

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: P938084

Luminaire Tested: SQ4-FB-125U-100D-B2750-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938084  
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-B2750-1D-UNV-STD-W-4-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

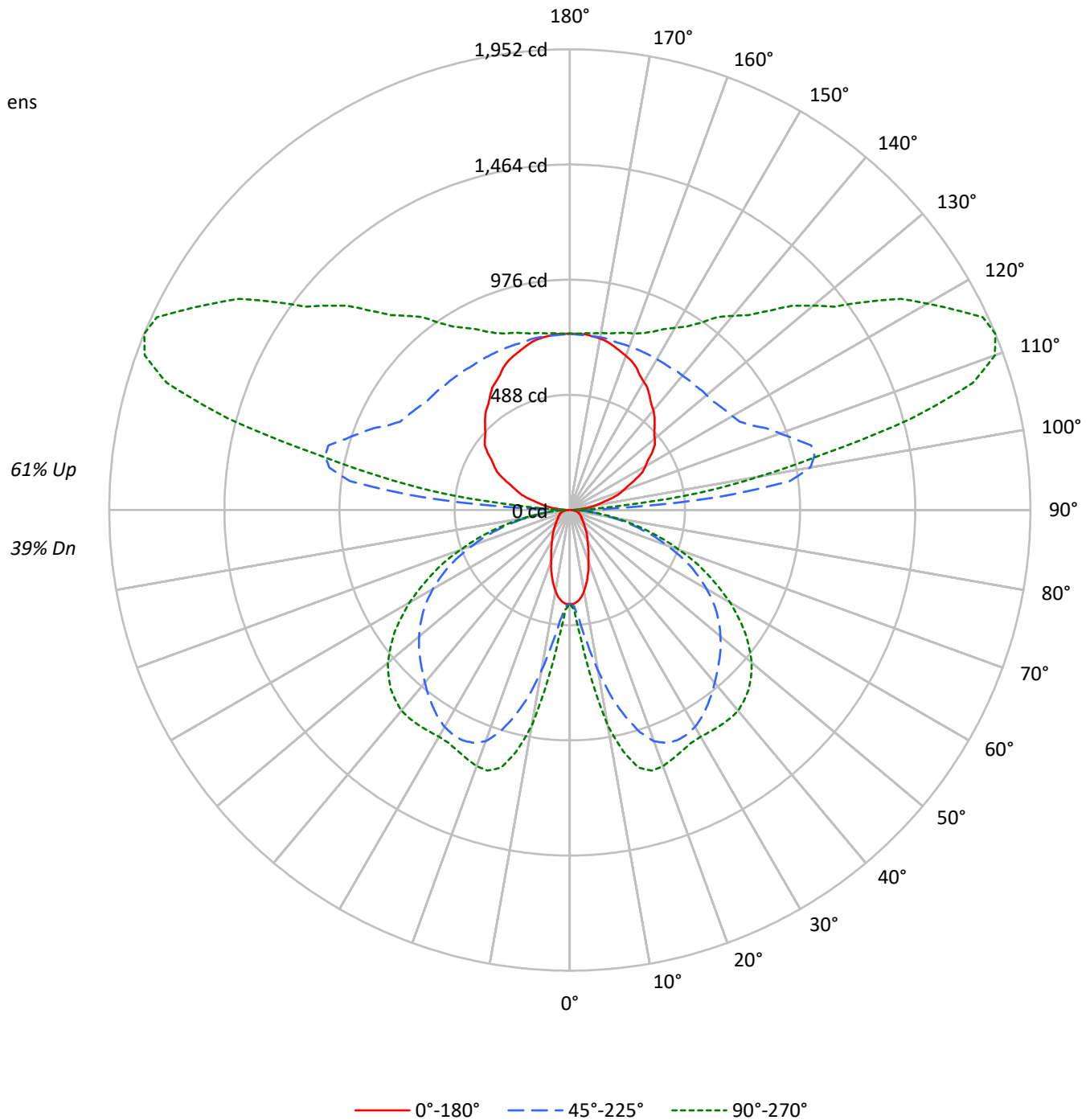
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7929.4 lumens  
Efficiency: N/A  
Efficacy: 123.1 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-Indirect

Input Watts (W): 64.4  
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

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CATALOG NUMBER: SQ4-FB-125U-100D-B2750-1D-UNV-STD-W-4-3500K

