

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: P936971

Luminaire Tested: SQ4-FB-050U-125D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936971
REPORT IS A COMBINATION OF REPORTS P933480 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

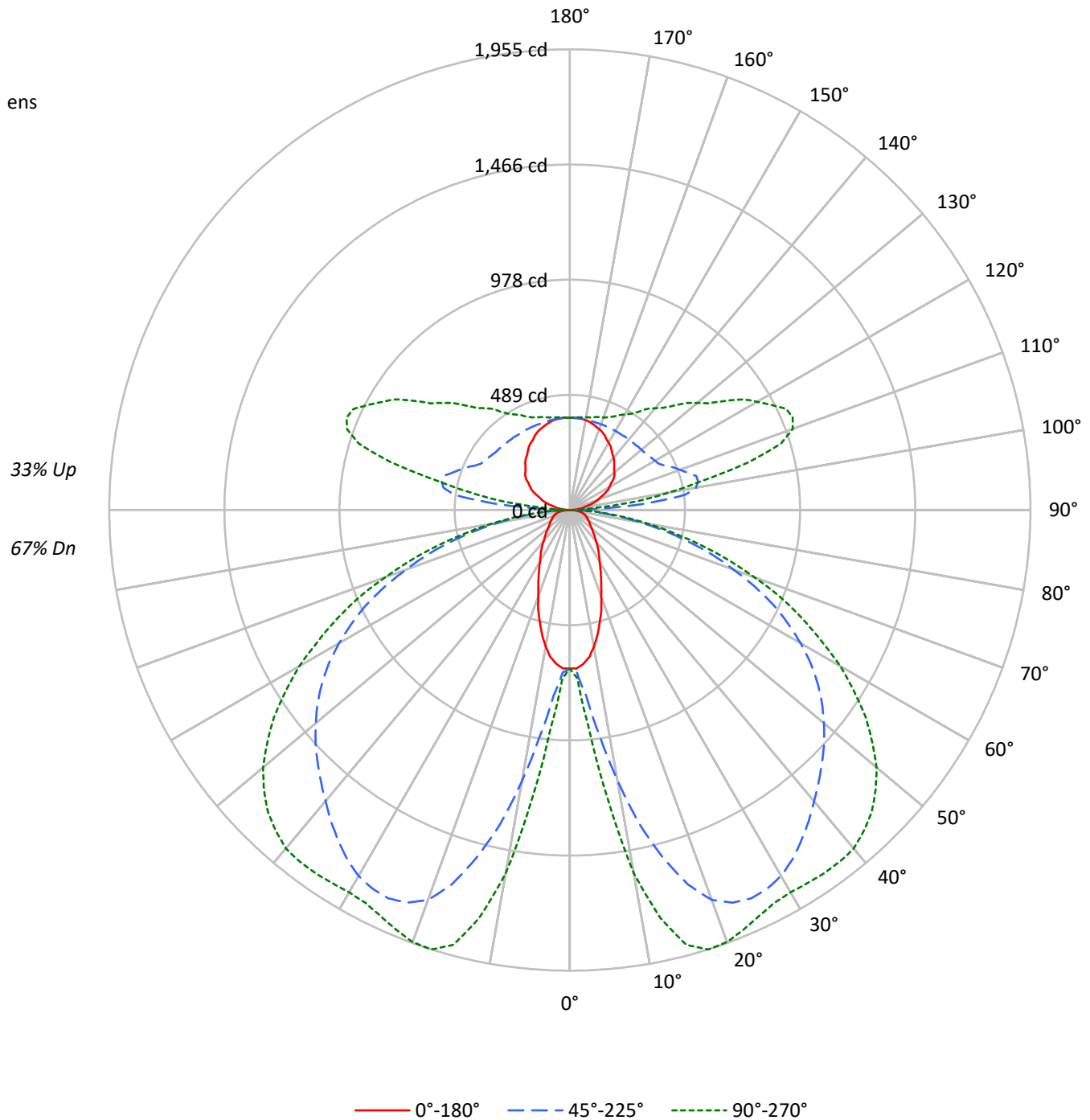
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7748.9 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 84
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: P936971
CATALOG NUMBER: SQ4-FB-050U-125D-935-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P936971

