

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: P936944

Luminaire Tested: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

**Test Information**

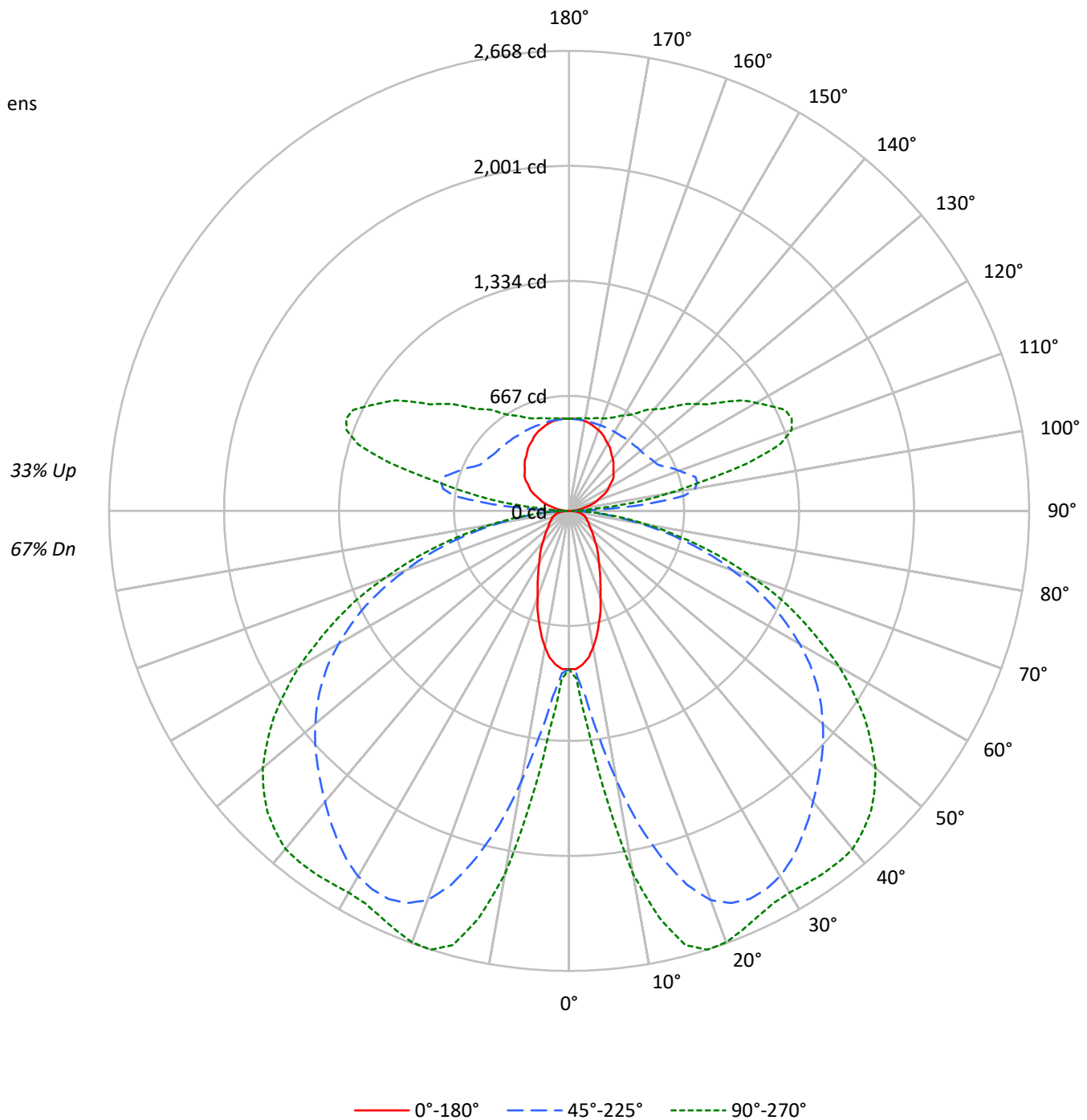
Test Method: LM-79-2019  
Report Number: P936944  
REPORT IS A COMBINATION OF REPORTS P933488 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-8-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10575.2 lumens  
Efficiency: N/A  
Efficacy: 94.4 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 (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





