

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: P936225

Luminaire Tested: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936225
REPORT IS A COMBINATION OF REPORTS P933429 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-12-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

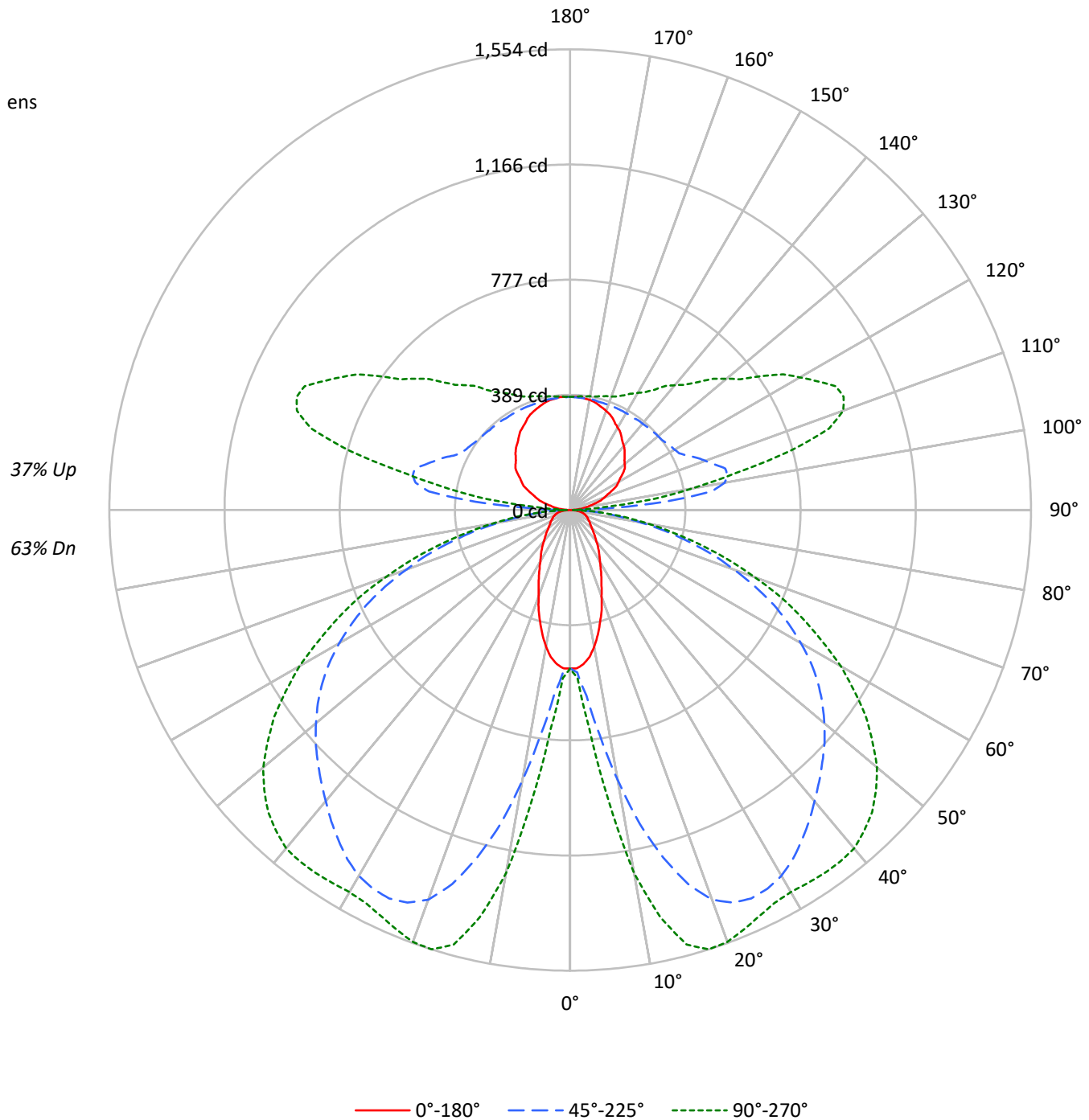
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6615.2 lumens
Efficiency: N/A
Efficacy: 100.2 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: Semi-Direct

