

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: P937883

Luminaire Tested: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937883  
REPORT IS A COMBINATION OF REPORTS P933597 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

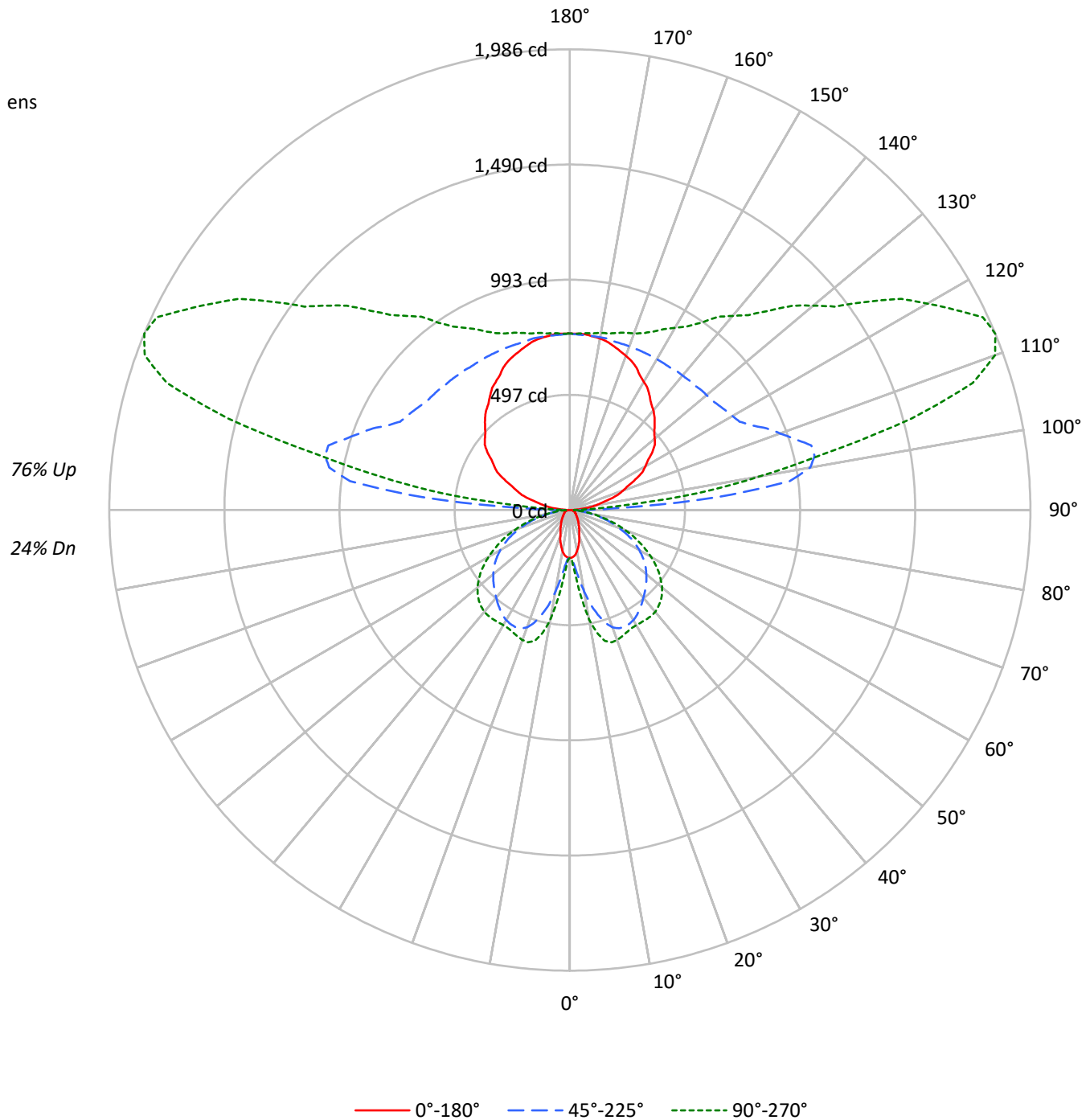
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6525.4 lumens  
Efficiency: N/A  
Efficacy: 137.1 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): 47.6  
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

