

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: P936753

Luminaire Tested: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-12-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936753
REPORT IS A COMBINATION OF REPORTS P933462 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-93050-1D-UNV-STD-W-12-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

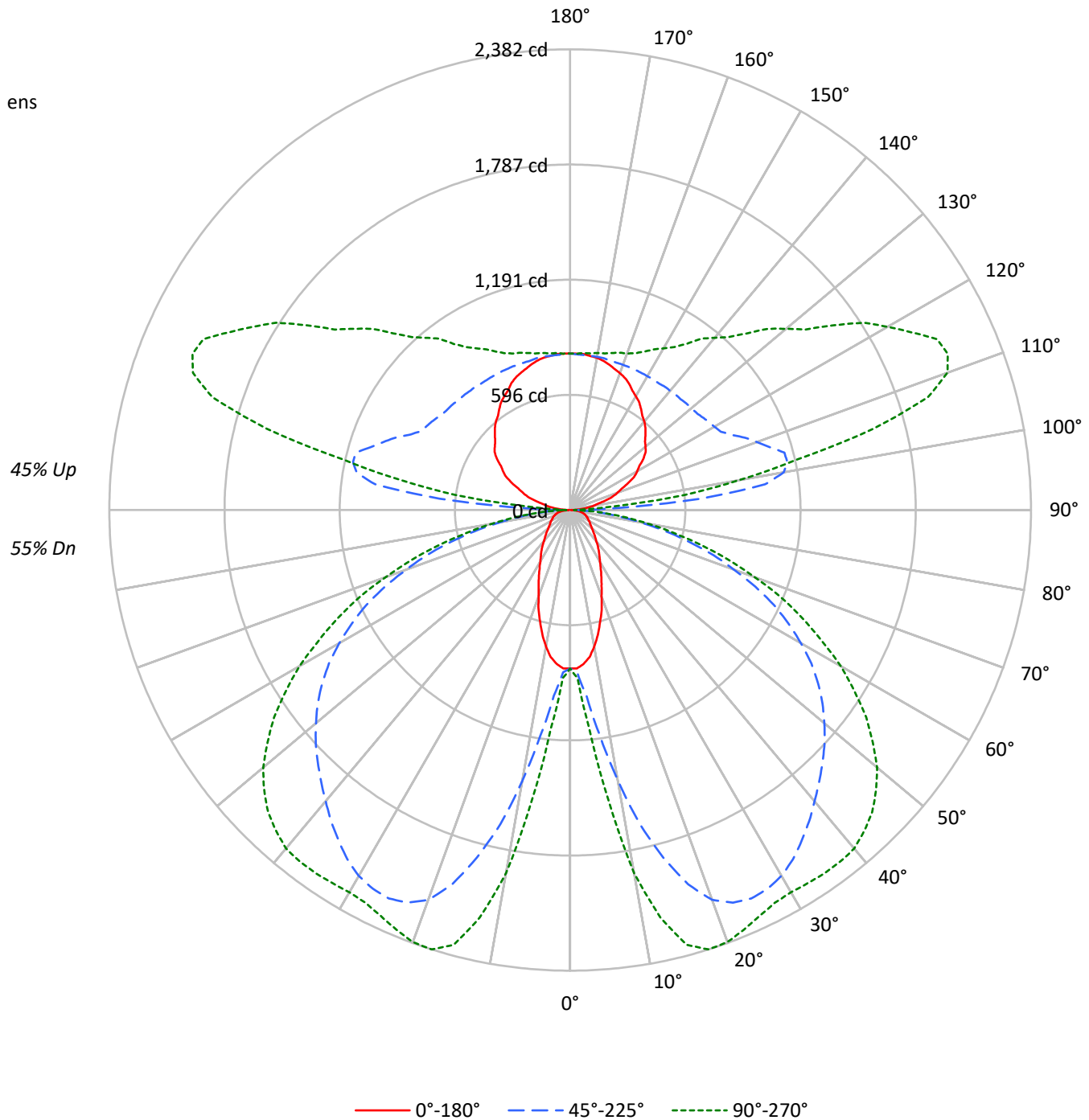
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11588.2 lumens
Efficiency: N/A
Efficacy: 106.1 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): 109.2
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

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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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2535	2535	2535
5°	2477	2930	3407
10°	2248	4273	5649
15°	1911	5583	6820
20°	1556	6472	6951
25°	1299	6774	6810
30°	1096	6819	6797
35°	969	6707	6973
40°	845	6562	7154
45°	766	6456	7182
50°	703	6361	7063
55°	674	6222	6750
60°	691	5951	6256
65°	720	5539	5577
70°	769	4833	4711
75°	855	3944	3676
80°	941	2739	2477
85°	852	1456	1268

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7182 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.0	0.9
10°-20°	469.8	4.1
20°-30°	821.8	7.1
30°-40°	1057.9	9.1
40°-50°	1181.6	10.2
50°-60°	1131.7	9.8
60°-70°	896.9	7.7
70°-80°	527.4	4.6
80°-90°	149.6	1.3
90°-100°	394.4	3.4
100°-110°	1037.0	8.9
110°-120°	1075.3	9.3
120°-130°	862.5	7.4
130°-140°	676.7	5.8
140°-150°	519.4	4.5
150°-160°	374.1	3.2
160°-170°	228.9	2.0
170°-180°	77.3	0.7
0°-30°	1397.6	12.1
0°-40°	2455.5	21.2
0°-60°	4768.8	41.2
0°-90°	6342.6	54.7
90°-120°	2506.7	21.6
90°-150°	4565.3	39.4
90°-180°	5246.0	45.3
0°-180°	11588.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	798	856	964	1091	1130	74
15°	598	1104	1860	2256	2327	166
25°	382	1252	2216	2314	2316	176
35°	258	1196	2087	2206	2292	161
45°	176	954	1844	2113	2208	137
55°	126	606	1565	1818	1868	115
65°	100	322	1162	1307	1325	99
75°	74	198	638	701	704	77
85°	26	61	158	174	176	28
90°	5	15	41	21	21	6
95°	52	204	679	350	238	58
105°	187	283	1146	1740	1624	198
