

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: P938223

Luminaire Tested: SQ4-FB-150U-050D-927-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938223
REPORT IS A COMBINATION OF REPORTS P933637 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

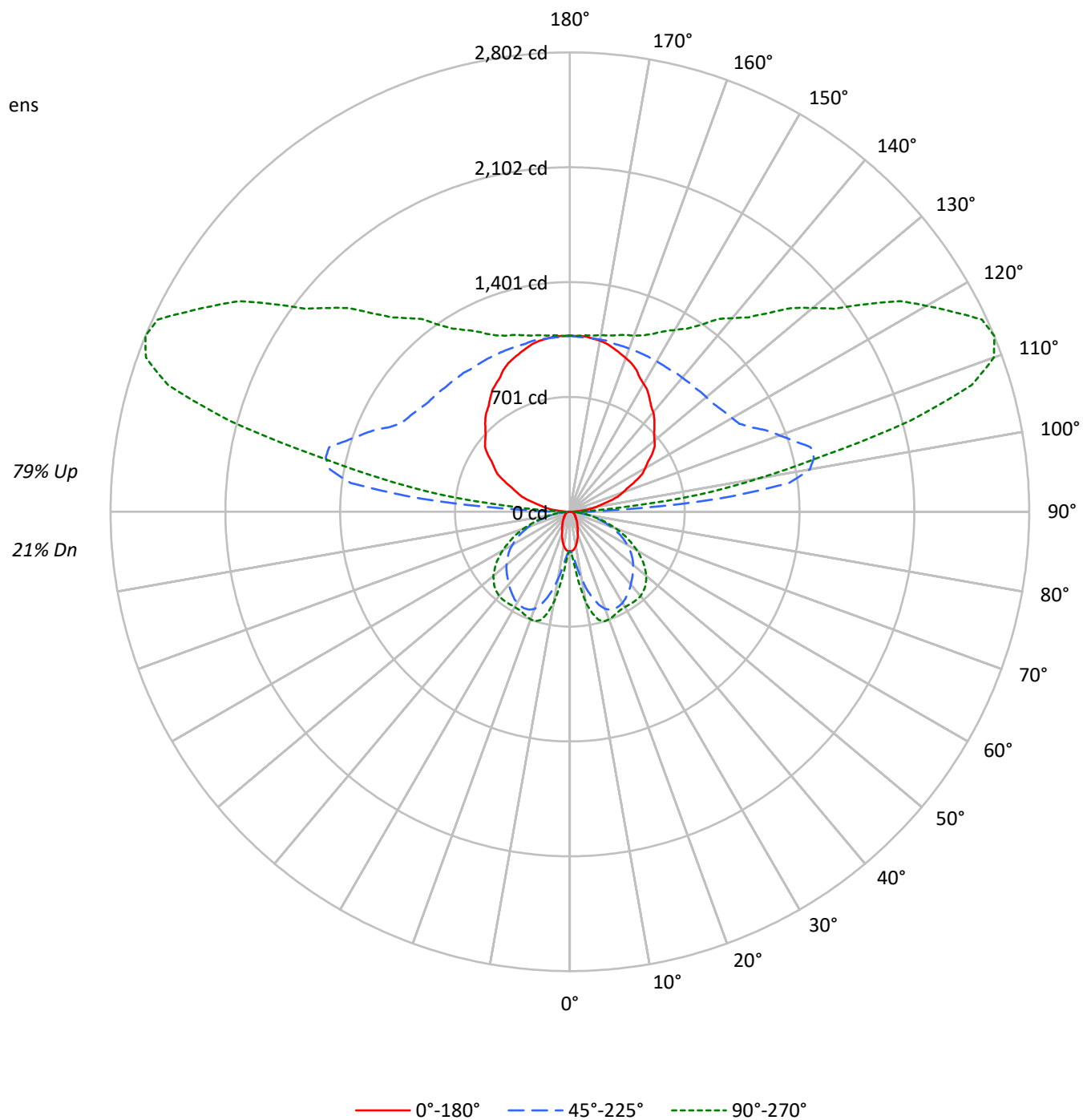
Lumens per Lamp: N/A
Luminaire Lumens: 8825.8 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 83.4
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: P938223

