

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: P936749

Luminaire Tested: SQ4-FB-050U-075D-930-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936749
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-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

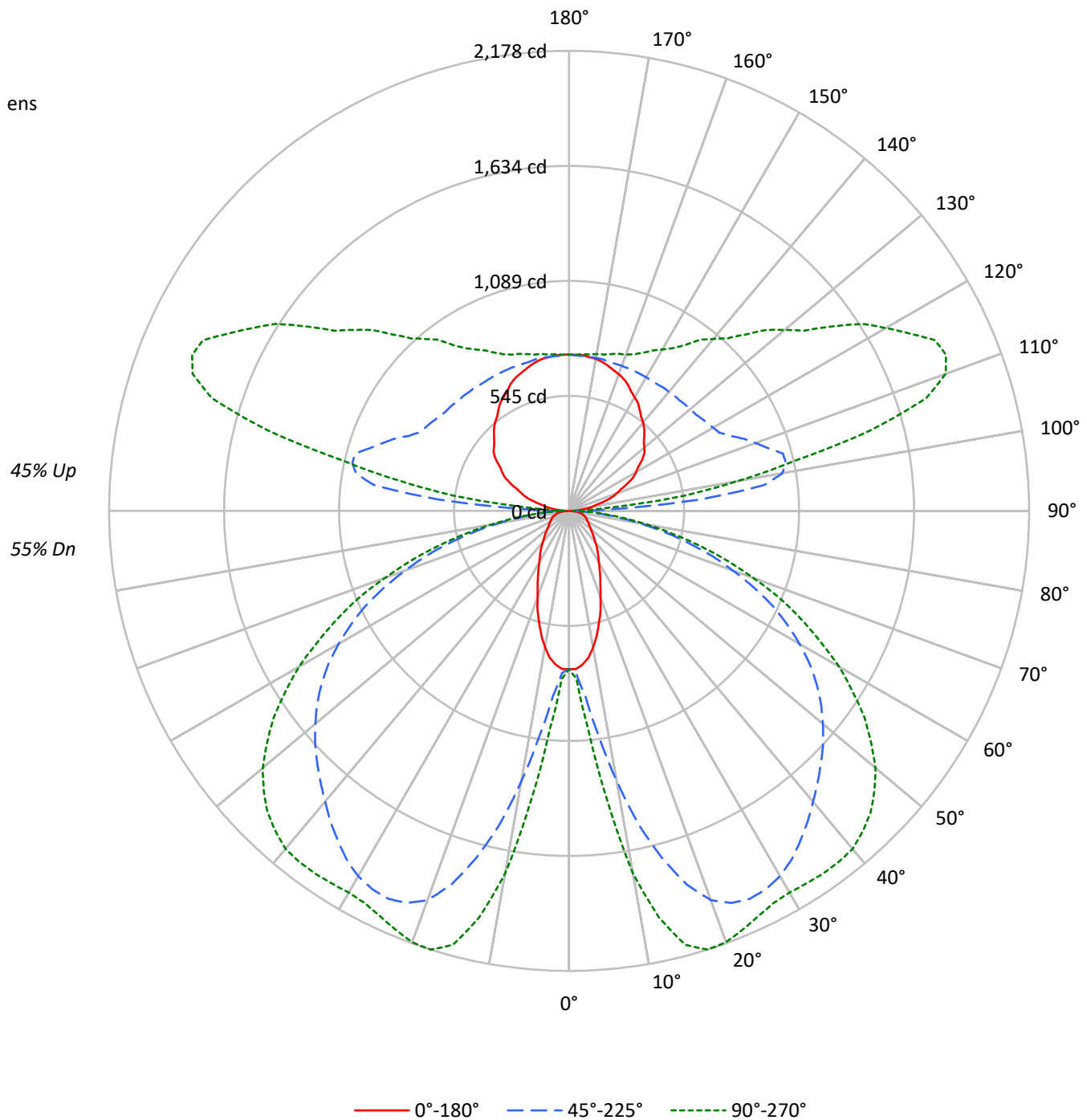
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10594.7 lumens
Efficiency: N/A
Efficacy: 97.0 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 (A_{in}): 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°	2317	2317	2317
5°	2265	2679	3115
10°	2055	3906	5164
15°	1747	5105	6236
20°	1423	5917	6355
25°	1187	6193	6226
30°	1002	6234	6214
35°	886	6132	6375
40°	773	5999	6541
45°	700	5903	6566
50°	643	5816	6458
55°	616	5688	6172
60°	632	5441	5720
65°	658	5064	5099
70°	703	4419	4307
75°	782	3606	3361
80°	861	2504	2265
85°	781	1330	1159

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6566 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.9	0.9
10°-20°	429.5	4.1
20°-30°	751.3	7.1
30°-40°	967.2	9.1
40°-50°	1080.3	10.2
50°-60°	1034.7	9.8
60°-70°	820.0	7.7
70°-80°	482.2	4.6
80°-90°	136.8	1.3
90°-100°	360.6	3.4
100°-110°	948.1	8.9
110°-120°	983.1	9.3
120°-130°	788.5	7.4
130°-140°	618.7	5.8
140°-150°	474.9	4.5
150°-160°	342.0	3.2
160°-170°	209.3	2.0
170°-180°	70.7	0.7
0°-30°	1277.8	12.1
0°-40°	2244.9	21.2
0°-60°	4359.9	41.2
0°-90°	5798.9	54.7
90°-120°	2291.7	21.6
90°-150°	4173.9	39.4
90°-180°	4796.0	45.3
0°-180°	10594.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	749	749	749	749	749	
5°	730	783	882	997	1034	67
15°	547	1010	1701	2062	2127	152
25°	349	1144	2026	2115	2118	161
35°	236	1094	1908	2016	2096	147
45°	161	872	1686	1932	2019	125
55°	116	554	1431	1662	1708	105
65°	92	294	1062	1195	1212	91
75°	68	181	583	641	643	71
85°	24	55	144	159	161	26
90°	5	14	38	19	19	6
95°	48	187	621	320	218	53
105°	171	259	1048	1591	1485	181
115°	303	368	840	1675	1912	300
125°	422	473	764	1290	1522	375
135°	503	554	740	1042	1181	389
145°	583	621	730	889	958	365
155°	659	678	730	802	825	303
165°	712	721	730	759	769	201