115°	332	403	918	1832	2091	328
125°	462	518	835	1411	1665	410
135°	550	606	809	1139	1292	426
145°	638	679	799	972	1048	400
155°	721	741	799	877	903	331
165°	778	788	799	830	841	220
175°	809	809	804	815	815	77
180°	809	809	809	809	809	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	819.5	819.5	819.5	819.5	819.5	819.5	819.5	819.5	819.5	819.5	819.5
2.5°	819.5	819.5	824.7	827.4	832.6	835.3	840.5	845.8	861.6	864.2	869.5
5°	798.4	808.9	843.2	856.3	893.2	943.3	964.4	998.7	1069.9	1090.9	1104.1
7.5°	766.8	790.5	874.8	895.9	988.1	1119.9	1175.3	1249.0	1362.3	1417.7	1462.5
10°	716.7	766.8	916.9	967.0	1117.3	1317.5	1420.3	1523.1	1694.3	1770.7	1799.7
12.5°	661.4	743.0	961.7	1030.3	1246.4	1538.9	1662.7	1776.0	1971.0	2073.8	2089.6
15°	598.1	708.8	1004.0	1104.1	1383.4	1723.3	1860.3	2000.0	2181.8	2255.6	2274.0
17.5°	542.8	682.4	1043.5	1148.9	1488.8	1889.3	2029.0	2144.9	2292.5	2342.5	2355.7
20°	474.3	640.3	1069.9	1206.9	1599.5	2010.5	2144.9	2234.5	2334.6	2366.2	2371.5
22.5°	424.2	595.5	1085.7	1228.0	1673.3	2084.3	2197.6	2268.7	2337.2	2347.8	2350.4
25°	382.1	545.4	1083.0	1251.7	1736.5	2129.1	2216.0	2268.7	2308.3	2313.5	2313.5
27.5°	342.5	490.1	1072.5	1256.9	1783.9	2139.6	2208.1	2245.0	2263.5	2274.0	2274.0
30°	308.3	437.4	1046.1	1246.4	1805.0	2129.1	2184.4	2202.9	2221.3	2237.1	2245.0
32.5°	281.9	387.3	1006.6	1225.3	1807.6	2102.7	2142.3	2152.8	2179.2	2216.0	2229.2
35°	258.2	337.3	961.7	1196.3	1791.8	2060.6	2086.9	2097.5	2150.2	2205.5	2223.9
37.5°	234.5	300.4	903.8	1146.3	1768.1	2010.5	2029.0	2047.4	2129.1	2195.0	2216.0
40°	210.8	268.8	835.3	1090.9	1731.2	1949.9	1965.7	1994.7	2102.7	2179.2	2200.2
42.5°	192.3	242.4	761.5	1033.0	1683.8	1881.4	1905.1	1947.3	2071.1	2152.8	2176.5
45°	176.5	216.1	682.4	953.8	1623.2	1810.3	1844.5	1902.5	2034.2	2113.3	2134.4
47.5°	160.7	197.6	600.8	872.2	1557.3	1739.1	1783.9	1849.8	1984.2	2060.6	2079.0
50°	147.6	179.2	519.1	785.2	1486.2	1662.7	1715.4	1783.9	1920.9	1992.1	2015.8
52.5°	137.0	163.4	442.7	698.2	1404.5	1583.7	1644.3	1715.4	1844.5	1913.0	1928.8
55°	126.5	150.2	376.8	606.0	1320.2	1499.3	1565.2	1633.7	1760.2	1818.2	1828.7
57.5°	121.2	139.6	321.5	519.1	1230.6	1404.5	1478.3	1541.5	1660.1	1704.9	1715.4