TEST NUMBER: P937883  
CATALOG NUMBER: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P937883

CATALOG NUMBER: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-3000K

**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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19	13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1909	1909	1909
5°	1864	2205	2566
10°	1688	3211	4254
15°	1433	4192	5137
20°	1165	4855	5234
25°	971	5077	5128
30°	818	5104	5119
35°	721	5016	5250
40°	628	4902	5388
45°	567	4816	5409
50°	520	4739	5319
55°	495	4628	5083
60°	505	4419	4710
65°	523	4103	4199
70°	553	3571	3548
75°	607	2903	2769
80°	651	2008	1866
85°	547	1060	954

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5409 cd/sqm



TEST NUMBER: P937883

CATALOG NUMBER: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.6	0.4
10°-20°	117.9	1.8
20°-30°	206.3	3.2
30°-40°	265.6	4.1
40°-50°	296.6	4.5
50°-60°	284.1	4.4
60°-70°	225.1	3.5
70°-80°	132.4	2.0
80°-90°	39.7	0.6
90°-100°	370.8	5.7
100°-110°	974.8	14.9
110°-120°	1010.8	15.5
120°-130°	810.8	12.4
130°-140°	636.2	9.7
140°-150°	488.3	7.5
150°-160°	351.6	5.4
160°-170°	215.2	3.3
170°-180°	72.7	1.1
0°-30°	350.8	5.4
0°-40°	616.4	9.4
0°-60°	1197.1	18.3
0°-90°	1594.3	24.4
90°-120°	2356.4	36.1
90°-150°	4291.6	65.8
90°-180°	4931.0	75.6
0°-180°	6525.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	206	206	206	206	206	
5°	200	215	242	274	284	19
15°	150	277	467	566	584	42
25°	96	314	556	581	581	44
35°	65	300	524	554	575	40
45°	44	239	463	530	554	34
55°	32	152	393	456	469	29
65°	25	81	292	328	333	25
75°	18	50	160	176	177	19
85°	7	15	40	44	44	7
90°	5	14	39	19	19	5
95°	49	192	639	329	224	54
105°	176	266	1078	1636	1526	186
115°	312	379	863	1722	1966	308
125°	434	486	785	1327	1565	385
135°	517	569	761	1071	1214	400
145°	600	638	751	914	985	376
155°	678	697	751	824	848	312
165°	732	741	751	780	790	206
175°	761	761	756	766	766	72
180°	761	761	761	761	761	



