

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: P936321

Luminaire Tested: SQ4-FB-025U-075D-927-1D-UNV-STD-W-12

Issue Date: 12/17/2024

**Test Information**

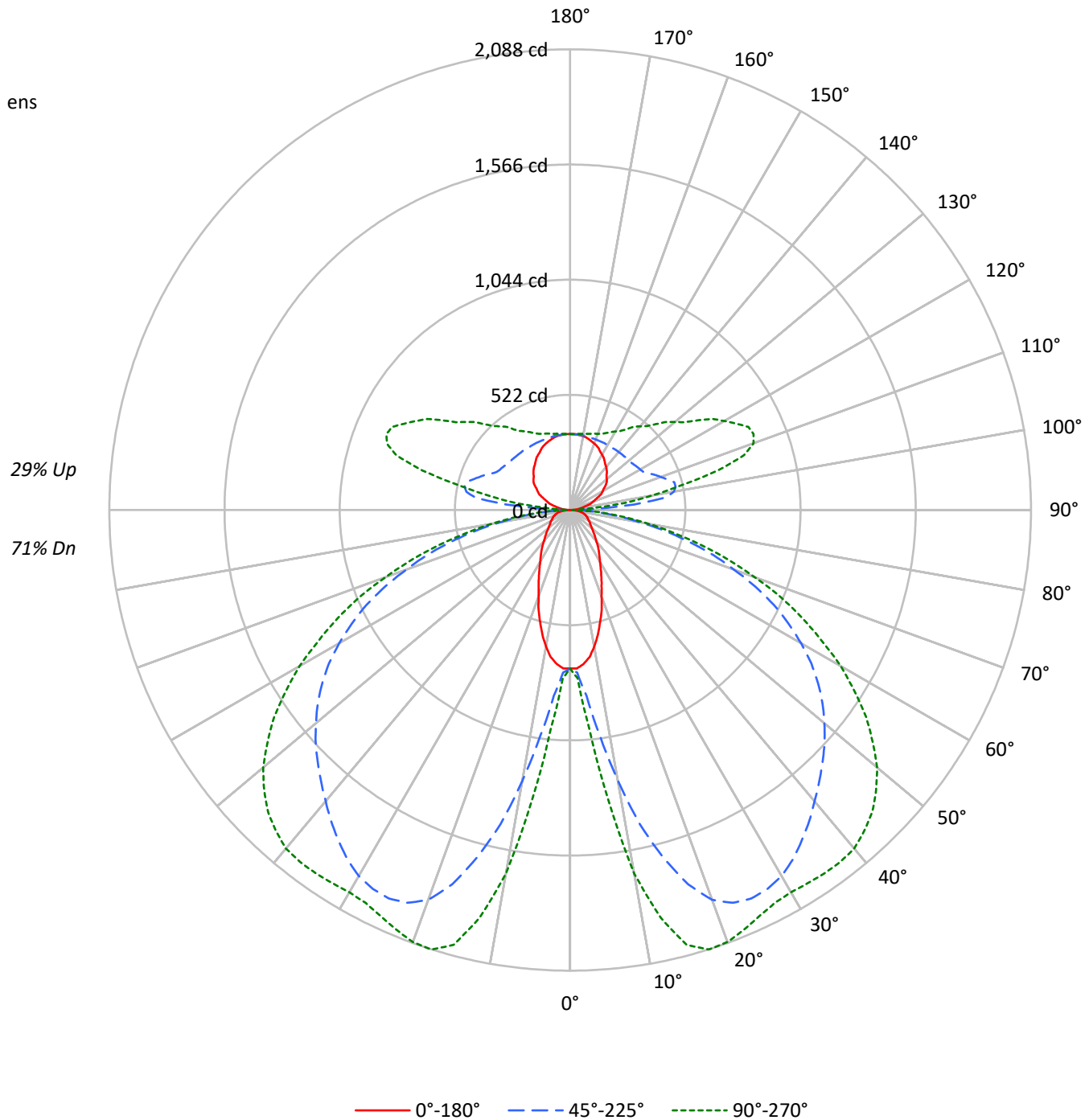
Test Method: LM-79-2019  
Report Number: P936321  
REPORT IS A COMBINATION OF REPORTS P933430 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-075D-927-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7793.9 lumens  
Efficiency: N/A  
Efficacy: 86.6 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 90  
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

