

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: P936425

Luminaire Tested: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936425
REPORT IS A COMBINATION OF REPORTS P933431 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-92765-1D-UNV-STD-W-12-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

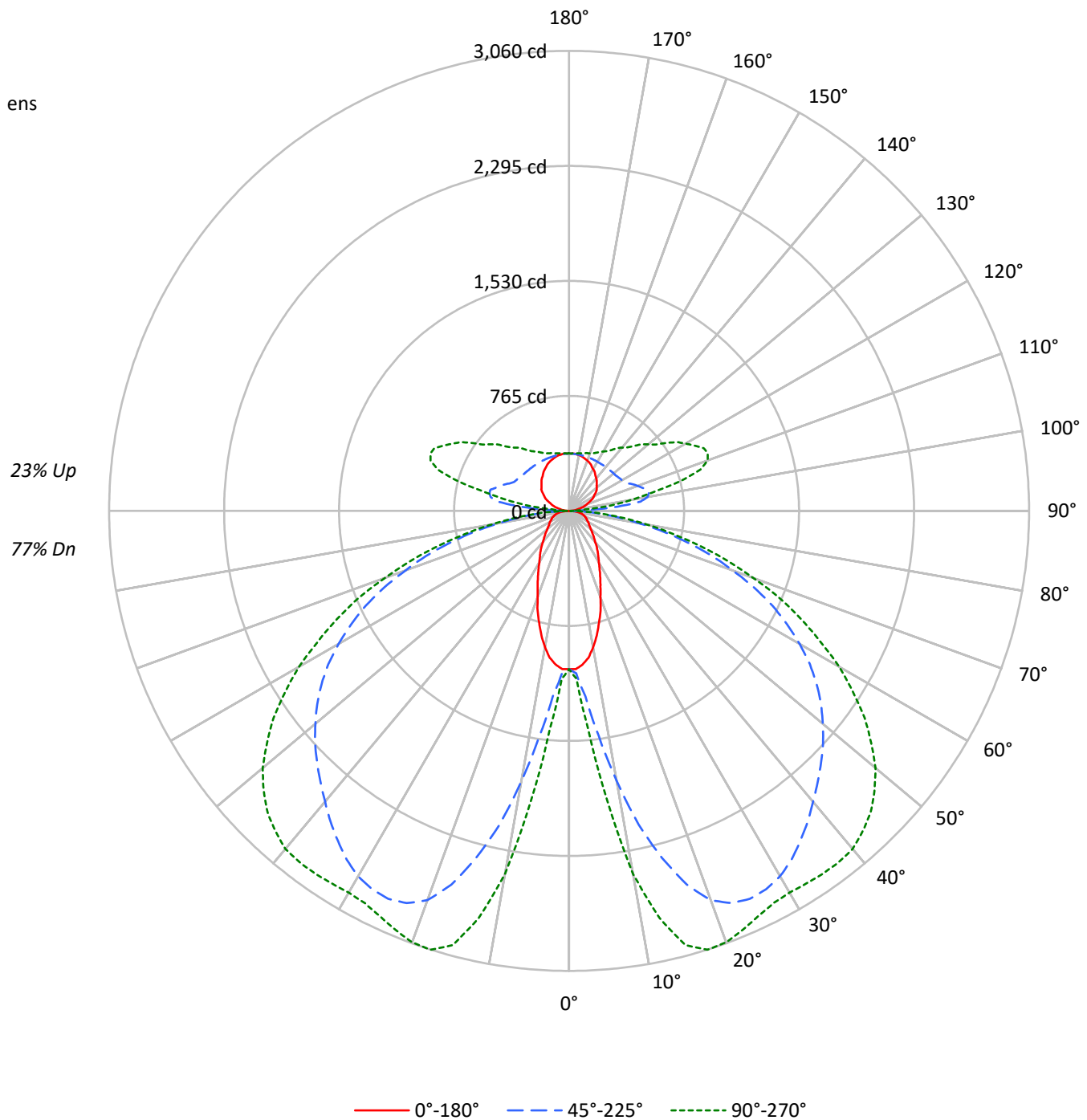
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10625.3 lumens
Efficiency: N/A
Efficacy: 91.3 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): 116.4
Input Voltage (V): NR
Input Current (A_{in}): 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														
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	50	30	10	50	30	10	50	30	10	0					
RCR																																			
0	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77									77								
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66	63									63								
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55	51									51								
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45	42									42								
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38	35									35								
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33	30									30								
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28	26									26								
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25	22									22								
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22	20									20								
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19	17									17								
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17	16									16								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3257	3257	3257
5°	3183	3765	4377
10°	2888	5490	7257
15°	2455	7174	8763
20°	1999	8315	8931
25°	1669	8704	8749
30°	1408	8761	8733
35°	1245	8618	8958
40°	1086	8431	9192
45°	984	8295	9228
50°	903	8173	9075
55°	866	7994	8673
60°	887	7646	8038
65°	925	7116	7165
70°	988	6210	6053
75°	1099	5068	4724
80°	1209	3519	3183
85°	1095	1870	1630

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9228 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.2	1.3
10°-20°	603.6	5.7
20°-30°	1055.8	9.9
30°-40°	1359.1	12.8
40°-50°	1518.1	14.3
50°-60°	1454.0	13.7
60°-70°	1152.3	10.8
70°-80°	677.6	6.4
80°-90°	189.7	1.8
90°-100°	186.4	1.8
