

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: P937785

Luminaire Tested: SQ4-FB-100U-125D-B2750-1D-UNV-W2A-W-4-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937785
REPORT IS A COMBINATION OF REPORTS P933568 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-B2750-1D-UNV-W2A-W-4-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

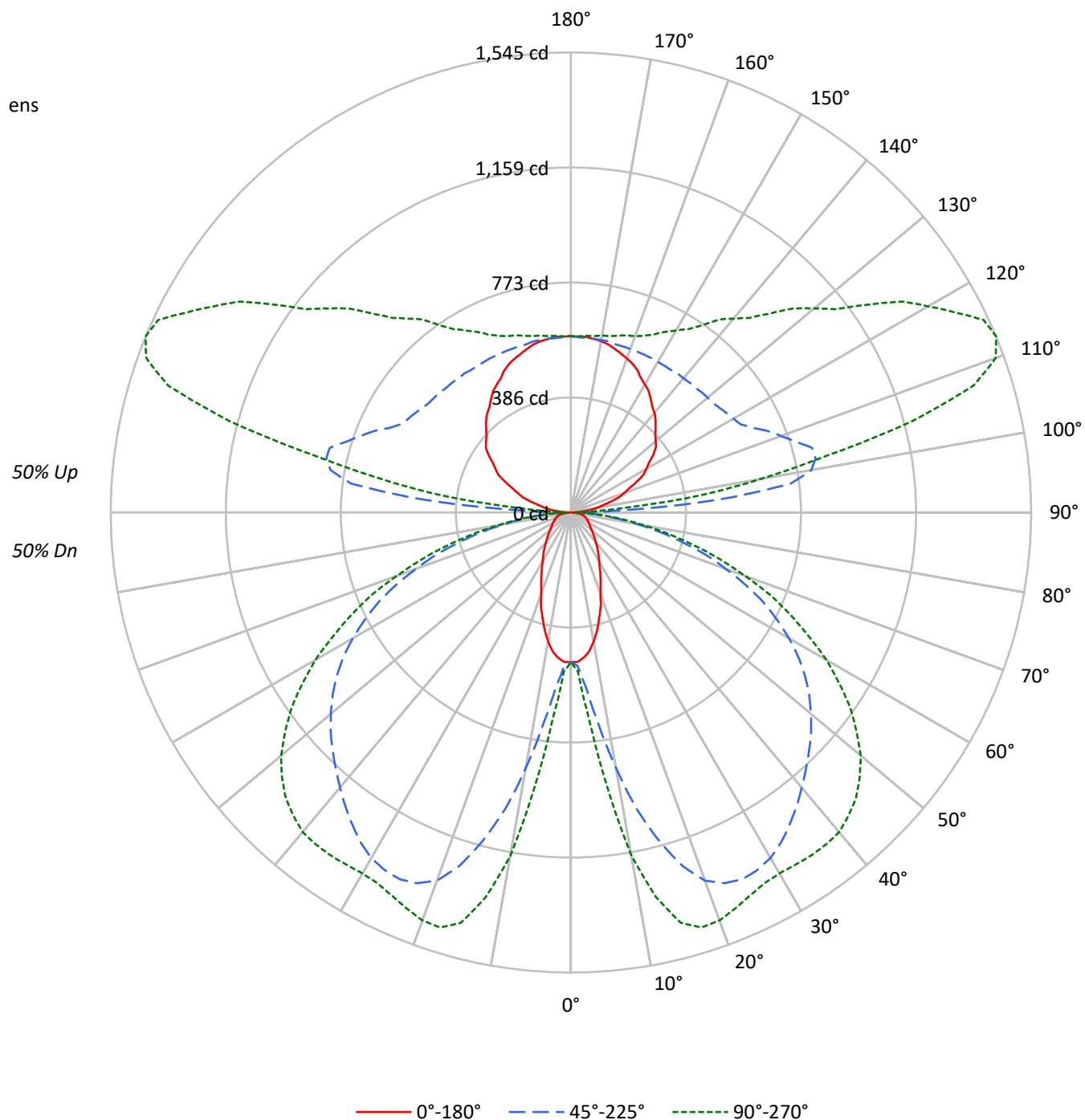
Lumens per Lamp: N/A
Luminaire Lumens: 7726.9 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 68.8
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: P937785

CATALOG NUMBER: SQ4-FB-100U-125D-B2750-1D-UNV-W2A-W-4-4000K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4663	4663	4663
5°	4551	5385	6268
10°	4123	7845	10392
15°	3500	10242	12548
20°	2847	11860	12788
25°	2372	12403	12529
30°	1997	12471	12506
35°	1762	12254	12828
40°	1534	11975	13162
45°	1387	11767	13214
50°	1269	11578	12995
55°	1211	11306	12419
60°	1236	10796	11510
65°	1280	10024	10260
70°	1353	8726	8668
75°	1486	7096	6765
80°	1587	4905	4558
85°	1333	2586	2333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13214 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	0.8
10°-20°	288.1	3.7
20°-30°	504.0	6.5
30°-40°	648.8	8.4
40°-50°	724.6	9.4
50°-60°	694.0	9.0
60°-70°	550.0	7.1
70°-80°	323.4	4.2
80°-90°	92.1	1.2
90°-100°	288.5	3.7
100°-110°	758.5	9.8
110°-120°	786.5	10.2
120°-130°	630.8	8.2
130°-140°	495.0	6.4
140°-150°	379.9	4.9
150°-160°	273.6	3.5
160°-170°	167.4	2.2
170°-180°	56.6	0.7
0°-30°	857.1	11.1
0°-40°	1505.8	19.5
0°-60°	2924.5	37.8
0°-90°	3890.1	50.3
90°-120°	1833.5	23.7
90°-150°	3339.2	43.2
90°-180°	3837.0	49.7
0°-180°	7726.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	502	502	502	502	502	
5°	490	525	591	669	693	45
15°	367	677	1141	1383	1427	102
25°	234	768	1359	1419	1420	108
35°	158	734	1280	1353	1406	99
45°	108	585	1131	1296	1354	84
55°	78	372	960	1115	1146	71
65°	61	197	713	802	813	61
75°	45	121	391	430	432	47
85°	16	37	97	107	108	17
90°	4	11	30	15	15	4
95°	38	149	497	256	174	42
105°	137	207	839	1273	1188	145
115°	243	295	672	1340	1529	240
