

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: P938060

Luminaire Tested: SQ4-FB-125U-100D-93050-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938060
REPORT IS A COMBINATION OF REPORTS P933599 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-93050-1D-UNV-STD-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

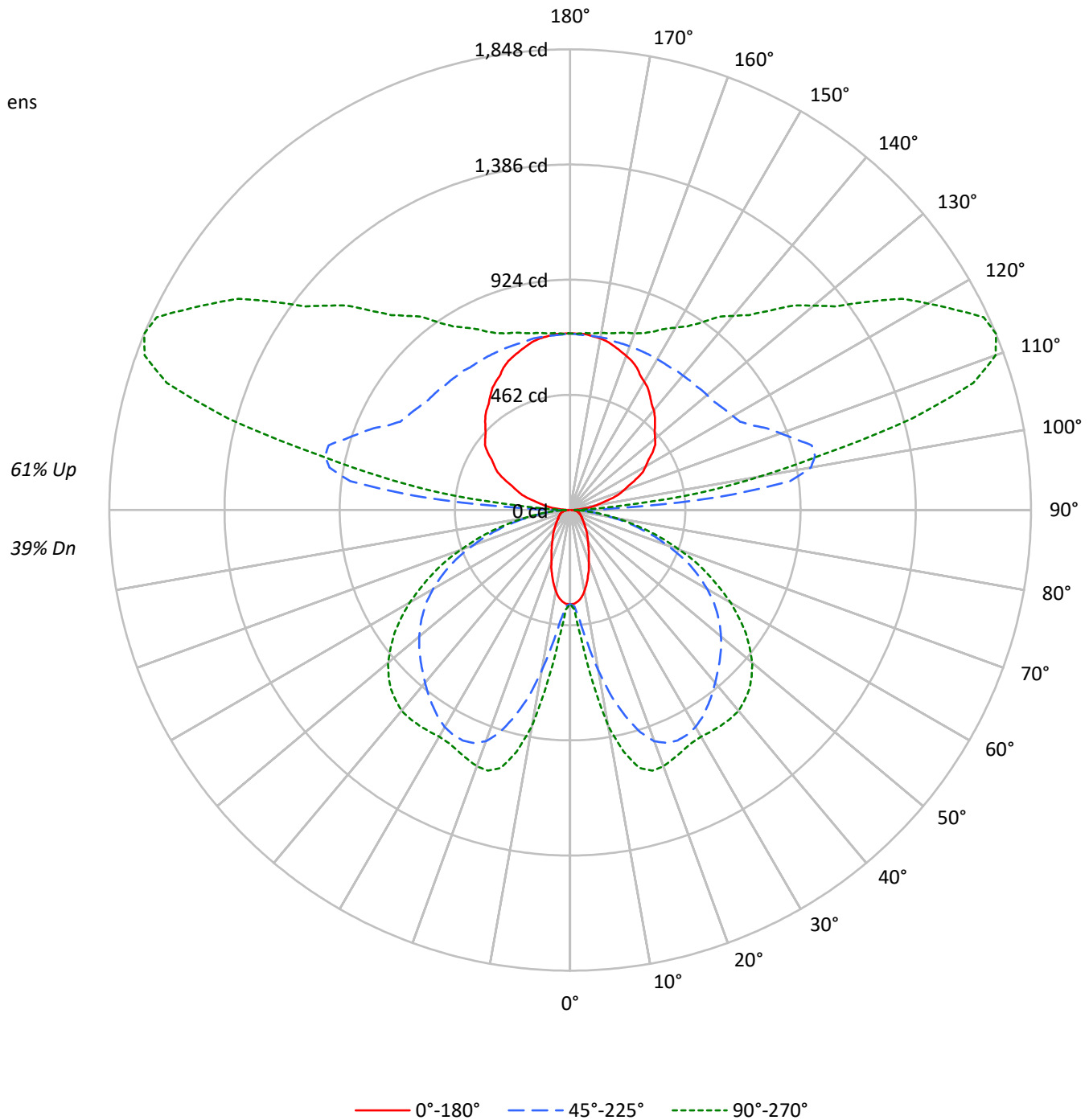
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7509.5 lumens
Efficiency: N/A
Efficacy: 116.6 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): 64.4
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

TEST NUMBER: P938060
CATALOG NUMBER: SQ4-FB-125U-100D-93050-1D-UNV-STD-W-4-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P938060

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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
RCR																				
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39		
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32		
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26		
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21		
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18		
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15		
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13		
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11		
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10		
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9		
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3499	3499	3499
5°	3415	4041	4704
10°	3094	5887	7798
15°	2626	7686	9416
20°	2135	8900	9596
25°	1779	9305	9402
30°	1499	9358	9383
35°	1323	9195	9627
40°	1151	8986	9877
45°	1040	8830	9916
50°	952	8688	9752
55°	909	8484	9319
60°	927	8101	8636
65°	961	7522	7698
70°	1015	6547	6503
75°	1115	5325	5076
80°	1189	3680	3419
85°	1002	1943	1750

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9916 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.8	0.6
10°-20°	216.2	2.9
20°-30°	378.2	5.0
30°-40°	486.8	6.5
40°-50°	543.8	7.2
50°-60°	520.8	6.9
60°-70°	412.7	5.5
70°-80°	242.7	3.2
80°-90°	70.1	0.9
90°-100°	345.1	4.6
100°-110°	907.3	12.1
110°-120°	940.8	12.5
120°-130°	754.6	10.0
130°-140°	592.1	7.9
140°-150°	454.5	6.1
