

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: P937532

Luminaire Tested: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937532
REPORT IS A COMBINATION OF REPORTS P933566 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

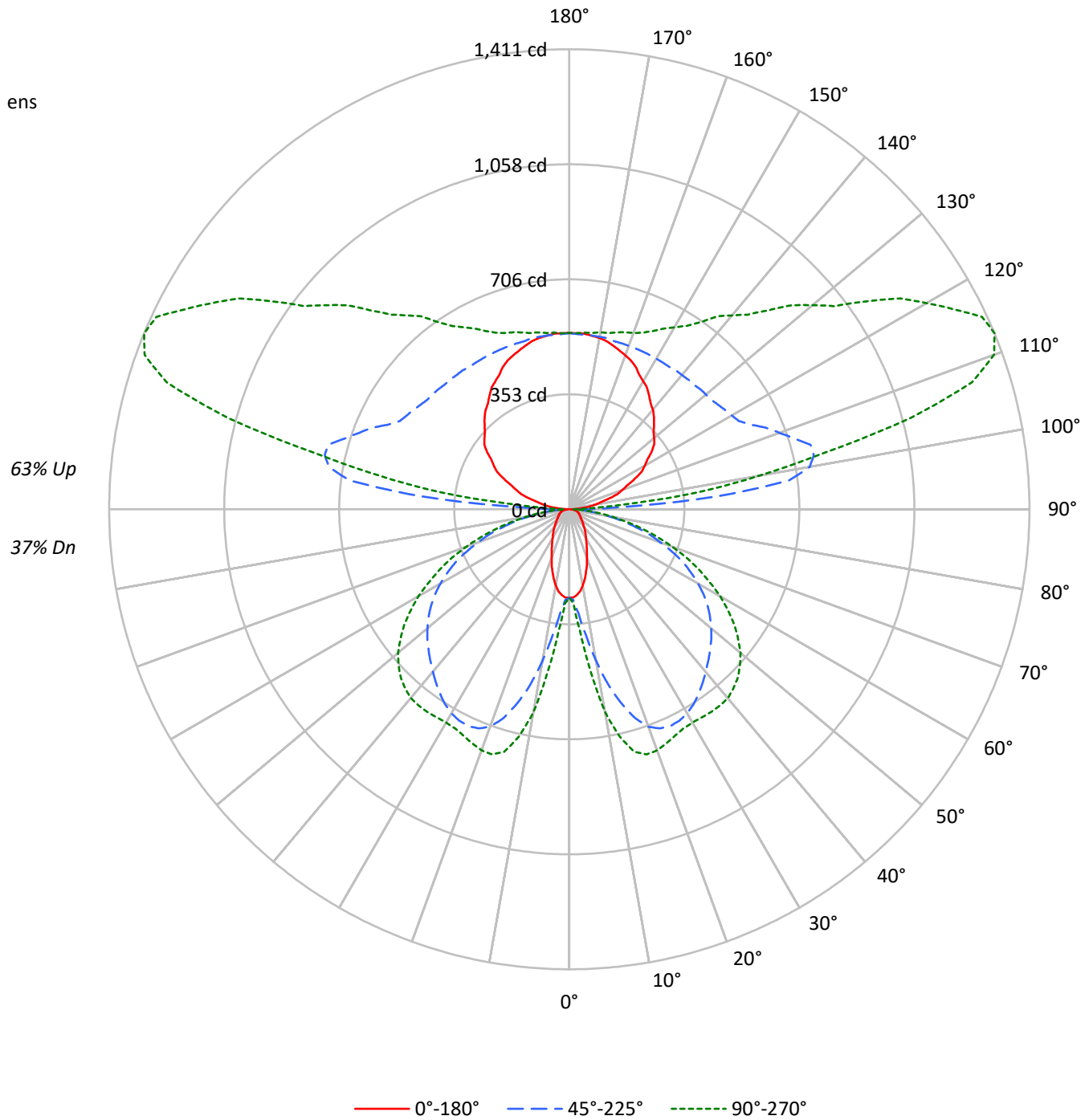
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5603.6 lumens
Efficiency: N/A
Efficacy: 113.9 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-Indirect

Input Watts (W): 49.2
Input Voltage (V): NR
Input Current (A_{in}): 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: P937532
CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-3000K

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			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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37			37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31			31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25			25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21			21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17			17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11			11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10			10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9			9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2517	2517	2517
5°	2456	2907	3383
10°	2225	4233	5608
15°	1889	5527	6771
20°	1536	6400	6901
25°	1279	6693	6761
30°	1077	6730	6748
35°	952	6613	6923
40°	828	6462	7103
45°	748	6350	7131
50°	684	6248	7013
55°	654	6101	6702
60°	667	5826	6211
65°	690	5410	5536
70°	731	4708	4677
75°	800	3828	3650
80°	856	2647	2459
85°	720	1396	1258

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°	35.1	0.6
10°-20°	155.5	2.8
20°-30°	272.0	4.9
30°-40°	350.1	6.2
40°-50°	391.0	7.0
50°-60°	374.5	6.7
60°-70°	296.8	5.3
70°-80°	174.5	3.1
80°-90°	50.5	0.9
90°-100°	263.4	4.7
100°-110°	692.6	12.4
110°-120°	718.2	12.8
120°-130°	576.0	10.3
130°-140°	452.0	8.1
140°-150°	346.9	6.2
150°-160°	249.8	4.5
160°-170°	152.9	2.7
170°-180°	51.6	0.9
0°-30°	462.5	8.3
0°-40°	812.6	14.5
0°-60°	1578.2	28.2
0°-90°	2100.1	37.5
90°-120°	1674.2	29.9
90°-150°	3049.1	54.4