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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	0
RCR																		
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14

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

	0°	45°	90°
0°	4259	4259	4259
5°	4161	4923	5724
10°	3774	7175	9490
15°	3207	9374	11460
20°	2611	10863	11679
25°	2178	11368	11442
30°	1837	11440	11420
35°	1624	11250	11715
40°	1415	11003	12021
45°	1282	10822	12068
50°	1176	10659	11868
55°	1126	10421	11342
60°	1153	9963	10511
65°	1199	9268	9370
70°	1277	8082	7915
75°	1416	6590	6178
80°	1547	4570	4162
85°	1374	2425	2131

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12068 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.7	1.1
10°-20°	526.2	5.0
20°-30°	920.5	8.7
30°-40°	1184.9	11.2
40°-50°	1323.5	12.5
50°-60°	1267.6	12.0
60°-70°	1004.6	9.5
70°-80°	590.7	5.6
80°-90°	166.2	1.6
90°-100°	261.1	2.5
100°-110°	686.4	6.5
110°-120°	711.7	6.7
120°-130°	570.9	5.4
130°-140°	447.9	4.2
140°-150°	343.8	3.3
150°-160°	247.6	2.3
160°-170°	151.5	1.4
170°-180°	51.2	0.5
0°-30°	1565.5	14.8
0°-40°	2750.4	26.0
0°-60°	5341.5	50.5
0°-90°	7103.0	67.2
90°-120°	1659.2	15.7
90°-150°	3021.9	28.6
90°-180°	3472.0	32.8
0°-180°	10575.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	894	959	1080	1222	1266	83
15°	670	1237	2084	2526	2606	186
25°	428	1402	2482	2591	2594	197
35°	289	1340	2338	2470	2568	181
45°	198	1068	2066	2367	2473	153
55°	142	679	1753	2036	2093	129
65°	112	360	1302	1464	1485	111
75°	83	221	714	785	788	87
85°	30	68	177	195	198	31
90°	4	10	27	14	14	5
95°	34	135	450	232	158	38
105°	124	187	759	1152	1075	131
115°	220	267	608	1212	1384	217
125°	306	342	553	934	1102	271
135°	364	401	536	754	855	282
145°	422	449	529	644	694	265
155°	477	491	529	580	597	219
165°	515	522	529	550	556	145
175°	536	536	532	539	539	51
180°	536	536	536	536	536	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9
2.5°	917.9	917.9	923.8	926.8	932.6	935.6	941.5	947.5	965.2	968.1	974.0
5°	894.3	906.1	944.5	959.2	1000.6	1056.6	1080.3	1118.6	1198.3	1221.9	1236.6
7.5°	858.9	885.5	979.9	1003.5	1106.8	1254.4	1316.3	1399.0	1525.9	1587.9	1638.1
10°	802.8	858.9	1027.1	1083.2	1251.5	1475.7	1590.9	1706.0	1897.8	1983.4	2015.9
12.5°	740.8	832.4	1077.3	1154.0	1396.0	1723.7	1862.4	1989.3	2207.7	2322.8	2340.5
15°	670.0	794.0	1124.5	1236.6	1549.5	1930.2	2083.7	2240.2	2443.9	2526.5	2547.1
17.5°	608.0	764.4	1168.8	1286.9	1667.6	2116.3	2272.6	2402.5	2567.8	2623.9	2638.6
20°	531.2	717.2	1198.3	1351.7	1791.6	2252.0	2402.5	2502.8	2615.1	2650.5	2656.3
22.5°	475.2	667.0	1216.1	1375.4	1874.2	2334.6	2461.6	2541.2	2617.9	2629.8	2632.8
25°	428.0	610.9	1213.1	1402.0	1945.1	2384.8	2482.2	2541.2	2585.5	2591.4	2591.4
27.5°	383.7	548.9	1201.2	1407.9	1998.2	2396.6	2473.4	2514.7	2535.4	2547.1	2547.1
30°	345.3	489.9	1171.8	1396.0	2021.8	2384.8	2446.8	2467.4	2488.1	2505.8	2514.7
