

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: P937922

Luminaire Tested: SQ4-FB-125U-075D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

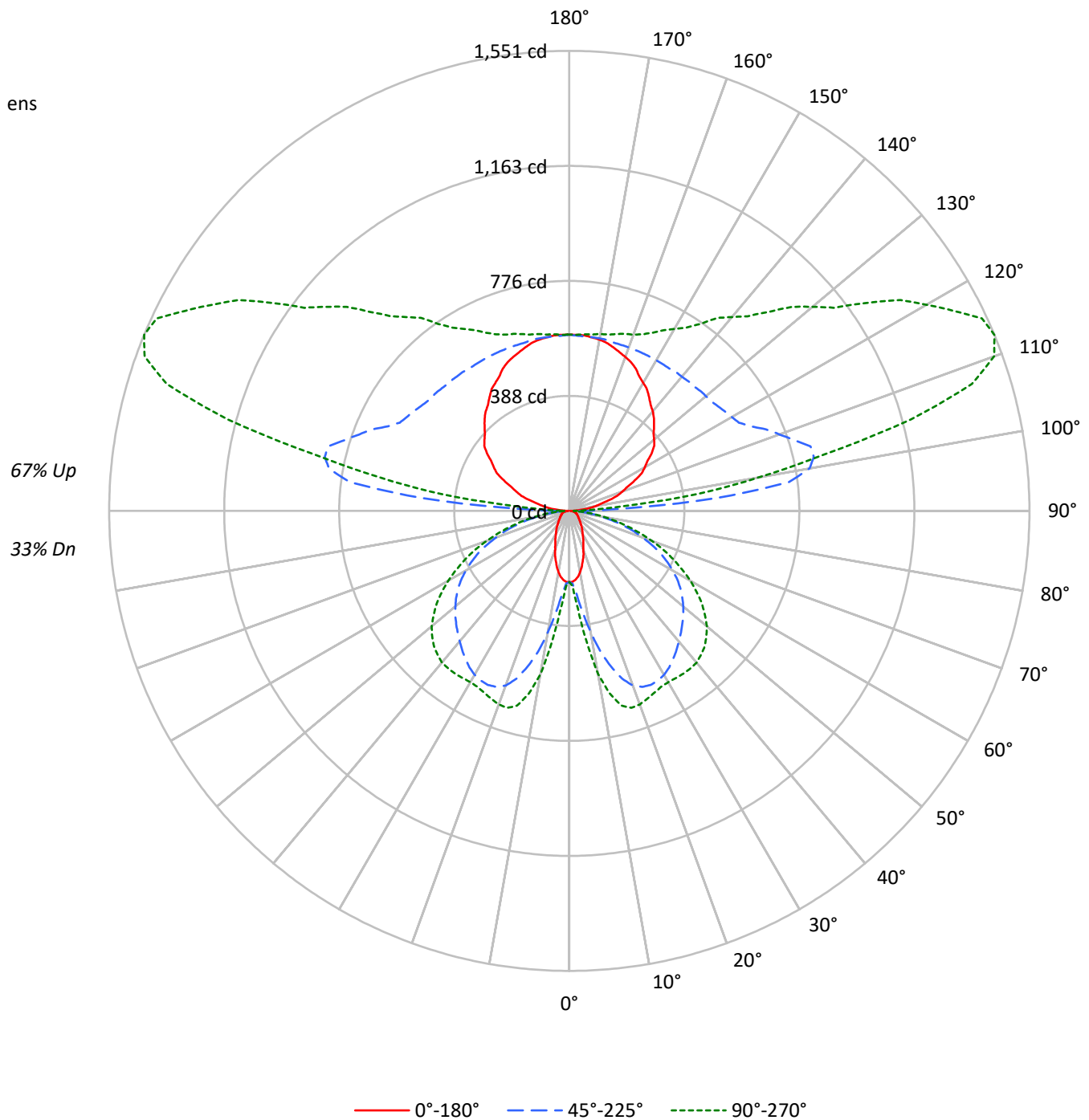
Test Method: LM-79-2019  
Report Number: P937922  
REPORT IS A COMBINATION OF REPORTS P933598 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-075D-927-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5705.6 lumens  
Efficiency: N/A  
Efficacy: 102.6 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): 55.6  
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





