

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: P936957

Luminaire Tested: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936957
REPORT IS A COMBINATION OF REPORTS P933472 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-93050-1D-UNV-STD-W-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

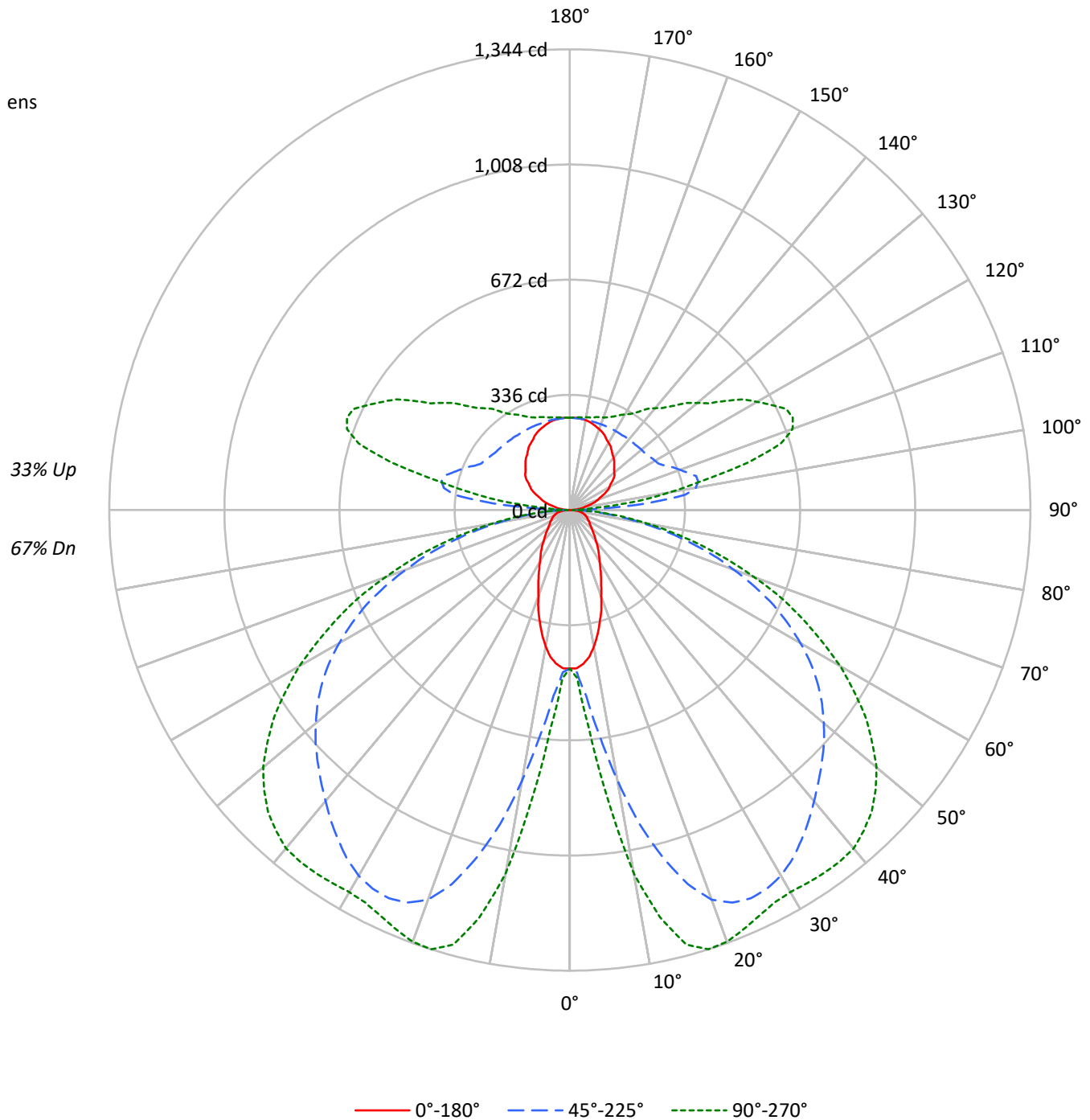
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5325.1 lumens
Efficiency: N/A
Efficacy: 95.1 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): 56
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67	67	67	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55	55	55	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45	45	45	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37	37	37	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31	31	31	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26	26	26	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23	23	23	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20	20	20	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17	17	17	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15	15	15	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14	14	14	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4289	4289	4289
5°	4185	4953	5765
10°	3792	7215	9557
15°	3220	9419	11540
20°	2618	10908	11762
25°	2181	11406	11523
30°	1837	11469	11501
35°	1621	11269	11797
40°	1411	11013	12105
45°	1275	10822	12153
50°	1168	10648	11951
55°	1114	10398	11422
60°	1137	9928	10586
65°	1177	9220	9435
70°	1244	8025	7972
75°	1364	6526	6221
80°	1460	4511	4193
85°	1226	2378	2146

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12153 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.8	1.1
10°-20°	265.0	5.0
20°-30°	463.5	8.7
30°-40°	596.6	11.2
40°-50°	666.4	12.5
50°-60°	638.3	12.0
60°-70°	505.8	9.5
70°-80°	297.5	5.6
80°-90°	83.7	1.6
90°-100°	131.5	2.5
100°-110°	345.7	6.5
110°-120°	358.4	6.7
120°-130°	287.5	5.4
130°-140°	225.6	4.2
140°-150°	173.1	3.3
150°-160°	124.7	2.3
160°-170°	76.3	1.4
170°-180°	25.8	0.5
0°-30°	788.3	14.8
0°-40°	1384.9	26.0
0°-60°	2689.6	50.5
0°-90°	3576.6	67.2
90°-120°	835.6	15.7
90°-150°	1521.8	28.6
