

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: P937882

Luminaire Tested: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

**Test Information**

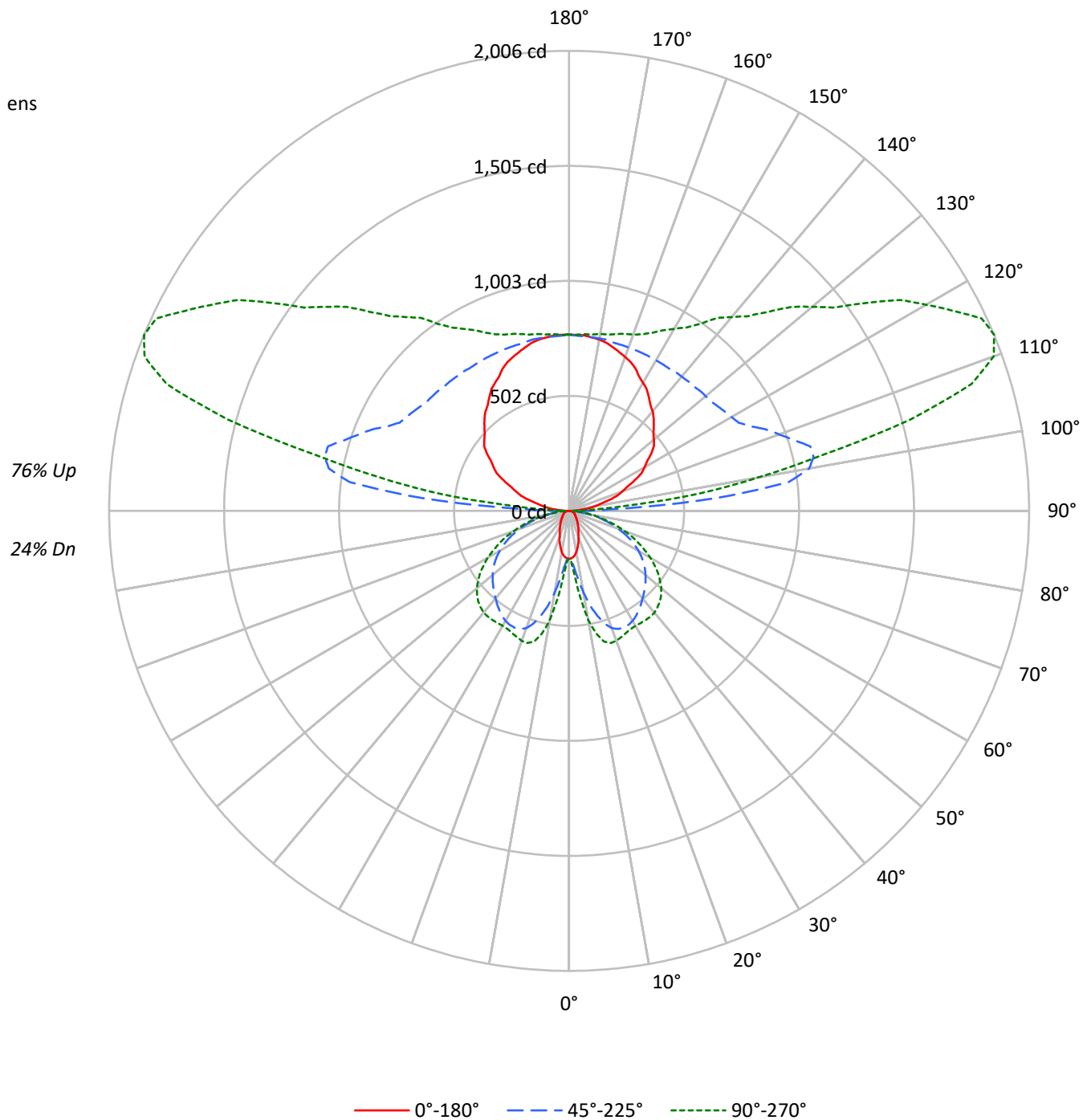
Test Method: LM-79-2019  
Report Number: P937882  
REPORT IS A COMBINATION OF REPORTS P933597 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-B2750-1D-UNV-STD-W-4-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6591.6 lumens  
Efficiency: N/A  
Efficacy: 138.5 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