Input Watts (W): 66
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: P936225
CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-12-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P936225

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-12-2700K

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	50	30	10
RCR																				
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	63		
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	51		
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	42		
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	34		
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	29		
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	24		
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	21		
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	18		
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	16		
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	14		
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	13		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1653	1653	1653
5°	1616	1911	2222
10°	1466	2787	3684
15°	1247	3642	4448
20°	1015	4221	4534
25°	847	4418	4442
30°	715	4448	4433
35°	632	4375	4548
40°	551	4280	4666
45°	499	4211	4684
50°	459	4149	4607
55°	440	4058	4403
60°	451	3882	4080
65°	470	3613	3637
70°	501	3153	3073
75°	557	2573	2398
80°	614	1786	1616
85°	557	949	827

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4684 cd/sqm



TEST NUMBER: P936225

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-12-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	1.0
10°-20°	306.4	4.6
20°-30°	536.0	8.1
30°-40°	690.0	10.4
40°-50°	770.7	11.7
50°-60°	738.1	11.2
60°-70°	585.0	8.8
70°-80°	344.0	5.2
80°-90°	97.0	1.5
90°-100°	186.4	2.8
100°-110°	490.0	7.4
110°-120°	508.1	7.7
120°-130°	407.6	6.2
130°-140°	319.8	4.8
140°-150°	245.5	3.7
150°-160°	176.8	2.7
160°-170°	108.2	1.6
170°-180°	36.5	0.6
0°-30°	911.6	13.8
0°-40°	1601.5	24.2
0°-60°	3110.3	47.0
0°-90°	4136.3	62.5
90°-120°	1184.6	17.9
90°-150°	2157.4	32.6
90°-180°	2479.0	37.5
0°-180°	6615.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	534	534	534	534	534	
5°	521	558	629	712	737	48
15°	390	720	1213	1471	1518	109
25°	249	816	1445	1509	1511	115
35°	168	780	1361	1438	1495	105
45°	115	622	1203	1378	1440	89
55°	82	395	1021	1186	1218	75
65°	65	210	758	852	864	65
75°	48	129	416	457	459	50
85°	17	40	103	113	115	18
90°	3	7	20	10	10	3
95°	25	96	321	166	113	27
105°	88	134	542	822	767	94
115°	157	190	434	866	988	155
125°	218	245	395	667	787	194
135°	260	286	382	538	610	201
145°	302	321	378	459	495	189
155°	341	350	378	414	427	157
165°	368	373	378	392	397	104
175°	382	382	380	385	385	36
180°	382	382	382	382	382	