CATALOG NUMBER: SQ4-FB-050U-125D-935-1D-UNV-STD-W-6

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°	4161	4161	4161
5°	4063	4808	5593
10°	3684	7007	9272
15°	3130	9152	11196
20°	2547	10603	11410
25°	2124	11092	11178
30°	1790	11160	11157
35°	1583	10972	11446
40°	1378	10727	11744
45°	1247	10547	11790
50°	1143	10386	11594
55°	1093	10150	11080
60°	1118	9700	10269
65°	1162	9017	9154
70°	1235	7858	7734
75°	1364	6402	6035
80°	1478	4434	4067
85°	1288	2349	2081

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11790 cd/sqm



TEST NUMBER: P936971

CATALOG NUMBER: SQ4-FB-050U-125D-935-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.0	1.1
10°-20°	385.6	5.0
20°-30°	674.5	8.7
30°-40°	868.2	11.2
40°-50°	969.8	12.5
50°-60°	928.8	12.0
60°-70°	736.1	9.5
70°-80°	432.8	5.6
80°-90°	121.8	1.6
90°-100°	191.3	2.5
100°-110°	503.0	6.5
110°-120°	521.5	6.7
120°-130°	418.3	5.4
130°-140°	328.2	4.2
140°-150°	251.9	3.3
150°-160°	181.4	2.3
160°-170°	111.0	1.4
170°-180°	37.5	0.5
0°-30°	1147.1	14.8
0°-40°	2015.3	26.0
0°-60°	3914.0	50.5
0°-90°	5204.7	67.2
90°-120°	1215.8	15.7
90°-150°	2214.3	28.6
90°-180°	2544.0	32.8
0°-180°	7748.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	673	673	673	673	673	
5°	655	703	792	895	928	60
15°	491	906	1527	1851	1910	137
25°	314	1027	1819	1899	1901	144
35°	212	982	1713	1810	1882	132
45°	145	783	1514	1734	1812	112
55°	104	497	1285	1492	1533	95
65°	82	264	954	1073	1088	81
75°	61	162	523	575	577	63
85°	22	50	130	143	145	23
90°	3	7	20	10	10	4
95°	25	99	330	170	116	28
105°	91	137	556	844	788	96
115°	161	195	445	888	1014	159
125°	224	251	405	685	808	199
135°	267	294	392	553	627	206
145°	310	329	388	472	508	194
155°	350	360	388	425	438	161
165°	377	382	388	403	408	107
175°	392	392	390	395	395	37
180°	392	392	392	392	392	