CATALOG NUMBER: SQ4-FB-150U-050D-927-1D-UNV-STD-W-6

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	26	25	24
2	83	75	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14
5	63	51	44	38	55	46	39	34	35	30	27	25	22	19	15	14	12
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11
7	53	41	33	28	47	37	30	25	28	23	20	20	17	14	12	11	9
8	49	37	30	24	43	33	27	22	25	21	17	18	15	13	11	9	8
9	45	34	26	21	40	30	24	19	23	18	15	16	13	11	10	9	7
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1490	1490	1490
5°	1455	1721	2003
10°	1320	2509	3320
15°	1121	3277	4009
20°	912	3797	4086
25°	761	3972	4003
30°	641	3997	3995
35°	567	3929	4099
40°	494	3842	4206
45°	447	3778	4222
50°	410	3719	4153
55°	392	3635	3969
60°	400	3474	3678
65°	415	3230	3278
70°	443	2815	2770
75°	488	2292	2161
80°	527	1588	1456
85°	465	842	745

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4222 cd/sqm

TEST NUMBER: P938223

CATALOG NUMBER: SQ4-FB-150U-050D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.2	0.4
10°-20°	138.1	1.6
20°-30°	241.5	2.7
30°-40°	310.9	3.5
40°-50°	347.3	3.9
50°-60°	332.6	3.8
60°-70°	263.6	3.0
70°-80°	155.0	1.8
80°-90°	47.2	0.5
90°-100°	523.2	5.9
100°-110°	1375.6	15.6
110°-120°	1426.3	16.2
120°-130°	1144.1	13.0
130°-140°	897.7	10.2
140°-150°	689.0	7.8
150°-160°	496.2	5.6
160°-170°	303.6	3.4
170°-180°	102.6	1.2
0°-30°	410.8	4.7
0°-40°	721.7	8.2
0°-60°	1401.7	15.9
0°-90°	1867.5	21.2
90°-120°	3325.1	37.7
90°-150°	6055.9	68.6
90°-180°	6958.0	78.8
0°-180°	8825.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	241	241	241	241	241	
5°	235	252	283	321	332	22
15°	176	325	547	663	684	49
25°	112	368	651	680	681	52
35°	76	352	613	648	674	47
45°	52	280	542	621	649	40
55°	37	178	460	534	549	34
65°	29	94	342	384	390	29
75°	22	58	187	206	207	23
85°	8	18	46	51	52	8
90°	7	20	55	27	27	6
95°	69	271	901	465	316	77
105°	248	375	1521	2309	2154	263
115°	440	534	1218	2430	2774	435
125°	612	686	1108	1872	2209	544
135°	730	803	1073	1511	1714	565
145°	846	900	1060	1290	1390	530
155°	957	983	1060	1163	1197	440
165°	1032	1046	1060	1102	1115	291
175°	1073	1073	1067	1080	1080	102
180°	1073	1073	1073	1073	1073	