100°-110°	490.0	4.6
110°-120°	508.1	4.8
120°-130°	407.6	3.8
130°-140°	319.8	3.0
140°-150°	245.5	2.3
150°-160°	176.8	1.7
160°-170°	108.2	1.0
170°-180°	36.5	0.3
0°-30°	1795.6	16.9
0°-40°	3154.7	29.7
0°-60°	6126.9	57.7
0°-90°	8146.4	76.7
90°-120°	1184.6	11.1
90°-150°	2157.4	20.3
90°-180°	2479.0	23.3
0°-180°	10625.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1053	1053	1053	1053	1053	
5°	1026	1100	1239	1402	1452	95
15°	768	1418	2390	2898	2989	214
25°	491	1608	2847	2972	2976	226
35°	332	1537	2681	2834	2945	207
45°	227	1226	2370	2715	2837	175
55°	162	779	2011	2336	2400	148
65°	129	413	1493	1679	1703	127
75°	95	254	819	900	904	99
85°	34	78	203	223	227	36
90°	3	7	20	10	10	4
95°	25	96	321	166	113	27
105°	88	134	542	822	767	94
115°	157	190	434	866	988	155
125°	218	245	395	667	787	194
135°	260	286	382	538	610	201
145°	302	321	378	459	495	189
155°	341	350	378	414	427	157
165°	368	373	378	392	397	104
175°	382	382	380	385	385	36
180°	382	382	382	382	382	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9	1052.9
2.5°	1052.9	1052.9	1059.6	1063.0	1069.8	1073.2	1080.0	1086.7	1107.0	1110.5	1117.2
5°	1025.8	1039.3	1083.4	1100.3	1147.7	1212.0	1239.1	1283.1	1374.5	1401.5	1418.5
7.5°	985.2	1015.6	1123.9	1151.0	1269.5	1438.8	1509.9	1604.7	1750.3	1821.3	1878.9
10°	920.8	985.2	1178.1	1242.4	1435.4	1692.7	1824.8	1956.8	2176.8	2275.0	2312.2
12.5°	849.8	954.7	1235.7	1323.7	1601.3	1977.1	2136.2	2281.8	2532.3	2664.4	2684.6
15°	768.5	910.7	1289.8	1418.5	1777.4	2214.1	2390.1	2569.6	2803.2	2897.9	2921.6
17.5°	697.4	876.8	1340.6	1476.0	1912.7	2427.3	2606.8	2755.8	2945.3	3009.6	3026.6
20°	609.3	822.7	1374.5	1550.5	2054.9	2583.1	2755.8	2870.8	2999.4	3040.1	3046.8
22.5°	545.0	765.1	1394.8	1577.6	2149.8	2677.9	2823.4	2914.9	3002.9	3016.4	3019.8
25°	490.9	700.8	1391.4	1608.1	2231.0	2735.4	2847.2	2914.9	2965.6	2972.4	2972.4
27.5°	440.1	629.7	1377.9	1614.8	2292.0	2748.9	2837.0	2884.4	2908.0	2921.6	2921.6
30°	396.1	562.0	1344.0	1601.3	2319.0	2735.4	2806.5	2830.2	2853.9	2874.2	2884.4
32.5°	362.2	497.6	1293.2	1574.2	2322.4	2701.6	2752.3	2765.9	2799.7	2847.2	2864.1
35°	331.7	433.3	1235.7	1537.0	2302.0	2647.4	2681.3	2694.8	2762.5	2833.6	2857.3
37.5°	301.3	386.0	1161.2	1472.7	2271.6	2583.1	2606.8	2630.5	2735.4	2820.1	2847.2
40°	270.8	345.3	1073.2	1401.5	2224.2	2505.2	2525.5	2562.7	2701.6	2799.7	2826.8