### 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°	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	0.6
10°-20°	228.3	2.9
20°-30°	399.3	5.0
30°-40°	514.0	6.5
40°-50°	574.2	7.2
50°-60°	549.9	6.9
60°-70°	435.8	5.5
70°-80°	256.3	3.2
80°-90°	74.0	0.9
90°-100°	364.4	4.6
100°-110°	958.0	12.1
110°-120°	993.4	12.5
120°-130°	796.8	10.0
130°-140°	625.2	7.9
140°-150°	479.9	6.1
150°-160°	345.6	4.4
160°-170°	211.4	2.7
170°-180°	71.4	0.9
0°-30°	679.1	8.6
0°-40°	1193.1	15.0
0°-60°	2317.2	29.2
0°-90°	3083.3	38.9
90°-120°	2315.8	29.2
90°-150°	4217.6	53.2
90°-180°	4846.0	61.1
0°-180°	7929.4	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°	5	14	38	19	19	5
95°	48	189	628	324	220	53
105°	173	261	1059	1608	1500	183
115°	306	372	848	1692	1932	303
125°	426	478	772	1304	1538	379
135°	508	559	748	1053	1194	393
145°	590	627	738	898	968	369
155°	666	685	738	810	834	306
165°	719	728	738	767	777	203
175°	748	748	743	752	752	71
180°	748	748	748	748	748	



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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°	5.0	9.0	13.1	14.1	22.1	32.8	38.1	33.8	25.4	19.1	19.1
92.5°	20.1	54.2	88.3	96.8	136.1	188.6	214.7	188.2	135.2	95.3	91.6
95°	48.2	110.6	173.1	188.7	335.0	530.0	627.6	560.1	425.0	323.6	312.1
97.5°	83.2	138.3	193.4	207.2	451.2	776.5	939.2	896.4	811.1	747.0	725.2
100°	110.4	160.4	210.3	222.8	493.5	854.5	1035.0	1038.1	1044.4	1049.0	1023.0
102.5°	133.4	180.0	226.6	238.3	512.9	879.1	1062.1	1116.6	1225.4	1307.0	1284.7
105°	172.6	212.1	251.6	261.4	527.3	881.9	1059.1	1181.1	1425.0	1608.0	1595.9
107.5°	212.7	249.5	286.3	295.5	530.0	842.6	998.9	1169.1	1509.3	1764.5	1767.4
110°	239.8	273.1	306.2	314.5	526.0	807.9	948.7	1139.0	1519.4	1804.7	1817.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	266.4	298.1	329.7	337.6	526.1	777.4	903.1	1097.8	1487.1	1779.1	1798.3
115°	306.5	335.8	365.0	372.3	531.0	742.5	848.4	1035.9	1411.0	1692.3	1718.8
117.5°	346.2	372.8	399.3	405.9	540.9	720.8	810.8	979.9	1318.4	1572.3	1601.8
120°	369.3	394.3	419.3	425.5	548.9	713.5	795.7	950.4	1259.6	1491.6	1520.3
122.5°	391.9	417.1	442.3	448.6	560.5	709.6	784.2	923.5	1201.9	1410.8	1439.1
125°	426.5	449.4	472.4	478.1	576.0	706.4	771.6	889.9	1126.5	1303.9	1330.0
127.5°	454.6	477.7	500.9	506.7	591.5	704.6	761.1	862.6	1065.8	1218.1	1240.1
130°	469.6	494.6	519.6	525.8	602.9	705.7	757.1	847.5	1028.3	1164.0	1184.2
132.5°	485.2	510.2	535.2	541.4	612.1	706.4	753.6	834.5	996.4	1117.8	1136.0
135°	508.2	531.0	553.7	559.4	622.1	705.7	747.6	815.4	951.0	1052.6	1068.3
137.5°	531.8	554.3	576.8	582.5	637.1	710.1	746.5	803.8	918.4	1004.4	1017.2
140°	551.4	572.1	592.8	598.1	646.4	710.9	743.0	792.5	891.6	965.8	977.8
142.5°	566.4	585.6	604.8	609.6	654.1	713.4	743.0	786.5	873.5	938.7	948.9
145°	589.5	606.2	623.0	627.1	664.1	713.4	738.0	773.6	844.7	898.1	905.9
147.5°	612.6	628.9	645.2	649.2	678.8	718.2	738.0	766.0	822.0	864.0	870.5
150°	627.6	642.4	657.1	660.8	686.5	720.8	738.0	761.6	808.9	844.4	849.6
152.5°	643.2	654.4	665.5	668.3	691.6	722.5	738.0	758.1	798.6	828.8	832.8
155°	666.3	674.5	682.8	684.8	702.5	726.2	738.0	754.1	786.1	810.3	812.9
157.5°	683.3	691.4	699.3	701.4	713.6	729.9	738.0	750.5	775.5	794.2	796.0
160°	694.9	701.1	707.4	708.9	718.6	731.5	738.0	748.6	770.1	786.1	787.2
162.5°	706.4	711.1	715.8	717.0	723.9	733.3	738.0	747.0	765.1	778.7	779.7
165°	718.9	723.2	727.4	728.5	731.7	735.9	738.0	744.5	757.4	767.1	768.1
167.5°	730.5	732.5	734.5	735.0	737.7	741.3	743.0	747.3	755.7	762.1	762.6
170°	738.0	740.0	742.1	742.5	742.7	742.9	743.0	747.3	755.7	762.1	762.1
172.5°	742.1	742.4	742.9	743.0	743.0	743.0	743.0	746.3	753.0	758.0	757.7
175°	747.6	747.6	747.6	747.6	746.0	744.0	743.0	745.2	749.3	752.5	752.5
177.5°	747.6	747.6	747.6	747.6	746.4	744.8	744.0	745.6	749.0	751.6	751.1
180°	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6