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20	20	20	20	20	20	20	20	20	20	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	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7

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

	0°	45°	90°
0°	2222	2222	2222
5°	2168	2566	2987
10°	1964	3738	4952
15°	1668	4880	5979
20°	1356	5652	6093
25°	1129	5910	5970
30°	952	5942	5958
35°	841	5839	6113
40°	731	5706	6272
45°	661	5607	6297
50°	604	5517	6192
55°	578	5388	5917
60°	589	5144	5484
65°	611	4777	4889
70°	645	4157	4129
75°	708	3380	3223
80°	758	2337	2171
85°	638	1233	1112

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
Vertical Angle: 45°  
Luminance: 6297 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.0	0.5
10°-20°	137.3	2.4
20°-30°	240.1	4.2
30°-40°	309.1	5.4
40°-50°	345.3	6.1
50°-60°	330.7	5.8
60°-70°	262.1	4.6
70°-80°	154.1	2.7
80°-90°	45.1	0.8
90°-100°	289.6	5.1
100°-110°	761.3	13.3
110°-120°	789.4	13.8
120°-130°	633.1	11.1
130°-140°	496.8	8.7
140°-150°	381.3	6.7
150°-160°	274.6	4.8
160°-170°	168.0	2.9
170°-180°	56.8	1.0
0°-30°	408.4	7.2
0°-40°	717.5	12.6
0°-60°	1393.5	24.4
0°-90°	1854.8	32.5
90°-120°	1840.2	32.3
90°-150°	3351.4	58.7
90°-180°	3851.0	67.5
0°-180°	5705.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	240	240	240	240	240	
5°	233	250	282	319	330	22
15°	175	323	544	659	680	49
25°	112	366	648	676	677	51
35°	76	350	610	644	670	47
45°	52	279	539	618	645	40
55°	37	177	457	531	546	34
65°	29	94	340	382	387	29
75°	22	58	186	205	206	23
85°	8	18	46	51	52	8
90°	4	11	30	15	15	4
95°	38	150	499	257	175	42
105°	137	208	842	1278	1192	145
115°	244	296	674	1345	1535	241
125°	339	380	613	1036	1222	301
135°	404	444	594	836	948	312
145°	468	498	586	714	770	293
155°	530	544	586	644	663	243
165°	571	579	586	610	617	161
175°	594	594	590	598	598	56
180°	594	594	594	594	594	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5
2.5°	239.5	239.5	241.0	241.8	243.3	244.1	245.6	247.2	251.8	252.6	254.1
5°	233.3	236.4	246.4	250.2	261.0	275.7	281.8	291.8	312.6	318.8	322.6
7.5°	224.1	231.0	255.6	261.8	288.8	327.2	343.4	365.0	398.1	414.3	427.4
10°	209.4	224.1	268.0	282.6	326.5	385.0	415.0	445.1	495.1	517.4	525.9
12.5°	193.3	217.1	281.0	301.1	364.2	449.7	485.9	519.0	576.0	606.0	610.6
15°	174.8	207.1	293.4	322.6	404.2	503.6	543.6	584.4	637.6	659.1	664.5
17.5°	158.6	199.4	304.9	335.7	435.0	552.1	592.9	626.8	669.9	684.5	688.4
20°	138.6	187.1	312.6	352.7	467.4	587.5	626.8	653.0	682.2	691.5	693.0
