

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: P937637

Luminaire Tested: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-6-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937637
REPORT IS A COMBINATION OF REPORTS P933575 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-6-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

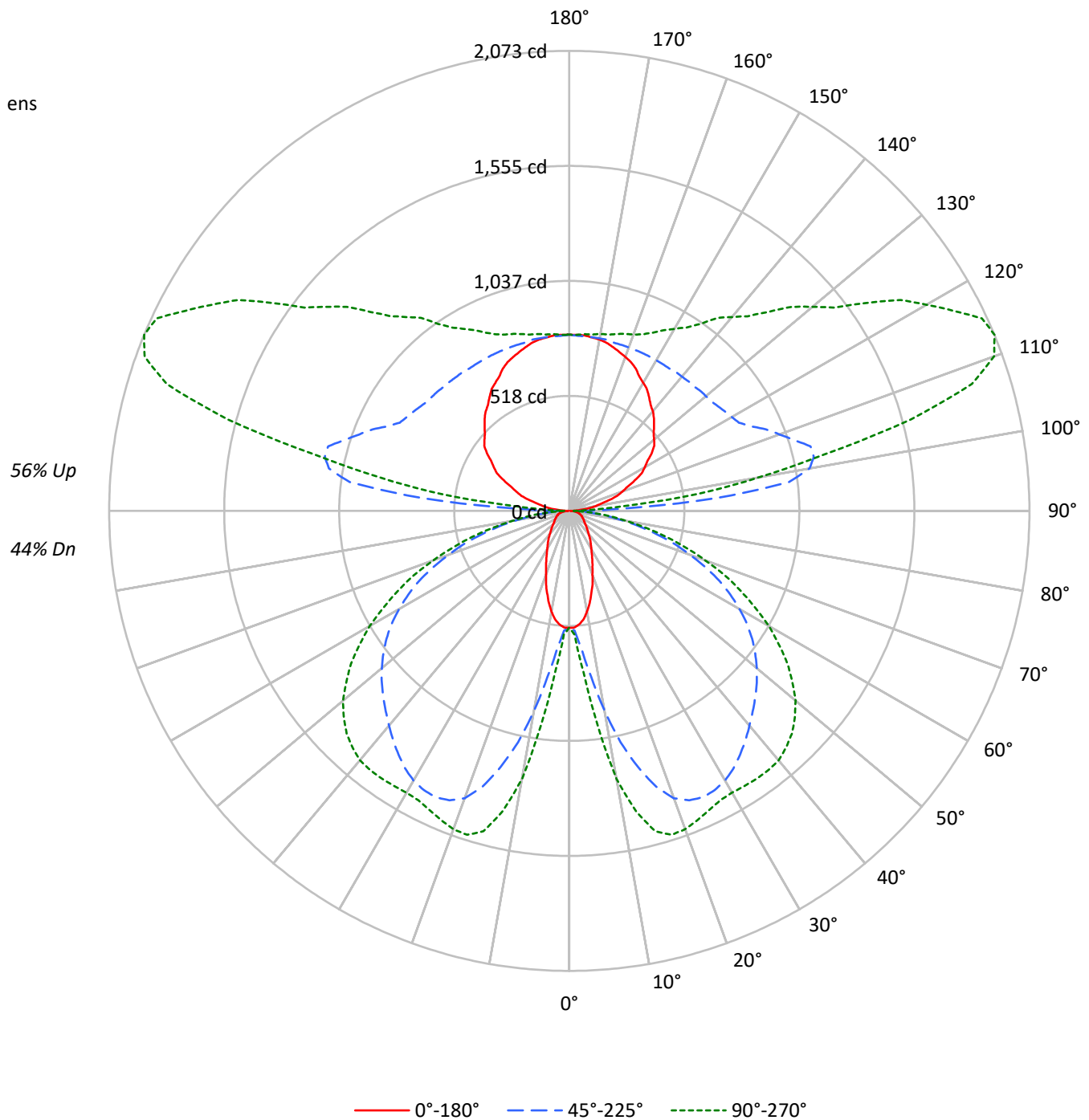
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9222.9 lumens
Efficiency: N/A
Efficacy: 106.0 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: General Diffuse

