

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: P938316

Luminaire Tested: SQ4-FB-150U-075D-835-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

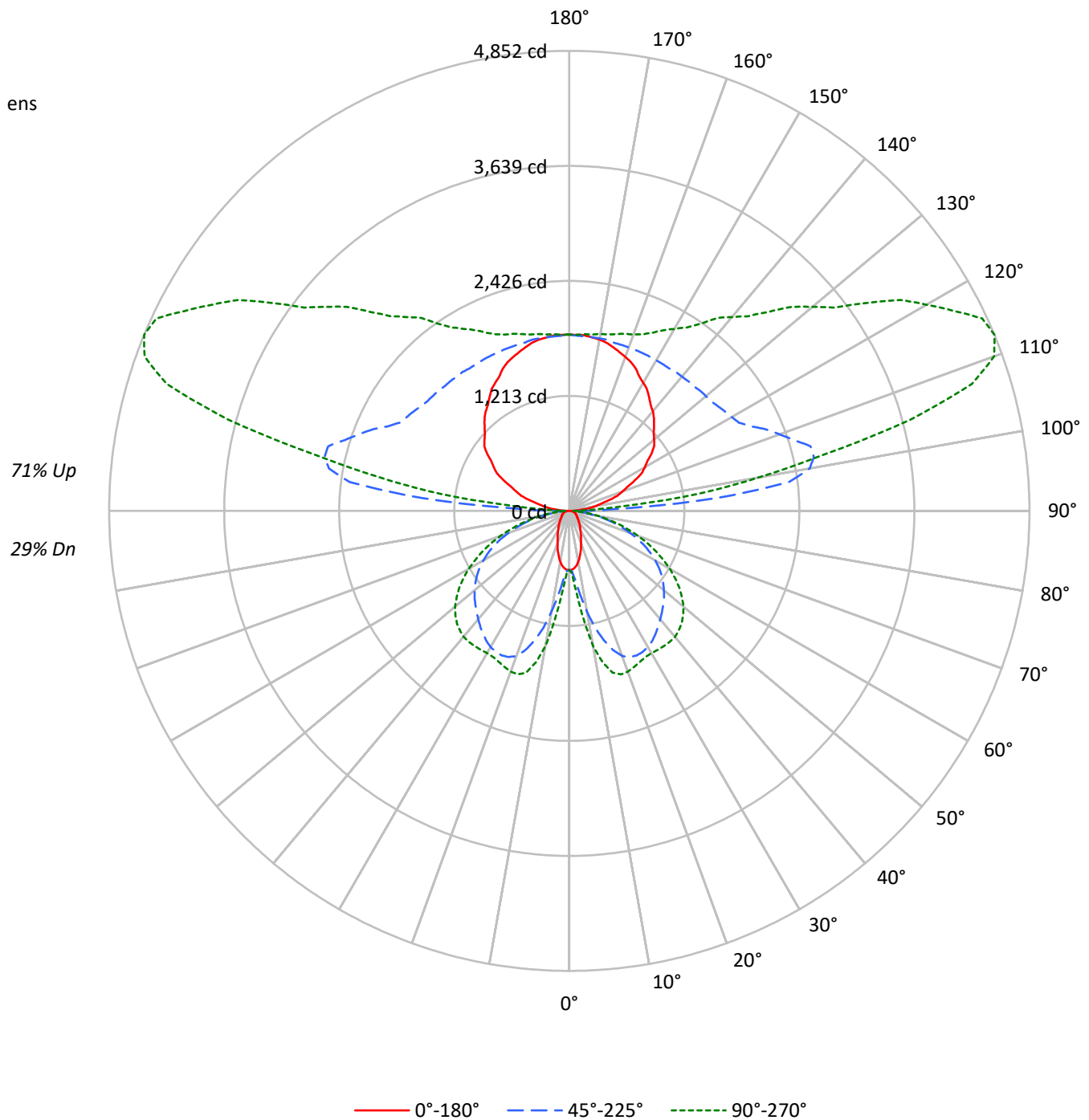
Test Method: LM-79-2019  
Report Number: P938316  
REPORT IS A COMBINATION OF REPORTS P933646 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-075D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16868.0 lumens  
Efficiency: N/A  
Efficacy: 132.6 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-Indirect  
  