175°	740	740	735	745	745	70
180°	740	740	740	740	740	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	749.2	749.2	749.2	749.2	749.2	749.2	749.2	749.2	749.2	749.2	749.2
2.5°	749.2	749.2	754.0	756.4	761.2	763.7	768.5	773.3	787.7	790.2	795.0
5°	729.9	739.6	770.9	782.9	816.7	862.4	881.7	913.1	978.1	997.4	1009.5
7.5°	701.0	722.7	799.8	819.1	903.4	1023.9	1074.5	1141.9	1245.5	1296.1	1337.1
10°	655.2	701.0	838.3	884.1	1021.5	1204.6	1298.5	1392.5	1549.1	1618.9	1645.4
12.5°	604.7	679.3	879.3	942.0	1139.5	1406.9	1520.2	1623.7	1802.0	1896.0	1910.4
15°	546.8	648.0	917.9	1009.5	1264.8	1575.6	1700.8	1828.5	1994.7	2062.2	2079.0
17.5°	496.3	623.9	954.0	1050.4	1361.2	1727.3	1855.0	1961.0	2095.9	2141.7	2153.7
20°	433.6	585.4	978.1	1103.4	1462.3	1838.1	1961.0	2042.9	2134.5	2163.4	2168.2
22.5°	387.8	544.4	992.6	1122.7	1529.8	1905.6	2009.2	2074.2	2136.9	2146.5	2148.9
25°	349.3	498.7	990.2	1144.4	1587.6	1946.6	2026.0	2074.2	2110.4	2115.2	2115.2
27.5°	313.2	448.1	980.5	1149.2	1631.0	1956.2	2018.8	2052.5	2069.4	2079.0	2079.0
30°	281.9	399.9	956.5	1139.5	1650.2	1946.6	1997.1	2014.0	2030.9	2045.3	2052.5
32.5°	257.8	354.1	920.3	1120.3	1652.7	1922.5	1958.6	1968.2	1992.3	2026.0	2038.1
35°	236.1	308.4	879.3	1093.8	1638.2	1883.9	1908.0	1917.6	1965.8	2016.4	2033.3
37.5°	214.4	274.6	826.3	1048.0	1616.5	1838.1	1855.0	1871.9	1946.6	2006.8	2026.0
40°	192.7	245.7	763.7	997.4	1582.8	1782.7	1797.2	1823.7	1922.5	1992.3	2011.6
42.5°	175.9	221.6	696.2	944.4	1539.4	1720.1	1741.8	1780.3	1893.6	1968.2	1989.9
45°	161.4	197.5	623.9	872.1	1484.0	1655.1	1686.4	1739.4	1859.8	1932.1	1951.4
47.5°	146.9	180.7	549.3	797.4	1423.8	1590.0	1631.0	1691.2	1814.1	1883.9	1900.8
50°	134.9	163.8	474.6	717.9	1358.8	1520.2	1568.3	1631.0	1756.2	1821.3	1843.0
52.5°	125.3	149.4	404.7	638.4	1284.1	1447.9	1503.3	1568.3	1686.4	1749.0	1763.5
55°	115.6	137.3	344.5	554.1	1207.0	1370.8	1431.0	1493.7	1609.3	1662.3	1671.9
57.5°	110.8	127.7	293.9	474.6	1125.1	1284.1	1351.5	1409.3	1517.8	1558.7	1568.3
60°	103.6	120.4	255.4	407.1	1036.0	1202.2	1260.0	1317.8	1409.3	1443.1	1450.3
62.5°	96.4	115.6	226.4	342.1	944.4	1105.8	1163.6	1216.6	1293.7	1317.8	1327.4
