

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: P936627

Luminaire Tested: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-3500K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P936627  
REPORT IS A COMBINATION OF REPORTS P933461 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

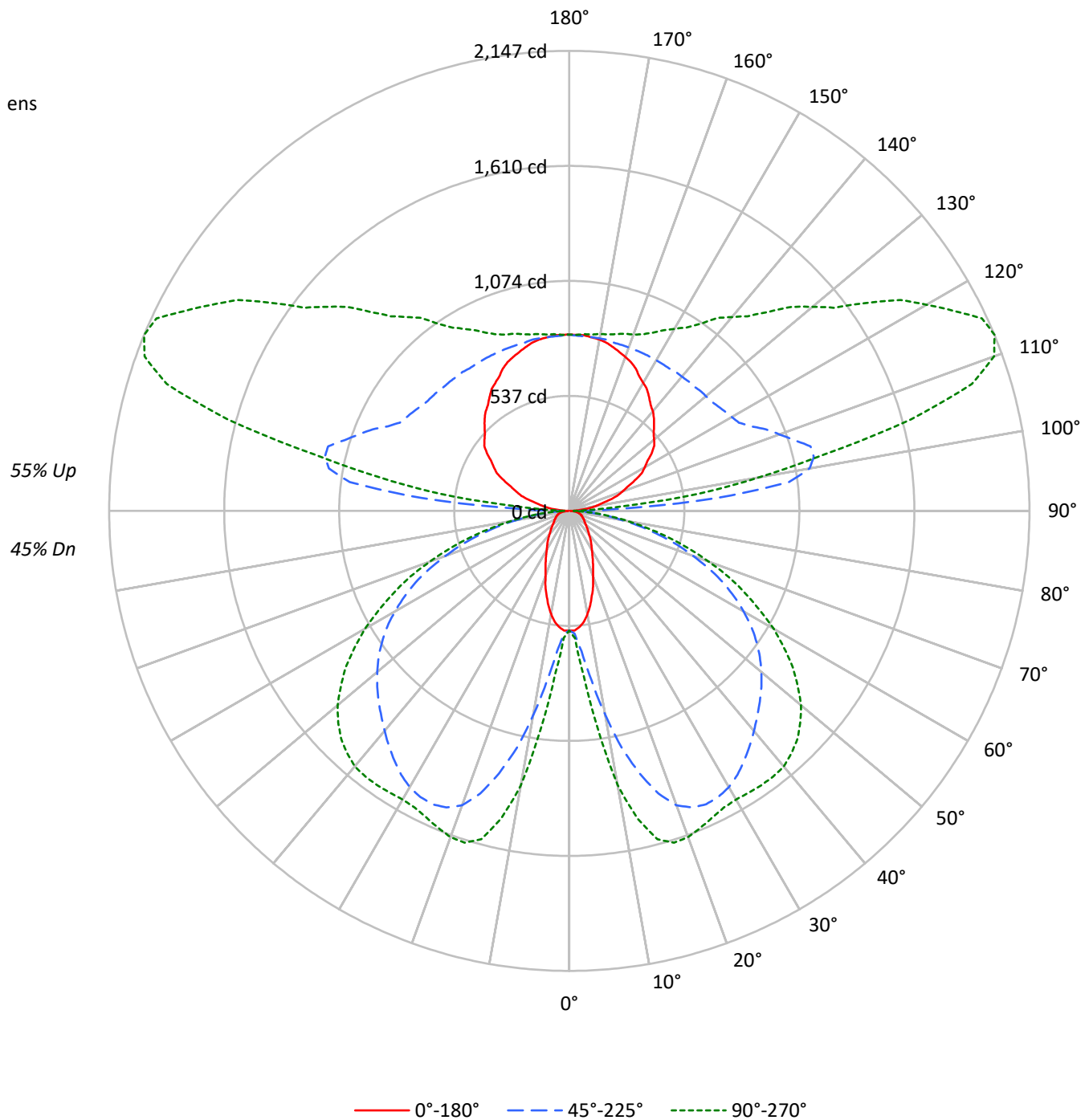
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9655.4 lumens  
Efficiency: N/A  
Efficacy: 113.3 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: General Diffuse