TEST NUMBER: P936321  
CATALOG NUMBER: SQ4-FB-025U-075D-927-1D-UNV-STD-W-12

### 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	50	30	10
RCR																				
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	71	
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62	62	58	
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51	51	48	
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43	43	39	
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36	36	33	
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	31	28	
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27	27	24	
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23	23	21	
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	21	18	
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18	18	16	
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16	16	14	

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

	0°	45°	90°
0°	2222	2222	2222
5°	2172	2569	2987
10°	1970	3746	4952
15°	1675	4895	5979
20°	1365	5674	6094
25°	1139	5939	5970
30°	961	5978	5959
35°	850	5880	6113
40°	741	5753	6272
45°	672	5660	6297
50°	617	5577	6192
55°	591	5454	5918
60°	606	5217	5485
65°	631	4856	4889
70°	674	4237	4130
75°	750	3458	3223
80°	825	2401	2172
85°	749	1276	1112

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6297 cd/sqm



TEST NUMBER: P936321

CATALOG NUMBER: SQ4-FB-025U-075D-927-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.9	1.2
10°-20°	411.9	5.3
20°-30°	720.5	9.2
30°-40°	927.4	11.9
40°-50°	1035.9	13.3
50°-60°	992.2	12.7
60°-70°	786.3	10.1
70°-80°	462.3	5.9
80°-90°	129.8	1.7
90°-100°	168.0	2.2
100°-110°	441.8	5.7
110°-120°	458.1	5.9
120°-130°	367.4	4.7
130°-140°	288.3	3.7
140°-150°	221.3	2.8
150°-160°	159.4	2.0
160°-170°	97.5	1.3
170°-180°	32.9	0.4
0°-30°	1225.3	15.7
0°-40°	2152.7	27.6
0°-60°	4180.8	53.6
0°-90°	5559.2	71.3
90°-120°	1067.9	13.7
90°-150°	1944.9	25.0
90°-180°	2235.0	28.7
0°-180°	7793.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	700	751	846	956	991	65
15°	524	968	1631	1977	2040	146
25°	335	1097	1943	2028	2031	154
35°	226	1049	1830	1934	2010	141
45°	155	836	1617	1853	1936	120
55°	111	531	1372	1594	1638	101
65°	88	282	1019	1146	1162	87
75°	65	173	559	614	617	68
85°	23	53	139	152	155	25
90°	2	6	18	9	9	3
95°	22	87	289	149	102	25
105°	80	120	488	742	692	84
115°	141	172	391	780	891	140
125°	197	220	356	601	709	175
135°	234	258	345	485	550	181
145°	272	289	340	414	446	170
155°	307	316	340	374	384	141
165°	332	336	340	354	358	94
175°	345	345	343	347	347	33
180°	345	345	345	345	345	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4
2.5°	718.4	718.4	723.0	725.3	730.0	732.3	736.9	741.5	755.4	757.7	762.3
5°	699.9	709.2	739.2	750.8	783.1	827.0	845.5	875.6	937.9	956.4	968.0
7.5°	672.2	693.0	766.9	785.4	866.2	981.8	1030.3	1095.0	1194.3	1242.9	1282.1
10°	628.3	672.2	803.9	847.8	979.5	1155.1	1245.2	1335.3	1485.4	1552.4	1577.8
