

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: P937814

Luminaire Tested: SQ4-FB-125U-050D-835-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937814
REPORT IS A COMBINATION OF REPORTS P933597 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

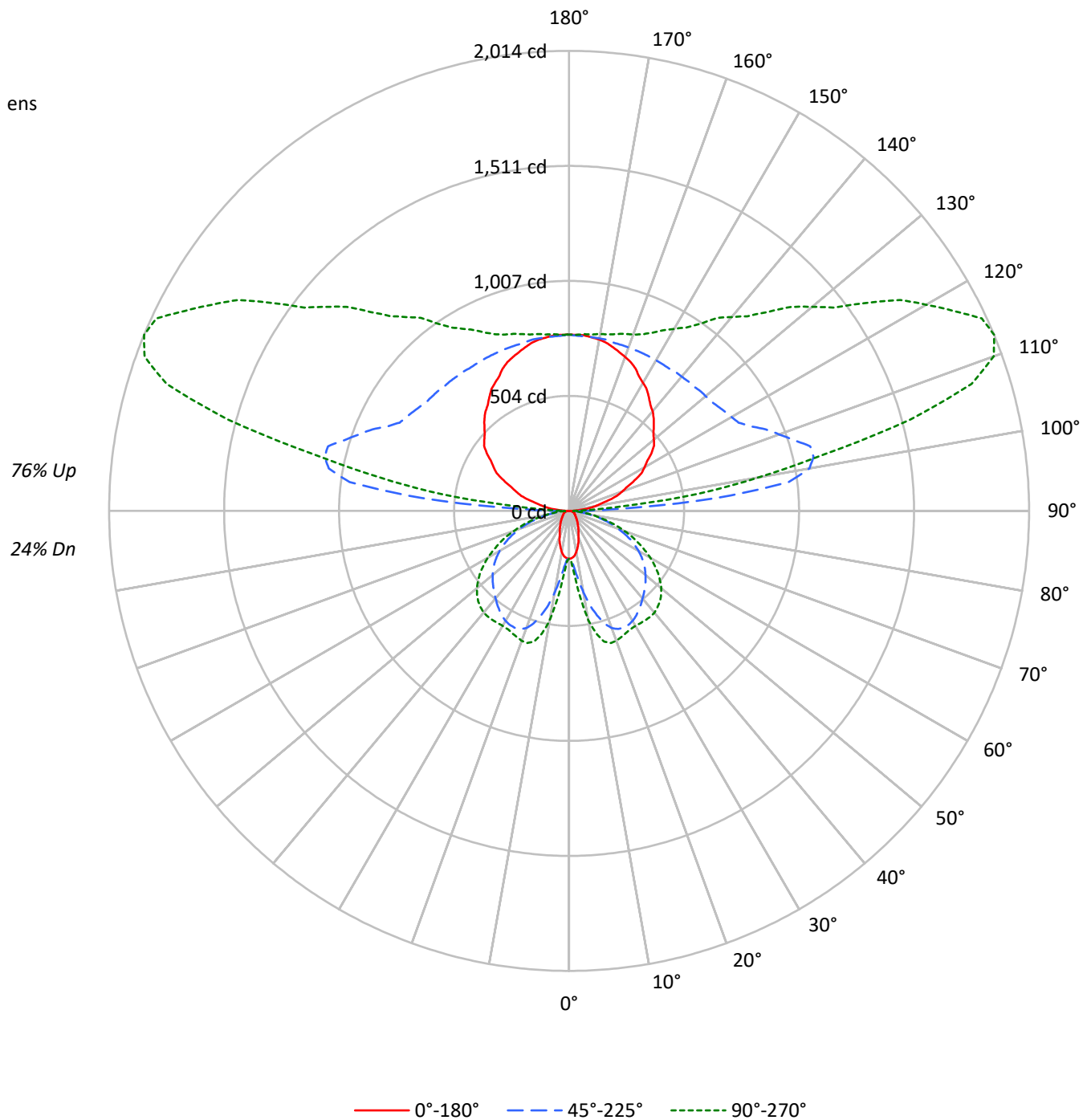
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6618.0 lumens
Efficiency: N/A
Efficacy: 139.0 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): 47.6
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

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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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24				24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20				20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16				16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19	13				13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11				11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10				10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8				8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7				7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6				6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6				6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5				5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1936	1936	1936
5°	1890	2236	2602
10°	1712	3257	4314
15°	1453	4252	5210
20°	1182	4924	5309
25°	985	5149	5201
30°	829	5177	5192
35°	731	5087	5325
40°	637	4972	5464
45°	575	4885	5486
50°	527	4806	5395
55°	503	4694	5155
60°	512	4482	4778
65°	531	4161	4259
70°	561	3622	3599
75°	617	2945	2808
80°	660	2036	1893
85°	555	1076	967

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5486 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.0	0.4
10°-20°	119.6	1.8
20°-30°	209.2	3.2
30°-40°	269.3	4.1
40°-50°	300.8	4.5
50°-60°	288.1	4.4
60°-70°	228.3	3.5
70°-80°	134.3	2.0
80°-90°	40.2	0.6
90°-100°	376.0	5.7
100°-110°	988.7	14.9
110°-120°	1025.1	15.5
120°-130°	822.3	12.4
130°-140°	645.2	9.7
140°-150°	495.2	7.5
150°-160°	356.6	5.4
160°-170°	218.2	3.3
170°-180°	73.7	1.1
0°-30°	355.8	5.4
