

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: P936976

Luminaire Tested: SQ4-FB-050U-125D-940-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936976
REPORT IS A COMBINATION OF REPORTS P933488 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

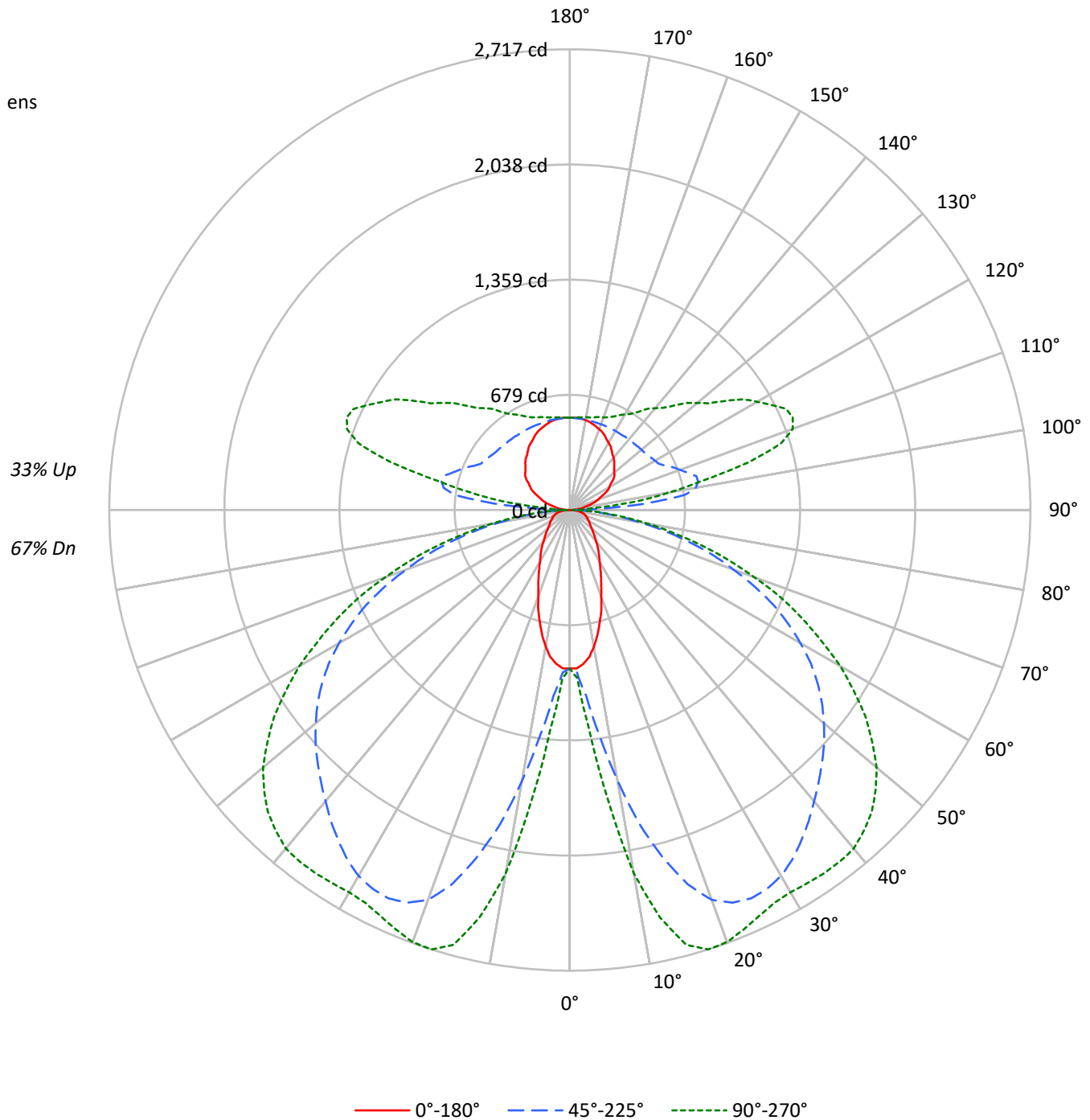
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10768.8 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 112
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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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67	67	67	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55	55	55	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45	45	45	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37	37	37	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31	31	31	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26	26	26	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23	23	23	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20	20	20	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17	17	17	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15	15	15	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14	14	14	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4337	4337	4337
5°	4236	5013	5829
10°	3843	7307	9664
15°	3266	9546	11669
20°	2659	11062	11893
25°	2218	11576	11651
30°	1870	11649	11629
35°	1654	11456	11930
40°	1441	11204	12241
45°	1305	11020	12288
50°	1197	10854	12085
55°	1147	10612	11549
60°	1173	10145	10703
65°	1221	9437	9541
70°	1301	8230	8061
75°	1442	6711	6290
80°	1574	4654	4239
85°	1397	2470	2170

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12288 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.9	1.1
10°-20°	535.9	5.0
20°-30°	937.3	8.7
30°-40°	1206.6	11.2
40°-50°	1347.8	12.5
50°-60°	1290.8	12.0
60°-70°	1023.0	9.5
70°-80°	601.6	5.6
80°-90°	169.2	1.6
90°-100°	265.9	2.5
100°-110°	699.0	6.5
110°-120°	724.8	6.7
120°-130°	581.3	5.4
130°-140°	456.2	4.2
140°-150°	350.1	3.3
150°-160°	252.1	2.3
160°-170°	154.3	1.4
170°-180°	52.1	0.5
0°-30°	1594.1	14.8
0°-40°	2800.7	26.0
0°-60°	5439.3	50.5
0°-90°	7233.1	67.2
90°-120°	1689.6	15.7
90°-150°	3077.2	28.6
90°-180°	3536.0	32.8