65°	91.5	110.8	204.8	293.9	850.4	1004.6	1062.4	1108.2	1170.9	1194.9	1199.8
67.5°	86.7	106.0	187.9	252.9	756.4	903.4	946.8	990.2	1038.4	1062.4	1064.9
70°	79.5	101.2	173.4	224.0	660.1	787.7	823.9	869.6	908.2	920.3	927.5
72.5°	74.7	94.0	163.8	202.4	561.3	676.9	710.7	737.2	770.9	782.9	782.9
75°	67.5	84.3	154.2	180.7	460.1	554.1	583.0	609.5	636.0	640.8	633.6
77.5°	60.2	74.7	132.5	151.8	358.9	438.4	462.5	477.0	498.7	503.5	505.9
80°	50.6	65.0	103.6	118.0	260.2	322.8	339.7	351.7	371.0	371.0	375.8
82.5°	38.5	50.6	74.7	84.3	175.9	221.6	236.1	243.3	255.4	255.4	255.4
85°	24.1	31.3	48.2	55.4	106.0	134.9	144.5	146.9	156.6	159.0	159.0
87.5°	12.0	16.9	31.3	33.7	55.4	69.9	69.9	74.7	74.7	72.3	69.9
90°	5.0	8.9	12.9	13.9	21.8	32.4	37.7	33.6	25.1	18.9	18.9
92.5°	19.8	53.6	87.4	95.8	134.7	186.5	212.5	186.2	133.7	94.4	90.6
95°	47.7	109.4	171.3	186.7	331.5	524.6	621.1	554.2	420.5	320.2	308.8
97.5°	82.4	136.9	191.4	205.1	446.5	768.5	929.5	887.2	802.7	739.3	717.7
100°	109.2	158.7	208.1	220.4	488.4	845.6	1024.3	1027.4	1033.5	1038.2	1012.4
102.5°	132.1	178.2	224.3	235.8	507.6	870.0	1051.1	1104.9	1212.6	1293.4	1271.3
105°	170.8	209.8	248.8	258.6	521.8	872.7	1048.2	1168.8	1410.2	1591.3	1579.4
107.5°	210.5	246.9	283.4	292.5	524.5	833.9	988.6	1157.0	1493.7	1746.3	1749.2
110°	237.4	270.2	303.1	311.3	520.5	799.5	938.9	1127.2	1503.6	1786.0	1798.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	263.6	294.9	326.3	334.1	520.7	769.4	893.7	1086.4	1471.7	1760.7	1779.6
115°	303.4	332.3	361.2	368.4	525.5	734.9	839.6	1025.2	1396.3	1674.7	1701.1
117.5°	342.6	368.8	395.1	401.7	535.2	713.3	802.4	969.9	1304.8	1556.1	1585.2
120°	365.4	390.2	414.8	421.0	543.1	706.1	787.5	940.6	1246.6	1476.2	1504.5
122.5°	387.8	412.7	437.6	443.9	554.6	702.2	776.0	913.8	1189.5	1396.2	1424.1
125°	422.1	444.8	467.5	473.2	570.0	699.1	763.7	880.7	1114.8	1290.4	1316.2
127.5°	449.8	472.8	495.8	501.5	585.4	697.2	753.2	853.7	1054.7	1205.5	1227.3
130°	464.8	489.5	514.2	520.3	596.6	698.4	749.3	838.7	1017.7	1151.9	1172.0
132.5°	480.1	504.8	529.6	535.8	605.8	699.1	745.7	825.9	986.1	1106.2	1124.2