90°-180°	3504.0	62.5
0°-180°	5603.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	271	271	271	271	271	
5°	264	283	319	361	374	24
15°	198	365	616	746	770	55
25°	126	414	733	766	766	58
35°	86	396	691	730	759	53
45°	58	316	610	699	731	45
55°	42	201	518	602	618	38
65°	33	106	385	432	439	33
75°	24	65	211	232	233	26
85°	9	20	52	58	58	9
90°	4	10	28	14	14	4
95°	35	136	454	234	159	39
105°	125	189	766	1162	1084	132
115°	222	269	613	1224	1396	219
125°	308	346	558	943	1112	274
135°	368	404	540	761	863	284
145°	426	453	534	649	700	267
155°	482	495	534	586	603	221
165°	520	527	534	555	562	147
175°	540	540	537	544	544	51
180°	540	540	540	540	540	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2	271.2
2.5°	271.2	271.2	272.9	273.8	275.6	276.4	278.2	279.9	285.2	286.0	287.8
5°	264.2	267.7	279.1	283.4	295.6	312.2	319.2	330.5	354.0	361.0	365.4
7.5°	253.8	261.6	289.5	296.5	327.0	370.6	388.9	413.3	450.8	469.2	484.0
10°	237.2	253.8	303.5	320.0	369.7	436.0	470.0	504.0	560.7	586.0	595.6
12.5°	218.9	245.9	318.3	341.0	412.5	509.3	550.3	587.8	652.3	686.3	691.5
15°	198.0	234.6	332.2	365.4	457.8	570.3	615.7	661.9	722.0	746.5	752.6
17.5°	179.6	225.9	345.3	380.2	492.7	625.2	671.5	709.8	758.7	775.2	779.6
20°	157.0	211.9	354.0	399.4	529.3	665.4	709.8	739.5	772.6	783.1	784.8
22.5°	140.4	197.1	359.3	406.4	553.7	689.8	727.3	750.8	773.5	777.0	777.9
25°	126.4	180.5	358.4	414.2	574.7	704.6	733.4	750.8	763.9	765.6	765.6
27.5°	113.4	162.2	354.9	416.0	590.4	708.1	730.8	743.0	749.1	752.6	752.6
30°	102.0	144.8	346.2	412.5	597.3	704.6	722.9	729.0	735.1	740.4	743.0
32.5°	93.3	128.2	333.1	405.5	598.2	695.9	709.0	712.5	721.2	733.4	737.7
35°	85.5	111.6	318.3	395.9	593.0	681.9	690.7	694.1	711.6	729.9	736.0
37.5°	77.6	99.4	299.1	379.3	585.1	665.4	671.5	677.6	704.6	726.4	733.4
40°	69.8	88.9	276.4	361.0	572.9	645.3	650.5	660.1	695.9	721.2	728.1
42.5°	63.7	80.2	252.0	341.8	557.2	622.6	630.5	644.4	685.4	712.5	720.3
45°	58.4	71.5	225.9	315.7	537.2	599.1	610.4	629.6	673.2	699.4	706.3
47.5°	53.2	65.4	198.8	288.6	515.4	575.5	590.4	612.2	656.6	681.9	688.0
50°	48.8	59.3	171.8	259.9	491.8	550.3	567.7	590.4	635.7	659.3	667.1