0°-40°	625.1	9.4
0°-60°	1214.1	18.3
0°-90°	1616.9	24.4
90°-120°	2389.8	36.1
90°-150°	4352.5	65.8
90°-180°	5001.0	75.6
0°-180°	6618.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	209	209	209	209	209	
5°	203	218	246	278	288	19
15°	152	281	474	574	592	42
25°	97	319	564	589	590	45
35°	66	305	531	562	584	41
45°	45	243	470	538	562	35
55°	32	154	398	463	476	29
65°	26	82	296	333	337	25
75°	19	50	162	178	179	20
85°	7	15	40	44	45	7
90°	5	14	39	20	20	5
95°	50	195	648	334	227	55
105°	178	270	1093	1659	1548	189
115°	316	384	876	1746	1993	312
125°	440	493	796	1346	1587	391
135°	524	577	772	1086	1232	406
145°	608	647	762	927	999	381
155°	688	707	762	836	860	316
165°	742	752	762	792	802	209
175°	772	772	767	777	777	73
180°	772	772	772	772	772	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6	208.6
2.5°	208.6	208.6	210.0	210.6	212.0	212.7	214.0	215.3	219.4	220.0	221.4
5°	203.3	206.0	214.7	218.0	227.4	240.2	245.5	254.3	272.4	277.7	281.1
7.5°	195.2	201.3	222.7	228.1	251.6	285.1	299.2	318.0	346.8	360.9	372.3
10°	182.5	195.2	233.5	246.2	284.4	335.4	361.6	387.8	431.4	450.8	458.2
12.5°	168.4	189.2	244.9	262.3	317.3	391.8	423.3	452.2	501.8	528.0	532.0
15°	152.3	180.5	255.6	281.1	352.2	438.7	473.6	509.2	555.5	574.2	578.9
17.5°	138.2	173.8	265.7	292.5	379.0	481.0	516.6	546.1	583.6	596.4	599.7
20°	120.8	163.0	272.4	307.3	407.2	511.9	546.1	568.9	594.4	602.4	603.8
22.5°	108.0	151.6	276.4	312.6	426.0	530.6	559.5	577.6	595.0	597.7	598.4
25°	97.3	138.9	275.7	318.7	442.1	542.0	564.2	577.6	587.7	589.0	589.0
27.5°	87.2	124.8	273.0	320.0	454.2	544.7	562.2	571.6	576.3	578.9	578.9
30°	78.5	111.4	266.3	317.3	459.5	542.0	556.1	560.8	565.5	569.6	571.6
32.5°	71.8	98.6	256.3	311.9	460.2	535.3	545.4	548.1	554.8	564.2	567.5
35°	65.7	85.9	244.9	304.6	456.2	524.6	531.3	534.0	547.4	561.5	566.2
37.5°	59.7	76.5	230.1	291.8	450.1	511.9	516.6	521.3	542.0	558.8	564.2
40°	53.7	68.4	212.7	277.7	440.8	496.4	500.5	507.8	535.3	554.8	560.2
42.5°	49.0	61.7	193.9	263.0	428.7	479.0	485.0	495.8	527.3	548.1	554.1
45°	44.9	55.0	173.8	242.8	413.2	460.9	469.6	484.4	517.9	538.0	543.4
47.5°	40.9	50.3	153.0	222.1	396.5	442.8	454.2	470.9	505.2	524.6	529.3