Input Watts (W): 85.2  
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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CATALOG NUMBER: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-12-3500K

### 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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

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

	0°	45°	90°
0°	1728	1728	1728
5°	1688	1997	2322
10°	1532	2912	3850
15°	1303	3806	4649
20°	1061	4411	4738
25°	886	4617	4642
30°	747	4648	4633
35°	661	4572	4753
40°	576	4473	4877
45°	522	4401	4896
50°	479	4336	4815
55°	459	4241	4601
60°	471	4057	4264
65°	491	3775	3801
70°	524	3295	3211
75°	583	2688	2506
80°	643	1867	1689
85°	580	992	864

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4896 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.3	0.7
10°-20°	320.2	3.3
20°-30°	560.1	5.8
30°-40°	721.1	7.5
40°-50°	805.4	8.3
50°-60°	771.4	8.0
60°-70°	611.3	6.3
70°-80°	359.5	3.7
80°-90°	103.0	1.1
90°-100°	400.9	4.2
100°-110°	1053.9	10.9
110°-120°	1092.8	11.3
120°-130°	876.5	9.1
130°-140°	687.8	7.1
140°-150°	527.9	5.5
150°-160°	380.2	3.9
160°-170°	232.6	2.4
170°-180°	78.6	0.8
0°-30°	952.6	9.9
0°-40°	1673.7	17.3
0°-60°	3250.5	33.7
0°-90°	4324.3	44.8
90°-120°	2547.5	26.4
90°-150°	4639.7	48.1
90°-180°	5331.0	55.2
0°-180°	9655.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	559	559	559	559	559	
5°	544	584	657	744	770	50
15°	408	753	1268	1537	1586	113
25°	260	853	1510	1577	1579	120
35°	176	815	1422	1503	1563	110
45°	120	650	1257	1440	1505	93
55°	86	413	1067	1239	1273	79
65°	68	219	792	891	903	68
75°	50	135	435	478	480	53
85°	18	41	108	118	120	19
90°	6	15	42	21	21	6
95°	53	208	690	356	242	59
105°	190	288	1165	1769	1650	201
115°	337	410	933	1862	2125	333
125°	469	526	849	1434	1692	416
135°	559	615	822	1158	1313	433
145°	648	690	812	988	1065	406
155°	733	753	812	891	917	337
165°	791	801	812	844	854	223
175°	822	822	817	828	828	78
180°	822	822	822	822	822	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	558.6	558.6	558.6	558.6	558.6	558.6	558.6	558.6	558.6	558.6	558.6
2.5°	558.6	558.6	562.2	564.0	567.5	569.3	573.0	576.5	587.3	589.1	592.7
5°	544.2	551.4	574.8	583.7	608.9	643.0	657.3	680.7	729.2	743.6	752.6
7.5°	522.6	538.8	596.3	610.6	673.6	763.4	801.0	851.4	928.6	966.3	996.8
10°	488.5	522.6	625.0	659.2	761.5	898.1	968.0	1038.1	1154.9	1207.0	1226.7
12.5°	450.8	506.5	655.5	702.2	849.5	1048.9	1133.4	1210.6	1343.5	1413.6	1424.3
15°	407.7	483.2	684.3	752.6	943.0	1174.6	1268.1	1363.2	1487.2	1537.4	1550.0
17.5°	370.0	465.1	711.2	783.1	1014.8	1287.8	1382.9	1462.0	1562.6	1596.7	1605.7
20°	323.3	436.5	729.2	822.6	1090.2	1370.4	1462.0	1523.1	1591.4	1612.9	1616.4