Input Watts (W): 127.2  
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: P938316  
CATALOG NUMBER: SQ4-FB-150U-075D-835-1D-UNV-STD-W-8

### Luminous Intensity Polar Plot







TEST NUMBER: P938316

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.5	0.5
10°-20°	356.6	2.1
20°-30°	623.8	3.7
30°-40°	803.0	4.8
40°-50°	896.9	5.3
50°-60°	859.0	5.1
60°-70°	680.7	4.0
70°-80°	400.3	2.4
80°-90°	118.3	0.7
90°-100°	906.0	5.4
100°-110°	2381.9	14.1
110°-120°	2469.8	14.6
120°-130°	1981.1	11.7
130°-140°	1554.4	9.2
140°-150°	1193.1	7.1
150°-160°	859.2	5.1
160°-170°	525.7	3.1
170°-180°	177.6	1.1
0°-30°	1060.8	6.3
0°-40°	1863.8	11.0
0°-60°	3619.7	21.5
0°-90°	4819.1	28.6
90°-120°	5757.7	34.1
90°-150°	10486.3	62.2
90°-180°	12049.0	71.4
0°-180°	16868.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	622	622	622	622	622	
5°	606	650	732	828	858	56
15°	454	838	1412	1712	1766	126
25°	290	950	1682	1756	1758	134
35°	196	908	1584	1674	1740	122
45°	134	724	1400	1604	1676	104
55°	96	460	1188	1380	1418	87
65°	76	244	882	992	1006	75
75°	56	150	484	532	534	59
85°	20	46	120	132	134	21
90°	12	35	95	47	47	12
95°	120	469	1560	805	548	133
105°	429	650	2633	3998	3730	455
115°	762	926	2109	4208	4802	753
125°	1060	1189	1918	3242	3825	941
135°	1264	1391	1859	2617	2968	978
145°	1466	1559	1835	2233	2408	918
155°	1657	1703	1835	2015	2073	761
165°	1788	1811	1835	1907	1931	504
175°	1859	1859	1847	1871	1871	176
180°	1859	1859	1859	1859	1859	



