

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: P937533

Luminaire Tested: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937533
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-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

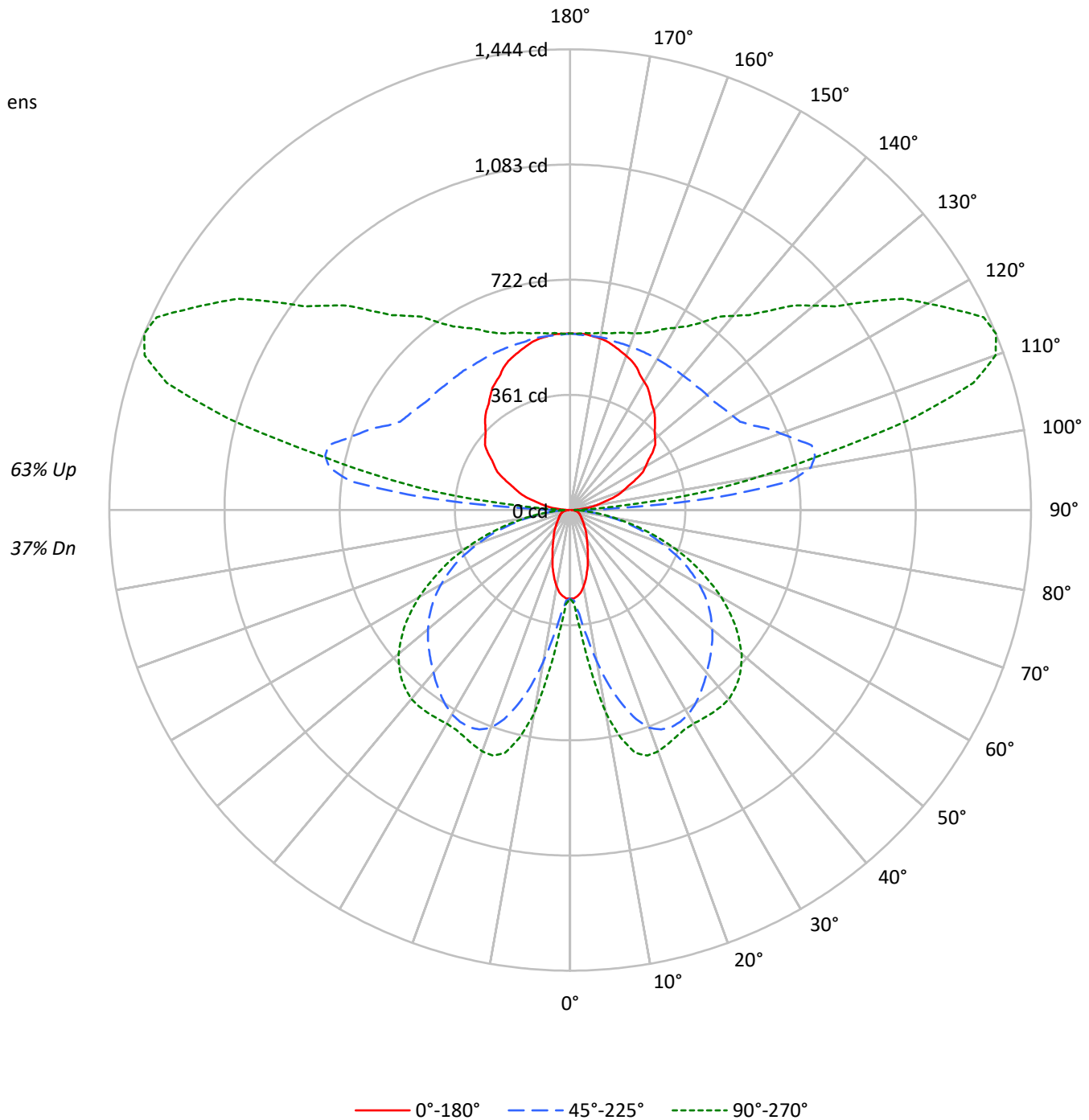
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5735.9 lumens
Efficiency: N/A
Efficacy: 116.6 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

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CATALOG NUMBER: SQ4-FB-100U-075D-92765-1D-UNV-STD-W-4-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P937533

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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°	2576	2576	2576
5°	2514	2975	3462
10°	2278	4333	5741
15°	1933	5658	6931
20°	1573	6551	7064
25°	1310	6851	6920
30°	1103	6889	6907
35°	974	6769	7086
40°	847	6615	7271
45°	766	6499	7299
50°	701	6396	7178
55°	669	6245	6860
60°	683	5962	6358
65°	706	5537	5667
70°	749	4820	4788
75°	820	3919	3736
80°	875	2709	2517
85°	737	1431	1288

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7299 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.9	0.6
10°-20°	159.2	2.8
20°-30°	278.4	4.9
30°-40°	358.4	6.2
40°-50°	400.3	7.0
50°-60°	383.4	6.7
60°-70°	303.8	5.3
70°-80°	178.7	3.1
80°-90°	51.7	0.9
90°-100°	269.7	4.7
100°-110°	709.0	12.4
110°-120°	735.1	12.8
120°-130°	589.6	10.3
130°-140°	462.7	8.1
140°-150°	355.1	6.2
150°-160°	255.7	4.5
160°-170°	156.5	2.7
170°-180°	52.9	0.9
0°-30°	473.4	8.3
0°-40°	831.8	14.5
0°-60°	1615.4	28.2
0°-90°	2149.7	37.5
90°-120°	1713.7	29.9
90°-150°	3121.1	54.4
90°-180°	3586.0	62.5
0°-180°	5735.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	278	278	278	278	278	
5°	270	290	327	370	383	25
15°	203	374	630	764	788	56
25°	129	424	751	784	785	60
35°	88	405	707	747	777	55
45°	60	323	625	716	748	46
55°	43	205	530	616	633	39
65°	34	109	394	443	449	34
75°	25	67	216	237	238	26
85°	9	20	54	59	60	9
90°	4	10	28	14	14	4
95°	36	140	464	240	163	40
105°	128	193	784	1190	1110	135
