

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: P936615

Luminaire Tested: SQ4-FB-050U-050D-835-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936615
REPORT IS A COMBINATION OF REPORTS P933477 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

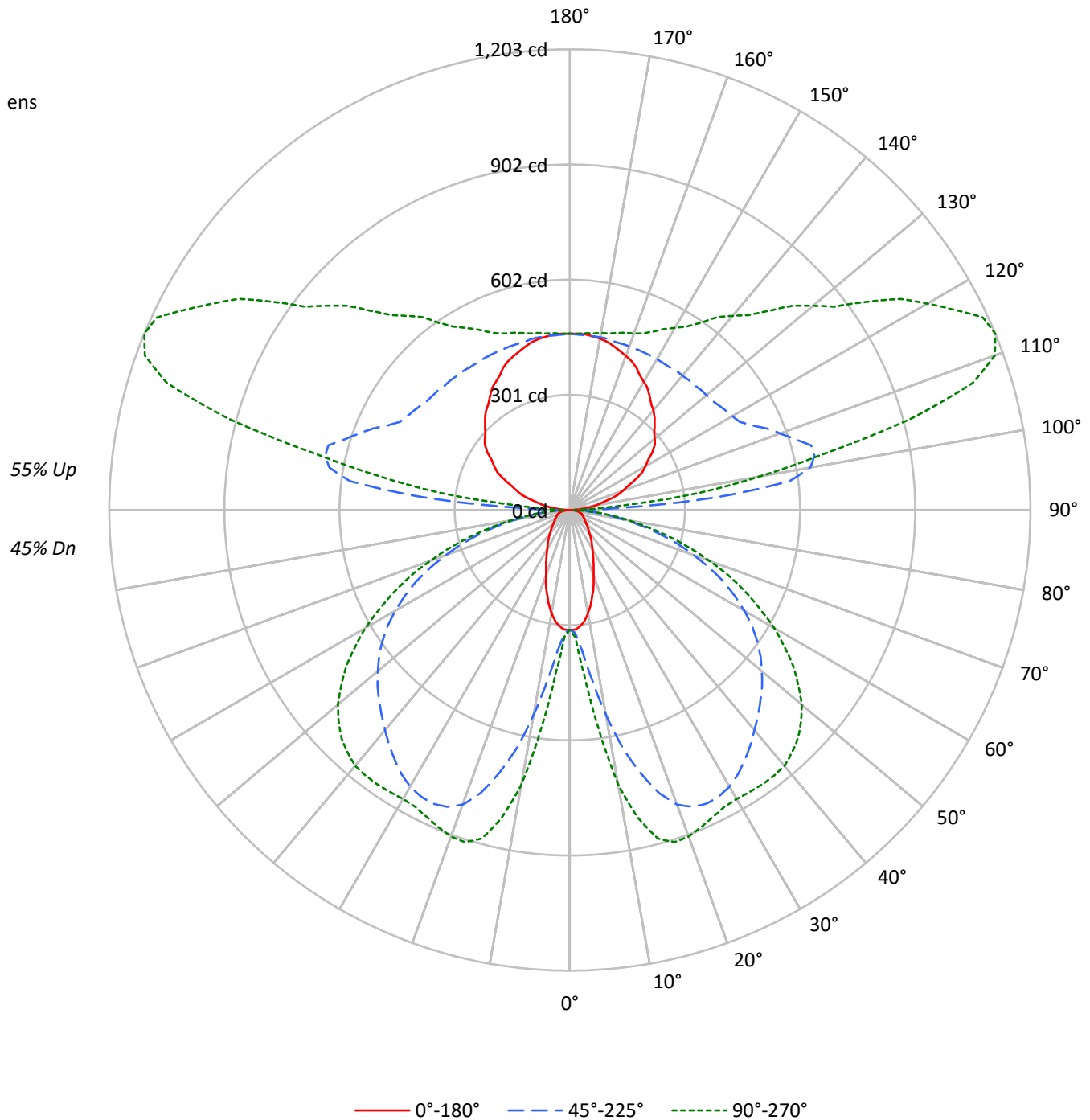
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5408.0 lumens
Efficiency: N/A
Efficacy: 126.9 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: General Diffuse