52.5°	45.3	54.1	146.5	231.1	464.8	524.1	544.1	567.7	610.4	633.1	638.3
55°	41.9	49.7	124.7	200.6	436.9	496.2	518.0	540.7	582.5	601.7	605.2
57.5°	40.1	46.2	106.4	171.8	407.2	464.8	489.2	510.1	549.4	564.2	567.7
60°	37.5	43.6	92.4	147.4	375.0	435.1	456.1	477.0	510.1	522.3	525.0
62.5°	34.9	41.9	82.0	123.8	341.8	400.3	421.2	440.4	468.3	477.0	480.5
65°	33.1	40.1	74.1	106.4	307.8	363.6	384.6	401.1	423.8	432.5	434.3
67.5°	31.4	38.4	68.0	91.6	273.8	327.0	342.7	358.4	375.8	384.6	385.4
70°	28.8	36.6	62.8	81.1	238.9	285.2	298.2	314.8	328.8	333.1	335.7
72.5°	27.0	34.0	59.3	73.3	203.2	245.0	257.3	266.8	279.1	283.4	283.4
75°	24.4	30.5	55.8	65.4	166.6	200.6	211.0	220.6	230.2	232.0	229.3
77.5°	21.8	27.0	48.0	54.9	129.9	158.7	167.4	172.7	180.5	182.3	183.1
80°	18.3	23.5	37.5	42.7	94.2	116.9	123.0	127.3	134.3	134.3	136.0
82.5°	14.0	18.3	27.0	30.5	63.7	80.2	85.5	88.1	92.4	92.4	92.4
85°	8.7	11.3	17.4	20.1	38.4	48.8	52.3	53.2	56.7	57.6	57.6
87.5°	4.4	6.1	11.3	12.2	20.1	25.3	25.3	27.0	27.0	26.2	25.3
90°	3.7	6.5	9.4	10.1	16.0	23.7	27.6	24.5	18.4	13.8	13.8
92.5°	14.5	39.2	63.8	70.0	98.5	136.3	155.2	136.0	97.7	68.9	66.2
95°	34.8	80.0	125.1	136.4	242.2	383.2	453.7	404.9	307.2	234.0	225.7
97.5°	60.2	100.0	139.9	149.8	326.2	561.4	679.0	648.1	586.4	540.1	524.3
100°	79.8	115.9	152.0	161.1	356.8	617.8	748.3	750.6	755.0	758.4	739.6
102.5°	96.4	130.2	163.9	172.3	370.9	635.5	767.9	807.2	885.9	944.8	928.7
105°	124.8	153.3	181.8	189.0	381.3	637.5	765.7	853.9	1030.2	1162.5	1153.9
107.5°	153.8	180.4	207.0	213.6	383.2	609.1	722.1	845.2	1091.2	1275.7	1277.8
110°	173.4	197.4	221.4	227.4	380.2	584.0	685.9	823.4	1098.4	1304.7	1313.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	192.6	215.5	238.3	244.1	380.4	562.0	652.9	793.6	1075.0	1286.2	1300.0
115°	221.6	242.7	263.8	269.1	383.9	536.9	613.4	749.0	1020.1	1223.5	1242.6
117.5°	250.3	269.5	288.6	293.4	391.0	521.1	586.2	708.5	953.2	1136.8	1158.1
120°	266.9	285.0	303.0	307.6	396.8	515.8	575.3	687.1	910.7	1078.4	1099.1
122.5°	283.3	301.5	319.8	324.3	405.1	513.0	566.9	667.5	868.9	1019.9	1040.3
125°	308.4	324.9	341.5	345.7	416.4	510.7	557.8	643.4	814.4	942.7	961.5