32.5°	315.9	433.8	1127.5	1372.4	2024.7	2355.3	2399.6	2411.3	2440.9	2482.2	2497.0
35°	289.3	377.8	1077.3	1340.0	2007.0	2308.1	2337.6	2349.3	2408.4	2470.4	2491.1
37.5°	262.7	336.4	1012.3	1283.9	1980.5	2252.0	2272.6	2293.3	2384.8	2458.6	2482.2
40°	236.1	301.0	935.6	1221.9	1939.1	2184.1	2201.8	2234.2	2355.3	2440.9	2464.5
42.5°	215.5	271.6	853.0	1157.0	1886.0	2107.4	2134.0	2181.1	2319.9	2411.3	2437.9
45°	197.8	242.0	764.4	1068.4	1818.1	2027.7	2066.0	2131.0	2278.5	2367.1	2390.7
47.5°	180.1	221.3	672.9	976.9	1744.3	1947.9	1998.2	2072.0	2222.5	2308.1	2328.8
50°	165.3	200.7	581.5	879.5	1664.6	1862.4	1921.4	1998.2	2151.7	2231.4	2257.9
52.5°	153.5	183.0	495.8	782.1	1573.1	1773.8	1841.7	1921.4	2066.0	2142.8	2160.5
55°	141.7	168.2	422.1	678.9	1478.7	1679.4	1753.2	1830.0	1971.6	2036.5	2048.3
57.5°	135.8	156.4	360.1	581.5	1378.3	1573.1	1655.8	1726.6	1859.4	1909.6	1921.4
60°	126.9	147.5	312.9	498.8	1269.2	1472.8	1543.6	1614.5	1726.6	1768.0	1776.8
62.5°	118.1	141.7	277.5	419.1	1157.0	1354.7	1425.6	1490.5	1584.9	1614.5	1626.3
65°	112.1	135.8	250.9	360.1	1041.9	1230.8	1301.6	1357.7	1434.4	1464.0	1469.8
67.5°	106.2	129.8	230.2	309.9	926.8	1106.8	1159.9	1213.1	1272.1	1301.6	1304.6
70°	97.4	124.0	212.5	274.5	808.7	965.2	1009.4	1065.5	1112.7	1127.5	1136.3
72.5°	91.5	115.1	200.7	247.9	687.7	829.4	870.7	903.2	944.5	959.2	959.2
75°	82.7	103.3	188.9	221.3	563.8	678.9	714.3	746.7	779.2	785.1	776.3
77.5°	73.8	91.5	162.4	185.9	439.8	537.2	566.6	584.4	610.9	616.9	619.8
80°	62.0	79.7	126.9	144.6	318.7	395.5	416.1	431.0	454.5	454.5	460.4
82.5°	47.3	62.0	91.5	103.3	215.5	271.6	289.3	298.1	312.9	312.9	312.9
85°	29.5	38.4	59.0	67.8	129.8	165.3	177.1	180.1	191.8	194.8	194.8
87.5°	14.7	20.7	38.4	41.3	67.8	85.6	85.6	91.5	91.5	88.5	85.6
90°	3.6	6.5	9.3	10.0	15.8	23.5	27.3	24.2	18.2	13.7	13.7
92.5°	14.4	38.8	63.3	69.4	97.6	135.1	153.8	134.8	96.8	68.3	65.6
95°	34.5	79.3	124.0	135.2	240.0	379.8	449.7	401.3	304.5	231.9	223.7
97.5°	59.6	99.1	138.6	148.4	323.3	556.4	672.9	642.3	581.1	535.3	519.6
100°	79.1	114.8	150.6	159.6	353.6	612.3	741.6	743.8	748.3	751.6	732.9
102.5°	95.7	129.1	162.4	170.7	367.5	629.9	761.0	800.0	878.0	936.4	920.4
105°	123.7	151.9	180.2	187.3	377.9	631.9	758.8	846.2	1021.1	1152.1	1143.5
107.5°	152.4	178.8	205.1	211.7	379.7	603.7	715.7	837.6	1081.4	1264.3	1266.4
110°	171.8	195.6	219.5	225.4	376.9	578.8	679.8	816.0	1088.6	1293.0	1301.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	190.9	213.6	236.2	241.9	377.0	557.1	647.0	786.5	1065.5	1274.7	1288.4
115°	219.7	240.6	261.5	266.8	380.5	532.1	607.9	742.3	1010.9	1212.5	1231.5
117.5°	248.0	267.0	286.0	290.8	387.5	516.4	580.9	702.2	944.7	1126.6	1147.7
120°	264.6	282.5	300.4	304.9	393.3	511.2	570.1	680.9	902.5	1068.7	1089.2
122.5°	280.7	298.8	316.8	321.3	401.5	508.4	561.9	661.6	861.2	1010.9	1031.1
125°	305.6	322.0	338.4	342.5	412.6	506.1	552.9	637.6	807.2	934.3	953.0
127.5°	325.7	342.3	358.8	363.0	423.8	504.8	545.3	618.1	763.6	872.8	888.5