Input Watts (W): 87
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: P937637
CATALOG NUMBER: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-6-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P937637

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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	44
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	34	30
3	79	69	62	56	72	63	57	52	53	48	44	43	39	36	33	31	29	24
4	72	61	53	46	65	56	49	43	46	41	37	38	34	30	29	27	24	20
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	20	18	15
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16	13
8	51	39	31	26	47	36	29	24	30	24	20	25	20	17	19	16	14	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10
10	44	32	25	20	41	30	23	19	25	20	16	21	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3256	3256	3256
5°	3180	3763	4377
10°	2884	5484	7257
15°	2450	7163	8762
20°	1994	8299	8930
25°	1663	8682	8749
30°	1402	8734	8733
35°	1238	8587	8959
40°	1078	8396	9192
45°	976	8256	9228
50°	895	8129	9075
55°	855	7944	8672
60°	875	7592	8037
65°	909	7058	7164
70°	967	6151	6053
75°	1067	5010	4723
80°	1155	3470	3183
85°	1008	1839	1629

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9228 cd/sqm



TEST NUMBER: P937637

CATALOG NUMBER: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-6-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	0.7
10°-20°	301.8	3.3
20°-30°	527.9	5.7
30°-40°	679.6	7.4
40°-50°	759.1	8.2
50°-60°	727.0	7.9
60°-70°	576.1	6.2
70°-80°	338.8	3.7
80°-90°	97.1	1.1
90°-100°	387.0	4.2
100°-110°	1017.6	11.0
110°-120°	1055.1	11.4
120°-130°	846.3	9.2
130°-140°	664.1	7.2
140°-150°	509.7	5.5
150°-160°	367.1	4.0
160°-170°	224.6	2.4
170°-180°	75.9	0.8
0°-30°	897.8	9.7
0°-40°	1577.4	17.1
0°-60°	3063.4	33.2
0°-90°	4075.5	44.2
90°-120°	2459.7	26.7
90°-150°	4479.8	48.6
90°-180°	5147.0	55.8
0°-180°	9222.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	526	526	526	526	526	
5°	513	550	620	701	726	47
15°	384	709	1195	1449	1495	107
25°	246	804	1424	1486	1488	113
35°	166	768	1341	1417	1473	104
45°	113	613	1185	1358	1418	88
55°	81	389	1006	1168	1200	74
65°	64	206	746	840	851	64
75°	47	127	410	450	452	50
85°	17	39	102	112	113	18
90°	5	15	40	20	20	6
95°	51	200	667	344	234	57
105°	183	278	1125	1708	1593	194
115°	326	395	901	1798	2052	322
125°	453	508	820	1385	1634	402
135°	540	594	794	1118	1268	418
145°	626	666	784	954	1028	392
155°	708	727	784	861	886	325
165°	764	774	784	815	825	216
175°	794	794	789	799	799	75
180°	794	794	794	794	794	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	526.4	526.4	526.4	526.4	526.4	526.4	526.4	526.4	526.4	526.4	526.4
2.5°	526.4	526.4	529.8	531.5	534.9	536.6	540.0	543.4	553.5	555.2	558.6
5°	512.9	519.7	541.7	550.1	573.8	606.0	619.5	641.5	687.2	700.8	709.3
7.5°	492.6	507.8	562.0	575.5	634.8	719.4	755.0	802.4	875.1	910.7	939.5
10°	460.4	492.6	589.1	621.2	717.7	846.4	912.4	978.4	1088.4	1137.5	1156.1