127.5°	328.6	345.3	362.2	366.3	427.6	509.4	550.3	623.7	770.5	880.7	896.5
130°	339.5	357.5	375.6	380.1	435.8	510.2	547.4	612.8	743.5	841.5	856.2
132.5°	350.7	368.8	386.8	391.4	442.5	510.7	544.8	603.3	720.3	808.1	821.3
135°	367.5	383.9	400.4	404.4	449.8	510.2	540.5	589.5	687.4	760.9	772.3
137.5°	384.5	400.8	417.0	421.1	460.6	513.4	539.7	581.1	664.0	726.1	735.4
140°	398.6	413.6	428.6	432.4	467.3	513.9	537.2	572.9	644.5	698.2	706.9
142.5°	409.5	423.4	437.2	440.7	472.9	515.7	537.2	568.6	631.4	678.6	686.1
145°	426.2	438.3	450.3	453.4	480.1	515.8	533.6	559.3	610.7	649.2	654.9
147.5°	442.9	454.7	466.4	469.3	490.8	519.3	533.6	553.8	594.3	624.6	629.3
150°	453.7	464.4	475.0	477.7	496.4	521.2	533.6	550.7	584.8	610.4	614.2
152.5°	465.0	473.0	481.1	483.1	499.9	522.3	533.6	548.2	577.3	599.2	602.1
155°	481.7	487.6	493.7	495.1	508.0	525.1	533.6	545.2	568.4	585.7	587.7
157.5°	494.0	499.8	505.6	507.1	515.9	527.7	533.6	542.6	560.6	574.1	575.5
160°	502.4	506.9	511.4	512.5	519.6	528.9	533.6	541.4	556.8	568.4	569.2
162.5°	510.7	514.1	517.5	518.3	523.4	530.2	533.6	540.1	553.1	562.9	563.6
165°	519.7	522.8	525.8	526.6	529.0	532.0	533.6	538.3	547.6	554.6	555.4
167.5°	528.1	529.6	531.1	531.4	533.3	535.9	537.2	540.2	546.3	551.0	551.3
170°	533.6	535.0	536.5	536.8	536.9	537.1	537.2	540.2	546.3	551.0	551.0
172.5°	536.5	536.8	537.1	537.2	537.2	537.2	537.2	539.6	544.4	548.1	547.8
175°	540.5	540.5	540.5	540.5	539.4	537.9	537.2	538.7	541.8	544.1	544.1
177.5°	540.5	540.5	540.5	540.5	539.6	538.5	537.9	539.1	541.5	543.4	543.0
180°	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	271.2	271.2
2.5°	289.5	287.8
5°	372.4	374.1
7.5°	501.4	500.5
10°	623.5	631.4
12.5°	712.5	714.2
15°	766.5	770.0
17.5°	787.4	788.3
20°	788.3	786.6
22.5°	778.7	777.0
25°	767.4	766.5
27.5°	756.9	757.8
30°	752.6	755.2
32.5°	752.6	756.9
35°	754.3	758.7
37.5°	753.4	758.7
40°	749.9	756.1
42.5°	740.4	744.7
45°	725.5	730.8
47.5°	706.3	709.8
50°	681.9	685.4
52.5°	651.4	652.3
55°	614.8	618.3
57.5°	575.5	576.4
60°	531.9	534.6
62.5°	485.7	485.7
65°	436.9	438.6
67.5°	386.3	390.7
70°	334.9	335.7
72.5°	284.3	284.3
75°	232.0	232.8