130°	336.4	354.3	372.3	376.7	431.9	505.6	542.4	607.2	736.8	833.9	848.5
132.5°	347.6	365.5	383.4	387.9	438.5	506.1	540.0	598.0	713.9	800.9	813.9
135°	364.2	380.5	396.7	400.8	445.7	505.6	535.6	584.2	681.3	754.1	765.4
137.5°	381.1	397.2	413.3	417.4	456.5	508.7	534.9	576.0	658.1	719.7	728.8
140°	395.0	409.9	424.8	428.5	463.1	509.3	532.4	567.9	638.8	692.0	700.5
142.5°	405.8	419.5	433.3	436.7	468.6	511.1	532.4	563.5	625.9	672.6	680.0
145°	422.4	434.4	446.4	449.4	475.9	511.2	528.8	554.3	605.3	643.5	649.1
147.5°	438.9	450.6	462.3	465.1	486.3	514.7	528.8	548.9	588.9	619.0	623.6
150°	449.7	460.3	470.8	473.4	491.9	516.5	528.8	545.7	579.6	605.0	608.8
152.5°	460.9	468.9	476.8	478.8	495.5	517.7	528.8	543.3	572.1	593.9	596.7
155°	477.4	483.3	489.2	490.7	503.4	520.3	528.8	540.3	563.2	580.5	582.4
157.5°	489.6	495.3	501.1	502.6	511.3	523.0	528.8	537.7	555.6	569.0	570.3
160°	497.8	502.4	506.8	508.0	514.9	524.2	528.8	536.5	551.7	563.2	564.0
162.5°	506.1	509.5	512.8	513.7	518.8	525.5	528.8	535.3	548.2	557.9	558.6
165°	515.1	518.2	521.1	521.9	524.2	527.2	528.8	533.4	542.7	549.6	550.4
167.5°	523.4	524.8	526.3	526.6	528.5	531.1	532.4	535.4	541.5	546.1	546.4
170°	528.8	530.2	531.7	532.0	532.1	532.3	532.4	535.4	541.5	546.1	546.1
172.5°	531.7	532.0	532.3	532.4	532.4	532.4	532.4	534.8	539.6	543.2	542.9
175°	535.6	535.6	535.6	535.6	534.6	533.1	532.4	533.9	536.9	539.2	539.2
177.5°	535.6	535.6	535.6	535.6	534.7	533.6	533.1	534.3	536.6	538.5	538.1
180°	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	917.9	917.9
2.5°	979.9	974.0
5°	1260.3	1266.2
7.5°	1697.1	1694.2
10°	2110.3	2136.9
12.5°	2411.3	2417.3
15°	2594.4	2606.2
17.5°	2665.2	2668.2
20°	2668.2	2662.2
22.5°	2635.7	2629.8
25°	2597.4	2594.4
27.5°	2561.9	2564.8
30°	2547.1	2556.0
32.5°	2547.1	2561.9
35°	2553.1	2567.8
37.5°	2550.1	2567.8
40°	2538.3	2559.0
42.5°	2505.8	2520.6
45°	2455.6	2473.4
47.5°	2390.7	2402.5
50°	2308.1	2319.9
52.5°	2204.8	2207.7
55°	2080.8	2092.6
57.5°	1947.9	1950.9
60°	1800.4	1809.3
62.5°	1644.0	1644.0
65°	1478.7	1484.6
67.5°	1307.5	1322.3
70°	1133.4	1136.3
72.5°	962.2	962.2
75°	785.1	788.1
77.5°	616.9	616.9
80°	457.5	460.4
82.5°	315.9	321.7
85°	197.8	197.8
87.5°	91.5	82.7
90°	13.7	13.7
92.5°	54.7	43.9
95°	190.7	157.8
97.5°	456.9	394.3
100°	658.4	583.7
102.5°	856.5	792.6
105°	1109.1	1074.8
107.5°	1274.7	1282.9
110°	1337.7	1373.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1343.4	1398.3
115°	1307.7	1383.9
117.5°	1232.3	1316.8
120°	1171.3	1253.5
122.5°	1112.1	1193.1
125°	1027.5	1102.2
127.5°	951.5	1014.4
130°	906.7	964.8
132.5°	866.0	918.1
135°	810.3	855.2
137.5°	765.6	802.4
140°	734.9	769.2
142.5°	709.5	739.0
145°	671.5	693.8
147.5°	642.2	660.7
150°	623.8	638.8
152.5°	608.1	619.4
155°	589.9	597.4
157.5°	575.6	580.9
160°	567.1	570.1
162.5°	561.5	564.4
165°	553.4	556.4
167.5°	547.6	548.9
170°	546.1	546.1
172.5°	541.8	540.7
175°	539.2	539.2
177.5°	536.9	535.6
180°	535.6	535.6