Input Watts (W): 42.6
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: P936615
CATALOG NUMBER: SQ4-FB-050U-050D-835-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P936615

CATALOG NUMBER: SQ4-FB-050U-050D-835-1D-UNV-STD-W-6

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	24	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1935	1935	1935
5°	1890	2236	2601
10°	1714	3259	4312
15°	1456	4256	5207
20°	1185	4931	5307
25°	988	5159	5199
30°	833	5191	5189
35°	736	5103	5323
40°	641	4990	5462
45°	580	4906	5483
50°	531	4830	5393
55°	509	4721	5154
60°	521	4512	4776
65°	540	4194	4257
70°	574	3655	3597
75°	635	2977	2807
80°	687	2062	1891
85°	602	1093	968

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5483 cd/sqm



TEST NUMBER: P936615

CATALOG NUMBER: SQ4-FB-050U-050D-835-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.5	0.7
10°-20°	179.3	3.3
20°-30°	313.7	5.8
30°-40°	403.8	7.5
40°-50°	451.0	8.3
50°-60°	432.0	8.0
60°-70°	342.4	6.3
70°-80°	201.3	3.7
80°-90°	57.7	1.1
90°-100°	224.5	4.2
100°-110°	590.3	10.9
110°-120°	612.1	11.3
120°-130°	491.0	9.1
130°-140°	385.3	7.1
140°-150°	295.7	5.5
150°-160°	213.0	3.9
160°-170°	130.3	2.4
170°-180°	44.0	0.8
0°-30°	533.5	9.9
0°-40°	937.3	17.3
0°-60°	1820.4	33.7
0°-90°	2421.7	44.8
90°-120°	1427.0	26.4
90°-150°	2599.0	48.1
90°-180°	2986.0	55.2
0°-180°	5408.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	313	313	313	313	313	
5°	305	327	368	416	432	28
15°	228	422	710	861	888	64
25°	146	478	846	883	884	67
35°	99	457	797	842	875	62
45°	67	364	704	807	843	52
55°	48	231	598	694	713	44
65°	38	123	444	499	506	38
75°	28	75	243	268	269	29
85°	10	23	60	66	67	11
90°	3	9	24	12	12	3
95°	30	116	387	199	136	33
105°	106	161	653	991	924	113
115°	189	229	523	1043	1190	187
125°	263	295	476	804	948	233
135°	313	345	461	649	736	242
145°	363	386	455	553	597	228
155°	411	422	455	499	514	189
165°	443	449	455	473	479	125
175°	461	461	458	464	464	44
180°	461	461	461	461	461	