TEST NUMBER: P938316

CATALOG NUMBER: SQ4-FB-150U-075D-835-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0
2.5°	622.0	622.0	626.0	628.0	632.0	634.0	638.0	642.0	654.0	656.0	660.0
5°	606.0	614.0	640.0	650.0	678.0	716.0	732.0	758.0	812.0	828.0	838.0
7.5°	582.0	600.0	664.0	680.0	750.0	850.0	892.0	948.0	1034.0	1076.0	1110.0
10°	544.0	582.0	696.0	734.0	848.0	1000.0	1078.0	1156.1	1286.1	1344.1	1366.1
12.5°	502.0	564.0	730.0	782.0	946.0	1168.1	1262.1	1348.1	1496.1	1574.1	1586.1
15°	454.0	538.0	762.0	838.0	1050.0	1308.1	1412.1	1518.1	1656.1	1712.1	1726.1
17.5°	412.0	518.0	792.0	872.0	1130.0	1434.1	1540.1	1628.1	1740.1	1778.1	1788.1
20°	360.0	486.0	812.0	916.0	1214.1	1526.1	1628.1	1696.1	1772.1	1796.1	1800.1
22.5°	322.0	452.0	824.0	932.0	1270.1	1582.1	1668.1	1722.1	1774.1	1782.1	1784.1
25°	290.0	414.0	822.0	950.0	1318.1	1616.1	1682.1	1722.1	1752.1	1756.1	1756.1
27.5°	260.0	372.0	814.0	954.0	1354.1	1624.1	1676.1	1704.1	1718.1	1726.1	1726.1
30°	234.0	332.0	794.0	946.0	1370.1	1616.1	1658.1	1672.1	1686.1	1698.1	1704.1
32.5°	214.0	294.0	764.0	930.0	1372.1	1596.1	1626.1	1634.1	1654.1	1682.1	1692.1
35°	196.0	256.0	730.0	908.0	1360.1	1564.1	1584.1	1592.1	1632.1	1674.1	1688.1
37.5°	178.0	228.0	686.0	870.0	1342.1	1526.1	1540.1	1554.1	1616.1	1666.1	1682.1
40°	160.0	204.0	634.0	828.0	1314.1	1480.1	1492.1	1514.1	1596.1	1654.1	1670.1
42.5°	146.0	184.0	578.0	784.0	1278.1	1428.1	1446.1	1478.1	1572.1	1634.1	1652.1
45°	134.0	164.0	518.0	724.0	1232.1	1374.1	1400.1	1444.1	1544.1	1604.1	1620.1
47.5°	122.0	150.0	456.0	662.0	1182.1	1320.1	1354.1	1404.1	1506.1	1564.1	1578.1
50°	112.0	136.0	394.0	596.0	1128.0	1262.1	1302.1	1354.1	1458.1	1512.1	1530.1
52.5°	104.0	124.0	336.0	530.0	1066.0	1202.1	1248.1	1302.1	1400.1	1452.1	1464.1
55°	96.0	114.0	286.0	460.0	1002.0	1138.1	1188.1	1240.1	1336.1	1380.1	1388.1
57.5°	92.0	106.0	244.0	394.0	934.0	1066.0	1122.0	1170.1	1260.1	1294.1	1302.1
60°	86.0	100.0	212.0	338.0	860.0	998.0	1046.0	1094.0	1170.1	1198.1	1204.1
62.5°	80.0	96.0	188.0	284.0	784.0	918.0	966.0	1010.0	1074.0	1094.0	1102.0
65°	76.0	92.0	170.0	244.0	706.0	834.0	882.0	920.0	972.0	992.0	996.0
67.5°	72.0	88.0	156.0	210.0	628.0	750.0	786.0	822.0	862.0	882.0	884.0
70°	66.0	84.0	144.0	186.0	548.0	654.0	684.0	722.0	754.0	764.0	770.0
72.5°	62.0	78.0	136.0	168.0	466.0	562.0	590.0	612.0	640.0	650.0	650.0
75°	56.0	70.0	128.0	150.0	382.0	460.0	484.0	506.0	528.0	532.0	526.0
77.5°	50.0	62.0	110.0	126.0	298.0	364.0	384.0	396.0	414.0	418.0	420.0
80°	42.0	54.0	86.0	98.0	216.0	268.0	282.0	292.0	308.0	308.0	312.0
82.5°	32.0	42.0	62.0	70.0	146.0	184.0	196.0	202.0	212.0	212.0	212.0
85°	20.0	26.0	40.0	46.0	88.0	112.0	120.0	122.0	130.0	132.0	132.0
87.5°	10.0	14.0	26.0	28.0	46.0	58.0	58.0	62.0	62.0	60.0	58.0
90°	12.5	22.5	32.4	34.9	54.9	81.5	94.8	84.3	63.2	47.4	47.4
92.5°	49.9	134.7	219.6	240.8	338.5	468.8	533.9	467.9	336.0	237.0	227.6
95°	119.8	275.0	430.2	469.0	832.8	1317.9	1560.5	1392.5	1056.6	804.6	776.0
97.5°	207.1	344.0	481.0	515.2	1121.9	1930.8	2335.2	2229.0	2016.7	1857.4	1803.1
100°	274.4	398.6	522.8	553.9	1227.1	2124.6	2573.4	2581.2	2596.7	2608.3	2543.6
102.5°	331.8	447.7	563.5	592.5	1275.3	2185.6	2640.8	2776.1	3046.6	3249.5	3194.1
105°	429.1	527.2	625.4	649.9	1311.0	2192.5	2633.3	2936.6	3543.1	3998.0	3968.2
107.5°	528.9	620.4	711.8	734.7	1317.7	2095.0	2483.6	2906.6	3752.7	4387.2	4394.4
110°	596.3	678.9	761.5	782.1	1307.7	2008.5	2358.9	2831.8	3777.6	4487.0	4518.0