12.5°	579.8	651.4	843.2	903.3	1092.7	1349.1	1457.7	1557.0	1728.0	1818.0	1831.9
15°	524.4	621.4	880.2	968.0	1212.8	1510.8	1630.9	1753.4	1912.8	1977.4	1993.6
17.5°	475.9	598.3	914.8	1007.2	1305.2	1656.3	1778.8	1880.4	2009.8	2053.7	2065.2
20°	415.8	561.3	937.9	1058.1	1402.2	1762.6	1880.4	1959.0	2046.7	2074.5	2079.1
22.5°	371.9	522.1	951.8	1076.5	1466.9	1827.3	1926.6	1989.0	2049.0	2058.3	2060.6
25°	335.0	478.2	949.5	1097.3	1522.4	1866.6	1942.8	1989.0	2023.6	2028.3	2028.3
27.5°	300.3	429.7	940.2	1101.9	1563.9	1875.8	1935.9	1968.2	1984.4	1993.6	1993.6
30°	270.3	383.5	917.1	1092.7	1582.4	1866.6	1915.1	1931.2	1947.4	1961.3	1968.2
32.5°	247.2	339.6	882.5	1074.2	1584.7	1843.5	1878.1	1887.3	1910.4	1942.8	1954.3
35°	226.4	295.7	843.2	1048.8	1570.9	1806.5	1829.6	1838.8	1885.0	1933.5	1949.7
37.5°	205.6	263.3	792.3	1004.9	1550.1	1762.6	1778.8	1794.9	1866.6	1924.3	1942.8
40°	184.8	235.6	732.3	956.4	1517.7	1709.5	1723.3	1748.7	1843.5	1910.4	1928.9
42.5°	168.6	212.5	667.6	905.6	1476.2	1649.4	1670.2	1707.2	1815.7	1887.3	1908.1
45°	154.8	189.4	598.3	836.2	1423.0	1587.0	1617.1	1667.9	1783.4	1852.7	1871.2
47.5°	140.9	173.2	526.7	764.6	1365.3	1524.7	1563.9	1621.7	1739.5	1806.5	1822.7
50°	129.4	157.1	455.1	688.4	1302.9	1457.7	1503.9	1563.9	1684.1	1746.4	1767.2
52.5°	120.1	143.2	388.1	612.2	1231.3	1388.4	1441.5	1503.9	1617.1	1677.1	1691.0
55°	110.9	131.7	330.3	531.3	1157.4	1314.5	1372.2	1432.3	1543.2	1594.0	1603.2
57.5°	106.3	122.4	281.8	455.1	1078.8	1231.3	1296.0	1351.4	1455.4	1494.6	1503.9
60°	99.3	115.5	244.9	390.4	993.4	1152.8	1208.2	1263.6	1351.4	1383.8	1390.7
62.5°	92.4	110.9	217.1	328.0	905.6	1060.4	1115.8	1166.6	1240.5	1263.6	1272.9
65°	87.8	106.3	196.4	281.8	815.4	963.3	1018.8	1062.7	1122.7	1145.8	1150.5
67.5°	83.2	101.6	180.2	242.6	725.3	866.2	907.9	949.5	995.7	1018.8	1021.1
70°	76.2	97.0	166.3	214.8	632.9	755.4	790.0	833.9	870.9	882.5	889.4
72.5°	71.6	90.1	157.1	194.0	538.2	649.1	681.4	706.9	739.2	750.8	750.8
75°	64.7	80.9	147.8	173.2	441.2	531.3	559.0	584.4	609.8	614.5	607.5
77.5°	57.8	71.6	127.0	145.5	344.2	420.4	443.5	457.4	478.2	482.8	485.1
80°	48.5	62.4	99.3	113.2	249.5	309.5	325.7	337.3	355.7	355.7	360.4
82.5°	37.0	48.5	71.6	80.9	168.6	212.5	226.4	233.3	244.9	244.9	244.9
85°	23.1	30.0	46.2	53.1	101.6	129.4	138.6	140.9	150.2	152.5	152.5
87.5°	11.6	16.2	30.0	32.3	53.1	67.0	67.0	71.6	71.6	69.3	67.0
90°	2.3	4.2	6.0	6.5	10.2	15.1	17.6	15.6	11.7	8.8	8.8
92.5°	9.2	24.9	40.7	44.7	62.8	86.9	99.0	86.8	62.3	44.0	42.2
95°	22.2	51.0	79.8	87.0	154.5	244.5	289.4	258.3	196.0	149.2	143.9
97.5°	38.4	63.8	89.2	95.6	208.1	358.1	433.1	413.4	374.1	344.5	334.4
100°	50.9	73.9	96.9	102.7	227.6	394.1	477.3	478.8	481.6	483.8	471.8
102.5°	61.5	83.0	104.5	109.9	236.5	405.4	489.8	514.9	565.0	602.7	592.4
105°	79.6	97.8	116.0	120.5	243.2	406.6	488.4	544.6	657.1	741.5	736.0
107.5°	98.1	115.0	132.1	136.3	244.4	388.5	460.6	539.1	696.0	813.7	815.0
110°	110.6	125.9	141.2	145.1	242.6	372.5	437.5	525.2	700.6	832.2	838.0



