.8	109.2	113.1	119.3	119.3	120.8
82.5°	12.4	16.2	24.0	27.1	56.5	71.2	75.9	78.2	82.1	82.1	82.1
85°	7.8	10.1	15.5	17.8	34.1	43.4	46.5	47.3	50.4	51.1	51.1
87.5°	3.8	5.4	10.1	10.9	17.8	22.5	22.5	24.0	24.0	23.3	22.5
90°	4.8	8.6	12.5	13.5	21.2	31.4	36.5	32.4	24.3	18.2	18.2
92.5°	19.2	51.9	84.5	92.7	130.4	180.5	205.6	180.2	129.4	91.2	87.6
95°	46.1	105.9	165.7	180.6	320.8	507.6	601.0	536.3	406.9	309.8	298.8
97.5°	79.8	132.5	185.3	198.4	432.0	743.6	899.4	858.5	776.7	715.3	694.4
100°	105.7	153.5	201.4	213.3	472.5	818.2	991.1	994.1	1000.1	1004.5	979.6
102.5°	127.8	172.5	217.1	228.2	491.2	841.8	1017.0	1069.1	1173.3	1251.5	1230.2
105°	165.2	203.0	240.9	250.3	505.0	844.5	1014.2	1131.0	1364.5	1539.7	1528.2
107.5°	203.7	238.9	274.2	283.0	507.5	806.8	956.5	1119.4	1445.2	1689.6	1692.4
110°	229.6	261.4	293.3	301.2	503.7	773.5	908.4	1090.6	1454.8	1728.0	1740.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	255.1	285.4	315.8	323.3	503.8	744.4	864.7	1051.1	1424.0	1703.5	1721.9
115°	293.5	321.5	349.4	356.4	508.4	711.0	812.4	991.9	1351.1	1620.5	1646.0
117.5°	331.5	356.9	382.3	388.6	517.8	690.2	776.3	938.4	1262.5	1505.6	1533.8
120°	353.6	377.5	401.4	407.4	525.6	683.1	761.9	910.0	1206.1	1428.3	1455.7
122.5°	375.2	399.3	423.5	429.5	536.6	679.4	750.9	884.3	1150.9	1350.9	1378.0
125°	408.3	430.4	452.4	457.8	551.6	676.4	738.9	852.2	1078.7	1248.6	1273.6
127.5°	435.3	457.5	479.7	485.3	566.4	674.7	728.8	826.1	1020.6	1166.5	1187.5
130°	449.7	473.6	497.5	503.5	577.3	675.8	725.0	811.5	984.7	1114.6	1134.0
132.5°	464.5	488.5	512.4	518.4	586.1	676.4	721.6	799.1	954.1	1070.4	1087.8
135°	486.6	508.4	530.2	535.7	595.7	675.8	715.8	780.7	910.5	1007.9	1022.9
137.5°	509.2	530.8	552.4	557.8	610.1	680.0	714.9	769.8	879.5	961.8	974.0
140°	528.0	547.9	567.7	572.6	618.9	680.6	711.5	758.9	853.7	924.8	936.2
142.5°	542.4	560.8	579.1	583.7	626.3	683.1	711.5	753.1	836.4	898.8	908.7
145°	564.5	580.5	596.5	600.5	635.9	683.1	706.7	740.7	808.9	859.9	867.4
147.5°	586.6	602.1	617.7	621.6	650.0	687.8	706.7	733.5	787.1	827.3	833.4
150°	601.0	615.1	629.2	632.7	657.3	690.2	706.7	729.3	774.5	808.5	813.5
152.5°	615.9	626.6	637.3	639.9	662.2	691.8	706.7	726.0	764.7	793.6	797.4
155°	638.0	645.9	653.7	655.7	672.7	695.4	706.7	722.1	752.8	775.9	778.4
157.5°	654.3	662.0	669.7	671.6	683.3	698.9	706.7	718.6	742.6	760.5	762.3
160°	665.4	671.4	677.4	678.8	688.1	700.5	706.7	716.9	737.4	752.8	753.8
162.5°	676.4	680.9	685.4	686.5	693.2	702.2	706.7	715.3	732.7	745.6	746.5
165°	688.5	692.5	696.5	697.5	700.6	704.7	706.7	712.9	725.3	734.6	735.6
167.5°	699.5	701.4	703.3	703.8	706.3	709.8	711.5	715.6	723.6	729.7	730.2
170°	706.7	708.6	710.6	711.0	711.2	711.4	711.5	715.6	723.6	729.7	729.7
172.5°	710.6	710.9	711.4	711.5	711.5	711.5	711.5	714.7	721.1	725.9	725.5
175°	715.8	715.8	715.8	715.8	714.3	712.4	711.5	713.5	717.6	720.6	720.6