22.5°	289.2	405.9	740.0	837.0	1140.5	1420.7	1497.9	1546.5	1593.1	1600.3	1602.1
25°	260.5	371.8	738.2	853.2	1183.6	1451.2	1510.5	1546.5	1573.3	1577.0	1577.0
27.5°	233.5	334.1	731.0	856.7	1215.9	1458.5	1505.1	1530.2	1542.8	1550.0	1550.0
30°	210.1	298.1	713.0	849.5	1230.3	1451.2	1489.0	1501.6	1514.1	1524.9	1530.2
32.5°	192.2	264.0	686.1	835.1	1232.1	1433.3	1460.2	1467.4	1485.3	1510.5	1519.5
35°	176.0	229.9	655.5	815.4	1221.4	1404.5	1422.5	1429.7	1465.6	1503.4	1515.8
37.5°	159.9	204.8	616.1	781.3	1205.1	1370.4	1382.9	1395.5	1451.2	1496.1	1510.5
40°	143.7	183.2	569.3	743.6	1180.0	1329.1	1339.9	1359.6	1433.3	1485.3	1499.7
42.5°	131.1	165.2	519.1	704.1	1147.7	1282.4	1298.6	1327.3	1411.7	1467.4	1483.5
45°	120.3	147.3	465.1	650.2	1106.4	1233.9	1257.3	1296.8	1386.6	1440.4	1454.8
47.5°	109.5	134.7	409.5	594.5	1061.5	1185.4	1215.9	1260.8	1352.4	1404.5	1417.1
50°	100.6	122.1	353.8	535.2	1012.9	1133.4	1169.2	1215.9	1309.4	1357.9	1374.0
52.5°	93.4	111.4	301.7	475.9	957.3	1079.4	1120.8	1169.2	1257.3	1303.9	1314.7
55°	86.2	102.4	256.8	413.1	899.9	1022.0	1066.9	1113.5	1199.8	1239.3	1246.5
57.5°	82.7	95.2	219.1	353.8	838.8	957.3	1007.6	1050.7	1131.5	1162.1	1169.2
60°	77.2	89.8	190.4	303.6	772.3	896.3	939.4	982.4	1050.7	1075.9	1081.2
62.5°	71.9	86.2	168.8	255.0	704.1	824.4	867.5	907.0	964.5	982.4	989.6
65°	68.3	82.7	152.6	219.1	634.0	749.0	792.1	826.2	872.9	890.8	894.4
67.5°	64.6	79.0	140.1	188.6	564.0	673.6	705.9	738.2	774.1	792.1	793.9
70°	59.3	75.4	129.3	167.0	492.1	587.3	614.3	648.4	677.1	686.1	691.5
72.5°	55.7	70.1	122.1	150.9	418.5	504.7	529.9	549.6	574.8	583.7	583.7
75°	50.3	62.8	115.0	134.7	343.0	413.1	434.6	454.4	474.2	477.7	472.4
77.5°	44.9	55.7	98.8	113.2	267.6	326.9	344.8	355.6	371.8	375.3	377.1
80°	37.8	48.5	77.2	88.0	194.0	240.7	253.2	262.3	276.6	276.6	280.2
82.5°	28.7	37.8	55.7	62.8	131.1	165.2	176.0	181.4	190.4	190.4	190.4
85°	17.9	23.4	35.9	41.3	79.0	100.6	107.7	109.5	116.8	118.5	118.5
87.5°	9.0	12.6	23.4	25.2	41.3	52.1	52.1	55.7	55.7	53.9	52.1
90°	5.5	9.9	14.4	15.4	24.3	36.1	42.0	37.3	27.9	21.0	21.0
92.5°	22.0	59.5	97.1	106.5	149.7	207.4	236.2	207.0	148.6	104.9	100.7
95°	53.0	121.7	190.4	207.5	368.5	583.1	690.4	616.1	467.5	356.0	343.3
97.5°	91.6	152.2	212.8	228.0	496.4	854.2	1033.2	986.3	892.3	821.8	797.8
100°	121.4	176.4	231.3	245.0	542.9	940.0	1138.6	1142.0	1148.9	1154.1	1125.4
102.5°	146.8	198.1	249.3	262.2	564.2	967.1	1168.4	1228.2	1347.9	1437.7	1413.2
105°	189.9	233.2	276.6	287.5	580.0	970.1	1165.1	1299.3	1567.6	1768.9	1755.7
107.5°	234.0	274.5	315.0	325.1	583.1	927.0	1098.9	1286.1	1660.5	1941.2	1944.4
110°	263.9	300.4	337.0	346.1	578.6	888.7	1043.7	1253.0	1671.4	1985.3	1999.0