TEST NUMBER: P936321

CATALOG NUMBER: SQ4-FB-025U-075D-927-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	122.9	137.4	152.1	155.7	242.6	358.5	416.5	506.3	685.8	820.4	829.3
115°	141.4	154.8	168.3	171.7	244.9	342.4	391.2	477.7	650.6	780.4	792.6
117.5°	159.6	171.9	184.1	187.2	249.4	332.4	373.9	452.0	608.1	725.1	738.7
120°	170.2	181.8	193.3	196.2	253.1	328.9	366.9	438.2	580.9	687.8	701.1
122.5°	180.7	192.3	203.9	206.8	258.4	327.2	361.6	425.8	554.2	650.6	663.6
125°	196.7	207.3	217.9	220.5	265.7	325.8	355.8	410.3	519.4	601.3	613.3
127.5°	209.6	220.3	231.0	233.7	272.8	324.9	351.0	397.8	491.5	561.7	571.9
130°	216.5	228.1	239.6	242.5	278.0	325.4	349.1	390.9	474.2	536.8	546.2
132.5°	223.8	235.2	246.8	249.6	282.3	325.8	347.5	384.8	459.5	515.5	523.9
135°	234.4	244.9	255.3	258.0	286.9	325.5	344.7	376.0	438.5	485.4	492.6
137.5°	245.2	255.6	266.0	268.6	293.8	327.5	344.3	370.7	423.5	463.2	469.1
140°	254.3	263.8	273.4	275.8	298.1	327.8	342.7	365.4	411.1	445.4	450.9
142.5°	261.2	270.0	278.9	281.1	301.6	328.9	342.7	362.7	402.8	432.9	437.7
145°	271.9	279.6	287.3	289.2	306.2	328.9	340.3	356.7	389.5	414.1	417.7
147.5°	282.5	290.0	297.5	299.4	313.0	331.3	340.3	353.3	379.1	398.4	401.4
150°	289.4	296.2	303.0	304.7	316.5	332.4	340.3	351.3	373.1	389.4	391.8
152.5°	296.6	301.8	306.8	308.2	318.9	333.2	340.3	349.7	368.3	382.2	384.1
155°	307.2	311.0	314.9	315.8	323.9	334.9	340.3	347.7	362.6	373.7	374.9
157.5°	315.1	318.8	322.6	323.5	329.1	336.6	340.3	346.1	357.6	366.2	367.1
160°	320.5	323.3	326.2	326.9	331.4	337.3	340.3	345.3	355.1	362.5	363.0
162.5°	325.8	327.9	330.1	330.6	333.9	338.2	340.3	344.5	352.8	359.1	359.5
165°	331.6	333.5	335.5	336.0	337.4	339.3	340.3	343.3	349.3	353.7	354.2
167.5°	336.9	337.8	338.7	339.0	340.2	341.8	342.7	344.6	348.5	351.4	351.7
170°	340.3	341.3	342.2	342.4	342.5	342.6	342.7	344.6	348.5	351.4	351.4
172.5°	342.2	342.4	342.6	342.7	342.7	342.7	342.7	344.2	347.3	349.6	349.4
175°	344.7	344.7	344.7	344.7	344.0	343.1	342.7	343.7	345.6	347.0	347.0
177.5°	344.7	344.7	344.7	344.7	344.2	343.5	343.1	343.9	345.4	346.6	346.3
180°	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	718.4	718.4
2.5°	766.9	762.3
5°	986.4	991.1
7.5°	1328.3	1326.0
10°	1651.7	1672.5
12.5°	1887.3	1892.0
15°	2030.6	2039.8
17.5°	2086.0	2088.3
20°	2088.3	2083.7
22.5°	2062.9	2058.3
25°	2032.9	2030.6
27.5°	2005.2	2007.5
30°	1993.6	2000.5
32.5°	1993.6	2005.2
35°	1998.2	2009.8
37.5°	1995.9	2009.8
40°	1986.7	2002.8
42.5°	1961.3	1972.8
45°	1922.0	1935.9
47.5°	1871.2	1880.4
50°	1806.5	1815.7
52.5°	1725.6	1728.0
55°	1628.6	1637.9
57.5°	1524.7	1527.0
60°	1409.2	1416.1
62.5°	1286.7	1286.7
65°	1157.4	1162.0
67.5°	1023.4	1035.0
70°	887.1	889.4
72.5°	753.1	753.1
75°	614.5	616.8
77.5°	482.8	482.8
80°	358.0	360.4
82.5°	247.2	251.8
85°	154.8	154.8
87.5°	71.6	64.7
90°	8.8	8.8
92.5°	35.3	28.3
95°	122.7	101.6
97.5°	294.1	253.8
100°	423.8	375.8
102.5°	551.2	510.1
105°	713.9	691.8
107.5°	820.4	825.7
110°	861.0	884.0