150°-160°	327.3	4.4
160°-170°	200.3	2.7
170°-180°	67.7	0.9
0°-30°	643.1	8.6
0°-40°	1130.0	15.0
0°-60°	2194.5	29.2
0°-90°	2920.1	38.9
90°-120°	2193.1	29.2
90°-150°	3994.3	53.2
90°-180°	4589.0	61.1
0°-180°	7509.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	377	377	377	377	377	
5°	367	394	444	502	520	34
15°	275	508	856	1038	1071	77
25°	176	576	1020	1065	1066	81
35°	119	550	960	1015	1055	74
45°	81	439	849	972	1016	63
55°	58	279	720	837	860	53
65°	46	148	535	602	610	46
75°	34	91	294	323	324	36
85°	12	28	73	80	81	13
90°	5	13	36	18	18	5
95°	46	179	594	306	209	51
105°	163	248	1003	1523	1421	173
115°	290	353	803	1603	1829	287
125°	404	453	731	1235	1457	359
135°	481	530	708	997	1130	372
145°	558	594	699	850	917	350
155°	631	648	699	767	790	290
165°	681	690	699	726	736	192
175°	708	708	704	713	713	67
180°	708	708	708	708	708	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	377.1	377.1	377.1	377.1	377.1	377.1	377.1	377.1	377.1	377.1	377.1
2.5°	377.1	377.1	379.6	380.8	383.1	384.4	386.8	389.2	396.5	397.7	400.1
5°	367.4	372.3	388.0	394.1	411.0	434.1	443.8	459.6	492.3	502.0	508.0
7.5°	352.9	363.8	402.6	412.3	454.7	515.4	540.8	574.8	626.9	652.4	672.9
10°	329.8	352.9	422.0	445.0	514.1	606.3	653.6	700.8	779.7	814.8	828.2
12.5°	304.4	341.9	442.6	474.1	573.6	708.2	765.2	817.3	907.0	954.3	961.6
15°	275.2	326.1	462.0	508.0	636.6	793.1	856.1	920.4	1004.1	1038.0	1046.4
17.5°	249.8	314.0	480.1	528.7	685.2	869.4	933.7	987.1	1055.0	1078.0	1084.1
20°	218.2	294.7	492.3	555.4	736.1	925.2	987.1	1028.3	1074.3	1088.9	1091.3
22.5°	195.2	274.0	499.6	565.0	769.9	959.2	1011.3	1044.1	1075.5	1080.4	1081.6
25°	175.8	251.0	498.4	575.9	799.1	979.7	1019.7	1044.1	1062.2	1064.6	1064.6
27.5°	157.7	225.6	493.5	578.4	820.9	984.6	1016.2	1033.1	1041.6	1046.4	1046.4
30°	141.9	201.3	481.4	573.6	830.6	979.7	1005.2	1013.7	1022.2	1029.5	1033.1
32.5°	129.8	178.2	463.3	563.8	831.8	967.6	985.8	990.7	1002.8	1019.7	1025.9
35°	118.8	155.2	442.6	550.5	824.5	948.3	960.4	965.2	989.5	1015.0	1023.4
37.5°	107.9	138.2	415.9	527.5	813.6	925.2	933.7	942.2	979.7	1010.1	1019.7
40°	97.0	123.7	384.4	502.0	796.7	897.3	904.6	918.0	967.6	1002.8	1012.5
42.5°	88.6	111.6	350.5	475.4	774.8	865.8	876.7	896.1	953.1	990.7	1001.6
