

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: P938057

Luminaire Tested: SQ4-FB-125U-100D-93050-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938057  
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-4-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

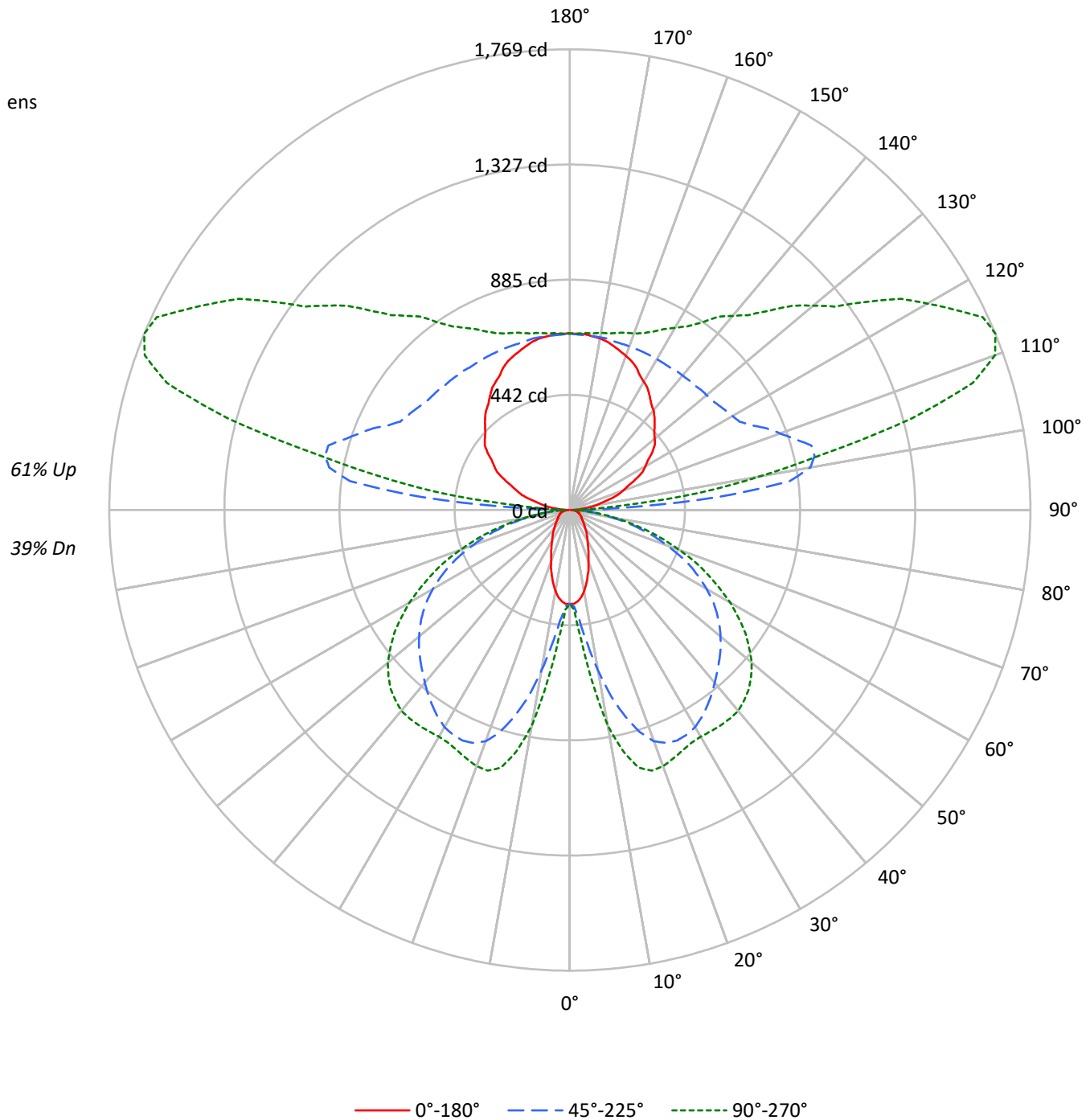
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7187.1 lumens  
Efficiency: N/A  
Efficacy: 111.6 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<sub>in</sub>): 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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CATALOG NUMBER: SQ4-FB-125U-100D-93050-1D-UNV-STD-W-4-3000K

### Luminous Intensity Polar Plot





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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	0
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°	3349	3349	3349
5°	3269	3867	4502
10°	2962	5634	7463
15°	2514	7356	9011
20°	2044	8518	9184
25°	1703	8907	8998
30°	1434	8956	8980
35°	1266	8800	9213
40°	1101	8599	9453
45°	995	8450	9490
50°	911	8315	9333
55°	870	8120	8919
60°	888	7753	8266
65°	919	7200	7368
70°	972	6266	6225
75°	1066	5097	4858
80°	1137	3521	3272
85°	961	1858	1674

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9490 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.7	0.6
10°-20°	206.9	2.9
20°-30°	361.9	5.0
30°-40°	465.9	6.5
40°-50°	520.4	7.2
50°-60°	498.4	6.9
60°-70°	395.0	5.5
70°-80°	232.3	3.2
80°-90°	67.1	0.9
90°-100°	330.3	4.6
100°-110°	868.4	12.1
110°-120°	900.4	12.5
120°-130°	722.2	10.0
130°-140°	566.7	7.9
140°-150°	434.9	6.1
150°-160°	313.2	4.4
160°-170°	191.7	2.7
170°-180°	64.7	0.9
0°-30°	615.5	8.6
0°-40°	1081.5	15.0
0°-60°	2100.3	29.2
0°-90°	2794.7	38.9
90°-120°	2099.0	29.2
90°-150°	3822.8	53.2
90°-180°	4392.0	61.1
0°-180°	7187.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	361	361	361	361	361	
5°	352	377	425	480	498	32
15°	263	486	819	993	1025	73
25°	168	551	976	1019	1020	78
35°	114	527	919	971	1010	71
45°	78	420	812	931	972	60
55°	56	267	689	801	823	51
65°	44	142	512	576	584	44
75°	32	87	281	309	310	34