135°	503.0	525.5	548.0	553.6	615.7	698.4	739.8	806.9	941.1	1041.7	1057.2
137.5°	526.3	548.6	570.9	576.5	630.6	702.8	738.8	795.5	909.0	994.0	1006.7
140°	545.6	566.2	586.7	591.8	639.7	703.4	735.3	784.3	882.3	955.8	967.7
142.5°	560.6	579.5	598.6	603.3	647.3	706.0	735.3	778.3	864.4	929.0	939.2
145°	583.4	599.9	616.5	620.6	657.3	706.0	730.4	765.6	836.0	888.8	896.5
147.5°	606.3	622.3	638.5	642.5	671.8	710.9	730.4	758.1	813.5	855.0	861.5
150°	621.1	635.7	650.3	653.9	679.4	713.4	730.4	753.8	800.5	835.6	840.8
152.5°	636.5	647.5	658.6	661.4	684.4	715.1	730.4	750.4	790.3	820.3	824.2
155°	659.3	667.5	675.7	677.7	695.3	718.7	730.4	746.3	778.0	801.9	804.4
157.5°	676.3	684.2	692.1	694.1	706.2	722.4	730.4	742.8	767.4	786.0	787.8
160°	687.7	693.9	700.1	701.6	711.2	724.0	730.4	741.0	762.1	778.0	779.1
162.5°	699.1	703.7	708.4	709.5	716.5	725.8	730.4	739.3	757.1	770.6	771.5
165°	711.5	715.7	719.9	720.9	724.1	728.3	730.4	736.8	749.6	759.2	760.2
167.5°	722.9	724.9	726.9	727.4	730.0	733.5	735.3	739.5	747.9	754.2	754.7
170°	730.4	732.3	734.3	734.8	735.0	735.2	735.3	739.5	747.9	754.2	754.2
172.5°	734.3	734.7	735.2	735.3	735.3	735.3	735.3	738.6	745.3	750.2	749.8
175°	739.8	739.8	739.8	739.8	738.3	736.3	735.3	737.4	741.7	744.8	744.8
177.5°	739.8	739.8	739.8	739.8	738.7	737.2	736.4	738.0	741.3	743.8	743.3
180°	739.8	739.8	739.8	739.8	739.8	739.8	739.8	739.8	739.8	739.8	739.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	749.2	749.2
2.5°	799.8	795.0
5°	1028.7	1033.5
7.5°	1385.3	1382.8
10°	1722.5	1744.2
12.5°	1968.2	1973.1
15°	2117.6	2127.2
17.5°	2175.4	2177.8
20°	2177.8	2173.0
22.5°	2151.3	2146.5
25°	2120.0	2117.6
27.5°	2091.1	2093.5
30°	2079.0	2086.3
32.5°	2079.0	2091.1
35°	2083.9	2095.9
37.5°	2081.5	2095.9
40°	2071.8	2088.7
42.5°	2045.3	2057.4
45°	2004.4	2018.8
47.5°	1951.4	1961.0
50°	1883.9	1893.6
52.5°	1799.6	1802.0
55°	1698.4	1708.1
57.5°	1590.0	1592.4
60°	1469.6	1476.8
62.5°	1341.9	1341.9
65°	1207.0	1211.8
67.5°	1067.3	1079.3
70°	925.1	927.5
72.5°	785.3	785.3
75°	640.8	643.2
77.5°	503.5	503.5
80°	373.4	375.8
82.5°	257.8	262.6