12.5°	424.8	477.4	617.9	661.9	800.7	988.6	1068.1	1140.9	1266.2	1332.2	1342.3
15°	384.3	455.3	645.0	709.3	888.6	1107.0	1195.1	1284.8	1401.5	1448.9	1460.8
17.5°	348.7	438.4	670.3	738.1	956.4	1213.7	1303.4	1377.9	1472.7	1504.8	1513.3
20°	304.7	411.3	687.2	775.3	1027.5	1291.5	1377.9	1435.4	1499.8	1520.1	1523.4
22.5°	272.6	382.6	697.4	788.8	1074.8	1338.9	1411.7	1457.4	1501.5	1508.2	1509.9
25°	245.5	350.4	695.7	804.1	1115.5	1367.7	1423.6	1457.4	1482.9	1486.2	1486.2
27.5°	220.0	314.8	688.9	807.4	1146.0	1374.5	1418.5	1442.2	1454.1	1460.8	1460.8
30°	198.1	281.0	672.0	800.7	1159.5	1367.7	1403.2	1415.1	1427.0	1437.1	1442.2
32.5°	181.2	248.8	646.6	787.1	1161.2	1350.8	1376.2	1382.9	1399.8	1423.6	1432.0
35°	165.9	216.7	617.9	768.5	1151.0	1323.7	1340.6	1347.4	1381.2	1416.8	1428.6
37.5°	150.7	192.9	580.6	736.3	1135.8	1291.5	1303.4	1315.3	1367.7	1410.0	1423.6
40°	135.4	172.6	536.6	700.8	1112.1	1252.6	1262.7	1281.4	1350.8	1399.8	1413.4
42.5°	123.6	155.7	489.2	663.6	1081.7	1208.6	1223.8	1250.9	1330.5	1382.9	1398.2
45°	113.4	138.8	438.4	612.8	1042.7	1162.9	1184.9	1222.2	1306.7	1357.6	1371.1
47.5°	103.3	126.9	386.0	560.3	1000.4	1117.2	1146.0	1188.3	1274.6	1323.7	1335.5
50°	94.8	115.1	333.5	504.4	954.7	1068.1	1102.0	1146.0	1234.0	1279.7	1294.9
52.5°	88.1	105.0	284.3	448.6	902.2	1017.4	1056.2	1102.0	1184.9	1228.9	1239.1
55°	81.2	96.5	242.1	389.3	848.1	963.1	1005.5	1049.5	1130.7	1167.9	1174.8
57.5°	77.9	89.7	206.5	333.5	790.5	902.2	949.6	990.3	1066.4	1095.2	1102.0
60°	72.8	84.6	179.5	286.0	727.9	844.6	885.3	925.9	990.3	1013.9	1019.0
62.5°	67.7	81.2	159.1	240.4	663.6	776.9	817.6	854.8	909.0	925.9	932.7
65°	64.3	77.9	143.9	206.5	597.5	705.9	746.5	778.6	822.7	839.6	842.9
67.5°	60.9	74.5	132.0	177.7	531.5	634.8	665.2	695.7	729.6	746.5	748.2
70°	55.9	71.1	121.9	157.4	463.8	553.5	578.9	611.0	638.1	646.6	651.7
72.5°	52.4	66.0	115.1	142.2	394.4	475.7	499.3	517.9	541.7	550.1	550.1
75°	47.4	59.3	108.3	126.9	323.3	389.3	409.6	428.3	446.9	450.3	445.2
77.5°	42.3	52.4	93.1	106.7	252.2	308.1	325.0	335.2	350.4	353.8	355.5
80°	35.5	45.7	72.8	82.9	182.8	226.9	238.6	247.1	260.7	260.7	264.1
82.5°	27.1	35.5	52.4	59.3	123.6	155.7	165.9	171.0	179.5	179.5	179.5
85°	16.9	22.0	33.8	38.9	74.5	94.8	101.6	103.3	110.0	111.7	111.7
87.5°	8.5	11.9	22.0	23.7	38.9	49.1	49.1	52.4	52.4	50.8	49.1
90°	5.3	9.6	13.8	14.9	23.5	34.8	40.5	36.0	27.0	20.2	20.2
92.5°	21.4	57.6	93.8	102.8	144.6	200.2	228.1	199.9	143.5	101.2	97.2
95°	51.2	117.4	183.8	200.4	355.8	563.0	666.6	594.9	451.3	343.7	331.5
97.5°	88.5	147.0	205.5	220.1	479.3	824.8	997.6	952.3	861.6	793.5	770.3
100°	117.3	170.3	223.4	236.6	524.2	907.6	1099.3	1102.7	1109.3	1114.3	1086.6
102.5°	141.8	191.3	240.8	253.2	544.8	933.7	1128.1	1186.0	1301.5	1388.2	1364.6
105°	183.3	225.2	267.2	277.7	560.1	936.7	1125.0	1254.5	1513.6	1707.9	1695.2
107.5°	225.9	265.0	304.2	313.9	563.0	895.0	1061.0	1241.7	1603.1	1874.2	1877.3
110°	254.7	290.0	325.3	334.1	558.7	858.1	1007.7	1209.7	1613.8	1916.8	1930.1