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CATALOG NUMBER: SQ4-FB-025U-075D-927-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	864.6	900.0
115°	841.7	890.7
117.5°	793.1	847.5
120°	753.9	806.7
122.5°	715.8	767.9
125°	661.3	709.3
127.5°	612.4	652.9
130°	583.6	621.0
132.5°	557.4	590.9
135°	521.5	550.4
137.5°	492.7	516.4
140°	473.0	495.1
142.5°	456.7	475.7
145°	432.1	446.5
147.5°	413.3	425.3
150°	401.5	411.1
152.5°	391.3	398.6
155°	379.7	384.5
157.5°	370.5	373.9
160°	365.0	366.9
162.5°	361.4	363.2
165°	356.2	358.1
167.5°	352.4	353.3
170°	351.4	351.4
172.5°	348.7	348.0
175°	347.0	347.0
177.5°	345.6	344.7
180°	344.7	344.7



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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	5.52	6.68	6.27	7.45	8.37	18.72	19.87	19.46	20.64	21.57
	3H	6.25	7.29	7.00	8.07	9.03	20.58	21.62	21.34	22.40	23.36
	4H	6.56	7.55	7.33	8.33	9.30	21.24	22.23	22.02	23.02	23.99
	6H	6.83	7.74	7.61	8.53	9.52	21.69	22.61	22.48	23.40	24.39
	8H	6.90	7.77	7.70	8.59	9.57	21.83	22.70	22.62	23.51	24.50
	12H	6.93	7.76	7.73	8.57	9.58	21.91	22.74	22.71	23.55	24.56
4H	2H	12.78	13.77	13.56	14.56	15.52	19.02	20.01	19.80	20.80	21.77
	3H	14.38	15.20	15.16	16.02	17.01	21.10	21.93	21.89	22.75	23.74
	4H	14.48	15.24	15.29	16.06	17.07	21.89	22.64	22.69	23.46	24.47
	6H	14.51	15.17	15.33	16.01	17.03	22.45	23.10	23.27	23.95	24.97
	8H	14.50	15.11	15.32	15.95	16.98	22.62	23.23	23.44	24.07	25.11
	12H	14.47	15.02	15.31	15.88	16.92	22.73	23.28	23.58	24.15	25.18
8H	4H	15.96	16.57	16.78	17.41	18.44	21.97	22.58	22.80	23.43	24.46
	6H	16.21	16.72	17.07	17.60	18.64	22.62	23.13	23.47	24.01	25.04
	8H	16.23	16.69	17.10	17.57	18.62	22.85	23.30	23.71	24.18	25.23
	12H	16.22	16.62	17.09	17.49	18.59	23.01	23.41	23.88	24.28	25.38
12H	4H	16.12	16.67	16.96	17.53	18.57	21.94	22.49	22.78	23.35	24.39
	6H	16.48	16.93	17.34	17.81	18.86	22.60	23.06	23.47	23.94	24.99
	8H	16.56	16.96	17.43	17.83	18.93	22.85	23.25	23.72	24.12	25.23