

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: P937918

Luminaire Tested: SQ4-FB-125U-075D-840-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937918
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-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

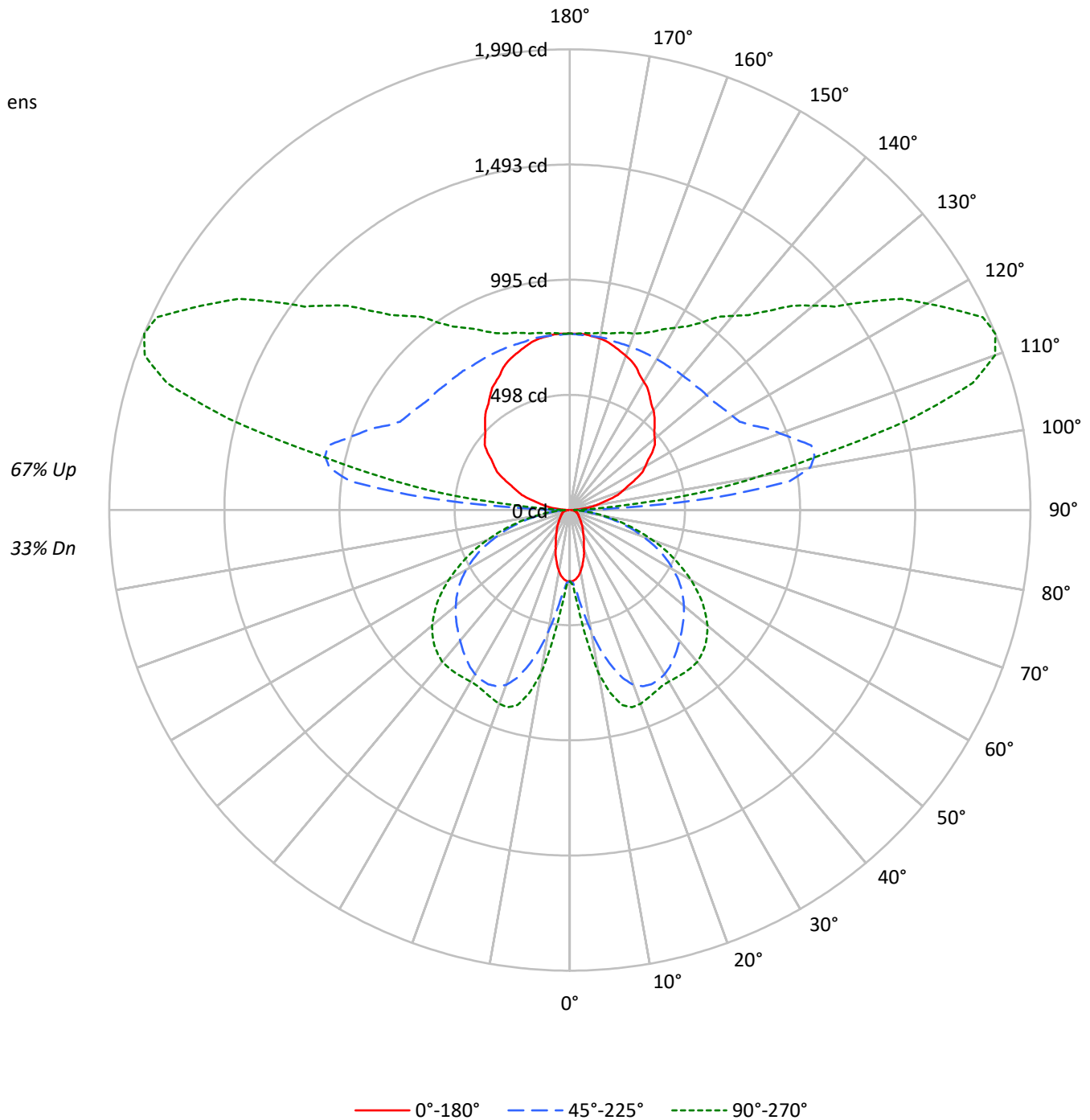
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7321.0 lumens
Efficiency: N/A
Efficacy: 131.7 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 (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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33				33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27				27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22				22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18				18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15				15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13				13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11				11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10				10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8				8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7				7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7				7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2852	2852	2852
5°	2783	3293	3833
10°	2521	4796	6354
15°	2140	6262	7672
20°	1740	7251	7819
25°	1450	7583	7660
30°	1221	7625	7645
35°	1078	7492	7844
40°	937	7321	8048
45°	848	7194	8079
50°	775	7079	7946
55°	740	6913	7593
60°	756	6600	7036
65°	781	6129	6273
70°	828	5335	5300
75°	908	4338	4136
80°	969	2998	2786
85°	820	1583	1426

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8079 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	0.5
10°-20°	176.2	2.4
20°-30°	308.1	4.2
30°-40°	396.6	5.4
40°-50°	443.0	6.1
50°-60°	424.3	5.8
60°-70°	336.3	4.6
70°-80°	197.7	2.7
80°-90°	57.8	0.8
90°-100°	371.5	5.1
100°-110°	976.8	13.3
110°-120°	1012.8	13.8
120°-130°	812.4	11.1
130°-140°	637.5	8.7
140°-150°	489.3	6.7
150°-160°	352.4	4.8
160°-170°	215.6	2.9
170°-180°	72.8	1.0
0°-30°	524.0	7.2
0°-40°	920.7	12.6
0°-60°	1788.1	24.4
0°-90°	2379.9	32.5
90°-120°	2361.2	32.3
90°-150°	4300.3	58.7
90°-180°	4941.0	67.5