TEST NUMBER: P937637

CATALOG NUMBER: SQ4-FB-100U-100D-92765-1D-UNV-STD-W-6-2700K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	283.0	316.6	350.3	358.6	558.9	825.8	959.2	1166.0	1579.5	1889.7	1910.0
115°	325.6	356.6	387.6	395.4	564.0	788.7	901.1	1100.3	1498.7	1797.5	1825.8
117.5°	367.7	395.9	424.1	431.1	574.4	765.6	861.1	1040.9	1400.4	1670.1	1701.4
120°	392.2	418.8	445.3	451.9	583.0	757.8	845.2	1009.4	1337.9	1584.3	1614.7
122.5°	416.2	443.0	469.8	476.4	595.2	753.7	832.9	980.9	1276.7	1498.5	1528.5
125°	452.9	477.4	501.8	507.9	611.8	750.4	819.6	945.3	1196.5	1385.1	1412.7
127.5°	482.8	507.4	532.1	538.3	628.3	748.4	808.4	916.3	1132.1	1293.9	1317.2
130°	498.8	525.4	551.9	558.5	640.4	749.6	804.2	900.2	1092.3	1236.4	1257.9
132.5°	515.3	541.9	568.3	575.0	650.2	750.4	800.4	886.4	1058.4	1187.3	1206.6
135°	539.8	564.0	588.2	594.2	660.8	749.6	794.0	866.0	1010.0	1118.1	1134.7
137.5°	564.8	588.8	612.8	618.7	676.8	754.3	793.0	853.9	975.6	1066.9	1080.5
140°	585.7	607.7	629.7	635.2	686.5	755.0	789.2	841.8	947.0	1025.8	1038.5
142.5°	601.6	622.1	642.4	647.5	694.7	757.7	789.2	835.4	927.8	997.0	1008.0
145°	626.2	643.9	661.7	666.1	705.4	757.8	783.9	821.7	897.3	953.9	962.2
147.5°	650.7	667.9	685.2	689.5	721.0	762.9	783.9	813.6	873.1	917.7	924.5
150°	666.6	682.3	697.9	701.8	729.2	765.6	783.9	809.0	859.2	896.8	902.4
152.5°	683.2	695.1	706.9	709.9	734.6	767.4	783.9	805.4	848.2	880.3	884.5
155°	707.7	716.4	725.2	727.4	746.3	771.4	783.9	801.0	835.1	860.6	863.4
157.5°	725.8	734.4	742.8	745.0	758.0	775.3	783.9	797.2	823.7	843.6	845.6
160°	738.1	744.7	751.4	753.0	763.3	777.1	783.9	795.3	818.0	835.1	836.2
162.5°	750.4	755.3	760.3	761.5	769.0	779.0	783.9	793.5	812.7	827.1	828.1
165°	763.7	768.1	772.6	773.8	777.2	781.7	783.9	790.8	804.5	814.8	815.9
167.5°	775.9	778.0	780.2	780.7	783.5	787.3	789.2	793.7	802.7	809.5	810.0
170°	783.9	786.1	788.2	788.7	788.9	789.1	789.2	793.7	802.7	809.5	809.5
172.5°	788.2	788.6	789.1	789.2	789.2	789.2	789.2	792.8	799.9	805.2	804.8
175°	794.0	794.0	794.0	794.0	792.4	790.2	789.2	791.4	796.0	799.4	799.4
177.5°	794.0	794.0	794.0	794.0	792.8	791.2	790.3	792.1	795.6	798.3	797.8
180°	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0