115°	227	276	628	1252	1429	224
125°	316	354	571	965	1138	280
135°	376	414	553	779	883	291
145°	436	464	546	665	717	273
155°	493	507	546	600	617	227
165°	532	539	546	568	575	150
175°	553	553	550	557	557	53
180°	553	553	553	553	553	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	277.6	277.6	277.6	277.6	277.6	277.6	277.6	277.6	277.6	277.6	277.6
2.5°	277.6	277.6	279.4	280.3	282.1	283.0	284.7	286.5	291.9	292.8	294.6
5°	270.5	274.0	285.6	290.1	302.6	319.6	326.7	338.3	362.4	369.5	374.0
7.5°	259.8	267.8	296.3	303.5	334.7	379.4	398.1	423.1	461.5	480.2	495.4
10°	242.8	259.8	310.6	327.6	378.5	446.3	481.1	515.9	574.0	599.8	609.7
12.5°	224.0	251.7	325.8	349.0	422.2	521.3	563.2	601.6	667.7	702.5	707.8
15°	202.6	240.1	340.1	374.0	468.6	583.8	630.2	677.5	739.1	764.1	770.3
17.5°	183.9	231.2	353.5	389.2	504.3	640.0	687.3	726.6	776.6	793.5	798.0
20°	160.7	216.9	362.4	408.8	541.8	681.1	726.6	756.9	790.9	801.6	803.4
22.5°	143.7	201.7	367.8	416.0	566.8	706.1	744.4	768.5	791.8	795.3	796.2
25°	129.4	184.8	366.9	424.0	588.2	721.2	750.7	768.5	781.9	783.7	783.7
27.5°	116.0	166.0	363.3	425.8	604.3	724.8	748.0	760.5	766.8	770.3	770.3
30°	104.4	148.2	354.4	422.2	611.4	721.2	740.0	746.2	752.5	757.8	760.5
32.5°	95.5	131.2	341.0	415.1	612.3	712.3	725.7	729.3	738.2	750.7	755.2
35°	87.5	114.3	325.8	405.2	607.0	698.0	707.0	710.5	728.4	747.1	753.4
37.5°	79.4	101.8	306.2	388.3	598.9	681.1	687.3	693.6	721.2	743.6	750.7
40°	71.4	91.0	283.0	369.5	586.5	660.5	665.9	675.7	712.3	738.2	745.3
42.5°	65.2	82.1	258.0	349.9	570.4	637.3	645.4	659.6	701.6	729.3	737.3
45°	59.8	73.2	231.2	323.1	549.9	613.2	624.8	644.5	689.1	715.9	723.0
47.5°	54.4	66.9	203.5	295.5	527.5	589.1	604.3	626.6	672.1	698.0	704.3
50°	50.0	60.7	175.8	266.0	503.4	563.2	581.1	604.3	650.7	674.8	682.9
52.5°	46.4	55.3	150.0	236.5	475.8	536.5	557.0	581.1	624.8	648.0	653.4
55°	42.8	50.9	127.6	205.3	447.2	507.9	530.2	553.4	596.3	615.9	619.5
57.5°	41.1	47.3	108.9	175.8	416.9	475.8	500.8	522.2	562.4	577.5	581.1
60°	38.4	44.6	94.6	150.9	383.8	445.4	466.8	488.3	522.2	534.7	537.4