0°-180°	7321.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	307	307	307	307	307	
5°	299	321	362	409	424	28
15°	224	414	698	846	872	62
25°	143	469	831	868	868	66
35°	97	449	782	827	860	60
45°	66	358	692	792	828	51
55°	47	227	587	682	700	43
65°	38	120	436	490	497	37
75°	28	74	239	263	264	29
85°	10	23	59	65	66	10
90°	5	14	39	20	20	5
95°	49	192	640	330	225	55
105°	176	267	1080	1640	1530	187
115°	312	380	865	1725	1970	309
125°	435	488	787	1330	1568	386
135°	518	570	762	1073	1217	401
145°	601	639	752	916	987	377
155°	679	698	752	826	850	312
165°	733	743	752	782	792	207
175°	762	762	758	767	767	72
180°	762	762	762	762	762	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	307.3	307.3	307.3	307.3	307.3	307.3	307.3	307.3	307.3	307.3	307.3
2.5°	307.3	307.3	309.2	310.2	312.2	313.2	315.2	317.1	323.1	324.1	326.0
5°	299.4	303.3	316.2	321.1	334.9	353.7	361.6	374.5	401.1	409.0	414.0
7.5°	287.5	296.4	328.0	335.9	370.5	419.9	440.6	468.3	510.8	531.5	548.3
10°	268.7	287.5	343.8	362.6	418.9	494.0	532.5	571.1	635.3	663.9	674.8
12.5°	248.0	278.6	360.6	386.3	467.3	577.0	623.4	665.9	739.0	777.6	783.5
15°	224.3	265.8	376.4	414.0	518.7	646.2	697.5	749.9	818.1	845.7	852.6
17.5°	203.5	255.9	391.2	430.8	558.2	708.4	760.8	804.2	859.6	878.3	883.3
20°	177.8	240.1	401.1	452.5	599.7	753.8	804.2	837.8	875.4	887.2	889.2
22.5°	159.1	223.3	407.1	460.4	627.4	781.5	824.0	850.7	876.4	880.3	881.3
25°	143.3	204.5	406.1	469.3	651.1	798.3	830.9	850.7	865.5	867.5	867.5
27.5°	128.4	183.8	402.1	471.3	668.9	802.3	827.9	841.8	848.7	852.6	852.6
30°	115.6	164.0	392.2	467.3	676.8	798.3	819.1	826.0	832.9	838.8	841.8
32.5°	105.7	145.2	377.4	459.4	677.8	788.4	803.2	807.2	817.1	830.9	835.8
35°	96.8	126.5	360.6	448.6	671.8	772.6	782.5	786.4	806.2	827.0	833.9
37.5°	87.9	112.6	338.9	429.8	662.9	753.8	760.8	767.7	798.3	823.0	830.9
40°	79.0	100.8	313.2	409.0	649.1	731.1	737.0	747.9	788.4	817.1	825.0
42.5°	72.1	90.9	285.5	387.3	631.3	705.4	714.3	730.1	776.6	807.2	816.1
45°	66.2	81.0	255.9	357.7	608.6	678.8	691.6	713.3	762.7	792.4	800.3
47.5°	60.3	74.1	225.3	327.0	583.9	652.1	668.9	693.6	744.0	772.6	779.5
50°	55.3	67.2	194.6	294.4	557.2	623.4	643.2	668.9	720.3	746.9	755.8