TEST NUMBER: P938223

CATALOG NUMBER: SQ4-FB-150U-050D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9
2.5°	240.9	240.9	242.4	243.2	244.8	245.6	247.1	248.6	253.3	254.0	255.6
5°	234.7	237.8	247.9	251.7	262.6	277.3	283.4	293.5	314.5	320.6	324.6
7.5°	225.4	232.4	257.1	263.3	290.4	329.2	345.4	367.1	400.4	416.7	429.9
10°	210.7	225.4	269.5	284.3	328.4	387.2	417.5	447.7	498.0	520.4	529.0
12.5°	194.4	218.4	282.7	302.8	366.4	452.3	488.7	522.1	579.3	609.5	614.2
15°	175.8	208.4	295.1	324.6	406.6	506.5	546.8	587.9	641.3	663.0	668.4
17.5°	159.5	200.6	306.7	337.7	437.6	555.3	596.4	630.5	673.8	688.5	692.4
20°	139.4	188.2	314.5	354.7	470.2	591.0	630.5	656.8	686.2	695.5	697.1
22.5°	124.7	175.0	319.1	360.9	491.8	612.6	646.0	666.8	687.0	690.1	690.8
25°	112.3	160.3	318.3	367.9	510.4	625.8	651.3	666.8	678.4	680.0	680.0
27.5°	100.7	144.1	315.2	369.4	524.4	628.9	649.0	659.9	665.3	668.4	668.4
30°	90.6	128.6	307.5	366.4	530.5	625.8	642.1	647.5	652.9	657.6	659.9
32.5°	82.9	113.9	295.8	360.1	531.3	618.1	629.7	632.8	640.5	651.3	655.3
35°	75.9	99.2	282.7	351.7	526.7	605.7	613.4	616.5	632.0	648.3	653.7
37.5°	68.9	88.3	265.7	337.0	519.7	591.0	596.4	601.8	625.8	645.2	651.3
40°	62.0	79.0	245.6	320.6	508.9	573.1	577.8	586.3	618.1	640.5	646.7
42.5°	56.5	71.2	223.8	303.6	494.9	553.0	559.9	572.3	608.8	632.8	639.7
45°	51.9	63.5	200.6	280.4	477.1	532.1	542.2	559.2	597.9	621.2	627.3
47.5°	47.3	58.1	176.6	256.3	457.8	511.2	524.4	543.7	583.2	605.7	611.1
50°	43.4	52.7	152.6	230.8	436.8	488.7	504.2	524.4	564.6	585.5	592.5
52.5°	40.3	48.0	130.1	205.3	412.8	465.5	483.3	504.2	542.2	562.3	567.0
55°	37.2	44.1	110.7	178.1	388.0	440.7	460.1	480.2	517.4	534.4	537.5
57.5°	35.7	41.0	94.5	152.6	361.7	412.8	434.5	453.1	487.9	501.1	504.2
60°	33.3	38.7	82.1	130.9	333.0	386.5	405.1	423.7	453.1	463.9	466.2
62.5°	31.0	37.2	72.8	110.0	303.6	355.5	374.1	391.2	415.9	423.7	426.7
65°	29.4	35.7	65.8	94.5	273.4	322.9	341.6	356.3	376.4	384.2	385.7
67.5°	27.9	34.1	60.4	81.3	243.2	290.4	304.4	318.3	333.8	341.6	342.3
70°	25.6	32.5	55.7	72.0	212.2	253.3	264.9	279.6	292.0	295.8	298.2
72.5°	24.0	30.2	52.7	65.1	180.5	217.6	228.5	237.0	247.9	251.7	251.7
75°	21.7	27.1	49.6	58.1	147.9	178.1	187.4	196.0	204.4	206.1	203.7
77.5°	19.3	24.0	42.6	48.8	115.4	141.0	148.7	153.4	160.3	161.9	162.6
80°	16.2	20.9	33.3	38.0	83.6	103.8	109.2	113.1	119.3	119.3	120.8
82.5°	12.4	16.2	24.0	27.1	56.5	71.2	75.9	78.2	82.1	82.1	82.1
85°	7.8	10.1	15.5	17.8	34.1	43.4	46.5	47.3	50.4	51.1	51.1
87.5°	3.8	5.4	10.1	10.9	17.8	22.5	22.5	24.0	24.0	23.3	22.5
90°	7.2	13.0	18.7	20.2	31.7	47.0	54.7	48.7	36.5	27.4	27.4
92.5°	28.8	77.8	126.8	139.1	195.5	270.7	308.3	270.2	194.0	136.9	131.4
95°	69.1	158.8	248.5	270.9	481.0	761.1	901.2	804.2	610.1	464.6	448.1
97.5°	119.6	198.7	277.7	297.5	647.9	1115.0	1348.6	1287.3	1164.6	1072.7	1041.3
100°	158.5	230.2	301.9	319.9	708.6	1227.0	1486.2	1490.6	1499.7	1506.4	1469.0
102.5°	191.7	258.6	325.5	342.2	736.5	1262.2	1525.1	1603.1	1759.4	1876.6	1844.5
105°	247.8	304.5	361.1	375.3	757.1	1266.2	1520.8	1695.8	2046.1	2308.8	2291.6
107.5°	305.5	358.3	411.1	424.3	760.9	1209.8	1434.3	1678.6	2167.2	2533.6	2537.8
110°	344.3	392.1	439.7	451.7	755.2	1159.9	1362.2	1635.3	2181.6	2591.2	2609.1