90°-180°	1749.0	32.8
0°-180°	5325.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	462	462	462	462	462	
5°	450	483	544	615	638	42
15°	337	623	1049	1272	1312	94
25°	216	706	1250	1305	1306	99
35°	146	675	1177	1244	1293	91
45°	100	538	1040	1192	1245	77
55°	71	342	883	1025	1054	65
65°	56	181	655	737	748	56
75°	42	112	360	395	397	44
85°	15	34	89	98	100	16
90°	2	5	14	7	7	3
95°	17	68	226	117	80	19
105°	62	94	382	580	541	66
115°	111	134	306	611	697	109
125°	154	172	278	470	555	137
135°	183	202	270	380	431	142
145°	213	226	266	324	349	133
155°	240	247	266	292	301	110
165°	260	263	266	277	280	73
175°	270	270	268	272	272	26
180°	270	270	270	270	270	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	462.2	462.2	462.2	462.2	462.2	462.2	462.2	462.2	462.2	462.2	462.2
2.5°	462.2	462.2	465.1	466.6	469.6	471.1	474.1	477.1	486.0	487.5	490.4
5°	450.3	456.3	475.6	483.0	503.8	532.1	543.9	563.3	603.4	615.2	622.7
7.5°	432.5	445.8	493.4	505.3	557.3	631.6	662.9	704.5	768.3	799.5	824.8
10°	404.2	432.5	517.1	545.4	630.1	743.0	801.0	859.0	955.6	998.7	1015.1
12.5°	373.0	419.1	542.4	581.1	703.0	867.9	937.8	1001.7	1111.7	1169.6	1178.5
15°	337.4	399.8	566.2	622.7	780.2	971.9	1049.2	1128.0	1230.6	1272.1	1282.6
17.5°	306.2	385.0	588.5	648.0	839.7	1065.6	1144.3	1209.8	1292.9	1321.2	1328.6
20°	267.5	361.2	603.4	680.7	902.1	1134.0	1209.8	1260.3	1316.7	1334.6	1337.6
22.5°	239.2	335.9	612.3	692.5	943.7	1175.5	1239.5	1279.6	1318.2	1324.2	1325.6
25°	215.5	307.7	610.9	705.9	979.4	1200.8	1249.9	1279.6	1301.9	1304.9	1304.9
27.5°	193.2	276.4	604.9	708.9	1006.1	1206.8	1245.4	1266.2	1276.6	1282.6	1282.6
30°	173.9	246.7	590.0	703.0	1018.0	1200.8	1232.0	1242.4	1252.8	1261.8	1266.2
32.5°	159.1	218.4	567.7	691.0	1019.5	1186.0	1208.3	1214.2	1229.1	1249.9	1257.3
35°	145.6	190.2	542.4	674.7	1010.6	1162.2	1177.0	1183.0	1212.7	1243.9	1254.3
37.5°	132.3	169.4	509.8	646.5	997.2	1134.0	1144.3	1154.8	1200.8	1238.0	1249.9
40°	118.9	151.6	471.1	615.2	976.4	1099.7	1108.7	1125.0	1186.0	1229.1	1241.0
42.5°	108.5	136.8	429.5	582.6	949.6	1061.2	1074.5	1098.3	1168.1	1214.2	1227.6
45°	99.6	121.9	385.0	538.0	915.5	1021.0	1040.3	1073.0	1147.3	1191.9	1203.8