TEST NUMBER: P938316

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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	662.4	741.1	819.8	839.5	1308.1	1932.9	2245.3	2729.3	3697.3	4423.3	4471.0
115°	762.2	834.8	907.4	925.6	1320.2	1846.3	2109.4	2575.6	3508.1	4207.5	4273.6
117.5°	860.7	926.7	992.7	1009.2	1344.7	1792.1	2015.8	2436.6	3278.2	3909.4	3982.7
120°	918.1	980.2	1042.3	1057.8	1364.7	1773.8	1978.4	2362.9	3131.9	3708.6	3779.8
122.5°	974.2	1036.9	1099.5	1115.2	1393.4	1764.3	1949.7	2295.9	2988.4	3507.7	3578.0
125°	1060.3	1117.4	1174.5	1188.8	1432.0	1756.3	1918.5	2212.6	2800.8	3242.0	3306.7
127.5°	1130.2	1187.8	1245.5	1259.9	1470.7	1751.8	1892.3	2144.8	2649.9	3028.7	3083.3
130°	1167.6	1229.7	1291.8	1307.3	1499.0	1754.5	1882.3	2107.1	2556.8	2894.0	2944.5
132.5°	1206.3	1268.4	1330.5	1346.0	1521.9	1756.4	1873.6	2074.8	2477.3	2779.2	2824.4
135°	1263.6	1320.2	1376.8	1390.9	1546.8	1754.7	1858.6	2027.2	2364.3	2617.1	2656.0
137.5°	1322.3	1378.3	1434.2	1448.2	1584.2	1765.5	1856.2	1998.7	2283.6	2497.3	2529.2
140°	1370.9	1422.5	1474.0	1486.9	1607.1	1767.3	1847.4	1970.5	2216.7	2401.3	2431.1
142.5°	1408.3	1456.0	1503.7	1515.6	1626.2	1773.7	1847.4	1955.5	2171.7	2333.9	2359.5
145°	1465.7	1507.3	1548.9	1559.3	1651.2	1773.7	1834.9	1923.3	2100.2	2232.9	2252.3
147.5°	1523.1	1563.6	1604.1	1614.2	1687.8	1785.9	1834.9	1904.5	2043.6	2148.0	2164.1
150°	1560.5	1597.1	1633.7	1642.8	1706.8	1792.2	1834.9	1893.7	2011.2	2099.4	2112.4
152.5°	1599.2	1626.9	1654.7	1661.6	1719.4	1796.4	1834.9	1885.1	1985.4	2060.7	2070.5
155°	1656.6	1677.1	1697.6	1702.7	1746.8	1805.5	1834.9	1874.8	1954.7	2014.6	2021.1
157.5°	1699.0	1719.0	1738.9	1743.9	1774.2	1814.7	1834.9	1866.0	1928.1	1974.7	1979.3
160°	1727.7	1743.2	1758.7	1762.6	1786.7	1818.8	1834.9	1861.5	1914.8	1954.7	1957.3
162.5°	1756.4	1768.0	1779.7	1782.6	1800.0	1823.3	1834.9	1857.4	1902.3	1936.0	1938.5
165°	1787.5	1798.0	1808.6	1811.2	1819.1	1829.6	1834.9	1851.0	1883.2	1907.3	1909.9
167.5°	1816.2	1821.2	1826.2	1827.5	1834.1	1843.0	1847.4	1857.9	1879.0	1894.8	1895.9
170°	1834.9	1839.9	1844.9	1846.2	1846.6	1847.1	1847.4	1857.9	1879.0	1894.8	1894.8
172.5°	1844.9	1846.0	1847.1	1847.4	1847.4	1847.4	1847.4	1855.7	1872.3	1884.8	1883.8
175°	1858.6	1858.6	1858.6	1858.6	1854.9	1849.9	1847.4	1852.7	1863.2	1871.1	1871.1
177.5°	1858.6	1858.6	1858.6	1858.6	1855.7	1851.8	1849.9	1854.1	1862.4	1868.6	1867.5
180°	1858.6	1858.6	1858.6	1858.6	1858.6	1858.6	1858.6	1858.6	1858.6	1858.6	1858.6