125°	338	379	611	1032	1218	300
135°	402	443	592	833	945	311
145°	467	496	584	711	767	292
155°	528	542	584	642	660	242
165°	569	577	584	607	615	161
175°	592	592	588	596	596	56
180°	592	592	592	592	592	

TEST NUMBER: P937785

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5
2.5°	502.5	502.5	505.8	507.4	510.6	512.3	515.5	518.8	528.4	530.0	533.3
5°	489.6	496.1	517.1	525.2	547.8	578.5	591.4	612.4	656.1	669.0	677.1
7.5°	470.2	484.8	536.5	549.4	605.9	686.7	720.7	766.0	835.4	869.3	896.8
10°	439.5	470.2	562.3	593.1	685.1	807.9	871.0	934.0	1039.0	1085.9	1103.7
12.5°	405.6	455.7	589.8	631.8	764.4	943.7	1019.7	1089.2	1208.7	1271.8	1281.4
15°	366.8	434.7	615.7	677.1	848.3	1056.8	1140.8	1226.5	1338.1	1383.2	1394.6
17.5°	332.9	418.6	639.9	704.6	913.0	1158.6	1244.3	1315.4	1405.9	1436.6	1444.6
20°	290.9	392.7	656.1	740.1	980.9	1233.0	1315.4	1370.3	1431.7	1451.1	1454.4
22.5°	260.1	365.2	665.7	753.0	1026.1	1278.2	1347.7	1391.3	1433.4	1439.9	1441.4
25°	234.4	334.5	664.2	767.5	1064.9	1305.7	1359.1	1391.3	1415.6	1418.8	1418.8
27.5°	210.1	300.5	657.7	770.8	1094.0	1312.2	1354.2	1376.8	1388.1	1394.6	1394.6
30°	189.1	268.3	641.6	764.4	1106.9	1305.7	1339.6	1350.9	1362.2	1372.0	1376.8
32.5°	173.0	237.5	617.3	751.4	1108.6	1289.5	1313.8	1320.2	1336.4	1359.1	1367.1
35°	158.3	206.9	589.8	733.6	1098.8	1263.7	1279.8	1286.3	1318.6	1352.6	1363.8
37.5°	143.8	184.2	554.3	703.0	1084.3	1233.0	1244.3	1255.6	1305.7	1346.1	1359.1
40°	129.3	164.8	512.3	669.0	1061.7	1195.8	1205.5	1223.3	1289.5	1336.4	1349.3
42.5°	117.9	148.7	467.0	633.5	1032.5	1153.8	1168.3	1194.2	1270.1	1320.2	1334.8
45°	108.3	132.6	418.6	584.9	995.4	1110.2	1131.2	1166.7	1247.5	1296.0	1308.9
47.5°	98.6	121.2	368.4	534.9	955.0	1066.5	1094.0	1134.4	1216.8	1263.7	1275.0
50°	90.5	109.9	318.3	481.5	911.4	1019.7	1052.0	1094.0	1178.0	1221.6	1236.2
52.5°	84.0	100.2	271.5	428.2	861.3	971.1	1008.4	1052.0	1131.2	1173.2	1182.9
55°	77.5	92.1	231.1	371.7	809.6	919.5	959.9	1001.9	1079.4	1115.0	1121.5
57.5°	74.3	85.7	197.1	318.3	754.6	861.3	906.6	945.4	1018.0	1045.5	1052.0