52.5°	51.4	61.3	166.0	261.8	526.6	593.8	616.5	643.2	691.6	717.3	723.2
55°	47.4	56.3	141.3	227.2	495.0	562.2	586.9	612.6	660.0	681.7	685.7
57.5°	45.4	52.4	120.5	194.6	461.4	526.6	554.3	578.0	622.4	639.2	643.2
60°	42.5	49.4	104.7	167.0	424.8	493.0	516.7	540.4	578.0	591.8	594.8
62.5°	39.5	47.4	92.9	140.3	387.3	453.5	477.2	498.9	530.6	540.4	544.4
65°	37.5	45.4	84.0	120.5	348.8	412.0	435.7	454.5	480.2	490.0	492.0
67.5°	35.6	43.5	77.1	103.7	310.2	370.5	388.3	406.1	425.8	435.7	436.7
70°	32.6	41.5	71.1	91.9	270.7	323.1	337.9	356.7	372.5	377.4	380.4
72.5°	30.6	38.5	67.2	83.0	230.2	277.6	291.5	302.3	316.2	321.1	321.1
75°	27.7	34.6	63.2	74.1	188.7	227.2	239.1	250.0	260.8	262.8	259.8
77.5°	24.7	30.6	54.3	62.2	147.2	179.8	189.7	195.6	204.5	206.5	207.5
80°	20.7	26.7	42.5	48.4	106.7	132.4	139.3	144.2	152.2	152.2	154.1
82.5°	15.8	20.7	30.6	34.6	72.1	90.9	96.8	99.8	104.7	104.7	104.7
85°	9.9	12.8	19.8	22.7	43.5	55.3	59.3	60.3	64.2	65.2	65.2
87.5°	4.9	6.9	12.8	13.8	22.7	28.7	28.7	30.6	30.6	29.6	28.7
90°	5.1	9.2	13.3	14.3	22.5	33.4	38.8	34.5	25.9	19.5	19.5
92.5°	20.5	55.2	90.0	98.7	138.8	192.3	218.9	191.9	137.8	97.2	93.4
95°	49.1	112.7	176.5	192.4	341.6	540.4	639.9	571.1	433.3	330.0	318.2
97.5°	84.9	141.0	197.2	211.2	460.0	791.7	957.6	914.0	827.0	761.6	739.4
100°	112.5	163.5	214.4	227.1	503.2	871.2	1055.3	1058.4	1064.9	1069.6	1043.0
102.5°	136.0	183.6	231.1	242.9	522.9	896.3	1082.9	1138.5	1249.4	1332.6	1309.9
105°	176.0	216.3	256.5	266.6	537.7	899.2	1079.9	1204.3	1453.0	1639.5	1627.2
107.5°	216.9	254.4	292.0	301.3	540.4	859.2	1018.5	1192.0	1538.9	1799.0	1802.0
110°	244.5	278.4	312.2	320.7	536.3	823.7	967.4	1161.3	1549.2	1840.1	1852.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	271.6	303.9	336.1	344.2	536.4	792.7	920.8	1119.3	1516.3	1814.0	1833.5
115°	312.5	342.3	372.2	379.6	541.4	757.1	865.0	1056.2	1438.6	1725.4	1752.5
117.5°	353.0	380.1	407.2	413.9	551.5	735.0	826.7	999.2	1344.3	1603.1	1633.2
120°	376.5	402.0	427.5	433.8	559.7	727.5	811.3	969.0	1284.3	1520.8	1550.1
122.5°	399.5	425.2	450.9	457.3	571.5	723.5	799.6	941.6	1225.5	1438.4	1467.3
125°	434.8	458.2	481.6	487.5	587.3	720.3	786.7	907.4	1148.6	1329.5	1356.0