62.5°	35.7	42.8	83.9	126.8	349.9	409.7	431.1	450.8	479.3	488.3	491.8
65°	33.9	41.1	75.9	108.9	315.1	372.2	393.6	410.6	433.8	442.7	444.5
67.5°	32.1	39.3	69.6	93.7	280.3	334.7	350.8	366.9	384.7	393.6	394.5
70°	29.5	37.5	64.3	83.0	244.6	291.9	305.3	322.2	336.5	341.0	343.7
72.5°	27.7	34.8	60.7	75.0	208.0	250.8	263.3	273.1	285.6	290.1	290.1
75°	25.0	31.2	57.1	66.9	170.5	205.3	216.0	225.8	235.7	237.4	234.8
77.5°	22.3	27.7	49.1	56.2	133.0	162.5	171.4	176.7	184.8	186.6	187.5
80°	18.7	24.1	38.4	43.7	96.4	119.6	125.9	130.3	137.5	137.5	139.2
82.5°	14.3	18.7	27.7	31.2	65.2	82.1	87.5	90.2	94.6	94.6	94.6
85°	8.9	11.6	17.9	20.5	39.3	50.0	53.6	54.4	58.0	58.9	58.9
87.5°	4.5	6.2	11.6	12.5	20.5	25.9	25.9	27.7	27.7	26.8	25.9
90°	3.7	6.7	9.6	10.4	16.3	24.3	28.2	25.1	18.8	14.1	14.1
92.5°	14.8	40.1	65.3	71.7	100.8	139.5	158.9	139.2	100.0	70.5	67.7
95°	35.6	81.9	128.1	139.6	247.9	392.2	464.4	414.4	314.5	239.5	231.0
97.5°	61.6	102.4	143.2	153.4	333.9	574.7	695.0	663.4	600.2	552.8	536.6
100°	81.7	118.6	155.6	164.9	365.3	632.4	766.0	768.3	772.8	776.3	757.0
102.5°	98.7	133.3	167.7	176.4	379.6	650.5	786.0	826.3	906.8	967.2	950.6
105°	127.7	156.9	186.1	193.4	390.3	652.6	783.8	874.1	1054.5	1190.0	1181.1
107.5°	157.5	184.7	211.9	218.7	392.2	623.5	739.2	865.1	1116.9	1305.8	1308.0
110°	177.5	202.1	226.6	232.8	389.2	597.8	702.0	842.8	1124.3	1335.4	1344.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	197.2	220.6	244.0	249.8	389.4	575.3	668.3	812.4	1100.4	1316.5	1330.7
115°	226.8	248.4	270.0	275.5	392.9	549.6	627.9	766.7	1044.2	1252.3	1272.0
117.5°	256.2	275.8	295.5	300.4	400.3	533.4	600.0	725.3	975.7	1163.6	1185.4
120°	273.2	291.7	310.2	314.8	406.1	528.0	588.9	703.3	932.2	1103.8	1125.1
122.5°	290.0	308.7	327.3	332.0	414.7	525.1	580.3	683.3	889.4	1044.0	1064.9
125°	315.6	332.6	349.5	353.8	426.2	522.7	571.0	658.6	833.6	964.9	984.2
127.5°	336.3	353.5	370.7	375.0	437.7	521.4	563.2	638.4	788.7	901.5	917.7
130°	347.5	366.0	384.5	389.1	446.1	522.3	560.3	627.2	761.0	861.4	876.4
132.5°	359.0	377.5	396.0	400.6	452.9	522.7	557.6	617.5	737.3	827.2	840.7