45°	81.2	99.4	314.0	438.9	746.9	833.1	848.8	875.5	936.1	972.5	982.2
47.5°	74.0	90.9	276.5	401.4	716.6	800.3	820.9	851.3	913.1	948.3	956.7
50°	67.9	82.5	238.9	361.4	683.9	765.2	789.4	820.9	884.0	916.7	927.6
52.5°	63.0	75.2	203.7	321.4	646.3	728.7	756.6	789.4	848.8	880.3	887.6
55°	58.2	69.1	173.4	278.9	607.5	689.9	720.3	751.8	810.0	836.7	841.5
57.5°	55.8	64.2	147.9	238.9	566.3	646.3	680.3	709.4	763.9	784.5	789.4
60°	52.1	60.7	128.6	204.9	521.4	605.0	634.2	663.3	709.4	726.4	729.9
62.5°	48.5	58.2	114.0	172.2	475.4	556.6	585.7	612.4	651.2	663.3	668.2
65°	46.1	55.8	103.1	147.9	428.0	505.6	534.7	557.8	589.3	601.5	603.8
67.5°	43.7	53.3	94.6	127.3	380.8	454.7	476.6	498.4	522.6	534.7	535.9
70°	40.0	50.9	87.3	112.8	332.2	396.5	414.7	437.7	457.1	463.3	466.8
72.5°	37.6	47.3	82.5	101.9	282.6	340.7	357.7	371.0	388.0	394.1	394.1
75°	34.0	42.4	77.6	90.9	231.6	278.9	293.5	306.8	320.1	322.6	318.9
77.5°	30.3	37.6	66.7	76.4	180.7	220.7	232.8	240.1	251.0	253.5	254.7
80°	25.4	32.8	52.1	59.4	131.0	162.5	171.0	177.0	186.8	186.8	189.1
82.5°	19.4	25.4	37.6	42.4	88.6	111.6	118.8	122.5	128.6	128.6	128.6
85°	12.1	15.8	24.2	27.9	53.3	67.9	72.8	74.0	78.8	80.0	80.0
87.5°	6.1	8.4	15.8	17.0	27.9	35.1	35.1	37.6	37.6	36.3	35.1
90°	4.8	8.5	12.4	13.3	20.9	31.0	36.1	32.0	24.0	18.1	18.1
92.5°	19.0	51.3	83.6	91.7	128.9	178.6	203.4	178.2	128.0	90.3	86.7
95°	45.6	104.7	163.9	178.7	317.2	502.0	594.4	530.4	402.5	306.5	295.6
97.5°	78.8	131.0	183.2	196.2	427.3	735.3	889.4	849.0	768.1	707.5	686.8
100°	104.5	151.9	199.1	211.0	467.4	809.2	980.2	983.1	989.1	993.5	968.8
102.5°	126.4	170.5	214.6	225.7	485.7	832.5	1005.9	1057.5	1160.5	1237.8	1216.7
105°	163.4	200.9	238.2	247.6	499.4	835.2	1003.0	1118.6	1349.6	1522.8	1511.4
107.5°	201.4	236.3	271.2	279.9	502.0	798.0	946.1	1107.2	1429.4	1671.0	1673.8
110°	227.1	258.6	290.0	297.9	498.1	765.1	898.5	1078.7	1438.9	1709.1	1721.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	252.3	282.3	312.2	319.7	498.2	736.3	855.3	1039.7	1408.4	1684.9	1703.1
115°	290.3	318.0	345.7	352.6	502.9	703.2	803.4	981.0	1336.3	1602.7	1627.8
117.5°	327.9	353.0	378.2	384.4	512.3	682.7	767.8	928.1	1248.6	1489.1	1516.9
120°	349.7	373.4	397.1	403.0	519.9	675.7	753.6	900.1	1192.9	1412.6	1439.8