85°	12	27	70	77	78	12
90°	5	13	34	17	17	5
95°	44	171	569	293	200	48
105°	156	237	960	1458	1360	166
115°	278	337	769	1534	1751	274
125°	386	433	699	1182	1394	343
135°	461	507	678	954	1082	356
145°	534	568	669	814	878	335
155°	604	621	669	734	756	277
165°	652	660	669	695	704	184
175°	678	678	674	682	682	64
180°	678	678	678	678	678	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	360.9	360.9	360.9	360.9	360.9	360.9	360.9	360.9	360.9	360.9	360.9
2.5°	360.9	360.9	363.3	364.4	366.7	367.9	370.2	372.5	379.5	380.7	382.9
5°	351.7	356.3	371.3	377.1	393.4	415.4	424.7	439.9	471.2	480.4	486.2
7.5°	337.7	348.2	385.3	394.6	435.2	493.3	517.6	550.1	600.0	624.4	644.1
10°	315.7	337.7	403.8	425.9	492.0	580.3	625.5	670.8	746.2	779.8	792.7
12.5°	291.3	327.3	423.6	453.7	548.9	677.8	732.3	782.2	868.1	913.3	920.3
15°	263.4	312.1	442.1	486.2	609.3	759.0	819.4	880.8	960.9	993.4	1001.5
17.5°	239.1	300.6	459.5	506.0	655.7	832.1	893.6	944.7	1009.7	1031.7	1037.5
20°	208.9	282.0	471.2	531.5	704.5	885.5	944.7	984.1	1028.2	1042.2	1044.5
22.5°	186.8	262.3	478.1	540.8	736.9	918.0	967.9	999.2	1029.4	1034.0	1035.2
25°	168.3	240.2	477.0	551.2	764.8	937.7	976.0	999.2	1016.6	1018.9	1018.9
27.5°	150.9	215.9	472.4	553.6	785.6	942.3	972.5	988.8	996.9	1001.5	1001.5
30°	135.8	192.6	460.8	548.9	795.0	937.7	962.1	970.2	978.3	985.3	988.8
32.5°	124.2	170.6	443.4	539.6	796.1	926.1	943.5	948.1	959.7	976.0	981.9
35°	113.7	148.5	423.6	526.9	789.2	907.5	919.1	923.8	947.0	971.4	979.5
37.5°	103.3	132.3	398.0	504.8	778.7	885.5	893.6	901.8	937.7	966.7	976.0
40°	92.8	118.4	367.9	480.4	762.5	858.8	865.7	878.6	926.1	959.7	969.0
42.5°	84.8	106.8	335.4	455.0	741.5	828.6	839.0	857.7	912.2	948.1	958.6
45°	77.7	95.1	300.6	420.1	714.8	797.3	812.3	837.9	896.0	930.7	940.0
47.5°	70.8	87.0	264.6	384.2	685.9	766.0	785.6	814.7	873.9	907.5	915.6
50°	65.0	79.0	228.6	345.9	654.5	732.3	755.5	785.6	846.1	877.3	887.8
52.5°	60.3	71.9	195.0	307.6	618.6	697.5	724.2	755.5	812.3	842.6	849.5
55°	55.7	66.1	166.0	266.9	581.4	660.3	689.4	719.5	775.3	800.7	805.4
57.5°	53.4	61.5	141.6	228.6	542.0	618.6	651.1	678.9	731.1	750.9	755.5