135°	376.2	392.9	409.8	414.0	460.4	522.3	553.2	603.4	703.7	778.9	790.5
137.5°	393.6	410.2	426.9	431.0	471.5	525.5	552.4	594.8	679.6	743.3	752.7
140°	408.0	423.4	438.7	442.6	478.4	526.0	549.9	586.5	659.7	714.7	723.6
142.5°	419.2	433.4	447.6	451.1	484.1	527.9	549.9	582.0	646.3	694.6	702.3
145°	436.2	448.6	460.9	464.1	491.5	528.0	546.2	572.5	625.1	664.6	670.4
147.5°	453.4	465.4	477.4	480.4	502.4	531.6	546.2	566.9	608.3	639.4	644.2
150°	464.4	475.3	486.2	489.0	508.1	533.5	546.2	563.7	598.6	624.8	628.7
152.5°	475.9	484.2	492.5	494.5	511.7	534.7	546.2	561.1	590.9	613.3	616.3
155°	493.1	499.2	505.3	506.8	520.0	537.4	546.2	558.1	581.8	599.6	601.5
157.5°	505.7	511.6	517.5	519.1	528.1	540.1	546.2	555.4	573.9	587.7	589.0
160°	514.2	518.9	523.4	524.6	531.8	541.4	546.2	554.1	569.9	581.8	582.6
162.5°	522.7	526.2	529.7	530.6	535.8	542.7	546.2	552.9	566.2	576.2	576.9
165°	532.0	535.1	538.2	539.1	541.5	544.6	546.2	551.0	560.6	567.7	568.5
167.5°	540.6	542.1	543.6	544.0	545.9	548.5	549.9	553.0	559.2	564.0	564.3
170°	546.2	547.6	549.1	549.5	549.6	549.8	549.9	553.0	559.2	564.0	564.0
172.5°	549.1	549.5	549.8	549.9	549.9	549.9	549.9	552.4	557.3	561.0	560.7
175°	553.2	553.2	553.2	553.2	552.1	550.6	549.9	551.5	554.6	556.9	556.9
177.5°	553.2	553.2	553.2	553.2	552.4	551.2	550.6	551.8	554.3	556.2	555.8
180°	553.2	553.2	553.2	553.2	553.2	553.2	553.2	553.2	553.2	553.2	553.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	277.6	277.6
2.5°	296.3	294.6
5°	381.1	382.9
7.5°	513.3	512.4
10°	638.2	646.3
12.5°	729.3	731.1
15°	784.6	788.2
17.5°	806.0	806.9
20°	806.9	805.1
22.5°	797.1	795.3
25°	785.5	784.6
27.5°	774.8	775.7
30°	770.3	773.0
32.5°	770.3	774.8
35°	772.1	776.6
37.5°	771.2	776.6
40°	767.7	773.9
42.5°	757.8	762.3
45°	742.7	748.0
47.5°	723.0	726.6
50°	698.0	701.6
52.5°	666.8	667.7
55°	629.3	632.9
57.5°	589.1	590.0
60°	544.5	547.2
62.5°	497.2	497.2
65°	447.2	449.0
67.5°	395.4	399.9
70°	342.8	343.7
72.5°	291.0	291.0
75°	237.4	238.3
77.5°	186.6	186.6
80°	138.4	139.2
82.5°	95.5	97.3
85°	59.8	59.8
87.5°	27.7	25.0