42.5°	247.1	311.5	978.4	1327.1	2163.2	2417.2	2447.7	2501.8	2661.0	2765.9	2796.3
45°	226.9	277.6	876.8	1225.5	2085.4	2325.8	2369.8	2444.3	2613.5	2715.1	2742.2
47.5°	206.5	253.9	771.9	1120.6	2000.8	2234.4	2292.0	2376.5	2549.2	2647.4	2671.1
50°	189.6	230.2	666.9	1008.9	1909.4	2136.2	2203.9	2292.0	2468.0	2559.4	2589.9
52.5°	176.0	209.9	568.8	897.2	1804.4	2034.6	2112.5	2203.9	2369.8	2457.8	2478.2
55°	162.5	192.9	484.1	778.6	1696.1	1926.3	2011.0	2098.9	2261.5	2336.0	2349.4
57.5°	155.7	179.5	413.1	666.9	1581.0	1804.4	1899.2	1980.5	2132.8	2190.3	2203.9
60°	145.5	169.3	358.8	572.1	1455.7	1689.3	1770.6	1851.8	1980.5	2027.9	2038.0
62.5°	135.4	162.5	318.2	480.7	1327.1	1553.9	1635.1	1709.6	1818.0	1851.8	1865.3
65°	128.6	155.7	287.8	413.1	1195.1	1411.7	1492.9	1557.3	1645.3	1679.1	1686.0
67.5°	121.9	149.0	264.1	355.5	1063.0	1269.5	1330.5	1391.4	1459.1	1492.9	1496.3
70°	111.7	142.2	243.8	314.8	927.6	1107.0	1157.9	1222.2	1276.3	1293.2	1303.4
72.5°	105.0	132.0	230.2	284.3	788.8	951.3	998.7	1036.0	1083.4	1100.3	1100.3
75°	94.8	118.5	216.7	253.9	646.6	778.6	819.3	856.5	893.8	900.5	890.3
77.5°	84.6	105.0	186.2	213.3	504.4	616.2	650.0	670.3	700.8	707.6	711.0
80°	71.1	91.4	145.5	165.9	365.7	453.6	477.4	494.3	521.4	521.4	528.1
82.5°	54.2	71.1	105.0	118.5	247.1	311.5	331.7	341.9	358.8	358.8	358.8
85°	33.8	44.0	67.7	77.9	149.0	189.6	203.1	206.5	220.0	223.4	223.4
87.5°	16.9	23.7	44.0	47.4	77.9	98.1	98.1	105.0	105.0	101.6	98.1
90°	2.6	4.6	6.7	7.2	11.3	16.7	19.5	17.3	13.0	9.7	9.7
92.5°	10.2	27.7	45.2	49.5	69.6	96.4	109.8	96.3	69.1	48.8	46.8
95°	24.6	56.5	88.5	96.5	171.3	271.2	321.1	286.5	217.4	165.5	159.6
97.5°	42.6	70.8	99.0	106.0	230.8	397.3	480.4	458.6	414.9	382.1	370.9
100°	56.5	82.0	107.5	113.9	252.5	437.1	529.5	531.1	534.3	536.6	523.3
102.5°	68.2	92.1	115.9	121.9	262.4	449.7	543.3	571.2	626.8	668.5	657.1
105°	88.3	108.5	128.6	133.7	269.7	451.1	541.8	604.1	728.9	822.5	816.4
107.5°	108.8	127.6	146.5	151.2	271.1	431.0	510.9	598.0	772.0	902.6	904.1
110°	122.7	139.6	156.6	160.9	269.1	413.2	485.3	582.6	777.2	923.1	929.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	136.3	152.5	168.7	172.7	269.1	397.7	462.0	561.6	760.7	910.1	919.9
115°	156.8	171.8	186.7	190.5	271.6	379.8	434.0	529.9	721.7	865.7	879.2