TEST NUMBER: P936225
 CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-12-2700K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5
2.5°	534.5	534.5	537.9	539.6	543.1	544.8	548.3	551.7	562.0	563.7	567.1
5°	520.8	527.6	550.0	558.5	582.6	615.2	629.0	651.4	697.7	711.5	720.1
7.5°	500.1	515.6	570.6	584.3	644.5	730.5	766.5	814.7	888.5	924.6	953.8
10°	467.5	500.1	598.1	630.8	728.7	859.3	926.3	993.4	1105.1	1155.0	1173.8
12.5°	431.3	484.6	627.3	671.9	812.9	1003.7	1084.5	1158.4	1285.5	1352.6	1362.8
15°	390.2	462.3	654.8	720.1	902.3	1123.9	1213.4	1304.4	1423.1	1471.2	1483.2
17.5°	354.0	445.1	680.6	749.3	971.1	1232.3	1323.3	1399.0	1495.2	1527.9	1536.5
20°	309.4	417.7	697.7	787.2	1043.2	1311.3	1399.0	1457.4	1522.7	1543.3	1546.7
22.5°	276.7	388.4	708.1	800.9	1091.3	1359.4	1433.3	1479.8	1524.4	1531.3	1533.0
25°	249.2	355.7	706.4	816.4	1132.6	1388.6	1445.4	1479.8	1505.5	1509.0	1509.0
27.5°	223.4	319.7	699.4	819.8	1163.5	1395.6	1440.2	1464.2	1476.3	1483.2	1483.2
30°	201.1	285.3	682.3	812.9	1177.2	1388.6	1424.8	1436.8	1448.8	1459.1	1464.2
32.5°	183.9	252.7	656.5	799.1	1179.0	1371.5	1397.3	1404.1	1421.3	1445.4	1454.0
35°	168.4	220.0	627.3	780.2	1168.7	1344.0	1361.1	1368.1	1402.4	1438.5	1450.5
37.5°	153.0	195.9	589.5	747.6	1153.2	1311.3	1323.3	1335.3	1388.6	1431.6	1445.4
40°	137.5	175.3	544.8	711.5	1129.2	1271.8	1282.1	1301.0	1371.5	1421.3	1435.0
42.5°	125.5	158.1	496.7	673.7	1098.2	1227.1	1242.6	1270.1	1350.8	1404.1	1419.6
45°	115.1	140.9	445.1	622.1	1058.7	1180.7	1203.0	1240.9	1326.8	1378.3	1392.1
47.5°	104.8	128.9	391.9	568.8	1015.7	1134.3	1163.5	1206.5	1294.1	1344.0	1356.0
50°	96.3	116.8	338.6	512.1	969.3	1084.5	1118.8	1163.5	1252.9	1299.3	1314.8
52.5°	89.3	106.6	288.7	455.4	916.1	1032.9	1072.4	1118.8	1203.0	1247.7	1258.0
55°	82.5	98.0	245.7	395.3	861.0	977.9	1020.9	1065.5	1148.0	1185.9	1192.7
57.5°	79.1	91.1	209.7	338.6	802.6	916.1	964.1	1005.4	1082.7	1112.0	1118.8
60°	73.9	85.9	182.2	290.5	739.0	857.6	898.9	940.1	1005.4	1029.5	1034.6
62.5°	68.8	82.5	161.5	244.0	673.7	788.9	830.1	867.9	922.9	940.1	947.0
65°	65.3	79.1	146.1	209.7	606.7	716.7	758.0	790.6	835.3	852.4	855.8
67.5°	61.8	75.6	134.0	180.5	539.6	644.5	675.4	706.4	740.7	758.0	759.7
70°	56.7	72.2	123.8	159.8	470.9	562.0	587.8	620.4	647.9	656.5	661.7
72.5°	53.3	67.0	116.8	144.3	400.4	482.9	507.0	525.9	550.0	558.5	558.5
75°	48.1	60.1	110.0	128.9	328.2	395.3	415.9	434.8	453.7	457.1	452.0
77.5°	43.0	53.3	94.6	108.3	256.1	312.8	329.9	340.3	355.7	359.2	360.9
80°	36.1	46.4	73.9	84.2	185.6	230.3	242.3	250.9	264.7	264.7	268.1
82.5°	27.5	36.1	53.3	60.1	125.5	158.1	168.4	173.6	182.2	182.2	182.2
85°	17.2	22.4	34.3	39.5	75.6	96.3	103.1	104.8	111.7	113.4	113.4
87.5°	8.6	12.0	22.4	24.1	39.5	49.9	49.9	53.3	53.3	51.6	49.9
90°	2.6	4.6	6.7	7.2	11.3	16.7	19.5	17.3	13.0	9.7	9.7
92.5°	10.2	27.7	45.2	49.5	69.6	96.4	109.8	96.3	69.1	48.8	46.8
95°	24.6	56.5	88.5	96.5	171.3	271.2	321.1	286.5	217.4	165.5	159.6
97.5°	42.6	70.8	99.0	106.0	230.8	397.3	480.4	458.6	414.9	382.1	370.9
100°	56.5	82.0	107.5	113.9	252.5	437.1	529.5	531.1	534.3	536.6	523.3
102.5°	68.2	92.1	115.9	121.9	262.4	449.7	543.3	571.2	626.8	668.5	657.1
105°	88.3	108.5	128.6	133.7	269.7	451.1	541.8	604.1	728.9	822.5	816.4
107.5°	108.8	127.6	146.5	151.2	271.1	431.0	510.9	598.0	772.0	902.6	904.1
110°	122.7	139.6	156.6	160.9	269.1	413.2	485.3	582.6	777.2	923.1	929.5