127.5°	463.5	487.1	510.7	516.6	603.1	718.4	776.0	879.5	1086.7	1242.0	1264.4
130°	478.8	504.3	529.8	536.1	614.7	719.6	771.9	864.1	1048.5	1186.8	1207.4
132.5°	494.7	520.2	545.7	552.0	624.1	720.3	768.4	850.9	1016.0	1139.8	1158.2
135°	518.2	541.4	564.5	570.4	634.3	719.6	762.2	831.4	969.6	1073.3	1089.3
137.5°	542.2	565.1	588.2	593.9	649.6	724.0	761.2	819.5	936.4	1024.1	1037.1
140°	562.2	583.3	604.5	609.8	659.1	724.8	757.6	808.1	909.1	984.7	997.0
142.5°	577.5	597.0	616.6	621.6	666.9	727.4	757.6	802.0	890.6	957.1	967.5
145°	601.1	618.1	635.2	639.4	677.1	727.4	752.5	788.7	861.2	915.7	923.7
147.5°	624.6	641.2	657.8	662.0	692.1	732.3	752.5	781.0	838.1	880.9	887.5
150°	639.9	654.9	670.0	673.7	700.0	735.0	752.5	776.6	824.8	860.9	866.3
152.5°	655.8	667.2	678.6	681.4	705.1	736.7	752.5	773.0	814.2	845.0	849.1
155°	679.3	687.7	696.1	698.2	716.3	740.4	752.5	768.9	801.6	826.2	828.8
157.5°	696.7	704.9	713.0	715.1	727.6	744.2	752.5	765.2	790.7	809.8	811.6
160°	708.5	714.8	721.2	722.8	732.7	745.8	752.5	763.3	785.2	801.6	802.7
162.5°	720.3	725.0	729.8	731.0	738.1	747.7	752.5	761.6	780.1	794.0	794.9
165°	733.0	737.3	741.7	742.8	746.0	750.3	752.5	759.1	772.2	782.1	783.2
167.5°	744.9	746.8	748.9	749.4	752.2	755.8	757.6	761.9	770.5	777.1	777.6
170°	752.5	754.5	756.6	757.1	757.3	757.5	757.6	761.9	770.5	777.1	777.1
172.5°	756.6	757.0	757.5	757.6	757.6	757.6	757.6	761.0	767.8	772.9	772.5
175°	762.2	762.2	762.2	762.2	760.7	758.6	757.6	759.8	764.0	767.3	767.3
177.5°	762.2	762.2	762.2	762.2	761.1	759.4	758.6	760.3	763.7	766.3	765.8
180°	762.2	762.2	762.2	762.2	762.2	762.2	762.2	762.2	762.2	762.2	762.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	307.3	307.3
2.5°	328.0	326.0
5°	421.9	423.9
7.5°	568.1	567.1
10°	706.4	715.3
12.5°	807.2	809.2
15°	868.5	872.4
17.5°	892.2	893.2
20°	893.2	891.2
22.5°	882.3	880.3
25°	869.4	868.5
27.5°	857.6	858.6
30°	852.6	855.6
32.5°	852.6	857.6
35°	854.6	859.6
37.5°	853.6	859.6
40°	849.7	856.6
42.5°	838.8	843.8
45°	822.0	827.9
47.5°	800.3	804.2
50°	772.6	776.6
52.5°	738.0	739.0
55°	696.5	700.5
57.5°	652.1	653.1
60°	602.7	605.6
62.5°	550.3	550.3
65°	495.0	497.0
67.5°	437.7	442.6
70°	379.4	380.4
