

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: P936510

Luminaire Tested: SQ4-FB-025U-125D-830-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936510
REPORT IS A COMBINATION OF REPORTS P933440 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-125D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

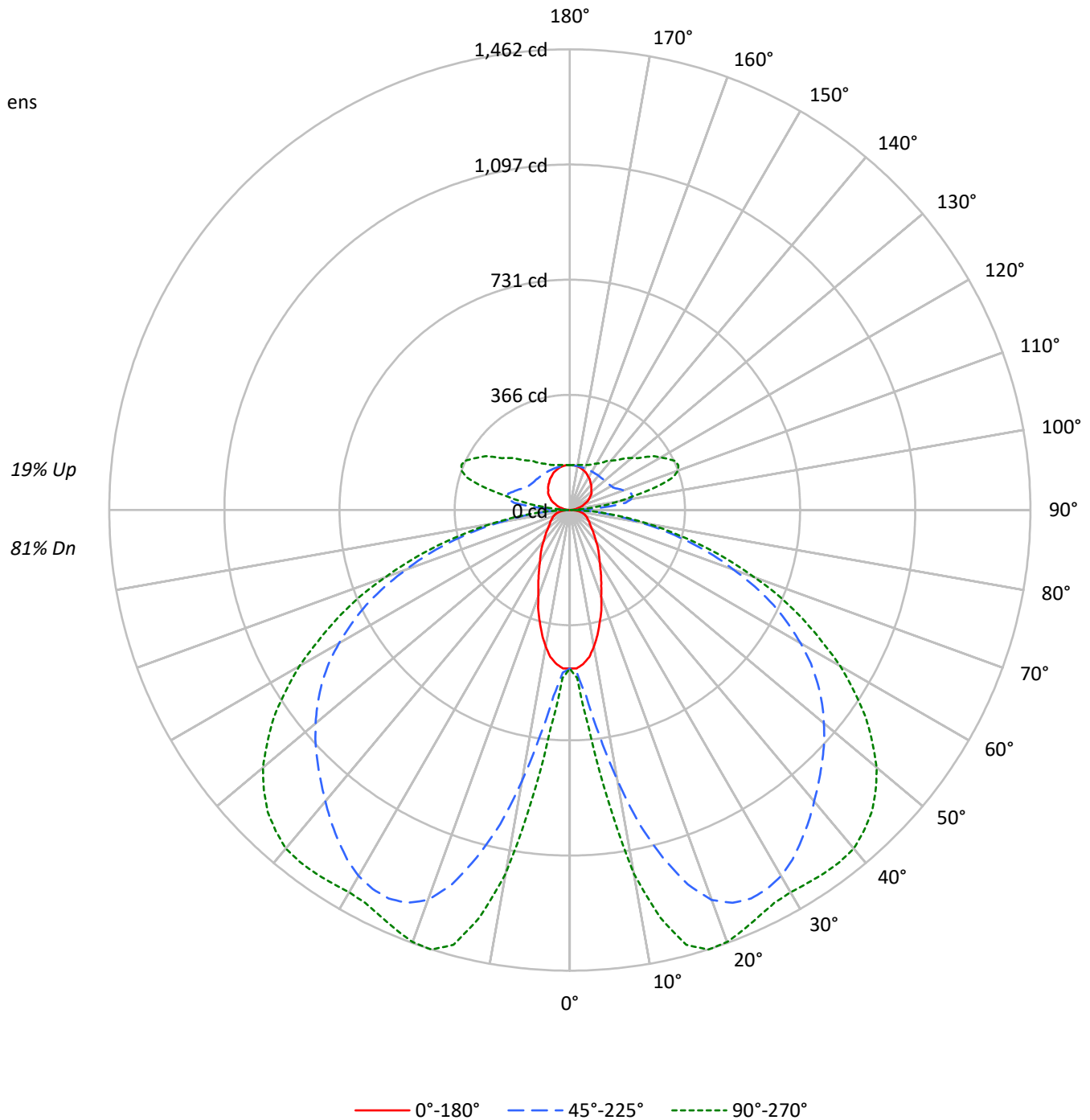
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4817.3 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 49.6
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

TEST NUMBER: P936510
CATALOG NUMBER: SQ4-FB-025U-125D-830-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P936510