0°-180°	10768.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	935	935	935	935	935	
5°	911	977	1100	1244	1289	84
15°	682	1259	2122	2573	2654	190
25°	436	1428	2528	2639	2642	201
35°	294	1364	2380	2516	2615	184
45°	201	1088	2104	2410	2519	156
55°	144	691	1785	2074	2131	131
65°	114	367	1325	1491	1512	113
75°	84	225	727	800	802	88
85°	30	69	180	198	201	32
90°	4	10	28	14	14	5
95°	35	138	458	236	161	39
105°	126	191	773	1173	1094	133
115°	224	272	619	1235	1409	221
125°	311	349	563	951	1122	276
135°	371	408	545	768	871	287
145°	430	458	538	655	706	269
155°	486	500	538	591	608	223
165°	524	532	538	560	567	148
175°	545	545	542	549	549	52
180°	545	545	545	545	545	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	934.7	934.7	934.7	934.7	934.7	934.7	934.7	934.7	934.7	934.7	934.7
2.5°	934.7	934.7	940.7	943.8	949.7	952.7	958.8	964.8	982.8	985.9	991.8
5°	910.6	922.7	961.8	976.8	1018.9	1076.0	1100.1	1139.1	1220.2	1244.3	1259.3
7.5°	874.6	901.7	997.8	1021.9	1127.0	1277.4	1340.4	1424.6	1553.8	1617.0	1668.1
10°	817.5	874.6	1045.9	1103.0	1274.4	1502.8	1620.0	1737.2	1932.6	2019.8	2052.8
12.5°	754.4	847.6	1097.0	1175.2	1421.6	1755.2	1896.5	2025.7	2248.1	2365.4	2383.4
15°	682.3	808.5	1145.1	1259.3	1577.9	1965.6	2121.9	2281.2	2488.6	2572.7	2593.8
17.5°	619.1	778.4	1190.2	1310.4	1698.1	2155.0	2314.2	2446.5	2614.8	2671.9	2686.9
20°	541.0	730.4	1220.2	1376.5	1824.4	2293.3	2446.5	2548.6	2662.9	2699.0	2704.9
22.5°	483.9	679.2	1238.3	1400.6	1908.5	2377.4	2506.6	2587.7	2665.9	2677.9	2681.0
25°	435.8	622.1	1235.3	1427.6	1980.7	2428.5	2527.7	2587.7	2632.8	2638.9	2638.9
27.5°	390.7	559.0	1223.2	1433.7	2034.8	2440.5	2518.6	2560.7	2581.8	2593.8	2593.8
30°	351.6	498.9	1193.2	1421.6	2058.8	2428.5	2491.6	2512.6	2533.6	2551.7	2560.7
32.5°	321.6	441.8	1148.1	1397.5	2061.8	2398.4	2443.5	2455.5	2485.6	2527.7	2542.7
35°	294.5	384.7	1097.0	1364.5	2043.7	2350.4	2380.4	2392.4	2452.5	2515.6	2536.7
37.5°	267.5	342.6	1030.9	1307.4	2016.7	2293.3	2314.2	2335.3	2428.5	2503.6	2527.7
40°	240.5	306.5	952.7	1244.3	1974.6	2224.1	2242.1	2275.1	2398.4	2485.6	2509.6
42.5°	219.4	276.5	868.6	1178.2	1920.6	2145.9	2173.0	2221.1	2362.3	2455.5	2482.6
45°	201.4	246.4	778.4	1088.0	1851.4	2064.8	2103.8	2170.0	2320.3	2410.5	2434.5