22.5°	124.0	174.0	317.2	358.8	489.0	609.1	642.2	663.0	683.0	686.1	686.8
25°	111.6	159.4	316.5	365.8	507.4	622.2	647.6	663.0	674.5	676.1	676.1
27.5°	100.1	143.2	313.4	367.3	521.3	625.2	645.3	656.0	661.4	664.5	664.5
30°	90.1	127.8	305.7	364.2	527.4	622.2	638.3	643.7	649.1	653.7	656.0
32.5°	82.4	113.2	294.1	358.0	528.2	614.5	626.0	629.1	636.8	647.6	651.4
35°	75.5	98.6	281.0	349.6	523.6	602.1	609.8	612.9	628.3	644.5	649.9
37.5°	68.5	87.8	264.1	335.0	516.7	587.5	592.9	598.3	622.2	641.4	647.6
40°	61.6	78.5	244.1	318.8	505.9	569.8	574.4	582.9	614.5	636.8	643.0
42.5°	56.2	70.8	222.5	301.8	492.0	549.8	556.7	569.0	605.2	629.1	636.0
45°	51.6	63.1	199.4	278.7	474.3	529.0	539.0	555.9	594.4	617.5	623.7
47.5°	47.0	57.8	175.6	254.9	455.1	508.2	521.3	540.5	579.8	602.1	607.5
50°	43.1	52.4	151.7	229.5	434.3	485.9	501.3	521.3	561.3	582.1	589.1
52.5°	40.0	47.7	129.4	204.0	410.4	462.8	480.5	501.3	539.0	559.0	563.6
55°	37.0	43.9	110.1	177.1	385.8	438.1	457.4	477.4	514.4	531.3	534.4
57.5°	35.4	40.8	93.9	151.7	359.6	410.4	432.0	450.4	485.1	498.2	501.3
60°	33.1	38.5	81.6	130.1	331.1	384.2	402.7	421.2	450.4	461.2	463.5
62.5°	30.8	37.0	72.4	109.3	301.8	353.4	371.9	388.8	413.5	421.2	424.3
65°	29.3	35.4	65.4	93.9	271.8	321.1	339.6	354.2	374.2	381.9	383.5
67.5°	27.7	33.9	60.1	80.9	241.8	288.8	302.6	316.5	331.9	339.6	340.3
70°	25.4	32.3	55.4	71.6	211.0	251.8	263.3	278.0	290.3	294.1	296.4
72.5°	23.9	30.0	52.4	64.7	179.4	216.4	227.2	235.6	246.4	250.2	250.2
75°	21.6	27.0	49.3	57.8	147.1	177.1	186.3	194.8	203.3	204.8	202.5
77.5°	19.2	23.9	42.4	48.5	114.7	140.1	147.8	152.5	159.4	160.9	161.7
80°	16.2	20.8	33.1	37.7	83.2	103.2	108.6	112.4	118.6	118.6	120.1
82.5°	12.3	16.2	23.9	27.0	56.2	70.8	75.5	77.8	81.6	81.6	81.6
85°	7.7	10.0	15.4	17.7	33.9	43.1	46.2	47.0	50.1	50.8	50.8
87.5°	3.8	5.4	10.0	10.8	17.7	22.3	22.3	23.9	23.9	23.1	22.3
90°	4.0	7.2	10.4	11.2	17.6	26.0	30.3	26.9	20.2	15.2	15.2
92.5°	15.9	43.0	70.1	76.9	108.2	149.8	170.6	149.5	107.4	75.8	72.8
95°	38.3	87.9	137.5	149.9	266.2	421.2	498.7	445.1	337.7	257.2	248.0
97.5°	66.1	109.9	153.7	164.6	358.5	617.0	746.3	712.3	644.5	593.6	576.3
100°	87.7	127.4	167.1	177.0	392.2	679.0	822.4	824.9	829.9	833.6	812.9
102.5°	106.0	143.1	180.1	189.3	407.6	698.5	844.0	887.3	973.7	1038.6	1020.9
105°	137.1	168.6	199.9	207.7	419.0	700.8	841.6	938.6	1132.4	1277.7	1268.2
107.5°	169.0	198.3	227.5	234.8	421.2	669.6	793.8	929.0	1199.4	1402.1	1404.4
110°	190.6	217.0	243.3	249.9	418.0	641.9	753.9	905.1	1207.4	1434.0	1444.0