CATALOG NUMBER: SQ4-FB-025U-125D-830-1D-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	50	30	10	0
RCR																					
0	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	84	84	84	81
1	104	99	94	90	99	95	91	87	87	84	81	80	77	75	73	71	70	70	70	70	66
2	94	85	78	72	89	82	75	70	75	70	66	69	65	61	63	60	57	57	57	57	54
3	85	74	66	59	81	71	64	58	65	59	54	60	55	51	55	51	48	48	48	48	45
4	77	65	56	49	74	63	54	48	58	51	45	53	47	43	49	44	40	40	40	40	37
5	71	58	49	42	67	55	47	41	51	44	39	47	41	36	43	38	34	34	34	34	32
6	65	51	42	36	62	49	41	35	46	39	33	42	36	31	39	34	30	30	30	30	27
7	60	46	37	31	57	45	36	30	41	34	29	38	32	27	35	30	26	26	26	26	24
8	55	42	33	27	53	40	32	27	37	30	25	35	29	24	32	27	23	23	23	23	21
9	52	38	30	24	49	37	29	24	34	27	23	32	26	22	29	24	20	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4667	4667	4667
5°	4555	5392	6275
10°	4128	7853	10403
15°	3504	10252	12561
20°	2850	11873	12802
25°	2374	12416	12542
30°	1999	12484	12518
35°	1765	12266	12841
40°	1535	11988	13176
45°	1388	11780	13228
50°	1270	11590	13009
55°	1212	11318	12432
60°	1238	10807	11523
65°	1282	10036	10271
70°	1353	8734	8677
75°	1486	7103	6771
80°	1587	4909	4563
85°	1341	2589	2336

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13228 cd/sqm



TEST NUMBER: P936510

CATALOG NUMBER: SQ4-FB-025U-125D-830-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.1	1.4
10°-20°	288.4	6.0
20°-30°	504.5	10.5
30°-40°	649.4	13.5
40°-50°	725.4	15.1
50°-60°	694.8	14.4
60°-70°	550.6	11.4
70°-80°	323.8	6.7
80°-90°	90.5	1.9
90°-100°	69.5	1.4
100°-110°	182.8	3.8
110°-120°	189.6	3.9
120°-130°	152.1	3.2
130°-140°	119.3	2.5
140°-150°	91.6	1.9
150°-160°	65.9	1.4
160°-170°	40.3	0.8
170°-180°	13.6	0.3
0°-30°	858.0	17.8
0°-40°	1507.4	31.3
0°-60°	2927.6	60.8
0°-90°	3892.4	80.8
90°-120°	442.0	9.2
90°-150°	804.9	16.7
90°-180°	925.0	19.2
0°-180°	4817.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	490	526	592	670	694	45
15°	367	678	1142	1385	1428	102
25°	235	768	1360	1420	1422	108
35°	158	734	1281	1354	1407	99
45°	108	586	1132	1297	1356	84
55°	78	372	961	1116	1147	71
65°	62	197	713	802	814	61
75°	45	121	392	430	432	47
85°	16	37	97	107	108	17
90°	1	3	7	4	4	2
95°	9	36	120	62	42	10
105°	33	50	202	307	286	35
115°	58	71	162	323	369	58
125°	81	91	147	249	294	72
135°	97	107	143	201	228	75
145°	112	120	141	171	185	70
155°	127	131	141	155	159	58
165°	137	139	141	146	148	39
175°	143	143	142	144	144	14
180°	143	143	143	143	143	