60°	113.3	131.7	279.3	445.3	1133.1	1314.9	1378.1	1441.4	1541.5	1578.4	1586.3
62.5°	105.4	126.5	247.7	374.2	1033.0	1209.5	1272.7	1330.7	1415.0	1441.4	1451.9
65°	100.1	121.2	224.0	321.5	930.1	1098.8	1162.1	1212.1	1280.7	1307.0	1312.3
67.5°	94.9	115.9	205.5	276.7	827.4	988.1	1035.6	1083.0	1135.7	1162.1	1164.7
70°	87.0	110.7	189.7	245.0	722.0	861.6	901.1	951.2	993.4	1006.6	1014.5
72.5°	81.7	102.8	179.2	221.3	613.9	740.4	777.3	806.3	843.2	856.3	856.3
75°	73.8	92.2	168.6	197.6	503.3	606.0	637.6	666.6	695.6	700.9	693.0
77.5°	65.9	81.7	144.9	166.0	392.6	479.6	505.9	521.7	545.4	550.7	553.3
80°	55.3	71.1	113.3	129.1	284.6	353.1	371.5	384.7	405.8	405.8	411.0
82.5°	42.2	55.3	81.7	92.2	192.3	242.4	258.2	266.1	279.3	279.3	279.3
85°	26.3	34.3	52.7	60.6	115.9	147.6	158.1	160.7	171.3	173.9	173.9
87.5°	13.2	18.4	34.3	36.9	60.6	76.4	76.4	81.7	81.7	79.0	76.4
90°	5.4	9.7	14.1	15.2	23.9	35.5	41.3	36.7	27.5	20.6	20.6
92.5°	21.7	58.6	95.6	104.8	147.3	204.0	232.4	203.7	146.2	103.2	99.1
95°	52.2	119.7	187.3	204.2	362.6	573.8	679.4	606.2	460.0	350.3	337.8
97.5°	90.1	149.8	209.4	224.3	488.4	840.5	1016.6	970.4	877.9	808.7	785.0
100°	119.4	173.6	227.6	241.1	534.2	924.9	1120.4	1123.7	1130.5	1135.6	1107.4
102.5°	144.5	194.9	245.3	258.0	555.2	951.6	1149.7	1208.5	1326.3	1414.7	1390.5
105°	186.8	229.5	272.2	282.9	570.7	954.5	1146.4	1278.5	1542.5	1740.5	1727.5
107.5°	230.3	270.1	310.0	319.9	573.7	912.1	1081.3	1265.5	1633.8	1910.0	1913.2
110°	259.6	295.5	331.6	340.5	569.3	874.4	1027.0	1232.9	1644.6	1953.4	1967.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	288.3	322.6	356.9	365.5	569.5	841.5	977.5	1188.3	1609.7	1925.8	1946.5
115°	331.8	363.4	395.1	403.0	574.8	803.8	918.4	1121.3	1527.3	1831.8	1860.6
117.5°	374.7	403.4	432.1	439.3	585.4	780.2	877.6	1060.8	1427.2	1702.0	1733.9
120°	399.7	426.8	453.7	460.5	594.1	772.3	861.3	1028.8	1363.5	1614.6	1645.6
122.5°	424.1	451.4	478.7	485.5	606.6	768.1	848.8	999.5	1301.0	1527.1	1557.7
125°	461.6	486.5	511.3	517.6	623.5	764.6	835.3	963.3	1219.3	1411.4	1439.6
127.5°	492.0	517.1	542.3	548.5	640.3	762.6	823.8	933.8	1153.6	1318.6	1342.4