122.5°	371.1	395.0	418.8	424.8	530.8	672.0	742.7	874.6	1138.3	1336.1	1362.9
125°	403.9	425.6	447.4	452.8	545.5	669.0	730.8	842.8	1066.8	1234.9	1259.5
127.5°	430.5	452.4	474.4	479.9	560.2	667.3	720.8	816.9	1009.4	1153.6	1174.5
130°	444.7	468.4	492.1	497.9	571.0	668.4	717.0	802.6	973.9	1102.3	1121.5
132.5°	459.5	483.2	506.8	512.7	579.7	669.0	713.7	790.3	943.7	1058.7	1075.8
135°	481.3	502.9	524.4	529.8	589.2	668.4	708.0	772.2	900.6	996.9	1011.8
137.5°	503.6	524.9	546.3	551.6	603.4	672.5	707.0	761.2	869.8	951.2	963.3
140°	522.2	541.8	561.4	566.4	612.2	673.2	703.7	750.6	844.4	914.7	926.0
142.5°	536.4	554.6	572.7	577.3	619.4	675.6	703.7	744.9	827.2	889.0	898.7
145°	558.3	574.1	590.0	593.9	628.9	675.6	698.9	732.6	800.0	850.5	858.0
147.5°	580.2	595.6	611.0	614.9	642.8	680.2	698.9	725.4	778.5	818.2	824.4
150°	594.4	608.3	622.3	625.8	650.2	682.7	698.9	721.3	766.1	799.7	804.6
152.5°	609.2	619.7	630.3	632.9	655.0	684.2	698.9	718.0	756.3	784.9	788.7
155°	631.0	638.8	646.6	648.5	665.3	687.7	698.9	714.2	744.5	767.4	769.9
157.5°	647.2	654.8	662.3	664.2	675.8	691.2	698.9	710.8	734.4	752.1	753.9
160°	658.1	664.0	669.9	671.4	680.6	692.8	698.9	709.0	729.3	744.5	745.5
162.5°	669.0	673.4	677.9	679.0	685.6	694.5	698.9	707.5	724.6	737.5	738.4
165°	680.8	684.9	688.9	689.9	693.0	696.9	698.9	705.1	717.3	726.4	727.5
167.5°	691.9	693.7	695.6	696.1	698.6	702.0	703.7	707.7	715.7	721.8	722.2
170°	698.9	700.8	702.8	703.2	703.4	703.6	703.7	707.7	715.7	721.8	721.8
172.5°	702.8	703.1	703.6	703.7	703.7	703.7	703.7	706.8	713.1	717.9	717.5
175°	708.0	708.0	708.0	708.0	706.5	704.6	703.7	705.7	709.7	712.7	712.7
177.5°	708.0	708.0	708.0	708.0	706.9	705.3	704.6	706.2	709.4	711.8	711.3
180°	708.0	708.0	708.0	708.0	708.0	708.0	708.0	708.0	708.0	708.0	708.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	377.1	377.1
2.5°	402.6	400.1
5°	517.8	520.2
7.5°	697.3	696.0
10°	867.0	877.9
12.5°	990.7	993.1
15°	1065.9	1070.7
17.5°	1095.0	1096.2
20°	1096.2	1093.7
22.5°	1082.9	1080.4
25°	1067.1	1065.9
27.5°	1052.5	1053.7
30°	1046.4	1050.1
32.5°	1046.4	1052.5
35°	1048.9	1055.0
37.5°	1047.6	1055.0
40°	1042.9	1051.3
42.5°	1029.5	1035.5
45°	1008.9	1016.2
47.5°	982.2	987.1
50°	948.3	953.1
52.5°	905.8	907.0
55°	854.8	859.7
57.5°	800.3	801.5
60°	739.7	743.3