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### Luminous Intensity Polar Plot





TEST NUMBER: P937882

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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	0
RCR																					
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24			24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20			20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16			16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19	13			13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11			11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10			10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8			8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6			6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5			5

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

	0°	45°	90°
0°	1928	1928	1928
5°	1882	2226	2591
10°	1705	3244	4297
15°	1448	4235	5188
20°	1177	4904	5288
25°	981	5128	5180
30°	826	5156	5171
35°	728	5067	5304
40°	635	4952	5442
45°	572	4865	5464
50°	524	4788	5374
55°	501	4675	5135
60°	511	4464	4759
65°	529	4144	4242
70°	559	3607	3585
75°	613	2934	2797
80°	655	2027	1886
85°	555	1070	963

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5464 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.9	0.4
10°-20°	119.1	1.8
20°-30°	208.4	3.2
30°-40°	268.2	4.1
40°-50°	299.6	4.5
50°-60°	287.0	4.4
60°-70°	227.4	3.5
70°-80°	133.7	2.0
80°-90°	40.1	0.6
90°-100°	374.5	5.7
100°-110°	984.7	14.9
110°-120°	1021.0	15.5
120°-130°	819.0	12.4
130°-140°	642.6	9.7
140°-150°	493.2	7.5
150°-160°	355.2	5.4
160°-170°	217.3	3.3
170°-180°	73.4	1.1
0°-30°	354.4	5.4
0°-40°	622.6	9.4
0°-60°	1209.2	18.3
0°-90°	1610.5	24.4
90°-120°	2380.3	36.1
90°-150°	4335.1	65.8
90°-180°	4981.0	75.6
0°-180°	6591.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	208	208	208	208	208	
5°	202	217	244	277	287	19
15°	152	280	472	572	590	42
25°	97	317	562	587	587	45
35°	65	303	529	559	581	41
45°	45	242	468	536	560	35
55°	32	154	397	461	474	29
65°	25	82	295	331	336	25
75°	19	50	162	178	178	20
85°	7	15	40	44	45	7
90°	5	14	39	20	20	5
95°	50	194	645	333	226	55
105°	177	269	1089	1653	1542	188
115°	315	383	872	1739	1985	311
125°	438	491	793	1340	1581	389
135°	522	575	768	1082	1227	404
145°	606	645	759	923	995	380
155°	685	704	759	833	857	315
165°	739	749	759	788	798	209
175°	768	768	764	774	774	73
180°	768	768	768	768	768	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8
2.5°	207.8	207.8	209.2	209.8	211.2	211.8	213.1	214.4	218.5	219.1	220.5
5°	202.5	205.2	213.8	217.1	226.5	239.2	244.5	253.3	271.3	276.6	280.0
7.5°	194.4	200.5	221.8	227.2	250.6	284.0	298.0	316.7	345.4	359.5	370.8
10°	181.8	194.4	232.6	245.2	283.3	334.1	360.2	386.2	429.7	449.0	456.4
12.5°	167.7	188.4	243.9	261.3	316.0	390.2	421.6	450.4	499.8	525.9	529.9