90°	14.1	14.1
92.5°	56.5	45.3
95°	197.0	163.0
97.5°	471.9	407.3
100°	680.0	603.0
102.5°	884.7	818.7
105°	1145.6	1110.2
107.5°	1316.5	1325.1
110°	1381.7	1418.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1387.5	1444.3
115°	1350.7	1429.4
117.5°	1272.7	1360.0
120°	1209.9	1294.7
122.5°	1148.6	1232.3
125°	1061.2	1138.4
127.5°	982.8	1047.8
130°	936.4	996.5
132.5°	894.4	948.2
135°	836.8	883.2
137.5°	790.8	828.7
140°	759.1	794.5
142.5°	732.8	763.4
145°	693.5	716.6
147.5°	663.3	682.4
150°	644.2	659.7
152.5°	628.0	639.7
155°	609.3	617.1
157.5°	594.6	600.0
160°	585.7	588.9
162.5°	579.9	582.9
165°	571.6	574.8
167.5°	565.6	566.9
170°	564.0	564.0
172.5°	559.6	558.4
175°	556.9	556.9
177.5°	554.6	553.2
180°	553.2	553.2



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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	3.01	3.80	4.06	4.86	6.29	16.15	16.94	17.20	17.99	19.43
	3H	3.71	4.42	4.77	5.49	6.94	17.97	18.67	19.03	19.74	21.20
	4H	4.01	4.68	5.08	5.75	7.21	18.60	19.27	19.67	20.34	21.80
	6H	4.25	4.87	5.33	5.94	7.42	19.01	19.63	20.10	20.70	22.18
	8H	4.32	4.91	5.40	6.00	7.47	19.13	19.71	20.21	20.80	22.27
	12H	4.33	4.89	5.42	5.98	7.47	19.18	19.74	20.28	20.83	22.32
4H	2H	10.19	10.86	11.27	11.93	13.39	16.42	17.09	17.49	18.16	19.62
	3H	11.75	12.31	12.84	13.41	14.89	18.44	19.00	19.53	20.10	21.57
	4H	11.85	12.36	12.94	13.45	14.94	19.19	19.71	20.28	20.79	22.29
	6H	11.85	12.30	12.95	13.41	14.90	19.72	20.16	20.82	21.27	22.76
	8H	11.83	12.24	12.93	13.34	14.85	19.87	20.28	20.97	21.38	22.89
	12H	11.78	12.16	12.90	13.27	14.78	19.95	20.32	21.07	21.44	22.95
8H	4H	13.27	13.69	14.37	14.79	16.30	19.25	19.66	20.35	20.76	22.27
	6H	13.51	13.86	14.64	15.00	16.50	19.86	20.20	20.98	21.35	22.85
	8H	13.53	13.83	14.66	14.96	16.48	20.07	20.37	21.20	21.50	23.02
	12H	13.50	13.76	14.63	14.88	16.44	20.20	20.47	21.34	21.59	23.15
12H	4H	13.41	13.79	14.53	14.90	16.41	19.20	19.57	20.31	20.69	22.20
	6H	13.77	14.07	14.90	15.19	16.72	19.84	20.14	20.97	21.27	22.79
	8H	13.83	14.10	14.97	15.22	16.78	20.06	20.33	21.20	21.45	23.01