TEST NUMBER: P936615

CATALOG NUMBER: SQ4-FB-050U-050D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8
2.5°	312.8	312.8	314.8	315.8	317.9	318.9	320.9	322.9	328.9	329.9	331.9
5°	304.8	308.8	321.9	326.9	341.0	360.1	368.1	381.2	408.4	416.4	421.5
7.5°	292.7	301.8	333.9	342.0	377.2	427.5	448.6	476.8	520.0	541.2	558.3
10°	273.6	292.7	350.0	369.2	426.5	502.9	542.2	581.4	646.8	675.9	687.0
12.5°	252.5	283.7	367.1	393.3	475.8	587.4	634.7	678.0	752.4	791.6	797.6
15°	228.3	270.6	383.2	421.5	528.1	657.8	710.1	763.5	832.9	861.0	868.1
17.5°	207.2	260.5	398.3	438.6	568.3	721.2	774.5	818.8	875.1	894.2	899.2
20°	181.1	244.4	408.4	460.7	610.6	767.5	818.8	853.0	891.2	903.3	905.3
22.5°	161.9	227.3	414.4	468.7	638.7	795.6	838.9	866.0	892.2	896.2	897.2
25°	145.9	208.2	413.4	477.8	662.9	812.7	845.9	866.0	881.1	883.1	883.1
27.5°	130.8	187.1	409.4	479.8	681.0	816.8	842.9	857.0	864.0	868.1	868.1
30°	117.7	167.0	399.3	475.8	689.0	812.7	833.9	840.9	847.9	854.0	857.0
32.5°	107.6	147.9	384.2	467.7	690.0	802.7	817.8	821.8	831.8	845.9	851.0
35°	98.6	128.8	367.1	456.7	684.0	786.6	796.6	800.7	820.8	841.9	848.9
37.5°	89.5	114.7	345.0	437.6	674.9	767.5	774.5	781.6	812.7	837.9	845.9
40°	80.5	102.6	318.9	416.4	660.9	744.3	750.4	761.4	802.7	831.8	839.9
42.5°	73.4	92.5	290.7	394.3	642.7	718.2	727.2	743.3	790.6	821.8	830.8
45°	67.4	82.5	260.5	364.1	619.6	691.0	704.1	726.2	776.5	806.7	814.7
47.5°	61.4	75.4	229.3	332.9	594.5	663.9	681.0	706.1	757.4	786.6	793.6
50°	56.3	68.4	198.2	299.7	567.3	634.7	654.8	681.0	733.3	760.4	769.5
52.5°	52.3	62.4	169.0	266.6	536.1	604.5	627.7	654.8	704.1	730.3	736.3
55°	48.3	57.3	143.8	231.3	503.9	572.3	597.5	623.6	671.9	694.0	698.1
57.5°	46.3	53.3	122.7	198.2	469.7	536.1	564.3	588.4	633.7	650.8	654.8
60°	43.3	50.3	106.6	170.0	432.5	501.9	526.1	550.2	588.4	602.5	605.5
62.5°	40.2	48.3	94.6	142.8	394.3	461.7	485.8	508.0	540.1	550.2	554.2
65°	38.2	46.3	85.5	122.7	355.1	419.4	443.6	462.7	488.8	498.9	500.9
67.5°	36.2	44.3	78.5	105.6	315.8	377.2	395.3	413.4	433.5	443.6	444.6
70°	33.2	42.2	72.4	93.5	275.6	328.9	344.0	363.1	379.2	384.2	387.3
72.5°	31.2	39.2	68.4	84.5	234.4	282.6	296.7	307.8	321.9	326.9	326.9
75°	28.2	35.2	64.4	75.4	192.1	231.3	243.4	254.5	265.5	267.6	264.5
77.5°	25.1	31.2	55.3	63.4	149.9	183.1	193.1	199.2	208.2	210.2	211.2
80°	21.1	27.2	43.3	49.3	108.6	134.8	141.8	146.9	154.9	154.9	156.9
82.5°	16.1	21.1	31.2	35.2	73.4	92.5	98.6	101.6	106.6	106.6	106.6
85°	10.1	13.1	20.1	23.1	44.3	56.3	60.4	61.4	65.4	66.4	66.4
87.5°	5.0	7.0	13.1	14.1	23.1	29.2	29.2	31.2	31.2	30.2	29.2
90°	3.1	5.6	8.1	8.7	13.6	20.2	23.5	20.9	15.6	11.7	11.7
92.5°	12.4	33.4	54.4	59.7	83.9	116.2	132.3	115.9	83.2	58.7	56.4
95°	29.7	68.1	106.6	116.2	206.4	326.7	386.8	345.2	261.9	199.4	192.3
97.5°	51.3	85.3	119.2	127.7	278.1	478.6	578.8	552.5	499.8	460.3	446.8
100°	68.0	98.8	129.6	137.3	304.1	526.6	637.8	639.7	643.6	646.5	630.5
102.5°	82.2	111.0	139.7	146.9	316.1	541.7	654.5	688.0	755.1	805.4	791.7
105°	106.4	130.7	155.0	161.1	324.9	543.4	652.6	727.8	878.1	990.9	983.5
107.5°	131.1	153.8	176.4	182.1	326.6	519.2	615.5	720.3	930.0	1087.3	1089.1
110°	147.8	168.2	188.7	193.8	324.1	497.8	584.6	701.8	936.3	1112.1	1119.8