15°	151.7	179.8	254.6	280.0	350.8	436.9	471.7	507.2	553.3	571.9	576.6
17.5°	137.6	173.1	264.6	291.3	377.5	479.1	514.5	543.9	581.3	594.0	597.3
20°	120.3	162.3	271.3	306.1	405.6	509.9	543.9	566.6	592.0	600.0	601.4
22.5°	107.6	151.0	275.3	311.3	424.3	528.5	557.3	575.3	592.6	595.3	596.0
25°	96.9	138.3	274.6	317.4	440.3	539.8	561.9	575.3	585.3	586.6	586.6
27.5°	86.9	124.3	271.9	318.7	452.4	542.5	560.0	569.3	574.0	576.6	576.6
30°	78.2	111.0	265.2	316.0	457.7	539.8	553.9	558.6	563.2	567.3	569.3
32.5°	71.5	98.2	255.3	310.7	458.4	533.2	543.2	545.9	552.6	561.9	565.2
35°	65.4	85.6	243.9	303.4	454.4	522.5	529.2	531.9	545.2	559.3	563.9
37.5°	59.5	76.2	229.2	290.6	448.3	509.9	514.5	519.2	539.8	556.6	561.9
40°	53.5	68.1	211.8	276.6	439.0	494.4	498.5	505.8	533.2	552.6	558.0
42.5°	48.8	61.5	193.1	261.9	427.0	477.1	483.1	493.8	525.2	545.9	551.9
45°	44.7	54.8	173.1	241.8	411.5	459.1	467.7	482.5	515.8	535.8	541.2
47.5°	40.7	50.1	152.4	221.2	394.9	441.0	452.4	469.0	503.2	522.5	527.2
50°	37.4	45.4	131.7	199.1	376.9	421.6	435.0	452.4	487.1	505.2	511.1
52.5°	34.8	41.4	112.2	177.1	356.2	401.6	416.9	435.0	467.7	485.1	489.1
55°	32.1	38.0	95.5	153.7	334.8	380.2	396.9	414.2	446.3	461.0	463.7
57.5°	30.8	35.5	81.5	131.7	312.0	356.2	374.8	390.8	420.9	432.3	435.0
60°	28.7	33.4	70.8	112.9	287.3	333.5	349.5	365.5	390.8	400.2	402.3
62.5°	26.7	32.1	62.8	94.9	261.9	306.7	322.7	337.4	358.8	365.5	368.1
65°	25.4	30.8	56.8	81.5	235.9	278.6	294.6	307.4	324.7	331.4	332.8
67.5°	24.1	29.4	52.1	70.1	209.8	250.6	262.5	274.6	287.9	294.6	295.3
70°	22.0	28.1	48.1	62.2	183.1	218.5	228.5	241.2	251.9	255.3	257.3
72.5°	20.7	26.1	45.4	56.2	155.7	187.7	197.1	204.5	213.8	217.1	217.1
75°	18.7	23.4	42.7	50.1	127.6	153.7	161.7	169.0	176.4	177.7	175.7
77.5°	16.7	20.7	36.8	42.1	99.6	121.6	128.3	132.3	138.3	139.6	140.3
80°	14.0	18.0	28.7	32.8	72.2	89.5	94.2	97.5	102.9	102.9	104.3
82.5°	10.7	14.0	20.7	23.4	48.8	61.5	65.4	67.5	70.8	70.8	70.8
85°	6.7	8.7	13.3	15.3	29.4	37.4	40.1	40.7	43.4	44.1	44.1
87.5°	3.4	4.7	8.7	9.4	15.3	19.4	19.4	20.7	20.7	20.0	19.4
90°	5.2	9.3	13.4	14.4	22.7	33.7	39.1	34.8	26.1	19.6	19.6
92.5°	20.6	55.7	90.7	99.5	139.9	193.8	220.7	193.4	138.9	98.0	94.1
95°	49.5	113.6	177.9	193.9	344.3	544.8	645.1	575.7	436.8	332.7	320.8
97.5°	85.6	142.1	198.8	212.9	463.7	798.1	965.3	921.4	833.7	767.8	745.4
100°	113.4	164.8	216.1	229.0	507.3	878.3	1063.8	1067.0	1073.5	1078.3	1051.5
102.5°	137.1	185.1	233.0	244.9	527.2	903.6	1091.7	1147.7	1259.5	1343.4	1320.5
105°	177.4	218.0	258.6	268.7	542.0	906.5	1088.6	1214.0	1464.7	1652.8	1640.4
107.5°	218.6	256.5	294.3	303.8	544.8	866.1	1026.8	1201.7	1551.4	1813.6	1816.6
110°	246.5	280.7	314.7	323.3	540.6	830.4	975.2	1170.7	1561.7	1855.0	1867.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	273.8	306.4	338.8	347.0	540.7	799.1	928.3	1128.4	1528.6	1828.7	1848.4