117.5°	177.1	190.6	204.2	207.6	276.7	368.7	414.8	501.4	674.5	804.3	819.5
120°	188.8	201.7	214.5	217.6	280.8	364.9	407.0	486.1	644.4	763.0	777.7
122.5°	200.5	213.4	226.2	229.4	286.6	362.9	401.1	472.3	614.8	721.7	736.1
125°	218.1	229.9	241.7	244.6	294.7	361.4	394.7	455.2	576.2	667.0	680.3
127.5°	232.5	244.4	256.2	259.2	302.6	360.4	389.3	441.2	545.2	623.1	634.4
130°	240.2	253.0	265.8	269.0	308.4	361.0	387.3	433.6	526.1	595.4	605.8
132.5°	248.2	260.9	273.7	276.9	313.1	361.4	385.5	426.9	509.7	571.8	581.1
135°	260.0	271.6	283.2	286.1	318.2	361.0	382.4	417.1	486.4	538.4	546.5
137.5°	272.0	283.6	295.0	297.9	325.9	363.3	381.9	411.2	469.8	513.8	520.3
140°	282.0	292.6	303.3	305.9	330.6	363.6	380.1	405.4	456.0	494.0	500.2
142.5°	289.7	299.5	309.4	311.8	334.6	364.9	380.1	402.3	446.8	480.2	485.5
145°	301.6	310.1	318.7	320.8	339.7	364.9	377.5	395.7	432.1	459.4	463.4
147.5°	313.4	321.7	330.0	332.1	347.2	367.4	377.5	391.9	420.5	441.9	445.3
150°	321.1	328.6	336.1	338.0	351.1	368.7	377.5	389.7	413.8	431.9	434.6
152.5°	329.0	334.7	340.4	341.8	353.7	369.6	377.5	387.9	408.5	424.0	426.0
155°	340.8	345.0	349.3	350.3	359.3	371.5	377.5	385.7	402.2	414.5	415.9
157.5°	349.5	353.6	357.8	358.8	365.1	373.3	377.5	383.9	396.7	406.2	407.2
160°	355.5	358.6	361.9	362.7	367.6	374.2	377.5	383.0	393.9	402.1	402.6
162.5°	361.4	363.8	366.2	366.8	370.3	375.1	377.5	382.1	391.4	398.3	398.8
165°	367.8	369.9	372.1	372.7	374.3	376.4	377.5	380.9	387.4	392.4	392.9
167.5°	373.7	374.7	375.7	376.0	377.4	379.1	380.1	382.2	386.6	389.8	390.1
170°	377.5	378.5	379.6	379.8	379.9	380.0	380.1	382.2	386.6	389.8	389.8
172.5°	379.6	379.8	380.0	380.1	380.1	380.1	380.1	381.8	385.2	387.8	387.6
175°	382.4	382.4	382.4	382.4	381.6	380.6	380.1	381.2	383.3	385.0	385.0
177.5°	382.4	382.4	382.4	382.4	381.8	381.0	380.6	381.5	383.2	384.4	384.2
180°	382.4	382.4	382.4	382.4	382.4	382.4	382.4	382.4	382.4	382.4	382.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1052.9	1052.9
2.5°	1123.9	1117.2
5°	1445.6	1452.4
7.5°	1946.6	1943.2
10°	2420.6	2451.0
12.5°	2765.9	2772.7
15°	2975.8	2989.4
17.5°	3057.0	3060.4
20°	3060.4	3053.7
22.5°	3023.2	3016.4
25°	2979.2	2975.8
27.5°	2938.5	2942.0
30°	2921.6	2931.8
32.5°	2921.6	2938.5
35°	2928.4	2945.3
37.5°	2925.0	2945.3
40°	2911.5	2935.1
42.5°	2874.2	2891.1
45°	2816.7	2837.0
47.5°	2742.2	2755.8
50°	2647.4	2661.0