47.5°	183.4	225.4	685.3	994.8	1776.3	1983.6	2034.8	2109.9	2263.2	2350.4	2371.4
50°	168.3	204.4	592.1	895.6	1695.1	1896.5	1956.6	2034.8	2191.1	2272.2	2299.2
52.5°	156.3	186.3	504.9	796.4	1602.0	1806.3	1875.5	1956.6	2103.8	2182.0	2200.0
55°	144.3	171.3	429.8	691.3	1505.8	1710.1	1785.3	1863.5	2007.7	2073.8	2085.8
57.5°	138.3	159.3	366.7	592.1	1403.6	1602.0	1686.1	1758.2	1893.5	1944.5	1956.6
60°	129.2	150.2	318.6	507.9	1292.4	1499.7	1571.8	1644.0	1758.2	1800.3	1809.3
62.5°	120.2	144.3	282.6	426.8	1178.2	1379.5	1451.7	1517.8	1613.9	1644.0	1656.0
65°	114.2	138.3	255.5	366.7	1061.0	1253.3	1325.4	1382.5	1460.7	1490.8	1496.7
67.5°	108.2	132.2	234.4	315.6	943.8	1127.0	1181.1	1235.3	1295.4	1325.4	1328.4
70°	99.2	126.3	216.4	279.5	823.5	982.8	1027.9	1085.0	1133.1	1148.1	1157.2
72.5°	93.2	117.2	204.4	252.5	700.3	844.6	886.7	919.7	961.8	976.8	976.8
75°	84.2	105.2	192.3	225.4	574.1	691.3	727.4	760.4	793.4	799.5	790.5
77.5°	75.1	93.2	165.3	189.3	447.8	547.0	577.0	595.1	622.1	628.2	631.2
80°	63.1	81.2	129.2	147.2	324.6	402.7	423.8	438.8	462.8	462.8	468.9
82.5°	48.1	63.1	93.2	105.2	219.4	276.5	294.5	303.5	318.6	318.6	318.6
85°	30.0	39.1	60.1	69.1	132.2	168.3	180.4	183.4	195.4	198.4	198.4
87.5°	15.0	21.0	39.1	42.1	69.1	87.2	87.2	93.2	93.2	90.1	87.2
90°	3.6	6.6	9.5	10.2	16.1	23.9	27.8	24.7	18.6	13.9	13.9
92.5°	14.7	39.5	64.5	70.7	99.4	137.6	156.6	137.3	98.6	69.5	66.8
95°	35.2	80.7	126.3	137.6	244.4	386.7	457.9	408.7	310.1	236.1	227.8
97.5°	60.7	100.9	141.1	151.1	329.2	566.5	685.3	654.1	591.8	545.1	529.1
100°	80.5	116.9	153.4	162.5	360.1	623.5	755.2	757.5	762.0	765.4	746.4
102.5°	97.4	131.4	165.3	173.9	374.2	641.4	775.0	814.7	894.0	953.5	937.3
105°	125.9	154.7	183.5	190.7	384.8	643.4	772.7	861.7	1039.8	1173.2	1164.4
107.5°	155.2	182.0	208.9	215.6	386.6	614.8	728.8	852.9	1101.2	1287.4	1289.6
110°	174.9	199.2	223.5	229.5	383.8	589.4	692.2	831.0	1108.5	1316.6	1325.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	194.4	217.5	240.6	246.3	383.9	567.3	658.9	800.9	1085.0	1298.0	1312.0
115°	223.7	245.0	266.3	271.6	387.4	541.9	619.0	755.9	1029.5	1234.7	1254.0
117.5°	252.5	271.9	291.3	296.1	394.6	525.9	591.5	715.0	962.0	1147.2	1168.7
120°	269.4	287.6	305.9	310.4	400.5	520.5	580.6	693.4	919.0	1088.2	1109.1