TEST NUMBER: P936615

CATALOG NUMBER: SQ4-FB-050U-050D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	164.2	183.7	203.2	208.1	324.2	479.1	556.5	676.5	916.4	1096.3	1108.1
115°	188.9	206.9	224.9	229.4	327.2	457.6	522.8	638.4	869.5	1042.8	1059.2
117.5°	213.3	229.7	246.0	250.1	333.3	444.2	499.6	603.9	812.5	968.9	987.1
120°	227.5	242.9	258.3	262.2	338.2	439.6	490.3	585.6	776.2	919.1	936.8
122.5°	241.5	257.0	272.5	276.4	345.3	437.2	483.2	569.0	740.7	869.4	886.8
125°	262.8	276.9	291.1	294.6	354.9	435.3	475.5	548.4	694.2	803.5	819.5
127.5°	280.1	294.4	308.7	312.3	364.5	434.2	469.0	531.6	656.7	750.6	764.1
130°	289.4	304.8	320.2	324.0	371.5	434.8	466.5	522.2	633.7	717.3	729.8
132.5°	299.0	314.4	329.8	333.6	377.2	435.3	464.4	514.3	614.0	688.8	700.0
135°	313.2	327.2	341.2	344.7	383.4	434.9	460.7	502.5	586.0	648.6	658.3
137.5°	327.7	341.6	355.4	358.9	392.6	437.5	460.0	495.3	565.9	618.9	626.8
140°	339.8	352.6	365.3	368.5	398.3	438.0	457.9	488.4	549.4	595.1	602.5
142.5°	349.0	360.8	372.6	375.6	403.0	439.6	457.9	484.7	538.2	578.4	584.8
145°	363.3	373.6	383.9	386.5	409.3	439.6	454.8	476.7	520.5	553.4	558.2
147.5°	377.5	387.5	397.6	400.1	418.3	442.6	454.8	472.0	506.5	532.4	536.4
150°	386.8	395.9	404.9	407.2	423.1	444.2	454.8	469.4	498.5	520.3	523.5
152.5°	396.3	403.2	410.1	411.8	426.1	445.2	454.8	467.2	492.1	510.7	513.1
155°	410.6	415.7	420.7	422.0	432.9	447.5	454.8	464.7	484.5	499.3	500.9
157.5°	421.1	426.0	431.0	432.2	439.7	449.8	454.8	462.5	477.9	489.4	490.5
160°	428.2	432.0	435.8	436.8	442.8	450.8	454.8	461.4	474.6	484.5	485.1
162.5°	435.3	438.2	441.1	441.8	446.1	451.9	454.8	460.4	471.5	479.8	480.4
165°	443.0	445.6	448.2	448.9	450.9	453.5	454.8	458.8	466.7	472.7	473.4
167.5°	450.1	451.3	452.6	452.9	454.6	456.8	457.9	460.5	465.7	469.6	469.9
170°	454.8	456.0	457.3	457.6	457.7	457.8	457.9	460.5	465.7	469.6	469.6
172.5°	457.3	457.6	457.8	457.9	457.9	457.9	457.9	459.9	464.0	467.1	466.9
175°	460.7	460.7	460.7	460.7	459.8	458.5	457.9	459.2	461.8	463.7	463.7
177.5°	460.7	460.7	460.7	460.7	460.0	459.0	458.5	459.5	461.6	463.1	462.8
180°	460.7	460.7	460.7	460.7	460.7	460.7	460.7	460.7	460.7	460.7	460.7