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	211.7	236.9	262.0	268.3	418.0	617.8	717.6	872.3	1181.7	1413.7	1429.0
115°	243.6	266.8	290.1	295.8	422.0	590.1	674.1	823.1	1121.2	1344.7	1365.8
117.5°	275.1	296.2	317.3	322.6	429.8	572.8	644.3	778.7	1047.7	1249.4	1272.8
120°	293.4	313.3	333.2	338.1	436.2	567.0	632.3	755.2	1000.9	1185.3	1208.1
122.5°	311.4	331.4	351.4	356.4	445.4	563.9	623.2	733.8	955.1	1121.0	1143.5
125°	338.9	357.1	375.4	379.9	457.7	561.3	613.2	707.2	895.1	1036.1	1056.8
127.5°	361.2	379.6	398.0	402.6	470.0	559.9	604.8	685.5	846.9	968.0	985.4
130°	373.1	393.0	412.9	417.8	479.1	560.8	601.6	673.4	817.1	924.9	941.0
132.5°	385.5	405.4	425.3	430.2	486.4	561.3	598.8	663.1	791.8	888.3	902.7
135°	403.9	422.0	440.0	444.5	494.3	560.8	594.1	648.0	755.7	836.5	848.9
137.5°	422.6	440.4	458.4	462.8	506.3	564.3	593.2	638.7	729.8	798.1	808.3
140°	438.1	454.6	471.1	475.2	513.7	564.9	590.4	629.8	708.5	767.5	777.0
142.5°	450.1	465.3	480.6	484.4	519.8	566.9	590.4	625.0	694.1	745.9	754.1
145°	468.5	481.7	495.0	498.3	527.7	566.9	586.4	614.7	671.2	713.6	719.9
147.5°	486.8	499.7	512.7	515.9	539.4	570.7	586.4	608.7	653.2	686.5	691.7
150°	498.7	510.4	522.1	525.1	545.5	572.8	586.4	605.2	642.8	671.0	675.1
152.5°	511.1	520.0	528.8	531.1	549.5	574.1	586.4	602.4	634.6	658.6	661.7
155°	529.5	536.0	542.5	544.2	558.2	577.0	586.4	599.2	624.7	643.9	646.0
157.5°	543.0	549.4	555.7	557.3	567.0	580.0	586.4	596.4	616.2	631.1	632.6
160°	552.2	557.1	562.1	563.3	571.0	581.3	586.4	594.9	611.9	624.7	625.5
162.5°	561.3	565.0	568.8	569.7	575.3	582.7	586.4	593.6	608.0	618.8	619.5
165°	571.3	574.7	578.0	578.9	581.4	584.7	586.4	591.6	601.8	609.5	610.4
167.5°	580.5	582.0	583.7	584.0	586.2	589.1	590.4	593.8	600.5	605.6	606.0
170°	586.4	588.0	589.7	590.1	590.2	590.4	590.4	593.8	600.5	605.6	605.6
172.5°	589.7	590.0	590.4	590.4	590.4	590.4	590.4	593.1	598.4	602.4	602.1
175°	594.1	594.1	594.1	594.1	592.8	591.2	590.4	592.1	595.4	598.0	598.0
177.5°	594.1	594.1	594.1	594.1	593.1	591.8	591.2	592.5	595.2	597.2	596.8
180°	594.1	594.1	594.1	594.1	594.1	594.1	594.1	594.1	594.1	594.1	594.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	239.5	239.5
2.5°	255.6	254.1
5°	328.8	330.3
7.5°	442.8	442.0
10°	550.6	557.5
12.5°	629.1	630.6
15°	676.8	679.9
17.5°	695.3	696.1
20°	696.1	694.5
22.5°	687.6	686.1
25°	677.6	676.8
27.5°	668.4	669.1
30°	664.5	666.8
32.5°	664.5	668.4
35°	666.1	669.9
37.5°	665.3	669.9
40°	662.2	667.6
42.5°	653.7	657.6
45°	640.6	645.3
47.5°	623.7	626.8
50°	602.1	605.2
52.5°	575.2	576.0
55°	542.8	545.9
57.5°	508.2	509.0
60°	469.7	472.0
62.5°	428.9	428.9
65°	385.8	387.3
67.5°	341.1	345.0
70°	295.7	296.4
72.5°	251.0	251.0
75°	204.8	205.6
77.5°	160.9	160.9
80°	119.4	120.1
82.5°	82.4	83.9
85°	51.6	51.6
87.5°	23.9	21.6
90°	15.2	15.2
92.5°	60.7	48.7
95°	211.5	175.0
97.5°	506.8	437.4
100°	730.2	647.4
102.5°	949.9	879.1
105°	1230.2	1192.0
107.5°	1413.6	1422.9
110°	1483.6	1523.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1489.9	1550.9
115°	1450.4	1534.9
117.5°	1366.6	1460.3
120°	1299.1	1390.2
122.5°	1233.3	1323.2
125°	1139.5	1222.3
127.5°	1055.2	1125.0
130°	1005.5	1070.1
132.5°	960.4	1018.2
135°	898.7	948.4
137.5°	849.1	889.8
140°	815.0	853.2
142.5°	786.9	819.7
145°	744.7	769.5
147.5°	712.2	732.7
150°	691.8	708.5
152.5°	674.3	686.9
155°	654.3	662.6
157.5°	638.4	644.3
160°	628.9	632.3
162.5°	622.8	625.9
165°	613.8	617.2
167.5°	607.4	608.8
170°	605.6	605.6
172.5°	600.8	599.6
175°	598.0	598.0
177.5°	595.4	594.1
180°	594.1	594.1