122.5°	285.8	304.2	322.6	327.2	408.8	517.7	572.1	673.7	877.0	1029.4	1050.0
125°	311.2	327.8	344.6	348.8	420.2	515.4	563.0	649.3	821.9	951.4	970.4
127.5°	331.7	348.5	365.4	369.7	431.6	514.1	555.3	629.4	777.6	888.8	904.8
130°	342.6	360.8	379.1	383.6	439.8	514.9	552.3	618.3	750.3	849.2	864.0
132.5°	354.0	372.2	390.5	395.0	446.6	515.4	549.8	608.9	727.0	815.5	828.8
135°	370.8	387.4	404.0	408.1	453.9	514.9	545.4	594.9	693.8	767.9	779.4
137.5°	388.1	404.5	420.9	425.0	464.9	518.1	544.7	586.5	670.2	732.9	742.2
140°	402.3	417.4	432.5	436.4	471.6	518.6	542.1	578.3	650.5	704.6	713.3
142.5°	413.3	427.2	441.2	444.7	477.2	520.5	542.1	573.8	637.3	684.9	692.5
145°	430.1	442.3	454.6	457.6	484.6	520.5	538.5	564.4	616.4	655.3	660.9
147.5°	446.9	458.8	470.7	473.7	495.2	524.1	538.5	558.9	599.7	630.3	635.0
150°	457.9	468.7	479.4	482.1	500.9	526.0	538.5	555.7	590.3	616.1	619.9
152.5°	469.3	477.5	485.6	487.6	504.6	527.2	538.5	553.2	582.6	604.7	607.7
155°	486.1	492.1	498.2	499.7	512.6	529.9	538.5	550.2	573.6	591.1	593.1
157.5°	498.5	504.4	510.2	511.8	520.6	532.5	538.5	547.5	565.7	579.4	580.8
160°	507.0	511.6	516.1	517.3	524.4	533.8	538.5	546.3	561.8	573.6	574.4
162.5°	515.4	518.9	522.2	523.1	528.3	535.1	538.5	545.1	558.3	568.1	568.9
165°	524.5	527.6	530.7	531.5	533.8	536.9	538.5	543.2	552.6	559.7	560.5
167.5°	533.0	534.4	535.9	536.3	538.2	540.8	542.1	545.2	551.4	556.1	556.4
170°	538.5	539.9	541.4	541.8	541.9	542.0	542.1	545.2	551.4	556.1	556.1
172.5°	541.4	541.8	542.0	542.1	542.1	542.1	542.1	544.6	549.5	553.1	552.9
175°	545.4	545.4	545.4	545.4	544.3	542.8	542.1	543.6	546.7	549.1	549.1
177.5°	545.4	545.4	545.4	545.4	544.5	543.4	542.8	544.1	546.5	548.3	548.0
180°	545.4	545.4	545.4	545.4	545.4	545.4	545.4	545.4	545.4	545.4	545.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	934.7	934.7
2.5°	997.8	991.8
5°	1283.3	1289.4
7.5°	1728.1	1725.2
10°	2149.0	2176.0
12.5°	2455.5	2461.5
15°	2641.9	2653.9
17.5°	2714.0	2717.0
20°	2717.0	2711.0
22.5°	2684.0	2677.9
25°	2644.9	2641.9
27.5°	2608.8	2611.8
30°	2593.8	2602.8
32.5°	2593.8	2608.8
35°	2599.8	2614.8
37.5°	2596.8	2614.8
40°	2584.8	2605.8
42.5°	2551.7	2566.8
45°	2500.6	2518.6
47.5°	2434.5	2446.5
50°	2350.4	2362.3
52.5°	2245.1	2248.1
55°	2118.9	2130.9
57.5°	1983.6	1986.6
60°	1833.4	1842.4
