

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: P936484

Luminaire Tested: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936484
REPORT IS A COMBINATION OF REPORTS P933439 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

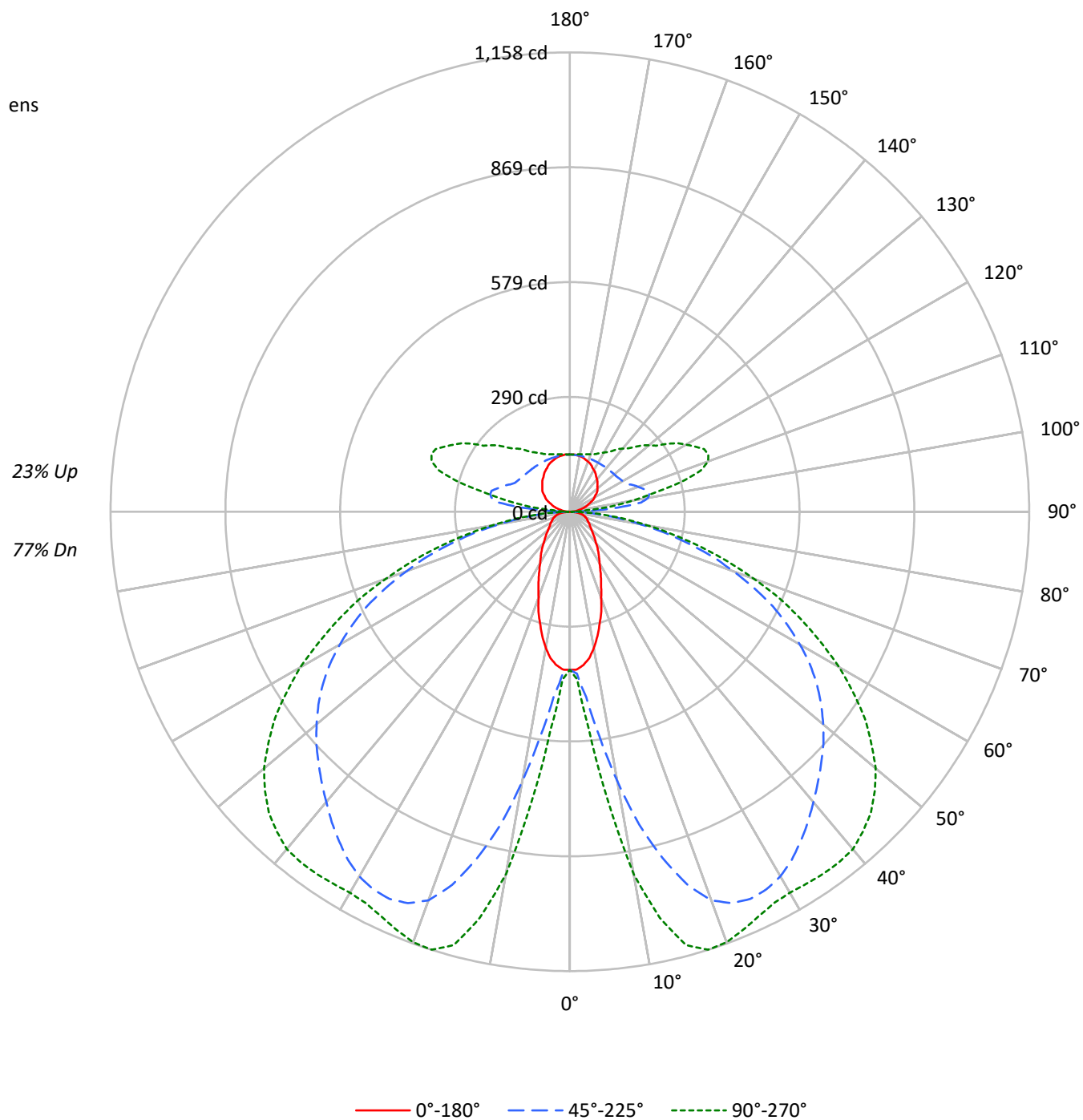
Lumens per Lamp: N/A
Luminaire Lumens: 4018.4 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 38.8
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