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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	1.90	2.65	2.99	3.74	5.24	15.04	15.79	16.13	16.88	18.38
	3H	2.60	3.27	3.69	4.37	5.88	16.86	17.53	17.95	18.63	20.14
	4H	2.89	3.53	4.00	4.63	6.15	17.49	18.12	18.59	19.22	20.74
	6H	3.14	3.72	4.25	4.83	6.36	17.90	18.48	19.01	19.59	21.12
	8H	3.20	3.76	4.32	4.88	6.41	18.01	18.57	19.13	19.69	21.21
	12H	3.22	3.74	4.34	4.86	6.41	18.07	18.60	19.19	19.71	21.26
4H	2H	9.08	9.71	10.19	10.82	12.34	15.30	15.94	16.42	17.04	18.56
	3H	10.64	11.17	11.76	12.30	13.83	17.32	17.85	18.44	18.98	20.52
	4H	10.73	11.22	11.85	12.33	13.89	18.07	18.56	19.20	19.68	21.23
	6H	10.73	11.15	11.87	12.29	13.84	18.59	19.01	19.73	20.15	21.70
	8H	10.71	11.10	11.84	12.23	13.79	18.75	19.14	19.88	20.27	21.83
	12H	10.66	11.01	11.81	12.16	13.72	18.83	19.18	19.97	20.32	21.89
8H	4H	12.15	12.54	13.28	13.68	15.24	18.13	18.52	19.26	19.65	21.21
	6H	12.39	12.71	13.54	13.89	15.45	18.74	19.06	19.89	20.23	21.79
	8H	12.41	12.69	13.57	13.84	15.42	18.95	19.23	20.11	20.38	21.96
	12H	12.37	12.62	13.53	13.77	15.38	19.08	19.33	20.24	20.48	22.09
12H	4H	12.29	12.64	13.44	13.79	15.35	18.07	18.43	19.22	19.57	21.14
	6H	12.64	12.93	13.80	14.08	15.66	18.72	19.00	19.88	20.15	21.73
	8H	12.71	12.96	13.87	14.11	15.72	18.93	19.18	20.10	20.33	21.95