TEST NUMBER: P937883

CATALOG NUMBER: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7
2.5°	205.7	205.7	207.1	207.7	209.0	209.7	211.0	212.3	216.3	216.9	218.3
5°	200.5	203.1	211.7	214.9	224.2	236.8	242.1	250.7	268.6	273.8	277.2
7.5°	192.5	198.5	219.6	224.9	248.1	281.1	295.0	313.5	341.9	355.8	367.1
10°	179.9	192.5	230.2	242.8	280.4	330.7	356.5	382.4	425.4	444.5	451.8
12.5°	166.0	186.6	241.5	258.6	312.9	386.3	417.4	445.9	494.8	520.6	524.6
15°	150.2	178.0	252.0	277.2	347.3	432.6	467.0	502.1	547.7	566.2	570.8
17.5°	136.3	171.4	262.0	288.4	373.7	474.3	509.4	538.5	575.4	588.1	591.3
20°	119.1	160.7	268.6	303.0	401.5	504.7	538.5	560.9	586.1	594.0	595.3
22.5°	106.5	149.5	272.5	308.2	420.0	523.2	551.7	569.5	586.7	589.3	590.0
25°	95.9	137.0	271.8	314.2	435.9	534.4	556.3	569.5	579.5	580.8	580.8
27.5°	86.0	123.1	269.2	315.5	447.8	537.1	554.3	563.6	568.2	570.8	570.8
30°	77.4	109.8	262.6	312.9	453.1	534.4	548.3	552.9	557.6	561.6	563.6
32.5°	70.8	97.2	252.7	307.5	453.8	527.8	537.8	540.4	547.0	556.3	559.6
35°	64.8	84.7	241.5	300.3	449.8	517.3	523.9	526.5	539.7	553.6	558.3
37.5°	58.9	75.4	226.9	287.7	443.8	504.7	509.4	514.0	534.4	551.0	556.3
40°	52.9	67.4	209.7	273.8	434.6	489.5	493.5	500.7	527.8	547.0	552.4
42.5°	48.3	60.8	191.2	259.3	422.7	472.3	478.2	488.9	519.9	540.4	546.3
45°	44.3	54.2	171.4	239.4	407.4	454.4	463.0	477.6	510.6	530.5	535.8
47.5°	40.3	49.6	150.9	219.0	390.9	436.6	447.8	464.3	498.1	517.3	521.9
50°	37.1	45.0	130.3	197.1	373.1	417.4	430.6	447.8	482.3	500.1	506.0
52.5°	34.4	41.0	111.1	175.3	352.6	397.6	412.7	430.6	463.0	480.2	484.2
55°	31.7	37.7	94.6	152.1	331.4	376.4	392.9	410.1	441.8	456.4	459.1
57.5°	30.5	35.1	80.7	130.3	308.9	352.6	371.0	386.9	416.7	427.9	430.6
60°	28.4	33.0	70.1	111.8	284.5	330.1	346.0	361.9	386.9	396.2	398.2
62.5°	26.4	31.7	62.2	94.0	259.3	303.6	319.5	334.1	355.2	361.9	364.4
65°	25.1	30.5	56.2	80.7	233.5	275.8	291.7	304.3	321.4	328.0	329.4
67.5°	23.9	29.1	51.6	69.4	207.7	248.1	259.9	271.8	285.1	291.7	292.3
70°	21.8	27.8	47.6	61.5	181.2	216.3	226.2	238.8	249.4	252.7	254.7
72.5°	20.5	25.8	45.0	55.6	154.1	185.9	195.1	202.4	211.7	214.9	214.9
75°	18.5	23.2	42.3	49.6	126.3	152.1	160.0	167.3	174.6	175.9	173.9
77.5°	16.6	20.5	36.4	41.7	98.6	120.4	127.0	130.9	137.0	138.2	138.9
80°	13.9	17.8	28.4	32.4	71.5	88.6	93.3	96.5	101.9	101.9	103.2
82.5°	10.6	13.9	20.5	23.2	48.3	60.8	64.8	66.9	70.1	70.1	70.1
85°	6.6	8.6	13.2	15.2	29.1	37.1	39.7	40.3	43.0	43.7	43.7
87.5°	3.4	4.6	8.6	9.3	15.2	19.2	19.2	20.5	20.5	19.8	19.2
90°	5.1	9.2	13.3	14.3	22.5	33.3	38.7	34.4	25.8	19.4	19.4
92.5°	20.4	55.1	89.8	98.5	138.5	191.9	218.5	191.5	137.5	97.0	93.2
95°	49.0	112.5	176.1	192.0	340.9	539.3	638.6	569.9	432.5	329.3	317.6
97.5°	84.7	140.7	196.8	210.8	459.1	790.1	955.6	912.1	825.3	760.1	737.9
100°	112.3	163.2	214.0	226.7	502.2	869.5	1053.1	1056.3	1062.7	1067.4	1040.9
102.5°	135.8	183.2	230.6	242.5	521.9	894.5	1080.8	1136.2	1246.9	1329.9	1307.2
105°	175.6	215.8	256.0	266.0	536.6	897.4	1077.7	1201.8	1450.0	1636.2	1623.9
107.5°	216.4	253.9	291.4	300.7	539.3	857.4	1016.5	1189.6	1535.8	1795.4	1798.4
110°	244.0	277.9	311.6	320.1	535.2	822.0	965.4	1158.9	1546.0	1836.3	1849.0