60°	69.5	80.8	171.3	273.1	694.9	806.4	845.2	883.9	945.4	968.0	972.8
62.5°	64.7	77.5	151.9	229.5	633.5	741.7	780.5	816.0	867.8	883.9	890.3
65°	61.4	74.3	137.3	197.1	570.4	673.8	712.6	743.4	785.4	801.5	804.8
67.5°	58.2	71.1	126.1	169.7	507.4	605.9	635.1	664.2	696.5	712.6	714.2
70°	53.3	67.9	116.3	150.3	442.7	528.4	552.7	583.3	609.2	617.3	622.2
72.5°	50.1	63.0	109.9	135.7	376.6	454.1	476.7	494.5	517.1	525.2	525.2
75°	45.3	56.5	103.4	121.2	308.7	371.7	391.1	408.8	426.6	429.8	425.0
77.5°	40.4	50.1	88.9	101.8	240.8	294.1	310.3	319.9	334.5	337.7	339.3
80°	33.9	43.6	69.5	79.2	174.5	216.5	227.9	235.9	248.9	248.9	252.1
82.5°	25.9	33.9	50.1	56.5	117.9	148.7	158.3	163.2	171.3	171.3	171.3
85°	16.1	21.0	32.3	37.1	71.1	90.5	96.9	98.6	105.0	106.7	106.7
87.5°	8.1	11.3	21.0	22.6	37.1	46.9	46.9	50.1	50.1	48.5	46.9
90°	4.0	7.2	10.3	11.1	17.5	26.0	30.2	26.8	20.2	15.1	15.1
92.5°	15.9	42.9	69.9	76.7	107.8	149.3	170.0	149.0	107.0	75.4	72.5
95°	38.1	87.6	137.0	149.4	265.2	419.6	496.9	443.4	336.4	256.2	247.2
97.5°	65.9	109.5	153.2	164.1	357.3	614.8	743.6	709.8	642.1	591.4	574.1
100°	87.4	126.9	166.5	176.4	390.8	676.6	819.5	822.0	826.8	830.6	809.9
102.5°	105.6	142.6	179.4	188.7	406.2	696.0	841.0	884.0	970.2	1034.7	1017.1
105°	136.7	167.9	199.1	206.9	417.5	698.2	838.6	935.1	1128.2	1273.1	1263.7
107.5°	168.5	197.6	226.7	234.0	419.6	667.1	790.8	925.6	1195.0	1397.1	1399.4
110°	189.9	216.2	242.5	249.1	416.4	639.6	751.1	901.7	1202.9	1428.8	1438.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	211.0	236.0	261.0	267.3	416.6	615.5	715.0	869.1	1177.3	1408.5	1423.7
115°	242.7	265.8	288.9	294.7	420.4	588.0	671.7	820.2	1117.2	1339.9	1360.9
117.5°	274.1	295.1	316.1	321.4	428.2	570.7	642.0	775.9	1043.9	1244.9	1268.2
120°	292.3	312.1	331.9	336.8	434.5	564.9	630.0	752.4	997.3	1181.0	1203.7
122.5°	310.3	330.2	350.2	355.2	443.7	561.8	620.8	731.1	951.6	1117.0	1139.3
125°	337.7	355.8	374.0	378.6	456.0	559.2	610.9	704.6	891.9	1032.4	1053.0
127.5°	359.8	378.2	396.6	401.2	468.3	557.8	602.6	683.0	843.8	964.5	981.8
130°	371.8	391.6	411.3	416.3	477.3	558.8	599.5	671.1	814.2	921.6	937.6