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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°	19.1	19.1
92.5°	76.4	61.2
95°	266.2	220.3
97.5°	637.8	550.4
100°	918.9	814.7
102.5°	1195.5	1106.3
105°	1548.1	1500.1
107.5°	1779.0	1790.6
110°	1867.1	1917.0





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1874.9	1951.7
115°	1825.2	1931.6
117.5°	1719.8	1837.7
120°	1634.8	1749.4
122.5°	1552.0	1665.1
125°	1434.0	1538.2
127.5°	1327.9	1415.8
130°	1265.4	1346.6
132.5°	1208.6	1281.3
135°	1130.9	1193.5
137.5°	1068.5	1119.8
140°	1025.7	1073.7
142.5°	990.2	1031.5
145°	937.1	968.3
147.5°	896.2	922.1
150°	870.6	891.6
152.5°	848.6	864.4
155°	823.4	833.8
157.5°	803.4	810.8
160°	791.5	795.7
162.5°	783.7	787.7
165°	772.4	776.7
167.5°	764.3	766.1
170°	762.1	762.1
172.5°	756.1	754.6
175°	752.5	752.5
177.5°	749.3	747.6
180°	747.6	747.6



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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	4.42	5.22	5.46	6.27	7.69	17.56	18.36	18.60	19.41	20.83
	3H	5.12	5.84	6.17	6.90	8.33	19.38	20.10	20.43	21.15	22.59
	4H	5.42	6.10	6.48	7.16	8.60	20.01	20.69	21.07	21.75	23.20
	6H	5.67	6.29	6.74	7.36	8.81	20.43	21.05	21.50	22.12	23.57
	8H	5.73	6.33	6.81	7.41	8.86	20.54	21.14	21.61	22.22	23.67
	12H	5.75	6.31	6.83	7.39	8.86	20.60	21.16	21.68	22.24	23.72
4H	2H	11.60	12.28	12.67	13.34	14.79	17.83	18.51	18.90	19.57	21.01
	3H	13.17	13.74	14.24	14.82	16.28	19.85	20.42	20.93	21.51	22.97
	4H	13.26	13.78	14.34	14.86	16.34	20.61	21.13	21.69	22.21	23.69
	6H	13.27	13.72	14.36	14.82	16.29	21.13	21.58	22.22	22.68	24.15
	8H	13.24	13.66	14.33	14.76	16.25	21.28	21.70	22.37	22.80	24.29
	12H	13.20	13.58	14.31	14.68	16.18	21.37	21.75	22.47	22.85	24.35
8H	4H	14.69	15.11	15.78	16.20	17.69	20.66	21.08	21.75	22.18	23.67
	6H	14.93	15.28	16.04	16.41	17.90	21.28	21.62	22.39	22.76	24.25
	8H	14.95	15.25	16.07	16.37	17.87	21.49	21.79	22.61	22.91	24.42
	12H	14.91	15.18	16.04	16.29	17.84	21.62	21.89	22.75	23.00	24.55
12H	4H	14.83	15.21	15.94	16.31	17.81	20.61	20.99	21.72	22.10	23.59
	6H	15.18	15.49	16.30	16.61	18.11	21.26	21.56	22.38	22.68	24.19
	8H	15.25	15.52	16.37	16.63	18.17	21.48	21.75	22.60	22.86	24.40