62.5°	675.4	675.4
65°	607.5	609.9
67.5°	537.2	543.3
70°	465.6	466.8
72.5°	395.3	395.3
75°	322.6	323.8
77.5°	253.5	253.5
80°	187.9	189.1
82.5°	129.8	132.1
85°	81.2	81.2
87.5°	37.6	34.0
90°	18.1	18.1
92.5°	72.3	58.0
95°	252.1	208.6
97.5°	604.0	521.3
100°	870.3	771.6
102.5°	1132.2	1047.7
105°	1466.1	1420.7
107.5°	1684.8	1695.8
110°	1768.2	1815.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1775.6	1848.3
115°	1728.6	1829.3
117.5°	1628.7	1740.4
120°	1548.2	1656.8
122.5°	1469.9	1577.0
125°	1358.1	1456.7
127.5°	1257.6	1340.8
130°	1198.4	1275.3
132.5°	1144.6	1213.5
135°	1071.0	1130.3
137.5°	1011.9	1060.5
140°	971.4	1016.8
142.5°	937.8	976.9
145°	887.5	917.1
147.5°	848.8	873.3
150°	824.5	844.4
152.5°	803.6	818.7
155°	779.8	789.7
157.5°	760.9	767.8
160°	749.6	753.6
162.5°	742.2	746.0
165°	731.5	735.5
167.5°	723.9	725.5
170°	721.8	721.8
172.5°	716.1	714.6
175°	712.7	712.7
177.5°	709.7	708.0
180°	708.0	708.0



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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	4.23	5.03	5.27	6.08	7.50	17.37	18.17	18.41	19.22	20.64
	3H	4.93	5.65	5.98	6.71	8.14	19.19	19.91	20.24	20.97	22.40
	4H	5.23	5.91	6.29	6.97	8.41	19.82	20.50	20.88	21.56	23.01
	6H	5.47	6.10	6.55	7.17	8.62	20.24	20.86	21.31	21.93	23.39
	8H	5.54	6.14	6.62	7.22	8.67	20.35	20.95	21.43	22.03	23.48
	12H	5.56	6.12	6.64	7.20	8.67	20.41	20.98	21.49	22.05	23.53
4H	2H	11.41	12.09	12.48	13.16	14.60	17.64	18.32	18.71	19.38	20.82
	3H	12.98	13.55	14.05	14.64	16.09	19.66	20.23	20.74	21.32	22.78
	4H	13.07	13.59	14.15	14.67	16.15	20.42	20.94	21.50	22.02	23.50
	6H	13.08	13.53	14.17	14.63	16.10	20.94	21.39	22.03	22.49	23.96
	8H	13.05	13.47	14.14	14.57	16.06	21.09	21.51	22.19	22.61	24.10
	12H	13.01	13.39	14.12	14.50	15.99	21.18	21.56	22.29	22.66	24.16
8H	4H	14.50	14.92	15.59	16.01	17.50	20.47	20.89	21.56	21.99	23.48
	6H	14.74	15.09	15.85	16.22	17.71	21.09	21.43	22.20	22.57	24.06
	8H	14.76	15.06	15.88	16.18	17.69	21.30	21.60	22.42	22.72	24.23
	12H	14.72	14.99	15.85	16.10	17.65	21.43	21.70	22.56	22.81	24.36
12H	4H	14.64	15.02	15.75	16.13	17.62	20.42	20.80	21.53	21.91	23.41
	6H	14.99	15.30	16.11	16.42	17.92	21.07	21.37	22.19	22.49	24.00
	8H	15.06	15.33	16.18	16.44	17.99	21.29	21.56	22.41	22.67	24.21