132.5°	384.1	403.9	423.6	428.6	484.6	559.2	596.6	660.7	788.8	885.0	899.4
135°	402.4	420.4	438.4	442.9	492.6	558.8	591.9	645.6	752.8	833.3	845.7
137.5°	421.1	438.9	456.7	461.2	504.4	562.2	591.0	636.4	727.1	795.2	805.4
140°	436.5	453.0	469.4	473.5	511.8	562.8	588.3	627.4	705.8	764.7	774.1
142.5°	448.5	463.7	478.8	482.7	517.9	564.8	588.3	622.7	691.5	743.2	751.4
145°	466.7	480.0	493.2	496.5	525.8	564.9	584.4	612.5	668.8	711.0	717.2
147.5°	485.0	497.9	510.7	514.0	537.5	568.7	584.4	606.5	650.8	684.1	689.2
150°	496.9	508.5	520.2	523.1	543.6	570.8	584.4	603.1	640.4	668.5	672.6
152.5°	509.2	518.0	526.9	529.1	547.5	572.0	584.4	600.3	632.2	656.2	659.3
155°	527.5	534.0	540.6	542.2	556.3	575.0	584.4	597.1	622.5	641.5	643.6
157.5°	541.0	547.4	553.7	555.3	565.0	577.9	584.4	594.2	614.0	628.8	630.2
160°	550.2	555.1	560.0	561.3	569.0	579.2	584.4	592.9	609.8	622.5	623.3
162.5°	559.2	563.0	566.7	567.7	573.2	580.6	584.4	591.5	605.8	616.5	617.2
165°	569.2	572.5	575.9	576.7	579.3	582.6	584.4	589.5	599.7	607.4	608.2
167.5°	578.3	580.0	581.6	582.0	584.1	586.8	588.3	591.6	598.3	603.4	603.8
170°	584.4	585.9	587.5	587.9	588.0	588.2	588.3	591.6	598.3	603.4	603.4
172.5°	587.5	587.9	588.2	588.3	588.3	588.3	588.3	591.0	596.2	600.2	599.9
175°	591.9	591.9	591.9	591.9	590.7	589.0	588.3	590.0	593.3	595.8	595.8
177.5°	591.9	591.9	591.9	591.9	591.0	589.7	589.0	590.4	593.1	595.1	594.7
180°	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	502.5	502.5
2.5°	536.5	533.3
5°	690.0	693.2
7.5°	929.2	927.6
10°	1155.4	1170.0
12.5°	1320.2	1323.4
15°	1420.5	1426.9
17.5°	1459.2	1460.9
20°	1460.9	1457.6
22.5°	1443.0	1439.9
25°	1422.0	1420.5
27.5°	1402.6	1404.2
30°	1394.6	1399.5
32.5°	1394.6	1402.6
35°	1397.8	1405.9
37.5°	1396.2	1405.9
40°	1389.7	1401.0
42.5°	1372.0	1380.0
45°	1344.4	1354.2
47.5°	1308.9	1315.4
50°	1263.7	1270.1
52.5°	1207.1	1208.7
55°	1139.2	1145.7
57.5°	1066.5	1068.2
60°	985.8	990.6
62.5°	900.1	900.1
65°	809.6	812.8
67.5°	715.9	724.0
70°	620.6	622.2
72.5°	526.8	526.8
75°	429.8	431.5
77.5°	337.7	337.7
80°	250.5	252.1
82.5°	173.0	176.1
85°	108.3	108.3