47.5°	90.6	111.5	338.8	491.9	878.3	980.9	1006.1	1043.3	1119.0	1162.2	1172.6
50°	83.3	101.1	292.7	442.8	838.2	937.8	967.5	1006.1	1083.4	1123.5	1137.0
52.5°	77.3	92.1	249.7	393.8	792.1	893.1	927.4	967.5	1040.3	1079.0	1087.9
55°	71.3	84.7	212.5	341.8	744.5	845.6	882.8	921.4	992.7	1025.4	1031.4
57.5°	68.3	78.8	181.3	292.7	694.0	792.1	833.8	869.4	936.3	961.6	967.5
60°	63.9	74.3	157.6	251.2	639.1	741.6	777.3	813.0	869.4	890.2	894.6
62.5°	59.5	71.3	139.7	211.1	582.6	682.2	717.8	750.5	798.1	813.0	818.8
65°	56.5	68.3	126.3	181.3	524.6	619.7	655.4	683.7	722.3	737.2	740.1
67.5°	53.5	65.4	115.9	156.1	466.6	557.3	584.1	610.9	640.5	655.4	656.9
70°	49.0	62.4	107.0	138.2	407.2	486.0	508.3	536.5	560.3	567.7	572.2
72.5°	46.1	58.0	101.1	124.8	346.3	417.6	438.4	454.8	475.6	483.0	483.0
75°	41.6	52.0	95.1	111.5	283.9	341.8	359.7	376.0	392.3	395.3	390.8
77.5°	37.2	46.1	81.8	93.6	221.4	270.5	285.4	294.2	307.7	310.6	312.1
80°	31.2	40.1	63.9	72.8	160.5	199.1	209.6	216.9	228.9	228.9	231.9
82.5°	23.8	31.2	46.1	52.0	108.5	136.8	145.6	150.1	157.6	157.6	157.6
85°	14.8	19.3	29.7	34.2	65.4	83.3	89.1	90.6	96.6	98.1	98.1
87.5°	7.5	10.4	19.3	20.8	34.2	43.1	43.1	46.1	46.1	44.6	43.1
90°	1.8	3.2	4.7	5.1	8.0	11.9	13.8	12.2	9.1	6.9	6.9
92.5°	7.2	19.5	31.9	35.0	49.1	68.0	77.5	67.9	48.7	34.4	33.0
95°	17.4	39.9	62.4	68.1	120.9	191.2	226.4	202.0	153.3	116.7	112.6
97.5°	30.0	49.9	69.7	74.7	162.7	280.2	338.8	323.5	292.6	269.6	261.6
100°	39.8	57.8	75.9	80.4	178.0	308.3	373.5	374.6	376.9	378.5	369.1
102.5°	48.1	65.0	81.8	86.0	185.1	317.2	383.2	402.9	442.1	471.6	463.5
105°	62.3	76.5	90.7	94.3	190.2	318.2	382.1	426.2	514.2	580.2	575.9
107.5°	76.8	90.0	103.3	106.6	191.2	304.1	360.5	421.8	544.6	636.7	637.7
110°	86.5	98.5	110.5	113.5	189.8	291.5	342.4	411.0	548.2	651.2	655.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	96.1	107.5	118.9	121.8	189.8	280.5	325.8	396.1	536.6	642.0	648.9
115°	110.6	121.1	131.7	134.3	191.6	267.9	306.1	373.7	509.1	610.6	620.2
117.5°	124.9	134.5	144.0	146.4	195.2	260.1	292.6	353.6	475.7	567.3	577.9
120°	133.2	142.3	151.2	153.5	198.1	257.4	287.1	342.9	454.5	538.2	548.6
122.5°	141.4	150.5	159.6	161.9	202.2	256.0	282.9	333.1	433.7	509.1	519.3