TEST NUMBER: P936510
 CATALOG NUMBER: SQ4-FB-025U-125D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0
2.5°	503.0	503.0	506.3	507.9	511.2	512.8	516.0	519.3	529.0	530.6	533.8
5°	490.1	496.6	517.7	525.7	548.4	579.1	592.1	613.1	656.8	669.7	677.8
7.5°	470.7	485.3	537.1	550.0	606.6	687.5	721.5	766.8	836.3	870.2	897.8
10°	440.0	470.7	562.9	593.7	685.8	808.8	871.9	935.0	1040.1	1087.1	1104.8
12.5°	406.0	456.2	590.4	632.5	765.2	944.7	1020.7	1090.3	1210.0	1273.1	1282.8
15°	367.2	435.2	616.3	677.8	849.2	1057.9	1142.0	1227.8	1339.5	1384.7	1396.0
17.5°	333.3	419.0	640.6	705.3	913.9	1159.8	1245.6	1316.8	1407.3	1438.1	1446.1
20°	291.2	393.1	656.8	740.9	981.9	1234.3	1316.8	1371.8	1433.2	1452.6	1455.9
22.5°	260.4	365.6	666.4	753.8	1027.2	1279.5	1349.1	1392.8	1434.9	1441.4	1442.9
25°	234.6	334.9	664.9	768.3	1066.0	1307.0	1360.5	1392.8	1417.1	1420.3	1420.3
27.5°	210.3	300.9	658.4	771.6	1095.1	1313.5	1355.6	1378.3	1389.5	1396.0	1396.0
30°	189.3	268.5	642.2	765.2	1108.1	1307.0	1341.0	1352.4	1363.6	1373.4	1378.3
32.5°	173.1	237.8	618.0	752.2	1109.7	1290.9	1315.2	1321.6	1337.8	1360.5	1368.5
35°	158.5	207.1	590.4	734.4	1100.0	1265.0	1281.1	1287.6	1319.9	1354.0	1365.3
37.5°	144.0	184.4	554.9	703.7	1085.4	1234.3	1245.6	1256.9	1307.0	1347.5	1360.5
40°	129.4	165.0	512.8	669.7	1062.8	1197.0	1206.8	1224.5	1290.9	1337.8	1350.7
42.5°	118.1	148.8	467.5	634.1	1033.6	1155.0	1169.6	1195.5	1271.5	1321.6	1336.2
45°	108.4	132.7	419.0	585.6	996.4	1111.4	1132.4	1167.9	1248.8	1297.4	1310.3
47.5°	98.7	121.3	368.8	535.5	956.0	1067.7	1095.1	1135.6	1218.0	1265.0	1276.4
50°	90.6	110.0	318.6	482.0	912.3	1020.7	1053.1	1095.1	1179.2	1222.9	1237.5
52.5°	84.1	100.3	271.8	428.7	862.2	972.2	1009.4	1053.1	1132.4	1174.4	1184.1
55°	77.6	92.2	231.4	372.1	810.4	920.4	960.9	1002.9	1080.6	1116.1	1122.6
57.5°	74.4	85.8	197.3	318.6	755.4	862.2	907.5	946.3	1019.1	1046.6	1053.1
60°	69.6	80.9	171.5	273.4	695.6	807.2	846.1	884.9	946.3	969.0	973.8
62.5°	64.7	77.6	152.1	229.7	634.1	742.5	781.3	816.9	868.7	884.9	891.3
65°	61.5	74.4	137.5	197.3	571.0	674.6	713.4	744.2	786.2	802.4	805.6
67.5°	58.2	71.2	126.2	169.9	507.9	606.6	635.7	664.9	697.2	713.4	715.0
70°	53.3	68.0	116.4	150.5	443.2	529.0	553.2	583.9	609.8	618.0	622.8
72.5°	50.2	63.1	110.0	135.8	377.0	454.6	477.2	495.0	517.7	525.7	525.7
75°	45.3	56.6	103.5	121.3	309.0	372.1	391.5	409.3	427.0	430.3	425.4
77.5°	40.4	50.2	89.0	101.9	241.0	294.4	310.6	320.3	334.9	338.0	339.7
80°	33.9	43.7	69.6	79.3	174.7	216.7	228.1	236.1	249.1	249.1	252.4
82.5°	25.9	33.9	50.2	56.6	118.1	148.8	158.5	163.4	171.5	171.5	171.5
85°	16.2	21.0	32.3	37.2	71.2	90.6	97.0	98.7	105.2	106.8	106.8
87.5°	8.1	11.3	21.0	22.7	37.2	46.9	46.9	50.2	50.2	48.6	46.9
90°	1.0	1.7	2.5	2.7	4.2	6.2	7.3	6.5	4.9	3.6	3.6
92.5°	3.8	10.3	16.8	18.5	26.0	36.0	41.0	35.9	25.8	18.2	17.4
95°	9.2	21.1	33.1	36.0	64.0	101.1	119.8	106.9	81.1	61.8	59.6
97.5°	15.9	26.4	36.9	39.6	86.1	148.2	179.2	171.1	154.8	142.5	138.3
100°	21.0	30.6	40.2	42.5	94.2	163.1	197.5	198.1	199.3	200.2	195.2
102.5°	25.4	34.3	43.3	45.5	97.9	167.8	202.7	213.1	233.8	249.4	245.1
105°	33.0	40.5	48.0	49.9	100.7	168.3	202.1	225.4	272.0	306.9	304.6
107.5°	40.6	47.6	54.7	56.4	101.1	160.8	190.6	223.1	288.0	336.8	337.4
110°	45.8	52.1	58.4	60.0	100.4	154.2	181.1	217.4	290.0	344.4	346.8