TEST NUMBER: P938223

CATALOG NUMBER: SQ4-FB-150U-050D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	382.5	428.0	473.4	484.8	755.4	1116.3	1296.7	1576.2	2135.2	2554.5	2582.0
115°	440.1	482.1	524.1	534.5	762.4	1066.2	1218.1	1487.4	2025.9	2429.8	2468.0
117.5°	497.0	535.2	573.3	582.8	776.6	1035.0	1164.2	1407.2	1893.1	2257.6	2300.0
120°	530.2	566.1	602.0	610.9	788.1	1024.4	1142.5	1364.6	1808.7	2141.7	2182.8
122.5°	562.6	598.8	635.0	644.0	804.6	1018.9	1126.0	1325.9	1725.8	2025.7	2066.3
125°	612.3	645.3	678.3	686.5	827.0	1014.3	1108.0	1277.8	1617.5	1872.3	1909.6
127.5°	652.7	685.9	719.3	727.6	849.3	1011.6	1092.8	1238.6	1530.3	1749.1	1780.6
130°	674.3	710.2	746.1	755.0	865.7	1013.3	1087.1	1216.9	1476.6	1671.3	1700.4
132.5°	696.6	732.5	768.4	777.3	878.9	1014.3	1082.0	1198.2	1430.7	1605.0	1631.1
135°	729.7	762.4	795.1	803.3	893.3	1013.3	1073.4	1170.7	1365.4	1511.4	1533.8
137.5°	763.6	795.9	828.3	836.4	914.9	1019.6	1071.9	1154.2	1318.8	1442.2	1460.6
140°	791.7	821.5	851.2	858.7	928.1	1020.6	1066.9	1138.0	1280.1	1386.8	1403.9
142.5°	813.3	840.8	868.4	875.3	939.2	1024.3	1066.9	1129.4	1254.2	1347.8	1362.6
145°	846.5	870.5	894.5	900.5	953.6	1024.3	1059.7	1110.7	1212.9	1289.5	1300.7
147.5°	879.6	903.0	926.3	932.2	974.7	1031.3	1059.7	1099.9	1180.2	1240.5	1249.8
150°	901.2	922.3	943.4	948.7	985.7	1035.0	1059.7	1093.6	1161.5	1212.4	1219.9
152.5°	923.5	939.6	955.6	959.6	992.9	1037.4	1059.7	1088.6	1146.6	1190.0	1195.7
155°	956.6	968.5	980.4	983.3	1008.8	1042.7	1059.7	1082.7	1128.8	1163.4	1167.2
157.5°	981.1	992.7	1004.2	1007.1	1024.6	1048.0	1059.7	1077.6	1113.5	1140.4	1143.0
160°	997.8	1006.7	1015.6	1017.9	1031.8	1050.4	1059.7	1075.1	1105.8	1128.8	1130.4
162.5°	1014.3	1021.0	1027.7	1029.4	1039.5	1053.0	1059.7	1072.6	1098.6	1118.0	1119.5
165°	1032.3	1038.4	1044.4	1046.0	1050.5	1056.6	1059.7	1069.0	1087.5	1101.5	1103.0
167.5°	1048.9	1051.7	1054.7	1055.4	1059.2	1064.4	1066.9	1073.0	1085.2	1094.2	1094.9
170°	1059.7	1062.5	1065.4	1066.1	1066.4	1066.8	1066.9	1073.0	1085.2	1094.2	1094.2
172.5°	1065.4	1066.1	1066.8	1066.9	1066.9	1066.9	1066.9	1071.7	1081.3	1088.5	1087.9
175°	1073.4	1073.4	1073.4	1073.4	1071.2	1068.4	1066.9	1069.9	1076.0	1080.5	1080.5
177.5°	1073.4	1073.4	1073.4	1073.4	1071.7	1069.5	1068.3	1070.7	1075.5	1079.2	1078.5
180°	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4