115°	315.0	345.1	375.2	382.7	545.8	763.2	872.0	1064.7	1450.3	1739.4	1766.7
117.5°	355.9	383.2	410.5	417.2	556.0	740.9	833.4	1007.3	1355.2	1616.1	1646.4
120°	379.6	405.3	431.0	437.3	564.2	733.4	817.9	976.9	1294.7	1533.1	1562.6
122.5°	402.8	428.7	454.6	461.0	576.1	729.4	806.1	949.2	1235.4	1450.1	1479.2
125°	438.3	461.9	485.6	491.4	592.0	726.1	793.1	914.7	1157.8	1340.2	1367.0
127.5°	467.2	491.0	514.8	520.8	608.0	724.2	782.3	886.6	1095.5	1252.1	1274.7
130°	482.7	508.4	534.1	540.4	619.7	725.4	778.2	871.1	1057.0	1196.4	1217.2
132.5°	498.7	524.4	550.1	556.5	629.2	726.1	774.6	857.8	1024.2	1149.0	1167.6
135°	522.4	545.8	569.1	575.0	639.4	725.4	768.4	838.1	977.5	1082.0	1098.1
137.5°	546.6	569.7	592.9	598.7	654.9	729.9	767.3	826.2	944.0	1032.4	1045.5
140°	566.7	588.0	609.4	614.7	664.4	730.7	763.7	814.6	916.4	992.7	1005.1
142.5°	582.2	601.9	621.6	626.6	672.3	733.3	763.7	808.5	897.8	964.8	975.4
145°	606.0	623.1	640.3	644.6	682.6	733.3	758.6	795.1	868.2	923.1	931.2
147.5°	629.7	646.4	663.1	667.3	697.7	738.2	758.6	787.3	844.9	888.0	894.7
150°	645.1	660.2	675.4	679.2	705.7	740.9	758.6	782.9	831.5	867.9	873.3
152.5°	661.1	672.6	684.1	686.9	710.8	742.6	758.6	779.3	820.8	851.9	856.0
155°	684.8	693.3	701.8	703.9	722.1	746.4	758.6	775.1	808.1	832.9	835.5
157.5°	702.4	710.6	718.8	720.9	733.5	750.2	758.6	771.4	797.1	816.3	818.2
160°	714.2	720.6	727.1	728.7	738.6	751.9	758.6	769.5	791.5	808.1	809.2
162.5°	726.1	730.9	735.7	736.9	744.1	753.8	758.6	767.8	786.4	800.4	801.4
165°	738.9	743.3	747.7	748.8	752.1	756.4	758.6	765.2	778.5	788.4	789.5
167.5°	750.9	752.9	755.0	755.5	758.3	761.9	763.7	768.1	776.8	783.4	783.9
170°	758.6	760.6	762.7	763.2	763.4	763.6	763.7	768.1	776.8	783.4	783.4
172.5°	762.7	763.1	763.6	763.7	763.7	763.7	763.7	767.1	774.0	779.2	778.8
175°	768.4	768.4	768.4	768.4	766.8	764.7	763.7	765.9	770.2	773.5	773.5
177.5°	768.4	768.4	768.4	768.4	767.2	765.5	764.7	766.4	769.9	772.5	772.0
180°	768.4	768.4	768.4	768.4	768.4	768.4	768.4	768.4	768.4	768.4	768.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	207.8	207.8
2.5°	221.8	220.5
5°	285.4	286.6
7.5°	384.2	383.6
10°	477.8	483.8
12.5°	545.9	547.2
15°	587.3	590.0
17.5°	603.4	604.1
20°	604.1	602.7
22.5°	596.7	595.3
25°	588.0	587.3
27.5°	580.0	580.7
30°	576.6	578.7
32.5°	576.6	580.0
35°	578.0	581.3
37.5°	577.3	581.3
40°	574.6	579.3
42.5°	567.3	570.6
45°	555.9	560.0
47.5°	541.2	543.9
50°	522.5	525.2
52.5°	499.1	499.8
55°	471.1	473.7
57.5°	441.0	441.6
60°	407.6	409.6
62.5°	372.2	372.2
65°	334.8	336.1
67.5°	296.0	299.3
70°	256.6	257.3
72.5°	217.8	217.8
75°	177.7	178.4
77.5°	139.6	139.6
80°	103.6	104.3
82.5°	71.5	72.8
85°	44.7	44.7
87.5°	20.7	18.7
90°	19.6	19.6
92.5°	78.5	62.9
95°	273.6	226.4
97.5°	655.6	565.7
100°	944.5	837.4
102.5°	1228.8	1137.1
105°	1591.2	1541.9
107.5°	1828.6	1840.5
110°	1919.1	1970.4