50°	37.6	45.6	132.2	199.9	378.4	423.3	436.7	454.2	489.1	507.2	513.2
52.5°	34.9	41.6	112.7	177.8	357.6	403.2	418.6	436.7	469.6	487.0	491.1
55°	32.2	38.2	95.9	154.3	336.1	381.7	398.5	415.9	448.1	462.9	465.6
57.5°	30.9	35.6	81.8	132.2	313.3	357.6	376.3	392.4	422.6	434.0	436.7
60°	28.8	33.5	71.1	113.4	288.5	334.8	350.9	367.0	392.4	401.8	403.9
62.5°	26.8	32.2	63.1	95.3	263.0	307.9	324.0	338.8	360.2	367.0	369.6
65°	25.5	30.9	57.0	81.8	236.8	279.7	295.8	308.6	326.0	332.7	334.1
67.5°	24.2	29.5	52.3	70.4	210.6	251.6	263.6	275.7	289.1	295.8	296.5
70°	22.1	28.2	48.3	62.4	183.8	219.4	229.4	242.2	252.9	256.3	258.3
72.5°	20.8	26.2	45.6	56.4	156.3	188.5	197.9	205.3	214.7	218.0	218.0
75°	18.8	23.5	42.9	50.3	128.1	154.3	162.3	169.7	177.1	178.4	176.4
77.5°	16.8	20.8	36.9	42.3	100.0	122.1	128.8	132.8	138.9	140.2	140.9
80°	14.1	18.1	28.8	32.9	72.5	89.9	94.6	97.9	103.3	103.3	104.7
82.5°	10.7	14.1	20.8	23.5	49.0	61.7	65.7	67.8	71.1	71.1	71.1
85°	6.7	8.7	13.4	15.4	29.5	37.6	40.3	40.9	43.6	44.3	44.3
87.5°	3.4	4.7	8.7	9.4	15.4	19.5	19.5	20.8	20.8	20.1	19.5
90°	5.2	9.3	13.5	14.5	22.8	33.8	39.3	34.9	26.2	19.7	19.7
92.5°	20.7	55.9	91.1	99.9	140.5	194.6	221.6	194.2	139.5	98.4	94.5
95°	49.7	114.1	178.6	194.7	345.7	547.0	647.7	578.0	438.6	334.0	322.1
97.5°	85.9	142.7	199.6	213.8	465.6	801.3	969.2	925.1	837.0	770.9	748.4
100°	113.9	165.5	217.0	229.9	509.3	881.8	1068.1	1071.3	1077.8	1082.6	1055.7
102.5°	137.7	185.8	233.9	245.9	529.3	907.2	1096.1	1152.3	1264.6	1348.8	1325.8
105°	178.1	218.9	259.6	269.8	544.2	910.1	1093.0	1218.9	1470.6	1659.4	1647.0
107.5°	219.5	257.5	295.5	305.0	547.0	869.6	1030.9	1206.5	1557.6	1820.9	1823.9
110°	247.5	281.8	316.0	324.6	542.8	833.7	979.1	1175.4	1568.0	1862.4	1875.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	274.9	307.6	340.2	348.4	542.9	802.3	932.0	1132.9	1534.7	1836.0	1855.8
115°	316.3	346.5	376.7	384.2	548.0	766.3	875.5	1069.0	1456.1	1746.4	1773.8
117.5°	357.3	384.7	412.1	418.9	558.2	743.9	836.7	1011.3	1360.6	1622.6	1653.0
120°	381.1	406.9	432.7	439.1	566.5	736.3	821.2	980.8	1299.9	1539.3	1568.9
122.5°	404.4	430.4	456.4	462.9	578.4	732.3	809.3	953.0	1240.4	1455.9	1485.1