TEST NUMBER: P937883

CATALOG NUMBER: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	271.1	303.3	335.4	343.5	535.3	791.1	919.0	1117.0	1513.2	1810.3	1829.8
115°	311.9	341.6	371.4	378.8	540.3	755.6	863.2	1054.0	1435.7	1722.0	1749.0
117.5°	352.3	379.3	406.3	413.0	550.4	733.5	825.0	997.1	1341.6	1599.9	1629.9
120°	375.8	401.2	426.6	433.0	558.6	726.0	809.7	967.1	1281.7	1517.7	1546.9
122.5°	398.7	424.4	450.0	456.4	570.3	722.0	798.0	939.7	1223.0	1435.5	1464.3
125°	433.9	457.3	480.7	486.5	586.1	718.8	785.2	905.5	1146.2	1326.8	1353.3
127.5°	462.5	486.1	509.7	515.6	601.9	716.9	774.4	877.7	1084.5	1239.5	1261.9
130°	477.8	503.3	528.7	535.0	613.5	718.1	770.4	862.4	1046.3	1184.4	1205.0
132.5°	493.7	519.1	544.6	550.9	622.9	718.8	766.8	849.1	1013.9	1137.4	1155.9
135°	517.2	540.3	563.4	569.2	633.0	718.1	760.7	829.7	967.7	1071.1	1087.1
137.5°	541.1	564.0	587.0	592.7	648.3	722.5	759.6	817.9	934.5	1022.0	1035.0
140°	561.0	582.1	603.2	608.6	657.8	723.3	756.1	806.4	907.2	982.7	995.0
142.5°	576.3	595.8	615.4	620.3	665.6	725.9	756.1	800.3	888.8	955.1	965.6
145°	599.9	616.8	633.9	638.1	675.7	725.9	750.9	787.1	859.5	913.8	921.8
147.5°	623.3	639.9	656.5	660.6	690.7	730.8	750.9	779.4	836.4	879.1	885.7
150°	638.6	653.6	668.6	672.4	698.6	733.5	750.9	775.0	823.1	859.2	864.5
152.5°	654.5	665.8	677.2	680.0	703.7	735.2	750.9	771.4	812.6	843.3	847.4
155°	678.0	686.4	694.7	696.8	714.8	738.9	750.9	767.3	799.9	824.5	827.2
157.5°	695.3	703.5	711.6	713.7	726.1	742.7	750.9	763.7	789.1	808.1	810.0
160°	707.1	713.4	719.8	721.4	731.2	744.3	750.9	761.8	783.6	799.9	801.0
162.5°	718.8	723.5	728.4	729.5	736.6	746.2	750.9	760.1	778.5	792.3	793.3
165°	731.5	735.9	740.2	741.3	744.5	748.8	750.9	757.5	770.7	780.5	781.6
167.5°	743.3	745.3	747.4	747.9	750.6	754.3	756.1	760.4	769.0	775.5	776.0
170°	750.9	753.0	755.1	755.6	755.8	756.0	756.1	760.4	769.0	775.5	775.5
172.5°	755.1	755.5	756.0	756.1	756.1	756.1	756.1	759.4	766.2	771.3	771.0
175°	760.7	760.7	760.7	760.7	759.1	757.1	756.1	758.2	762.5	765.7	765.7
177.5°	760.7	760.7	760.7	760.7	759.5	757.8	757.1	758.7	762.2	764.7	764.2
180°	760.7	760.7	760.7	760.7	760.7	760.7	760.7	760.7	760.7	760.7	760.7