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1927.2	2006.0
115°	1876.1	1985.4
117.5°	1767.7	1888.9
120°	1680.4	1798.2
122.5°	1595.3	1711.5
125°	1474.0	1581.1
127.5°	1364.9	1455.3
130°	1300.7	1384.1
132.5°	1242.3	1317.0
135°	1162.4	1226.8
137.5°	1098.3	1151.0
140°	1054.3	1103.6
142.5°	1017.8	1060.2
145°	963.2	995.3
147.5°	921.2	947.8
150°	894.9	916.4
152.5°	872.2	888.5
155°	846.3	857.1
157.5°	825.8	833.4
160°	813.5	817.9
162.5°	805.6	809.6
165°	793.9	798.3
167.5°	785.6	787.4
170°	783.4	783.4
172.5°	777.2	775.6
175°	773.5	773.5
177.5°	770.2	768.4
180°	768.4	768.4



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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	0.26	0.95	1.40	2.08	3.68	13.40	14.08	14.54	15.22	16.81
	3H	0.95	1.57	2.10	2.71	4.32	15.21	15.82	16.36	16.97	18.58
	4H	1.24	1.83	2.40	2.97	4.59	15.83	16.42	17.00	17.57	19.18
	6H	1.48	2.02	2.65	3.17	4.79	16.24	16.78	17.41	17.93	19.55
	8H	1.55	2.06	2.72	3.22	4.84	16.35	16.87	17.52	18.03	19.64
	12H	1.56	2.04	2.73	3.20	4.84	16.41	16.89	17.58	18.05	19.69
4H	2H	7.43	8.01	8.60	9.16	10.77	13.65	14.24	14.82	15.38	17.00
	3H	8.98	9.47	10.15	10.64	12.27	15.67	16.16	16.84	17.33	18.95
	4H	9.07	9.52	10.24	10.68	12.32	16.41	16.87	17.59	18.02	19.67
	6H	9.07	9.45	10.25	10.64	12.27	16.93	17.32	18.11	18.50	20.13
	8H	9.04	9.40	10.22	10.57	12.23	17.08	17.44	18.26	18.61	20.27
	12H	8.99	9.32	10.19	10.50	12.16	17.16	17.49	18.35	18.67	20.32
8H	4H	10.49	10.85	11.67	12.02	13.67	16.46	16.82	17.64	17.99	19.64
	6H	10.72	11.02	11.92	12.23	13.88	17.07	17.37	18.27	18.58	20.23
	8H	10.74	11.00	11.94	12.19	13.86	17.28	17.54	18.48	18.73	20.40
	12H	10.70	10.93	11.91	12.12	13.81	17.41	17.63	18.61	18.82	20.52
12H	4H	10.62	10.95	11.82	12.13	13.79	16.40	16.73	17.60	17.92	19.57
	6H	10.97	11.23	12.18	12.43	14.09	17.05	17.31	18.25	18.50	20.17
	8H	11.03	11.26	12.24	12.45	14.15	17.26	17.49	18.47	18.68	20.38