125°	440.1	463.8	487.5	493.4	594.4	729.0	796.3	918.4	1162.5	1345.6	1372.5
127.5°	469.1	493.0	516.9	522.9	610.4	727.1	785.4	890.2	1099.9	1257.1	1279.8
130°	484.6	510.4	536.2	542.6	622.2	728.3	781.3	874.6	1061.2	1201.2	1222.1
132.5°	500.7	526.5	552.3	558.7	631.7	729.0	777.7	861.2	1028.3	1153.6	1172.3
135°	524.5	548.0	571.4	577.3	642.0	728.3	771.5	841.5	981.4	1086.3	1102.5
137.5°	548.8	572.0	595.3	601.1	657.5	732.8	770.4	829.5	947.8	1036.5	1049.7
140°	569.0	590.4	611.8	617.2	667.1	733.6	766.8	817.9	920.1	996.7	1009.1
142.5°	584.5	604.3	624.1	629.1	675.0	736.2	766.8	811.7	901.4	968.7	979.3
145°	608.4	625.6	642.9	647.2	685.3	736.2	761.6	798.3	871.7	926.8	934.9
147.5°	632.2	649.0	665.8	670.0	700.5	741.2	761.6	790.5	848.3	891.6	898.3
150°	647.7	662.9	678.1	681.9	708.5	743.9	761.6	786.0	834.8	871.4	876.8
152.5°	663.8	675.3	686.8	689.7	713.7	745.6	761.6	782.4	824.1	855.3	859.4
155°	687.6	696.1	704.6	706.7	725.0	749.4	761.6	778.2	811.3	836.2	838.9
157.5°	705.2	713.5	721.7	723.8	736.4	753.2	761.6	774.5	800.3	819.6	821.5
160°	717.1	723.5	730.0	731.6	741.6	754.9	761.6	772.6	794.7	811.3	812.4
162.5°	729.0	733.8	738.7	739.9	747.1	756.8	761.6	770.9	789.6	803.6	804.6
165°	741.9	746.3	750.7	751.8	755.1	759.4	761.6	768.3	781.6	791.6	792.7
167.5°	753.9	755.9	758.0	758.5	761.3	765.0	766.8	771.2	779.9	786.5	787.0
170°	761.6	763.7	765.8	766.3	766.5	766.7	766.8	771.2	779.9	786.5	786.5
172.5°	765.8	766.2	766.7	766.8	766.8	766.8	766.8	770.2	777.1	782.3	781.9
175°	771.5	771.5	771.5	771.5	769.9	767.8	766.8	769.0	773.3	776.6	776.6
177.5°	771.5	771.5	771.5	771.5	770.3	768.6	767.8	769.5	773.0	775.6	775.1
180°	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	208.6	208.6
2.5°	222.7	221.4
5°	286.5	287.8
7.5°	385.7	385.1
10°	479.7	485.7
12.5°	548.1	549.4
15°	589.7	592.4
17.5°	605.8	606.5
20°	606.5	605.1
22.5°	599.1	597.7
25°	590.4	589.7
27.5°	582.3	583.0
30°	578.9	581.0
32.5°	578.9	582.3
35°	580.3	583.6
37.5°	579.6	583.6
40°	576.9	581.6
42.5°	569.6	572.9
45°	558.1	562.2
47.5°	543.4	546.1
50°	524.6	527.3
52.5°	501.1	501.8
55°	473.0	475.6
57.5°	442.8	443.4
60°	409.2	411.2
62.5°	373.7	373.7
65°	336.1	337.4
67.5°	297.2	300.5
70°	257.6	258.3