60°	49.9	58.1	123.0	196.1	499.1	579.1	607.0	634.8	678.9	695.2	698.6
62.5°	46.5	55.7	109.1	164.8	455.0	532.7	560.5	586.1	623.2	634.8	639.5
65°	44.1	53.4	98.6	141.6	409.6	483.9	511.8	533.8	564.0	575.6	577.9
67.5°	41.8	51.0	90.6	121.8	364.4	435.2	456.1	477.0	500.2	511.8	512.9
70°	38.3	48.7	83.5	107.9	317.9	379.5	396.9	418.9	437.5	443.4	446.8
72.5°	36.0	45.2	79.0	97.5	270.4	326.1	342.4	355.1	371.3	377.1	377.1
75°	32.5	40.6	74.3	87.0	221.7	266.9	280.9	293.6	306.4	308.7	305.2
77.5°	29.0	36.0	63.9	73.1	172.9	211.2	222.8	229.8	240.2	242.6	243.7
80°	24.3	31.4	49.9	56.8	125.3	155.5	163.6	169.4	178.7	178.7	181.0
82.5°	18.5	24.3	36.0	40.6	84.8	106.8	113.7	117.3	123.0	123.0	123.0
85°	11.6	15.1	23.2	26.7	51.0	65.0	69.6	70.8	75.4	76.6	76.6
87.5°	5.8	8.1	15.1	16.2	26.7	33.6	33.6	36.0	36.0	34.8	33.6
90°	4.6	8.2	11.9	12.7	20.0	29.7	34.5	30.7	23.0	17.3	17.3
92.5°	18.2	49.1	80.0	87.7	123.4	170.9	194.6	170.6	122.5	86.4	83.0
95°	43.7	100.2	156.9	171.0	303.6	480.4	568.9	507.7	385.2	293.4	282.9
97.5°	75.4	125.3	175.3	187.8	408.9	703.8	851.2	812.5	735.1	677.1	657.3
100°	100.0	145.4	190.6	201.9	447.3	774.5	938.1	940.9	946.6	950.8	927.2
102.5°	120.9	163.2	205.4	216.0	464.9	796.8	962.7	1012.1	1110.7	1184.7	1164.5
105°	156.4	192.3	228.0	237.0	478.0	799.3	960.0	1070.6	1291.6	1457.5	1446.6
107.5°	192.8	226.2	259.5	267.9	480.4	763.8	905.4	1059.7	1368.0	1599.3	1601.9
110°	217.4	247.5	277.5	285.1	476.7	732.2	859.9	1032.4	1377.2	1635.7	1647.1



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	241.4	270.2	298.8	306.0	476.8	704.7	818.6	995.0	1347.9	1612.6	1630.0
115°	277.8	304.3	330.9	337.4	481.3	673.0	769.0	938.9	1278.9	1533.9	1557.9
117.5°	313.8	337.9	361.9	367.9	490.3	653.4	734.9	888.2	1195.0	1425.1	1451.8
120°	334.7	357.4	380.0	385.7	497.6	646.7	721.3	861.4	1141.7	1352.0	1378.0
122.5°	355.2	378.0	400.9	406.6	508.0	643.2	710.8	837.0	1089.4	1278.7	1304.4
125°	386.5	407.4	428.2	433.4	522.1	640.3	699.4	806.6	1021.0	1181.8	1205.5
127.5°	412.0	433.0	454.0	459.3	536.1	638.6	689.8	781.9	966.0	1104.1	1124.0