TEST NUMBER: P936484

CATALOG NUMBER: SQ4-FB-025U-100D-B2750-1D-UNV-STD-W-4-3500K

Luminous Intensity Polar Plot



TEST NUMBER: P936484

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	20
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3695	3695	3695
5°	3606	4267	4967
10°	3267	6216	8233
15°	2773	8116	9942
20°	2255	9398	10133
25°	1879	9827	9927
30°	1582	9881	9908
35°	1397	9710	10165
40°	1215	9487	10429
45°	1098	9323	10470
50°	1005	9173	10297
55°	959	8959	9840
60°	978	8554	9120
65°	1013	7942	8129
70°	1071	6913	6867
75°	1177	5623	5360
80°	1254	3884	3611
85°	1060	2050	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10470 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	1.3
10°-20°	228.3	5.7
20°-30°	399.3	9.9
30°-40°	514.0	12.8
40°-50°	574.2	14.3
50°-60°	549.9	13.7
60°-70°	435.8	10.8
70°-80°	256.3	6.4
80°-90°	71.7	1.8
90°-100°	70.5	1.8
100°-110°	185.3	4.6
110°-120°	192.2	4.8
120°-130°	154.1	3.8
130°-140°	120.9	3.0
140°-150°	92.8	2.3
150°-160°	66.8	1.7
160°-170°	40.9	1.0
170°-180°	13.8	0.3
0°-30°	679.1	16.9
0°-40°	1193.1	29.7
0°-60°	2317.2	57.7
0°-90°	3081.0	76.7
90°-120°	448.0	11.1
90°-150°	815.9	20.3
90°-180°	937.0	23.3
0°-180°	4018.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	388	416	469	530	549	36
15°	291	536	904	1096	1130	81
25°	186	608	1077	1124	1126	86
35°	126	581	1014	1072	1114	78
45°	86	464	896	1027	1073	66
55°	61	294	761	883	908	56
65°	49	156	565	635	644	48
75°	36	96	310	341	342	38
85°	13	30	77	84	86	14
90°	1	3	7	4	4	2
95°	9	36	121	63	43	10
105°	33	51	205	311	290	35
115°	59	72	164	327	374	59
125°	82	92	149	252	298	73
135°	98	108	145	204	231	76
145°	114	121	143	174	187	71
155°	129	132	143	157	161	59
165°	139	141	143	148	150	39
175°	145	145	144	146	146	14
180°	145	145	145	145	145	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2
2.5°	398.2	398.2	400.8	402.0	404.6	405.9	408.4	411.0	418.7	420.0	422.5
5°	388.0	393.1	409.7	416.1	434.0	458.3	468.6	485.3	519.9	530.0	536.4
7.5°	372.6	384.1	425.1	435.4	480.1	544.2	571.0	606.9	661.9	688.9	710.6
10°	348.3	372.6	445.5	469.9	542.8	640.2	690.1	740.0	823.3	860.4	874.5
12.5°	321.4	361.0	467.3	500.6	605.6	747.8	808.0	863.0	957.8	1007.7	1015.3
15°	290.6	344.4	487.8	536.4	672.2	837.4	904.0	971.8	1060.2	1096.0	1105.0
17.5°	263.8	331.6	507.0	558.2	723.5	918.0	985.9	1042.3	1114.0	1138.3	1144.7