72.5°	218.7	218.7
75°	178.4	179.1
77.5°	140.2	140.2
80°	104.0	104.7
82.5°	71.8	73.1
85°	44.9	44.9
87.5°	20.8	18.8
90°	19.7	19.7
92.5°	78.8	63.2
95°	274.7	227.3
97.5°	658.2	568.0
100°	948.3	840.8
102.5°	1233.7	1141.7
105°	1597.6	1548.1
107.5°	1835.9	1847.9
110°	1926.8	1978.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1934.9	2014.1
115°	1883.6	1993.4
117.5°	1774.8	1896.5
120°	1687.1	1805.4
122.5°	1601.7	1718.4
125°	1479.9	1587.4
127.5°	1370.4	1461.1
130°	1305.9	1389.7
132.5°	1247.3	1322.3
135°	1167.1	1231.7
137.5°	1102.7	1155.6
140°	1058.5	1108.0
142.5°	1021.9	1064.5
145°	967.1	999.3
147.5°	924.9	951.6
150°	898.5	920.1
152.5°	875.7	892.1
155°	849.7	860.5
157.5°	829.1	836.7
160°	816.8	821.2
162.5°	808.8	812.9
165°	797.1	801.5
167.5°	788.8	790.6
170°	786.5	786.5
172.5°	780.3	778.7
175°	776.6	776.6
177.5°	773.3	771.5
180°	771.5	771.5



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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	0.27	0.96	1.42	2.09	3.69	13.41	14.10	14.56	15.23	16.83
	3H	0.96	1.58	2.12	2.72	4.33	15.22	15.84	16.37	16.98	18.59
	4H	1.25	1.84	2.42	2.99	4.60	15.85	16.43	17.01	17.58	19.19
	6H	1.50	2.04	2.67	3.18	4.81	16.26	16.80	17.43	17.94	19.57
	8H	1.56	2.07	2.73	3.23	4.85	16.37	16.88	17.54	18.04	19.66
	12H	1.57	2.06	2.75	3.21	4.85	16.42	16.91	17.60	18.06	19.70
4H	2H	7.44	8.03	8.61	9.17	10.78	13.67	14.25	14.83	15.40	17.01
	3H	8.99	9.48	10.17	10.65	12.28	15.68	16.17	16.85	17.34	18.96
	4H	9.08	9.53	10.26	10.69	12.34	16.43	16.88	17.60	18.04	19.68
	6H	9.08	9.47	10.26	10.65	12.28	16.94	17.33	18.13	18.51	20.15
	8H	9.05	9.42	10.23	10.59	12.24	17.10	17.46	18.28	18.63	20.28
	12H	9.00	9.33	10.20	10.51	12.17	17.17	17.50	18.37	18.68	20.34
8H	4H	10.50	10.86	11.68	12.03	13.69	16.47	16.83	17.65	18.01	19.66
	6H	10.74	11.03	11.94	12.25	13.90	17.08	17.38	18.28	18.60	20.24
	8H	10.75	11.01	11.96	12.20	13.87	17.29	17.55	18.50	18.74	20.41
	12H	10.71	10.94	11.92	12.13	13.83	17.42	17.65	18.63	18.84	20.54
12H	4H	10.63	10.96	11.83	12.14	13.80	16.42	16.75	17.61	17.93	19.58
	6H	10.99	11.25	12.19	12.44	14.11	17.06	17.32	18.27	18.52	20.18
	8H	11.05	11.28	12.26	12.47	14.17	17.28	17.51	18.49	18.70	20.39