130°	425.6	448.3	470.9	476.6	546.5	639.7	686.2	768.2	932.1	1055.0	1073.4
132.5°	439.8	462.4	485.1	490.7	554.8	640.3	683.1	756.4	903.2	1013.2	1029.6
135°	460.7	481.3	501.9	507.0	563.9	639.7	677.6	739.1	862.0	954.1	968.3
137.5°	482.0	502.4	522.9	527.9	577.5	643.6	676.6	728.6	832.5	910.4	922.0
140°	499.8	518.5	537.3	542.1	585.9	644.3	673.5	718.4	808.1	875.4	886.3
142.5°	513.4	530.8	548.1	552.5	592.9	646.6	673.5	712.9	791.7	850.8	860.1
145°	534.4	549.5	564.7	568.4	601.9	646.6	668.9	701.1	765.6	814.0	821.1
147.5°	555.3	570.0	584.8	588.5	615.2	651.0	668.9	694.3	745.1	783.1	789.0
150°	568.9	582.2	595.6	598.9	622.3	653.4	668.9	690.3	733.2	765.4	770.1
152.5°	583.0	593.1	603.2	605.8	626.8	654.9	668.9	687.2	723.8	751.2	754.8
155°	603.9	611.4	618.9	620.7	636.8	658.2	668.9	683.5	712.6	734.4	736.8
157.5°	619.4	626.7	633.9	635.7	646.8	661.5	668.9	680.2	702.9	719.9	721.5
160°	629.8	635.5	641.2	642.6	651.3	663.0	668.9	678.6	698.0	712.6	713.5
162.5°	640.3	644.5	648.8	649.9	656.2	664.7	668.9	677.1	693.5	705.8	706.7
165°	651.6	655.5	659.3	660.3	663.2	667.0	668.9	674.8	686.5	695.3	696.2
167.5°	662.2	663.9	665.8	666.2	668.7	671.9	673.5	677.3	685.0	690.8	691.2
170°	668.9	670.8	672.6	673.0	673.2	673.4	673.5	677.3	685.0	690.8	690.8
172.5°	672.6	673.0	673.4	673.5	673.5	673.5	673.5	676.5	682.5	687.1	686.7
175°	677.6	677.6	677.6	677.6	676.2	674.4	673.5	675.4	679.2	682.1	682.1
177.5°	677.6	677.6	677.6	677.6	676.6	675.1	674.4	675.9	678.9	681.2	680.8
180°	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	360.9	360.9
2.5°	385.3	382.9
5°	495.5	497.9
7.5°	667.3	666.1
10°	829.8	840.2
12.5°	948.1	950.5
15°	1020.1	1024.7
17.5°	1048.0	1049.1
20°	1049.1	1046.8
22.5°	1036.4	1034.0
25°	1021.3	1020.1
27.5°	1007.3	1008.5
30°	1001.5	1005.0
32.5°	1001.5	1007.3
35°	1003.9	1009.7
37.5°	1002.7	1009.7
40°	998.1	1006.2
42.5°	985.3	991.1
45°	965.6	972.5
47.5°	940.0	944.7
50°	907.5	912.2
52.5°	866.9	868.1
55°	818.1	822.8
57.5°	766.0	767.1
60°	707.9	711.4
62.5°	646.4	646.4
65°	581.4	583.7
67.5°	514.2	520.0
70°	445.6	446.8
72.5°	378.4	378.4
75°	308.7	309.9
77.5°	242.6	242.6
80°	179.9	181.0
82.5°	124.2	126.5