125°	153.9	162.1	170.4	172.5	207.8	254.9	278.4	321.1	406.5	470.5	479.9
127.5°	164.0	172.4	180.8	182.9	213.4	254.3	274.6	311.3	384.5	439.5	447.4
130°	169.4	178.5	187.4	189.7	217.6	254.6	273.2	305.8	371.1	420.0	427.3
132.5°	175.0	184.1	193.1	195.3	220.9	254.9	271.9	301.1	359.5	403.3	409.9
135°	183.4	191.6	199.8	201.8	224.5	254.6	269.7	294.1	343.1	379.8	385.4
137.5°	191.9	200.0	208.2	210.2	229.9	256.2	269.4	290.0	331.4	362.4	367.0
140°	198.9	206.4	214.0	215.8	233.2	256.5	268.1	286.0	321.7	348.5	352.8
142.5°	204.4	211.3	218.2	219.9	236.0	257.3	268.1	283.8	315.1	338.7	342.4
145°	212.7	218.7	224.8	226.3	239.6	257.4	266.3	279.1	304.8	324.0	326.8
147.5°	221.1	227.0	232.7	234.2	245.0	259.2	266.3	276.4	296.6	311.7	314.1
150°	226.4	231.7	237.1	238.4	247.7	260.1	266.3	274.8	291.9	304.7	306.6
152.5°	232.0	236.1	240.1	241.1	249.5	260.7	266.3	273.6	288.2	299.1	300.5
155°	240.4	243.4	246.4	247.1	253.5	262.0	266.3	272.1	283.7	292.4	293.4
157.5°	246.5	249.4	252.3	253.0	257.4	263.3	266.3	270.8	279.8	286.6	287.3
160°	250.8	253.0	255.2	255.8	259.3	263.9	266.3	270.2	277.9	283.7	284.0
162.5°	254.9	256.6	258.2	258.7	261.2	264.6	266.3	269.6	276.1	281.0	281.3
165°	259.5	260.9	262.5	262.9	264.0	265.5	266.3	268.6	273.2	276.8	277.1
167.5°	263.6	264.3	265.0	265.2	266.1	267.4	268.1	269.6	272.7	275.0	275.2
170°	266.3	267.0	267.7	267.9	268.0	268.1	268.1	269.6	272.7	275.0	275.0
172.5°	267.7	267.9	268.1	268.1	268.1	268.1	268.1	269.3	271.7	273.5	273.3
175°	269.7	269.7	269.7	269.7	269.2	268.4	268.1	268.8	270.4	271.6	271.6
177.5°	269.7	269.7	269.7	269.7	269.3	268.8	268.5	269.1	270.3	271.2	271.0
180°	269.7	269.7	269.7	269.7	269.7	269.7	269.7	269.7	269.7	269.7	269.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	462.2	462.2
2.5°	493.4	490.4
5°	634.6	637.6
7.5°	854.6	853.1
10°	1062.6	1076.0
12.5°	1214.2	1217.1
15°	1306.4	1312.3
17.5°	1342.0	1343.5
20°	1343.5	1340.6
22.5°	1327.1	1324.2
25°	1307.8	1306.4
27.5°	1290.0	1291.5
30°	1282.6	1287.1
32.5°	1282.6	1290.0
35°	1285.6	1292.9
37.5°	1284.1	1292.9
40°	1278.1	1288.5
42.5°	1261.8	1269.1
45°	1236.5	1245.4
47.5°	1203.8	1209.8
50°	1162.2	1168.1
52.5°	1110.2	1111.7
55°	1047.7	1053.7
57.5°	980.9	982.4
60°	906.6	911.1
62.5°	827.8	827.8
65°	744.5	747.5