TEST NUMBER: P938316

CATALOG NUMBER: SQ4-FB-150U-075D-835-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	622.0	622.0
2.5°	664.0	660.0
5°	854.0	858.0
7.5°	1150.1	1148.1
10°	1430.1	1448.1
12.5°	1634.1	1638.1
15°	1758.1	1766.1
17.5°	1806.1	1808.1
20°	1808.1	1804.1
22.5°	1786.1	1782.1
25°	1760.1	1758.1
27.5°	1736.1	1738.1
30°	1726.1	1732.1
32.5°	1726.1	1736.1
35°	1730.1	1740.1
37.5°	1728.1	1740.1
40°	1720.1	1734.1
42.5°	1698.1	1708.1
45°	1664.1	1676.1
47.5°	1620.1	1628.1
50°	1564.1	1572.1
52.5°	1494.1	1496.1
55°	1410.1	1418.1
57.5°	1320.1	1322.1
60°	1220.1	1226.1
62.5°	1114.0	1114.0
65°	1002.0	1006.0
67.5°	886.0	896.0
70°	768.0	770.0
72.5°	652.0	652.0
75°	532.0	534.0
77.5°	418.0	418.0
80°	310.0	312.0
82.5°	214.0	218.0
85°	134.0	134.0
87.5°	62.0	56.0
90°	47.4	47.4
92.5°	189.9	152.2
95°	661.8	547.6
97.5°	1585.7	1368.4
100°	2284.7	2025.8
102.5°	2972.3	2750.6
105°	3849.0	3729.8
107.5°	4423.2	4452.0
110°	4642.2	4766.4





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CATALOG NUMBER: SQ4-FB-150U-075D-835-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	4661.7	4852.4
115°	4538.1	4802.5
117.5°	4276.0	4569.3
120°	4064.8	4349.7
122.5°	3859.1	4140.2
125°	3565.7	3824.6
127.5°	3301.8	3520.2
130°	3146.3	3348.1
132.5°	3005.1	3185.9
135°	2811.8	2967.6
137.5°	2656.7	2784.2
140°	2550.3	2669.5
142.5°	2462.1	2564.7
145°	2329.9	2407.5
147.5°	2228.4	2292.7
150°	2164.6	2216.7
152.5°	2109.9	2149.3
155°	2047.2	2073.2
157.5°	1997.5	2015.8
160°	1967.9	1978.4
162.5°	1948.4	1958.4
165°	1920.5	1931.0
167.5°	1900.4	1904.8
170°	1894.8	1894.8
172.5°	1880.0	1876.1
175°	1871.1	1871.1
177.5°	1863.0	1858.6
180°	1858.6	1858.6



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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	2.30	3.01	3.41	4.13	5.67	15.48	16.19	16.59	17.31	18.85
	3H	2.99	3.63	4.12	4.76	6.32	17.31	17.95	18.43	19.07	20.63
	4H	3.28	3.89	4.42	5.02	6.58	17.94	18.55	19.08	19.68	21.24
	6H	3.53	4.09	4.67	5.21	6.79	18.37	18.93	19.51	20.05	21.63
	8H	3.59	4.12	4.74	5.27	6.84	18.48	19.02	19.63	20.16	21.73
	12H	3.60	4.11	4.75	5.25	6.84	18.55	19.05	19.70	20.19	21.78
4H	2H	9.50	10.11	10.64	11.23	12.80	15.73	16.34	16.88	17.47	19.03
	3H	11.05	11.56	12.20	12.71	14.29	17.76	18.28	18.91	19.42	21.00
	4H	11.14	11.61	12.29	12.74	14.34	18.53	19.00	19.68	20.13	21.73
	6H	11.14	11.54	12.30	12.70	14.29	19.06	19.46	20.21	20.62	22.21
	8H	11.11	11.49	12.27	12.64	14.25	19.21	19.59	20.37	20.74	22.35
	12H	11.06	11.40	12.23	12.57	14.18	19.30	19.64	20.47	20.80	22.42
8H	4H	12.57	12.95	13.73	14.10	15.70	18.57	18.95	19.73	20.10	21.71
	6H	12.80	13.12	13.98	14.31	15.91	19.20	19.51	20.37	20.70	22.30
	8H	12.82	13.09	14.00	14.26	15.89	19.41	19.68	20.60	20.86	22.48
	12H	12.78	13.02	13.97	14.19	15.85	19.55	19.79	20.74	20.96	22.62
12H	4H	12.71	13.05	13.88	14.21	15.82	18.52	18.86	19.69	20.02	21.63
	6H	13.06	13.33	14.24	14.51	16.13	19.18	19.45	20.36	20.62	22.24
	8H	13.12	13.36	14.31	14.53	16.19	19.40	19.64	20.59	20.81	22.46