TEST NUMBER: P936510

CATALOG NUMBER: SQ4-FB-025U-125D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	50.9	56.9	62.9	64.4	100.4	148.4	172.4	209.6	283.8	339.6	343.2
115°	58.5	64.1	69.6	71.0	101.3	141.8	161.9	197.7	269.3	322.9	328.0
117.5°	66.1	71.1	76.2	77.4	103.2	137.6	154.8	187.1	251.6	300.1	305.7
120°	70.5	75.2	80.0	81.2	104.7	136.1	151.8	181.4	240.4	284.7	290.1
122.5°	74.8	79.5	84.3	85.6	106.9	135.4	149.6	176.2	229.3	269.2	274.6
125°	81.4	85.8	90.2	91.3	109.9	134.8	147.2	169.8	215.0	248.8	253.8
127.5°	86.7	91.2	95.6	96.7	112.9	134.4	145.2	164.6	203.4	232.5	236.7
130°	89.6	94.4	99.1	100.4	115.1	134.7	144.5	161.8	196.3	222.2	226.0
132.5°	92.6	97.4	102.2	103.3	116.8	134.8	143.8	159.3	190.1	213.4	216.8
135°	97.0	101.3	105.7	106.8	118.7	134.7	142.6	155.5	181.4	200.9	203.8
137.5°	101.5	105.8	110.1	111.2	121.6	135.5	142.4	153.3	175.2	191.7	194.2
140°	105.3	109.2	113.2	114.1	123.3	135.7	141.8	151.2	170.2	184.3	186.6
142.5°	108.1	111.8	115.4	116.3	124.9	136.1	141.8	150.1	166.7	179.2	181.2
145°	112.5	115.7	118.9	119.7	126.8	136.1	140.8	147.6	161.2	171.4	172.9
147.5°	116.9	120.0	123.1	123.9	129.5	137.1	140.8	146.2	156.9	164.9	166.2
150°	119.8	122.6	125.4	126.1	131.0	137.6	140.8	145.3	154.4	161.2	162.1
152.5°	122.8	124.9	127.0	127.5	131.9	137.9	140.8	144.6	152.4	158.2	159.0
155°	127.1	128.7	130.3	130.7	134.0	138.5	140.8	143.9	150.1	154.7	155.2
157.5°	130.4	131.9	133.5	133.8	136.1	139.3	140.8	143.2	148.0	151.5	151.9
160°	132.6	133.7	135.0	135.3	137.1	139.6	140.8	142.8	146.9	150.0	150.2
162.5°	134.8	135.7	136.6	136.8	138.1	140.0	140.8	142.5	146.0	148.6	148.8
165°	137.2	138.0	138.8	139.0	139.6	140.4	140.8	142.1	144.5	146.4	146.6
167.5°	139.4	139.8	140.1	140.2	140.7	141.4	141.8	142.5	144.2	145.4	145.5
170°	140.8	141.2	141.6	141.7	141.7	141.8	141.8	142.5	144.2	145.4	145.4
172.5°	141.6	141.7	141.8	141.8	141.8	141.8	141.8	142.4	143.7	144.6	144.5
175°	142.6	142.6	142.6	142.6	142.3	142.0	141.8	142.2	143.0	143.6	143.6
177.5°	142.6	142.6	142.6	142.6	142.4	142.2	142.0	142.3	142.9	143.4	143.3
180°	142.6	142.6	142.6	142.6	142.6	142.6	142.6	142.6	142.6	142.6	142.6