TEST NUMBER: P936615

CATALOG NUMBER: SQ4-FB-050U-050D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	312.8	312.8
2.5°	333.9	331.9
5°	429.5	431.5
7.5°	578.4	577.4
10°	719.2	728.2
12.5°	821.8	823.8
15°	884.2	888.2
17.5°	908.3	909.3
20°	909.3	907.3
22.5°	898.2	896.2
25°	885.2	884.2
27.5°	873.1	874.1
30°	868.1	871.1
32.5°	868.1	873.1
35°	870.1	875.1
37.5°	869.1	875.1
40°	865.0	872.1
42.5°	854.0	859.0
45°	836.9	842.9
47.5°	814.7	818.8
50°	786.6	790.6
52.5°	751.4	752.4
55°	709.1	713.2
57.5°	663.9	664.9
60°	613.6	616.6
62.5°	560.3	560.3
65°	503.9	505.9
67.5°	445.6	450.6
70°	386.3	387.3
72.5°	327.9	327.9
75°	267.6	268.6
77.5°	210.2	210.2
80°	155.9	156.9
82.5°	107.6	109.6
85°	67.4	67.4
87.5°	31.2	28.2
90°	11.7	11.7
92.5°	47.0	37.7
95°	164.0	135.7
97.5°	393.0	339.2
100°	566.3	502.1
102.5°	736.7	681.7
105°	954.0	924.4
107.5°	1096.2	1103.4
110°	1150.5	1181.3



TEST NUMBER: P936615
CATALOG NUMBER: SQ4-FB-050U-050D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1155.4	1202.6
115°	1124.7	1190.3
117.5°	1059.8	1132.5
120°	1007.4	1078.1
122.5°	956.5	1026.1
125°	883.7	947.9
127.5°	818.3	872.5
130°	779.8	829.8
132.5°	744.8	789.6
135°	696.9	735.5
137.5°	658.5	690.1
140°	632.0	661.6
142.5°	610.2	635.6
145°	577.5	596.7
147.5°	552.3	568.2
150°	536.5	549.4
152.5°	522.9	532.7
155°	507.4	513.8
157.5°	495.1	499.6
160°	487.7	490.3
162.5°	482.9	485.4
165°	476.0	478.6
167.5°	471.0	472.1
170°	469.6	469.6
172.5°	465.9	465.0
175°	463.7	463.7
177.5°	461.8	460.7
180°	460.7	460.7



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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	2.80	3.65	3.79	4.66	6.00	15.96	16.81	16.96	17.82	19.16
	3H	3.50	4.27	4.51	5.28	6.65	17.80	18.56	18.80	19.58	20.94
	4H	3.80	4.52	4.82	5.55	6.91	18.44	19.16	19.45	20.18	21.55
	6H	4.05	4.72	5.08	5.74	7.13	18.86	19.53	19.89	20.56	21.94
	8H	4.12	4.75	5.15	5.80	7.18	18.98	19.62	20.01	20.66	22.04
	12H	4.14	4.74	5.17	5.78	7.18	19.05	19.65	20.09	20.69	22.09
4H	2H	10.00	10.73	11.03	11.75	13.12	16.24	16.96	17.26	17.98	19.35
	3H	11.57	12.18	12.60	13.23	14.61	18.28	18.88	19.31	19.93	21.32
	4H	11.67	12.22	12.70	13.26	14.67	19.04	19.59	20.08	20.64	22.04
	6H	11.68	12.15	12.73	13.22	14.62	19.57	20.05	20.62	21.12	22.52
	8H	11.65	12.10	12.70	13.16	14.57	19.73	20.18	20.78	21.24	22.65
	12H	11.61	12.01	12.68	13.09	14.51	19.82	20.23	20.89	21.30	22.72
8H	4H	13.11	13.55	14.16	14.61	16.03	19.10	19.55	20.15	20.60	22.02
	6H	13.35	13.72	14.42	14.82	16.23	19.72	20.09	20.80	21.19	22.61
	8H	13.37	13.69	14.45	14.77	16.21	19.94	20.27	21.02	21.35	22.78
	12H	13.33	13.62	14.42	14.70	16.17	20.08	20.37	21.17	21.45	22.92
12H	4H	13.25	13.65	14.32	14.72	16.15	19.05	19.46	20.12	20.53	21.95
	6H	13.60	13.93	14.69	15.01	16.45	19.71	20.03	20.79	21.12	22.55
	8H	13.67	13.96	14.76	15.04	16.51	19.93	20.22	21.02	21.30	22.77