177.5°	715.8	715.8	715.8	715.8	714.7	713.3	712.5	714.1	717.3	719.6	719.2
180°	715.8	715.8	715.8	715.8	715.8	715.8	715.8	715.8	715.8	715.8	715.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	240.9	240.9
2.5°	257.1	255.6
5°	330.7	332.3
7.5°	445.4	444.6
10°	553.8	560.7
12.5°	632.8	634.3
15°	680.8	683.9
17.5°	699.4	700.2
20°	700.2	698.6
22.5°	691.6	690.1
25°	681.6	680.8
27.5°	672.3	673.1
30°	668.4	670.7
32.5°	668.4	672.3
35°	670.0	673.8
37.5°	669.2	673.8
40°	666.1	671.5
42.5°	657.6	661.4
45°	644.4	649.0
47.5°	627.3	630.5
50°	605.7	608.8
52.5°	578.6	579.3
55°	546.0	549.2
57.5°	511.2	512.0
60°	472.5	474.8
62.5°	431.4	431.4
65°	388.0	389.5
67.5°	343.1	347.0
70°	297.5	298.2
72.5°	252.5	252.5
75°	206.1	206.8
77.5°	161.9	161.9
80°	120.0	120.8
82.5°	82.9	84.4
85°	51.9	51.9
87.5°	24.0	21.7
90°	18.2	18.2
92.5°	73.1	58.6
95°	254.9	210.9
97.5°	610.7	527.0
100°	879.9	780.2
102.5°	1144.7	1059.3
105°	1482.3	1436.4
107.5°	1703.5	1714.6
110°	1787.9	1835.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1795.3	1868.8
115°	1747.7	1849.6
117.5°	1646.8	1759.8
120°	1565.5	1675.2
122.5°	1486.3	1594.5
125°	1373.2	1472.9
127.5°	1271.7	1355.7
130°	1211.7	1289.4
132.5°	1157.4	1227.0
135°	1082.9	1142.9
137.5°	1023.2	1072.3
140°	982.2	1028.1
142.5°	948.3	987.8
145°	897.4	927.2
147.5°	858.2	883.0
150°	833.6	853.7
152.5°	812.6	827.8
155°	788.4	798.4
157.5°	769.3	776.3
160°	757.9	761.9
162.5°	750.4	754.2
165°	739.7	743.7
167.5°	731.9	733.6
170°	729.7	729.7
172.5°	724.0	722.6
175°	720.6	720.6
177.5°	717.5	715.8
180°	715.8	715.8



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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	0.01	0.73	1.13	1.84	3.39	13.18	13.89	14.29	15.01	16.55
	3H	0.71	1.35	1.83	2.47	4.03	15.00	15.64	16.12	16.77	18.33
	4H	1.00	1.61	2.13	2.73	4.30	15.64	16.25	16.77	17.37	18.94
	6H	1.24	1.80	2.38	2.93	4.51	16.05	16.62	17.20	17.74	19.32
	8H	1.30	1.84	2.45	2.98	4.55	16.17	16.70	17.31	17.85	19.42
	12H	1.32	1.82	2.47	2.96	4.55	16.23	16.74	17.38	17.87	19.47
4H	2H	7.20	7.81	8.34	8.94	10.50	13.43	14.05	14.58	15.17	16.73
	3H	8.76	9.27	9.90	10.42	11.99	15.46	15.97	16.61	17.12	18.70
	4H	8.85	9.32	10.00	10.45	12.05	16.22	16.69	17.37	17.83	19.42
	6H	8.85	9.25	10.00	10.41	12.00	16.75	17.15	17.90	18.31	19.90
	8H	8.82	9.20	9.98	10.35	11.95	16.90	17.28	18.06	18.43	20.03
	12H	8.77	9.11	9.94	10.27	11.88	16.98	17.33	18.16	18.49	20.10
8H	4H	10.27	10.65	11.43	11.80	13.41	16.27	16.64	17.42	17.80	19.40
	6H	10.51	10.82	11.69	12.01	13.62	16.88	17.20	18.06	18.39	19.99
	8H	10.52	10.80	11.71	11.97	13.59	17.10	17.37	18.28	18.54	20.17
	12H	10.49	10.73	11.67	11.89	13.55	17.23	17.47	18.42	18.64	20.30
12H	4H	10.41	10.75	11.58	11.91	13.52	16.21	16.55	17.38	17.72	19.33
	6H	10.76	11.04	11.95	12.21	13.83	16.87	17.14	18.05	18.31	19.93
	8H	10.83	11.07	12.01	12.24	13.89	17.09	17.33	18.27	18.50	20.15