TEST NUMBER: P937637

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	526.4	526.4
2.5°	562.0	558.6
5°	722.8	726.2
7.5°	973.3	971.7
10°	1210.3	1225.5
12.5°	1382.9	1386.3
15°	1487.9	1494.6
17.5°	1528.5	1530.2
20°	1530.2	1526.8
22.5°	1511.6	1508.2
25°	1489.6	1487.9
27.5°	1469.3	1471.0
30°	1460.8	1465.9
32.5°	1460.8	1469.3
35°	1464.2	1472.7
37.5°	1462.5	1472.7
40°	1455.7	1467.6
42.5°	1437.1	1445.6
45°	1408.4	1418.5
47.5°	1371.1	1377.9
50°	1323.7	1330.5
52.5°	1264.5	1266.2
55°	1193.4	1200.1
57.5°	1117.2	1118.9
60°	1032.6	1037.6
62.5°	942.9	942.9
65°	848.1	851.4
67.5°	749.8	758.3
70°	650.0	651.7
72.5°	551.9	551.9
75°	450.3	451.9
77.5°	353.8	353.8
80°	262.4	264.1
82.5°	181.2	184.5
85°	113.4	113.4
87.5°	52.4	47.4
90°	20.2	20.2
92.5°	81.1	65.0
95°	282.7	233.9
97.5°	677.4	584.6
100°	976.0	865.4
102.5°	1269.7	1175.0
105°	1644.3	1593.4
107.5°	1889.7	1902.0
110°	1983.2	2036.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1991.5	2073.0
115°	1938.7	2051.7
117.5°	1826.7	1952.0
120°	1736.5	1858.2
122.5°	1648.6	1768.7
125°	1523.3	1633.9
127.5°	1410.6	1503.9
130°	1344.1	1430.3
132.5°	1283.8	1361.1
135°	1201.2	1267.8
137.5°	1135.0	1189.5
140°	1089.5	1140.4
142.5°	1051.9	1095.7
145°	995.4	1028.5
147.5°	952.0	979.5
150°	924.7	947.0
152.5°	901.4	918.2
155°	874.5	885.6
157.5°	853.4	861.1
160°	840.7	845.2
162.5°	832.3	836.6
165°	820.5	824.9
167.5°	811.8	813.7
170°	809.5	809.5
172.5°	803.1	801.5
175°	799.4	799.4
177.5°	795.9	794.0
180°	794.0	794.0



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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	4.55	5.39	5.55	6.41	7.75	17.71	18.56	18.71	19.57	20.92
	3H	5.25	6.01	6.26	7.03	8.40	19.55	20.30	20.55	21.33	22.70
	4H	5.55	6.27	6.57	7.30	8.67	20.19	20.91	21.21	21.93	23.31
	6H	5.80	6.46	6.83	7.49	8.88	20.61	21.28	21.64	22.31	23.70
	8H	5.87	6.50	6.90	7.55	8.93	20.73	21.36	21.77	22.41	23.79
	12H	5.88	6.48	6.93	7.53	8.94	20.80	21.40	21.84	22.44	23.85
4H	2H	11.75	12.47	12.78	13.50	14.87	17.99	18.70	19.01	19.73	21.11
	3H	13.32	13.92	14.36	14.98	16.37	20.02	20.63	21.06	21.68	23.07
	4H	13.41	13.97	14.46	15.01	16.42	20.79	21.34	21.83	22.39	23.80
	6H	13.42	13.90	14.48	14.97	16.38	21.32	21.80	22.38	22.87	24.27
	8H	13.40	13.84	14.45	14.91	16.33	21.48	21.93	22.54	22.99	24.41
	12H	13.36	13.76	14.43	14.83	16.26	21.57	21.97	22.64	23.05	24.48
8H	4H	14.85	15.30	15.91	16.36	17.78	20.85	21.29	21.90	22.35	23.78
	6H	15.09	15.46	16.17	16.57	17.99	21.47	21.84	22.55	22.94	24.36
	8H	15.11	15.44	16.20	16.52	17.96	21.69	22.01	22.77	23.10	24.54
	12H	15.08	15.37	16.17	16.45	17.93	21.83	22.11	22.92	23.20	24.68
12H	4H	14.99	15.40	16.07	16.47	17.90	20.80	21.20	21.87	22.28	23.71
	6H	15.35	15.68	16.44	16.76	18.20	21.45	21.78	22.54	22.86	24.31
	8H	15.42	15.71	16.51	16.79	18.27	21.68	21.97	22.77	23.05	24.53