TEST NUMBER: P936971

CATALOG NUMBER: SQ4-FB-050U-125D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	672.6	672.6	672.6	672.6	672.6	672.6	672.6	672.6	672.6	672.6	672.6
2.5°	672.6	672.6	676.9	679.0	683.4	685.6	689.9	694.2	707.2	709.4	713.7
5°	655.3	664.0	692.1	702.9	733.1	774.2	791.5	819.6	878.1	895.4	906.2
7.5°	629.4	648.8	718.0	735.3	811.0	919.1	964.5	1025.1	1118.1	1163.5	1200.3
10°	588.2	629.4	752.6	793.7	917.0	1081.4	1165.7	1250.1	1390.6	1453.3	1477.1
12.5°	542.8	609.9	789.4	845.6	1022.9	1263.0	1364.6	1457.6	1617.7	1702.0	1715.0
15°	490.9	581.7	824.0	906.2	1135.4	1414.4	1526.9	1641.5	1790.7	1851.2	1866.4
17.5°	445.5	560.1	856.4	942.9	1221.9	1550.6	1665.2	1760.4	1881.6	1922.6	1933.4
20°	389.3	525.5	878.1	990.5	1312.8	1650.2	1760.4	1833.9	1916.1	1942.0	1946.4
22.5°	348.2	488.8	891.0	1007.8	1373.3	1710.6	1803.7	1862.0	1918.3	1927.0	1929.1
25°	313.6	447.6	888.9	1027.3	1425.2	1747.5	1818.8	1862.0	1894.5	1898.9	1898.9
27.5°	281.2	402.2	880.2	1031.6	1464.2	1756.1	1812.3	1842.6	1857.7	1866.4	1866.4
30°	253.0	359.0	858.6	1022.9	1481.5	1747.5	1792.9	1808.0	1823.1	1836.1	1842.6
32.5°	231.4	317.9	826.1	1005.6	1483.6	1725.8	1758.3	1766.9	1788.5	1818.8	1829.6
35°	212.0	276.8	789.4	981.8	1470.6	1691.2	1712.9	1721.5	1764.7	1810.2	1825.3
37.5°	192.5	246.6	741.8	940.8	1451.1	1650.2	1665.2	1680.4	1747.5	1801.5	1818.8
40°	173.0	220.6	685.6	895.4	1420.9	1600.4	1613.3	1637.1	1725.8	1788.5	1805.8
42.5°	157.9	198.9	625.0	847.7	1381.9	1544.2	1563.6	1598.2	1699.8	1766.9	1786.4
45°	144.9	177.3	560.1	782.9	1332.2	1485.7	1513.8	1561.5	1669.6	1734.5	1751.8
47.5°	131.9	162.2	493.1	715.9	1278.2	1427.4	1464.2	1518.2	1628.5	1691.2	1706.4
50°	121.1	147.1	426.1	644.5	1219.7	1364.6	1407.9	1464.2	1576.6	1635.0	1654.4
52.5°	112.5	134.1	363.3	573.1	1152.7	1299.7	1349.5	1407.9	1513.8	1570.1	1583.1
55°	103.8	123.3	309.3	497.4	1083.5	1230.5	1284.6	1340.9	1444.7	1492.3	1500.9
57.5°	99.5	114.6	263.9	426.1	1010.0	1152.7	1213.2	1265.1	1362.5	1399.2	1407.9
60°	93.0	108.1	229.3	365.5	930.0	1079.1	1131.1	1183.0	1265.1	1295.5	1301.9
62.5°	86.5	103.8	203.3	307.1	847.7	992.7	1044.6	1092.2	1161.4	1183.0	1191.6
65°	82.2	99.5	183.9	263.9	763.4	901.8	953.7	994.8	1051.0	1072.7	1077.0
67.5°	77.9	95.2	168.7	227.1	679.0	811.0	850.0	888.9	932.1	953.7	955.9
70°	71.4	90.8	155.7	201.2	592.6	707.2	739.6	780.7	815.4	826.1	832.7
72.5°	67.1	84.3	147.1	181.6	503.9	607.7	638.0	661.7	692.1	702.9	702.9
75°	60.6	75.7	138.4	162.2	413.0	497.4	523.4	547.2	570.9	575.3	568.8
77.5°	54.1	67.1	118.9	136.2	322.2	393.6	415.3	428.2	447.6	452.0	454.2
80°	45.4	58.4	93.0	106.0	233.5	289.8	304.9	315.8	333.0	333.0	337.4
82.5°	34.6	45.4	67.1	75.7	157.9	198.9	212.0	218.5	229.3	229.3	229.3
85°	21.6	28.1	43.3	49.8	95.2	121.1	129.8	131.9	140.6	142.7	142.7
87.5°	10.8	15.2	28.1	30.2	49.8	62.7	62.7	67.1	67.1	64.9	62.7
90°	2.6	4.8	6.9	7.4	11.6	17.2	20.0	17.8	13.3	10.0	10.0
92.5°	10.6	28.5	46.3	50.9	71.5	99.0	112.7	98.7	70.9	50.0	48.1
95°	25.3	58.0	90.8	99.0	175.9	278.3	329.6	294.1	223.1	169.9	163.8
97.5°	43.7	72.7	101.6	108.8	236.9	407.8	493.1	470.7	425.8	392.2	380.7
100°	57.9	84.2	110.4	117.0	259.1	448.7	543.4	545.0	548.3	550.8	537.2
102.5°	70.0	94.6	119.0	125.2	269.3	461.5	557.6	586.2	643.3	686.2	674.5
105°	90.7	111.4	132.1	137.3	276.8	463.0	556.0	620.1	748.1	844.2	837.9
107.5°	111.7	131.0	150.3	155.1	278.3	442.4	524.4	613.7	792.4	926.4	927.9
110°	125.9	143.3	160.8	165.1	276.1	424.1	498.1	597.9	797.7	947.5	954.1