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	293.0	327.9	362.7	371.4	578.8	855.2	993.5	1207.6	1635.9	1957.2	1978.2
115°	337.2	369.4	401.5	409.5	584.1	816.9	933.3	1139.6	1552.2	1861.6	1890.9
117.5°	380.8	410.0	439.2	446.5	594.9	792.9	891.9	1078.1	1450.4	1729.7	1762.1
120°	406.2	433.7	461.1	468.0	603.8	784.9	875.4	1045.5	1385.7	1640.9	1672.4
122.5°	431.0	458.8	486.5	493.4	616.5	780.6	862.6	1015.8	1322.2	1552.0	1583.1
125°	469.2	494.4	519.7	526.0	633.7	777.1	848.9	979.0	1239.2	1434.4	1463.1
127.5°	500.0	525.6	551.1	557.4	650.7	775.1	837.3	949.0	1172.5	1340.1	1364.3
130°	516.6	544.1	571.5	578.4	663.2	776.3	832.9	932.3	1131.3	1280.5	1302.8
132.5°	533.7	561.2	588.7	595.6	673.4	777.1	829.0	918.1	1096.1	1229.7	1249.7
135°	559.1	584.1	609.1	615.4	684.4	776.4	822.4	897.0	1046.2	1158.0	1175.2
137.5°	585.0	609.8	634.7	640.8	701.0	781.2	821.3	884.3	1010.4	1105.0	1119.1
140°	606.5	629.4	652.1	657.9	711.1	781.9	817.4	871.8	980.8	1062.5	1075.7
142.5°	623.1	644.2	665.4	670.6	719.5	784.8	817.4	865.2	960.9	1032.7	1044.0
145°	648.5	666.9	685.3	689.9	730.6	784.8	811.9	851.0	929.3	988.0	996.5
147.5°	673.9	691.8	709.7	714.2	746.8	790.2	811.9	842.7	904.3	950.5	957.6
150°	690.4	706.6	722.8	726.9	755.2	793.0	811.9	837.9	889.9	928.9	934.7
152.5°	707.6	719.8	732.1	735.2	760.8	794.9	811.9	834.2	878.5	911.8	916.2
155°	732.9	742.0	751.1	753.4	772.9	798.9	811.9	829.6	864.9	891.4	894.2
157.5°	751.8	760.6	769.3	771.6	785.1	803.0	811.9	825.7	853.1	873.7	875.7
160°	764.4	771.3	778.2	779.9	790.6	804.8	811.9	823.7	847.2	864.9	866.0
162.5°	777.1	782.3	787.5	788.7	796.5	806.7	811.9	821.8	841.7	856.6	857.6
165°	791.0	795.6	800.2	801.4	804.9	809.6	811.9	819.1	833.3	843.9	845.0
167.5°	803.6	805.8	808.0	808.5	811.5	815.4	817.4	822.0	831.4	838.3	838.9
170°	811.9	814.1	816.3	816.8	817.0	817.3	817.4	822.0	831.4	838.3	838.3
172.5°	816.3	816.7	817.3	817.4	817.4	817.4	817.4	821.0	828.4	834.0	833.5
175°	822.4	822.4	822.4	822.4	820.7	818.4	817.4	819.7	824.4	827.9	827.9
177.5°	822.4	822.4	822.4	822.4	821.1	819.4	818.5	820.4	824.1	826.8	826.3
180°	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4	822.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	558.6	558.6
2.5°	596.3	592.7
5°	766.9	770.5
7.5°	1032.8	1031.0
10°	1284.2	1300.4
12.5°	1467.4	1470.9
15°	1578.8	1585.9
17.5°	1621.9	1623.7
20°	1623.7	1620.1
22.5°	1603.9	1600.3
25°	1580.6	1578.8
27.5°	1559.0	1560.8
30°	1550.0	1555.4
32.5°	1550.0	1559.0
35°	1553.6	1562.6
37.5°	1551.8	1562.6
40°	1544.6	1557.2
42.5°	1524.9	1533.9
45°	1494.3	1505.1
47.5°	1454.8	1462.0
50°	1404.5	1411.7
52.5°	1341.7	1343.5
55°	1266.3	1273.4
57.5°	1185.4	1187.2
60°	1095.6	1101.0
62.5°	1000.4	1000.4
65°	899.9	903.4
67.5°	795.7	804.6
70°	689.7	691.5
72.5°	585.6	585.6
75°	477.7	479.5
77.5°	375.3	375.3
80°	278.4	280.2
82.5°	192.2	195.8
85°	120.3	120.3
87.5°	55.7	50.3
90°	21.0	21.0
92.5°	84.0	67.3
95°	292.8	242.3
97.5°	701.6	605.5
100°	1010.9	896.4
102.5°	1315.1	1217.0
105°	1703.0	1650.3
107.5°	1957.1	1969.8
110°	2053.9	2108.9