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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	7.47	8.56	8.25	9.38	10.38	20.65	21.74	21.43	22.56	23.56
	3H	8.19	9.18	8.99	10.00	11.03	22.50	23.49	23.30	24.31	25.34
	4H	8.50	9.43	9.31	10.27	11.30	23.16	24.09	23.97	24.93	25.96
	6H	8.76	9.63	9.59	10.47	11.52	23.60	24.47	24.43	25.31	26.36
	8H	8.84	9.66	9.67	10.52	11.57	23.73	24.55	24.57	25.41	26.47
	12H	8.86	9.65	9.71	10.50	11.58	23.80	24.59	24.65	25.45	26.53
4H	2H	14.71	15.65	15.53	16.48	17.52	20.95	21.88	21.77	22.72	23.75
	3H	16.30	17.08	17.13	17.95	19.00	23.01	23.80	23.85	24.66	25.72
	4H	16.40	17.12	17.25	17.98	19.07	23.79	24.51	24.64	25.37	26.45
	6H	16.43	17.05	17.29	17.94	19.02	24.35	24.97	25.21	25.85	26.94
	8H	16.41	16.99	17.28	17.88	18.98	24.51	25.09	25.38	25.98	27.08
	12H	16.38	16.91	17.27	17.81	18.91	24.62	25.14	25.51	26.05	27.15
8H	4H	17.87	18.45	18.73	19.33	20.43	23.87	24.45	24.74	25.34	26.44
	6H	18.12	18.61	19.02	19.53	20.63	24.51	25.00	25.41	25.92	27.02
	8H	18.14	18.57	19.05	19.49	20.61	24.74	25.17	25.64	26.08	27.20
	12H	18.12	18.50	19.03	19.41	20.58	24.89	25.27	25.80	26.18	27.35
12H	4H	18.02	18.55	18.91	19.45	20.56	23.84	24.36	24.72	25.26	26.37
	6H	18.38	18.81	19.29	19.73	20.85	24.50	24.93	25.40	25.85	26.96
	8H	18.47	18.84	19.37	19.75	20.92	24.74	25.12	25.65	26.03	27.20