130°	508.4	535.4	562.4	569.1	652.6	763.9	819.5	917.4	1113.2	1259.9	1281.9
132.5°	525.1	552.2	579.2	586.0	662.6	764.6	815.7	903.3	1078.6	1209.9	1229.6
135°	550.2	574.8	599.4	605.5	673.4	763.9	809.2	882.6	1029.4	1139.4	1156.4
137.5°	575.6	600.1	624.5	630.5	689.7	768.7	808.1	870.1	994.2	1087.2	1101.1
140°	596.8	619.3	641.7	647.3	699.7	769.4	804.3	857.8	965.1	1045.4	1058.4
142.5°	613.1	633.9	654.7	659.9	708.0	772.2	804.3	851.3	945.5	1016.1	1027.3
145°	638.1	656.2	674.3	678.8	718.9	772.2	798.9	837.4	914.4	972.1	980.5
147.5°	663.1	680.7	698.3	702.7	734.8	777.6	798.9	829.2	889.8	935.2	942.2
150°	679.4	695.3	711.2	715.2	743.1	780.3	798.9	824.5	875.6	914.0	919.7
152.5°	696.2	708.3	720.4	723.4	748.6	782.1	798.9	820.8	864.4	897.2	901.5
155°	721.2	730.1	739.1	741.3	760.5	786.1	798.9	816.3	851.0	877.1	879.9
157.5°	739.7	748.4	757.0	759.2	772.5	790.1	798.9	812.4	839.4	859.7	861.7
160°	752.2	758.9	765.7	767.4	777.9	791.9	798.9	810.5	833.6	851.0	852.1
162.5°	764.6	769.7	774.8	776.1	783.7	793.8	798.9	808.7	828.2	842.8	843.9
165°	778.3	782.8	787.4	788.5	792.0	796.6	798.9	805.9	819.9	830.3	831.5
167.5°	790.7	792.8	795.0	795.6	798.5	802.3	804.3	808.8	818.0	824.9	825.4
170°	798.9	801.0	803.2	803.7	803.9	804.2	804.3	808.8	818.0	824.9	824.9
172.5°	803.2	803.6	804.2	804.3	804.3	804.3	804.3	807.9	815.2	820.6	820.2
175°	809.2	809.2	809.2	809.2	807.5	805.3	804.3	806.5	811.2	814.6	814.6
177.5°	809.2	809.2	809.2	809.2	807.9	806.3	805.4	807.2	810.8	813.6	813.0
180°	809.2	809.2	809.2	809.2	809.2	809.2	809.2	809.2	809.2	809.2	809.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	819.5	819.5
2.5°	874.8	869.5
5°	1125.2	1130.5
7.5°	1515.2	1512.5
10°	1884.0	1907.8
12.5°	2152.8	2158.1
15°	2316.2	2326.7
17.5°	2379.4	2382.0
20°	2382.0	2376.8
22.5°	2353.1	2347.8
25°	2318.8	2316.2
27.5°	2287.2	2289.8
30°	2274.0	2281.9
32.5°	2274.0	2287.2
35°	2279.3	2292.5
37.5°	2276.6	2292.5
40°	2266.1	2284.5
42.5°	2237.1	2250.3
45°	2192.3	2208.1
47.5°	2134.4	2144.9
50°	2060.6	2071.1
52.5°	1968.4	1971.0
55°	1857.7	1868.2
57.5°	1739.1	1741.8
60°	1607.4	1615.3
62.5°	1467.7	1467.7
65°	1320.2	1325.4
67.5°	1167.3	1180.5
70°	1011.9	1014.5
72.5°	859.0	859.0
75°	700.9	703.5