20°	230.4	311.1	519.9	586.4	777.2	976.9	1042.3	1085.8	1134.4	1149.8	1152.3
22.5°	206.1	289.3	527.5	596.6	813.0	1012.8	1067.8	1102.4	1135.7	1140.8	1142.1
25°	185.7	265.0	526.3	608.1	843.8	1034.5	1076.8	1102.4	1121.6	1124.1	1124.1
27.5°	166.5	238.2	521.1	610.8	866.8	1039.6	1073.0	1090.9	1099.8	1105.0	1105.0
30°	149.8	212.5	508.3	605.6	877.0	1034.5	1061.4	1070.4	1079.4	1087.0	1090.9
32.5°	137.0	188.2	489.2	595.4	878.3	1021.7	1040.9	1046.0	1058.8	1076.8	1083.2
35°	125.5	163.9	467.3	581.3	870.6	1001.3	1014.1	1019.2	1044.8	1071.7	1080.6
37.5°	114.0	145.9	439.2	557.0	859.1	976.9	985.9	994.9	1034.5	1066.6	1076.8
40°	102.4	130.6	405.9	530.0	841.2	947.5	955.1	969.3	1021.7	1058.8	1069.1
42.5°	93.5	117.8	370.1	501.9	818.1	914.2	925.7	946.2	1006.4	1046.0	1057.6
45°	85.8	104.9	331.6	463.5	788.7	879.7	896.2	924.4	988.5	1026.8	1037.1
47.5°	78.1	96.0	292.0	423.8	756.7	845.1	866.8	898.8	964.2	1001.3	1010.2
50°	71.7	87.1	252.2	381.6	722.1	808.0	833.5	866.8	933.4	967.9	979.5
52.5°	66.6	79.4	215.1	339.3	682.5	769.5	798.9	833.5	896.2	929.6	937.2
55°	61.4	73.0	183.1	294.5	641.5	728.5	760.6	793.8	855.3	883.4	888.6
57.5°	58.9	67.8	156.2	252.2	598.0	682.5	718.3	749.0	806.6	828.4	833.5
60°	55.0	64.1	135.8	216.4	550.6	638.9	669.7	700.4	749.0	767.0	770.7
62.5°	51.3	61.4	120.3	181.8	501.9	587.7	618.4	646.6	687.6	700.4	705.5
65°	48.6	58.9	108.8	156.2	451.9	533.9	564.6	589.0	622.3	635.1	637.6
67.5°	46.1	56.3	99.9	134.4	402.0	480.1	503.2	526.3	551.8	564.6	565.9
70°	42.2	53.8	92.2	119.1	350.8	418.7	437.9	462.2	482.7	489.2	492.9
72.5°	39.7	49.9	87.1	107.6	298.4	359.8	377.7	391.8	409.7	416.1	416.1
75°	35.9	44.8	82.0	96.0	244.6	294.5	309.9	323.9	338.0	340.6	336.7
77.5°	32.0	39.7	70.4	80.6	190.8	233.0	245.8	253.5	265.0	267.6	268.9
80°	26.8	34.6	55.0	62.7	138.3	171.6	180.5	186.9	197.2	197.2	199.7
82.5°	20.4	26.8	39.7	44.8	93.5	117.8	125.5	129.4	135.8	135.8	135.8
85°	12.8	16.7	25.6	29.5	56.3	71.7	76.8	78.1	83.2	84.5	84.5
87.5°	6.4	8.9	16.7	17.9	29.5	37.1	37.1	39.7	39.7	38.4	37.1
90°	1.0	1.7	2.5	2.7	4.3	6.3	7.4	6.6	4.9	3.7	3.7
92.5°	3.9	10.5	17.1	18.7	26.4	36.5	41.6	36.4	26.2	18.4	17.6
95°	9.3	21.4	33.5	36.5	64.8	102.5	121.4	108.3	82.2	62.6	60.4
97.5°	16.1	26.7	37.4	40.1	87.3	150.2	181.7	173.5	156.9	144.5	140.2
100°	21.3	31.0	40.7	43.1	95.4	165.3	200.2	200.8	202.0	202.9	197.9