TEST NUMBER: P937883

CATALOG NUMBER: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-3000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	205.7	205.7
2.5°	219.6	218.3
5°	282.5	283.8
7.5°	380.3	379.7
10°	473.0	478.9
12.5°	540.4	541.7
15°	581.4	584.1
17.5°	597.3	598.0
20°	598.0	596.6
22.5°	590.7	589.3
25°	582.1	581.4
27.5°	574.1	574.8
30°	570.8	572.9
32.5°	570.8	574.1
35°	572.2	575.4
37.5°	571.5	575.4
40°	568.8	573.5
42.5°	561.6	564.9
45°	550.3	554.3
47.5°	535.8	538.5
50°	517.3	519.9
52.5°	494.1	494.8
55°	466.4	468.9
57.5°	436.6	437.2
60°	403.5	405.4
62.5°	368.5	368.5
65°	331.4	332.7
67.5°	293.0	296.3
70°	254.0	254.7
72.5°	215.6	215.6
75°	175.9	176.6
77.5°	138.2	138.2
80°	102.5	103.2
82.5°	70.8	72.1
85°	44.3	44.3
87.5°	20.5	18.5
90°	19.4	19.4
92.5°	77.7	62.3
95°	270.9	224.1
97.5°	649.0	560.0
100°	935.0	829.0
102.5°	1216.4	1125.7
105°	1575.2	1526.4
107.5°	1810.2	1822.0
110°	1899.8	1950.6





TEST NUMBER: P937883

CATALOG NUMBER: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-3000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1907.8	1985.9
115°	1857.2	1965.5
117.5°	1750.0	1869.9
120°	1663.5	1780.1
122.5°	1579.3	1694.3
125°	1459.2	1565.2
127.5°	1351.2	1440.6
130°	1287.6	1370.2
132.5°	1229.8	1303.8
135°	1150.8	1214.5
137.5°	1087.3	1139.4
140°	1043.7	1092.5
142.5°	1007.6	1049.6
145°	953.6	985.3
147.5°	912.0	938.3
150°	885.9	907.2
152.5°	863.4	879.6
155°	837.8	848.5
157.5°	817.5	825.0
160°	805.4	809.7
162.5°	797.5	801.5
165°	785.9	790.3
167.5°	777.8	779.5
170°	775.5	775.5
172.5°	769.4	767.8
175°	765.7	765.7
177.5°	762.5	760.7
180°	760.7	760.7



TEST NUMBER: P937883

CATALOG NUMBER: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-3000K

**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	0.22	0.91	1.37	2.05	3.64	13.36	14.05	14.51	15.19	16.78
	3H	0.92	1.53	2.07	2.68	4.29	15.17	15.79	16.33	16.93	18.54
	4H	1.21	1.79	2.37	2.94	4.55	15.80	16.38	16.96	17.53	19.14
	6H	1.45	1.99	2.62	3.14	4.76	16.21	16.75	17.38	17.89	19.52
	8H	1.51	2.03	2.68	3.19	4.80	16.32	16.83	17.49	17.99	19.61
	12H	1.52	2.01	2.70	3.17	4.81	16.37	16.86	17.55	18.02	19.65
4H	2H	7.39	7.98	8.56	9.12	10.74	13.62	14.20	14.79	15.35	16.96
	3H	8.95	9.44	10.12	10.61	12.23	15.63	16.12	16.81	17.29	18.92
	4H	9.03	9.48	10.21	10.64	12.29	16.38	16.83	17.56	17.99	19.63
	6H	9.03	9.42	10.21	10.60	12.23	16.90	17.28	18.08	18.46	20.10
	8H	9.01	9.37	10.19	10.54	12.19	17.05	17.41	18.23	18.58	20.23
	12H	8.95	9.28	10.15	10.47	12.12	17.12	17.45	18.32	18.63	20.29
8H	4H	10.45	10.81	11.63	11.99	13.64	16.43	16.79	17.61	17.96	19.61
	6H	10.69	10.98	11.89	12.20	13.85	17.03	17.33	18.23	18.55	20.19
	8H	10.70	10.96	11.91	12.15	13.82	17.24	17.50	18.45	18.69	20.36
	12H	10.66	10.89	11.87	12.08	13.78	17.37	17.60	18.58	18.79	20.49
12H	4H	10.58	10.91	11.78	12.09	13.75	16.37	16.70	17.57	17.88	19.54
	6H	10.94	11.20	12.14	12.39	14.06	17.01	17.27	18.22	18.47	20.13
	8H	11.00	11.23	12.21	12.42	14.12	17.23	17.46	18.44	18.65	20.35