77.5°	550.7	550.7
80°	408.4	411.0
82.5°	281.9	287.2
85°	176.5	176.5
87.5°	81.7	73.8
90°	20.6	20.6
92.5°	82.6	66.2
95°	288.1	238.4
97.5°	690.3	595.8
100°	994.7	882.0
102.5°	1294.0	1197.5
105°	1675.7	1623.8
107.5°	1925.7	1938.2
110°	2021.0	2075.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2029.6	2112.6
115°	1975.7	2090.9
117.5°	1861.6	1989.3
120°	1769.7	1893.7
122.5°	1680.1	1802.4
125°	1552.3	1665.1
127.5°	1437.4	1532.5
130°	1369.8	1457.6
132.5°	1308.3	1387.0
135°	1224.2	1292.0
137.5°	1156.6	1212.1
140°	1110.3	1162.2
142.5°	1072.0	1116.6
145°	1014.3	1048.2
147.5°	970.2	998.2
150°	942.3	965.1
152.5°	918.6	935.7
155°	891.3	902.6
157.5°	869.6	877.6
160°	856.8	861.3
162.5°	848.3	852.7
165°	836.1	840.7
167.5°	827.4	829.3
170°	824.9	824.9
172.5°	818.5	816.8
175°	814.6	814.6
177.5°	811.1	809.2
180°	809.2	809.2



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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	4.66	5.61	5.57	6.54	7.74	17.85	18.80	18.76	19.74	20.93
	3H	5.37	6.23	6.29	7.17	8.39	19.71	20.56	20.62	21.50	22.72
	4H	5.68	6.48	6.61	7.43	8.66	20.36	21.17	21.29	22.11	23.34
	6H	5.93	6.68	6.88	7.63	8.87	20.80	21.54	21.74	22.50	23.74
	8H	6.00	6.71	6.95	7.68	8.93	20.92	21.64	21.88	22.61	23.85
	12H	6.02	6.70	6.98	7.66	8.93	21.00	21.67	21.96	22.64	23.91
4H	2H	11.90	12.71	12.84	13.65	14.88	18.14	18.95	19.08	19.89	21.12
	3H	13.47	14.15	14.42	15.13	16.37	20.20	20.87	21.15	21.85	23.10
	4H	13.57	14.19	14.53	15.16	16.43	20.97	21.59	21.93	22.56	23.83
	6H	13.59	14.12	14.56	15.12	16.38	21.52	22.06	22.49	23.05	24.32
	8H	13.56	14.07	14.54	15.05	16.34	21.69	22.19	22.66	23.18	24.46
	12H	13.53	13.98	14.52	14.98	16.27	21.79	22.24	22.78	23.25	24.54
8H	4H	15.03	15.53	16.00	16.51	17.80	21.04	21.54	22.01	22.53	23.81
	6H	15.27	15.69	16.27	16.72	18.00	21.68	22.09	22.68	23.12	24.40
	8H	15.29	15.66	16.30	16.67	17.98	21.90	22.27	22.91	23.28	24.59
	12H	15.26	15.59	16.28	16.60	17.94	22.05	22.38	23.07	23.39	24.73
12H	4H	15.17	15.63	16.17	16.63	17.92	21.00	21.45	21.99	22.45	23.74
	6H	15.53	15.90	16.54	16.92	18.22	21.66	22.03	22.67	23.05	24.35
	8H	15.61	15.93	16.62	16.94	18.29	21.90	22.22	22.91	23.23	24.58