TEST NUMBER: P936225

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-12-2700K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	136.3	152.5	168.7	172.7	269.1	397.7	462.0	561.6	760.7	910.1	919.9
115°	156.8	171.8	186.7	190.5	271.6	379.8	434.0	529.9	721.7	865.7	879.2
117.5°	177.1	190.6	204.2	207.6	276.7	368.7	414.8	501.4	674.5	804.3	819.5
120°	188.8	201.7	214.5	217.6	280.8	364.9	407.0	486.1	644.4	763.0	777.7
122.5°	200.5	213.4	226.2	229.4	286.6	362.9	401.1	472.3	614.8	721.7	736.1
125°	218.1	229.9	241.7	244.6	294.7	361.4	394.7	455.2	576.2	667.0	680.3
127.5°	232.5	244.4	256.2	259.2	302.6	360.4	389.3	441.2	545.2	623.1	634.4
130°	240.2	253.0	265.8	269.0	308.4	361.0	387.3	433.6	526.1	595.4	605.8
132.5°	248.2	260.9	273.7	276.9	313.1	361.4	385.5	426.9	509.7	571.8	581.1
135°	260.0	271.6	283.2	286.1	318.2	361.0	382.4	417.1	486.4	538.4	546.5
137.5°	272.0	283.6	295.0	297.9	325.9	363.3	381.9	411.2	469.8	513.8	520.3
140°	282.0	292.6	303.3	305.9	330.6	363.6	380.1	405.4	456.0	494.0	500.2
142.5°	289.7	299.5	309.4	311.8	334.6	364.9	380.1	402.3	446.8	480.2	485.5
145°	301.6	310.1	318.7	320.8	339.7	364.9	377.5	395.7	432.1	459.4	463.4
147.5°	313.4	321.7	330.0	332.1	347.2	367.4	377.5	391.9	420.5	441.9	445.3
150°	321.1	328.6	336.1	338.0	351.1	368.7	377.5	389.7	413.8	431.9	434.6
152.5°	329.0	334.7	340.4	341.8	353.7	369.6	377.5	387.9	408.5	424.0	426.0
155°	340.8	345.0	349.3	350.3	359.3	371.5	377.5	385.7	402.2	414.5	415.9
157.5°	349.5	353.6	357.8	358.8	365.1	373.3	377.5	383.9	396.7	406.2	407.2
160°	355.5	358.6	361.9	362.7	367.6	374.2	377.5	383.0	393.9	402.1	402.6
162.5°	361.4	363.8	366.2	366.8	370.3	375.1	377.5	382.1	391.4	398.3	398.8
165°	367.8	369.9	372.1	372.7	374.3	376.4	377.5	380.9	387.4	392.4	392.9
167.5°	373.7	374.7	375.7	376.0	377.4	379.1	380.1	382.2	386.6	389.8	390.1
170°	377.5	378.5	379.6	379.8	379.9	380.0	380.1	382.2	386.6	389.8	389.8
172.5°	379.6	379.8	380.0	380.1	380.1	380.1	380.1	381.8	385.2	387.8	387.6
175°	382.4	382.4	382.4	382.4	381.6	380.6	380.1	381.2	383.3	385.0	385.0
177.5°	382.4	382.4	382.4	382.4	381.8	381.0	380.6	381.5	383.2	384.4	384.2
180°	382.4	382.4	382.4	382.4	382.4	382.4	382.4	382.4	382.4	382.4	382.4