TEST NUMBER: P936510

CATALOG NUMBER: SQ4-FB-025U-125D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	503.0	503.0
2.5°	537.1	533.8
5°	690.7	694.0
7.5°	930.2	928.6
10°	1156.6	1171.2
12.5°	1321.6	1324.8
15°	1422.0	1428.4
17.5°	1460.8	1462.4
20°	1462.4	1459.1
22.5°	1444.5	1441.4
25°	1423.5	1422.0
27.5°	1404.1	1405.7
30°	1396.0	1400.9
32.5°	1396.0	1404.1
35°	1399.3	1407.3
37.5°	1397.7	1407.3
40°	1391.2	1402.5
42.5°	1373.4	1381.4
45°	1345.9	1355.6
47.5°	1310.3	1316.8
50°	1265.0	1271.5
52.5°	1208.4	1210.0
55°	1140.4	1146.9
57.5°	1067.7	1069.3
60°	986.8	991.7
62.5°	901.0	901.0
65°	810.4	813.7
67.5°	716.6	724.7
70°	621.2	622.8
72.5°	527.3	527.3
75°	430.3	431.9
77.5°	338.0	338.0
80°	250.8	252.4
82.5°	173.1	176.3
85°	108.4	108.4
87.5°	50.2	45.3
90°	3.6	3.6
92.5°	14.5	11.7
95°	50.9	42.1
97.5°	121.7	105.1
100°	175.4	155.5
102.5°	228.1	211.1
105°	295.5	286.3
107.5°	339.6	341.8
110°	356.3	365.9



TEST NUMBER: P936510

CATALOG NUMBER: SQ4-FB-025U-125D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	357.8	372.5
115°	348.4	368.6
117.5°	328.2	350.8
120°	312.0	333.8
122.5°	296.2	317.8
125°	273.7	293.6
127.5°	253.4	270.2
130°	241.5	257.0
132.5°	230.7	244.5
135°	215.9	227.8
137.5°	203.9	213.8
140°	195.7	204.9
142.5°	189.0	196.8
145°	178.9	184.8
147.5°	171.0	176.0
150°	166.2	170.2
152.5°	161.9	165.0
155°	157.2	159.2
157.5°	153.3	154.8
160°	151.0	151.8
162.5°	149.5	150.3
165°	147.4	148.2
167.5°	145.8	146.2
170°	145.4	145.4
172.5°	144.3	144.0
175°	143.6	143.6
177.5°	143.0	142.6
180°	142.6	142.6



TEST NUMBER: P936510
 CATALOG NUMBER: SQ4-FB-025U-125D-830-1D-UNV-STD-W-4

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	8.77	10.07	9.40	10.72	11.47	21.91	23.21	22.54	23.86	24.61
	3H	9.51	10.68	10.15	11.34	12.13	23.76	24.94	24.41	25.60	26.38
	4H	9.82	10.94	10.49	11.61	12.40	24.42	25.53	25.08	26.20	27.00
	6H	10.10	11.13	10.78	11.81	12.62	24.86	25.89	25.54	26.57	27.38
	8H	10.18	11.16	10.87	11.87	12.68	24.98	25.97	25.67	26.67	27.49
	12H	10.21	11.15	10.91	11.85	12.69	25.06	26.00	25.76	26.70	27.54
4H	2H	16.01	17.12	16.68	17.80	18.59	22.23	23.35	22.90	24.02	24.81
	3H	17.62	18.55	18.30	19.26	20.08	24.30	25.24	24.98	25.95	26.76
	4H	17.73	18.58	18.43	19.30	20.14	25.08	25.93	25.78	26.64	27.49
	6H	17.77	18.51	18.49	19.25	20.10	25.63	26.37	26.35	27.11	27.97
	8H	17.76	18.45	18.48	19.19	20.06	25.80	26.49	26.52	27.23	28.10
	12H	17.74	18.37	18.48	19.12	20.00	25.91	26.53	26.65	27.29	28.16
8H	4H	19.21	19.90	19.93	20.64	21.50	25.18	25.87	25.90	26.61	27.47
	6H	19.47	20.05	20.22	20.82	21.69	25.82	26.39	26.57	27.17	28.04
	8H	19.49	20.01	20.26	20.79	21.67	26.03	26.55	26.80	27.33	28.21
	12H	19.48	19.94	20.25	20.71	21.65	26.19	26.65	26.96	27.42	28.36
12H	4H	19.37	19.99	20.11	20.75	21.63	25.15	25.78	25.90	26.54	27.41
	6H	19.73	20.25	20.49	21.03	21.91	25.80	26.32	26.57	27.10	27.98
	8H	19.82	20.28	20.59	21.05	21.99	26.05	26.51	26.82	27.27	28.22