TEST NUMBER: P936971

CATALOG NUMBER: SQ4-FB-050U-125D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	139.9	156.5	173.1	177.3	276.2	408.2	474.1	576.4	780.8	934.0	944.1
115°	160.9	176.3	191.6	195.4	278.8	389.9	445.4	543.9	740.8	888.5	902.4
117.5°	181.7	195.7	209.6	213.1	284.0	378.5	425.7	514.5	692.2	825.5	841.0
120°	193.8	207.0	220.1	223.4	288.1	374.5	417.7	498.9	661.3	783.1	798.2
122.5°	205.8	219.0	232.2	235.5	294.2	372.5	411.7	484.8	631.1	740.7	755.6
125°	223.9	235.9	248.0	251.0	302.4	370.9	405.1	467.2	591.5	684.6	698.2
127.5°	238.6	250.8	263.0	266.1	310.6	369.9	399.6	452.9	559.5	639.5	651.0
130°	246.6	259.7	272.8	276.0	316.5	370.4	397.5	444.9	539.9	611.1	621.8
132.5°	254.7	267.9	281.0	284.2	321.4	370.9	395.7	438.2	523.1	586.9	596.4
135°	266.8	278.8	290.7	293.7	326.7	370.5	392.5	428.1	499.3	552.6	560.9
137.5°	279.2	291.0	302.8	305.8	334.5	372.8	391.9	422.0	482.1	527.3	534.0
140°	289.5	300.4	311.2	314.0	339.4	373.2	390.1	416.1	468.1	507.0	513.3
142.5°	297.3	307.4	317.5	320.0	343.4	374.5	390.1	413.0	458.5	492.8	498.2
145°	309.5	318.3	327.1	329.3	348.7	374.5	387.5	406.1	443.5	471.5	475.6
147.5°	321.6	330.2	338.8	340.9	356.4	377.1	387.5	402.1	431.5	453.6	457.0
150°	329.6	337.3	345.0	346.9	360.5	378.5	387.5	399.9	424.7	443.3	446.0
152.5°	337.6	343.5	349.4	350.9	363.0	379.3	387.5	398.1	419.3	435.1	437.2
155°	349.8	354.2	358.4	359.5	368.8	381.3	387.5	395.9	412.8	425.4	426.8
157.5°	358.8	363.0	367.2	368.2	374.6	383.2	387.5	394.0	407.2	417.0	417.9
160°	364.8	368.1	371.3	372.2	377.3	384.1	387.5	393.1	404.4	412.8	413.3
162.5°	370.9	373.3	375.8	376.4	380.1	385.0	387.5	392.3	401.7	408.8	409.3
165°	377.4	379.7	381.9	382.5	384.2	386.4	387.5	390.9	397.6	402.7	403.3
167.5°	383.5	384.5	385.6	385.9	387.3	389.2	390.1	392.3	396.8	400.1	400.4
170°	387.5	388.5	389.6	389.9	390.0	390.0	390.1	392.3	396.8	400.1	400.1
172.5°	389.6	389.9	390.0	390.1	390.1	390.1	390.1	391.8	395.3	398.0	397.8
175°	392.5	392.5	392.5	392.5	391.7	390.6	390.1	391.2	393.5	395.1	395.1
177.5°	392.5	392.5	392.5	392.5	391.9	391.1	390.6	391.5	393.3	394.6	394.3
180°	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5	392.5