TEST NUMBER: P936225

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-12-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	534.5	534.5
2.5°	570.6	567.1
5°	733.9	737.3
7.5°	988.2	986.5
10°	1228.8	1244.3
12.5°	1404.1	1407.5
15°	1510.7	1517.5
17.5°	1552.0	1553.7
20°	1553.7	1550.2
22.5°	1534.7	1531.3
25°	1512.4	1510.7
27.5°	1491.7	1493.5
30°	1483.2	1488.3
32.5°	1483.2	1491.7
35°	1486.6	1495.2
37.5°	1484.9	1495.2
40°	1478.0	1490.0
42.5°	1459.1	1467.7
45°	1429.9	1440.2
47.5°	1392.1	1399.0
50°	1344.0	1350.8
52.5°	1283.8	1285.5
55°	1211.7	1218.5
57.5°	1134.3	1136.0
60°	1048.4	1053.5
62.5°	957.3	957.3
65°	861.0	864.5
67.5°	761.4	769.9
70°	660.0	661.7
72.5°	560.3	560.3
75°	457.1	458.8
77.5°	359.2	359.2
80°	266.4	268.1
82.5°	183.9	187.3
85°	115.1	115.1
87.5°	53.3	48.1
90°	9.7	9.7
92.5°	39.1	31.3
95°	136.1	112.7
97.5°	326.3	281.5
100°	470.1	416.8
102.5°	611.5	565.9
105°	791.9	767.3
107.5°	910.1	916.0
110°	955.1	980.6



TEST NUMBER: P936225

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-12-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	959.1	998.3
115°	933.6	988.1
117.5°	879.8	940.1
120°	836.3	894.9
122.5°	794.0	851.8
125°	733.5	786.8
127.5°	679.3	724.2
130°	647.3	688.9
132.5°	618.3	655.5
135°	578.5	610.5
137.5°	546.6	572.9
140°	524.7	549.2
142.5°	506.6	527.7
145°	479.3	495.3
147.5°	458.5	471.7
150°	445.3	456.0
152.5°	434.1	442.2
155°	421.2	426.6
157.5°	411.0	414.8
160°	404.9	407.0
162.5°	400.8	402.9
165°	395.1	397.3
167.5°	390.9	391.9
170°	389.8	389.8
172.5°	386.7	386.0
175°	385.0	385.0
177.5°	383.3	382.4
180°	382.4	382.4



TEST NUMBER: P936225
 CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-12-2700K

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	3.82	4.86	4.66	5.72	6.80	17.01	18.05	17.85	18.91	19.99
	3H	4.54	5.48	5.39	6.35	7.45	18.87	19.81	19.72	20.68	21.78
	4H	4.85	5.73	5.71	6.61	7.72	19.53	20.41	20.39	21.29	22.40
	6H	5.11	5.92	5.98	6.81	7.94	19.97	20.79	20.85	21.68	22.80
	8H	5.18	5.96	6.06	6.86	7.99	20.10	20.88	20.98	21.78	22.91
	12H	5.20	5.95	6.09	6.84	8.00	20.18	20.92	21.07	21.82	22.97
4H	2H	11.07	11.95	11.93	12.83	13.94	17.31	18.19	18.17	19.07	20.19
	3H	12.65	13.39	13.53	14.30	15.43	19.38	20.12	20.25	21.03	22.16
	4H	12.75	13.43	13.64	14.34	15.49	20.15	20.83	21.04	21.74	22.89
	6H	12.77	13.36	13.68	14.29	15.45	20.71	21.30	21.61	22.23	23.38
	8H	12.76	13.30	13.66	14.23	15.40	20.88	21.43	21.79	22.35	23.52
	12H	12.72	13.22	13.65	14.16	15.34	20.98	21.48	21.91	22.42	23.60
8H	4H	14.22	14.76	15.12	15.69	16.86	20.23	20.78	21.14	21.70	22.87
	6H	14.47	14.92	15.40	15.89	17.06	20.87	21.33	21.81	22.29	23.46
	8H	14.49	14.89	15.43	15.85	17.04	21.10	21.50	22.04	22.46	23.65
	12H	14.46	14.82	15.41	15.77	17.01	21.25	21.61	22.20	22.56	23.80
12H	4H	14.37	14.87	15.30	15.81	16.99	20.19	20.69	21.12	21.63	22.81
	6H	14.73	15.13	15.67	16.09	17.28	20.86	21.26	21.80	22.22	23.41
	8H	14.81	15.16	15.76	16.11	17.35	21.10	21.45	22.05	22.41	23.64