85°	161.4	161.4
87.5°	74.7	67.5
90°	18.9	18.9
92.5°	75.6	60.5
95°	263.4	217.9
97.5°	631.2	544.7
100°	909.4	806.4
102.5°	1183.1	1094.8
105°	1532.0	1484.6
107.5°	1760.6	1772.1
110°	1847.7	1897.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1855.6	1931.5
115°	1806.3	1911.6
117.5°	1702.0	1818.7
120°	1618.0	1731.3
122.5°	1536.1	1647.9
125°	1419.2	1522.3
127.5°	1314.2	1401.2
130°	1252.4	1332.7
132.5°	1196.1	1268.1
135°	1119.2	1181.2
137.5°	1057.5	1108.2
140°	1015.1	1062.5
142.5°	980.1	1020.9
145°	927.4	958.3
147.5°	887.0	912.6
150°	861.5	882.3
152.5°	839.9	855.5
155°	814.9	825.2
157.5°	795.1	802.4
160°	783.3	787.5
162.5°	775.5	779.6
165°	764.5	768.6
167.5°	756.4	758.2
170°	754.2	754.2
172.5°	748.3	746.8
175°	744.8	744.8
177.5°	741.6	739.8
180°	739.8	739.8



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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	4.35	5.30	5.26	6.23	7.43	17.54	18.49	18.45	19.42	20.62
	3H	5.06	5.92	5.98	6.86	8.08	19.39	20.25	20.31	21.19	22.41
	4H	5.36	6.17	6.30	7.12	8.35	20.05	20.86	20.98	21.80	23.03
	6H	5.62	6.37	6.57	7.32	8.56	20.49	21.23	21.43	22.18	23.43
	8H	5.69	6.40	6.64	7.37	8.61	20.61	21.32	21.56	22.29	23.54
	12H	5.71	6.39	6.67	7.35	8.62	20.69	21.36	21.64	22.33	23.60
4H	2H	11.59	12.39	12.52	13.34	14.57	17.83	18.64	18.77	19.58	20.81
	3H	13.16	13.84	14.11	14.81	16.06	19.89	20.56	20.84	21.54	22.79
	4H	13.26	13.88	14.22	14.85	16.12	20.66	21.28	21.62	22.25	23.52
	6H	13.27	13.81	14.25	14.80	16.07	21.21	21.75	22.18	22.74	24.01
	8H	13.25	13.75	14.23	14.74	16.03	21.38	21.88	22.35	22.87	24.15
	12H	13.21	13.67	14.21	14.67	15.96	21.48	21.93	22.47	22.93	24.22
8H	4H	14.71	15.21	15.69	16.20	17.49	20.73	21.23	21.70	22.22	23.50
	6H	14.96	15.38	15.96	16.41	17.69	21.37	21.78	22.37	22.81	24.09
	8H	14.98	15.35	15.99	16.36	17.66	21.59	21.96	22.60	22.97	24.27
	12H	14.95	15.28	15.97	16.29	17.63	21.74	22.07	22.76	23.08	24.42
12H	4H	14.86	15.32	15.86	16.32	17.61	20.69	21.14	21.68	22.14	23.43
	6H	15.22	15.59	16.23	16.61	17.91	21.35	21.72	22.36	22.73	24.04
	8H	15.30	15.62	16.31	16.63	17.98	21.59	21.91	22.60	22.92	24.27