102.5°	25.8	34.8	43.9	46.1	99.2	170.1	205.4	216.0	237.0	252.8	248.5
105°	33.4	41.1	48.6	50.6	102.0	170.5	204.8	228.5	275.7	311.0	308.7
107.5°	41.2	48.3	55.4	57.2	102.5	163.0	193.2	226.2	292.0	341.4	342.0
110°	46.4	52.8	59.2	60.9	101.7	156.3	183.5	220.4	293.9	349.1	351.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	51.6	57.7	63.8	65.3	101.7	150.4	174.7	212.4	287.7	344.2	347.9
115°	59.3	64.9	70.5	72.0	102.7	143.7	164.1	200.4	273.0	327.3	332.5
117.5°	67.0	72.1	77.2	78.5	104.7	139.4	156.9	189.6	255.0	304.2	309.9
120°	71.4	76.3	81.1	82.3	106.1	138.0	153.9	183.8	243.7	288.6	294.1
122.5°	75.8	80.6	85.5	86.7	108.3	137.2	151.6	178.6	232.5	272.9	278.3
125°	82.5	86.9	91.4	92.5	111.4	136.6	149.2	172.1	217.9	252.2	257.3
127.5°	87.9	92.4	96.9	98.1	114.4	136.2	147.2	166.9	206.2	235.7	239.9
130°	90.8	95.6	100.5	101.7	116.7	136.5	146.4	164.0	198.9	225.2	229.1
132.5°	93.9	98.7	103.6	104.7	118.4	136.6	145.7	161.4	192.7	216.3	219.8
135°	98.4	102.7	107.2	108.2	120.3	136.5	144.6	157.7	183.9	203.6	206.6
137.5°	102.9	107.3	111.6	112.7	123.3	137.3	144.4	155.4	177.6	194.3	196.8
140°	106.7	110.7	114.7	115.7	125.0	137.5	143.7	153.3	172.5	186.8	189.1
142.5°	109.6	113.3	117.0	117.9	126.6	138.0	143.7	152.1	169.0	181.6	183.6
145°	114.1	117.2	120.5	121.3	128.5	138.0	142.7	149.6	163.4	173.7	175.3
147.5°	118.5	121.6	124.8	125.6	131.3	139.0	142.7	148.2	159.0	167.2	168.4
150°	121.4	124.2	127.1	127.8	132.8	139.4	142.7	147.3	156.5	163.4	164.3
152.5°	124.4	126.6	128.7	129.3	133.7	139.7	142.7	146.6	154.5	160.4	161.1
155°	128.9	130.4	132.1	132.5	135.9	140.4	142.7	145.8	152.1	156.8	157.3
157.5°	132.2	133.7	135.3	135.7	138.0	141.2	142.7	145.2	150.0	153.6	154.0
160°	134.4	135.6	136.8	137.1	139.0	141.5	142.7	144.8	148.9	152.0	152.2
162.5°	136.6	137.5	138.5	138.7	140.0	141.9	142.7	144.5	148.0	150.6	150.8
165°	139.1	139.8	140.7	140.9	141.5	142.3	142.7	144.0	146.5	148.4	148.5
167.5°	141.3	141.7	142.1	142.2	142.6	143.3	143.7	144.5	146.1	147.4	147.5
170°	142.7	143.1	143.5	143.6	143.6	143.7	143.7	144.5	146.1	147.4	147.4
172.5°	143.5	143.6	143.7	143.7	143.7	143.7	143.7	144.4	145.6	146.6	146.5
175°	144.6	144.6	144.6	144.6	144.3	143.9	143.7	144.1	145.0	145.5	145.5
177.5°	144.6	144.6	144.6	144.6	144.4	144.1	143.9	144.2	144.9	145.4	145.3
180°	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6