62.5°	1674.1	1674.1
65°	1505.8	1511.8
67.5°	1331.5	1346.5
70°	1154.1	1157.2
72.5°	979.8	979.8
75°	799.5	802.5
77.5°	628.2	628.2
80°	465.8	468.9
82.5°	321.6	327.6
85°	201.4	201.4
87.5°	93.2	84.2
90°	13.9	13.9
92.5°	55.7	44.7
95°	194.2	160.7
97.5°	465.3	401.6
100°	670.4	594.4
102.5°	872.2	807.1
105°	1129.4	1094.5
107.5°	1298.0	1306.4
110°	1362.2	1398.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1368.0	1423.9
115°	1331.6	1409.3
117.5°	1254.8	1340.9
120°	1192.8	1276.4
122.5°	1132.5	1215.0
125°	1046.3	1122.3
127.5°	968.9	1033.0
130°	923.3	982.5
132.5°	881.9	934.9
135°	825.1	870.9
137.5°	779.7	817.0
140°	748.3	783.3
142.5°	722.5	752.6
145°	683.8	706.5
147.5°	653.9	672.8
150°	635.2	650.5
152.5°	619.2	630.7
155°	600.7	608.4
157.5°	586.2	591.5
160°	577.5	580.6
162.5°	571.8	574.7
165°	563.5	566.6
167.5°	557.7	559.0
170°	556.1	556.1
172.5°	551.7	550.6
175°	549.1	549.1
177.5°	546.7	545.4
180°	545.4	545.4



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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	7.53	8.63	8.32	9.44	10.44	20.71	21.80	21.49	22.62	23.62
	3H	8.25	9.24	9.05	10.07	11.09	22.56	23.55	23.36	24.38	25.41
	4H	8.56	9.50	9.38	10.33	11.37	23.22	24.16	24.04	24.99	26.03
	6H	8.82	9.69	9.65	10.53	11.58	23.66	24.53	24.49	25.37	26.42
	8H	8.90	9.72	9.74	10.58	11.64	23.79	24.62	24.63	25.48	26.53
	12H	8.93	9.71	9.77	10.57	11.65	23.87	24.65	24.71	25.51	26.59
4H	2H	14.77	15.71	15.59	16.54	17.58	21.01	21.95	21.83	22.78	23.82
	3H	16.36	17.15	17.19	18.01	19.07	23.08	23.86	23.91	24.73	25.78
	4H	16.47	17.18	17.31	18.05	19.13	23.85	24.57	24.70	25.43	26.52
	6H	16.49	17.11	17.35	18.00	19.09	24.41	25.03	25.27	25.92	27.00
	8H	16.47	17.06	17.34	17.94	19.04	24.58	25.16	25.44	26.04	27.14
	12H	16.44	16.97	17.33	17.87	18.98	24.68	25.21	25.57	26.11	27.21
8H	4H	17.93	18.51	18.80	19.40	20.50	23.94	24.52	24.80	25.40	26.50
	6H	18.19	18.67	19.08	19.59	20.69	24.58	25.06	25.47	25.98	27.08
	8H	18.21	18.64	19.11	19.55	20.67	24.80	25.23	25.70	26.15	27.26
	12H	18.19	18.56	19.09	19.47	20.64	24.96	25.33	25.86	26.24	27.41
12H	4H	18.09	18.61	18.97	19.51	20.62	23.90	24.43	24.79	25.33	26.43
	6H	18.45	18.88	19.35	19.79	20.91	24.56	24.99	25.47	25.91	27.03
	8H	18.53	18.91	19.44	19.82	20.98	24.80	25.18	25.71	26.09	27.26