85°	77.7	77.7
87.5°	36.0	32.5
90°	17.3	17.3
92.5°	69.2	55.5
95°	241.3	199.6
97.5°	578.1	498.9
100°	832.9	738.5
102.5°	1083.6	1002.8
105°	1403.2	1359.7
107.5°	1612.5	1623.0
110°	1692.3	1737.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1699.4	1769.0
115°	1654.4	1750.8
117.5°	1558.8	1665.7
120°	1481.8	1585.7
122.5°	1406.8	1509.3
125°	1299.8	1394.2
127.5°	1203.6	1283.3
130°	1147.0	1220.6
132.5°	1095.5	1161.4
135°	1025.1	1081.8
137.5°	968.5	1015.0
140°	929.7	973.2
142.5°	897.5	935.0
145°	849.4	877.7
147.5°	812.3	835.8
150°	789.2	808.1
152.5°	769.1	783.5
155°	746.3	755.8
157.5°	728.2	734.9
160°	717.4	721.3
162.5°	710.4	714.0
165°	700.1	704.0
167.5°	692.8	694.4
170°	690.8	690.8
172.5°	685.3	683.9
175°	682.1	682.1
177.5°	679.2	677.6
180°	677.6	677.6



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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	4.08	4.88	5.12	5.93	7.35	17.22	18.02	18.26	19.07	20.49
	3H	4.78	5.50	5.83	6.56	7.99	19.04	19.75	20.09	20.81	22.25
	4H	5.08	5.76	6.14	6.82	8.26	19.67	20.35	20.73	21.41	22.86
	6H	5.32	5.95	6.39	7.01	8.47	20.09	20.71	21.16	21.78	23.23
	8H	5.39	5.99	6.47	7.07	8.52	20.20	20.79	21.27	21.88	23.33
	12H	5.40	5.97	6.49	7.05	8.52	20.26	20.82	21.34	21.90	23.37
4H	2H	11.26	11.94	12.33	13.00	14.45	17.49	18.17	18.55	19.23	20.67
	3H	12.83	13.39	13.90	14.48	15.94	19.51	20.08	20.59	21.17	22.63
	4H	12.92	13.44	14.00	14.52	16.00	20.27	20.79	21.35	21.87	23.35
	6H	12.93	13.38	14.02	14.48	15.95	20.79	21.24	21.88	22.34	23.81
	8H	12.90	13.32	13.99	14.42	15.90	20.94	21.36	22.03	22.46	23.94
	12H	12.85	13.23	13.96	14.34	15.84	21.02	21.40	22.13	22.51	24.01
8H	4H	14.35	14.77	15.44	15.86	17.35	20.32	20.74	21.41	21.84	23.32
	6H	14.59	14.93	15.70	16.07	17.56	20.93	21.28	22.05	22.42	23.90
	8H	14.60	14.91	15.72	16.03	17.53	21.15	21.45	22.27	22.57	24.07
	12H	14.57	14.84	15.69	15.95	17.49	21.28	21.55	22.40	22.66	24.20
12H	4H	14.48	14.86	15.59	15.97	17.47	20.27	20.65	21.38	21.76	23.25
	6H	14.84	15.15	15.96	16.26	17.77	20.92	21.22	22.04	22.34	23.85
	8H	14.91	15.18	16.03	16.29	17.83	21.14	21.40	22.26	22.52	24.06