87.5°	50.1	45.3
90°	15.1	15.1
92.5°	60.5	48.4
95°	210.8	174.4
97.5°	504.9	435.8
100°	727.5	645.1
102.5°	946.5	875.9
105°	1225.6	1187.7
107.5°	1408.5	1417.7
110°	1478.2	1517.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1484.5	1545.2
115°	1445.1	1529.3
117.5°	1361.6	1455.0
120°	1294.4	1385.1
122.5°	1228.9	1318.4
125°	1135.4	1217.9
127.5°	1051.5	1121.0
130°	1001.9	1066.2
132.5°	956.9	1014.5
135°	895.3	945.0
137.5°	846.0	886.6
140°	812.1	850.0
142.5°	784.1	816.7
145°	741.9	766.7
147.5°	709.7	730.1
150°	689.2	705.8
152.5°	671.8	684.4
155°	651.9	660.2
157.5°	636.1	642.0
160°	626.7	630.0
162.5°	620.5	623.6
165°	611.6	614.9
167.5°	605.1	606.5
170°	603.4	603.4
172.5°	598.7	597.4
175°	595.8	595.8
177.5°	593.3	591.9
180°	591.9	591.9

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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	6.37	7.27	7.32	8.24	9.51	19.51	20.41	20.46	21.38	22.65
	3H	7.08	7.89	8.04	8.87	10.16	21.34	22.15	22.30	23.13	24.41
	4H	7.38	8.15	8.35	9.13	10.43	21.98	22.74	22.95	23.73	25.02
	6H	7.63	8.34	8.62	9.33	10.64	22.40	23.11	23.38	24.09	25.40
	8H	7.70	8.38	8.69	9.38	10.69	22.51	23.19	23.50	24.19	25.50
	12H	7.72	8.37	8.72	9.36	10.69	22.57	23.22	23.57	24.22	25.55
4H	2H	13.57	14.34	14.54	15.32	16.61	19.79	20.56	20.77	21.54	22.84
	3H	15.14	15.79	16.13	16.80	18.10	21.83	22.47	22.81	23.48	24.79
	4H	15.24	15.83	16.23	16.83	18.16	22.59	23.18	23.58	24.18	25.51
	6H	15.25	15.76	16.26	16.79	18.12	23.11	23.62	24.12	24.65	25.98
	8H	15.23	15.71	16.24	16.73	18.07	23.27	23.75	24.28	24.77	26.11
	12H	15.19	15.62	16.22	16.66	18.01	23.36	23.79	24.39	24.82	26.17
8H	4H	16.68	17.15	17.69	18.17	19.52	22.65	23.13	23.66	24.15	25.49
	6H	16.92	17.32	17.96	18.38	19.72	23.27	23.66	24.30	24.73	26.07
	8H	16.94	17.29	17.98	18.34	19.70	23.48	23.83	24.52	24.88	26.24
	12H	16.91	17.22	17.96	18.26	19.66	23.62	23.93	24.67	24.97	26.37
12H	4H	16.82	17.25	17.85	18.29	19.64	22.61	23.04	23.63	24.07	25.42
	6H	17.18	17.53	18.22	18.57	19.93	23.25	23.60	24.29	24.65	26.01
	8H	17.25	17.56	18.30	18.60	20.00	23.48	23.78	24.52	24.83	26.23