77.5°	182.3	182.3
80°	135.2	136.0
82.5°	93.3	95.1
85°	58.4	58.4
87.5°	27.0	24.4
90°	13.8	13.8
92.5°	55.2	44.2
95°	192.5	159.2
97.5°	461.0	397.9
100°	664.3	589.1
102.5°	864.3	799.8
105°	1119.2	1084.5
107.5°	1286.2	1294.5
110°	1349.8	1385.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1355.5	1411.0
115°	1319.6	1396.5
117.5°	1243.3	1328.6
120°	1182.0	1264.8
122.5°	1122.1	1203.8
125°	1036.8	1112.1
127.5°	960.1	1023.6
130°	914.9	973.5
132.5°	873.8	926.4
135°	817.5	862.9
137.5°	772.5	809.6
140°	741.6	776.2
142.5°	715.9	745.8
145°	677.5	700.1
147.5°	648.0	666.7
150°	629.3	644.5
152.5°	613.5	625.0
155°	595.3	602.8
157.5°	580.9	586.2
160°	572.2	575.3
162.5°	566.6	569.4
165°	558.5	561.5
167.5°	552.5	553.8
170°	551.0	551.0
172.5°	546.7	545.5
175°	544.1	544.1
177.5°	541.8	540.5
180°	540.5	540.5



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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	2.93	3.72	3.98	4.78	6.21	16.07	16.85	17.12	17.91	19.35
	3H	3.63	4.34	4.69	5.40	6.86	17.89	18.59	18.95	19.66	21.12
	4H	3.93	4.59	5.00	5.67	7.13	18.52	19.19	19.59	20.26	21.72
	6H	4.17	4.79	5.25	5.86	7.34	18.93	19.55	20.01	20.62	22.10
	8H	4.24	4.83	5.32	5.92	7.38	19.04	19.63	20.13	20.72	22.19
	12H	4.25	4.81	5.34	5.89	7.39	19.10	19.66	20.19	20.75	22.24
4H	2H	10.11	10.78	11.19	11.85	13.31	16.34	17.00	17.41	18.08	19.54
	3H	11.67	12.23	12.76	13.33	14.81	18.36	18.92	19.45	20.02	21.49
	4H	11.77	12.28	12.86	13.37	14.86	19.11	19.63	20.20	20.71	22.21
	6H	11.77	12.22	12.87	13.33	14.81	19.63	20.08	20.73	21.19	22.68
	8H	11.75	12.16	12.85	13.26	14.77	19.79	20.20	20.89	21.30	22.81
	12H	11.70	12.07	12.82	13.19	14.70	19.87	20.24	20.99	21.36	22.87
8H	4H	13.19	13.61	14.29	14.71	16.22	19.17	19.58	20.27	20.68	22.19
	6H	13.43	13.77	14.56	14.92	16.42	19.78	20.12	20.90	21.27	22.77
	8H	13.45	13.75	14.58	14.88	16.40	19.99	20.29	21.12	21.42	22.94
	12H	13.41	13.68	14.55	14.80	16.36	20.12	20.39	21.26	21.51	23.07
12H	4H	13.33	13.70	14.45	14.82	16.33	19.12	19.49	20.23	20.61	22.12
	6H	13.69	13.99	14.82	15.11	16.63	19.76	20.06	20.89	21.19	22.71
	8H	13.75	14.02	14.89	15.14	16.70	19.98	20.24	21.11	21.37	22.93