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2062.7	2147.0
115°	2007.9	2125.0
117.5°	1891.9	2021.7
120°	1798.5	1924.6
122.5°	1707.5	1831.8
125°	1577.6	1692.2
127.5°	1460.9	1557.5
130°	1392.1	1481.4
132.5°	1329.6	1409.6
135°	1244.1	1313.0
137.5°	1175.5	1231.9
140°	1128.4	1181.1
142.5°	1089.4	1134.8
145°	1030.9	1065.3
147.5°	986.0	1014.5
150°	957.7	980.8
152.5°	933.6	951.0
155°	905.8	917.3
157.5°	883.8	891.9
160°	870.8	875.4
162.5°	862.1	866.6
165°	849.8	854.4
167.5°	840.8	842.8
170°	838.3	838.3
172.5°	831.8	830.1
175°	827.9	827.9
177.5°	824.3	822.4
180°	822.4	822.4



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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	2.41	3.26	3.41	4.27	5.61	15.61	16.46	16.60	17.47	18.81
	3H	3.12	3.88	4.12	4.90	6.26	17.45	18.21	18.45	19.23	20.59
	4H	3.42	4.14	4.43	5.16	6.53	18.10	18.82	19.11	19.84	21.21
	6H	3.67	4.33	4.69	5.36	6.74	18.53	19.20	19.56	20.23	21.61
	8H	3.73	4.37	4.77	5.41	6.79	18.66	19.29	19.69	20.33	21.71
	12H	3.75	4.36	4.79	5.39	6.80	18.73	19.33	19.76	20.37	21.77
4H	2H	9.64	10.36	10.66	11.38	12.75	15.88	16.60	16.90	17.62	18.99
	3H	11.20	11.81	12.23	12.86	14.24	17.93	18.53	18.96	19.58	20.97
	4H	11.30	11.85	12.34	12.89	14.30	18.70	19.25	19.74	20.30	21.70
	6H	11.31	11.79	12.36	12.85	14.25	19.24	19.72	20.29	20.79	22.19
	8H	11.28	11.73	12.33	12.79	14.20	19.41	19.85	20.46	20.91	22.33
	12H	11.24	11.64	12.31	12.72	14.14	19.50	19.91	20.57	20.98	22.40
8H	4H	12.74	13.19	13.79	14.25	15.67	18.76	19.20	19.81	20.26	21.68
	6H	12.98	13.36	14.06	14.46	15.87	19.39	19.76	20.46	20.86	22.27
	8H	13.00	13.33	14.08	14.41	15.85	19.61	19.94	20.69	21.02	22.46
	12H	12.97	13.26	14.06	14.34	15.81	19.76	20.05	20.85	21.13	22.60
12H	4H	12.89	13.29	13.96	14.36	15.79	18.71	19.11	19.78	20.19	21.61
	6H	13.25	13.57	14.33	14.65	16.09	19.37	19.70	20.45	20.78	22.22
	8H	13.31	13.60	14.40	14.68	16.15	19.61	19.89	20.69	20.97	22.44