TEST NUMBER: P936484

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	398.2	398.2
2.5°	425.1	422.5
5°	546.7	549.3
7.5°	736.2	734.9
10°	915.5	926.9
12.5°	1046.0	1048.7
15°	1125.5	1130.5
17.5°	1156.2	1157.5
20°	1157.5	1154.9
22.5°	1143.4	1140.8
25°	1126.8	1125.5
27.5°	1111.3	1112.6
30°	1105.0	1108.8
32.5°	1105.0	1111.3
35°	1107.6	1114.0
37.5°	1106.2	1114.0
40°	1101.2	1110.1
42.5°	1087.0	1093.4
45°	1065.3	1073.0
47.5°	1037.1	1042.3
50°	1001.3	1006.4
52.5°	956.4	957.8
55°	902.6	907.8
57.5°	845.1	846.3
60°	781.0	784.9
62.5°	713.2	713.2
65°	641.5	644.0
67.5°	567.3	573.6
70°	491.7	492.9
72.5°	417.4	417.4
75°	340.6	341.9
77.5°	267.6	267.6
80°	198.5	199.7
82.5°	137.0	139.5
85°	85.8	85.8
87.5°	39.7	35.9
90°	3.7	3.7
92.5°	14.7	11.8
95°	51.6	42.6
97.5°	123.4	106.5
100°	177.8	157.7
102.5°	231.2	214.0
105°	299.5	290.2
107.5°	344.2	346.4
110°	361.1	370.8

TEST NUMBER: P936484

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	362.7	377.5
115°	353.1	373.6
117.5°	332.7	355.5
120°	316.3	338.4
122.5°	300.2	322.1
125°	277.4	297.6
127.5°	256.9	273.8
130°	244.8	260.5
132.5°	233.8	247.9
135°	218.8	230.9
137.5°	206.7	216.7
140°	198.4	207.7
142.5°	191.6	199.5
145°	181.3	187.3
147.5°	173.4	178.4
150°	168.4	172.5
152.5°	164.1	167.2
155°	159.3	161.3
157.5°	155.4	156.9
160°	153.1	153.9
162.5°	151.6	152.3
165°	149.4	150.2
167.5°	147.8	148.2
170°	147.4	147.4
172.5°	146.2	145.9
175°	145.5	145.5
177.5°	145.0	144.6
180°	144.6	144.6

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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	7.66	8.90	8.34	9.60	10.43	20.80	22.03	21.48	22.74	23.57
	3H	8.39	9.51	9.09	10.22	11.09	22.65	23.77	23.35	24.48	25.34
	4H	8.71	9.76	9.42	10.49	11.36	23.30	24.36	24.02	25.08	25.96
	6H	8.98	9.96	9.71	10.69	11.58	23.74	24.72	24.47	25.45	26.34
	8H	9.06	9.99	9.80	10.75	11.64	23.87	24.80	24.60	25.55	26.44
	12H	9.09	9.98	9.83	10.73	11.65	23.94	24.83	24.68	25.58	26.50
4H	2H	14.90	15.95	15.61	16.68	17.55	21.12	22.17	21.84	22.90	23.77
	3H	16.50	17.39	17.23	18.15	19.04	23.18	24.07	23.91	24.83	25.72
	4H	16.61	17.42	17.36	18.18	19.10	23.96	24.76	24.70	25.53	26.45
	6H	16.64	17.35	17.41	18.13	19.06	24.51	25.21	25.27	26.00	26.92
	8H	16.63	17.29	17.40	18.07	19.01	24.67	25.33	25.44	26.11	27.05
	12H	16.61	17.20	17.40	18.01	18.95	24.78	25.37	25.57	26.18	27.12
8H	4H	18.08	18.73	18.85	19.52	20.46	24.05	24.71	24.82	25.49	26.43
	6H	18.34	18.88	19.14	19.71	20.65	24.68	25.23	25.48	26.06	27.00
	8H	18.36	18.85	19.17	19.67	20.63	24.90	25.39	25.71	26.21	27.17
	12H	18.35	18.78	19.16	19.59	20.61	25.06	25.49	25.87	26.30	27.32
12H	4H	18.24	18.83	19.03	19.64	20.58	24.02	24.62	24.81	25.42	26.37
	6H	18.60	19.09	19.41	19.91	20.87	24.67	25.16	25.48	25.99	26.94
	8H	18.69	19.12	19.50	19.93	20.95	24.91	25.34	25.73	26.16	27.18