72.5°	322.1	322.1
75°	262.8	263.8
77.5°	206.5	206.5
80°	153.1	154.1
82.5°	105.7	107.7
85°	66.2	66.2
87.5°	30.6	27.7
90°	19.5	19.5
92.5°	77.9	62.4
95°	271.4	224.6
97.5°	650.3	561.2
100°	936.9	830.7
102.5°	1218.9	1128.0
105°	1578.4	1529.5
107.5°	1813.9	1825.7
110°	1903.7	1954.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1911.7	1989.9
115°	1861.0	1969.5
117.5°	1753.5	1873.7
120°	1666.9	1783.7
122.5°	1582.5	1697.8
125°	1462.1	1568.4
127.5°	1354.0	1443.6
130°	1290.2	1373.0
132.5°	1232.3	1306.4
135°	1153.1	1216.9
137.5°	1089.5	1141.7
140°	1045.8	1094.7
142.5°	1009.6	1051.7
145°	955.5	987.3
147.5°	913.8	940.2
150°	887.7	909.1
152.5°	865.2	881.4
155°	839.5	850.2
157.5°	819.2	826.7
160°	807.0	811.3
162.5°	799.1	803.1
165°	787.5	791.9
167.5°	779.3	781.1
170°	777.1	777.1
172.5°	770.9	769.4
175°	767.3	767.3
177.5°	764.0	762.2
180°	762.2	762.2



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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	2.77	3.51	3.86	4.60	6.10	15.91	16.65	17.00	17.74	19.24
	3H	3.47	4.13	4.56	5.23	6.75	17.72	18.39	18.82	19.49	21.01
	4H	3.76	4.39	4.87	5.49	7.02	18.35	18.99	19.46	20.09	21.61
	6H	4.00	4.59	5.12	5.69	7.23	18.76	19.35	19.88	20.45	21.99
	8H	4.07	4.63	5.19	5.74	7.27	18.87	19.43	20.00	20.55	22.08
	12H	4.08	4.61	5.21	5.72	7.27	18.93	19.46	20.06	20.57	22.13
4H	2H	9.94	10.58	11.06	11.68	13.20	16.17	16.80	17.28	17.91	19.43
	3H	11.50	12.04	12.63	13.16	14.70	18.19	18.72	19.31	19.85	21.38
	4H	11.59	12.08	12.72	13.20	14.75	18.94	19.43	20.07	20.55	22.10
	6H	11.60	12.02	12.73	13.16	14.70	19.46	19.88	20.59	21.02	22.56
	8H	11.57	11.96	12.70	13.10	14.66	19.61	20.00	20.74	21.14	22.70
	12H	11.52	11.88	12.67	13.02	14.59	19.69	20.05	20.84	21.19	22.76
8H	4H	13.02	13.41	14.15	14.54	16.10	18.99	19.38	20.12	20.51	22.08
	6H	13.26	13.58	14.41	14.75	16.31	19.60	19.93	20.76	21.10	22.66
	8H	13.27	13.56	14.43	14.71	16.29	19.81	20.10	20.97	21.25	22.83
	12H	13.23	13.48	14.40	14.63	16.25	19.94	20.19	21.11	21.34	22.96
12H	4H	13.15	13.51	14.30	14.65	16.22	18.94	19.29	20.09	20.44	22.01
	6H	13.51	13.79	14.67	14.95	16.52	19.58	19.87	20.74	21.02	22.60
	8H	13.57	13.82	14.74	14.97	16.59	19.80	20.05	20.96	21.20	22.81