TEST NUMBER: P938223

CATALOG NUMBER: SQ4-FB-150U-050D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	240.9	240.9
2.5°	257.1	255.6
5°	330.7	332.3
7.5°	445.4	444.6
10°	553.8	560.7
12.5°	632.8	634.3
15°	680.8	683.9
17.5°	699.4	700.2
20°	700.2	698.6
22.5°	691.6	690.1
25°	681.6	680.8
27.5°	672.3	673.1
30°	668.4	670.7
32.5°	668.4	672.3
35°	670.0	673.8
37.5°	669.2	673.8
40°	666.1	671.5
42.5°	657.6	661.4
45°	644.4	649.0
47.5°	627.3	630.5
50°	605.7	608.8
52.5°	578.6	579.3
55°	546.0	549.2
57.5°	511.2	512.0
60°	472.5	474.8
62.5°	431.4	431.4
65°	388.0	389.5
67.5°	343.1	347.0
70°	297.5	298.2
72.5°	252.5	252.5
75°	206.1	206.8
77.5°	161.9	161.9
80°	120.0	120.8
82.5°	82.9	84.4
85°	51.9	51.9
87.5°	24.0	21.7
90°	27.4	27.4
92.5°	109.6	87.9
95°	382.2	316.2
97.5°	915.8	790.3
100°	1319.5	1169.9
102.5°	1716.5	1588.4
105°	2222.8	2153.9
107.5°	2554.4	2571.0
110°	2680.8	2752.6



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CATALOG NUMBER: SQ4-FB-150U-050D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2692.2	2802.3
115°	2620.7	2773.5
117.5°	2469.4	2638.8
120°	2347.4	2512.0
122.5°	2228.6	2390.9
125°	2059.1	2208.7
127.5°	1906.8	2033.0
130°	1817.0	1933.5
132.5°	1735.4	1839.8
135°	1623.9	1713.8
137.5°	1534.3	1607.9
140°	1472.8	1541.6
142.5°	1421.9	1481.1
145°	1345.5	1390.3
147.5°	1286.9	1324.1
150°	1250.0	1280.1
152.5°	1218.4	1241.2
155°	1182.2	1197.3
157.5°	1153.6	1164.2
160°	1136.4	1142.5
162.5°	1125.2	1131.0
165°	1109.0	1115.1
167.5°	1097.5	1100.0
170°	1094.2	1094.2
172.5°	1085.7	1083.5
175°	1080.5	1080.5
177.5°	1075.9	1073.4
180°	1073.4	1073.4

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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	0.00	0.00	0.00	0.63	2.26	11.98	12.64	13.14	13.79	15.42
	3H	0.00	0.10	0.67	1.26	2.90	13.79	14.39	14.97	15.55	17.20
	4H	0.00	0.36	0.97	1.52	3.17	14.43	14.99	15.61	16.16	17.80
	6H	0.03	0.55	1.22	1.71	3.37	14.84	15.36	16.03	16.53	18.19
	8H	0.09	0.59	1.28	1.77	3.42	14.96	15.45	16.15	16.63	18.28
	12H	0.10	0.57	1.30	1.74	3.42	15.01	15.48	16.21	16.66	18.33
4H	2H	5.99	6.56	7.18	7.72	9.37	12.23	12.79	13.42	13.95	15.60
	3H	7.54	8.02	8.74	9.20	10.86	14.25	14.72	15.44	15.91	17.57
	4H	7.63	8.07	8.82	9.24	10.92	15.00	15.44	16.20	16.61	18.29
	6H	7.63	8.00	8.83	9.20	10.87	15.53	15.90	16.73	17.10	18.76
	8H	7.60	7.95	8.80	9.14	10.82	15.68	16.03	16.88	17.22	18.90
	12H	7.55	7.86	8.76	9.06	10.75	15.76	16.08	16.97	17.28	18.97
8H	4H	9.05	9.40	10.25	10.59	12.27	15.05	15.39	16.24	16.58	18.27
	6H	9.29	9.57	10.50	10.80	12.49	15.66	15.95	16.88	17.18	18.86
	8H	9.30	9.55	10.52	10.76	12.46	15.88	16.13	17.10	17.33	19.04
	12H	9.26	9.48	10.49	10.69	12.42	16.01	16.23	17.23	17.43	19.16
12H	4H	9.19	9.50	10.40	10.70	12.39	14.99	15.31	16.20	16.50	18.19
	6H	9.54	9.79	10.76	11.00	12.70	15.64	15.89	16.86	17.10	18.80
	8H	9.60	9.82	10.83	11.03	12.76	15.86	16.08	17.09	17.29	19.02

END OF REPORT