52.5°	2528.9	2532.3
55°	2386.7	2400.3
57.5°	2234.4	2237.7
60°	2065.1	2075.3
62.5°	1885.7	1885.7
65°	1696.1	1702.9
67.5°	1499.8	1516.7
70°	1300.0	1303.4
72.5°	1103.6	1103.6
75°	900.5	903.9
77.5°	707.6	707.6
80°	524.8	528.1
82.5°	362.2	369.0
85°	226.9	226.9
87.5°	105.0	94.8
90°	9.7	9.7
92.5°	39.1	31.3
95°	136.1	112.7
97.5°	326.3	281.5
100°	470.1	416.8
102.5°	611.5	565.9
105°	791.9	767.3
107.5°	910.1	916.0
110°	955.1	980.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	959.1	998.3
115°	933.6	988.1
117.5°	879.8	940.1
120°	836.3	894.9
122.5°	794.0	851.8
125°	733.5	786.8
127.5°	679.3	724.2
130°	647.3	688.9
132.5°	618.3	655.5
135°	578.5	610.5
137.5°	546.6	572.9
140°	524.7	549.2
142.5°	506.6	527.7
145°	479.3	495.3
147.5°	458.5	471.7
150°	445.3	456.0
152.5°	434.1	442.2
155°	421.2	426.6
157.5°	411.0	414.8
160°	404.9	407.0
162.5°	400.8	402.9
165°	395.1	397.3
167.5°	390.9	391.9
170°	389.8	389.8
172.5°	386.7	386.0
175°	385.0	385.0
177.5°	383.3	382.4
180°	382.4	382.4



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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	7.24	8.48	7.92	9.18	10.01	20.43	21.67	21.12	22.37	23.20
	3H	7.98	9.09	8.67	9.81	10.67	22.31	23.42	23.00	24.14	25.00
	4H	8.29	9.34	9.00	10.07	10.94	22.97	24.03	23.68	24.75	25.62
	6H	8.56	9.54	9.29	10.27	11.16	23.43	24.40	24.15	25.14	26.02
	8H	8.64	9.57	9.38	10.33	11.22	23.56	24.49	24.30	25.25	26.14
	12H	8.67	9.56	9.41	10.31	11.23	23.64	24.53	24.39	25.28	26.20
4H	2H	14.51	15.56	15.23	16.29	17.16	20.75	21.81	21.47	22.53	23.40
	3H	16.11	17.00	16.84	17.76	18.65	22.84	23.72	23.57	24.48	25.37
	4H	16.22	17.03	16.97	17.79	18.71	23.62	24.43	24.37	25.19	26.11
	6H	16.25	16.96	17.02	17.74	18.67	24.19	24.89	24.95	25.68	26.61
	8H	16.24	16.90	17.01	17.68	18.62	24.36	25.02	25.13	25.80	26.75
	12H	16.22	16.81	17.00	17.61	18.56	24.48	25.07	25.27	25.88	26.82
8H	4H	17.70	18.36	18.47	19.14	20.08	23.71	24.37	24.48	25.16	26.10
	6H	17.96	18.51	18.76	19.33	20.28	24.37	24.91	25.16	25.74	26.68
	8H	17.98	18.47	18.79	19.30	20.25	24.59	25.08	25.40	25.91	26.86
	12H	17.97	18.40	18.78	19.22	20.23	24.76	25.19	25.57	26.01	27.02
12H	4H	17.86	18.46	18.65	19.26	20.21	23.69	24.28	24.48	25.09	26.03
	6H	18.23	18.71	19.03	19.54	20.50	24.35	24.84	25.16	25.67	26.62
	8H	18.31	18.74	19.13	19.56	20.57	24.61	25.04	25.42	25.85	26.87