67.5°	658.4	665.8
70°	570.7	572.2
72.5°	484.5	484.5
75°	395.3	396.8
77.5°	310.6	310.6
80°	230.4	231.9
82.5°	159.1	162.0
85°	99.6	99.6
87.5°	46.1	41.6
90°	6.9	6.9
92.5°	27.6	22.0
95°	96.0	79.5
97.5°	230.1	198.6
100°	331.6	294.0
102.5°	431.3	399.2
105°	558.6	541.3
107.5°	641.9	646.1
110°	673.7	691.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	676.6	704.2
115°	658.6	696.9
117.5°	620.5	663.1
120°	589.9	631.2
122.5°	560.1	600.8
125°	517.4	555.0
127.5°	479.1	510.8
130°	456.6	485.9
132.5°	436.1	462.3
135°	408.1	430.6
137.5°	385.5	404.0
140°	370.1	387.4
142.5°	357.3	372.2
145°	338.1	349.4
147.5°	323.4	332.7
150°	314.2	321.7
152.5°	306.2	311.9
155°	297.1	300.9
157.5°	289.9	292.6
160°	285.6	287.1
162.5°	282.8	284.2
165°	278.7	280.3
167.5°	275.8	276.4
170°	275.0	275.0
172.5°	272.8	272.3
175°	271.6	271.6
177.5°	270.4	269.7
180°	269.7	269.7



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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	7.48	8.57	8.26	9.39	10.39	20.62	21.71	21.40	22.53	23.53
	3H	8.20	9.19	9.00	10.01	11.04	22.46	23.45	23.25	24.27	25.30
	4H	8.51	9.44	9.32	10.28	11.32	23.10	24.04	23.92	24.87	25.91
	6H	8.77	9.64	9.60	10.48	11.53	23.53	24.40	24.36	25.24	26.29
	8H	8.85	9.67	9.69	10.53	11.59	23.65	24.48	24.49	25.34	26.39
	12H	8.87	9.66	9.72	10.51	11.60	23.72	24.51	24.57	25.36	26.45
4H	2H	14.70	15.63	15.51	16.46	17.50	20.92	21.85	21.74	22.69	23.73
	3H	16.29	17.07	17.12	17.94	18.99	22.97	23.76	23.80	24.62	25.68
	4H	16.39	17.11	17.24	17.97	19.05	23.74	24.45	24.58	25.32	26.40
	6H	16.42	17.04	17.28	17.93	19.01	24.28	24.90	25.14	25.79	26.87
	8H	16.40	16.98	17.27	17.86	18.96	24.44	25.02	25.31	25.90	27.00
	12H	16.37	16.89	17.26	17.80	18.90	24.54	25.06	25.42	25.97	27.07
8H	4H	17.85	18.43	18.71	19.31	20.41	23.82	24.40	24.69	25.28	26.38
	6H	18.10	18.58	18.99	19.51	20.61	24.45	24.93	25.34	25.85	26.95
	8H	18.12	18.55	19.03	19.47	20.58	24.66	25.09	25.57	26.01	27.13
	12H	18.10	18.48	19.01	19.39	20.56	24.81	25.19	25.72	26.10	27.27
12H	4H	18.00	18.52	18.89	19.43	20.53	23.78	24.31	24.67	25.21	26.32
	6H	18.36	18.79	19.26	19.71	20.82	24.43	24.86	25.34	25.78	26.90
	8H	18.44	18.82	19.35	19.73	20.90	24.67	25.05	25.58	25.96	27.12