TEST NUMBER: P936971

CATALOG NUMBER: SQ4-FB-050U-125D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	672.6	672.6
2.5°	718.0	713.7
5°	923.5	927.8
7.5°	1243.6	1241.4
10°	1546.3	1565.8
12.5°	1766.9	1771.2
15°	1901.0	1909.7
17.5°	1952.9	1955.1
20°	1955.1	1950.7
22.5°	1931.2	1927.0
25°	1903.1	1901.0
27.5°	1877.2	1879.3
30°	1866.4	1872.9
32.5°	1866.4	1877.2
35°	1870.7	1881.6
37.5°	1868.5	1881.6
40°	1859.9	1875.0
42.5°	1836.1	1847.0
45°	1799.3	1812.3
47.5°	1751.8	1760.4
50°	1691.2	1699.8
52.5°	1615.5	1617.7
55°	1524.7	1533.3
57.5°	1427.4	1429.5
60°	1319.2	1325.7
62.5°	1204.6	1204.6
65°	1083.5	1087.8
67.5°	958.1	968.9
70°	830.4	832.7
72.5°	705.0	705.0
75°	575.3	577.4
77.5°	452.0	452.0
80°	335.2	337.4
82.5°	231.4	235.7
85°	144.9	144.9
87.5°	67.1	60.6
90°	10.0	10.0
92.5°	40.0	32.1
95°	139.7	115.6
97.5°	334.8	289.0
100°	482.5	427.8
102.5°	627.7	580.8
105°	812.8	787.6
107.5°	934.0	940.1
110°	980.2	1006.5



TEST NUMBER: P936971

CATALOG NUMBER: SQ4-FB-050U-125D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	984.4	1024.6
115°	958.2	1014.1
117.5°	902.9	964.9
120°	858.3	918.5
122.5°	814.9	874.2
125°	752.9	807.6
127.5°	697.2	743.4
130°	664.4	707.0
132.5°	634.6	672.7
135°	593.8	626.6
137.5°	561.0	588.0
140°	538.5	563.7
142.5°	519.9	541.5
145°	492.0	508.4
147.5°	470.6	484.1
150°	457.1	468.1
152.5°	445.5	453.9
155°	432.3	437.8
157.5°	421.8	425.7
160°	415.5	417.7
162.5°	411.4	413.6
165°	405.6	407.8
167.5°	401.3	402.2
170°	400.1	400.1
172.5°	396.9	396.2
175°	395.1	395.1
177.5°	393.5	392.5
180°	392.5	392.5



TEST NUMBER: P936971
 CATALOG NUMBER: SQ4-FB-050U-125D-935-1D-UNV-STD-W-6

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	7.38	8.48	8.17	9.29	10.29	20.55	21.64	21.33	22.46	23.46
	3H	8.10	9.09	8.90	9.92	10.95	22.40	23.39	23.20	24.21	25.24
	4H	8.41	9.35	9.23	10.18	11.22	23.05	23.99	23.87	24.82	25.86
	6H	8.68	9.54	9.51	10.38	11.44	23.49	24.35	24.32	25.19	26.25
	8H	8.75	9.58	9.59	10.44	11.49	23.61	24.44	24.45	25.30	26.35
	12H	8.78	9.56	9.62	10.42	11.50	23.69	24.48	24.53	25.33	26.41
4H	2H	14.62	15.55	15.44	16.38	17.42	20.85	21.78	21.67	22.62	23.66
	3H	16.21	16.99	17.04	17.86	18.91	22.91	23.70	23.74	24.56	25.62
	4H	16.31	17.03	17.16	17.89	18.97	23.68	24.40	24.53	25.26	26.35
	6H	16.34	16.96	17.20	17.84	18.93	24.23	24.86	25.10	25.74	26.83
	8H	16.32	16.90	17.18	17.78	18.88	24.40	24.98	25.27	25.86	26.96
	12H	16.29	16.81	17.17	17.71	18.82	24.50	25.03	25.39	25.93	27.03
8H	4H	17.77	18.35	18.64	19.24	20.34	23.77	24.35	24.63	25.23	26.33
	6H	18.03	18.51	18.92	19.43	20.53	24.40	24.88	25.30	25.81	26.91
	8H	18.05	18.48	18.95	19.39	20.51	24.62	25.05	25.53	25.97	27.09
	12H	18.03	18.41	18.94	19.32	20.48	24.78	25.15	25.68	26.06	27.23
12H	4H	17.93	18.45	18.81	19.35	20.46	23.73	24.26	24.62	25.16	26.26
	6H	18.29	18.72	19.19	19.63	20.75	24.39	24.82	25.29	25.73	26.85
	8H	18.37	18.75	19.28	19.66	20.82	24.63	25.01	25.54	25.92	27.08